

PSY2 RETAIN TIPS
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RETAIN Technical Data

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PREFACE Preface

This document was edited on 05/23/98 at 01:15:49 by using the BKRETAIN package.

Technical data records obtained from the IBM RETAIN database have been sorted and categorized by type. Modification to the format of the online records has been limited to relocating the abstract to the beginning of the record. The records may have been translated to lower case if the original record was in upper case.

Special thanks to Terry Judkins in Atlanta for developing the BKRETAIN package utilized in this offering.

We also want to thank Dave Schaefer for developing the code to automate this process and sharing the code with us.

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1.4.653	DECREASED NETWORK PERFORMANCE USING 100MBS ETHERNET
1.4.654	DEFECTIVE EXTERNAL SCSI CABLES
1.4.655	DEVICES IN CONFIGURATION SEEN ONLY AFTER COLD BOOT
1.4.656	DIAG ERROR 00019201, SUSPEND RESUME PROBLEMS
1.4.657	DIAGNOSTICS HANG IN LOOP MODE WITH TOKEN RING INSTALLED
1.4.658	DIAGNOSTICS MAY HANG WHEN 3270 CONNECTION CARD IS INSTALLED
1.4.659	DIFFERENCE OR INCREASE IN TAPE BACKUP TIME
1.4.660	DIRECTDRAW APPS DO NOT RUN WITH INTERGRAPH ADAPTER
1.4.661	DISKETTE CREATE FAILS IN OS/2 WARP REMOTE INSTALL
1.4.662	DISKETTE DRIVE "A" ACCESS PROBLEM W/ AIX OPERATING SYSTEM
1.4.663	DISKETTE DRIVE FAILURE, DISKETTE CHANGE NOT RECOGNIZED
1.4.664	DISKETTE DRIVE FAILURE, DISKETTE CHANGE NOT RECOGNIZED
1.4.665	DISKETTE DRIVE FAILURES W/DCA IRMA CARD INSTALLED
1.4.666	DISKETTE DRIVE MISALIGNED IN PC 350 & 750
1.4.667	DISKETTE FACTORY FAILS TO BUILD OS/2 WARP DISKETTES
1.4.668	DISKETTE READ / WRITE ERRORS W/ CRT ATTACHED
1.4.669	DISKETTE READ ERROR DURING FILE TRANSFER ON PC 300
1.4.670	DISKETTE READ ERRORS WHILE INSTALLING WINDOWS-NT
1.4.671	DISKETTES FROM DISKETTE FACTORY UNUSABLE
1.4.672	DISPLAY APPLETT WINDOW TOO LARGE FOR SCREEN
1.4.673	DISPLAY FOCUS, COLOR PURITY, AND BLOTCHING
1.4.674	DISPLAY JITTER/FLICKER WITH WINDOWS95
1.4.675	DISPLAY PROPERTIES WINDOW TOO LARGE IN THAI WINDOWS NT4.0
1.4.676	DISTORTED IMAGE W/VIDEO ADAPTER IN a IBM PC 700
1.4.677	DISTORTED LINES APPEAR W/AUTOCAD AND WINDOWS
1.4.678	DIVIDE BY ZERO ERROR OPENING MICROSOFT WORD FILE
1.4.679	DMA ARBITRATION ERROR 113 WITH ADVANCED DIAGNOSTICS LVL 1.03
1.4.680	DMA TIMEOUT ERROR (TRAP0002) ON PS/2
1.4.681	DMI BROWSER CONTROL PANEL TEXT TURNS UPSIDE DOWN
1.4.682	DMI INSTALL README TEXT NOT VISIBLE ON DESKTOP
1.4.683	DOS SUPPORT FOR CD-ROM WILL NOT INSTALL WITH OS/2 DUAL BOOT
1.4.684	DOS 3270 APPLICATION FAILS TO CONNECT UNDER OS/2
1.4.685	DOS 3270 APPLICATION FAILS TO CONNECT UNDER OS/2
1.4.686	DOSCALL\$ TRAP ERROR WITH MWAIVE AND TCPIP INSTALLED
1.4.687	DOTS AND DASHES REMAIN ON 8555 SYSTEM MONITOR
1.4.688	DOUBLE KEY KEY STROKES W/ CARBON COPY & PC ANYWHERE
1.4.689	EICON ADAPTER FAILS TO CONFIGURE IN PC700
1.4.690	EICON ADAPTER FAILS TO CONFIGURE IN SERVER 310, 320 & 520
1.4.691	EISA SLOT 6 CONFIGURATION PROBLEM
1.4.692	EMM386 EXCEPTION 06 OR REBOOT AFTER TRACK POINT OPERATION
1.4.693	ENHANCED 80386 MEMORY ADAPTER W/SYSTEM DETECTED MEMORY ERROR
1.4.694	ENHANCED 80386 MEMORY ADAPTER W/SYSTEM DETECTED MEMORY ERROR
1.4.695	ENHANCED 80386 MEMORY NOT RECOGNIZED BY THE SYSTEM
1.4.696	ENHANCED 80386 MEMORY NOT RECOGNIZED BY THE SYSTEM
1.4.697	ENTER KEY DOES NOT WORK ON IBM REGISTRATION WINDOW BUTTONS
1.4.698	EPROM CHANGE FOR TOKEN RING ADAPTER
1.4.699	ERRATIC MICROSOFT MOUSE MOVEMENT ON DOCKED THINKPAD.
1.4.700	ERROR CODE 00024700 INCORRECT IN THE HMM
1.4.701	ERROR INSTALLING IBM UTILITIES IN RETAIL WINDOWS NT 4.0
1.4.702	ERROR LOADING PCI TOKEN RING DRIVER IN WINDOWS NT 4.0
1.4.703	ERROR MESSAGE VIEWING PROSET ETHERNET HELP FILE
1.4.704	ERROR MSG&COLON. "INVALID MEDIA TYPE" ON LAN WORKSTATION

1.4.705	ERRORS INITIALIZING KODAK SCANNERS
1.4.706	ERRORS INSTALLING OS/2 FROM CD-ROM ON a 9553
1.4.707	ERRORS INSTALLING OS/2 ON a 9553
1.4.708	ESDI FIXED DISKS WILL NOT CONFIGURE OR COME READY
1.4.709	ESS 1868 AUDIO ADAPTER HANGS SYSTEM IF NOT INSTALLED
1.4.710	ETHERNET CONFIGURATION CORRUPTED ON PC 300/700
1.4.711	EXCEPTION 6 ERRORS ON PCSERVER 320 EISA CONFIGURATION
1.4.712	EXCESSIVE LOST ALLOCATION UNITS W/340MB DRIVE
1.4.713	EXTERNAL CABLE / TERMINATOR MAY NOT FIT
1.4.714	EXTERNAL CACHE FAILURE USING QAPLUS/PRO
1.4.715	EXTERNAL DISPLAY PROBLEM WHEN ATTACHED TO THE 750 MONO.
1.4.716	EXTERNAL DRIVE MOTOR SPINS WHEN ACCESSING THE INTERNAL DRIVE
1.4.717	EXTERNAL 5.25" 360KB DISKETTE DRIVE CONFIGURATION PROBLEM
1.4.718	FAILURE ACCESSING 60 OR 120 MEGABYTE DRIVE ON 8550Z OR 8570
1.4.719	FAILURES WITH HYUNDAI 4MB MEMORY SIMMS
1.4.720	FALSE / ERRONEOUS ERROR CODES ON 8590 AND 8595
1.4.721	FALSE "DISK CHANGE" TEST FAILURE IN QAPLUS/WIN-WIN
1.4.722	FALSE ASYNC OR MPCA DIAGNOSTIC ERRORS
1.4.723	FALSE CPU ERROR CODE MBD061 WITH QAPLUS/2
1.4.724	FALSE DDD ERRORS WHILE RUNNING TME 10 NETFINITY
1.4.725	FALSE DIAG ERROR CODE WITH XGA AND 2 MPCA CARDS INSTALLED
1.4.726	FALSE DIAGNOSTIC ERROR ON RAID SCSI DEVICE
1.4.727	FALSE DIAGNOSTIC ERROR WITH FIXED DISK CONTROLLER TEST
1.4.728	FALSE DIAGNOSTIC ERRORS REPORTED BY QAPLUS/WIN-WIN
1.4.729	FALSE DIAGNOSTIC FAILURES WITH QAPLUS/WIN
1.4.730	FALSE DISKETTE ERROR CODE 667
1.4.731	FALSE DRIVER CONFLICT MESSAGE IN EVENT VIEWER
1.4.732	FALSE ERRORS FROM PS/2 WITH AOX CARD INSTALLED
1.4.733	FALSE MEMORY ERROR WITH QAPLUS/WIN-WIN ON PC 340
1.4.734	FALSE VIDEO DIAGNOSTIC ERROR MESSAGE
1.4.735	FALSE 11XX ERROR WHILE TESTING PS/2 SYSTEMS
1.4.736	FALSE 1280 DIAGNOSTIC ERROR ON THINKPAD 350
1.4.737	FALSE 162 POST ERRORS ON PC 700
1.4.738	FALSE 1702 1713 ERRORS ON PS/2 "E"
1.4.739	FALSE 198 ERRORS WHEN RUNNING DIAGNOSTICS
1.4.740	FALSE 301 OR 301/8602 POST ERROR
1.4.741	FALSE 401 PARALLEL PORT ERRORS WITH DIAGNOSTIC LEVEL 1.03
1.4.742	FALSE 701 MATH COPROCESSOR DIAGNOSTICS ERRORS
1.4.743	FDISK SHOWS DRIVES IN WRONG ORDER
1.4.744	FIXED DISK ERRORS OR 1714 DIAGS ERROR ON 6484/6494
1.4.745	FIXED DISK PROBLEMS AFTER MAKING PHYSICAL CHANGES.
1.4.746	FORMAT FAILURE ON DOS 3.3 WITH CERTAIN PS/2 MODELS
1.4.747	FRONT PANEL LED'S ARE INACCURATE
1.4.748	FULL LENGTH ADAPTER CARDS DON'T FIT SLOT
1.4.749	GENERAL PROTECTION FAULTS W/INTEL ETHEREXPRESS PRO/10
1.4.750	GP/2 INSTALLING DOS LAN REQUESTER ON 6899 OR 6589
1.4.751	GP/2 ADAPTER FAILS DIAGNOSTICS IN PC 300
1.4.752	GP/2, PAGE FAULT ABEND RUNNING NETWARE 3X/4X (SPXS PATCH)
1.4.753	G42 MONITOR DOES NOT DISPLAY 1152 X 864 RESOLUTION IN NT
1.4.754	G50 AND G41 MONITORS INTERMITTENTLY BLINK
1.4.755	G70 MONITOR SCREEN BLANKS INTERMITTENTLY
1.4.756	HANG/FORMAT FAILURE INSTALLING OS/2 ON 2GB DRIVE
1.4.757	HANGS & TRAP 000E ERRORS WITH 256KB WRITE-THRU CACHE
1.4.758	HANGS & TRAP 000E ERRORS WITH 256KB L2 CACHE
1.4.759	HANGS ON SOFT IPL
1.4.760	HARDFILE AND DISKETTE DRIVE RELATED ERRORS
1.4.761	HARDFILE ERROR CODE "10463" ON a MODEL 111 (115MB HARDFILE)
1.4.762	HARDFILE LED REMAINS ON AFTER PERFORMING SHUTDOWN
1.4.763	HARDFILE NOISE OR VIBRATION IN PC 360
1.4.764	HAYES SMARTMODEM 2400 WON'T CONFIGURE IN 6876/6886
1.4.765	HIGH SPEED PARALLEL PORT PROBLEMS
1.4.766	HORIZONTAL LINES APPEAR ON RIGHT SIDE OF MONITOR
1.4.767	HORIZONTAL LINES APPEAR ON RIGHT SIDE OF MONITOR
1.4.768	HOT SWAP FIXED DISKS FAIL TO POWER UP
1.4.769	HP EXPLORER S/W FAILS TO RECOGNIZE HP LASERJET 4
1.4.770	HP 10/100VG ETHERNET ADAPTER DOES NOT FUNCTION UNDER WARP 4
1.4.771	HP 100MBIT ETHERNET ADAPTER FAILS IN 6381/SI
1.4.772	IBM ANTIVIRUS 2.5 ERRORS AFTER INSTALLATION ON PC 365
1.4.773	IBM AUTO LANSTREAMER PCI ADAPTER DIAGNOSTIC HANG
1.4.774	IBM AUTO 16/4 TOKEN RING FAILS IN PC300
1.4.775	IBM ENHANCED MOUSE FAILURES ON THINKPADS
1.4.776	IBM ES MC32 ADAPTER IN UTP ENVIRONMENT HAVING LOW THROUGHPUT
1.4.777	IBM ETHERNET ADAPTER FAILS IN PS/VALUEPOINT
1.4.778	IBM G40 DISPLAY NOT SEEN AS DDC1 ON PC 340 6560
1.4.779	IBM G40 MONITOR IN MONO MODE WHEN SYSTEM BOOTS
1.4.780	IBM G70 DISPLAY NOT SEEN AS DDC1 ON 6576/6586
1.4.781	IBM MPEG INTERACTIVE VIDEO PLAYER SEQUENCE ERRORS
1.4.782	IBM PCI TOKEN RING ADAPTER HANGS IN PC700
1.4.783	IBM PC300-GL FAILS TO ENTER APM MODE WITH NT 4.0
1.4.784	IBM PC6562/6592 HANGS AT WINDOWS 3.11 LOGO SCREEN
1.4.785	IBM PC700 FAILS WHEN LOADING AUDIO DRIVERS
1.4.786	IBM PC700 TRAP 0002 ERRORS WARM BOOTING OS/2
1.4.787	IBM PC700 1762/162 POST ERRORS
1.4.788	IBM PS/2 9576/77 HANGS W/NCI X-OVER ADAPTER

1.4.789	IBM P200/P201 DISPLAYS NOT SEEN AS DDC COMPLIANT
1.4.790	IBM T/R BRIDGE SOFTWARE FAILS IN PC 700 MICROCHANNEL
1.4.791	IBM TMC-850 SCSI CARD BY FUTURE DOMAIN FAILS IN 300/700
1.4.792	IBM TOKEN RING ADAPTER FAILS WINDOWS NT RPL
1.4.793	IBM TOKEN RING DRIVER INSTALL FAILS IN WINDOWSNT 4.0
1.4.794	IDE HARDFILE FAILS WITH PLANAR UPGRADE
1.4.795	ILLEGAL OPERATION ERROR IN QAPLUS/WIN-WIN
1.4.796	IMAGE ADAPTER/A MAY CAUSE SYSTEM HANG CONDITION
1.4.797	INCONSISTENT IMAGE INTENSITY, STREAKS ON LEFT
1.4.798	INCORRECT COLOR IN QAPLUS GRID TEST W/COSESSION VIEWER
1.4.799	INCORRECT COLORS IN ADOBE PHOTOSHOP 4.0/4.1
1.4.800	INCORRECT INFORMATION DISPLAYED BY IBM DMI BROWSER
1.4.801	INSTALL & UNINSTALL OF IBM PRODUCT REGISTRATION FAILS
1.4.802	INSTALL PROBLEM WITH WINDOWS NT SERVER 3.51.
1.4.803	INSUFFICIENT MEMORY ERROR WITH CHKDSK
1.4.804	INSUFFICIENT SPACE CREATING WINDOWS 3.11 BACKUP
1.4.805	INTEL NDIS OID QUERY PROTOCOL ERRORS
1.4.806	INTERMITTENT "NOT READY" OR "GENERAL FAILURE" MESSAGES
1.4.807	INTERMITTENT DISKETTE FAILURES ON PS/VALUEPOINT
1.4.808	INTERMITTENT DISKETTE FAILURES ON PS/VALUEPOINT
1.4.809	INTERMITTENT FAILURES USING KEYBOARD PASSWORD FUNCTION
1.4.810	INTERMITTENT FALSE C-2 SECURITY ERROR MESSAGES
1.4.811	INTERMITTENT MEDIA ERRORS ON R/W OPTICAL DRIVES
1.4.812	INTERMITTENT OR SOLID 24XX ERRORS ON 6384
1.4.813	INTERMITTENT POWER-ON FAILURE ON IBM PC300-GL
1.4.814	INTERMITTENT TAPE ERRORS WITH 4/10GB TAPE DRIVE
1.4.815	INTERMITTENT TRAP 000E OR GPF'S IN 6576 AND 6586
1.4.816	INTERMITTENT VIDEO CORRUPTION RUNNING WINSTONE 96
1.4.817	INTERMITTENT 161 POST ERRORS ON PC 700 6877/6887
1.4.818	INTERMITTENT 162 POST ERRORS W/MITSUMI IDE CDROM
1.4.819	INTERMITTENT 162 POST ERRORS ON 6381/SI
1.4.820	INTERNAL PROCESSING ERROR AT LOCATION XXXX&COLON. XXXX
1.4.821	INTERNAL PROCESSING ERROR DURING INSTALL OF OS/2
1.4.822	INTERNAL PROCESSING ERROR & SYSTEM HALTS ON PC 300/700
1.4.823	INTERNAL 245MB/270MB SCSI DRIVE NOT RECOGNIZED
1.4.824	INTERNET EXPLORER HANGS IN IBM WELCOME CENTER
1.4.825	INTRANETWARE FAILS INSTALL W/ 7870 DRIVER ON 7895 CONTROLLER
1.4.826	IOS ERROR DURING INITIAL BOOT ON IBM PC6588-12U
1.4.827	IPX/SPX ERROR USING WORKGROUPS FOR WINDOWS
1.4.828	IRWIN TAPE DRIVES-READ/WRITE ERRORS, FORMAT FAILURES
1.4.829	PC SERVER 330&COLON. BOOT ERROR AFTER ADDING SERVERAID II_ADAPTER
1.4.830	I386 ERROR INSTALLING NETWORK ADAPTERS UNDER WINDOWS NT
1.4.831	I999XXXX ERRORS ON PS/2 SYSTEMS
1.4.832	I999XXXX ERRORS ON PS/2 SYSTEMS WITH IML
1.4.833	I999XXXX ERRORS ON PS/2 SYSTEMS WITH IML
1.4.834	I999XXXX ERRORS ON PS/2 8590, 8595, 9590 AND 9595
1.4.835	I999009X ERRORS ON PS/2 8556 OR 8557
1.4.836	I9990303 ERROR (SYSTEM PARTITION BOOT FAILURE)
1.4.837	JITTER IN 800 X 600 MODE ON G41 & G50
1.4.838	JITTER ON MONITOR ATTACHED TO IBM PC300PL
1.4.839	KEYBOARD ERRORS IN WINDOWS95 NOTEPAD
1.4.840	KEYBOARD LOCK-UP WITH BIOS 42A ON PC SERVER 325/330
1.4.841	KEYBOARD LOCK-UP/SYSTEM HANG IN WORDPERFECT 6.1
1.4.842	KEYBOARD LOCKS USING WINDOWS OR WINDOWS FOR WORKGROUPS
1.4.843	KODAK IMAGELINK 990D SCANNER FAILS ON PC 300 OR 700
1.4.844	KODAK SCANNER IS NOT "SEEN" BY SERVER 300, 320 & 520
1.4.845	KOFAX IMAGE ADAPTER NOT RECOGNIZED BY NETFINITY
1.4.846	KOFAX IMAGE ADAPTER NOT RECOGNIZED BY NETFINITY
1.4.847	LANDESK HELP NOT AVAILABLE IN WINDOWS NT V4.0
1.4.848	LANDESK 3.0 REPORTS LOW VIRTUAL MEMORY
1.4.849	LARGE FONT ERROR SWITCHING TO 640X480 RESOLUTION
1.4.850	LCCM FAILS TO IDENTIFY ONBOARD ETHERNET IN PC6588/6888
1.4.851	LCCM LAN CONTROL MANAGER UNABLE TO CONNECT WITH CLIENT
1.4.852	LCD BLANK AFTER MEMORY COUNT
1.4.853	LOCKUP AFTER SUSPEND RESUME OF a SOUNDBLASTER GAME
1.4.854	LOW MEMORY RESOURCE ERROR RUNNING WINDOWS 3.1
1.4.855	MATROX DEVICE DRIVER INSTALLATION FAILS ON PC 700
1.4.856	MATROX DRIVER INSTALLATION REQUESTS WRONG DISK
1.4.857	MAXIMUM OF 8MB OF USABLE SYSTEM MEMORY
1.4.858	MAXIMUM OF 8MB OF USABLE SYSTEM MEMORY
1.4.859	MAXTOR HDD TEST FAILS UNDER QAPLUS DIAGNOSTICS
1.4.860	MEDIALESS 8556 9556 RUN SLOW AFTER 486SLC2 UPGRADE
1.4.861	MEMORY LEAKS/HANG W/ NETFINITY SERVICES AND ASMA W/ NETWARE
1.4.862	MEMORY PARITY ERRORS USING DOS/WINDOWS
1.4.863	MEMORY RANGE CONFLICT IN WINDOWS 95
1.4.864	MGA MONITOR TAB INFORMATION IS NOT UPDATED
1.4.865	MGA POWER DESK MENU OPTION REMAINS IN TASK BAR
1.4.866	MGA POWERDESK ICON REMAINS AFTER UNINSTALL ROUTINE
1.4.867	MICROSOFT DESKTOP MANAGEMENT CONFLICTS WITH LANDESK
1.4.868	MICROSOFT FRAMEMAKER FAILS ON PS/2 9576/9577
1.4.869	MICROSOFT SYSTEM CERTIFICATION TESTS HANG SYSTEM
1.4.870	MODEM FAILS ON COM 4 W/WINDOWS 95 & PC 700
1.4.871	MONITOR APPEARS TO BOOT IN 40 COLUMN MODE
1.4.872	MONITOR BLANK, NO GREEN LED, DOES NOT WAKE UP

1.4.873	MONITOR BLANKS ON SERVER 295
1.4.874	MONITOR CARD TRAY SLIDER & ON/OFF BUTTON
1.4.875	MONITOR DISPLAYS a WHITE SCREEN DURING POST
1.4.876	MONITOR DISPLAYS CHANGING OR INCONSISTENT SCREEN COLORS
1.4.877	MONITOR DOES NOT ADJUST SATISFACTORILY
1.4.878	MONITOR EXHIBITS BLINKING ON 9576 AND 9577
1.4.879	MONITOR FAILURE WHEN USING PS/VP WITH S3 VIDEO
1.4.880	MONITOR JITTER WHEN ATTACHED TO 9576 OR 9577
1.4.881	MONITOR KEYPAD DOES NOT OPERATE PROPERLY
1.4.882	MONITOR LOOSES TOUCH FUNCTION
1.4.883	MONITOR MAY NOT DISPLAY HIGH RESOLUTION MODE
1.4.884	MONOCHROME MONITOR FAILS TO DISPLAY 16 GREY SHADES
1.4.885	MOUSE CURSOR IS ERRATIC OR LOCKED AFTER APM WAKEUP
1.4.886	MOUSE FAILS EXITING POWER MANAGEMENT IN WINDOWS 3.X
1.4.887	MOUSE FAILS ON VALUEPOINT
1.4.888	MOUSE FAILS TO FUNCTION UNDER DOS MERGE W/AIX 1.1 OR 1.2
1.4.889	MOUSE IS NOT DETECTED DURING POST
1.4.890	MULTIMEDIA SYSTEM HANGS W/"TALK-TO PLUS"
1.4.891	MULTIPLE DDD DRIVES ON PC-SERVER 320/500/520/720
1.4.892	MULTIPLE PNP ADAPTERS NOT RECOGNIZED BY OS/2 WARP 4
1.4.893	MULTIPLE 8554 VOLTAGE CONVERTER FAILURES
1.4.894	MWAVE MODEM NOT DETECTED BY CLOSEUP V6.0
1.4.895	NEC CDR250 CDROM NOT RECOGNIZED IN PC 300
1.4.896	NETFINITY ERROR&COLON. UNABLE TO COMMUNICATE W/BROWSER BASE
1.4.897	NETFINITY FOR WINDOWS95 INSTALLATION FAILS FROM THE RTC
1.4.898	NETFINITY RAID DRIVE INFORMATION IS DISPLAYED INCORRECTLY
1.4.899	NETFINITY V2.01 ERROR, "UNABLE TO CONNECT NETBASE.EXE"
1.4.900	NETFINITY 3500&COLON. SCO OPENSERVENET INSTALL REQUIRES BIOS FLASH
1.4.901	NETFINITY 3500&COLON. SYSTEM HANGS WHEN BOOTING SERVERGUIDE CD#2
1.4.902	NETFINITY 3500&COLON. SYSTEM HANGS/NO VIDEO AFTER 333MHZ UPGRADE
1.4.903	NETFINITY 7000&COLON. COOLING FAILURE LIGHT BLINKS SLOWLY
1.4.904	NETFINITY 7000&COLON. FRONT PANEL DISPLAYS UNREADABLE CHARACTERS
1.4.905	NETFINITY 7000&COLON. POWER FAIL LED BLINKS AFTER REPLACING P.S.
1.4.906	NETWARE LAN FAILURE WITH PS/2 IBM ETHERNET ADAPTER/A
1.4.907	NETWARE 3.12&COLON. LOST HARDWARE INTERRUPT
1.4.908	NETWARE 3X / 4X WILL NOT AUTO REGISTER >16MB OR >64MB RAM
1.4.909	NETWARE 4.11 HANGS DURING INSTALL VIA SOME IDE CD-ROMS
1.4.910	NETWORK SERVER MODE LOST
1.4.911	NETWORK SERVER MODE LOST
1.4.912	NETWORKING ERRORS W/HP J2585A PCI 10/100 ADAPTER
1.4.913	NEW STYLE MOUSE REQUIRES ADJUSTMENT OF I/O PANEL
1.4.914	NE2000 ADAPTER HANGS ON 2C_STRSC NDIS TEST SCRIPT
1.4.915	NE2000 ETHERNET FAILS IN PC 300 6588/6888
1.4.916	NO DISPLAY AND SOLID HDD LED.
1.4.917	NO DISPLAY,1-2-2 BEEP CODE AFTER REPLACING BOARD
1.4.918	NO ERROR MESSAGE IF VIDEO TEST FAILS IN QAPLUS/2
1.4.919	NO HELP TEXT DURING ETHERNET DRIVER INSTALLATION
1.4.920	NO VIDEO ON PC 700 MICROCHANNEL W/MATROX VIDEO ADAPTER
1.4.921	NO VIDEO ON PC 700 WITH XGA-2 ADAPTER INSTALLED
1.4.922	NO VIDEO OR VIDEO FADES ON PC SERVER 320/520
1.4.923	NO VIDEO OR 210 POST ERROR IN PC 300 W/32MB
1.4.924	NO VIDEO W/ MICRO CHANNEL VIDEO ADAPTER
1.4.925	NO VIDEO W/CORNERSTONE ACCEL/2 ADAPTER INSTALLED
1.4.926	NO VIDEO W/DIAMOND VIPER VIDEO CARD
1.4.927	NO VIDEO W/MATROX VLB VIDEO ADAPTER IN PS/VALUEPOINT
1.4.928	NO VIDEO/SYSTEM HANG WITH KURTA VIDEO ADAPTER
1.4.929	NOISE FROM THE 3545 WHEN a SYSTEM IS INSTALLED.
1.4.930	NON-FUNCTIONAL ICONS ON OS/2 LAUNCHPAD
1.4.931	NOVELL FAILS TO INSTALL ON 64XX W/540MB HARDFILE
1.4.932	NOVELL NETWARE - SLUGGISH PRINTER OUTPUT
1.4.933	NOVELL NETWARE FAILS ON MAXTOR 540MB SCSI DISKS
1.4.934	NOVELL NETWARE FAILS ON PS/2 8535/8540 SYSTEMS
1.4.935	NOVELL NETWARE LOST HARDWARE INTERRUPTS
1.4.936	NOVELL UNIXWARE 1.1 FAILS TO INSTALL FROM CDROM
1.4.937	NUMBER 9 VIDEO CONFIGURATION FOR OS/2 WARP SERVER V4 SMP
1.4.938	N51 HANGS AFTER a SUSPEND / RESUME OPERATION.
1.4.939	OBI ISA 33.6 MODEM INTERFERES WITH ADJACENT ADAPTER
1.4.940	OEM MONITOR FAILS ON PC 300/700 SYSTEMS
1.4.941	OEM, PACIFIC RIM SYSTEMS* EXT DSKT DRIVE FAILURES
1.4.942	ON-BOARD DIAGNOSTICS FAILS CONTINUOUS LOOP TEST
1.4.943	ONBOARD ETHERNET CONTROLLER RIPL DOES NOT ABORT
1.4.944	OPERATING SYSTEMS USING A BIOS FAIL TO ACCESS FIXED DISK
1.4.945	OPTICAL WRITABLE DVCE DRVR WILL NOT LOAD WITH IBM CD-ROM
1.4.946	ORCHID CD-ROM FAILS IN 6381/SI
1.4.947	OS/2 DUMP FAILS WITH CP-6E IN THE INFORMATION PANEL
1.4.948	OS/2 FDISK ERRORS ON IDE DRIVES LARGER THAN 4.0GB
1.4.949	OS/2 HANGS ON REBOOT AFTER RESOLUTION CHANGE
1.4.950	OS/2 SCREEN TOGGLES CAUSE VIDEO CORRUPTION
1.4.951	OS/2 SYSTEM HANG W/TOKEN RING & MATROX MGA CARD
1.4.952	OS/2 TRAP 0002 ERRORS OCCUR DURING 6157 TAPE BACKUP
1.4.953	OS/2 VIDEO ERROR MSG RUNNING LOTUS 123
1.4.954	OS/2 WARP CONNECT DESKTOP & ICONS DISTORTED
1.4.955	OS/2 WARP CONNECT HANGS AT BOOT ON IBM PC
1.4.956	OS/2 WARP SERVER V4 SMP DESKTOP&COLON. FAINT LINE REMAINS

1.4.957	OS/2 WON'T INSTALL ON 8580 W/486DX UPGRADE
1.4.958	OS/2 2.1 INSTALL FAILS W/ISA CD-ROM DRIVE
1.4.959	OS/2 2.1 INSTALL FAILS W/ISA CD-ROM DRIVE
1.4.960	OS/2 3.0 INSTALL IS SLOW, OR HANGS ON SCSI MODELS
1.4.961	PAGE FAULT ERRORS VIEWING THE COSESSION USER'S GUIDE
1.4.962	PANASONIC CD-ROM FAILS IN PC300/700
1.4.963	PARALLEL PORT OPERATIONS ON IML SYSTEMS
1.4.964	PARITY ERRORS WITH EYECOM SOFTWARE
1.4.965	PC DOCTOR DIAGNOSTICS SKIPS / HANGS TESTING WITH TAPE DRIVE
1.4.966	PC DOCTOR DIAGNOSTICS SKIPS / HANGS TESTING WITH TAPE DRIVE
1.4.967	PC DOCTOR MISIDENTIFIES PENTIUM II PROCESSORS
1.4.968	PC NETWORK ADAPTER ERROR AFTER AUTO-CONFIG
1.4.969	PC SERVER RUNS SLOW WHILE MIRRORING WITH NETWARE
1.4.970	PC SERVER SERVERAID ADAPTER CONFIGURATION ERROR
1.4.971	PC SERVER 300&COLON. BIOS ERRORS WITH ADAPTEC 2940W AT BIOS 1.19S8
1.4.972	PC SERVER 310 HANGS WHEN ACCESSING SCSESELECT UTILITY
1.4.973	PC SERVER 310 TRAPS WITH ISA ETHERJET ADAPTER
1.4.974	PC SERVER 310&COLON. WINDOWS NT 4.0 INSTALLATION
1.4.975	PC SERVER 315 EXPERIENCING INTERMITTENT VIDEO FAILURES
1.4.976	PC SERVER 315 HANGS AT <CTRL-A> PROMPT DURING BOOT.
1.4.977	PC SERVER 315&COLON. POWER-UP PROBLEM.
1.4.978	PC SERVER 320 PROCESSOR UPGRADE INSTALLATION ERROR
1.4.979	PC SERVER 320/520&COLON. OS/2 MAY TRAP AFTER REPLACING VIDEO CARD
1.4.980	PC SERVER 325 / 330 SLOW SYSTEM BOOT UP TIME
1.4.981	PC SERVER 325&COLON. A.S.M.A. LOGS / REPORTS FALSE FAN FAILURES
1.4.982	PC SERVER 325/330 LOST HARDWARE INTERRUPT WITH NETWARE 3X/4X
1.4.983	PC SERVER 325/330 NT RE-ENABLES ONBOARD CONTROLLERS
1.4.984	PC SERVER 325/330 ONBOARD ETHERNET CONTROLLER FAILS
1.4.985	PC SERVER 325/330 ONBOARD ETHERNET FAILS W/ DRIVERS.
1.4.986	PC SERVER 325/330 OS/2 INSTALL HANGS AT CHECKPOINT 7F
1.4.987	PC SERVER 325/330 TRAP / HANG WITH 128MB DIMM
1.4.988	PC SERVER 325/330 8X CD-ROM WON'T EJECT
1.4.989	PC SERVER 325/330&COLON. SOME SERIAL PORT RESOURCE SETTINGS FAIL
1.4.990	PC SERVER 325/330&COLON. NT INSTALL FAILS WITH SERVERAID II
1.4.991	PC SERVER 325/330&COLON. CONFIGURING MEMORY RESOURCES FOR A.S.M.A.
1.4.992	PC SERVER 330 HANGS DURING NETWORK OPSYS INSTALLATION
1.4.993	PC SERVER 330&COLON. BOOT ERROR AFTER ADDING SERVERAID II_ADAPTER
1.4.994	PC SERVER 330&COLON. INTERMITTENT RAID PROBLEMS
1.4.995	PC SERVER 520 RESPONDS SLOW, CLIENTS LOSE CONNECTION
1.4.996	PC SERVER 704 ABEND&COLON. DIVIDE BY ZERO EXCEPTION
1.4.997	PC SERVER 704 HANGS WITH PCI BRIDGE TO BRIDGE ADAPTERS
1.4.998	PC SERVER 704 PARALLEL PORT NOT FUNCTIONING IN EPP/ECP MODE.
1.4.999	PC SERVER 704 POST ERROR 0303 (ECC SIMMS INCOMPATIBLE)
1.4.1000	PC SERVER 704 RAID DRIVES FAIL TO FORMAT
1.4.1001	PC SERVER 704 TRAPS, HANGS, OR REBOOTS
1.4.1002	PC SERVER 704&COLON. FALSE CPU FAILURE AT POST
1.4.1003	PC SERVER 704&COLON. SYS0281 DURING BOOT OF WARP SERVER SMP
1.4.1004	PC SERVER 704&COLON. 0176, 0177, 0178, 0179 POST ERRORS
1.4.1005	PC SERVER 720 HANGS WITH PEERMASTER OR ARTIC ADAPTERS
1.4.1006	PC SERVER 720 HANGS WITH WINDOWS NT SERVER
1.4.1007	PC 100 FAILS TO REMOTE IPL W/3COM 3C509-B CARD
1.4.1008	PC 100 SETUP INCORRECTLY SHOWS 2 CDROM DRIVES
1.4.1009	PC 300 FAILS TO FORMAT a 1.44MB DISKETTE
1.4.1010	PC 300 FAILS TO LOAD S3 TRIO64 VIDEO DRIVERS
1.4.1011	PC 300 HARDFILES ENTER APM MODE PREMATURELY
1.4.1012	PC 300 REBOOTS OR BOOTS TO SETUP UTILITY
1.4.1013	PC 300 6576/6586 FAILS TO BOOT W/FVC ATM ADAPTER
1.4.1014	PC 300 6576/6586 W/WINDOWS95 BOOTS TO SETUP UTILITY
1.4.1015	PC 300 6586 FAILS TO POWER ON WITH 220V
1.4.1016	PC 300/700 ERRORS WITH PCI LAN CARD INSTALLED
1.4.1017	PC 300/700 FAILS TO BOOT W/CORNERSTONE IMAGEACCEL CARD
1.4.1018	PC 300/700 FAILS TO DISPLAY GRAY SHADES W/4707
1.4.1019	PC 300/700 MAY FAIL TO CONNECT AT 57.6 BAUD RATE
1.4.1020	PC 300GL SYSTEM DOES NOT BOOT AFTER POWER-ON
1.4.1021	PC 360 6598 HANGS DURING RIPL TO AN OS/2 WARP SERVER
1.4.1022	PC 700 FAILS TO BOOT AFTER UPDATING FLASH BIOS
1.4.1023	PC 700 FAILS TO PRINT GRAPHICS
1.4.1024	PC 700 FAILS TO RIPL W/ADAPTEC 2940 SCSI CARD
1.4.1025	PC 700 FAILURES AFTER INSTALLING MICROCHANNEL BUS
1.4.1026	PC 700 HANGS WHEN FULLY POPULATED WITH ADAPTERS
1.4.1027	PC 700 IPL'S WHEN THE AC LINE CORD IS ATTACHED
1.4.1028	PC-DOCTOR DRIVE INFORMATION IS INCORRECT
1.4.1029	PC/300 OR PC/700 FAILS TO POWER OFF OR ON
1.4.1030	PC/300 OR PC/700 RECURRING DISK NOISE
1.4.1031	PCI ADAPTERS FAIL AFTER WARM BOOT IN PC 300/700
1.4.1032	PCI RAID SERVER TRAPS OR HANGS INTERMITTENTLY
1.4.1033	PCI SCSI DEVICES ARE NOT RECOGNIZED.
1.4.1034	PCI TOKEN RING ADAPTER FAILURE IN 8640
1.4.1035	PCI VIDEO ADAPTERS FAIL IN SECONDARY PCI SLOTS
1.4.1036	PCI 100MBPS ETHERNET ADAPTERS FAIL IN 6899
1.4.1037	PCI/EISA SERVER DOESN'T RECOGNIZE 1.44MB DISKETTES
1.4.1038	PCI/EISA SERVER HANGS WITH IBM 100/10 ETHERNET ADAPTER
1.4.1039	PCI/MCA SERVER HANGS WITH IBM 100/10 ETHERNET ADAPTER
1.4.1040	PCMCIA SERIES II ADAPTERS FAILS IN 9576/77

1.4.1041	PCSERVER 300 (8640) TRAP 0002'S AND HANGS
1.4.1042	PC300 AND PC700 GARBLED SOUND OR CHOPPY VIDEO
1.4.1043	PC300 PENTIUM, PC700, & 64XX SERIAL PORT ERRORS
1.4.1044	PC300 W/COLORADO TAPE DRIVE HANGS OR REBOOTS
1.4.1045	PC300 6576 OR 6586 SYSTEM BOARD APPEARS DEAD
1.4.1046	PC300/700 & VALUEPOINT ERRATIC MOUSE OPERATION
1.4.1047	PC300/700 SERIAL DEVICE RESPONDS DURING POST
1.4.1048	PC300, PC700 REAR PANEL INTERFERES WITH I/O CABLES
1.4.1049	PC SERVER 720&COLON. INSTALLING LONG ADAPTERS
1.4.1050	PC700 EMITS HIGH PITCHED NOISE
1.4.1051	PC700 HANGS AFTER INSTALLING SYSTEM BOARD
1.4.1052	PC700 HANGS USING BUSINESS AUDIO WITH OS/2
1.4.1053	PD/CD ROM DRIVE FAILS IN WINDOWS 3.1
1.4.1054	PERSONAL SYSTEM/2 FAILS TO READ SOME 720KB PROGRAM DISKETTES
1.4.1055	PLANAR BOARD DIAGNOSTICS HANG WITH DIAGNOSTIC LEVEL 1.03
1.4.1056	POSSIBLE DRIVE FAILURES IN 3518/3519 ENCLOSURE
1.4.1057	POST ERROR CODE 200001 ON THINKPAD 300
1.4.1058	POST ERRORS OR NO VIDEO IN IBM PC300XL SYSTEMS
1.4.1059	POST OR CONFIGURATION ERRORS W/ SERVERGUARD INSTALLED
1.4.1060	POST 8603 ERROR ON MOD A21 WHEN USING MICRO-SOFT MOUSE
1.4.1061	POTENTIAL DATA MODIFICATION W/NETFINITY
1.4.1062	POTENTIAL DISKETTE EJECTION PROBLEMS WITH OLD STYLE BEZEL
1.4.1063	POTENTIAL UNDETECTED DATA MODIFICATION ON 9585
1.4.1064	POWER MANAGEMENT FAILS WITH IBMIDECD.SYS LOADED
1.4.1065	POWER SUPPLY "FAILS" AFTER ADDING FIXED DISK OPTIONS
1.4.1066	POWER-ON PASSWORD CAN'T BE RESET
1.4.1067	POWER-ON VIDEO/SYSTEM FAILURE IN IBM PC300PL MODEL 6562
1.4.1068	POWER-ON VIDEO/SYSTEM FAILURE IN IBM PC300PL
1.4.1069	POWERPC FAILS TO BOOT FROM 1GB WITH WINDOWSNT
1.4.1070	POWERPOINT SLIDE SHOW IN BLACK/WHITE UNDER OS/2 WARP
1.4.1071	PREVENT FALSE DDD ERRORS ON SERVER HARD DRIVES
1.4.1072	PROBLEMS USING WORDPERFECT ON VALUEPOINT 64XX
1.4.1073	PROBLEMS USING WORDPERFECT ON VALUEPOINT 63XX
1.4.1074	PROCESSOR TYPE IS INCORRECT IN NETFINITY
1.4.1075	PROGRAM MANAGER MENU BAR TURNS BLACK AFTER OPEN_GL DEMO
1.4.1076	PROSET DIAGNOSTICS FAILS LOOPBACK TEST
1.4.1077	PROSHARE UNINSTALL DOES NOT REMOVE ALL FILES
1.4.1078	PS/VALUEPOINT FAILS REMOTE PRINTING W/HP DESKJET
1.4.1079	PS/VALUEPOINT WILL NOT POWER ON OR POWER OFF
1.4.1080	PS/VP POST ERROR 12904, HANG, OR LOOP
1.4.1081	PS/2 "E" MACHINE ERROR CODES 301 303 305
1.4.1082	PS/2 BOOTS TO BASIC WITHOUT "INSERT DISKETTE" ICON
1.4.1083	PS/2 FAXCONCENTRATOR FAILS TO CONNECT TO REMOTE FAX MACHINE
1.4.1084	PS/2 HANGS OR VIDEO CORRUPTION W/IMAGE-I ADAPTER/A
1.4.1085	PS/2 INTERMITTENTLY HANGS WITH CONTINUOUS BEEPING
1.4.1086	PS/2 MODEL 8556 & 8557 DISPLAY a 161 BATTERY ERROR
1.4.1087	PS/2 OR VALUEPOINT DISKETTE DRIVE FAILURES
1.4.1088	PS/2 SERVER 95A (9595A) HANGS DURING WARM BOOT
1.4.1089	PS/2 SYSTEM HANGS WHEN EXITING WRITING ASSISTANT
1.4.1090	PS/2 WORKSTATION FAILS TO RPL ON ETHERNET NETWORK
1.4.1091	PS/2 8535/40 EXHIBIT SYSTEM HANG WITH IRMA 3T CARD INSTALLED
1.4.1092	PS/2 8555 486SLC UPGRADE PERFORMANCE FAILURE
1.4.1093	PS2 CHANNEL TIMEOUTS, FIXED DISK AND MEMORY PARITY ERRORS
1.4.1094	P50 MONITOR IMAGE IS SHIFTED TO THE RIGHT
1.4.1095	P60/D HANGS RUNNING DOS APPLICATIONS UNDER OS/2
1.4.1096	QAPLUS/PRO V5.44 FAILS TO RUN MULTIPLE LAPS
1.4.1097	QAPLUS/WIN-WIN FAILS MOUSE TEST ON PC 340 6560
1.4.1098	QAPLUS/WIN-WIN FAILS TO PRINT IN WINDOWS95
1.4.1099	QAPLUS/WIN-WIN INCORRECTLY DISPLAYS 109 KEY KEYBOARD
1.4.1100	QAPLUS/WIN-WIN QUICK TEST LOOPS ON PC 700
1.4.1101	QAPLUS/2 FAILS TO PRINT THE TEST PAGE
1.4.1102	RAID DISK DRIVES SHOW DDD (DEFUNCT)
1.4.1103	RAID FIXED DISKS CONFIGURATION & READY PROBLEMS
1.4.1104	RAID SERVER DOES NOT BOOT TO CORRECT OPERATING SYSTEM
1.4.1105	READ ERRORS WITH IBM 2X IDE CDROM DRIVE
1.4.1106	READY-TO-CONFIGURE CDROM (RTC) ERROR UNDER DOS/WINDOWS
1.4.1107	RECORD NUMBER H122991 HAS REPLACED THIS TIP
1.4.1108	RECOVERY BOOT DISKETTE REPEATEDLY REQUESTS CD TYPE
1.4.1109	REINSTALLATION OF QAPLUS/2 FAILS ON PC 700
1.4.1110	REMOTE INSTALL OF WINDOWSNT FAILS W/ETHEREXPRESS
1.4.1111	RESOURCE CONFLICTS WITH SHARED INTERRUPTS RUNNING NETWORK
1.4.1112	RIGHT ALT KEY NOT FUNCTIONAL WITH DOS 3.30
1.4.1113	RIPL ABORT <HOME> KEY DOES NOT STOP RIPL PROCESS
1.4.1114	RMP INOPERABLE MESSAGE DURING BOOT
1.4.1115	RPL ERRORS WITH ONBOARD ETHERNET UNDER OS/2 WARP 3.0/4.0
1.4.1116	RTC CDROM SCSI DRIVER INSTALLATION FAILS
1.4.1117	SAFE RECOVERY MESSAGE DURING INITIAL BOOT OF PC 300
1.4.1118	SAP INSTALLATION ON PC 300 TAKES UP TO 30 MINUTES
1.4.1119	SCANDINAVIAN INTERGRAPH INFO TAB IS IN ENGLISH
1.4.1120	SCANDISK REQUIRED AFTER APM SHUTDOWN ON IBM PC
1.4.1121	SCANNER FAILS WITH SCSI-2 ADAPTER
1.4.1122	SCO UNIX FAILS TO INSTALL ON a PC SERVER 310
1.4.1123	SCO UNIX INSTALLATION FAILURES
1.4.1124	SCO XENIX, SCO UNIX AND SCO OPEN DESKTOP INCOMPATIBILITY

1.4.1125	SCROLLING CHARACTERS/TRAPS WITH OS/2 V 2.XX
1.4.1126	SCSI BIOS ERROR&COLON. "SCSI TERMINATION NOT FOUND"
1.4.1127	SCSI DISK FORMAT FAILURES
1.4.1128	SCSI FIXED DISK LOW LEVEL FORMAT FAILS
1.4.1129	SCSI-2 OPTION INSTALLATION IN 9595A RAID SYSTEM
1.4.1130	SDLC COMMUNICATION ERRORS ON 3545 DOCK I
1.4.1131	SEAMLESS APPLICATIONS HANG UNDER OS/2 2.11
1.4.1132	SECOND ADAPTEC SCSI ADAPTER NOT RECOGNIZED IN M/T 6898
1.4.1133	SECOND DISKETTE DRIVE NOT SEEN IN 6588/6888 SETUP
1.4.1134	SECONDARY IDE PORT NOT PRESENT AFTER WIN95 REBOOT
1.4.1135	SECTOR NOT FOUND ERRORS W/360KB DISKETTES IN 6381
1.4.1136	SECURITY ERROR NOT POSTED BY PC-730
1.4.1137	SERIAL PORT ERRORS (DATA, DEVICE, OR DRIVERS)
1.4.1138	SERIAL PORT FAILURES ON 6381 & 6384 P60/D
1.4.1139	SERIAL PORT ON 8550 SYSTEM BOARD MAY NOT FUNCTION
1.4.1140	SERIAL PORT OPERATIONS ON IML SYSTEMS
1.4.1141	SERVER BACKPLANE ADDRESS JUMPER CONFIGURATION
1.4.1142	SERVER HANGS W/ BLACK SCREEN WHEN USING "ADMCHART"
1.4.1143	SERVER HANGS WITH CDROM AND NOVELL NETWARE
1.4.1144	SERVER HANGS WITH PCI SCSI ADAPTER INSTALLED.
1.4.1145	SERVER RAID DRIVES DDD WITH ARCSERVE TAPE BACKUP
1.4.1146	SERVER SERVICE ERROR AFTER NETWORKING INSTALLATION
1.4.1147	SERVER WON'T POWER OFF WITH ADV SYS MGMT OPT INSTALLED
1.4.1148	SERVER 300 HANGS
1.4.1149	SERVER 310 HANGS WITH INTEL ETHEREXPRESS ADAPTER
1.4.1150	SERVER 320 & 520 ERRONEOUS CONFIGURATION ERROR MESSAGE
1.4.1151	SERVER 320 DUAL PROCESSOR NETWORKING FAILURES W/ETHERNET
1.4.1152	SERVER 320 FAILS TO LOAD WINDOWS NT 3.51
1.4.1153	SERVER 320 FAILS W/TRAP 000D TRAP 000E W/OEM ADAPTER
1.4.1154	SERVER 320 HANGS RUNNING OS/2 SMP OR OS/2 WARP
1.4.1155	SERVER 320 HANGS W/ADAPTEC SCSI CARD
1.4.1156	SERVER 320 HARD DRIVES LOSE POWER OR HANG
1.4.1157	SERVER 320 TRAPS WITH 8 PARITY SIMMS INSTALLED
1.4.1158	SERVER 320 TRAPS/HANGS WITH NEC 32MB PARITY SIMM
1.4.1159	8556/57 FAILS WITH "STB" OEM VIDEO ADAPTER
1.4.1160	SERVER 320/520 HANGS BOOTING DIAGS OR SERVERGUIDE
1.4.1161	SERVER 320/520 MICROCHANNEL PARITY MEMORY TRAPS
1.4.1162	SERVER 320/520 PCI/EISA WON'T ACCEPT BIOS FLASH
1.4.1163	SERVER 320/520 SERVERGUIDE INSTALLATION FAILS OR HANGS
1.4.1164	SERVER 320/520 TRAPS AFTER CACHE UPGRADE
1.4.1165	SERVER 325/330 HANG AT POST WITH PCI ARTIC ADAPTER
1.4.1166	SERVER 325/330 HARD DRIVE IN-USE LED NOT FLASHING
1.4.1167	SERVER 500 DIAGNOSTIC ERROR WITH 851X MONITOR ATTACHED
1.4.1168	SERVER 500 DIAGNOSTIC HANG
1.4.1169	SERVER 500 MICROCHANNEL RAID DRIVES DDD, CABLE INSTRUCTIONS
1.4.1170	SERVER 500 S/390 - FALSE PROCESSOR DIAGNOSTIC ERROR
1.4.1171	SERVER 500 WARP VIDEO INSTALLATION
1.4.1172	SERVER 520 BOOTS AS a SERVER 320
1.4.1173	SERVER 520 PCI RAID DRIVES DDD&COLON. CABLE INSTRUCTIONS
1.4.1174	SERVER 704 RAID TIMEOUT WITH MICROSOFT EXCHANGE SERVER
1.4.1175	SERVER 704 TRAPS OR HANGS DURING OS INSTALLATION
1.4.1176	SERVER 720 (133MHZ AND 166MHZ) PANIC WITH SCO SMP
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1.4.1180	SERVER 720 HANGS AT CP 69 AFTER PLANAR REPLACEMENT
1.4.1181	SERVER 720 HANGS WITH SERVERAID AND/OR PCI TOKEN RING
1.4.1182	SERVER 720 RUNNING SCO DISPLAYS PANIC OR WARNING
1.4.1183	SERVER 720 RUNS SLOW AFTER RUNNING DIAGNOSTICS
1.4.1184	SERVER 720 WON'T BOOT AFTER FLASHING TO BIOS 10
1.4.1185	SERVERAID ADAPTERS&COLON. ERRORS RUNNING 2.23 RAID UTILITY
1.4.1186	SERVERGUARD DIAGNOSTIC FAILURES
1.4.1187	SERVERGUIDE 4.01&COLON. SOFTWAREGUIDE CD HANGS IN PC SERVER 325
1.4.1188	SERVERGUIDE/NETWARE V4.02 INSTALLATION
1.4.1189	SETUP READ.ME ERROR INSTALLING INFRARED PDA DRIVERS FROM RTC
1.4.1190	SHRINKWRAP NT4.0 TRAPS WITH SERVICE PACKS 2 AND 3
1.4.1191	SIMPLY SPEAKING DOES NOT UNINSTALL IN WINDOWS NT 3.51
1.4.1192	SLOW LAN PERFORMANCE W/RACAL ETHERBLASTER & 6381
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1.4.1194	SMC ETHEREZ ADAPTER FAILS IN 6899
1.4.1195	SMC 10/100 ETHERNET DIAGNOSTIC FAILURE
1.4.1196	SOME OEM ADAPTERS MAY FAIL TO FUNCTION IN 8535/8540 SYSTEMS
1.4.1197	SONY 17SEII DISPLAY NOT SEEN AS DDC COMPLIANT
1.4.1198	SOUNDBLASTER AWE32 DRIVER FAILS TO LOAD
1.4.1199	SOUNDPIPER 16 MICRO CHANNEL ADAPTER FAILS IN PC 700
1.4.1200	SPACE SAVER KEYBD INACTIVE KEYS
1.4.1201	SPURIOUS CHARACTERS ON SCREEN
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1.4.1203	SYS HANGS WITH PC NETWORK ADAPTER II/A AND ARTIC INSTALLED
1.4.1204	SYSTEM BOOT/HANG FAILURES W/IBM (ADAPTEC) PCI SCSI-2
1.4.1205	SYSTEM DISPLAYS UNEXPECTED GRAPHICS & HANGS
1.4.1206	SYSTEM FAILS TO BOOT FROM THE CD-ROM
1.4.1207	SYSTEM FAILS TO START POST AFTER POWER-ON
1.4.1208	SYSTEM FAILURES WITH 16MB ECC MEMORY INSTALLED

1.4.1209	SYSTEM HANG ACCESSING SELECTIVE INSTALL WITH WARP
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1.4.1211	SYSTEM HANG AFTER INSTALLING OS/2 S3 DRIVERS
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1.4.1217	SYSTEM HANG DURING FILE TRANSFER W/IBM ETHERNET
1.4.1218	SYSTEM HANG DURING FLASH BIOS UPDATE
1.4.1219	SYSTEM HANG DURING IPL W/3COM 3C509B ADAPTER
1.4.1220	SYSTEM HANG DURING OS/2 WARP 4 NETWORK INSTALL
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1.4.1224	SYSTEM HANG IN WINDOWS W/8MB PARITY MEMORY SIMM
1.4.1225	SYSTEM HANG IN WINDOWS W/ETHERNET 10/100 ADAPTER
1.4.1226	SYSTEM HANG IN WINDOWS W/WANG WINLOC CARD
1.4.1227	SYSTEM HANG INSTALLING WINDOWS NT FROM CDROM
1.4.1228	SYSTEM HANG ON INITIAL BOOT TO WINDOWSNT 3.51
1.4.1229	SYSTEM HANG ON PC 700 WITH 256KB L2 CACHE
1.4.1230	SYSTEM HANG ON 8590/95 W/IMAGE ADAPTER/A & OS/2 2.0
1.4.1231	SYSTEM HANG OR TRAP 000D LOADING OS/2
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1.4.1234	SYSTEM HANG PRINTING REPORTS W/QAPLUS/PRO 5.32
1.4.1235	SYSTEM HANG RUNNING MS EXCEL WITH OS/2 WARP CONNECT
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1.4.1241	SYSTEM HANG USING LOTUS 3.1 ON 6384
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1.4.1244	SYSTEM HANG W/DIAMOND VIPER VLB ADAPTER IN PC 300
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1.4.1246	SYSTEM HANG WHEN DEVICES ARE ADDED/REMOVED ON SCSI ADAPTER(S)
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1.4.1249	SYSTEM HANG WITH QAPLUS/PRO AT CDROM LINEAR ACCESS TEST
1.4.1250	SYSTEM HANG/DISTORTED VIDEO BOOTING OS/2
1.4.1251	SYSTEM HANG/DIVIDE BY 0 ERROR USING PROCMM PLUS
1.4.1252	SYSTEM HANGS & GPF'S IN WINDOWSNT W/ADAPTEC AVA-1515
1.4.1253	SYSTEM HANGS & TRAP ERRORS IN PC300
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1.4.1261	SYSTEM HANGS USING OS/2 TO FORMAT a SECOND HARDFILE
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1.4.1264	SYSTEM HANGS W/ TOKEN RING & VIDEO ADAPTER INSTALLED
1.4.1265	SYSTEM HANGS W/DOS 6.3 AND PCI NETWORK ADAPTERS
1.4.1266	SYSTEM HANGS WITH a CORNERSTONE IMAGEACCEL ADAPTER
1.4.1267	SYSTEM HANGS WITH BUSLOGIC SCSI ADAPTERS IN WINDOWS NT
1.4.1268	SYSTEM HANGS WITH DISTORTED VIDEO AFTER WINDOWS LOGO
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1.4.1271	SYSTEM HANGS WITH 5250 EMULATION
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1.4.1274	SYSTEM HANGS, PERSONAL/370 ADAPTER/A INSTALLED
1.4.1275	SYSTEM INFORMATION TOOL "USING HELP" FUNCTION FAILS
1.4.1276	SYSTEM INFORMATION TOOL "USING HELP" FUNCTION FAILS
1.4.1277	SYSTEM LOCKS UP WITH 110 ERROR OR TRAP 0002 / TRAP 000C
1.4.1278	SYSTEM LOSES CONNECTION W/3COM 3C59X ETHERNET CARDS
1.4.1279	SYSTEM REBOOTS ON POWER OFF, DRAINS BATTERY
1.4.1280	SYSTEM TRAPS OR HANGS AFTER SETUP IS MODIFIED
1.4.1281	SYSTEM TRAPS/HANGS WITH 16MB OKI PARITY SIMM INSTALLED
1.4.1282	SYSTEM W/INTERNAL TAPE BACKUP MAY HANG OR REBOOT
1.4.1283	SYSTEM WILL NOT BOOT AFTER REPLACING SYSTEM BOARD
1.4.1284	SYSTEM WON'T BOOT THE OPERATING SYSTEM AFTER PROCESSOR SWAP
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1.4.1286	SYSTEM 36/38 WORKSTATION EMULATION ADAPTER (5250 EMULATION)
1.4.1287	SYS1217 ERROR WHEN USING OS/2 SELECTIVE INSTALL
1.4.1288	SYS2170 ERROR IN NETVIEW DM CID INSTALL OF S3 DRIVERS
1.4.1289	SYS3175 ERROR RUNNING COMM MANAGER/2 1.11 W/WARP
1.4.1290	SYS3175 ERROR USING SYSTEM INFORMATION TOOL IN WARP
1.4.1291	TAPE BACKUPS OF COMPRESSED FILES MAY FAIL
1.4.1292	TAPE CANNOT BE FORMATTED USING ARCSERVE V5.X AND NETWORK

1.4.1293	TAPE SECURING SCSI CONNECTORS MAY CAUSE HARD DRIVE FAILURES
1.4.1294	TCP/IP CONFLICT W/KEYWOOD & IBM INTERNET CONNECTION
1.4.1295	TEST PATTERN NOT SEEN AT 640X480@60HZ INTERLACED RESOLUTION
1.4.1296	TESTING PC SERVER 720 PROCESSORS (8642)
1.4.1297	TEXAS INSTRUMENTS MODEL 885 PRINTS GARBAGE
1.4.1298	TEXAS INSTRUMENTS 885 COMMON SYMPTOMS AND SOLUTIONS
1.4.1299	TEXAS INSTRUMENTS 885 DOUBLE SPACES AFTER EACH LINE PRINTED
1.4.1300	TEXT FILE PRINTING ERRORS FROM WINDOWS95 DOS WINDOW
1.4.1301	THE SYSTEM HANGS/DEVICE DRIVER WON'T BIND TO NETWORK PROTO.
1.4.1302	THINKPAD MWAVE EXPERIENCES AUDIO CD SOUND CLIPPING.
1.4.1303	THINKPAD SPEAKER NOISE WITH DATA/FAX MODEM INSTALLED
1.4.1304	THINKPAD SUSPEND RESUME PROBLEM WHEN USING WARP 4.
1.4.1305	THINKPAD WITH OS/2 2.11. SUSPEND LOCKS UP SYSTEM
1.4.1306	THINKPAD 340CSE - BATTERY CHARGING
1.4.1307	THINKPAD 510 PAGE FAULT ERROR
1.4.1308	THINKPAD 700C POST ERROR CODES 00019104 AND 00019111
1.4.1309	THINKPAD 750 MAP FALLOUT FOR "NO BEEP"
1.4.1310	THINKPAD 760CD CDROM NOISE
1.4.1311	THOMAS CONRAD TOKEN RING NOT RECOGNIZED IN SETUP
1.4.1312	TOKEN RING & COM 2 CONFLICT IN PC 700
1.4.1313	TOKEN RING ERRORS W/SOUNDBLASTER-16 INSTALLED
1.4.1314	TOKEN RING, 5250 OR 3270 ADAPTER FAILS IN 6384
1.4.1315	TOKEN-RING LAN ERROR DURING OS/2 BOOT
1.4.1316	TRACKPOINT II KEYBOARD CANNOT BE ON SERIAL PORT
1.4.1317	TRAP ERRORS WITH IBM ISA ATM ADAPTER IN PC 365
1.4.1318	TRAP 0 ERRORS ON 8590 OR 8595 WITH 50 MHZ PROCESSORS
1.4.1319	TRAP 000D W/TOKEN RING 16/4 ADAPTER II
1.4.1320	TRAP 000E & L2 CACHE ERRORS AFTER INTELDX4 UPGRADE
1.4.1321	TRAP 000E ERRORS USING IBM FAST SCSI-2 PCI CARD
1.4.1322	TRAP 000E OR XMS MEMORY ERRORS ON 6875/6885
1.4.1323	TRAP 000E OR XMS MEMORY ERRORS ON 6576/6586
1.4.1324	TRAP 000E USING 12X CDROM IN 6899
1.4.1325	TRAP 000E/0002 ERRORS W/4MB PARITY MEMORY SIMM
1.4.1326	TRAP 0002 ERRORS WITH P/N92G7521 MEMORY
1.4.1327	TRAP 0002 FOLLOWED BY 118 POST ERROR
1.4.1328	TRAP 0002 W/MPCA AND OS/2 COMM MGR.
1.4.1329	TRAP 2 ERROR DURING POST
1.4.1330	TRIPLE PCI LANSTREAMER FAILS NETWARE CLIENT LOGIN
1.4.1331	TR4 TAPE DRIVE INSTALLATION IN PC SERVER 330
1.4.1332	UNABLE TO EDIT DICTIONARY OR VIEW HELP IN MONOLOGUE
1.4.1333	UNABLE TO INSTALL SVGA SUPPORT UNDER WINDOWS NT 3.51
1.4.1334	UNABLE TO INSTALL WINDOWS NT 4.0 FROM CDROM BOOT
1.4.1335	UNDETERMINED PROBLEM (SYSTEM DEAD)
1.4.1336	UNINSTALL OF IBM PRODUCT REGISTRATION FAILS
1.4.1337	UNRECOGNIZED FAST/WIDE SCSI-2 RAID DRIVE
1.4.1338	USB KEYBOARDS FAIL POWER-ON TEST IN PC DOCTOR
1.4.1339	USING HELP FAILS IN NETFINITY SERVICE MANAGER
1.4.1340	VALUEPOINT "UNKNOWN FLASH ID" MESSAGE
1.4.1341	VALUEPOINT ADVANCED DIAGS 189 ERROR W/80486 DX4
1.4.1342	VALUEPOINT DATE AND TIME CHANGES
1.4.1343	VALUEPOINT DIAGNOSTICS ERROR 105
1.4.1344	VALUEPOINT DISKETTE ERRORS W/5250 INSTALLED
1.4.1345	VALUEPOINT FLOATING POINT & STACK ERRORS
1.4.1346	VALUEPOINT HANGS OR DROP OFF LINE WITH OS/2 2.1
1.4.1347	VALUEPOINT HANGS W/ 3270 ERRORS&COLON. NET805 & NET810
1.4.1348	VALUEPOINT HANGS, DRIVE ERRORS, NO VIDEO OR DEAD
1.4.1349	VALUEPOINT LOSING/GAINING TIME RUNNING NOVELL
1.4.1350	VALUEPOINT SCSI READ ERRORS
1.4.1351	VALUEPOINT SERIAL PORT DISABLED AFTER SOFT BOOT
1.4.1352	VALUEPOINT VIDEO DIAGNOSTICS 2418 ERROR
1.4.1353	VALUEPOINT VIDEO PROBLEMS
1.4.1354	VALUEPOINT 3.5" DISKETTE DRIVE FAILS
1.4.1355	VALUEPOINT 3.5" DISKETTE DRIVE FAILS
1.4.1356	VALUEPOINT 6381 COMPLETES POST WITH 2 BEEPS
1.4.1357	CD-ROM SOFTWARE MAY NOT RUN CORRECTLY
1.4.1358	VIDEO CORRUPTION IN OS/2 W/4777 OR 4778 INSTALLED
1.4.1359	VIDEO CORRUPTION IN WINDOWS 3.11 ON PC 340 6560
1.4.1360	VIDEO CORRUPTION IN WINDOWS NT 3.51 GAMES ON 6899 AND 8638
1.4.1361	VIDEO CORRUPTION OF ICONS IN QAPLUS/WIN-WIN
1.4.1362	VIDEO CORRUPTION OR SYNC LOSS W/3278/79 ADAPTER
1.4.1363	VIDEO CORRUPTION USING VIDEO ADAPTERS IN PC 365 6589
1.4.1364	VIDEO CORRUPTION W/ARTIST GRAPHICS ADAPTER IN PC 300
1.4.1365	VIDEO CORRUPTION W/COLORGRAPHICS VIDEO ADAPTER
1.4.1366	VIDEO CORRUPTION W/CORNERSTONE IMAGEACCEL2
1.4.1367	VIDEO CORRUPTION WHILE RUNNING ADOBE ACROBAT 2.0
1.4.1368	VIDEO CORRUPTION WITH INTERCEPT V4.0 IN WIN-OS/2
1.4.1369	VIDEO DISTORTION IN WINDOWS ON PC 300 (486)
1.4.1370	VIDEO DISTORTION MOVING WINDOWS IN OS/2 WARP
1.4.1371	VIDEO DISTORTION OF WINDOWS PROGRAM GROUP BUTTONS
1.4.1372	VIDEO DISTORTION W/WINDOWS FOR WORKGROUPS
1.4.1373	VIDEO MEMORY SIZE IS INCORRECT W/NETFINITY
1.4.1374	VIDEO PROBS W/ "AQUILA" AND "MICROSTATION" SOFTWARE
1.4.1375	VIDEO RGB MIXER TEST FAILS IN QAPLUS/2
1.4.1376	VPD (VITAL PRODUCT DATA) ERRORS 187 & 188, CONTINUOUS LOOPS

1.4.1377	WAC ADAPTER OVERLAYS SYSTEM DIAGNOSTICS
1.4.1378	WAC CARD FAILS IN PC300
1.4.1379	WAKE ON LAN FEATURE HALTS AT MOUSE ERROR MESSAGE
1.4.1380	WANG MC-LOC * ADAPTER CARD CAUSES a HANG DURING POST
1.4.1381	WARP CONNECT UNINSTALL DOES NOT REMOVE ALL FILES
1.4.1382	WARP 3 INSTALLS SOUNDBLASTER DRIVERS FOR CRYSTAL AUDIO
1.4.1383	WAVERUNNER AND WINDSURFER FAIL IN 6381
1.4.1384	WEB BROWSERS HANG WHEN STARTING JAVA APPS
1.4.1385	WHITE SCREEN OR TRAP SWITCHING FROM WIN-OS/2 TO OS/2
1.4.1386	WIDE AREA CONNECTOR ADAPTER DATA ERRORS
1.4.1387	WIN-OS/2 FAILS AFTER DUAL BOOTING FROM DOS/WINDOWS
1.4.1388	WIN-OS/2 SESSION VIDEO CORRUPTION ON PC 700
1.4.1389	WIN-OS2 FULL SCREEN FAILURE W/ARTIST GRAPHICS CARD
1.4.1390	WINDOWS NT HANGS WITH SONY 16X CDROM DRIVE INSTALLED
1.4.1391	WINDOWS NT INSTALLATION ON PC SERVER 720 (8642)
1.4.1392	WINDOWS NT SHUTDOWN HANGS WITH LANSTREAMER ADAPTER
1.4.1393	WINDOWS NT TRAPS ON RAID SERVERS
1.4.1394	WINDOWS NT 3.51 FAILS TO INSTALL
1.4.1395	WINDOWS NT 3.51 REPORTS LANSTREAMER MISSING
1.4.1396	WINDOWS NT 4.0 ICONS ARE DISPLAYED WITH INCORRECT COLORS
1.4.1397	WINDOWS NT 4.0 INSTALL HALTS ON INTELLISTAITON M-PRO (6898)
1.4.1398	WINDOWS NT 4.0 INSTALL HALTS ON INTELLISTAITON M-PRO (6889)
1.4.1399	WINDOWS NT 4.0 TRAPS WITH SERVICE PACKS 2 AND 3
1.4.1400	WINDOWS 3.11 LOOPS ON S3 VIDEO DRIVER INSTALLATION
1.4.1401	WINDOWS 32 BIT DISK ACCESS ERRORS ON PC 300 & 700
1.4.1402	WINDOWS 95 DISKETTE FACTORY HANGS THE SYSTEM
1.4.1403	WINDOWS-NT FAILS TO LOAD ON 6384-P60/D W/527MB DASD
1.4.1404	WINDOWSNT 4.0/3.51 TRAP (BLUE SCREEN) ERROR ON IBM PC300
1.4.1405	WINDOWS95 INFRARED FAILS TO CONNECT AT HIGH SPEED
1.4.1406	WINDOWS95 VIDEO ERROR AFTER CHANGING RESOLUTION
1.4.1407	WINDOW95 REASSIGNS DISABLED COM & LPT PORTS
1.4.1408	WIN95 SYSTEM HANGS AFTER INSTALLING NOVELL CLIENT 32
1.4.1409	WIN95 USER NAME AND PASSWORD PROMPT FAILS TO APPEAR
1.4.1410	0002251R ERROR OCCURS AFTER REPLACING PROCESSOR CARD
1.4.1411	01291300 ERRORS CAUSED BY MULTIPROTOCOL ADAPTER/A
1.4.1412	1 LONG & 3 SHORT BEEPS ON PC 700 W/IMAGE ADAPTER/A
1.4.1413	1 19499-XXXXX POST ERROR ON 8555 OR 8565 W/ 2-8MB AND XGA
1.4.1414	1.44MB DISKETTE MADE WITH "COPY DISK" IS UNREADABLE
1.4.1415	1/2 CHARACTERS DISPLAYED WITH ENTRY LEVEL EMULATION
1.4.1416	1/2 CHARACTERS DISPLAYED WITH ENTRY LEVEL EMULATION
1.4.1417	100MHZ 6482/6492, HANG OR OP-SYSTEM ERROR
1.4.1418	102 OR 225 ERROR ON 8570 W/486 UPGRADE INSTALLED
1.4.1419	1024X768 RESOLUTION FAILS ON IBM G50 MONITORS
1.4.1420	10482 OR 10483 POST ERROR ON 8555
1.4.1421	10482 OR 10483 POST ERROR ON 8550 & 8570
1.4.1422	11XX SERIAL PORT DIAGNOSTIC ERRORS
1.4.1423	110 MEMORY PARITY ERROR ON 8580
1.4.1424	1101 ERROR DURING POST ON 8550 8555 8560 AND 8530 286
1.4.1425	1101 POST ERROR
1.4.1426	1101 POST ERROR
1.4.1427	114 OR 3052 ERROR ON 8580 W/PC NETWORK ADPT.
1.4.1428	12902/12904 CACHE ERRORS ON VALUEPOINT 6384/D
1.4.1429	152 ERRORS
1.4.1430	16 / 20MHZ 8570 HANGS OR HAS INCORRECT KEYBOARD OPERATION
1.4.1431	16X CD HANGS OR LOADS 2 COPIES OF APPLICATION
1.4.1432	161/162/163 POST ERRORS ON 425SX VALUEPOINT MODELS
1.4.1433	162 / DISKETTE PROBLEM USING REFERENCE DISKETTE
1.4.1434	162 / 601 ERROR AT POWER-ON
1.4.1435	162 ERROR
1.4.1436	162 ERROR AFTER BOOTING FROM FIXED DISK ON PS/2
1.4.1437	162 ERROR AFTER INSTALLING SCSI ADAPTER W/CACHE
1.4.1438	162 ERROR WITH ACTION MEDIA II INSTALLED
1.4.1439	162 POST ERRORS W/TRAKKER TAPE DRIVE INSTALLED
1.4.1440	162/163 ERRORS ON 6384 RUNNING OS/2
1.4.1441	163 POST ERROR - DATE & TIME INCORRECT
1.4.1442	165 ERRORS WITH NOVELL OPERATING SYSTEM
1.4.1443	166 POST ERROR WITH IBM SERVERGUARD ADAPTER
1.4.1444	1709 DIAGNOSTIC ERROR ON THINKPAD 350
1.4.1445	171 POST ERRORS ON 8595 AND 9595 SYSTEMS
1.4.1446	174 ERRORS AFTER RUNNING AUTO CONFIG
1.4.1447	176 POST COVER TAMPERING ERROR POSTED BY PC 700
1.4.1448	1762 POST ERROR ON IBM PC365 WITH 4.2GB HARDFILE
1.4.1449	178/161/163 POST ERRORS ON IBM PC 700
1.4.1450	1790 POST ERROR AFTER REPLACING HARDFILE
1.4.1451	187 ERROR AFTER AUTO-CONFIG
1.4.1452	19498 ERRORS W/2-8MB 80286 MEMORY ADAPTER
1.4.1453	2 GIGABYTE HARDFILE FAILS TO CONFIGURE
1.4.1454	2.3G BYTE INTERNAL TAPE BACK-UP UNIT DIAGNOSTIC CONFLICT
1.4.1455	201 MEMORY ERRORS WITH 2MB OKI MEMORY SIMM
1.4.1456	2010601 DIAGNOSTIC ERROR ON 540MB SATSUMA HARDFILE
1.4.1457	2380 PRINTER CONTINUOUSLY RESETS ON PC300
1.4.1458	2390 PRINTER CONTINUOUSLY RESETS ON EDUQUEST 9614
1.4.1459	2401 ERRORS CAUSED BY SYSTEM BOARD VIDEO CABLE
1.4.1460	2401 OR 2402 ERRORS, FLICKERING/CHANGING COLORS

1.4.1461	2610 340CSE SYSTEM LOCKUP IN DOS ENVIRONMENT.
1.4.1462	2615 MODEM DOES NOT INITIALIZE.
1.4.1463	2618 FLOATING MOUSE POINTER
1.4.1464	2620 MODS 360CE, CSE AND PE FAIL TO STANDBY.
1.4.1465	2625 FAILS TO RESUME WHEN STANDBY IS DISABLED.
1.4.1466	2630 DOCK II ADAPTER OPTION FAILS AT INSTALLATION
1.4.1467	2630 FAILS POWER UP ON FIRST SWITCH DEPRESSION.
1.4.1468	2630 HANGS WHEN RESUME PASSWORD & 640X480X 16M ARE ENABLED.
1.4.1469	2630 LONG POST TIME AND DISCOLORED WHITE ON THE LCD.
1.4.1470	2630. CANNOT ENTER MORE THAN a 40 CHARACTER STRING.
1.4.1471	3.5 INCH DISKETTE WILL NOT EJECT FROM DISKETTE DRIVE
1.4.1472	3COM & MADGE NETWORK ADAPTERS FAIL TO CONFIGURE
1.4.1473	3COM ETHERLINK III ADAPTER NOT RECOGNIZED IN 6381
1.4.1474	3COM 3C509 ADAPTER MAY NOT CONFIGURE IN 6576
1.4.1475	32-BIT DISK ACCESS ERRORS W/CDROM INSTALLED
1.4.1476	3270 ADAPTER OPTION/DIAGNOSTIC DISKETTE INFORMATION
1.4.1477	3270 CARD FAILS W/MATROX VIDEO ADAPTER INSTALLED
1.4.1478	3270/B CARD, NO HOST COMM, OR FEMALE SYMBOLS DISPLAYED
1.4.1479	3270/B COMMUNICATION PROB OR OTHER ADPT NOT OPERATIONAL
1.4.1480	3270/5250 DIAGNOSTIC FAILURES ON VALUE POINT SYSTEMS
1.4.1481	3278/79 ADAPTER NOT FOUND OR 2810 S ERROR
1.4.1482	3516 ON/OFF BUTTON STICKS WHEN PRESSED
1.4.1483	3518 LCD AND CONTROL PANEL NOT FUNCTIONING
1.4.1484	3518 STORAGE ENCLOSURE&COLON. SYNCHRONIZATION MAY FAIL W/ 2.25GB
1.4.1485	3546 AUTO ISA ADAPTER OPERATION HANGS
1.4.1486	370 CHANNEL ATTACH UNABLE TO ALLOCATE MEMORY
1.4.1487	4/10GB TAPE BACKUPS HANG SERVER WITH ARCSERVE
1.4.1488	4/10GB TAPE DRIVE APPEARS HUNG, ERROR RECOVERY
1.4.1489	4/10GB TAPE DRIVE&COLON. CLEANING PROCEDURES
1.4.1490	4/10GB TAPE DRIVE&COLON. CLEANING PROCEDURES
1.4.1491	4MM TAPE DRIVE ON SCSI-2 FAST WIDE FAILS DIAGS
1.4.1492	4MM TAPE OPTION FAILS
1.4.1493	4X SCSI CDROM READ ERRORS ON SERVER-720
1.4.1494	4029 PRINTER FAILS ON 8570 SYSTEM BOARD UPGRADE
1.4.1495	4680 STORE LOOP ERRORS B4/S008/E023 RC=68
1.4.1496	486 & 386SLC PROCESSOR HANGS USING LOTUS 3.1 & DOS 5.0
1.4.1497	4869 EXTERNAL DRIVE FAILS ON 8525
1.4.1498	5250 ADAPTER DROPS LINE WHEN 6384 IS POWERED ON
1.4.1499	5250 CARD FAILS IN 64XX SYSTEM
1.4.1500	5250 MSG&COLON. "DIAG ERROR ON COMMUNICATION ADAPTER"
1.4.1501	5250 MSG&COLON. "DIAG ERROR ON COMMUNICATION ADAPTER"
1.4.1502	540MB DISK APPEARS AS 340MB IN a 9545.
1.4.1503	55LS HANGS AT POST W/ REPLACEMENT SYSTEM BOARD
1.4.1504	6157 FAILS AFTER SYSBRD IS REPLACED
1.4.1505	6157 FAILS AFTER SYSBRD IS REPLACED
1.4.1506	6157 TAPE ADAPTER CAUSES TRAP OR HANG SYMPTOMS
1.4.1507	6272/6282 SYSTEMS HANG DURING POST AT CHECKPOINT 60
1.4.1508	63XX/95XX MONITORS APPEAR TO BOOT IN 40 COLUMN MODE
1.4.1509	63XX/95XX MONITORS GEOMETRY / COLOR PROBLEMS
1.4.1510	6318, IMAGE IS NARROW OR JITTERS
1.4.1511	6327 EXHIBITS BLANKING
1.4.1512	6327, IMAGE SHIFTS TO THE LEFT
1.4.1513	6381 FAILS TO CONNECT TO SERVER W/SMC ARCNET
1.4.1514	6381 HANGS WITH WINDOWS FOR WORKGROUPS 3.11
1.4.1515	6381 POST HANG WHEN 1ST 128KB L2 CACHE IS INSTALLED
1.4.1516	6381 PS/VALUEPOINT POWER ON PASSWORD FAILS
1.4.1517	6381 SYSTEM HANG LOADING OS/2 FROM SERVER
1.4.1518	6382/84/87 FAILS TO RECOGNIZE COM3 OR COM4
1.4.1519	6384 HANGS AFTER INSTALLING ATI VIDEO ADAPTER
1.4.1520	6384 HANGS WITH DIALOGIC ADAPTER INSTALLED
1.4.1521	6384 P60/D BEEPS 3 TIMES THEN HANGS
1.4.1522	6384 P60/D HANGS DURING OS/2 INSTALLATION
1.4.1523	6384 P60/D HANGS W/ATI DRIVERS & WINDOWS OR OS/2
1.4.1524	6384 P60/D INTERMITTENT HANGS DURING MEMORY COUNT
1.4.1525	64XX FAILS WITH MORE THAN 16MB MEMORY INSTALLED
1.4.1526	64XX HANGS AFTER INSTALLING PCI ADAPTER
1.4.1527	64XX SYSTEM FAILURES W/128KB CACHE INSTALLED
1.4.1528	64XX SYSTEM HANG OR OPERATING SYSTEM ERROR
1.4.1529	64XX VIDEO PROBLEMS
1.4.1530	64XX WITH QUATECH CARD HANGS
1.4.1531	6553 MONITOR - 2401 POST ERROR WITH DDC ENABLED
1.4.1532	6554/6555 MONITOR DISPLAYS a GREEN TINT
1.4.1533	6562 HMC / SASE POWERON VIDEO/SYSTEM FAILURE ON IBM PC300PL
1.4.1534	6577/6587 SYSTEM W/2.5GB DRIVE SHOWS 2.0GB AVAILABLE
1.4.1535	6598 FAILS WHEN AN AUDIO ADAPTER IS INSTALLED
1.4.1536	6877/6887 FAILS TO LOAD APPLICATIONS FROM a SERVER
1.4.1537	6899 FAILS TO BOOT W/3COM ETHERLINK XL CARD
1.4.1538	6899 FAILS TO POWER ON/OFF
1.4.1539	800X600 RESOLUTION CAUSES BLANK SCREEN IN WINDOWSNT
1.4.1540	8513 CONNECTED TO a PS-2 8530 MAY DROP POWER.
1.4.1541	8514/8515/8516 JITTER IN HIGH RESOLUTION MODES
1.4.1542	8515/8516 EXHIBITS DISTORTED VIDEO WHEN ATTACHED TO 8530
1.4.1543	8525 DISPLAY EXHIBITS CURVED, SHADOWY LINES
1.4.1544	8525 DISPLAY IMAGE ROLL

1.4.1545	8525-286,1.44MB DISKETTE DRIVE OPTION INSTALLATION PROBLEM
1.4.1546	8525SX HARD DISK ERRORS 1780, 1712, NOISE
1.4.1547	8525SX, 8535, 8540 COM1/LPT1 DISABLED AFTER AUTO-CONFIG
1.4.1548	8530 CURSOR KEYS PRODUCE CHARACTERS ON SCREEN
1.4.1549	8535 W/OEM DISK SHUTS DOWN JUST AFTER POWER ON
1.4.1550	8535/40 W/OEM HAS BLANK SCREEN, NO POWER ON LED
1.4.1551	8543 KEYBOARD ENTRY GIVES UNEXPECTED RESULTS
1.4.1552	8550 LOSS OF TIME
1.4.1553	8550Z HANGS ON POST WITH 3270 ADAPTER
1.4.1554	8550Z W/PROCESSOR UPGRADE HANGS DURING POST
1.4.1555	8551 MOUSE FAILS CUSTOMER OPERATION. DIAGS WORK.
1.4.1556	8551 SUSPENDS AFTER POWER ON
1.4.1557	8555 HANGS WITH MICROSOFT WINDOWS 2.11
1.4.1558	8555/8570 HARDFILE ERRORS/NMI'S WITH WINDOWS 3.0
1.4.1559	8555, 8565 DISKETTE FORMAT & COPY PROBLEMS W/ WINDOWS 386
1.4.1560	8555, 8565 POWER ON PASSWORD PROBLEMS
1.4.1561	8556 / 8557 "TYPE MANAGER V2.0 FOR WINDOWS BY ADOBE
1.4.1562	8556 OR 8557 1200/2400 INTERNAL MODEM HANG
1.4.1563	8556/57 FAILS WITH "STB" OEM VIDEO ADAPTER
1.4.1564	8556/57 POST MEMORY COUNT MISSING 256KB
1.4.1565	8557 & 9557 BACKGROUND SPEAKER NOISE
1.4.1566	8560 W/PROCESSOR UPGRADE HANGS DURING POST
1.4.1567	8560 8565 8580 9585 CONFIG PROBLEMS WITH 5 OR MORE ADAPTERS
1.4.1568	8560/8580 DISK FORMAT AND 1755 ERRORS
1.4.1569	8560, 8565, 8580 UPGRADE PLANAR / MEMORY REQUIREMENTS
1.4.1570	8565 FALSE 201 ERROR DURING SOFT BOOT (CTL-ALT-DEL)
1.4.1571	8565 HANGS DURING TAPE BACKUP
1.4.1572	8570 / DOS 4.01 (DOSSHELL) TIME DELAYS, SCREEN ERRORS
1.4.1573	8570 / 4680 OPERATING SOFTWARE HANGS ON SOFT IPL
1.4.1574	8570 DISKETTE DATA ERRORS USING MICROSOFT * WINDOWS/386
1.4.1575	8570 ERROR CODES 10483 AND 10458 FRU CALL OUT
1.4.1576	8570 EXPERIENCING INTERMITTENT 165 POST ERRORS W/ TOKEN RING
1.4.1577	8570 HOT KEY ERRORS USING GRAPHICS WORKSTATION PROGRAM
1.4.1578	8570 MOD A21 DOS 3.3 ERROR FORMATTING MULTIPLE DSKTS
1.4.1579	8570 MOD 061,121 "RACAL INTERLAN" NI9210 COM FAILURE
1.4.1580	8570 MOD 061,121 EMERALD SYSTEMS* TAPE DRIVE FAILURE
1.4.1581	8570 MODEL A21 OR 121 10463 HARDFILE ERROR CODE
1.4.1582	8570 OEM EXTERNAL DISKETTE DRIVE ERRORS
1.4.1583	8570 OR 8580 COMM LINK FAILURE W/ 486 UPGRADE
1.4.1584	8570 POWER PLATFORM MES UPGRADE INFORMATION
1.4.1585	8570 UPGRADE PLANAR 006 ERROR / MEMORY REQUIREMENTS
1.4.1586	8570 W/4700 KEYBRD HANGS SELECTING DOSSHELL COMMAND PROMPT
1.4.1587	8570, NO DISPLAY AT POST W/ OEM MOUSE AND KEYBOARD.
1.4.1588	8570, 8573 MOD 061,121 EVEREX EVERCOM 24* MODEM PROBLEM
1.4.1589	8573 HANGS OR 110 ERRORS ON COLD BOOT.
1.4.1590	8573 162 ERRORS WITH TOKEN RING INSTALLED
1.4.1591	8580 SYSTEM DOES NOT COUNT MEMORY, HANGS AT POST
1.4.1592	8580 W/486 UPGRADE HANGS W/TWO ESDI HARDFILES
1.4.1593	8580 W/486 UPGRADE WITH TWO SCSI ADAPTERS
1.4.1594	8580 80386/80387 CONFLICT CAUSES SYS HANG
1.4.1595	8580, 110 PARITY ERRORS, WIZARD / BUSMASTER
1.4.1596	8590 AND 8595 50MHZ SYSTEMS HANG WITH 36/38 ADAPT
1.4.1597	8600 REDUNDANT POWER SUPPLY
1.4.1598	8600 SYSTEM FIXED DISK GO OFF-LINE OR NOT READY
1.4.1599	8600 SYSTEM POWER FAILURES
1.4.1600	8640 ERROR 020860FU 61EI DURING SYSTEM BOOT
1.4.1601	8640 HANGS OR TRAP 000D RUNNING NTS/2
1.4.1602	8640 HANGS WHILE BOOTING OS/2 V2.1
1.4.1603	8641 (SERVER 500) WILL NOT POWER OFF
1.4.1604	95XX SYSTEM HANGS WHILE INSTALLING OS/2 2.1
1.4.1605	9507 MONITOR GOES BLANK
1.4.1606	9524 TOUCH SCREEN MONITOR DEAD OR BLANK
1.4.1607	9527 IMAGE SHIFTS WHEN CONNECTED TO a 3483 OR 3488.
1.4.1608	9545 (ALL MODS) KEYBOARD HANGS USING WP 6.1
1.4.1609	9545 BLANK SCREEN DURING RESUME ON AC POWER.
1.4.1610	9545 FAILS TO HIBERNATE USING OS2 2.1
1.4.1611	9545 HANGS WHEN WORD PERFECT IS USED.
1.4.1612	9545 KEYBOARD HANGS
1.4.1613	9545 LCD IMAGES SMEARING OR BLEEDING IN 640X480 MODE.
1.4.1614	9545 LCD SHIFTS ONE PIXEL OFF LEFT SIDE OF SCREEN.
1.4.1615	9545 LI-ION BATTERY INFORMATION.
1.4.1616	9545 PC CARD MODEM FAILS TO RESUME
1.4.1617	9545 SLOW BOOTING TO OS/2 2.11
1.4.1618	9545 755C & 755CS EXTERNAL CRT FLICKER ON 640X480
1.4.1619	9545 755CSE. LINES ON LCD AFTER SUSPEND/RESUME.
1.4.1620	9545/46/47 & 2625 POST 8603 OR 8611 AND KYBD RESETS.
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1.4.1626	9552 "PS2" COMMAND WILL NOT CHANGE MODEM (ON/OFF).
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1.0 *PSY2 RETAIN TIPS*

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- 1.2 Chapter 2. Service Aids and Additional Information
- 1.3 Chapter 3. Parts Information Tips
- 1.4 Chapter 4. Symptom/Fix Tips

1.1 Chapter 1. Engineering Change Announcements

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 1.1.2 ECA001 ** THIS ECA HAS EXPIRED 12/31/94 **
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 1.1.69 9546 ECA005 HEAT SINK INSTALLATION
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 1.1.79 ECA007, SIGNAL QUALITY CONDITION
 1.1.80 9546 ECA007 - 2.1 OR 3.0GB HANGS / FILE COPY, IPL, WAKE UP.
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 1.1.109 ECA020, OBSOLETE
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 1.1.111 ECA021, OBSOLETE
 1.1.112 ECA022, OBSOLETE
 1.1.113 ECA023, OBSOLETE
 1.1.114 ECA024, OBSOLETE
 1.1.115 ECA025, OBSOLETE
 1.1.116 ECA026, OBSOLETE
 1.1.117 ECA027, OBSOLETE
 1.1.118 ECA028, OBSOLETE
 1.1.119 ECA029, OBSOLETE
 1.1.120 ECA030, OBSOLETE
 1.1.121 ECA031, OBSOLETE
 1.1.122 ECA032, OBSOLETE
 1.1.123 ECA033, OBSOLETE
 1.1.124 ECA034, OBSOLETE
 1.1.125 ECA035, OBSOLETE
 1.1.126 ECA036, OBSOLETE
 1.1.127 ECA037, OBSOLETE
 1.1.128 ECA038, OBSOLETE
 1.1.129 ECA039, OBSOLETE
 1.1.130 ECA040, OBSOLETE
 1.1.131 ECA041, OBSOLETE
 1.1.132 ECA043, OBSOLETE
 1.1.133 ECA044, OBSOLETE
 1.1.134 ECA045, DEFECTIVE PS/2 POWER CORDS
 1.1.135 ECA046, OBSOLETE
 1.1.136 ECA047, OBSOLETE
 1.1.137 ECA048, OBSOLETE
 1.1.138 ECA049, OBSOLETE
 1.1.139 ECA050, OBSOLETE
 1.1.140 ECA051, OBSOLETE
 1.1.141 ECA052, OBSOLETE
 1.1.142 ECA053, OBSOLETE
 1.1.143 ECA054, OBSOLETE
 1.1.144 ECA055, OBSOLETE
 1.1.145 ECA056, OBSOLETE
 1.1.146 ECA057, OBSOLETE
 1.1.147 ECA058, OBSOLETE
 1.1.148 ECA058, OBSOLETE
 1.1.149 ECA059 (EXPIRED), 8570 AX1/BX1, PARITY CHECK ERRORS
 1.1.150 ECA060, OBSOLETE
 1.1.151 ECA061, OBSOLETE
 1.1.152 ECA062, OBSOLETE
 1.1.153 ECA063, OBSOLETE
 1.1.154 ECA064, OBSOLETE
 1.1.155 ECA065, OBSOLETE
 1.1.156 ECA066, OBSOLETE
 1.1.157 ECA067, OBSOLETE
 1.1.158 ECA068, OBSOLETE
 1.1.159 ECA069, OBSOLETE
 1.1.160 ECA070, OBSOLETE
 1.1.161 ECA071, OBSOLETE
 1.1.162 ECA072, OBSOLETE
 1.1.163 ECA073, OBSOLETE
 1.1.164 ECA075, OBSOLETE
 1.1.165 ECA076, OBSOLETE

1.1.166 ECA077, OBSOLETE
1.1.167 ECA079, OBSOLETE
1.1.168 ECA080, OBSOLETE
1.1.169 ECA081, OBSOLETE
1.1.170 ECA082, OBSOLETE
1.1.171 ECA083, (EXPIRED) 8570, TRAP 0002, 110 ERROR, NMI ERROR
1.1.172 ECA084, OBSOLETE
1.1.173 ECA085, OBSOLETE
1.1.174 ECA087, OBSOLETE
1.1.175 ECA088, OBSOLETE
1.1.176 ECA089, OBSOLETE
1.1.177 ECA092, OBSOLETE
1.1.178 ECA093, OBSOLETE
1.1.179 ECA094, OBSOLETE
1.1.180 ECA095, OBSOLETE
1.1.181 ECA098, OBSOLETE
1.1.182 ECA102, OBSOLETE
1.1.183 ECA103, OBSOLETE (EXPIRED 9-31-94)
1.1.184 ECA104, OBSOLETE
1.1.185 ECA107 (EXPIRED), BROKEN 8551 LCD HINGE MOUNTING POST
1.1.186 ECA901, ETHERNET RPL FAILS ON NOVELL 2.2 SERVER
1.1.187 2625 (EXPIRED ON 11/30/1997) MEMPHIS REPAIR CENTER ONLY!
1.1.188 9545 (EXPIRED OCTOBER 15, 1997)MEMPHIS ONLY.

1.1.1 ECA001 (EXPIRED), PS/2 MOD 90/95 DATA LOSS/MODIFICATION

Record number: H085835

Device:	D/T9595	Service code:	33
ECA number:	ECA001	Parts source:	
EC number:	ECD06620	Publish flag:	R
Mandatory:	N	Hit count:	UHC01841
Automatic shipment:	N	Success count:	USC0003
Availability date:	11/01	Publication code:	PC50
Plant of control:	40	Date created:	093/10/26
Tip key:		Date last altered:	A95/08/17
		Owning B.U.:	USA

PURPOSE:

*** THIS ECA HAS EXPIRED ***

IT PROVIDED A REPLACEMENT ENHANCED 486/50 MHZ PROCESSOR CARD, FRU P/N82G2484, TO PREVENT POTENTIAL UNDETECTED LOSS OR MODIFICATION OF OF DATA.

FEATURES:

Type, Model, Stage	With B/M	Machines Affected and/or Feature/Device Description	B/M to be Installed	Service Hours	System Hours
0	B/M0000000		B/M0000000	00.1	00.0

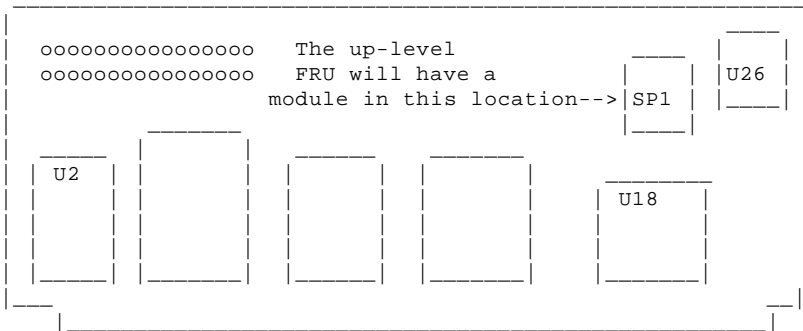
PHYSICAL CHECK:

TO QUALIFY FOR REPLACEMENT UNDER THIS ECA, THE ENHANCED 486/50 MHZ PROCESSOR CARD WAS TO BE IDENTIFIED WITH FRU P/N57F1597.

*****NOTE: *****
NO OTHER PROCESSOR CARDS QUALIFIED

CURRENT LEVEL CARDS ARE IDENTIFIED WITH FRU P/N82G2484;
THESE CARDS ARE NOT AFFECTED, AND SHOULD NOT BE REPLACED.

NOTE: A SMALL QUANTITY OF NEW FRUS WERE PRODUCED WITHOUT THE FRU PART NUMBER BEING CHANGED ON THE BOARD. UP-LEVEL FRUS CAN BE IDENTIFIED BY CHECKING FOR A MODULE IN LOCATION SP1. IF THERE IS NO MODULE IN THIS LOCATION THE PART IS DOWN-LEVEL AND SHOULD BE REPLACED. REFER TO THE FOLLOWING DIAGRAM FOR THE LOCATION OF SP1:



PREREQUISITES: NONE

COMPANION: NONE

CONCURRENT: NONE

DETAIL:

ANY PS/2 MODEL 90 OR 95 CONFIGURED OR UPGRADED WITH AN ENHANCED 486/50 MHZ PROCESSOR CARD MANUFACTURED PRIOR TO 10/22/93 MAY FAIL RESULTING IN MODIFIED/LOST DATA WITH NO INDICATION TO THE USER.

50MHZ ENHANCED PROCESSOR CARDS ELIGIBLE FOR THIS ECA WERE MANUFACTURED AND SHIPPED PRIOR TO 10/22/93 IN THE FOLLOWING PS/2 SYSTEMS:

- 8595 MODELS OMF AND OMT
- 9595 MODELS OMF, OMG, AND OMT

IN ADDITION, THESE PROCESSOR CARDS WERE AVAILABLE AS AN UPGRADE

FOR EARLIER MODELS OF THE 8590, 8595, 9590, AND 9595.

- PROCESSOR INSPECTION IS COVERED BY THIS ECA ONLY FOR THE 8595 AND 9595 MODELS LISTED ABOVE, OR FOR OTHER 90 AND 95 MODELS IF THE CUSTOMER HAS VERIFIED THAT THE ENHANCED 50MHZ PROCESSOR OPTION IS INSTALLED.
TO VERIFY THE ENHANCED 50MHZ OPTION IS INSTALLED, THE CUSTOMER SHOULD BOOT TO THE SYSTEM PARTITION, SELECT "MORE UTILITIES" FROM THE MAIN MENU, THEN SELECT "DISPLAY REVISION LEVELS." A PROCESSOR P/N OF 57F1597 INDICATES THAT THE ENHANCED 50MHZ PROCESSOR OPTION IS INSTALLED.
- ONLY CARDS IDENTIFIED WITH FRU P/N57F1597 WERE TO BE REPLACED.
- THIS ECA WAS MANDATORY ONLY IF CUSTOMERS WERE USING, OR PLANNED TO USE, ANY OF THE FOLLOWING ADAPTERS:

ADAPTER	FRU P/N	FEATURE	OPTION#
IBM LANSTREAMER MC 32	P/N92F8941	8942 1100	92F8942
IBM LANSTREAMER MC 16	P/N58G8999	8998 1515	59G8998
IBM ETHERSTREAMER MC 32	P/N59G9081	9066 3310	59G9066

NOTES:

*** THIS ECA HAS EXPIRED ***

SAS KEYWORDS:

PSY2	PSY2ADPT	PS/2	PS2
LAN	8590ECA	8595ECA	9595ECA
D/T8590	D/T8595	D/T9590	STREAMER
ETHER	BOARD	50MHZ	486
PSY2ECA			

1.1.2 ECA001 ** THIS ECA HAS EXPIRED 12/31/94 **

Record number: H122991

Device:	D/T9556	Service code:	33
ECA number:	ECA001	Parts source:	AUS
EC number:	ECD26206G	Publish flag:	R
Mandatory:	N	Hit count:	UHC00841
Automatic shipment:	N	Success count:	USC0000
Availability date:	94/02	Publication code:	PC50
Plant of control:	44	Date created:	094/02/24
Tip key:		Date last altered:	A95/01/05
		Owning B.U.:	USA

PURPOSE:

***** THIS ECA HAS EXPIRED 12/31/94 *****

THIS ECA PROVIDED A REPLACEMENT SYSTEM BOARD, FRU P/N65G9714, FOR 9556 AND 9557 486SLC3 SYSTEMS MANUFACTURED AND SHIPPED PRIOR TO FEBRUARY 16,1994. THESE SYSTEMS MAY FAIL TO LOAD LARGE SOFTWARE APPLICATIONS, SUCH AS OS/2, FROM DISKETTES.

FEATURES:

Type, Model, Stage	With B/M	Machines Affected and/or Feature/Device Description	B/M to be Installed	Service Hours	System Hours
9556	B/MNONE	DE9 23GNGA0 TO 23GNXE9	B/MNONE	00.5	00.3
	B/MNONE	DEB 23LAHVA TO 23LDWYF	B/MNONE	00.5	00.3
	B/MNONE	DED 23FXFVW TO 23PXNLC	B/MNONE	00.5	00.3
	B/MNONE	1EX 23WTCWP TO 23WTDRE	B/MNONE	00.5	00.3
	B/MNONE	2EX 23AAAOA TO 23AAG7J	B/MNONE	00.5	00.3
9557	B/MNONE	DE9 23NVTMO TO 23NWKR4	B/MNONE	00.5	00.3
	B/MNONE	DEB 23NYHBC TO 23PARYY	B/MNONE	00.5	00.3
	B/MNONE	DED 23VKRLM TO 23VKXLZ	B/MNONE	00.5	00.3
	B/MNONE	DEG 23AAAOA TO 23ADYOZ	B/MNONE	00.5	00.3

PHYSICAL CHECK:

INSPECTION OF THE SYSTEM BOARD WAS REQUIRED.

IF THE SYSTEM BOARD WAS LABELED WITH FRU PART NUMBER P/N71G3599 OR P/N65G8615, THE SYSTEM BOARD WAS TO BE REPLACED WITH FRU P/N65G9714.

CURRENT LEVEL BOARDS ARE IDENTIFIED WITH FRU P/N65G9714; THESE BOARDS WERE NOT AFFECTED, AND SHOULD NOT BE REPLACED.

PREREQUISITES: NONE

COMPANION: NONE

CONCURRENT: NONE

DETAIL:

THIS ECA WAS RELEASED TO ADDRESS PROBLEMS THAT APPEARED WHEN LOADING LARGE APPLICATIONS FROM DISKETTE. WHEN LOADING OS/2, SYSTEM ERROR CODES SUCH AS: SYS0049, SYS3175, SYS0318, OR HANGS AND TRAP ERRORS SUCH AS TRAP 0004, TRAP 0006, TRAP 0008 OR TRAP 000D MAY HVE BEEN EXPERIENCED. THESE PROBLEMS MAY OF OCCURED ON 9556 AND 9557 486SLC3 SYSTEMS MANUFACTURED AND SHIPPED PRIOR TO FEBRUARY 16, 1994.

TO AVOID THE POTENTIAL FOR FUTURE PROBLEMS IBM RECOMMENDED THAT CUSTOMERS HAVING SYSTEMS WITHIN THE AFFECTED S/N RANGES, HAVE THEIR SYSTEM BOARDS REPLACED USING THIS ECA.

IBM NOTIFIED CUSTOMERS OF THIS PROBLEM VIA THE APPROPRIATE MARKETING CHANNELS.

IF FRU P/N65G9714 WAS INSTALLED, AND FURTHER PROBLEMS WERE EXPERIENCED, NORMAL PROBLEM DETERMINATION PROCEDURES WOULD ISOLATE THE FAILURE.

IF FRU P/N65G9714 WAS INSTALLED, & SYS0049, SYS0045, SYS0046 ERRORS WERE ENCOUNTERED, SOFTWARE SUPPORT WAS TO BE CONTACTED. APARS PJ11015, PJ11722 AND PJ13228 SHOULD BE CONSIDERED.

A REPLACEMENT SYSTEM BOARD FRU P/N65G9714 WAS TO BE ORDERED USING NORMAL FRU PARTS ORDERING PROCEDURES. ALL ORDERS FOR FRU P/N71G3599 OR P/N65G8615 ARE AUTOMATICALLY SUBSTITUTED TO THE CURRENT FRU PART NUMBER.

NOTES :

***** THIS ECA HAS EXPIRED 12/31/94 *****

SAS KEYWORDS:

PSY2	PSY2ECA	9556	D/T9557
9557	PLANAR	PSY2BRD	ERROR
SLC	3	PSY2ERR	HANG
STOPPED	HUNG	HANGS	OS2
SLC3	SYS049	SYS046	SYS045
INTERNAL	TAPE	RESTORE	PMTAPE
PSY2TAPE	DUALSTOR	SR	MAKESR

1.1.3 ECA001, (EXPIRED) 3550 MOD 002 COVER KIT

Record number: H122663

Device:	D/T3550	Service code:	33
ECA number:	ECA001	Parts source:	LOC
EC number:	ECD43367	Publish flag:	R
Mandatory:	N	Hit count:	UHC00317
Automatic shipment:	N	Success count:	USC0000
Availability date:	94/02	Publication code:	PC40
Plant of control:	27	Date created:	094/02/09
Tip key:		Date last altered:	A95/08/17
		Owning B.U.:	USA

PURPOSE:

>>>>>>>> THIS ECA EXPIRED DECEMBER 31, 1994 <<<<<<<<<

Replace cover components on the 3550 model
002 Docking Station to correct the following conditions and
improve security features:

1. Left Docking Station rail blocks opening of the 720 PCMCIA door.
2. Security locking feature added to right Docking Station rail.
3. Alignment problems between the system and docking station micro-channel bus connectors.
4. Correct fit of the docking station alignment / security plug.

FEATURES:

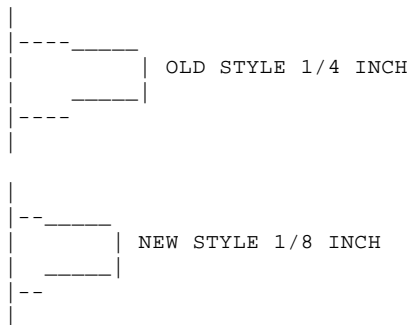
Type, Model, Stage	With B/M	Machines Affected and/or Feature/Device Description	B/M to be Installed	Service Hours	System Hours
3550	B/M0000000	3550 MOD 002	B/M0D43367	00.5	00.5

PHYSICAL CHECK:

Docking stations with serial numbers above 97-C0001 have the new EC level cover installed.

ALSO

An alignment plug shoulder length of 1/8th inch indicates the new cover is installed. The plug fits into the AC Adapter port on the Thinkpad.



PREREQUISITES: NONE

COMPANION: NONE

CONCURRENT: NONE

DETAIL:

Cover Kit, FRU P/N66G9433, has been released to correct connection and fit conditions found on 3550 model 002 Docking Stations that meet the requirements in the Physical Check section.

The FRU kit contains the installation instructions for the left and right hand system guide rails, the alignment plug that fits into the system units external power connector, and a new 3550 micro-channel connector shroud.

NOTE:

The alignment plug is for alignment only; it does not conduct current.

NOTES:

This ECA expired December 31, 1994. Order FRU P/N66G9433.

SAS KEYWORDS:

PSY2 RETAIN TIPS

ECA001, (EXPIRED) 3550 MOD 002 COVER KIT

PSY2
PSY2ERR

PSY2ECA
TIGHT

FIT
LOOSE

INTERMITTENT

1.1.4 ECA001, AMBRA PENTIUM PROCESSOR REPLACEMENT

Record number: H127568

Device:	D/T0958	Service code:	33
ECA number:	ECA001	Parts source:	NONE
EC number:	EC000000	Publish flag:	R
Mandatory:	N	Hit count:	UHC00131
Automatic shipment:	N	Success count:	USC0000
Availability date:	95/05	Publication code:	PC50
Plant of control:	23	Date created:	095/05/16
Tip key:		Date last altered:	A95/10/09
		Owning B.U.:	USA

PURPOSE:

THE PURPOSE OF THIS ECA IS TO PROVIDE A REPLACEMENT INTEL 60MHZ OR 90MHZ PENTIUM PROCESSOR FOR AN AMBRA SYSTEM (IBM M/T 0958). THE REPLACEMENT IS TO RESOLVE THE "REDUCED PRECISION" FLOATING POINT CALCULATION PROBLEM.

INTEL HAS ACKNOWLEDGED A DEFECT IN ITS PENTIUM MICROPROCESSOR THAT CAN CAUSE INACCURATE RESULTS IN SOME MATHEMATICAL APPLICATIONS. IN SOME CASES THE PRECISION OF THE PENTIUM DIVIDE OPERATION MAY BE REDUCED.

FEATURES:

Type, Model, Stage	With B/M	Machines Affected and/or Feature/Device Description	B/M to be Installed	Service Hours	System Hours
0958 AMBRA	B/M0000000	0958 AMBRA MODELS: DP90PCI TP90PCI DP60E/VL TP60E/VL DP60E/VL2	B/M0000000	00.3	00.2

PHYSICAL CHECK:

TO VERIFY THE PROCESSOR IS AFFECTED, A PROCESSOR TEST PROGRAM HAS BEEN MADE AVAILABLE BY IBM. THIS BOOTABLE PROGRAM WILL DISPLAY PROCESSOR ID INFORMATION AND TEST THE PROCESSOR'S FLOATING POINT DIVISION FUNCTION. THE TEST RESULTS WILL BE DISPLAYED TO THE USER, AND CLEARLY IDENTIFY IF THE PROCESSOR HAS THE FLOATING POINT DIVIDE (FDIV) DEFECT.

THE PROCESSOR ID PROGRAM MAY BE OBTAINED THROUGH THE IBM INTERNAL "VALUE" DISK BY ENTERING THE FOLLOWING COMMAND AT THE VM PROFS/OFFICEVISION COMMAND LINE:

```
REQUEST CPUIDIBM PACKAGE FROM VALUE AT BCRVMPC2
```

THE CPUIDIBM PROGRAM MAY ALSO BE OBTAINED FROM THE IBM PC COMPANY BBS SYSTEM BY CALLING 1-919-517-0001. LOCATE THE "MISCELLANEOUS FILES" SECTION (SECTION #7) FOR THE FILE TITLED "CPUIDIBM.DSK."

THE CPUIDIBM PROGRAM MAY ALSO BE DOWNLOADED VIA THE INTERNET FROM THE IBM PERSONAL COMPUTER FILE LIBRARY BY SEARCHING THE FOLLOWING INTERNET URL:
<http://www.pc.ibm.com/files.html>

THE PROGRAM IS LOCATED IN THE "MISCELLANEOUS FILES" SECTION OR BY USING THE SEARCH FACILITY TO LOCATE THE FILE BY THE NAME "CPUIDIBM.DSK."

INTEL 486 PROCESSORS ARE NOT AFFECTED.

SYSTEM DIAGNOSTICS RUN WITHOUT ERRORS.

PREREQUISITES: NONE

COMPANION: NONE

CONCURRENT: NONE

DETAIL:

SERVICERS WITH AFFECTED SYSTEMS SHOULD ORDER:

FRU P/N06H6099 - 60MHZ KIT FOR MODELS:	DP60PCI TP60PCI
FRU P/N06H7422 - 90MHZ KIT FOR MODELS:	DP90PCI TP90PCI
FRU P/N06H7423 - 60MHZ KIT FOR MODELS:	DP60E/VL TP60E/VL
FRU P/N06H7424 - DUAL 60MHZ KIT FOR MODEL:	DP60E/VL2

PSY2 RETAIN TIPS

ECA001, AMBRA PENTIUM PROCESSOR REPLACEMENT

UTILIZE NORMAL PARTS ORDERING PROCEDURES FOR REPLACEMENT INTEL PENTIUM PROCESSOR KITS. THE FRU KIT CONTAINS THE PROCESSOR(S), HEATSINK(S) AND THERMAL GREASE.

THE DEFECTIVE PROCESSOR SHOULD BE RETURNED USING NORMAL PARTS RETURN PROCEDURES.

THIS ECA DOES NOT COVER ANY SYSTEM BOARD REPLACEMENTS IN AN AMBRA SYSTEM. THERE ARE NO SYSTEM BOARDS IN FRU STOCK THAT CONTAIN AN UPDATED PROCESSOR.

NOTES:

ALL PARTS ARE TO BE RETURNED TO IBM IMMEDIATELY FOLLOWING THE INSTALLATION.

IBM AND TSS SERVICERS SHOULD RECORD PARTS, ACTUAL TIME AND TRAVEL TO: SERVICE CODE - 33
D/T 0958, ECA 001
OTHER OFFICE - 990

PENTIUM IS A TRADEMARK OF INTEL CORPORATION

SAS KEYWORDS:

PSY2	PSY2ECA	IBMPC	PSY2PROG
PSVPPART	PSY2OPER	PSVPPROG	PENT
PSY2OEM	PSY2PART	PSVP	PSVPOPER
PSVPOEM	ECAVALID		

1.1.5 ECA001, APTIVA PENTIUM PROCESSOR REPLACEMENT

Record number: H127566

Device:	D/T2144	Service code:	33
ECA number:	ECA001	Parts source:	NONE
EC number:	EC000000	Publish flag:	R
Mandatory:	N	Hit count:	UHC00192
Automatic shipment:	N	Success count:	USC0000
Availability date:	95/05	Publication code:	PC50
Plant of control:	23	Date created:	095/05/16
Tip key:		Date last altered:	A95/10/09
		Owning B.U.:	USA

PURPOSE:

THE PURPOSE OF THIS ECA IS TO PROVIDE A REPLACEMENT INTEL 60MHZ PENTIUM PROCESSOR FOR AN IBM APTIVA SYSTEM. THE REPLACEMENT IS TO RESOLVE THE "REDUCED PRECISION" FLOATING POINT CALCULATION PROBLEM.

INTEL HAS ACKNOWLEDGED A DEFECT IN ITS PENTIUM MICROPROCESSOR THAT CAN CAUSE INACCURATE RESULTS IN SOME MATHEMATICAL APPLICATIONS. IN SOME CASES THE PRECISION OF THE PENTIUM DIVIDE OPERATION MAY BE REDUCED.

FEATURES:

Type, Model, Stage	With B/M	Machines Affected and/or Feature/Device Description	B/M to be Installed	Service Hours	System Hours
2144	B/M000000	2144 APTIVA MODELS 82P 23ANN00-23BFR99 83P 23BMWXV-23BFBPA 86P 23BFT00-23BNZ99	B/M000000	00.3	00.2

PHYSICAL CHECK:

ALL SYSTEMS WITHIN THE ABOVE SERIAL NUMBER RANGES WERE MANUFACTURED WITH THE AFFECTED PENTIUM PROCESSOR. TO VERIFY THE PROCESSOR IS AFFECTED, A PROCESSOR TEST PROGRAM HAS BEEN MADE AVAILABLE BY IBM. THIS BOOTABLE PROGRAM WILL DISPLAY PROCESSOR ID INFORMATION AND TEST THE PROCESSOR'S FLOATING POINT DIVISION FUNCTION. THE TEST RESULTS WILL BE DISPLAYED TO THE USER, AND CLEARLY IDENTIFY IF THE PROCESSOR HAS THE FLOATING POINT DIVIDE (FDIV) DEFECT.

THE PROCESSOR ID PROGRAM MAY BE OBTAINED THROUGH THE IBM INTERNAL "VALUE" DISK BY ENTERING THE FOLLOWING COMMAND AT THE VM PROFS/OFFICEVISION COMMAND LINE:

```
REQUEST CPUIDIBM PACKAGE FROM VALUE AT BCRVMPC2
```

THE CPUIDIBM PROGRAM MAY ALSO BE OBTAINED FROM THE IBM PC COMPANY BBS SYSTEM BY CALLING 1-919-517-0001. LOCATE THE "MISCELLANEOUS FILES" SECTION (SECTION #7) FOR THE FILE TITLED "CPUIDIBM.DSK."

THE CPUIDIBM PROGRAM MAY ALSO BE DOWNLOADED VIA THE INTERNET FROM THE IBM PERSONAL COMPUTER FILE LIBRARY BY SEARCHING THE FOLLOWING INTERNET URL:
<http://www.pc.ibm.com/files.html>

THE PROGRAM IS LOCATED IN THE "MISCELLANEOUS FILES" SECTION OR BY USING THE SEARCH FACILITY TO LOCATE THE FILE BY THE NAME "CPUIDIBM.DSK."

INTEL 486 PROCESSORS ARE NOT AFFECTED.

SYSTEM DIAGNOSTICS RUN WITHOUT ERRORS.

PREREQUISITES:

NONE

COMPANION:

NONE

CONCURRENT:

NONE

DETAIL:

SERVICERS WITH AFFECTED SYSTEMS SHOULD ORDER FRU P/N06H6055 USING NORMAL PARTS ORDERING PROCEDURES FOR A REPLACEMENT INTEL 60MHZ PENTIUM PROCESSOR. THE FRU KIT CONTAINS THE PROCESSOR, HEATSINK AND THERMAL GREASE.

THE DEFECTIVE PROCESSOR SHOULD BE RETURNED USING NORMAL PARTS

RETURN PROCEDURES.

THIS ECA DOES NOT COVER ANY SYSTEM BOARD REPLACEMENTS IN AN IBM APTIVA. THE APTIVA SYSTEM BOARD FRU DOES NOT CONTAIN A PROCESSOR.

NOTES:

ALL PARTS ARE TO BE RETURNED TO IBM IMMEDIATELY FOLLOWING THE INSTALLATION.

IBM AND TSS SERVICERS SHOULD RECORD PARTS, ACTUAL TIME AND TRAVEL TO: SERVICE CODE - 33
D/T2144, ECA 001
OTHER OFFICE - 990

PENTIUM IS A TRADEMARK OF INTEL CORPORATION

SAS KEYWORDS:

PSY2	PSY2ECA	IBMPC	PSY2PROG
PSVPPART	PSY2OPER	PSVPPROG	PENT
PS/1	PSY2PART	PSVP	PSVPOPER
PS1	ECAVALID	06H6055	

1.1.6 ECA001, EXPIRED JUNE 96.

Record number: H13508

Device:	D/T2620	Service code:	33
ECA number:	ECA001	Parts source:	LOC
EC number:	ECE16189	Publish flag:	R
Mandatory:	N	Hit count:	UHC00252
Automatic shipment:	N	Success count:	USC0000
Availability date:	95/06	Publication code:	PC20
Plant of control:	93	Date created:	095/08/09
Tip key:		Date last altered:	A97/02/28
		Owning B.U.:	USA

PURPOSE:

Correct IBM 16/4 ISA-16 or AUTO-ISA adapter hangs during POST or operation when used in conjunction with the 2620 system and the Dock I or Dock II.

FEATURES:

Type, Model, Stage	With B/M	Machines Affected and/or Feature/Device Description	B/M to be Installed	Service Hours	System Hours
2620	B/M0000000	MOD 80D 360CSE 170MB MOD 80F 360CSE 340MB MOD 80G 360CSE 540MB MOD 90D 360CE 170MB MOD 90F 360CE 340MB MOD 90G 360CE 540MB MOD B0F 360PE 340MB MOD B0G 360PE 540MB MOD BYF 360PE 340MB MOD H3F 360CE 340MB MOD 8YF 360CSE 340MB MOD 8CF 360CSE 340MB MOD 8YG 360CSE 540MB MOD 9CF 360CE 340MB MOD 9YF 360CE 340MB MOD 9YG 360CE 540MB	B/M0000000	00.7	00.5

PHYSICAL CHECK: All of the following four conditions must be present to qualify for ECA usage.

- Any 2620 models in the ECA FEATURES section with a serial number range of 97-xxxxx (x indicates any Alpha or numeric character,) or the following model specific serial number ranges.

80G	78-00001	THROUGH	78-FCW00	360CSE	540MB
90F	78-00001	THROUGH	78-GBD00	360CE	340MB
90G	78-00001	THROUGH	78-HGP00	360CE	540MB
8YF	78-00001	THROUGH	78-KKM00	360CSE	340MB
8CF	78-00001	THROUGH	78-KTW00	360CSE	340MB
H3F	78-00001	THROUGH	78-LDC00	360CE	340MB
BYF	78-00001	THROUGH	78-MKR00	360PE	340MB
80F	78-00001	THROUGH	78-MRC00	360CSE	340MB

- Above system used in conjunction with the:
 3545 Dock I
 or
 3546 Dock II
- Dock I or II must contain the IBM 16/4 ISA-16 or AUTO-ISA adapter card.
- A failing condition of a hang during POST or token ring operation.

PREREQUISITES:

none

COMPANION: NONE

CONCURRENT: NONE

DETAIL:

The 360 systems identified in the ECA FEATURES section may experience token ring hang conditions during POST or during token ring operation when an IBM 16/4 ISA-16 or AUTO-ISA adapter is used in an attached 3545 Dock I or 3546 Dock II docking station.

To correct this condition replace the 2620 system board FRU P/N85G2409 with a new level system board FRU P/N45H9503.

PSY2 RETAIN TIPS
ECA001, EXPIRED JUNE 96.

FRU P/N85G2409 has been purged from stock. All part orders on P/N85G2409 will be substituted to P/N45H9503.

NOTES: THIS ECA EXPIRES JUNE-15-1996
Order all FRU parts locally and record Time and Material to service code 33, ECA 001, and OTHER OFFICE 990.

SAS KEYWORDS:

PSY2	PSY2ECA	PSY2CA	THINKPAD
PSY2BRD	LOCK UP	PSY2COMM	TOKENRING
ECAVALID			

1.1.7 ECA001, IBM PC 300 PENTIUM PROCESSOR REPLACEMENT

Record number: H126326

Device:	D/T6575	Service code:	33
ECA number:	ECA001	Parts source:	NONE
EC number:	EC000000	Publish flag:	R
Mandatory:	N	Hit count:	UHC00358
Automatic shipment:	N	Success count:	USC0001
Availability date:	95/02	Publication code:	PC50
Plant of control:	23	Date created:	095/02/03
Tip key:		Date last altered:	A98/02/16
		Owning B.U.:	USA

PURPOSE:

THE PURPOSE OF THIS ECA IS TO PROVIDE A REPLACEMENT INTEL 60MHZ PENTIUM PROCESSOR FOR AN IBM PC 300 SERIES SYSTEM. THE REPLACEMENT IS TO RESOLVE THE "REDUCED PRECISION" FLOATING POINT CALCULATION PROBLEM.

INTEL HAS ACKNOWLEDGED A DEFECT IN ITS PENTIUM MICROPROCESSOR THAT CAN CAUSE INACCURATE RESULTS IN SOME MATHEMATICAL APPLICATIONS. IN SOME CASES THE PRECISION OF THE PENTIUM DIVIDE OPERATION MAY BE REDUCED.

FEATURES:

Type, Model, Stage	With B/M	Machines Affected and/or Feature/Device Description	B/M to be Installed	Service Hours	System Hours
6575	B/M0000000	6575 PC 330 ALL 1XX MODELS	B/M0000000	00.3	00.2
6585	B/M0000000	6585 PC 350 MODELS 14F 23A0000-23A0106 15H 23AA000-23AA219 ALL OTHER 1XX MODS. NOT LISTED ABOVE.	B/M0000000	00.3	00.2

PHYSICAL CHECK:

ALL SYSTEMS WITHIN THE ABOVE SERIAL NUMBER RANGES WERE MANUFACTURED WITH THE AFFECTED PENTIUM PROCESSOR. TO VERIFY THE PROCESSOR IS AFFECTED, A PROCESSOR TEST PROGRAM HAS BEEN MADE AVAILABLE BY IBM. THIS BOOTABLE PROGRAM WILL DISPLAY PROCESSOR ID INFORMATION AND TEST THE PROCESSOR'S FLOATING POINT DIVISION FUNCTION. THE TEST RESULTS WILL BE DISPLAYED TO THE USER, AND CLEARLY IDENTIFY IF THE PROCESSOR HAS THE FLOATING POINT DIVIDE (FDIV) DEFECT.

THE CPUIDIBM PROGRAM MAY ALSO BE OBTAINED FROM THE IBM PC COMPANY BBS SYSTEM BY CALLING 1-919-517-0001. LOCATE THE "MISCELLANEOUS FILES" SECTION (SECTION #7) FOR THE FILE TITLED "CPUIDIBM.DSK."

THE CPUIDIBM PROGRAM MAY BE DOWNLOADED VIA THE INTERNET FROM THE IBM PERSONAL COMPUTER FILE LIBRARY BY SEARCHING THE FOLLOWING INTERNET URL:

<http://www.us.pc.ibm.com/files.html>

THE PROGRAM IS LOCATED IN THE "MISCELLANEOUS FILES" SECTION OR BY USING THE SEARCH FACILITY TO LOCATE THE FILE BY THE NAME "CPUIDIBM.DSK."

INTEL 486 PROCESSORS ARE NOT AFFECTED.

SYSTEM DIAGNOSTICS RUN WITHOUT ERRORS.

PREREQUISITES:

NONE

COMPANION:

NONE

CONCURRENT:

NONE

DETAIL:

SERVICERS WITH AFFECTED SYSTEMS SHOULD ORDER FRU P/N06H6055 USING NORMAL PARTS ORDERING PROCEDURES FOR A REPLACEMENT INTEL 60MHZ PENTIUM PROCESSOR. THE FRU KIT CONTAINS THE PROCESSOR, HEATSINK AND THERMAL GREASE.

THE DEFECTIVE PROCESSOR SHOULD BE RETURNED USING NORMAL PARTS RETURN PROCEDURES.

THIS ECA DOES NOT COVER ANY SYSTEM BOARD REPLACEMENTS IN THE IBM PC 300. THE PC 300 SYSTEM BOARD FRU DOES NOT CONTAIN A PROCESSOR.

NOTES :

ALL PARTS ARE TO BE RETURNED TO IBM IMMEDIATELY FOLLOWING THE INSTALLATION.

IBM AND TSS SERVICERS SHOULD RECORD PARTS, ACTUAL TIME AND TRAVEL TO: SERVICE CODE - 33
D/T6575, ECA 001
OTHER OFFICE - 990

THIS ECA WILL EXPIRE FEBRUARY 03, 1998

Upon expiration of this ECA, customers may contact Intel directly to obtain a replacement processor. Replacement instructions and customer service telephone numbers can be found at the following Internet URL:

www.intel.com/procs/support/pentium/fdiv

PENTIUM IS A TRADEMARK OF INTEL CORPORATION

SAS KEYWORDS:

PSY2	65XX	PSY2ECA	IBMPC
D/T6585	PSY2OPER	PSVPPROG	PSY2PROG
PENTIUM	PSY2PART	PSVP	PENT
PC330	PC350	PC300	PSVPOPER
PSVPPART	D/T65XX	D/T6585	ECAVALID
06H6055			

1.1.8 ECA001, IBM PC 700 PENTIUM PROCESSOR REPLACEMENT

Record number: H126327

Device:	D/T6875	Service code:	33
ECA number:	ECA001	Parts source:	NONE
EC number:	EC000000	Publish flag:	R
Mandatory:	N	Hit count:	UHC00383
Automatic shipment:	N	Success count:	USC0000
Availability date:	95/02	Publication code:	PC50
Plant of control:	23	Date created:	095/02/06
Tip key:		Date last altered:	A98/02/16
		Owning B.U.:	USA

PURPOSE:

THE PURPOSE OF THIS ECA IS TO PROVIDE A REPLACEMENT INTEL 90MHZ PENTIUM PROCESSOR FOR AN IBM PC 700 SERIES SYSTEM. THE REPLACEMENT IS TO RESOLVE THE "REDUCED PRECISION" FLOATING POINT CALCULATION PROBLEM.

INTEL HAS ACKNOWLEDGED A DEFECT IN ITS PENTIUM MICROPROCESSOR THAT CAN CAUSE INACCURATE RESULTS IN SOME MATHEMATICAL APPLICATIONS. IN SOME CASES THE PRECISION OF THE PENTIUM DIVIDE OPERATION MAY BE REDUCED.

FEATURES:

Type, Model, Stage	With B/M	Machines Affected and/or Feature/Device Description	B/M to be Installed	Service Hours	System Hours
6875	B/M0000000	6875 PC 730 ALL 4XX MODELS	B/M0000000	00.3	00.2
6885	B/M0000000	6885 PC 750 MODELS 48H 23GG000-23GG166 45H 23AA000-23AA732 ALL OTHER 4XX MODS. NOT LISTED ABOVE.	B/M0000000	00.3	00.2

PHYSICAL CHECK:

ALL SYSTEMS WITHIN THE ABOVE SERIAL NUMBER RANGES WERE MANUFACTURED WITH THE AFFECTED PENTIUM PROCESSOR. TO VERIFY THE PROCESSOR IS AFFECTED, A PROCESSOR TEST PROGRAM HAS BEEN MADE AVAILABLE BY IBM. THIS BOOTABLE PROGRAM WILL DISPLAY PROCESSOR ID INFORMATION AND TEST THE PROCESSOR'S FLOATING POINT DIVISION FUNCTION. THE TEST RESULTS WILL BE DISPLAYED TO THE USER, AND CLEARLY IDENTIFY IF THE PROCESSOR HAS THE FLOATING POINT DIVIDE (FDIV) DEFECT.

THE CPUIDIBM PROGRAM MAY ALSO BE OBTAINED FROM THE IBM PC COMPANY BBS SYSTEM BY CALLING 1-919-517-0001. LOCATE THE "MISCELLANEOUS FILES" SECTION (SECTION #7) FOR THE FILE TITLED "CPUIDIBM.DSK."

THE CPUIDIBM PROGRAM MAY ALSO BE DOWNLOADED VIA THE INTERNET FROM THE IBM PERSONAL COMPUTER FILE LIBRARY BY SEARCHING THE FOLLOWING INTERNET URL:

<http://www.us.pc.ibm.com/files.html>

THE PROGRAM IS LOCATED IN THE "MISCELLANEOUS FILES" SECTION OR BY USING THE SEARCH FACILITY TO LOCATE THE FILE BY THE NAME "CPUIDIBM.DSK."

INTEL 486 PROCESSORS ARE NOT AFFECTED.

SYSTEM DIAGNOSTICS RUN WITHOUT ERRORS.

PREREQUISITES:

NONE

COMPANION:

NONE

CONCURRENT:

NONE

DETAIL:

SERVICERS WITH AFFECTED SYSTEMS SHOULD ORDER FRU P/N06H4567 USING NORMAL PARTS ORDERING PROCEDURES FOR A REPLACEMENT INTEL 90MHZ PENTIUM PROCESSOR. THE FRU KIT CONTAINS THE PROCESSOR, HEATSINK AND THERMAL GREASE.

THE DEFECTIVE PROCESSOR SHOULD BE RETURNED USING NORMAL PARTS RETURN PROCEDURES.

THIS ECA DOES NOT COVER ANY SYSTEM BOARD REPLACEMENTS IN THE IBM PC 700. THERE ARE NO SYSTEM BOARDS IN FRU STOCK THAT CONTAIN AN UPDATED PROCESSOR.

NOTES :

ALL PARTS ARE TO BE RETURNED TO IBM IMMEDIATELY FOLLOWING THE
INSTALLATION.

IBM AND TSS SERVICERS SHOULD RECORD PARTS, ACTUAL TIME AND

TRAVEL TO: SERVICE CODE - 33

D/T6875, ECA 001

OTHER OFFICE - 990

THIS ECA WILL EXPIRE FEBRUARY 06, 1998

Upon expiration of this ECA, customers may contact Intel
directly to obtain a replacement processor. Replacement
instructions and customer service telephone numbers can be
found at the following Internet URL:

www.intel.com/procs/support/pentium/fdiv

PENTIUM IS A TRADEMARK OF INTEL CORPORATION

SAS KEYWORDS:

PSY2	68XX	PSY2ECA	IBMPC
D/T6885	PSY2OPER	PSVPPROG	PSY2PROG
PENTIUM	PSY2PART	PSVP	PENT
PC730	PC750	PC700	PSVPOPER
PSVPPART	D/T68XX	6885	6875
ECAVALID	06H4567	PSVPECA	

1.1.9 ECA001, OBSOLETE

Record number: H02674

Device:	D/T8550	Service code:	
ECA number:	ECA001	Parts source:	LOC.
EC number:	EC000000	Publish flag:	R
Mandatory:	N	Hit count:	UHC02430
Automatic shipment:	N	Success count:	USC0000
Availability date:	87/04	Publication code:	PC50
Plant of control:	27	Date created:	087/04/03
Tip key:		Date last altered:	A93/06/17
		Owning B.U.:	USA

PURPOSE: THIS ECA HAS EXPIRED.

FEATURES:

Type, Model, Stage	With B/M	Machines Affected and/or Feature/Device Description	B/M to be Installed	Service Hours	System Hours
00000	B/M0000000		B/M0000000	00.1	00.0

PHYSICAL CHECK:

PREREQUISITES:

COMPANION:

CONCURRENT:

DETAIL:

NOTES: THIS ECA HAS EXPIRED.

SAS KEYWORDS:

PSY2 PSY2ECA

1.1.10 ECA001, PENTIUM PROCESSOR REPLACEMENT IN 6384 P60/D

Record number: H062600

Device:	D/T6384	Service code:	33
ECA number:	ECA001	Parts source:	NONE
EC number:	EC0000000	Publish flag:	R
Mandatory:	N	Hit count:	UHC00724
Automatic shipment:	N	Success count:	USC0002
Availability date:	95/01	Publication code:	PC50
Plant of control:	23	Date created:	095/01/04
Tip key:		Date last altered:	A98/02/16
		Owning B.U.:	USA

PURPOSE:

THE PURPOSE OF THIS ECA IS TO PROVIDE A REPLACEMENT INTEL 60MHZ PENTIUM PROCESSOR FOR AN IBM PS/VALUEPOINT P60/D SYSTEM. THE REPLACEMENT IS TO RESOLVE THE "REDUCED PRECISION" FLOATING POINT CALCULATION PROBLEM.

INTEL HAS ACKNOWLEDGED A DEFECT IN ITS PENTIUM MICROPROCESSOR THAT CAN CAUSE INACCURATE RESULTS IN SOME MATHEMATICAL APPLICATIONS. IN SOME CASES THE PRECISION OF THE PENTIUM DIVIDE OPERATION MAY BE REDUCED.

FEATURES:

Type, Model, Stage	With B/M	Machines Affected and/or Feature/Device Description	B/M to be Installed	Service Hours	System Hours
6384	B/M0000000	6384 P60/D, ALL MODS. SERIAL NUMBER RANGE 23AAAA1 - 23ABBB1 6384-PU0 (DRM MODELS) 230000A - 231315V	B/M0000000	00.3	00.2

PHYSICAL CHECK:

ALL SYSTEMS WITHIN THE ABOVE SERIAL NUMBER RANGES WERE MANUFACTURED WITH THE AFFECTED PENTIUM PROCESSOR. TO VERIFY THE PROCESSOR IS AFFECTED, A PROCESSOR TEST PROGRAM HAS BEEN MADE AVAILABLE BY IBM. THIS BOOTABLE PROGRAM WILL DISPLAY PROCESSOR ID INFORMATION AND TEST THE PROCESSOR'S FLOATING POINT DIVISION FUNCTION. THE TEST RESULTS WILL BE DISPLAYED TO THE USER, AND CLEARLY IDENTIFY IF THE PROCESSOR HAS THE FLOATING POINT DIVIDE (FDIV) DEFECT.

THE CPUIDIBM PROGRAM MAY BE OBTAINED FROM THE IBM PC COMPANY BBS SYSTEM BY CALLING 1-919-517-0001. LOCATE THE "MISCELLANEOUS FILES" SECTION (SECTION #7) FOR THE FILE TITLED "CPUIDIBM.DSK."

THE CPUIDIBM PROGRAM MAY ALSO BE DOWNLOADED VIA THE INTERNET FROM THE IBM PERSONAL COMPUTER FILE LIBRARY BY SEARCHING THE FOLLOWING INTERNET URL:

<http://www.us.pc.ibm.com/files.html>

THE PROGRAM IS LOCATED IN THE "MISCELLANEOUS FILES" SECTION OR BY USING THE SEARCH FACILITY TO LOCATE THE FILE BY THE NAME "CPUIDIBM.DSK."

INTEL 386 AND 486 PROCESSORS ARE NOT AFFECTED.

THERE ARE NO OTHER PS/VALUEPOINT SYSTEMS THAT UTILIZE THE INTEL PENTIUM PROCESSOR.

SYSTEM DIAGNOSTICS RUN WITHOUT ERRORS.

PREREQUISITES:

NONE

COMPANION:

NONE

CONCURRENT:

NONE

DETAIL:

SERVICERS WITH AFFECTED SYSTEMS SHOULD ORDER FRU P/N06H6099 USING NORMAL PARTS ORDERING PROCEDURES FOR A REPLACEMENT INTEL 60MHZ PENTIUM PROCESSOR. THE FRU KIT CONTAINS THE PROCESSOR AND HEATSINK.

THE DEFECTIVE PROCESSOR SHOULD BE RETURNED USING NORMAL PARTS RETURN PROCEDURES.

PSY2 RETAIN TIPS

ECA001, PENTIUM PROCESSOR REPLACEMENT IN 6384 P60/D

THIS ECA DOES NOT COVER ANY SYSTEM BOARD REPLACEMENTS IN THE 6384 P60/D. THE 6384 P60/D SYSTEM BOARD FRU DOES NOT CONTAIN A PROCESSOR.

NOTES:

ALL PARTS ARE TO BE RETURNED TO IBM IMMEDIATELY FOLLOWING THE INSTALLATION.

IBM AND TSS SERVICERS SHOULD RECORD PARTS, ACTUAL TIME AND TRAVEL TO: SERVICE CODE - 33
D/T6384, ECA 001
OTHER OFFICE - 990

THIS ECA WILL EXPIRE JANUARY 04, 1998

Upon expiration of this ECA, customers may contact Intel directly to obtain a replacement processor. Replacement instructions and customer service telephone numbers can be found at the following Internet URL:

[Www.intel.com/procs/support/pentium/fdiv](http://www.intel.com/procs/support/pentium/fdiv)

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SAS KEYWORDS:

VALUE POINT	PS/VP	PSVP	P60D
PSVOPER	PSY2OPER	PSVPPROG	PSY2PROG
193	PSY2	189	199
PSVPECA	PSY2ECA	PENTIUM	PSVPPART
PSY2PART	PSY2	PENT	ECAVALID
06H6099			

1.1.11 ECA001, 2625 PROACTIVE SYSTEM UPGRADE.

Record number: H021331

Device:	D/T2625	Service code:	33
ECA number:	ECA001	Parts source:	PLT
EC number:	ECE41965	Publish flag:	R
Mandatory:	Y	Hit count:	UHC00052
Automatic shipment:	N	Success count:	USC0000
Availability date:	96/06	Publication code:	PC40
Plant of control:	27	Date created:	096/06/28
Tip key:		Date last altered:	A96/11/18
		Owning B.U.:	USA

PURPOSE:

The purpose of this ECA is to install current engineering changes that improve system operations listed in the DETAIL section.

FEATURES:

Type, Model, Stage	With B/M	Machines Affected and/or Feature/Device Description	B/M to be Installed	Service Hours	System Hours
2625	B/M9999999	365C / 305, W13, 3Y5 365C / W17 365CS / 203, 205, 2Y5 365CS / W11, W12, W16 365CD / B05, W15, BY5 365CD / W19 365CSD / A05, W14, AY5 365CSD / W18	B/M9999999	01.0	01.0

PHYSICAL CHECK: View the inside of the system base under the main battery for the presence of the following EC label:

```

+-----+
| IBM EC E41965 |
|   Applied     |
+-----+
    
```

The label indicates that the EC has been applied. If this EC label is not present the ECA must be installed.

PREREQUISITES: NONE

COMPANION: NONE

CONCURRENT: NONE

DETAIL:

This upgrade EC may be applied prior to system failure or during a repair action (RA). Only 2625 models listed in the FEATURES section require the upgrade.

IBM would like customers that qualify for this ECA upgrade to call their IBM authorized service provider for this service.

The EC will improve operations in the following areas with the installation of a System board, BIOS upgrade, AC Adapter, and Upgrade Kit.

1. Improves CMOS battery life.
2. Improves memory card retention.
3. Improves fuel gauge accuracy.
4. Improves low battery beep. (current beep may not be clear.)
5. Improves external video when attached to port replicator.
6. Improves AC Adapter, system end, plug retention.
7. System BIOS is updated to current level (2.0.14 or later.)

The FRUs to be ordered for the following Models are:

ThinkPad 365 Model	FRU Part Number	Sysbrd Bar Code
203, 205, 2Y5, W11, W12, W16	Sysbrd P/N76H2986 *	J11NX
All Other Models	Sysbrd P/N76H2984 **	J11NW
All Models	Ac Adapter P/N85G6698	N/A

All Models	Upgrade Kit P/N76H2987	N/A
------------	------------------------	-----

The Upgrade Kit FRU P/N76H2987 contains a:

Memory Bracket, Mylar Insulator, Rubber Bumper, and an illustrated installation instruction sheet.

* Note: System board FRU P/N76H2951 with bar code J11KH is at the correct level, but, if ordered, it now substitutes to System board FRU P/N76H2986 listed in the above chart.

** Note: System board FRU P/N76H2949 with bar code J11KG is at the correct level, but, if ordered, it now substitutes to System board FRU P/N76H2984 listed in the above chart.

BIOS Code can be down loaded in the following ways.

Files are located on the PC company's Bulletin Board Service (BBS). The direct line for modem connection to The PC Company BBS is 1-919-517-0001 or tieline 255-0001.
(BBS). The direct line for modem connection to The PC Company BBS is 1-919-517-0001 or tieline 255-0001.

The Canadian BBS phone numbers are:

Montreal-514-938-3022, Toronto-905-316-4255,
Winnipeg-204-934-2735, Vancouver-604-664-6464.

The data may also be downloaded via the Internet from the IBM Personal Computer File Library by searching the following Internet URL: <http://www.pc.ibm.com/files.html>

NOTES:

This upgrade may be applied by any authorized IBM servicer:

- O In the USA at the TSS Repair Center in Memphis Tn.
Call the IBM PC Help Center at 1-800-PS2-2227 for shipping information.
- O In Canada at the Nulogix Repair Centre in North York, Ontario.
Canadian Customers can call IBM's PC Support Line at
1 - 800-565 - 3344 for shipping information.
- O Customers can carry their systems in to an IBM Authorized Business Partner (IBM Authorized Dealer Servicer) for this ECA upgrade.
- O Customers with IBM On-site Warranty Upgrades can have this ECA upgrade applied by their IBM Servicer.

This ECA will expire November 30, 1997. TSS and IBM Servicers should record all time and ECA FRUs using Service Code 33, ECA001, other office 990. IBM Authorized Business Partners (IBM Authorized Service Dealers) should refer to their Dealers Service Support Guide for reimbursement information.

Any other warranty labor and FRU part replacement done on the system must be recorded using normal accounting procedures.

It is IBM's intention to provide this upgrade to all systems that require it during the life of this ECA.

SAS KEYWORDS:

PSY2	PSY2PWR	PSY2BRD	PSY2ADPT
PSY2ECA	PSY2ECBM	THINKPAD	365
UNCLASSIFIED			

1.1.12 ECA001, 320/720 SCSI CABLE REPLACEMENT TO SUPPORT CDROM

Record number: H132199

Device:	D/T8642	Service code:	33
ECA number:	ECA001	Parts source:	
EC number:	EC000000	Publish flag:	R
Mandatory:	N	Hit count:	UHC00460
Automatic shipment:	N	Success count:	USC0000
Availability date:	96/01	Publication code:	PC50
Plant of control:	27	Date created:	096/01/15
Tip key:		Date last altered:	A98/05/13
		Owning B.U.:	USA

PURPOSE:

----- Note: This ECA expires September 3, 2002-----

PURPOSE:

This ECA provides SCSI cables to replace the existing SCSI cable shipped in a limited number of Server 720 (8642) Systems OR PC Server 320 (8640) EISA/PCI Systems configured with a Hot-Swap Bay Option and at least one 16 bit SCSI Drive.

The new cable(s) eliminate a potential cause of intermittent read errors and general failures when reading from a 8 bit SCSI device during periods of high activity on the SCSI channel.

FEATURES:

Type, Model, Stage	With B/M	Machines Affected and/or Feature/Device Description	B/M to be Installed	Service Hours	System Hours
8642	B/M0000000	PC SERVER 720 MODELS 0Z0, 1Z0, 2ZS, AND 4ZS, MFG. BEFORE 12/12/95. (MFG DATE: 512)	B/M0000000	00.5	00.3
8640	B/M0000000	PC SERVER 320 MODELS 0X*, 0Y*, 1Y* WITH HOT-SWAP BAY.	B/M0000000	00.5	00.3

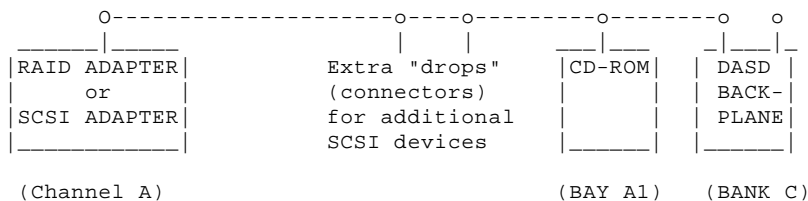
PHYSICAL CHECK:

Affected Systems are PC Server 720 Type 8642 model 0Z0, 1Z0, 2ZS, 4ZS manufactured in 1995, utilizing a SINGLE Multi-connector SCSI Cable (FRU p/n06H6661 or 06H6675) and PC Server 320 Type 8640 model 0Xx, 0Yx, 1Yx configured with a Hot-Swap Bay Option utilizing a SINGLE Multi-connector SCSI Cable (FRU p/n06H6876), and at least one 16-bit SCSI Hard Drive.

PC Server 720 and 320 Systems with the TWO-CABLE SCSI attachment design are not affected. Check the System to determine the cabling method installed according to the following diagrams:

1. SINGLE CABLE METHOD (PC Server 720):

The CD-ROM is attached between the RAID controller or SCSI adapter and the DASD backplane, as follows:

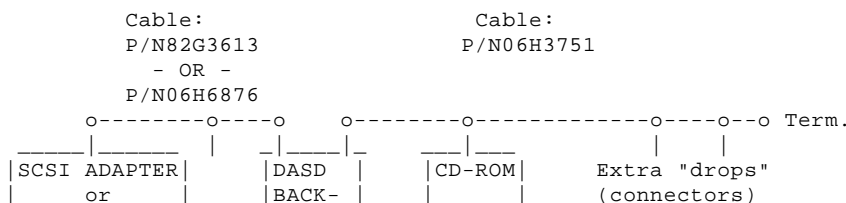


This configuration includes:

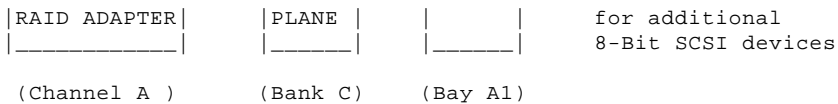
- o Cable FRU P/N 06H6661 (RAID Array Systems)
- OR -
- o Cable FRU P/N 06H6675 (Non-RAID Array Systems)

2. TWO CABLE SOLUTION (PC Server 720):

The DASD BACKPLANE is attached between the RAID controller or SCSI adapter and the CD-ROM, as follows:



ECA001, 320/720 SCSI CABLE REPLACEMENT TO SUPPORT CDROM

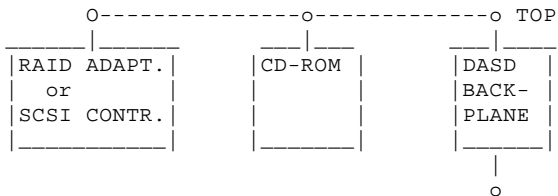


This configuration requires:

- o Cable FRU P/N06H3751.
 - AND -
- o Cable FRU P/N82G3613 (RAID Array Systems)
 - OR-
- o Cable FRU P/N06H6876 (Non-RAID Array Systems)

3. SINGLE CABLE METHOD (PC Server 320):

The CD-ROM is attached between the RAID controller or SCSI adapter and the DASD backplane, as follows:



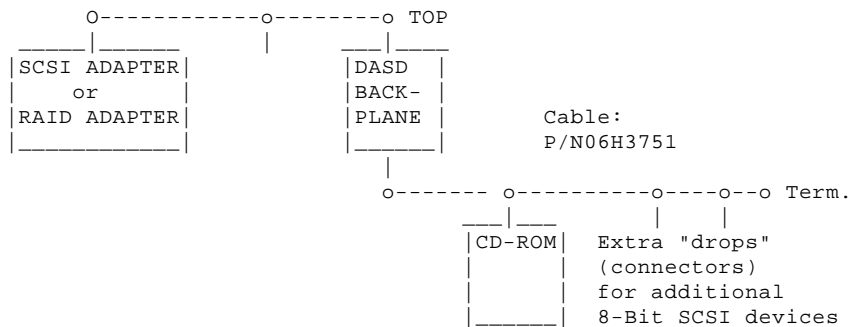
This configuration includes:

- O Cable FRU P/N 06H6876 (RAID Array and Non-RAID Array Systems with Hot-Swap Bay Option).

4. TWO CABLE SOLUTION (PC Server 320):

The DASD BACKPLANE is attached between the RAID controller or SCSI adapter and the CD-ROM, as follows:

Cable:
P/N06H6876



This configuration includes:

- O Cable FRU P/N06H6876 (RAID Array and Non-RAID Array Systems with Hot-Swap Bay Option).
- O Cable FRU P/N06H3751 (RAID Array and Non-RAID Array Systems with Hot-Swap Bay Option).

If the Server has the SINGLE SCSI cable, with the CD-ROM attached between the SCSI controller (or the RAID adapter) and the DASD Backplane, this ECA is applicable (see 1 and 3 above).

PREREQUISITES: NONE

COMPANION: NONE

CONCURRENT: NONE

DETAIL:

Early production of the Server 720 and all of the Server 320 Hot-Swap models contained a single multi-drop SCSI cable to connect the 8 - bit CDROM drive, SCSI or RAID Adapter, and the Hot-Swap Backplane. Some of these Systems, with 8-bit SCSI devices (CDROM drive) installed between the SCSI Adapter and hot Swap Backplane have experienced intermittent "General Failures" or "Read Errors"(example: CDROM reads) Specifically the 4x CDROM configured in the Server 720. These failures may occur during applications or diagnostics. The frequency of failure may change with removal or addition of

16 - Bit Hard drives.

While no failures have been observed on 720 Systems with the 2X CDROM drive, the two cable solution should be used to ensure stability. This situation is not a fault of the 4X CDROM drive but specific to placement of a 8 Bit SCSI Device between the 16 Bit SCSI / RAID Adapter and the 16 Bit hard drives on the SCSI Bus of the 320 and 720 Servers.

Example:

```

16 - Bit ----- 8-Bit ----- 16-Bit
RAID or           Drive           Drive(s)
Non-RAID         (CDROM)          (Hard Drives)
Adapter
    
```

The two cable configuration resolves this problem by locating the 8 - Bit SCSI Devices AFTER the 16-Bit SCSI Devices.

Example:

```

16 - Bit ----- 16-Bit ----- 8-Bit
RAID or           Drive(s)        Drive(s)
Non-RAID         (Hard Drives)    (CDROM, Etc.)
Adapter
    
```

For the 720:

Order one of FRU P/N06H3751 and either FRU P/N82G3613 (Array) or P/N06H6876 (Non-Array) using normal parts ordering procedures. The RAID Controller or SCSI Adapter to Backplane cable will attach to the Backplane next to the power connector. Cable FRU P/N06H3751 (Backplane-CDROM-Terminator Cable) will connect from the second connector (on the opposite side of the Backplane) to the CDROM drive and will contain termination.

For the 320:

Order one of the FRU P/N06H3751 using normal parts ordering procedures. Disconnect the Original Cable from the CDROM. Cable FRU P/N06H3751 (Backplane-CDROM-Terminator Cable) will connect from the second connector (bottom connector) of the Hot-Swap Backplane to the CDROM drive and will contain termination.

Note: All 8-Bit SCSI devices in including the CDROM must be connected to the second cable in either the 320 or 720 Server.

Cable FRU P/N Reference for 2 cable configurations in the 320 and 720 Servers:

FRU Number	Description
82G3613	RAID Controller to Hot-Swap Backplane cable for 720 RAID Array Systems
06H6876	SCSI Adapter to Hot-Swap Backplane cable for 720 Non-RAID Array Systems
06H3751	Bottom/end of Hot-Swap Backplane to CDROM Terminator Cable (all 320 / 720)
06H6876	SCSI Adapter / RAID Controller to Hot-Swap Backplane cable for 320 with Hot-Swap Bay Option (standard)

NOTES:

Only the FRU Part numbers listed above (82G3613, 06H6876 and 06H3751 for 720, 06H3751 for 320) are eligible for reimbursement under this ECA.

Use Service Code 33, Other office worked 990, and ECA001 to record parts and labor.

This ECA expires September 3, 2002

This ECA is "As Required"

SAS KEYWORDS:

PSY2	ECA001	ECBM	PSY2ECA
SERVER	720	D/T8642	SCSI-2
ROM	CD	PSY2ERR	ECAVALID
HEALTH	P/N82G3613	P/N06H6876	P/N06H3751
P/N06H6661	P/N06H6675	320	D/T8640
8640	8642	SERVICER ONLY	

1.1.13 ECA001, 8600 W/ OS/2 2.1 OR TOKN-RNG LAN STREAMER

Record number: H12981

Device:	D/T8600	Service code:	33
ECA number:	ECA001	Parts source:	LOC.
EC number:	EC000048	Publish flag:	R
Mandatory:	N	Hit count:	UHC00694
Automatic shipment:	N	Success count:	USC0000
Availability date:	93/09	Publication code:	PC40
Plant of control:	27	Date created:	093/06/08
Tip key:		Date last altered:	A95/09/11
		Owning B.U.:	USA

PURPOSE:

The purpose of this ECA is to provide an 8600 field upgrade to enable support of either of the following:

- OS/2 Version 2.1
- IBM Token Ring Lan Streamer

FEATURES:

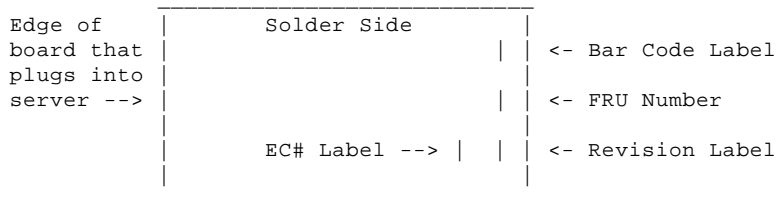
Type, Model, Stage	With B/M	Machines Affected and/or Feature/Device Description	B/M to be Installed	Service Hours	System Hours
8600	B/M000000	MODELS 001, 002, 003	B/M71G4841	03.0	02.5

PHYSICAL CHECK:

The EC level of the 50MHz processor board must be known to determine ECA eligibility and appropriate action required. There are two manufacturers of 50MHz boards which may be encountered in the field, each having different labeling methods. The EC level can be determined by referencing labels on the solder side of the boards. The labels can be read without removing the boards from the server.

(Note: The 50MHz boards can only be used in slots 0 and 1 of the server.)

The EC level of the boards can be determined one of two ways, depending on the manufacturer of the board assembly:



1. Some boards will contain an EC# label on the solder side of the board, with the EC level (eg. D30616).
2. Other processor boards may not contain an EC# label, and the bar code label is different; the bar code label will state "50 MHZ CPU 308-0017-001." On these boards, the revision level of the board must be used to determine the EC level. The revision level is identified by the highest number colored-in on the revision label.

REVISION LEVEL 26 = EC LEVEL D30616
 REVISION LEVEL 27 = EC LEVEL D30640
 Other revisions may be encountered.

If ANY of the following conditions exist, NO hardware replacement is necessary. However, the appropriate firmware and software levels are required.

FOR OS/2 VERSION 2.1:

1. LESS than 128 MB of memory installed;
2. ONLY 33MHz CPU(s) installed (no 50MHz installed);
3. IBM Orthogonal RAID-5 software is NOT used;
4. EC D30640 installed (processor board revision 27);
5. EC D30616 installed (processor board revision 26) AND firmware upgraded to version 1.6.2

FOR IBM TOKEN-RING LAN STREAMER:

1. The LAN streamer is to be located in a micro channel slot controlled by a 33MHz processor;
2. EC D30640 installed (processor board revision 27);
3. EC D30616 installed (processor board revision 26) AND firmware upgraded to version 1.6.2

PREREQUISITES: See DETAIL section below.

COMPANION: See DETAIL section below.

CONCURRENT: See DETAIL section below.

DETAIL:

THE PROPER USE OF THIS ECA REQUIRES CORRECT LEVELS OF HARDWARE, FIRMWARE, AND SOFTWARE. These requirements are listed in the following three sections.

***** 1. HARDWARE *****

If the installed 50MHz processor board IS at EC level D30616 or D30640, NO hardware replacement is required.

If the installed 50MHz processor board is NOT at EC level D30616 or D30640, order Field B/M 71G4841, quantity equal to the number of 50MHz processor boards that must be replaced. Each Field B/M contains one 50MHz processor board at EC level D30640, with complete installation instructions. The MLC Coordinator in the Branch Office should be contacted for assistance ordering B/M 71G4841 from the Raleigh Plant. NO FRU PARTS SHOULD BE ORDERED OR CHARGED TO THIS ECA.

***** 2. FIRMWARE *****

Firmware level 1.6.2 is required to support OS/2 2.1 and the LANSTREAMER Adapter. Cards that require a firmware upgrade, if present, are the:

- 50MHz CPU (*)
- 33MHz CPU (FRU P/N 92F0219),
- Remote Maintenance Processor (FRU P/N 92F0200).

* If the 50MHz processor boards in the machine are at EC level D30616 (revision 26), then the firmware must be upgraded on the processor boards to version 1.6.2. Processor boards at EC level D30640 already have 1.6.2.

If the customer is responding to the "OS/2 2.1 Upgrade Program" and has completed the "Customer Response Information" form, the firmware package will be shipped to the location specified on the form.

Firmware level 1.6.2 can be obtained electronically from the SERV295 tool repository by entering the following VM command:

```
TOOLS SENDTO BCRVMPC2 SERC SERV295 GET UPGF0162 PACKAGE
```

Firmware level 1.6.2 is also available by calling Multimedia Technical Support at 1-800-241-1620 (in the U.S.). Requests from outside the U.S. should be submitted through RETAIN as a software PMR to queue SV295 L18I, and must contain system serial number and complete shipping information.

***** 3. SOFTWARE *****

Once the correct hardware and firmware level has been installed in the system, the software products, such as MASS/2, RAID-5, and MP EXTENSIONS/2, must be upgraded to the correct level.

If the customer is responding to the "OS/2 2.1 Upgrade Program" and has completed the "Customer Response Information" form, the appropriate software level(s) will be shipped to the location specified on the form.

The following software versions are necessary with firmware level 1.6.2:

- FOR OS/2 VERSION 2.1
- IBM Multi Processing Extensions/2 Version 2.0
 - IBM Orthogonal RAID-5 Disk Array/2 Version 2.0
 - IBM Maximum Availability and Support System/2 Version 1.6
- These software versions (including firmware 1.6.2) can also be obtained electronically from the SERV295 tool repository by entering the following VM command:

```
TOOLS SENDTO BCRVMPC2 SERC SERV295 GET UPGOS21 PACKAGE
```

FOR NETWARE VERSION 3.11

- IBM Orthogonal RAID-5 Disk Array/2 Version 1.01
 This software version (including firmware 1.6.2) can also be obtained electronically from the SERV295 tool repository by entering the following VM command:

TOOLS SENDTO BCRVMPC2 SERC SERV295 GET UPGNW311 PACKAGE

FOR OS/2 VERSION 1.30.2

- IBM Multi Processing Extensions/2 Version 1.6
 - IBM Orthogonal RAID-5 Disk Array/2 Version 1.6
 - IBM Maximum Availability and Support System/2 Version 1.6
 These software versions (including firmware 1.6.2) can also be obtained electronically from the SERV295 tool repository by entering the following VM command:

TOOLS SENDTO BCRVMPC2 SERC SERV295 GET UPGFW162 PACKAGE

Appropriate software versions can also be obtained from Multimedia Technical Support at 1-800-241-1620 (in the U.S.). Requests from outside the U.S. should be submitted through RETAIN as a software PMR to queue SV295 L18I, and must contain system serial number and complete shipping information.

NOTES:

Record all time using D/T8600, ECA001, Service Code 33.
 NO FRU PARTS SHOULD BE CHARGED TO THIS ECA.

Return all parts according to procedures outlined in the ECA instructions shipped with the Field Bill of Material.

SAS KEYWORDS:

PSY2	D/T8600	195	295
PSY2MEM	PSY2COMM	PARALLAN	PSY2PROG
SERVER	8600	TOKEN-RING	MICROCODE
PSY2ECA	ECAVALID		

1.1.14 ECA001, 8640 PENTIUM PROCESSOR REPLACEMENT

Record number: H126291

Device:	D/T8640	Service code:	33
ECA number:	ECA001	Parts source:	NONE
EC number:	EC000000	Publish flag:	R
Mandatory:	N	Hit count:	UHC00636
Automatic shipment:	N	Success count:	USC0000
Availability date:	01/01	Publication code:	PC50
Plant of control:	23	Date created:	094/12/28
Tip key:		Date last altered:	A98/05/18
		Owning B.U.:	USA

PURPOSE:

THE PURPOSE OF THIS ECA IS TO PROVIDE A REPLACEMENT INTEL 60MHZ PENTIUM PROCESSOR FOR AN IBM 8640 PC SERVER 300. THE REPLACEMENT IS TO RESOLVE THE "REDUCED PRECISION" FLOATING POINT CALCULATION PROBLEM.

INTEL HAS ACKNOWLEDGED A DEFECT IN ITS PENTIUM MICROPROCESSOR THAT CAN CAUSE INACCURATE RESULTS IN SOME MATHEMATICAL APPLICATIONS. IN SOME CASES THE PRECISION OF THE PENTIUM DIVIDE OPERATION MAY BE REDUCED.

THIS ECA WILL EXPIRE ON JANUARY 23, 2002

FEATURES:

Type, Model, Stage	With B/M	Machines Affected and/or Feature/Device Description	B/M to be Installed	Service Hours	System Hours
8640	B/M000000	8640 ALL MODELS W/PENT	B/M000000	00.3	00.0

PHYSICAL CHECK:

ALL 8640 PENTIUM MODELS (OPT, OP0) WERE MANUFACTURED WITH THE AFFECTED PENTIUM PROCESSOR. TO VERIFY THE PROCESSOR CURRENTLY INSTALLED IS AFFECTED, A PROCESSOR TEST PROGRAM HAS BEEN MADE AVAILABLE BY IBM. THIS BOOTABLE PROGRAM WILL DISPLAY PROCESSOR ID INFORMATION AND TEST THE PROCESSOR'S FLOATING POINT DIVISION FUNCTION. THE TEST RESULTS WILL BE DISPLAYED TO THE USER, AND CLEARLY IDENTIFY IF THE PROCESSOR HAS THE FLOATING POINT DIVIDE (FDIV) DEFECT.

THE PROCESSOR ID PROGRAM MAY BE OBTAINED THROUGH THE IBM INTERNAL "VALUE" DISK BY ENTERING THE FOLLOWING COMMAND AT THE VM PROFS/OFFICEVISION COMMAND LINE:

REQUEST CPUIDIBM PACKAGE FROM VALUE AT BCRVMPC2

THE CPUIDIBM PROGRAM MAY ALSO BE OBTAINED FROM THE IBM PC COMPANY BBS SYSTEM BY CALLING 1-919-517-0001. LOCATE THE "MISCELLANEOUS FILES" SECTION (SECTION #7) FOR THE FILE TITLED "CPUIDIBM.DSK."

THE CPUIDIBM PROGRAM MAY ALSO BE DOWNLOADED VIA THE INTERNET FROM THE IBM PERSONAL COMPUTER FILE LIBRARY BY SEARCHING THE FOLLOWING INTERNET URL:

<http://www.pc.ibm.com/files.html>

THE PROGRAM IS LOCATED IN THE "MISCELLANEOUS FILES" SECTION OR BY USING THE SEARCH FACILITY TO LOCATE THE FILE BY THE NAME "CPUIDIBM.DSK."

VIEW THE README.TXT FILE ON THE CPUIDIBM DISKETTE PRIOR TO USING THE DISKETTE.

INTEL 486 PROCESSORS ARE NOT AFFECTED.

SYSTEM DIAGNOSTICS COMPLETE WITHOUT ERROR.

PREREQUISITES: NONE

COMPANION: NONE

CONCURRENT: NONE

DETAIL:

SERVICERS WITH AFFECTED SYSTEMS SHOULD ORDER FRU P/N06H7718 USING NORMAL PARTS ORDERING PROCEDURES FOR A REPLACEMENT INTEL 60MHZ PROCESSOR. THE FRU KIT CONTAINS THE PROCESSOR, HEATSINK AND THERMAL GREASE.

THE DEFECTIVE PROCESSOR SHOULD BE RETURNED USING NORMAL PARTS RETURN PROCEDURES.

PSY2 RETAIN TIPS

ECA001, 8640 PENTIUM PROCESSOR REPLACEMENT

THIS ECA DOES NOT COVER ANY SYSTEM BOARD REPLACEMENTS IN THE 8640. THE 8640 SYSTEM BOARD FRU DOES NOT CONTAIN A PROCESSOR.

NOTES :

ALL PARTS ARE TO BE RETURNED TO IBM IMMEDIATELY FOLLOWING THE INSTALLATION.

IBM AND TSS SERVICERS SHOULD RECORD PARTS, ACTUAL TIME AND TRAVEL TO: SERVICE CODE - 33
D/T8640, ECA 001
OTHER OFFICE - 990

PENTIUM IS A TRADEMARK OF INTEL CORPORATION

THIS ECA WILL EXPIRE ON JANUARY 23, 2002

SAS KEYWORDS:

PSY2	8640	PSY2ECA	IBMPC
PSY2OPER	PSY2PROG	PENTIUM	PSY2PART
PCSERVER	ECAVALID	06H7718	HEALTH

1.1.15 ECA001, 9527 POTENTIAL SAFETY EXPOSURE

Record number: H13988

Device:	D/T9527	Service code:	33
ECA number:	ECA001	Parts source:	
EC number:	EC000000	Publish flag:	R
Mandatory:	Y	Hit count:	UHC00191
Automatic shipment:	N	Success count:	USC0000
Availability date:	95/09	Publication code:	PC00
Plant of control:	27	Date created:	095/09/22
Tip key:		Date last altered:	A95/09/22
		Owning B.U.:	USA

PURPOSE: IMPORTANT SAFETY INSTRUCTIONS

The purpose of this ECA is to correct a limited potential exposure to electrical shock on all models and serial numbers of 9527 monitors (17P, 17PT, 17X, 17XT and 17XG).

This condition occurs only if ALL of the following conditions exist:

1. If one of two screws on top of the EMI shield penetrates an improperly installed top degaussing coil.
2. If the monitor and system is attached to an ungrounded power receptacle.
3. If a person is touching earth ground and system or monitor ground.
4. If the monitor is in a degaussing cycle (approximately 6 seconds) which occurs:
 - a. at power-on,
 - b. any time the degaussing switch on the front panel is depressed,
 - c. when the monitor comes out of power saver mode.

This ECA corrects this exposure to electrical shock by providing instructions to remove two screws and affix labels to indicate the screws have been removed and should not be re-installed.

FEATURES:

Type, Model, Stage	With B/M	Machines Affected and/or Feature/Device Description	B/M to be Installed	Service Hours	System Hours
9527	B/M0000000	ALL MODELS	B/M0000000	00.3	00.3

PHYSICAL CHECK:

Look for a "IBM Check Code" label (example below) on the UNDERSIDE of the rear cover, next to the machine type, serial number and date of manufacture label. (This label is NOT ON THE BACK OF THE REAR COVER. It is on the UNDERSIDE of the rear cover.)

If the monitor is packed, check for an IBM Check Code label adjacent to the carton bar-code label. If present, no action is required.

If the IBM Check Code 2785 label is not present, continue with this procedure. The label appears as below:

```

| IBM CHECK CODE 2785 |
| SEQUENCE CODE XXXXX |

```

PREREQUISITES: NONE

COMPANION: NONE

CONCURRENT: NONE

DETAIL:

During recent internal testing, IBM discovered a potential safety issue with all models of the 9527 color monitor.

A small number of monitors may have been incorrectly assembled in a manner which could allow either of two sheet metal screws at the top of the monitor to penetrate the top degaussing coil.

The two degaussing coils are located inside the Metal ITC Shield touching the CRT (Cathode Ray Tube) at the top and bottom.

Servicers should order Bill of Material FRU P/N60H5798 which provides materials sufficient to fix 10 monitors and contains:

1. A detailed instruction sheet with illustrations.

2. 10 label sets containing:
 - "No Screw Here" labels using icon symbols.
 - Check Code labels to show the monitor has been fixed.
 - 10 pre-addressed postcards to be mailed back for records update.

Unused label sets should be retained for future use.

-----IMPORTANT-----
The pre-addressed postcard MUST be filled out and mailed for tracking purposes.

Corrective action procedure:

NOTE: Observe all safety instructions in HMM S71G-4197-02, at all times.

1. Power off the system unit and monitor.
2. Remove all cables from the monitor.
It is not necessary to remove the tilt swivel stand.
3. Place the monitor face-down on a flat clean surface, protected with a soft cloth or other material.
4. On the rear of the monitor, remove 4 plastic covers, which hide the rear cover screws, by turning them 90 degrees with a screwdriver. Use care not to damage the plugs.
5. Remove the four cover mounting screws (5.5mm or 7/32" socket or nut driver, some monitors may have phillips screws).
6. Remove the rear cover with the tilt swivel stand attached.
7. Locate and remove the two screws on the top of the monitor EMI (ElectroMagnetic Interference) shield, closest to the front of the screen. These two screws attach the top front of the EMI shield to the top of the Metal ITC Shield. (Refer to the illustrations in the instructions.)
8. Discard the two screws just removed and place one "No Screw Here" label over each screw hole in the EMI shield, so it does not overlap the metal ITC shield.
9. Reinstall the rear cover.
10. Place an "IBM Check code" label on the underside of the rear cover cover, in the molded rectangle area next to the machine type, serial number and date of manufacture label.
11. Write the serial number of the monitor on the pre-addressed post card which the labels were affixed to. Mail this post card at the earliest opportunity.
12. Place the monitor in the operating position, perform power on check (Power LED on, test raster, etc.) attach the cables and return it to the customer.
13. The remaining "IBM Check code" label is to be placed on the outside of the carton, next to the bar code label, for monitors that are packaged in cartons.

NOTES:

When servicing any model of 9527 the above service action is a MANDATORY SAFETY REWORK and must be applied in addition to any other repair. Please ensure that this SAFETY REWORK is applied to ALL of the customer's 9527 monitors.

The labels, post card and instructions used in FRU P/N60H5798 will also be shipped with all of the major 9527 repair FRU's to assure that any 9527 being repaired for any reason, has the labels and instructions available to implement this safety exposure fix.

The following action is applicable if replacing the ITC or degauss coil:

Prior to disassembling the monitor to replace the ITC or degaussing coil, notice the routing of the degaussing coil. The degaussing coil should be in direct contact with the CRT.

There are channels formed at both the top and bottom of the metal ITC shield into which the degaussing coil must be placed and secured by tie wraps supplied with the ITC FRU. If the coil obstructs any screw holes, the routing is wrong and requires correction before reassembling the monitor.

Service activity should be recorded using Service Code 33, Machine type 9527, ECA 001 and Other Office 990.

SAS KEYWORDS:

PSY2	PSY2ECA	PSY2DISP	PSY2ECBM
SAFETY	FULL	JACKET	

1.1.16 2524 730T TOP COVER BEZEL REPLACEMENT.

Record number: H162138

Device:	D/T2524	Service code:	33
ECA number:	ECA001	Parts source:	LOC
EC number:	EC9999999	Publish flag:	R
Mandatory:	N	Hit count:	UHC00009
Automatic shipment:	N	Success count:	USC0000
Availability date:	97/11	Publication code:	PC40
Plant of control:	24	Date created:	097/12/03
Tip key:		Date last altered:	A97/12/10
		Owning B.U.:	USA

PURPOSE:

Replace FRU Bezel when cracked.

FEATURES:

Type, Model, Stage	With B/M	Machines Affected and/or Feature/Device Description	B/M to be Installed	Service Hours	System Hours
2524	B/M9999999	MODEL 730T AND 730TE	B/M9999999	00.4	00.2

PHYSICAL CHECK:

Must be Model 730T or 730TE.

PREREQUISITES: NONE

COMPANION: NONE

CONCURRENT: NONE

DETAIL:

The Model 730T bezel, called Top Cover Assembly (TPF Model) FRU should be replaced using this ECA if the bezel has cracked. Use current FRU stock of FRU P/N84G0509 for the 730T and FRU P/N39H6020 for the 730TE.

NOTES:

Order all FRU parts locally and record time and material to ECA001 other office worked 990.

THIS ECA EXPIRES on 11/30/1999.

SAS KEYWORDS:

PSY2 PSY2ECA THINKPAD UNCLASSIFIED

1.1.17 2619 MOD 355 LCD HINGE (EXPIRED NOVEMBER-22-1997.)

Record number: H136834

Device:	D/T2619	Service code:	33
ECA number:	ECA001	Parts source:	LOC
EC number:	ECE67321	Publish flag:	R
Mandatory:	N	Hit count:	UHC00141
Automatic shipment:	N	Success count:	USC0002
Availability date:	96/11	Publication code:	PC40
Plant of control:	24	Date created:	097/03/10
Tip key:		Date last altered:	A98/03/31
		Owning B.U.:	USA

PURPOSE:

To correct LCD cover damage caused by loose hinge screws install the new FRU components listed in the detail area of this ECA.

FEATURES:

Type, Model, Stage	With B/M	Machines Affected and/or Feature/Device Description	B/M to be Installed	Service Hours	System Hours
2619	B/M9999999	MODELS K20 K25 L50 L55 KYD KCD LYE LCE	B/M9999999	00.7	00.5

PHYSICAL CHECK:

- o Any 2619 355C and CS with cracks or breaks in or near the hinge area of the LCD cover.

OR

- o Any 2619 355C, CS, with hinge screws that are not tightly seated or are loose within the LCD unit.

PREREQUISITES: NONE

COMPANION: NONE

CONCURRENT: NONE

DETAIL:

This is a no cost ECA that will be applied to systems identified in the FEATURES and PHYSICAL CHECK sections.

A small percentage of 2619 systems have been reported to have LCD cover stress cracks or breakage in the hinge area. It has been determined that this is caused by loose hinge screws. New level FRUs, listed below, have been released to correct this condition.

An installation instruction sheet is included in the Hinge Kits.

Note: There are 2 6mm screws and 2 4mm screws that hold the hinge to the back of the LCD rear cover. Replace the 6mm screws with coated 6mm screws (P/N in chart).

The 2 4mm brass screws that are removed from the hinge area of the LCD back cover should be coated with Loctite before they are reinstalled in the new cover (P/N in chart).

The 2 other screws holding the LCD to the cover and the 1 screw holding the card to the cover should be tightened if loose. Do not use Loctite on these screws.

IMPORTANT:

The following FRU Part Numbers in the far right column can be used until the FRU kits are available.

REQUIRED ECA MATERIAL

DESCRIPTION	FRU P/N	QUANTITY NEEDED FOR EACH ECA		SEPARATE FRU COMPONENTS OF THE KITS.
		TFT LCD	DSTN LCD	
TFT Hinge Kit	P/N11J9524	1		P/N84G5661 P/N84G5662
DSTN Hinge Kit	P/N11J9522		1	P/N66G6205 P/N66G6206
2.5 x 6mm adhesive	P/N11J9527	2	2	P/N66G5124 SCREW KIT. USE WITH LOCTITE.

PSY2 RETAIN TIPS

2619 MOD 355 LCD HINGE (EXPIRED NOVEMBER-22-1997.)

TFT LCD Rear Cover	P/N11J9525	1		P/N84G5654 MUST TRANSFER OLD LOGO.
DSTN LCD Rear Cove	P/N11J9523		1	P/N84G5865 MUST TRANSFER OLD LOGO.
Loctite 290	P/N0216348	1	1	

NOTES: THIS ECA EXPIRES NOVEMBER-22-1997
Order all FRU parts locally and record Time and Material to service code 33, ECA 001, and OTHER OFFICE 990.

SAS KEYWORDS:

PSY2 PSY2ECA THINKPAD UNCLASSIFIED
SPLIT D/T2620

1.1.18 2630 ECA001 REPLACE LCD COVER FOR BREAKAGE AT LEFT HINGE.

Record number: H161730

Device:	D/T2630	Service code:	33
ECA number:	ECA001	Parts source:	LOC
EC number:	EC9999999	Publish flag:	R
Mandatory:	N	Hit count:	UHC00033
Automatic shipment:	N	Success count:	USC0000
Availability date:	97/11	Publication code:	PC40
Plant of control:	24	Date created:	097/11/10
Tip key:		Date last altered:	A97/12/08
		Owning B.U.:	USA

PURPOSE:

Replace the LCD top cover for cracks at the left hinge area as shown in the PHYSICAL CHECK.

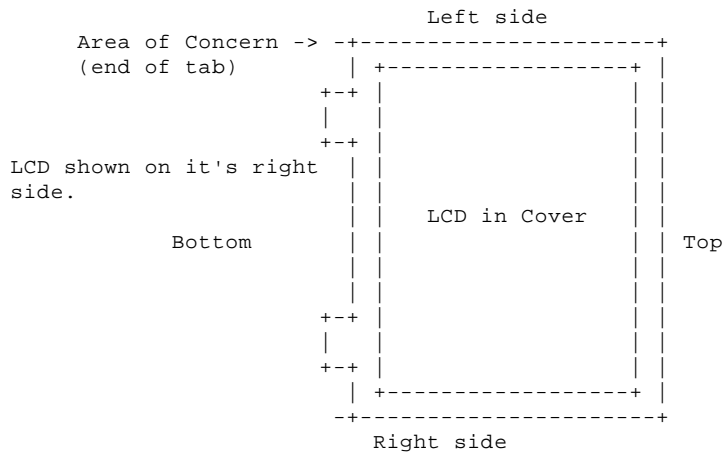
Install a new left hinge during ECA activity, if the hinge is glued to the original LCD cover.

FEATURES:

Type, Model, Stage	With B/M	Machines Affected and/or Feature/Device Description	B/M to be Installed	Service Hours	System Hours
2630	B/M9999999	ALL MODELS	B/M9999999	00.4	00.2

PHYSICAL CHECK:

Check for cracking or breakage on the top cover FRU P/N04H8326 or FRU P/N42H1423 as shown in the following diagram:



PREREQUISITES: NONE

COMPANION: NONE

CONCURRENT: NONE

DETAIL:

The LCD top cover FRU P/N04H8326 or FRU P/N42H1423 may crack or break at the tab area shown in the PHYSICAL CHECK after extensive use. This is caused by an improper alignment of the cover and left hinge during manufacturing. During reassembly ensure the hinge is fully seated in the new cover to prevent future cover damage.

If the original left hinge was glued to the cover, replace the left hinge FRU P/N04H8389 using this ECA.

Note: Do NOT glue the new left hinge to the cover.

NOTES:

Order all FRU parts locally and record time and material to ECA001 other office worked 990.

THIS ECA EXPIRES on 11/30/1999.

SAS KEYWORDS:

PSY2 PSY2ECA THINKPAD UNCLASSIFIED

1.1.19 2635 ECA001 CORRECT INTERMITTENT 163 OR 173 POST ERRORS.

Record number: H162661

Device:	D/T2635	Service code:	33
ECA number:	ECA001	Parts source:	LOC
EC number:	ECF06623	Publish flag:	R
Mandatory:	N	Hit count:	UHC00008
Automatic shipment:	N	Success count:	USC0000
Availability date:	97/12	Publication code:	PC40
Plant of control:	24	Date created:	098/02/04
Tip key:		Date last altered:	A98/02/07
		Owning B.U.:	USA

PURPOSE:

Correct intermittent 163 or 173 Post Errors during Boot.

FEATURES:

Type,	With	Machines Affected	B/M to be	Service	System
Model,		and/or Feature/Device	Installed	Hours	Hours
Stage	B/M	Description			
2635	B/M9999999	ALL	B/M9999999	00.7	00.5

PHYSICAL CHECK:

2635 System boards with a header code containing one of the following character sequences.

- 17S 39S TPK ZFJ ZLJ
- 18S 40S TPL ZFK ZLK
- 19S TCL TPM ZGJ ZMJ
- 29S TCM TRK ZGK ZMK
- 30S TDL TRL ZHJ ZNJ
- 31S TDM TRM ZHK ZNK
- 32S TEL ZDJ ZJJ ZPJ
- 33S TEM ZDK ZJK ZPK
- 34S TNK ZEJ ZKJ ZRJ
- 38S TNL ZEK ZKK ZRK

System board header code information is available in Easy-Setup and in the ThinkPad features program.

To access the Easy-Setup information cold boot the ThinkPad while pressing the F1 key. The header code information is listed on the first page next to "System Serial Number". It will look like: 1M##XXXXXX - X represents any letter or number and the # sign represents one of the above alph/numeric header identifiers.

To access the ThinkPad Features information find and open the ThinkPad features program. Click on the Systems Information area in the upper left hand corner of the screen. The System board header code information will be displayed as in the Easy-Setup example.

PREREQUISITES: NONE

COMPANION: NONE

CONCURRENT: NONE

DETAIL:

2635 systems that receive POST 163 or 173 errors and contain a system board identified in the PHYSICAL CHECK area should have their system board replaced with a like MHz system board, FRU P/N10L1503 (P150), P/N10L1504 (MMX 150), P/N10L1505 (MMX166).

All down level FRU stock has been purged.

NOTES:

This ECA will expire on February 1, 1999.

Order all FRU parts locally, and record Time and Material to service code 33, ECA 001, and OTHER OFFICE 990.

SAS KEYWORDS:

PSY2	PSY2ECA	THINKPAD	UNCLASSIFIED
PSY2BRD	PSY2ERR	10L1503	10L1504
10L1505			

1.1.20 2640 LCD COVER PROGRAM

Record number: H16360

Device:	D/T2640	Service code:	33
ECA number:	ECA001	Parts source:	LOC
EC number:	EC9999999	Publish flag:	R
Mandatory:	Y	Hit count:	UHC00003
Automatic shipment:	N	Success count:	USC0000
Availability date:	97/07	Publication code:	PC40
Plant of control:	24	Date created:	097/07/09
Tip key:		Date last altered:	A97/07/09
		Owning B.U.:	USA

PURPOSE:

1. Proactive Replacement of LCD rear covers that contain LCD panel placement pins.
2. Replacement of horizontally cracked LCD panels on systems with the above cover.

FEATURES:

Type, Model, Stage	With B/M	Machines Affected and/or Feature/Device Description	B/M to be Installed	Service Hours	System Hours
2640	B/M9999999	ALL MODELS	B/M9999999	00.6	00.4

PHYSICAL CHECK:

Check the rear cover for raised locator pins when any LCD component level FRU is replaced.

PREREQUISITES: NONE

COMPANION: NONE

CONCURRENT: NONE

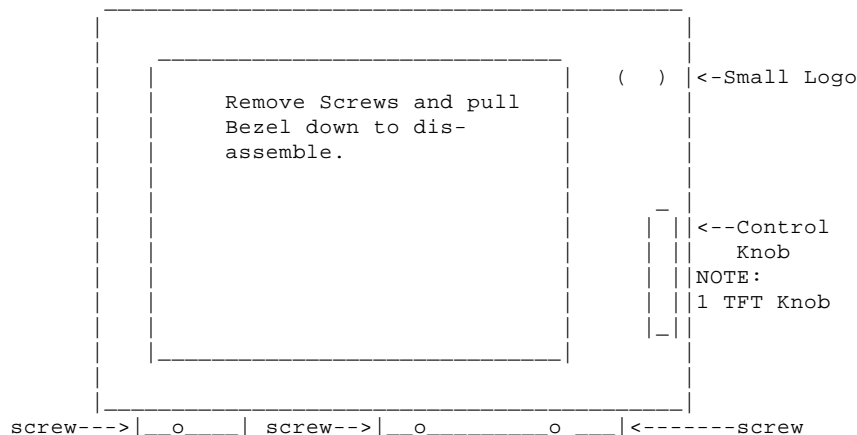
DETAIL:

The 2640 rear TFT LCD cover was made with and without LCD Bosses (locator pins). A small number of LCD panels were installed incorrectly on the locator boss covers. This has the potential to cause a horizontal crack across the LCD glass panel. This ECA covers two actions:

1. Preventive Action:
Locator bosses should be removed during any LCD FRU component service action. NOTE: All rear cover FRU stock is now made without locator bosses and all FRU stock has been purged of locator boss rear cover FRUs.
2. LCD replacement:
LCD panels can be replaced if they have horizontal cracks and are mounted in rear covers that contain locator bosses.

 Locator boss location and removal instructions:

LCD front Cover: TFT Removal. NOTE: The Hardware Maintenance Manual dated February 1997 form # S84H-8101-00 contains complete cover removal and replacement instructions.

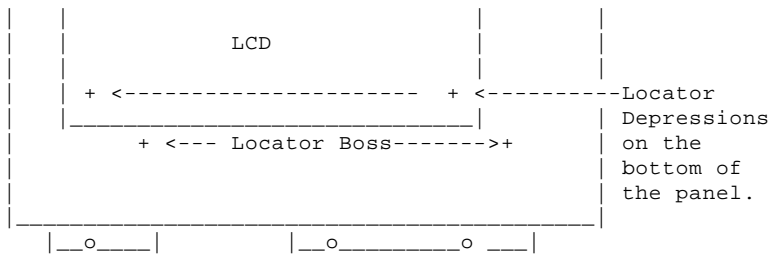


 LCD Locator Boss Location and removal instructions:

The diagram below shows the LCD panel raised above the bosses

PSY2 RETAIN TIPS
2640 LCD COVER PROGRAM

on the back cover.



The complete HMM description is on page 169 of S84H-8101-00. The locator boss identified with a + in the above diagram can be removed with a pair of flush-cut diagonal cutting pliers. The panel can then be reinstalled in the reworked rear cover.

If the rework can not be done, order a new rear cover FRU P/N20H4264.

NOTES: This ECA expiration date is 07/31/1998. Order all FRU parts locally and record Time and Material to service code 33, ECA 001, and OTHER OFFICE 990.

SAS KEYWORDS:

PSY2

PSY2ECA

PSY2DSP

THINKPAD

UNCLASSIFIED

3545 ECA001 CORRECTS 3COM ETHERNET FAILURES.

1.1.21 3545 ECA001 CORRECTS 3COM ETHERNET FAILURES.

Record number: H024731

Device:	D/T3545	Service code:	33
ECA number:	ECA001	Parts source:	LOC
EC number:	ECE15611	Publish flag:	R
Mandatory:	N	Hit count:	UHC00118
Automatic shipment:	N	Success count:	USC0000
Availability date:	95/05	Publication code:	PC20
Plant of control:	93	Date created:	095/05/11
Tip key:		Date last altered:	A95/09/11
		Owning B.U.:	USA

PURPOSE:

Allow proper 3COM ISA Ethernet adapter card operation in the 3545 Dock I docking station.

THIS ECA EXPIRES 5-31-96.

FEATURES:

Type, Model, Stage	With B/M	Machines Affected and/or Feature/Device Description	B/M to be Installed	Service Hours	System Hours
3545	B/M9999999	MODEL 001	B/M9999999	00.6	00.4

PHYSICAL CHECK:

To be eligible for ECA001, the following 3545 Dock I conditions must be met:

1. Dock I serial number range of 97-00001 to 97-C9999
2. 3COM* 3C509/3C509B Ethernet Adapter installed.
3. Ethernet function failure.

PREREQUISITES:

COMPANION: NONE

CONCURRENT: NONE

DETAIL:

The Thinkpad, Dock I and 3COM* 3C509/3C509B Ethernet Adapter may occasionally fail to log on to the network or may lose network connection during operation. If this occurs use ECA001 to replace the system board with system board FRU P/N84G1311.

All FRU stock has been purged of old level boards FRU P/N84G1281.

* 3COM is a registered trade mark of the 3COM Corporation.

NOTES:

Order all FRU parts locally and record time and material to ECA001 other office worked 990.

THIS ECA EXPIRES 5-31-96.

SAS KEYWORDS:

PSY2	PSY2ECA	CA	PSY2BRD
PSY2ADPT	THINKPAD	DOCK	750/C/CS/P
360/C/CS/P	750CE	360CSE/CE/PE	755C/CS
755CE/CSE	755CX	755CV	755CD
755CDV	PSY2CA	370C	ECAVALID

1.1.22 3546 ECA001 EXPIRED 5-31-96.

Record number: H016204

Device:	D/T3546	Service code:	33
ECA number:	ECA001	Parts source:	LOC
EC number:	ECE15611	Publish flag:	R
Mandatory:	N	Hit count:	UHC00268
Automatic shipment:	N	Success count:	USC0000
Availability date:	95/05	Publication code:	PC20
Plant of control:	93	Date created:	095/05/26
Tip key:		Date last altered:	A97/02/28
		Owning B.U.:	USA

PURPOSE:

Allow proper 3COM ISA Ethernet adapter card operation in the 3546 Dock II docking station.

THIS ECA EXPIRES 5-31-96.

FEATURES:

Type, Model, Stage	With B/M	Machines Affected and/or Feature/Device Description	B/M to be Installed	Service Hours	System Hours
3546	B/M9999999	MODEL 001	B/M9999999	00.7	00.5

PHYSICAL CHECK:

To be eligible for ECA001, the following 3546 Dock II conditions must be met:

1. Dock II serial number range of 97-00001 to 97-26999.
2. 3COM* 3C509/3C509B Ethernet Adapter installed.
3. Ethernet function failure.

PREREQUISITES:

COMPANION: NONE

CONCURRENT: NONE

DETAIL:

The Thinkpad, Dock II and 3COM* 3C509/3C509B Ethernet Adapter may occasionally fail to log on to the network or may lose network connection during operation. If this occurs use ECA001 to replace the system board with system board FRU P/N84G1312.

All FRU stock has been purged of old level boards FRU P/N84G3614.

* 3COM is a registered trade mark of the 3COM Corporation.

NOTES:

Order all FRU parts locally and record time and material to ECA001 other office worked 990.

THIS ECA EXPIRES 5-31-96.

SAS KEYWORDS:

PSY2	PSY2ECA	CA	PSY2BRD
PSY2ADPT	THINKPAD	DOCK	750/C/CS/P
360/C/CS/P	750CE	360CSE/CE/PE	755C/CS
755CE/CSE	755CX	755CV	755CD
755CDV	PSY2CA	370C	ECAVALID
UNCLASSIFIED			

3547 SELECTA DOCK I WITH 760E OR ED HANGS AT POST.

1.1.23 3547 SELECTA DOCK I WITH 760E OR ED HANGS AT POST.

Record number: H135609

Device:	D/T3547	Service code:	33
ECA number:	ECA001	Parts source:	LOC
EC number:	ECE67327	Publish flag:	R
Mandatory:	N	Hit count:	UHC00190
Automatic shipment:	N	Success count:	USC0000
Availability date:	96/12	Publication code:	PC40
Plant of control:	23	Date created:	096/12/06
Tip key:		Date last altered:	A98/01/07
		Owning B.U.:	USA

PURPOSE:

Eliminate 760E and 760ED system lockup during POST while connected to a 3547 SlectaDock I.

FEATURES:

Type,	With	Machines Affected	B/M to be	Service	System
Model,		and/or Feature/Device	Installed	Hours	Hours
Stage	B/M	Description			
3547	B/M9999999	9546 MOD U3A, U9A, U9B	B/M9999999	00.7	00.5

PHYSICAL CHECK:

All of the following conditions must be present to qualify ECA usage.

O ThinkPad 760E and 760ED models referenced in the FEATURES section.

O Intermittent hangs during POST.

O ThinkPad installed in a 3547 "SlectaDock I" with a serial number below 97-34259.

Note: "SlectaDock I" docking stations with a serial number of 97 - 34259 or higher contain the new system board and will not require this ECA.

PREREQUISITES: NONE

COMPANION: NONE

CONCURRENT: NONE

DETAIL:

9546 760E and 760ED models referenced in the FEATURES section of this ECA may intermittently lockup during POST if they are installed in the 3547 SlectaDock I. The lockup condition occurs during POST Check Point 40, the screen is blank except for a cursor in the upper left corner. The type of operating system is not a factor, because the failure occurs before it is loaded.

A new "SlectaDock I" system board has been released to correct this condition. The new system board is FRU P/N39H7452. If the old FRU, P/N39H7422, is ordered it will automatically substitute to the new FRU number.

NOTE: SlectaDocks used with the following models do not require this ECA.

- | | | |
|---|-------------------------------------|--|
| | UNAFFECTED MODELS | |
| o | All 760EL and 760ELD models. | |
| o | 760E models U3B, U4A, U4B, and U3L. | |
| | | |

NOTES:

This ECA will expire November 1, 1998. Order FRU P/N39H7452 and record all time using Service Code 33, ECA001, other office 990.

SAS KEYWORDS:

PSY2	PSY2ECA	THINKPAD	PSY2BRD
HANG	UNCLASSIFIED		

1.1.24 6324 ECA001 MONITOR COLORS CHANGING OR INCONSISTENT

Record number: H132121

Device:	D/T6324	Service code:	33
ECA number:	ECA001	Parts source:	
EC number:	EC000000	Publish flag:	H
Mandatory:	N	Hit count:	UHC00018
Automatic shipment:	N	Success count:	USC0000
Availability date:	95/12	Publication code:	PC00
Plant of control:	27	Date created:	096/01/02
Tip key:		Date last altered:	A96/01/02
		Owning B.U.:	USA

PURPOSE:

To provide a replacement signal cable for failing 6324, 6325, 6327, 9524, 9525 monitors which exhibit changing or inconsistent screen colors during operation.

THIS ECA EXPIRES JAN. 01, 1997

FEATURES:

Type, Model, Stage	With B/M	Machines Affected and/or Feature/Device Description	B/M to be Installed	Service Hours	System Hours
6324	B/M0000000	MODEL 001	B/M0000000	00.5	00.3
6325		MODEL 001	B/M0000000	00.5	00.3
9524		MODEL 001	B/M0000000	00.5	00.3
9525		MODEL 001	B/M0000000	00.5	00.3
6327		MODEL 023 ONLY	B/M0000000	00.5	00.3

PHYSICAL CHECK:

Inspect the exterior covering of the signal cable for the following printed in black ink:

"...30V LOW VOLTAGE COMPUTER CABLE J1-HAW"

PREREQUISITES: NONE

COMPANION: NONE

CONCURRENT: NONE

DETAIL:

If the monitor signal cable has the markings described in the Physical Check above, and exhibits changing or inconsistent colors, the signal cable should be replaced with a new signal cable FRU P/N39G6264.

It is highly unlikely that these symptoms are caused by the Analog Card Tray, therefore the card tray SHOULD NOT BE REPLACED in an attempt to implement this ECA.

The ONLY VALID PART part to be used on this ECA is the signal cable, FRU P/N39G6264. Claims (QSARs) submitted for this ECA with any FRU part number other than P/N39G6264 will not be accepted for financial recovery.

If the symptom remains, utilize normal problem determination procedures to isolate the failing FRU or application. Use the appropriate Service Code to record any service activity not specifically directed by this ECA.

NOTES:

The 6327 - 001 monitor uses signal cable FRU P/N71G8490. Signal cables installed on 6327-001 monitors are not affected.

Record time and FRU P/N39G6264 to ECA001, Service Code 33, other office 990.

THIS ECA EXPIRES JAN. 01, 1997

SAS KEYWORDS:

PSY2	PSY2ECA	ECBM	D/T6324
D/T6325	D/T9524	D/T9525	D/T6327
6324	6325	6327	9524
9525	JI HAW	J1HAW	INTERFACE
COLOR	DISPLAY	VIDEO	PSVP

1.1.25 6542 ECA001 - REPLACE BROKEN TILT-SWIVEL STAND

Record number: H132499

Device:	D/T6542	Service code:	33
ECA number:	ECA001	Parts source:	
EC number:	EC000000	Publish flag:	R
Mandatory:	N	Hit count:	UHC00038
Automatic shipment:	N	Success count:	USC0000
Availability date:	96/02	Publication code:	PC00
Plant of control:	27	Date created:	096/02/05
Tip key:		Date last altered:	A96/03/22
		Owning B.U.:	USA

PURPOSE:

This ECA provides a replacement tilt/swivel stand for 6542 and 6543 monitors with a broken stand. Element exchange of the entire monitor is not required.

This ECA expires Jan. 31, 1997.

FEATURES:

Type, Model, Stage	With B/M	Machines Affected and/or Feature/Device Description	B/M to be Installed	Service Hours	System Hours
6542	B/M0000000	ALL	B/M0000000	00.2	00.1
6543	B/M0000000	ALL	B/M0000000	00.2	00.1

PHYSICAL CHECK:

Broken tilt/swivel stands will separate into two pieces.

PREREQUISITES: NONE

COMPANION: NONE

CONCURRENT: NONE

DETAIL:

A replacement stand FRU P/N96G1600 is available. Replacement of the entire monitor is not required and is not supported to correct this problem. Servicicers may order the replacement stand using normal FRU ordering procedures.

This problem has been corrected in current production.

NOTES:

Only FRU P/N96G1600 is valid for use in implementing this ECA. Use of the element exchange monitor FRU part number is invalid to implement this ECA and WILL NOT BE REIMBURSED.

Record all parts and labor using service code 33, other office 990, ECA001.

This ECA will expire Jan. 31, 1997.

SAS KEYWORDS:

PSY2	PSY2ECA	ECBM	D/T6553
PSY2DISP	VPDISP	VP	PSY2ECBM
001	ECA	G40	G41
G50			

1.1.26 9545 MODEL 755CSE (EXPIRE NOVEMBER 30, 1996.)

Record number: H062139

Device:	D/T9545	Service code:	33
ECA number:	ECA001	Parts source:	LOC
EC number:	ECE59523	Publish flag:	R
Mandatory:	Y	Hit count:	UHC00351
Automatic shipment:	N	Success count:	USC0000
Availability date:	95/11	Publication code:	PC40
Plant of control:	23	Date created:	095/11/17
Tip key:		Date last altered:	A98/03/31
		Owning B.U.:	USA

PURPOSE:

Installation of this ECA will prevent an LCD failure that consists of a horizontal orange bar across the lower third of the LCD.

IF THE ORANGE BAR FAILURE HAS OCCURRED USE NORMAL WARRANTY PROCEDURES FOR LCD REPLACEMENT. DO NOT USE THIS ECA TO RECORD LCD FRU PART USAGE.

FEATURES:

Type, Model, Stage	With B/M	Machines Affected and/or Feature/Device Description	B/M to be Installed	Service Hours	System Hours
9545	B/M9999999	755CSE	B/M9999999	00.4	00.3

PHYSICAL CHECK:

Remove the main battery and check for an ECA001 completion label on the system base beneath the battery. The label reads:

```

-----
| STN-TB | FRU-PANEL ASM |
|         | 46H7860         |
|-----|-----|
| DATE CODE | EC LEVEL |
|   /       | E59523   |
|-----|-----|
    
```

Place the date (year and month) in the above DATE CODE area.

NOTE: A small number of early ECAed systems could have the following label beneath the battery.

```

-----
| LCD PANEL EC E59523 |
|-----|
    
```

PREREQUISITES: NONE

COMPANION: NONE

CONCURRENT: NONE

DETAIL:

INSTALL THIS ECA UPON REQUEST OR WHEN SERVICING A 755CSE

DETAIL: Order label and screw cover kit FRU P/N46H8640. One kit is needed per ECA.

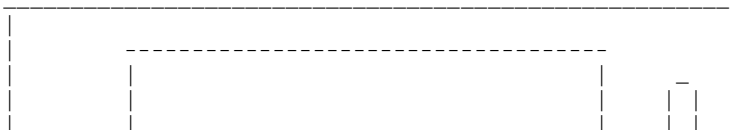
The ECA consists of removing two (2) screws from the card located to the left of the LCD panel. Removal of the screws prevents flexing and subsequent cracking of the connection between the card and the LCD.

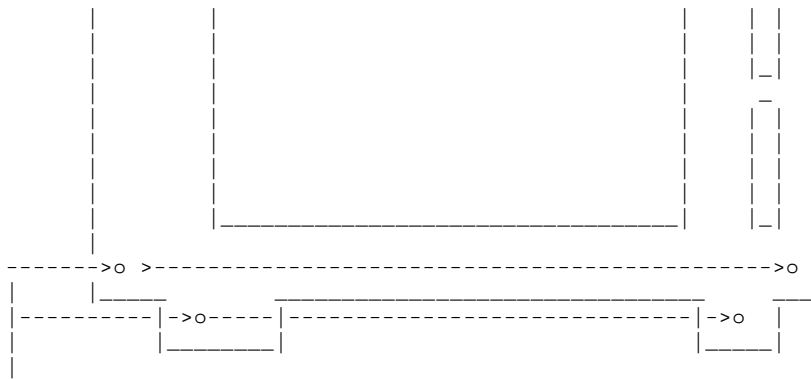
The following diagrams are here to describe the ECA procedure. Follow the actual ECA Kit instructions when performing the removal and replacement procedures.

SAFETY: REMOVE ALL POWER FROM THE SYSTEM BEFORE BEGINNING. Detach the system from the docking station, port replicator or AC adapter and remove the main battery.

Bezel removal:

1. Remove four (4) identified screw covers and screws. Set aside for bezel reinstallation.



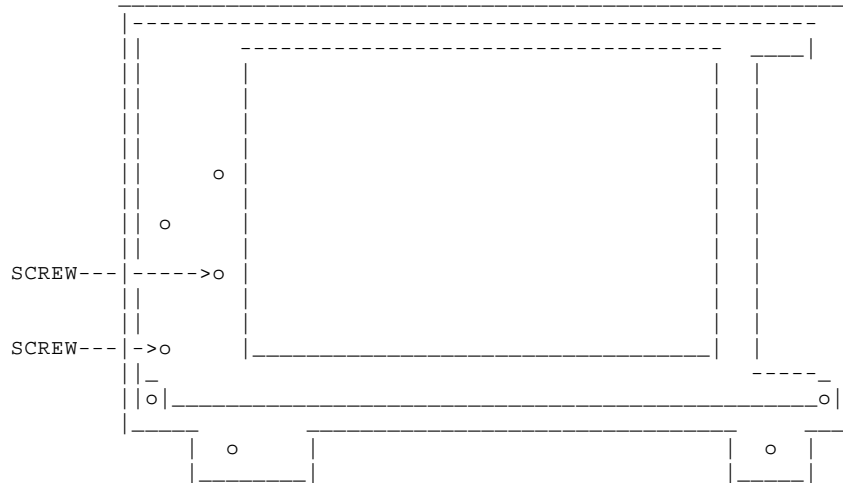


Four (4) bezel attachment screws.

CORRECTIVE PROCEDURE (Complete instructions in FRU P/N46H8640.)
Screw Removal

Follow the actual ECA Kit instructions when performing the removal and replacement procedures.

1. Remove and discard the two (2) identified screws.
LCD WITH BEZEL REMOVED



2. Place the EC label over the area that contained the screws.
This label has the FRU, EC, and LCD part number on it.
3. Replace bezel and attach using original screws.
4. Install new screw covers.
5. Place the ECA001 label inside the system on the base beneath the battery.

NOTES:

This ECA will expire November 30, 1996. Order FRU P/N46H8640 and record all time using Service Code 33, ECA001, other office 990. THIS IS A PREVENTATIVE ECA ONLY. If the LCD has the orange bar failure, use normal Warranty procedures for LCD replacement.

SAS KEYWORDS:

PSY2 THINKPAD PSY2ECA

1.1.27 9546 THERMAL BASE PAD FOR EVEN HEAT TRANSFER.

Record number: H135606

Device:	D/T9546	Service code:	33
ECA number:	ECA001	Parts source:	LOC
EC number:	ECF00499	Publish flag:	R
Mandatory:	N	Hit count:	UHC00164
Automatic shipment:	N	Success count:	USC0000
Availability date:	97/01	Publication code:	PC40
Plant of control:	23	Date created:	096/12/05
Tip key:		Date last altered:	A98/01/07
		Owning B.U.:	USA

PURPOSE:

A new option has been developed to evenly transfer any heat that escapes through the bottom of the 760 ThinkPad.

FEATURES:

Type, Model, Stage	With B/M	Machines Affected and/or Feature/Device Description	B/M to be Installed	Service Hours	System Hours
9546	B/M9999999	MOD U3A U3B U4A U4B U3L U13 U28 U1C U2J U11 U21 U22 U27 U1A U2A U2B U2H	B/M9999999	00.5	00.3

PHYSICAL CHECK:

Model 760 C/CD/E/ED systems mentioned in the FEATURES section that have customer complaints of excessive base heat.

PREREQUISITES: NONE**COMPANION:** NONE**CONCURRENT:** NONE**DETAIL:**

Because some users prefer to use the 9546 on their lap, IBM has designed a thermal transfer product which is called a "thermoplastic energy transfer pad". This product, when attached to the underside of the unit, evenly transfers any heat that escapes through the bottom of the machine. This is especially useful for customers who use a ThinkPad in their lap and feel uncomfortable with basic heat dissipation that occurs with any mobile computer.

The Thermal Pad Kit, FRU / CRU P/N82H8966, will be given to any customer that feels the base of the system is too warm for use on their lap.

The normal method of delivery in the US and Canada will be by direct shipment to the customer from the IBM Help Center.

NOTE: The above Help Center action does NOT require the use of this ECA.

WORLD WIDE HELP CENTERS THAT SUPPORT CRU SHIPMENT TO CUSTOMERS.

Canada	- IBM's HelpPC	1-800-565-3344
US	- IBM PC Company HelpCenter	1-800-772-2227

|NOTE: This ECA should only be installed during the following |
| situations: |
This ECA can be installed by a CE or Dealer following normal ECA terms and conditions if it qualifies under the FEATURES and PHYSICAL CHECK areas and one of the following conditions occur:

1. The customer requires servicer installation instead of a direct CRU (Customer Replaceable Unit) shipment.
2. The IBM geography does not support direct CRU shipments to customers.

Servicers should order the Thermal Pad FRU Kit P/N82H8966.

NOTES:

This ECA will expire December 31, 1998. Order FRUs locally and record all time using Service Code 33, ECA001, other office 990.

SAS KEYWORDS:

PSY2	PSY2ECA	D/T9547	THINKPAD
UNCLASSIFIED			

1.1.28 9547 HANGS DURING OPERATING SYSTEM LOAD.

Record number: H135588

Device:	D/T9547	Service code:	33
ECA number:	ECA001	Parts source:	LOC
EC number:	ECE67599	Publish flag:	R
Mandatory:	N	Hit count:	UHC00201
Automatic shipment:	N	Success count:	USC0000
Availability date:	96/11	Publication code:	PC40
Plant of control:	24	Date created:	096/12/06
Tip key:		Date last altered:	A98/01/07
		Owning B.U.:	USA

PURPOSE:

Correct intermittent system hangs during POST or during the operating system load.

FEATURES:

Type, Model, Stage	With B/M	Machines Affected and/or Feature/Device Description	B/M to be Installed	Service Hours	System Hours
9547	B/M9999999	MOD EL/ELD U4H, U4F, U6F, U6G, U3F, U4R, U4S, U6R.	B/M9999999	00.2	00.1

PHYSICAL CHECK:

Systems in the FEATURES section of this ECA containing DIMM adapter FRU P/N39H6229 (8MB) or DIMM adapter FRU P/N46H6023 that experience intermittent hangs when used with the following system boards and 1 or 2 of any manufacture's DIMMs.

The number used to identify the system board is located on a label in the Ultra Bay compartment between the second battery connector and the Ultra Bay connector. It can be seen without using tools. Open the keyboard and remove the component in the Ultra Bay. It will be a diskette drive, CD Rom drive, Hard Drive Battery. NOTE: this is a Manufacturing part number NOT a FRU part number.

Manufacturing Part Numbers

36H1368

36H1514

36H2040

36H1367

36H1513

36H2039

36H2057

36H2058

36H2059

00M0032

00M0033

PREREQUISITES: NONE

COMPANION: 9547 ECA003: 9547 760 MODELS NEW LOCKING DIMM DOOR.

Check and install or notify customer of the need for this direct shipment CRU when applicable.

CONCURRENT: NONE

DETAIL: Customers experiencing solid or intermittent errors during POST or load of the operating system with one of the 9547 models identified in the FEATURES section of this ECA should call the IBM PCCO Help Center. They will verify the failing condition and replace their current OMB or 8MB Adapter with a new OMB DIMM adapter FRU P/N83H7124 or a new 8MB (soldered on memory) DIMM adapter FRU P/N83H7126 that has been released to correct this condition.

Customers that are not having the above conditions can also receive a new level DIMM adapter card if their system board requires it. The new part number DIMM adapter will operate correctly in any level system, but its primary design is to correct intermittent or solid hangs that occur on the system boards identified in the PHYSICAL CHECK area of the ECA.

The DIMM Adapter FRU will be sent directly to the customer. They are Customer Replaceable Units (CRUs) that are easily installed.

NOTE: The Help Center Telephone numbers are listed at the end of the DETAIL section.

NOTE: The above Help Center action does NOT require the use of this ECA.

Systems with system boards that are not identified in the PHYSICAL CHECK area of the ECA can utilize the old or new level of DIMM adapters. These systems do NOT require this ECA.

The following are examples of some of the failing conditions.

- O The system hangs during POST with a flashing cursor on a dark screen. The Fixed Disk icon may also flash on the LCD indicator Assembly.
- O The operating system starts, but encounters memory problems such as, "himem.sys has found bad ems memory @ location xxxx" with a following message that "himem.sys is not loaded".
- O The operating system starts, but hangs with the operating system logo screen displayed.

If the above conditions are met, remove the Memory DIMM(s) and reboot the system. Note: Intermittent conditions normally occur 3 out of 10 times during cold boots.

|NOTE: This ECA should only be installed during the following |
| situations: |
This ECA can be installed by a CE or Dealer following normal ECA terms and conditions if it qualifies under the FEATURES and PHYSICAL CHECK areas and one of the following conditions occur:

1. The system currently being serviced has an intermittent or solid hang condition.
2. The customer requires servicer installation instead of a direct CRU (Customer Replaceable Unit) shipment.
3. The IBM geography does not support direct CRU shipments to customers.

WORLD WIDE HELP CENTERS THAT SUPPORT CRU SHIPMENT TO CUSTOMERS.

Canada - IBM's HelpPC 1-800-565-3344

US - IBM PC Company HelpCenter 1-800-772-2227

NOTES:

This ECA will expire November 30, 1998. Order FRUs locally and record all time using Service Code 33, ECA001, other office 990.

SAS KEYWORDS:

PSY2	PSY2MEM	PSY2PART	THINKPAD
PSY2ECA	UNCLASSIFIED		

NOTES:

This ECA's expiration date is 11/30/1998.

Order all FRU parts locally, and record Time and Material to service code 33, ECA 001, and OTHER OFFICE 990.

SAS KEYWORDS:

PSY2

PSY2MEM

PSY2ECA

PSY2PROG

THINKPAD

UNCLASSIFIED

PREREQUISITES: NONE

COMPANION:

To Install B/M	ECA Required	Machine Type	Comments
B/M99999999	ECA006	9546	SAME CONDITION.
B/M99999999	ECA006	9547	SAME CONDITION.
B/M99999999	ECA001	9548	SAME CONDITION.

CONCURRENT: NONE

DETAIL:

A system error may occur when a 32MB SO DIMM identified in the PHYSICAL CHECK section is installed with any other SO DIMM memory.

The failure may appear in the following operating systems as:

1. Windows 95 could display a failure as a REGISTRY error. The Registry error will not necessarily point to a memory problem. Windows 95 will fail when the error occurs during operation, so the Windows 95 error could have a wide range of symptoms in applications and not just the above registry error.
2. Windows NT can display a file corruption error upon failure during the NT boot sequence, and it may indicate possible file corruption. In this case the file has NOT been corrupted.
3. OS/2 can receive a TRAP002 (memory), TRAP008 (double fault) or TRAP00D upon failure.
4. Windows 3.1 can display a General Protection Fault (GPF) or hang during operation.

Systems with the above memory and symptoms should have its IBM 32MB SO DIMM memory replaced with FRU P/N42H2769. All FRU stock has been purged of defective stock.

Option Boxes with the following label may contain the defective 32MB memory. Because good levels of memory are also packaged in option boxes with this label, opened memory must be checked to determine if it meets the ECA requirements before being replaced

Customers that have an unopened memory option with the following label can return the option to their point of sale for a new replacement option. In this case no sorting of the memory in the box is necessary and the ECA will not be used.

MEMORY BOX LABEL

```

92G7342 Non-Parity SO DIMM Memory Upgrade
32MB 60ns 3.3V EDO 4k Refresh
-----
International Business MachineCorp
Old Orchard Road
-- Armonk, New York, USA 10504
-----
BY IBM      Made in Korea
-----
          CE
-----
Contains:  1 - 4Mx64 144-pin (Au) Serial-PD 8-byte SO DIMM
           TP560 BIOS Update Diskette
-----
          *P92G7342*          *1S92G734292xxxxx*
SAM          J128H          03SEP97
-----
Header code          Ship date
    
```

NOTES:

1. In the long bar code, the xxxxx = any number or letter.
2. Header code: J128H, or J141B indicates affected memory.
3. Corrected Memory (Ship Date): Ship Dates of 31OCT97 and newer have the corrected level of memory.

NOTES:

This ECA's expiration date is 11/30/1998.

Order all FRU parts locally, and record Time and Material to service code 33, ECA 001, and OTHER OFFICE 990.

SAS KEYWORDS:

PSY2	PSY2ECA	THINKPAD	UNCLASSIFIED
PSY2MEM	PSY2PROG		

PSY2 RETAIN TIPS
ECA002, OBSOLETE

1.1.31 ECA002, OBSOLETE

Record number: H022134

Device:	D/T8550	Service code:	33
ECA number:	ECA002	Parts source:	LOC.
EC number:	EC000000	Publish flag:	R
Mandatory:	N	Hit count:	UHC03373
Automatic shipment:	N	Success count:	USC0000
Availability date:	87/06	Publication code:	PC50
Plant of control:	27	Date created:	087/05/18
Tip key:		Date last altered:	A93/01/07
		Owning B.U.:	USA

PURPOSE:

*** THIS ECA EXPIRED 12-31-92 ***

FEATURES:

Type, Model, Stage	With B/M	Machines Affected and/or Feature/Device Description	B/M to be Installed	Service Hours	System Hours
8550	B/M0000000		B/M0000000	00.5	00.5

PHYSICAL CHECK:

PREREQUISITES: NONE

COMPANION: NONE

CONCURRENT: NONE

DETAIL:

NOTES:

*** THIS ECA EXPIRED 12-31-92 ***

SAS KEYWORDS:

PSY2 PSY2ECA

1.1.32 ECA002, PC SERVER FIXED DISK FAILS TO SPIN-UP

Record number: H13646

Device:	D/T8641	Service code:	33
ECA number:	ECA002	Parts source:	LOC.
EC number:	EC000000	Publish flag:	R
Mandatory:	N	Hit count:	UHC01351
Automatic shipment:	N	Success count:	USC0001
Availability date:	95/08	Publication code:	PC50
Plant of control:	27	Date created:	095/08/30
Tip key:		Date last altered:	A98/05/12
		Owning B.U.:	USA

PURPOSE:

This ECA will expire November 14, 2002

This ECA provides replacement 2.25GB fixed disks to correct highly intermittent failures to come "Ready" (spin-up) at power-on.

This ECA covers hardware replacement of 2.25 GB fixed disks only. 1.12GB and 4.5GB drives are not eligible for replacement under this ECA. Affected 1.12GB disks are corrected with a customer installed microcode update; affected 4.5GB options should be replaced under the option warranty.

FEATURES:

Type, Model, Stage	With B/M	Machines Affected and/or Feature/Device Description	B/M to be Installed	Service Hours	System Hours
8640	B/M0000000	SERVER 320	B/M0000000	01.5	01.5
8641	B/M0000000	SERVER 500 0YV, 0YS	B/M0000000	01.5	01.5

PHYSICAL CHECK:

The following Systems and Options may be affected:

- Server 320 MXT, MX0, MYT, MY0, MYR (shipped with 1GB drives)
- Server 500 Non-Array model 8641-0YV (one 2.25GB drive)
- Server 500 RAID Array model 8641-0YS (three 2.25GB drives)
- The 2.25GB Fast/Wide SCSI-2 Hot-Swap Hard Disk Option, option part number 94G2650.
- The 4.5GB FastWide SCIS-2 Hard Disk Option, option part number 94G2651.

NOTE: The 4.5GB option is not eligible for replacement using this ECA. Replace affected drives using existing option warranty provisions.

Affected 2.25 GB fixed disks are known to have been shipped in the above systems and options, however, NOT ALL OF THESE PRODUCTS WILL HAVE THE AFFECTED FIXED DISKS.

HOW TO IDENTIFY AFFECTED FIXED DISKS:

A self-booting utility diskette is required to examine the customers fixed disk sub-systems. The utility diskette will survey all fixed disks installed, and create a list of disks in that system by drive serial number and physical location. The user is then requested to contact the HelpCenter and provide the list of serial numbers to the PC Company for identification of affected drives. For customers using the utility diskette, the HelpCenter will arrange for a service call if any of the drives should be replaced. The servicer is to order and install replacement drives.

The utility diskette functions on all 8641 PC-Server 500 models, and on all NON-Array 8640 PC-Server 320 models. THE UTILITY DISKETTE DOES NOT FUNCTION ON RAID ARRAY MODELS OF THE 8640 PC-SERVER 320. Refer to the DETAILS section below for additional detail on the Server 320.

Customers and servicers may obtain the IBM Hard Disk Drive Update Utility Version 2.00 by calling the IBM PC Company HelpCenter at 1-800-772-2227 and requesting it, or it may be down-loaded from the IBM PC Company Bulletin Board System by calling 1 - 919-517-0001.

In addition, the utility diskette will update microcode on 1.12GB, 2.25GB, and 4.5GB disks as required. For affected 1.12GB drives, increased spin-up performance provided by the microcode update is the only fix required. A "Readme" file on the utility diskette provides additional detail.

PREREQUISITES: NONE

COMPANION: NONE

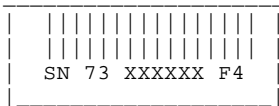
CONCURRENT: NONE

DETAIL:

Version 2.00 of the IBM Hard Disk Drive Update Utility is now available which supersedes the original version 1.00 released in May, 1995. Version 2.00 (micro-code level 4.1) provides the same survey utility function as the prior version 1.00, but also includes minor enhancements to ECC error correction and drive performance.

Version 1.00 of the Hard Disk Drive Update Utility, should be discarded. Fixed disks currently being shipped are at microcode level 4.1. Use of the Version 1.00 Update Utility on these drives will DOWN-LEVEL the micro code to level 1.7. While no functional problems will be associated with this, the above enhancements would be deleted.

Customers or servicers with the RAID Array Server 320, should contact the PC Company HelpCenter for assistance in identifying affected drives installed. The serial numbers for the 2.25 GB fixed disk are located on a bar code label on the front edge of the drive. The label, located under the handle, just behind the green power-on LED, may be read without powering down or physically removing the drive. It appears as follows:



FRU PARTS AVAILABILITY:

The Mechanicsburg Distribution Center will stock replacement drives under a unique FRU, which will be classified as "UMP Code 73" (NOT FOR CUSTOMER SALE). Servicers replacing a 2.25GB drive under this ECA should order the following FRU, set up to be used FOR THIS ECA ONLY:

2.25GB ECA002 Fixed Disk: FRU P/N 06H7360

Normal service actions for the 2.25 GB drive, should utilize FRU P/N06H8561. FRU stock is not affected with this problem.

NOTES:

This ECA will expire November 14, 2002

Claims (QSARs) submitted for this ECA with any drive other than P/N06H7360 will not be accepted for financial recovery.

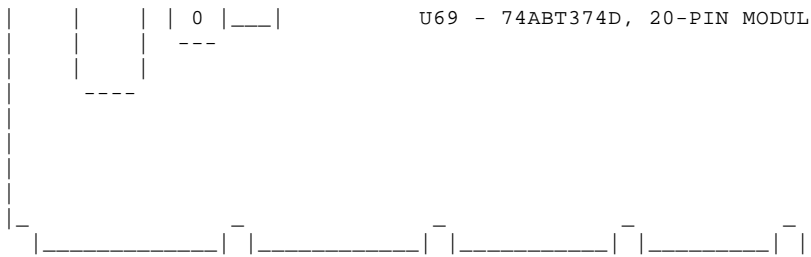
FRU P/N 06H7360 will not be recognized as a normal warranty FRU part for any service action except this ECA. Therefore, parts expense will not be reimbursed for normal maintenance actions (Service code 01, etc.) using this special ECA FRU.

PARTS RETURN INSTRUCTIONS:

- A part number label (06H7360), included with the ECA 2.25GB FRU, must be placed over the old FRU part number on the returned drive. Put label on the hardfile - not on the box.
- Return the old drive in the FRU p/n06H7360 packaging.
- Return all removed drives immediately via expedited UPR procedures for FRU P/N06H7360 (UPR return code X).

SAS KEYWORDS:

PSY2	PSY2FDSK	PSY2ECA	D/T8640
PSY2ECBM	STICTION	STARFIRE	STAR FIRE
1GB	2GB	4GB	STICK
POWER	SPIN	SPIN UP	PS/2
8640ECA	8641ECA	PS2	HARDFILE
ECBM	DASD	P/N06H3372	06H3372
06H8561	06H7360	P/N06H7360	



PREREQUISITES: NONE

COMPANION: NONE

CONCURRENT: NONE

DETAIL:

TO QUALIFY FOR REPLACEMENT, THE 486DX2 33/66 MHZ PROCESSOR CARD MUST BE FRU P/N61G2343, WITH NO WIRE-ADD AS DESCRIBED ABOVE. NO OTHER PROCESSOR CARD QUALIFIES FOR THIS ECA.

NOTES:

A REPLACEMENT PROCESSOR CARD, FRU P/N06H7266, SHOULD BE ORDERED USING NORMAL FRU PARTS ORDERING PROCEDURES. ALL ORDERS FOR FRU P/N61G2343 WILL AUTOMATICALLY SUBSTITUTE TO THE NEW FRU PART NUMBER.

ON-GOING FRU AVAILABILITY IS DEPENDENT UPON TIMELY RETURN OF USED PARTS. ALL CARDS SHOULD BE RETURNED IMMEDIATELY VIA NORMAL UPR PROCEDURES.

RECORD ALL TIME AND MATERIALS UNDER SERVICE CODE 33, DEVICE TYPE 9595, ECA002, OTHER OFFICE 990.

SAS KEYWORDS:

PSY2	PSY2ECA	D/T9595A	8595
D/T8595	PSY2ECBM	ECBM	9595ECA
WIRE	PSY2ERR	1291500	12915
1915	001915	ECAVALID	

1.1.34 ECA002, 6875 AND 6885 L2 CACHE REPLACEMENT

Record number: H127080

Device:	D/T6875	Service code:	33
ECA number:	ECA002	Parts source:	MECH
EC number:	EC000000	Publish flag:	H
Mandatory:	N	Hit count:	UHC00672
Automatic shipment:	N	Success count:	USC0000
Availability date:	95/04	Publication code:	PC50
Plant of control:	23	Date created:	095/04/10
Tip key:		Date last altered:	A97/07/13
		Owning B.U.:	USA

PURPOSE:

The purpose of this ECA is to provide a set of replacement 256Kb external level 2 cache modules to resolve the following failure symptoms on the IBM PC 700 series systems (6875 & 6885).

- Trap 000E errors with OS/2 2.X or OS/2 WARP
- Intermittent system hang on a warm boot
- The system will display an error message stating "Unreliable XMS memory at location XXXXXXX" (X=any character) or HIMEM.SYS errors while using MS DOS 6.X.
- Failures when attempting to install Microsoft WindowsNT from either diskettes or CDROM. Installation will not complete.

This ECA will expire March 31, 1996.

FEATURES:

Type, Model, Stage	With B/M	Machines Affected and/or Feature/Device Description	B/M to be Installed	Service Hours	System Hours
6875	B/M0000000	6875 PC 730 44F MODELS - 23A0012-23A4934 44G MODELS - 23FCZ01-23FDC69 45F MODELS - 23NN001-23NN401 45H MODELS - 23AA038-23AB426	B/M0000000	00.4	00.2
6885	B/M0000000	6885 PC 750 44H MODELS - 23AAA00-23AAB90 45H MODELS - 23AA000-23AP856 45J MODELS - 23PBN01-23PBX63 48H MODELS - 23GG000-23GG778	B/M0000000	00.4	00.2

PHYSICAL CHECK:

There are 10 cache sockets on the system board; 9 of these sockets will be populated with cache modules manufactured for IBM by IDT, Alliance, or Micron. SYSTEMS ELIGIBLE FOR THIS ECA WILL HAVE 3 "IDT" MODULES INSTALLED IN LOCATIONS U31, U32, and U34. (U31, U32, and U34 are the sockets closest to the riser card.) Systems with Alliance, Micron, SEC or Toshiba cache modules in U31, U32, and U34 are not affected.

The remaining cache sockets may have any combination of IDT, Alliance, Micron, SEC or Toshiba modules.

System diagnostics run without errors.

PREREQUISITES: NONE

COMPANION: NONE

CONCURRENT:

Install flash BIOS update level 63A when updating the cache modules.

```

----- IMPORTANT -----
| THESE FLASH UPDATES ARE CUSTOMER INSTALLABLE. CUSTOMERS |
| SHOULD BE ADVISED TO CONTACT THE PC COMPANY HELPCENTER AT |
| 800-772 - 2227 IF ASSISTANCE IS REQUIRED IN GETTING THE |
| APPROPRIATE UPDATE. |
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ECA002. 6875 AND 6885 L2 CACHE REPLACEMENT

The current update is titled "N1JT63A.DSK", and may be downloaded from the IBM PC Company HelpCenter bulletin board service by calling 919-517-0001. An update diskette may be requested from the HelpCenter for those Customers that do not have communication capabilities.

DETAIL:

A 256Kb Cache replacement kit, P/N06H8004 is available from Mechanicsburg. The kit contains 3 Alliance, Micron, SEC or Toshiba cache modules to be placed in locations U31, U32 and U34.

The modules that are removed from the system board should be returned to Mechanicsburg using normal parts return procedures.

NOTES:

IBM AND TSS Servicicers should record time, materials and travel, along with the other product information to:

Service Code: 33
 Machine Type: 6875
 ECA: 002
 Other Branch Office: 990

This ECA will expire March 31, 1996.

SAS KEYWORDS:

PSY2	68XX	PSY2ECA	IBMPC
PSVPECA	PSY2PART	PSVP	PC730
PC750	PC700	PSVPPART	D/T68XX
6885	6875	PSY2PART	PSVPERR
PSY2ERR	TRAP 00E	PSVPMEM	PSY2MEM
PSVPBRD	PSY2BRD	D/T6885	PC 730
PC 750	LEVEL 2	TRAP E	ECAVALID

ECA002, 8600 REDUNDANT POWER SUPPLY AC RECEPTACLE

1.1.35 ECA002, 8600 REDUNDANT POWER SUPPLY AC RECEPTACLE

Record number: H122066

Device:	D/T8600	Service code:	33
ECA number:	ECA002	Parts source:	
EC number:	ECD06631A	Publish flag:	R
Mandatory:	Y	Hit count:	UHC00134
Automatic shipment:	Y	Success count:	USC0000
Availability date:	93/12	Publication code:	PC00
Plant of control:	27	Date created:	093/11/12
Tip key:		Date last altered:	A95/09/11
		Owning B.U.:	USA

PURPOSE:

To physically inspect the redundant power supply (RPS) rear door assembly, as directed by the instructions included in the Bill of Material, and if necessary to replace the AC power receptacle to satisfy U/L requirements.

FEATURES:

Type, Model, Stage	With B/M	Machines Affected and/or Feature/Device Description	B/M to be Installed	Service Hours	System Hours
8600	B/M0000000	MODELS 001, 002,& 003 WITH FC 2448, 110 VOLT OR 220 VOLT REDUNDANT AC POWER SUPPLY FEATURE	B/M82G3404	01.5	01.0

PHYSICAL CHECK:

All machines without EC D06631, must install B/M 82G3404

PREREQUISITES: NONE

COMPANION: NONE

CONCURRENT: NONE

DETAIL:

All systems with the redundant AC power supply must be inspected. Bill of Material 82G3404 contains the instructions and all parts to install EC D06631.

As this ECA is Mandatory, the Field Bill of Material FBM will be automatically shipped by the Raleigh Plant to all affected machines (those with Redundant Power Supplies).

NO FRU PARTS SHOULD BE ORDERED OR CHARGED TO THIS ECA.

NOTES:

Record all time using D/T8600, ECA002, Service Code 33.

Update machine records to reflect EC D06631 being installed.

Scrap all used parts according to procedures outlined in the ECA instructions shipped with the Field Bill of Material.

SAS KEYWORDS:

PSY2	PSY2POWR	295	195
PSY2ECA	SAFETY	ECAVALID	

NOTES:

All labor and parts should be recorded using Service Code 33, Other Office 990, and ECA002. Processor cards removed from eligible systems should be returned to IBM in a timely manner to expedite re-use.

Netware is a trademark of Novell Inc.

Netware is a trademark of Novell Inc.

SAS KEYWORDS:

PSY2	8642	PSY2ECBM	P/N94G6054
P/N75H9684	94G6054	75H9684	PSY2ECA
ECAVALID	HEALTH		

1.1.37 ECA002, 9545 MOD 755CE/CSE/CD TRAP, HANG, OR NO POWER

Record number: H137544

Device:	D/T9545	Service code:	33
ECA number:	ECA002	Parts source:	LOC
EC number:	ECF00944	Publish flag:	R
Mandatory:	N	Hit count:	UHC00123
Automatic shipment:	N	Success count:	USC0000
Availability date:	97/04	Publication code:	PC40
Plant of control:	23	Date created:	097/04/23
Tip key:		Date last altered:	A98/05/04
		Owning B.U.:	USA

PURPOSE:

When replacing any FRU within the logic assembly inspect the DC/DC card FRU P/N85G1500. Replace it if it matches the PHYSICAL CHECK. A small number of DC/DC adapter cards of this level could cause solid hangs, Trap 2, D, E or no power conditions.

FEATURES:

Type, Model, Stage	With B/M	Machines Affected and/or Feature/Device Description	B/M to be Installed	Service Hours	System Hours
9545	B/M9999999	MOD 755CE, CSE & CD	B/M9999999	00.4	00.2

PHYSICAL CHECK:

1. Remove the main battery. A label on the base cover under the battery stating "EC F00944 Applied" indicates this ECA is already installed. No further inspection or action is required.
2. If the label described above is not under the battery, examine the DC/DC card, FRU P/N85G1500. If it has a red capacitor with date code of 4HC in position 41, or a red capacitor with a date code of 4JC or 4KC in position 50, the DC/DC card must be replaced.
See the Detail section for position locations.

NOTE: DC/DC cards with purple capacitors in position 41 or 50 are at EC F00944 and do not require this ECA.

PREREQUISITES: NONE

COMPANION: NONE

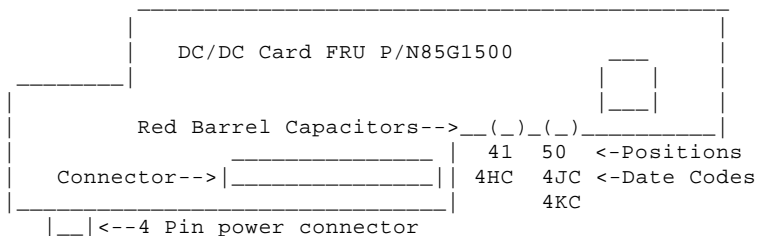
CONCURRENT: NONE

DETAIL:

The 9545 755 CE, CSE, and CD models in the FEATURES SECTION without an EC label F00944 installed should have the DC/DC Adapter FRU P/N85G1500 checked when any FRU in the system's Logic assembly is being serviced.

Use the DC/DC Adapter card diagram in Figure 1 to determine the position of the affected capacitors. If they are present, replace the card. All DC/DC Adapter card FRU stock of P/N85G1500 contains the correct level capacitors.

Figure 1



NOTES:

This ECA will expire on April 30, 1999. Order the DC/DC card locally and record all time to Service code 33, 9545 ECA002, other office 990.

SAS KEYWORDS:

PSY2	PSY2ECA	THINKPAD	UNCLASSIFIED
PSY2ADPT	ECAVALID		

1.1.38 2620 MOD 360 LCD HINGE AND COVER REPLACEMENT ECA.

Record number: H135337

Device:	D/T2620	Service code:	33
ECA number:	ECA002	Parts source:	LOC
EC number:	ECE67321	Publish flag:	R
Mandatory:	N	Hit count:	UHC00186
Automatic shipment:	N	Success count:	USC0003
Availability date:	96/11	Publication code:	PC40
Plant of control:	24	Date created:	096/11/20
Tip key:		Date last altered:	A97/11/20
		Owning B.U.:	USA

PURPOSE:

To correct LCD cover damage caused by loose hinge screws install the new FRU components listed in the detail area of this ECA.

FEATURES:

Type, Model, Stage	With B/M	Machines Affected and/or Feature/Device Description	B/M to be Installed	Service Hours	System Hours
2620	B/M9999999	MODEL 20D 20F 30D 30F 2YF 3YD 3YF 2CF 3CF 80D 80F 80G 90D 90F 90G 8YD 9YF 9YG	B/M9999999	00.7	00.5

PHYSICAL CHECK:

- o Any 2620 360C, CS, CE, and CSE with cracks or breaks in or near the hinge area of the LCD cover.

OR

- o Any 2620 360C, CS, CE, and CSE with hinge screws that are not tightly seated or are loose within the LCD unit.

PREREQUISITES: NONE

COMPANION: NONE

CONCURRENT: NONE

DETAIL:

This is a no cost ECA that will be applied to systems identified in the FEATURES and PHYSICAL CHECK sections. A small percentage of 2620 systems have been reported to have LCD cover stress cracks or breakage in the hinge area. It has been determined that this is caused by loose hinge screws. New level FRUs, listed below, have been released to correct this condition.

An installation instruction sheet is included in the Hinge Kits.

Note: In order to make these parts available quickly it was necessary to release the ECA without the instruction sheet in the initial shipment of Hinge Kits. This exception only relates to a small number of kits. If your Hinge Kit does not have instructions and you require them please contact the IBM PCCO Help Center at 800-772-2227.

Note: There are 2 6mm screws and 2 4mm screws that hold the hinge to the back of the LCD rear cover. Replace the 6mm screws with coated 6mm screws (P/N in chart).

The 2 4mm brass screws that are removed from the hinge area of the LCD back cover should be coated with Loctite before they are reinstalled in the new cover (P/N in chart).

The 2 other screws holding the LCD to the cover and the 1 screw holding the card to the cover should be tightened if loose. Do not use Loctite on these screws.

IMPORTANT:

The following FRU Part Numbers in the far right column can be used until the FRU kits are available.

REQUIRED ECA MATERIAL

DESCRIPTION	FRU P/N	QUANTITY NEEDED		SEPARATE FRU COMPONENTS OF THE KITS.
		TFT LCD	DSTN LCD	
TFT Hinge Kit	P/N11J9524	1		P/N84G5661

PSY2 RETAIN TIPS

2620 MOD 360 LCD HINGE AND COVER REPLACEMENT ECA.

				P/N84G5662
DSTN Hinge Kit	P/N11J9522		1	P/N66G6205 P/N66G6206
2.5 x 6mm adhesive	P/N11J9527	2	2	P/N66G5124 SCREW KIT. USE WITH LOCTITE.
TFT LCD Rear Cover	P/N11J9525	1		P/N84G5654 MUST TRANSFER OLD LOGO.
DSTN LCD Rear Cove	P/N11J9523		1	P/N84G5865 MUST TRANSFER OLD LOGO.
Loctite 290	P/N0216348	1	1	

NOTES: THIS ECA EXPIRES NOVEMBER-22-1998
 Order all FRU parts locally and record Time and Material to
 service code 33, ECA 002, and OTHER OFFICE 990.

SAS KEYWORDS:
 PSY2 PSY2ECA THINKPAD UNCLASSIFIED
 SPLIT

1.1.39 2625 365X & XD BASE SHIELD UPGRADE KIT.

Record number: H137343

Device:	D/T2625	Service code:	33
ECA number:	ECA002	Parts source:	LOC
EC number:	ECF00806	Publish flag:	R
Mandatory:	N	Hit count:	UHC00003
Automatic shipment:	N	Success count:	USC0000
Availability date:	97/04	Publication code:	PC40
Plant of control:	23	Date created:	097/04/11
Tip key:		Date last altered:	A97/04/11
		Owning B.U.:	USA

PURPOSE:

Install the Base Shield ECA Kit on systems that match the PHYSICAL CHECK criteria.

FEATURES:

Type,	With	Machines Affected	B/M to be	Service	System
Model,		and/or Feature/Device	Installed	Hours	Hours
Stage	B/M	Description			
2625	B/M9999999	MOD 365X XD	B/M73H8598	00.3	00.1

PHYSICAL CHECK:

Inspect for an ECA label or black mark beneath the battery at the front inner edge of the system base. If this area is blank, install the Base Shield ECA Kit during the installation of any FRU listed in figure 1.

Parts Description	FRU P/N
System board card assembly	P/N69H7908
CPU card assembly	P/N69H7912 (P100)
	P/N74H0237 (P120)
	P/N82H8162 (P133)
Base cover assembly	P/N69H7903
Base Insulator (*)	P/N69H7916

* Contained in the Miscellaneous Base Parts kit P/N69H7916.

PREREQUISITES: NONE

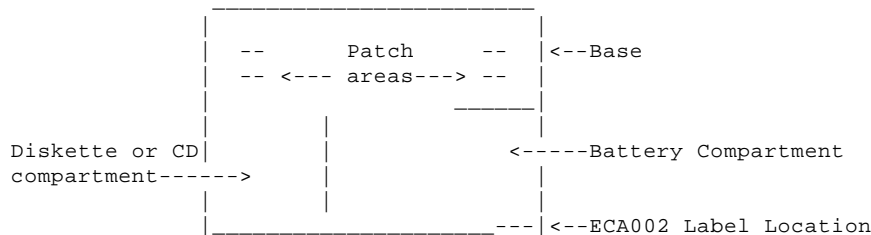
COMPANION: NONE

CONCURRENT: NONE

DETAIL:

The inner bottom of the system is covered with an aluminum mylar sheet, except for two 31mm square areas. The Shield Kit should be installed in these areas during a repair action on any FRU listed in Fig 1 of the PHYSICAL CHECK.

The kit is FRU P/N73H8598. It contains self stick aluminum mylar patches and detailed instructions. The patches should be placed in the blank spots located on the inside the base at the external leg indents. The ECA002 Label should be placed beneath and in front of the battery at the front edge of the system base. Both of these locations are shown in the following diagram and in detail in the instruction sheet.



NOTES:

This ECA will expire on April 30, 2000. Order FRU Kit P/N73H8598 locally and record all time to ECA002 other office worked 990.

SAS KEYWORDS:

PSY2 PSY2ECA THINKPAD UNCLASSIFIED
PSY2PART

1.1.40 2630 ECA002 REPLACES BROKEN MEMORY DOOR AND PCMCIA BEZEL.

Record number: H161867

Device:	D/T2630	Service code:	33
ECA number:	ECA002	Parts source:	LOC
EC number:	EC9999999	Publish flag:	R
Mandatory:	N	Hit count:	UHC00013
Automatic shipment:	N	Success count:	USC0000
Availability date:	97/11	Publication code:	PC40
Plant of control:	24	Date created:	097/11/11
Tip key:		Date last altered:	A97/12/08
		Owning B.U.:	USA

PURPOSE:

1. Replace memory door for cracked latch
2. Replace PCMCIA bezels with a cracked or broken lower right hand corner.

FEATURES:

Type, Model, Stage	With B/M	Machines Affected and/or Feature/Device Description	B/M to be Installed	Service Hours	System Hours
2630	B/M9999999	ALL MODELS	B/M9999999	00.3	00.1

PHYSICAL CHECK: ONLY:

Memory doors with broken or cracked latch.
 PCMCIA Bezels with broken or cracked lower right hand corner.

PREREQUISITES: NONE

COMPANION: NONE

CONCURRENT: NONE

DETAIL: The Memory door and PCMCIA bezel are Customer replaceable units (CRU)s. These parts can be directly ordered from the PCCO Help Centers where applicable.

Customers in the US should contact the IBM PC Group Help Center at 800-772-2227. Customers in Canada should call IBM's HelpPC at 800-565-3344

IBM authorized servicers may use this ECA when servicing systems with either of these conditions.

It has been determined that some 2630 Memory doors and PCMCIA bezels may fail during normal customer use as described in the PHYSICAL CHECK section.

Only memory doors and PCMCIA bezels following the PHYSICAL CHECK criteria can be replaced using this ECA.

Use Memory door FRU P/N04H8337 and PCMCIA Bezel FRU P/N04H8346 when installing new parts.

NOTES:

This ECA's expiration date is 11/30/1999.

Order all FRU parts locally, and record Time and Material to service code 33, ECA 002, and OTHER OFFICE 990.

SAS KEYWORDS:

PSY2 PSY2ECA THINKPAD UNCLASSIFIED

1.1.41 2640 ECA002, NEW AC ADAPTER CORRECTS LCD FLICKER.

Record number: H134528

Device:	D/T2640	Service code:	33
ECA number:	ECA002	Parts source:	LOC
EC number:	EC9999999	Publish flag:	R
Mandatory:	N	Hit count:	UHC00011
Automatic shipment:	N	Success count:	USC0000
Availability date:	97/06	Publication code:	PC40
Plant of control:	27	Date created:	097/06/20
Tip key:		Date last altered:	A97/12/05
		Owning B.U.:	USA

PURPOSE:

Correct intermittent LCD screen flicker when using AC power.

FEATURES:

Type, Model, Stage	With B/M	Machines Affected and/or Feature/Device Description	B/M to be Installed	Service Hours	System Hours
2640	B/M9999999	THINKPAD-560 MODELS: EOA, EOC, F0D, F0E, FOG, 20U	B/M9999999	00.3	00.1

PHYSICAL CHECK:

Eligible Thinkpad 560 systems must exhibit screen flicker, and have an AC adapter OTHER THAN the following FRU p/n's:

2pin DC 2 - prong AC FRU: p/n85G6707 p/n85G6738 p/n12J1442 or
p/n11J9992
2pin DC 3 - prong AC FRU: p/n85G6736 or p/n12J1444

(These AC adapters do NOT cause screen flicker)

PREREQUISITES: NONE

COMPANION: NONE

CONCURRENT: NONE

DETAIL:

LCD flicker may intermittently occur when using an AC adapter during the initial 50% of the battery charge cycle. If this occurs a 35 Watt AC Adapter FRU from the above list should be installed. The most common FRU currently available in the US is p/n12J1442.

NOTE: ENSURE THE CUSTOMER'S CURRENT AC CORD IS CONFIGURED TO FIT THE REPLACEMENT AC ADAPTER IN THE PHYSICAL CHECK AREA. REFER TO HMM DETAIL.

The AC Adapter can be directly obtained by your customer if they call IBM at the following numbers:

Customers in the US can call the IBM PC Company HelpCenter at 800-772 - 2227.

Customers in Canada can call IBM's HelpPC at 800-565-3344.

OR

The ECA can be installed by an authorized servicer.

NOTES:

This ECA will expire on 06/30/1998.
Order all FRU parts locally and record Time and Material to service code 33, ECA 002, and OTHER OFFICE 990.

SAS KEYWORDS:

PSY2	PSY2ECA	THINKPAD	UNCLASSIFIED
PSY2PWR	PSY2DSP	ECAVALID	

1.1.42 3545 DOCK I ECA002/BLANK LCD & INCOMPLETE BOOT WHEN DOCKED.

Record number: H162104

Device:	D/T3545	Service code:	33
ECA number:	ECA002	Parts source:	LOC
EC number:	ECF00812	Publish flag:	R
Mandatory:	N	Hit count:	UHC00004
Automatic shipment:	N	Success count:	USC0000
Availability date:	97/10	Publication code:	PC40
Plant of control:	24	Date created:	097/10/13
Tip key:		Date last altered:	A97/12/05
		Owning B.U.:	USA

PURPOSE:

3545 system board replacement to correct blank LCD and incomplete boot symptoms.

FEATURES:

Type,	With	Machines Affected	B/M to be	Service	System
Model,	B/M	and/or Feature/Device	Installed	Hours	Hours
Stage		Description			
3545	B/M9999999	760E (XGA) 9546-U9B 760ED(XGA) 9546-U9A 760EL 9547-U4G,U4T,U4K 760XD 9546-U9E 760XL 9547-U9C, U9K	B/M9999999	00.7	00.5

PHYSICAL CHECK:

The 3545 001 must have all of the following:

- O Failing condition: solid or intermittent blank LCD with or without cursor during a hung boot sequence.
- O A Dock I system board prior to FRU P/N05K3110.
- O A 3545 Dock I model 001 connected to a 954x model listed in the FEATURES section of this ECA.

NOTE: The failing condition is operating system independent. The blank LCD condition can occur with no Hard Disk installed.

PREREQUISITES: NONE

COMPANION: NONE

CONCURRENT: NONE

DETAIL:

To correct the failing condition listed in the Physical check section replace the Dock I model 001 system board with FRU P/N05K3110.

NOTES:

This ECA's expiration date is 12/31/1998.

Order all FRU parts locally, and record Time and Material to service code 33, ECA 002, and OTHER OFFICE 990.

SAS KEYWORDS:

PSY2	PSY2ECA	THINKPAD	D/T9546
UNCLASSIFIED	PSY2PART		

1.1.43 9546 760 MODELS NEW LOCKING DIMM DOOR.

Record number: H135610

Device:	D/T9546	Service code:	33
ECA number:	ECA002	Parts source:	LOC
EC number:	ECE67323	Publish flag:	R
Mandatory:	N	Hit count:	UHC00122
Automatic shipment:	N	Success count:	USC0000
Availability date:	96/12	Publication code:	PC40
Plant of control:	23	Date created:	096/12/05
Tip key:		Date last altered:	A98/01/07
		Owning B.U.:	USA

PURPOSE:

Prevent DIMM door loss and possible memory card damage.

FEATURES:

Type, Model, Stage	With B/M	Machines Affected and/or Feature/Device Description	B/M to be Installed	Service Hours	System Hours
9546	B/M9999999	ALL 760 MODEL SYSTEMS	B/M9999999	00.2	00.1

PHYSICAL CHECK:

Any 760 system with a non locking Dimm door FRU P/N29H9195.

PREREQUISITES: NONE**COMPANION:** NONE**CONCURRENT:** NONE**DETAIL:**

The new DIMM door FRU P/N69H8422 is designed to lock securely to the system, preventing door loss and possible memory loss or damage.

It can be sent directly to a customer. To obtain the new door at no cost the customer should call:

WORLD WIDE HELP CENTERS THAT SUPPORT CRU SHIPMENT TO CUSTOMERS and request FRU P/N69H8422 via 9546 ECA002.

Canada	- IBM's HelpPC	1-800-565-3344
US	- IBM PC Company HelpCenter	1-800-772-2227

NOTE: The above Help Center action does NOT require the use of this ECA.

|NOTE: This ECA should only be installed during the following |
| situations: |

This ECA can be installed by a CE or Dealer following normal ECA terms and conditions, if it qualifies under the FEATURES and PHYSICAL CHECK areas and one of the following conditions occur:

1. During any service action the non locking DIMM door FRU P/N29H9195 should be replaced with the new locking DIMM door FRU P/N69H8422.
2. The IBM geography does not support direct CRU shipments to customers.

NOTES:

This ECA will expire December 31, 1998. Order FRUs locally and record all time using Service Code 33, ECA002, other office 990.

SAS KEYWORDS:

PSY2	PSY2ECA	THINKPAD	UNCLASSIFIED
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1.1.44 9547 THERMAL BASE PAD FOR EVEN HEAT TRANSFER.

Record number: H136053

Device:	D/T9547	Service code:	33
ECA number:	ECA002	Parts source:	LOC
EC number:	ECF00499	Publish flag:	R
Mandatory:	N	Hit count:	UHC00123
Automatic shipment:	N	Success count:	USC0000
Availability date:	97/01	Publication code:	PC40
Plant of control:	23	Date created:	097/01/08
Tip key:		Date last altered:	A98/01/07
		Owning B.U.:	USA

PURPOSE:

A new option has been developed to evenly transfer any heat that escapes through the bottom of the 760 ThinkPad.

FEATURES:

Type, Model, Stage	With B/M	Machines Affected and/or Feature/Device Description	B/M to be Installed	Service Hours	System Hours
9547	B/M9999999	MOD U48 U4F U6F U6G U3F U4R U4S U6R U01 U31 U0A U3A U0R U3R	B/M9999999	00.5	00.3

PHYSICAL CHECK:

Model 760 EL/ELD/L/LD systems mentioned in the FEATURES section that have customer complaints of excessive base heat.

PREREQUISITES: NONE**COMPANION:** NONE**CONCURRENT:** NONE**DETAIL:**

Because some users prefer to use the 9547 on their lap, IBM has designed a thermal transfer product which is called a "thermoplastic energy transfer pad". This product, when attached to the underside of the unit, evenly transfers any heat that escapes through the bottom of the machine. This is especially useful for customers who use a ThinkPad in their lap and feel uncomfortable with basic heat dissipation that occurs with any mobile computer.

The Thermal Pad Kit, FRU / CRU P/N82H8966, will be given to any customer that feels the base of the system is too warm for use on their lap.

The normal method of delivery in the US and Canada will be by direct shipment to the customer from the IBM Help Center.

NOTE: The above Help Center action does NOT require the use of this ECA.

WORLD WIDE HELP CENTERS THAT SUPPORT CRU SHIPMENT TO CUSTOMERS.

Canada - IBM's HelpPC 1-800-565-3344

US - IBM PC Company HelpCenter 1-800-772-2227

|NOTE: This ECA should only be installed during the following |
| situations: |
This ECA can be installed by a CE or Dealer following normal ECA terms and conditions if it qualifies under the FEATURES and PHYSICAL CHECK areas and one of the following conditions occur:

1. The customer requires servicer installation instead of a direct CRU (Customer Replaceable Unit) shipment.
2. The IBM geography does not support direct CRU shipments to customers.

Servicers should order the Thermal Pad FRU Kit P/N82H8966.

NOTES:

This ECA will expire December 31, 1998. Order FRUs locally and record all time using Service Code 33, ECA002, other office 990.

SAS KEYWORDS:

PSY2

PSY2ECA

THINKPAD

UNCLASSIFIED

1.1.45 9548 SYSTEM HANGS WITH SDRAM MEMORY DIMMS INSTALLED.

Record number: H163171

Device:	D/T9548	Service code:	33
ECA number:	ECA002	Parts source:	LOC
EC number:	ECF06986	Publish flag:	R
Mandatory:	N	Hit count:	UHC00008
Automatic shipment:	N	Success count:	USC0000
Availability date:	98/03	Publication code:	PC40
Plant of control:	24	Date created:	098/03/23
Tip key:		Date last altered:	A98/04/03
		Owning B.U.:	USA

PURPOSE:

Correct System hangs on systems containing SDRAMs and system board FRUs P/N12J0405, P/N05K3456 or P/N10L1559.

FEATURES:

Type, Model, With Stage B/M	Machines Affected and/or Feature/Device Description	B/M to be Installed	Service Hours	System Hours
9548 B/M9999999	ALL MODELS	B/M0000000	00.8	00.2

PHYSICAL CHECK:

The system must contain system board FRU P/N12J0405, P/N05K3456, or P/N10L1559 to qualify for this ECA application.

The system board FRU part number can be seen by opening the DIMM door on the bottom of the system unit. To do this turn the ThinkPad over (front facing you), open the DIMM door. The system board FRU part number will be located on the system board at the upper right of the DIMM door opening. FRU P/N12J0405, P/N05K3456 or P/N10L1559 will be painted (silk screened) in this area.

NOTE:

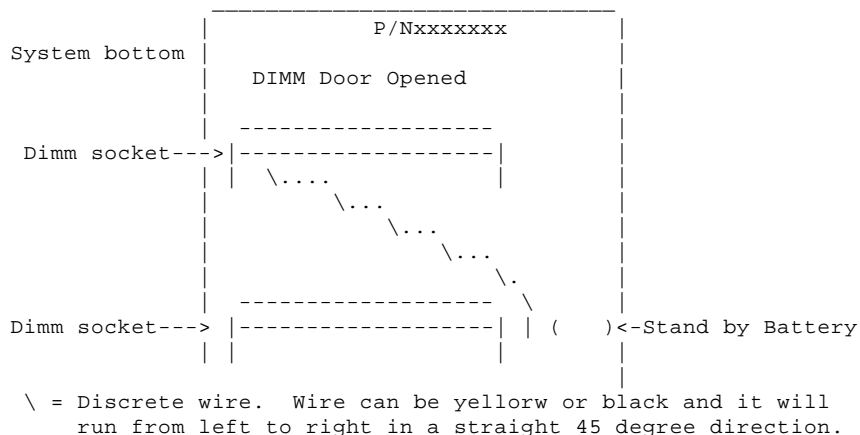
The new level replacement system board will have FRU P/N10L1574 written on a label in same area as the old part number.

NOTE:

A small number of early board fixes did not receive the FRU label containing FRU P/N10L1574. Because of this, along with the FRU P/N10L1574 label, the following will also indicate that a correct level card is installed in the system.

1. Label with FRU P/N10L1574 or newer substitution.
2. Discrete wire fix (shown below) and the old silk screen number.

Fix Diagram:



PREREQUISITES: NONE

COMPANION: NONE

CONCURRENT: NONE

DETAIL:

The 770 system may hang during any phase of POST, if system board FRU P/N12J0405, P/N05K3456, or P/N10L1559 contain SDRAM memory DIMMs. To correct this condition any of the above FRU part numbers should be replaced by an IBM authorized servicer with system board FRU P/N10L1574 (or later Substitute) during any system repair action or contact.

PSY2 RETAIN TIPS

9548 SYSTEM HANGS WITH SDRAM MEMORY DIMMS INSTALLED.

NOTE: SDRAM Memory installation or system hang failures are not required to qualify for this ECA.

NOTES: This ECA will expire on April 1, 1999.
Order all FRU parts locally, and record Time and Material to service code 33, ECA 002, and OTHER OFFICE 990.

SAS KEYWORDS:

PSY2ECA	THINKPAD	PSY2BRD	LOCKUP
LOCK	D/T9549	UNCLASSIFIED	10L1574

1.1.46 9549 SYSTEM HANGS WITH SDRAM MEMORY DIMMS INSTALLED.

Record number: H163170

Device:	D/T9549	Service code:	33
ECA number:	ECA002	Parts source:	LOC
EC number:	ECF06986	Publish flag:	R
Mandatory:	N	Hit count:	UHC00025
Automatic shipment:	N	Success count:	USC0000
Availability date:	98/03	Publication code:	PC40
Plant of control:	24	Date created:	098/03/23
Tip key:		Date last altered:	A98/04/06
		Owning B.U.:	USA

PURPOSE:

Correct System hangs on systems containing SDRAMs and system board FRU P/N12J0405, P/N05K3456 or P/N10L1559.

FEATURES:

Type,	With	Machines Affected	B/M to be	Service	System
Model,		and/or Feature/Device	Installed	Hours	Hours
Stage	B/M	Description			
9549	B/M9999999	ALL MODELS	B/M0000000	00.8	00.2

PHYSICAL CHECK:

The system must contain system board FRU P/N12J0405, P/N05K3456, or P/N10L1559 to qualify for this ECA application.

The system board FRU part number can be seen by opening the DIMM door on the bottom of the system unit. To do this turn the ThinkPad over (front facing you), open the DIMM door. The system board FRU part number will be located on the system board at the upper right of the DIMM door opening. FRU P/N12J0405, P/N05K3456 or P/N10L1559 will be painted (silk screened) in this area.

NOTE:

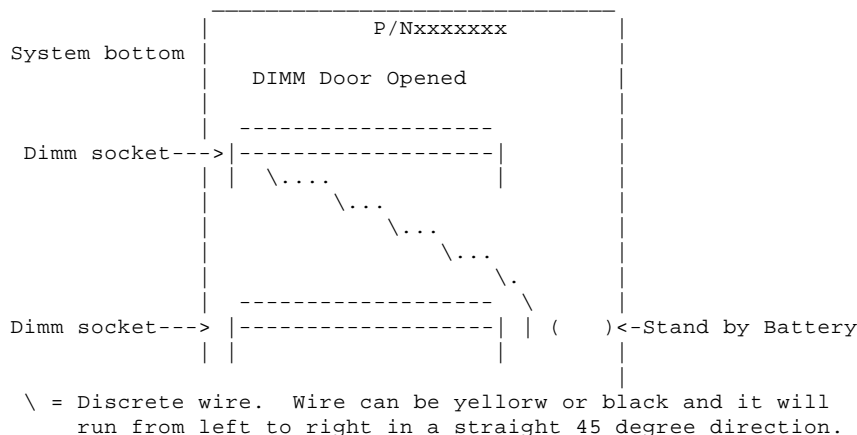
The new level replacement system board will have FRU P/N10L1574 written on a label in same area as the old part number.

NOTE:

A small number of early board fixes did not receive the FRU label containing FRU P/N10L1574. Because of this, along with the FRU P/N10L1574 label, the following will also indicate that a correct level card is installed in the system.

1. Label with FRU P/N10L1574 or newer substitution.
2. Discrete wire fix (shown below) and the old silk screen number.

Fix Diagram:



PREREQUISITES: NONE

COMPANION: NONE

CONCURRENT: NONE

DETAIL:

The 770 system may hang during any phase of POST, if system board FRU P/N12J0405 contains SDRAM memory DIMMs. To correct this condition system board FRU P/N12J0405 should be replaced by an IBM authorized servicer with system board FRU P/N10L1574 during any system repair action or contact.

The old level FRU P/N12J0405 will substitute to FRU P/N10L1574

PSY2 RETAIN TIPS

9549 SYSTEM HANGS WITH SDRAM MEMORY DIMMS INSTALLED.

or a later level FRU.

NOTE: SDRAM Memory installation or system hang failures are not required to qualify for this ECA.

NOTES: This ECA will expire on April 1, 1999.
Order all FRU parts locally, and record Time and Material to service code 33, ECA 002, and OTHER OFFICE 990.

SAS KEYWORDS:

PSY2ECA	THINKPAD	PSY2BRD	LOCKUP
LOCK	D/T9548	UNCLASSIFIED	10L1574

1.1.47 ECA003, OBSOLETE

Record number: H021904

Device:	D/T8580	Service code:	33
ECA number:	ECA003	Parts source:	LOC
EC number:	EC000000	Publish flag:	R
Mandatory:	N	Hit count:	UHC02180
Automatic shipment:	N	Success count:	USC0000
Availability date:	87/06	Publication code:	PC50
Plant of control:	27	Date created:	087/06/08
Tip key:		Date last altered:	A93/01/14
		Owning B.U.:	USA

PURPOSE:

*** THIS ECA EXPIRED 12/31/92 ***

FEATURES:

Type, Model, Stage	With B/M	Machines Affected and/or Feature/Device Description	B/M to be Installed	Service Hours	System Hours
8550	B/M0000000		B/M0000000	00.1	00.0

PHYSICAL CHECK:

PREREQUISITES: NONE

COMPANION: NONE

CONCURRENT: NONE

DETAIL:

NOTES:

*** THIS ECA EXPIRED 12/31/92 ***

SAS KEYWORDS:

PSY2ECA PSY2

1.1.48 ECA003, PREVENT MULTIPLE DDD SCSI DRIVES IN SERVER

Record number: H133326

Device:	D/T8640	Service code:	33
ECA number:	ECA003	Parts source:	MECH
EC number:	EC000000	Publish flag:	R
Mandatory:	N	Hit count:	UHC01318
Automatic shipment:	N	Success count:	USC0000
Availability date:	96/04	Publication code:	PC50
Plant of control:	23	Date created:	096/04/23
Tip key:		Date last altered:	A98/05/12
		Owning B.U.:	USA

PURPOSE:

This ECA provides for installation of a Pin Converter on some SCSI 1GB, 2GB, and 4GB fixed disks in TYPE 2 Hot-Swap trays in PC Server systems. The Pin Converter is a small cable connector interposer, which attaches between the fixed disk SCSI-ID pins and the SCSI-ID cable.

Important:

Install the interposers on hard drives mounted in TYPE 2 TRAYS FRU p/n06H3956 ONLY (This tray has only the light pipe LED).

Do NOT install the interposers on drives mounted in TYPE 3 TRAYS FRU P/N06H8631 (This tray has an amber LED, a green LED, and a power button in addition to the light pipe LED).

If using TYPE 2 TRAYS without the interposers installed, customers may experience MULTIPLE fixed disks appearing Defunct (DDD) when actually only ONE(1) drive has failed. This symptom is related to the type of drives installed, as described below.

In the event of a fixed disk failure, the Pin Converter prevents other drives attached to the same backplane from incorrectly appearing Defunct (DDD). This ECA may be installed at any time on eligible systems; there is no fix-on-fail requirement.

See Record H131887 for recovery instructions when multiple disks are DDD.

This ECA will expire November 14, 2002

FEATURES:

Type, Model, Stage	With B/M	Machines Affected and/or Feature/Device Description	B/M to be Installed	Service Hours	System Hours
8640	B/M0000000	PC SERVER SYSTEMS	B/M0000000	00.4	00.3
8641	B/M0000000	WITH HOT-SWAP FIXED	B/M0000000	00.4	00.3
8642	B/M0000000	DISK DRIVES MEETING THE PHYSICAL CHECK IN TYPE 2 TRAYS.	B/M0000000	00.4	00.3

PHYSICAL CHECK:

Systems eligible for this ECA are IBM PC Servers 8640 (with Hot-Swap Bay Assemblies installed), 8641, and 8642, WHICH HAVE ANY OF THE FOLLOWING FIXED DISKS INSTALLED:

- 1GB FRU p/n 06H8560
- 2GB FRU p/n 06H8561
- 4GB FRU p/n 06H8562

The affected drives are known to have been installed in the above system models, however not all of these systems will have the affected fixed disks.

The simplest way to inspect for eligible drives is to remove the front system cover, exposing the front of the fixed disks. Eligible drives are silver. There may also be black drives in the system, which do not require this ECA. Systems may have either type of drive installed, or a combination of both.

The interposers must be installed on the drives listed above, in both RAID and non-RAID systems, in TYPE 2 TRAYS FRU p/n06H3956 ONLY (This tray has only the light pipe LED); however, if placed on the correct SCSI-ID pins of other SCSI hard drives, no damage will occur.

Do NOT install the interposers on drives mounted in TYPE 3 TRAYS FRU P/N06H8631 (This tray has an amber LED, a green LED, and a power button in addition to the light pipe LED).

PREREQUISITES: NONE

COMPANION: NONE

CONCURRENT: NONE

DETAIL:

To obtain Pin Converters, order the IBM PC Server Pin Converter Kit, FRU p/n75H8103, which consists of six Pin Converter connectors and installation instructions.

Without the Pin Converter, the SCSI-ID cable plugs into five of the six pairs of SCSI-ID pins on the drive. The Pin Converter attaches to the cable, and then plugs into all six pairs of SCSI-ID pins on the fixed disk.

You can install the Pin Converter to the hot-swap drive while the server is powered-on. However, the SCSI-ID pins are located behind the handle on the front of the drive, limiting physical access to the pins. You might find this procedure easier if you power-off the server and remove the drive.

New systems are shipped with a Pin Converter on applicable drives. When replacing a fixed disk that has the Pin Converter installed, transfer the Pin Converter to the new FRU drive.

NOTES:

This ECA will expire November 14, 2002

IBM/TSS CEs should record all time and parts to Service Code 33, ECA003, Other Office 990.

SAS KEYWORDS:

PSY2	PSY2FDSK	HARDFILE	QUANTUM
06H8560	06H8561	06H8562	PASS 4
PSY2ECA	ECAVALID	PASS	PASS 2
1.12GB	2.25GB	4.51GB	SERVER
320	720	520	D/T8640
D/T8641	D/T8642	RAID	HEALTH

1.1.49 ECA003, 8600 WITH ONE OR TWO 50MHZ CPU CARDS

Record number: H01453

Device:	D/T8600	Service code:	33
ECA number:	ECA003	Parts source:	LOC.
EC number:	ECD64568	Publish flag:	R
Mandatory:	N	Hit count:	UHC00120
Automatic shipment:	N	Success count:	USC0000
Availability date:	94/09	Publication code:	PC40
Plant of control:	27	Date created:	094/09/21
Tip key:		Date last altered:	A95/09/11
		Owning B.U.:	USA

PURPOSE:

To physically inspect each 50 MHZ CPU card in the server and, if necessary, replace each 50 MHZ CPU card (max of two) to eliminate the chance of undetected data modification.

FEATURES:

Type, Model, Stage	With B/M	Machines Affected and/or Feature/Device Description	B/M to be Installed	Service Hours	System Hours
8600	B/M0000000	ALL 002 AND 003 MODELS AND SOME 001 MODELS: SEE "PHYSICAL CHECK" BELOW.	B/M82G5853	02.5	02.0

PHYSICAL CHECK:

All 50MHZ machines without EC D64568 must be inspected to determine if B/M 82G5853 must be installed, quantity equal to number of 50 MHZ CPU cards installed (one or two). This includes all model 002 and 003 systems.

Model 001 systems are affected only if:

- FC 5639 is installed,
- OR
- FC 9525, combined with FC 2432 or FC 2653, is installed.

PREREQUISITES: NONE**COMPANION:** NONE**CONCURRENT:** NONE**DETAIL:**

To determine if you must install this ECA, you will have to order the inspection instructions. This can be done in one of the following ways:

- Request the instructions in a LIST3820 file format from the SERV295 ToolsDisk by entering the following VM Command:


```
TOOLS SENDTO BCRVMPC2 SERC SERV295 GET ECA003 PACKAGE
```
- FAX a request addressed to the Server 195/295 ECA Coordinator at (407) 443-3186. Indicate that you are requesting the ECA003 inspection instructions and whether you wish them to be faxed or mailed. The request will be processed within 1 business day.
- Send a VM note to the Server 195/295 ECA Coordinator at BCRVM1(295SERV). Indicate that you are requesting the ECA003 inspection instructions and whether you wish them to be faxed or mailed. The request will be processed within 1 business day.
- Phone the Network Support Center at 800-426-2472 and request a copy of 8600 ECA 003 inspection instructions.

If you have determined that your server is eligible for this ECA, then for each affected 50 MHZ CPU card, you must order Field Bill of Material (FBM) 82G5853 from Raleigh manufacturing. Each FBM contains one 50 MHZ CPU card and installation instructions.

NOTE: SHIP THE 50 MHZ CPU CARD(S) THAT IS BEING REPLACED BACK TO RALEIGH IN THE BOX SUPPLIED WITH THE FBM. ADHERE THE LOOSE PRE-PAID AIRBORNE EXPRESS LABEL TO THE OUTSIDE OF THE BOX PRIOR TO SHIPPING.

THE RALEIGH ADDRESS:

IBM
3039 CORNWALLIS RD.

RTP, N.C. 27709

ATTN: DARLEEN MAYO
DEPT. W38A / BLDG. 205
RALVM8 (DMAYO)
T/L 441-3044

NO FRU PARTS SHOULD BE ORDERED OR CHARGED TO THIS ECA.

NOTES:

Record all time using D/T8600, ECA003, Service Code 33.

Update machine records to reflect EC D64568 being installed.

Return all used parts according to procedures outlined in the ECA instructions shipped with the Field Bill of Material.

SAS KEYWORDS:

APP2	PSY2ECA	SERVER	195
295	8600	PARALLAN	ECA
003	ECA003	PSY2	ECAVALID

INTERNAL "VALUE" DISK BY ENTERING THE FOLLOWING COMMAND AT THE VM PROFS/OFFICEVISION COMMAND LINE:

REQUEST CPUIDIBM PACKAGE FROM VALUE AT BCRVMPC2

THE ID PROGRAM MAY ALSO BE OBTAINED FROM THE IBM PC COMPANY BULLETIN BOARD SERVICE BY CALLING 919-517-0001 AND DOWNLOADING THE FILE TITLED "CPUIDIBM.DSK".

A COPY OF THE PROGRAM ON DISKETTE MAY BE REQUESTED FROM THE IBM PC COMPANY HELPCENTER BY CALLING 1-800-426-3389 IF THE TWO METHODS ABOVE ARE NOT AVAILABLE.

INTEL 386 AND 486 PROCESSORS ARE NOT AFFECTED.

SYSTEM DIAGNOSTICS COMPLETE WITHOUT ERRORS.

PREREQUISITES: NONE

COMPANION: NONE

CONCURRENT: NONE

DETAIL:

PHONE CALLS FROM CUSTOMERS REQUESTING THIS ECA WILL BE DIRECTED TO IBM DISPATCH. THE SERVICER SHOULD THEN CONTACT THE CUSTOMER, DETERMINE THE REQUIRED ECA PART AND ORDER IT USING NORMAL PROCEDURES.

INCLUDED WITH THE NEW 60 AND 66 MHZ PROCESSOR MODULE FRU KITS:

COMPLETE INSTALLATION INSTRUCTIONS,
A SPECIAL MODULE REMOVAL TOOL,
A MODULE INSERTION PAD TO PREVENT PROCESSOR BOARD DAMAGE,
THE PENTIUM MODULE WITH HEAT SINK ATTACHED.

THE 90 MHZ PROCESSOR BOARD ASSY IS FRU P/N06H7095.

NOTES:

ALL PARTS REMOVED, PENTIUM MODULES AND PROCESSOR BOARDS, ARE TO BE RETURNED TO IBM IMMEDIATELY FOLLOWING THE INSTALLATION USING NORMAL UPR PARTS RETURN PROCEDURES.

THE USE OF THE SPECIAL ECA 60 AND 66 MHZ PENTIUM PROCESSOR MODULE KITS (P/N's 07H0758 AND 07H0759) FOR ANY SERVICE ACTION EXCEPT THIS ECA IS NOT SUPPORTED BY ENGINEERING. THEREFORE, USE OF THESE SPECIAL PARTS WILL NOT BE RECOGNIZED, OR REIMBURSED, AS A NORMAL WARRANTY PART FOR ANY OTHER SERVICE ACTION (SERVICE CODE 01, etc.).

PART, TRAVEL AND LABOR FOR THIS ECA SHOULD BE RECORDED USING SERVICE CODE 33, ECA003 AND OTHER OFFICE WORKED 990.

This ECA will expire July 27, 2001

ADDITIONAL INFORMATION ABOUT BIOS LEVEL 3.00 AND OTHER BIOS LEVELS IS AVAILABLE IN RETAIN RECORD H126229.
PENTIUM IS A TRADEMARK OF INTEL CORPORATION

ADDENDUM:

The versions of Flash/BIOS currently available for 9595 products with a Type 4 Reference Diskette are:

Version

- 1.00 Initially shipped with the 9595 models xNx, xPx and xQx. Supports 16MB Memory SIMMs.
- 2.00 Identical to version 1.00, except support for 32MB Memory SIMMS was added.
- 3.00 Support was added for the following enhancements:
 - A. 90MHZ processor card, FRU P/N06H3739, for 9595 & 8641.
 - b. CD-ROM as a bootable device.

Notes: This version of BIOS REQUIRES the Reference Diskette to be at version 1.31 and the Diagnostic Diskette be at version 2.31.

OS/2 2.0X requires later SCSI Device Drivers (IBM2SCSI.ADD) with this version of flash BIOS.

- 4.00 This version was released, but immediately superseded

by version 5.00, which is the preferred replacement.

- 5.00 Note: Version 5.00 BIOS requires the Reference Diskette to be at version 1.33 and the Diagnostic Diskette to be at version 2.32 or higher.

Support was added for the following enhancements:

- A. Provides support for the 4 GB (gigabyte) hardfile.
- B. Enables the VPD (Vital Product Data) to display the processor ID and Step level (thereby, enabling a clear determination if a Pentium processor with the floating point divide (FDIV) fix is installed.
- C. Allows disabling of the error reporting log POST error, which is useful during RIPL under some conditions.

Resolves the following problems:

- A. Corrects problems encountered with the bootable CD-ROM attached to the RAID controller, when an additional non-RAID SCSI adapter is installed.
- B. Fixes diagnostic problems related to the CD-ROM being attached to the RAID controller.
- C. Fixes problems encountered while running SCSI fixed disk diagnostics with the "read verify" option selected.

This Device Driver may be downloaded from the IBM PC Company Bulletin Board System by calling 919-517-0001.

Upgrading the POST/BIOS:

The Level of POST/BIOS is indicated on the IBM logo screen of the system.

Type 4 Reference Diskette versions below 1.31 will be disabled from running on a system with a BIOS version 3.00 to prevent configuration errors and startup sequence errors. If the system is "flashed" DOWN below BIOS version 3.00, AN OLDER REFERENCE DISKETTE WILL BE REQUIRED to configure the system.

Back up the system partition before updating the system and SAVE the diskettes. This set of back-up diskettes will be compatible with BIOS level 1, 2, 3 or 5.

Also verify configuration information and startup sequence before updating the system. A configuration error and startup sequence error will occur after the update. The new Reference diskette will be required to correct the configuration error.

Prior to "Flashing" a system to a different BIOS version, the customer's original System partition should be backed up to diskette and saved. This will allow restoration of the original system configuration (setup) in the event of an unforeseen compatibility problem. However, the Flash/BIOS version can not be backed up from the system to a Diskette. Therefore, before "flashing" a system to a different version, it is recommended that the customer's current version BIOS diskette be available.

Additional information about BIOS level 3.00 is available in Retain record H126229.

SAS KEYWORDS:

PSY2	PSY2PROG	PSY2OPER	PSY2ECA
D/T8590	D/T8595	D/T9595A	SERVER
95	SERVER95	D/T9590	PENT
D/T8641	8590	9590	8595
9595	8641	ECAVALID	07H0758
07H0759			

PSY2 RETAIN TIPS
2625 KEYBOARD CABLE FAILURES.

1.1.51 2625 KEYBOARD CABLE FAILURES.

Record number: H16811

Device:	D/T2625	Service code:	33
ECA number:	ECA003	Parts source:	LOC
EC number:	EC9999999	Publish flag:	R
Mandatory:	N	Hit count:	UHC00039
Automatic shipment:	N	Success count:	USC0000
Availability date:	97/08	Publication code:	PC40
Plant of control:	24	Date created:	097/07/31
Tip key:		Date last altered:	A98/04/15
		Owning B.U.:	USA

PURPOSE:

Replace keyboards made before 12/31/96 to correct potential keyboard signal cable failures.

FEATURES:

Type, Model, Stage	With B/M	Machines Affected and/or Feature/Device Description	B/M to be Installed	Service Hours	System Hours
2625	B/M9999999	MODEL 365X 365XD	B/M9999999	00.4	00.2

PHYSICAL CHECK:

During any service action open the keyboard and check the date code on the upper right corner. Keyboards with date codes of 12/31/96 and before should be replaced.

PREREQUISITES: NONE

COMPANION: NONE

CONCURRENT: NONE

DETAIL: The original keyboard signal cable (membrane) could in some cases crack and loose conductivity in some of its lands. This could result in certain key failures when operating or during POST. The POST error would be 3XX (X = any number.)

The membrane crack is the result of increased cable flexing caused by a relocation of the 365X and XD system board keyboard cable connectors. A new more robust keyboard membrane has been designed to allow for the increased flex and eliminate premature membrane failure.

The membrane (cable) is an integral part of the keyboard FRU and all keyboard FRU stock has been purged of the affected date codes.

NOTES: This ECA will expire on 08/31/1999.
Order all FRU parts locally and record Time and Material to service code 33, ECA 003, and OTHER OFFICE 990.

SAS KEYWORDS:

PSY2 PSY2ECA THINKPAD UNCLASSIFIED

1.1.52 2640 ECA003 CORRECTS TFT LCD FLICKER

Record number: H132151

Device:	D/T2640	Service code:	33
ECA number:	ECA003	Parts source:	LOC
EC number:	EC9999999	Publish flag:	R
Mandatory:	N	Hit count:	UHC00002
Automatic shipment:	N	Success count:	USC0000
Availability date:	97/07	Publication code:	PC40
Plant of control:	24	Date created:	097/07/15
Tip key:		Date last altered:	A97/07/15
		Owning B.U.:	USA

PURPOSE:

Correct LCD flicker during AC operation.

FEATURES:

Type, Model, Stage	With B/M	Machines Affected and/or Feature/Device Description	B/M to be Installed	Service Hours	System Hours
2640	B/M9999999	MODELS E0A,E0C,F0D,F0E FOG,20U	B/M9999999	00.7	00.5

PHYSICAL CHECK:

The manufacturing part number of the new inverter FRU is P/N82H5509. The existing inverter card on these models did not have a FRU part number.

Note: DSTN LCD panel systems do not require this ECA. If a DSTN LCD has this type of symptom, normal problem determination should be used.

PREREQUISITES: 2640 ECA002

COMPANION: NONE

CONCURRENT: NONE

DETAIL:

Some 2640 systems may experience an intermittent LCD flicker during AC operation. The flicker would appear more pronounced when the brightness is set to a minimum setting.

NOTE:

ECA002 is a PREREQUISITE to correct this condition. ECA003 should only be used if the AC Adapter replacement in ECA002 does not correct the flickering condition.

This ECA corrects the TFT LCD Flicker condition by replacing the LCD inverter card. The TFT inverter is FRU P/N82H5509.

NOTES:

This ECA expiration date is 07/31/1998.
Order all FRU parts locally and record Time and Material to service code 33, ECA 003, and OTHER OFFICE 990.

SAS KEYWORDS:

PSY2 PSY2ECA PSY2DSP THINKPAD
UNCLASSIFIED

1.1.54 9546 SUSPEND RESUME PROB WITH PORT REPLICATOR II

Record number: H135693

Device:	D/T9546	Service code:	33
ECA number:	ECA003	Parts source:	LOC
EC number:	ECE67476	Publish flag:	R
Mandatory:	N	Hit count:	UHC00126
Automatic shipment:	N	Success count:	USC0000
Availability date:	96/12	Publication code:	PC40
Plant of control:	23	Date created:	096/12/10
Tip key:		Date last altered:	A98/01/07
		Owning B.U.:	USA

PURPOSE:

Replace the Port Replicator II, FRU P/N66G3575, to correct hangs during resume when it is docked with a 9546 referenced in the FEATURES section of this ECA.

FEATURES:

Type, Model, Stage	With B/M	Machines Affected and/or Feature/Device Description	B/M to be Installed	Service Hours	System Hours
9546	B/M9999999	MODEL U1A U2A U2B U2H U11 U21 U22 U27 U13 U28 U1C U2 U3A U3B U4A U4B U3L U9A U9B	B/M9999999	00.3	00.1

PHYSICAL CHECK:

Port Replicator FRU P/N66G3575 used with 9546 in FEATURES Section.

PREREQUISITES: NONE

COMPANION: NONE

CONCURRENT: NONE

DETAIL: The 9546 models listed in the FEATURES section will not resume from suspend when connected to the Port Replicator II, FRU P/N66G3575.

A new level Port Replicator II has been released to correct this condition. It is FRU P/N69H8340. The older level Port Replicator FRU P/N66G3575 will work correctly on all 2620 and 9545 ThinkPads and will not require this ECA.

The New Port Replicator II FRU is a Customer Replaceable Unit (CRU) and can be sent directly to the customer. Customers experiencing this condition should call the following:

WORLD WIDE HELP CENTERS THAT SUPPORT CRU SHIPMENT TO CUSTOMERS.

Canada - IBM's HelpPC 1-800-565-3344

US - IBM PC Company HelpCenter 1-800-772-2227

|NOTE: This ECA should only be installed during the following |
| situations: |
This ECA can be installed by a CE or Dealer following normal EC terms and conditions if it qualifies under the FEATURES and PHYSICAL CHECK areas and one of the following conditions occur:

1. The system is currently being serviced and normal problem determination indicates this ECA is the resolution.
2. The IBM geography does not support direct CRU shipments to customers.

NOTES:

This ECA will expire on December 31 1998. Order FRU P/N69H8340 locally and record all time to ECA003 other office worked 990.

SAS KEYWORDS:

PSY2 PSY2ECA THINKPAD UNCLASSIFIED

1.1.55 9547 760 MODELS NEW LOCKING DIMM DOOR.

Record number: H136054

Device:	D/T9547	Service code:	33
ECA number:	ECA003	Parts source:	LOC
EC number:	ECE67323	Publish flag:	R
Mandatory:	N	Hit count:	UHC00115
Automatic shipment:	N	Success count:	USC0000
Availability date:	96/12	Publication code:	PC40
Plant of control:	23	Date created:	097/01/08
Tip key:		Date last altered:	A98/01/07
		Owning B.U.:	USA

PURPOSE:

Prevent DIMM door loss and possible memory card damage.

FEATURES:

Type, Model, Stage	With B/M	Machines Affected and/or Feature/Device Description	B/M to be Installed	Service Hours	System Hours
9547	B/M9999999	ALL 760 MODEL SYSTEMS	B/M9999999	00.2	00.1

PHYSICAL CHECK:

Any 760 system with a non locking Dimm door FRU P/N29H9195.

PREREQUISITES: NONE**COMPANION:** NONE**CONCURRENT:** NONE**DETAIL:**

The new DIMM door FRU P/N69H8422 is designed to lock securely to the system, preventing door loss and possible memory loss or damage.

It can be sent directly to a customer. To obtain the new door at no cost the customer should call:

WORLD WIDE HELP CENTERS THAT SUPPORT CRU SHIPMENT TO CUSTOMERS and request FRU P/N69H8422 via 9546 ECA003.

Canada	- IBM's HelpPC	1-800-565-3344
US	- IBM PC Company HelpCenter	1-800-772-2227

NOTE: The above Help Center action does NOT require the use of this ECA.

|NOTE: This ECA should only be installed during the following |
| situations: |

This ECA can be installed by a CE or Dealer following normal ECA terms and conditions, if it qualifies under the FEATURES and PHYSICAL CHECK areas and one of the following conditions occur:

1. During any service action the non locking DIMM door FRU P/N29H9195 should be replaced with the new locking DIMM door FRU P/N69H8422.
2. The IBM geography does not support direct CRU shipments to customers.

NOTES:

This ECA will expire December 31, 1998. Order FRUs locally and record all time using Service Code 33, ECA003, other office 990.

SAS KEYWORDS:

PSY2	PSY2ECA	THINKPAD	UNCLASSIFIED
------	---------	----------	--------------

1.1.56 ECA004, BENT CHASSIS ON PC 350/750 5X5 SYSTEMS

Record number: H024262

Device:	D/T6885	Service code:	33
ECA number:	ECA004	Parts source:	NONE
EC number:	EC000000	Publish flag:	R
Mandatory:	N	Hit count:	UHC00001
Automatic shipment:	N	Success count:	USC0000
Availability date:	96/06	Publication code:	PC50
Plant of control:	23	Date created:	096/06/28
Tip key:		Date last altered:	A96/06/28
		Owning B.U.:	USA

PURPOSE:

The purpose of this ECA is to provide a replacement 3.5 inch DASD tray/riser support bracket for IBM PC 350/750 Series systems with a bent chassis preventing the installation of adapters in slots 3 & 4 (top 2 full length card slots).

This is a labor-only ECA. All parts will be provided by the IBM PC Company.

FEATURES:

Type, Model, Stage	With B/M	Machines Affected and/or Feature/Device Description	B/M to be Installed	Service Hours	System Hours
6885	B/M0000000	6885 PC 750 ANY MODEL WITH 55-XXXXX SERIAL NUMBERS ONLY	B/M0000000	00.3	00.2
6886	B/M0000000	6886 PC 750 MICRO CHANNEL 55-XXXXX SERIAL NUMBERS ONLY	B/M0000000	00.3	00.2
6586	B/M0000000	6586 PC 350 ANY MODEL WITH 55-XXXXX SERIAL NUMBERS ONLY	B/M0000000	00.3	00.2
6581	B/M0000000	6581 PC 350 ANY MODEL WITH 55-XXXXX SERIAL NUMBERS ONLY	B/M0000000	00.3	00.2
6583	B/M0000000	6583 PC 350	B/M0000000	00.3	00.2

PHYSICAL CHECK:

IBM PC 350/750 Series systems containing a 55 prefixed serial number AND a date of manufacture of 9-1-95 through 12-21-95 may be affected. The date of manufacture is located on the product identification label attached to the IBM shipping carton.

Affected systems may also be identified by either of the following methods:

- A) With the top cover removed, locate the 3.5 inch DASD tray/riser support bracket. The bracket extends from the front to the rear of the system and houses the IDE or SCSI hardfile while providing support for the riser card.

Remove the screw holding the 3.5 inch DASD tray/riser support bracket at the top rear of the system. When the screw is removed, the bracket will appear to move forward. The mounting hole on the 3.5 inch DASD tray/riser support bracket will no longer align with the mounting hole on the frame.

To reinstall the screw, the rear of the base frame must be pulled forward to align the mounting holes in the frame and the 3.5 inch DASD tray/riser support bracket.

- B) When installing an adapter card in slot 4, (top slot on the left side of the riser card) the card will plug into the riser slot, however, when the mounting screw is positioned to lock down the adapter to the base frame, the slot on the adapter bracket will not align with the hole in the base frame. If the adapter bracket is forced to the rear to align the mounting holes of the base frame and the adapter bracket, the adapter card will unseat itself from the riser card as the screw is tightened.

PREREQUISITES: NONE

COMPANION: NONE

CONCURRENT: NONE

DETAIL:

A limited number of IBM PC 350/750 Series systems were manufactured with the base frame and 3.5 inch DASD tray/riser support bracket out of specification. This problem ONLY affects PC 350 and 750 systems with 5 drive bays and 5 riser card slots (5x5 systems with machine types of 6X8X).

The PC 330 and 730 systems are not affected (3x3 systems with machine types of 6X7X).

Systems with a "23" serial number prefix are not affected.

This ECA provides a replacement 3.5 inch DASD tray/riser support bracket that corrects the out-of-spec condition. THE REPLACEMENT BRACKET IS NOT THE SAME AS FRU P/N06H1780 AND IS NOT AVAILABLE THROUGH NORMAL PARTS ORDERING PROCEDURES.

End Users, Dealers or TSS servicers with affected systems are asked to contact the IBM PC Company HelpCenter at 1-800-772-2227 to request the fix for the "Bent Chassis" problem by referencing "ECA 004 for PC 300/700." A 3.5 inch DASD tray/riser support bracket replacement kit will be sent to the address specified by the caller. The bracket kit will contain detailed instructions for the removal/replacement and disposition of the existing bracket. Replacement of the bracket should be completed by an IBM Authorized Servicer or TSS servicer.

Recording parts usage with this ECA will invalidate the claim or QSAR. This is a labor-only ECA.

NOTES:

IBM and TSS Servicers should record time and travel, along with the other product information to:

Service Code: 33

ECA: 004

Other Branch Office: 990

This ECA will expire June 1, 1999.

SAS KEYWORDS:

PSY2	PSVP	PSY2ECA	IBMPC
PSVPECA	PSY2ADPT	PSVPADPT	PSVPPART
PSY2PART	D/T6885	D/T6886	D/T6581
D/T6583	D/T6586	6885	6886
6581	6583	6586	PC750
PC350	PC 750	PC 350	

1.1.57 ECA004, OBSOLETE

Record number: H022011

Device:	D/T8550	Service code:	33
ECA number:	ECA004	Parts source:	LOC.
EC number:	EC0000000	Publish flag:	R
Mandatory:	N	Hit count:	UHC01596
Automatic shipment:	N	Success count:	USC0000
Availability date:	87/07	Publication code:	PC20
Plant of control:	27	Date created:	087/06/17
Tip key:		Date last altered:	A93/07/13
		Owning B.U.:	USA

PURPOSE:

*** THIS ECA EXPIRED 12-31-92 ***

FEATURES:

Type, Model, Stage	With B/M	Machines Affected and/or Feature/Device Description	B/M to be Installed	Service Hours	System Hours
8530	B/M0000000		B/M0000000	00.5	00.5

PHYSICAL CHECK:

PREREQUISITES: NONE

COMPANION: NONE

CONCURRENT: NONE

DETAIL:

NOTES:

*** THIS ECA EXPIRED 12-31-92 ***

SAS KEYWORDS:

PSY2	PSY2ECBM	8530SYSECBM	8530ECA
PSY2ECA	D/T8530		

PSY2 RETAIN TIPS

ECA004, REPLACEMENT 8MB MEMORY IN 8640

REPLACE ELIGIBLE MEMORY WITH FRU p/n73G3234. Although the FRU number has not changed, current Option, FRU, and Manufacturing stock do not contain affected SIMMs. DUE TO EXISTING FIELD STOCK LEVELS, YOU SHOULD EXAMINE SIMMs BEFORE INSTALLATION TO ENSURE THEY ARE NOT AFFECTED.

NOTES:

IBM/TSS CEs should record all time and parts to Service Code 33, D/T8640, ECA004, Other Office 990.

Return all replaced memory via normal UPR procedures.

This ECA will expire February 23, 2002

SAS KEYWORDS:

PSY2	PSY2ECA	PSY2ECBM	SHRINK2
SHRINK-2	SHRINK 2	73G3234	92G7203
PSY2MEM	PSY2ERR	NMI	0002
PANIC	ECAVALID	HEALTH	

1.1.59 2625 365XX MOUSE.DUAL BUTTON OPERATION W/ SINGLE ACTION.

Record number: H121776

Device:	D/T2625	Service code:	33
ECA number:	ECA004	Parts source:	LOC
EC number:	EC999999	Publish flag:	R
Mandatory:	N	Hit count:	UHC00018
Automatic shipment:	N	Success count:	USC0000
Availability date:	97/09	Publication code:	PC40
Plant of control:	24	Date created:	097/08/14
Tip key:		Date last altered:	A97/09/25
		Owning B.U.:	USA

PURPOSE:

Replace the keyboard card assembly FRU for incorrect mouse button operation. When one mouse button is pressed a left and right mouse button result occurs.

FEATURES:

Type, Model, Stage	With B/M	Machines Affected and/or Feature/Device Description	B/M to be Installed	Service Hours	System Hours
2625	B/M9999999	365X & XD MOD 1E9 1F9 2E9 6B7 EBF EEF ELF FE9 FF9 FR9 GE9 GF9	B/M9999999	00.8	00.6

PHYSICAL CHECK: 2625 365 X and XD system must have the three following items to be eligible for this ECA:

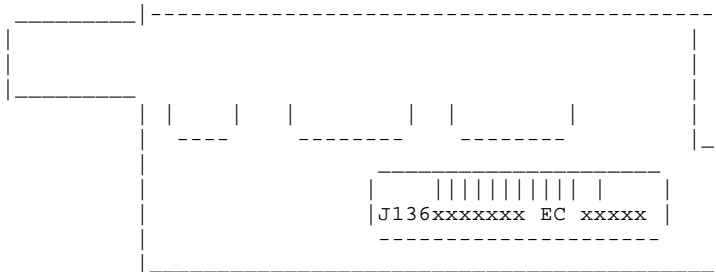
- 1 This Bar code information on the bottom of the system.

TYPE 2625 - xxx S/N 78-xxxxx 97/0#
 ||||||||||||||||||||||||||| ||||||||||||||| ||| | | ||| |||||

X = any number or letter, and # can be 3 or 4.

- 2. Model number listed in the FEATURES Section of this ECA.
- 3. A Keyboard Card Assembly FRU P/N69H7913 that contains the following information on its bar code:

The bar code information is located on the keyboard card and can be seen below the keyboard connectors when the top cover is removed. x = any number or letter.



PREREQUISITES: NONE

COMPANION: NONE

CONCURRENT: NONE

DETAIL:

A small number of Keyboard card assembly FRUs may fail because of an incorrectly installed component on this FRU. A single mouse button depression, on systems with one of these FRUs can cause a left and right mouse button action to occur.

This can result is unexpected information appearing on the display or unexpected program actions.

Systems with this condition require a Keyboard card replacement. Use keyboard card FRU P/N69H7913. All FRU stock of the early level keyboard card (same FRU part number) has been purged.

NOTES:

This ECA will expire August 31, 1998. Order FRUs locally and record all time using Service Code 33, ECA004, other office 990.

SAS KEYWORDS:

PSY2 PSY2ECA THINKPAD UNCLASSIFIED

2640 ECA004 CORRECTS MOUSE BUTTON SCRATCH TO LCD.

1.1.60 2640 ECA004 CORRECTS MOUSE BUTTON SCRATCH TO LCD.

Record number: H161580

Device:	D/T2640	Service code:	33
ECA number:	ECA004	Parts source:	LOC
EC number:	EC9999999	Publish flag:	R
Mandatory:	N	Hit count:	UHC00006
Automatic shipment:	N	Success count:	USC0000
Availability date:	97/10	Publication code:	PC40
Plant of control:	24	Date created:	097/10/23
Tip key:		Date last altered:	A98/04/14
		Owning B.U.:	USA

PURPOSE:

Prevent or correct LCD scratches caused by keyboard mouse buttons or track point.

FEATURES:

Type, Model, Stage	With B/M	Machines Affected and/or Feature/Device Description	B/M to be Installed	Service Hours	System Hours
2640	B/M9999999	MODEL 560	B/M9999999	00.4	00.2

PHYSICAL CHECK:

1. The model 560 must have an old level Keyboard as listed below.
- OR
2. An old level LCD Bezel.

NOTE:

A description of the OLD level Bezel is in Fig 1 and the NEW level is in Fig 2.

OLD LEVEL KEYBOARD FRU P/N

Arabic	P/N46H3885 or P/N20H4232
Belgian	P/N46H3883 or P/N20H4230
Canadian French	P/N46H3890 or P/N20H4237
Danish	P/N46H3877 or P/N20H4225
Dutch	P/N46H3876 or P/N20H4224
French	P/N46H3874 or P/N20H4222
German	P/N46H3873 or P/N20H4221
Greek	P/N46H3888 or P/N20H4235
Hebrew	P/N46H3886 or P/N20H4233
Italian	P/N46H3875 or P/N20H4223
Japanese	P/N46H3892 or P/N20H4239
Latin Spanish	P/N46H3889 or P/N20H4236
Norwegian	P/N46H3879 or P/N20H4227
Portuguese	P/N46H3879 or P/N20H4231
Russian	P/N46H3891 or P/N20H4238
Spanish	P/N46H3878 or P/N20H4226
Swedish / Finnish	P/N46H3882 or P/N20H4229
Swiss	P/N46H3880 or P/N20H4228
Turkish	P/N46H3887 or P/N20H4234
U.K. English	P/N46H3872 or P/N20H4220
U.S. English	P/N46H3871 or P/N20H4219

.
. .
. .
. .

FIG 1

OLD LEVEL LCD BEZEL

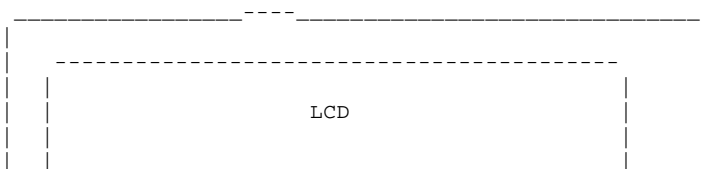
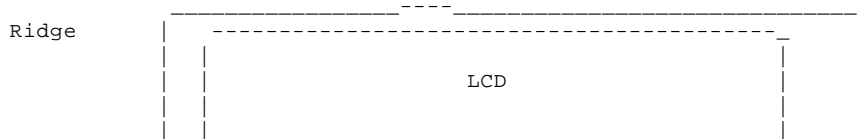


FIG 2

NEW LEVEL LCD BEZEL



PREREQUISITES: NONE

COMPANION: NONE

CONCURRENT: NONE

DETAIL:

1. Replace all old level keyboards and LCD Bezels identified in the PHYSICAL CHECK area with a new level keyboard and LCD Bezel FRU listed in the following chart.
2. Check all model 560 systems with old level keyboards for LCD marks or scratches in the area where the keyboard mouse buttons and trackpoint approach the LCD when the cover is closed.
3. Clean the LCD with a mixture of 50% isopropyl alcohol and 50% distilled water. If marks/scratches are not removed from the above areas replace the LCD.

Safety Note: DO NOT SPRAY OR POUR CLEANING SOLUTION DIRECTLY ON THE LCD. DAMPEN A CLOTH WITH THE CLEANING SOLUTION FIRST AND THEN CLEAN THE LCD WITH THE CLOTH.

LCD PANEL	FRU P/N
TFT LCD PANEL	P/N12J1600
DSTN LCD PANEL	P/N20H4267
LCD BEZEL	NEW FRU P/N
TFT Bezel raised	P/N20H4266
DSTN Bezel raised	P/N20H4265
KEYBOARD	NEW FRU P/N
Arabic	P/N97H3886
Belgian	P/N97H3884
Canadian French	P/N97H3891
Danish	P/N97H3879
Dutch	P/N97H3878
French	P/N97H3876
German	P/N97H3875
Greek	P/N97H3889
Hebrew	P/N97H3887
Italian	P/N97H3877
Japanese	P/N97H3893
Korean	P/N97H3894
Latin Spanish	P/N97H3890
Norwegian	P/N97H3881
Portuguese	P/N97H3885
Russian	P/N97H3892
Spanish	P/N97H3880
Swedish or Finnish	P/N97H3883
Swiss	P/N97H3882
Turkish	P/N97H3888
U.K. English	P/N97H3874
U.S. English	P/N97H3873

NOTE: The FRU part numbers to the left are the first new level containing the corrected Engineering Change (EC.) All future releases of the FRU also contain the EC and will automatically ship, if the part number listed here is ordered. Example Danish P/N97H3879 now P/N02K4395 which also has the EC correction.

NOTES:

This ECA's expiration date is 10/31/1998.

Order all FRU parts locally, and record Time and Material to

PSY2 RETAIN TIPS

2640 ECA004 CORRECTS MOUSE BUTTON SCRATCH TO LCD.

service code 33, ECA 004, and OTHER OFFICE 990.

SAS KEYWORDS:

PSY2

PSY2ECA

THINKPAD

UNCLASSIFIED

1.1.61 9545, ALL 370, 750 & 755 MOUSE BUTTON FAILURES.

Record number: H16779

Device:	D/T9545	Service code:	33
ECA number:	ECA004	Parts source:	LOC
EC number:	EC999999	Publish flag:	H
Mandatory:	N	Hit count:	UHC00004
Automatic shipment:	N	Success count:	USC0000
Availability date:	97/08	Publication code:	PC40
Plant of control:	23	Date created:	097/07/18
Tip key:		Date last altered:	A97/08/14
		Owning B.U.:	USA

PURPOSE:

Replace the ThinkPad keyboard to correct a failing mouse button condition.

FEATURES:

Type, Model, Stage	With B/M	Machines Affected and/or Feature/Device Description	B/M to be Installed	Service Hours	System Hours
9545	B/M9999999	ALL 750, 755, AND 370 MODELS.	B/M9999999	00.4	00.2

PHYSICAL CHECK: 9545 ThinkPads systems listed in the features section must have all of the following to qualify for this ECA:

1. A solid or intermittently failing mouse button.
2. A keyboard with a label "Manufactured for IBM by Lexmark" on the keyboard base.

The new keyboard will have the following label on it. These keyboards are not eligible for this ECA.

EXAMPLE:

```

|-----|
| Part No.  XXXXXXXX   Manufactured for IBM |
| FRU No.   XXXXXXXX   by Key Tronic       |
| ID No.    XXXXXXXX                                     |
| (month, day, year)<-numeric                 |
| Plt. No.  XXXX Model XXXX made in the USA  |
|-----|
|          |||||||||||||||||||||||||||||||| |
|          |||||||||||||||||||||||||||||||| |
|          1MXXXXXXXXXX                          |
|-----|
    
```

X = any number or letter.

PREREQUISITES: NONE

COMPANION:

CONCURRENT: NONE

DETAIL: Some 9545 mouse buttons that receive a high amount of use may exhibit intermittent or solid failures during use.

The FEATURES section identifies the 9545 models that can be affected and are eligible for this ECA. A new keyboard with a more robust button is now in FRU stock. The FRU part number has not changed. The label shown in the Physical Check area identifies this new level keyboard.

This ECA covers all keyboard languages.

NOTES:

This ECA will expire August 31, 1998. Order FRUs locally and record all time using Service Code 33, ECA004, other office 990.

SAS KEYWORDS:

PSY2 PSY2ECA PSY2KEYBD THINKPAD
UNCLASSIFIED

1.1.62 9546 HANGS DURING OPERATING SYSTEM LOAD.

Record number: H136052

Device:	D/T9546	Service code:	33
ECA number:	ECA004	Parts source:	LOC
EC number:	ECE67599	Publish flag:	R
Mandatory:	N	Hit count:	UHC00237
Automatic shipment:	N	Success count:	USC0000
Availability date:	96/11	Publication code:	PC40
Plant of control:	24	Date created:	097/01/08
Tip key:		Date last altered:	A98/01/07
		Owning B.U.:	USA

PURPOSE:

Correct intermittent system hangs during POST or during the operating system load.

FEATURES:

Type, Model, Stage	With B/M	Machines Affected and/or Feature/Device Description	B/M to be Installed	Service Hours	System Hours
9546	B/M9999999	MOD E/ED U3A, U3B, U4A U4B, U3L	B/M9999999	00.2	00.1

PHYSICAL CHECK:

Systems in the FEATURES section of this ECA containing DIMM adapter FRU P/N39H6229 (8MB) or DIMM adapter FRU P/N46H6023 that experience intermittent hangs when used with the following system boards and 1 or 2 of any manufacture's DIMMs.

The number used to identify the system board is located on a label in the Ultra Bay compartment between the second battery connector and the Ultra Bay connector. It can be seen without using tools. Open the keyboard and remove the component in the Ultra Bay. It will be a diskette drive, CD Rom drive, Hard Drive Battery. NOTE: this is a Manufacturing part number NOT a FRU part number.

Manufacturing Part Numbers

36H1368
36H1514
36H2040
36H1367
36H1513
36H2039
36H2057
36H2058
36H2059
00M0032
00M0033

PREREQUISITES: NONE

COMPANION: 9546 ECA002: 9546 760 MODELS NEW LOCKING DIMM DOOR.

Check and install or notify customer of the need for this direct shipment CRU when applicable.

CONCURRENT: NONE

DETAIL: Customers experiencing solid or intermittent errors during POST or load of the operating system with one of the 9546 models identified in the FEATURES section of this ECA should call the IBM PCCO Help Center. They will verify the failing condition and replace their current OMB or 8MB Adapter with a new OMB DIMM adapter FRU P/N83H7124 or a new 8MB (soldered on memory) DIMM adapter FRU P/N83H7126 that has been released to correct this condition.

Customers that are not having the above conditions can also

receive a new level DIMM adapter card if their system board requires it. The new part number DIMM adapter will operate correctly in any level system, but its primary design is to correct intermittent or solid hangs that occur on the system boards identified in the PHYSICAL CHECK area of the ECA.

The DIMM Adapter FRU will be sent directly to the customer. They are Customer Replaceable Units (CRUs) that are easily installed.

NOTE: The Help Center Telephone numbers are listed at the end of the DETAIL section.

NOTE: The above Help Center action does NOT require the use of this ECA.

Systems with system boards that are not identified in the PHYSICAL CHECK area of the ECA can utilize the old or new level of DIMM adapters. These systems do NOT require this ECA.

The following are examples of some of the failing conditions.

- O The system hangs during POST with a flashing cursor on a dark screen. The Fixed Disk icon may also flash on the LCD indicator Assembly.
- O The operating system starts, but encounters memory problems such as, "himem.sys has found bad ems memory @ location xxxx" with a following message that "himem.sys is not loaded".
- O The operating system starts, but hangs with the operating system logo screen displayed.

If the above conditions are met, remove the Memory DIMM(s) and reboot the system. Note: Intermittent conditions normally occur 3 out of 10 times during cold boots.

|NOTE: This ECA should only be installed during the following |
| situations: |

This ECA can be installed by a CE or Dealer following normal ECA terms and conditions if it qualifies under the FEATURES and PHYSICAL CHECK areas and one of the following conditions occur:

1. The system currently being serviced has an intermittent or solid hang condition.
2. The customer requires servicer installation instead of a direct CRU (Customer Replaceable Unit) shipment.
3. The IBM geography does not support direct CRU shipments to customers.

WORLD WIDE HELP CENTERS THAT SUPPORT CRU SHIPMENT TO CUSTOMERS.

Canada - IBM's HelpPC 1-800-565-3344

US - IBM PC Company HelpCenter 1-800-772-2227

NOTES:

This ECA will expire November 30, 1998. Order FRUs locally and record all time using Service Code 33, ECA004, other office 990.

SAS KEYWORDS:

PSY2	PSY2MEM	PSY2PART	THINKPAD
PSY2ECA	UNCLASSIFIED		

1.1.63 9547 SUSPEND RESUME (EXPIRED ON DECEMBER 31 1997.)

Record number: H136055

Device:	D/T9547	Service code:	33
ECA number:	ECA004	Parts source:	LOC
EC number:	ECE67476	Publish flag:	R
Mandatory:	N	Hit count:	UHC00124
Automatic shipment:	N	Success count:	USC0000
Availability date:	96/12	Publication code:	PC40
Plant of control:	23	Date created:	097/01/08
Tip key:		Date last altered:	A98/03/31
		Owning B.U.:	USA

PURPOSE:

Replace the Port Replicator II, FRU P/N66G3575, to correct hangs during resume when it is docked with a 9547 referenced in the FEATURES section of this ECA.

FEATURES:

Type, Model, Stage	With B/M	Machines Affected and/or Feature/Device Description	B/M to be Installed	Service Hours	System Hours
9547	B/M9999999	MODEL I01 U31 U0A U3A U0R U3R U4H U4F U6F U6G U3F U4R U4S U6R U4G U6H U4T U4K	B/M9999999	00.3	00.1

PHYSICAL CHECK:

Port Replicator FRU P/N66G3575 used with 9547 in FEATURES Section.

PREREQUISITES: NONE

COMPANION: NONE

CONCURRENT: NONE

DETAIL: The 9547 models listed in the FEATURES section will not resume from suspend when connected to the Port Replicator II, FRU P/N66G3575.

A new level Port Replicator II has been released to correct this condition. It is FRU P/N69H8340. The older level Port Replicator FRU P/N66G3575 will work correctly on all 2620 and 9545 ThinkPads and will not require this ECA.

The New Port Replicator II FRU is a Customer Replaceable Unit (CRU) and can be sent directly to the customer. Customers experiencing this condition should call the following:

WORLD WIDE HELP CENTERS THAT SUPPORT CRU SHIPMENT TO CUSTOMERS.

Canada - IBM's HelpPC 1-800-565-3344

US - IBM PC Company HelpCenter 1-800-772-2227

|NOTE: This ECA should only be installed during the following |
| situations: |
This ECA can be installed by a CE or Dealer following normal EC terms and conditions if it qualifies under the FEATURES and PHYSICAL CHECK areas and one of the following conditions occur:

1. The system is currently being serviced and normal problem determination indicates this ECA is the resolution.
2. The IBM geography does not support direct CRU shipments to customers.

NOTES:

This ECA will expire on December 31 1997. Order FRU P/N69H8340 locally and record all time to ECA004 other office worked 990.

SAS KEYWORDS:

PSY2 PSY2ECA THINKPAD UNCLASSIFIED

1.1.64 ECA005, OBSOLETE

Record number: H022239

Device:	D/T8550	Service code:	
ECA number:	ECA005	Parts source:	
EC number:	EC000000	Publish flag:	R
Mandatory:	N	Hit count:	UHC04928
Automatic shipment:	N	Success count:	USC0000
Availability date:	87/07	Publication code:	PC50
Plant of control:	27	Date created:	087/07/01
Tip key:		Date last altered:	A93/06/17
		Owning B.U.:	USA

PURPOSE: THIS ECA HAS EXPIRED.

FEATURES:

Type, Model, Stage	With B/M	Machines Affected and/or Feature/Device Description	B/M to be Installed	Service Hours	System Hours
00000	B/M0000000		B/M0000000	00.1	00.0

PHYSICAL CHECK: NONE

PREREQUISITES: NONE

COMPANION: NONE

CONCURRENT: NONE

DETAIL:

NOTES: THIS ECA HAS EXPIRED.

SAS KEYWORDS:

PSY2 PSY2ECA

1.1.65 ECA005, 6877 & 6887 CMOS BATTERY REPLACEMENT

Record number: H136471

Device:	D/T6877	Service code:	33
ECA number:	ECA005	Parts source:	MECH
EC number:	EC000000	Publish flag:	R
Mandatory:	N	Hit count:	UHC00007
Automatic shipment:	N	Success count:	USC0000
Availability date:	97/02	Publication code:	PC50
Plant of control:	23	Date created:	097/02/05
Tip key:		Date last altered:	A97/02/05
		Owning B.U.:	USA

PURPOSE:

The purpose of this ECA is to provide a replacement CMOS battery for IBM PC 700 Series 6877 and 6887 systems that exhibit intermittent 161 or 161/184 POST errors.

FEATURES:

Type, Model, Stage	With B/M	Machines Affected and/or Feature/Device Description	B/M to be Installed	Service Hours	System Hours
6877	B/M0000000	6877 PC 730 ALL MODELS	B/M0000000	00.3	00.2
6887	B/M0000000	6887 PC 750 ALL MODELS	B/M0000000	00.3	00.2

PHYSICAL CHECK:

Affected systems may exhibit 161 or 161/184 POST errors under the following conditions:

- 1) During installation at the initial power-on.
- 2) Systems that are placed in storage for periods exceeding 90 days (3 months) and exhibit a 161 POST error at installation.
- 3) Systems that are disconnected from AC power periodically, either via a circuit breaker or by powering the system off from a power strip or surge suppressor.

System diagnostics run without errors.

PREREQUISITES:

Remove the AC line cord from the wall outlet or power strip. Using a voltmeter, measure the battery voltage from the top of the battery located on the right side, center of the system board, to ground using the base frame. Pin 1 of the "CMOS/Password Clear" jumper location at J15 may also be used for a Ground probe point. DO NOT remove the battery from the system board to measure the battery capacity.

A good battery will measure in the range of 2.3 to 3.0 vdc.

- A) If the battery voltage is higher than 2.3 vdc, it is unlikely the battery has caused the 161 or 184 POST errors. Continue with normal problem determination.
- B) If the battery voltage is 2.3vdc or lower, replace the battery, FRU P/N33F8354.

COMPANION:

None

CONCURRENT:

None

DETAIL:

A limited number of IBM PC 700 Series systems may intermittently exhibit a 161 or 161/184 POST error indicating that a CMOS Date/Time and/or Power-on Password error has occurred.

The cause of the failure is due to early CMOS battery drain caused by prolonged storage before installation or repeated disconnection from an AC power source in day to day use. NOT ALL PC 700 Series 6877/6887 systems are affected.

NOTES:

This ECA provides for the replacement of a defective CMOS battery ONLY, FRU P/N33F8354. Any other part claims submitted against this ECA are invalid.

IBM AND TSS Servicicers should record time, materials and travel,

PSY2 RETAIN TIPS

ECA005, 6877 6887 CMOS BATTERY REPLACEMENT

along with the other product information to:

Service Code: 33
Machine Type: 6877 or 6887
ECA: 005
Other Branch Office: 990

SAS KEYWORDS:

PSY2	68XX	PSY2ECA	IBMPC
PSVPECA	PSY2PART	PSVP	D/T6887
PC730	PC750	PC700	PSY2BRD
PSVPBRD	PSY2ERR	PSVPERR	ECAVALID

1.1.66 ECA005, 8642 PROCESSOR AND MEMORY CARD REPLACEMENT

Record number: H133731

Device:	D/T8642	Service code:	33
ECA number:	ECA005	Parts source:	LOC
EC number:	EC000000	Publish flag:	R
Mandatory:	Y	Hit count:	UHC00921
Automatic shipment:	N	Success count:	USC0000
Availability date:	96/08	Publication code:	PC50
Plant of control:	27	Date created:	096/08/22
Tip key:		Date last altered:	A98/05/12
		Owning B.U.:	USA

PURPOSE: *IMPORTANT*

Read and understand this entire ECA before implementing it. The goal of this procedure is to upgrade the PC Server 720 to the latest EC levels while only shutting down the server once. This ECA provides for replacement of 100Mhz processor cards and memory cards in eligible PC Server 720 systems. This is a MANDATORY EC and must be applied to all affected systems. These new cards correct a problem with intermittent traps, hangs, and NMIs (Non-Maskable Interrupts). POST error EP: 1043 may also be corrected by applying this EC.

This ECA will expire November 22, 2002

FEATURES:

Type, Model, Stage	With B/M	Machines Affected and/or Feature/Device Description	B/M to be Installed	Service Hours	System Hours
8642	B/M0000000	PC SERVER 720 SYSTEMS WITH 100MHZ PROCESSOR CARDS. -AND/OR- SYSTEMS MATCHING THE SERIAL NUMBER LIST BELOW HAVING MEMORY CARD(S) WITH THE SUSPECT HEADERCODE.	B/M0000000	01.0	00.8

PHYSICAL CHECK:

Before going on-site, order all necessary parts, and download the current Reference, Diagnostic, and RAID firmware diskettes for the PC Server 720. The diskette images are available on the IBM PC Company BBS at 919-517-0001 or via the internet at URL <http://www.pc.ibm.com/files.html>

720UPD.EXE BIOS Revision Level 10, Reference and Diagnostics
 RAID221A.EXE MicroChannel RAID firmware
 FLASH243.EXE PCI RAID firmware
 C43.EXE Hard Drive Update V4.2

- Systems manufactured after August 1, 1996 (MFG DATE: 608 and later on the rear serial number label) are NOT affected. However, if the customer installed additional processor and/or memory cards, then an inspection should be performed.
- 8642 - 0Z0, 1Z0, 2ZS, and 4ZS are the 100MHz processor models, but any model could have 100MHz processors as different processor speeds are supported in a Server 720.
- The 100MHz processor card FRU p/n71G0692 or FRU p/n75H9684 has a Motorola cache chip in locations U6, U7, U8, or U9, AND the part number on this chip is "MCM67C618AFN7." These chips have the Motorola logo which is the letter "M" inside a circle.
- The memory card FRU p/n71G0696 should only be replaced if the system serial number matches the list below OR the memory card has one of the following suspect header codes:

J11CS J11MJ J11CT J11VX J11TN J11LQ J11CU

System Inventory:

Call the customer and obtain the configuration of the system. The customer may know the system configuration without opening the covers. Or the customer can inventory the system without shutting down the server by gently removing the front cover and opening the side door. If the customer is unable to provide the configuration, then schedule an on-site visit to inventory the system. Obtain the following information:

1. Full System type-model number (ie.8642-xxx): _____
2. System serial number: _____
3. If the serial number is on the list below, the number of memory cards (FRU p/n71G0696): _____
 (Memory cards have a red LED visible from rear of system)

4. The number of 100 MHz processors: _____
5. The number of PCI RAID adapters (FRU p/n06H5078): _____
(PCI cards are plugged into white planar connectors)
6. The number of hard drives: _____
7. Network Operating System: _____

Note: An 8642 RAID system ships with the MicroChannel (MCA) RAID adapter (FRU p/n06H3059) which can be identified by its external blade connector.

If the customer installed a PCI RAID adapter (FRU p/n06H5078), then it can be identified by its external pin connector.

Order Parts:

IMPORTANT: Order ALL parts using CODE X.

Be prepared; Order enough parts to replace all the suspect parts if necessary.

A. Memory card(s):

If the system serial number matches the list below, order the quantity of memory card(s) (FRU p/n71G0696) recorded in step 3.

B. Processor card(s):

Order the quantity of 100MHz processor cards recorded in step 4:

For systems with NetWare SMP and 100MHz processors, order the 100 MHz processor(s) FRU p/n75H9684.

-or-

For systems with any other operating system, order the 100MHz processor(s) FRU p/n71G0692.

C. PCI RAID adapters: (Refer to ECA006)

Order the quantity of PCI RAID adapter(s) FRU p/n06H5078 recorded in step 5.

D. Hard drive interposer kit: (Refer to ECA003)

Note the number of hard drives in step 6.

The interposer kit (FRU p/n75H8103) has six(6) connectors for six(6) hard drives. Order one kit for every six hard drives.

PREREQUISITES: NONE

COMPANION:

Update the system BIOS to revision level 09 or higher.

BIOS revision level 10 is recommended.

Note: The bridge card LED will remain OFF with BIOS 09.

BIOS 09 requires Reference and Diagnostic Diskettes version 1.11.

Update the RAID firmware with the correct firmware flash.

Update the hard drives with the HD Update V4.2

Important: Flashing with the wrong firmware can corrupt the adapter BIOS requiring replacement of the adapter.

MCA RAID Adapter (FRU p/n06H3059): Download RAID221A.EXE

Note: When flashing the MCA RAID Adapter, the following message will appear: "Found # channel # target PCI controller"

Disregard this message as the MCA adapter has been found.

PCI RAID Adapter (FRU p/n06H5078): Download FLASH243.EXE

While inspecting the system, verify that the following ECAs have been applied:

ECA #	RETAIN #	Description
ECA001	H132199	SCSI Cable Replacement (4X-CDROM)
ECA003	H133326	Prevent Multiple DDD SCSI Drives
ECA006	H133523	PCI RAID Adapter Replacement (New)

CONCURRENT: NONE

DETAIL:

The Service Call:

Bring all the necessary parts including the Reference, Diagnostic, and RAID firmware diskettes for the PC Server 720.

Use the following procedure:

1. Ensure that the customer has a current backup of all data.
2. Shutdown the operating system.
3. Boot to the RAID Option Diskette, select Advanced Functions, then select Backup Config to diskette. Choose a filename for the backup, press <Enter>, and then exit.
4. Power off and unplug the server. Power remains on the service processor logic on the system board until the power cord is unplugged.
5. Inspect the 100MHz processor card.

Note: NetWare SMP servers use FRU p/n75H9684.
 All other operating systems use FRU p/n71G0692.

- A. Locate the cache chips at locations U6, U7, U8, and U9.
 - b. If any chip is a Motorola chip (Logo: The letter "M" inside a circle), AND the the part number on the chip is "MCM67C618AFN7," then the processor card must be replaced:
 Replace FRU p/n71G0692 with FRU p/n71G0692
 -or-
 Replace FRU p/n75H9684 with FRU p/n 75H9684 (NetWare SMP)
 - C. Other Motorola chips, Micron Technology chips, and IMD chips are good and no action is necessary.
6. Inspect the memory card in systems that match the system serial number list below.
 - a. Locate the barcode label on the logic side of the card.

B. Example of barcode label:

```

S/N  .----- .
      | ||||| ||| ||||| ||||| ||||| ||||| | <--- Bar-code
      | xxxxxxxxxxxxJ11??xxxxxx          | <--- Header
      |-----|
    
```

- C. Search for J11 in the header, then read the next two(2) characters. Compare this number with the suspect list below. Replace the card with FRU p/n71G0696 if a suspect headercode is found.

Suspect Memory Card Headercodes:

 J11CS J11MJ J11CT J11VX J11TN J11LQ J11CU

7. Reinstall the card bracket and close the covers.
8. Plug in and power on the server and run memory diagnostics using the Diagnostic Diskette v1.11.
9. Power off the Server after running the diagnostics, then start the Operating System and verify its operation.

NOTES:

IMMEDIATELY return all parts removed and all unopened parts using the UPR and New Parts Return processes.

This ECA will expire November 23, 2002

IBM/TSS CEs should record all time and parts to Service Code 33, ECA005, Other Office 990.

List of system serial numbers to inspect for memory card:

- 23DP748 23DP759 23DP761 23DP778 23DP782 23DP783 23DP784 23DP785
- 23DP786 23DP787 23DP788 23DP789 23DP790 23DP791 23DP792 23DP793
- 23DP794 23DP797 23DP798 23DP799 23DP800 23DP801 23DP802 23DP803
- 23DP804 23DP805 23DP806 23DP807 23DP808 23DP809 23DP810 23DP811
- 23DP812 23DP813 23DP814 23DP816 23DP818 23DP819 23DP820 23DP821
- 23DP822 23DP823 23DP824 23DP825 23DP827 23DP828 23DP829 23DP830
- 23DP831 23DP832 23DP833 23DP834 23DP835 23DP837 23DP838 23DP839
- 23DP840 23DP841 23DP842 23DP843 23DP844 23DP845 23DP846 23DP847
- 23DP848 23DP849 23DP851 23DP852 23DP854 23DP855 23DP856 23DP857
- 23DP858 23DP860 23DP861 23DP862 23DP863 23DP864 23DP865 23DP866
- 23DP867 23DP868 23DP869 23DP870 23DP871 23DP872 23DP873 23DP874
- 23DP875 23DP878 23DP880 23DP881 23DP882 23DP883 23DP884 23DP885
- 23DP886 23DP887 23DP888 23DP889 23DP890 23DP893 23DP894 23DP895
- 23DP896 23DP898 23DP899 23DP900 23DP901 23DP902 23DP903 23DP904
- 23DP905 23DP907 23DP908 23DP910 23DP911 23DP914 23DP916 23DP918
- 23DP919 23DP920 23DP921 23DP922 23DP923 23DP924 23DP925 23DP926
- 23DP927 23DP928 23DP929 23DP930 23DP932 23DP934 23DP935 23DP937
- 23DP938 23DP940 23DP942 23DP943 23DP944 23DP945 23DP946 23DP948
- 23DP949 23DP950 23DP951 23DP952 23FD010 23FD161 23FD193 23FD195
- 23FD264 23FD269 23FD381 23FD427 23FD595 23FD640 23FD648 23FD656
- 23FD657 23FD659 23FD821 23FD858 23FD877 23FD878 23FD879 23FD883
- 23FD885 23FD886 23FD887 23FD888 23FD889 23FD890 23FD891 23FD892
- 23FD893 23FD894 23FD895 23FD896 23FD897 23FD898 23FD899 23FD900
- 23FD901 23FD902 23FD903 23FD904 23FD905 23FD907 23FD909 23FD911
- 23FD912 23FD913 23FD914 23FD915 23FD917 23FD918 23FD919 23FD920
- 23FD922 23FD923 23FD925 23FD926 23FD927 23FD929 23FD930 23FD932
- 23FD935 23FD936 23FD937 23FD938 23FD940 23FD941 23FD943 23FD947
- 23FD948 23FD950 23FD951 23FD952 23FD953 23FD956 23FD957 23FD958
- 23FD959 23FD960 23FD961 23FD962 23FD963 23FD964 23FD965 23FD966
- 23FD967 23FD970 23FD971 23FD972 23FD973 23FD976 23FD977 23FD978
- 23FD979 23FD980 23FD982 23FD983 23FD984 23FD985 23FD986 23FD988

23FD989 23FD990 23FD992 23FD993 23FD994 23FD996 23FD998 23FF001
 23FF002 23FF003 23FF004 23FF009 23FF010 23FF012 23FF014 23FF016
 23FF028 23FF031 23FF032 23FF034 23FF035 23FF036 23FT161 23FT239
 23FT327 23FT618 23FT711 23FT714 23FT717 23FT754 23FT831 23FT836
 23FT838 23FT876 23FV006 23FV140 23FV141 23FV142 23FV143 23FV144
 23FV145 23FV146 23FV147 23FV148 23FV149 23FV150 23FV151 23FV152
 23FV153 23FV154 23FV157 23FV158 23FV159 23FV160 23FV161 23FV162
 23FV163 23FV166 23FV167 23FV168 23FV169 23FV170 23FV171 23FV172
 23FV173 23FV174 23GD636 23GD679 23GD833 23GD902 23GD912 23GD927
 23GD928 23GD929 23GD931 23GD933 23GD994 23GD997 23GD998 23GD999
 23GF000 23GF001 23GF002 23GF003 23GF005 23GF006 23GF007 23GF010
 23GF012 23GF013 23GF014 23GF015 23GF016 23GF017 23GF018 23GF019
 23GF020 23GF022 23GF023 23GF024 23GF025 23GF027 23GF028 23KN034
 23KN041 23KN058 23KN071 23KN096 23KN098 23KN099 23KN100 23KN103
 23KN104 23KN105 23KN106 23KN107 23KN131 23KN133 23KN135 23KN136
 23KN137 23KN138 23KN139 23KN140 23KN141 23KN142 23KN143 23KN144
 23KN145 23KN146 23KN148 23KN149 23KN150 23KN162 23KN166 23KN168
 23KN169 23KN177 23KN178 23KN181 23KW025 23KW070 23KW072 23KW073
 23KW084 23KW091 23KW103 23KW106 23KW112 23KW119 23LB001 23LB004
 23LB005 23LB006 23LB007 23LB011 23LB012 23LB013 23LB014 23LB015
 23LB016 23LB017 23LB018 23LB019 23LB022 23LB023 23LB024 23LB027
 23LB028 23LB030 23LB031 23LB032 23LB033 23LB034 23LB036 23LB037
 23LB038 23LB039 23LB040 23LB041 23LB043 23LB044 23LH001 23LH002
 23LH004 23LH005 23LH007 23LH008 23LH009 23LH010 23LH011 23LH012
 23LH013 23LH014 23LH015 23LH016 23LH017 23LH018 23LH019 23LH020
 23LH023 23LH025 23LH026 23LH027 23LH028 23LH029 23LH030 23LH031
 23LH032 23LH039 23LH040 23LH041 23LH042 23LH044 23LH046 23LH047
 23LH048 23LH063 23LH064 23LH065 23LH066 23LH067 23LH068 23LH070
 23LH086 23LH087 23LH099 23LH100 23LH101 23LH102 23LP001 23LP002
 23LP014 23LP032 23LP033 23LP034 23LP036 23LP037 23LP038 23LP039
 23LP041 23LP042 23LP043 23LP044 23LP045 23LP047 23LP048 23LP049
 23LP050 23LP051 23LP052 23LP055 23LP056 23LP057 23LP058 23LP059
 23LP060 23LP061 23Z4036 23Z4069 23Z4078 23Z4086 23Z4088 23Z4089
 23Z4090 23Z4093 23Z4094 23Z4095 23Z4096 23Z4098 23Z4099 23Z4100
 23Z4101 23Z4102 23Z4106 23Z4107 23Z4109 23Z4110 23Z4112 23Z4113
 23Z4114 23Z4115 23Z4117 23Z4119 23Z4121 23Z4122 23Z4123 23Z4124
 23Z4125 23Z4126 23Z4127 23Z4128 23Z4130 23Z4131 23Z4134 23Z4135
 23Z4136 23Z4137 23Z4138 23Z4139 23Z4141 23Z4142 23Z4143 23Z4144
 23Z4153 23Z4222

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SAS KEYWORDS:

PSY2	PSY2ECA	PSY2MEM	PSY2ADPT
ECAVALID	NMI	71G0692	71G0696
SERVER	TRAP	HANG	HEALTH

1.1.67 2625 ECA005 CORRECTS LCD COVER CRACKS IN HINGE AREAS.

Record number: H137702

Device:	D/T2625	Service code:	33
ECA number:	ECA005	Parts source:	LOC
EC number:	ECF06828	Publish flag:	R
Mandatory:	N	Hit count:	UHC00072
Automatic shipment:	N	Success count:	USC0000
Availability date:	97/10	Publication code:	PC40
Plant of control:	24	Date created:	097/10/14
Tip key:		Date last altered:	A98/04/24
		Owning B.U.:	USA

PURPOSE:

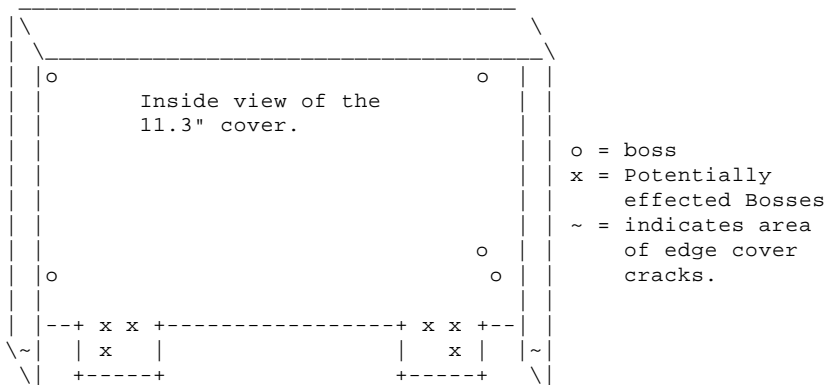
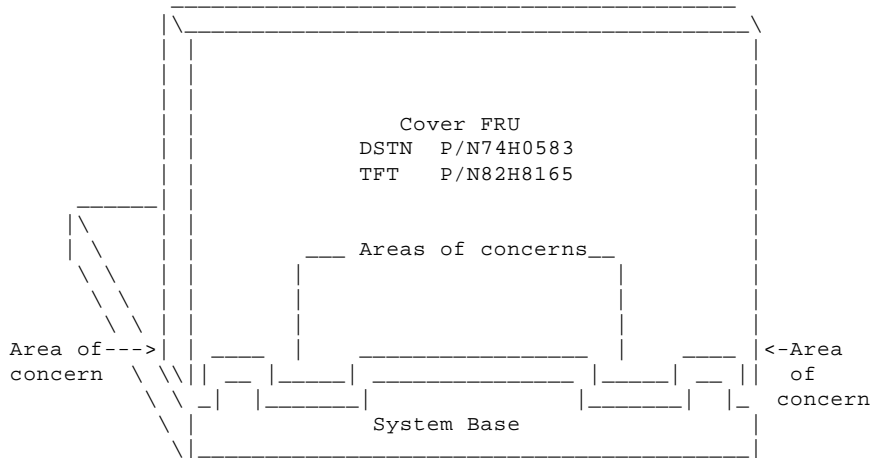
Replace LCD covers with cracks in the hinge, lower cover edge, or internal LCD boss areas.

FEATURES:

Type,	With	Machines Affected	B/M to be	Service	System
Model,		and/or Feature/Device	Installed	Hours	Hours
Stage	B/M	Description			
2625	B/M9999999	THE ASTERISK IN THE 2ND POSITION OF THE MOD NUMBER EQUALS ANY LETTER. MOD 1*9, 2*9, F*9, E*F	B/M9999999	00.5	00.3

PHYSICAL CHECK:

Check for cracks in the hinge area, lower LCD cover edge or in the area of the internal LCD attachment bosses as shown in the following diagrams.



PREREQUISITES: NONE

COMPANION: NONE

CONCURRENT: NONE

DETAIL:

A new more robust plastic is being used in the LCD cover to prevent premature cracking at the side tabs of the cover, in the area of the hinges, and in the area of the internal LCD attachment bosses. Any LCD covers on systems identified in the FEATURES Section should be replaced with the following LCD cover FRUs.

2625 ECA005 CORRECTS LCD COVER CRACKS IN HINGE AREAS.

NOTE: the LCD Miscellaneous parts Kit FRU P/N74H0619 contains:

- LCD Slide Knob,
- LCD Foam Support,
- Right Hinge,
- Left Hinge,
- Cable Clamp,
- Back Gasket,
- Top Gasket,
- Copper TFT Tape,
- Rubber Lid,
- Front Logo,
- Rear Logo

LCD COVER DESCRIPTION	FRU P/N	SUBS TO
11.3 DSTN Top Cover Kit	P/N74H0583	--> P/N05K4739
11.3 TFT Top Cover Kit	P/N82H8165	--> P/N05K4740
LCD Miscellaneous parts	P/N74H0619	

NOTES:

This ECA's expiration date is 10/31/1999.

Order all FRU parts locally, and record Time and Material to service code 33, ECA 005, and OTHER OFFICE 990.

SAS KEYWORDS:

PSY2	PSY2ECA	THINKPAD	UNCLASSIFIED
05K4740	05K4739	82H8165	74H0583
74H0619			

1.1.68 9545 ECA005 NO TV VIDEO IN/OUT DISPLAYED.

Record number: H162253

Device:	D/T9545	Service code:	33
ECA number:	ECA005	Parts source:	LOC
EC number:	EC999999	Publish flag:	R
Mandatory:	N	Hit count:	UHC00021
Automatic shipment:	N	Success count:	USC0000
Availability date:	97/12	Publication code:	PC40
Plant of control:	24	Date created:	097/12/11
Tip key:		Date last altered:	A98/01/26
		Owning B.U.:	USA

PURPOSE:

Replace the Video card FRU P/N85G8507 or FRU P/N85G1885 along with the 2.5x14mm S-Video mounting screw to correct a no TV Video in/out symptom.

See NOTE in detail regarding the replacement of the S-Video Card FRU P/N85G1934 under this ECA.

FEATURES:

Type, Model, Stage	With B/M	Machines Affected and/or Feature/Device Description	B/M to be Installed	Service Hours	System Hours
9545	B/M9999999	MOD 755CD AND 755CDV	B/M9999999	00.8	00.6

PHYSICAL CHECK:

No TV signal in/out displayed and a broken connection at the J14 connector on the video card.

Fig 1. Video Card Bottom View

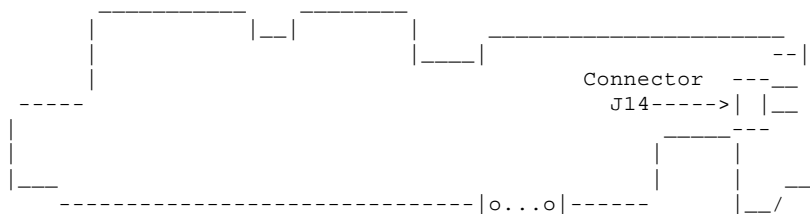


Figure two shows the FRU P/N85G1934 with a straight cable. This will cause excessive tension on the J14 Video card connector, if it is installed without being pre-bent. This condition could cause a J14 solder connection failure.

Side view of P14 connector, cable and TV connector.

FIG 2.

Cable may be straight



PREREQUISITES: NONE

COMPANION: NONE

CONCURRENT: NONE

DETAIL:

9545 755CD and 755CDV Video Boards may experience no TV video in on the LCD or an external monitor and no TV video out on the TV monitor, if the Video Card J14 connector breaks away from the card. This may occur if the S-Video card cable was installed as Fig 2 (straight with no pre-bending). The tension from the straight cable will cause excessive strain at the J14 connector and could cause it to fail.

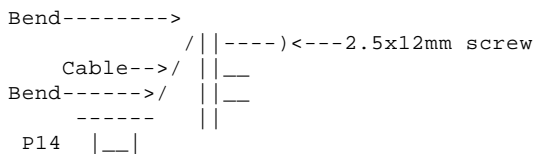
FIG 2 S-Video Card FRU P/N85G1934 (with straight cable.)



Systems meeting the PHYSICAL CHECK criteria should have the following done:

1. Video Adapter Card replaced with FRU P/N85G8507.
2. Discard the 2.5x14mm screw that attaches the S-Video card to the plastic bracket. Use a 2.5x12mm screw contained in Screw Kit FRU P/N12J0808. The screw itself is contained in a kit bag 12j0811 (12j0811 is an identifier number, not a FRU) - a separate 2.5x12mm screw FRU P/N06G9550 is available, but should only be used by repair centers that carry this part in bulk quantities.

FIG 3



3. Bend the cable on the S-Video card FRU P/N85G1934 as shown in Fig 3 and attach it to the plastic bracket using the new size screw.
4. Place the S-Video card / bracket into position. The P14 plug should align itself correctly above the J14 connector while exerting some downward pressure.
5. Insert the P14 plug into the J14 Connector. This eliminates the above downward pressure, ensuring a minimal torque between the connector and plug.

NOTE: A new S-Video Card is not required unless it is damaged. The new level S-Video card has the same FRU part number, but it now has a pre-bent cable. This cable should also be checked for limited tension and adjusted accordingly when an S-Video Card is being installed.

NOTES:

This ECA will expire on December 31, 1998.

Order all FRU parts locally, and record Time and Material to service code 33, ECA 005, and OTHER OFFICE 990.

SAS KEYWORDS:

PSY2	PSY2ECA	PSY2DISP	THINKPAD
UNCLASSIFIED	85G8507	85G1934	6G9550
12J0808			

1.1.69 9546 ECA005 HEAT SINK INSTALLATION

Record number: H161477

Device:	D/T9546	Service code:	33
ECA number:	ECA005	Parts source:	LOC
EC number:	EC9999999	Publish flag:	R
Mandatory:	N	Hit count:	UHC00033
Automatic shipment:	N	Success count:	USC0000
Availability date:	97/10	Publication code:	PC40
Plant of control:	24	Date created:	097/10/20
Tip key:		Date last altered:	A97/12/09
		Owning B.U.:	USA

PURPOSE:

Install heat sink FRU P/N12J2170 on the system Video Card during any service action concerning the system board, video card, DC/DC card, or CPU.

FEATURES:

Type, Model, Stage	With B/M	Machines Affected and/or Feature/Device Description	B/M to be Installed	Service Hours	System Hours
9546	B/M9999999	MODELS U3A U31	B/M9999999	00.5	00.3

PHYSICAL CHECK:

The following Video Card FRU is manufactured with the heat sink and does not require this ECA.

Video Card FRU

P/N97H5500

PREREQUISITES: NONE

COMPANION: NONE

CONCURRENT: NONE

DETAIL:

The Video Card Heat Sink Kit FRU P/N12J2170 contains the following parts:

- INSTRUCTIONS
- HEAT SINK
- NUT PLATE
- SILICON RUBBER, UPPER
- SILICON RUBBER, LOWER
- SCREW M2.5 5MM, FLAT

It can be installed on this FRU Part number:

Old Video Card FRUs with-out heat Sink
P/N39H6227

NOTES:

This ECA's expiration date is 10/31/1998.

Order all FRU parts locally, and record Time and Material to service code 33, ECA 005, and OTHER OFFICE 990.

SAS KEYWORDS:

PSY2 PSY2ECA THINKPAD UNCLASSIFIED

1.1.70 9547 ECA005 HEAT SINK INSTALLATION

Record number: H161478

Device:	D/T9547	Service code:	33
ECA number:	ECA005	Parts source:	LOC
EC number:	EC9999999	Publish flag:	R
Mandatory:	N	Hit count:	UHC00030
Automatic shipment:	N	Success count:	USC0000
Availability date:	97/10	Publication code:	PC40
Plant of control:	24	Date created:	097/10/20
Tip key:		Date last altered:	A97/12/09
		Owning B.U.:	USA

PURPOSE:

Install heat sink FRU P/N12J2170 on the system Video Card during any service action concerning the system board, video card, DC/DC card or CPU.

FEATURES:

Type, Model, Stage	With B/M	Machines Affected and/or Feature/Device Description	B/M to be Installed	Service Hours	System Hours
9547	B/M9999999	MODELS U4G, U4K, AND U4T	B/M9999999	00.5	00.3

PHYSICAL CHECK:

The following Video Card FRU is manufactured with the heat sink and does not require this ECA.
Video Card FRU

P/N97H5502

PREREQUISITES: NONE

COMPANION: NONE

CONCURRENT: NONE

DETAIL:

The Video Card Heat Sink Kit FRU P/N12J2170 contains the following parts:

- INSTRUCTIONS
- HEAT SINK
- NUT PLATE
- SILICON RUBBER, UPPER
- SILICON RUBBER, LOWER
- SCREW M2.5 5MM, FLAT

It can be installed on these FRU part numbers:

Old Video Card FRUs with-out heat Sink
P/N82H8882
P/N12J1569

NOTES:

This ECA's expiration date is 10/31/1998.

Order all FRU parts locally, and record Time and Material to service code 33, ECA 005, and OTHER OFFICE 990.

SAS KEYWORDS:

PSY2 PSY2ECA THINKPAD UNCLASSIFIED

PSY2 RETAIN TIPS
ECA006, OBSOLETE

1.1.71 ECA006, OBSOLETE

Record number: H017961

Device:	D/T8550	Service code:	33
ECA number:	ECA006	Parts source:	
EC number:	EC000000	Publish flag:	R
Mandatory:	N	Hit count:	UHC06601
Automatic shipment:	N	Success count:	USC0000
Availability date:	87/11	Publication code:	PC50
Plant of control:	27	Date created:	087/08/04
Tip key:		Date last altered:	A93/01/13
		Owning B.U.:	USA

PURPOSE:

*** THIS ECA WAS OBSOLETE BY ECA052 ***

FEATURES:

Type, Model, Stage	With B/M	Machines Affected and/or Feature/Device Description	B/M to be Installed	Service Hours	System Hours
8560	B/M0000000		B/M0000000	00.1	00.0

PHYSICAL CHECK:

PREREQUISITES: NONE

COMPANION: NONE

CONCURRENT: NONE

DETAIL:

NOTES:

SAS KEYWORDS:
PSY2 PSY2ECA EXPIRED

1.1.72 ECA006, SERVER PCI RAID ADAPTER REPLACEMENT

Record number: H133523

Device:	D/T8640	Service code:	33
ECA number:	ECA006	Parts source:	LOC
EC number:	EC000000	Publish flag:	R
Mandatory:	N	Hit count:	UHC00970
Automatic shipment:	N	Success count:	USC0000
Availability date:	96/08	Publication code:	PC50
Plant of control:	27	Date created:	096/08/02
Tip key:		Date last altered:	A98/05/13
		Owning B.U.:	USA

PURPOSE:

This ECA provides for replacement of PCI RAID Adapters in eligible PC Server 300, 320, 520, and 720 systems. The new adapter eliminates intermittent RAID failures such as DDD drives and multiple DDD drives.

This ECA expires February 23, 2002

FEATURES:

Type, Model, Stage	With B/M	Machines Affected and/or Feature/Device Description	B/M to be Installed	Service Hours	System Hours
8640	B/M0000000	PC SERVER 300 AND 320	B/M0000000	01.0	00.8
8641	B/M0000000	PC SERVER 520			
8642	B/M0000000	PC SERVER 720			

PHYSICAL CHECK:

- The system is a PC Server 300, 320, 520, or 720 with a PCI RAID adapter (FRU p/n06H5078).

Note: Prior to removing the RAID adapter, ensure that the customer has a current backup of all data and programs. Also backup the current RAID configuration using the PCI RAID Option diskette.

- The Work Order (W.O.) number on the white label, on the back of the PCI RAID adapter, matches one from the list below: If a match is found, then replace the adapter with FRU p/n06H5078.

RE12490	RE5007	R12188H	R12188z	12434B	12435A	12435B
12453	12489	12490	12516-A	12543	12547	12548A
12561	12561A	12579	12580	12580C	12598	12598G
12598H	12598I					

Note: On the Server 320, the white label may be visible on the adapter without removing it.

PREREQUISITES: NONE

COMPANION:

Refer to RETAIN record H135499 for inspection of the 4MB memory SIMM which is on the PCI RAID Adapter.

CONCURRENT:

Flash the RAID firmware to level 2.43.
The filename on the IBM BBS is FLASH243.EXE

```

-----IMPORTANT-----
|
| Diskette images are customer installable. Customers should
| review any "README" files located on the diskette for
| installation information. Contact the IBM PC HelpCenter at
| 800-772 - 2227 if download/installation assistance is needed.
|
| IBM PC Server files are located in Directory 22 on the PC
| Company Bulletin Board Service (BBS) at 1-919-517-0001 or
| tieline 255-0001.
| The files may also be downloaded via the Internet from the
| IBM PC File Library by searching the following Internet URL:
| http: //www.pc.ibm.com/files.html
|
-----

```

DETAIL:

- Use the following procedure:
1. Ensure that the customer has a current backup of all data.
 2. Perform a shutdown of the operating system.
 3. Boot to the PCI RAID Option Diskette.
 4. Select Advanced Functions from Main Menu.
 5. Select Backup Config to diskette.
 6. Enter name of Backup Config File:
ERROR: If an error is encountered during this backup, then

return to the Main Menu and select View Configuration.

Write down the entire RAID configuration.

For Array A:

Number of Logical Drives:

Size of EACH Logical Drive:

RAID Level of Each Logical Drive:

For Array B if 2 Arrays are Configured:

Number of Logical Drives:

Size of EACH Logical Drive:

RAID Level of Each Logical Drive:

7. Power off and unplug the server. On the Server 720, power remains on service processor logic on the system board until the power cord is unplugged.
8. Remove the PCI RAID adapter if necessary. On the white label, on the back of the card, locate the Work Order (W.O.) number and check it against the list above. If a match is found, then replace the adapter with FRU p/n06H5078. If not, reinstall the original adapter; proceed to step 13.
9. Boot to the PCI RAID Option Diskette. During the boot, verify that the RAID firmware level is 2.43. If the RAID firmware is downlevel, then flash it by booting to the diskette built from the file FLASH243.EXE available on the IBM BBS.
10. The new RAID Adapter's configuration may not match the actual configuration, so error messages may appear about drives being defunct (DDD) and not responding. This is normal.
11. Answer "Yes" to Mark Defunct and Update Configuration.
12. Reboot the server with the RAID Option Diskette, select Advanced Functions at the Main Menu, select Restore Config from diskette, and enter the filename from step 5 above.
- or- If the configuration was not saved to diskette, select Create/delete array, Create disk array, and create an array and define logical drives exactly the same size as documented in step 5. Confirm and Exit and wait for the configuration to be saved.
13. Remove the diskette and reboot the server.

NOTES:

This ECA expires February 23, 2002

IBM/TSS CEs should record all time and parts to Service Code 33, ECA006, Other Office 990.

SAS KEYWORDS:

PSY2	PSY2ECA	PSY2ADPT	ECAVALID
06H5078	PSY2FDSK	D/T8641	D/T8642
SERVER	60G2175	TRAPS	TRAP
HANG	HANGS	HEALTH	

1.1.73 ECA006, 2.5 GB TIMING INCOMPATIBILITY CONDITION

Record number: H16200

Device:	D/T6577	Service code:	33
ECA number:	ECA006	Parts source:	NONE
EC number:	EC0000000	Publish flag:	R
Mandatory:	Y	Hit count:	UHC00025
Automatic shipment:	N	Success count:	USC0000
Availability date:	97/05	Publication code:	PC50
Plant of control:	23	Date created:	097/06/24
Tip key:		Date last altered:	A97/07/23
		Owning B.U.:	USA

PURPOSE:

The purpose of this ECA is to provide a hardfile update program to eliminate a drive timing incompatibility condition that can potentially affect data transfers on IBM PC 300 Series 6577 and 6587 systems. These systems must contain a 2.5GB IDE hardfile, Microsoft WindowsNT 4.0 or Microsoft Windows95, and either of the following Busmaster IDE device drivers:

Intel PIIX PCI Bus Master IDE Controller
Intel 82371SB PCI Bus Master IDE Controller

FEATURES:

Type, Model, Stage	With B/M	Machines Affected and/or Feature/Device Description	B/M to be Installed	Service Hours	System Hours
6577	B/M0000000	6577 PC 330 MODELS - 7BT 7BJ,9BT,KBT	B/M0000000	00.2	00.1
6587	B/M0000000	6587 PC 350 MODELS - 7BT, 7BJ,9BT,K0U, KBT,KSX,L0U, LBV	B/M0000000	00.2	00.1

PHYSICAL CHECK:

Affected systems contain at least one 2.5 Gb IDE hardfile with a FRU part number of P/N76H0961 and manufacturing part number P/N46H3431 or P/N46H3282. No other IDE hardfile used in the manufacture of the PC 300 6577/6587 or sold through Options By IBM (OBI) is affected.

The system MUST be running a WindowsNT or Windows95 Busmaster IDE device driver obtained from the IBM PC Company BBS system or installed from the RTC CDROM that shipped with the PC 300 6577/6587.

To verify that the Bus Master IDE driver is installed, perform the following steps appropriate for the operating system installed:

WindowsNT 4.0

1. Double click "My Computer" icon.
2. Open the "Control Panel" folder.
3. Open the "SCSI Adapters" applet.
4. Select the "Drivers" tab.
5. If one or more instance of: "Intel PIIX PCI Bus Master IDE Controller" is listed, then you are using a Bus Master IDE device driver.

Windows95

1. Select "My Computer."
2. Open the "Control Panel" folder.
3. Open the "System" applet.
4. Select the "Device Manager" tab.
5. Select "Hard disk controllers" from the list of devices.
6. If one or more instance of: "Intel 82371SB PCI Bus Master IDE Controller" is listed, then you are using a Bus Master IDE device driver.

System diagnostics run without errors.

PREREQUISITES:

A system exposed to the failure MUST contain other IDE devices attached to the system board integrated IDE controller such as a secondary IDE hardfile or an IDE CDROM drive. The 2.5Gb IDE drive installed alone in a 6577/6587 will NOT exhibit the condition.

COMPANION:

NONE

CONCURRENT:

NONE

DETAIL:

A limited number of IBM PC300 6577/6587 Series systems containing a 2.5GB IDE hardfile may be exposed to a drive timing incompatibility condition which can potentially affect data transfer when the specified systems are used in conjunction with an IDE Bus Master device driver for WindowsNT or Windows95. The condition can result in a modification of data without any error indications or other evidence of system failure. The condition has been isolated to certain 2.5GB IDE fixed disks that were used in twelve PC300 6577/6587 models announced on January 8, 1997.

Systems that do meet ALL of the conditions should have the Bus Master IDE Device Driver disabled until the following update is applied. The update program prevents the potential condition from occurring.

Obtain the hardfile update program from the IBM PC Company BBS system by calling 1-919-517-0001. Locate the "IBM PC 300/700 Files" section (section #21) for the file titled:

25GBFIX.EXE

The update program may also be downloaded via the Internet from the IBM Personal Computer File Library by searching the following Internet URL:

<http://www.pc.ibm.com/files.html>

NOTES:

Physical replacement of the fixed disk is not necessary.

Systems of the specified models which do not contain the 2.5GB IDE drive are not affected.

Running the utility 25GBFIX.EXE will not affect existing data on the fixed disk drive.

Running the utility on an IBM PC300 6577/6587 model that does not require it will have no adverse affects.

This ECA provides labor reimbursement in situations where the Customer is unable or unwilling to install the hardfile update program on the PC 300 6577/6587. Any warranty claims submitted against this ECA that include parts are invalid.

IBM and TSS Servicicers should record time and travel, along with the other product information to:

Service Code: 33
Machine Type: 6577 or 6587
ECA: 006
Other Branch Office: 990

==> This ECA will expire on July 31, 1998 <==

WindowsNT & Windows95 are trademarks of the Microsoft Corporation.

SAS KEYWORDS:

PSY2	PSVP	IBMPC	PSVPFDSK
PSY2FDSK	PSY2PART	PSVPPART	PSVPECA
PSY2ECA	PC350	PC330	D/T6587
UNCLASSIFIED	PSY2OPER	PSVPOPER	D/T6577

1.1.74 2640 560E & X ECA006 EXTERNAL FDD ERRORS USING a PORT REP

Record number: H162103

Device:	D/T2640	Service code:	33
ECA number:	ECA006	Parts source:	LOC
EC number:	EC9999999	Publish flag:	R
Mandatory:	N	Hit count:	UHC00006
Automatic shipment:	N	Success count:	USC0000
Availability date:	97/11	Publication code:	PC40
Plant of control:	24	Date created:	097/11/10
Tip key:		Date last altered:	A97/12/05
		Owning B.U.:	USA

PURPOSE:

Correct external Floppy Diskette Drive (FDD) intermittent READ / WRITE / FORMAT ERRORS when using the FDD and 2640 with a Port Replicator.

FEATURES:

Type, Model, Stage	With B/M	Machines Affected and/or Feature/Device Description	B/M to be Installed	Service Hours	System Hours
2640	B/M9999999	MODEL 560E AND 560X	B/M9999999	00.3	00.1

PHYSICAL CHECK:

An intermittent FDD READ / WRITE / FORMAT ERROR can occur when certain external floppy diskette drives FRU P/N10H4056 are connected to 2640 560E or 560X systems through a Port Replicator FRU P/N46H4107 and FRU P/N05K4645. Only external FDD drives with a bar code header code of K1SS2 are affected and qualify for replacement under this ECA.

PREREQUISITES: NONE

COMPANION: NONE

CONCURRENT: NONE

DETAIL:

Intermittent READ / WRITE / FORMAT errors may occur when using the external FDD unit FRU P/N10H4056 described in the Physical Check section with a Port Replicator FRU P/N46H4107 and FRU P/N05K4645.

To correct this intermittent failure, replace the external FDD. Use the same FRU part number FDD. All FDD FRU stock has been purged of defective units.

NOTES:

Order all FRU parts locally and record time and material to ECA006 other office worked 990.

THIS ECA EXPIRES on 11/30/1998.

SAS KEYWORDS:

PSY2 PSY2ECA THINKPAD UNCLASSIFIED

PSY2 RETAIN TIPS

9546 ECA006 - 32MB SO DIMM FAILURE

newer have the corrected level of memory.

NOTES:

This ECA's expiration date is 11/30/1998.

Order all FRU parts locally, and record Time and Material to service code 33, ECA 006, and OTHER OFFICE 990.

SAS KEYWORDS:

PSY2

PSY2ECA

THINKPAD

UNCLASSIFIED

PSY2MEM

PSY2PROG

PSY2 RETAIN TIPS

9547 ECA006 - 32MB SO DIMM FAILURE

newer have the corrected level of memory.

NOTES:

This ECA's expiration date is 11/30/1998.

Order all FRU parts locally, and record Time and Material to service code 33, ECA 006, and OTHER OFFICE 990.

SAS KEYWORDS:

PSY2

PSY2ECA

THINKPAD

UNCLASSIFIED

PSY2MEM

PSY2PROG

1.1.77 ECA007, OBSOLETE

Record number: H024058

Device:	D/T8550	Service code:	
ECA number:	ECA007	Parts source:	
EC number:	EC0000000	Publish flag:	R
Mandatory:	N	Hit count:	UHC01948
Automatic shipment:	N	Success count:	USC0000
Availability date:	87/10	Publication code:	PC50
Plant of control:	27	Date created:	087/09/30
Tip key:		Date last altered:	A93/06/17
		Owning B.U.:	USA

PURPOSE: THIS ECA HAS EXPIRED.

FEATURES:

Type, Model, Stage	With B/M	Machines Affected and/or Feature/Device Description	B/M to be Installed	Service Hours	System Hours
00000	B/M0000000		B/M0000000	00.1	00.0

PHYSICAL CHECK:

PREREQUISITES: NONE

COMPANION: NONE

CONCURRENT: NONE

DETAIL:

NOTES: THIS ECA HAS EXPIRED.

SAS KEYWORDS:

PSY2 PSY2ECA

1.1.78 ECA007, PC SERVER 320 POWER SUPPLY REPLACEMENT

Record number: H135078 Number of altered copies: 1

Device:	D/T8640	Service code:	33
ECA number:	ECA007	Parts source:	LOC
EC number:	EC000000	Publish flag:	R
Mandatory:	N	Hit count:	UHC00544
Automatic shipment:	N	Success count:	USC0000
Availability date:	96/11	Publication code:	PC50
Plant of control:	23	Date created:	096/11/12
Tip key:		Date last altered:	A98/05/13
		Owning B.U.:	USA

PURPOSE:

This ECA provides for the replacement of the power supply in eligible PC Server 320 systems. The new power supply prevents an over-voltage condition at power-on that may cause damage to the system components.

This ECA will expire June 14, 2002.

FEATURES:

Type, Model, Stage	With B/M	Machines Affected and/or Feature/Device Description	B/M to be Installed	Service Hours	System Hours
8640	B/M0000000	PC SERVER 320 MFG. BEFORE 10/1/96 (MFG DATE: 610 AND EARLIER)	B/M0000000	00.8	00.6

PHYSICAL CHECK:

There is a S/N list of PC Server 320s with the suspect power supply. The list has both the system S/N and the bar code of the power supply that the system was built with. Before going on-site, call the Support Center or the HelpCenter to determine if the PC Server 320 is on the suspect list.

The serial numbers of all affected systems begin with the number 23 or 82 (ie. 23Y4449 or 82BM3GP).

Systems manufactured after October 1, 1996 (MFG DATE: 610 and later on the rear serial number label) are NOT affected.

A good power supply has a SQUARE fan grill (FRU p/n71G0044 and IBM p/n71G0662) OR a ROUND fan grill (IBM p/n76H4079). Do not replace these power supplies.

The suspect power supply has a ROUND fan grill (IBM p/n06H9111). Replace this power supply with FRU p/n71G0044.

Description	FRU P/N	IBM P/N	Comment
Square grill (ASTEC)	71G0044	71G0662	Good
Round grill (API)	N/A	76H4079	Good
Round grill (API); on S/N list	N/A	06H9111	Replace

PREREQUISITES: NONE

COMPANION: NONE

CONCURRENT: NONE

DETAIL:

Call the Support Center or the HelpCenter with the serial number of the PC Server 320 in question. If the serial number matches one on the list, then order the power supply FRU p/n71G0044. Once on-site, inspect the power supply to determine if it needs replacement.

The FRU p/n71G0044 comes with a power switch attached to the power supply. When installing this FRU, remove the power switch (mounted internally with a screw) from the Server.

NOTES:

If the Server is up and running, then the components are NOT at risk unless the power cord is unplugged and then reconnected. System components may be damaged over time if the suspect power supply is not replaced and the power cord is unplugged and reconnected.

This ECA expires June 14, 2002

IBM/TSS CEs should record all time and parts to Service Code 33,

ECA007, Other Office 990.

SAS KEYWORDS:

PSY2

PSY2ECA

PSY2POWER

HEALTH

UNCLASSIFIED

ECAVALID

1.1.79 ECA007, SIGNAL QUALITY CONDITION

Record number: H137696

Device:	D/T6577	Service code:	33
ECA number:	ECA007	Parts source:	NONE
EC number:	EC000000	Publish flag:	R
Mandatory:	Y	Hit count:	UHC00196
Automatic shipment:	N	Success count:	USC0000
Availability date:	97/05	Publication code:	PC50
Plant of control:	23	Date created:	097/05/12
Tip key:		Date last altered:	A97/11/18
		Owning B.U.:	USA

PURPOSE:

The purpose of this ECA is to provide a replacement PCI/ISA Riser Card to eliminate a potential signal quality condition which may occur during file transfer operations in specific systems that contain an IBM PCI Auto LANStreamer Token Ring adapter or IBM PCI Token Ring adapter (all part numbers).

This condition can potentially interfere with or affect data being transferred between the affected IBM PCI Token Ring adapters and the referenced IBM PC Systems.

FEATURES:

Type, Model, Stage	With B/M	Machines Affected and/or Feature/Device Description	B/M to be Installed	Service Hours	System Hours
6577	B/M0000000	6577 PC 330 ALL MODELS	B/M0000000	00.3	00.2
6587	B/M0000000	6587 PC 350 ALL MODELS	B/M0000000	00.3	00.2

PHYSICAL CHECK:

Affected systems contain an IBM PCI Auto LANStreamer Token Ring adapter or an IBM PCI Token Ring adapter.

System diagnostics run without errors.

PREREQUISITES:

Currently all installed systems that are potentially exposed to the condition contains one of the following PCI/ISA riser cards:

- 6577 PC 330 - P/N76H6227-FRU P/N06H9896 - Barcode Header J11C5
J11GQ
- 6577 PC 330 - P/N06H9143-FRU P/N76H0231 - Barcode Header B173S
B173X
J10Z2
- 6587 PC 350 - P/N06H9086-FRU P/N06H9899 - Barcode Header J10NU
J11GP
K1004
- 6587 PC 350 - P/N07H1267-FRU P/N07H1266 - Barcode Header B173C
J10YB

COMPANION:

None

CONCURRENT:

None

DETAIL:

All models of the PC 300 Series 6577 and 6587 systems may experience the signal quality condition when on of the following IBM PCI network adapters is installed in either of the systems referenced above:

- IBM PCI Auto LANStreamer Token Ring Adapter
 - IBM FRU P/N 04H8098
 - IBM Assembly P/N 92G8457 (Original level)
 - P/N 42H0658
 - P/N 42H3279
 - P/N 55H8985 (Current level)
- IBM PCI Token Ring Adapter
 - IBM FRU P/N 41H8874
 - IBM Assembly P/N 41H8862

The condition can potentially cause a data error that could manifest itself in a system hang, or result in incorrect data with or without generating an error message.

Install riser card FRU P/N 12J5553 (6577 PC 330) or FRU P/N 12J5554 (6587 PC 350) in systems that meet all of the criteria for exposure to the potential condition, which include:

- 1) PC 300 Series 6577 or 6587 with a riser card matching the part number and barcode identification as stated in the "PREREQUISITES" section of this ECA.
- 2) The system contains an IBM PCI Auto LANStreamer Token Ring Adapter or an IBM PCI Token Ring Adapter

After installing the updated riser, place the hologram sticker that shipped with the new riser card, on the machine type/model label on the rear of the system unit. Remarketers should also place a sticker on the external shipping label attached to the box as well as on the rear of the updated system unit. Use the sticker attached to the rear of the system unit as a means for the customer or servicer to identify updated systems prior to an on-site service call.

No other combination of IBM or non-IBM PCI network adapters and the PC 300 or 700 Series systems have exhibited this problem.

NOTES:

Placement of PCI adapters, especially PCI network adapters of any brand, should be done beginning with the PCI slot at the base of the riser card, closest to the system board. Additional PCI adapters should be installed in a bottom to top configuration.

Customers exposed to this potential condition should place the IBM PCI network adapter in the slot closest to the system board until the new riser card has been installed. This will minimize the possibility of this condition.

This ECA provides labor reimbursement for replacement of a riser card in a PC 300 Series 6577/6587 system that meets ALL of the criteria stated above.

IN THE USA:

Replacement riser cards MUST be ordered directly from the IBM PC Company HelpCenter at 1-800-426-7763. IBM Remarketers should use their existing Authorization and PIN numbers and the Dial-A-Speciality (DAS) code of 111.

IBM PC Company Marketing and TSS Servicers should also call the HelpCenter at 1-800-426-7763. The Authorization number is ECA007CARD, and the PIN number is B990. Use the DAS code stated above. This service will provide access to a support group established to distribute the new riser card. DO NOT ORDER THE UPDATED RISER USING NORMAL PARTS ORDERING PROCEDURES.

IBM Authorized Servicers should scrap replaced risers locally. TSS Servicers should return replaced risers to the branch office for bulk return/scrap.

IN CANADA:

Replacement Riser cards should now be requested through, and claims made via the standard ECA processes.

All replaced risers should be returned to IBM via the normal UPR (Used Parts Return) process.

IBM and TSS Servicers should record time and travel, along with the other product information to:

Service Code: 33 (PSS) or 08 (BP)

Machine Type: 6577 or 6587

ECA: 007

Other Branch Office: 990 (PSS only)

==> This ECA will expire on May 31, 1998 <==

U.S. Business Partners should contact the HelpCenter to register their customer requirements for these cards. DO NOT ORDER THE UPDATED RISER USING NORMAL PARTS ORDERING PROCEDURES.

SAS KEYWORDS:

PSY2	PSVP	IBMPC	PSVPERR
PSY2ERR	PSY2PART	PSVPPART	PSVPECA
PSY2ECA	PC350	PC330	D/T6587
ECAVALID	SERVICER ONLY	PSVPCOMM	PSY2COMM
PSVPADPT	PSY2ADPT		

1.1.80 9546 ECA007 - 2.1 OR 3.0GB HANGS / FILE COPY, IPL, WAKE UP.

Record number: H163594

Device:	D/T9546	Service code:	33
ECA number:	ECA007	Parts source:	LOC
EC number:	EC999999	Publish flag:	R
Mandatory:	N	Hit count:	UHC00012
Automatic shipment:	N	Success count:	USC0000
Availability date:	98/05	Publication code:	PC40
Plant of control:	24	Date created:	098/04/16
Tip key:		Date last altered:	A98/05/06
		Owning B.U.:	USA

PURPOSE:

Correct a system hang condition that can occur during operating system load, while copying files, or during wake up from hibernation.

FEATURES:

Type, Model, Stage	With B/M	Machines Affected and/or Feature/Device Description	B/M to be Installed	Service Hours	System Hours
9546	B/M9999999	MOD 760E/ED/XD	B/M9999999	00.4	00.2

PHYSICAL CHECK:

The system must contain an 8X or 8X-20 Internal CD ROM drive and an IBM 2.1GB or 3.0GB HDD that has intermittent or solid hangs during operating system load, while copying files or during wake up from Hibernation.

HDD Identification Chart

HDD Size	FRU Part Number	Description
2.1GB HDD	P/N05K9000	17mm thick
3.0GB HDD	P/N45H8791	17mm thick
3.0GB HDD	P/N45H8791	17mm thick

PREREQUISITES: NONE

COMPANION: NONE

CONCURRENT: NONE

DETAIL:

ThinkPad models 760E,ED,XD, with a 2.1GB or 3.0GB HDD, and an IBM 8X or 8 - 20X Internal CD ROM may hang during operating system load, when copying files, or during wake up from Hibernation. HDDs listed in the PHYSICAL CHECK area require an HDD Micro-code update to correct this condition.

Because the code is proprietary it must be installed by an IBM authorized servicer. It is not a Customer Installable Unit (CRU) and the update file can not be given to a customer.

The code is located on the IBM Intranet in the Dealer area of the BBS. The file name is fud103.exe. It can be down loaded using the following URLs.

The following URL will display the main BBS page:
<http://w3.pc.ibm.com/files/>

This URL will go directly to the fud103.exe file.
<http://w3.pc.ibm.com/cgi-bin/files/searchftp?action=string&str=fud103&bool=all>

Authorized Dealers can access the file through the IBM PC Resellers home page at URL <http://www.partner.us.pc.ibm.com/>

NOTE: IBM Intranet information can not be viewed by general internet users. It is only accessible to IBM employees and authorized dealers.

The following installation instructions are taken from the readme file created when the downloaded fud103.exe file is run.

NOTE: this down load allow creation of the "Firmware Update Diskette" Version 1.03.

HDD "Firmware Update Diskette" (Ver. 1.03)

What This Diskette Does

This diskette can update the firmware of Hard Disk Drive in the following Hard Disk Drive ;

- 2.1GB (FRU P/N: 82H8489 and 05K9000)
- 3.0GB (FRU P/N: 45H8791)

To run this diskette, please refer to the "Operation Procedure" section.

Released Version

Version 1.00	Initial Release
Version 1.01	Update README.TXT
Version 1.02	Add Support HDD P/N
Version 1.03	Update README.TXT

Operation Procedure

- Notes:**
- You need an AC adapter and a charged battery pack to run this diskette.
 - If your computer is attached to any kind of Docking station or port replicator, turn off the computer and detach it before proceeding.
1. Ensure that the Hard Disk Drive to be updated is installed in the ThinkPad HDD bay, not in the UltraBay (with 2nd HDD Adapter).
 2. Print these instruction or display on another computer.
 3. Connect the AC adapter to the computer.
 4. Insert this HDD "Firmware Update Program Diskette" into the diskette drive and turn on the computer.
Warning: Do not turn off or suspend the computer until the update has been completed. IF YOU TURN OFF OR SUSPEND THE COMPUTER WHILE THE UPDATE IS STILL IN PROGRESS, THE HARD DISK DRIVE MAY NOT WORK PROPERLY.
 5. Confirm the message "Update is successfully completed.".

If you get the message "Update is not required for this HDD" the firmware update is not required for the Hard Disk Drive.

If you get another message, please contact IBM Service.

After the change has been completed, do the following to make the change effective.
 6. Make sure the HDD "Firmware Update Program Diskette" is removed from the diskette drive, then turn off the computer.

NOTES: This ECA will expire on April 30,1999.
Down load the micro-code update and record Time to service code 33, ECA 007, and OTHER OFFICE 990.

This is a labor only ECA, FRU parts can not be written off to 9546 ECA007.

D/T9547 Model 760L, 760LD, 760EL, 760ELD, 760XL and 765L and 765XL should use D/T9547 ECA 007 to correct this condition.

SAS KEYWORDS:

PSY2	PSY2ECA	THINKPAD	UNCLASSIFIED
PSY2MCD	BIOS	NO FRU PARTS	

1.1.81 9547 ECA007 - 2.1 OR 3.0GB HANGS / FILE COPY, IPL, WAKE UP.

Record number: H163596

Device:	D/T9547	Service code:	33
ECA number:	ECA007	Parts source:	LOC
EC number:	EC9999999	Publish flag:	R
Mandatory:	N	Hit count:	UHC00007
Automatic shipment:	N	Success count:	USC0000
Availability date:	98/05	Publication code:	PC40
Plant of control:	24	Date created:	098/05/05
Tip key:		Date last altered:	A98/05/06
		Owning B.U.:	USA

PURPOSE:

Correct a system hang condition that can occur during operating system load, while copying files, or during wake up from hibernation.

FEATURES:

Type, Model, Stage	With B/M	Machines Affected and/or Feature/Device Description	B/M to be Installed	Service Hours	System Hours
9547	B/M9999999	MOD L/LD EL/ELD XL AND 765L	B/M9999999	00.4	00.2

PHYSICAL CHECK:

The system must contain an 8X or 8X-20 Internal CD ROM drive and an IBM 2.1GB or 3.0GB HDD that has intermittent or solid hangs during operating system load, while copying files or during wake up from Hibernation.

HDD Identification Chart

HDD Size	FRU Part Number	Description
2.1GB HDD	P/N05K9000	17mm thick
3.0GB HDD	P/N45H8791	17mm thick
3.0GB HDD	P/N45H8791	17mm thick

PREREQUISITES: NONE

COMPANION: NONE

CONCURRENT: NONE

DETAIL:

ThinkPad models 760L,LD,EL,ELD, XL and 765L with a 2.1GB or 3.0GB HDD, and an IBM 8X or 8-20X Internal CD ROM Drive may hang during operating systemload, when copying files, or during wake up from Hibernation.

HDDs listed in the PHYSICAL CHECK area require an HDD Micro-code update to correct this condition.

Because the code is proprietary it must be installed by an IBM authorized servicer. It is not a Customer Installable Unit (CRU) and the update file can not be given to a customer. The code is located on the IBM Intranet in the Dealer area of the BBS. The file name is fudl03.exe. It can be down loaded using the following URLs.

The following URL will display the main BBS page:
<http://w3.pc.ibm.com/files/>

This URL will go directly to the fudl03.exe file.
<http://w3.pc.ibm.com/cgi-bin/files/searchftp?action=string&str=fudl03&bool=all>

Authorized Dealers can access the file through the IBM PC Resellers home page at URL <http://www.partner.us.pc.ibm.com/>

NOTE: IBM Intranet information can not be viewed by general internet users. It is only accessible to IBM employees and authorized dealers.

The following instalation instructions are taken from the readme file created when the downloaded fudl03.exe file is run.

NOTE: this down load allow creation of the "Firmware Update

Diskette" Version 1.03.

HDD "Firmware Update Diskette" (Ver. 1.03)

What This Diskette Does

 This diskette can update the firmware of Hard Disk Drive
 in the following Hard Disk Drive ;

- 2.1GB (FRU P/N: 82H8489 and 05K9000)
- 3.0GB (FRU P/N: 45H8791)

To run this diskette, please refer to the "Operation Procedure"
 section.

Released Version

 Version 1.00 Initial Release
 Version 1.01 Update README.TXT
 Version 1.02 Add Support HDD P/N
 Version 1.03 Update README.TXT
 Operation Procedure

Notes: - You need an AC adapter and a charged battery pack to
 run this diskette.

- If your computer is attached to any kind of Docking
 station or port replicator, turn off the computer
 and detach it before proceeding.

1. Ensure that the Hard Disk Drive to be updated is installed
 in the ThinkPad HDD bay, not in the UltraBay (with 2nd HDD
 Adapter).
2. Print these instruction or display on another computer.
3. Connect the AC adapter to the computer.
4. Insert this HDD "Firmware Update Program Diskette" into the
 diskette drive and turn on the computer.

Warning: Do not turn off or suspend the computer until the
 update has been completed. IF YOU TURN OFF OR
 SUSPEND THE COMPUTER WHILE THE UPDATE IS STILL IN
 PROGRESS, THE HARD DISK DRIVE MAY NOT WORK PROPERLY.

5. Confirm the message "Update is successfully completed."

If you get the message "Update is not required for this HDD"
 the firmware update is not required for the Hard Disk Drive.

If you get another message, please contact IBM Service.

After the change has been completed, do the following to
 make the change effective.

6. Make sure the HDD "Firmware Update Program Diskette" is
 removed from the diskette drive, then turn off the computer.

NOTES: This ECA will expire on April 30,1999.
 Down load the micro-code update and record Time to service code
 33, ECA 007, and OTHER OFFICE 990.

This is a labor only ECA, FRU parts can not be written off to
 9547 ECA007.

D/T9546 Model 760E, 760ED, 760X, 760XD should use D/T9546 ECA007
 to correct this condition.

SAS KEYWORDS:

PSY2	PSY2ECA	THINKPAD	UNCLASSIFIED
PSY2MCD	BIOS	NO FRU PARTS	

1.1.82 ECA008, OBSOLETE

Record number: H027448

Device:	D/T8550	Service code:	33
ECA number:	ECA008	Parts source:	LOC.
EC number:	EC0000000	Publish flag:	R
Mandatory:	N	Hit count:	UHC01987
Automatic shipment:	N	Success count:	USC0001
Availability date:	88/06	Publication code:	PC20
Plant of control:	27	Date created:	088/05/31
Tip key:		Date last altered:	A93/01/14
		Owning B.U.:	USA

PURPOSE:

*** THIS ECA EXPIRED 12/31/92 ***

FEATURES:

Type, Model, Stage	With B/M	Machines Affected and/or Feature/Device Description	B/M to be Installed	Service Hours	System Hours
8550	B/M0000000		B/M0000000	00.1	00.0

PHYSICAL CHECK:

PREREQUISITES: NONE

COMPANION: NONE

CONCURRENT: NONE

DETAIL:

NOTES:

*** THIS ECA EXPIRED 12/31/92 ***

SAS KEYWORDS:

PSY2 PSY2ECA

Record number: H137086

Device:	D/T8640	Service code:	33
ECA number:	ECA008	Parts source:	LOC
EC number:	EC0000000	Publish flag:	R
Mandatory:	N	Hit count:	UHC00662
Automatic shipment:	N	Success count:	USC0000
Availability date:	97/03	Publication code:	PC50
Plant of control:	23	Date created:	097/03/21
Tip key:		Date last altered:	A98/05/12
		Owning B.U.:	USA

PURPOSE:

- The purpose of this ECA to:
- Identify the existing ECAs that apply to PC Server 300, 320, 500, and 520 systems.
 - provide instructions for implementing the existing ECAs.
 - provide a consolidated list of RETAIN tips that should be reviewed along with the ECAs.
 - provide a means of reporting activity against a single ECA.

This ECA does not contain any additional technical information. It simply provides a simplified vehicle for reporting activity.

IBM/TSS CEs will record all time and parts to Service Code 33, ECA008, Other Office 990.

This ECA will expire February 23, 2002

FEATURES:

Type, Model, Stage	With B/M	Machines Affected and/or Feature/Device Description	B/M to be Installed	Service Hours	System Hours
8640	B/M0000000	PC SERVER 300 AND 320	B/M0000000	02.2	02.0
8641	B/M0000000	PC SERVER 520	B/M0000000	02.2	02.0
8642	B/M0000000	PC SERVER 500	B/M0000000	02.2	02.0

PHYSICAL CHECK:

Each of the existing ECAs listed below have a physical and/or logical check to determine if the ECA is necessary. Use the matrix below to determine which ECA(s) apply:

	ECA 001	ECA 003	ECA 004	ECA 006	ECA 007	ECA 012	ECA 016
300 EISA	x		x	x		x	x
320 EISA			x		x	x	x
320 EISA RAID		x	x	x	x	x	x
320 MCA		x	x		x	x	x
320 MCA RAID		x	x	x	x	x	x

	ECA * 003	ECA 006	ECA 012	ECA 016
500 MCA	x		x	x
500 MCA RAID	x		x	x
520 EISA	x		x	x
520 EISA RAID	x	x	x	x
520 MCA	x		x	x
520 MCA RAID	x	x	x	x

(*) ECA003 applies to ALL PC Server 520s except 166MHz models which have type III Trays FRU p/n06H8631.

PREREQUISITES: NONE

COMPANION:

The following ECAs are available:

	RETAIN #
ECA001 8640 PENTIUM PROCESSOR REPLACEMENT	H126291
ECA003 Prevent Multiple DDD SCSI Drives in Server	H133326

ECA008, PC SERVER 300/320/500/520 HEALTH CHECKUP

ECA004 Replacement 8MB Parity Memory (320 EISA/MCA)	H003263
ECA006 Server PCI RAID Adapter Replacement	H133523
ECA007 PC Server 320 Power Supply Replacement (API)	H135078
ECA012 1.12GB, 2.25GB HARD DRIVE REPLACEMENT	H161379
ECA016 FIRMWARE UPGRADE FOR SOME 4.5/9.1GB SCSI DRIVES	H162303

CONCURRENT:

Review the following RETAIN tips as they resolve issues not covered by the existing ECAs:

H133024, 4/10GB TAPE DRIVE: CLEANING PROCEDURES
 H013309, INTERMITTENT TAPE ERRORS 4/10GB TAPE DRIVE
 H133402, 4/10GB TAPE DRIVE APPEARS HUNG, ERROR RECOVERY
 H001115, Server 320/520 Traps After Cache Upgrade
 H003814, Server Hard Drives Lose Power or Hang
 H007813, Traps/Hangs with 8 Parity SIMMs Installed (320 only)
 H015437, Server 320/520 Microchannel Parity Memory Traps
 H122801, Bowed Backplane May Cause Hardfile Problems
 H123235, Hot-swap Tray Fits Tightly in DASD Bay
 H131928, System Traps/Hangs With 16MB OKI Parity SIMM Installed
 H132270, System Reports No Operating System
 H132711, Flash BIOS Diskette Inoperative / Windows95 (310)
 H133777, Backplane Jumper Configuration Check
 H134111, C43 Firmware Change - Quantum Pass 4 HDDs
 H135499, PCI RAID Server Traps or Hangs Intermittently
 H135791, Server 320 Traps/Hangs with NEC 32MB Parity SIMM failures
 H136613, Server RAID drives DDD with ARCSERVE Tape Backup

DETAIL:

Before going on-site:

- Study the Server Health Checklist for PC Server 300/320 or the Checklist for PC Server 500/520 to determine which ECA(s) and/or RETAIN tips apply. These two documents are available from the following IBM Internal Intranet URL:
<http://w3-02.us.pc.ibm.com/support/hintspcsrv.html>
- Schedule Server downtime with the customer
- Advise the customer to perform a full backup of all data

Once on-site:

- Ensure that the customer has a full backup of all data
- Record all time using Service Code 33, ECA008, Other Office 990. It is NOT necessary to record time against the individual ECAs (ie. ECA003, ECA004, ECA006, ECA007)

NOTES:

This ECA will expire February 23, 2002

SAS KEYWORDS:

PSY2	UNCLASSIFIED	ECAVALID	PSY2ECA
300	320	500	520
D/T8641	P/N75H8103	P/N06H5078	P/N06H8510
P/N96G3692	P/N96G1339	P/N71G6291	P/N06H8388
P/N60G2950	P/N60G2175	P/N73G3234	P/N71G0044
P/N06H2173	P/N06H3956	P/N73G3235	P/N06H5068
HEALTH			

1.1.84 ECA008, SIGNAL QUALITY CONDITION

Record number: H137697

Device:	D/T6877	Service code:	33
ECA number:	ECA008	Parts source:	NONE
EC number:	EC000000	Publish flag:	R
Mandatory:	Y	Hit count:	UHC00101
Automatic shipment:	N	Success count:	USC0000
Availability date:	97/05	Publication code:	PC50
Plant of control:	23	Date created:	097/05/12
Tip key:		Date last altered:	A97/11/18
		Owning B.U.:	USA

PURPOSE:

The purpose of this ECA is to provide a replacement PCI/ISA Riser Card to eliminate a potential signal quality condition which may occur during file transfer operations in specific systems that contain an IBM PCI Auto LANStreamer Token Ring adapter or IBM PCI Token Ring adapter (all part numbers).

This condition can potentially interfere with or affect data being transferred between the affected IBM PCI Token Ring adapters and the referenced IBM PC Systems.

FEATURES:

Type, Model, Stage	With B/M	Machines Affected and/or Feature/Device Description	B/M to be Installed	Service Hours	System Hours
6877	B/M0000000	6877 PC 730 ALL MODELS	B/M0000000	00.3	00.2
6887	B/M0000000	6887 PC 750 ALL MODELS	B/M0000000	00.3	00.2

PHYSICAL CHECK:

Affected systems contain an IBM PCI Auto LANStreamer Token Ring adapter or an IBM PCI Token Ring adapter.

System diagnostics run without errors.

PREREQUISITES:

Currently all installed systems that are potentially exposed to the condition contains one of the following PCI/ISA riser cards:

- 6877 PC 730 - P/N76H6227-FRU P/N06H9896 - Barcode Header J11C5
J11GQ
- 6877 PC 730 - P/N06H9143-FRU P/N76H0231 - Barcode Header B173S
B173X
J10Z2
- 6887 PC 750 - P/N06H9086-FRU P/N06H9899 - Barcode Header J10NU
J11GP
K1004
- 6887 PC 750 - P/N07H1267-FRU P/N07H1266 - Barcode Header B173C
J10YB

COMPANION:

None

CONCURRENT:

None

DETAIL:

All models of the PC 700 Series 6877 and 6887 systems may experience the signal quality condition when used in conjunction with either of the following IBM PCI network adapters:

- IBM PCI Auto LANStreamer Token Ring Adapter
 - IBM FRU P/N 04H8098
 - IBM Assembly P/N 92G8457 (Original level)
 - P/N 42H0658
 - P/N 42H3279
 - P/N 55H8985 (Current level)
- IBM PCI Token Ring Adapter
 - IBM FRU P/N 41H8874
 - IBM Assembly P/N 41H8862

The condition can potentially cause a data error that could manifest itself in a system hang, or result in incorrect data with or without generating an error message.

Install riser card FRU P/N01K2028 (6877 PC 730) or FRU P/N01K2094 (6887 PC 750) in systems that meet all of the criteria for exposure to the potential condition, which include:

- 1) PC 700 Series 6877 or 6887 with a riser card matching the part number and barcode identification as stated in the "PREREQUISITES" section of this ECA.
- 2) The system contains an IBM PCI Auto LANStreamer Token Ring Adapter or an IBM PCI Token Ring Adapter

After installing the updated riser, place the hologram sticker that shipped with the new riser card, on the machine type/model label on the rear of the system unit. Remarketers should also place a sticker on the external shipping label attached to the box as well as on the rear of the updated system unit. Use the sticker attached to the rear of the system unit as a means for the customer or servicer to identify updated systems prior to an on-site service call.

No other combination of IBM or non-IBM PCI network adapters and the PC 300 or 700 Series systems have exhibited this problem.

NOTES:

Placement of PCI adapters, especially PCI network adapters of any brand, should be done beginning with the PCI slot at the base of the riser card, closest to the system board. Additional PCI adapters should be installed in a bottom to top configuration.

Customers exposed to this potential condition should place the IBM PCI network adapter in the slot closest to the system board until the new riser card has been installed. This will minimize the possibility of this condition.

This ECA provides labor reimbursement for replacement of a riser card in a PC 700 Series 6877/6887 system that meets ALL of the criteria stated above.

IN THE USA:

Replacement riser cards MUST be ordered directly from the IBM PC Company HelpCenter at 1-800-426-7763. IBM Remarketers should use their existing Authorization and PIN numbers and the Dial-A-Speciality (DAS) code of 111.

IBM PC Company Marketing and TSS Servicers should also call the HelpCenter at 1-800-426-7763. The Authorization number is ECA007CARD, and the PIN number is B990. Use the DAS code stated above. This service will provide access to a support group established to distribute the new riser card. DO NOT ORDER THE UPDATED RISER USING NORMAL PARTS ORDERING PROCEDURES.

IBM Authorized Servicers should scrap replaced risers locally. TSS Servicers should return replaced risers to the branch office for bulk return/scrap.

IN CANADA:

Replacement Riser cards should now be requested through, and claims made via the standard ECA processes.

All replaced risers should be returned to IBM via the normal UPR (Used Parts Return) process.

IBM and TSS Servicers should record time and travel, along with the other product information to:

Service Code: 33 (PSS) or 08 (BP)

Machine Type: 6877 or 6887

ECA: 008

Other Branch Office: 990 (PSS only)

==> This ECA will expire on May 31, 1998 <==

U.S. Business Partners should contact the HelpCentre to register their customer requirements for these cards. DO NOT ORDER THE UPDATED RISER USING NORMAL PARTS ORDERING PROCEDURES.

SAS KEYWORDS:

PSY2	PSVP	IBMPC	PSVPERR
PSY2ERR	PSY2PART	PSVPPART	PSVPECA
PSY2ECA	PC750	PC730	D/T6887
ECAVALID	SERVICER ONLY	PSVPCOMM	PSY2COMM
PSVPADPT	PSY2ADPT		

1.1.85 ECA009, OBSOLETE

Record number: H02888

Device:	D/T8550	Service code:	33
ECA number:	ECA009	Parts source:	LOC.
EC number:	EC000000	Publish flag:	R
Mandatory:	N	Hit count:	UHC04331
Automatic shipment:	N	Success count:	USC0001
Availability date:	88/09	Publication code:	PC20
Plant of control:	27	Date created:	088/08/30
Tip key:		Date last altered:	A93/07/23
		Owning B.U.:	USA

PURPOSE:

*** THIS ECA HAS EXPIRED ***
 PROVIDE A REPLACEMENT 8512 COLOR DISPLAY FOR A FAILING UNIT.

FEATURES:

Type, Model, Stage	With B/M	Machines Affected and/or Feature/Device Description	B/M to be Installed	Service Hours	System Hours
8512	B/M000000	8512 DISPLAYS WITHIN SPECIFIED SERIAL NUMBER RANGE	B/M000000	00.4	00.2

PHYSICAL CHECK:

FAILING 8512 DISPLAYS THAT MEET ALL THREE FOLLOWING
 SPECIFICATIONS:

1. SERIAL NUMBER WITH A "72" PREFIX.
 *****AND*****
2. SERIAL NUMBER RANGE
 - A. 72 - 0000000 THRU 72-0540000 - ECA EXPIRES 2/29/92. SEE NOTE 2
 - B. 72 - 0540000 THRU 72-0650000 - ECA EXPIRES 6/30/92. SEE NOTE 2
 *****AND*****
3. DISPLAY EXHIBITS FAILING SYMPTOMS AS DESCRIBED IN
 THE "DETAIL" SECTION OF THIS ECA.

PREREQUISITES: NONE

COMPANION: NONE

CONCURRENT: NONE

DETAIL:

A LIMITED NUMBER OF 8512 COLOR DISPLAYS MAY FAIL, CAUSING A 2401 ERROR DURING POWER-ON SELF-TEST (POST), OR A 2402 OR 2409 ERROR CODE WHEN VGA ADVANCED DIAGNOSTICS ARE EXECUTED. THE PROBLEM MAY ALSO APPEAR AS FLICKERING OR CHANGING COLORS ON THE DISPLAY DURING USE. THESE SYMPTOMS MAY BE VERY INTERMITTENT. A 2401 ERROR CODE CAN BE BYPASSED IN MOST CASES BY PRESSING THE "F1" KEY. SUBSEQUENT OPERATION WILL NOT HARM THE DISPLAY OR SYSTEM UNIT.

2401, 2402, 2409, AND 2410 ERROR CODES MAY BE CAUSED BY EITHER A DEFECTIVE DISPLAY OR SYSTEM UNIT PLANAR BOARD. THE FOLLOWING SYMPTOM AND ACTION CHART WILL HELP TO MINIMIZE UNNECESSARY REPLACEMENT OF THE SYSTEM UNIT PLANAR BOARD. 2401 IS A POST ERROR; 2402, 2409, AND 2410 ARE ADVANCED DIAGNOSTIC ERROR CODES.

REPORTED SYMPTOM -----	CORRECTIVE ACTION -----
CUSTOMER REPORTS FLICKERING OR CHANGING COLORS ON THE DISPLAY WITH NO ERROR CODE OCCURRING:	REPLACE THE 8512 COLOR DISPLAY.
2401 OR 2402 ERROR DISPLAYED IN A COLOR OTHER THAN WHITE ON A BLACK BACKGROUND:	REPLACE THE 8512 COLOR DISPLAY.
2401, 2402, OR 2410 ERROR DISPLAYED IN WHITE NUMBERS ON BLACK BACKGROUND, AND NO REPORTED FLICKERING OR CHANGING COLORS ON THE DISPLAY:	REPLACE THE SYSTEM UNIT PLANAR BOARD. * SEE NOTES BELOW.
2409 ERROR CODE	REPLACE THE 8512 COLOR DISPLAY.

NOTES:

PSY2 RETAIN TIPS
ECA009, OBSOLETE

*** THIS ECA HAS EXPIRED ***

* ONLY AN 8512 DISPLAY REPLACEMENT WILL BE COVERED BY THIS ECA. SYSTEM UNIT PLANAR BOARD REPLACEMENT MUST BE DONE CONSISTENT WITH THE TERMS AND CONDITIONS OF THE SYSTEM UNIT WARRANTY OR SERVICE AGREEMENT IF APPLICABLE.

NOTE 2

THIS ECA EXPIRES ON THE DATES GIVEN ABOVE IN THE SERIAL NUMBER RANGE FIELDS. IF THE CUSTOMERS 8512 IS DISPLAYING THE SYMPTOMS GIVEN AND THE DATE FOR THE THEIR SERIAL NUMBER HAS EXPIRED, THE CUSTOMER MAY RECEIVE A REPLACEMENT DISPLAY IF THEY CAN PROVIDE THE ORIGINAL "PROOF OF PURCHASE" FOR THE 8512. WITH THE "PROOF OF PURCHASE", THIS ECA IS EFFECTIVE FOR THREE (3) YEARS FROM THE DATE OF PURCHASE.

ORDER REPLACEMENT DISPLAYS (FRU P/N61X8924) THROUGH NORMAL DISTRIBUTION.

SAS KEYWORDS:

PSY2	8512DISP	PSY2ERR	PSY2DISP
8550SYSECBM	8560SYSECBM	8570SYSECBM	8580SYSECBM
PSY2ECA	8550ECA	8560ECA	8570ECA
8580ECA	8550SYSERR	8560SYSERR	8570SYSERR
8580SYSERR	8530SYSECBM	8530ECA	8530SYSERR
8555SYSERR	8555SYSECBM	8555ECA	D/T8512

1.1.86 ECA009, PC SERVER 704 HOT-SWAP TRAY REPLACEMENT

Record number: H091076

Device:	D/T8650	Service code:	33
ECA number:	ECA009	Parts source:	LOC
EC number:	EC0000000	Publish flag:	R
Mandatory:	Y	Hit count:	UHC00172
Automatic shipment:	N	Success count:	USC0000
Availability date:	97/04	Publication code:	PC50
Plant of control:	23	Date created:	097/04/28
Tip key:		Date last altered:	A98/05/12
		Owning B.U.:	USA

PURPOSE:

This ECA provides for the replacement of Hot-Swap trays in the PC Server 704 (8650). These Hot-Swap trays prevent some DDD and DED errors on IBM 4.51GB half-height hard drives. This is a MANDATORY EC and must be applied to all affected 4.51GB Hot-Swap drives in the PC Server 704.

This ECA will expire February 28, 2003

FEATURES:

Type, Model, Stage	With B/M	Machines Affected and/or Feature/Device Description	B/M to be Installed	Service Hours	System Hours
8650	B/M0000000	PC SERVER 704 WITH 4.51GB IBM 1/2 HEIGHT IBM HARD DRIVE OPTIONS	B/M0000000	01.0	00.8

PHYSICAL CHECK:

IBM PC Server 704 (8650) systems with the IBM 4.51GB half-height hard drive FRU p/n76H4898 (Option p/n94G6679) are eligible for this ECA.

PREREQUISITES: NONE**COMPANION:** NONE**CONCURRENT:** NONE**DETAIL:**

The inspection can be performed without shutting down the Server and without removing the hard drives. If the trays need to be replaced, a shutdown will be required; ensure that the customer has a current backup of all data prior to a shutdown.

Open the front cover and the metal door which covers the hard drives, and look for hard drives with a serial number label with the following format: SN xx XXXXXX F8

If F8 appears on a drive AND the tray does NOT have a piece of foam visible behind the handle, replace the tray with FRU p/n75H9031.

Note: The new trays ship with four(4) screws. It is important to use the new screws along with the new trays.

Although the FRU number has not changed, the trays without foam have been cleared from stock.

The new trays with foam eliminate hard drive vibration and may prevent drives from becoming DDD or DED.

No PC Server 704 systems are manufactured with 4.51GB hard drives. These hard drives are options only.

All trays manufactured after April 29, 1997 have the foam.

NOTES:

This ECA will expire February 28, 2003

IBM/TSS CEs should record all time and parts to Service Code 33, ECA009, Other Office 990.

SAS KEYWORDS:

PSY2	PSY2ECA	ECAVALID	UNCLASSIFIED
PSY2FDSK	PSY2PART	76H4898	94G6679
75H9031	HEALTH		

1.1.87 ECA009, SIGNAL QUALITY CONDITION

Record number: H137698

Device:	D/T6589	Service code:	33
ECA number:	ECA009	Parts source:	NONE
EC number:	EC000000	Publish flag:	R
Mandatory:	Y	Hit count:	UHC00234
Automatic shipment:	N	Success count:	USC0000
Availability date:	97/05	Publication code:	PC50
Plant of control:	23	Date created:	097/05/12
Tip key:		Date last altered:	A97/11/18
		Owning B.U.:	USA

PURPOSE:

The purpose of this ECA is to provide a replacement PCI/ISA Riser Card to eliminate a potential signal quality condition which may occur during file transfer operations in specific systems that contain an IBM PCI Auto LANStreamer Token Ring adapter or IBM PCI Token Ring adapter (all part numbers).

This condition can potentially interfere with or affect data being transferred between the affected IBM PCI Token Ring adapters and the referenced IBM PC Systems.

FEATURES:

Type, Model, Stage	With B/M	Machines Affected and/or Feature/Device Description	B/M to be Installed	Service Hours	System Hours
6589	B/M0000000	6589 PC 365 MODELS 10X, 11X, 12X, 13X, 15X, 17U AND 18U	B/M0000000	00.3	00.2

PHYSICAL CHECK:

Affected systems contain an IBM PCI Auto LANStreamer Token Ring adapter or an IBM PCI Token Ring adapter (all part numbers).

System diagnostics run without errors.

PREREQUISITES:

Currently all PC 365 models stated above that are potentially exposed to the condition contains one of the following PCI/ISA riser cards:

6589 PC 365 - IBM P/N 07H1267 - IBM FRU P/N 07H1266

COMPANION:

None

CONCURRENT:

None

DETAIL:

IBM PC 365 Series 6589 models 10x, 12x, 13x, 15x, 17U, and 18U systems may experience the signal quality condition when used in conjunction with either of the following IBM PCI network adapters:

- IBM PCI Auto LANStreamer Token Ring Adapter
 - IBM FRU P/N 04H8098
 - IBM Assembly P/N 92G8457 (Original level)
 - P/N 42H0658
 - P/N 42H3279
 - P/N 55H8985 (Current level)
- IBM PCI Token Ring Adapter
 - IBM FRU P/N 41H8874
 - IBM Assembly P/N 41H8862

The condition can potentially cause a data error that could manifest itself in a system hang, or result in incorrect data with or without generating an error message.

Install riser card FRU P/N12J5554 in systems that meet all of the criteria for exposure to the potential condition, which include:

- 1) PC 365 Series 6589 system with a riser card matching the part number identification as stated in the "PREREQUISITES" section of this ECA.
- 2) The system contains an IBM PCI Auto LANStreamer Token Ring Adapter or an IBM PCI Token Ring Adapter

After installing the updated riser, place the hologram sticker that shipped with the new riser card, on the machine type/model label on the rear of the system unit. Remarketers should also

place a sticker on the external shipping label attached to the box as well as on the rear of the updated system unit. Use the sticker attached to the rear of the system unit as a means for the customer or servicer to identify updated systems prior to an on-site service call.

No other combination of IBM or non-IBM PCI network adapters and the PC 365 Series systems have exhibited this problem.

NOTES:

Placement of PCI adapters, especially PCI network adapters of any brand, should be done beginning with the PCI slot at the base of the riser card, closest to the system board. Additional PCI adapters should be installed in a bottom to top configuration.

Customers exposed to this potential condition should place the IBM PCI network adapter in the slot closest to the system board until the new riser card has been installed. This will minimize the exposure of this condition.

This ECA provides labor reimbursement for replacement of a riser card in a PC 365 Series 6589 system that meets ALL of the criteria stated above.

IN THE USA:

Replacement riser cards MUST be ordered directly from the IBM PC Company HelpCenter at 1-800-426-7763. IBM Remarketers should use their existing Authorization and PIN numbers and the Dial-A-Speciality (DAS) code of 111.

IBM PC Company Marketing and TSS Servicers should also call the HelpCenter at 1-800-426-7763. The Authorization number is ECA007CARD, and the PIN number is B990. Use the DAS code stated above. This service will provide access to a support group established to distribute the new riser card. Do not order the updated riser using normal parts ordering procedures.

IBM Authorized Servicers should scrap replaced risers locally. TSS Servicers should return replaced risers to the branch office for bulk return/scrap.

IN CANADA:

Replacement Riser cards should now be requested through, and claims made via the standard ECA processes.

All replaced risers should be returned to IBM via the normal UPR (Used Parts Return) process.

IBM and TSS Servicers should record time and travel, along with the other product information to:
Service Code: 33 (PSS) or 08 (BP)
Machine Type: 6589
ECA: 009
Other Branch Office: 990 (PSS only)

==> This ECA will expire on May 31, 1998 <==

U.S. Business Partners should contact the HelpCentre to register their customer requirements for these cards. DO NOT ORDER THE UPDATED RISER USING NORMAL PARTS ORDERING PROCEDURES.

SAS KEYWORDS:

PSY2	PSVP	IBMPC	PSVPERR
PSY2ERR	PSY2PART	PSVPPART	PSVPECA
PSY2ECA	PC365	ECAVALID	SERVICER ONLY
PSVPCOMM	PSY2COMM	PSVPADPT	PSY2ADPT

1.1.89 ECA010, OBSOLETE

Record number: H02984

Device:	D/T8550	Service code:	33
ECA number:	ECA010	Parts source:	LOC.
EC number:	EC000000	Publish flag:	R
Mandatory:	N	Hit count:	UHC04888
Automatic shipment:	N	Success count:	USC0000
Availability date:	88/09	Publication code:	PC20
Plant of control:	27	Date created:	088/09/01
Tip key:		Date last altered:	A93/01/13
		Owning B.U.:	USA

PURPOSE:

*** THIS ECA HAS EXPIRED ***

FEATURES:

Type, Model, Stage	With B/M	Machines Affected and/or Feature/Device Description	B/M to be Installed	Service Hours	System Hours
0	B/M0000000		B/M0000000	00.1	00.0

PHYSICAL CHECK:

PREREQUISITES: NONE

COMPANION: NONE

CONCURRENT: NONE

DETAIL: NONE

NOTES:

*** THIS ECA IS OBSOLETE ***

SAS KEYWORDS:

PSY2 PSY2ECA

1.1.90 ECA010, 6589-14U SIGNAL QUALITY CONDITION

Record number: H161030

Device:	D/T6589	Service code:	33
ECA number:	ECA010	Parts source:	NONE
EC number:	EC000000	Publish flag:	R
Mandatory:	Y	Hit count:	UHC00056
Automatic shipment:	N	Success count:	USC0000
Availability date:	97/09	Publication code:	PC50
Plant of control:	23	Date created:	097/09/10
Tip key:		Date last altered:	A97/11/18
		Owning B.U.:	USA

PURPOSE:

The purpose of this ECA is to provide a replacement PCI/ISA Riser Card to eliminate a potential signal quality condition which may occur during file transfer operations in specific systems that contain a PCI networking adapter, IBM or OEM.

This condition can potentially interfere with or affect data being transferred between PCI network adapters and the referenced IBM PC System.

FEATURES:

Type,	Machines Affected				
Model, With	and/or Feature/Device	B/M to be	Service	System	
Stage B/M	Description	Installed	Hours	Hours	
6589	B/M0000000	6589-14U ONLY	B/M0000000	00.3	00.2

PHYSICAL CHECK:

Affected systems contain any brand of PCI networking adapter cards, IBM or OEM.

System diagnostics run without errors.

PREREQUISITES:

Currently, the IBM PC365 6589-14U is the ONLY model exposed to the condition if it contains a PCI networking adapter card, IBM or OEM, and contains the following PCI/ISA riser card: IBM FRU P/N93H1426

COMPANION:

A "Special Process" has been developed to assist Remarketers in updating their inventory of affected systems that are targeted for their Configuration Centers, both AAP and non-AAP configuration. This process assumes that the system will be undergoing "normal" hardware configuration changes prior to delivery to the customer, which would involve the removal of the top cover assembly to access the interior of the system unit. Those units that meet this criteria should be updated with the new riser card REGARDLESS of whether an IBM PCI Auto LANStreamer Token Ring or an IBM PCI Token Ring adapter will be installed now or at a later date by the end-user.

The following steps should be used to obtain the new riser card and receive a direct adjusted payment of \$10.00 per unit updated during the Configuration Center process.

Do not submit a Warranty Claim form for systems updated in the Configuration Center using this process.

- A) Contact 1 - 800-426-7763 as indicated in the "NOTES" section of this ECA to order the necessary number of riser cards to meet the weekly/monthly requirements of the configuration center.
- B) Riser cards will be allocated to the Remarketer and delivered via the over-night carrier. The IBM PC Company will make voice contact with the designated contact person at the dealership to confirm the number of risers that will ship and arrange reimbursement.
- C) Install the updated riser cards during the configuration process and DOCUMENT THE MACHINE TYPE AND SERIAL NUMBERS OF THOSE UPDATED SYSTEMS ON THE COMPANY LETTER HEAD. This information will be sent back to the IBM PC Company as verification of work performed and payment processing.
- D) Riser cards replaced using the process MUST be returned to IBM using bulk return procedures. The contact person at IBM that arranged for shipment will also provide the return instructions.

This process is NOT intended for updating all systems in the Remarketers inventory. Only those systems that are

to run through the configuration center are to updated with this process. All other systems in inventory (ship-through) will be updated in the field under the terms and conditions of this ECA.

CONCURRENT:

None

DETAIL:

IBM PC365 Series 6589-14U systems may experience the signal quality condition when used in conjunction with a PCI network adapter.

The condition can potentially cause a data error that could manifest itself in a system hang, or result in incorrect data with or without generating an error message.

Install riser card FRU P/N93H7830 in systems that meet all of the criteria for exposure to the potential condition, which include:

- 1) IBM PC365 Model 6589-14U system with a riser card matching the part number identification as stated in the "PREREQUISITES" section of this ECA.
- 2) The system contains a PCI networking adapter, IBM or OEM.

NOTES:

Placement of PCI adapters, especially PCI network adapters of any brand, should be done beginning with the PCI slot at the base of the riser card, closest to the system board. Additional PCI adapters should be installed in a bottom to top configuration.

Customers exposed to this potential condition should place the PCI network adapter in the slot closest to the system board until the new riser card has been installed. This will minimize the exposure to this condition.

This ECA provides labor reimbursement for replacement of a riser card in a PC 365 Series 6589-14U system that meets ALL of the criteria stated above.

IN THE USA:

Replacement riser cards MUST be ordered directly from the IBM PC Company HelpCenter at 1-800-426-7763. IBM Remarketers should use their existing Authorization and PIN numbers and the Dial-A-Speciality (DAS) code of 111.

IBM PC Company Marketing and TSS Servicicers should also call the HelpCenter at 1-800-426-7763. The Authorization number is ECA010CARD, and the PIN number is B990. Use the DAS code stated above. This service will provide access to a support group established to distribute the new riser card. Do not order the updated riser using normal parts ordering procedures.

IBM Authorized Servicicers should scrap replaced risers locally. TSS Servicicers should return replaced risers to the branch office for bulk return/scrap.

IN CANADA:

Replacement Riser cards should now be requested through, and claims made via the standard ECA processes.

All replaced risers should be returned to IBM via the normal UPR (Used Parts Return) process.

IBM and TSS Servicicers should record time and travel, along with the other product information to:
Service Code: 33 (PSS) or 08 (BP)
Machine Type: 6589
ECA: 009
Other Branch Office: 990 (PSS only)

==> This ECA will expire on September 30, 1998 <==

U.S. Business Partners should contact the HelpCenter to register their customer requirements for these cards. DO NOT ORDER THE UPDATED RISER USING NORMAL PARTS ORDERING PROCEDURES.

SAS KEYWORDS:

PSY2	PSVP	IBMPC	PSVPERR
PSY2ERR	PSY2PART	PSVPPART	PSVPECA
PSY2ECA	PC365	ECAVALID	SERVICER ONLY

1.1.91 ECA011&COLON. PC SERVER 310 RISER CARD REPLACEMENT

Record number: H013335 Number of altered copies: 1

Device:	D/T8639	Service code:	33
ECA number:	ECA011	Parts source:	LOC
EC number:	EC000000	Publish flag:	R
Mandatory:	Y	Hit count:	UHC00208
Automatic shipment:	N	Success count:	USC0000
Availability date:	97/05	Publication code:	PC50
Plant of control:	23	Date created:	097/05/12
Tip key:		Date last altered:	A98/05/13
		Owning B.U.:	USA

PURPOSE:

The purpose of this ECA is to provide a replacement PCI/ISA Riser Card to eliminate a potential signal quality condition which may occur during file transfer operations in eligible PC Server 310 models.

This is a MANDATORY EC and must be applied to all affected PC Server 310 166MHz models.

This ECA will expire December 29, 2003

FEATURES:

Type, Model, Stage	With B/M	Machines Affected and/or Feature/Device Description	B/M to be Installed	Service Hours	System Hours
8639	B/M0000000	PC SERVER 310 166MHZ 8639 MODELS 0E0, 0EV, 0EB, AND ANY PENTIUM P54C 166MHZ SPECIAL BID MODELS	B/M0000000	00.3	00.2

PHYSICAL CHECK:

PC Server 310 systems (8639-0E0, 0EV, 0EB) 166MHz models with the following Riser cards are eligible for the EC:

FRU p/n06H9899 (Assembly p/n06H9086)
FRU p/n07H1266 (Assembly p/n07H1267)

Systems manufactured after May 1, 1997 (MFG DATE: 705 and later on the rear system serial number label) are NOT affected.

PREREQUISITES: NONE

COMPANION: NONE

CONCURRENT: NONE

DETAIL:

The affected PC Server 310 166MHz models have the potential for exposure to the signal quality condition when using the following PCI adapters:

- IBM PCI Auto LANStreamer Token Ring Adapter FRU p/n04H8098.
- IBM PCI Token Ring Adapter FRU p/n41H8874.

The condition can potentially cause a data error that could manifest itself in a system hang, or result in incorrect data with or without generating an error message.

Install the new riser card FRU P/N12J5554 in any PC Server 310 166MHz model if an affected riser card, identified in the Physical Check, is found.

After installing the new riser, place the small white IBM sticker (a 3/8" dot which may ship separately from the new riser card) on the machine type/model label on the rear of the system unit. Remarketers should also place a sticker on the external shipping label attached to the box as well as on the rear of the updated system unit. Use the sticker attached to the rear of the system unit as a means for the customer or servicer to identify updated systems prior to an on-site service call.

NOTES:

This ECA will expire December 29, 2003

Placement of PCI adapters, especially PCI network adapters of any brand, should be done beginning with the PCI slot at the base of the riser card, closest to the system board. Additional PCI adapters should be installed in a bottom to top

configuration.

Customers exposed to this potential condition should place the IBM PCI network adapter in the slot closest to the system board until the new riser card has been installed. This will minimize exposure of this potential signal quality condition.

This ECA provides labor reimbursement for the replacement of riser cards in a PC Server 310 166MHz models that meet the criteria in the Physical Check.

IN THE USA:

Replacement riser cards MUST be ordered directly from the IBM PC Company HelpCenter at 1-800-426-7763. IBM Remarketers should use their existing Authorization code and PIN number and use the Dial-A-Speciality (DAS) code of 111.

IBM PC Company Marketing and TSS Servicicers should also call the HelpCenter at 1-800-426-7763. Use Authorization code ECA007CARD and PIN number B990.

This service will provide access to a support group established to distribute the new riser card. DO NOT ORDER THE UPDATED RISER USING NORMAL PARTS ORDERING PROCEDURES.

IBM Authorized Servicicers should scrap replaced risers locally. TSS Servicicers should return replaced risers to the branch office for bulk return/scrap.

IN CANADA:

Replacement Riser cards should now be requested through, and claims made via the standard ECA processes.

All replaced risers should be returned to IBM via the normal UPR (Used Parts Return) process.

IBM and TSS Servicicers should record time and travel, along with the other product information to:

Service Code: 33 (PSS) or 08 (BP)

Machine Type: 8639

ECA: 011

Other Branch Office: 990 (PSS only)

U.S. Business Partners should contact the HelpCentre to register their customer requirements for these cards. DO NOT ORDER THE UPDATED RISER USING NORMAL PARTS ORDERING PROCEDURES.

Pentium is a trademark of Intel Corporation

SAS KEYWORDS:

PSY2

PSY2ECA

ECAVALID

SERVICER ONLY

PSY2ADPT

PSY2ERR

PSY2PART

HEALTH

1.1.92 ECA011, OBSOLETE

Record number: H013954

Device:	D/T8550	Service code:	
ECA number:	ECA011	Parts source:	
EC number:	EC000000	Publish flag:	R
Mandatory:	N	Hit count:	UHC04291
Automatic shipment:	N	Success count:	USC0001
Availability date:	88/12	Publication code:	PC50
Plant of control:	27	Date created:	088/11/11
Tip key:		Date last altered:	A93/06/17
		Owning B.U.:	USA

PURPOSE: THIS ECA HAS EXPIRED.

FEATURES:

Type, Model, Stage	With B/M	Machines Affected and/or Feature/Device Description	B/M to be Installed	Service Hours	System Hours
00000	B/M0000000		B/M0000000	00.1	00.0

PHYSICAL CHECK:

PREREQUISITES: NONE

COMPANION: NONE

CONCURRENT: NONE

DETAIL:

NOTES: THIS ECA HAS EXPIRED.

SAS KEYWORDS:

PSY2 PSYECA

1.1.93 ECA012&COLON. ERRORS, SYSTEM HANGS ON FIRST BOOT OF WINDOWS95

Record number: H16501

Device:	D/T6588	Service code:	33
ECA number:	ECA012	Parts source:	NONE
EC number:	EC000000	Publish flag:	R
Mandatory:	N	Hit count:	UHC00006
Automatic shipment:	N	Success count:	USC0000
Availability date:	97/07	Publication code:	PC50
Plant of control:	23	Date created:	097/07/22
Tip key:		Date last altered:	A97/07/22
		Owning B.U.:	USA

PURPOSE:

The purpose of this ECA is to provide a solution to a system hang and/or IOS/Disk Full error that may occur during the initial boot-up on certain IBM PC6588-12U systems preloaded with Windows95.

FEATURES:

Type, Model, Stage	With B/M	Machines Affected and/or Feature/Device Description	B/M to be Installed	Service Hours	System Hours
6588	B/M0000000	IBM PC6588-12U ONLY SERIAL NUMBERS 23AAA90 TO 23AAK17	B/M0000000	00.2	00.2
6588	B/M0000000	IBM PC6588-12U ONLY SERIAL NUMBERS 23NNA00 TO 23NNF96	B/M0000000	00.2	00.2

PHYSICAL CHECK:

Affected systems are limited to IBM PC6588-12U systems manufactured on or before July 10, 1997 and within the following serial number ranges:

6588 - 12U PC300-XL Serial Numbers 23-AAA90 to 23-AAK17
6588 - 12U PC300-XL Serial Numbers 23-NNA00 to 23-NNF96

PREREQUISITES:

None

COMPANION:

None

CONCURRENT:

None

DETAIL:

During the initial boot-up of IBM PC6588-12U systems preloaded with Windows95, the user may see an error message or hang condition similar to the following examples:

A "Cannot write to registry file, disk full" error message
An IOS Error: "Error: An I/O subsystem driver failed to load"
A hang condition at the "Setting Up Hardware" window
A hang condition at the main Windows95 logo screen
A Windows Protection Error message

NOTE: If the system HAS NOT been powered on for the first time and booted to the Windows95 operating system, perform steps 2 - 7 in STEP 1 below to prevent these errors from occurring.

A limited number of 6588-12U systems may experience problems following the initial boot of the Windows95 preload. Those systems that manifest problems can be recovered by following the fix procedures below.

STEP 1:

1. Power off the system.
2. Power the system back on and press F1 for the Setup Utility.
3. Highlight "Start Options" and press <Enter>.
4. Highlight "Configuration Mode" then use the arrow keys to select "Use BIOS Setup" and press <Enter>.
5. Highlight "Exit Setup" and press <Enter>.
6. Highlight "Yes, save and exit the Setup Utility" and press <Enter>.
7. Optional: If the Microsoft Windows95 Startup Menu Option is displayed when rebooting after following this procedure, select option "#1. Normal."

Some 6588 - 12U systems that experienced problems on the initial boot of Windows95 have Device Manager conflicts. Yellow caution

indicators will appear underneath the "Sound, Video, and Game Controllers" section beside the "Creative Labs Sound Blaster Pro" and the "Crystal PnP Audio System CODEC" devices. Those systems can be correctly configured by following the procedure below.

STEP 2:

1. From the Windows95 desktop, right click the "My Computer" icon and select "Properties."
2. From the System Properties Menu, select the "Device Manager" tab.
3. Highlight the "Creative Labs Sound Blaster Pro" device underneath the "Sound, video, and game controllers section and select Remove.
4. Select Close from the System Properties Window.
5. From the Taskbar select Start, then select Shutdown, then select "Restart the Computer?" and choose Yes.
6. As the system is rebooting, press F1 for the Setup Utility.
7. Highlight "Start Options" and press <Enter>.
8. Highlight "Configuration Mode" then use the arrow keys to select "Use PNP OS" and press <Enter>.
9. Press <Esc>, then highlight "Exit Setup" and press <Enter>.
10. Highlight "Yes, save and exit the Setup Utility" and press <Enter>.
11. After the Windows95 desktop is displayed, select Start, then select Shutdown, then select "Restart the Computer?" and choose Yes.
12. As the system is rebooting, press F1 for the Setup Utility.
13. Highlight "Start Options" and press <Enter>.
14. *Highlight "Configuration Mode" then use the arrow keys to select "Use BIOS Setup" and press <Enter>.
15. Press <Esc>, then highlight "Exit Setup" and press <Enter>.
16. Highlight "Yes, save and exit the Setup Utility" and press <Enter>.

NOTES:

*Configuration Mode is set back to "Use BIOS Setup" in order to maintain compatibility with system management software.

If at anytime during this procedure Windows95 will not allow the steps to be followed because of hang conditions or other error messages, contact the IBM PC HelpCenter at
1 - 800-772 - 2227.

IBM and TSS servicers should record time and travel, along with the other product information to:

Service Code: 33
Machine Type: 6588-12U
ECA: 012
Other Branch Office: 990

This ECA will expire on July 31, 1998.

-Windows and Windows95 are trademarks of Microsoft Corporation

SAS KEYWORDS:

PSY2	PSY2OPER	PSY2PROG	PSY2ERR
PSVP	PSVPOPER	PSVPPROG	PSVPERR
D/T6588	PC300XL	PC300-XL	6588
UNCLASSIFIED			

1.1.94 ECA012, 1.12GB, 2.25GB HARD DRIVE REPLACEMENT

Record number: H161379

Device:	D/T8640	Service code:	33
ECA number:	ECA012	Parts source:	LOC
EC number:	EC0000000	Publish flag:	R
Mandatory:	N	Hit count:	UHC00245
Automatic shipment:	N	Success count:	USC0000
Availability date:	97/10	Publication code:	PC50
Plant of control:	23	Date created:	097/10/13
Tip key:		Date last altered:	A98/01/20
		Owning B.U.:	USA

PURPOSE:

This ECA provides for the replacement of some SCSI 1.12GB and 2.25GB hard drives in IBM PC Server 300, 320, 325, 330, 500, 520, and 720 systems or in a type 3518 external enclosure connected to these IBM PC Servers. The affected Hard Drives may experience read/write errors which could cause defunct drive(s) (DDD).

See RETAIN records H131887 and H133326 for related information on defunct drives.

** EMEA version of H133326 is H044218 **

This ECA expires 10/31/98.

FEATURES:

Type, Model, Stage	With B/M	Machines Affected and/or Feature/Device Description	B/M to be Installed	Service Hours	System Hours
8640	B/M0000000	PC SERVER SYSTEMS	B/M0000000	01.5	01.3
8641	B/M0000000	WITH HARD DRIVES	B/M0000000	01.5	01.3
8642	B/M0000000	IDENTIFIED BY THE HARD DRIVE IDENTIFY UTILITY DISKETTE *****NOTE***** ****EMEA FIX TIMES**** 0.8HRS TRAVEL PER SITE 2.0HRS FILE REPLACE	B/M0000000	01.5	01.3

PHYSICAL CHECK:

Some of the following hard drives are eligible for this ECA:

- 1GB FRU p/n06H8560 (Option p/n94G2649 or p/n70G9861)
- 2GB FRU p/n06H8561 (Option p/n94G2650 or p/n70G9862)

Only those hard drives identified by the IBM Hard Disk Drive Identify Utility Diskette are to be replaced.

Warm Boot (<Ctrl> <Alt>) the IBM Hard Drive Identify Utility Diskette (V2.10) available on the IBM PC Company BBS/WEB; the utility will report the SCSI ID(s) of the hard drives that need to be replaced.

Note: It is important to Warm Boot the diskette as disk drive logs are analyzed by the utility diskette.

PREREQUISITES: NONE

COMPANION:

ECA016

The "IBM Hard Disk Drive Identify Utility Diskette" ver. 2.10 or higher will prompt (at completion) for the "PC Server 4.5 - 9.1GB Hard Drive Update Diskette" V 1.00 that is described in ECA016.

CONCURRENT: NONE

DETAIL:

1. Before going on-site, download the following diskettes:

- "IBM Hard Disk Drive Identify Utility Diskette" ver. 2.10 or higher.
- "PC Server RAID Synch/Update Utility" ver. 1.20 or higher.

The diskette images are available on the IBM PC Company BBS at

919 - 517 - 0001 or via the internet at the following URL:

Http: //www.pc.ibm.com/us/files.html

- At the Web page, Search on "Drive identify" or "ServeRAID synch"
 - Download the file. These files are self-extracting executable files that create diskettes.
2. Read and understand the detailed instructions in the README files of both diskettes before going on-site.
 3. Ensure that the customer has a current backup of all data.
 4. Follow the detailed instructions in the README file.
 5. Warm Boot (<Ctrl> <Alt> the Hard Disk Drive Identify Utility Diskette.
 6. If hard drives need to be replaced, order the correct ECA012 drive/tray assembly using Code "B":
 - 02K0300 - 2.25GB Hot-Swap Drive in type II tray assembly; (type II tray has a single green light pipe LED only)
 - 02K0302 - 2.25GB Hot-Swap Drive in type III tray assembly (type III tray has two(2) LEDs (green and amber) and a power-off button)
- Note: If Code "B" is not used, the orders will be rejected.
- Note: The replacement drives are all 2.25GB and are assembled in hot swap trays. Order the correct drive/tray assembly.
- Note: The type 3518 enclosure supports only the type III tray/drive assembly (FRU p/n02k0300).
- Note: For PC Servers without Hot-Swap disk drives, order the type II tray/drive assembly (FRU p/n02K0300), remove the tray and interposer, and install the jumper from the old drive.
7. If disk drives do not need replacing, remove the diskette, reboot the server, and exit this procedure. Notify the customer about the IBM White Papers which discuss Synchronization and preventative maintenance like "Data Scrubbing" for RAID systems. These IBM White Papers are available from the following IBM sources:
 - WEB URL: <http://www3.pc.ibm.com/support?page=search>
Search for "White Paper"
 - WEB URL: <http://www.pc.ibm.com/techconnect/tech/resource.html>
 - FaxBack: 1-800-426-3395; documents 11202,11203,11204, & 11205
 8. If the Hard Disk Drive Identify Diskette identifies disk drives to be replaced AND a ServeRAID Adapter is installed, read the important information below before replacing any disk drives.

Important: RAID-5 Servers with the IBM PC ServeRAID Adapter:

| If a customer with a ServeRAID RAID-5 array did not |
 | synchronize or is NOT sure if synchronization was performed on |
 | a RAID-5 array, prior to the installation of software or data |
 | to the hard drives, read the note below. |

| If synchronization was performed prior to installation, it is |
 | NOT necessary to run the Synch/Verify Utility noted below. |

| Note: |

| Before shutting down the Server and before replacing any hard |
 | drives in a RAID-5 Array on a Server with the IBM ServeRAID |
 | Adapter FRU p/n06H9334, FRU p/n76H6875, or FRU p/n76H3587, run |
 | the SYNCV1 Utility on the IBM PC ServeRAID Synch Verify Update |
 | Diskette to determine if synchronization was performed when |
 | the Server was first installed. |

| The SYNCV1 Utility is run while the Server is up and running; |
 | it may take 15 minutes to 2 hours to complete depending on the |
 | size of the RAID arrays. Schedule the SYNCV1 during off-peak |
 | hours to minimize the impact on system performance. |

| If the Synch/Verify (SYNCV1) determines that one or more
| RAID-5 logical drives may not be synchronized, then downtime
| must be scheduled to synchronize with the SYNCV2 Tool.
|
| The SYNCV2 tool will also report the existence of media errors
| if they exist. By using the SYNCV1 and SYNCV2 tools, media
| errors can be analyzed and data integrity issues can be
| identified.
| Once RAID-5 logical drives have been synchronized, they are
| synchronized for the life of the logical drive. Future
| preventative procedures such as Data Scrubbing should be
performed as outlined in RETAIN tip H134082.

9. Place the orange dot on the old drive and return to IBM.

NOTE: Step 9 is extremely important in order to ensure that
IBM receives credit from the vendor for these hard drives.

10. Place the ECA label on the rear of the Server indicating that
ECA012 has been performed.

Servicers replacing 1.12GB or 2.25GB drives with this ECA should
order the part numbers above which have been set up specifically
for use on ECA012 ONLY.

The replacement drive(s) will ship with the following:
- 2.25GB hard drive with tray
- replacement instructions
- orange dot to be placed on old drive returned to IBM
- ECA label to be placed on the rear of the system

Note:
For normal service activity on 1.12GB and 2.25GB hard drives,
use the normal FRU part numbers.

NOTES:

All parts must be ordered using Code B.

** EMEA Dealers: raise an EMERGENCY CLAIM **

This ECA will expire 10/31/98.

IBM/TSS CEs should record all time and parts to Service
Code 33, ECA012, Other Office 990.

SAS KEYWORDS:

PSY2	PSY2FDSK	HARDFILE	QUANTUM
06H8560	06H8561	06H8562	PASS 4
PSY2ECA	ECAVALID	PASS	PASS 2
1.12GB	2.25GB	4.51GB	SERVER
320	720	520	D/T8640
D/T8641	D/T8642	RAID	94G2649
94G2650	70G9861	70G9862	SERVICER ONLY
H133326	H044218	HEALTH	D/T3518

1.1.95 ECA013&COLON. 8650 BACKPLANE/DISPLAY PANEL FIRMWARE REPLACEMENT

Record number: H161692 Number of altered copies: 1

Device:	D/T8650	Service code:	33
ECA number:	ECA013	Parts source:	LOC
EC number:	ECEC0000	Publish flag:	R
Mandatory:	N	Hit count:	UHC00294
Automatic shipment:	N	Success count:	USC0000
Availability date:	97/11	Publication code:	PC50
Plant of control:	23	Date created:	097/10/13
Tip key:		Date last altered:	A98/05/13
		Owning B.U.:	USA

PURPOSE:

This ECA provides for the replacement of three (3) Firmware chips: one for each of the two backplanes, and one for the "front panel control board" of the PC Server 704 type 8650 model 4B0/7AX/4M0 to include:

- model 5M0 with machine s/n less than 23M8787
- model 6MM with machine s/n less than 23T6744

This ECA will expire on December 28, 2003

Servers eligible for this ECA may exhibit any of the following FALSE CPU failures at POST:

- PC Server 704 POST Messages:

0176 Previous CPU Failure - Slot 1, CPU #1
 0178 Previous CPU Failure - Slot 2, CPU #1
 0180 Attempting to boot with failed CPU

- OR- depending on the number of processors, the following POST messages (or something similar) may appear:

0177 Previous CPU Failure - Slot 1, CPU #2
 0179 Previous CPU Failure - Slot 2, CPU #2
 0181 BSP switched, system may be in uniprocessor mode

- OR-

0960 Watchdog Timeout has occurred

FEATURES:

Type, Model, Stage	With B/M	Machines Affected and/or Feature/Device Description	B/M to be Installed	Service Hours	System Hours
8650	B/M0000000	PC SERVER 704 TYPE 8650 MODEL 4B0/7AX/4M0 /5M0/6MM.	B/M01K6603	01.5	01.3

PHYSICAL CHECK:

- Look on the Server cover directly below the system service label (located on the access door side of the power supply chassis) check for the ECA013 label.
- If the ECA 013 label IS in place, then ONLY apply Retain TIP # H134786.
- If the ECA 013 label is NOT in place, then apply this ECA.

PREREQUISITES: NONE**COMPANION:**

This ECA is a companion to the Retain TIP # H134786

CONCURRENT: NONE**DETAIL:**

- 1 - Order Firmware kit, FRU p/n01K6603 (using code B) which includes:
 - Two 32 - pin Flash modules (to replace the existing modules on both backplanes).
 - One 28 - pin Flash module (to replace the existing module on the "front panel control board").
 - One ECA013 Installed label (to place on the inside of the server cover after you install the new modules).
 - Installation booklet.

A chip removal tool FRU p/n10G3902 will be

required.

Refer to the IBM PC Server Hardware Maintenance Manual Supplement, Part Number S78H-6414-02 for assembly details.

- 2 - Review the Safety Information on page III of the installation booklet contained in the Firmware kit.
- 3 - Review the information about handling static-sensitive devices on page v of the installation booklet contained in the Firmware Kit.
- 4 - Complete Installation instructions 1 through 16 in the Installation booklet contained in the Firmware kit.

NOTES:

This ECA will expire on December 28, 2003

All parts must be ordered using code B; a maximum of 5 Firmware kits can be ordered per order.

IBM/TSS CE's should record all time and parts to Service Code 33, ECA013, Other office 990.
Scrap the Removed Firmware chips locally.

SAS KEYWORDS:

PSY2	SERVICER ONLY	01K6603	FIRMWARE KIT
704	H134786	D/T8650	ECAVALID
CPU ERROR	10G3902	8650-4BW	8650-7AX
8650-4M0	8650-5M0	8650-6MM	CODE B

PSY2 RETAIN TIPS

ECA014 (EXPIRED), 8573 CONVERSION LEVEL 1 TO LEVEL 2 FRUS

PSY2ECBM
8573ECA
8573SYSERR

PSY2DISP
8573SYSPWR
8573SYSADPT

PSY2ADPT
8573SYSDISP
8573SYSPART

PSY2PART
8573SYSECBM

1.1.97 ECA015&COLON. PC SERVER 330 FIRMWARE UPGRADE ON SOME SELECT MODELS

Record number: H162305

Device:	D/T8640	Service code:	33
ECA number:	ECA015	Parts source:	LOC
EC number:	EC000000	Publish flag:	R
Mandatory:	Y	Hit count:	UHC00071
Automatic shipment:	N	Success count:	USC0000
Availability date:	97/11	Publication code:	PC50
Plant of control:	23	Date created:	097/11/25
Tip key:		Date last altered:	A98/05/12
		Owning B.U.:	USA

PURPOSE:

This ECA provides for the upgrade of Firmware code on the integrated ServeRAID II controller in the PC Server 330 type 8640 models PM0/PT0/PB0.

This ECA is mandatory.

Recent product evaluations have revealed that a data corruption condition can occur using the integrated ServeRAID II controller. Typical symptoms may include Operating System hangs, error executing a Operating System file, and in very rare occasions, corruption of data files could occur.

Flashing the integrated ServeRAID II controller Firmware to rev. 97326 fixes the problem.

This Firmware level is being implemented in manufacturing.

This ECA will expire September 30, 2004

FEATURES:

Type, Model, Stage	With B/M	Machines Affected and/or Feature/Device Description	B/M to be Installed	Service Hours	System Hours
8640	B/M0000000	USA: PC SERVER 330 TYPE 8640 MODEL PM0/PT0/PB0	B/M0000000	00.6	00.5
8640	B/M0000000	EMEA: PC SERVER 330 TYPE 8640 MODEL PM0/PT0/PB0 HOURS PER SYSTEM: 0.8 HOURS TRAVEL: 0.8.	B/M0000000	00.8	00.8

PHYSICAL CHECK:

The following System Serial number ranges in the field are suspect of downlevel ServeRAID II controller Firmware:

USA/WTTA: Increment example:
23YW998,23YW999,23YX000,23YX001

8640-PB0 23PR929 - 23PR999
23PT009 - 23PT394
23TN900 - 23TN999
23TP000 - 23TP999
23TR000 - 23TR999
23TT001 - 23TT999
23TV001 - 23TV999
23TW000 - 23TW899
23YT901 - 23YT999
23YV000 - 23YV721
23YW422 - 23YW999
23YX000 - 23YX431

8640-PT0 23PP935 - 23PP966
23PR142 - 23PR238

EMEA/FUJI: Increment example:
550736X,550736Y,550736Z,550737A

8640-PB0 555H21B - 555H47H
556F31P - 556H42B
550736X - 550894T

8640-PT0 555G940 - 555H21A
550578Z - 550707W

8640-PM0 555B31P - 555B84D

550421B - 550503A

Shutdown the system, then reboot. Observe the Firmware level displayed when the integrated ServeRAID II controller BIOS loads.

APPLY THIS ECA IF THE FIRMWARE LEVEL ON THE INTEGRATED SERVERAID II CONTROLLER IS 97239 OR LOWER.

CHECK THE FIRMWARE LEVEL AND IF REQUIRED, APPLY THIS ECA IF REPLACING THE SYSTEM PLANER FRU P/N60H8109.

PREREQUISITES:

This condition is only possible when the integrated ServeRAID II controller is being used as a primary or secondary disk subsystem controller. However, the Firmware update is strongly recommended for all applicable systems whether the integrated ServeRAID II controller is currently being used or not.

The integrated ServeRAID II controller is at Firmware level 97239 or lower.

COMPANION:

See the readme.txt file located on the "IBM PC Server 330 (8640-PB0, PM0, PT0) ServeRAID II Onboard Controller Firmware Update Diskette V2.31" for directions on the Firmware flash operation.

CONCURRENT: NONE

DETAIL:

- 1 - Download the "IBM PC Server 330 (8640-PB0, PM0, PT0) ServeRAID II Onboard Controller Firmware Update Diskette V2.31" from the IBM Website URL:

[Http: //www.pc.ibm.com/us/files.html](http://www.pc.ibm.com/us/files.html)
 -Select SEARCH.
 -Type "ServeRAID II Firmware" in the Keywords box, then select SEARCH.
 -Select the File with the following description: "IBM PC Server 330 (8640-PB0, PM0, PT0) ServeRAID II Onboard Controller Firmware Update Diskette V2.31"

The file is a self-extracting executable file that will create a diskette.

- 2 - Print the readme.txt file located on the "IBM PC Server 330 (8640-PB0, PM0, PT0) ServeRAID II Onboard Controller Firmware Update Diskette V2.31" (using a workstation).
- 3 - Shutdown, and power off the server.
- 4 - Boot the Server with the "IBM PC Server 330 (8640-PB0, PM0, PT0) ServeRAID II Onboard Controller Firmware Update Diskette V2.31" and follow the directions in the readme.txt printout to apply the Firmware flash to the integrated ServeRAID II controller. This Firmware flash will upgrade the integrated ServeRAID controller to rev. 97326.

NOTES:

This ECA will expire September 30, 2004

IBM/TSS CE's should record all time to Service Code 33, ECA015, other office 990.

EMEA Dealers: Claim as type 5, referencing ECA015.

SAS KEYWORDS:

PSY2	SERVICER ONLY	D/T8640	SERVERAID_II
ECA015	FLASH	8640-PM0	8640-PT0
8640-PB0	HEALTH	60H8109	PLANER
MANDATORY			

1.1.98 ECA015, NEW IBM PC ENHANCED DIAGNOSTIC RELEASE

Record number: H16960

Device:	D/T6577	Service code:	33
ECA number:	ECA015	Parts source:	MECH
EC number:	EC000000	Publish flag:	R
Mandatory:	N	Hit count:	UHC00170
Automatic shipment:	N	Success count:	USC0000
Availability date:	97/09	Publication code:	PC50
Plant of control:	23	Date created:	097/09/04
Tip key:		Date last altered:	A98/02/24
		Owning B.U.:	USA

PURPOSE:

The purpose of this ECA is to provide notification of a new diagnostic application for the IBM PC 300/700 Series and IntelliStation M-Pro/Z-Pro systems.

This is a no-part, no-labor Engineering Change Announcement. No warranty claims or QSAR's will be accepted against this ECA.

FEATURES:

Type, Model, Stage	With B/M	Machines Affected and/or Feature/Device Description	B/M to be Installed	Service Hours	System Hours
PC300	B/M0000000	SEE PHYSICAL CHECK SECTION FOR A LIST OF APPLICABLE MACHINE TYPES	B/M0000000	00.1	00.0

PHYSICAL CHECK:

The new IBM PC Enhanced Diagnostic program is designed to function on the following machine types:

PC 300 Series (PC 330/340/350/360/365)		PC 700 Series (730/750/PWS M & Z Pro)	
PC 140	- 6260	PC 700	- 6875/6885
PC 300GL	- 6272/6282	PC 700 MC	- 6876/6886
PC 300GL	- 6561/6591	PC 700	- 6877/6887
PC 300PL	- 6562/6592	PWS M Pro	- 6888/6898
PC 340	- 6560	PWS Z Pro	- 6899
PC 300	- 6575/6585		
PC 300	- 6576/6586		
PC 300	- 6577/6587		
PC 300XL	- 6588		
PC 365	- 6589		
PC 360	- 6598		

THE IBM PC ENHANCED DIAGNOSTIC DISKETTE REPLACES ALL PRIOR RELEASED VERSIONS OF IBM ADVANCED DIAGNOSTICS AND QAPLUS/PRO DIAGNOSTIC APPLICATIONS RELEASED TO SUPPORT THE SYSTEMS LISTED ABOVE.

As new systems are released to the marketplace, the diagnostic application will be updated to include the new systems and will be incorporated into the system ship group.

The diagnostic application functions only on the models listed above. Attempting to run the package on a model not listed above will result in a "This program is not licensed for this system" message.

PREREQUISITES:

None

COMPANION:

None

CONCURRENT:

None

DETAIL:

IBM, in conjunction with Watergate Software, the makers of PC Doctor diagnostic software, have developed a highly effective diagnostic application designed specifically to support the IBM PC 300/700 Series and IntelliStation product families.

This new diagnostic has been developed to:

-Decrease service costs associated with a high No Defect Found (NDF) rate on returned parts.

- Improve servicer confidence in the effectiveness of the new IBM PC Enhanced Diagnostic package.
 - To create a "machine specific" diagnostic application that is designed to thoroughly interrogate hardware and firmware while ensuring that the package is user-friendly enough for an end user to confidently diagnose a hardware failure with greater than 95% efficiency. This includes intermittent memory related failures.
- Particular focus has been given to memory isolation to the SIMM/DIMM level. Effectiveness ratings for the enhanced memory test exceed 95%. This translates into reduced service calls relating to intermittent memory failures, reduced NDF rates on cache, SIMMs/DIMMs, system boards, processors and related hardware. The end result is improved customer satisfaction and increased servicer confidence in the diagnostic package.

The diagnostic application will be used in new product manufacturing, field repair, and used-part-return repair processes. All three phases will see one common base of error codes to ensure a consistency in defect reporting and problem resolution.

Future direction for the IBM PC Enhanced Diagnostics will include the following:

- Regular maintenance updates to ensure the vitality of the diagnostic application.
- Enhancements based on user feedback.
- Customer use of the Diagnostic application prior to the HelpCenters dispatching an IBM Servicer.
- Mandatory reporting of error codes on Parts Return Forms.

NOTES:

The IBM PC Enhanced Diagnostic Diskette may be downloaded via the Internet from the IBM Personal Computer File Library by searching the following Internet URL:

[Http: //www.us.pc.ibm.com/files.html](http://www.us.pc.ibm.com/files.html)

The IBM PC Enhanced Diagnostic diskette may also be obtained from the IBM PC Company BBS system by calling 919-517-0001. Locate the "IBM PC 300/700 Files" section (Section #21) for the file titled:

T3GT11A.EXE - "IBM Enhanced Diagnostics for all non-486 IBM PC machines"

T3GT11A.TXT - Text file describing the new diagnostic package.

The new IBM PC Enhanced Diagnostic package will be available from the Mechanicsburg publication ordering system under publication number S06J-0786-00 in mid-September 1997. The package will contain the single diskette and an information sheet.

There is a complete set of HELP instructions incorporated into the single diagnostic diskette.
PC Doctor is a trademark of Watergate Software, Inc.
QAPLUS/PRO is a trademark of DiagSoft, Inc.

SAS KEYWORDS:

PSY2	PSVP	IBMPC	PSVPDIAG
PSY2DIAG	PSY2PROG	PSVPPROG	PSVPECA
PSY2ECA	UNCLASSIFIED	D/T6575	D/T6585
ECAVALID	D/T6576	D/T6586	D/T6560
D/T6260	D/T6272	D/T6282	D/T6577
D/T6587	D/T6588	D/T6589	D/T6598
D/T6875	D/T6885	D/T6876	D/T6886
D/T6877	D/T6887	D/T6888	D/T6899
D/T6562	D/T6592	D/T6898	D/T6561
D/T6591			

PSY2 RETAIN TIPS
ECA015, OBSOLETE

1.1.99 ECA015, OBSOLETE

Record number: H035474

Device:	D/T8550	Service code:	33
ECA number:	ECA015	Parts source:	LOC.
EC number:	ECC00993	Publish flag:	R
Mandatory:	N	Hit count:	UHC01289
Automatic shipment:	N	Success count:	USC0000
Availability date:	89/07	Publication code:	PC20
Plant of control:	27	Date created:	089/07/19
Tip key:		Date last altered:	A93/07/26
		Owning B.U.:	USA

PURPOSE:

*** THIS ECA EXPIRED 6-30-93 ***
INSTALL METAL SHIELD OVER 8525 DISKETTE DRIVE "A".

FEATURES:

Type, Model, Stage	With B/M	Machines Affected and/or Feature/Device Description	B/M to be Installed	Service Hours	System Hours
8525	B/M0000000	ALL 8525 WITH COLOR DISPLAY.	B/M0000000	00.7	00.5

PHYSICAL CHECK:

ANY 8525 WITH A COLOR DISPLAY.

PREREQUISITES: NONE

COMPANION: NONE

CONCURRENT: NONE

DETAIL:

MAGNETIC INTERFERENCE, GENERATED BY THE 8525 COLOR MONITOR, CAN
CREATE DISKETTE READ ERRORS ON THE "A" DRIVE. DRIVE "B" AND
MONOCHROME 8525 SYSTEMS ARE NOT AFFECTED.
IF A COLOR MODEL 8525 IS EXHIBITING DISKETTE READ ERRORS
DURING NORMAL USE, BUT THE DISKETTE DRIVE DOES NOT FAIL WHEN
TESTED WITH THE STARTER DISKETTE OR ADVANCED DIAGNOSTICS, A
METAL SHIELD (FRU P/N33F4904) SHOULD BE INSTALLED ON DRIVE "A".

THIS SHIELD MUST BE ATTACHED DIRECTLY TO THE DISKETTE
DRIVE, COVERING THE TOP AND BOTH SIDES OF THE DRIVE. THE
SHIELD, ATTACHING SCREWS, AND INSTALLATION INSTRUCTIONS ARE
AVAILABLE BY ORDERING FRU P/N33F4904.

NOTES:

*** THIS ECA EXPIRED 6-30-93 ***
ORDER PARTS THROUGH NORMAL DISTRIBUTION.

SAS KEYWORDS:

PSY2	PSY2DSKT	8525SYSDSKT	8525SYSERR
PSY2ECA	PSY2ERR	PSY2ECBM	8525SYSECBM

PSY2 RETAIN TIPS
ECA015, OBSOLETE

1.1.100 ECA015, OBSOLETE

Record number: H12693

Device:	D/T8550	Service code:	33
ECA number:	ECA015	Parts source:	LOC.
EC number:	ECC00993	Publish flag:	R
Mandatory:	N	Hit count:	UHC01275
Automatic shipment:	N	Success count:	USC0000
Availability date:	89/07	Publication code:	PC20
Plant of control:	27	Date created:	093/07/13
Tip key:		Date last altered:	A93/07/26
		Owning B.U.:	USA

PURPOSE:

*** THIS ECA EXPIRED 6-30-93 ***

FEATURES:

Type, Model, Stage	With B/M	Machines Affected and/or Feature/Device Description	B/M to be Installed	Service Hours	System Hours
8525	B/M0000000	ALL 8525 WITH COLOR DISPLAY.	B/M0000000	00.7	00.5

PHYSICAL CHECK:

ANY 8525 WITH A COLOR DISPLAY.

PREREQUISITES: NONE

COMPANION: NONE

CONCURRENT: NONE

DETAIL:

MAGNETIC INTERFERENCE, GENERATED BY THE 8525 COLOR MONITOR, CAN CREATE DISKETTE READ ERRORS ON THE "A" DRIVE. DRIVE "B" AND MONOCHROME 8525 SYSTEMS ARE NOT AFFECTED.

IF A COLOR MODEL 8525 IS EXHIBITING DISKETTE READ ERRORS DURING NORMAL USE, BUT THE DISKETTE DRIVE DOES NOT FAIL WHEN TESTED WITH THE STARTER DISKETTE OR ADVANCED DIAGNOSTICS, A METAL SHIELD (FRU P/N33F4904) SHOULD BE INSTALLED ON DRIVE "A".

THIS SHIELD MUST BE ATTACHED DIRECTLY TO THE DISKETTE DRIVE, COVERING THE TOP AND BOTH SIDES OF THE DRIVE. THE SHIELD, ATTACHING SCREWS, AND INSTALLATION INSTRUCTIONS ARE AVAILABLE BY ORDERING FRU P/N33F4904.

NOTES:

*** THIS ECA EXPIRED 6-30-93 ***

ORDER PARTS THROUGH NORMAL DISTRIBUTION.

SAS KEYWORDS:

PSY2	PSY2DSKT	8525SYSDSKT	8525SYSERR
PSY2ECA	PSY2ERR	PSY2ECBM	8525SYSECBM

1.1.101 ECA016&COLON. FIRMWARE UPGRADE FOR SOME 4.5/9.1GB SCSI HARD DRIVES

Record number: H162303

Device:	D/T8640	Service code:	33
ECA number:	ECA016	Parts source:	LOC
EC number:	EC000000	Publish flag:	R
Mandatory:	N	Hit count:	UHC00341
Automatic shipment:	N	Success count:	USC0000
Availability date:	97/12	Publication code:	PC50
Plant of control:	23	Date created:	097/12/05
Tip key:		Date last altered:	A98/05/13
		Owning B.U.:	USA

PURPOSE:

This ECA provides for a microcode upgrade on the following IBM SCSI hard drives:

- 4.5 GB 80-Pin SCSI Hard Disk Drive (FRU p/n76H5817)
- 4.5 GB 80-Pin SCSI Hard Disk Drive (FRU p/n01K6675)
- 9.1 GB 80-Pin SCSI Hard Disk Drive (FRU p/n76H5818)
- 9.1 GB 80-Pin SCSI Hard Disk Drive (FRU p/n01K6679)
- 4.5 GB 68 - Pin SCSI Hard Disk Drive (FRU p/n76H2697)
- 4.5 GB 68 - Pin SCSI Hard Disk Drive (FRU p/n93G2970)
- 9.1 GB 68 - Pin SCSI Hard Disk Drive (FRU p/n76H2698)
- 9.1 GB 68 - Pin SCSI Hard Disk Drive (FRU p/n93G2972)
- 4.5 GB 50-Pin SCSI Hard Disk Drive (FRU p/n76H2695)
- 9.1 GB 50-Pin SCSI Hard Disk Drive (FRU p/n76H2696)

The Microcode will upgrade these hard drives when attached to the following adapters/controllers:

		Utility Menu selection #
DAC 960 PL F/W RAID Adapter (PC Server 704 only)	FRU p/n75H9011 Opt. p/n94G5884	5
Micro Channel RAID Adapter	FRU p/n06H3059 Opt. p/n70G9263	4
Micro Channel SCSI-2 F/W /A	FRU p/n92F0160 Opt. p/n70G8498	4
PCI RAID Adapter	FRU p/n06H5078 Opt. p/n94G2764	3
ServerRAID Adapter	FRU p/n06H9334 Opt. p/n70G8489	2
ServerRAID Adapter	FRU p/n76H6875 Opt. p/n70G8489	2
ServerRAID II Adapter	FRU p/n76H3587 Opt. p/n76H3584	2
ServerRAID Onboard Controller	(Integrated)	2
PCI SCSI-2 F/W Adapter	FRU p/n06H6473 Opt. p/n94G3771	1
PCI SCSI-2 F/W Adapter II	FRU p/n06H8574 Opt. p/n94G4673	1
PCI SCSI-2 U/W Adapter	FRU p/n60H7823 Opt. p/n76H5407	1
PCI SCSI-2 F/W Controller	(Integrated)	1
PCI SCSI-2 U/W Controller	(Integrated)	1

Servers eligible for this ECA may exhibit hard drive read errors on the hard drives specific to this ECA and/or may experience degradation of RAID disk subsystem performance due to read errors on the drives specific to this ECA. Drives may be located in the Server or a type 3518 enclosure attached to the Server.

This ECA is "As Required"

FEATURES:

Type, Model, Stage	With B/M	Machines Affected and/or Feature/Device Description	B/M to be Installed	Service Hours	System Hours
8638	B/M0000000	PC SERVER 315	B/M0000000	00.5	00.3
8639	B/M0000000	PC SERVER 310	B/M0000000	00.5	00.3
8639	B/M0000000	PC SERVER 325	B/M0000000	00.5	00.3

ECA016COLON. FIRMWARE UPGRADE FOR SOME 4.5/9.1GB SCSI HARD DRIVES

8640	B/M0000000	PC SERVER 320	B/M0000000	00.5	00.3
8640	B/M0000000	PC SERVER 330	B/M0000000	00.5	00.3
8641	B/M0000000	PC SERVER 500	B/M0000000	00.5	00.3
8641	B/M0000000	PC SERVER 520	B/M0000000	00.5	00.3
8642	B/M0000000	PC SERVER 720	B/M0000000	00.5	00.3
8650	B/M0000000	PC SERVER 704	B/M0000000	00.5	00.3
8651	B/M0000000	NETFINITY 7000	B/M0000000	00.5	00.3
		EMEA: (SAME MODELS)			
		HOURS PER SYSTEM: 0.8			
		HOURS TRAVEL: 0.8			

PHYSICAL CHECK:

- Determine which SCSI Adapter(s)/Controller is present in the PC Server/Netfinity server (the Microcode Update will prompt for a SCSI Adapter/Controller selection when it is booted).
- If a type 3518 external storage enclosure is attached to the PC Server/Netfinity server, ensure that it is connected securely to the appropriate SCSI Port, and powered on.

Note: Refer to the Adapter List in this Document for FRU p/n's of adapters that the update utility supports.

PREREQUISITES:

To Install	ECA	EC	Physical Check
B/M	Required	Required	for Prerequisites
B/M0000000	ECA000	EC000000	NONE

COMPANION:

To Install	ECA	Machine	Comments
B/M	Required	Type	
B/M0000000	ECA012	0000	THE UPDATE UTILITY PROMPTS FOR THE HARD DISK IDENTIFY DISKETTE USED IN ECA012. LIKEWISE, THE DISK IDENTIFY DISKETTE USED IN ECA012 PROMPTS FOR THE UPDATE UTILITY DISKETTE.

CONCURRENT:

To Install	ECA	Machine	Comments
B/M	Required	Type	
B/M0000000	ECA000	0000	RETAIN RECORD# H162302 IDENTIFIES A UPDATE UTILITY THAT IS ONLY FOR USE ON THE SERVERAID II ADAPTER.

DETAIL:

The Microcode update is executed from a Utility Update Diskette. This diskette is bootable. Upon boot, it will prompt for the user to select from a list of SCSI adapters to load the respective driver (see the "Utility Menu selection #" column in the adapter/controller List for proper adapter selection). When the driver loads, the adapter/controller will initialize and then the utility will search for the SCSI hard drives specific to this ECA.

If found, the drive(s) Firmware will be flashed to a new microcode level (level 63) which fixes the read error issue.

NOTE: DO NOT power off the PC Server / Netfinity server or a attached type 3518 enclosure while the Update Utility is running.

NOTE: If there are multiple SCSI adapters in the system that are identical, it will not be necessary to run the update utility for each adapter.

NOTE: If there are multiple SCSI adapters of different types, then the Update Utility needs to be executed more than one time since the correct driver must be selected at boot time. The adapters are different and will respond to their respective drivers.

The Update utility is located on the IBM Website listed as:
 "PC Server 4.5 - 9.1GB Hard Drive Update Diskette"
 Ver 1.00. The URL is:

Http: //www.pc.ibm.com/us/files.html

- Search on 9.1 GB.
- Locate the file by the above description.
- Download the file. It is a self extracting executable file that creates a diskette.

NOTES:

This ECA will expire on June 14, 2002.

IBM/TSS CE's should record all time to Service Code 33, ECA016, other office 990.

** EMEA Dealers: claim as type 5, referencing ECA016 **

SAS KEYWORDS:

PSY2	UNCLASSIFIED	D/T8638	D/T8640
D/T8641	D/T8642	D/T8650	D/T8651
MICROCODE	4.5GB	9.1GB	H162302
ECA016	ECA012	HEALTH	D/T3518

1.1.102 ECA016, OBSOLETE

Record number: H022988

Device:	D/T8550	Service code:	33
ECA number:	ECA016	Parts source:	LOC.
EC number:	EC0000000	Publish flag:	R
Mandatory:	N	Hit count:	UHC01361
Automatic shipment:	N	Success count:	USC0000
Availability date:	89/04	Publication code:	PC20
Plant of control:	27	Date created:	089/03/30
Tip key:		Date last altered:	A93/01/13
		Owning B.U.:	USA

PURPOSE:

*** THIS ECA HAS EXPIRED ***

FEATURES:

Type, Model, Stage	With B/M	Machines Affected and/or Feature/Device Description	B/M to be Installed	Service Hours	System Hours
0000	B/M0000000		B/M0000000	00.1	00.0

PHYSICAL CHECK: NONE

PREREQUISITES: NONE

COMPANION: NONE

CONCURRENT: NONE

DETAIL: NONE

NOTES:

*** THIS ECA IS OBSOLETE ***

SAS KEYWORDS:

PSY2 PSY2ECA

1.1.103 ECA016, SYSTEM BOARD UNSEATING CONDITION

Record number: H163169 Number of altered copies: 1

Device:	D/T6562	Service code:	33
ECA number:	ECA016	Parts source:	MECH
EC number:	EC000000	Publish flag:	R
Mandatory:	N	Hit count:	UHC00001
Automatic shipment:	N	Success count:	USC0000
Availability date:	98/03	Publication code:	PC50
Plant of control:	23	Date created:	098/03/24
Tip key:		Date last altered:	A98/03/24
		Owning B.U.:	USA

PURPOSE:

The purpose of this ECA is to provide rubber spacers, or "stops" to eliminate a potential system board unseating condition. This condition may occur during shipment, or after setup and operation of the unit in a vertical position.

This condition can potentially cause "dead system" errors (Power LED On, No POST, No Display, No IPL) or other POST related errors to occur.

FEATURES:

Type,	With	Machines Affected	B/M to be	Service	System
Model,		and/or Feature/Device	Installed	Hours	Hours
Stage	B/M	Description			
6562	B/M0000000	6562 PC300PL ALL MODELS	B/M0000000	00.2	00.2

PHYSICAL CHECK:

1. Date of manufacture prior to 01/30/1998. The date of manufacture code can be found on the label attached to the bottom of the system unit.
2. Presence of two rubber spacers on the inside surface of the side bracket.

PREREQUISITES:

None

COMPANION:

None

CONCURRENT:

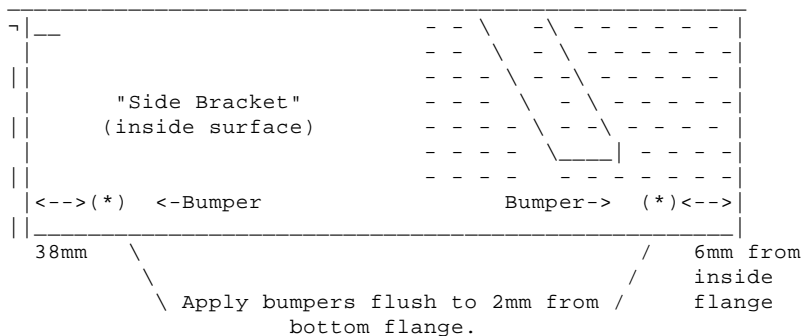
None

DETAIL:

All models of the PC300PL Series 6562 systems may experience the system board unseating condition during shipment, or after continued operation in a vertical position.

Machine Type 6592 systems are not affected.

Rubber spacer kits are available from Mechanicsburg under FRU P/N03K9732. The FRU kit contains two self-adhesive rubber spacers, one screw for the side bracket, and an illustration for proper placement of the spacers.



NOTES:

If the system unit is currently exhibiting the symptoms described above, remove and reseal the system board before replacing any parts. See "Removing and Replacing the System Board" found in the "Installing Options in Your Personal Computer" booklet supplied with the system.

If the symptoms persist after reseating the system board, continue normal problem determination procedures to isolate

the failing FRU or application.

==> This ECA will expire on December 31, 1999 <==

SAS KEYWORDS:

PSY2	PSVP	IBMPC	PSVPERR
PSY2ERR	PSY2PART	PSVPPART	PSVPECA
PSY2ECA	PC300PL	D/T6562	6562
03K9732	SERVICER ONLY		

1.1.104 ECA017, OBSOLETE

Record number: H026535

Device:	D/T8550	Service code:	
ECA number:	ECA017	Parts source:	LOC.
EC number:	EC000000	Publish flag:	R
Mandatory:	N	Hit count:	UHC04521
Automatic shipment:	N	Success count:	USC0001
Availability date:	90/11	Publication code:	PC20
Plant of control:	27	Date created:	089/03/30
Tip key:		Date last altered:	A93/06/17
		Owning B.U.:	USA

PURPOSE: THIS ECA HAS EXPIRED.

FEATURES:

Type, Model, Stage	With B/M	Machines Affected and/or Feature/Device Description	B/M to be Installed	Service Hours	System Hours
00000	B/M0000000		B/M0000000	00.1	00.0

PHYSICAL CHECK:

PREREQUISITES: NONE

COMPANION: NONE

CONCURRENT: NONE

DETAIL:

NOTES: THIS ECA HAS EXPIRED.

SAS KEYWORDS:

PSY2 PSY2ECA

Record number: H163554

Device:	D/T8644	Service code:	33
ECA number:	ECA018	Parts source:	BBS
EC number:	EC000000	Publish flag:	R
Mandatory:	Y	Hit count:	UHC00014
Automatic shipment:	N	Success count:	USC0000
Availability date:	98/04	Publication code:	PC50
Plant of control:	23	Date created:	098/04/03
Tip key:		Date last altered:	A98/05/04
		Owning B.U.:	USA

PURPOSE:

This ECA provides for a required flash upgrade to the System BIOS revision level 29a or higher.

THIS IS A MANDATORY ECA

FEATURES:

Type, Model, Stage	With B/M	Machines Affected and/or Feature/Device Description	B/M to be Installed	Service Hours	System Hours
8644	B/M0000000	USA: NETFINITY SERVER 3500 TYPE 8644 MODELS: 10U,20U,30U,21U,29U EMEA: _SAME SYSTEMS: TRAVEL PER SITE: 0.8HR SERVICE PER SYSTEM: 1.0HR	B/M0000000	01.0	00.3

PHYSICAL CHECK:

The System is a Netfinity server 3500 Type 8644 model 10U, 20U, 30U, 21U, 29U, with a BIOS revision less than 29A.

Note: The BIOS revision level of the System may be determined by accessing the "Product Data" Selection listed in the "Configuration/Setup Utility" screen that may be accessed by pressing <F1> when prompted during System Boot.

PREREQUISITES: NONE

COMPANION: NONE

CONCURRENT: NONE

DETAIL:

If the System meets the Physical Check criteria, flash the System BIOS to 29A or higher using the following procedure:

- 1 - Prior to going onsite, download the "Netfinity 3500 BIOS flash update diskette version 1.29 (revision 29)" (or higher) from the IBM Website at the following URL:

Http: //www.pc.ibm.com/us/files.html

- Select SEARCH
- Type 3500 BIOS in the keywords box
- Select SEARCH
- Select the "Netfinity 3500 BIOS flash update diskette version 1.29 (revision 29)" (or higher) to download

The file is a self-extracting executable file that will create a diskette.

In addition, open and print the associated README file to reference during step 3.

- 2 - Power down the Server, place the diskette in the diskette drive, then power up the Server.
- 3 - Follow the on-screen prompts to flash the System BIOS.
*****IMPORTANT*****
DO NOT INTERRUPT THE FLASH UTILITY OPERATION

- 4 - Verify the upgrade by viewing the BIOS revision level (access the "Product Data" Selection listed in the "Configuration/Setup Utility" screen that may be accessed by pressing <F1> when prompted during System Boot).

NOTE: BIOS revision 29A or higher implements the following:

- Fix for installing SCO OpenServer. Installing SCO OpenServer 5.04 (with earlier system BIOS) would result in the following error message at the "Hardware Configuration" screen immediately after the boot kernel has loaded into memory (at the beginning of installation):
"k_trap - Unexpected NMI in system mode!"
- Pentium II support (A0 / A1 processor configurations). Previous BIOS revisions do not offer A1-stepping Pentium II 66/333Mhz support, which would result in the following error after the Adaptec SCSI BIOS is displayed:

"167 No processor BIOS found"
- Language selection function in the ServerGuide boot CD. Previous BIOS versions required a work around, implemented in ServerGuide, in order to allow users to select language desired. BIOS 29A or higher will allow correct language selection.
- Corrected the ECC algorithm for the processor L2 cache. Users must upgrade to BIOS 29A or higher to improve robustness of the Netfinity 3500.
- Added support for CDROM boot catalog menu.
- Added support for hardfiles greater than 8.4GB.

NOTE: On rare occasions, the System may experience a hang, trap(s), or a NT Blue Screen if using a earlier BIOS revision.

NOTES:

This is a MANDATORY ECA.

This ECA will expire on November 30, 2004

USA:

IBM TSS CE's should record all time and parts to Service code 33, ECA018, Other Office 990.

EMEA:

IBM PSS CE's as above.

Business Partner Servicicers should claim using CPPS claim type 5, Code "SJ".

Adaptec is a trademark of Adaptec Inc.

NT is a trademark of Microsoft Corporation.

Pentium II is a trademark of Intel Corporation.

SCO and OpenServer are trademarks of The Santa Cruz Operation, Inc.

SAS KEYWORDS:

PSY2	PSY2ECA	ECA018	D/T8644
UNCLASSIFIED	NETFINITY	3500	PSY2BIOS
BIOS	29A	MANDATORY	UNCLASSIFIED
167	K_TRAP	NMI	HEALTH
ECC	LANGUAGE	STEPPING	SCO
CDROM	9GB		

1.1.106 ECA018, SYSTEM HANGS & TRAP ERRORS WITH 256KB L2 CACHE

Record number: H163546

Device:	D/T6282	Service code:	33
ECA number:	ECA018	Parts source:	MECH
EC number:	EC000000	Publish flag:	R
Mandatory:	N	Hit count:	UHC00000
Automatic shipment:	N	Success count:	USC0000
Availability date:	98/04	Publication code:	PC50
Plant of control:	23	Date created:	098/04/21
Tip key:		Date last altered:	A98/05/01
		Owning B.U.:	USA

PURPOSE:

The purpose of this ECA is to correct possible intermittent system hangs or other error indications in IBM PC300GL Series 6272/6282 systems equipped with a 256Kb L2 cache memory module.

FEATURES:

Type, Model, Stage	With B/M	Machines Affected and/or Feature/Device Description	B/M to be Installed	Service Hours	System Hours
6272	B/M0000000	6272 PC300GL ALL MODELS	B/M0000000	00.2	00.2
6282	B/M0000000	6282 PC300GL ALL MODELS	B/M0000000	00.2	00.2

PHYSICAL CHECK:

System failures that have been reported to IBM as of this date have contained the following brand of 256Kb level 2 cache installed. Note that only a small percentage of systems containing this module type have exhibited any of the failing conditions:

1. ISSI brand logo printed on the chips.
2. Label attached to the rear of the module contains "ISSI000210x" (x=any alpha character, typically A or B).
3. IBM FRU P/N01K1554.

Note that there are other brands of cache modules used in the manufacture of the PC 300GL systems which also contain a label indicating IBM FRU P/N01K1554.

PREREQUISITES:

None

COMPANION:

None

CONCURRENT:

None

DETAIL:

IBM PC300GL Series 6272/6282 systems with a 256Kb level 2 cache module installed may intermittently exhibit the following error indications:

1. OS/2 Warp 3.x or 4.x - Trap 000D and 000E errors.
2. Microsoft WindowsNT 3.xx or 4.x Blue Screen system hang condition.
3. Microsoft Windows95 General Protection Faults (GPF) and system hang conditions.
4. System hangs when running Scandisk or Check Disk (CHKDSK) fixed disk utilities.

Remove the 256Kb L2 cache module from the system and attempt to recreate the failing condition. If the problem can be recreated with the cache module removed, THIS ECA DOES NOT APPLY. Continue with normal problem determination to isolate the failing FRU or application.

If the error cannot be recreated with the cache module removed, the 256Kb level 2 cache may be the cause of the failing condition.

NOTES:

If the system is exhibiting failures consistent with the details stated above, replace the L2 cache memory module with IBM FRU P/N01K4400.

As a temporary fix, the system may be operated with the 256Kb level 2 cache module removed from the system.

This ECA will expire on December 31, 2001.

Windows95 and WindowsNT are trademarks of Microsoft Corporation.

SAS KEYWORDS:

PSY2	PSY2ERR	PSY2MEM	PSY2PART
PSVP	PSVPERR	PSVPMEM	PSVPPART
D/T6272	D/T6282	6272	6282
01K1554	01K4400	PSY2OEM	PSVPOEM
INTERNAL ONLY			

1.29, revision 29a (or higher).

Planar Replacement and Processor Upgrade:

1. Save the CMOS configuration on the original Planar to diskette, using the procedure listed in the Readme.lst file located on the Netfinity 3500 BIOS Flash Update Diskette.
2. Power down the system and any connected peripherals. Disconnect the power cord feeding power to the System as well as the power cord(s) feeding power to any connected peripherals.
3. Remove the System cover.
4. Note the location of and remove any Adapters located on the System Planar.
5. Remove the existing Microprocessor(s) and companion processor bus terminator card (if only one Microprocessor was installed). Refer to the "Netfinity 3500 Hardware Maintenance Manual"(p/n05L1908) section on "Installing or Replacing Microprocessors".
6. Remove the System Planar FRU p/n93H7269.
7. Set the Microprocessor speed switches located at the lower right corner of the new replacement System Planar FRU p/n08L0046 for 333MHz operation as identified in the following diagram:

Microprocessor Speed Switch Settings:

		Switch # 12A1									
		1	2	3	4	5	6	7	8		
On	X			X						Note: Leave 5,6,7,8	
Off	X		X							in their default	
											positions.

8. Install the new replacement System Planar into the System.

Note:

When installing the replacement Planar FRU p/n08L0046, care must be taken to avoid bending the metal "fingers" on the EMC shield.

When properly seated, thin metal "fingers" will be in place over the USB, mouse/keyboard, and Ethernet port connectors. For installation of the System Planar, first, angle the System Planar downward and under the EMC shield "fingers" to prevent bending or damaging the "fingers."

9. Install the 333MHz Microprocessor(s) Option p/n01K8025 and the processor bus terminator card from the original System Planar (if only one Processor is to be installed). Use the Air Baffle that ships with the 333MHz Processor Option. Refer to the "Netfinity 3500 Hardware Maintenance Manual"(p/n05L1908) section on "Installing or Replacing Microprocessors".
10. Re-install any Adapters that were removed in step 4 to their original locations.
11. Install the System Cover.
12. Connect the Power Cord to the System and the Power Cord(s) to any Peripheral(s) connected to the System.

BIOS Update:

13. Insert the Netfinity 3500 BIOS Flash Update Diskette in the floppy drive, then turn the power on.
14. Resolve any configuration or POST startup error messages following the on screen instructions.

DO NOT DISTURB THE BIOS FLASH PROGRAM UNLESS PROMPTED

15. When the BIOS update is complete, remove the diskette from the floppy drive, and press <Enter> to restart the system.

Initialization and Setting Defaults:

16. Refer to the "Important Instructions when replacing the 8644's System Board" section of the Readme.lst file located in the Netfinity 3500 BIOS Flash Update Diskette.

Restore Customer's CMOS if backed up in step 1:

17. Follow the procedure in the readme.lst file located in the Netfinity 3500 BIOS Flash Update Diskette to restore the CMOS configuration.

18. Initialization of the replacement system board is now complete.

NOTES:

This ECA is "Fix-as-required".

This ECA will expire November 30, 2004.

USA:

IBM TSS CE's should record all time and parts to Service Code 33, ECA019, Other Office 990.

EMEA:

IBM PSS CE's should record all time and parts to Service Code 33, ECA019, Other Office 990.

Business Partners use warranty claim type 5 (ECA), and quote ECA number SK (2 character code used due to CPPS restrictions).

Dealer Information:**USA:**

Customers may arrange to have this ECA installed by calling 1 - 800-IBM-SERV. Request that ECA019 be installed.

This ECA is only required if upgrading the Netfinity 3500 server to 333mhz, and does not include the 333Mhz Option p/n01K8025, and will not be applied unless proof of purchase for the Option is provided.

SAS KEYWORDS:

PSY2	PSY2ECA	ECA019	ECA
019	SERVICER ONLY	333MHZ	333
MHZ	D/T8644	93H7269	08L0046
01K8025	UPGRADE	NETFINITY	3500
01K3135	VIDEO	HANG	12A1

1.1.108 ECA019, DATA MISCOMPARE ERRORS USING IBM ANTIVIRUS V3.0

Record number: H163722 Number of altered copies: 1

Device:	D/T9548	Service code:	33
ECA number:	ECA019	Parts source:	NONE
EC number:	EC000000	Publish flag:	R
Mandatory:	Y	Hit count:	UHC00007
Automatic shipment:	N	Success count:	USC0000
Availability date:	98/05	Publication code:	PC50
Plant of control:	23	Date created:	098/05/15
Tip key:		Date last altered:	A98/05/18
		Owning B.U.:	USA

PURPOSE: The purpose of this ECA is to correct a down level program condition that may result in a potential data modification problem on systems using IBM Antivirus version 3.0, build 300.507. See the Physical Check section below for build level determination.

Data miscompare errors may be observed on servers running Microsoft WindowsNT 4.0 serving clients with WindowsNT 4.0 and IBM Antivirus v3.0 installed.

FEATURES:

Type, Model, Stage	With B/M	Machines Affected and/or Feature/Device Description	B/M to be Installed	Service Hours	System Hours
9548	B/M0000000	MODELS 31U, 31F, 310 US, FRENCH, GERMAN LOADED WITH MICROSOFT WINDOWS NT 4.0	B/M0000000	00.3	00.2

PHYSICAL CHECK:

IBM 9548 systems running Microsoft WindowsNT 4.0 and IBM Antivirus v3.0, (Build level 300.507) connected to a server running Microsoft WindowsNT 4.0.

To determine if the IBM Antivirus program currently installed is exposed to the problem, a customer can perform the following steps:

1. From the WindowsNT desktop, open the IBM Antivirus folder from the START, PROGRAMS menu or right click on the minimized IBM Antivirus icon on the right side of the Task Bar.
2. Click on "Log", then "Current Log" in the title bar of the IBM Antivirus for WindowsNT window.
3. The Current Log is displayed with the first line giving the version of the Antivirus program and the "Build" number.
4. THE AFFECTED VERSION OF THE IBM ANTIVIRUS PROGRAM IS VERSION 3.0 WITH BUILD NUMBER 300.507.
5. IBM ANTIVIRUS VERSION 3.0 WITH BUILD LEVELS OTHER THAN 300.507 ARE NOT AFFECTED BY THIS PROBLEM

If the currently installed build level of IBM Antivirus is 300.507, open the IBM Antivirus - System Shield function. To do this, "Cancel" out of the Current Log screen and click on "System Shield" from the "Setup" pull down menu in the IBM Antivirus title bar. Verify that the option for "Check files when accessed" box is checked. If the box is checked, the system is exposed.

PREREQUISITES:

None

COMPANION:

None

CONCURRENT:

None

DETAIL:

Systems running Microsoft WindowsNT and IBM Antivirus v3.0 (Build level 300.507) may experience data loss or data modification if the IBM Antivirus program is configured for "Check files when accessed" in the Antivirus System Shield.

When writing successive data files across a WindowsNT 4.0 network, WindowsNT opens and then closes files. IBM Antivirus synchronously analyzes the files from the server and then compares the data. The software layers involved in analyzing the data files may lose the correct sequence of file operations causing an open file not to be closed and possibly overwritten. The file may be modified without notice to the user. No error or warning message is displayed. The system continues to operate normally. The only indication that a user may experience as a result of this problem is an error condition when the corrupted or manipulated file is accessed. The use of some corrupted data files may not exhibit any failure symptom when accessed.

Systems complying to the PHYSICAL CHECK Section of this ECA can have either of the following corrections installed using this ECA.

Note: Customers can also apply the corrections by using the following instructions.

Exposure to the failing condition can be eliminated by removing the check from the box labeled "Check files when accessed" in the IBM Antivirus System Shield function.

Exposure to this problem can also be eliminated by upgrading the IBM Antivirus package.

NOTE: THERE IS A DISTINCT DIFFERENCE BETWEEN AN UPDATE TO THE IBM ANTIVIRUS FOR WINDOWSNT PROGRAM AND A COMPLETE UPGRADE. THE RESOLUTION TO THIS PROBLEM REQUIRES A COMPLETE UPGRADE TO THE APPLICATION RATHER THAN THE TYPICAL VIRUS SIGNATURE UPDATES. The latest available version of the IBM Antivirus upgrade may be obtained in the following manner:

1. Download the complete IBM Antivirus Upgrade via the Internet using the following FTP command:

Ftp: //ftp.pc.ibm.com/pub/special/haze/avwsntea.exe

To install this application, click on the Start button, click on Run, type the file path and name in the space provided, click on OK, and then follow the instructions on the screen.

-OR-

If diskettes are required, download the portable version files below:

Ftp: //ftp.pc.ibm.com/pub/special/haze/avntea1.dsk
ftp: //ftp.pc.ibm.com/pub/special/haze/avntea2.dsk
ftp: //ftp.pc.ibm.com/pub/special/haze/avntea3.dsk

These diskettes will perform a complete install of the updated version of IBM Antivirus for WindowsNT v3.0, build level 304.073.

To extract the diskette images from their compressed format (.DSK), download the .DSK extraction utility LDF.COM from the following Internet URL:

Http: //www.pc.ibm.com/files.html

LDF.COM is a self-extracting file that contains the utility and instructions on how to build the installation diskettes.

2. If further assistance is required, contact the IBM Personal Systems Group HelpCenter at 1-800-772-2227. The HelpCenter will NOT provide the IBM Antivirus package, only assistance in determining if the system is exposed and user assistance in downloading the required upgrade package. The upgrade package MUST be downloaded from the FTP site.

Outside of the United States, use the normal support structure of Country Support and Local HelpCenters for additional assistance.

NOTES :

This is a customer installable fix or upgrade.

This ECA will expire on December 31, 1999

Windows and WindowsNT are trademarks of the Microsoft Corporation.

SAS KEYWORDS:

PSY2	THINKPAD	UNCLASSIFIED	SERVER
NETFINITY	PC SERVER	PSVP	IBMAV
D/T6561	D/T6591	6561	6591
DESKTOP	VIRUS	CDT	PWS
INTELLISTATION			

1.1.109 ECA020, OBSOLETE

Record number: H035901

Device:	D/T8550	Service code:	33
ECA number:	ECA020	Parts source:	LOC
EC number:	EC000000	Publish flag:	R
Mandatory:	N	Hit count:	UHC02308
Automatic shipment:	N	Success count:	USC0000
Availability date:	89/06	Publication code:	PC40
Plant of control:	27	Date created:	089/06/21
Tip key:		Date last altered:	A93/07/26
		Owning B.U.:	USA

PURPOSE:

*** THIS ECA EXPIRED 6-30-93 ***

FEATURES:

Type, Model, Stage	With B/M	Machines Affected and/or Feature/Device Description	B/M to be Installed	Service Hours	System Hours
8570	B/M0000000		B/M0000000	01.0	01.0

PHYSICAL CHECK:

PREREQUISITES: NONE

COMPANION: NONE

CONCURRENT: NONE

DETAIL:

NOTES:

*** THIS ECA EXPIRED 6-30-93 ***

SAS KEYWORDS:

PSY2	PSY2FDSK	PSY2ECA	PSY2ECBM
8570ECA	8570SYFDSK	8570SYSECBM	

1.1.110 ECA021&COLON. PC SERVER 300 HANGS OR RE-BOOTS INTERMITTENTLY

Record number: H163753

Device:	D/T8640	Service code:	33
ECA number:	ECA021	Parts source:	LOC
EC number:	ECE72530	Publish flag:	R
Mandatory:	N	Hit count:	UHC00002
Automatic shipment:	N	Success count:	USC0000
Availability date:	98/05	Publication code:	PC50
Plant of control:	23	Date created:	098/05/07
Tip key:		Date last altered:	A98/05/21
		Owning B.U.:	USA

PURPOSE:

This ECA provides for the replacement of the System Planar in PC Server 300 Type 8640 model 0P0, 0PT, 1P0, 1PT. Application of this ECA requires that normal PD has been performed to eliminate any other causes of intermittent hangs and / or reboots, and the System holds true to the Physical Check section in this document.

This ECA will expire on January 23, 2002

FEATURES:

Type, Model, Stage	With B/M	Machines Affected and/or Feature/Device Description	B/M to be Installed	Service Hours	System Hours
8640	B/M0000000	USA: PC SERVER 300 MODELS 0P0, 0PT, 1P0, 1PT EMEA: _SAME SYSTEMS: TRAVEL PER SITE: 0.8HR SERVICE PER SYSTEM: 1.5HR	B/M0000000	01.5	01.0

PHYSICAL CHECK:

All of the following must hold true for this ECA to apply:

- The System is a PC Server 300 Type 8640 model 0P0, 0PT, 1P0, 1PT configured with a System Board FRU p/n 71G0747 or 06H8756 (FRU# is located at the middle of the System Board).
- The System is properly configured with a supported PCI LAN Adapter or Disk Subsystem Adapter.
- The System is properly configured with supported memory.
- The System is running any of the supported Network Operating Systems.
- System Diagnostics pass.
- The System experiences intermittent hangs and/or reboots.

PREREQUISITES: NONE

COMPANION: NONE

CONCURRENT:

None

DETAIL:

- 1 - Before going out onsite, download the current PC Server 300 BIOS flash utility revision T53 from the IBM Website at the following URL:

Http: //www.pc.ibm.com/us/files.html

- Select "Search"
- Type "BIOS T.53" in the Keywords box
- Select "Search"
- Select the "PC Server 300 (8640-0P0, 1P0, 1PT) BIOS flash update diskette version T.53" to download.

The file is a self-extracting executable file that creates a diskette.

Print out the readme file located on the diskette, and be sure to bring the Diskette and the print-out onsite.

Note: Refer to the HMM (Hardware Maintenance Manual) p/n70H0751

for instructions on the removal / installation of the System Board, and refer to the Users Handbook p/n83G8040 for instructions to remove, install, and configure ISA, EISA, and PCI Devices relative to the following procedure:

- 2 - Power off the System, and remove the power cord.
- 3 - Note the Configuration and Slot locations of any ISA, EISA, PCI Devices located on the System Board, then remove them.
- 4 - Replace the System Planar with FRU p/n28L0973 (do not install any Adapters at this time).
- 5 - Connect the power cord.
- 6 - Flash the System to BIOS level T.53 using the BIOS Flash Update Diskette (refer to the Readme file from step 1 for instructions to properly flash the System BIOS).
- 7 - Power off the System, and remove the power cord.
- 8 - Install any ISA, EISA, PCI adapters that were removed in step 2, and configure them in the System per the notes taken in step 2.
- 9 - Connect the Power cord.
- 10 - Configure the ISA, EISA, and PCI Devices in the System per the notes in step 2.

NOTE: BIOS Revision T53 defaults the PCI Bus interrupt setting to "disabled" in the CMOS Setup Utility. This must be set for Interrupt 11 if running NetWare and configured with a PCI Adapter.

NOTES:

THIS ECA IS "AS REQUIRED".

THIS ECA WILL EXPIRE ON JANUARY 23, 2002

All parts must be ordered using Code B.

Return old part using the normal warranty parts return process.

USA:

IBM TSS CE's should record all time and parts to Service code 33, ECA021, Other Office 990.

EMEA:

IBM PSS CE'S should record all time and parts to Service code 33, ECA021, Other Office 990.
Business Partners should raise Claim Type 5 (ECA), quoting ECA number "SM"

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SAS KEYWORDS:

PSY2	D/T8640	HANG	REBOOT
NETWARE	NOVELL	WINDOWS	NT
28L0973	71G0747	06H8756	SYSTEM BOARD
UNCLASSIFIED	T53		

PSY2 RETAIN TIPS
ECA021, OBSOLETE

1.1.111 ECA021, OBSOLETE

Record number: H035031

Device:	D/T8550	Service code:	33
ECA number:	ECA021	Parts source:	LOC
EC number:	EC000000	Publish flag:	R
Mandatory:	N	Hit count:	UHC01756
Automatic shipment:	N	Success count:	USC0000
Availability date:	89/05	Publication code:	PC00
Plant of control:	27	Date created:	089/05/23
Tip key:		Date last altered:	A93/07/26
		Owning B.U.:	USA

PURPOSE:

*** THIS ECA EXPIRED 6-30-93 ***
REPLACE MODEL A21 SYSTEM BOARDS THAT ARE AFFECTED BY COMPONENT
INCOMPATIBILITY.

FEATURES:

Type, Model, Stage	With B/M	Machines Affected and/or Feature/Device Description	B/M to be Installed	Service Hours	System Hours
8570	B/M0000000	MODEL A21	B/M0000000	01.0	01.0

PHYSICAL CHECK:

MODEL A21 SYSTEMS WITH A SERIAL NUMBER FROM 6000001 THROUGH
6015499 AND WITH BAR CODE LABELS OF B1HC8XXXXXX, B1HC9XXXXXX,
OR B1HCAXXXXXX. (X = ANY ALPHA NUMERIC CHARACTER.)

PREREQUISITES: NONE

COMPANION: NONE

CONCURRENT: NONE

DETAIL:

8570 MODEL A21 SYSTEM BOARD P/N15F7657 SHOULD BE REPLACED IF
SYSTEM COMPLIES WITH THE PHYSICAL CHECK PORTION OF THIS ECA,
AND FAILS POST AFTER A MEMORY UPGRADE WITH A 110 ERROR AND
FIVE QUESTION MARKS.

NOTES:

*** THIS ECA EXPIRED 6-30-93 ***

SAS KEYWORDS:

PSY2	PSY2BRD	PSY2MEM	PSY2ECA
PSY2ECBM	8570ECA	8570SYSBRD	8570SYSMEM
8570SYSECBM			

1.1.112 ECA022, OBSOLETE

Record number: H035028

Device:	D/T8550	Service code:	33
ECA number:	ECA022	Parts source:	LOC
EC number:	EC000000	Publish flag:	R
Mandatory:	N	Hit count:	UHC01401
Automatic shipment:	N	Success count:	USC0000
Availability date:	89/05	Publication code:	PC00
Plant of control:	27	Date created:	089/05/23
Tip key:		Date last altered:	A93/07/26
		Owning B.U.:	USA

PURPOSE:

*** THIS ECA EXPIRED 6-30-93 ***
 REPLACE MODEL A21 SYSTEM BOARDS THAT ARE AFFECTED BY MOUSE PORT
 INCOMPATIBILITY WHEN USING THE MICRO-SOFT MOUSE.

FEATURES:

Type, Model, Stage	With B/M	Machines Affected and/or Feature/Device Description	B/M to be Installed	Service Hours	System Hours
8570	B/M0000000	MODEL A21	B/M0000000	01.0	01.0

PHYSICAL CHECK:

MODEL A21 SYSTEMS WITH A SERIAL NUMBER FROM 6000001 THROUGH
 6015499 AND WITH SYSTEM BOARD BAR CODE LABELS OF B1HC8XXXXXX,
 B1HC9XXXXXX, B1HCAXXXXXX, B1HCBXXXXXX, OR B1HCCXXXXXX. (X =
 ANY ALPHA NUMERIC CHARACTER.)

PREREQUISITES: NONE

COMPANION: NONE

CONCURRENT: NONE

DETAIL:

8570 MODEL A21 SYSTEM BOARDS P/N15F7657 SHOULD BE REPLACED
 IF THE TWO FOLLOWING CONDITIONS ARE MET:

- O THE MICRO-SOFT MOUSE OPERATES IN THE SYSTEM BOARD SERIAL
 PORT BUT NOT IN THE SYSTEM BOARD MOUSE PORT.
- O THE SYSTEM COMPLIES WITH THE PHYSICAL CHECK PORTION OF
 THIS ECA.

NOTES:

*** THIS ECA EXPIRED 6-30-93 ***

SAS KEYWORDS:

PSY2	PSY2BRD	POEM	PSY2ECA
PSY2ECBM	PSY2NLGO	8570SYSBRD	8570SYSECBM
8570ECA	8570SYSNLGO		

1.1.113 ECA023, OBSOLETE

Record number: H013770

Device:	D/T8550	Service code:	33
ECA number:	ECA023	Parts source:	LOC.
EC number:	EC000000	Publish flag:	R
Mandatory:	N	Hit count:	UHC01669
Automatic shipment:	N	Success count:	USC0001
Availability date:	89/09	Publication code:	PC20
Plant of control:	27	Date created:	089/08/14
Tip key:		Date last altered:	A93/07/12
		Owning B.U.:	USA

PURPOSE:

*** THIS ECA EXPIRED ON 06-30-93 ***

FEATURES:

Type, Model, Stage	With B/M	Machines Affected and/or Feature/Device Description	B/M to be Installed	Service Hours	System Hours
8525	B/M0000000		B/M0000000	00.1	00.0

PHYSICAL CHECK:

PREREQUISITES:

COMPANION:

CONCURRENT:

DETAIL:

NOTES:

*** THIS ECA EXPIRED ON 06-30-93 ***

SAS KEYWORDS:

PSY2	PSY2BRD	PSY2ECA	PSY2ECBM
8525SYSBRD	8525ECA	8525SYSECBM	D/T8525

1.1.114 ECA024, OBSOLETE

Record number: H064377

Device:	D/T8550	Service code:	33
ECA number:	ECA024	Parts source:	LOC
EC number:	ECA79678	Publish flag:	R
Mandatory:	N	Hit count:	UHC02917
Automatic shipment:	N	Success count:	USC0001
Availability date:	90/08	Publication code:	PC00
Plant of control:	27	Date created:	090/07/31
Tip key:		Date last altered:	A93/07/23
		Owning B.U.:	USA

PURPOSE:

*** THIS ECA EXPIRED 6-30-93 ***
 DETERMINE IF THE 60MB OR 120MB
 FIXED DISK SHOULD BE REPLACED TO CORRECT A 113 ERROR /
 SYSTEM HALT IN AN 8550, 8555, 8570 OR 8573.

FEATURES:

Type, Model, Stage	With B/M	Machines Affected and/or Feature/Device Description	B/M to be Installed	Service Hours	System Hours
00000	B/M0000000	* SEE PHYSICAL CHECK *	B/M0000000	01.0	01.0

PHYSICAL CHECK: IDENTIFY AFFECTED FIXED DISK BY LOCATING A LABEL
 ON THE FIXED DISK MARKED WITH EC A79678. ONLY FIXED DISKS THAT
 MEET THE CONDITIONS DESCRIBED IN THE DETAIL BELOW SHOULD BE
 REPLACED.

AFFECTED MACHINES INCLUDE:

TYPE-MOD	FDISK	FRU P/N	EC LABEL
8550-021 (OPT)	60MB	90X8627	A79678
8550-031 (OPT)	60MB	90X8627	A79678
8550-061	60MB	90X8627	A79678
8555 - 061	60MB	6128272	A79678
8570-A21	120MB	90X9286	A79678
8570-E61	60MB	90X8627	A79678
8570-121	120MB	90X9286	A79678
8573 - 061	60MB	90X8627	A79678
8573 - 121	120MB	90X9286	A79678

PREREQUISITES: NONE

COMPANION: NONE

CONCURRENT: NONE

DETAIL: CERTAIN FIXED DISKS MAY CAUSE A 113 (DMA TIMEOUT) ERROR
 / SYSTEM HALT WHEN THE FIXED DISK AND OTHER DEVICES PERFORM
 CONCURRENT OPERATIONS IN A MULTITASKING ENVIRONMENT. WHEN THIS
 CONDITION OCCURS THE SYSTEM HALTS AND/OR DISPLAYS A DMA TIMEOUT
 ERROR MESSAGE APPROPRIATE FOR THE OPERATING SYSTEM BEING USED.
 THERE IS NO DATA LOSS FROM THIS CONDITION. TO RESTART, THE
 SYSTEM MUST BE POWERED OFF THEN BACK ON. IF THE ABOVE CONDITION
 EXISTS AND THE FIXED DISK MATCHES THE "PHYSICAL CHECK", REPLACE
 THE FIXED DISK.

NOTES:

*** THIS ECA EXPIRED 6-30-93 ***
 SOME EXAMPLES OF MULTI-TASKING SYSTEMS ARE: OS/2, AIX,
 XENIX, AND TAPE BACKUP ROUTINES THAT RUN ON DOS OR A MULTI-
 TASKING OPERATING SYSTEM.

NOTE: SOME EXAMPLES OF SYSTEM HALTS ARE NON-MASKABLE INTERUP
 ERRORS (NMI), 113 DIRECT MEMORY ACCESS (DMA) ERRORS,

SAS KEYWORDS:

PSY2	PSY2ECA	PSY2ECBM	PSY2FDSK
PSY2ERR	8550SYSECBM	8550ECA	8550SYSERR
8550SYSFDSK	8555SYSECBM	8555ECA	8555SYSERR
8555SYSFDSK	8570SYSECBM	8570ECA	8570SYSERR
8570SYSFDSK	8573SYSECBM	8573ECA	8573SYSERR
8573SYSFDSK	D/T8555	D/T8570	D/T8573

1.1.115 ECA025, OBSOLETE

Record number: H036344

Device:	D/T8550	Service code:	33
ECA number:	ECA025	Parts source:	LOC.
EC number:	EC000000	Publish flag:	R
Mandatory:	N	Hit count:	UHC01150
Automatic shipment:	N	Success count:	USC0001
Availability date:	89/11	Publication code:	PC30
Plant of control:	27	Date created:	089/10/03
Tip key:		Date last altered:	A93/01/13
		Owning B.U.:	USA

PURPOSE:

*** THIS ECA HAS EXPIRED ***

FEATURES:

Type, Model, Stage	With B/M	Machines Affected and/or Feature/Device Description	B/M to be Installed	Service Hours	System Hours
0000	B/M0000000		B/M0000000	00.1	00.0

PHYSICAL CHECK:

PREREQUISITES:

COMPANION:

CONCURRENT:

DETAIL:

NOTES:

*** THIS ECA IS OBSOLETE ***

SAS KEYWORDS:

PSY2 PSY2ECA

1.1.116 ECA026, OBSOLETE

Record number: H036345

Device:	D/T8550	Service code:	33
ECA number:	ECA026	Parts source:	LOC.
EC number:	EC000000	Publish flag:	R
Mandatory:	N	Hit count:	UHC02124
Automatic shipment:	N	Success count:	USC0001
Availability date:	89/11	Publication code:	PC30
Plant of control:	27	Date created:	089/10/12
Tip key:		Date last altered:	A93/01/13
		Owning B.U.:	USA

PURPOSE:

*** THIS ECA HAS EXPIRED ***

FEATURES:

Type, Model, Stage	With B/M	Machines Affected and/or Feature/Device Description	B/M to be Installed	Service Hours	System Hours
0000	B/M0000000		B/M0000000	00.1	00.0

PHYSICAL CHECK: NONE

PREREQUISITES: NONE

COMPANION: NONE

CONCURRENT: NONE

DETAIL: NONE

NOTES:

*** THIS ECA IS OBSOLETE ***

SAS KEYWORDS:

PSY2 PSY2ECA

1.1.117 ECA027, OBSOLETE

Record number: H037789

Device:	D/T8550	Service code:	33
ECA number:	ECA027	Parts source:	
EC number:	EC000000	Publish flag:	R
Mandatory:	Y	Hit count:	UHC02711
Automatic shipment:	N	Success count:	USC0000
Availability date:	90/05	Publication code:	PC00
Plant of control:	27	Date created:	090/04/18
Tip key:		Date last altered:	A93/07/15
		Owning B.U.:	USA

PURPOSE:

THIS ECA EXPIRED 04/30/93

FEATURES:

Type, Model, Stage	With B/M	Machines Affected and/or Feature/Device Description	B/M to be Installed	Service Hours	System Hours
8565	B/M0000000		B/M0000000	01.3	01.0
8580	B/M0000000		B/M0000000	01.3	01.0
8550	B/M0000000		B/M0000000	01.3	01.0
8560					
8570		SCSI ADAPTER			
8573					

PHYSICAL CHECK:

PREREQUISITES: NONE

COMPANION: NONE

CONCURRENT: NONE

DETAIL:

NOTES:

THIS ECA EXPIRED 4-30-93

SAS KEYWORDS:

PSY2 PSY2ECA

PSY2 RETAIN TIPS
ECA028, OBSOLETE

1.1.118 ECA028, OBSOLETE

Record number: H007070

Device:	D/T8550	Service code:	33
ECA number:	ECA028	Parts source:	LOC
EC number:	EC000000	Publish flag:	R
Mandatory:	N	Hit count:	UHC01744
Automatic shipment:	N	Success count:	USC0000
Availability date:	90/03	Publication code:	PC10
Plant of control:	23	Date created:	090/03/28
Tip key:		Date last altered:	A93/07/23
		Owning B.U.:	USA

PURPOSE:

*** THIS ECA EXPIRED 6-30-93 ***

FEATURES:

Type, Model, Stage	With B/M	Machines Affected and/or Feature/Device Description	B/M to be Installed	Service Hours	System Hours
8570	B/M0000000	MOD A61	B/M0000000	00.8	00.8
8570	B/M0000000	MOD A21	B/M0000000	00.8	00.8

PHYSICAL CHECK:

PREREQUISITES: NONE

COMPANION: NONE

CONCURRENT: NONE

DETAIL:

NOTES:

*** THIS ECA EXPIRED 6-30-93 ***

SAS KEYWORDS:

PSY2	PSY2BRD	PSY2MEM	PSY2ECA
PSY2ECBM	8570ECA	8570SYSBRD	8570SYSTEMEM
8570SYSECBM			

1.1.119 ECA029, OBSOLETE

Record number: H061182

Device:	D/T8550	Service code:	33
ECA number:	ECA029	Parts source:	LOC
EC number:	ECC00758	Publish flag:	R
Mandatory:	N	Hit count:	UHC00805
Automatic shipment:	N	Success count:	USC0000
Availability date:	90/09	Publication code:	PC40
Plant of control:	27	Date created:	090/09/19
Tip key:		Date last altered:	A93/07/23
		Owning B.U.:	USA

PURPOSE:

*** THIS ECA EXPIRED 6-30-93 ***

FEATURES:

Type, Model, Stage	With B/M	Machines Affected and/or Feature/Device Description	B/M to be Installed	Service Hours	System Hours
8570	B/MNONE	MODEL A61	B/MNONE	01.0	01.0
8570	B/MNONE	MODEL A21	B/MNONE	01.0	01.0

PHYSICAL CHECK:

PREREQUISITES:

NONE

COMPANION: NONE

CONCURRENT: NONE

DETAIL:

NOTES:

*** THIS ECA EXPIRED 6-30-93 ***

SAS KEYWORDS:

PSY2	PSY2BRD	PSY2ADPT	PSY2ECA
PSY2ECBM	8570SYSECBM	8570ECA	8570SYSBRD
8570SYSADPT			

1.1.120 ECA030, OBSOLETE

Record number: H036771

Device:	D/T8550	Service code:	33
ECA number:	ECA030	Parts source:	LOC.
EC number:	ECC00866	Publish flag:	R
Mandatory:	N	Hit count:	UHC00626
Automatic shipment:	N	Success count:	USC0000
Availability date:	90/01	Publication code:	PC00
Plant of control:	27	Date created:	089/11/14
Tip key:		Date last altered:	A93/07/26
		Owning B.U.:	USA

PURPOSE:

*** THIS ECA EXPIRED 06-30-93 ***

PROVIDE INSTRUCTIONS TO DETERMINE IF THE DUAL ASYNC CARD
INSTALLED IN AN 8550 MODELS 031,061 SHOULD BE REPLACED
FOR 1210 OR 1225 ERRORS WHILE RUNNING DIAGNOSTICS.

FEATURES:

Type, Model, Stage	With B/M	Machines Affected and/or Feature/Device Description	B/M to be Installed	Service Hours	System Hours
8550	B/M0000000	*** MODELS 031,061 ***	B/M0000000	01.0	01.0

PHYSICAL CHECK: AFFECTED DUAL ASYNC CARDS (FRU P/N34F0008) ARE
IDENTIFIED BY LOCATING RAW CARD PART NUMBER 90X8074 (UPPER LEFT
CORNER) ON THE COMPONENT SIDE OF THE CARD.

PREREQUISITES: NONE

COMPANION: NONE

CONCURRENT: NONE

DETAIL: ERROR CODE 1210 INDICATES A DUAL ASYNC PORT 1
REGISTER TEST FAILURE. ERROR CODE 1225 INDICATES A DUAL
ASYNC PORT 2 REGISTER TEST FAILURE.

ERROR CODE 1210 OR 1225 MAY OCCUR WHILE RUNNING DIAGNOSTICS ON
AN 8550 MODELS 031,061 WITH A DUAL ASYNC CARD INSTALLED. IF THIS
CONDITION EXISTS AND THE DUAL ASYNC CARD MATCHES THE ABOVE
MENTIONED PHYSICAL CHECK, REPLACE THE CARD (FRU P/N34F0008).

NOTES:

*** THIS ECA EXPIRED 06-30-93 ***

ORDER DUAL ASYNC CARDS THROUGH NORMAL DISTRIBUTION.

SAS KEYWORDS:

PSY2	PSY2ERR	PSY2COMM	PSY2ECA
PSY2ECBM	PSY2ADPT	8550SYSADPT	8550SYSCOMM
8550SYSECBM	8550SYSERR	8550ECA	

1.1.121 ECA031, OBSOLETE

Record number: H036665

Device:	D/T8550	Service code:	
ECA number:	ECA031	Parts source:	
EC number:	EC000000	Publish flag:	R
Mandatory:	N	Hit count:	UHC02054
Automatic shipment:	N	Success count:	USC0000
Availability date:	89/12	Publication code:	PC30
Plant of control:	27	Date created:	089/12/11
Tip key:		Date last altered:	A93/06/17
		Owning B.U.:	USA

PURPOSE: THIS ECA HAS EXPIRED.

FEATURES:

Type, Model, Stage	With B/M	Machines Affected and/or Feature/Device Description	B/M to be Installed	Service Hours	System Hours
00000	B/M0000000		B/M0000000	00.1	00.0

PHYSICAL CHECK:

PREREQUISITES: NONE

COMPANION: NONE

CONCURRENT: NONE

DETAIL:

NOTES: THIS ECA HAS EXPIRED.

SAS KEYWORDS:

PSY2 PSY2ECA

1.1.122 ECA032, OBSOLETE

Record number: H037758

Device:	D/T8550	Service code:	33
ECA number:	ECA032	Parts source:	
EC number:	EC000000	Publish flag:	R
Mandatory:	Y	Hit count:	UHC03942
Automatic shipment:	N	Success count:	USC0000
Availability date:	90/05	Publication code:	PC00
Plant of control:	27	Date created:	090/04/24
Tip key:		Date last altered:	A93/07/15
		Owning B.U.:	USA

PURPOSE:

THIS ECA EXPIRED APRIL 30, 1993.

FEATURES:

Type, Model, Stage	With B/M	Machines Affected and/or Feature/Device Description	B/M to be Installed	Service Hours	System Hours
8565	B/M0000000		B/M0000000	01.3	01.0
8580	B/M0000000		B/M0000000	01.3	01.0
8550					
8555	B/M0000000		B/M0000000	01.3	01.0
8560					
8570					

PHYSICAL CHECK:

PREREQUISITES: NONE

COMPANION: NONE

CONCURRENT: NONE

DETAIL:

NOTES:

THIS ECA EXPIRED 4-30-93

SAS KEYWORDS:

PSY2 PSY2ECA

1.1.123 ECA033, OBSOLETE

Record number: H037143

Device:	D/T8550	Service code:	33
ECA number:	ECA033	Parts source:	LOC
EC number:	ECC31457	Publish flag:	R
Mandatory:	N	Hit count:	UHC00770
Automatic shipment:	N	Success count:	USC0000
Availability date:	90/02	Publication code:	PC00
Plant of control:	27	Date created:	090/02/20
Tip key:		Date last altered:	A93/01/13
		Owning B.U.:	USA

PURPOSE:

*** THIS ECA HAS EXPIRED ***

FEATURES:

Type, Model, Stage	With B/M	Machines Affected and/or Feature/Device Description	B/M to be Installed	Service Hours	System Hours
8570	B/M0000000		B/M0000000	00.1	00.0

PHYSICAL CHECK:

PREREQUISITES: NONE

COMPANION: NONE

CONCURRENT: NONE

DETAIL:

NOTES:

*** THIS ECA IS OBSOLETE ***

SAS KEYWORDS:

PSY2 PSY2ECA

1.1.124 ECA034, OBSOLETE

Record number: H037144

Device:	D/T8550	Service code:	33
ECA number:	ECA034	Parts source:	LOC
EC number:	ECC31457	Publish flag:	R
Mandatory:	N	Hit count:	UHC01128
Automatic shipment:	N	Success count:	USC0000
Availability date:	90/02	Publication code:	PC00
Plant of control:	27	Date created:	090/02/20
Tip key:		Date last altered:	A93/01/13
		Owning B.U.:	USA

PURPOSE:

*** THIS ECA HAS EXPIRED ***

FEATURES:

Type, Model, Stage	With B/M	Machines Affected and/or Feature/Device Description	B/M to be Installed	Service Hours	System Hours
8570	B/M0000000		B/M0000000	00.1	00.0

PHYSICAL CHECK:

PREREQUISITES: NONE

COMPANION: NONE

CONCURRENT: NONE

DETAIL:

NOTES:

*** THIS ECA HAS EXPIRED ***

SAS KEYWORDS:

PSY2 PSY2ECA

1.1.125 ECA035, OBSOLETE

Record number: H025636

Device:	D/T8550	Service code:	33
ECA number:	ECA035	Parts source:	LOC.
EC number:	EC0000000	Publish flag:	R
Mandatory:	N	Hit count:	UHC00981
Automatic shipment:	N	Success count:	USC0000
Availability date:	90/03	Publication code:	PC20
Plant of control:	23	Date created:	090/03/15
Tip key:		Date last altered:	A93/01/13
		Owning B.U.:	USA

PURPOSE:

THIS ECA EXPIRED 12-31-92 ***

FEATURES:

Type, Model, Stage	With B/M	Machines Affected and/or Feature/Device Description	B/M to be Installed	Service Hours	System Hours
8550	B/M0000000		B/M0000000	00.5	00.8

PHYSICAL CHECK:

PREREQUISITES: NONE

COMPANION: NONE

CONCURRENT: NONE

DETAIL:

NOTES:

*** THIS ECA EXPIRED 12-31-92 ***

SAS KEYWORDS:

PSY2 PSY2ECA

1.1.126 ECA036, OBSOLETE

Record number: H007224

Device:	D/T8550	Service code:	33
ECA number:	ECA036	Parts source:	LOC.
EC number:	ECA90602	Publish flag:	R
Mandatory:	N	Hit count:	UHC01687
Automatic shipment:	N	Success count:	USC0000
Availability date:	90/08	Publication code:	PC20
Plant of control:	23	Date created:	090/05/04
Tip key:		Date last altered:	A93/01/13
		Owning B.U.:	USA

PURPOSE:

*** THIS ECA HAS EXPIRED ***

ORIGINAL EXPIRATION DATE OF 08/30/91 WAS EXTENDED TO
08/30/92.

FEATURES:

Type, Model, Stage	With B/M	Machines Affected and/or Feature/Device Description	B/M to be Installed	Service Hours	System Hours
8525	B/M0000000		B/M0000000	00.1	00.1

PHYSICAL CHECK:

PREREQUISITES: NONE

COMPANION: NONE

CONCURRENT: NONE

DETAIL:

NOTES:

*** THIS ECA EXPIRED ON 8-30-92 ***

SAS KEYWORDS:

PSY2 PSY2ECA

1.1.127 ECA037, OBSOLETE

Record number: H006851

Device:	D/T8550	Service code:	33
ECA number:	ECA037	Parts source:	LOC.
EC number:	EC0000000	Publish flag:	R
Mandatory:	N	Hit count:	UHC01033
Automatic shipment:	N	Success count:	USC0001
Availability date:	91/01	Publication code:	PC20
Plant of control:	27	Date created:	090/12/19
Tip key:		Date last altered:	A93/07/27
		Owning B.U.:	USA

PURPOSE:

THIS ECA HAS EXPIRED.

FEATURES:

Type, Model, Stage	With B/M	Machines Affected and/or Feature/Device Description	B/M to be Installed	Service Hours	System Hours
00000	B/M0000000		B/M0000000	00.1	00.0

PHYSICAL CHECK: NONE

PREREQUISITES: NONE

COMPANION: NONE

CONCURRENT: NONE

DETAIL: NONE

NOTES:

THIS ECA HAS EXPIRED.

SAS KEYWORDS:

PSY2 PSY2ECA

1.1.128 ECA038, OBSOLETE

Record number: H082184

Device:	D/T8550	Service code:	01
ECA number:	ECA038	Parts source:	LOC.
EC number:	ECC32659	Publish flag:	R
Mandatory:	N	Hit count:	UHC00647
Automatic shipment:	N	Success count:	USC0001
Availability date:	91/04	Publication code:	PC20
Plant of control:	23	Date created:	091/04/25
Tip key:		Date last altered:	A93/07/27
		Owning B.U.:	USA

PURPOSE:

*** THIS ECA EXPIRED 12-31-92 ***

FEATURES:

Type, Model, Stage	With B/M	Machines Affected and/or Feature/Device Description	B/M to be Installed	Service Hours	System Hours
8555	B/M0000000	8555 MODEL 031 AND 061 WITH 0-8MB EXPANDED MEMORY ADAPTER/A	B/M0000000	01.0	00.5

PHYSICAL CHECK:

PREREQUISITES: NONE

COMPANION: NONE

CONCURRENT: NONE

DETAIL:

8555 SX SYSTEMS WITH A 0-8MB EXPANDED MEMORY ADAPTER MAY FAIL WITH 8502 AND/OR 8503 POST ERRORS. REPLACING THE 0-8MB ADAPTER WITH A 2 - 8MB ADAPTER WILL PREVENT THESE ERRORS. THE 2-8MB FRU (P/N 85F0480) CONTAINS AN OPTION DISKETTE, INSTALLATION INSTRUCTIONS, AND AN ADAPTER CARD WITHOUT MEMORY. THE OPTION DISKETTE VERSION 1.1 CONTAINS AN UPDATED DEVICE DRIVER. DEVICE DRIVER INSTALLATION INSTRUCTIONS ARE AVAILABLE TO THE CUSTOMER IN THE 2 - 8MB ADAPTER INSTALLATION INSTRUCTIONS. THE INSTALLATION INSTRUCTIONS AND OPTION DISKETTE SHOULD BE RETAINED BY THE CUSTOMER.

THE 0-8MB ADAPTER USES 256KB AND 1MB MEMORY MODULES; THE 2-8MB ADAPTER USES PHYSICALLY LARGER 1MB AND 2MB MODULES. THEREFORE, WHEN REPLACING THE DEFECTIVE 0-8MB ADAPTER WITH A 2-8MB ADAPTER, ALL ADAPTER MEMORY MODULES MUST ALSO BE REPLACED.

THE 2 - 8MB ADAPTER CAN BE POPULATED ONLY WITH 1MB AND 2MB SIMMS. IT IS POSSIBLE TO ENCOUNTER FAILING SYSTEMS WHICH HAVE A 0-8MB ADAPTER POPULATED AT .5MB INCREMENTS. IN THESE SITUATIONS, THE REPLACEMENT 2 - 8MB ADAPTER SHOULD BE POPULATED AT THE NEXT HIGHEST MB OF MEMORY. FOR EXAMPLE, WHEN REPLACING A 0-8MB ADAPTER POPULATED WITH 2.5MB OF MEMORY, A 2-8MB ADAPTER WITH 3MB OF MEMORY SHOULD BE USED.

THE FOLLOWING CHART SHOWS THE CORRECT COMBINATION OF MEMORY TO ORDER FOR USE ON THE REPLACEMENT 2-8MB ADAPTER FRU P/N85F0480.

MEM ON FAILING 0-8MB ADAPTER	TOTAL MEM REQUIRED FOR 2-8MB ADAPTER	(QTY.) AND FRU P/N OF MEM FOR 2-8MB ADAPTER
0.5MB	1MB	(1) 1MB FRU P/N90X8624
1.0MB	1MB	(1) 1MB FRU P/N90X8624
1.5MB	2MB	(1) 2MB FRU P/N92F0104
2.0MB	2MB	(1) 2MB FRU P/N92F0104
2.5MB	3MB	(1) 2MB FRU P/N92F0104 (1) 1MB FRU P/N90X8624
3.0MB	3MB	(1) 2MB FRU P/N92F0104 (1) 1MB FRU P/N90X8624
3.5MB	4MB	(2) 2MB FRU P/N92F0104
4.0MB	4MB	(2) 2MB FRU P/N92F0104
4.5MB	5MB	(2) 2MB FRU P/N92F0104 (1) 1MB FRU P/N90X8624

PSY2 RETAIN TIPS
ECA038, OBSOLETE

5.0MB	5MB	(2) 2MB FRU P/N92F0104 (1) 1MB FRU P/N90X8624
6.0MB	6MB	(3) 2MB FRU P/N92F0104
6.5MB	7MB	(3) 2MB FRU P/N92F0104 (1) 1MB FRU P/N90X8624
8.0MB	8MB	(4) 2MB FRU P/N92F0104

NOTES:

*** THIS ECA EXPIRED 12-31-92 ***

CUSTOMER ENGINEERS SHOULD USE FUNCTION CODE 97 TO INDICATE THAT THE PART NUMBER REMOVED FROM THE MACHINE IS DIFFERENT FROM THE PART NUMBER REPORTED AS USAGE. FUNCTION CODE 97 MUST ALWAYS BE PRECEDED BY A FUNCTION CODE 2 OR 21.

SAS KEYWORDS:

PSY2	PSY2ECA	PSY2ECBM	PSY2ADPT
PSY2MEM	PSY2ERR	D/T8555	P/N85F0480

1.1.129 ECA039, OBSOLETE

Record number: H024508

Device:	D/T8550	Service code:	33
ECA number:	ECA039	Parts source:	
EC number:	ECC01278	Publish flag:	R
Mandatory:	N	Hit count:	UHC00754
Automatic shipment:	N	Success count:	USC0000
Availability date:	90/05	Publication code:	PC50
Plant of control:	27	Date created:	090/05/18
Tip key:		Date last altered:	A93/07/26
		Owning B.U.:	USA

PURPOSE:

*** THIS ECA EXPIRED 6-30-93 ***
REPLACE SYSTEM BOARD, FRU P/N34F0046, WHICH WILL
ALLOW "POST" TO PROCEED, WITHOUT OPERATOR INTERVENTION,
WHEN USING THE REMOTE IPL FEATURE OF NETWORK CARDS.

FEATURES:

Type, Model, Stage	With B/M	Machines Affected and/or Feature/Device Description	B/M to be Installed	Service Hours	System Hours
E01	B/M0000000	SYSTEM BOARD FRU	B/M0000000	00.5	00.5
E21		P/N27F4069 WITH A BIOS			
LA0		MODULE NUMBER OF: 30F9579 & 30F9580 OR 30F9543 & 30F9544 OR 33F8645 & 30F8646 OR 37F6652 OR 41F0258 OR 27F4092			

PHYSICAL CHECK:

THE FOLLOWING PHYSICAL CHECK REQUIREMENTS MUST BE MET ON
SYSTEMS THAT HAVE A NETWORK ADAPTER, IBM OR OEM, WITH A
REMOTE IPL FEATURE.

THERE ARE TWO LEVELS OF THE 8530 286 SYSTEM BOARD,
FRU P/N27F4069. ONE LEVEL HAS A PAIR OF BIOS MODULES
WITH NUMBERS OF 30F9579 & 30F9580 OR 30F9543 & 30F9544
OR 33F8645 & 33F8646. THE OTHER LEVEL HAS ONE BIOS
MODULE WITH A NUMBER OF 37F6652 OR 41F0258 OR 27F4092.
IF ANY OTHER NUMBERS ARE FOUND PRINTED ON THE TOP OF THE
BIOS MODULES, THIS ECA DOES NOT APPLY.

PREREQUISITES: NONE

COMPANION: NONE

CONCURRENT: NONE

DETAIL:

EARLY LEVEL SYSTEM BOARDS REQUIRED A USER TO PRESS "F1"
TO CONTINUE PROCESSING DURING POST. WITH THIS ECA, ALL
MODELS AND LEVELS OF THE 286 WILL BE CONSISTENT IN THE
MANNER THAT REMOTE IPL IS INVOKED.

NOTES:

*** THIS ECA EXPIRED 6-30-93 ***
ORDER THE SYSTEM BOARD FRU P/N34F0046 THROUGH NORMAL
DISTRIBUTION.

SAS KEYWORDS:

PSY2	8530ECA	PSYBRD	PSY2ECA
8530SYSCOMM	8530SYSBRD	8530SYSECBM	PSY2ECBM
PSY2COMM	PSY2ADPT	8530SYSADPT	

1.1.130 ECA040, OBSOLETE

Record number: H065034

Device:	D/T8550	Service code:	33
ECA number:	ECA040	Parts source:	
EC number:	EC000000	Publish flag:	R
Mandatory:	N	Hit count:	UHC00856
Automatic shipment:	N	Success count:	USC0000
Availability date:	90/06	Publication code:	PC00
Plant of control:	27	Date created:	090/05/21
Tip key:		Date last altered:	A93/01/14
		Owning B.U.:	USA

PURPOSE:

*** THIS ECA EXPIRED 12/31/92 *****

FEATURES:

Type, Model, Stage	With B/M	Machines Affected and/or Feature/Device Description	B/M to be Installed	Service Hours	System Hours
8550	B/M0000000		B/M0000000	00.1	00.0

PHYSICAL CHECK:

PREREQUISITES: NONE

COMPANION: NONE

CONCURRENT: NONE

DETAIL:

NOTES:

*** THIS ECA EXPIRED 12/31/92 ***

SAS KEYWORDS:

PSY2 PSY2ECA

1.1.131 ECA041, OBSOLETE

Record number: H026880

Device:	D/T8550	Service code:	33
ECA number:	ECA041	Parts source:	LOC.
EC number:	ECC01381	Publish flag:	R
Mandatory:	N	Hit count:	UHC00985
Automatic shipment:	N	Success count:	USC0000
Availability date:	90/07	Publication code:	PC20
Plant of control:	27	Date created:	090/07/03
Tip key:		Date last altered:	A93/01/13
		Owning B.U.:	USA

PURPOSE:

*** THIS ECA EXPIRED 12-31-92 ***

FEATURES:

Type, Model, Stage	With B/M	Machines Affected and/or Feature/Device Description	B/M to be Installed	Service Hours	System Hours
8550	B/M0000000		B/M0000000	01.0	01.0

PHYSICAL CHECK:

PREREQUISITES: NONE

COMPANION: NONE

CONCURRENT: NONE

DETAIL:

NOTES:

*** THIS ECA EXPIRED 12-31-92 ***

SAS KEYWORDS:

PSY2 PSY2ECA

1.1.132 ECA043, OBSOLETE

Record number: H065128

Device:	D/T8550	Service code:	33
ECA number:	ECA043	Parts source:	LOCA
EC number:	EC9999999	Publish flag:	R
Mandatory:	N	Hit count:	UHC00674
Automatic shipment:	N	Success count:	USC0000
Availability date:	90/11	Publication code:	PC40
Plant of control:	23	Date created:	090/10/18
Tip key:		Date last altered:	A93/01/05
		Owning B.U.:	USA

PURPOSE:

*** THIS ECA IS OBSOLETE ***

FEATURES:

Type, Model, Stage	With B/M	Machines Affected and/or Feature/Device Description	B/M to be Installed	Service Hours	System Hours
8573	B/M0000000	MODEL 061	B/M0000000	00.1	00.1

PHYSICAL CHECK:

PREREQUISITES:

NONE

COMPANION: NONE

CONCURRENT: NONE

DETAIL:

NOTES:

*** THIS ECA IS OBSOLETE ***

SAS KEYWORDS:

PSY2 PSY2ECA

1.1.133 ECA044, OBSOLETE

Record number: H067855

Device:	D/T8550	Service code:	33
ECA number:	ECA044	Parts source:	LOC.
EC number:	ECC31638	Publish flag:	R
Mandatory:	N	Hit count:	UHC00743
Automatic shipment:	N	Success count:	USC0000
Availability date:	90/07	Publication code:	PC20
Plant of control:	27	Date created:	090/07/24
Tip key:		Date last altered:	A93/01/13
		Owning B.U.:	USA

PURPOSE:

*** THIS ECA EXPIRED 12-31-92 ***

FEATURES:

Type, Model, Stage	With B/M	Machines Affected and/or Feature/Device Description	B/M to be Installed	Service Hours	System Hours
8550	B/M0000000	ALL	B/M0000000	00.1	00.1

PHYSICAL CHECK:

PREREQUISITES: NONE

COMPANION: NONE

CONCURRENT: NONE

DETAIL:

NOTES:

*** THIS ECA EXPIRED 12-31-92 ***

SAS KEYWORDS:

PSY2 PSY2ECA

1.1.134 ECA045, DEFECTIVE PS/2 POWER CORDS

Record number: H025259

Device:	D/T8550	Service code:	33
ECA number:	ECA045	Parts source:	LOC.
EC number:	EC000000	Publish flag:	R
Mandatory:	N	Hit count:	UHC01793
Automatic shipment:	N	Success count:	USC0000
Availability date:	90/06	Publication code:	PC20
Plant of control:	72	Date created:	090/06/26
Tip key:		Date last altered:	A95/09/11
		Owning B.U.:	USA

PURPOSE: IMPORTANT SAFETY INSTRUCTIONS

 REPLACE PERSONAL SYSTEM/2 POWER CORDS MANUFACTURED BY MULTILEC.
 A POTENTIAL SHOCK HAZARD EXISTS IN SOME PS/2 POWER CORDS. THIS
 ECA PROVIDES INSTRUCTIONS TO IDENTIFY AND REPLACE MULTILEC POWER
 CORDS.

FEATURES:

Type, Model, Stage	With B/M	Machines Affected and/or Feature/Device Description	B/M to be Installed	Service Hours	System Hours
8525	B/M0000000	ALL LISTED MACHINE	B/M0000000	00.2	00.2
8530		TYPES AND PERIPHERALS			
8550		EQUIPPED WITH MULTILEC			
8555		POWER CORDS.			
8560					
8565					
8570					
8573					
8580					

PHYSICAL CHECK:

PS/2 POWER CORDS SHOULD BE INSPECTED FOR THE WORD "MULTILEC"
 MOLDED INTO THE PLUG ENDS. IF "MULTILEC" IS MOLDED INTO THE
 CONNECTOR, THE POWER CORD IS SUSPECT AND SHOULD NOT BE USED.

ALL MULTILEC POWER CORDS MANUFACTURED FOR IBM ARE "PIGGYBACK"
 TYPE CORDS. (THE END OF THE CORD WHICH PLUGS INTO THE WALL
 RECEPTACLE HAS FEMALE CONNECTORS ALLOWING ANOTHER CORD TO BE
 ATTACHED) ALTHOUGH ALL MULTILEC CORDS ARE PIGGYBACK, NOT ALL
 IBM PIGGYBACK CORDS WERE MANUFACTURED BY MULTILEC. IT IS NOT
 NECESSARY TO INSPECT ANY CORD THAT IS NOT A PIGGYBACK TYPE CORD.

THE AFFECTED POWER CORDS WERE SHIPPED TO CANADA AND LATIN
 AMERICA FOR USE ON ALL PS/2 MODELS. WITHIN THE UNITED STATES,
 SHIPMENT OF MULTILEC POWER CORDS WAS LIMITED TO PS/2 MODEL 55SX
 SYSTEMS BETWEEN SERIAL NUMBERS 9000000 AND 9499999.
 HOWEVER, SINCE THE CORDS ARE COMPATIBLE WITH OTHER PS/2 SYSTEMS
 AND PERIPHERALS, AND MAY BE SHIPPED WITH PS/2 MODELS ORIGINATING
 FROM OTHER COUNTRIES, IT IS ADVISED THAT ALL PS/2 PRODUCTS BE
 INSPECTED FOR A MULTILEC POWER CORD. ANY CUSTOMER WITH A
 MULTILEC POWER CORD IS ENTITLED TO ON-SITE REPLACEMENT OF THE
 CORD AT NO CHARGE.

*** DO NOT ATTEMPT TO INSTALL OR TO TEST SUSPECT POWER CORDS ***

PREREQUISITES: NONE**COMPANION:** NONE**CONCURRENT:** NONE**DETAIL:**

A POTENTIAL DEFECT EXISTS IN PS/2 POWER CORDS MANUFACTURED BY
 MULTILEC. AFFECTED POWER CORDS HAVE AN IMPROPERLY WIRED PLUG
 IN WHICH LINE VOLTAGE COULD BE PRESENT ON THE GROUND TERMINAL AT
 THE SYSTEM END OF THE CORD. IF A SYSTEM IS CONNECTED TO POWER
 WITH AN IMPROPERLY WIRED CORD, 120 VOLTS CAN BE APPLIED TO THE
 SYSTEM CHASSIS AND METAL COVERS, AS WELL AS ANY OTHER ATTACHED
 DEVICES AND/OR CABLES. UNDER THESE CONDITIONS, A POTENTIAL
 EXPOSURE EXISTS FOR ELECTRIC SHOCK WHICH COULD CAUSE PERSONAL
 INJURY. USING THE INFORMATION INCLUDED IN THE PHYSICAL CHECK
 SECTION, ALL PS/2 SYSTEM POWER CORDS SHOULD BE INSPECTED

IF THE SYSTEM HAS NOT BEEN PREVIOUSLY INSTALLED, OR IS TO BE
 REINSTALLED, INSPECT THE CORD AND REPLACE IT IF MANUFACTURED
 BY MULTILEC.

IF THE SYSTEM HAS BEEN PHYSICALLY INSTALLED BUT NOT POWERED ON,
 OR IF THE SYSTEM WILL NOT OPERATE AT INITIAL INSTALLATION, DO

PSY2 RETAIN TIPS
ECA045, DEFECTIVE PS/2 POWER CORDS

NOT TOUCH THE SYSTEM OR ANY ATTACHED PERIPHERAL DEVICES. IF POSSIBLE, REQUEST THAT THE CUSTOMER REMOVE POWER FROM THE SYSTEM AT THE APPROPRIATE CIRCUIT BREAKER. DISCONNECT THE CORD FROM THE WALL OUTLET AND INSPECT THE PLUG ENDS. IF MANUFACTURED BY MULTILEC, REPLACE THE POWER CORD WITH ONE FROM FRU STOCK.

PS/2 SYSTEMS WHICH ARE INSTALLED AND OPERATIONAL ARE SAFE TO USE, BUT SHOULD NOT BE UNPLUGGED AND PLUGGED INTO ANOTHER OUTLET, RECONFIGURED, OR REPAIRED BEFORE REPLACING THE MULTILEC POWER CORD.

ALL SUSPECT POWER CORDS MUST BE DESTROYED. BE SURE THAT THE CORD IS NOT PLUGGED INTO A POWER SOURCE, THEN CUT OFF THE CONNECTOR AT EACH END OF THE CORD.

REPLACEMENT POWER CORD.....FRU P/N62X1045

NOTES:

ORDER REPLACEMENT POWER CORDS THROUGH NORMAL PARTS DISTRIBUTION.

* RECORD ALL TIME AND MATERIALS TO ECA045, SERVICE CODE 33, OTHER OFFICE 990.

* IMPORTANT:

NSD SERVICE PERSONNEL MUST COMPLETE AN INDIVIDUAL QSAR FOR EACH MULTILEC POWER CORD REPLACED. A COMPLETED QSAR REPRESENTS DESTRUCTION OF THE MULTILEC POWER CORD FOR THE REPORTED MACHINE TYPE AND SERIAL NUMBER.

SAS KEYWORDS:

PSY2	PSY2ECA	PSY2ECBM	8525ECA
8525SYSPWR	8525SYSECBM	8530ECA	8530SYSECBM
8530SYSPWR	8550ECA	8550SYSECBM	8550SYSPWR
PSY2PWR	8555ECA	8555SYSECBM	8555SYSPWR
8560ECA	8560SYSECBM	8560SYSPWR	8565SYSECBM
8565ECA	8565SYSPWR	8570SYSPWR	8570ECA
8570SYSECBM	8580ECA	8580SYSECBM	8580SYSPWR
8573ECA	8573SYSECBM	8573SYSPWR	ECAVALID

PSY2 RETAIN TIPS
ECA046, OBSOLETE

1.1.135 ECA046, OBSOLETE

Record number: H021827

Device:	D/T8550	Service code:	33
ECA number:	ECA046	Parts source:	LOC
EC number:	ECC31457	Publish flag:	R
Mandatory:	N	Hit count:	UHC00862
Automatic shipment:	N	Success count:	USC0000
Availability date:	90/02	Publication code:	PC00
Plant of control:	27	Date created:	090/12/20
Tip key:		Date last altered:	A93/07/23
		Owning B.U.:	USA

PURPOSE:

*** THIS ECA EXPIRED 12-31-92 ***
REPLACE 8570 SYSTEM BOARD TO CORRECT FALSE 8601
POST ERRORS THAT OCCUR ON POWER UP WHEN A 4717 MAGSTRIPE
READER OR 4718 PIN PAD IS ATTACHED TO 8570 SYSTEMS IDENTIFIED
IN THE PHYSICAL CHECK.

FEATURES:

Type, Model, Stage	With B/M	Machines Affected and/or Feature/Device Description	B/M to be Installed	Service Hours	System Hours
8570	B/M0000000	MOD E61	B/M0000000	00.8	00.8
8570	B/M0000000	MOD 061	B/M0000000	00.8	00.8
8570	B/M0000000	MOD 121	B/M0000000	00.8	00.8

PHYSICAL CHECK: REQUIREMENTS FOR ECA INSTALLATION:

1. MODEL E61, 061, OR 121.
2. SERIAL NUMBER RANGE FROM:
MOD E61
7161007 THROUGH 7208999
F001000 THROUGH F003793
MOD 061
8007049 THROUGH 8041499
5001500 THROUGH 5002444
MOD 121
9075500 THROUGH 9107999
5505500 THROUGH 5506937
3. SYSTEM BOARD FRU P/N33F5834 OR P/N33F5835 CONTAINING A ROM
MODULE, ENGINEERING PART NUMBER 33F4906, IN SYSTEM BOARD
LOCATION U10.
4. FALSE 8601 ERROR ON POWER UP, CORRECTED BY PRESSING F1.

PREREQUISITES: NONE

COMPANION: NONE

CONCURRENT: NONE

DETAIL:

NOTES:

*** THIS ECA EXPIRED 12-31-92 ***

SAS KEYWORDS:

PSY2	PSY2ECA	PSY2ECBM	PSY2ERR
PSY2SYSBRD	8570ECA	8570SYSECBM	8570SYSBRD
8570SYSERR	PSY2SYSBRD	8570SYSBRD	

1.1.136 ECA047, OBSOLETE

Record number: H021852

Device:	D/T8550	Service code:	33
ECA number:	ECA047	Parts source:	LOC
EC number:	ECC31457	Publish flag:	R
Mandatory:	N	Hit count:	UHC01578
Automatic shipment:	N	Success count:	USC0000
Availability date:	90/02	Publication code:	PC00
Plant of control:	27	Date created:	090/12/20
Tip key:		Date last altered:	A93/07/23
		Owning B.U.:	USA

PURPOSE:

*** THIS ECA EXPIRED 12-31-92 ***

THIS ECA WILL SUPPLY A HARDWARE FIX FOR A DISKETTE DATA AND FORMAT PROBLEM THAT OCCURS WHEN USING MICROSOFT WINDOWS/386. THE ECA WILL BE INSTALLED IF THE CUSTOMER DOES NOT WANT TO USE THE IBM SOFTWARE FIX AVAILABLE ON DISKETTE FROM THEIR MARKETING POINT OF SALE.

FEATURES:

Type, Model, Stage	With B/M	Machines Affected and/or Feature/Device Description	B/M to be Installed	Service Hours	System Hours
8570	B/M0000000	MOD E61	B/M0000000	00.8	00.8
8570	B/M0000000	MOD U61	B/M0000000	00.8	00.8
8570	B/M0000000	MOD 061	B/M0000000	00.8	00.8
8570	B/M0000000	MOD 121	B/M0000000	00.8	00.8

PHYSICAL CHECK: REQUIREMENTS FOR ECA INSTALLATION:

1. MODEL E61, U61, 061, OR 121.
2. SERIAL NUMBER RANGE FROM:
 - MOD E61
 - 7161007 THROUGH 7208999
 - F001000 THROUGH F003793
 - MOD U61
 - U001476 THROUGH U001823
 - MOD 061
 - 8007049 THROUGH 8041499
 - 5001500 THROUGH 5002444
 - MOD 121
 - 9075500 THROUGH 9107999
 - 5505500 THROUGH 5506937
3. SYSTEM BOARD FRU P/N33F5834 OR P/N33F5835 CONTAINING A ROM MODULE, ENGINEERING PART NUMBER 33F4906, IN SYSTEM BOARD LOCATION U10.
4. DISKETTE FORMAT OPERATION AND DISKETTE WRITE ERRORS WHEN EXECUTING UNDER CONTROL OF MICROSOFT WINDOWS/386 VERSION 2.11 OR LOWER.

PREREQUISITES: NONE

COMPANION: NONE

CONCURRENT: NONE

DETAIL:

TO PERFORM THE HARDWARE FIX, THE 8570 SYSTEM BOARDS IDENTIFIED IN THE PHYSICAL CHECK REQUIRE REPLACEMENT. OBTAIN AN IBM SYSTEM BOARD FRU P/N33F5834 FOR 16MHZ SYSTEMS OR IBM SYSTEM BOARD FRU P/N33F5835 FOR 20MHZ SYSTEMS. ALL FRU STOCK IS AT THE CORRECT LEVEL.

NOTES:

*** THIS ECA EXPIRED 12-31-92 ***

* MICROSOFT WINDOWS/386 IS A TRADEMARK OF THE MICROSOFT CORPORATION.

SAS KEYWORDS:

PSY2	PSY2ECA	PSY2ECBM	PSY2PROG
8570ECA	8570SYSECBM	8570SYSPROG	PSY2DSKT
8570SYSDSKT	8570SYSBRD	PSY2SYSBRD	

1.1.137 ECA048, OBSOLETE

Record number: H067984

Device:	D/T8550	Service code:	
ECA number:	ECA048	Parts source:	
EC number:	EC000000	Publish flag:	R
Mandatory:	N	Hit count:	UHC03501
Automatic shipment:	N	Success count:	USC0000
Availability date:	90/10	Publication code:	PC50
Plant of control:	27	Date created:	090/10/19
Tip key:		Date last altered:	A93/06/17
		Owning B.U.:	USA

PURPOSE: THIS ECA HAS EXPIRED.

FEATURES:

Type, Model, Stage	With B/M	Machines Affected and/or Feature/Device Description	B/M to be Installed	Service Hours	System Hours
00000	B/M0000000		B/M0000000	00.1	00.0

PHYSICAL CHECK:

PREREQUISITES:

COMPANION: NONE

CONCURRENT: NONE

DETAIL:

NOTES: THIS ECA HAS EXPIRED.

SAS KEYWORDS:

PSY2 PSY2ECA

1.1.138 ECA049, OBSOLETE

Record number: H021431

Device:	D/T8550	Service code:	33
ECA number:	ECA049	Parts source:	LOC.
EC number:	ECC31612	Publish flag:	R
Mandatory:	N	Hit count:	UHC00875
Automatic shipment:	N	Success count:	USC0000
Availability date:	90/11	Publication code:	PC20
Plant of control:	27	Date created:	090/09/14
Tip key:		Date last altered:	A93/01/13
		Owning B.U.:	USA

PURPOSE:

*** THIS ECA EXPIRED 12-31-92 ***

FEATURES:

Type, Model, Stage	With B/M	Machines Affected and/or Feature/Device Description	B/M to be Installed	Service Hours	System Hours
8550	B/M0000000	ALL	B/M0000000	00.1	00.1

PHYSICAL CHECK:

PREREQUISITES: NONE

COMPANION: NONE

CONCURRENT: NONE

DETAIL:

NOTES:

*** THIS ECA EXPIRED 12-31-92 ***

SAS KEYWORDS:

PSY2 PSY2ECA

1.1.139 ECA050, OBSOLETE

Record number: H024083

Device:	D/T8550	Service code:	33
ECA number:	ECA050	Parts source:	LOC
EC number:	EC9999999	Publish flag:	R
Mandatory:	N	Hit count:	UHC00840
Automatic shipment:	N	Success count:	USC0000
Availability date:	90/11	Publication code:	PC40
Plant of control:	23	Date created:	090/12/03
Tip key:		Date last altered:	A93/01/13
		Owning B.U.:	USA

PURPOSE:

*** THIS ECA EXPIRED 12-31-92 ***

FEATURES:

Type, Model, Stage	With B/M	Machines Affected and/or Feature/Device Description	B/M to be Installed	Service Hours	System Hours
8550	B/M0000000		B/M0000000	00.1	00.0

PHYSICAL CHECK:

PREREQUISITES: NONE

COMPANION: NONE

CONCURRENT: NONE

DETAIL:

NOTES:

*** THIS ECA EXPIRED 12-31-92 ***

SAS KEYWORDS:

PSY2 PSY2ECA

1.1.140 ECA051, OBSOLETE

Record number: H062921

Device:	D/T8550	Service code:	
ECA number:	ECA051	Parts source:	
EC number:	EC000000	Publish flag:	R
Mandatory:	N	Hit count:	UHC02072
Automatic shipment:	N	Success count:	USC0001
Availability date:	91/02	Publication code:	PC00
Plant of control:	27	Date created:	091/01/29
Tip key:		Date last altered:	A93/06/17
		Owning B.U.:	USA

PURPOSE: THIS ECA HAS EXPIRED.

FEATURES:

Type, Model, Stage	With B/M	Machines Affected and/or Feature/Device Description	B/M to be Installed	Service Hours	System Hours
00000	B/M0000000		B/M0000000	00.1	00.0

PHYSICAL CHECK:

PREREQUISITES: NONE

COMPANION: NONE

CONCURRENT: NONE

DETAIL:

NOTES: THIS ECA HAS EXPIRED.

SAS KEYWORDS:

PSY2 PSY2ECA

1.1.141 ECA052, OBSOLETE

Record number: H091310

Device:	D/T8550	Service code:	
ECA number:	ECA052	Parts source:	
EC number:	ECC32795	Publish flag:	R
Mandatory:	N	Hit count:	UHC07862
Automatic shipment:	N	Success count:	USC0001
Availability date:	91/08	Publication code:	PC00
Plant of control:	27	Date created:	091/07/12
Tip key:		Date last altered:	A93/06/17
		Owning B.U.:	USA

PURPOSE: THIS ECA HAS EXPIRED.

FEATURES:

Type, Model, Stage	With B/M	Machines Affected and/or Feature/Device Description	B/M to be Installed	Service Hours	System Hours
00000	B/M0000000		B/M0000000	00.1	00.0

PHYSICAL CHECK:

PREREQUISITES: NONE

COMPANION: NONE

CONCURRENT: NONE

DETAIL:

NOTES: THIS ECA HAS EXPIRED.

SAS KEYWORDS:

PSY2 PSY2ECA

1.1.142 ECA053, OBSOLETE

Record number: H085171

Device:	D/T8550	Service code:	33
ECA number:	ECA053	Parts source:	
EC number:	EC000000	Publish flag:	R
Mandatory:	N	Hit count:	UHC03085
Automatic shipment:	N	Success count:	USC0001
Availability date:	91/03	Publication code:	PC50
Plant of control:	27	Date created:	091/02/20
Tip key:		Date last altered:	A94/02/07
		Owning B.U.:	USA

PURPOSE:

 This ECA expired 9/30/93.

IDENTIFY 33 MHZ PROCESSOR BOARDS FOR PS/2 8590 AND 8595 SYSTEMS, WHICH ARE EXPERIENCING INTERMITTENT, DIFFICULT TO DIAGNOSE MEMORY PARITY ERRORS, SUCH AS OS/2 TRAP 0002, DOS PARITY CHECK OR AIX NMI MEMORY ERRORS. ALL OF THESE ERRORS WILL REQUIRE SYSTEM RE-BOOT AND WILL DISPLAY AN ERROR CODE OF 00011800 (118 ERROR) DURING POST (POWER-ON SYSTEM TEST).

FEATURES:

Type, Model, Stage	With B/M	Machines Affected and/or Feature/Device Description	B/M to be Installed	Service Hours	System Hours
8590	B/M0000000	MODEL 0K9-23HYFBL THRU 23HYTVK	B/M0000000	01.0	00.9
8595	B/M0000000	MODEL 0KD-23AAAA0 THRU 23BADK3	B/M0000000	01.0	00.9

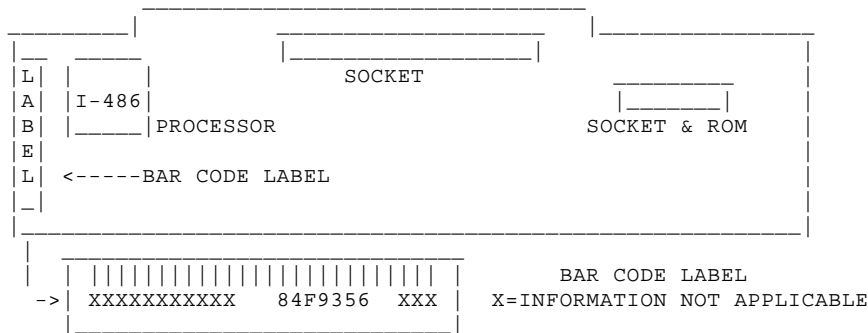
PHYSICAL CHECK:

INSPECT THE 33MHZ PROCESSOR BOARD FOR MANUFACTURING PART NUMBER 84F9356 ON THE BAR CODE LABEL. IF P/N 84F9356 IS PRESENT AND THE SYSTEM IS EXPERIENCING MEMORY PARITY ERRORS, BUT DIAGNOSTICS RUN ERROR FREE, THE PROCESSOR BOARD SHOULD BE REPLACED.

IMPORTANT

ONLY the bar code part number should be used to determine if the processor board is affected.

THE BAR CODE LABEL IS LOCATED ON THE EDGE OF THE BOARD AS ILLUSTRATED BELOW:



PREREQUISITES: NONE

COMPANION: NONE

CONCURRENT: NONE

DETAIL:

ERROR CODE 00011800 (118 ERROR) WILL BE DISPLAYED AT POST. THE MEMORY DIAGNOSTIC MUST BE RUN AT THIS TIME TO CLEAR THE 118 POST ERROR.

THE FOLLOWING QUESTION WILL BE DISPLAYED WHEN THE MEMORY DIAGNOSTICS ARE RUN: "A MEMORY FAILURE HAS BEEN DETECTED, HAVE YOU REPLACED A SIM?" THE SERVICER SHOULD REPLY "YES" TO THIS QUESTION.

THE MEMORY DIAGNOSTIC WILL THEN TEST THE MEMORY AND TERMINATE WITH NO ERROR DETECTED (THE MEMORY IS NOT AT FAULT). THE DIAGNOSTIC WILL RESET THE 118 ERROR WHICH APPEARS AT POST.

ONLY 33MHZ PROCESSOR BOARD MANUFACTURING PART 84F9356 IS AFFECTED. IF THE PROCESSOR HAS ANY OTHER MANUFACTURING

PSY2 RETAIN TIPS
ECA053, OBSOLETE

PART NUMBER, THIS CHANGE IS ALREADY INSTALLED.

NOTES:

This ECA expired 9/30/93.

THIS ECA HAS EXPIRED. DO NOT RECORD ANY TIME OR PARTS TO THIS
ECA.

ALL PARTS SHOULD BE ORDERED USING NORMAL PARTS
ORDERING PROCEDURES. USED PARTS SHOULD BE RETURNED
VIA THE NORMAL UPR (USED PART RETURN) PROCESS.

SAS KEYWORDS:

PSY2	PSY2ECBM	8595SYSECBM	PSY2ERR
PSY2MEM	PSY2ECA	8590SYSERR	8595SYSERR
8590SYSTEMEM	8595SYSTEMEM	8590ECA	8595ECA
8590SYSECBM	8595SYSECBM	D/T8590	D/T8595
FRU	P/N64F0198		

1.1.143 ECA054, OBSOLETE

Record number: H084110

Device:	D/T8550	Service code:	
ECA number:	ECA054	Parts source:	LOC
EC number:	ECC32670	Publish flag:	R
Mandatory:	N	Hit count:	UHC01423
Automatic shipment:	N	Success count:	USC0001
Availability date:	91/02	Publication code:	PC40
Plant of control:	27	Date created:	091/02/12
Tip key:		Date last altered:	A93/06/17
		Owning B.U.:	USA

PURPOSE: THIS ECA HAS EXPIRED.

FEATURES:

Type, Model, Stage	With B/M	Machines Affected and/or Feature/Device Description	B/M to be Installed	Service Hours	System Hours
0000	B/M0000000		B/M0000000	00.1	00.0

PHYSICAL CHECK:

PREREQUISITES: NONE

COMPANION: NONE

CONCURRENT: NONE

DETAIL:

NOTES: THIS ECA HAS EXPIRED.

SAS KEYWORDS:

PSY2 PSY2ECA

1.1.144 ECA055, OBSOLETE

Record number: H061329

Device:	D/T8550	Service code:	33
ECA number:	ECA055	Parts source:	LOC
EC number:	ECC32677	Publish flag:	R
Mandatory:	N	Hit count:	UHC01875
Automatic shipment:	N	Success count:	USC0000
Availability date:	91/02	Publication code:	PC10
Plant of control:	27	Date created:	091/01/21
Tip key:		Date last altered:	A93/07/27
		Owning B.U.:	USA

PURPOSE:

**** THIS ECA EXPIRED 06-30-93 ****

FEATURES:

Type, Model, Stage	With B/M	Machines Affected and/or Feature/Device Description	B/M to be Installed	Service Hours	System Hours
8550	B/MNONE	061 7679204 7761999	B/MNONE	00.5	00.5
8555	B/MNONE	061 ALL ALPHA SERIALS	B/MNONE	00.5	00.5
8555	B/MNONE	061 1116983 1309668	B/MNONE	00.5	00.5
8555	B/MNONE	061 9290267 9329525	B/MNONE	00.5	00.5
8555	B/MNONE	T61 ALL NUMBERS	B/MNONE	00.5	00.5
8555	B/MNONE	U61 ALL NUMBERS	B/MNONE	00.5	00.5
8555	B/MNONE	W61 ALL NUMBERS--	B/MNONE	00.5	00.5
8570	B/MNONE	061 8000500 8132999	B/MNONE	00.5	00.5
8570	B/MNONE	A61 6500500 6523999	B/MNONE	00.5	00.5
8570	B/MNONE	B61 4625421 4630249	B/MNONE	00.5	00.5
8570	B/MNONE	E61 ALL ALPHA SERIALS	B/MNONE	00.5	00.5
8570	B/MNONE	E61 7160500 7271849	B/MNONE	00.5	00.5
8570	B/MNONE	U61 ALL NUMBERS	B/MNONE	00.5	00.5
8570	B/MNONE	W61 ALL NUMBERS	B/MNONE	00.5	00.5

PHYSICAL CHECK:

NO HARDWARE IS TO BE REPLACED WITH THIS ECA. THIS ECA CONTAINS INFORMATION ABOUT A MICROCODE PATCH FOR THE FIXED DISK, AND RELATED INSTALLATION INSTRUCTIONS.

THIS ECA APPLIES TO SEAGATE 60MB FIXED DISK DRIVES, FRU P/N90X8627. SOME SYSTEMS IN THE ABOVE SERIAL NUMBER RANGES HAVE THE AFFECTED DRIVES INSTALLED IN THEM. IT IS NOT NECESSARY TO OPEN THE SYSTEM TO CHECK THE ACTUAL DISK DRIVE SERIAL NUMBER RANGES BEFORE ATTEMPTING TO INSTALL THIS ECA.

NOTE: IF THE SYSTEM IS OPENED, THE 60MB DRIVES THAT ARE AFFECTED CAN BE IDENTIFIED BY A SUPPLIER CODE OF 820850 ON A LABEL LOCATED ON THE TOP OF THE DRIVE.

SEE THE DETAIL SECTION FOR SYMPTOMS. SOME OPERATING SYSTEMS SUCH AS DOS DO NOT HAVE A DISCERNIBLE FAILURE SYMPTOM, BUT BECAUSE OPERATING SYSTEMS ARE OFTEN CHANGED DURING THE LIFE OF A SYSTEM, THIS CODE INSTALLATION IS REQUIRED ON ALL SYSTEMS WITH THE ABOVE DISK DRIVE.

PREREQUISITES: NONE

COMPANION: NONE

CONCURRENT: NONE

DETAIL: CUSTOMERS MAY INSTALL THE "60MB FIXED DISK BUFFER TEST UPDATE DISKETTE" USING THE INSTALLATION INSTRUCTIONS CONTAINED IN THE DISKETTE / FRU PACKAGE. THEY MAY OBTAIN THIS DISKETTE AND INSTALLATION INFORMATION BY CALLING 1-800-845-4263 OR THEY CAN ELECT TO HAVE THEIR SERVICER OBTAIN AND INSTALL THE UPDATE DISKETTE.

THIS CODE INSTALLATION IS DESIGNED TO PREVENT DATA LOSS PROBLEMS WHILE RUNNING OS/2 AND TO PREVENT NMI ERRORS WHILE RUNNING AIX. THIS CAN HAPPEN WHEN FILE INTERRUPTS OCCUR DURING AUTOMATICALLY EXECUTED DISK DRIVE DIAGNOSTIC ROUTINES CONTAINED WITHIN THE DRIVE CODE. SOME OF THE SYMPTOMS THAT CAN OCCUR ARE:

- * SYSTEMS WITH AIX OPERATING SYSTEMS CAN DISPLAY A MESSAGE THAT READS "PANIC MESSAGE SYSTEM WILL REBOOT IN SECONDS."
- * SYSTEMS WITH OS/2 OPERATING SYSTEMS CAN EXPERIENCE INTERMITTENT HALTS THAT REQUIRE A SYSTEM REBOOT TO RESET.

TO INSTALL THE UPDATE CODE INSERT THE DISKETTE AND BOOT THE SYSTEM. THE FOLLOWING MESSAGES CAN OCCUR DURING THE EXECUTION

OF THE PROGRAM:

- "WARNING! SHARE SHOULD BE LOADED FOR LARGE MEDIA."
THIS MESSAGE IS PRODUCED BY THE DISKETTE'S OPERATING SYSTEM
AND IS NOT APPLICABLE FOR THIS SITUATION. DISREGARD THIS
MESSAGE!
- "FOR MORE DETAILS ON THE UPDATE PROCESS, PRESS CTRL-BRK AND
VIEW THE README FILE. OTHERWISE, PRESS ANY KEY TO CONTINUE."
THIS MESSAGE IS INFORMATIONAL AND CAN BE ACCESSED BY KEYING:
(TYPE README) JUST REMEMBER TO USE THE PAUSE KEY TO STOP
SCROLLING.
- "UPDATE COMPLETE, REMOVE THE DISKETTE, THEN RESTART THE
SYSTEM."
- "UPDATE NOT REQUIRED FOR THIS SYSTEM, REMOVE THE DISKETTE,
THEN RESTART THE SYSTEM."
- "UNEXPECTED ERROR, RUN SYSTEM CHECKOUT."

ERROR RECOVERY PROCESS:

INTERRUPTIONS IN THE TRANSFER OF CODE FROM THE "60MB FIXED
DISK BUFFER TEST, UPDATE DISKETTE" TO THE FIXED DISK MAY
CAUSE A PARTIAL LOAD OF THE NEW CODE. THIS CAN CAUSE FAILURES
TO OCCUR DURING THE START UP OF THE SYSTEM (BOOT).
INTERRUPTIONS CAN BE CAUSED BY A POWER FAILURE, DEFECTIVE
DISKETTE, OR OTHER HARDWARE FAILURE OCCURRING AT THE TIME OF
DATA TRANSFER. FOLLOW THIS PROCEDURE TO RECOVER:

1. LEAVE THE DISKETTE IN THE SYSTEM.
2. TURN THE SYSTEM OFF FOR 30 SECONDS AND TURN THE SYSTEM ON.
 - IF A DISKETTE "FAIL ABORT RETRY" OCCURS BOOT ANOTHER
"60MB FIXED DISK BUFFER TEST UPDATE DISKETTE."
. A COMPLETION MESSAGE INDICATES A SUCCESSFUL
CODE TRANSFER.
 - IF A 10483 ERROR OCCURS, SEE NOTE BELOW AND PROCEED TO
STEP 3.

NOTE:

A 10483 ERROR MEANS EITHER THE DRIVE DID NOT RECEIVE ALL OF THE
CODE OR A HARDWARE ERROR HAS OCCURRED. IN MOST CASES THE DRIVE
DID NOT RECEIVE ALL THE CODE. BECAUSE OF THE POST ERROR THE
FOLLOWING LOAD PROCEDURE IS NEEDED TO RELOAD THE FIXED DISK
CODE.

3. PRESS THE F1 KEY; ANOTHER MESSAGE WILL APPEAR BRIEFLY AND
THE A: PROMPT WILL BE DISPLAYED.
4. LEVEL "C" DRIVE. (IDENTIFIED BY P/N6373575 ON WHITE LABEL)

AT THE A: PROMPT, KEY REVCFIX. FILES WILL TRANSFER TO THE
FIXED DISK. IF FILES DO NOT TRANSFER TRY ANOTHER FIX
DISKETTE. IF THE FILES HAVE TRANSFERRED AND A 10483 ERROR
OCCURS DURING NORMAL CUSTOMER REBOOT GO TO STEP 5.
5. FOLLOW STEP 3 TO GET TO THE A: PROMPT THEN GO TO STEP 6.
6. LEVEL "B" DRIVE. (IDENTIFIED BY P/N6373526 ON WHITE LABEL)

AT THE A: PROMPT, KEY REVBFIX. FILES WILL TRANSFER TO THE
FIXED DISK. IF THIS IS YOUR FIRST TIME HERE AND THE FILES
DO NOT TRANSFER TRY ANOTHER FIX DISKETTE. STILL FAILS? GO
TO STEP 8.
7. REBOOT THE SYSTEM WITH THE DISKETTE REMOVED.
 - NORMAL CUSTOMER BOOT. PROGRAM COMPLETE
 - IF A 10483 ERROR OR OTHER PROBLEMS OCCUR GO TO
STEP 8.
8. CALL SUPPORT AND REQUEST PLANT LEVEL SUPPORT FOR FURTHER
INSTRUCTIONS.

NOTE: CODE INFORMATION WILL ONLY LOAD TO A FIXED DISK THAT
REQUIRES IT. THE INFORMATION IN THE CODE OF THE DRIVE IS
CORRECTED WITH THE UPDATE DISKETTE. OTHER TYPES OF HARDWARE
FAILURES WILL BE RESOLVED BY USING THE CUSTOMER'S CURRENT
SERVICE AGREEMENT TO REPLACE DEFECTIVE FRUS.

THIS ECA IS NOT TO BE USED FOR ANY HARDWARE REPLACEMENTS.

NOTES:

*** THIS ECA EXPIRED 6-30-93 ***
SUBSCRIBERS TO THE SLSS SIM SUBSCRIPTION NUMBER SBOF-2480 WILL
AUTOMATICALLY RECEIVE THE FIX DISKETTE PACKAGE. OTHER SERVICERS

PSY2 RETAIN TIPS
ECA055, OBSOLETE

CAN ORDER THE DISKETTE FRU PACKAGE, P/N92F0619, THROUGH NORMAL PARTS CHANNELS.

SAS KEYWORDS:

PSY2	PSY2ECA	8570ECA	8570SYSECBM
8570SYSMCD	8555ECA	8555SYSECBM	8555SYSMCD
8550ECA	8550SYSECBM	8550SYSMCD	PSY2ECBM
PSY2PROG	PSY2FDSK	8550SYSPROG	8550SYSFDSK
8555SYSPROG	8555SYSFDSK	8570SYSPROG	8570SYSFDSK
PSY2ERR	8570SYSERR	8550SYSERR	8555SYSERR

1.1.145 ECA056, OBSOLETE

Record number: H082715

Device:	D/T8550	Service code:	33
ECA number:	ECA056	Parts source:	LOC.
EC number:	ECC01361	Publish flag:	R
Mandatory:	N	Hit count:	UHC00777
Automatic shipment:	N	Success count:	USC0000
Availability date:	90/03	Publication code:	PC20
Plant of control:	27	Date created:	091/03/26
Tip key:		Date last altered:	A93/07/23
		Owning B.U.:	USA

PURPOSE:

*** THIS ECA EXPIRED 6-30-93 ***

TO DETERMINE IF THE ARTIC MULTIPORT/2 ADAPTER SHOULD BE REPLACED AS DESCRIBED IN THE DETAIL OF THIS ECA.

FEATURES:

Type, Model, Stage	With B/M	Machines Affected and/or Feature/Device Description	B/M to be Installed	Service Hours	System Hours
8595	B/M0000000	ALL MODELS	B/M0000000	01.0	01.0

PHYSICAL CHECK:

CHECK FOR PART NUMBER 09F1877 OR 57F2712 ON THE GATE ARRAY (LARGE SILVER COMPONENT LOCATED ABOVE THE BUS CONNECTOR) AND FOR THE PRESENCE OF COMPONENTS IN POSITIONS U21 AND U22. AFFECTED ADAPTERS WILL HAVE ONE OF THE ABOVE PART NUMBERS AND COMPONENTS IN POSITIONS U21 AND U22.

PREREQUISITES: NONE

COMPANION: NONE

CONCURRENT: NONE

DETAIL:

THE MULTIPORT/2 ADAPTER MAY CAUSE THE FOLLOWING INTERMITTENT ERRORS WHEN INSTALLED IN AN 8595:

- 111 ERRORS
- SYSTEM HANG CONDITIONS
- MEMORY FAILURES WHILE RUNNING DIAGNOSTICS

THESE FAILURES MAY BE SYSTEM AND SLOT SENSITIVE.

NOTES:

*** THIS ECA EXPIRED 6-30-93 ***

REPLACE THE ARTIC MULTIPORT/2 ADAPTER P/N09F1888 (512KB) OR P/N09F1962 (1MB) AS APPROPRIATE.

SAS KEYWORDS:

PSY2	PSY2ADPT	PSY2ERR	PSY2ECA
PSY2ECBM	8595ECA	8595SYSECBM	8595SYSADPT
8595SYSERR	PSY2MEM	8595SYSMEM	D/T8595

1.1.146 ECA057, OBSOLETE

Record number: H023561

Device:	D/T8550	Service code:	
ECA number:	ECA057	Parts source:	LOC
EC number:	ECC69623	Publish flag:	R
Mandatory:	Y	Hit count:	UHC00932
Automatic shipment:	N	Success count:	USC0000
Availability date:	90/12	Publication code:	PC20
Plant of control:	24	Date created:	090/12/17
Tip key:		Date last altered:	A93/06/17
		Owning B.U.:	USA

PURPOSE: THIS ECA HAS EXPIRED.

FEATURES:

Type, Model, Stage	With B/M	Machines Affected and/or Feature/Device Description	B/M to be Installed	Service Hours	System Hours
00000	B/M0000000		B/M0000000	00.1	00.0

PHYSICAL CHECK:

PREREQUISITES: NONE

COMPANION: NONE

CONCURRENT: NONE

DETAIL:

NOTES: THIS ECA HAS EXPIRED.

SAS KEYWORDS:

PSY2 PSY2ECA

1.1.147 ECA058, OBSOLETE

Record number: H033669

Device:	D/T8550	Service code:	33
ECA number:	ECA058	Parts source:	LOC.
EC number:	ECC32664	Publish flag:	R
Mandatory:	N	Hit count:	UHC00547
Automatic shipment:	N	Success count:	USC0000
Availability date:	90/12	Publication code:	PC20
Plant of control:	27	Date created:	090/12/18
Tip key:		Date last altered:	A93/07/23
		Owning B.U.:	USA

PURPOSE:

*** THIS ECA EXPIRED 12-31-92 ***

FEATURES:

Type, Model, Stage	With B/M	Machines Affected and/or Feature/Device Description	B/M to be Installed	Service Hours	System Hours
SAVE	B/M0000000	8525-286	B/M0000000	01.0	00.8

PHYSICAL CHECK:

1. AN 8525 - 286 WITH SYSTEM BOARD FRU P/N64F0178 INSTALLED.FRU P/N64F0178 CAN ALSO BE IDENTIFIED BY P/N37F6657 ON THE BARCODE LABEL.
***** AND *****
2. SYSTEM EXHIBITS "SYSTEM HANG" CONDITION WITH OEM ADAPTER CARD INSTALLED. "SYSTEM HANG" SYMPTOM CAN BE ELIMINATED BY REMOVING THE OEM ADAPTER CARD.

NOTE:

8525 - 286 SYSTEMS MANUFACTURED WITH SYSTEM BOARD FRU P/N64F0178 ARE AS FOLLOWS:
 MODEL 006/G06 - SYSTEM S/N BELOW D0000.
 MODEL 036/G36 - SYSTEM S/N BELOW CAA00.

PREREQUISITES: NONE

COMPANION: NONE

CONCURRENT: NONE

DETAIL:

AN 8525 - 286 WITH SYSTEM BOARD FRU P/N64F0178 MAY EXPERIENCE A SYSTEM HANG CONDITION IF AN OEM ADAPTER CARD IS INSTALLED. THIS PROBLEM HAS BEEN CORRECTED IN SYSTEM BOARD FRU P/N91F8319. THIS ECA APPLIES ONLY TO FAILING SYSTEMS MEETING "PHYSICAL CHECK" REQUIREMENTS OF THIS ECA. SYSTEMS NOT EXHIBITING A SYSTEM HANG CONDITION DO NOT QUALIFY FOR THIS ECA.

NOTES:

*** THIS ECA EXPIRED 12-31-92 ***

ORDER REPLACEMENT SYSTEM BOARD, FRU P/N91F8319, THROUGH NORMAL DISTRIBUTION.

SAS KEYWORDS:

PSY2	8525SYSBRD	8525ECA	8525SYSADPT
8525SYSERR	PSY2ECBM	PSY2BRD	PSY2ECA
PSY2OEM	8525SYSOEM	PSY2ADPT	8525SYSECBM
PSY2ERR			

1.1.148 ECA058, OBSOLETE

Record number: H20391

Device:	D/T8550	Service code:	33
ECA number:	ECA058	Parts source:	LOC.
EC number:	EC000000	Publish flag:	R
Mandatory:	N	Hit count:	UHC00040
Automatic shipment:	N	Success count:	USC0000
Availability date:	90/03	Publication code:	PC20
Plant of control:	23	Date created:	093/01/22
Tip key:		Date last altered:	A93/01/22
		Owning B.U.:	USA

PURPOSE:

THIS ECA EXPIRED 12-31-92 ***

FEATURES:

Type, Model, Stage	With B/M	Machines Affected and/or Feature/Device Description	B/M to be Installed	Service Hours	System Hours
8550	B/M0000000		B/M0000000	00.1	00.0

PHYSICAL CHECK:

PREREQUISITES: NONE

COMPANION: NONE

CONCURRENT: NONE

DETAIL:

NOTES:

*** THIS ECA EXPIRED 12-31-92 ***

SAS KEYWORDS:

PSY2 PSY2ECA

1.1.149 ECA059 (EXPIRED), 8570 AX1/BX1, PARITY CHECK ERRORS

Record number: H084204

Device:	D/T8550	Service code:	33
ECA number:	ECA059	Parts source:	LOC
EC number:	ECC32663	Publish flag:	R
Mandatory:	N	Hit count:	UHC01713
Automatic shipment:	N	Success count:	USC0000
Availability date:	91/02	Publication code:	PC10
Plant of control:	27	Date created:	091/01/23
Tip key:		Date last altered:	A95/08/17
		Owning B.U.:	USA

PURPOSE: SYSTEM BOARD REPLACEMENT TO CORRECT FALSE SYSTEM BOARD MEMORY PARITY ERRORS ON SOME 8570 SYSTEMS.

>>>>>> THIS ECA EXPIRED 6-30-95 <<<<<<<<

FEATURES:

Type, Model, Stage	With B/M	Machines Affected and/or Feature/Device Description	B/M to be Installed	Service Hours	System Hours
8570	B/MNONE	MOD A61 A21 386 25MHZ	B/MNONE	01.0	01.0
8570	B/MNONE	MOD B61 B21 486 25MHZ	B/MNONE	01.0	01.0

PHYSICAL CHECK: BEFORE INSTALLING HARDWARE FRUS, ALL SOFTWARE FIXES SHOULD BE APPLIED TO THE INSTALLED OPERATING SYSTEM OF THE 8570 25MHZ SYSTEMS. THE FOLLOWING CONDITIONS MUST BE MET:

- 8570 MODELS A61 AND A21 (386 / 25MHZ) SYSTEMS MUST BE EXPERIENCING THE PARITY CHECK ON SYSTEMS CONTAINING SYSTEM BOARD FRU P/N15F7657, 8570 MODELS B61 AND B21 (486 / 25MHZ) SYSTEMS MUST CONTAIN SYSTEM BOARD FRU P/N64F0122.
- BOTH SYSTEM BOARDS MUST HAVE A DATE CODE OF 8933CP OR HIGHER ON THE MODULE LOCATED IN LOCATION U142.
DATE CODE INFO: 89 = YEAR, 33 = WEEK OF YEAR, CP = PLANT LOCATION.
MODULE LOCATION: U142 IS THE LONGEST MODULE NEXT TO THE INNER MOST MEMORY MODULE SOCKET J17.
NOTE: THE PROCESSOR CARD DOES NOT HAVE TO BE REMOVED TO SEE THE DATE CODE.
- THE SYSTEM BOARD MUST HAVE MEMORY INSTALLED IN MORE THAN ONE SYSTEM BOARD SOCKET IN ORDER TO EXPERIENCE THIS PROBLEM.

PREREQUISITES: NONE

COMPANION: NONE

CONCURRENT: NONE

DETAIL:

INTERMITTENT ERRORS CAUSED BY THE CONDITION NORMALLY OCCUR AT POST, OR DURING OPERATION SHORTLY AFTER POST. BECAUSE THIS ERROR IS NORMALLY CAUSED BY DEFECTIVE MEMORY SIMMS, IT IS RECOMMENDED THAT SYSTEM BOARD MEMORY BE CONSIDERED BEFORE THE SYSTEM BOARD IS REPLACED. FAILING MEMORY IS NOT COVERED BY THIS ECA. ADVANCED DIAGNOSTICS MUST BE RUN SO SOLID HARDWARE FAILURES, NOT ASSOCIATED WITH THIS FAILURE, CAN BE ELIMINATED. ALL SOFTWARE OPERATING SYSTEMS SHOULD HAVE THE LATEST UPGRADES APPLIED TO THEM. FOR EXAMPLE OS.2 1.1 EXTENDED REQUIRES THE WR03089 CORRECTIVE SERVICE DISKETTE (CSD) AND OS/2 1.2 EXTENDED REQUIRES THE WR04098 CSD.

REPLACE SYSTEM BOARD WHEN:

- ALL REQUIREMENTS IN THE PHYSICAL CHECK ARE MET.
- ALL THE SYMPTOMS OF THE OPERATING SYSTEMS LISTED BELOW ARE MET.

THE FOLLOWING EXAMPLES SHOW HOW VARIOUS OPERATING SYSTEMS DISPLAY THIS PARITY ERROR:

ALL LEVELS OF DOS WILL DISPLAY A MESSAGE THAT READS "PARITY CHECK 1"

OS/2 WILL DISPLAY TRAP ERROR 0002. THE SCREEN WILL READ "THE SYSTEM DETECTED A HARDWARE MEMORY ERROR ON THE SYSTEM BOARD. THE SYSTEM STOPPED. RUN THE DIAGNOSTICS SUPPLIED WITH YOUR SYSTEM TO DETERMINE THE CAUSE OF YOUR PROBLEM.

TRAP 0002

(OTHER VARIABLE INFORMATION WILL BE HERE)

ERRCD=0001

(OTHER VARIABLE INFORMATION WILL BE HERE)

AIX WILL DISPLAY A MESSAGE THAT READS:

NMI_ERR: MEMORY PARITY ERROR

XENIX AND UNIX WILL DISPLAY A MESSAGE THAT READS:
"PANIC: NMI: ERROR: MEMORY FAILURE - PARITY ERROR"

IF THE XENIX OR UNIX SYSTEMS HAVE A FILE CALLED OEM.O DRIVER
OR THEY ARE AT VERSION 2.34 OR HIGHER THE FOLLOWING MESSAGE
WILL ALSO BE INCLUDED.

"NON MASKABLE INTERRUPT, CAUSE = XX"
(THE XX CAN BE ANY CHARACTERS)

NOTES:

>>>>>>> THIS ECA EXPIRED 6-30-95 <<<<<<<<<

FOR THE 8570 MODEL A61 OR A21 ORDER SYSTEM BOARD FRU P/N92F0580.
FOR THE 8570 MODEL B61 OR B21 ORDER SYSTEM BOARD FRU P/N92F0581.

ORDERS FOR OLD FRU PART NUMBERS WILL AUTOMATICALLY SUB TO
THE CURRENT FRU.

SAS KEYWORDS:

PSY2	PSY2ECA	PSY2ECBM	PSY2MEM
PSY2BRD	8570ECA	8570SYSECBM	8570YSYSMEM
8570SYSBRD	PSY2ERR	8570SYSERR	

PSY2 RETAIN TIPS
ECA060, OBSOLETE

1.1.150 ECA060, OBSOLETE

Record number: H084565

Device:	D/T8550	Service code:	33
ECA number:	ECA060	Parts source:	LOC
EC number:	ECC32663	Publish flag:	R
Mandatory:	N	Hit count:	UHC00642
Automatic shipment:	N	Success count:	USC0000
Availability date:	91/02	Publication code:	PC10
Plant of control:	27	Date created:	091/01/25
Tip key:		Date last altered:	A93/07/27
		Owning B.U.:	USA

PURPOSE:

*** THIS ECA EXPIRED 6-30-93 ***

FEATURES:

Type, Model, Stage	With B/M	Machines Affected and/or Feature/Device Description	B/M to be Installed	Service Hours	System Hours
8570	B/MNONE	MOD A61 A21 386 25MHZ	B/MNONE	01.0	01.0
8570	B/MNONE	MOD B61 B21 486 25MHZ	B/MNONE	01.0	01.0

PHYSICAL CHECK:

1. 25MHZ 386 SYSTEMS MUST CONTAIN A SYSTEM BOARD FRU P/N15F7657 THAT FALLS WITHIN THE SYSTEM BOARD BAR CODE RANGE OF B1HCJXXXXXX AND B1HCTXXXXXX.

NOTE: 1. X = ANY CHARACTER

2. THE SIGNIFICANT CHARACTER IS THE 5TH FROM THE LEFT. (J THROUGH T)

3. THE BAR CODE IS LOCATED ON THE SIDE OF THE SYSTEM BOARD NEXT TO POSITION U126.

2. 25MHZ 486 SYSTEMS MUST CONTAIN A SYSTEM BOARD FRU P/N64F0122.

3. THESE SYSTEMS MUST BE EXPERIENCING A COLOR CHANGING PROBLEM ON DISPLAY.

PREREQUISITES: NONE

COMPANION: NONE

CONCURRENT: NONE

DETAIL:

THESE PROBLEMS WILL HAPPEN MOST FREQUENTLY IN TEXT MODE. SOME OF THE SYMPTOMS ARE: BACK GROUND COLOR CHANGES, MISSING PIXELS IN CHARACTERS, AND A SMEARING / BREAKING UP OF CHARACTERS.

THE COLOR CHANGING PROBLEM WILL HAPPEN MORE OFTEN AS THE HEAT WITHIN THE SYSTEM RISES. THEREFORE, OPTIONS THAT CREATE MORE HEAT WILL INCREASE THE SYMPTOMS. THIS SITUATION IS LIMITED TO THE SYSTEMS IDENTIFIED IN THE FEATURES SECTION.

NOTES:

*** THIS ECA EXPIRED 6-30-93 ***

ORDER 25MHZ 386 SYSBRD FRU P/N92F0580 FOR THE 8570 MOD A61 & A21
ORDER 25MHZ 486 SYSBRD FRU P/N92F0581 FOR THE 8570 MOD B61 & B21

SAS KEYWORDS:

PSY2	PSY2ECA	PSY2ECBM	PSY2DISP
8570ECA	8570SYSECBM	8503DISP	8512DISP
8513DISP	8514DISP	8515DISP	PSY2SYSBRD
8570SYSBRD	PSY2BRD	8570SYSBRD	BLEEDING

1.1.151 ECA061, OBSOLETE

Record number: H033070

Device:	D/T8550	Service code:	33
ECA number:	ECA061	Parts source:	LOC.
EC number:	EC000000	Publish flag:	R
Mandatory:	N	Hit count:	UHC02021
Automatic shipment:	N	Success count:	USC0000
Availability date:	91/01	Publication code:	PC20
Plant of control:	27	Date created:	091/01/18
Tip key:		Date last altered:	A93/07/27
		Owning B.U.:	USA

PURPOSE:

*** THIS ECA EXPIRED 06-30-93 ***

FEATURES:

Type, Model, Stage	With B/M	Machines Affected and/or Feature/Device Description	B/M to be Installed	Service Hours	System Hours
8513	B/M0000000	8513 COLOR DISPLAYS WITHIN SPECIFIED SERIAL NUMBER RANGES	B/M0000000	00.4	00.2

PHYSICAL CHECK:

FAILING 8513 DISPLAYS MUST MEET ALL THREE OF THE FOLLOWING REQUIREMENTS:

1. DISPLAY DEAD, SCREEN BLANK.
 *****AND*****
2. DISPLAY POWER LED OFF.
 *****AND*****
3. SERIAL NUMBER RANGE WITH "23" PREFIX.
 - A. 23 - D7300 THRU 23-Z9999 --- ECA EXPIRES 06/30/93.
 - B. 23 - AA000 THRU 23-ZZ999 --- ECA EXPIRES 06/30/93.
 - C. 23 - AAA00 THRU 23-PCB00 --- ECA EXPIRES 06/30/93.

PREREQUISITES: NONE

COMPANION: NONE

CONCURRENT: NONE

DETAIL:

A LIMITED NUMBER OF 8513 COLOR DISPLAYS MAY FAIL, CAUSING A BLANK SCREEN THAT CANNOT BE CORRECTED USING THE BRIGHTNESS AND CONTRAST CONTROLS. THE POWER ON LED WILL NOT BE LIT.

NOTES:

*** THIS ECA EXPIRED 06-30-93 ***

IF CUSTOMER PROVIDES "PROOF OF PURCHASE", THIS ECA IS EFFECTIVE FOR THREE (3) YEARS FROM DATE OF PURCHASE.

ORDER REPLACEMENT DISPLAYS THROUGH NORMAL DISTRIBUTION.

SAS KEYWORDS:

PSY2	8513DISP	8513ECA	PSY2DISP
PSY2ECA	8530ECA	8550ECA	8555ECA
8560ECA	8565ECA	8570ECA	8580ECA
8590ECA	8595ECA	PSY2ECBM	

PSY2 RETAIN TIPS
ECA062, OBSOLETE

1.1.152 ECA062, OBSOLETE

Record number: H08578

Device:	D/T8550	Service code:	33
ECA number:	ECA062	Parts source:	LOC
EC number:	ECC81223	Publish flag:	R
Mandatory:	N	Hit count:	UHC01254
Automatic shipment:	N	Success count:	USC0000
Availability date:	91/04	Publication code:	PC40
Plant of control:	27	Date created:	091/04/25
Tip key:		Date last altered:	A93/07/26
		Owning B.U.:	USA

PURPOSE:

*** THIS ECA EXPIRED 6-30-93 ***

CORRECT SOLID OR INTERMITTENT SYSTEM HANGS OCCURRING AT POST BY
INSTALLING A SYSTEM BOARD AND PREREQUISITE ECA070 FOR THE
INSTALLATION OF A RE-ENGINEERED DISKETTE DRIVE COVER,
FRU P/N79F3239.

FEATURES:

Type, Model, Stage	With B/M	Machines Affected and/or Feature/Device Description	B/M to be Installed	Service Hours	System Hours
8573	B/MNONE	MOD 031 BELOW XX49999 FRU P/N38F5969	B/MNONE	01.0	01.0
8573	B/MNONE	MOD 061 BELOW XX49999 FRU P/N65X1564	B/MNONE	01.0	01.0
8773	B/MNONE	MOD 121 BELOW XX49999 FRU P/N65X1564	B/MNONE	01.0	01.0

PHYSICAL CHECK:

SYSTEMS WITH SERIAL NUMBERS OF 49,999 OR EARLIER THAT EXPERIENCE
SOLID OR INTERMITTENT POST HANGS WITH THE POWER AND DISKETTE
DRIVE LIGHT ON SOLIDLY DURING THE HANG.

PREREQUISITES:

To Install B/M	ECA Required	EC Required	Physical Check for Prerequisites
B/MNONE	ECA070	ECC81223	METAL COATING ON THE INSIDE SURFACE OF THE DISKETTE DRIVE COVER WHERE THE DISKETTE ENTERS.

COMPANION: NONE

CONCURRENT: NONE

DETAIL:

STATIC FROM A PERSON INSERTING A DISKETTE INTO THE
DISKETTE DRIVE CAN CAUSE A SYSTEM BOARD GATE ARRAY TO FAIL OR BE
DAMAGED. TO SOLVE THIS PROBLEM THE DISKETTE DRIVE COVER HAS BEEN
REDESIGNED AND IS AVAILABLE AS A PREREQUISITE ECA AND FRU.

A SYSTEM BOARD THAT HAS EXPERIENCED A STATIC CHARGE WILL EXHIBIT
SOLID OR INTERMITTENT POST HANGS WITH NO POST BEEP AND WILL HAVE
A CONSTANT POWER GOOD AND DISKETTE DRIVE LIGHT ON DURING THE
HANG CONDITION. IF THIS IS OCCURRING, A NEW DISKETTE DRIVE COVER
MUST FIRST BE INSTALLED, THEN THE SYSTEM BOARD CAN BE REPLACED.

NOTES:

*** THIS ECA EXPIRED 6-30-93 ***

THIS DOES NOT APPLY TO 8573 SYSTEMS ABOVE SERIAL
NUMBER XX50,000 BECAUSE THEY ARE NOT SUBJECT TO THIS
TYPE OF STATIC DISCHARGE.

ORDER PARTS THROUGH NORMAL DISTRIBUTION CHANNELS. RECORD ALL
TIME AND MATERIALS TO SERVICE CODE 33, ECA062 AND OTHER OFFICE
WORKED 990.

SAS KEYWORDS:

PSY2	PSY2ECA	PSY2ECBM	PSY2SYSBRD
8573ECA	8573SYSECBM	8573SYSBRD	D/T8573

1.1.153 ECA063, OBSOLETE

Record number: H015520

Device:	D/T8550	Service code:	
ECA number:	ECA063	Parts source:	
EC number:	ECC32647	Publish flag:	R
Mandatory:	N	Hit count:	UHC01070
Automatic shipment:	N	Success count:	USC0000
Availability date:	91/04	Publication code:	PC30
Plant of control:	27	Date created:	091/04/18
Tip key:		Date last altered:	A93/06/17
		Owning B.U.:	USA

PURPOSE: THIS ECA HAS EXPIRED.

FEATURES:

Type, Model, Stage	With B/M	Machines Affected and/or Feature/Device Description	B/M to be Installed	Service Hours	System Hours
00000	B/M0000000		B/M0000000	00.1	00.0

PHYSICAL CHECK:

PREREQUISITES:

COMPANION: NONE

CONCURRENT: NONE

DETAIL:

NOTES: THIS ECA HAS EXPIRED.

SAS KEYWORDS:

PSY2 PSY2ECA

1.1.154 ECA064, OBSOLETE

Record number: H094158

Device:	D/T8550	Service code:	33
ECA number:	ECA064	Parts source:	RAL
EC number:	ECC40168	Publish flag:	R
Mandatory:	N	Hit count:	UHC00555
Automatic shipment:	N	Success count:	USC0000
Availability date:	03/01	Publication code:	PC50
Plant of control:	98	Date created:	092/02/27
Tip key:		Date last altered:	A93/07/23
		Owning B.U.:	USA

PURPOSE:

**** THIS ECA EXPIRED 6-30-93 ****

IF LOADING ITEM FILES INTO A TERMINAL RAM DISK AND IT TAKES LONGER TO COMPLETE THIS TASK THAN NORMAL.

AND

ERROR LOG 4 (THE CONTROLLER EVENT LOG), SOURCE 008 OR 009
 EVENT 23 WITH UNIQUE DATA = 68.

EXAMPLE OF EVENT LOG ENTRY:

B4/S008/E023

OR

B4/S009/E023

FEATURES:

Type, Model, Stage	With B/M	Machines Affected and/or Feature/Device Description	B/M to be Installed	Service Hours	System Hours
ALL	B/MNONE	ALL	B/MNONE	00.3	00.3

PHYSICAL CHECK: NONE

PREREQUISITES: NONE

COMPANION: NONE

CONCURRENT: NONE

DETAIL:

REPLACE THE STORE LOOP ADAPTER IF THE P/N'S ARE:

39F8013 CARD PART NUMBER

53F7446 CARD PART NUMBER

ORDER NEW STORE LOOP ADAPTER P/N 96X4852 (RAW CARD P/N 74F4017)

NOTES: NONE

*** THIS ECA EXPIRED 06-30-93 ***

SAS KEYWORDS:

PSY2	PSY2ECA	PSY2ADPT	PSY2ECBM
D/T8525	D/T8530	D/T8535	D/T8540
D/T8555	D/T8557	D/T8560	D/T8565
D/T8570	D/T8580	D/T8590	D/T8595
8525SYSADPT	8530SYSADPT	8535SYSADPT	8540SYSADPT
8555SYSADPT	8557SYSADPT	8560SYSADPT	8565SYSADPT
8570SYSADPT	8580SYSADPT	8590SYSADPT	8595SYSADPT
8525SYSECA	8530SYSECA	8535SYSECA	8540SYSECA
8550SYSECA	8550SYSADPT	8555SYSECA	8557SYSECA
8560SYSECA	8565SYSECA	8570SYSECA	8580SYSECA
8590SYSECA	8595SYSECA		

1.1.155 ECA065, OBSOLETE

Record number: H093278

Device:	D/T8550	Service code:	33
ECA number:	ECA065	Parts source:	LOC.
EC number:	ECC04628	Publish flag:	R
Mandatory:	N	Hit count:	UHC01597
Automatic shipment:	N	Success count:	USC0001
Availability date:	91/07	Publication code:	PC30
Plant of control:	26	Date created:	091/06/17
Tip key:		Date last altered:	A93/01/14
		Owning B.U.:	USA

PURPOSE:

*** THIS ECA HAS EXPIRED ***

FEATURES:

Type, Model, Stage	With B/M	Machines Affected and/or Feature/Device Description	B/M to be Installed	Service Hours	System Hours
8550	B/M0000000		B/M0000000	00.1	00.0

PHYSICAL CHECK:

PREREQUISITES: NONE

COMPANION: NONE

CONCURRENT: NONE

DETAIL:

NOTES:

*** THIS ECA HAS EXPIRED ***

SAS KEYWORDS:

PSY2 PSY2ECA

1.1.156 ECA066, OBSOLETE

Record number: H081663

Device:	D/T8550	Service code:	
ECA number:	ECA066	Parts source:	LOC.
EC number:	ECA58854	Publish flag:	R
Mandatory:	N	Hit count:	UHC03514
Automatic shipment:	N	Success count:	USC0000
Availability date:	91/04	Publication code:	PC40
Plant of control:	23	Date created:	091/04/16
Tip key:		Date last altered:	A93/06/17
		Owning B.U.:	USA

PURPOSE: THIS ECA HAS EXPIRED.

FEATURES:

Type, Model, Stage	With B/M	Machines Affected and/or Feature/Device Description	B/M to be Installed	Service Hours	System Hours
0000	B/M0000000		B/M0000000	00.1	00.0

PHYSICAL CHECK:

PREREQUISITES: NONE

COMPANION: NONE

CONCURRENT: NONE

DETAIL:

NOTES: THIS ECA HAS EXPIRED.

SAS KEYWORDS:

PSY2ECA PSY2

1.1.157 ECA067, OBSOLETE

Record number: H067472

Device:	D/T8550	Service code:	
ECA number:	ECA067	Parts source:	LOC.
EC number:	ECC32659	Publish flag:	R
Mandatory:	N	Hit count:	UHC00682
Automatic shipment:	N	Success count:	USC0000
Availability date:	91/06	Publication code:	PC40
Plant of control:	27	Date created:	091/06/20
Tip key:		Date last altered:	A93/06/17
		Owning B.U.:	USA

PURPOSE: THIS ECA HAS EXPIRED.

FEATURES:

Type, Model, Stage	With B/M	Machines Affected and/or Feature/Device Description	B/M to be Installed	Service Hours	System Hours
00000	B/M0000000		B/M0000000	00.1	00.0

PHYSICAL CHECK:

PREREQUISITES: NONE

COMPANION: NONE

CONCURRENT: NONE

DETAIL:

NOTES: THIS ECA HAS EXPIRED.

SAS KEYWORDS:

PSY2 PSY2ECA

1.1.158 ECA068, OBSOLETE

Record number: H081593

Device:	D/T8550	Service code:	33
ECA number:	ECA068	Parts source:	LOC
EC number:	ECC27218	Publish flag:	R
Mandatory:	N	Hit count:	UHC01070
Automatic shipment:	N	Success count:	USC0002
Availability date:	91/05	Publication code:	PC40
Plant of control:	27	Date created:	091/04/04
Tip key:		Date last altered:	A93/07/26
		Owning B.U.:	USA

PURPOSE:

*** THIS ECA EXPIRED 6-30-93 ***

CORRECT SYSTEM HANG PROBLEMS WHEN LOADING OS/2, AIX, UNIX OR XENIX OPERATING SYSTEMS TO THE FIXED DISK BY REPLACING THE DOWN LEVEL BUS INTERFACE ASSEMBLY P/N65X1567.

FEATURES:

Type, Model, Stage	With B/M	Machines Affected and/or Feature/Device Description	B/M to be Installed	Service Hours	System Hours
8573	B/MNONE	MOD 061 BELOW XX50000	B/MNONE	01.2	01.0
8573	B/MNONE	MOD 121 BELOW XX50000	B/MNONE	01.2	01.0

PHYSICAL CHECK: CHECK BUS INTERFACE ASSEMBLY P/N65X1567 FOR A 1000MF CAPACITOR INSTALLED ON THE BOTTOM OF THE CARD. THE CAPACITOR IS THE ONLY ELECTRONIC COMPONENT ON THE CARD. IF AN OPTION CARD IS INSTALLED IN THE LOWER CONNECTOR IT MAY BE NECESSARY TO REMOVE THE CARD TO VIEW THE CAPACITOR.

NOTE:

WHEN USING THE HMR FOR REMOVAL AND REPLACEMENT PROCEDURES, THE BUS INTERFACE ASSEMBLY IS REFERRED TO AS THE OPTION-CONNECTOR ASSEMBLY.

IN SOME CASES BUS INTERFACE ASSEMBLIES HAVE A SMALL BLACK SHRINK WRAPPED COMPONENT ON THEM. THIS IS NOT THE CORRECT COMPONENT.

NOTE: THE FIRST TWO PLACES IN THE SERIAL NUMBER ARE NOT PART OF THE SERIAL NUMBER RANGE AND SHOULD NOT BE USED TO DETERMINE ECA ELIGIBILITY.

THE FOLLOWING SYSTEMS ARE NOT AFFECTED:

- P70 8573 - 031 ALL
- 8573 - 061 ABOVE S/N XX50000
- 8573 - 121 ABOVE S/N XX50000
- P75 8573 - 161 ALL
- 8573 - 401 ALL

PREREQUISITES: NONE

COMPANION: NONE

CONCURRENT: NONE

DETAIL: THIS ECA PROVIDED FOR THE REPLACEMENT OF BUS INTERFACE ASSEMBLIES NOT HAVING A CAPACITOR PRESENT ON THE CONNECTOR CARD. CURRENT LEVEL BUS INTERFACE ASSEMBLIES HAVE THE CAPACITOR ON THE BUS CONNECTOR CARD ELIMINATING A DATA TRANSFER NOISE THAT CAN PREVENT LOADING OS/2, AIX, UNIX OR XENIX OPERATING SYSTEMS TO THE FIXED DISK.

NOTES:

*** THIS ECA EXPIRED 6-30-93 ***

ORDER P/N65X1567 THROUGH NORMAL DISTRIBUTION.

SAS KEYWORDS:

PSY2	PSY2ECA	8573ECA	PSY2ECBM
8573SYSECBM	D/T8573	8573SYSPROG	PSY2PROG

1.1.159 ECA069, OBSOLETE

Record number: H081255

Device:	D/T8550	Service code:	
ECA number:	ECA069	Parts source:	
EC number:	ECC32689	Publish flag:	R
Mandatory:	N	Hit count:	UHC01437
Automatic shipment:	N	Success count:	USC0000
Availability date:	91/04	Publication code:	PC00
Plant of control:	23	Date created:	091/04/11
Tip key:		Date last altered:	A93/06/17
		Owning B.U.:	USA

PURPOSE: THIS ECA HAS EXPIRED.

FEATURES:

Type, Model, Stage	With B/M	Machines Affected and/or Feature/Device Description	B/M to be Installed	Service Hours	System Hours
00000	B/M0000000		B/M0000000	00.1	00.0

PHYSICAL CHECK:

PREREQUISITES: NONE

COMPANION: NONE

CONCURRENT: NONE

DETAIL:

NOTES: THIS ECA HAS EXPIRED.

SAS KEYWORDS:

PSY2 PSY2ECA

PSY2 RETAIN TIPS
ECA070, OBSOLETE

1.1.160 ECA070, OBSOLETE

Record number: H08891

Device:	D/T8550	Service code:	33
ECA number:	ECA070	Parts source:	LOC
EC number:	ECC81223	Publish flag:	R
Mandatory:	N	Hit count:	UHC00926
Automatic shipment:	N	Success count:	USC0000
Availability date:	91/04	Publication code:	PC40
Plant of control:	27	Date created:	091/04/25
Tip key:		Date last altered:	A93/07/23
		Owning B.U.:	USA

PURPOSE:

*** THIS ECA EXPIRED 6-30-93 ***
TO PREVENT STATIC DAMAGE TO AN 8573 SYSTEM WITH A SERIAL NUMBER OF XX49,999 OR EARLIER, REPLACE THE DISKETTE DRIVE COVER IDENTIFIED IN THE PHYSICAL CHECK SECTION OF THE ECA WITH A RE-ENGINEERED DISKETTE DRIVE COVER FRU P/N79F3239.

FEATURES:

Type, Model, Stage	With B/M	Machines Affected and/or Feature/Device Description	B/M to be Installed	Service Hours	System Hours
8573	B/MNONE	MOD 031 BELOW XX49999	B/MNONE	00.5	00.5
8573	B/MNONE	MOD 061 BELOW XX49999	B/MNONE	00.5	00.5
8573	B/MNONE	MOD 121 BELOW XX49999	B/MNONE	00.5	00.5

PHYSICAL CHECK:

REMOVE THE DISKETTE DRIVE COVER ON SYSTEMS WITH SERIAL NUMBERS BELOW XX49,999 AND CHECK FOR A METALIZED COATING ON THE INSIDE OF THE DRIVE AREA WHERE THE DISKETTE OPENING IS LOCATED. COVERS WITH A COATING IN THIS AREA SHOULD BE REPLACED WITH THE NEW LEVEL OF DISKETTE DRIVE COVER.
NOTE: THE FIRST TWO PLACES IN THE SERIAL NUMBER ARE NOT PART OF THE SERIAL NUMBER RANGE AND ARE TO BE USED WHEN DETERMINING ECA ELIGIBILITY.

PREREQUISITES: NONE

COMPANION:

To Install B/M	ECA Required	Machine Type	Comments
B/MNONE	ECA062	8573	REQUIRED IF SOLID OR INTERMITTENT POST HANGS OCCUR WITH A SOLID POWER AND DSKT LIGHT.

CONCURRENT: NONE

DETAIL: STATIC FROM A PERSON INSERTING A DISKETTE INTO THE DISKETTE DRIVE CAN CAUSE A SYSTEM BOARD GATE ARRAY TO FAIL OR BE DAMAGED. THIS WILL CAUSE SOLID OR INTERMITTENT POST HANGS TO OCCUR WITH A SOLID POWER AND DISKETTE DRIVE LIGHT ON. IF THE COVER HAS A METAL COATING ON THE INSIDE WHERE THE DISKETTE PASSES THROUGH, REPLACE THE OLD LEVEL DISKETTE DRIVE COVER WITH THE NEW COVER, FRU P/N79F3239. IF THE SYSTEM IS ALSO EXPERIENCING A POST HANG CONDITION USE ECA062 TO INSTALL A SYSTEM BOARD. CHECK THE MODEL AND SERIAL NUMBER OF THE SYSTEM TO DETERMINE THE SYSTEM BOARD FRU NUMBER.

NOTES:

*** THIS ECA EXPIRED 6-30-93 ***
THIS ECA DOES NOT APPLY TO 8573 P70 SYSTEMS ABOVE SERIAL NUMBER XX50,000 BECAUSE THEY ARE NOT SUBJECT TO THIS TYPE OF STATIC DISCHARGE.

SAS KEYWORDS:

PSY2	PSY2ECA	PSY2ECBM	PSY2SYSBRD
8573ECA	8573SYSECBM	8573SYSBRD	8573SYSDSKT
PSY2DSKT	D/T8573		

1.1.161 ECA071, OBSOLETE

Record number: H091264

Device:	D/T8550	Service code:	33
ECA number:	ECA071	Parts source:	LOC
EC number:	ECC32864	Publish flag:	R
Mandatory:	N	Hit count:	UHC01059
Automatic shipment:	N	Success count:	USC0000
Availability date:	91/09	Publication code:	PC30
Plant of control:	27	Date created:	091/08/30
Tip key:		Date last altered:	A93/07/27
		Owning B.U.:	USA

PURPOSE:

*** THIS ECA EXPIRED 6-30-93 ***

FEATURES:

Type, Model, Stage	With B/M	Machines Affected and/or Feature/Device Description	B/M to be Installed	Service Hours	System Hours
E61	B/MNONE	SERIAL NUMBER LIST IN THE PHYSICAL CHECK.	B/MNONE	01.0	00.8
U61	B/MNONE	"	B/MNONE	01.0	00.8
061	B/MNONE	"	B/MNONE	01.0	00.8
121	B/MNONE	"	B/MNONE	01.0	00.8

PHYSICAL CHECK:

8570 MODELS THAT CONTAIN:

1. A 16MHZ SYSTEM BOARD FRU P/N90X9355 OR A 20MHZ SYSTEM BOARD FRU P/N90X8623. THESE SYSTEM BOARDS ARE IN 8570'S LISTED IN THE FOLLOWING TABLE.
2. A PROCESSOR IN POSITION U143 WITH XXX386-20 or XXX386-16 WRITTEN ON ITS SURFACE. (XXX = ANY CHAR.)
AND
3. APPLICATION PROGRAMS THAT INSTALL, BUT LOCK UP (HANGS) WHEN RUN.
4. A MATH COPROCESSOR.

MODEL	SYSTEM SERIAL NUMBER RANGE	MHZ	FRU PART NUMBER
E61	1500000 TO 1999999	16	P/N90X9355
	2500000 TO 2515999	16	"
	7000000 TO 7163999	16	"
	F000000 TO F000999	16	"
U61	U000000 TO U001476	16	P/N90X9355
061	5000000 TO 5001499	20	P/N90X8623
121	0500000 TO 0999999	20	P/N90X8623
	3750000 TO 3999999	20	"
	5500000 TO 5505499	20	"
	8000000 TO 8006999	20	"
	9000000 TO 9075499	20	"

THE SYSTEM BOARDS IN THE FOLLOWING 8570 SYSTEMS CAN NOT BE IDENTIFIED BY SERIAL NUMBER RANGES. IN THESE CASES THE SYSTEM BOARD MUST BE IDENTIFIED BY ITS' FRU PART NUMBER AND PROCESSOR MODULE MENTIONED ABOVE.

E61	4000000 TO 4499999	16	?
061	3000000 TO 3249999	20	?
121	3500000 TO 3749999	20	?

PREREQUISITES: NONE

COMPANION: NONE

CONCURRENT: NONE

DETAIL:

CERTAIN APPLICATIONS WILL NOT OPERATE IN THE ABOVE SYSTEMS WITH SYSTEM BOARD FRU P/N90X9355 OR FRU P/N90X8623 INSTALLED. IT IS NECESSARY TO UPGRADE THIS LEVEL SYSTEM TO A NEW LEVEL OF SYSTEM BOARD TO USE THE APPLICATION.

ORIGINAL SYSTEM BOARD	REPLACEMENT SYSTEM BOARD
-----	-----
16MHZ FRU P/N90X9355	16MHZ FRU P/N96F7309
-----	-----
20MHZ FRU P/N90X8623	20MHZ FRU P/N96F7308

PSY2 RETAIN TIPS
ECA071, OBSOLETE

SYSTEMS EXPERIENCING THIS WILL LOCK UP WHEN THE PROGRAM
APPLICATION IS RUN ON THE SYSTEM.

NOTES:

*** THIS ECA EXPIRED 6-30-93 ***
THE ORIGINAL FRU PARTS NUMBERS WILL SUB TO THE NEW LEVEL NUMBERS
WHEN ORDERED.

SAS KEYWORDS:

PSY2	PSY2ECA	PSY2ECBM	PSY2BRD
8570SYSBRD	8570ECA	8570SYSECBM	PSY2PROG
8570SYSPROG	D/T8570		

PSY2 RETAIN TIPS
ECA072, OBSOLETE

1.1.162 ECA072, OBSOLETE

Record number: H08882

Device:	D/T8550	Service code:	33
ECA number:	ECA072	Parts source:	RAL
EC number:	EC9999999	Publish flag:	H
Mandatory:	N	Hit count:	UHC01167
Automatic shipment:	N	Success count:	USC0000
Availability date:	91/05	Publication code:	PC40
Plant of control:	27	Date created:	091/05/13
Tip key:		Date last altered:	A93/01/13
		Owning B.U.:	USA

PURPOSE:

*** THIS ECA HAS EXPIRED ***

ALL SYSTEMS REQUIRING THIS ECA HAVE BEEN UPDATED. NO FURTHER PARTS OR TIME MAY BE WRITTEN OFF AGAINST ECA072.

FEATURES:

Type, Model, Stage	With B/M	Machines Affected and/or Feature/Device Description	B/M to be Installed	Service Hours	System Hours
8543	B/MNONE	8543	B/MNONE	00.1	00.1

PHYSICAL CHECK:

PREREQUISITES: NONE

COMPANION: NONE

CONCURRENT: NONE

DETAIL:

EARLY SHIP SYSTEMS AT CUSTOMER SITES REQUIRE AN UPGRADE TO MVT LEVELS. THIS UPGRADE REPLACES HARDWARE THAT MAY CAUSE PROGRAMMING AND HARDWARE CONFLICTS. THESE SYSTEMS ARE SERVICED BY IBM CUSTOMER ENGINEERS; ALL CUSTOMERS REQUIRING THIS CHANGE HAVE BEEN INFORMED OF THE UPGRADE. CE'S INSTALLING THIS UPGRADE HAVE BEEN GIVEN PARTS AND INSTRUCTIONS BY RALEIGH ENGINEERING.

NOTES:

SAS KEYWORDS:
PSY2 PSY2ECA

PSY2 RETAIN TIPS
ECA073, OBSOLETE

1.1.163 ECA073, OBSOLETE

Record number: H08888

Device:	D/T8550	Service code:	33
ECA number:	ECA073	Parts source:	LOC
EC number:	EC9999999	Publish flag:	H
Mandatory:	Y	Hit count:	UHC00694
Automatic shipment:	N	Success count:	USC0000
Availability date:	91/05	Publication code:	PC50
Plant of control:	27	Date created:	091/05/07
Tip key:		Date last altered:	A93/07/23
		Owning B.U.:	USA

PURPOSE:

*** THIS ECA EXPIRED 6-30-93 ***

FEATURES:

Type, Model, Stage	With B/M	Machines Affected and/or Feature/Device Description	B/M to be Installed	Service Hours	System Hours
8573	B/MNONE	MOD 161 23-AAAAXXX	B/MNONE	01.0	01.0
8573	B/MNONE	MOD 401 23-AAAAXXX	B/MNONE	01.0	01.0
		XXX= ANY NUMBER			

PHYSICAL CHECK:

PREREQUISITES: NONE

COMPANION: NONE

CONCURRENT: NONE

DETAIL:

NOTES:

*** THIS ECA HAS EXPIRED ***

SAS KEYWORDS:

PSY2	PSY2ECA	PSY2ECBM	8573ECA
8573SYSECBM	D/T8573		

1.1.164 ECA075, OBSOLETE

Record number: H085218

Device:	D/T8550	Service code:	
ECA number:	ECA075	Parts source:	
EC number:	ECC24551	Publish flag:	R
Mandatory:	N	Hit count:	UHC01377
Automatic shipment:	N	Success count:	USC0000
Availability date:	91/06	Publication code:	PC50
Plant of control:	23	Date created:	091/06/03
Tip key:		Date last altered:	A93/06/17
		Owning B.U.:	USA

PURPOSE: THIS ECA HAS EXPIRED.

FEATURES:

Type, Model, Stage	With B/M	Machines Affected and/or Feature/Device Description	B/M to be Installed	Service Hours	System Hours
0000	B/M0000000		B/M0000000	00.1	00.0

PHYSICAL CHECK:

PREREQUISITES: NONE

COMPANION: NONE

CONCURRENT: NONE

DETAIL:

NOTES: THIS ECA HAS EXPIRED.

SAS KEYWORDS:

PSY2ECA PSY2

PSY2 RETAIN TIPS
ECA076, OBSOLETE

1.1.165 ECA076, OBSOLETE

Record number: H027664

Device:	D/T8550	Service code:	33
ECA number:	ECA076	Parts source:	LOC.
EC number:	ECC32446	Publish flag:	R
Mandatory:	N	Hit count:	UHC01330
Automatic shipment:	N	Success count:	USC0000
Availability date:	91/08	Publication code:	PC20
Plant of control:	27	Date created:	091/06/06
Tip key:		Date last altered:	A93/01/13
		Owning B.U.:	USA

PURPOSE:

*** THIS ECA EXPIRED 12-31-92 ***

FEATURES:

Type, Model, Stage	With B/M	Machines Affected and/or Feature/Device Description	B/M to be Installed	Service Hours	System Hours
8550	B/M0000000	ALL	B/M0000000	00.1	00.1

PHYSICAL CHECK:

PREREQUISITES: NONE

COMPANION: NONE

CONCURRENT: NONE

DETAIL:

NOTES:

*** THIS ECA EXPIRED 12-31-92 ***

SAS KEYWORDS:

PSY2 PSY2ECA

1.1.166 ECA077, OBSOLETE

Record number: H093046

Device:	D/T8550	Service code:	33
ECA number:	ECA077	Parts source:	LOC
EC number:	ECC32864	Publish flag:	R
Mandatory:	N	Hit count:	UHC00538
Automatic shipment:	N	Success count:	USC0000
Availability date:	91/09	Publication code:	PC30
Plant of control:	27	Date created:	091/08/30
Tip key:		Date last altered:	A93/07/23
		Owning B.U.:	USA

PURPOSE:

*** THIS ECA EXPIRED 6-30-93 ***
UPGRADE EARLY MODEL 8570 E61, U61, 061 AND 121 SYSTEM BOARDS
WHEN INSTALLING BUSMASTER ADAPTER OPTIONS.

FEATURES:

Type, Model, Stage	With B/M	Machines Affected and/or Feature/Device Description	B/M to be Installed	Service Hours	System Hours
E61	B/MNONE	SERIAL NUMBER LIST IN THE PHYSICAL CHECK.	B/MNONE	01.0	00.8
U61	B/MNONE	"	B/MNONE	01.0	00.8
061	B/MNONE	"	B/MNONE	01.0	00.8
121	B/MNONE	"	B/MNONE	01.0	00.8

PHYSICAL CHECK:

WHEN INSTALLING A BUSMASTER ADAPTER ON 8570 SYSTEMS CHECK THE
FOLLOWING TABLE TO DETERMINE IF A 16MHZ SYSTEM BOARD FRU
P/N90X9355 OR A 20MHZ SYSTEM BOARD FRU P/N90X8623 IS INSTALLED.

MODEL	SYSTEM SERIAL NUMBER RANGE	MHZ	FRU PART NUMBER
E61	1500000 TO 1999999	16	P/N90X9355
	2500000 TO 2515999	16	"
	7000000 TO 7163999	16	"
	F000000 TO F000999	16	"
U61	U000000 TO U001476	16	P/N90X9355
061	5000000 TO 5001499	20	P/N90X8623
121	0500000 TO 0999999	20	P/N90X8623
	3750000 TO 3999999	20	"
	5500000 TO 5505499	20	"
	8000000 TO 8006999	20	"
	9000000 TO 9075499	20	"

THE SYSTEM BOARDS IN THE FOLLOWING 8570 SYSTEMS CAN NOT BE
IDENTIFIED BY SERIAL NUMBER RANGES. IN THESE CASES THE SYSTEM
BOARD MUST BE IDENTIFIED BY ITS' FRU PART NUMBER.

E61	4000000 TO 4499999	16	?
061	3000000 TO 3249999	20	?
121	3500000 TO 3749999	20	?

* BUSMASTER ADAPTERS USUALLY CONTAIN A MICROPROCESSOR AND HAVE
THE CAPABILITY OF CONTROLLING DATA TRANSFER ON THE MICRO
CHANNEL BUS INDEPENDENTLY OF THE SYSTEM MICROPROCESSOR.
DUE TO VARIATIONS IN DESIGN VISUAL IDENTIFICATION OF A
BUSMASTER MAY BE DIFFICULT, FOR FURTHER ASSISTANCE READ THE
ADAPTER'S ACCOMPANYING INFORMATION OR CONTACT THE POINT OF
SALE FOR THE ADAPTER DESCRIPTION.

PREREQUISITES: NONE

COMPANION: NONE

CONCURRENT: NONE

DETAIL:

BUSMASTER ADAPTERS WILL NOT OPERATE WHEN INSTALLED IN THE ABOVE
SYSTEMS THAT USE SYSTEM BOARD FRU P/N90X9355 OR FRU P/N90X8623.
IT IS NECESSARY TO UPGRADE TO A NEW LEVEL OF SYSTEM BOARD TO USE
THIS TYPE OF ADAPTER.

ORIGINAL SYSTEM BOARD	REPLACEMENT SYSTEM BOARD
-----	-----
16MHZ FRU P/N90X9355	16MHZ FRU P/N96F7309
-----	-----
20MHZ FRU P/N90X8623	20MHZ FRU P/N96F7308

PSY2 RETAIN TIPS
ECA077, OBSOLETE

SYSTEMS REQUIRING THIS UPDATE WILL LOCK UP WHEN THE
BUSMASTER ADAPTER CARD IS USED OR WHEN A SYSTEM POST OCCURS.

NOTES:

*** THIS ECA EXPIRED 6-30-93 ***

SAS KEYWORDS:

PSY2	PSY2ECA	PSY2ECBM	D/T8570
8570SYSBRD	8570ECA	8570SYSECBM	PSY2PROG
8570SYSPROG	PSY2BRD	PSY2ADPT	8570SYSADPT

PSY2 RETAIN TIPS
ECA079, OBSOLETE

1.1.167 ECA079, OBSOLETE

Record number: H092329

Device:	D/T8550	Service code:	33
ECA number:	ECA079	Parts source:	LOC
EC number:	ECC64604	Publish flag:	H
Mandatory:	N	Hit count:	UHC00364
Automatic shipment:	N	Success count:	USC0000
Availability date:	91/06	Publication code:	PC50
Plant of control:	23	Date created:	091/06/18
Tip key:		Date last altered:	A93/07/27
		Owning B.U.:	USA

PURPOSE:

*** THIS ECA EXPIRED 6-30-93 ***

FEATURES:

Type, Model, Stage	With B/M	Machines Affected and/or Feature/Device Description	B/M to be Installed	Service Hours	System Hours
8535	B/M0000000		B/M0000000	00.1	00.0
8540	B/M0000000		B/M0000000	00.1	00.0

PHYSICAL CHECK:

PREREQUISITES: NONE

COMPANION: NONE

CONCURRENT: NONE

DETAIL:

NOTES:

*** THIS ECA EXPIRED 6-30-93 ***

SAS KEYWORDS:

PSY2 PSY2ECA EXPIRED

1.1.168 ECA080, OBSOLETE

Record number: H063807

Device:	D/T8550	Service code:	33
ECA number:	ECA080	Parts source:	LOC.
EC number:	ECC99999	Publish flag:	R
Mandatory:	N	Hit count:	UHC01290
Automatic shipment:	N	Success count:	USC0000
Availability date:	92/09	Publication code:	PC40
Plant of control:	23	Date created:	091/08/13
Tip key:		Date last altered:	A93/01/13
		Owning B.U.:	USA

PURPOSE:

*** THIS ECA EXPIRED 10-20-92 ***

THIS ECA WAS REPLACED BY ECA103.

FEATURES:

Type, Model, Stage	With B/M	Machines Affected and/or Feature/Device Description	B/M to be Installed	Service Hours	System Hours
8555	B/MNONE	8550 MODEL 061	B/MNONE	00.1	00.1

PHYSICAL CHECK:

PREREQUISITES: NONE

COMPANION: NONE

CONCURRENT: NONE

DETAIL:

NOTES:

THIS ECA IS EXPIRED.

SAS KEYWORDS:

PSY2 PSY2ECA

PSY2 RETAIN TIPS
ECA081, OBSOLETE

1.1.169 ECA081, OBSOLETE

Record number: H086730

Device:	D/T8550	Service code:	33
ECA number:	ECA081	Parts source:	LOC.
EC number:	ECC32822	Publish flag:	R
Mandatory:	N	Hit count:	UHC01128
Automatic shipment:	N	Success count:	USC0000
Availability date:	91/07	Publication code:	PC20
Plant of control:	27	Date created:	091/07/12
Tip key:		Date last altered:	A93/07/26
		Owning B.U.:	USA

PURPOSE:

*** THIS ECA EXPIRED 6-30-93 ***

FEATURES:

Type, Model, Stage	With B/M	Machines Affected and/or Feature/Device Description	B/M to be Installed	Service Hours	System Hours
8550	B/M0000000	ALL MICROCHANNEL PS/2	B/M0000000	01.0	01.0

PHYSICAL CHECK:

CHECK FOR THE PRESENCE PART NUMBER B9159XXXXX ON THE BAR CODE LABEL LOCATED ON THE CONNECTOR. ONLY BOARDS BEGINNING WITH PART NUMBER B9159 ARE AFFECTED.

PREREQUISITES: NONE

COMPANION: NONE

CONCURRENT: NONE

DETAIL:

SYMPTOM:

CANNOT ESTABLISH COMMUNICATIONS WITH CERTAIN V.35 DEVICES. DIAGNOSTICS WILL NOT FAIL.

THIS FAILURE WILL NOT OCCUR WITH ALL V.35 DEVICES. DEPENDANT ON DESIGN CHARACTERISTICS OF THE SPECIFIC DEVICE, COMMUNICATIONS MAY WORK.

NOTES:

*** THIS ECA EXPIRED 6-30-93 ***

ORDER FRU P/N84F7540 THROUGH NORMAL DISTRIBUTION.

SAS KEYWORDS:

PSY2	PSY2ECA	PSY2ECBM	8550ECA
8550SYSECBM	8550SYSCOMM	8555ECA	8555SYSECBM
8555SYSCOMM	8560ECA	8560SYSECBM	8560SYSCOMM
8565SYSECBM	8565ECA	8565SYSCOMM	8570ECA
8570SYSECBM	8570SYSCOMM	8580SYSECBM	8580ECA
8580SYSCOMM	7538ECA	7538SYSECBM	7541ECA
7538SYSCOM	7541SYSECBM	7541SYSCOMM	7542ECA
7541SYSECBM	7541SYSCOMM	7542ECA	7542SYSECBM
7542SYSCOMM	7561SYSECBM	7561ECA	7561SYSCOMM
7562ECA	7562SYSECBM	7562SYSCOMM	7562ECA
7562SYSECBM	7562SYSCOMM	7568ECA	7568SYSECBM
7568SYSCOMM	RTIC	RIC	

PSY2 RETAIN TIPS
ECA082, OBSOLETE

1.1.170 ECA082, OBSOLETE

Record number: H093303

Device:	D/T8550	Service code:	33
ECA number:	ECA082	Parts source:	LOC.
EC number:	ECC32911	Publish flag:	R
Mandatory:	N	Hit count:	UHC00307
Automatic shipment:	N	Success count:	USC0000
Availability date:	91/09	Publication code:	PC20
Plant of control:	72	Date created:	091/10/15
Tip key:		Date last altered:	A93/07/23
		Owning B.U.:	USA

PURPOSE:

*** THIS ECA EXPIRED 6-30-93 ***

FEATURES:

Type, Model, Stage	With B/M	Machines Affected and/or Feature/Device Description	B/M to be Installed	Service Hours	System Hours
8525	B/MNONE	8525-286 SYSTEMS	B/MNONE	00.7	00.5

PHYSICAL CHECK:

PREREQUISITES: NONE

COMPANION: NONE

CONCURRENT: NONE

DETAIL:

NOTES:

*** THIS ECA EXPIRED 6-30-93 ***

SAS KEYWORDS:

PSY2	PSY2ECA	PSY2ECBM	PSY2ERR
PSY2ERR	8525ECA	8525SYSECBM	8525SYSBRD
8525SYSERR			

PSY2 RETAIN TIPS

ECA083, (EXPIRED) 8570, TRAP 0002, 110 ERROR, NMI ERROR

ONLY SYSTEMS THAT CAN HAVE THIS PROBLEM.

ALL FRU STOCK IS AT THE CORRECT LEVEL. ORDER ALL FRU PARTS
LOCALLY.

SAS KEYWORDS:

PSY2	PSY2ECA	PSY2ECBM	PSY2BRD
D/T8570	8570ECA	8570SYSECBM	8570SYSBRD
PSY2PROG	8570SYSPROG	PSY2MEM	8570SYSTEMEM
PSY2ERR	8570SYSERR		

PSY2 RETAIN TIPS
ECA084, OBSOLETE

1.1.172 ECA084, OBSOLETE

Record number: H096559

Device:	D/T8550	Service code:	33
ECA number:	ECA084	Parts source:	
EC number:	EC000000	Publish flag:	R
Mandatory:	N	Hit count:	UHC00864
Automatic shipment:	N	Success count:	USC0000
Availability date:	92/02	Publication code:	PC00
Plant of control:	27	Date created:	092/02/27
Tip key:		Date last altered:	A93/07/26
		Owning B.U.:	USA

PURPOSE:

THIS ECA EXPIRED 6-30-93 ***

FEATURES:

Type, Model, Stage	With B/M	Machines Affected and/or Feature/Device Description	B/M to be Installed	Service Hours	System Hours
8590	B/M0000000	ALL	B/M0000000	01.0	00.7

PHYSICAL CHECK:

Inspect the memory riser cards for FRU P/N33F4905.

PREREQUISITES: NONE

COMPANION: NONE

CONCURRENT: NONE

DETAIL:

If memory riser card FRU P/N33F4905 is populated with "MIXED SIMMS" and experiencing any of the following errors: DOS NMI, OS/2 TRAP 0002, POST, or diagnostic memory errors, replace both memory riser cards with New FRU P/N81F8823 . (TWO REQUIRED)

NOTE: "MIXED SIMMs," is defined as SIMMs with 12 modules or more per SIMM, mixed with SIMMs having less than 12 modules per SIMM mounted on the same riser card. If FRU P/N81F8823 is already installed, this ECA is not applicable

NOTES:

*** THIS ECA EXPIRED 6-30-93 ***

Use normal parts procurement procedures when ordering FRU P/N81F8823.

SAS KEYWORDS:

PSY2	PSY2ECA	PSY2ECBM	D/T8590
8590SYSECA	PSY2MEM	PSY2ERR	8590SYSERR
8590SYSTEMEM			

1.1.173 ECA085, OBSOLETE

Record number: H094223

Device:	D/T8550	Service code:	33
ECA number:	ECA085	Parts source:	LOC
EC number:	ECC32878	Publish flag:	R
Mandatory:	N	Hit count:	UHC00662
Automatic shipment:	N	Success count:	USC0000
Availability date:	91/10	Publication code:	PC50
Plant of control:	27	Date created:	091/10/10
Tip key:		Date last altered:	A93/07/27
		Owning B.U.:	USA

PURPOSE:

*** THIS ECA EXPIRED 6-30-93 ***

FEATURES:

Type, Model, Stage	With B/M	Machines Affected and/or Feature/Device Description	B/M to be Installed	Service Hours	System Hours
8535	B/M0000000		B/M0000000	00.1	00.1
8540	B/M0000000		B/M0000000	00.7	00.3

PHYSICAL CHECK:

PREREQUISITES: NONE

COMPANION: NONE

CONCURRENT: NONE

DETAIL:

NOTES:

*** THIS ECA EXPIRED 6-30-93 ***

SAS KEYWORDS:

PSY2 PSY2ECA

PSY2 RETAIN TIPS
ECA087, OBSOLETE

1.1.174 ECA087, OBSOLETE

Record number: H094429

Device:	D/T8550	Service code:	33
ECA number:	ECA087	Parts source:	LOC
EC number:	ECC32878	Publish flag:	R
Mandatory:	N	Hit count:	UHC00511
Automatic shipment:	N	Success count:	USC0000
Availability date:	91/10	Publication code:	PC50
Plant of control:	27	Date created:	091/10/02
Tip key:		Date last altered:	A93/07/27
		Owning B.U.:	USA

PURPOSE:

*** THIS ECA EXPIRED 6-30-93 ***

FEATURES:

Type, Model, Stage	With B/M	Machines Affected and/or Feature/Device Description	B/M to be Installed	Service Hours	System Hours
8535	B/M0000000		B/M0000000	00.1	00.1

PHYSICAL CHECK:

PREREQUISITES: NONE

COMPANION: NONE

CONCURRENT: NONE

DETAIL:

NOTES:

*** THIS ECA EXPIRED 6-30-93 ***

SAS KEYWORDS:

PSY2 PSY2ECA

1.1.175 ECA088, OBSOLETE

Record number: H001566

Device:	D/T8550	Service code:	33
ECA number:	ECA088	Parts source:	LOC
EC number:	ECC81715A	Publish flag:	R
Mandatory:	N	Hit count:	UHC01825
Automatic shipment:	N	Success count:	USC0002
Availability date:	91/12	Publication code:	PC30
Plant of control:	27	Date created:	091/12/13
Tip key:		Date last altered:	A93/07/23
		Owning B.U.:	USA

PURPOSE:

*** THIS ECA EXPIRED 6-30-93 ***

PROVIDE A REPLACEMENT IMAGE ADAPTER/A CARD FOR SYSTEMS EXHIBITING A SYSTEM HANG CONDITION WHEN AN IMAGE ADAPTER/A CARD IS INSTALLED.

FEATURES:

Type, Model, Stage	With B/M	Machines Affected and/or Feature/Device Description	B/M to be Installed	Service Hours	System Hours
8550	B/M0000000	ALL 85XX MICROCHANNEL SYSTEMS AND MODELS SUPPORTING THE PS/2 IMAGE ADAPTER/A	B/M0000000	00.3	00.2

PHYSICAL CHECK:

TO QUALIFY FOR REPLACEMENT OF THE IMAGE ADAPTER/A CARD, BOTH OF THE FOLLOWING REQUIREMENTS MUST BE MET:

1. A.THE SYSTEM CONFIGURATION MUST INCLUDE A MICROCHANNEL MEMORY CARD AND AN IMAGE ADAPTER/A CARD.

***** OR *****

B.THE SYSTEM MUST BE A PS/2 8557-ANY MODEL.

NOTE:

A PS/2 8557 SYSTEM, WITH AN IMAGE ADAPTER/A CARD INSTALLED, DOES NOT REQUIRE A MICROCHANNEL MEMORY CARD INSTALLED TO EXPERIENCE THE SYSTEM HANG SYMPTOM.

***** AND *****

2. THE IMAGE ADAPTER/A FRU PART NUMBER MUST BE ONE OF THE FOLLOWING:

- A. P/N07F4401
- B. P/N07F2481*
- C. P/N07F2508

SYSTEMS CONTAINING IMAGE ADAPTER/A CARD FRU PART NUMBERS NOT LISTED ABOVE ARE NOT AFFECTED AND ARE NOT ELIGIBLE FOR THIS ECA.

PREREQUISITES:

IBM PERSONAL SYSTEM/2 IMAGE ADAPTER/A OPTION DISKETTE VERSION 1.04, PUBLICATION NUMBER S15F-2240.

COMPANION: NONE

CONCURRENT: NONE

DETAIL:

ANY PS/2 SYSTEM CONFIGURED WITH AN IMAGE ADAPTER/A AND A MICROCHANNEL MEMORY ADAPTER MAY EXHIBIT A SYSTEM HANG DUE TO A BUS CONTENTION OR BUSMASTER PROBLEM GENERATED BY THE IMAGE ADAPTER/A.

ANY PS/2 MODEL 8557 MAY EXHIBIT A SYSTEM HANG CONDITION WITH AN IMAGE ADAPTER/A INSTALLED, DUE TO A BUS CONTENTION PROBLEM, WITH OR WITHOUT A MICROCHANNEL MEMORY CARD INSTALLED.

A REPLACEMENT IMAGE ADAPTER/A CARD (FRU P/N06G8224) WILL BE PROVIDED, AT NO CHARGE TO THE CUSTOMER, FOR SYSTEMS THAT MEET THE PHYSICAL CHECK REQUIREMENTS ABOVE.

THE IMAGE ADAPTER/A OPTION DISKETTE VERSION 1.04 MUST BE USED IN CONJUNCTION WITH THE REFERENCE DISKETTE TO CONFIGURE THE NEW IMAGE ADAPTER/A CARD. THE NEW IMAGE ADAPTER/A CARD, FRU P/N06G8224 WILL CONTAIN A VERSION 1.04 OPTION DISKETTE THAT SHOULD BE LEFT WITH THE CUSTOMER.

NOTES:

PSY2 RETAIN TIPS
ECA088, OBSOLETE

*** THIS ECA EXPIRED 6-30-93 ***

* P/N06G8224 AND EIGHT VRAM MODULES P/N75X5894 MUST BE ORDERED
WHEN REPLACING P/N07F2481. THE EIGHT DRAM MODULES, P/N07F4407,
MUST BE TRANSFERRED FROM P/N07F2481 TO THE NEW CARD
P/N06G8224.

ORDER PARTS THROUGH NORMAL DISTRIBUTION.

SAS KEYWORDS:

PSY2	D/T8555	D/T8557	D/T8560
D/T8565	D/T8570	D/T8580	D/T8590
D/T8595	PSY2ADPT	8503DISP	8518DISP
8550SYSERR	8550SYSADPT	8555SYSERR	8555SYSADPT
8557SYSERR	8557SYSADPT	8560SYSERR	8560SYSADPT
8565SYSERR	8565SYSADPT	8570SYSERR	8570SYSADPT
8580SYSERR	8580SYSADPT	8590SYSERR	8590SYSADPT
8595SYSERR	8595SYSADPT	8504DISP	8512DISP
8513DISP	8514DISP	8515DISP	8516DISP
PSY2ERR	PSY2ECA	8550ECA	8555ECA
8557ECA	8560ECA	8565ECA	8570ECA
8580ECA	8590ECA	8595ECA	

1.1.176 ECA089, OBSOLETE

Record number: H037979

Device:	D/T8550	Service code:	33
ECA number:	ECA089	Parts source:	LOC
EC number:	ECC32878	Publish flag:	R
Mandatory:	N	Hit count:	UHC01047
Automatic shipment:	N	Success count:	USC0001
Availability date:	91/10	Publication code:	PC50
Plant of control:	27	Date created:	092/05/21
Tip key:		Date last altered:	A93/07/26
		Owning B.U.:	USA

PURPOSE:

*** THIS ECA EXPIRED 6-30-93 ***

INSTALL A ROM* BIOS** REPLACEMENT KIT FOR THE 8535 OR 8540 SYSTEM THAT EXPERIENCE ONE OR MORE OF THE FOLLOWING SYMPTOMS:

1. NETWORK ADAPTER CARD FAILS TO REMOTE INITIAL PROGRAM LOAD (RIPL).
2. VIDEO ADAPTER CARD FAILS TO OPERATE.
3. KEYBOARD RELATED ERRORS.
4. SYSTEM HANG WITH MATH COPROCESSOR INSTALLED.
5. OEM ADAPTER FAILS UPON INITIAL INSTALLATION.

* ROM=READ ONLY MEMORY.
 **BIOS=BASIC INPUT/OUTPUT SYSTEM.

NOTE:

BOTH ROM BIOS MODULES ARE ON THE SYSTEM BOARD AT LOCATIONS U19 AND U31. INSTALLATION INSTRUCTIONS ARE INCLUDED IN THE ROM BIOS KIT.

FEATURES:

Type, Model, Stage	With B/M	Machines Affected and/or Feature/Device Description	B/M to be Installed	Service Hours	System Hours
8535	B/M0000000	SEE PHYSICAL CHECK	B/M0000000	00.5	00.3
8540	B/M0000000	SEE PHYSICAL CHECK	B/M0000000	00.5	00.3

PHYSICAL CHECK:

TO QUALIFY FOR ROM BIOS REPLACEMENT KIT, THE SYSTEM MUST MEET THE FOLLOWING REQUIREMENTS:

1. THE SYSTEM UNIT SERIAL NUMBER MUST FALL WITHIN THE FOLLOWING RANGES:

8535 SYSTEMS-

- A. MODEL 8535-040, 1. SERIAL NUMBER 23-A0001 TO 23-D5499.
 2. SERIAL NUMBER 23-AAAAA TO 23-ACXDL.
- B. MODEL 8535-043, 1. SERIAL NUMBER 23-AA000 TO 23-BW999.
 2. SERIAL NUMBER 23-AVPAF TO 23-BLXKA.
 3. SERIAL NUMBER 23-DG000 TO 23-DY499.
- C. MODEL 8535-045, 1. SERIAL NUMBER 23-XGCT0 TO 23-XKTY0.
- D. MODEL 8535-14X, 1. SERIAL NUMBER 23-CGVAM TO 23-DBHAP.
 2. SERIAL NUMBER 23-AAA00 TO 23-CVP99.
- E. MODEL 8535-24X, 1. SERIAL NUMBER 23-BNDAH TO 23-CGVAL.
 2. SERIAL NUMBER 23-TD000 TO 23-ZK999.

8540 SYSTEMS-

- A. MODEL 8540-040, 1. SERIAL NUMBER 23-CYZWT TO 23-CZFHU.
 2. SERIAL NUMBER 23-AA000 TO 23-AL875.
- B. MODEL 8540-043, 1. SERIAL NUMBER 23-AAA00 TO 23-ATF67.
 2. SERIAL NUMBER 23-DTNWH TO 23-DTVKC.
- C. MODEL 8540-045, 1. SERIAL NUMBER 23-AAAA0 TO 23-AHNA6.
 2. SERIAL NUMBER 23-FMCVR TO 23-FNFLC.

***** OR *****

2. THE SYSTEM BIOS DATE MUST BE 2-13-92 OR EARLIER.

THE FOLLOWING PROCEDURE SHOULD BE USED TO DETERMINE SYSTEM BIOS DATE:

- AT THE C: > TYPE "BASIC" AND PRESS "ENTER".
- FOR MEDIALESS SYSTEMS, DISCONNECT THE LAN CABLE AND UNPLUG THE LAN ADAPTER CARD TO GET TO "BASIC".
- AT THE "OK" TYPE THE FOLLOWING EXACTLY AS SHOWN:
 DEF SEG=-1: FOR X=5 TO 12: PRINT CHR\$(PEEK(X));: NEXT
- IF "SYNTAX ERROR" IS DISPLAYED INSTEAD OF A DATE, VERIFY THE LINE WAS TYPED EXACTLY AS SHOWN ABOVE.
- IF THE DATE DISPLAYED IS 2-14-92 OR LATER, THE SYSTEM IS NOT ELIGIBLE FOR THIS ECA.
- IF THE DATE DISPLAYED IS 2-13-92 OR EARLIER, THE SYSTEM

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ECA089, OBSOLETE

IS ELIGIBLE FOR THIS ECA IF REQUIREMENT 3 (BELOW) IS MET.

***** AND *****

3. SYSTEM BOARD FRU PART NUMBER MUST BE P/N92F0108, P/N92F0140 OR P/N85F0077.

NOTE:

SYSTEM BOARD FRU PART NUMBERS THAT ARE NOT LISTED ABOVE ARE NOT EXPOSED TO THESE PROBLEMS.

PREREQUISITES: NONE

COMPANION: NONE

CONCURRENT: NONE

DETAIL:

A LIMITED NUMBER OF 8535 AND 8540 SYSTEMS MAY EXPERIENCE ONE OR MORE OF THE FOLLOWING FAILURES:

1. FAILURE TO RIPL WITH A NETWORK CARD.
2. WHEN AN VIDEO ADAPTER IS INSTALLED, THE MONITOR ATTACHED TO THE VIDEO ADAPTER MAY DISPLAY UNINTELLIGIBLE VIDEO PATTERNS OR REMAIN COMPLETELY BLANK.
3. VARIOUS KEYBOARD RELATED FAILURES THAT ARE NOT RESOLVED WITH A KEYBOARD REPLACEMENT.
4. SYSTEM HANG CONDITION MAY OCCUR WHEN A MATH COPROCESSOR IS INSTALLED. THE HANG CONDITION MAY OCCUR AT ANY TIME, BUT PRIMARILY WHEN WINDOWS TYPE SOFTWARE IS RUNNING OR WHEN EXITING THESE TYPE APPLICATIONS.
5. A KNOWN GOOD OEM (OTHER EQUIPMENT MANUFACTURER) ADAPTER FAILS TO BE RECOGNIZED, OR TO FUNCTION PROPERLY, UPON INITIAL INSTALLATION. THIS MAY ALSO APPEAR AS A SYSTEM HANG. THE SYSTEM OPERATES PROPERLY WITH THE ADAPTER REMOVED.

IN ALL FIVE CASES ABOVE, IF THE SYSTEM UNIT MEETS ALL OF THE REQUIREMENTS CALLED OUT IN THE "PHYSICAL CHECK" SECTION, INSTALL SYSTEM ROM BIOS KIT FRU P/N92F2434.

NOTE:

A REPLACEMENT STARTER DISKETTE, VERSION 1.20 OR HIGHER, IS INCLUDED WITH THE REPLACEMENT ROM BIOS KIT. THE OLD LEVEL STARTER DISKETTE, VERSION 1.10 OR EARLIER, IS NOT COMPATIBLE WITH THE REPLACEMENT ROM BIOS AND SHOULD BE PROMPTLY DISCARDED.

NOTES:

*** THIS ECA EXPIRED 6-30-93 ***

ORDER PARTS THROUGH NORMAL DISTRIBUTION.

SAS KEYWORDS:

PSY2	PSY2ECA	PSY2BRD	PSY2ADPT
D/T8535	D/T8540	PSY2ECBM	8535ECA
8535SYSKBD	8540SYSKDB	8540ECA	8535SYSBRD
8540SYSBRD	8535SYSADPT	8540SYSADPT	8535SYSECBM
8540SYSECBM	PSY2FDSK		

1.1.177 ECA092, OBSOLETE

Record number: H096139

Device:	D/T8550	Service code:	33
ECA number:	ECA092	Parts source:	LOC
EC number:	ECC32677	Publish flag:	R
Mandatory:	N	Hit count:	UHC00747
Automatic shipment:	N	Success count:	USC0000
Availability date:	92/01	Publication code:	PC40
Plant of control:	27	Date created:	092/01/13
Tip key:		Date last altered:	A93/07/26
		Owning B.U.:	USA

PURPOSE:

*** THIS ECA EXPIRED 6-30-93 ***

FEATURES:

Type, Model, Stage	With B/M	Machines Affected and/or Feature/Device Description	B/M to be Installed	Service Hours	System Hours
8570	B/MNONE	MODEL A81, A16 AND SYSTEMS UPGRADED FROM MOD A81 OR A16 TO B81 OR B16.	B/MNONE	00.5	00.5

PHYSICAL CHECK:

This applies to all 25Mhz 8570 systems that contain an 80Mb or 160Mb hardfile that are running DOS or OS/2. The 8570s that contain those hardfiles are models A81 and A16 and upgraded 486 8570 B81 and B16 models.

PREREQUISITES: NONE

COMPANION: NONE

CONCURRENT: NONE

DETAIL:

The "8570 MODELS A81/A16 BIOS Patch Diskette" will prevent unreported data modification problems from occurring on 8570 A16, A81, B16 and B81 models that are identified in the FEATURES and PHYSICAL CHECK sections of this ECA.

If the system boots to both DOS and OS/2 the patch must be loaded for each operating system. It is not required on AIX and Novell Netware operating systems; these operating systems already contain equivalent code.

If a hardfile is replaced or formatted the 8570 DOS and OS/2 patch must be reinstalled. The 8570 Patch Diskette should be retained by the customer in case reloading is necessary.

THE FOLLOWING BIOS PATCH INSTALLATION INSTRUCTIONS ARE ALSO INCLUDED WITH "8570 Models A81/A16 BIOS Patch Diskette" package.

NOTE: The patch diskette is used on DOS and OS/2 operating systems only.

DOS Systems

1. Turn on the computer.
2. After DOS has completed loading, insert the patch diskette in the default drive (drive A:).
3. At the DOS prompt (>), type A: INSTALL and press Enter.
4. The Installation Menu will appear. Carefully read the information on the screen then press 1 or 2 accordingly.
5. Your patch diskette already contains the driver program. Press Enter to continue.
6. After the installation program completes, the DOS prompt will appear. Remove the patch diskette from the diskette drive.
7. Restart the system to activate the BIOS (basic input/output system) patch.

OS/2 Systems

1. Turn on the computer.
2. Select an OS/2 full screen session. You can not use an OS/2 window or a DOS window.
3. Insert the patch diskette in the default drive (drive A:).
4. At the OS/2 prompt type A: OS2INST and press Enter.
5. The ABIOS (advanced basic input/output system) Patch information screen will appear, press Enter to continue with the installation procedure.

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6. Select the drive that contains OS/2, then press Enter.
7. After the installation program completes, the Option Menu will appear. Select 3, then press Enter.
8. Remove the patch diskette from the diskette drive.
9. Restart the system to activate the BIOS patch.

SERVICER

IF AN ERROR MESSAGE APPEARS ON THE SCREEN AFTER INSTALLING THE DOS OR OS/2 PATCH PROGRAM CONTACT IBM SUPPORT.

These could be POST errors, DIAGNOSTIC errors, or a message such as ABORT or RETRY the operation. If these are intermittent errors the customer will be able to continue operation until the system can be serviced.

NOTES:

*** THIS ECA EXPIRED 6-30-93 ***

Customers may install the "8570 Models A81/A16 BIOS Patch diskette" using the installation instructions contained in the patch diskette package. They may obtain this diskette with installation information by calling 1-800-845-4263 and requesting the 8570 Models A81/A16 BIOS Patch Diskette package 41G2930.

SLSS Subscribers to the PS/2 SIM form number SBOF-2480 will automatically receive this Patch Diskette package (form number G41G-2930.) Other servicers may order it separately as a publication using the same form number (G41G-2930,) or they may order the diskette FRU package, P/N10G4144, through normal parts channels.

Diskettes obtained from the above sources may be copied and distributed for use as necessary.

SAS KEYWORDS:

PSY2	PSY2ECA	8570ECA	8570SYSECBM
8570SYSMCD	PSY2ECBM	PSY2PROG	PSY2FDSK
8570SYSPROG	8570SYSFDSK	PSY2ERR	8570SYSERR

1.1.178 ECA093, OBSOLETE

Record number: H097556

Device:	D/T8550	Service code:	33
ECA number:	ECA093	Parts source:	LOC.
EC number:	ECC32904	Publish flag:	R
Mandatory:	N	Hit count:	UHC00835
Automatic shipment:	N	Success count:	USC0000
Availability date:	92/05	Publication code:	PC40
Plant of control:	27	Date created:	092/05/01
Tip key:		Date last altered:	A93/07/27
		Owning B.U.:	USA

PURPOSE:

*** THIS ECA EXPIRED 4-30-93 ***

Replace system board when the 8570 system fails with a 10482 POST error and meets the physical check requirements listed below.

FEATURES:

Type, Model, Stage	With B/M	Machines Affected and/or Feature/Device Description	B/M to be Installed	Service Hours	System Hours
8570	B/MNONE	A81	B/MNONE	01.0	00.8
8570	B/MNONE	A16	B/MNONE	01.0	00.8
8570	B/MNONE	B21, UPGRADED A81/A16	B/MNONE	01.0	00.8
8570	B/MNONE	B61, UPGRADED A81/A16	B/MNONE	01.0	00.8
8570	B/MNONE	R21, UPGRADED A81/A16	B/MNONE	01.0	00.8

PHYSICAL CHECK:

Affected systems will meet all 4 following requirements.

1. System fails with a 10482 POST error. This error may be reported as 010482XX ("XX" can be any number).
2. System has an 80mb or 160mb internal hardfile installed.
3. System has 2 or more adapter cards installed.
4. The 8570 has any system board installed OTHER THAN FRU P/N10G4009 or P/N41G3979.

PREREQUISITES: NONE

COMPANION: NONE

CONCURRENT: NONE

DETAIL:

When 10482 POST errors are experienced with systems that meet the physical check requirements above, replace the system board with the following FRU:

8570 25mhz 386: FRU P/N10G4009
 8570 25mhz 486: FRU P/N41G3979

Because the 10482 POST error is usually representative of a fixed disk problem, it is possible to encounter systems meeting the physical check requirements that will not be fixed by system board replacement. Since replacement of the fixed disk may be a considerable impact to some customers, we recommend that the system board be replaced (in eligible systems) before the fixed disk. If the 10482 POST error persists after system board replacement, reinstall the original system board and follow normal diagnostic procedures to isolate the failing FRU.

NOTES:

*** THIS ECA EXPIRED 4-30-93 ***

All 8570 25mhz 486 models will utilize 1 system board, FRU P/N41G3979. Any down level FRU part number ordered will automatically sub to the current level.

The 8570 25mhz 386 models will now utilize 2 different system boards. FRU P/N10G4009 should be ordered for systems with an 80mb or 160mb hardfile. FRU P/N92F0580 remains the correct system board for systems with a 60mb or 120mb hardfile.

Order parts through normal distribution. All replaced system boards should be returned via UPR.

SAS KEYWORDS:

PSY2 RETAIN TIPS
ECA093, OBSOLETE

PSY2
PSY2ERR
8570ECA
8570SYSBRD

PSY2ECA
PSY2ADPT
8570SYSERR
8570SYSECBM

PSY2BRD
PSY2ECBM
8570SYSECA
8570SYSFDSK

PSY2FDSK
FIXED DISK
8570SYSADPT

1.1.179 ECA094, OBSOLETE

Record number: H096594

Device:	D/T8550	Service code:	
ECA number:	ECA094	Parts source:	
EC number:	EC000000	Publish flag:	R
Mandatory:	N	Hit count:	UHC00702
Automatic shipment:	N	Success count:	USC0001
Availability date:	92/02	Publication code:	PC00
Plant of control:	27	Date created:	092/01/24
Tip key:		Date last altered:	A93/06/30
		Owning B.U.:	USA

PURPOSE: THIS ECA HAS EXPIRED.

FEATURES:

Type, Model, Stage	With B/M	Machines Affected and/or Feature/Device Description	B/M to be Installed	Service Hours	System Hours
00000	B/M0000000		B/M0000000	00.1	00.0

PHYSICAL CHECK:

PREREQUISITES: NONE

COMPANION: NONE

CONCURRENT:

DETAIL:

NOTES:

THIS ECA HAS EXPIRED

SAS KEYWORDS:

PSY2 PSY2ECA

PSY2 RETAIN TIPS
ECA095, OBSOLETE

1.1.180 ECA095, OBSOLETE

Record number: H037105

Device:	D/T8550	Service code:	33
ECA number:	ECA095	Parts source:	LOC
EC number:	ECC64604	Publish flag:	R
Mandatory:	N	Hit count:	UHC00585
Automatic shipment:	N	Success count:	USC0000
Availability date:	92/02	Publication code:	PC50
Plant of control:	27	Date created:	092/05/21
Tip key:		Date last altered:	A93/07/26
		Owning B.U.:	USA

PURPOSE:

*** THIS ECA EXPIRED 6-30-93 ***

FEATURES:

Type, Model, Stage	With B/M	Machines Affected and/or Feature/Device Description	B/M to be Installed	Service Hours	System Hours
8535	B/M0000000	SEE PHYSICAL CHECK	B/M0000000	00.5	00.3
8540	B/M0000000	SEE PHYSICAL CHECK	B/M0000000	00.5	00.3

PHYSICAL CHECK:

A. TO BE AFFECTED, THE SYSTEM
MUST MEET ALL THREE FOLLOWING REQUIREMENTS:

1. SERIAL NUMBER RANGE

8535

SYSTEM UNIT SERIAL NUMBER MUST BE:

- A. MODEL 8535-040, SERIAL NUMBER 23-A0001 TO 23-A5370
- B. MODEL 8535-043, SERIAL NUMBER 23-AA300 TO 23-AX523
- C. MODEL 8535-24X, SERIAL NUMBER 23-TH000 TO 23-TL426

8540

SYSTEM UNIT SERIAL NUMBER MUST BE:

- A. MODEL 8540-040, SERIAL NUMBER 23-AA000 TO 23-AA853
- B. MODEL 8540-043, SERIAL NUMBER 23-AAA02 TO 23-AGM57
- C. MODEL 8540-045, SERIAL NUMBER 23-AAAA3 TO 23-ACBK6

***** AND *****

2. SYSTEM BOARD FRU PART NUMBER MUST BE P/N85F0077

***** AND *****

3. RISER CARD FRU PART NUMBER MUST BE:

- A. P/N79F3444 FOR A 8535.
** OR **
- B. P/N85F0028 FOR A 8540.

PREREQUISITES: NONE

COMPANION: NONE

CONCURRENT: NONE

DETAIL:

A SMALL NUMBER OF 8535/8540 SYSTEMS MEETING THE PHYSICAL CHECK REQUIREMENTS MAY EXPERIENCE EXTRA RANDOM CHARACTERS DURING (PARALLEL PORT) HARDCOPY PRINTING OPERATIONS. IF THIS PROBLEM OCCURS, REPLACE THE DOWN-LEVEL BUS CARD.

ANY ORDERS FOR THE OLD LEVEL BUS CARD FRU WILL AUTOMATICALLY SUB TO THE NEW FRU:

	OLD FRU P/N	NEW FRU P/N
8535 BUS ADAPTER CARD	P/N79F3444	P/N79F3529
8540 BUS ADAPTER CARD	P/N85F0028	P/N92F0107

NOTES:

*** THIS ECA EXPIRED 6-30-93 ***

ORDER PARTS THROUGH NORMAL DISTRIBUTION.

SAS KEYWORDS:

PSY2	PSY2ECA	PSY2BRD	PSY2ADPT
D/T8535	PSY2PRT	D/T8540	

1.1.181 ECA098, OBSOLETE

Record number: H034938

Device:	D/T8550	Service code:	33
ECA number:	ECA098	Parts source:	LOC
EC number:	ECC32878	Publish flag:	R
Mandatory:	N	Hit count:	UHC00843
Automatic shipment:	N	Success count:	USC0000
Availability date:	91/10	Publication code:	PC50
Plant of control:	27	Date created:	092/05/21
Tip key:		Date last altered:	A93/07/26
		Owning B.U.:	USA

PURPOSE:

*** THIS ECA EXPIRED 6-30-93 ***

THIS ECA PROVIDED A ROM* BIOS** REPLACEMENT KIT FOR THE 8535 OR 8540 SYSTEM THAT EXPERIENCE CORRUPTED HARDFILE DATA DURING RESTORE OPERATIONS FROM A DISKETTE DRIVE OR TAPE UNIT.

* ROM=READ ONLY MEMORY.

**BIOS=BASIC INPUT/OUTPUT SYSTEM.

NOTE:

BOTH ROM BIOS MODULES ARE ON THE SYSTEM BOARD AT LOCATIONS U19 AND U31. INSTALLATION INSTRUCTIONS ARE INCLUDED IN THE ROM BIOS KIT.

FEATURES:

Type, Model, Stage	With B/M	Machines Affected and/or Feature/Device Description	B/M to be Installed	Service Hours	System Hours
8535	B/M0000000	SEE PHYSICAL CHECK	B/M0000000	00.5	00.3
8540	B/M0000000	SEE PHYSICAL CHECK	B/M0000000	00.5	00.3

PHYSICAL CHECK:

TO QUALIFY FOR ROM BIOS REPLACEMENT KIT, THE SYSTEM MUST MEET THE FOLLOWING REQUIREMENTS:

1. THE SYSTEM UNIT SERIAL NUMBER MUST FALL WITHIN THE FOLLOWING RANGES:

8535 SYSTEMS-

- A. MODEL 8535-040, 1. SERIAL NUMBER 23-A0000 TO 23-M9999.
2. SERIAL NUMBER 78-TXD00 TO 78-XPV99.
- B. MODEL 8535-043, 1. SERIAL NUMBER 23-AA000 TO 23-TC999.
2. SERIAL NUMBER 78-AAAA0 TO 78-BLTG9.
- C. MODEL 8535-24X, 1. SERIAL NUMBER 23-TD000 TO 23-ZK999.
2. SERIAL NUMBER 78-BLTH0 TO 78-CYKP9.

8540 SYSTEMS-

- A. MODEL 8540-040, 1. SERIAL NUMBER 23-AA000 TO 23-NN999.
2. SERIAL NUMBER 78-NM000 TO 78-PM999.
- B. MODEL 8540-043, 1. SERIAL NUMBER 23-AAA00 TO 23-LGX99.
2. SERIAL NUMBER 78-YMKW0 TO 78-ZFFY9.
- C. MODEL 8540-045, 1. SERIAL NUMBER 23-AAAA0 TO 23-LYDX9.
2. SERIAL NUMBER 78-XBX00 TO 78-YDG99.

***** OR *****

2. THE SYSTEM BIOS DATE MUST BE 09-24-91 OR EARLIER.

THE FOLLOWING PROCEDURE SHOULD BE USED TO DETERMINE SYSTEM BIOS DATE:

- AT THE C: > TYPE "BASIC" AND PRESS "ENTER".
- AT THE "OK" TYPE THE FOLLOWING EXACTLY AS SHOWN:
DEF SEG=-1: FOR X=5 TO 12: PRINT CHR\$(PEEK(X));: NEXT
- IF "SYNTAX ERROR" IS DISPLAYED INSTEAD OF A DATE, VERIFY THE LINE WAS TYPED EXACTLY AS SHOWN ABOVE.
- IF THE DATE DISPLAYED IS 09-25-91 OR LATER, THE SYSTEM IS NOT ELIGIBLE FOR THIS ECA.
- IF THE DATE DISPLAYED IS 09-24-91 OR EARLIER, THE SYSTEM IS ELIGIBLE FOR THIS ECA IF REQUIREMENT 3 (BELOW) IS MET.

***** AND *****

3. SYSTEM BOARD FRU PART NUMBER MUST BE P/N92F0108 OR P/N85F0077

NOTE:

SYSTEM BOARD FRU PART NUMBERS THAT ARE NOT LISTED ABOVE ARE NOT EXPOSED TO THESE PROBLEMS.

PREREQUISITES: NONE

COMPANION: NONE

CONCURRENT: NONE

DETAIL:

A LIMITED NUMBER OF 8535 AND 8540 SYSTEMS MAY EXPERIENCE CORRUPTED DATA ON THE HARDFILE DURING A RESTORE OPERATION FROM A TAPE UNIT OR DISKETTE DRIVE. THIS PROBLEM CAN ONLY OCCUR WITH HARDWARE WHICH ATTACHES TO THE SYSTEM BOARD DISKETTE DRIVE CONNECTOR (J15).

IF THE SYSTEM UNIT MEETS ALL OF THE REQUIREMENTS CALLED OUT IN THE "PHYSICAL CHECK" SECTION, A REPLACEMENT SET OF SYSTEM ROM BIOS (FRU P/N92F2434) SHOULD BE INSTALLED.

NOTE:

A REPLACEMENT STARTER DISKETTE, VERSION 1.20 OR HIGHER, IS INCLUDED WITH THE REPLACEMENT ROM BIOS KIT. THE OLD LEVEL STARTER DISKETTE, VERSION 1.10 AND EARLIER, IS NOT COMPATIBLE WITH THE REPLACEMENT ROM BIOS AND SHOULD BE PROMPTLY DISCARDED.

NOTES:

*** THIS ECA EXPIRED 6-30-93 ***

ORDER PARTS THROUGH NORMAL DISTRIBUTION. ALL ROM BIOS MODULES REMOVED SHOULD BE SCRAPPED LOCALLY.

SAS KEYWORDS:

PSY2	PSY2ECA	PSY2BRD	PSY2ADPT
D/T8535	D/T8540	PSY2ECBM	8535ECA
8535SYSKBD	8540SYSKDB	8540ECA	8535SYSBRD
8540SYSBRD	8535SYSADPT	8540SYSADPT	8535SYSECBM
8540SYSECBM	PSY2FDSK		

1.1.182 ECA102, OBSOLETE

Record number: H096764

Device:	D/T8550	Service code:	33
ECA number:	ECA102	Parts source:	LOC
EC number:	ECC80575	Publish flag:	R
Mandatory:	N	Hit count:	UHC00971
Automatic shipment:	N	Success count:	USC0001
Availability date:	92/03	Publication code:	PC40
Plant of control:	27	Date created:	092/03/04
Tip key:		Date last altered:	A93/07/26
		Owning B.U.:	USA

PURPOSE:

*** THIS ECA EXPIRED 6-30-93 ***

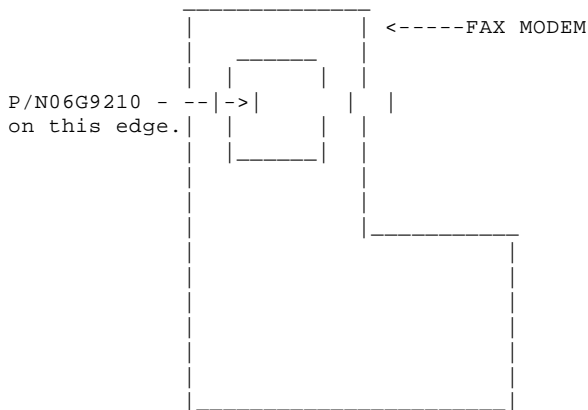
FEATURES:

Type, Model, Stage	With B/M	Machines Affected and/or Feature/Device Description	B/M to be Installed	Service Hours	System Hours
8543	B/MNONE	DATA FAX ADAPTER W/O 06G9210	B/MNONE	00.7	00.5

PHYSICAL CHECK:

To be affected, the Internal Data Fax Modem must:

1. Pass FAX diagnostics
AND
2. Fail when running fax programs.
AND
3. NOT have P/N06G9210 written on the edge of the module
in the drawing below.



PREREQUISITES: NONE

COMPANION: NONE

CONCURRENT: NONE

DETAIL:

Some down level Data Fax Modems may not operate with class one FAX programs. If the system is experiencing FAX program hangs when trying to transmit or receive data, run the advanced FAX diagnostic from the reference diskette. If this operates correctly check the modem for the part number in the physical check section. If part number 06G9210 is NOT on the fax modem, the modem may be affected.

NOTES:

*** THIS ECA WILL EXPIRED 6-30-93 ***

Order FRU P/N79F0996 through normal distribution. All FRU stock has been purged of down level stock.

SAS KEYWORDS:

PSY2ECA	D/T8543	PSY2ECBM	8543ECA
8543SYSECBM	PSY2COMM	8543SYSCOMM	PSY2

1.1.183 ECA103, OBSOLETE (EXPIRED 9-31-94)

Record number: H063747

Device:	D/T8550	Service code:	33
ECA number:	ECA103	Parts source:	LOC.
EC number:	ECC99999	Publish flag:	R
Mandatory:	N	Hit count:	UHC01194
Automatic shipment:	N	Success count:	USC0000
Availability date:	92/09	Publication code:	PC40
Plant of control:	23	Date created:	092/10/20
Tip key:		Date last altered:	A95/03/10
		Owning B.U.:	USA

PURPOSE:

*** THIS ECA HAS EXPIRED ***

THIS ECA PROVIDES A REPLACEMENT 60MB FIXED DISK FOR AFFECTED 8550, 8555, AND 8570 SYSTEMS WHEN THE DRIVE FAILS TO SPIN AT POWER-ON.

FEATURES:

Type, Model, Stage	With B/M	Machines Affected and/or Feature/Device Description	B/M to be Installed	Service Hours	System Hours
8550	B/MNONE	8550 MODELS W/60MB	B/MNONE	00.7	00.5
8555	B/MNONE	8555 MODELS W/60MB	B/MNONE	00.7	00.5
8570	B/MNONE	8570 MODELS W/60MB	B/MNONE	00.7	00.5

PHYSICAL CHECK:

AFFECTED DRIVES ARE KNOWN TO HAVE BEEN SHIPPED IN THE ABOVE SYSTEM MODELS, HOWEVER NOT ALL OF THESE SYSTEMS WILL HAVE THE AFFECTED FIXED DISKS.

TO DETERMINE IF A DRIVE IS ELIGIBLE FOR THIS ECA INSPECT THE DRIVE TO ENSURE THAT IT IS AN ST-177I 60MB FIXED DISK MANUFACTURED FOR IBM BY SEAGATE. ONLY THIS MODEL SEAGATE DRIVE THAT FAILS POST WITH THE FOLLOWING SYMPTOMS IS ELIGIBLE FOR THIS ECA:

- THE SYSTEM WILL DISPLAY THE MEMORY COUNT.
- THE DRIVE WILL MAKE A CLICKING OR TAPPING NOISE AT POST.
- THE SYSTEM WILL DISPLAY A 10483 POST ERROR.

NOTE:

IF THE FIXED DISK HAS AN LED LIGHT ON THE DRIVE, THE LIGHT WILL BLINK 9 TIMES AT POST. THE LIGHT WILL STAY ON APPROXIMATELY ONE MINUTE, THEN BEGIN BLINKING AGAIN AND THE 10483 ERROR WILL REMAIN DISPLAYED. SOME 8570 FIXED DISKS DO NOT HAVE AN LED. THE 8570 HARDFILE EXTERNAL LED (NEAR THE POWER SWITCH) WILL NOT BLINK, AND SHOULD NOT BE USED TO IDENTIFY THIS FAILURE.

PREREQUISITES: NONE

COMPANION: NONE

CONCURRENT: NONE

DETAIL:

SOME 60MB FIXED DISKS IN 8550, 8555, AND 8570 SYSTEMS MAY FAIL TO SPIN AT POWER-ON. THIS ECA PROVIDES A REPLACEMENT DRIVE FOR THOSE MEETING THE PHYSICAL CHECK REQUIREMENTS.

IF AN AFFECTED FIXED DISK FAILS TO SPIN AFTER MULTIPLE POWER-ON ATTEMPTS, AND THE CUSTOMER'S DATA IS NOT BACKED-UP, THE FOLLOWING PROCEDURE MAY RESTORE TEMPORARY OPERATION OF THE DISK:

1. REMOVE THE DRIVE FROM THE SYSTEM. PLACE IT ON A SHEET OF PAPER ON A FLAT SURFACE. THE PAPER IS USED TO AVOID SCRATCHING THE FLAT SURFACE. THE DRIVE SHOULD BE RESTING ON ITS PLASTIC SLIDE MOUNT RAILS, IN ITS NORMAL OPERATING POSITION.
2. KEEPING THE DRIVE AGAINST THE FLAT SURFACE, ROTATE IT IN A BRISK CLOCKWISE/COUNTER-CLOCKWISE MOTION. DO NOT HIT, BANG, DROP, OR OTHERWISE SHOCK THE FIXED DISK.
3. THIS ROTATING ACTION SHOULD PROVIDE SUFFICIENT TORQUE TO RELEASE ANY BOUND INTERNAL PARTS. INSTALL THE DRIVE. IF POST COMPLETES SUCCESSFULLY, THE CUSTOMER SHOULD BACK-UP THE FIXED DISK IMMEDIATELY.

REPLACE THE 60MB FIXED DISK WITH FRU P/N85F0049 FOR THE 8555 AND WITH FRU P/N6128294 FOR THE 8550 AND 8570 SYSTEMS.

NOTES:

*** THIS ECA EXPIRED 9-30-94 ***

PSY2 RETAIN TIPS

ECA103, OBSOLETE (EXPIRED 9-31-94)

ORDER PARTS THROUGH NORMAL DISTRIBUTION. RECORD ALL TIME AND MATERIAL TO SERVICE CODE 33, ECA103, OTHER OFFICE 990. RETURN DEFECTIVE DRIVES USING NORMAL UPR PROCEDURES.

SAS KEYWORDS:

PSY2

D/T8555

PSY2ECA

PSY2FDSK

STICTION

PSY2ECBM

PSY2ECA

PSY2ERR

D/T8570

1.1.184 ECA104, OBSOLETE

Record number: H104165

Device:	D/T8550	Service code:	33
ECA number:	ECA104	Parts source:	LOC
EC number:	EC999999	Publish flag:	R
Mandatory:	N	Hit count:	UHC00661
Automatic shipment:	N	Success count:	USC0001
Availability date:	92/08	Publication code:	PC40
Plant of control:	27	Date created:	092/04/02
Tip key:		Date last altered:	A93/07/27
		Owning B.U.:	USA

PURPOSE:

*** THIS ECA EXPIRED 6-01-93 ***

Prevent internal power supply RFI (radio frequency interference) from affecting data and program transfers between the system and its fixed disk and diskette drive.

FEATURES:

Type, Model, Stage	With B/M	Machines Affected and/or Feature/Device Description	B/M to be Installed	Service Hours	System Hours
8573	B/MNONE	ALL MODELS	B/MNONE	00.2	00.4

PHYSICAL CHECK:

Systems experiencing data transfer read or write errors such as: CRC checks, post 601, 602, 10480, 10481, 10490 and 10491 errors, or other system hangs and lockups during data transfers.

PREREQUISITES: P70 systems below serial number xx-xx50000 should also have ECA068 installed if a multi-tasking operating system is installed.

X = any character

COMPANION: NONE

CONCURRENT: NONE

DETAIL:

Some 8573 power supplies may transmit RFI that interferes with diskette and fixed disk operation. This RFI signal could affect any 8573 system.

The types of problems that may occur include, but are not limited to the following:

1. Installing programs or transferring data to the fixed disk drive from any source (E.G. internal or external diskette drive, tape drive etc.)
2. Backing up data from the disk to diskette or any other media.
3. Installing programs, data, or operating systems from diskette to the system.
4. Loading programs, data, or operating systems from diskette or disk to the system.
5. Saving information running on the system to diskette or fixed disk.

IMPORTANT:

IF THE RFI LEVEL IS HIGH ENOUGH TO CAUSE A PROBLEM DURING DATA TRANSFER AN ERROR WILL OCCUR.

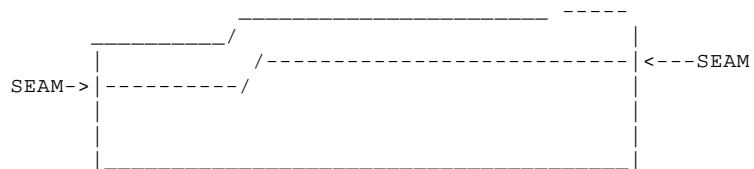
COPPER TAPE KIT FRU P/N07G1680

The kit contains a diagram and twelve inches of copper tape needed for one power supply.

To install the copper tape lift the clear plastic shield covering the side and top of the supply. Install the 1 inch wide copper tape length wise across the top and side of the supply so it covers the seam opening. This tape will prevent RFI from escaping from any space between the top and side covers by ensuring conductivity between these two surfaces. RFI transmissions can escape between two electrically insulated pieces of conductive material. Note: The rear vent holes are electrically connected to each other so the RFI can not pass through them.

/ <----POWER SWITCH

PSY2 RETAIN TIPS
ECA104, OBSOLETE



NOTES :

*** THIS ECA EXPIRED 6-01-93 ***

ORDER THE COPPER TAPE KIT FRU P/N07G1680 FROM NORMAL FRU STOCK.

SAS KEYWORDS:

PSY2	PSY2ECA	PSY2ERR	PSY2PROG
PSY2ECBM	8573ECA	8573SYSECBM	8573SYSERR
8573SYSPROG	D/T8573	HARDFILE	DASD
OS2 2.0	PSY2PWR	8573SYSPWR	

ECA107 (EXPIRED), BROKEN 8551 LCD HINGE MOUNTING POST

1.1.185 ECA107 (EXPIRED), BROKEN 8551 LCD HINGE MOUNTING POST

Record number: H017085

Device:	D/T8550	Service code:	33
ECA number:	ECA107	Parts source:	LOC
EC number:	EC999999	Publish flag:	R
Mandatory:	N	Hit count:	UHC00311
Automatic shipment:	N	Success count:	USC0000
Availability date:	93/06	Publication code:	PC40
Plant of control:	27	Date created:	093/09/10
Tip key:		Date last altered:	A95/08/17
		Owning B.U.:	USA

PURPOSE:

Replace the keyboard cover assembly FRU P/N07G1208 if the LCD mounting posts are broken and the system meets the physical check portion of this ECA.

FEATURES:

Type, Model, Stage	With B/M	Machines Affected and/or Feature/Device Description	B/M to be Installed	Service Hours	System Hours
8551	B/MNONE	8551 SERIAL 97-XXXXX	B/MNONE	01.5	01.5

PHYSICAL CHECK:

The system must be partially disassembled to view the following.

1. Broken mounting posts on keyboard cover for LCD hinge.
ONLY POSTS WITHOUT METAL BANDS ARE ELIGIBLE.
2. Systems with a serial prefix of 97-XXXXX (X=any number or letter.)

PREREQUISITES: NONE

COMPANION: NONE

CONCURRENT: NONE

DETAIL:

The LCD hinges fasten to four posts on the keyboard cover asm. Some of these posts in systems with a 97 serial number prefix may weaken in the early life of the system. Two types of keyboard covers can correct this; one is made with a more flexible plastic and the other has a reinforcing metal band around the posts. The FRU part number has not changed and all stock is composed of either of these improved keyboard covers.

There are four posts in the keyboard cover. If one or more of them are broken the system may exhibit the following conditions:

1. The LCD may not stay in the position that it is set to.
2. The LCD cover may not latch correctly with the keyboard cover when it is closed.
3. 301 or other post errors may occur intermittently.
3. If all posts are broken the LCD will open 180 degrees.

NOTE:

The LCD normally opens to approximately 120 degrees, not 180 degrees.

NOTES:

THIS ECA EXPIRED DECEMBER 31, 1994. Order FRU P/N07G1208.

SAS KEYWORDS:

PSY2 PSY2ECA PSY2ECBM

ECA901, ETHERNET RPL FAILS ON NOVELL 2.2 SERVER

1.1.186 ECA901, ETHERNET RPL FAILS ON NOVELL 2.2 SERVER

Record number: H124769

Device:	D/T6384	Service code:	33
ECA number:	ECA901	Parts source:	RAL
EC number:	EC000000	Publish flag:	H
Mandatory:	N	Hit count:	UHC00420
Automatic shipment:	N	Success count:	USC0000
Availability date:	94/07	Publication code:	PC40
Plant of control:	23	Date created:	094/07/29
Tip key:		Date last altered:	A95/09/11
		Owning B.U.:	USA

PURPOSE:

THIS ECA PROVIDES AN EPROM UPGRADE KIT TO ENABLE IBM LAN ADAPTERS FOR ETHERNET NETWORKS TO REMOTE PROGRAM LOAD (RPL) FROM A SERVER RUNNING NOVELL NETWARE* VERSION 2.2.

FEATURES:

Type, Model, Stage	With B/M	Machines Affected and/or Feature/Device Description	B/M to be Installed	Service Hours	System Hours
ALL	B/M0000000	ANY ISA BUS SYSTEM WITH IBM ETHERNET ADAPTERS MEETING THE PHYSICAL CHECK CRITERIA BELOW.	B/M0000000	00.7	00.4

PHYSICAL CHECK:

VERIFY THAT THE SERVER IS USING NOVELL NETWARE VERSION 2.2 ONLY. THIS ECA IS NOT REQUIRED WHEN USING LATER VERSIONS OF NOVELL NETWARE.

VERIFY THAT THE ADAPTER IN THE WORKSTATION IS ONE OF THE FOLLOWING:

	OPTION #	FRU #
LAN ADAPTER FOR ETHERNET	48G7169	P/N48G7170
LAN ADAPTER FOR ETHERNET CX	60G0615	P/N60G0621
LAN ADAPTER FOR ETHERNET TP	60G0605	P/N60G0611

ALSO VERIFY THAT THE EPROM INSTALLED ON THE LAN ADAPTER FOR ETHERNET IS NOT 73G6193. IF THIS PART NUMBER IS ON THE EPROM, THIS ECA IS ALREADY INSTALLED. EPROM 73G6193, CONTAINED IN THE FRU KIT, WILL ONLY FUNCTION ON THE ADAPTERS LISTED ABOVE. DO NOT INSTALL THE EPROM ON ANY OTHER LEVEL OF IBM LAN ADAPTERS FOR ETHERNET.

PREREQUISITES: NONE**COMPANION:**

NONE

CONCURRENT:

NONE

DETAIL:

AFFECTED LAN ADAPTERS FOR ETHERNET NETWORKS WILL NOT REMOTE PROGRAM LOAD (RPL) FROM A SERVER THAT USES NOVELL NETWARE 2.2. THE WORKSTATION REPORTS THAT IT CANNOT LINK TO SERVER. ONLY RPL IS AFFECTED; THE WORKSTATION WILL CONNECT TO SERVER WHEN USING A BOOT DISKETTE.

EPROM KIT FRU P/N73G6197 CONTAINS A REPLACEMENT EPROM AND INSTALLATION INSTRUCTIONS.

*** IMPORTANT ***

THE EPROM UPDATE KIT IS ONLY FOR ADAPTERS THAT ARE INTENDED TO RPL FROM A NOVELL NETWARE 2.2 SERVER. THIS ECA DOES NOT APPLY TO SERVERS USING ANY OTHER LEVEL OF NOVELL NETWARE.

IF THE CUSTOMER WANTS TO USE A LATER VERSION OF NOVELL AFTER INSTALLING THIS ECA, THE EPROM MUST BE REPLACED AGAIN WITH A CURRENT VERSION. CONTACT IBM ETHERNET APPLICATIONS ENGINEERING AT ONE OF THE FOLLOWING NUMBERS TO OBTAIN CURRENT LEVEL EPROMS:

- JIM SALEMBIER 919-543-4023 OR TL.441-4023
- MICHELE RIGGS 919-543-7306 OR TL.441-7306

NOTES:

ORDER EPROM KIT, FRU P/N73G6197. RECORD ALL TIME AND MATERIAL USING SERVICE CODE 33, ECA901, OTHER OFFICE 990.

REMOVED EPROMS MUST BE RETURNED TO THE FOLLOWING ADDRESS:

IBM
3039 CORNWALLIS RD.
RTP, NC 27709
ATTN: JIM SALEMBIER

* REGISTERED TRADEMARK OF NOVELL, INC.

SAS KEYWORDS:

PSVP	PSY2	PSY2ECA	PSVPECA
PSY2COMM	PSVPCOMM	D/T6381	D/T6382
D/T6387	D/T8525	D/T8530	D/T8535
D/T8540	D/T9535	D/T9540	RIPL
NOVEL	NOVELE	22	D/T6472
D/T6482	D/T6492	D/T6484	D/T6494
D/T63XX	D/T64XX	63XX	64XX
ECAVALID			

1.2 Chapter 2. Service Aids and Additional Information

Subtopics

- 1.2.1 (BIOS) FIX MULTIPLE THINKPAD PRODUCT HANG CONDITION.
- 1.2.2 "AVOID SHORTS" WHEN ADJUSTING VIDEO CARDS
- 1.2.3 "CONFLICT" BETWEEN XGA AND ENHANCED 80386 MEMORY ADAPTER
- 1.2.4 "CP" CODES DISPLAYED ON THE 8595/9595/8641 INFORMATION PANEL
- 1.2.5 "OTHER DEVICES" DISPLAYS "?" IN WINDOWS95 OSR1
- 1.2.6 "SERVICE LAYER NOT RUNNING" ERROR W/DMI BROWSER
- 1.2.7 "WARNING" INCORRECT DISKETTE DRIVE CAN DAMAGE SYSTEM
- 1.2.8 ABEND&COLON. UNABLE TO RESET PS/2 INTERNAL DISK CONTROLLER
- 1.2.9 ADAPTER INTERRUPT SETTINGS FOR 6381/SI
- 1.2.10 ADAPTER RESOURCE CONFLICT IN PC 700 6877/6887
- 1.2.11 ADAPTERS MAY CAUSE SYSTEM HANG CONDITION, NETWORK ERRORS
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 1.2.195 INCORRECT KEYBOARD SETTING IN WINDOWSNT 4.0 ON PC 365
 1.2.196 INCORRECT SPEAKER CABLE SHIPPED WITH 50/50Z UPGRADES
 1.2.197 INCORRECT SPEED MARKED ON 60NS DIMM'S IN 6577/6587
 1.2.198 INCORRECT UK SUPPORT INFORMATION IN IBM WELCOME CENTER
 1.2.199 INCORRECT 6387/T SYSTEM BOARD FRU IN HMS/R
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 1.2.203 INFO WINDOW DISPLAY (D/T4050) FLASHES
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 1.2.205 INFORMATION ON CLEANING IBM PC AND PS/2 SYSTEMS
 1.2.206 INSTALLATION OF ARTIC ADAPTERS IN 8590 AND 8595.
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- 1.2.327 PARALLAN MODEL 290 SERVICE STRATEGY
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- 1.2.329 PARTITION INFORMATION INCORRECT W/IBM NETFINITY
- 1.2.330 PC & PS2 FRU IDENTIFICATION CHART
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1.2.334 PC DOCTOR QUICK/FULL ERASE UTILITY AND FORMATTING
 1.2.335 PC SERVER INFO! IMPORTANT&COLON. PLEASE READ AND RESPOND TODAY!
 1.2.336 PC SERVER 325/300&COLON. CONFIGURING INTERRUPTS FOR ASMA
 1.2.337 PC SERVER 325/330&COLON. FALSE LED ACTIVITY FOR 2ND CPU
 1.2.338 PC SERVER 325/330&COLON. SOME DIMM'S MISSING FRU AND OPTION P/N'S
 1.2.339 PC SERVER 720 (8642) PROCESSOR CARD SUPPORT
 1.2.340 PC SERVER 720&COLON. INSTALLING LONG ADAPTERS
 1.2.341 PC 300 6576 & 6586 SYSTEM BOARD FRU DETAIL
 1.2.342 PC 300 6577 & 6587 DOES NOT SUPPORT 70NS MEMORY
 1.2.343 PC 300/700 PRELOADED SOFTWARE PROBLEM/FIXES
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 1.2.345 PC 340 SETUP UTILITY SHOWS 166MHZ OVERDRIVE AS 0MHZ
 1.2.346 PC 350/750 COVER BENDS & SHIFTS W/LARGE MONITOR ON TOP
 1.2.347 PC 360 6598 NON-SUPPORT OF 2.88 DISKETTE DRIVE
 1.2.348 PC-PS/2 SERVICE INFORMATION MANUAL (SIM) CORRECTIONS
 1.2.349 PCI IDE ADAPTERS NOT SUPPORTED IN PC 300/700 SYSTEMS
 1.2.350 PCSERVER HMM DOCUMENTATION ERRORS
 1.2.351 PC300 RISER INSTALLATION PROCEDURE
 1.2.352 PC300 486 JUMPER CORRECTIONS
 1.2.353 PC300/700 FRONT BEZEL REMOVAL PROCEDURE
 1.2.354 PC300/700 HMM (83G7789-01) UPDATES
 1.2.355 PC300/700 HMM PARTS & INFORMATION UPDATES
 1.2.356 PC300/700 HMM PARTS UPDATES
 1.2.357 PENTIUM PRO REPLACEMENT PROCEDURE IN SERVER 325/330
 1.2.358 PENTIUM PROCESSOR DEFECT, REPLACEMENT OVERVIEW
 1.2.359 PERFORMANCE ENHANCEMENTS
 1.2.360 PERFORMANCE ENHANCEMENTS FOR SERVERAID II ADAPTER/CONTROLLER
 1.2.361 PERSONAL PAGEPRINTER ADAPTER/A RUN IN LOOP MODE WILL FAIL.
 1.2.362 PERSONAL PAGEPRINTER ADAPTER/A AND 3270 ADAPTER CARD FAIL.
 1.2.363 PERSONAL PAGEPRINTER ADAPTOR PROBLEMS ON PS/2 8570 MOD A21
 1.2.364 PERSONAL PUBLISHING SYSTEM ERRORS & HMS INFO
 1.2.365 PERSONALITY MODULE FOR OKIDATA ML292, 3 & 4 PRINTERS.
 1.2.366 PERSONALITY MODULE FOR OKIDATA ML290 SERIES PRINTER.
 1.2.367 PHOTOMORPH NT PERFORMANCE IMPROVES W/WINDOWSNT 4.0
 1.2.368 PLANAR INSTALLATION IN IBM INTELLISTATION M-PRO, M/T6898
 1.2.369 PLASTIC DISKETTE HOLDERS AVAILABLE FROM MECHANICSBURG PUBS
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 1.2.371 PLUG N PLAY ADAPTER FAILS TO CONFIGURE IN 6577/87
 1.2.372 POST ERROR CODES FOR SERVERAID AND SERVRAID II CONTROLLERS
 1.2.373 POST 301 ERROR
 1.2.374 POST 301 ERROR
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 1.2.380 POWER SUPPLY LEADS TOO SHORT FOR OEM OPTION
 1.2.381 POWER SUPPLY TEST - MODELS 35, 40, 56, 57, 76, 77
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 1.2.383 PRINTER DIP SWITCH SETTING CHANGED
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 1.2.391 PS/VALUEPOINT PARTS AND MODEL INFORMATION
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 1.2.396 PS/2 COMPONENT DAMAGE
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 1.2.400 PS/2 ETHERNET ADAPTER/A FRU P/N92F0005 INSTALLATION
 1.2.401 PS/2 ETHERNET ADAPTER/A FAILS TO COMMUNICATE
 1.2.402 PS/2 FAILS RUNNING OS/2 WITH KINGSTON MEMORY
 1.2.403 PS/2 FIXED DISK READ VERIFY ERRORS
 1.2.404 PS/2 HANGS WITH XGA, SCSI AND IMAGE ADAPTER INSTALLED
 1.2.405 PS/2 HANGS&COLON. ERRORS WITH MICROCHANNEL TO MAINFRAME CONNECTION
 1.2.406 PS/2 HANGS&COLON. ERRORS WITH MICROCHANNEL TO MAINFRAME CONNECTION
 1.2.407 PS/2 INSTALLATION PLANNING GUIDE-REVISION
 1.2.408 PS/2 INTERNAL MODEM DIAGNOSTICS HANG PROBLEM
 1.2.409 PS/2 INTERNAL TAPE UNIT AND NDC OP SYS
 1.2.410 PS/2 LAN STATION FAILS W/ NOVELL AND TOKEN RING
 1.2.411 PS/2 LAN WORKSTATION HANGS WHEN PRINTING W/ DLR 1.2
 1.2.412 PS/2 LAN WORKSTATION USING NOVELL W/ ETHERNET
 1.2.413 PS/2 MEMORY IDENTIFICATION/CLARIFICATION
 1.2.414 PS/2 MOD 56/57 REFERENCE & DIAGNOSTIC DISKETTES
 1.2.415 PS/2 MODEL NUMBER ASSIGNMENT CONVENTION
 1.2.416 PS/2 MODEL 55 SYSTEM USES 80286 MEMORY ADAPTER
 1.2.417 PS/2 REFERENCE DISKETTE REQUIRES COLD START

1.2.418 PS/2 SERVER 295, GENERAL INFORMATION
 1.2.419 PS/2 SYSTEM USE OF DOTS VS SLASHES IN THE ZERO CHARACTER
 1.2.420 PS/2 WIZARD ADAPTER DATA INTEGRITY
 1.2.421 PS/2 8516 TOUCH SCREEN DISPLAY
 1.2.422 PS/2 8518/8511 - FIELD REPAIRABLE COLOR DISPLAYS
 1.2.423 PS/2 8525 AND 8525-286 DISPLAY FRU INFORMATION
 1.2.424 PS/2 8540 WILL NOT BOOT FROM 2ND HARDFILE
 1.2.425 PS/2 95XX 63XX COLOR MONITORS FLICKER
 1.2.426 PS/2 9585 REFERENCE & DIAGNOSTIC LEVELS
 1.2.427 PS/2, 1/3-HIGH VS 1/2-HIGH DISKETTE DRIVE IDENTIFICATION
 1.2.428 QAPLUS FE DIAGNOSTICS NOT COMPATIBLE W/PC300 & 700
 1.2.429 QAPLUS WIN-WIN STOPS FOR WINDOWS95 SCREENSAVER
 1.2.430 QAPLUS/PRO HANGS WITH JAPANESE 106-KEY KEYBOARD
 1.2.431 QUANTUM SCSI-2 F/W JUMPERS AND LED INDICATORS
 1.2.432 Q5 PIN MISSING ON 9527 VIDEO CARD
 1.2.433 RAID ADAPTER FIRMWARE CHART (MICROCHANNEL)
 1.2.434 RAID ADAPTER FIRMWARE CHART (PCI)
 1.2.435 RAID ARRAY: DATA SCRUBBING, PREVENT RAID REBUILD FAILURES
 1.2.436 RAID ARRAY FIXED DISK DRIVE REPLACEMENT PROCESS
 1.2.437 RAID BIOS/DEVICE DRIVER INSTALLATION/VERIFICATION PROCEDURES
 1.2.438 RAID OPTIONS JUMPERED INCORRECTLY
 1.2.439 RAPID RESUME FAILS WITH SCSI DRIVE AS PRIMARY
 1.2.440 REFERENCE DISKETTE IMAGES AVAILABLE ON PCPROD
 1.2.441 REMOTE IPL FAILS ON 55LS WITH FIXED DISK
 1.2.442 REMOTE SCSI ID CABLE MAY BE KEYED INCORRECTLY
 1.2.443 REPAIR ID TAG COVERS SERIAL NUMBER PREFIX
 1.2.444 REPORTING PS/2 MACHINE SERIAL NUMBERS
 1.2.445 REVISED PS/2 SIM AND PC SIM MANUALS
 1.2.446 RIPL FAILS ON 50MHZ 8590/8595 W/TOKEN RING
 1.2.447 ROM ADDRESS FOR ESDI ADAPTER CAN NOT BE CHANGED
 1.2.448 RPL TYPE PS2 FAILS TO INSERT ON TOKEN RING THROUGH 8230
 1.2.449 SAS KEYWORDS FOR IBM PC PRODUCTS
 1.2.450 SCO UNIXWARE 2.1 CANNOT ACCESS GREATER THAN 128MB
 1.2.451 SCREEN READER HANGS PLANAR DIAGNOSTICS ON THE 8570
 1.2.452 SCREWS MAY CAUSE SCSI FIXED DISK FAILURES
 1.2.453 SCSI ADAPTER IN 8550,8555 MODELS 031
 1.2.454 SCSI ADDRESS SWITCH/CABLES FOR 3510 SCSI ENCLOSURES
 1.2.455 SCSI BUS TERMINATION GUIDELINES
 1.2.456 SCSI CABLE TOO SHORT WHEN USED WITH CD ROM DRIVE
 1.2.457 SCSI DEVICES NOT REMOVED DURING AUTO-CONFIGURATION
 1.2.458 SCSI DEVICES WILL NOT CONFIGURE OR COME READY
 1.2.459 SCSI DRIVE FAILS TO BOOT W/16 BIT AT FAST SCSI
 1.2.460 SCSI FIXED DISK DIAGNOSTIC ERROR RETURN CODES
 1.2.461 SCSI INLINE TERMINATOR NOW AVAILABLE
 1.2.462 SCSI-2 FAST/WIDE ADAPTER SUPPORT DISK MISSING.
 1.2.463 SCSI/RAID ADAPTER LIST
 1.2.464 SDLC ADAPTERS FAIL IN PC 700 SYSTEMS
 1.2.465 SDLC FAILS IN 6384 W/SOUNDBLASTER PRO ADAPTER
 1.2.466 SECOND PROCESSOR INSTALLATION IN INTELLISTATION M-PRO
 1.2.467 SELECT a DOCK REPLACEMENT KEY ORDERING.
 1.2.468 SERIAL PORTS MISLABELED ON 6381/SI
 1.2.469 SERVER FAILURES/TRAP/NMI/HANG PROBLEM APPROACH
 1.2.470 SERVER 295 SOFTWARE INSTALLATION
 1.2.471 SERVER 300 AND SERVER 320 DOCUMENTATION
 1.2.472 SERVER 300 PENTIUM PROCESSOR HEAT SINK CHANGED

(BIOS) FIX MULTIPLE THINKPAD PRODUCT HANG CONDITION.

1.2.1 (BIOS) FIX MULTIPLE THINKPAD PRODUCT HANG CONDITION.

Record number: H161335 Number of altered copies: 1

Device: D/T9547
 Model: M
 Tip key: 012
 Date created: 097/10/01
 Date last altered: A97/10/08

A new BIOS level has been released that corrects hang conditions occurring during battery operation on the following ThinkPad device types.

- 9547 765L, 760EL, 760ELD, and XL.
- 9546 765D, 760E, 760ED, and 760XD.
- 2640 560, 560E.
- 2635 385D, 385ED, 380, 380D, 380E, and 380ED.

NO OTHER THINKPAD SYSTEM MODELS ARE EFFECTED.

This BIOS upgrade does not pertain to hangs occurring during AC operation, so normal problem determination procedures should be used to correct hangs occurring during AC power mode.

The BIOS upgrade should be installed immediately to prevent any future hang related incidents during battery operation.

The condition is not operating system dependent - error messages will be reported by each operating system's normal error reporting methods. Because the hang condition can occur during various segments of operation, the operating system's reported errors may vary.

The 9546 / 9547 765/760 ThinkPad BIOS upgrade eliminates any potential system hang instances by disabling the stop clock function. This may cause up to a 3 percent decrease in battery run down time during certain types of system use. The actual results during all operations will be at or above our published battery run down specifications.

The 2635 380 and 2640 560 BIOS upgrade changes the stop clock implementation in BIOS to correct the hang condition. This has no battery run down effect.

The new BIOS level is customer installable and is located on the IBM PCCO BBS and the IBM BBS area on the world wide web. The upgrade file is titled:

- SYT38103.EXE for the ThinkPad 2635 380/385
- SYTPK109.EXE " " " 2640 560
- SETPK102.EXE " " " 2640 560E
- SYTPG201.EXE " " " 9546 / 9547 760 without XGA
- SYTPH201.EXE " " " 9546 / 9547 760 with XGA

Machine Type	BIOS Name	SPSD Version	BIOS Date
9546,9547 XGA	SYTPH201	2.00 or later	8/15/97 or later
9546,9547 SVGA	SYTPG201	2.00 or later	8/15/97 or later
2640 (560E)	SETPK102	1.02 or later	9/03/97 or later
2640 (560)	SYTPK109	1.09 or later	9/03/97 or later
2635	SYT38103	1.03 or later	9/03/97 or later

IMPORTANT

Diskette based fixes are customer installable. Customers should be advised to contact the IBM PC Company HelpCenter at 800-772 - 2227 if assistance is required in getting or installing this information.

Files are located on the PC company's Bulletin Board Service (BBS). The direct line for modem connection to The PC Company BBS is 1-919-517-0001 or tieline 255-0001.

Customers in Canada should call IBM's HelpPC at 800-565-3344 for Assistance or down load information. The Canadian BBS phone numbers are:

- Montreal-514-938-3022, Toronto-905-316-4255,
- Winnipeg-204-934-2735, Vancouver-604-664-6464.

PSY2 RETAIN TIPS

(BIOS) FIX MULTIPLE THINKPAD PRODUCT HANG CONDITION.

| The data may also be downloaded via the Internet from |
| the IBM Personal Computer File Library by searching the |
| following Internet URL: |
http: //www.us.pc.ibm.com/files.html

SAS KEYWORDS:

PSY2	PSY2MCD	THINKPAD	UNCLASSIFIED
D/T9546	D/T2640	D/T2635	UPGRADE

1.2.2 "AVOID SHORTS" WHEN ADJUSTING VIDEO CARDS

Record number: H123128

Device: D/T9517
Model: M
Tip key: 004
Date created: 094/03/10
Date last altered: A95/06/20

When adjusting the video card, FRU P/N39G2100, on a 9517 monitor, care should be used while inserting the tool through the metal video shield into the video card to prevent shorts from occurring.

The tool, FRU P/N6247769, identified in the HMM for these adjustments has a metal tip which may short the metal video shield and video card. This will occur if the tool is not inserted carefully into the pot and the tool contacts a nearby solder land.

The back cover of the metal video shield may be removed to complete the adjustments. The back cover is removed by pressing in on the sides and top of the shield assembly.

SAS KEYWORDS:

PSY2	9517	DISPLAY	PSY2DISP
TOUCH	CONTACT	TOOL	

1.2.3 "CONFLICT" BETWEEN XGA AND ENHANCED 80386 MEMORY ADAPTER

Record number: H20593

Device: D/T8550
 Model: MCP1
 Tip key: 164
 Date created: 093/03/02
 Date last altered: A93/03/02

If an Enhanced 80386 Memory Expansion Adapter is installed in a system having an XGA video adapter, the system may not count all installed memory during POST. This will occur if the system has 16MB of memory. This is not considered a hardware defect.

This is caused by the inability of most operating systems to count higher than 16MB. By the time POST begins counting, memory, on the memory adapter, 1MB of memory has been already been allocated to the XGA adapter.

When XGA and Enhanced 80386 Memory Expansion Adapters are installed in a system with 16MB, POST will not count beyond 15232 KB.

(The above information was provided by RLPROD)

SAS KEYWORDS:

8570SYSADPT	8573SYSADPT	8580SYSADPT	PSY2SYSADPT
8570SYSTEM	8573SYSTEM	8580SYSTEM	PSY2SYSTEM
8570SYSERR	8573SYSERR	8580SYSERR	PSY2SYSERR
PSY2SYSMISC	D/T8570	D/T8573	D/T8580
PSY2			

1.2.4 "CP" CODES DISPLAYED ON THE 8595/9595/8641 INFORMATION PANEL

Record number: H036218

Device: D/T8595
 Model: M
 Tip key: 007
 Date created: 091/09/26
 Date last altered: A95/09/27

ALL ACTUAL HARDWARE ERROR CODES ON THE INFORMATION PANEL ARE EIGHT DIGITS OR MORE. (SCSI ERROR CODES MAY BE 12 DIGITS). THE "CP XX" CODES, WHICH ARE DISPLAYED ON THE 8595/9595/8641 INFORMATION PANEL DURING POST (POWER-ON SYSTEM TEST), ARE NOT ERROR CODES.

THE CP MEANS: CHECK POINT.
 THE PURPOSE OF THIS CODE IS TO PROVIDE AN INDICATION OF ACTIVITY TAKING PLACE DURING POST. THE ACTUAL CP CODES VARY DEPENDING UPON MODEL, INSTALLED OPTIONS AND OTHER FACTORS.

A CHECK POINT CODE DISPLAYED IN THE INFORMATION PANEL MEANS THAT SPECIFIC CHECK POINT IN THE POST ROUTINE HAS BEEN SUCCESSFULLY REACHED. THAT CP CODE WILL BE VISIBLE IN THE INFORMATION PANEL UNTIL THE NEXT CHECK POINT HAS BEEN REACHED.
 SO, IF A "HANG" CONDITION OCCURS DURING POST, IT COULD BE AT ANY (UNKNOWN) POINT AFTER THE LAST CP CODE WAS SENT TO THE INFORMATION PANEL.

POST, ON THESE SYSTEM UNITS, IS VERY COMPLEX AND MAY CONSIST OF UP TO 20,000 LINES OF CODE. ANY HARDWARE ATTACHED TO THE SYSTEM HAS THE POTENTIAL OF CREATING A "HANG CONDITION" AT ANY POINT IN THE POST ROUTINE. FOR THIS REASON, CP CODES ARE NOT MEANINGFUL FOR DIAGNOSING SYSTEM HANGS DURING POST. THEREFORE, THE HARDWARE MAINTENANCE LIBRARY DOES NOT REFERENCE ANY "CP ERROR CODES."

LISTING ALL THE CP CODES WHICH MAY BE DISPLAYED UNDER VARIOUS CONDITIONS IS BEYOND THE SCOPE OF THIS TIP AND ARE NOT AVAILABLE FOR PUBLICATION. HOWEVER, IT COULD BE USEFUL TO NOTE THE CHECK POINTS WHICH AN INDIVIDUAL SYSTEM NORMALLY DISPLAYS DURING THE POST PROCESS. THIS COULD BE OF LIMITED USEFULNESS LATER, IF "CP HANGS" ARE EXPERIENCED. (REMEMBER, THE ACTUAL CP CODES VARY DEPENDING UPON INSTALLED FEATURES AND OTHER FACTORS WHICH AFFECT THE ACTUAL POST PROCESS.

HOWEVER, SOME CP CODES TEND TO BE COMMON AND ARE LISTED BELOW:

CP 05 INITIALIZE BASIC VIDEO SUBSYSTEM.
 CP 25 THE BEGINNING OF KEYBOARD TESTING.
 CP 40 THE CURSOR FIRST BECOMES VISIBLE ON THE MONITOR.
 CP 66 THE DISKETTE DRIVE IS INITIALIZED, TEST FOR 2ND DRIVE.
 CP 6B THE SERIAL AND PARALLEL PORTS ARE INITIALIZED.
 CP 71 THE PASSWORD IS REQUIRED, IF INSTALLED. (MAY BE CP 70)
 CP 80 THE SCSI FIXED DISK MOTOR IS STARTED.
 CP 82 THE FIXED DISK IML RECORD IS LOADED AND VERIFIED.

NOTE: THE ABOVE LIST IS IN NUMERICAL ORDER. THIS IS NOT THE ORDER IN WHICH THEY ARE EXERCISED ON THE SYSTEM.

AN EXAMPLE OF LIMITED USAGE:

THE SYSTEM APPEARS TO "HANG" WITH "CP 71" DISPLAYED ON THE INFORMATION PANEL, BUT NOTHING IS DISPLAYED ON THE ATTACHED MONITOR. AT "CP 71," A "KEY" SYMBOL IS NORMALLY VISIBLE ON THE MONITOR AND THE SYSTEM WAITS FOR THE OPERATOR TO KEY IN THE POWER-ON PASSWORD. THE OPERATOR ONLY SEES A BLANK MONITOR AND THE "CP 71" CODE, WHICH DOESN'T GO AWAY (HANGS) AND INTERPRETS THIS AS A SYSTEM FAILURE. ACTUALLY, THE SYSTEM UNIT IS FUNCTIONING NORMALLY, BUT THE ATTACHED MONITOR IS DEFECTIVE, OR TURNED OFF.

NOTE: THE EIGHT DIGIT DISPLAY PANEL ON THESE SYSTEMS IS AN OUTPUT DEVICE. IT MAY BE ADDRESSED EITHER BY PROGRAMMING OR BY ERROR, SUCH AS AN ADAPTER FAILURE. UNUSUAL OR UNEXPECTED "CODES" OR "CHARACTERS" SEEN IN THE PANEL COULD BE THE RESULT OF EITHER. AN EXAMPLE OF THE INFORMATION PANEL BEING INTENTIONALLY USED AS AN OUTPUT DEVICE BY SOFTWARE, IS THE ASTERISK INDICATING FIXED DISK ACTIVITY BY OS/2 VERSION 2.0.

SAS KEYWORDS:

PSY2	8595SYSERR	PSY2MISC	PSY2ERR
CP-XX	CP	PSY2PROG	D/T9595
D/T8641	8641	SERVER	500
95	D/T9595A	9595A	

1.2.5 "OTHER DEVICES" DISPLAYS "?" IN WINDOWS95 OSR1

Record number: H135239

Device: D/T6577
 Model: M
 Tip key: 009
 Date created: 096/11/19
 Date last altered: A97/11/10

IBM PC systems with USB ports may display a "?" in the "Other Devices" field of the Windows95 Device Manager screen.

Select the "My Computer" folder from the Windows95 desktop, then click on "Control Panel." From the Control Panel, select the "System" icon." Click on the "Device Manager" tab to display a list of the systems hardware detail. A "?" will appear next to the "Other Devices" entry.

The "?" appears because the IBM PC system PCI chipset contains a Universal System Bus (USB) module. Windows95 is capable of recognizing the PCI chipset, but cannot install device drivers for the USB. USB was introduced to market after the release of Windows95. Because of this, Windows95 displays a "?" next to "Other Devices" just to inform the user that the PCI hardware is recognized, but device drivers for the USB module cannot be installed.

Do not replace hardware in the IBM PC. This is not a hardware malfunction or resource conflict. Support for the USB module in Windows95 should be available from Microsoft in 1997.

Windows95 is a trademark of the Microsoft Corporation.

SAS KEYWORDS:

PSY2	D/T65XX	6577	6587
IBMPC	PSVP	PSVPPROG	PSY2PROG
D/T6587	PC 350	PC350	PC300
PC 330	PC330	51438	76020
76020F_1	PC300GL	76550F_1	UNCLASSIFIED
USB			

"SERVICE LAYER NOT RUNNING" ERROR W/DMI BROWSER

1.2.6 "SERVICE LAYER NOT RUNNING" ERROR W/DMI BROWSER

Record number: H01774

Device: D/T6577
Model: M
Tip key: 006
Date created: 096/06/19
Date last altered: A96/06/19

IBM PC 300 Series 6577 and 6587 systems preloaded with Windows 3.11 may display a "Service Layer Not Running" error the first time that the DMI Browser application is executed.

This is a one-time error condition. Powering the system off/on will eliminate the cause of the error.

SAS KEYWORDS:

PSY2	D/T65XX	6577	6587
IBMPC	PSVP	PSVPPROG	PSY2PROG
D/T6587	PC 350	PC350	PC300
PC 330	PC330	46198	

"WARNING" INCORRECT DISKETTE DRIVE CAN DAMAGE SYSTEM

1.2.7 "WARNING" INCORRECT DISKETTE DRIVE CAN DAMAGE SYSTEM

Record number: H063153

Device: D/T8590
 Model: M
 Tip key: 001
 Date created: 090/10/31
 Date last altered: A91/11/04

-----"WARNING"-----

THE DISKETTE DRIVE FOR PS/2 8590 AND 8595 IS SYSTEM
 SPECIFIC. USE OF THE WRONG DISKETTE DRIVE CAN RESULT IN DAMAGE
 TO THE SYSTEM BOARD, INCORRECT OPERATION OF THE 1.44MB 3 1/2
 DISKETTE DRIVE AND THE 5 1/4 INCH DISKETTE DRIVE.

THE FOLLOWING FRU'S (FIELD REPLACEABLE UNITS) ARE FOR USE IN
 THESE PRODUCTS:

FRU P/N64F0162 3.5 INCH 1.44MB DISKETTE DRIVE
 FRU P/N64F4102 5.25 INCH 1.2MB DISKETTE DRIVE

SAS KEYWORDS:
 PSY2 PSY2DSKT 8590SYSDSKT 8595SYSDSKT
 D/T8590 D/T8595

ABENDCOLON. UNABLE TO RESET PS/2 INTERNAL DISK CONTROLLER

1.2.8 ABEND&COLON. UNABLE TO RESET PS/2 INTERNAL DISK CONTROLLER

Record number: H021309

Device: D/T8530
Model: M
Tip key: 040
Date created: 090/11/01
Date last altered: A90/11/15

8530-286 SYSTEMS RUNNING THE NOVELL NETWARE* OPERATING SYSTEM,
DISPLAYING A MESSAGE: "ABEND: UNABLE TO RESET PS/2 INTERNAL DISK
CONTROLLER", MAY REQUIRE A SOFTWARE PATCH FROM NOVELL, INC.

AFFECTED CUSTOMERS SHOULD BE ADVISED TO CONTACT NOVELL, INC.
FOR ASSISTANCE IN OBTAINING AND INSTALLING THE REQUIRED PATCH.
HAVE THE CUSTOMER REFER TO NOVELL TECHNICAL BULLETIN NUMBER
1 - 274.

* REGISTERED TRADEMARK OF NOVELL, INC.

SAS KEYWORDS:

PSY2	PSY2ERR	8530SYSERR	PSY2FDSK
8530SYSFDSK	PSY2PROG	8530SYSPROG	

1.2.9 ADAPTER INTERRUPT SETTINGS FOR 6381/SI

Record number: H062449

Device: D/T6381
 Model: M
 Tip key: 002
 Date created: 093/12/07
 Date last altered: A95/08/08

FAILURES EXPERIENCED WITH ADAPTERS IN THE PS/VALUEPOINT 6381/SI
 MAY BE CAUSED BY THE INTERRUPT SETTING USED BY THE ADAPTER.

APPLICATION ERROR MESSAGES SUCH AS ADAPTER NOT FOUND, PC
 INTERRUPT NOT GENERATED, AND ADAPTER INITIALIZE FAILED,
 ALONG WITH SYSTEM HANG CONDITIONS AND INTERMITTENT OPERATION
 OF ADAPTERS ARE ALSO SYMPTOMS OF THIS PROBLEM.

COMMUNICATION ADAPTERS, SUCH AS TOKEN RING, 3270 AND ETHERNET
 ADAPTERS ARE ESPECIALLY SUSCEPTIBLE TO THIS TYPE OF FAILURE.

IF AN ADAPTER IS EXHIBITING SYMPTOMS SIMILAR TO THOSE STATED
 ABOVE, CHANGE THE ADAPTER INTERRUPT REQUEST TO ONE OF THE
 FOLLOWING:

IRQ 2, IRQ 9, IRQ 10 OR IRQ 11
 THE USE IRQ3 FOR 16 BIT ADAPTERS IN THE 6381/SI MAY ALSO CAUSE
 THE SYMPTOMS MENTIONED ABOVE.

NOTE -IF IRQ 2 OR 9 IS USED, ENSURE THE VIDEO INTERRUPT ENABLE
 JUMPER (J14 ON DX & DX2 MODELS AND J23 ON SX MODELS) IS
 SET IN THE DEFAULT POSITION (REAR 2 PINS).

SAS KEYWORDS:

VALUE POINT	PSVP	PSY2	PSVPCOMM
PSY2COMM	PSVPADPT	PSY2ADPT	PSVPMISC
PSY2MISC	PSVPERR	PSY2ERR	PSVPOPER
PSY2OPER	PSVPPART	PSY2PART	6381
PARITY ERRORS	DCA		

1.2.10 ADAPTER RESOURCE CONFLICT IN PC 700 6877/6887

Record number: H133190

Device: D/T6877
 Model: M
 Tip key: 009
 Date created: 096/03/25
 Date last altered: A96/03/25

IBM PC 700 Series 6877 and 6887 systems may exhibit adapter resource conflicts, device conflicts in Windows95, and General Protection Faults (GPF) in Windows 3.11.

This situation does not indicate that there is a hardware or software problem. Management of available resources will prevent these situations from occurring. This is a common responsibility for the user ANY brand of computer.

The problem is due to the amount of available system resources (multiple adapter cards) and the types of applications being used, typically communication applications. Installations that include the Mwave adapter are susceptible due to the multiple functions of the Mwave card.

Use the Setup/Configuration Utility (Press F1 during memory count) to disable planar and adapter resources that are not being used. For example, COM 2 and the Game Port are two system resources which can usually be disabled.

Windows & Windows95 are trademarks of the Microsoft Corporation.

SAS KEYWORDS:

PSY2	D/T68XX	6887	6877
IBMPC	PSVP	PSY2PROG	PSVPPROG
D/T6887	PC750	PC700	PC 730
PC 750	PC730	41762	PSY2OPER
PSVPOPER	PSVPERR	PSY2ERR	

ADAPTERS MAY CAUSE SYSTEM HANG CONDITION, NETWORK ERRORS

1.2.11 ADAPTERS MAY CAUSE SYSTEM HANG CONDITION, NETWORK ERRORS

Record number: H036595

Device: D/T8555
 Model: M
 Tip key: 009
 Date created: 089/12/11
 Date last altered: A91/05/10

THE 8555 MAY FAIL TO OPERATE PROPERLY WITH CERTAIN ADAPTERS, RESULTING IN SYSTEM HANGS OR NETWORK ERRORS. THE FAILURES ARE AS FOLLOWS:

8514/A ADAPTER - MAY CAUSE SYSTEM TO HANG CONDITION DURING SYSTEM POST.

ARTIC MULTIPORT/2 - MAY CAUSE SYSTEM HANG CONDITION DURING ARTIC DIAGNOSTICS OR CAUSE HANG CONDITION DURING APPLICATION EXECUTIONS (E.G. OS/2 TRAP ERRORS).

RACAL INTERLAN (OEM) NETWORK ADAPTER (ALSO KNOWN AS MICOM) - MAY CAUSE INTERMITTENT NETWORK ERRORS AND/OR SYSTEM HANG CONDITION.

IT IS POSSIBLE THAT OTHER SYSTEM ADAPTERS MAY ALSO FAIL WITH SYSTEM HANG SYMPTOMS.

FIX:

A NEW LEVEL BUS ADAPTER CARD IS AVAILABLE AS FRU P/N27F4666, AND SHOULD BE INSTALLED IN SYSTEMS WHICH EXPERIENCE THESE SYMPTOMS. THE NEW LEVEL BUS ADAPTER CAN BE IDENTIFIED BY MANUFACTURING PART NUMBER 64F0809 PRINTED ON THE CARD. IF THE SYSTEM BUS ADAPTER IS ALREADY THE NEW LEVEL, OR THE NEW BUS ADAPTER DOESN'T CHANGE THE FAILING SYMPTOM, USE NORMAL PROBLEM DETERMINATION PROCEDURES TO ISOLATE THE FAILURE.

SAS KEYWORDS:

PSY2	PSY2ADPT	8555SYSADPT	8555SYSCOMM
PSY2COMM	PSY2MISC	8555SYSMISC	

1.2.12 ADAPTERS MAY CAUSE SYSTEM HANG CONDITION, NETWORK ERRORS

Record number: H125281

Device: D/T8555
 Model: M
 Tip key: 025
 Date created: 093/02/14
 Date last altered: A93/02/14

THE 8555 MAY FAIL TO OPERATE PROPERLY WITH CERTAIN ADAPTERS, RESULTING IN SYSTEM HANGS OR NETWORK ERRORS. THE FAILURES ARE AS FOLLOWS:

8514/A ADAPTER - MAY CAUSE SYSTEM TO HANG CONDITION DURING SYSTEM POST.

ARTIC MULTIPORT/2 - MAY CAUSE SYSTEM HANG CONDITION DURING ARTIC DIAGNOSTICS OR CAUSE HANG CONDITION DURING APPLICATION EXECUTIONS (E.G. OS/2 TRAP ERRORS).

RACAL INTERLAN (OEM) NETWORK ADAPTER (ALSO KNOWN AS MICOM) - MAY CAUSE INTERMITTENT NETWORK ERRORS AND/OR SYSTEM HANG CONDITION.

IT IS POSSIBLE THAT OTHER SYSTEM ADAPTERS MAY ALSO FAIL WITH SYSTEM HANG SYMPTOMS.

FIX:

A NEW LEVEL BUS ADAPTER CARD IS AVAILABLE AS FRU P/N27F4666, AND SHOULD BE INSTALLED IN SYSTEMS WHICH EXPERIENCE THESE SYMPTOMS. THE NEW LEVEL BUS ADAPTER CAN BE IDENTIFIED BY MANUFACTURING PART NUMBER 64F0809 PRINTED ON THE CARD. IF THE SYSTEM BUS ADAPTER IS ALREADY THE NEW LEVEL, OR THE NEW BUS ADAPTER DOESN'T CHANGE THE FAILING SYMPTOM, USE NORMAL PROBLEM DETERMINATION PROCEDURES TO ISOLATE THE FAILURE.

SAS KEYWORDS:

PSY2	PSY2ADPT	8555SYSADPT	8555SYSCOMM
PSY2COMM	PSY2MISC	8555SYSMISC	

1.2.13 ADDITIONAL MEMORY AVAILABLE FOR PROGRAMS.

Record number: H127783

Device: D/T9545
 Model: M
 Tip key: 038
 Date created: 095/05/19
 Date last altered: A95/09/08

This tip lists methods to maximize system memory utilization.

If your customer is using DOS/Windows and is experiencing memory shortages, the following actions may help to increase the available memory.

1. Windows Audio Driver (only for machines with Audio Card):

----- IMPORTANT -----

Diskette fixes are customer installable. Customers should be advised to contact the IBM PC Company HelpCenter at 800-772 - 2227 if assistance is required in getting or installing this information.

Files are located on the PC company's Bulletin Board Service (BBS). The direct line for modem connection to The PC Company BBS is 1-919-517-0001 or tieline 255-0001.

Customers in Canada should call IBM's HelpPC at 800-565-3344 for Assistance or down load information. The Canadian BBS phone numbers are:
 Montreal-514-938-3022, Toronto-905-316-4255,
 Winnipeg-204-934-2735, Vancouver-604-664-6464.

The data may also be downloaded via the Internet from the IBM Personal Computer File Library by searching the following Internet URL: <http://www.pc.ibm.com/files.html>

If you are not using Video for Windows or other full motion video applications in Windows, you may be able to save a significant amount of memory in the Windows environment by installing a new version of the Windows Audio Driver that can be almost entirely loaded into extended memory. Full motion video audio is demanding and best performance can only be achieved when the Windows Audio Driver is loaded low (below 1 MB).

To install the new driver, IBMMME5.DRV, your customer will do the following:

- A. Make a backup copy of your current IBMMME.DRV, located in the \WINDOWS\SYSTEM subdirectory by copying it to a file such as IBMMME.OLD.
- b. Down load TPMEMHLP.EXE from the IBM PC Company BBS. Follow the installation instructions in the readme file.
- c. Copy IBMMME5.DRV to IBMMME.DRV in the \WINDOWS\SYSTEM subdirectory.
- d. Edit the TPAUDWIN.INI file in the \WINDOWS\SYSTEM subdirectory. Locate the "YCOMMON" section and add the following line:

```
LOADHIGH=1
```

NOTE: The above line causes the Windows Audio Driver to be loaded high, saving memory for Windows Applications. If, however, you want to load the driver low for peak performance in full motion video applications, remove this line or comment it out by placing a semicolon in the first column of the line like this:

```
; LOADHIGH=1
```

After changes are made, save the file and exit your editor.

- d. Restart Windows for the new Audio Driver to take effect.

2. Include Unused Reserved BIOS Area

Although the entire area E0000 - FFFFF (128KB) is reserved for BIOS some of this area may actually be available for use by EMM386, or other memory managers. The actual area available varies with Machine type and model, and with BIOS level. Video BIOS is included in the reserved BIOS area above, so the C0000 - DFFFF area is completely available for use by ISA adapters, SCSI

ADDITIONAL MEMORY AVAILABLE FOR PROGRAMS.

(Dock 1 and Dock 2), PCMCIA and by memory managers such as EMM386. Following are the current areas available:

Machine	BIOS Level System Program Service Diskette Version	BIOS P/N and Date	Reserved BIOS Are Available
TP750 except Ce	1.15	91G0362/10-12-94	E000-E5FF (24KB)
TP750Ce	1.15	91G0363/10-14-94	E000-E6FF (28KB)

NOTE:

The amount of memory available in future versions of BIOS may change because of BIOS requirements.

It may be necessary to reduce these available areas in future versions of BIOS to incorporate enhanced function or to correct problems. The user must assume responsibility to ensure that any areas of the reserved BIOS region required by BIOS or future BIOS updates are available.

3. REM DOS Audio Driver in CONFIG.SYS:

If audio is not being used in DOS applications more than 50KB of memory may be saved by removing the DOS Audio Driver from CONFIG.SYS, by placing a "REM" in front of the DOS Audio Driver.

4. Minimize Reserved UMB for PCMCIA Cards:

In the DOS / Windows preloads, a total of 32KB is reserved for use by PCMCIA Card Services and PCMCIA cards. However, depending on the PC cards you are actually using, this area may be reduced

The minimum requirements are:

Card Services	4KB
Modem	0KB additional
Token Ring	24KB additional
Ethernet	16KB additional
3270	8KB additional

Additional NOTES:

Card Services can use any 4KB area between:

C000 - DFFF (TP750)
C100 - CFFF (TP755 and TP360/355)
D100 - DFFF (TP755 and TP360/355)

Care must be taken to ensure that PCMCIA cards are setup to use areas within the specified "/MA= " Range, or they may fail to be enabled. For example, the PROTOCOL.INI or NET.CFG for a Token Ring PCMCIA card should not specify MMIO or SRAM outside the "/MA= " area.

Any area included in the "/MA= " is designated as available for Card Services / PCMCIA devices, and therefore, should not be used by other devices or memory managers. For example, if

/MA=C100-C7FF

then this area should be excluded from EMM386 with the

X=C100-C7FF

parameter on the EMM386 line in CONFIG.SYS.

See the User's Guide section on PCMCIA for more details.

5. Group UMBs used by Devices:

The upper memory area, between the 640KB conventional memory and 1MB limit, is best utilized by EMM386 or other memory managers if all free upper memory is contiguous. Device drivers and TSR programs can then be loaded more easily and efficiently into the upper memory blocks.

To accomplish this, it is best to group all memory used by such devices as

PCMCIA Cards (and Card Services)
ISA Adapters (in Dock 1 or Dock 2)
SCSI BIOS (Dock 1 or Dock 2)

Either at the bottom of the upper memory range (ie. around C000) or at the top of the upper memory range (ie. around D000), as much as possible. Limitations of some devices may dictate to what degree this can actually be accomplished.

6. Use Point Enablers for PCMCIA:

PSY2 RETAIN TIPS**ADDITIONAL MEMORY AVAILABLE FOR PROGRAMS.**

If hot plugging of PCMCIA cards is not needed, you may be able to use point enablers to enable your PCMCIA cards. Point enablers communicate directly with the PCMCIA controller, and eliminate the memory needed for Socket Services, Card services, PCMCIA Power Management, and any PCMCIA client drivers.

NOTE:

Care should be taken when using more than one Point Enabler, since there is potential that one may interfere with operation of another. Generally, point enablers cannot be used to enable PCMCIA cards in the PCMCIA slots in the Port Replicator 1 or the Dock II.

SAS KEYWORDS:

PSY2	PSY2PROG	PSY2MEM	D/T2620
THINKPAD	750	755	360
355	340	D/T2610	

1.2.14 ADF FILE MAY CAUSE TRAP ERRORS WHILE USING 6157 TAPE BACKUP

Record number: H094164

Device: D/T8580
Model: M
Tip key: 016
Date created: 091/09/09
Date last altered: A93/12/02

A DOWN LEVEL ADF FILE, @DFBF.ADF (152 BYTES), FOR THE 6157 TAPE DRIVE AND ADAPTER MAY CAUSE TRAP ERRORS WHILE PERFORMING TAPE BACKUP ON SYSTEMS RUNNING UNDER OS/2. CUSTOMERS SHOULD USE THE ADF FILE, @DFBF.ADF (1073 BYTES) THAT IS PROVIDED WITH THE SYTOS* APPLICATION SOFTWARE FROM SYTRON, INC. TO CONFIGURE THEIR SYSTEMS.

CUSTOMERS MAY CONTACT SYTRON, INC. TECHNICAL SUPPORT FOR ASSISTANCE AT 508-898-0193.

IBM SOFTWARE SUPPORT, FOR THE 6157 TAPE DRIVE AND ADAPTER, IS AVAILABLE BY CALLING 1-800-992-4777,

IBM CUSTOMER ENGINEERING ASSISTANCE MAY BE OBTAINED THROUGH THROUGH THE NORMAL HARDWARE SUPPORT STRUCTURE.

* REGISTERED TRADEMARK OF THE SYTRON CORPORATION.

SAS KEYWORDS:

PSY2	D/T8570	PSY2SYSERR	8570SYSERR
8580SYSTAPE	8570SYSTAPE	PSY2TAPE	8580SYSERR
D/T6157			

1.2.15 ADVANCED DIAGNOSTIC DISKETTES

Record number: H016227

```
Device:           D/T5150
Model:            M
Tip key:          132
Date created:     088/07/12
Date last altered: A88/12/06
```

PERSONAL COMPUTER HARDWARE MAINTENANCE SERVICE MANUALS (HMS) AND SUPPLEMENTS WHICH INCLUDE ADVANCED DIAGNOSTIC DISKETTES ARE LISTED IN THIS TIP. THE LATEST LEVEL ADVANCED DIAGNOSTIC DISKETTE IS DOWNWARD COMPATIBLE.

TO OBTAIN THE LATEST LEVEL ADVANCED DIAGNOSTIC DISKETTE, CUSTOMER ENGINEERS SHOULD ORDER HMS MANUALS AND SUPPLEMENTS THROUGH THE BRANCH OFFICE SLSS COORDINATOR USING THE ASSIGNED FORM NUMBER.

DESCRIPTION:	FORM NUMBER:
PC HARDWARE MAINTENANCE SERVICE MANUAL -CONTAINS ADVANCED DIAGNOSTIC DISKETTE, VERSION 2.20 FOR PC, XT, AND PORTABLE (5150, 5155, 5160) -CONTAINS ADVANCED DIAGNOSTIC DISKETTE, VERSION 2.03 FOR THE AT (5170)	S2299603
PC XT MODEL 286 HMS SUPPLEMENT -CONTAINS ADVANCED DIAGNOSTIC DISKETTE, VERSION 2.04 FOR THE XT 286 AND THE AT (5162, 5170)	SS340021
IBM PC MUSIC FEATURE (MIDI) HARDWARE MAINTENANCE LIBRARY UPDATE -CONTAINS ADVANCED DIAGNOSTIC DISKETTE, VERSION 2.24 FOR PC, XT, AND PORTABLE (5150, 5155, 5160) -CONTAINS ADVANCED DIAGNOSTIC DISKETTE, VERSION 2.07 FOR PC "AT", AND XT MODEL 286. -CONTAINS ADVANCED DIAGNOSTIC DISKETTE, VERSION 1.03 FOR 8530	SA231029
PS/2 8525 HMS SUPPLEMENT -CONTAINS ADVANCED DIAGNOSTIC DISKETTE, VERSION 1.00	S68X2202
PS/2 8525 20MB FIXED DISK HMS SUPPLEMENT -CONTAINS ADVANCED DIAGNOSTIC DISKETTE, VERSION 2.25 FOR PC, XT, AND PORTABLE (5150, 5155, 5150)	S01F0246
PS/2 8530 HMS SUPPLEMENT -CONTAINS ADVANCED DIAGNOSTIC DISKETTE, VERSION 1.00	SA231201
PS/2 8530 286 HMS SUPPLEMENT -CONTAINS MODEL 30 286 ADVANCED DIAGNOSTIC DISKETTE VERSION 1.00	S01F0235
PS/2 8514/A DISPLAY ADAPTER HMS SUPPLEMENT -CONTAINS OPTION DISKETTE, VERSION 1.00	S68X2250
IBM 2MB EXPANDED MEMORY ADAPTER HMS SUPPLEMENT -CONTAINS ADVANCED DIAGNOSTIC DISKETTE, VERSION 2.20 FOR THE 5160, VERSION 2.05 FOR THE 5170 AND VERSION 1.01 FOR THE 8530	SA231031
3270 PC/G & GX ADVANCED DIAGNOSTIC DISKETTE -CONTAINS ADVANCED DIAGNOSTIC DISKETTE, VERSION 1.10 (DISKETTE ONLY)	SA333197
3270 PC AT/G & GX ADVANCED DIAGNOSTIC DISKETTE -CONTAINS ADVANCED DIAGNOSTIC DISKETTE, VERSION 2.5 (DISKETTE ONLY)	SY330135
3270 PC AT/G & GX DIAGNOSTIC DISKETTE (CUSTOMER LEVEL) -CONTAINS DIAGNOSTIC DISKETTE 2.5 (DISKETTE ONLY)	SA333183

SAS KEYWORDS:

PCOM	PCOMDOC	5150SYSDOC	5155SYSDOC
5160SYSDOC	5170SYSDOC	8530SYSDOC	5162SYSDOC
5371SYSDOC	5373SYSDOC	8525SYSDOC	PSY2
PSY2DOC	PCOMDIAG	PSY2DIAG	5150SYSDIAG
5160SYSDIAG	5155SYSDIAG	8530SYSDIAG	5170SYSDIAG
5371SYSDIAG	5373SYSDIAG		

1.2.16 ADVANCED DIAGNOSTICS FAIL TO LOAD ON 6384

Record number: H2088

Device: D/T6384
 Model: M
 Tip key: 009
 Date created: 093/01/25
 Date last altered: A93/01/25

A SMALL NUMBER OF PS/VALUEPOINT 6384 MODELS M00, M20 AND M40 SYSTEMS WERE SHIPPED WITH AN EARLY LEVEL 486DX 33MHZ SYSTEM BOARD INSTALLED THAT HAS A DIFFERENT MODEL BYTE THAN THE SYSTEM BOARD CURRENTLY USED IN THE MXX MODELS OF VALUEPOINT. THE PS/VALUEPOINT ADVANCED DIAGNOSTIC DISKETTE, VERSION 1.00 WILL NOT FUNCTION WITH THIS SYSTEM BOARD INSTALLED. THE MESSAGE "ADVANCED DIAGNOSTICS WILL NOT RUN ON THIS SYSTEM" WILL BE POSTED WHEN ATTEMPTING TO RUN ADVANCED DIAGNOSTICS.

EARLY LEVEL SYSTEM BOARD FRU - *P/N93F0008

PS/VALUEPOINT MXX MODEL SYSTEM BOARD FRU - P/N52G8780

IF THE CUSTOMER IS EXPERIENCING SYSTEM FAILURES, AND DIAGNOSING THE FAILURE WITH ADVANCED DIAGNOSTICS IS NECESSARY, REPLACE THE SYSTEM BOARD WITH FRU P/N52G8780. UTILIZE NORMAL PROBLEM DETERMINATION PROCEDURES TO ISOLATE THE FAILING FRU.

NOTE - THE EARLY LEVEL SYSTEM BOARD INSTALLED IN THESE SYSTEMS IS FUNCTIONAL AND COMPATIBLE WITH THE VALUEPOINT MXX MODELS, AND SHOULD NOT BE REPLACED DUE TO THE PART NUMBER DIFFERENCE OR THE INABILITY TO RUN ADVANCED DIAGNOSTICS UNLESS THE CUSTOMER IS EXPERIENCING FAILURES.

* FRU P/N93F0008 IS LISTED IN THE PS/VALUEPOINT HMS/R FOR REPLACEMENT OF THE 486 DX SYSTEM BOARD. P/N52G8780 WILL REPLACE P/N93F0008 IN FUTURE RELEASES OF THIS PUBLICATION.

SAS KEYWORDS:

PSVP	VALUE POINT	93F0008	52G8780
PSY2	PSY2BRD	PSY2DIAG	PSVPDIAG
PSVPBRD			

1.2.17 ADVANCED POWER MANAGEMENT FAILURES ON PC 300 OR 700

Record number: H133581

Device: D/T6576
 Model: M
 Tip key: 003
 Date created: 096/08/08
 Date last altered: A96/08/08

Power Management and Advanced Power Management failures may be experienced on systems that have had the preloaded software modified or removed from the hardfile.

Customers that have chosen to alter or remove the system preload should be advised to create the IBM Power Management for Windows diskette and the IBM Management Plus diskettes using the Diskette Factory prior to software modifications. This will enable the User to properly reload ALL of the necessary files needed to run Power Management features.

Both the IBM Management Plus and IBM Power Management for Windows diskettes must be installed for Power Management to operate correctly. Power Management must also be enabled in the systems Setup Utility. The Setup Utility is accessed by pressing F1 during the memory count.

SAS KEYWORDS:

PSVP	PSY2	PSVPPROG	PSY2PROG
PSVPERR	PSY2ERR	PC 330	IBMPC
PC 730	PC 750	D/T6586	PC 330
PC 350	D/T6571	D/T6573	D/T6581
D/T6583	D/T6575	D/T6585	D/T6586
D/T6577	D/T6587	D/T6598	D/T6560
D/T6877	D/T6887	PC 340	PC 360

1.2.18 ALL THINKPADS. LCD CLEANING TIPS.

Record number: H136841 Number of altered copies: 1

Device: D/T9547
Model: M
Tip key: 007
Date created: 097/03/14
Date last altered: A97/03/14

Dirt or oil deposited on the Mouse buttons and trackpoint tip by fingers, may transfer to the LCD when the panel is closed. This is a normal result of system operation. FRU parts should not be replaced or systems should not be sent in for warranty repair for these reasons.

The marks can be removed by cleaning the LCD panel. Gently wipe the screen with a soft lint-free cloth lightly moistened with a 50-50 mixture of isopropyl alcohol and water.

DANGER: Isopropyl Alcohol is a flammable liquid. Do not use this cleaner near an exposed flame or when the system is on.

WARNING:

Never spray or pour any liquid directly on the LCD panel!

SAS KEYWORDS:

PSY2	PSY2DISP	THINKPAD	UNCLASSIFIED
D/T9546	D/T9545	D/T2640	D/T2635
D/T2630	D/T2625	D/T2620	D/T2619
D/T2618	D/T2610	D/T2604	D/T9552
D/T2603			

1.2.19 APPLICATIONS THAT USE DIRECTX FAIL IN WINDOWS95

Record number: H136882

Device: D/T6899
Model: M
Tip key: 001
Date created: 097/03/18
Date last altered: A97/03/18

IBM IntelliStation Z Pro 6899 systems preloaded with Microsoft Windows95 contain support for applications that use DirectX. Systems preloaded with Windows95 are at Release 2 (OSR2).

If a customer is installing a Matrox Millennium adapter in an IBM IntelliStation Z Pro 6899 system that contains a non-preloaded (Retail purchase) version of Windows95 that is not at Release 2 (OSR2), DirectX support is not included.

Obtain the DirectX drivers prior to installing the Matrox drivers from the RTC CD provided with the 6899. If the Matrox adapter was purchased separately, DirectX drivers should also be obtained prior to installing the adapters device drivers.

The DirectX drivers may be obtained at the following Internet URL: http://www.matrox.com/mgaweb/ftp_mutl.htm

Windows95 is a trademark of the Microsoft Corporation
Matrox Millennium is a trademark of Matrox Graphics, Inc.

SAS KEYWORDS:

PSVP	PSY2	IBMPC	PSY2OEM
PSVPOEM	PSVPADPT	PSY2ADPT	PSY2DISP
PSVPDISP	UNCLASSIFIED	62243	PWS
PSVPPROG	PSY2PROG		

ARTIC DIAGNOSTICS FAIL WITH PC NETWORK ADAPTER II INSTALLED.

1.2.20 ARTIC DIAGNOSTICS FAIL WITH PC NETWORK ADAPTER II INSTALLED.

Record number: H037256

Device: D/T7538
 Model: M
 Tip key: 004
 Date created: 090/02/23
 Date last altered: A90/03/02

WHEN RUNNING ARTIC DIAGNOSTICS WITH AN IBM PC NETWORK ADAPTER II INSTALLED, THE ARTIC DIAGNOSTICS MAY NOT RECOGNIZE THE PRESENCE OF THE ARTIC CARD. THIS IS CAUSED BY A ROM-DECODE CONFLICT WITH THE PC NETWORK ADAPTER II. DISABLE THE ROM ON THE PC NETWORK ADAPTER II. REFER TO THE PC NETWORK ADAPTER II DOCUMENTATION FOR JUMPER INFORMATION. AFTER COMPLETION OF THE ARTIC DIAGNOSTICS, RETURN THE JUMPERS TO THEIR ORIGINAL POSITION.

SAS KEYWORDS:

PSY2	PSY2COMM	PSY2ADPT	8550SYSCOMM
8550SYSADPT	8555SYSADPT	8555SYSCOMM	8560SYSADPT
8560SYSCOMM	8570SYSADPT	8570SYSCOMM	8580SYSCOMM
8580SYSADPT	PCOMM	5150SYSERR	5160SYSERR
5170SYSERR	5150SYSADPT	5160SYSADPT	5170SYSADPT
5150SYSCOMM	5160SYSCOMM	5170SYSCOMM	

ARTIC DIAGNOSTICS HANG, LOOP, WILL NOT START OR COMPLETE

1.2.21 ARTIC DIAGNOSTICS HANG, LOOP, WILL NOT START OR COMPLETE

Record number: H104652

Device: D/T8550
Model: M
Tip key: 138
Date created: 092/10/05
Date last altered: A92/10/14

If ARTIC diagnostics hang, loop, fail to start, fail to complete or exhibit other abnormal symptoms examine the date of the MPORT.DGS file on the system reference diskette. The following information is valid for the ARTIC Multiport/2, X.25 and High Speed Communication Co-Processor:

MPORT.DGS 31167 1-03-90 (Ships with Multiport/2 and X.25)
MPORT.DGS 31383 1-02-91 (Ships with High Speed Co-Processor)

(Either of these can be used on any of the above referenced adapters.)

If the MPORT.DGS file does not match one of the above sizes and dates it should be replaced. Ensure that the file on the ARTIC Option diskette is one of the above dates and copy it to the system reference diskette. If necessary, an ARTIC option diskette can be ordered from the Microcode update center by calling tie line 441-8124 or 441-8033 (outside 919-543-8124 or 8033.) Specify that you are ordering ARTIC microcode and request P/N53F2644. Be prepared to supply shipping information. Details of this ordering procedure can be found in TIP H02013.

NOTE:

If the date on the system reference diskette MPORT.DGS file is later than the dates above DO NOT use the "Copy Option" function from the system reference diskette (it will not copy over a file with a later date). Use the copy command of the operating system installed.

SAS KEYWORDS:

PSY2 PSY2DIAG

ARTIC INTERFACE BOARD MICROCODE (RCM) REQUIREMENTS

1.2.22 ARTIC INTERFACE BOARD MICROCODE (RCM) REQUIREMENTS

Record number: H08241

Device: D/T7538
 Model: M
 Tip key: 012
 Date created: 091/05/10
 Date last altered: A93/11/04

REALTIME CONTROL MICROCODE (RCM) MUST BE AT THE PROPER LEVEL TO SUPPORT THE SELECTABLE, 6-PORT V.35 AND 6-PORT X.21 (SEE NOTE) INTERFACE BOARDS ON EITHER THE ARTIC PORTMASTER ADAPTER/A OR THE MULTIPORT MODEL 2. THE RCM VERSION CAN BE IDENTIFIED BY CHECKING THE DATE OF THE ICARCM.COM FILE WHICH IS SHIPPED WITH THE ADAPTER. IF THE FILE IS DATED PRIOR TO 07-25-91 AN UPDATED DISKETTE CAN BE ORDERED BY CONTACTING THE MICROCODE UPDATE CENTER AT TIE LINE 441-8124 OR 441-8033 OR BY SENDING A NOTE TO COFORDER AT RALVM8. SPECIFY THAT YOU ARE ORDERING ARTIC MICROCODE AND BE PREPARED TO PROVIDE THE SHIPPING INFORMATION. TELEPHONE ORDERS CAN BE EXPEDITED ON REQUEST. ORDERS PLACED ELECTRONICALLY CANNOT. REQUEST ONE OF THE FOLLOWING PART NUMBERS AS REQUIRED.

64F2248 - 3.5 INCH, PORTMASTER ADAPTER/A
 64F2249 - 3.5 INCH, MULTIPORT MODEL 2
 64F2250 - 5.25 INCH, MULTIPORT MODEL 2

SAS KEYWORDS:

PSY2	PSY2COMM	PSY2ADPT	8550SYSCOMM
8550SYSADPT	S555SYSADPT	8555SYSCOMM	8560SYSADPT
8560SYSCOMM	8570SYSADPT	8570SYSCOMM	8580SYSCOMM
8580SYSADPT	8565SYSADPT	8565SYSCOMM	

1.2.23 ARTIC PORTMASTER AND MULTIPORT MODEL/2 INTERFACE CONNECTIONS

Record number: H037007

Device: D/T7538
 Model: M
 Tip key: 003
 Date created: 090/01/19
 Date last altered: A90/01/25

IT IS EXTREMELY IMPORTANT TO ENSURE THAT THE 100-PIN CONNECTOR ON THE 8 - PORT INTERFACE CABLE (FRU P/N53F2621) OR THE 100-PIN PLUGS (FRU P/N57F0085 OR P/N57F0086) ARE CONNECTED PROPERLY TO THE INTERFACE BOARD. PORT ERRORS CAN OCCUR IF THESE ARE NOT PROPERLY INSTALLED. THE WRAP PLUGS AND CABLE ARE USED ON BOTH THE ARTIC PORTMASTER AND MULTIPORT MODEL/2 ADAPTERS. IN ORDER TO ENSURE THAT THEY SEAT SECURELY, TIGHTEN BOTH THUMBSCREWS AT THE SAME TIME WHILE APPLYING SLIGHT PRESSURE TO THE MATING CONNECTOR.

SAS KEYWORDS:

PSY2COMM	PSY2ERR	PSY2DIAG	PSY2
8550SYSCOMM	8550SYSERR	8550SYSDIAG	8555SYSCOMM
8555SYSERR	8555SYSDIAG	8560SYSCOMM	8560SYSERR
8560SYSDIAG	8570SYSCOMM	8570SYSERR	8570SYSDIAG
8580SYSCOMM	8580SYSERR	8580SYSDIAG	8573SYSCOMM
8573SYSERR	8573SYSDIAG		

1.2.24 ARTIC PORTMASTER/A AND MULTIPORT MODEL 2 COMMUNICATION DIAGS

Record number: H037258

Device: D/T7538
Model: M
Tip key: 005
Date created: 090/02/23
Date last altered: A97/09/30

WHEN DIAGNOSING SUSPECTED COMMUNICATION PROBLEMS ON THE ARTIC PORTMASTER ADAPTER/A, USE ADVANCED DIAGNOSTICS VERSION 1.42 OR LATER. FOR THE ARTIC MULTIPORT ADAPTER MODEL 2 USE VERSION 1.52 OR LATER. PRIOR LEVEL ADVANCED DIAGNOSTICS MAY NOT ISOLATE SOME COMMUNICATIONS FAILURES.

Diagnostics are available on the World Wide Web at URL
<http://wwprodsoln.bocaron.ibm.com/artic>.

SAS KEYWORDS:

SYSADPT	5150SYSCOMM	8550SYSCOMM	PSY2ADPT
5160SYSCOMM	5170SYSCOMM	8550SYSCOMM	8560SYSCOMM
8580SYSCOMM	5150SYSADPT	5160SYSADPT	5170SYSADPT
8550SYSADPT	8560SYSADPT	8580SYSADPT	5160SYSDIAG
5170SYSDIAG	8550SYSDIAG	8560SYSDIAG	8570SYSDIAG
8580SYSDIAG	8570SYSADPT		

1.2.25 ARTIC X.25 AND HIGH SPEED COMMUNICATIONS CO-PROCESSOR DIAGS

Record number: H015545

Device: D/T8550
Model: M
Tip key: 127
Date created: 092/07/15
Date last altered: A92/07/15

DIAGNOSTICS CAN BE RUN AGAINST THE ARITC HIGH-SPEED COMMUNICATION CO-PROCESSOR USING THE MULTIPORT/2 OR X.25 DIAGNOSTICS FROM THE ADVANCED DIAGNOSTIC SELECTION MENU. IN ADDITION, THE WRAP PLUGS ARE THE SAME FOR BOTH THE X.25 CO-PROCESSOR AND THE HIGH-SPEED COMMUNICATIONS CARDS. THE HIGH-SPEED COMMUNICATIONS CO-PROCESSOR DIAGNOSTICS ARE FUNCTIONALLY THE SAME AS THE MULTIPORT/2 AND X.25 DIAGNOSTICS. THE HIGH-SPEED COMMUNICATIONS CO-PROCESSOR HML CAN BE ORDERED UNDER PART NUMBER 04G5831 OR FEATURE CODE 0618.

SAS KEYWORDS:
PSY2 PSY2DIAG

1.2.26 AUDIO DSP CABLE NOT LISTED IN PC 300/700 HMM

Record number: H137077

Device: D/T6877
Model: M
Tip key: 027
Date created: 097/03/27
Date last altered: A97/03/27

Some models of the IBM PC 700 Series contain an IBM Audio DSP Data Collaboration Card (DCC). The Audio DSP card is connected to the system board and the Audio Front Panel assembly. The current PC 300/700 Hardware Maintenance Manual (HMM) does not contain the part number for the system board to DSP card cable assembly.

Audio DSP Card --> System Board DSP Audio Conn.- FRU P/N76H2654

This part number will be included in the next revision of the IBM PC 300/700 HMM.

SAS KEYWORDS:

PSY2	PSVP	IBMPC	PSVPPART
PSY2PART	PSVPBRD	PSY2BRD	PSVPADPT
PSY2ADPT	UNCLASSIFIED	PSVPDOC	PSY2DOC
76H2654			

AUDIO FEATURE FAILS AFTER SUSPEND IN WINDOWS95

1.2.27 AUDIO FEATURE FAILS AFTER SUSPEND IN WINDOWS95

Record number: H133194

Device: D/T6877
Model: M
Tip key: 011
Date created: 096/03/25
Date last altered: A96/03/25

Using the Suspend feature of Windows95 while playing a WAVE file, MIDI file, or CD may prevent the Audio feature (Mwave) from restarting after the system resumes.

To reactivate the Audio feature, the system must be rebooted.

To prevent this problem from occurring, close down any audio files that are playing before using Suspend.

Windows95 is a trademark of the Microsoft Corporation.

SAS KEYWORDS:

PSY2	D/T68XX	6887	6877
IBMPC	PSVP	PSY2PROG	PSVPPROG
D/T6887	PC750	PC700	PC 730
PC 750	PC730	41475	PSY2OPER
PSVPOPER			

1.2.28 AUDIO VISUAL COMPUTER (AVC) FRUS AND PUBLICATIONS

Record number: H1273

Device: D/T8550
 Model: MCP1
 Tip key: 173
 Date created: 093/05/18
 Date last altered: A93/05/18

THE AUDIO CAPTURE & PLAYBACK ADAPTER, AUDIO CAPTURE & PLAYBACK ADAPTER/A AND VIDEO CAPTURE ADAPTER/A PROVIDE THE CAPABILITY TO CAPTURE, DIGITIZE, STORE AND PLAYBACK HIGH QUALITY AUDIO AND IMAGES ON STANDARD PS/2 HARDWARE.

THESE HARDWARE PRODUCTS ARE MANUFACTURED BY TECMAR, INC. FOR EXCLUSIVE RESALE AND SERVICE BY IBM. THEY MAY BE USED WITH THE IBM AUDIO VISUAL CONNECTION PROGRAM PRODUCT OR ALTERNATE SOFTWARE PRODUCTS.

FOLLOWING IS A LIST OF FRUS AND PUBLICATIONS. PLEASE NOTE THAT THE CUSTOMER RECEIVES ALL NECESSARY PARTS, CABLES AND PUBLICATIONS WITH THE ADAPTER(S) AT TIME OF PURCHASE.

AUDIO CAPTURE & PLAYBACK ADAPTER (NON-MICROCHANNEL)		P/N34F2786
AUDIO CAPTURE & PLAYBACK ADAPTER/A (MICROCHANNEL)		P/N34F2787
AUDIO DIAGNOSTIC DISKETTE		P/N34F2793
VIDEO CAPTURE ADAPTER/A (MICROCHANNEL)		P/N34F2788
VIDEO INPUT/OUTPUT CABLE		P/N34F2789
VIDEO Y/C CABLE (S-CONNECTOR)		P/N34F2790
VIDEO WRAP CABLE		P/N34F2791
VIDEO TERMINATORS (THREE 75 OHM PLUGS)		P/N34F2792
VIDEO DIAGNOSTIC DISKETTE		P/N34F2794
AUDIO INSTALLATION MANUAL AND TECH REF	G571-0181	P/N34F2795
VIDEO INSTALLATION MANUAL AND TECH REF	G571-0180	P/N34F2796

THE AUDIO VISUAL CONNECTION SOFTWARE AND AVC HARDWARE DEFECT SUPPORT IS THROUGH THE IBM ADVANCED EDUCATION SYSTEMS IN ATLANTA
 1 - 800-627 - 0920.

SAS KEYWORDS:

PSY2DOC	PSY2	8525SYSDOC	8530SYSDOC
8550SYSDOC	8555SYSDOC	8560SYSDOC	8570SYSDOC
8580SYSDOC	PSY2MISC	8525SYSADPT	8530SYSADPT
8550SYSADPT	8555SYSADPT	8560SYSADPT	8570SYSADPT
8580SYSADPT	PSY2DOC	PSY2ADPT	D/T8550
D/T8555	D/T8556	D/T8557	D/T8560
D/T8565	D/T8570	D/T8573	D/T8580
D/T8590	D/T8595	D/T8525	D/T8530
D/T8535	D/T8540	D/T8543	

BATTERY COVER INSTALLED ON 9576 RISER CARD

1.2.29 BATTERY COVER INSTALLED ON 9576 RISER CARD

Record number: H097843

Device: D/T9576
Model: M
Tip key: 003
Date created: 092/10/26
Date last altered: A95/05/16

A LIMITED NUMBER OF 9576 SYSTEM UNITS HAVE BEEN MANUFACTURED WITH RISER CARDS THAT HAVE A BLACK PLASTIC BATTERY COVER. THE BATTERY COVER MAY INTERFERE WHEN AN ADAPTER IS INSTALLED IN SLOT 2 OF THE RISER CARD.

THE PLASTIC BATTERY COVER MAY BE REMOVED IF IT INTERFERES WITH ADAPTER INSTALLATION. THE BATTERY COVER HAS BEEN REMOVED FROM RISER CARDS USED FOR NEW PRODUCTION AND FRU STOCK.

THE RISER CARD FRU IS P/N87F4833.

THE P/N ON THE PLASTIC BATTERY COVER (84F4833) IS A MANUFACTURING NUMBER - NOT A VALID FRU.

SAS KEYWORDS:

PSY2	BUSS	BUS	BATT
EXPANSION	PSY2ADPT	P/N84F4833	87F4833

BENCHMARK COMPARISON OF COMPUTER SYSTEMS

1.2.30 BENCHMARK COMPARISON OF COMPUTER SYSTEMS

Record number: H20207

Device: D/T8550
 Model: M
 Tip key: 150
 Date created: 093/02/01
 Date last altered: A94/03/21

The results of benchmark programs are not valid to initiate hardware troubleshooting. Only normal system unit problem determination aids, such as the diagnostics supplied with the system, are valid for this purpose.

FACTS:

- A. There are many different benchmark programs available to the marketplace from many different sources. These programs vary in their design, just as computer systems vary in their design and in their configuration and options.
- B. While benchmark programs do perform some meaningful comparisons, there is no universally accepted benchmark program which accounts for all the variations and dependencies associated with subsystem performance.
- C. IBM does not recognize or support any specific benchmark program as a valid test of a systems total balanced performance.

EXPLANATION:

The most meaningful performance test of a computer system is the customer's application job stream. There are variables which benchmark programs may not factor into their programming such as:

- A. Fixed disk formatting techniques and interleave.
- b. Data and address bus width.
- c. Cache memory availability and size.
- d. Internal design variations of different processor modules.
- f. Variations in video attachments and video RAM.
- g. Variations in optional attachments.
- h. Bus mastering

Summary:

For the best performance on any computer system, the operating system, application software and hardware configuration should be optimized to take advantage of the available design features.

SAS KEYWORDS:

PSY2	PS/2	PS2	PSY2PROG
BENCHMARK	BENCH	MARK	NORTON
D/T8525	D/T8530	D/T8535	D/T8540
D/T8543	D/T8551	D/T8554	D/T8550
D/T8555	D/T8556	D/T8557	D/T8573
D/T8560	D/T8565	D/T8570	D/T9576
D/T8580	D/T8590	D/T8595	D/T9585
D/T9577	D/T9556	D/T9557	D/T9595
D/T9590	D/T9595A	D/T6387	D/T9533
D/T6384	D/T6381	D/T6382	

1.2.31 BIOS IMAGES FOR IBM PS/2 PLANAR UPGRADES

Record number: H121912

Device: D/T8580
 Model: M
 Tip key: 028
 Date created: 093/11/29
 Date last altered: A96/01/15

The flash BIOS images for the IBM PS/2 system board upgrades used on the 8550, 8555, 8570, and 8580 systems may be down loaded from the IBM PC Company Bulletin Board System by calling 919 - 517-0001.

If using the Bulletin Board, the Flash BIOS file names to search for are I1_40-50, 70_FLASH, & I1_38-80, for the Model 50/50Z/55, 70, and 80 respectively. These are self extracting files to be used in conjunction with the Upgrade Reference Diskette's Utility Menu Item: Update System BIOS.

```

=
= THESE FLASH UPDATES ARE CUSTOMER INSTALLABLE. CUSTOMERS =
= SHOULD BE ADVISED TO CONTACT THE PC COMPANY HELPCENTER AT =
= 800-772 - 2227 IF ASSISTANCE IS REQUIRED IN GETTING THE =
= APPROPRIATE UPDATE. =

```

SAS KEYWORDS:

PSY2	PSY2PROG	DIAGNOSTIC	D/T8550
D/T8570	SYSTEM	D/T8550	D/T8555
REPLY	LEVELS	LEVEL	IMAGE
FLASH			

1.2.32 BIOS UPDATE DURING SYSBRD REPLACEMENT

Record number: H132284

Device: D/T9545
 Model: M
 Tip key: 056
 Date created: 096/01/19
 Date last altered: A96/01/19

BIOS levels on system board FRUs should be updated to the latest level after system board replacement to ensure the system BIOS features and fixes are at the current level. System board FRU stock BIOS is flashed during manufacture or repair, but because FRU installation may occur some time after this flash the BIOS level on FRU stock may be below the latest available BIOS.

BIOS levels can be checked by invoking Diagnostics (Hold down F1 while doing a cold boot.) Then select system board configuration to display the current BIOS level.

----- IMPORTANT -----

Diskette fixes are customer installable. Customers should be advised to contact the IBM PC Company HelpCenter at 800-772 - 2227 if assistance is required in getting or installing this information.

Files are located on the PC company's Bulletin Board Service (BBS). The direct line for modem connection to The PC Company BBS is 1-919-517-0001 or tieline 255-0001.

Customers in Canada should call IBM's HelpPC at 800-565-3344 for Assistance or down load information. The Canadian BBS phone numbers are:
 Montreal-514-938-3022, Toronto-905-316-4255,
 Winnipeg-204-934-2735, Vancouver-604-664-6464.

The data may also be downloaded via the Internet from the IBM Personal Computer File Library by searching the following Internet URL: <http://www.pc.ibm.com/files.html>

SAS KEYWORDS:

PSY2	PSY2MCD	PSY2BRD	PSY2ERR
THINKPAD	D/T2620	D/T2619	D/T9546
D/T2630	D/T2635		

BLACK KEYBOARD, NUMERIC PAD AND CABLE FRUS

1.2.33 BLACK KEYBOARD, NUMERIC PAD AND CABLE FRUS

Record number: H124511

Device: D/T9545
 Model: M
 Tip key: 019
 Date created: 094/06/29
 Date last altered: A95/06/06

The following FRUs have been released to support the space saver black keyboard and numeric key pad options. The options are supported on the devices listed in the SAS section of this tip.

Option Part Number	Option / FRU Name	FRU part number
84G2524	BLACK KEYBOARD US	P/N84G2529
84G2533	BLACK NUMPAD US	P/N84G2530
	KEYBRD TO SYSTEM CABLE	P/N84G2531
	KEYBRD TO NUMPAD CABLE	P/N84G2532

SAS KEYWORDS:

PSY2	PSY2PART	84G2529	84G2530
84G2531	84G2532	PSY2KBD	PSY2OPT
D/T2604	D/T2610	D/T9545	

1.2.34 BLANK SCREEN IN 3270 SESSION ON 64XX SYSTEMS

Record number: H021006

Device: D/T6484
Model: M
Tip key: 006
Date created: 094/08/03
Date last altered: A94/08/03

PS/ValuePoint 6472, 6482, 6484, 6492 and 6494 Performance Series system units using the IBM Personal Communication/3270 application require version 3.1 or higher.

Earlier levels of this application will appear to load successfully during IPL, however, a blank screen will be displayed when the session is accessed. The system will not be in a locked or hung state.

SAS KEYWORDS:

VALUE POINT	PS/VP	PSVP	D/T6472
D/T6482	D/T6492	D/T6494	PSVPPROG
PSY2PROG	PCOMM	PCOM	PSY2
PC3270	PC/3270	VALUEPOINT	

BOCA RESEARCH ADAPTER MAY CAUSE VARIOUS ERRORS

1.2.35 BOCA RESEARCH ADAPTER MAY CAUSE VARIOUS ERRORS

Record number: H201002

Device: D/T9585
Model: M
Tip key: 003
Date created: 093/04/30
Date last altered: A93/05/07

SYSTEMS CONFIGURED WITH A BOCA RESEARCH PARALLEL ADAPTER, BOCA.MCA*, (CARD TYPE BMCP01) MAY EXHIBIT UNIQUE ERRORS DEPENDING ON THE DEVICE TYPE IT IS INSTALLED IN.

IF THE BOCA RESEARCH ADAPTER IS IDENTIFIED WITH A BOCA RESEARCH PART NUMBER OF PN4253, AND THE SYSTEM IS FAILING, THE CUSTOMER SHOULD BE ADVISED TO CONTACT BOCA RESEARCH AT 407 - 241 - 8088 FOR ASSISTANCE.

IF THE ADAPTER INSTALLED IS NOT IDENTIFIED WITH PART NUMBER PN4253 AND PROBLEMS STILL OCCUR, NORMAL PROBLEM DETERMINATION PROCEDURES SHOULD BE FOLLOWED.

* BOCA.MCA IS A TRADEMARK OF BOCA RESEARCH CORPORATION.

SAS KEYWORDS:

PSY2	D/T9595	PSY2ERR	PSY2ADPT
POEM	PSY2OEM	PSY2PRT	D/T8595
D/T8590			

BOWED BACKPLANE MAY CAUSE HARDFILE PROBLEMS

1.2.36 BOWED BACKPLANE MAY CAUSE HARDFILE PROBLEMS

Record number: H122801

Device: D/T8641
 Model: M
 Tip key: 015
 Date created: 096/04/18
 Date last altered: A98/01/20

Testing and failure analysis has shown that some PC Server 500, 520, and 720 fixed disk problems may be caused by a bowed backplane.

In cases where the drive is not fully seated in the backplane connector, it could appear Offline or DDD (drive defunct), or exhibit other drive-related failure symptoms.

When diagnosing hardfile problems on these Servers, either solid or intermittent, examine the backplane card lengthwise for a bowed condition. If the card is bowed enough to potentially cause a poor drive connection, replace the backplane FRU as follows:

PC Server 500: Replace FRU p/n71G6291 with 71G6291 or 06H8388.

PC Server 520/720: Replace FRU p/n06H8388 with 06H8388 only.

Note: The fixed disk assembly should plug into the backplane connector without excessive force. If the connectors are not properly aligned and the drive is forced, the backplane may be bent. This could result in other drives on the same backplane appearing Offline or DDD.

SAS KEYWORDS:

PSY2	PSY2FDSK	D/T8642	DEFUNCT
PC SERVER	SERVER	500	520
720	WARPED	BENT	FRAME
DASD	P/N71G6291	P/N06H8388	HEALTH

CABLE PART NUMBER FOR P200 DISPLAY

1.2.37 CABLE PART NUMBER FOR P200 DISPLAY

Record number: H131553

Device: D/T9076
Model: M
Tip key:
Date created: 095/11/02
Date last altered: A95/11/03

When hooking up a 6555 Mod P200 display to a 701X control workstation, you need to use cable p/n96g2689. This cable has a D shell at each end.

SAS KEYWORDS:

PSY2	PSY2DISP	PLUTO	RISC 6000
D/T6555	D/T6554	DISPLAY	9076
P70	P200	RS6000	RS/6000
GTX	VIDEO	96G2689	

CABLETRON ADAPTER NOT COMPATIBLE W/VALUEPOINT

1.2.38 CABLETRON ADAPTER NOT COMPATIBLE W/VALUEPOINT

Record number: H125386

Device: D/T6384
 Model: M
 Tip key: 071
 Date created: 094/10/24
 Date last altered: A94/10/24

PS/VALUEPOINT 6384/D, 6382/S AND 6387/T, ALL MODELS, ARE NOT COMPATIBLE WITH THE CABLETRON T2015 BUSMASTER TOKEN RING ADAPTER CARD.

THERE ARE SIGNAL AND TIMING INCOMPATIBILITIES BETWEEN THE CABLETRON ADAPTER AND THE PS/VALUEPOINT SYSTEM.

CUSTOMERS EXPERIENCING PROBLEMS WITH THIS CABLETRON ADAPTER INSTALLED IN A PS/VALUEPOINT SYSTEM SHOULD BE DIRECTED BACK TO THEIR POINT OF PURCHASE.

SAS KEYWORDS:

PSVP	PSY2	PSVPOEM	PSY2OEM
PSVPCOMM	PSY2COMM	PSVPADPT	PSY2ADPT
6387	6384	6382	PS/VP
VALUE POINT	PSVPPART	PSY2PART	D/T6382
D/T6387			

CACHE EXTRACTION TOOL AVAILABLE FOR PC 300/700

1.2.39 CACHE EXTRACTION TOOL AVAILABLE FOR PC 300/700

Record number: H136869

Device: D/T6576
 Model: M
 Tip key: 006
 Date created: 097/03/17
 Date last altered: A97/03/17

A level 2 cache/video memory module extraction tool has been made available as a Special Tool for the IBM PC 300 and 700 Series systems.

This tool will aid in removing video memory and Level 2 cache modules from sockets on the system board.

The extraction tool part numbers is:

FRU P/N73G5523 - Extraction Tool

The tool is stocked in Mechanicsburg and available through normal parts ordering procedures.

The Hardware Maintenance Manual for the IBM PC 300/700 Series systems will be updated to include the part number in the "Special Tools" section.

SAS KEYWORDS:

PSVP	PSY2	IBMPC	PSY2MEM
PSVPMEM	PSY2PART	PSVPPART	D/T6571
D/T6573	D/T6581	D/T6583	D/T6575
D/T6585	D/T6560	D/T6260	D/T6577
D/T6587	D/T6586	D/T6589	D/T6598
D/T6875	D/T6885	D/T6876	D/T6886
D/T6877	D/T6887	PC 330	PC 730
UNCLASSIFIED	PC 350	PC 750	PC 340
PC300	PC700		

CAPACITY STATEMENTS FOR SCSI DRIVES

1.2.40 CAPACITY STATEMENTS FOR SCSI DRIVES

Record number: H121331

Device: D/T8550
 Model: M
 Tip key: 189
 Date created: 093/09/24
 Date last altered: A93/09/24

The capacity of IBM SCSI fixed disk drives may appear different, depending on the source of information used.

For example, the stated capacity of a drive in marketing and service documentation (104MB) is different than the capacity displayed using View Configuration from the reference diskette or system partition, which is 108MB (total capacity). In addition, the manufacturer's label on the drive indicates the drive is 100MB. In this case, 104MB is used in marketing and service documentation to more accurately describe the "customer usable" space after system partition and other variables are considered. This is in response to customer feedback, and IBM plans to continue this convention in the future.

The following may help to indentify the following SCSI drives:

Drive Size HMS SCSI	FRU#	View Config	Drive Label	Feature Code
104Mb	95F4748	108	100	1241
208Mb	N/A *	213	200	N/A *
212Mb	95F4749	216	200	1242

* The 208Mb SCSI drive was only used in manufacturing. The FRU replacement for this drive is the 212Mb SCSI drive FRU P/N95F4749.

SAS KEYWORDS:

PSY2	D/T8550	D/T8555	D/T8556
D/T8557	D/T8573	D/T8560	D/T8565
D/T8570	D/T9576	D/T8580	D/T8590
D/T8595	D/T9585	D/T9577	D/T9556
D/T9557	D/T9595	PSY2FDSK	FILE
HARDFILE	SPACE	SIZE	

CARDBOARD INSERT CAN DAMAGE DISKETTE DRIVE ON 8525 AND 8530

1.2.41 CARDBOARD INSERT CAN DAMAGE DISKETTE DRIVE ON 8525 AND 8530

Record number: H001562

Device: D/T8530
 Model: M
 Tip key: 017
 Date created: 088/10/21
 Date last altered: A92/01/08

THE CARDBOARD INSERTS SHIPPED WITH 720KB DISKETTE DRIVES IN THE MODEL 8525 AND 8530 ARE NOT INTERCHANGEABLE BETWEEN DRIVES MANUFACTURED BY TOSHIBA OR ALPS. HEAD CARRIAGE DAMAGE CAN RESULT IF THE INCORRECT CARDBOARD INSERT IS PUT IN THE DISKETTE DRIVE.

IF THE INSERT IS RETAINED FOR FUTURE USE, IT SHOULD BE LABELED WITH A MACHINE AND DRIVE I.D. (IE. D/T8525 SER#999997-DRIVE A) DISCARD THE OLD INSERT IF THE DRIVE IS REPLACED.

THE DISKETTE DRIVE CAN BE IDENTIFIED BY THE MANUFACTURER'S NAME CAST INTO THE METAL FRAME OF THE DRIVE.

THE CARDBOARD INSERTS CAN BE IDENTIFIED BY THE FOLLOWING PART NUMBERS PRINTED ON THE INSERT:

TOSHIBA: BPO-DR500099, BPO-DR50014501, OR BPO-DR52902501
 ALPS: BN9-YA228

SAS KEYWORDS:

PSY2	PSY2DSKT	8525SYSDSKT	8530SYSDSKT
PSY2MISC	8525SYSMISC	8530SYSMISC	D/T8525
D/T8630APP			

1.2.42 CD-ROM & SOUNDBLASTER DIAGS/PARTS IN VALUEPOINT

Record number: H095327

Device: D/T6384
 Model: M
 Tip key: 034
 Date created: 093/07/21
 Date last altered: A95/11/16

VALUEPOINT 6384/D FSx AND MSx MODELS INCLUDE AN IBM CD-ROM AND SOUNDBLASTER ADAPTER. DIAGNOSTICS FOR THESE FEATURES ARE PRE-LOADED ON THE HARD DISK DRIVE IN A DIRECTORY CALLED "SB16".

"TESTCD.EXE" TESTS THE CD-ROM AND CABLES.
 "TESTSB16.EXE" TESTS THE SOUNDBLASTER ADAPTER.

RUN THE TESTS FROM THE "SB16" DIRECTORY OF DRIVE C.
 ENTER "TESTCD" TO TEST THE CD-ROM. ENTER
 "TESTSB16" TO TEST THE SOUNDBLASTER ADAPTER.

CUSTOMERS SHOULD BACK-UP THE CONTENTS OF THE SBI6
 DIRECTORY, SHOULD HARDFILE REPLACEMENT EVER BE
 NECESSARY.

SERVICE PARTS:

PART NAME	FRU
CD-ROM	P/N61G4109
SOUNDBLASTER CD	P/N71G2924
CABLE, AUDIO AND DATA	P/N71G2925

SAS KEYWORDS:

VALUE POINT	PSY2	PSVP	PSVPDIAG
CDROM	PSVPMISC	PSVPADPT	6384
PSVPCDROM	PSY2CDROM		

1.2.43 CD-ROM I, II & ENHANCED STUCK DISK REMOVAL PROCEDURE

Record number: H101778

Device: D/T3510
 Model: M
 Tip key: 006
 Date created: 092/10/30
 Date last altered: A93/07/13

A defective CD ROM drive may fail to eject CDs reliably. The following procedures may be attempted to remove a stuck CD ROM from its drive. If the cause of the failure cannot be identified, the CD ROM drive should be replaced after removing the customer's CD. If the cause of the failure is identified and the drive is reassembled without incident, the drive may still be functional.

DISK REMOVAL PROCEDURE FOR CD-ROM I: (P/N81F7930)

1. Remove drive from host system (or external enclosure).
2. Place the drive flat on a table with the bezel facing toward you (Safety labels pointing down).
3. Remove the screws from the sides of the CD-ROM drive bezel using a small screwdriver.
4. Insert the screwdriver through the hole located in the center of drive just behind the bezel, and push downward on bezel attachment tab. This will cause the bezel to pop off.

Note: The hole containing the bezel tab may be covered by a clear mylar label. This label should be removed or pierced to reach the tab.

5. Turn the drive upside down (Safety labels pointing up) with the bezel towards you.
6. Remove the rail on the left side of the drive.
7. Locate the slide mechanism on the side of the drive under the rail.

Note: The bezel slide may be covered by a clear mylar label. This label should be removed or pierced to reach the tab.

8. Locate the 2 recessed Phillips screws located at the right side of the drive near the Laser Warning labels.

Note: The screws may be covered by a clear mylar label. This label should be removed or pierced to reach the screws.

9. Turn the each of the screws 2 revolutions counter-clockwise. This will disengage the loader mechanism.
10. Insert a screwdriver to the rear of the slide and push the slide forward. If the slide will not push forward, loosen the screws another 1/2 turn each. Push the slide forward. Repeat the process until the slide mechanism slides forward and the CD-ROM disk caddy is pushed out.
11. After removal of the CD-ROM disk caddy, it may be possible to tighten the 2 screws back to their original position (the loader mechanism will become tight again) and continue to use the drive, but care must be taken that the loader mechanism is completely secure before reinstallation. If there is ANY doubt that the loader is not secure, replace the drive (FRU P/N81F7930) using normal service procedures.

DISK REMOVAL PROCEDURE FOR CD-ROM II, P/N92F0084, AND ENHANCED CD-ROM, P/N61G1901:

1. Remove drive from host system (or external enclosure).
2. Place the drive flat on a table with the bezel facing toward you.
3. Remove the copper colored tape covering the bezel and drive assembly.
4. Remove the bezel assembly.
5. Above the volume control dial observe a white paper "DOT".

CD-ROM I, II ENHANCED STUCK DISK REMOVAL PROCEDURE

Remove the "DOT" and behind it is a hole with a manual eject lever.

6. By inserting a small screw driver or heavy duty paper clip through the hole and pressing the lever, the CD may be ejected. The CD-ROM white cover assembly may also be removed without incident to observe the lever and CD.
8. After removal of the CD the drive may be put back together by reversing the above process.
9. If there is ANY doubt that the drive is not functioning properly after re-assembly replace the drive using normal service procedures.

SAS KEYWORDS:

PSY2	D/T8550	D/T8555	D/T8556
D/T8557	D/T8560	D/T8565	D/T8570
D/T8573	D/T8580	D/T8590	D/T8595
D/T9576	D/T9577	D/T9556	D/T9557
D/T9585	D/T9595	CDROM	

1.2.44 CD-ROM KIT D FRU PART NUMBERS

Record number: H122638

Device: D/T9595
 Model: M
 Tip key: 005
 Date created: 094/02/07
 Date last altered: A94/02/08

The following FRU parts have been released to provide service support for the CD-ROM "Kit D," option number 70G9207, Feature code 7583, which is required to support the Enhanced CD-ROM, option number 32G2958, in PS/2 9595A systems:

CD-ROM Bezel	FRU P/N64F0138
Hot plug rack (Tray)	FRU P/N61G3527 *
Cable adapter (converter)	FRU P/N71G2552 *

Note:

These FRU part numbers are for service support only and should not be used as a substitute for the marketing option. The above list does not include all items in the marketing option.

* These FRU part numbers are not currently published in the PS/2 Hardware Maintenance Manual, S52G-9971-01, dated Sept. 1993. Future updates of the manual will include these parts.

SAS KEYWORDS:

PSY2	PSY2PART	CD	ROM
D/T9595A	CDROM	9595	

1.2.45 CD-ROM SOFTWARE MAY NOT RUN CORRECTLY

Record number: H015167

Device: D/T8550
 Model: M
 Tip key: 054
 Date created: 090/05/09
 Date last altered: A95/11/16

CERTAIN CD-ROM SOFTWARE PACKAGES WILL NOT RUN CORRECTLY ON PS/2 SYSTEMS UNDER DOS (DISK OPERATING SYSTEM) EQUIPPED WITH THE SCSI INTERFACE 3510, EXTERNAL CD-ROM OR INTERNAL CD-ROM OPTION.

DURING TESTING OF THE CD-ROM DRIVE, SOME SOFTWARE WAS DISCOVERED WHICH WOULD NOT RUN CORRECTLY ON PS/2 SYSTEMS. ANALYSIS REVEALED ERRORS WITHIN THE APPLICATION SOFTWARE.

IF ERRORS ARE ENCOUNTERED USING THE CD-ROM, AND THE DIAGNOSTICS RUN ERROR-FREE, REFER THE CUSTOMER TO THE POINT-OF-SALE OF THE APPLICATION SOFTWARE FOR ASSISTANCE.

THIS SITUATION WILL MOST LIKELY BE ENCOUNTERED WHEN NEW SOFTWARE IS ADDED TO SYSTEMS WHICH HAVE PREVIOUSLY RUN ERROR-FREE.

SAS KEYWORDS:

PSY2	PSY2ERR	PSY2PROG	8550SYSERR
8555SYSERR	8560SYSERR	8565SYSERR	8570SYSERR
8580SYSERR	8550SYSPROG	8555SYSPROG	8560SYSPROG
8565SYSPROG	8570SYSPROG	8580SYSPROG	3510SYSPROG
3510SYSERR	D/T8550	D/T8560	D/T8570
D/T8580	D/T3510	D/T8555	D/T8565
CDROM	PSY2CDROM		

1.2.46 CE MODE FOR PS/2 LEASE LINE MODEM (PSLIM)

Record number: H065613

Device: D/T8550
 Model: M
 Tip key: 057
 Date created: 090/07/11
 Date last altered: A90/08/08

IT IS REQUIRED THAT THE PSLIM BE IN CE MODE IN ORDER TO MODIFY SOME OF THE CONFIGURATION PARAMETERS. THE MAINTENANCE DOCUMENTATION DOES NOT EXPLAIN HOW TO ENTER 'CE MODE'. THE 'SUPPLEMENT FOR THE MAINTENANCE SERVICE' P/N26F0854 WILL BE UPDATED IN THE FUTURE. TO ENTER CE MODE: 1. LOAD THE PSLIM SERVICE PROGRAM (SEE PLSLIM GUIDE TO OPERATIONS GA33-0154) 2. ADVANCE THROUGH THE WELCOME PANEL, LOCAL MODEM CONFIGURATION PANEL, LOCAL MODEM SELECTION MENU, TO THE MAIN MENU. 3. AT THE MAIN MENU TYPE - B300 - FOLLOWED BY THE ENTER KEY 4. THE PSLIM IS NOW IN CE MODE AND ALL 'CE ONLY' CONFIGURATION PARAMETERS CAN BE MODIFIED.

SAS KEYWORDS:

PSY2	PSY2COMM	PSY2ADPT	8550SYSCOMM
8550SYSADPT	8555SYSCOMM	8555SYSADPT	8560SYSCOMM
8560SYSADPT	8565SYSCOMM	8565SYSADPT	8570SYSCOMM
8570SYSADPT	8573SYSCOMM	8573SYSADPT	8580SYSCOMM
8580SYSADPT			

1.2.47 CHASSIS INTRUSION BIT RESET ON IBM PC6588 & PC6888

Record number: H16421

Device: D/T6588
 Model: M
 Tip key: 002
 Date created: 097/07/11
 Date last altered: A97/07/14

On the IBM PC 6588 and IBM PC 6888, an alert for chassis intrusion can occur if the system cover has been removed. Once the system cover has been put back on, the user/servicer should reset the chassis intrusion indication through the DMI application.

In Windows3.11 or Windows95:

1. Open the DMI Control Panel from the DMI programs group.
2. Select the PC System Monitors component.
3. Select the Intrusion group within the PC System Monitors component.
4. Next, set a value for the Intrusion Reset attribute. Double click on the value to the right of the Intrusion Reset, type a new value of "1", and press enter.

A refresh may be required before intrusion information is displayed correctly in the DMI Control Panel.

In WindowsNT:

1. Open the DMI MIF Browser from the IBM SystemView agent program group.
2. Click on the plus sign to the left of PC System Monitors to open the PC System Monitors component.
3. Double click on the Intrusion group within the PC System Monitors component.
4. Next, set a new value for the Intrusion Reset attribute. Double click on Intrusion Reset, type a new value of "1", click on apply, then click on Cancel.

A refresh may be required before intrusion information is displayed correctly in the DMI Control Panel.

In OS/2:

1. Open the DMI MIF browser from the IBM DMI programs group.
2. Click on the plus sign to the left of PC System Monitors to
3. Double click on the Intrusion group within the PC System Monitors component.
4. Next, set a new value for the Intrusion Reset attribute. Double click on Intrusion Reset, type a new value of "1", click on apply, then click on Cancel.

A refresh may be required before intrusion information is displayed correctly in the DMI Control Panel.

-Windows, Windows3.11, Windows95, and WindowsNT are trademarks of Microsoft Corporation.

SAS KEYWORDS:

PSY2	PSY2OPER	PSY2PROG	PSVP
PSVPOPER	PSVPPROG	D/T6588	D/T6888
6588	6888	64683	UNCLASSIFIED

CHECK MOUNTING SCREWS DURING SERVICE CALL

1.2.48 CHECK MOUNTING SCREWS DURING SERVICE CALL

Record number: H125505

Device: D/T9552
Model: M
Tip key: 033
Date created: 094/11/02
Date last altered: A97/03/26

ENSURE ALL INTERNAL MOUNTING SCREWS ARE SECURE WHEN SERVICING A MOBILE SYSTEM. LOOSE SCREWS CAN CAUSE SHORTS AND GROUNDS ON ELECTRONIC COMPONENTS WITHIN THE SYSTEMS THAT MAY RESULTS IN FUTURE SYSTEM FAILURES.

SAS KEYWORDS:

PSY2	PSY2MISC	PSY2PART	PSY2BRD
PSY2PWR	D/T8543	D/T8554	D/T8551
D/T2614	D/T2615	D/T2618	D/T2620
D/T2603	D/T2610	D/T2604	D/T2619
D/T9545	PSY2ERR	THINKPAD	UNCLASSIFIED

CHICONY 104 KEYBOARD APP KEY CAUSES PRINTER ACTIVITY

1.2.49 CHICONY 104 KEYBOARD APP KEY CAUSES PRINTER ACTIVITY

Record number: H136047

Device: D/T6576
 Model: M
 Tip key: 005
 Date created: 097/01/10
 Date last altered: A97/01/10

Any IBM PC 300 or 700 Series system running OS/2 2.11 with a Chicony 104 Key Keyboard installed may exhibit printer activity and possibly a print error when the Application Key is pressed.

Printer errors may be displayed in OS/2 after pressing the Application key on the Chicony 104 key keyboard if no printer is attached, the printer is not ready, or not powered-on. If a printer is attached and ready, the entire contents of the screen will be printed as if the Print Screen key had been pressed.

The Chicony Keyboard Application Key is located on the lower right hand side of the 104 key keyboard. In the OS/2 2.11 operating system environment, the Application key has no supported function, however, it is functional in the Windows95 environment. There are no plans to add support for the Application key to OS/2 2.11.

The same problem can occur with OS/2 WARP 3.x. Install FixPack 26 or higher to eliminate the problem.

SAS KEYWORDS:

PSVP	PSY2	IBMPC	PSY2KBD
PSVPKBD	PSY2PRT	PSVPPRT	D/T6571
D/T6573	D/T6581	D/T6583	D/T6575
D/T6585	D/T6560	D/T6260	D/T6577
D/T6587	D/T6586	D/T6589	D/T6598
D/T6875	D/T6885	D/T6876	D/T6886
D/T6877	D/T6887	PC 330	PC 730
UNCLASSIFIED	PC 350	PC 750	51226

1.2.50 CHKDSK DOES NOT IDENTIFY USABLE FIXED DISK SPACE

Record number: H096476

Device: D/T8550
 Model: M
 Tip key: 106
 Date created: 092/02/24
 Date last altered: A94/06/03

In certain situations, hardfiles have been mistakenly replaced due to a perceived shortage of total hardfile space.

For example: The 320 MB SCSI hardfile has 625,365 user sectors or 320,186,880 bytes which is the total hardfile capacity, but it is not what the user will see when using CHKDSK.

CHKDSK will only report the capacity for a logical drive. If IML is loaded and/or the drive is divided into multiple partitions, the available space will be further reduced. CHKDSK does not report space taken up by partition tables, FAT(s) and/or the directories used by the operating system.

>> HARDFILE SPACE DEPENDS ON WHAT SOFTWARE IS LOADED ! <<

Hardfile space available to the user will also depend on the type and version of the specific operating system. The operating system will store its FAT (or HPFS) and directories, which also take up space. The amount of space taken by the FAT and directories will vary depending on the number of partitions.

The capacity of the hardfile never changes due to defects. There are enough spare sectors, "ABOVE" the 625,365 user sectors, or 320 MB, to map out any defects that would be found during the normal life of the hardfile. User sectors that are identified as defective will be replaced with these spare sectors so that the capacity of the hardfile will not vary. These principles can be applied to other SCSI and ESDI drives.

In summary, hardfiles should only be replaced when called out by Advanced Diagnostics and/or MAPs located in the HMS.

SAS KEYWORDS:

PSY2	D/T8525	D/T8530	D/T8540
D/T8560	D/T8565	D/T8535	D/T8590
D/T8595	D/T8570	D/T8580	D/T9585
FORMAT	DASD	SCSI	D/T9576
D/T9577	D/T9556	D/T9557	PSY2FDSK
D/T9595	DASD	PCOM	PCOMFDSK

1.2.51 CLIENTCARE, CLIENT MANAGER USAGE TIPS IN PC300GL (6561)

Record number: H132320

Device: D/T6561
 Model: M
 Tip key: 005
 Date created: 098/02/23
 Date last altered: A98/03/17

The following are usage tips when installing and uninstalling IBM ClientCare and IBM LANdesk Client Manager in the IBM PC300GL, machine types 6561 and 6591.

1. CLIENTCARE HELP FILES MISSING IN NON-ENGLISH PRELOADS

After starting the ClientCare/DMI browser and selecting "Help," the system displays error message "Aide de Windows" and indicates that file "fraLDXX.hlp" is missing. Translated versions of the help text are not available for this product. As a workaround, the user can elect to search for help files and select "enuLDXX.hlp" to display the English version of the help text.

2. CLIENTCARE INSTALLATION ERROR MESSAGE 401

While installing ClientCare, if the user elects to backup to the "Welcome to DMI Services Provider 2.0 Installation" window, and then proceed again with the installation, they are presented with the following error message:

"Setup string variable is not large enough for string.
 Check the string declarations."

Ignoring the error and clicking on "OK" will allow the installation to proceed normally. No additional data is written to, or deleted from the hard drive.

3. CLIENTCARE RETURNS ERROR DURING UNINSTALL

After running "Uninstall LANdesk Client Manager 3.1" from the INTEL LANdesk Management folder and restarting the system, the following error is returned each time the system is restarted: "Cannot Open I2c Device"

If LANdesk Client Manager is uninstalled before IBM IBM ClientCare, IBM ClientCare may not be completely uninstalled, resulting in error messages. The error condition can be corrected by removing the following registry key:

HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Services\ASSETCI

4. LANDESK CLIENT MANAGER DOES NOT COMPLETELY UNINSTALL

After running "Uninstall LANdesk Client Manager 3.1" from the LANdesk Management folder, the LANdesk Management folder is still present on the Start, Programs menu. The remaining folder can be removed manually via the Start, Settings, Task Bar menu.

Windows, Windows95, and WindowsNT are trademarks of Microsoft Corporation.

SAS KEYWORDS:

PSY2	PSY2ERR	PSY2COMM	PSY2OPER
PSVP	PSVPERR	PSVPCOMM	PSVPOPER
D/T6561	D/T6591	6561	6591
83530	83531	86900	UNCLASSIFIED

1.2.52 CLMODE DOES NOT SET 72HZ REFRESH RATE ON 9553

Record number: H122182

Device: D/T9553
Model: M
Tip key: 002
Date created: 093/12/15
Date last altered: A93/12/31

An error exists on the "SVGA Video Drivers Diskettes" diskette number 4, Version 1.30, which is shipped with the 9553. The error is observed while using the CLMODE utility as follows:

- "MONITOR TYPE" selection number 7, "Extended Super Multifrequency," incorrectly identifies the refresh rate for the 640 x 480 mode as 72Hz.

The refresh rate set for selection number 7 is 640 x 480 at 60Hz.

- The selection labeled "Advanced" incorrectly identifies the refresh rate for the 640 x 480 mode as 60Hz.

The refresh rate for "Advanced" is 640 x 480 at 72Hz. Use the selection labeled "Advanced" to set the refresh rate for 640 x 480 mode to 72Hz.

Diskette 4 will be corrected during the next release.

SAS KEYWORDS:

PSY2	640X480	PSY2ERR	72
60	HZ	82G4218	DRIVER
PSY2DISP	DISPLAY		

CMOS CAN BE CLEARED BY SHORTING MODULES TO GROUND

1.2.53 CMOS CAN BE CLEARED BY SHORTING MODULES TO GROUND

Record number: H104756

Device: D/T8580
 Model: M
 Tip key: 020
 Date created: 092/08/19
 Date last altered: A94/10/06

8580 systems use CMOS to store system configuration. CMOS may become contaminated for various reasons. The current field procedure is to remove the battery and allow CMOS to drain until the configuration is no longer present, which may take several hours.

A faster way to drain CMOS is to short the CMOS modules to ground.

">> DISCONNECT THE BATTERY FROM THE 8580 SYSTEM <<"

Locate the CMOS modules, identified below and by using a meter lead connected to frame ground, such as the power supply case, carefully drag the meter lead around each of the respective modules, contacting each of the pins. This will immediately drain CMOS. Connect the battery.

CMOS modules are located in the following positions for the following systems:

8580-041,071 (16MHZ) in position U186 & U187

8580-081,111,121,161,311,321 (20MHZ) in position U146 & U186

8580-A16,A21,A31 (25MHZ) in position U132 & U152
 (Near Blue Conn.)

If problems are still encountered after draining CMOS, normal problem determination should be performed to determine the cause of defect.

SAS KEYWORDS:

PSY2	PSY2SYSBRD	8580SYSBRD	STOP
PSY2BRD	8580SYSERR	PSY2ERR	HANG
SHORTED	NEW	DEFECTIVE	BROKEN
DEAD	HUNG	161	163
ERROR	CONFIG	BASIC	BOOTS
BOOT			

COLOR CHANGES/DISTORTED VIDEO W/DIAMOND VIPERPRO

1.2.54 COLOR CHANGES/DISTORTED VIDEO W/DIAMOND VIPERPRO

Record number: H124623

Device: D/T6384
 Model: M
 Tip key: 067
 Date created: 094/07/13
 Date last altered: A94/07/13

PS/ValuePoint 6384 P60/D Pentium systems with a Diamond ViperPRO video adapter may exhibit color changes and/or distorted video during POST and while using software applications.

The Diamond ViperPRO adapter card must contain BIOS version 1.02 or contain the Weitek 9100 Revision-E module to eliminate this failure.

Customers should be referred to the Diamond Computer Technical Support group who can provide information regarding the level of adapter being used and how to obtain the appropriate fixes for this failure.

The Technical Support numbers are:

(408)736-2000
 (408)773-8000 (FAX)
 (408)730-1100 (BBS,2400)
 (408)730-9301 (BBS,9600)

World Trade customers should contact their place of purchase for support or call the North America Technical Support number.

SAS KEYWORDS:

VALUE POINT	PS/VP	PSVP	P60D
PSVPOEM	PSY2OEM	PSVPADPT	PSY2ADPT
193	PSY2	189	199
BLEEDING	VGA SNOOPING	PSY2DISP	PSVPDISP

1.2.55 COLOR MIXING ON DISPLAY W/MATROX MGA PCI/2+

Record number: H124216

Device: D/T6384
 Model: M
 Tip key: 064
 Date created: 094/06/10
 Date last altered: A94/06/10

PS/ValuePoint 6384 P60/D Pentium systems with a Matrox MGA PCI/2+ video adapter may exhibit a failure known as "Palette Snooping." "Palette Snooping" is a term used to describe a symptom of colors on the display becoming mixed or shifting.

The manufacturer of the adapter, Matrox, will provide an adapter BIOS Update for customers that are experiencing this failure. The BIOS Update is level 809-7 and may be obtained from Matrox Technical Support by calling (514)685-0270 in North America. Reference the following failure descriptions when requesting the update:

- "Display Colors Are Mixed Up"
- "Color Mixed or Shifts"

World Trade customers should contact their "place of purchase" for support or call the North America Technical Support number.

SAS KEYWORDS:

VALUE POINT	PS/VP	PSVP	P60D
PSVPOEM	PSY2OEM	PSVPADPT	PSY2ADPT
193	PSY2	189	199
BLEEDING	VGA SNOOPING	D/T8511	D/T8513
D/T8515	D/T8516	D/T8517	D/T8518
D/T9515	D/T9517	D/T9518	D/T9524
D/T9525	D/T9507	D/T9521	D/T9527
D/T6312	D/T6314	D/T6317	D/T6319
D/T6324	D/T6325	D/T6327	

COLOR PURITY PROBLEMS APPEAR ON 9527 MONITOR

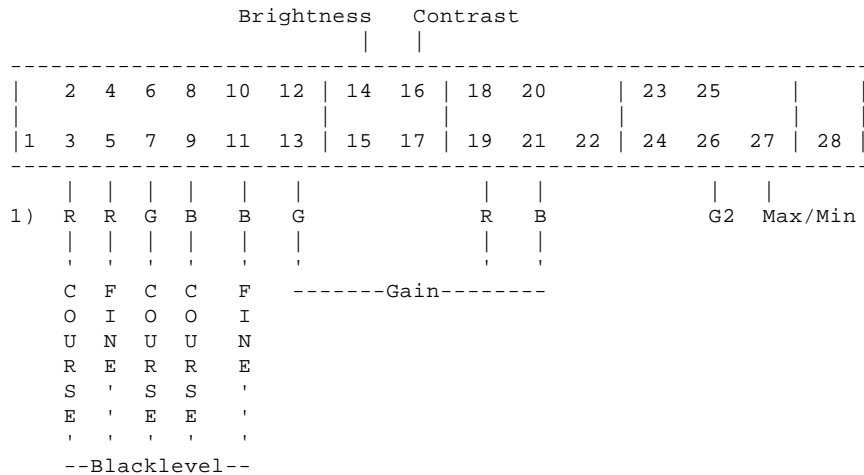
1.2.56 COLOR PURITY PROBLEMS APPEAR ON 9527 MONITOR

Record number: H124106

Device: D/T9527
 Model: M
 Tip key: 003
 Date created: 094/05/05
 Date last altered: A95/05/18

Color purity problems or blotching have occurred on 9527 monitors. An additional Service Mode has been made available which will provide adjustments that may correct these problems without FRU replacement. These adjustments are identified as the Service Mode 3 adjustments.

The numbers in the graphic below represent the Key Pad of the 9527 monitor. The HMM, S71G-4197-02, should be consulted for a pictorial of these buttons if required.



Note 1) Color: R = Red / G = Green / B = Blue
 OBJECTIVE OF THIS COLOR ADJUSTMENT PROCEDURE

To set the blacklevel color point by balancing the red, green, and blue blacklevel controls.
 To set the white gain color point by balancing the red, green, and blue gain controls.

Service Mode 3 is accessed and adjusted by following the steps below. To escape from Service Mode 3 without updating the memory, power off the monitor:

1. Power off the 9527 and remove the covers.
2. Remove write protect (reference HMM.) and power on the 9527.
3. Insert the test pattern diskette, part number 41G8502 and boot the system.
4. Power off the 9527.
5. Press and hold button 22 (Refer to the diagram above.)
6. Power "on" the monitor.
7. Release button 22.
8. Select pattern C, full raster.
9. Select blank screen.
10. Adjust G2 on the analog card until the screen (raster) is just visible. Use button 26 (G2) on the customer control panel hereafter.
11. Turn down any dominant color, or increase the other colors to balance the blacklevel.
12. Repeat steps 10 and 11 until the white color point remains consistent at various G2 levels.
13. Turn down the G2 until the screen (raster) just disappears.
14. Select red, green, and blue screens in turn and adjust the gains to an acceptable level.
15. Select pattern D, grey scale.
16. Turn down any dominant color or increase the other two colors to balance the intensity (gain.)
17. Increase and decrease the brightness level to ensure that grey remains consistent through various levels.
18. Repeat steps 16 and 17 until the grey scale is consistent.
19. Set the grey scale so that the grey box, top row, third from the right is just visible.
20. Wait 5 seconds for the settings to be saved.
21. Press button 22.
22. Power "off" the monitor.
23. Remove the jumper from the write protect.

COLOR PURITY PROBLEMS APPEAR ON 9527 MONITOR

24. Color adjustment is complete.

To invoke the Factory settings that were set in the Service Mode the RESET buttons must be pushed in USER mode to load the newly set Factory defaults.

The HMM has been updated to reflect Service Mode 3.

SAS KEYWORDS:

PSY2

PSY2DISP

9527

COLORADO DJ-10C DAMAGING SYSTEM BOARDS

1.2.57 COLORADO DJ-10C DAMAGING SYSTEM BOARDS

Record number: H122427

Device: D/TOEMF
Model: MEAT
Tip key: 045
Date created: 094/01/25
Date last altered: A94/01/25

UNDER NO CIRCUMSTANCE SHOULD THE DJ-10C (P/N 93F8510) BE
INSTALLED INTO A PS/2 SYSTEM IN PLACE OF THE DJ-10 (P/N 31F0969)
AS THE DJ-10C IS SUPPORTED AND DESIGNED FOR 638X VALUPOINT LINE.
IF THE DJ-10C IS INSTALLED INTO A PS/2, IT WILL DAMAGE THE
SYSTEM BOARD! USE ONLY THE DJ-10 IN A PS/2 UNTIL IT GOES
END OF SERVICE.

SAS KEYWORDS:

POEM	COLORADO	PSY2	PSVP
PSY2TAPE	PSVPTAPE	93F8510	31F0969

COMMON KEY LOCK ASSEMBLY FOR VALUEPOINT

1.2.58 COMMON KEY LOCK ASSEMBLY FOR VALUEPOINT

Record number: H123085

Device: D/T6384
 Model: M
 Tip key: 051
 Date created: 094/02/17
 Date last altered: A94/03/11

IF A CUSTOMER REQUIRES A SINGLE KEY TO UNLOCK ALL THEIR VALUEPOINT SYSTEMS, KEY LOCK ASSEMBLIES ARE AVAILABLE FROM:

FORT LOCK COMPANY
 3000 NORTH RIVERGROVE
 CHICAGO, ILLINOIS 60171
 (708) 456 - 1100

THE CUSTOMER IS RESPONSIBLE FOR PURCHASE AND INSTALLATION.

SAS KEYWORDS:

PSVP	PS/VP	VALUE POINT	P/N61G2177
P/N52G8744	PSY2MISC	PSVPMISC	PS/VALUEPOINT
D/T6381	D/T6387	D/T6382	6381
6387	6382	KEYLOCK	COVER LOCK
52G8744	61G2177	6384	

CONFIGURATION FOR SERIAL/PARALLEL CARD IN 8530

1.2.59 CONFIGURATION FOR SERIAL/PARALLEL CARD IN 8530

Record number: H021364

Device: D/T8530
Model: M
Tip key: 007
Date created: 087/04/30
Date last altered: A87/08/04

WHEN A SERIAL/PARALLEL ADAPTER CARD IS INSTALLED IN AN 8530 IT SHOULD BE CONFIGURED AS AN ALTERNATE PARALLEL PORT. THIS ALLOWS YOU TO USE THE PLANAR PARALLEL PORT AS LPT1 AND THE SERIAL/ADAPTER CARD AS LPT2. IF YOU CONFIGURE THE ADAPTER CARD AS THE PRIMARY PORT (LPT1) THE 8530 WILL NOT ALLOW YOU TO USE THE PLANAR PARALLEL PORT AS LPT2 (AN ERROR MESSAGE WILL BE DISPLAYED).

SAS KEYWORDS:

8530SYSCOMM

PSY2COMM

PSY2

8530SYSADPT

PSY2ADPT

1.2.60 CONFIGURATION OR SETUP UTILITY ERRORS ON PC700

Record number: H13303

Device: D/T6875
 Model: M
 Tip key: 006
 Date created: 095/06/26
 Date last altered: A95/07/10

The IBM PC 700 Series system may display the following symptoms after replacing the system board, following configuration changes, or immediately following system installation:

- 161/162/163 Configuration Errors
- 1962 POST errors
- Missing or incorrect entries in the Setup Utility
- Beep codes indicating a CMOS or ROM BIOS error

Before replacing the system board for the above symptoms, perform the following steps to clear CMOS:

- 1) Power the system unit off, remove the top cover assembly and locate jumper J40. J40 is located to the left of the riser card socket, next to the video memory upgrade sockets. Jumper J40 is also known as the Password Bypass Jumper.
- 2) Move the J40 jumper from the default position, pins 2 & 3 to pins 1 & 2.
- 3) Power the system on and allow POST to complete (1 or 2 audible beeps).
- 4) Power the system unit off and return the J40 jumper to its original position (pins 2 & 3).
- 5) Power the system unit on. POST errors will be received indicating that a configuration change has occurred. View the Setup utility and verify that the correct entries are present for the hardware installed (adapter cards will not be present in the Setup Utility). Save the changes and exit the Setup Utility. Allow the system to reboot. There should be one audible beep at the end of POST.

If the system continues to POST configuration errors after performing the steps above and/or the entries in the Setup Utility do not match the hardware configuration, perform the next set of instructions to drain CMOS:

- 1) Turn the system power off. Remove the AC line cord from the AC receptacle.
- 2) Remove the top cover assembly and locate the battery (left rear of the system board).
- 3) Remove the battery from the system board or slide a piece of paper between the battery and the metal contact strip on top of the battery.
- 4) Allow the system to remain in this state for a minimum of 15 minutes.
- 5) Install the battery or remove the paper strip, and reattach the AC line cord. Turn power on and allow the system to complete POST. The system will post configuration errors indicating that a change has occurred.

NOTE - This procedure may be used if a CMOS virus is suspected. As a part of step #1, remove the hardfile signal cable from either the system board or the rear of the boot drive. If the system is booted from a diskette, replace the boot diskette with a bootable DOS diskette that has not been used on any system in the account.

Allow CMOS to drain and reboot the system WITHOUT the boot drive or normally used boot diskette. Perform two cold boots (off/on) to verify a successful completion of POST, then reattach the boot drive. Run Viruscan immediately.

If the failures persists, continue normal problem determination.

SAS KEYWORDS:

IBMPC

PSY2

PSVP

6885

PSY2 RETAIN TIPS

CONFIGURATION OR SETUP UTILITY ERRORS ON PC700

6875	D/T6885	D/T6886	D/T6876
PSVPERR	PSY2ERR	6886	6876
D/T68XX	68XX	CONFIG	161
162	163		

1.2.61 CONFIGURING ISA/PCI ADAPTERS IN PC 300/700 SYSTEMS

Record number: H126246

Device: D/T68XX
 Model: M
 Tip key: 004
 Date created: 095/02/01
 Date last altered: A97/06/19

Perform the following steps BEFORE installing an ISA or PCI adapter card in an IBM PC 300/700 Series system. These steps do not apply to Plug-N-Play adapters.

1. Power on the system and press F1 when the memory count appears (to access the Setup Utility).
2. Select "ISA Legacy Resources" from the Main Menu of the Setup Utility.
3. Check the documentation that accompanies the ISA or PCI adapter to determine what system resources are required. The type of resources that need to be determined are memory address range, I/O address range, DMA assignments, and IRQ assignments.
4. Select each of the options from the "ISA Legacy Resources" to configure a ISA adapter. Use the "IRQ Resources" selection from the Main Menu to configure a PCI adapter. Follow the steps below to correctly configure the system for the adapter. When complete, return to the Main Menu.

NOTE: Read the instructions carefully for the type of adapter being installed. Installation of an ISA adapter is slightly different from the installation of a PCI adapter.

A) ISA ADAPTERS - Change the fields under each of the menu selections under "ISA Legacy Resources" from "Available" to "Not Available" that correspond to the resources that are used by the ISA adapter. For example, if an ISA adapter uses I/O ranges 220 - 240h, DMA channel 7, and IRQs 9 and 10, set each of these selections to "Not Available" under the appropriate menu of "ISA Legacy Resources."

B) PCI ADAPTERS - If a PCI adapter is installed that uses any interrupts, at least one of the interrupts that can be used by the PCI bus (IRQ 3,5,9,10 & 11) must be set to "Available" under "IRQ Resources" in order for the PCI adapter to operate correctly. Select an interrupt that is not currently being used by an ISA adapter and verify that it set to "Available."

5. From the Setup Utility Main Menu, select "Advanced Setup." Then select "ROM Shadowing."
6. Determine whether the ISA adapter card contains ROM or uses a RAM buffer by using the adapter documentation. If the adapter card contains a ROM or uses a RAM buffer, record the starting address and size of the ROM or RAM buffer used by the card.
7. If the ISA adapter card contains ROM or uses a RAM buffer, disable ROM shadowing for the address range used by the ISA adapter card. Each field under ROM Shadowing on page 4 of the Setup Utility is 32Kb in size. For example, if the ISA adapter card contains a ROM that is 32KB in size and is located at D4000, disable ROM shadowing at D4000-DBFFF. The system can ONLY SHADOW IN 32kb BLOCKS. If the adapter ROM is only 8kb, a 32kb block must be disabled for the adapter ROM.
8. Press the ESC key until the screen appears that allows the changes made to be saved. Select YES and press ENTER to save the changes.

The ISA or PCI adapter may now be installed and tested using the adapter diagnostics to ensure that the adapter will initialize and function properly. This information is contained in the User documentation that is shipped with the system unit.

SAS KEYWORDS:

PSY2	6875	D/T6875	D/T6885
D/T6876	D/T6886	6885	6876
6886	PSY2ADPT	PSY2OEM	PSY2PART
PSY2BRD	PSY2DIAG	IBMPC	PSY2ERR
PC 750	SOUND BLASTER	PSVP	6888
ADAPTEC	6588	D/T65XX	D/T6571
D/T6573	D/T6581	D/T6583	D/T6585
D/T6575	6571	6573	6581

PSY2 RETAIN TIPS

CONFIGURING ISA/PCI ADAPTERS IN PC 300/700 SYSTEMS

6583	6575	6585	6576
6586	D/T6576	D/T6586	ESS
D/T6577	D/T6587	D/T6877	D/T6887
D/T6560	D/T6260	D/T6598	D/T6589

1.2.62 CONFIGURING ISA/PCI ADAPTERS IN DESKTOP SYSTEMS

Record number: H161187

Device: D/T65XX
 Model: M
 Tip key: 003
 Date created: 097/09/24
 Date last altered: A97/10/20

Perform the following steps BEFORE installing an ISA or PCI adapter card in an IBM Commercial Desktop system. These steps do not apply to Plug-N-Play adapters.

1. Power on the system and press F1 when the memory count appears (to access the Setup Utility).
2. Select "ISA Legacy Resources" from the Main Menu of the Setup Utility.
3. Check the documentation that accompanies the ISA or PCI adapter to determine what system resources are required. The type of resources that need to be determined are memory address range, I/O address range, DMA assignments, and IRQ assignments.
4. Select each of the options from the "ISA Legacy Resources" to configure a ISA adapter. Use the "IRQ Resources" selection from the Main Menu to configure a PCI adapter. Follow the steps below to correctly configure the system for the adapter. When complete, return to the Main Menu.

NOTE: Read the instructions carefully for the type of adapter being installed. Installation of an ISA adapter is slightly different from the installation of a PCI adapter.

A) ISA ADAPTERS - Change the fields under each of the menu selections under "ISA Legacy Resources" from "Available" to "Not Available" that correspond to the resources that are used by the ISA adapter. For example, if an ISA adapter uses I/O ranges 220 - 240h, DMA channel 7, and IRQs 9 and 10, set each of these selections to "Not Available" under the appropriate menu of "ISA Legacy Resources."

B) PCI ADAPTERS - If a PCI adapter is installed that uses any interrupts, at least one of the interrupts that can be used by the PCI bus (IRQ 3,5,9,10 & 11) must be set to "Available" under "IRQ Resources" in order for the PCI adapter to operate correctly. Select an interrupt that is not currently being used by an ISA adapter and verify that it set to "Available."

5. From the Setup Utility Main Menu, select "Advanced Setup." Then select "ROM Shadowing."
6. Determine whether the ISA adapter card contains ROM or uses a RAM buffer by using the adapter documentation. If the adapter card contains a ROM or uses a RAM buffer, record the starting address and size of the ROM or RAM buffer used by the card.
7. If the ISA adapter card contains ROM or uses a RAM buffer, disable ROM shadowing for the address range used by the ISA adapter card. Each field under ROM Shadowing on page 4 of the Setup Utility is 32Kb in size. For example, if the ISA adapter card contains a ROM that is 32KB in size and is located at D4000, disable ROM shadowing at D4000-DBFFF. The system can ONLY SHADOW IN 32kb BLOCKS. If the adapter ROM is only 8kb, a 32kb block must be disabled for the adapter ROM.
8. Press the ESC key until the screen appears that allows the changes made to be saved. Select YES and press ENTER to save the changes.

The ISA or PCI adapter may now be installed and tested using the adapter diagnostics to ensure that the adapter will initialize and function properly. This information is contained in the User documentation that is shipped with the system unit.

NOTE: This tip serves as a re-release of Retain tip number H126246 as an aid to installing and configuring ISA/PCI adapters (non Plug-N-Play) in the newer IBM PC Commercial Desktop Systems. The principles and methods described above can be applied to all models of Commercial Desktop Systems. The steps used in accessing options in the F1 Setup Utility will vary slightly from one model to another.

SAS KEYWORDS:

PSY2 RETAIN TIPS

CONFIGURING ISA/PCI ADAPTERS IN DESKTOP SYSTEMS

PSY2	PSY2ADPT	PSY2OEM	PSY2PART
PSY2BRD	PSY2DIAG	IBMPC	PSY2ERR
SOUND BLASTER	PSVP	ADAPTEC	MODEM
D/T6260	D/T6272	D/T6282	D/T6560
D/T6562	D/T6577	D/T6587	D/T6588
D/T6592	D/T6877	D/T6887	D/T6888
D/T6898	D/T6899	78928	76180
ESS1868	UNCLASSIFIED		

1.2.63 CONFIGURING SCSI REPEATERS IN THE 3518 ENCLOSURE

Record number: H162824

Device: D/T8650
 Model: M
 Tip key: 003
 Date created: 098/02/18
 Date last altered: A98/02/24

A SCSI Repeater Card Option p/n94G7585 FRU p/n07L8624 is required when configuring any IBM External Enclosure type 3518 Model 001 or 002 with ANY of the following configurations on a single SCSI Channel:

- Supported external SCSI cable greater than 1 Meter Long.
- Daisy-Chaining of 2 Backplanes inside the 3518.
- More than 6 Harddrives inside the 3518.

3518 CONFIGURATION LIMITATIONS/REQUIREMENTS:

- 1 - If attaching the 3518 to a Non-RAID Ultra-Wide SCSI Controller/Adapter, the ULTRA setting on the Controller/Adapter MUST BE DISABLED.
- 2 - Ultra Seed is NOT supported on the 3518 Enclosure
- 3 - The MAXIMUM Configuration of a Single SCSI Channel WITHOUT a REPEATER in a 3518 Enclosure is:
 - 1 Supported Hot-Swap Backplane
 - 6 Supported Hard Drives
 - A Single Supported 1 Meter external SCSI cable.
- 4 - The MAXIMUM Configuration of a Single SCSI Channel WITH REPEATER (Option p/n94G7585/FRU p/n07L8624) in a 3518 Enclosure is:
 - 2 Supported Hot-Swap Backplanes (Daisy-Chained)
 - 12 Supported Hard Drives
 - A Single Supported 4.3 Meter external SCSI cable.

See the following IBM Website URL for 3518 System Compatibility and Hardware Prerequisites:

[Http: //www.pc.ibm.com/us/products/catalog/31f6_6fe.html](http://www.pc.ibm.com/us/products/catalog/31f6_6fe.html)

SAS KEYWORDS:

PSY2	PSY2DASD	UNCLASSIFIED	D/T8639
D/T8640	D/T8638	D/T8639	D/T8640
D/T8641	D/T8642	D/T8650	D/T8651
D/T8652	HEALTH	D/T3518	

1.2.64 COPY COMMAND PROBLEM WITH WINDOWSNT 4.0

Record number: H136896

Device: D/T6899
Model: M
Tip key: 004
Date created: 097/03/18
Date last altered: A97/03/18

When using the COPY command in WindowsNT v4.0, an embedded EOF (End of File) marker may be placed in the new file causing the file to fail with the using application. This symptom may occur with any brand of personal computer.

Example: COPY FILE_1.TXT+FILE_2.TXT FILE_1.TXT
This command copies the contents of FILE_1.TXT and FILE_2.TXT into a new file with the same name as one of the original files, FILE_1.TXT.

This scenario may cause an EOF marker to be embedded into FILE_1.TXT. The use of ASCII or BINARY switches have no effect.

In testing with earlier versions WindowsNT, PC DOS 7.0 and OS/2, the command functions normally.
To use this command with WindowsNT v4.0, enter the command as follows:

Example: COPY FILE_1.TXT+FILE_2.TXT NEWNAME.TXT
Naming the newly created file with a filename different from either of the two contributing files allows the command to function properly.

For additional information regarding this situation, contact Microsoft WindowsNT Technical Support.

WindowsNT is a trademark of the Microsoft Corporation.

SAS KEYWORDS:

PSVP	PSY2	IBMPC	PSY2PROG
PSVPPROG	PWS	PSVPOEM	PSY2OEM
UNCLASSIFIED	56958		

1.2.65 CORRUPTED & INCORRECT VIDEO DISPLAYED ON PC'S

Record number: H131462

Device: D/T6885
 Model: M
 Tip key: 003
 Date created: 095/10/26
 Date last altered: A96/08/07

All brands of Personal Computers are exposed to some sort of system/video corruption due to operating system, application or device driver levels. While exposure to video corruption is extremely small, the end user may suspect that the failure is due to a hardware failure in the display or system unit.

Video corruption may be as subtle as a single pixel change in one corner of the display to a totally unreadable or unexpected image.

Below are some examples of the types of video corruption or distortion that may NOT be caused by the display or the system unit, but rather the device drivers, BIOS level or operating system:

- A) Unexpected characters on the screen and/or imbedded within text data files
- B) Color palette shifting (areas of the display changing colors)
- C) Rolling image
- D) Image shift (screen appears to shift vertically or horizontally)
- E) Blank display after mode switching (text <--> Hi-Res)
- F) Unexpected or incorrect results from a video test
- G) Video corruption while moving or resizing windowed sessions
- H) Blank or unreadable display after installing an operating system or application

Non-display related symptoms of video device driver, Flash BIOS or operating system failures:

- I) Print failures (incorrect printed output to a locally attached printer, for example: LPT1:)
- J) System hangs, Trap errors or memory errors when accessing an application.
- K) The operating system reports that there is insufficient memory available when attempting to run a graphic intensive application Microsoft Word or Microsoft PowerPoint.
- L) General Protection Faults in a Windows environment.
- M) System error code while switching between sessions.

BEFORE REPLACING ANY HARDWARE, ENSURE THAT THE LATEST LEVEL FLASH BIOS AND VIDEO DEVICE DRIVERS APPROPRIATE FOR THE VIDEO ADAPTER OR VIDEO CHIPSET ARE INSTALLED.

When attempting to diagnose symptoms similar to those stated above, consult the User's Guide for the system to aid in accessing the system's Configuration Utility. The information in the Configuration Utility will allow viewing of the BIOS revision level and, in some models, allow modification of the display setup characteristics.

In many cases the documentation for software applications will not address in great detail the importance of obtaining the latest level video device drivers or Flash BIOS, and how to determine what levels are installed.

Some applications include video drivers that are tested on popular video adapters and video chipsets to ensure compatibility. User knowledge of the type of video adapter and/or chipset installed is an important step in properly configuring an application.

Through ongoing testing of IBM products, the IBM PC Company makes available video device driver updates for DOS, Microsoft Windows, and OS/2. Updates to these drivers are done as a result of field reported problems and Lab testing.

Updated video device drivers along with the latest Flash BIOS updates (Flash BIOS updates also include enhancements for the video chipset installed) are available from the IBM PC Company Bulletin Board system for the following types of products:

- IBM PS/2 Systems (Microchannel and ISA Bus models)
- IBM PS/ValuePoint
- IBM PS/ValuePoint Performance Series

IBM PC 300 and 700 Series
IBM PC Server Products

The updates may be obtained from the IBM PC Company BBS system
by calling 1 - 919-517-0001.

The updates may also be downloaded via the Internet from the
IBM Personal Computer File Library by searching the following
Internet URL:

<http://www.pc.ibm.com/files.html>

SAS KEYWORDS:

PSVP	PSY2	PSVPPROG	PSY2PROG
IBMPC	PSY2ADPT	PSVPADPT	HUNG
D/T6381	D/T6382	D/T6384	D/T6387
D/T6472	D/T6482	D/T6484	D/T6492
D/T6494	D/T6571	D/T6573	D/T6581
D/T6583	D/T6575	D/T6585	D/T6576
D/T6586	D/T6875	D/T6885	D/T6876
D/T6886	D/T65XX	D/T68XX	OS2
D/T9595	D/T9585	D/T8525	D/T8530
D/T8535	D/T8540	D/T8556	D/T9585
D/T8550	D/T8555	D/T8565	D/T9595
D/T8557	D/T8560	D/T8595	D/T8590
D/T8570	D/T9576	D/T9557	D/T9556
D/T8580	D/T9577	D/T9533	PSY2DISP
PSVPDISP	PSY2MCD	PSVPMCD	

1.2.66 COSESSION INFORMATION SCREEN BLOCKED BY WINDOWS95 BAR

Record number: H132880

Device: D/T6887
 Model: M
 Tip key: 003
 Date created: 096/03/04
 Date last altered: A96/03/04

The CoSession for Windows application preloaded on IBM PC 700 Series 6877 and 6887 as part of the Windows95 preload may show a part of the CoSession Information window blocked by the Windows95 task bar. The Windows95 task bar prevents the user from having clear access to the "Stop" and "Next" action buttons.

The solution to this problem is to simply relocate (drag) the CoSession information window so that the "Next" and "Stop" action buttons can be accessed.

The next release of CoSession for Windows will resolve this problem. The updated version will be available in March 1996 from the IBM PC Company BBS or through the Internet in the PC Company File Library at the following URL:

<http://www.pc.ibm.com/files.html>

Windows95 is a trademark of the Microsoft Corporation.

SAS KEYWORDS:

PSY2	D/T68XX	6877	6877
IBMPC	PSVP	PSVPCOMM	PSY2COMM
D/T6887	PSVPPROG	PSY2PROG	PSVPPDISP
40675	PC750	PSY2DISP	PC 750
PC730	PC700	PC 730	

1.2.67 CPU FANS INSTALLED BACKWARDS IN PC300GL SERIES 6561

Record number: H163281

Device: D/T6561
 Model: M
 Tip key: 008
 Date created: 098/04/06
 Date last altered: A98/04/06

A small number of IBM PC300GL Series 6561 systems manufactured in Research Triangle Park may contain a CPU cooling fan installed facing in the wrong direction.

Note that IBM PC300GL Series 6591 systems ARE NOT affected.

Based on inspection results, the suspect manufacturing date range is 3/19/98 to 3/24/98.

By model number, the suspect serial number ranges are as follows:

6561 - 32U 23NT883 - 23NX532
 6561 - 34U 23AAZ16 - 23ABN90
 6561 - 34U 23ABX41 - 23ADA84
 6561 - 42U 23GNG03 - 23GNR02
 6561 - 50U 23TXD00 - 23TXZ39
 6561 - 53U 23AAAL7 - 23AAHG8
 6561 - 54U 23BLTH0 - 23BLZP9

Some additional systems may fall outside of these ranges.

Failure symptoms that may be reported by customers can vary from a hung system to intermittent application errors to system shutdowns. Servicicers should inspect the orientation of the CPU cooling fan before replacing any hardware when servicing these PC300GL 6561 systems.

In the correct position, the round vendor label on the center of the fan should face the CPU, or rear of the system. The top of the black fan housing also features a molded arrow that should point towards the CPU when in the correct position. In some systems, this arrow may be covered by a bar code label.

If failures persist after confirming the correct orientation of the CPU cooling fan, continue normal problem determination procedures to isolate the failing FRU or application.

SAS KEYWORDS:

PSY2	PSY2PART	PSVP	PSVPPART
D/T6561	6561	CPU	FAN
SERVICER ONLY			

1.2.68 CRYSTAL AUDIO DRIVER FOR OS/2 README CORRECTION

Record number: H123250

Device: D/T6272
 Model: M
 Tip key: 001
 Date created: 097/04/15
 Date last altered: A97/04/15

The README file on the Crystal Audio for OS/2 Device Support diskette, provided with IBM PC 300GL 6272 and 6282 systems, incorrectly directs the user to a Multimedia Folder on the Desktop that does not exist. The driver affected is v1.53.

The affected driver directs the user to the following folders to begin the installation: Multimedia Icon (OS/2 Desktop)

|
v

Multimedia Application Install

The correct sequence for Crystal Audio for OS/2 installation are as follows:

1) Insert the Crystal Audio for OS/2 diskette in drive A: .

2) Double click on: OS/2 System

|
v

System Setup

|
v

Install/Remove

|
v

Multimedia Application Install

3) Select the diskette drive where the Audio Support diskette was inserted in step #1. Follow the instructions displayed on the screen to complete the installation.

Updated versions of the Crystal Audio for OS/2 installation diskette will contain a corrected README file.

SAS KEYWORDS:

PSVP	PSY2	PSVDOC	PSY2DOC
IBMPC	61331F_1	PSVPPROG	PSY2PROG
UNCLASSIFIED	PC 330	PC 340	PC300GL

1.2.69 D/T2625 365X & XD DO NOT SUPPORT IBM VOICE DICTATION.

Record number: H136018

Device: D/T2625
Model: M
Tip key: 010
Date created: 097/01/13
Date last altered: A97/01/14

The 365X and XD do not support the IBM Voice Type Dictation product (VTD). The VTD may function, but because it is not supported on this device type, the quality of operation may not be acceptable. Because this is NOT a hardware or software failure. FRUS should NOT be replaced if this condition is reported.

SAS KEYWORDS:

PSY2 THINKPAD PSY2PART PSY2PROG
UNCLASSIFIED

PSY2 RETAIN TIPS
D/T8543 MODEL L40SX SWITCHES

1.2.70 D/T8543 MODEL L40SX SWITCHES

Record number: H066636

Device: D/T8543
Model: M
Tip key: 014
Date created: 094/06/01
Date last altered: A94/06/01

THE WHITE ON-OFF SWITCH AND BLUE POWER SAVER SWITCH ARE NOT INCLUDED WITH THE TOP COVER ASSEMBLY FRU P/N79F3893. THE SWITCHES ARE PART OF THE SYSTEM-STATUS DISPLAY ASSEMBLY FRU P/N79F0991.

SAS KEYWORDS:

PSY2PART	PSY2	PSY/2	PART
8543	79F3893	79F0991	

1.2.71 D/T9545 AUTO STANDBY MODE

Record number: H124367

Device: D/T9545
Model: M
Tip key: 016
Date created: 094/06/20
Date last altered: A94/06/21

TO CONSERVE BATTERY POWER, THE 9545 THINKPAD 750 AND 755 CAN AUTOMATICALLY ENTER STANDBY MODE WHEN THE COMPUTER IS NOT USED FOR A PREDETERMINED AMOUNT OF TIME. THIS OCCURS ONLY WHEN AUTO STANDBY MODE HAS BEEN PROPERLY SET AS DESCRIBED BELOW.

FOR EXAMPLE:

IF THE SUSPEND TIMER IS SET FOR 5 MINUTES AND AUTO STANDBY HAS BEEN SET, THE SYSTEM WILL GO INTO STANDBY MODE FOR A PERIOD OF 5 MINUTES BEFORE GOING INTO SUSPEND MODE.

DURING STANDBY MODE, THE HARD DISK DRIVE STOPS, THE LCD TURNS OFF, AND THE PROCESSOR RUNS AT ITS LOWEST SPEED TO SAVE POWER. ALL SYSTEM TASKS ARE SUSPENDED WHEN ENTERING THE STANDBY MODE.

TO RESUME NORMAL OPERATION DEPRESS ANY KEY OR CLICK THE MOUSE BUTTON.

TO SET AUTO STANDBY MODE:

1. ENTER PS2 AT THE DOS PROMPT (C: \ ROOT DIRECTORY)
2. SELECT SET POWER FEATURES FROM THE THINKPAD FEATURES MENU.
3. SET POWER MODE TO LOW
4. PRESS F5 KEY (CUSTOMIZE)
5. SET SUSPEND TIMER TO THE TIME YOU WANT THE COMPUTER TO REMAIN IN STANDBY MODE.
6. SET AUTO STANDBY
7. PRESS ENTER

THESE CHANGES ARE EFFECTIVE WHEN THE AC ADAPTER IS DISCONNECTED.

THIS INFORMATION WILL BE INCLUDED IN THE NEXT RELEASE OF THE IBM THINKPAD 750/755 USER'S GUIDE (S71G-4118).

SAS KEYWORDS:

PSY2	9545	AUTO	PSY/2
750C	755C		

DAG AND GROUND STRAP MISSING FROM ITC FRU

1.2.72 DAG AND GROUND STRAP MISSING FROM ITC FRU

Record number: H124354

Device: D/T9525
 Model: M
 Tip key: 004
 Date created: 094/06/17
 Date last altered: A94/12/09

The 9524 ITC, FRU P/N39G6250, the 9525 ITC, FRU P/N39G6293 or the 9515 ITC, FRU P/N07G9832 may have been shipped without the Degauss coil and ground cables (DAG cable).

Remove the cables from the old ITC and install them on the new ITC. Take note of the installation of these cables on the old ITC, before removing, for correct installation on the new ITC.

Manufacturing has been made aware of this problem and has taken corrective action on the newly assembled ITC FRUs.

If a new DAG or ground cable is required, Level 2 hardware support should be contacted via the established support structure. The servicers Name, Address and Phone number should be included in the PMR.

SAS KEYWORDS:

PSY2	9524	PSY2DISP	MONITOR
CRT	DISPLAY	D/T9525	DEGAUSS
DEGUASS	D/T9524	D/T9515	9515

PSY2 RETAIN TIPS
DAMAGED 3.5" DISKETTE DRIVES

1.2.73 DAMAGED 3.5" DISKETTE DRIVES

Record number: H031798

Device: D/T8530
Model: M
Tip key: 024
Date created: 089/01/30
Date last altered: A89/01/31

INCORRECTLY INSERTING DISKETTES INTO A 720KB OR 1.44MB 3.5"
DISKETTE DRIVE CAN LEAVE THE DRIVE PERMANENTLY DAMAGED AND
INOPERABLE.

THE INTERNAL COMPONENTS OF THE DRIVE, PARTICULARLY THE MECHANISM
THAT OPENS THE METAL SLIDING DOOR OF A 3.5" DISKETTE, WILL BE
BENT IF THE DISKETTE IS INSERTED BACKWARD OR UPSIDE-DOWN.

SAS KEYWORDS:

PSY2	8525SYSDSKT	8530SYSDSKT	8550SYSDSKT
8570SYSDSKT	8580SYSDSKT	PSY2DSKT	8560SYSDSKT

1.2.74 DCA IRMA CARD FAILS ON 6384 SYSTEMS

Record number: H103441

Device: D/T6384
Model: M
Tip key: 008
Date created: 092/12/08
Date last altered: A92/12/08

THE DCA IRMA LAN ADAPTER CARD AND SOFTWARE MAY NOT FUNCTION ON A PS/VALUEPOINT SYSTEM. THE SYSTEM WILL NOT RECOGNIZE THE PRESENCE OF THE ADAPTER CARD; SUBSEQUENTLY, THE LAN SOFTWARE WILL NOT LOAD PROPERLY. ALL MODELS OF THE PS/VALUEPOINT SYSTEMS MAY EXPERIENCE THE PROBLEM WITH A DCA IRMA CARD INSTALLED.

FIX:

HAVE THE CUSTOMER CONTACT POINT OF PURCHASE FOR THE DCA IRMA CARD OR CONTACT THE DCA SUPPORT CENTER FOR THE COMCHK.EXE UPDATE AT 404 - 442-4000.

IF THE PROBLEM PERSISTS AFTER UPDATING THE DCA ADAPTER, UTILIZE NORMAL PROBLEM DETERMINATION PROCEDURES TO ISOLATE THE FAILING FRU.

SAS KEYWORDS:

PSVP	PSY2	PSY2ADPT	PSY2OEM
VALUE POINT	VALUEPOINT	PSY2COMM	PSY2DIAG

DEC ETHERNET ADAPTER MAY FAIL IN PS/VALUEPOINT

1.2.75 DEC ETHERNET ADAPTER MAY FAIL IN PS/VALUEPOINT

Record number: H122419

Device: D/T6384
 Model: M
 Tip key: 046
 Date created: 094/01/25
 Date last altered: A94/01/25

DEC ETHERNET ADAPTER MODELS DE200, DE201 AND DE202 MAY FAIL IN PS/VALUEPOINT SYSTEMS WITH AN ERROR MESSAGE STATING "LANCE I/O ADDRESS CONFLICT" OR TIMEOUT AND RETURN TO THE OPERATING SYSTEM PROMPT WHEN LOADING COMMUNICATION SOFTWARE.

DEC ETHERNET ADAPTER MODELS DE200, DE201 AND DE202 ARE NOT FUNCTIONALLY COMPATIBLE WITH PS/VALUEPOINT SYSTEMS. TIMING INCOMPATIBILITIES EXIST BETWEEN THE DEC ETHERNET ADAPTERS AND THE PS/VALUEPOINT SYSTEM.

AFFECTED CUSTOMERS SHOULD BE REFERRED TO THEIR DEC ETHERNET ADAPTER POINT OF SALE.

SAS KEYWORDS:

PSVP	PSY2	PSVPCOMM	PSY2COMM
PSVPPART	PSY2PART	PSVPADPT	PSY2ADPT
D/T6387	D/T6382	6382	6384
6387	VALUE POINT	PS VP	D/T6381
6381			

1.2.76 DELAYS ACCESSING HARD DRIVE W/ NT4.0 USING NEW 7895 DRIVERS

Record number: H162657

Device: D/T8644
 Model: M
 Tip key: 003
 Date created: 098/01/27
 Date last altered: A98/02/06

It has been determined that while running NT 4.0 w/ Service pack 3.0, and the new Adaptec 7895 driver dated 10/20/97 on any model Netfinity type 8644 server, access delays up to 3-4 seconds as well as client connectivity delays may be experienced.

The following Disk Subsystems are effected if the latest 7895 driver dated 10/20/97 is used:

- Onboard 7895 SCSI Controller
- AHA-2940/2940U/2940W

Note: The 7895 driver is downward compatible with the 7870 chipset adapters.

The source of these pauses when the hard drive is being accessed has been linked to the new Adaptec 7895 driver dated 10/20/97.

Pauses should be temporary with respect to Drive access.

Customers are directed to do NT Disk Maintenance during off-peak hours.

Product Development is looking into the issue at this time with Adaptec. This TIP will be updated with the final fix when it is identified.

Adaptec is a trademark of Adaptec Inc.

SAS KEYWORDS:

PSY2	PSY2DRIVER	SERVICER ONLY	7895
D/T8644	3500	ADAPTEC	DELAY
PAUSE	SLOW	NT	4.0
SERVICE PACK 3	UNCLASSIFIED		

DETAILS OF 6384 HARD FILES (CYL HEADS SECTORS)

1.2.77 DETAILS OF 6384 HARD FILES (CYL HEADS SECTORS)

Record number: H106662

Device: D/T6384
Model: M
Tip key: 007
Date created: 092/12/02
Date last altered: A92/12/04

Additional information on hard files in 6384.

OPTION P/N	SIZE	CYLINDERS	HEADS	SECTORS
6451074	80MB	929	10	17
6451296	170MB	984	10	34
32G3861	212MB	686	16	38

SAS KEYWORDS:

PSY2	VALUE POINT	VALUEPOINT	D/T6384
PSVP	PSY2FDSK	PSVPFDSK	

1.2.78 DIAGNOSING DIRECT DRIVER SOFTWARE SYSTEM FAILURES

Record number: H104541

Device: D/T8550
 Model: M
 Tip key: 134
 Date created: 092/08/26
 Date last altered: A95/03/14

System failures may be encountered on PS/2 systems which cannot be resolved by hardware replacement.

These problems may be difficult to diagnose and/or intermittent. The diagnostics run error-free, and attempts to isolate the problem by swapping hardware are unsuccessful, yet the problem "appears" to be a hardware failure.

If a problem, as described above, is being experienced and the operating system is of the "direct driver" variety (bypasses the BIOS * interface) such as AIX,* Novell Netware,* SCO Xenix,* SCO Unix,* other Unix based software, and some "windowing" interfaces, the most likely cause is a mis-match between the software and the hardware.

Applications which use the Multiprotocol Adapter/A, magnetic tape and some SCSI devices such as CD-ROM require direct software drivers. There is no BIOS interface for these devices in any PS/2 product.

In resolving these problems, the following facts are very useful and in some cases critical:

- A. DIRECT DRIVER SOFTWARE IS SENSITIVE TO THE HARDWARE.
 Direct driver software is sensitive to variations in hardware design. The resulting incompatibilities are usually addressed with a revision, or a "patch" to the direct driver software. Make certain the software is current and all known "fixes" or updates are present. PCPROD and other soft ware "tools" sources, such as Novell Netware, should be referenced by the software support personnel for any revisions, fixes, etc., provided by the appropriate software vendor.

The greatest cause of system problems, when direct driver software is involved, is the failure to obtain the latest revisions or "fixes" from the software vendor.

- B. SOFTWARE INSTALLATION IS IMPORTANT.
 It is very important to follow the vendor's installation procedures. The software should be installed "out of the box" and not migrated from another system, unless migration is EXPRESSLY supported by the software, particularly from a different model in the product line.

Note: Migrating adapters from slower systems to faster systems, may cause failures. This is due to device specific, system specific, or time dependent software code which controls these devices.

- C. NOT ALL ADAPTERS ARE SOFTWARE COMPATIBLE.
 The hardware adapters for some operating systems must be certified by the software vendor to be compatible with that software. This certification (approval) is specific for the system, adapter (version, E.C. level) and software version. The software vendor should be contacted to confirm that the complete system/adaptor configuration is supported by their software level. This compatibility approval is very important for, but not limited to, LAN adapters. This is particularly true in RIPL (Remote Initial Program Load) applications.
- D. SOFTWARE MAY FAIL AFTER A HARDWARE CHANGE.
 After initial installation, any changes in the hardware configuration (addition or changes of adapters, features, etc.) may cause system failures and require reinstallation of the operating system and/or software patches or updates. Specific hardware configuration changes (such as memory address, interrupt level, Programmable option select, etc.) may result in a system failure if the software has unique operating requirements.

In Summary: Almost all of the problems experienced on systems using direct driver software fall into one of the above categories. Experience has demonstrated that if the

DIAGNOSING DIRECT DRIVER SOFTWARE SYSTEM FAILURES

diagnostics run error-free, the hardware is probably within specifications and is not defective.

LAN support assistance is available from SOFTWARE/LAN support in Austin. They can be reached at 1-800-992-4777. Additional level 2 LAN support is available, if required, for customers using Novell Netware purchased from IBM ("BLUE BOX"), through the IBM Defect Support Center in Austin. NON-IBM (RED BOX) Novell Netware customers should contact their normal software support.

For further information on the software/hardware relationship, the PS/2 Installation Planning and Beyond manual, form # G41G-2927 - 00, chapter 8, "PS/2 System Software," page 8-3, "BIOS Interface," should be referenced.

* BIOS (Basic Input-Output System):

BIOS is a layer of software which provides a consistent interface between the system hardware and the user application software and operating system. BIOS guarantees compatibility and flexibility of software across the hardware model line, by compensating for minor variations in hardware which may exist from system to system.

- * AIX is a registered trademark of the IBM Corporation.
- Netware is a registered trademark of Novell Inc.
- SCO Xenix is a registered trademark of Santa Cruz Operations.
- SCO Unix is a registered trademark of Santa Cruz Operations.

SAS KEYWORDS:

PSY2	PS2	PS/2	PSY2PROG
PSY2ERR	ZENIX	WINDOW	D/T8560
D/T8570	D/T8565	D/T8580	D/T8590
D/T8595	D/T8555	NOVELLE	PSY2TAPE
NOVELLE	D/T8590	D/T8595	D/T8555
D/T8573	PSY2TAPE	D/T8525	D/T8530
D/T8557	D/T8556	D/T8540	D/T8535
NOVEL	OEM	PSY2OEM	ABIOS
D/T6384	PSVP	VALUEPOINT	VALUE POINT
D/T9595	D/T9585	D/T9577	D/T9576
DJADRIVER			

1.2.80 DISKETTE COMPATIBILITY

Record number: H02694

Device: D/T8550
Model: M
Tip key: 004
Date created: 087/04/03
Date last altered: A91/09/03

INFORMATION ABOUT 1.0MB AND 2.0MB CAPACITY DISKETTES

* 1.0 CAPACITY (2HC) DISKETTES SHOULD ONLY BE FORMATTED TO 720KB USING EITHER 720KB OR 1.44MB DISKETTE DRIVES. 1.44MB DISKETTE DRIVES HAVE "1.44" PRINTED ON THE EJECT BUTTON. NO PRINTING ON THE EJECT BUTTON INDICATES A 720KB DISKETTE DRIVE.

* DOS FORMAT VERSION 3.3 AND ABOVE WILL DEFAULT TO A 1.44MB FORMAT ON A 1.44MB DISKETTE DRIVE REGARDLESS OF THE TYPE OF DISKETTE BEING USED. TO FORMAT A 1MB DISKETTE TO 720KB ON A 1.44MB DRIVE, THE DOS FORMAT COMMAND IS
FORMAT /N: 9/T: 80

THE 1MB AND 2MB DISKETTES HAVE DIFFERENT CHARACTERISTICS:

- 1) THE MAGNETIC PARTICLE USED IN THE COATING INK IS DIFFERENT.
- 2) THE COATING THICKNESS ON THE 2MB DISKETTE IS MUCH THINNER THAN THE 1MB DISKETTE.
- 3) THE COERCIVITY, THE ABILITY TO MAINTAIN MAGNETIC INFORMATION, VARIES FROM THE 1MB TO 2MB DISKETTE.

2MB DISKETTES ARE PHYSICALLY THINNER THAN 1MB DISKETTES. THE 1MB FORMAT WRITES AT A HIGHER WRITE CURRENT; THEREFORE, IF YOU TRIED TO FORMAT A 2MB DISKETTE IN THE 1MB MODE YOU COULD WRITE THROUGH ONE SIDE OF THE DISKETTE TO THE OTHER.

* 2.0MB CAPACITY (2HD) DISKETTES SHOULD ONLY BE FORMATTED TO 1.44MB USING A 1.44MB DISKETTE DRIVE.

* 2.0MB CAPACITY DISKETTES SHOULD NOT BE FORMATTED TO 720KB AND SHOULD NOT BE USED IN 720KB DISKETTE DRIVES.

* WHEN TRANSFERRING DISKETTES BETWEEN COMPUTERS THAT HAVE 720KB AND 1.44MB DISKETTE DRIVES, USE ONLY 1.0MB CAPACITY DISKETTES FORMATTED TO 720KB.

* MANY APPLICATION PROGRAMS CONTAIN DISKETTE COPY PROCEDURES THAT ALLOW A BACKUP ONLY TO A DISKETTE OF THE SAME CAPACITY AS THE ORIGINAL DISKETTE.

SAS KEYWORDS:

8550SYSDSKT	8560SYSDSKT	8580SYSDSKT	PSY2
PSY2DSKT	8530SYSDSKT	8525SYSDSKT	8570SYSDSKT
8555SYSDSKT	8573SYSDSKT	8557SYSDSKT	8535SYSDSKT
8540SYSDSKT	D/T8525	D/T8530	D/T8535
D/T8540	D/T8555	D/T8557	D/T8560
D/T8565	8565SYSDSKT	D/T8570	D/T8573
D/T8580	D/T8590	8590SYSDSKT	D/T8595
8595SYSDSKT			

DISKETTE DRIVE BUS ADAPTER CAUSES VARIOUS ERRORS/SYMPTOMS

1.2.81 DISKETTE DRIVE BUS ADAPTER CAUSES VARIOUS ERRORS/SYMPTOMS

Record number: H025645

Device: D/T8550
Model: M
Tip key: 019
Date created: 088/02/01
Date last altered: A93/10/29

THE 8550 DISKETTE DRIVE BUS ADAPTER CAN CAUSE VARIOUS PROBLEMS IF THE COPPER LANDS BECOME EXPOSED AND SHORT OUT AGAINST THE SUPPORT STRUCTURE. THE FOLLOWING ERRORS MAY BE CAUSED BY THE DISKETTE BUS ADAPTER BEING SHORTED:

- 1) FIXED DISK LIGHT STAYS ON WHEN FIXED DISK IS NOT OPERATING.
- 2) EXTERNAL DRIVE ERRORS WHEN NO EXTERNAL DRIVE EXISTS.
- 3) 652 ERRORS WHEN RUNNING DIAGNOSTICS.
- 4) 162 ERRORS

OTHER ERRORS MAY BE CAUSED DEPENDING ON WHICH SIGNAL LINES ARE SHORTED. THESE ERRORS CAN BE SOLID OR INTERMITTENT.

PROBLEM ISOLATION: FIRST ENSURE THE DISKETTE BUS ADAPTER CARD IS FULLY SEATED. INSPECT THE BUS ADAPTER CARD FOR EXPOSED LANDS WHERE THE CARD MAY CONTACT THE SUPPORT STRUCTURE (IN SOME CASES THE PROBLEM COULD BE INTERNAL AND NOT VISIBLE TO THE EYE). A PIECE OF TAPE MAY BE PLACED ON THE EXPOSED AREA TO SEE IF THE SYMPTOM GOES AWAY. IF SO, REPLACE THE CARD.

NOTE: THE WIRE CLAMP THAT HOLDS THE CARD IN PLACE MAY BE REMOVED BY PULLING THE BOTTOM OF THE CLAMP TOWARDS THE REAR OF THE SYSTEM. THIS CLAMP IS INSTALLED FOR SHIPPING AND IS NOT A FRU PART.

SAS KEYWORDS:

PSY2 PSY2DSKT PSY2ADPT PSY2ERR
PSY2FDSK

DISKETTE DRIVE DAMAGED BY MULTIPLE LABELS

1.2.82 DISKETTE DRIVE DAMAGED BY MULTIPLE LABELS

Record number: H122082

Device: D/T9552
Model: M
Tip key: 022
Date created: 093/09/27
Date last altered: A93/09/27

Engineering has determined that placing more than one (1) diskette label on a diskette (one on top of the other) may cause diskette drive head damage when the diskette is inserted in the drive of an IBM mobile system.

SAS KEYWORDS:

PSY2 PSY2PART PSY2DSKT

1.2.83 DISKETTE DRIVE PACKAGE FRU LABEL INCORRECT, P/N72X8523

Record number: H092667

Device: D/T8550
Model: M
Tip key: 102
Date created: 091/12/24
Date last altered: A91/12/24

THE 1.44MB DISKETTE DRIVE FRU P/N72X8523 MAY BE INCORRECTLY
LABELED IN THE FRU PACKAGE. IT MAY BE LABELED FRU P/N15F7570.
BOTH OF THE ABOVE FRU PART NUMBERS ARE ASSEMBLED FROM THE
SAME BASE MANUFACTURING PART NUMBERED DISKETTE DRIVE. THE
DIFFERENCE IS THE BEZEL. THE DRIVE IN THE FRU PACKAGE
IS THE CORRECT FRU PART EVEN THOUGH IT IS MISLABELED. THE
BEZEL THAT WOULD MAKE IT P/N15F7570 IS NOT INCLUDED.

SAS KEYWORDS:

PSY2	PSY2DSKT	8530SYSDSKT	8550SYSDSKT
8560SYSDSKT	8570SYSDSKT	8580SYSDSKT	D/T8530
D/T8550	D/T8560	D/T8570	D/T8580

1.2.84 DISKETTE DRIVE PROBLEMS, CONTAMINATION, ETC.

Record number: H09135

Device: D/T8550
 Model: M
 Tip key: 100
 Date created: 091/11/22
 Date last altered: A94/02/08

PERSONAL COMPUTER AND PERSONAL SYSTEMS/2 USERS MAY EXPERIENCE DISKETTE DRIVE ERRORS, DAMAGED DISKETTES AND INTERCHANGEABILITY PROBLEMS DUE TO CONTAMINATION AND ENVIRONMENTAL CONDITIONS.

ANALYSIS OF FIELD RETURNED DISKETTE DRIVES AND DISKETTES HAVE REVEALED THE FOLLOWING PRIMARY CAUSES OF DISKETTE DRIVE PROBLEMS:

1. HEAD CONTAMINATION DUE TO "BURNISHED-ON OXIDE*."
2. HEAD CONTAMINATION DUE TO DUST AND/OR PARTICULATE MATTER.
3. POOR QUALITY MEDIA, WITH POOR OXIDE BONDING.
4. POOR QUALITY MEDIA, WITH IMBEDDED PARTICULATE CONTAMINANTS.

* BURNISHED-ON OXIDE, IS THE OXIDE AND BINDER RESIDUE WHICH HAS MIGRATED FROM THE DISKETTE MEDIA AND FIRMLY BONDED TO THE READ/WRITE HEADS.

INTERCHANGEABILITY PROBLEMS:

CONTAMINATION, WHICH INTERFERES WITH NORMAL HEAD/MEDIA CONTACT, MAY CAUSE INTERCHANGEABILITY PROBLEMS (DISKETTES MAY READ ON ONE DRIVE, BUT NOT ON ANOTHER). THIS CAN CAUSE LOWER THAN NORMAL AMPLITUDE SIGNALS AND RESULTING READ ERRORS. POOR QUALITY MEDIA MAY BE A CONTRIBUTING FACTOR TO THIS SITUATION.

FORMAT FAILURES AND DIAGNOSTIC ERRORS:

UNNECESSARY FRU REPLACEMENT HAS BEEN ATTRIBUTED TO POOR QUALITY OR DAMAGED MEDIA BEING USED DURING TROUBLESHOOTING. SUBSEQUENT USE OF IBM BRAND MEDIA HAS RESULTED IN ERROR FREE DIAGNOSTICS AND SUCCESSFUL DISKETTE FORMATS ON DRIVES WHICH HAD BEEN "FAILING" PREVIOUSLY.

AS DISKETTE QUALITY IS NOT OBVIOUS BY VISUAL INSPECTION, ONLY IBM BRAND DISKETTES SHOULD BE USED TO TROUBLESHOOT. THE FOLLOWING BLANK DISKETTES ARE AVAILABLE FOR DIAGNOSTIC USE BY SERVICERS THROUGH THE MECHANICSBURG PARTS DISTRIBUTION SYSTEM:

FRU P/N6023450 FOR 5.25" DSDD (360KB)
 FRU P/N6109660 FOR 5.25" DSHD (1.2MB)

DUSTY ENVIRONMENTS AND INFREQUENT USAGE:

MANY FAILURES ARE CAUSED BY DUST AND FIBER PARTICLES WHICH PICK UP A MINUTE ELECTRICAL (STATIC) CHARGE AND ADHERE TO THE RECORDING HEAD SURFACES. THIS IS PARTICULARLY TRUE IF THERE IS NO DISKETTE DRIVE USAGE FOR LONG PERIODS OF TIME. THEN, WHEN A DISKETTE IS INSERTED, THE HEADS ABOVE AND BELOW THE DISKETTE COME TOGETHER AND TRAP THE CONTAMINATION BETWEEN THE DISKETTE AND THE HEADS. DAMAGE RESULTS FROM ONE OF THE FOLLOWING:

- A. TINY CIRCULAR DAMAGE MARKS MAY OCCUR AT THE HEAD CONTACT POINT DUE TO CONTAMINATION PARTICLES BEING COMPRESSED INTO THE DISKETTE SURFACE.
- B. THE CONTAMINANT STICKS TO THE HEAD LONG ENOUGH TO DEVELOP A SCRATCH INTO THE MAGNETIC RECORDING COATING.
- C. THE CONTAMINANT MAY BOND (STICK) TO THE MEDIA RECORDING SURFACE.
- D. A PARTICLE MAY BOND TO THE RECORDING SURFACE OF THE HEAD AND STRIP THE COATING FROM THE MEDIA, IF THE COATING BONDING (ADHESION) IS WEAK.

IN AN AREA OF HIGH DUST OR PARTICULATE CONTAMINATION AND INFREQUENT DISKETTE DRIVE USAGE (DAILY OR LESS), SUCH AS A BANKING, STORE SYSTEM ENVIRONMENT OR SOME LAN ENVIRONMENTS, THE FOLLOWING RECOMMENDATION SHOULD BE VERY HELPFUL:

USE AN "EXPENDABLE" DISKETTE AND DO A DIRECTORY LISTING ("DIR A: ", ETC), PRIOR TO INSERTING A "CRITICAL" DATA DISKETTE. THIS WILL "WIPE" THE HEADS AND MINIMIZE THE EXPOSURE OF CONTAMINANTS DAMAGING DISKETTES AND CAUSING ERRORS.

ADDITIONAL INFORMATION:

IBM BRAND MEDIA WAS USED IN A TEST OF FIELD RETURNED DISKETTE DRIVES WHICH HAD INITIALLY FAILED DIAGNOSTIC TESTING. THE HEADS

PSY2 RETAIN TIPS
DISKETTE DRIVE PROBLEMS, CONTAMINATION, ETC.

ON THESE DRIVES WERE CONTAMINATED WITH "BURNISHED-ON" OXIDE. BY PERFORMING REPETITIVE FORMAT ROUTINES UNTIL ALL ERRORS WERE ELIMINATED, THESE DRIVES WERE RETURNED TO SERVICEABLE CONDITION.

SUMMARY:

THE USE OF "HEAD CLEANING KITS" ON PC AND PS/2 5.25 AND 3.5 INCH DISKETTE DRIVES IS NOT SUPPORTED. ENGINEERING INVESTIGATIONS INTO "CLEANING" OF DISKETTE DRIVES HAVE SHOWN NO CURRENTLY AVAILABLE METHOD TO BE ACCEPTABLE. SHOULD THIS SITUATION CHANGE DUE TO CONTINUING REVIEW, THIS RETAIN TIP WILL BE UPDATED WITH THE APPROPRIATE INFORMATION.

DURING THE SECOND QUARTER OF 1993, AN ENGINEERING REVIEW OF THE USE OF "HEAD CLEANING KITS" ON PS/2 DISKETTE DRIVES REVEALED THE FOLLOWING FACTS:

Due to recent environmental issues, FREON based solvents, used in some diskette drive cleaning kits, have been eliminated and replaced with Isopropyl Alcohol. This exposes the user to the following situations:

1. Freon evaporates faster than Isopropyl Alcohol., therefore, a user can put too much fluid on the cleaning disk which will leave a liquid on the head surface. If a data diskette is then immediately inserted and the heads are loaded, the magnetic recording surface under the head can be dissolved.
2. Unlike FREON, Isopropyl Alcohol, as it dries, can leave a film on the heads. Any film on the head surface can cause read problems.

THE USE OF QUALITY MEDIA, SUCH AS THAT SUPPLIED BY IBM, AWARENESS OF THE "DUST" FACTOR AND USE OF THE "EXPENDABLE DISKETTE" CIRCUMVENTION TECHNIQUE, AS DESCRIBED ABOVE, IS THE BEST LONG TERM SOLUTION TO GAINING THE BEST RELIABILITY FROM DISKETTE DRIVES.

SAS KEYWORDS:

PSY2	PSY2DSKT	PSY2ERR	PCOM
D/T8525	D/T8530	D/T8535	D/T8540
D/T8550	D/T8555	D/T8557	D/T8560
D/T8565	D/T8570	D/T8573	D/T8580
D/T8590	D/T8595	D/T5150	D/T5160
D/T5162	D/T5170	8525SYSDSKT	8530SYSDSKT
8535SYSDSKT	8540SYSDSKT	8550SYSDSKT	8555SYSDSKT
8557SYSDSKT	8560SYSDSKT	8565SYSDSKT	8570SYSDSKT
8573SYSDSKT	8580SYSDSKT	8590SYSDSKT	8595SYSDSKT
8525SYSERR	8530SYSERR	8535SYSERR	8540SYSERR
8550SYSERR	8555SYSERR	8557SYSERR	8560SYSERR
8570SYSERR	8573SYSERR	8580SYSERR	8590SYSERR
8595SYSERR	PCOMSYSERR	PCOMSYSDSKT	5170SYSDSKT
5170SYSERR	5162SYSERR	5162SYSDSKT	5160SYSDSKT
5160SYSERR	5150SYSERR	5150SYSDSKT	D/T6384
D/T6387	D/T6382	PSVP	PSVPDSKT
VALUEPOINT	VALUE POINT	D/T9595	D/T9585
D/T9576	D/T9577	D/T9556	D/T9557
DIRT			

DISKETTE FACTORY LOOPS ON SCSI-2 DRIVER CREATION

1.2.85 DISKETTE FACTORY LOOPS ON SCSI-2 DRIVER CREATION

Record number: H132789

Device: D/T6877
 Model: M
 Tip key: 001
 Date created: 096/02/27
 Date last altered: A96/02/27

IBM PC 700 Series 6877 and 6887 systems preloaded with DOS and Windows 3.11 may continue to ask for a diskette after creating both of the SCSI-2 driver diskettes.

The SCSI-2 device drivers for Windows 3.11 requires 2 diskettes. When the Diskette Factory completes the second diskette, the application requests the user to insert "diskette 2." The Diskette Factory will continue building diskette #2 until the application is closed by the Program Manager or by rebooting the system.

Windows95 is a trademark of the Microsoft Corporation.

SAS KEYWORDS:

PSY2	D/T68XX	6887	6877
IBMPC	PSVP	PSY2PROG	PC 730
D/T6887	PSVPPROG	PC700	PC730
SCSI2	PC750	PC 750	40740

1.2.86 DISKETTE FACTORY UP/DOWN ARROW KEYS FAIL

Record number: H133202

Device: D/T6877
Model: M
Tip key: 017
Date created: 096/03/25
Date last altered: A96/03/25

IBM PC 700 Series 6877 and 6887 systems preloaded with Microsoft Windows95 may lose the ability highlight items within the Diskette Factory menu with the Up/Down Arrow keys after creating a set of diskettes.

The Up/down Arrow keys are used to highlight an item within the Diskette Factory menu for diskette creation.

To eliminate this problem, click the mouse pointer on any item in the Diskette Factory menu. This will bring the highlight bar to the item selected. The Up/Down Arrow keys will then respond correctly.

Windows95 is a trademark of the Microsoft Corporation.

SAS KEYWORDS:

PSY2	D/T68XX	6887	6877
IBMPC	PSVP	PSY2PROG	PSVPPROG
D/T6887	PC750	PC700	PC 730
PC 750	PC730	41269	PSVPKBD
PSY2KBD			

1.2.87 DISKETTE PACKAGE FOR OS/2 PREINSTALLED SYSTEMS

Record number: H10751

Device: D/T8550
 Model: M
 Tip key: 142
 Date created: 092/11/12
 Date last altered: A93/09/15

Servicers may be required to reload the operating system on "preinstalled systems" if a fixed disk failure is experienced upon installation. An OS/2 image reload package is available to servicers for this purpose.

The package is designed for ease of use without the need for special education and is available by calling 1-800-342-6672, Monday through Friday, 9: 00am - 9: 00pm Eastern Time.

The servicer would replace the fixed disk using normal fixed disk maintenance procedures and then reload OS/2.

After successfully reloading OS/2, the customer is responsible for installing all OS/2 applications and data files.

The appropriate version of the OS/2 image loaded on the system may be found on the shipping container and documentation sent with the ship group.

The following versions are available as "reload packages":

OS/2 Version	Reload Part number
2.0	41G3329
2.00.1	52G9973

SAS KEYWORDS:

PSY2	PSY2PROG	OS2	D/T8556
D/T8557	D/T9577	D/T9576	D/T8590
D/T8595	D/T8557	D/T8595	D/T9595
D/T9556	D/T9557	D/T9585	D/T95XX
D/T6384	PSVP	PSVPPROG	

PSY2 RETAIN TIPS
DISPLAY POWER CORDS MISSING

1.2.88 *DISPLAY POWER CORDS MISSING*

Record number: H12538

Device: D/T9515
Model: M
Tip key: 004
Date created: 093/07/06
Date last altered: A93/07/07

A limited number of 9515 monitors have been distributed to the field with the AC power cord missing from the shipping group.

A replacement line cord may be ordered using FRU P/N38F3968.

SAS KEYWORDS:

PSY2	PSY2DISP	PSY2POWR	PSVP
LINE	SHIP		

1.2.89 DISPLAY POWER MANAGEMENT FAILS W/WINDOWSNT 3.51

Record number: H134037

Device: D/T6589
Model: M
Tip key: 002
Date created: 096/09/18
Date last altered: A96/09/18

IBM PC 365 Series 6589 systems running Microsoft WindowsNT v3.51 will not perform Display Power Management. Enabling the Display Power Management settings from the systems Setup Utility will have no effect on a Power Management capable display in the WindowsNT v3.51 environment.

Microsoft WindowsNT v3.51 does not support Display Power Management in dual processor systems such as the PC 365 6589 Series.

Customers requiring this function should upgrade to WindowsNT version 4.0.

WindowsNT is a trademark of the Microsoft Corporation.

SAS KEYWORDS:

PSY2	PSVP	IBMPC	PSVPPROG
PSY2PROG	PSVPDISP	PSY2DISP	51332
PC365			

1.2.90 DISPLAY TILT FACTORS

Record number: H122146

Device: D/T8550
 Model: M
 Tip key: 194
 Date created: 093/12/23
 Date last altered: A95/03/06

Slight iterations of tilt are becoming more noticeable in newer monitors since users are being given the ability to adjust video width and height out to bezel edges. This allows a direct comparison of video squareness with bezel edge squareness. This is especially true in newer software applications using full screen reverse video.

Cathode ray tube (CRT) monitors may have some permissible horizontal tilt that is perceivable by the customer. The following is a list of some of the factors which may combine to affect what is perceived as "tilt":

1. Integrated Tube Component (ITC) - This is the CRT and Deflection Yoke assembly. The rotational position of the Deflection Yoke on the neck of the CRT determines (mechanical) tilt within the ITC assembly. This adjustment of tilt is fixed and cannot be changed.
2. ITC and Bezel assembly - The ITC is mounted into the monitor bezel by locating it against physical references molded into the bezel (locating tabs). The bezel edges effectively become the final reference for determining tilt in manufacture of the monitor. This tilt factor is guarded closely during manufacturing.
3. The magnetic environment of the monitor - All factory screen setups are performed with the monitor located within a neutralized magnetic environment to minimize any external influences from the Earth's magnetic field or other magnetic sources.

The magnetic environment consists of:

- A. The local geomagnetic* field (Northern hemisphere, Southern hemisphere, equatorial, possible local magnetic anomalies or disturbances, etc.)
- b. Local magnetic variations caused by large metal objects, small electrical appliances in close proximity to the monitor and local power lines and transformers.
- c. The physical orientation of the monitor in relation to magnetic north. (Rotating the monitor in a different directions and allowing it to automatically degauss, can make a perceptible difference in tilt.)
- d. The current magnetic state of the monitor itself (Does it require degaussing?).

Summary:

The aim of the manufacturing and alignment processes referenced above is to minimize these variations as much as possible. However, these combinations of factors mean that no monitor can ever be absolutely perfect.

Note: No image quality assessments should be done on any monitor that has not been turned-on for at least 20 minutes.

Additional information on monitors is available in RETAIN record number H12816, "SERVICE AID FOR PS/2 AND VALUEPOINT MONITORS."

* Geomagnetic: Magnetism associated with the Earth's natural magnetic field.

SAS KEYWORDS:

PSY2	PS2	PSY2DISP	PSVP
PSVPDISP	D/T8517	D/T8515	D/T9515
CRT	TUBE	MONITOR	D/T8506
D/T8503	D/T8512	D/T8513	D/T8514
D/T8515	D/T8517	D/T9517	D/T8508
D/T8504	D/T6312	D/T6314	D/T6319
D/T9507	D/T6321	D/T6318	D/T6317
D/T9524	D/T9525	D/T9521	D/T9527
D/T6327	D/T8504	D/T9504	D/T8525
D/T6319	DJAM		

1.2.91 DISPLAYS&COLON. WAVY IMAGES, JITTER, & COLOR DISTORTION

Record number: H12927

Device: D/T8550
 Model: M
 Tip key: 188
 Date created: 093/07/29
 Date last altered: A95/08/08

SINCE COMPUTER DISPLAY IMAGES ARE CREATED BY CONTROLLING AN ELECTRON BEAM WITH A MAGNETIC FIELD, THEY ARE SUBJECT TO INTERFERENCE FROM OTHER SOURCES OF MAGNETIC ENERGY.

PC, PS2, AND OEM DISPLAYS MAY EXHIBIT WAVY IMAGES IN CLOSE PROXIMITY TO SMALL APPLIANCES SUCH AS FANS, CLOCKS, FLORESCENT LIGHTS, AND OTHER DISPLAYS. MOVING THE APPLIANCE A SHORT DISTANCE FROM THE DISPLAY SHOULD FIX THE PROBLEM.

INCIDENTS OF INTERFERENCE HAVE BEEN CAUSED BY LARGE POWER TRANSFORMERS, AND OTHER SOURCES OF LOW FREQUENCY FLUCTUATING MAGNETIC FIELDS. MOVING THE DISPLAY TO ANOTHER LOCATION MAY BE NECESSARY TO CORRECT THESE EXTREME CASES.

WAVY IMAGES AND JITTER HAVE ALSO BEEN CAUSED BY FAULTY POWER LINE SURGE SUPPRESSORS. TO TEST FOR THIS CONDITION, BY-PASS THE SURGE SUPPRESSOR BY PLUGGING THE DISPLAY DIRECTLY INTO THE POWER RECEPTACLE.

SAS KEYWORDS:

PCOM	PSY2DISP	PCOMDISP	PSY2
8503	8512	8513	8514
5153	5154	5175	8515
8516	8518	PSY2	D/T8503
D/T8513	D/T8514	D/T8512	D/T8515
D/T8516	D/T8517	D/T9517	D/T8518
D/T8504	D/T8511	D/T9515	D/T9518
D/T9524	D/T9525	D/T6324	D/T6325
D/T6312	D/T6314	D/T6319	D/T6318

1.2.92 DISTINGUISHING DUALSTOR FROM IBM ITBU

Record number: H125672

Device: D/T8550
 Model: MCP1
 Tip key: 206
 Date created: 094/11/29
 Date last altered: A95/08/22

HOW TO TELL AN IBM DUALSTOR DRIVE (FRU P/N82G7106) FROM AN IBM PS/2 INTERNAL TAPE BACKUP UNIT (ITBU) WITHOUT REMOVING MACHINE COVERS:

1) The carrier that holds the DUALSTOR drive read head is spring loaded by a vertical spring. (there is only one head in either drive).

When you look in the slot where tapes are inserted, you see the read head. There are two pins that the head carrier ride on. If the two pins are not even (one is mounted a little further to the rear), and the left pin is covered by a spring, the drive is a DUALSTOR.

If the pins are even, and neither is covered by a spring, the drive is an IBM ITBU

2) Both drives have micro switches that sense tape presence and write protect, but the switches are different.

When you look in the tape insertion slot, you see two switches, mounted one on top of the other, on the rear left hand side of the tape slot. If the switches have two white plastic pins pointing at you, the drive is a DUALSTOR. If the switches have two metal levers that activate the switches, the drive is an IBM ITBU. Also, the switches on the IBM ITBU make a clicking sound when activated by hand. The DUALSTOR switches are silent.

Part Numbers:

IBM PS/2 Internal Tape Backup Unit (ITBU).....P/N 87F9787
 IBM DualStor Internal Tape Backup Unit (DSTBU)....P/N 82G7106
 IBM Blank formatted test tape.....P/N 30F5277

SAS KEYWORDS:

PSY2TAPE	PSY2ERR	PSY2	PSY2MISC
P/N87F9787	BACKUP	ITBU	P/N30F5277
DUALSTOR	P/N82G7106	TAPE	TESTTAPE

1.2.93 DOS VERSION 3.3 FORMAT FAILS WHEN FORMATTING 3.5" DISKETTES

Record number: H021408

Device: D/T8550
Model: M
Tip key: 007
Date created: 087/05/08
Date last altered: A94/08/15

THE PC-DOS VERSION 3.3 FORMAT COMMAND WILL FAIL TO FORMAT MULTIPLE DISKETTES ON PERSONAL SYSTEM/2 MODELS 50/60 ONLY.

THE ERROR IS DISPLAYED AS AN "INVALID MEDIA OR TRACK 0 BAD -DISK UNUSABLE" MESSAGE WHEN THE USER REPLIES "Y" TO THE DOS PROMPT "FORMAT ANOTHER (Y/N)?" AFTER THE FIRST DISKETTE IS FORMATTED. THE ERROR MESSAGE IS DISPLAYED WHEN ATTEMPTING TO FORMAT THE SECOND DISKETTE.

THIS ERROR WILL ONLY OCCUR WHEN NO PREVIOUS DISKETTE I/O COMMANDS HAVE BEEN ISSUED. IN MOST CASES, IT WILL ONLY OCCUR WHEN DOS IS BOOTED FROM THE FIXED DISK AND THE "FORMAT A: " IS THE FIRST OPERATION ATTEMPTED. IF ANY DISKETTE I/O COMMAND IS ISSUED PRIOR TO "FORMAT", THEN MULTIPLE DISKETTES MAY BE FORMATTED AT ONE TIME WITHOUT ERROR.

FIX:

CONTACT THE ACCOUNT WORKSTATION SYSTEM ENGINEER TO INSTALL THE DASDDRVR.SYS MODULE UPDATE. THE DASDDRVR.SYS INFORMATION IS AVAILABLE ON HONE/EQUAL ITEM #913MN.

NOTE: THE SYSTEM UPDATE DISKETTE ALSO CONTAINS DASDDRVR. THE DISKETTE CAN BE OBTAINED BY FOLLOWING THE INSTRUCTIONS IN HSF RECORD NUMBER H037906.

SAS KEYWORDS:

PSY2MISC	PSY2PROG	PSY2OPER	PSY2
D/T8580	D/T8550	D/T8560	

1.2.94 *DOUBLE UNDERLINE APPEARS AS a "SOLID" UNDERLINE*

Record number: H021699

Device: D/T8503
Model: M
Tip key: 001
Date created: 087/04/06
Date last altered: A87/06/01

THE SCREEN RESOLUTION OF THE NEW ANALOG MONITORS IS FAR SUPERIOR TO THAT OF THE EGA AND CGA (400 SCAN LINES VS 200). AS A RESULT, THE DOUBLE UNDERSCORE APPEARS TO BE A SOLID LINE (BLOCK) RATHER THAN 2 DEFINED LINES. THE PRINTER OUTPUT LOOKS NORMAL. NO CHANGES PLANNED.

SAS KEYWORDS:

PSY2	8503DISP	8512DISP	8513DISP
8514DISP	8530SYSMISC	8550SYSMISC	8550SYSMISC
8580SYSMISC	PSY2MISC	PSY2DISP	

EARLY PS/2 MACHINES MAY HAVE INCORRECT MACHINE

1.2.95 EARLY PS/2 MACHINES MAY HAVE INCORRECT MACHINE

Record number: H02789

Device: D/T8550
 Model: M
 Tip key: 203
 Date created: 087/04/20
 Date last altered: A94/08/15

EARLY LEVEL PERSONAL SYSTEMS/2 MACHINES MAY HAVE INCORRECT MACHINE TYPE ON THE LOGO / S/N LABEL, THIS MAY BE OBSERVED ON SYSTEM UNITS AND DISPLAYS. THE AFFECTED MACHINES WERE PRE-ANNOUNCE UNITS AND WILL BE FOUND IN IBM INTERNAL LOCATIONS. WHEN SERVICING THESE MACHINES, USE THE FOLLOWING TABLE TO TRANSLATE TO THE CORRECT MACHINE TYPE FOR CALL RECORDING AND MAINTENANCE DOCUMENTATION.

INCORRECT	CORRECT		
4862	8530		
4866	8550		
4867	8560		
5156	8503		
5157	8513		
5158	8512		
SAS KEYWORDS:			
PCOM	PSY2	PSY2DISP	5150SYSMISC
5160SYSMISC	5170SYSMISC	8530SYSMISC	8550SYSMISC
8560SYSMISC	8580SYSMISC	8503DISP	8512DISP
8513DISP	D/T5160	D/T8530	D/T5170
D/T5150	D/T8560	D/T8503	D/T8512
D/T8513	D/T8580		

1.2.96 EC FOR EARLY VERSION 3119 WITH 11950 ERRORS

Record number: H065334

Device: D/T3119
Model: M
Tip key: 006
Date created: 090/08/08
Date last altered: A92/05/27

EC C64049 WAS RELEASED TO CORRECT 11950 ERRORS ON EARLY SHIPPED 3119'S. IT REPLACES THE PROM ON THE ADAPTER A CARD. EARLY SHIPPED AND CURRENT ADAPTERS HAVE THE SAME FRU PART NUMBER, P/N94X2425, BUT THE EARLY SHIPPED CARDS WILL HAVE PROM P/N94X2477, P/N94X2478 OR P/N38F6285 INSTALLED. EC C64049 REPLACES THESE PROMS WITH PROM P/N94X2513. THE PROM CAN BE WRITTEN OFF USING SC33 AGAINST ECA999.

BE SURE TO CLEAN THE TOP MARKER, WHITE BAND, MIRROR, LENSE AND TABLE TOP, REPLACE THE MOTOR IF THE GEAR PIN IS BROKEN OR REPLACE THE LAMP IF THE DARK AT EITHER END, BEFORE REPLACING THE PROM. THE PROM IS MANUFACTURED IN CHARLOTTE.

SAS KEYWORDS:

D/T3119	PSY2	PSY2ADPT	8570SYSADPT
PSY2ERR	8570SYSERR		

1.2.97 EICON EC/PC ADAPTER FAILS IN 6381/SI

Record number: H124073

Device: D/T6381
Model: M
Tip key: 004
Date created: 094/05/26
Date last altered: A94/05/27

THE EICON EC/PC COMMUNICATION ADAPTER HAS AN INTERRUPT TIMING INCOMPATIBILITY WITH ALL MODELS OF PS/VALUEPOINT 6381/SI SYSTEMS. THE EICON EC/PC ADAPTER WILL FAIL TO OPERATE IN A 6381/SI SYSTEM ON INTERRUPTS 2, 4, 5, 6, OR 7,

THE ADAPTER MAY FUNCTION IF CONFIGURED TO USE IRQ3, HOWEVER, THE SERIAL PORT CONFIGURATION WILL HAVE TO BE ALTERED USING THE CONFIGURATION UTILITY TO PREVENT AN IRQ CONFLICT WITH THE EICON EC/PC ADAPTER.

EICON COMMUNICATION ADAPTERS HAVE NOT BEEN TESTED BY IBM OR BY EICON COMMUNICATION TECHNOLOGIES FOR USE IN PS/VALUEPOINT SYSTEMS.

SAS KEYWORDS:

PSVP	PSY2	PS/VP	6381
PSVPDIAG	PSY2DIAG	PSVPERR	PSY2ERR
PSVPPART	PSY2PART	VALUEPOINT	PSVPOEM
PSY2OEM	PSVPCOMM	PSY2COMM	PSVPADPT
PSY2ADPT			

1.2.98 ELECTRONIC COMPONENT FAILURES IN IBM PC PRODUCTS

Record number: H121366

Device: D/T8550
 Model: M
 Tip key: 190
 Date created: 093/09/09
 Date last altered: A95/06/27

IBM Personal Computer products are designed to meet high standards of health and safety and are tested for compliance with industry, U/L, CSA and other stringent international safety requirements. A key factor in the selection of materials to be used in IBM Personal Computer products is to be as non-flammable and non-toxic as current engineering requirements and limitations permit.

All electronic devices are subject to component failures during operation. This type of failure may produce a small puff of smoke and possibly some noise. The affected device usually becomes inoperative immediately. PS/2 system units, displays and associated attachments may also exhibit this type failure.

Occasionally, an electronic failure occurs which results in the emission of small quantities of visible smoke. Typically this smoke is of short duration as a component such as a resistor or capacitor overheats and fails. This type of failure is usually self-limiting * and little danger of fire exists. Due to careful selection of materials and circuit design, IBM products do not support sustained combustion.

The smoke and odor associated with this type event, while unpleasant, is usually of short duration and generally harmless in a properly ventilated environment in the small quantities emitted. Temporarily increasing ventilation may be useful to minimize any temporary discomfort.

IF YOU OR YOUR CUSTOMER HAVE QUESTIONS REGARDING THE CHEMICAL EMISSIONS OF IBM PRODUCTS OR SUPPLIES AND THEIR POTENTIAL TOXICITY, YOU MAY DIRECT YOUR QUESTIONS TO IBM'S CENTER FOR PROCESS AND PRODUCT TOXICOLOGY AT 1-800-745-2200, OR T/L 263-2200. THE CCPT CONTACT IS DR. BRADFORD BROOKS.

* An example of a self limiting electronic component failure is as follows:

The internal insulation in a capacitor used in a power supply fails. The resulting current surge across the plates of the capacitor cause it to heat up and rupture, with an accompanying audible "pop." The heat causes a small puff of smoke to be emitted from the top of the unit (some discoloration of the cabinet may be noticeable). The current surge causes a fuse to open, which cuts off current flow, making the unit inoperable.

SAS KEYWORDS:

PSY2	D/T8503	D/T8504	D/T8512
D/T8513	D/T8514	PSY2DISP	D/T8515
D/T8516	SMELL	D/T8511	D/T8517
D/T6312	D/T6314	D/T6317	D/T6319
D/T9515	D/T9517	D/T9518	D/T8506
D/T6324	MONITOR	D/T6325	D/T9524
D/T9525	DISPLAY	D/T8525	D/T8530
D/T8535	D/T8540	D/T8543	D/T8551
D/T8554	D/T8550	D/T8555	D/T8556
D/T8557	D/T8573	D/T9525	SCREEN
D/T8560	D/T8565	D/T8570	D/T9576
D/T8580	D/T8590	D/T8595	D/T9585
D/T9577	D/T9556	D/T9557	D/T9595
D/T9533	D/T6312	D/T6314	D/T6317
D/T6319	D/T6324	D/T6325	PSY2ADPT
D/T6384	D/T6381	D/T6382	D/T6387
D/T6492	D/T6484	D/T6494	D/T6472
D/T6482	D/T6583	D/T6581	D/T6573
D/T6571	D/T6585	D/T6575	D/T6886
D/T6885	D/T6876	D/T6875	D/T6576
D/T8640	D/T8641	D/T8642	PSVP
VALUEPOINT	VALUE	POINT	D/T9521
D/T6321	D/T9527	D/T3516	D/T3510
D/T3511			

1.2.99 EMC SHIELD FOR 9595 AND 8641 BOARDS

Record number: H131935

Device: D/T8641
Model: M
Tip key: 010
Date created: 095/11/14
Date last altered: A95/12/11

System board FRU P/N92F2623 is common to both the Server 95 (9595 and 9595A) and the Server 500 (8641).

There are 2 unique EMC shields for system board FRU P/N92F2623 and they are not interchangeable between the 9595 and 8641.

When replacing the system board, the EMC shield should be transferred from the old system board to the new one.

In the rare instance that a new bracket is required FRU P/N06H3796 is available for the Server 500 (8641).

Due to the low probability that this part will be required by servicers for the 9595, there will be no FRU available through the Mechanicsburg Distribution System.

In the event that an EMC Shield for a 9595 is required by a field servicer, the requirement should be escalated through the Field Service Support Structure for Engineering assistance.

SAS KEYWORDS:

PSY2	SERVER	PSY2PART	500
95	D/T9595	D/T8641	PSY2BRD
92F2623	06H3796		

1.2.100 EMU SAMPLE WAVE FILE FAILS IN WINDOWS95

Record number: H133196

Device: D/T6877
 Model: M
 Tip key: 013
 Date created: 096/03/25
 Date last altered: A96/03/25

When attempting to play one of the EMU Sample WAVE files with the Sound Recorder in Windows95, the system reports that the WAVE file is corrupted and cannot be opened. Other WAVE files play normally.

This failure occurs on PC 700 Series 6877 or 6887 systems with the Audio Feature installed and the Windows95 preloaded software.

To play the EMU Sample WAVE files, use the Media Player application. The EMU files were not intended to be played using the Sound Recorder.

Windows95 is a trademark of the Microsoft Corporation.

SAS KEYWORDS:

PSY2	D/T68XX	6887	6877
IBMPC	PSVP	PSY2PROG	PSVPPROG
D/T6887	PC750	PC700	PC 730
PC 750	PC730	40484	PSY2OPER
PSVPOPER	PSVPERR	PSY2ERR	

1.2.101 EPSON MX-100 AND MX-100 III PRINTERS

Record number: H032376

Device: D/T1515
Model: M
Tip key: 007
Date created: 089/02/16
Date last altered: A89/02/16

WHEN SERVICING THE EPSON MX-100 SERIES PRINTERS, PLEASE NOTE THERE IS A DIFFERENCE IN BIOS LEVELS BETWEEN THE MODEL MX-100 AND THE MODEL MX-100 (III). THE MODEL MX-100 (III) HAS AN UPGRADED BIOS LEVEL WHICH ALLOWS THIS MODEL TO PERFORM ADDITIONAL FUNCTIONS FROM THE MODEL MX-100. THEREFORE NO SUBSTITUTION SHOULD BE MADE FROM A MODEL MX-100 (III) TO A MODEL MX-100. PC LEVEL 1 SUPPORT SHOULD BE CONTACTED IF ASSISTANCE IS NEEDED TO OBTAIN A MODEL MX-100 (III) UNTIL AN IBM PART NUMBER IS RELEASED.

SAS KEYWORDS:

POEM	EPSONMX100	EPSON	MX100
5150SYSPART	5160SYSPART	8550SYSPART	PSY2PART
OEMPART	OEMPC	PS2OEM2	OEMPRT
PCOMOEM			

1.2.102 ERROR CODE 2401 WITH ZENITH 1490 MONITORS P/N11F9837

Record number: H037331

Device: D/T1517
 Model: M
 Tip key: 002
 Date created: 090/03/09
 Date last altered: A91/05/24

ERROR CODE 2401 WITH ZENITH 1490 MONITORS PN 11F9837

ERROR CODE 2401 MAY OCCUR WITH A ZENITH 1490 MONITOR PN11F9837 ATTACHED TO AN IBM PC BECAUSE OF AN INCOMPATIBILITY PROBLEM BETWEEN THE MONITOR AND THE PC. A BUILD-UP OF PARTICLES ON THE CONNECTOR PINS MAY CAUSE AN ERROR MESSAGE TO APPEAR WHEN AN IMPEDANCE CHECK IS PERFORMED BY AN IBM PC.

TO FIX THE ERROR, FIRST TRY PULLING OFF THE I/O CABLE CONNECTOR FROM THE VIDEO BOARD, AND THEN RECONNECT IT. IF THIS DOES NOT WORK, THEN USE A FREON BASED CLEANER (E-557 STONER ELECTRO KLENE, P/N8549396 ON THE CONNECTOR. ALONG WITH THE CLEANER, CANNED AIR (ULTRA JET DUST REMOVER, P/N2648326 CAN ALSO BE USED. ERROR 2401 MAY ALSO BE CAUSED BY THE PS/2 BOOTING BEFORE THE ZENITH 1490 MONITOR WARMS UP. SOME MONITORS MAY HAVE A SURGE PROTECTOR WITH A SWITCH ON IT.

FIX: TURN ON THE MONITOR FIRST ALLOWING TIME FOR THE MONITOR TO WARM UP AND THEN BOOT THE PS/2. A SOFT BOOT OF THE PS/2 WILL ALSO BYPASS THIS ERROR.

IF THESE FIXES FAIL TO CORRECT THE ERROR, THEN THE MONITOR SHOULD BE REPLACED AND THE OLD ONE RETURNED TO MECHANICSBURG FOR REPAIR. THE REPAIR VENDOR WILL MAKE THE ADDITIONAL REPAIRS NECESSARY TO FIX THIS ERROR CONDITION.

SAS KEYWORDS:

APP0SYSPART	5155SYSPART	5160SYSPART	5170SYSPART
8530SYSPART	8550SYSPART	8560SYSPART	8580SYSPART
PSY2PART	POEM	OEMPART	OEMPC
SYS2OEM	OEMDISPLAY	PCOMOEM	POEMCOLOR
OEMCOLOR	ZENITH	DISPLAY	ZENITH1490
P/N11F9837	ERROR2401	2401	

ERROR MSGCOLON. PROBLEM IN DISPLAY GROUND CIRCUIT

1.2.103 ERROR MSG&COLON. PROBLEM IN DISPLAY GROUND CIRCUIT

Record number: H032880

Device: D/T8550
 Model: M
 Tip key: 073
 Date created: 091/01/28
 Date last altered: A92/03/05

CERTAIN DOWNLEVEL VGA DIAGNOSTICS MAY DISPLAY THE FOLLOWING ERROR MESSAGE IF THE SYSTEM DISPLAY IS ATTACHED TO AN ADAPTER CARD, SUCH AS THE 8514/A ADAPTER, AND THE SYSTEM BOARD VGA DIAGNOSTICS ARE RUN:

THE SYSTEM HAS DETECTED A PROBLEM IN THE DISPLAY GROUND CIRCUIT.
 1. REPLACE THE DISPLAY
 2. RERUN THE VIDEO DIAGNOSTIC TESTS.
 3. IF THIS SCREEN APPEARS AGAIN, REPLACE THE SYSTEM BOARD.

IF THIS ERROR MESSAGE IS OBSERVED, ATTACH THE DISPLAY SIGNAL CABLE TO THE SYSTEM BOARD VGA CONNECTOR AND RE-RUN THE VGA TESTS.

THIS LEVEL OF VGA DIAGNOSTICS CAN BE IDENTIFIED BY A BYTE COUNT OF 20071 (FILE NAME: VGA.DGS), AND WAS SHIPPED ON THE FOLLOWING:

- IBM PS/2 MODELS 50/60/70/80 DIAGNOSTIC UPDATE DSKT, VER 1.01
 - IBM PS/2 MODEL 55 REFERENCE DISKETTE, VER 1.00
 THE DIAGNOSTIC UPDATE DISKETTE MAY HAVE BEEN COPIED TO ANY PS/2 REFERENCE DISKETTE.

ALL CURRENT LEVEL REFERENCE DISKETTE VGA DIAGNOSTICS HAVE BEEN CHANGED TO ALLOW SYSTEM BOARD VGA TESTING WITH THE DISPLAY ATTACHED TO AN ADAPTER CARD. SYSTEMS SHOULD ALWAYS BE TESTED WITH CURRENT LEVEL DIAGNOSTICS PRIOR TO PARTS REPLACEMENT.

SAS KEYWORDS:

PSY2	PSY2ERR	PSY2DISP	PSY2DIAG
8503DISP	8512DISP	8513DISP	8514DISP
8515DISP	8550SYSERR	8555SYSERR	8560SYSERR
8565SYSERR	8570SYSERR	8580SYSERR	8550SYSDIAG
8555SYSDIAG	8560SYSDIAG	8565SYSDIAG	8570SYSDIAG
8580SYSDIAG	8514	8515	D/T8580
D/T8560	D/T8565	D/T8515	D/T8570
D/T8503	D/T8512	D/T8513	D/T8514
D/T8580	D/T8565	D/T8560	

ERROR MSGCOLON. PROBLEM IN DISPLAY GROUND CIRCUIT

1.2.104 ERROR MSG&COLON. PROBLEM IN DISPLAY GROUND CIRCUIT

Record number: H033360

Device: D/T8514
 Model: M
 Tip key: 003
 Date created: 091/01/30
 Date last altered: A94/01/12

CERTAIN DOWNLEVEL VGA DIAGNOSTICS MAY DISPLAY THE FOLLOWING ERROR MESSAGE IF THE SYSTEM DISPLAY IS ATTACHED TO AN ADAPTER CARD, SUCH AS THE 8514/A ADAPTER, AND THE SYSTEM BOARD VGA DIAGNOSTICS ARE RUN:

THE SYSTEM HAS DETECTED A PROBLEM IN THE DISPLAY GROUND CIRCUIT.
 1. REPLACE THE DISPLAY
 2. RERUN THE VIDEO DIAGNOSTIC TESTS.
 3. IF THIS SCREEN APPEARS AGAIN, REPLACE THE SYSTEM BOARD.

IF THIS ERROR MESSAGE IS OBSERVED, ATTACH THE DISPLAY SIGNAL CABLE TO THE SYSTEM BOARD VGA CONNECTOR AND RE-RUN THE VGA TESTS.

THIS LEVEL OF VGA DIAGNOSTICS CAN BE IDENTIFIED BY A BYTE COUNT OF 20071 (FILE NAME: VGA.DGS), AND WAS SHIPPED ON THE FOLLOWING:

- IBM PS/2 MODELS 50/60/70/80 DIAGNOSTIC UPDATE DSKT, VER 1.01
 - IBM PS/2 MODEL 55 REFERENCE DISKETTE, VER 1.00
 THE DIAGNOSTIC UPDATE DISKETTE MAY HAVE BEEN COPIED TO ANY PS/2 REFERENCE DISKETTE.

ALL CURRENT LEVEL REFERENCE DISKETTE VGA DIAGNOSTICS HAVE BEEN CHANGED TO ALLOW SYSTEM BOARD VGA TESTING WITH THE DISPLAY ATTACHED TO AN ADAPTER CARD. SYSTEMS SHOULD ALWAYS BE TESTED WITH CURRENT LEVEL DIAGNOSTICS PRIOR TO PARTS REPLACEMENT.

SAS KEYWORDS:

PSY2	PSY2ERR	PSY2DISP	PSY2DIAG
8503DISP	8512DISP	8513DISP	8514DISP
8515DISP	D/T8515	8514	8515
D/T8512	D/T8513	D/T8503	

1.2.105 ERROR&COLON. MISSING OPERATING SYSTEM

Record number: H001264

Device: D/T8550
Model: M
Tip key: 071
Date created: 090/11/27
Date last altered: A92/06/09

8570, 8573, OR 8580 SYSTEMS WITH A 80386 ENHANCED MEMORY ADAPTER
INSTALLED (FRU P/N34F2825) RUNNING THE NOVELL NETWARE* OPERATING
SYSTEM MAY EXHIBIT THE ERROR MESSAGE:

"MISSING OPERATING SYSTEM (UNABLE TO BOOT FROM TRACK ZERO)".
FAILING SYSTEMS MAY REQUIRE A SOFTWARE PATCH FROM NOVELL, INC.

AFFECTED CUSTOMERS SHOULD BE ADVISED TO CONTACT NOVELL, INC. FOR
ASSISTANCE IN OBTAINING THE REQUIRED PATCH FOR THIS ERROR. HAVE
THE CUSTOMER REFER TO NOVELL TECHNICAL BULLETIN NUMBER 1-274.

* REGISTERED TRADEMARK OF NOVELL, INC.

SAS KEYWORDS:

PSY2	PSY2MEM	8570SYSTEM	8573SYSTEM
8580SYSTEM	PSY2ERR	8570SYSERR	8573SYSERR
8580SYSERR	8570SYSADPT	8573SYSADPT	8580SYSADPT
D/T8580	D/T8570	D/T8573	

1.2.106 ERRORS ACCESSING 6384 CONFIGURATION UTILITY

Record number: H007621

Device: D/T6384
 Model: M
 Tip key: 006
 Date created: 092/12/01
 Date last altered: A93/09/22

SETTING TIME/DATE, OR VIEWING CONFIGURATION UTILITY
 ON THE 6384 425SX, 433DX AND 325T* MODELS MAY
 FAIL WITH ERRONEOUS INFORMATION. ACCESSING THE
 CONFIGURATION UTILITY BY PRESSING F1 DURING POST MAY ALSO
 FAIL.

THE ERRONEOUS INFORMATION MAY BE SEEN ON EITHER THE RESIDENT
 CONFIGURATION UTILITY (F1 DURING POST) OR THE SETUP OPTION
 ON THE ADVANCED DIAGNOSTIC DISKETTE. THE INFORMATION SHOWN FOR
 THE AMOUNT OF MEMORY INSTALLED MAY BE INCORRECT OR UNREADABLE
 FOR EXAMPLE.

ACCESSING THE CONFIGURATION UTILITY MAY FAIL WHEN THE F1 KEY
 IS PRESSED DURING POST. POST WILL CONTINUE UNTIL COMPLETION
 AND BEGIN THE IPL PROCESS.
 THIS FAILURE IS LIMITED TO A SMALL NUMBER OF SYSTEM BOARDS
 THAT LEFT THE MANUFACTURING PROCESS IN A "MANUFACTURING
 DIAGNOSTIC MODE." THIS FAILURE ONLY AFFECTS FRU'S, NOT NEW
 SYSTEMS.

THE FRU PART NUMBERS AFFECTED ARE:

SYSTEM BOARD, 486SX, W/O SIMMs - FRU P/N52G8752 OR 60G9713
 SYSTEM BOARD, 486DX, W/O SIMMs - FRU P/N52G8780 OR 60G9712
 SYSTEM BOARD, 325T, W/O SIMMs - FRU P/N52G8751

FIX:

FOR SYSTEMS WITH A MOUSE:

PRESS AND HOLD BOTH MOUSE BUTTONS SIMULTANEOUSLY, AND POWER
 ON THE SYSTEM. RELEASE THE MOUSE BUTTONS WHEN THE CURSOR
 APPEARS IN THE UPPER LEFT CORNER OF THE DISPLAY OR UNTIL
 POST COMPLETES. THIS ACTIVITY WILL RESET CMOS AND MAY CAUSE
 A 162 POST ERROR. RESET DATE AND TIME USING THE CONFIGURATION
 UTILITY. ADVISE THE CUSTOMER TO VERIFY PROPER CONFIGURATION
 SETTINGS OF ANY OPTIONS THEY MAY HAVE INSTALLED.

THIS PROCEDURE MAY BE USED AT ANY TIME ON A 486 BASED 6384
 SYSTEMS, IF THE CONFIGURATION APPEARS TO HAVE BEEN CORRUPTED
 OR DIFFICULTY IS EXPERIENCED ADDING OPTIONS TO THE BASE
 SYSTEM CONFIGURATION. ADAPTERS ADDED TO THE SYSTEM WILL
 NOT BE PRESENT IN THE CONFIGURATION UTILITY SCREENS.

FOR SYSTEMS W/O A MOUSE OR IF THE MOUSE BUTTONS ARE INEFFECTIVE:

*FOR 386SLC AND 486 BASED SYSTEMS, REMOVE THE BATTERY FROM THE
 SYSTEM BOARD TO ALLOW CMOS TO DRAIN. THE AMOUNT OF TIME
 NECESSARY TO DRAIN CMOS VARIES FROM 10-15 MINUTES TO SEVERAL
 HOURS.

IF THE PROBLEM PERSISTS, UTILIZE NORMAL PROBLEM DETERMINATION
 PROCEDURES TO ISOLATE THE FAILING FRU.

SAS KEYWORDS:

PSVP	PSY2	PSY2BRD	PSY2DIAG
PSY2MISC	PSY2PART	VALUE POINT	VALUEPOINT
PSVPBRD	PSVPDIAG	PSVPMISC	PSVPPART
DRAIN	CONFIG	GARBAGE	CHARACTERS
INVALID			

1.2.107 ETHERJET DRIVER INSTALLATION FAILS IN WINDOWS95

Record number: H133200

Device: D/T6877
 Model: M
 Tip key: 016
 Date created: 096/03/25
 Date last altered: A96/03/25

IBM EtherJet device driver installation may fail on a PC 700 Series 6877 or 6887 preloaded with Microsoft Windows95.

The EtherJet device driver diskette created using the Diskette Factory application will appear to load successfully. When the system completes the driver install from the device driver diskette, Windows95 will prompt the user to insert Windows95 "Disk 2." The default path will not locate the files necessary to complete the installation process.

At this point enter the following path to enable the successful completion of the driver installation:
 C: \WINDOWS\OPTIONS\CABS

Windows95 is a trademark of the Microsoft Corporation.

SAS KEYWORDS:

PSY2	D/T68XX	6887	6877
IBMPC	PSVP	PSY2PROG	PSVPPROG
D/T6887	PC750	PC700	PC 730
PC 750	PC730	42161	PSVPCOMM
PSY2COMM	PSVPADPT	PSY2ADPT	

ETHERNET ADAPTER FAILURES, POOR PERFORMANCE

1.2.108 ETHERNET ADAPTER FAILURES, POOR PERFORMANCE

Record number: H015245

Device: D/T5150
 Model: M
 Tip key: 158
 Date created: 093/06/08
 Date last altered: A93/06/08

A PROBLEM HAS BEEN FOUND WITH THE IBM LAN ADAPTER FOR ETHERNET. THIS IS AN "ISA" (INDUSTRY STANDARD ARCHITECTURE) BUS COMPATIBLE PRODUCT. THIS PROBLEM ONLY AFFECTS CUSTOMERS WHO ARE USING THE 10BASE2 MEDIA CONNECTOR. THE OPTION PART NUMBER FOR THIS PRODUCT IS P/N48G7169. THE FRU NUMBER IS P/N48G7170.

THE PROBLEM CAN SHOW IN TWO WAYS:

1. THE CUSTOMER HAS ENABLED THE BOOT PROM.

DURING SYSTEM BOOT THE ADAPTER RUNS A POWER ON SELF TEST. (POST). IF THE ADAPTER IS DEFECTIVE THE POST TEST WILL RESULT IN THE FOLLOWING MESSAGE:

'ETHERNET ADAPTER AT IO ADDRESS 0XXXH FAILED THE PACKET-
 OUTPUT TEST, NO ADAPTERS RESPONDING."
 XXX IS THE I/O ADDRESS OF THE FAILING ADAPTER.
 e.g. 0300H, 0320H, or 0240H

NOTE:

THE CUSTOMER MUST HAVE THE 10BASE2 CONNECTOR PROPERLY ATTACHED TO AN ETHERNET NETWORK OR HAVE A T-CONNECTOR INSTALLED WITH EACH END TERMINATED.

2. THE CUSTOMER HAS NOT ENABLED THE BOOT PROM.

IF THE CUSTOMER HAS DISABLED OR REMOVED THE BOOT PROM, THE POST PROCESS DOES NOT OCCUR. THE DEFECTIVE ADAPTER WILL EXHIBIT POOR PERFORMANCE OR EXCESSIVE LOST SESSIONS. CAUSE:

DEFECTIVE ADAPTERS WERE ASSEMBLED USING AN INCORRECT COMPONENT. THE COMPONENT IS "U20" LOCATED APPROXIMATELY IN THE MIDDLE OF THE ADAPTER. THE INCORRECT COMPONENT IS MARKED WITH THE NUMBER "9210".
 *** THE NUMBER OF THE CORRECT COMPONENT IS "9120" ***

NOTE:

ADAPTERS FITTED WITH THE CORRECT COMPONENT (9120) WHICH EXHIBIT THE ABOVE SYMPTOMS ARE FAILING FOR A REASON NOT ASSOCIATED WITH THIS PROBLEM. FOR EXAMPLE, THE 10BASE2 CABLE MAY BE DEFECTIVE OR DISCONNECTED OR THE CONFIGURATION OF THE ADAPTER DOES NOT MATCH THE DESIRED MEDIA.

ACTION:

THE CUSTOMER SHOULD REPLACE THE ADAPTER THROUGH WARRANTY PROCEDURES. (FRU P/N48G7170)

SAS KEYWORDS:

PSY2	PSVP	PCOM	D/T6382
D/T6387	D/T8525	D/T5150	D/T5160
D/T5170	D/T8530	D/T8535	D/T8540
D/T5162	D/T5155	PSY2COMM	PSY2ADPT
PSY2ERR	PCOMCOMM	PCOMERR	PCOMADPT
PSVPERR	PSVPCOMM	PSVPADPT	INSTALL

ETHERNET ADAPTER FAILURES, POOR PERFORMANCE

1.2.109 ETHERNET ADAPTER FAILURES, POOR PERFORMANCE

Record number: H12325

Device: D/T6384
 Model: M
 Tip key: 031
 Date created: 093/06/10
 Date last altered: A93/06/10

A PROBLEM HAS BEEN FOUND WITH THE IBM LAN ADAPTER FOR ETHERNET. THIS IS AN "ISA" (INDUSTRY STANDARD ARCHITECTURE) BUS COMPATIBLE PRODUCT. THIS PROBLEM ONLY AFFECTS CUSTOMERS WHO ARE USING THE 10BASE2 MEDIA CONNECTOR. THE OPTION PART NUMBER FOR THIS PRODUCT IS P/N48G7169. THE FRU NUMBER IS P/N48G7170.

THE PROBLEM CAN SHOW IN TWO WAYS:

1. THE CUSTOMER HAS ENABLED THE BOOT PROM.

DURING SYSTEM BOOT THE ADAPTER RUNS A POWER ON SELF TEST. (POST). IF THE ADAPTER IS DEFECTIVE THE POST TEST WILL RESULT IN THE FOLLOWING MESSAGE:

'ETHERNET ADAPTER AT IO ADDRESS 0XXXH FAILED THE PACKET-
 OUTPUT TEST, NO ADAPTERS RESPONDING."
 XXX IS THE I/O ADDRESS OF THE FAILING ADAPTER.
 e.g. 0300H, 0320H, or 0240H

NOTE:

THE CUSTOMER MUST HAVE THE 10BASE2 CONNECTOR PROPERLY ATTACHED TO AN ETHERNET NETWORK OR HAVE A T-CONNECTOR INSTALLED WITH EACH END TERMINATED.

2. THE CUSTOMER HAS NOT ENABLED THE BOOT PROM.

IF THE CUSTOMER HAS DISABLED OR REMOVED THE BOOT PROM, THE POST PROCESS DOES NOT OCCUR. THE DEFECTIVE ADAPTER WILL EXHIBIT POOR PERFORMANCE OR EXCESSIVE LOST SESSIONS. CAUSE:

DEFECTIVE ADAPTERS WERE ASSEMBLED USING AN INCORRECT COMPONENT. THE COMPONENT IS "U20" LOCATED APPROXIMATELY IN THE MIDDLE OF THE ADAPTER. THE INCORRECT COMPONENT IS MARKED WITH THE NUMBER "9210".

*** THE NUMBER OF THE CORRECT COMPONENT IS "9120" ***

ACTION:

ADAPTERS WITH COMPONENT NUMBER "9210" SHOULD BE REPLACED USING NORMAL WARRANTY PROCEDURES. (FRU P/N48G7170)

NOTE:

ADAPTERS FITTED WITH THE CORRECT COMPONENT (9120) WHICH EXHIBIT THE ABOVE SYMPTOMS ARE FAILING FOR A REASON NOT ASSOCIATED WITH THIS PROBLEM. FOR EXAMPLE, THE 10BASE2 CABLE MAY BE DEFECTIVE OR DISCONNECTED OR THE CONFIGURATION OF THE ADAPTER DOES NOT MATCH THE DESIRED MEDIA.

SAS KEYWORDS:

PSY2	PSVP	PCOM	D/T6382
D/T6387	D/T8525	D/T5150	D/T5160
D/T5170	D/T8530	D/T8535	D/T8540
D/T5162	D/T5155	PSY2COMM	PSY2ADPT
PSY2ERR	PCOMCOMM	PCOMERR	PCOMADPT
PSVPERR	PSVPCOMM	PSVPADPT	INSTALL

ETHERNET CABLE PROBLEM DETERMINATION

1.2.110 ETHERNET CABLE PROBLEM DETERMINATION

Record number: H022221

Device: D/T8555
 Model: M
 Tip key: 023
 Date created: 091/09/03
 Date last altered: A93/01/15

ONE METHOD TO TRACK DOWN ETHERNET BNC CABLING PROBLEMS IS TO MEASURE RESISTANCE BETWEEN THE CENTER NODE AND THE OUTER SHELL OF THE T-CONNECTOR.

THE RESISTANCE OF A PROPERLY TERMINATED NETWORK SHOULD READ 25 OHMS (+/- 2 OHMS). THE ETHERNET BNC TRANSCEIVER IS TUNED TO OPERATE INTO THIS RESISTANCE; ANYTHING HIGHER OR LOWER WILL RESULT IN THE WORKSTATION NOT BEING ABLE TO CONNECT TO THE SERVER AND ADAPTER DIAGNOSTICS FAILING WITH A 06421 ERROR.



WHEN THE ADAPTER LEVEL II DIAGNOSTICS ARE RUN AND THE ADAPTER RETURNS ERROR CODE 06421 WHEN CONNECTED TO THE LAN, ONE OF THE FOLLOWING PROBLEMS MAY EXIST:

- INCORRECT VALUE OF TERMINATOR. ONLY 50 OHM TERMINATORS SHOULD BE USED. 74 OHM TERMINATORS WILL NOT WORK.
- OPEN CONNECTION OR BAD T-CONNECTOR SOMEWHERE ON NETWORK.
- INCORRECT CABLE. CABLE SHOULD BE IEEE 802.3 NETWORK CABLE OR HIGH QUALITY RG-58 A/U TYPE.

SAS KEYWORDS:

PSY2	PSY2COMM	PSY2ADPT	PSY2ERR
8550SYSCOMM	8550SYSADPT	8550SYSERR	8555SYSADPT
8555SYSCOMM	8555SYSERR	LAN	D/T8555
D/T8557	D/T8560	D/T8525	D/T8530
D/T8535	D/T8540	D/T8565	D/T8570
D/T8573	D/T8580	D/T8590	D/T8595

EXCESSIVE BAD SECTORS CRC CHECKS AFTER INSTALLATION

1.2.111 EXCESSIVE BAD SECTORS & CRC CHECKS AFTER INSTALLATION

Record number: H064242

Device: D/T6885
 Model: M
 Tip key: 009
 Date created: 096/09/26
 Date last altered: A96/09/26

IBM PC 300 & 700 Series and PS/ValuePoint systems may exhibit an excessive amount of bad sectors or CRC checks/errors when the IDE or SCSI hardfile is examined by CHKDSK or other disk utilities shortly following installation of the system.

A large percentage of these errors are caused by the mishandling of the system during transportation, installation, or operational damage. Any capacity, type (IDE or SCSI), or brand of hardfile may exhibit this type of failure symptom.

Drives exhibiting this failure symptom should be tested with the systems diagnostic package to verify the failure, then replaced.

SAS KEYWORDS:

PSY2FDSK	PSVPFDSK	PSY2ERR	PSVPERR
IBMPC	PSVP	PSY2	D/T6589
D/T6381	D/T6382	D/T6384	D/T6387
D/T6472	D/T6482	D/T6484	D/T6492
D/T6494	D/T6571	D/T6573	D/T6581
D/T6583	D/T6575	D/T6585	D/T6576
D/T6586	D/T6875	D/T6885	D/T6876
D/T6886	D/T6877	D/T6887	PC 360
D/T6598	D/T6560	D/T6577	D/T6587
PC750	PC730	PC300	PC330
PC350	D/T6260	PC 340	PC 365

PSY2 RETAIN TIPS
EXTERNAL AC ADAPTER RECALL

1.2.112 EXTERNAL AC ADAPTER RECALL

Record number: H126073

Device: D/T9545
 Model: M
 Tip key: 029
 Date created: 095/01/20
 Date last altered: A95/11/30

Manufacturing testing has found that a limited number of 40 watt AC Adapters, FRU P/N49G2196, may malfunction.

In keeping with strict IBM quality procedures, IBM is issuing a recall of these AC adapters which, in remote cases, may pose a potential exposure to electrical shock if they are being used in un-grounded receptacles. This shock potential could be conducted to the ThinkPad computer through the AC Adapter grounding conductor therefore requiring that ALL affected adapters be replaced.

Customers with AC Adapters that meet all 3 following criteria should contact IBM at 1-800-426-7261.

Description: External AC-adapter (100-240 V AC, 40 Watt)

1. Part numbers: P/N49G2192 FRU P/N49G2196

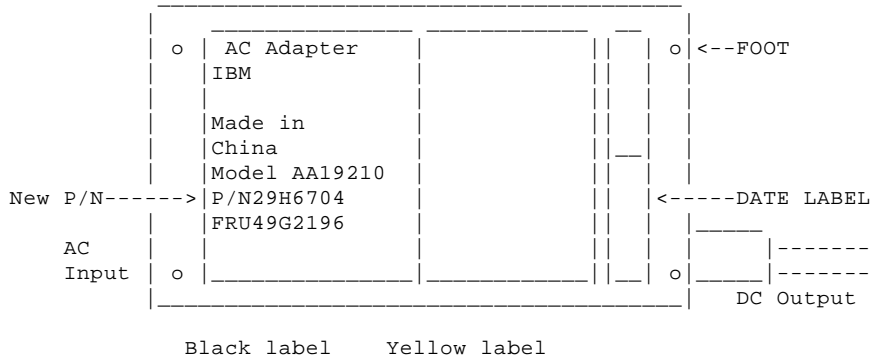
2. Model number: AA19210

3. Date code: 9452 or lower

AC Adapter physical description:

The following line drawing shows an AC Adapter with a black and yellow label on the bottom of the unit. (The bottom has the rubber feet.) NOTE: The date label is located to the right of the yellow portion of the label and the IBM TEST LABEL that indicates a corrected AC Adapter is located to the right of the bar code label.

!!!! AC ADAPTERS WITH NEW P/N29H6704 ARE NOT AFFECTED !!!!



NOTE: AC Adapters FRU P/N49G2196 that have a black label on the top and yellow label on the bottom are not affected. These units do not have a date code on them.

Affected AC-Adapters have shipped with the following system models in the US and Canada, but do not make up the majority of AC-Adapters shipped with these systems:

ThinkPad 9545 755C:

- Models F0E
- L0E
- L9E
- F0G
- L0G
- FYC
- FYE
- LYE
- LYG
- LCE

ThinkPad 2620 360Cs

Model 20F

ThinkPad 9545 755CE:

- Model 7BC
- 7BD
- 7BE
- 7PC

PSY2 RETAIN TIPS
EXTERNAL AC ADAPTER RECALL

ThinkPad 9545 755CD
Model 9BE

Although the affected AC-Adapters were shipped with some of the above systems, it is possible for customers to be using them on ANY 9552, 9545, 2620 or 2619 system.

FRU stock must not be used as replacement parts for this program. If your customer has one of the suspected AC-Adapters please have them call 1-800-238-1967 for further assistance and AC-Adapter shipping information. CEs and Dealers should contact their normal areas of support if further information is needed.

Note: FRU stock is not affected by this recall and is to be used for routine service replacements.

SAS KEYWORDS:

PSY2	PSY2PWR	SAFETY	D/T9552
D/T2620	D/T2619	DISCHARGE	GROUND

1.2.113 EXTERNAL CABLES / SWITCHING DEVICES

Record number: H095349

Device: D/T8550
 Model: M
 Tip key: 088
 Date created: 091/07/10
 Date last altered: A97/10/23

CABLE TYPES AND LENGTHS:

ONLY IBM MANUFACTURED CABLES IN THE LENGTHS SUPPLIED BY IBM, ARE TESTED AND SUPPORTED ON PS/2 SYSTEMS. THE PERFORMANCE OF NON-IBM AND LOCALLY FABRICATED CABLES AND SWITCHING DEVICES ARE THE CUSTOMER'S/SUPPLIER'S RESPONSIBILITY.

THE USE OF NON-IBM MANUFACTURED CABLES AND/OR SWITCHING DEVICES ATTACHED TO DISPLAY, SERIAL, PARALLEL, KEYBOARD AND MOUSE PORTS, MAY CAUSE UNPREDICTABLE AND DIFFICULT TO DIAGNOSE SYSTEM PROBLEMS. THIS CAN BE CAUSED BY FACTORS ASSOCIATED WITH DATA SIGNALS (SUCH AS CABLE IMPEDANCE AND REACTANCE*) WHICH CAN NOT BE MEASURED WITHOUT SPECIAL TEST EQUIPMENT.

A SIMPLE DC (DIRECT CURRENT) RESISTANCE CHECK, NORMALLY DONE BY A VOLT-OHM METER, IS INSUFFICIENT TO DETERMINE THAT A CABLE OR DEVICE WILL FUNCTION CORRECTLY DURING SYSTEM OPERATION.

EXTENDED LENGTH AND/OR IMPROPERLY SHIELDED CABLES OR SWITCHING DEVICES MAY ALSO RADIATE SIGNALS BEYOND ACCEPTABLE FCC (FEDERAL COMMUNICATION COMMISSION) CLASS B STANDARDS. THIS MAY CAUSE INTERFERENCE PROBLEMS WITH OTHER NON-ASSOCIATED ELECTRICAL EQUIPMENT.

* EXCESSIVE REACTANCE AND IMPEDANCE CAUSES DEGRADATION OF SIGNAL QUALITY.

SAS KEYWORDS:

PSY2	PSY2ADPT	PSY2OEM	VALUEPOINT
D/T8525	D/T8530	D/T8535	D/T8540
D/T8543	D/T8551	D/T8554	D/T8550
D/T8555	D/T8556	D/T8557	D/T8573
D/T8560	D/T8565	D/T8570	D/T9576
D/T8580	D/T8590	D/T8595	D/T9585
D/T9577	D/T9556	D/T9557	D/T9595
D/T9577I	D/T9577S	D/T9576I	D/T9577S
D/T9590	D/T9595A	D/T8641	D/T8642
D/T9533	D/T8640	D/T8590	D/T8595
D/T6384	D/T6381	D/T6382	D/T6387
D/T6492	D/T6484	D/T6494	D/T6472
D/T6482	D/T6583	D/T6581	D/T6573
D/T6571	D/T6585	D/T6575	D/T6886
D/T6885	D/T6876	D/T6875	D/T6576
D/T6586	SIGNAL	SWITCHER	BLACK
BOX	VP	VALUE	POINT
PSVP	MOBILE	PSVP	THINKPAD
PERSONAL	COMPUTER	SWITCH	

EXTERNAL SCSI DEVICE TERMINATOR MAY CAUSE HANG

1.2.114 EXTERNAL SCSI DEVICE TERMINATOR MAY CAUSE HANG

Record number: H12395

Device: D/T8550
 Model: M
 Tip key: 182
 Date created: 093/06/08
 Date last altered: A93/06/17

A REPLACEMENT 50 PIN TERMINATOR USED ON ALL (IBM & OEM) EXTERNAL SCSI DEVICES, SUCH AS CD-ROM, IS AVAILABLE. THIS TERMINATOR MAY PREVENT A HANG CONDITION.

TO DETERMINE IF A REPLACEMENT IS REQUIRED, INSPECT THE IBM EXTERNAL 50 PIN SCSI DEVICE TERMINATOR FOR A FRU PART NUMBER. ONLY 50 PIN IBM TERMINATORS WITHOUT A NEW FRU NUMBER OF P/N92F0057 MAY BE SUBJECT TO THIS HANG SITUATION.

THE OLD TERMINATOR, FRU P/N34F0016, WAS NOT IDENTIFIED WITH AN IMPRINTED FRU PART NUMBER.

 DO NOT CONFUSE THE ABOVE TERMINATOR WITH THE 60 PIN EXTERNAL SCSI "ADAPTER" TERMINATOR, FRU P/N33F8464 WHICH HAS AN IMPRINT OF PART NUMBER 15F6743. THIS TERMINATOR IS REQUIRED ON OLDER SCSI ADAPTERS WITH CACHE THAT DO NOT HAVE EXTERNAL SCSI DEVICES ATTACHED.

SAS KEYWORDS:

PSY2	PSY2MISC	D/T8555	D/T8556
D/T8557	D/T8573	D/T8560	D/T8565
D/T8570	D/T9576	D/T8580	D/T8590
D/T8595	D/T9585	D/T9577	D/T9556
D/T9557	D/T9595	CDROM	CD-ROM

1.2.115 FALSE COM 2 ERRORS USING QAPLUS/WIN-WIN V1.15

Record number: H134039

Device: D/T6589
Model: M
Tip key: 003
Date created: 096/09/18
Date last altered: A96/09/18

IBM PC 365 Series 6589 systems contain one standard serial port, and one infrared (IR) port.

When the QAPlus/WIN-WIN COM port tests are selected, two COM ports are displayed. The COM 2 selection is the IR port. Version 1.15 of QAPlus/WIN-WIN is not capable of properly detecting and testing the IR port. When the test is performed, QAPlus/WIN-WIN reports that COM 2 tests have failed.

Disregard any error messages displayed indicating a failed test on COM 2. QAPlus/PRO (IBM PC 300/700 Diagnostic diskette) should be used to verify proper operation of the serial port.

An updated version of QAPlus/WIN-WIN, which will eliminate the false reporting of COM ports and COM port errors will be placed on the IBM PC Company BBS during September 1996.

QAPlus/WIN-WIN is a trademark of DiagSoft, Inc.

SAS KEYWORDS:

PSY2	PSVP	IBMPC	PSVPPROG
PSY2PROG	PSVPDIAG	PSY2DIAG	PSY2ERR
PSVPERR	50694	PC365	

1.2.116 FALSE DIAGNOSTIC ERRORS ON ARTIC X.25 W/EXTERNAL 3363 DISK

Record number: H096084

Device: D/T8550
Model: M
Tip key: 105
Date created: 090/08/21
Date last altered: A91/11/08

WHEN RUNNING ARTIC X.25/2 ADAPTER ADVANCED DIAGNOSTICS, ERROR CODE 0046203000EF MAY APPEAR WHEN A 6157 STREAMING TAPE DRIVE AND A 3363 OPTICAL DISK DRIVE ARE ATTACHED AND POWERED-ON, PRIOR TO TURNING THE SYSTEM UNIT ON.

THE ERROR CODE POSTED IS ERRONEOUS, AND THE CONDITIONS CAUSING THIS SITUATION ARE ELIMINATED BY POWERING-DOWN EITHER THE 3363 EXTERNAL OPTICAL DRIVE OR THE EXTERNAL 6157 STREAMING TAPE DRIVE PRIOR TO POWERING-ON THE SYSTEM UNIT.

THE FAILING CONFIGURATION IS:

85XX SYSTEM UNIT WITH:
AN EXTERNAL 6157 STREAMING TAPE DRIVE ATTACHED.
AN EXTERNAL 3363 OPTICAL DISK DRIVE ATTACHED.
AN ARTIC X.25/2 ADAPTER INSTALLED.

THE FAILING CONDITIONS ARE AS FOLLOWS:

THE EXTERNAL 3363 AND 6157 ARE POWERED-ON PRIOR TO THE 85XX.
THE ADVANCED DIAGNOSTICS ARE IMMEDIATELY RUN ON THE ARTIC X.25/2 ADAPTER.

POWERING EITHER EXTERNAL DEVICE OFF PRIOR TO POWER-ON OF THE 85XX OR A WARM-BOOT (CTL-ALT-DEL) ELIMINATES THE CONDITIONS WHICH CAUSE THE FALSE ERROR. IF OTHER ADVANCED DIAGNOSTICS ARE RUN PRIOR TO THE ARTIC X.25/2 DIAGNOSTIC, THE CONDITIONS WILL ALSO BE RESET.

NO HARDWARE SHOULD BE REPLACED OR SWAPPED FOR THIS SITUATION.

IN THE NEXT RELEASE OF THE REFERENCE DISKETTE.

SAS KEYWORDS:

PSY2 PSY2DIAG 85XX

FALSE F030 ERROR ON ARTIC MULTIPORT MODEL/2 AND PORTMASTER.

1.2.117 FALSE F030 ERROR ON ARTIC MULTIPORT MODEL/2 AND PORTMASTER.

Record number: H037507

Device:	D/T7538	Date created:	090/01/19
Model:	M	Date last altered:	A95/04/03
Diagnostic ID:	DIAGF030	Owning B.U.:	USA
Tip key:	007		

Additional diagnostic IDs and online tests:

A FALSE F030 ERROR MAY OCCUR WHEN RUNNING ADVANCED DIAGNOSTICS ON THE ARTIC PORTMASTER ADAPTER/A OR THE ARTIC MULTIPORT ADAPTER, MODEL 2. ENSURE THAT YOU ARE USING VERSION 1.42 OR LATER WHEN TESTING THE PORTMASTER ADAPTER/A AND VERSION 1.52 OR LATER WHEN TESTING THE MULTIPORT ADAPTER, MODEL 2.

SAS KEYWORDS:

8550SYSDIAG	8550SYSERR	8550SYSADPT	8560SYSDIAG
8560SYSERR	8560SYSADPT	8570SYSDIAG	8570SYSERR
8570SYSADPT	8580SYSERR	8580SYSDIAG	8580SYSADPT
8525SYSDIAG	8525SYSERR	8525SYSADPT	8530SYSDIAG
8530SYSERR	8530SYSADPT	PCOMM	PSY2COMM

1.2.118 FALSE LEVEL 2 CACHE ERROR WITH QAPLUS/PRO

Record number: H085826

Device: D/T6887
 Model: M
 Tip key: 004
 Date created: 096/09/20
 Date last altered: A96/09/20

The level 2 cache test in QAPlus/Pro version 5.43 and lower may indicate a level 2 cache test failure when the cache is tested in loop mode with Advanced Power Management (APM) enabled. This failure occurs on IBM PC 700 Series 6877 or 6887 with EDO (Enhanced Data Output) memory SIMMs and a 133Mhz or 166Mhz Pentium Processor in stalled. The cache size may be either 256Kb or 512Kb.

When the level 2 external cache is tested in loop mode with a setting of 112 or higher, a test failure may be indicated at the end of the 112th loop of the test. Disabling APM allows the test to run properly to completion.

This is a false indication. The external level 2 cache should NOT be replaced. This problem will be resolved in future revisions of QAPlus/Pro.

QAPlus/Pro is a trademark of DiagSoft, Inc.

SAS KEYWORDS:

PSY2	D/T68XX	D/T6887	6887
6877	PC 750	PC700	PC750
68XX	IBMPC	PSVP	PC730
PC 730	PSVPERR	PSY2ERR	L2
PSY2DIAG	PSVPDIAG		

1.2.119 FALSE LEVEL 2 CACHE ERROR WITH QAPLUS/PRO 5.32

Record number: H132876

Device: D/T6887
 Model: M
 Tip key: 001
 Date created: 096/03/04
 Date last altered: A96/09/20

The level 2 cache test in QAPlus/Pro version 5.32 may indicate a failure in an IBM PC 700 Series 6877 or 6887 with EDO (Enhanced Data Output) memory SIMMs and a 133Mhz or 166Mhz Pentium Processor in stalled. The cache size may be either 256Kb or 512Kb.

This is a false indication. The external level 2 cache should NOT be replaced.

This problem will be resolved in QAPlus/Pro version 5.42 which will be available from the IBM PC Company BBS during March 1996.

QAPlus/Pro is a trademark of DiagSoft, Inc.

SAS KEYWORDS:

PSY2	D/T68XX	D/T6877	6887
6877	PC 750	PC700	PC750
68XX	IBMPC	PSVP	PC730
PC 730	PSVPERR	PSY2ERR	41525
PSVPDIAG	PSY2DIAG		

FALSE SCSI ERROR GENERATED WHILE TESTING THE CDROM

1.2.120 FALSE SCSI ERROR GENERATED WHILE TESTING THE CDROM

Record number: H093374

Device: D/T3510
 Model: M
 Tip key: 004
 Date created: 091/09/17
 Date last altered: A92/06/09

A FALSE SCSI ERROR MAY BE GENERATED WHEN RUNNING CUSTOMER OR ADVANCED LEVEL HARDWARE DIAGNOSTICS ON THE CD-ROM DRIVE WHEN CONNECTED TO AN 8557 or 8556 PS/2.

THE FOLLOWING ERROR MESSAGE IS DISPLAYED:

```
"SLOT= 0 1 CDROM DEVICE
ERROR CODE 02150000
A SCSI ADAPTER COULD NOT BE DETECTED
RUN SCSI ADAPTER DIAGNOSTICS"
```

THE 215 ERROR INDICATES THAT DIAGNOSTICS CANNOT FIND A SCSI ADAPTER. THE ERROR IS CREATED BECAUSE THE SCSI ADAPTER HARDWARE IS INTEGRATED ON THE 8557 SYSTEM BOARD AND HARDWARE DIAGNOSTICS EXPECT THE SCSI ADAPTER TO BE IN A MICRO CHANNEL SLOT AS IN OTHER PS/2 SYSTEMS.

IF THE 215 ERROR OCCURS AND THE USER HAS NOT EXPERIENCED ANY SCSI OR CD-ROM ERRORS, THEN THIS DIAGNOSTIC ERROR SHOULD BE CONSIDERED FALSE. IF ANY OTHER ERRORS OCCUR, THEY SHOULD BE TREATED AS VALID AND NORMAL PROBLEM DETERMINATION MUST BE PERFORMED.

THE FALSE ERROR INDICATION FOR SCSI AND THE CD-ROM DRIVE WILL BE CORRECTED IN THE NEXT RELEASE OF THE CD-ROM DIAGNOSTICS.

SAS KEYWORDS:

PSY2	PSY2ADPT	PSY2DIAG	PSY2ERR
8557SYSERR	8557SYSADPT	8557SYSDIAG	3510SYSERR
D/T8557	3510SYSADPT	3510SYSDIAG	PSY2CDROM
D/T8556			

1.2.121 FALSE SCSI ERRORS AND OS/2 TRAP 000E ERRORS

Record number: H036627

Device: D/T8590
 Model: M
 Tip key: 014
 Date created: 092/04/20
 Date last altered: A92/05/22

ON 8590 AND 8595 SYSTEMS WITH 25MHZ 486SX PROCESSORS
 INSTALLED, TWO KNOWN ERROR CONDITIONS MAY OCCUR WITH
 THE FOLLOWING CONFIGURATION:

- A. 486SX-25MHZ PROCESSOR CARD (FRU P/N92F0079, SUBMODEL
 CODES 57 AND 59 ON 8590; 58 AND 5A ON 8595) *
- B. 16 BIT SCSI ADAPTER WITHOUT CACHE (FRU P/N85F0002)
 (THE STANDARD CONFIGURATION IS WITH A 32-BIT CACHED
 SCSI ADAPTER.)
- C. GREATER THAN 16MB OF SYSTEM MEMORY INSTALLED.
- D. REFERENCE DISKETTE (TYPE 2) LATER THAN VERSION 1.00.

* NOTE: 25MHZ 486DX PROCESSOR MODELS (SUBMODEL CODES 11, 14,
 FRU P/N64F0201) ARE NOT AFFECTED WITH THE FOLLOWING
 LIMITATION.

FALSE SCSI DIAGNOSTIC ERRORS MAY BE EXPERIENCED WHEN RUNNING
 DIAGNOSTICS WITH REFERENCE DISKETTE (SYSTEM PARTITION)
 VERSION LATER THAN 1.00 (TYPE 2 DISKETTE). DEPRESS THE
 F1 KEY TO BYPASS THE FALSE ERROR (011270X3) IF YOU DESIRE TO
 CONTINUE. (NOTE: X = MICRO CHANNEL SLOT IN WHICH THE
 THE SCSI ADAPTER IS INSTALLED.)

TRAP ERROR 000E (PAGE FAULT) MAY ALSO BE EXPERIENCED WITH THIS
 CONFIGURATION WHEN RUNNING OS/2 VERSION 2.00. THIS SYMPTOM
 CANNOT BE BYPASSED WITH THE ABOVE CONFIGURATION.

REMOVAL OF SYSTEM MEMORY ABOVE 16MHZ, OR REMOVAL OF THE NON-
 CACHED SCSI ADAPTER WILL PERMIT NORMAL OPERATION.

THE STANDARD CONFIGURATION FOR 8590 AND 8595 SYSTEMS INCLUDES
 A CACHED 32 - BIT SCSI ADAPTER, WHICH DOES NOT EXHIBIT THIS
 LIMITATION.

THE LIMITATION WITH THE 16-BIT NON-CACHED SCSI ADAPTER WAS
 STATED IN IVORY LETTER # 191194, DATED 10/17/91, AT THE
 TIME OF GENERAL AVAILABILITY OF THE 8590 AND 8595 SYSTEMS,
 THEREFORE NO FURTHER ACTION IS PLANNED.

SAS KEYWORDS:

PSY2	PSY2ERR	PSY2ADPT	8590SYSERR
8595SYSERR	8590SYSADPT	8595SYSADPT	D/T8595
PS2	PS/2		

1.2.122 FALSE W804 STORE CONTROLLER COMMUNICATION ERRORS

Record number: H036818

Device: D/T8550
 Model: M
 Tip key: 051
 Date created: 090/03/29
 Date last altered: A92/04/03

SUBJECT: FALSE HARDWARE FAULT ON MPCA CARD

A SOFTWARE PROBLEM IN THE 4680 OPERATING SYSTEM CAUSES ERRONEOUS LOGGING OF W804 MESSAGES WITH B1/S015/E002. THIS INDICATES A HARDWARE FAULT IN THE MPCA CARD IMPROPERLY.

THIS PROBLEM IS RESOLVED BY APAR IR88131. THIS APAR WAS SHIPPED ON CORRECTIVE DISKETTE 9001 (CD 3) OF THE 4680 OPERATING SYSTEM FOR VERSION 2 RELEASE 1. THE PTF NUMBER FOR THIS CORRECTIVE DISKETTE IS UR29511.

IF A CUSTOMER IS SEEING THIS ERROR LOGGED ON A PS/2 MACHINE, YOU SHOULD FIRST DETERMINE WHETHER OR NOT APAR IR88131 IS INSTALLED ON THE STORE CONTROLLER. IF IT IS ALREADY INSTALLED, YOU SHOULD PURSUE THE PROBLEM AS A HARDWARE FAULT.

IF YOU FOLLOW THE "REQUESTING A MODULE LEVEL REPORT" PROCEDURE IN APPENDIX A OF THE 4680 STORE SYSTEM MESSAGES GUIDE (SC30-3521) YOU WILL BE ABLE TO GET A REPORT OF THE APAR LEVEL OF THE SOFTWARE MODULES IN THAT CONTROLLER. REFER TO REPORT EXAMPLES IN APPENDIX B FOR EXPLANATION.

IF APAR IR88131 IS NOT INSTALLED, YOU SHOULD CONSIDER THIS FACT WHEN DOING PROBLEM DETERMINATION. IF THE DIAGNOSTICS FAIL, THEN THE PROBLEM WILL NOT BE FIXED BY IR88131. IF THE DIAGNOSTICS DO NOT FAIL, YOU SHOULD INSTALL IR88131 BEFORE PROCEEDING FURTHER WITH PD.

SAS KEYWORDS:

PSY2	PSY2COMM	PSY2ADPT	PSY2PROG
4680SYSCOMM	4860SYSADPT	4680SYSPROG	PSY2ERR
4680SYSERR	8550SYSERR	8560SYSERR	8570SYSERR
8550SYSCOMM	8550SYSADPT	8570SYSPROG	8550SYSPROG
8560SYSCOMM	8560SYSADPT	8580SYSERR	8560SYSPROG
8570SYSCOMM	8570SYSADPT	8580SYSPROG	8555SYSERR
8555SYSCOMM	8580SYSCOMM	8555SYSPROG	8555SYSADPT
8565SYSCOMM	8565SYSERR	8565SYSPROG	8565SYSADPT
8555SYSADPT	D/T8550	D/T8555	D/T8556
D/T8557	D/T8560	D/T8565	D/T8570
D/T8573	D/T8580	D/T8590	D/T8595

1.2.123 FALSE 102XX ERROR WITH THE 4250 PRINT ADAPTER/A

Record number: H024103

Device: D/T8550
 Model: M
 Tip key: 029
 Date created: 088/09/26
 Date last altered: A91/09/03

A PERSONAL SYSTEM/2 MODEL 50,55,60,65,70,73 & 80 WITH 4250 PRINT ADAPTER/A INSTALLED MAY GIVE A FALSE 4250 PRINT ADAPTER/A ERROR (102XX) DURING CUSTOMER OR ADVANCED DIAGNOSTICS.

ISOLATION AID: THE FALSE ERROR CAN OCCUR IF THE SYSTEM DIAGNOSTICS ARE RUN MULTIPLE TIMES (LOOPED) WITH THE 4250 PRINT ADAPTER/A INCLUDED IN THE TESTS. THIS ERROR MAY ALSO OCCUR IF THE 4250 PRINT ADAPTER/A ADVANCED DIAGNOSTICS ARE RUN IMMEDIATELY FOLLOWING ADVANCED DIAGNOSTICS ON THE SYSTEM BOARD. ALL OTHER ERRORS SHOULD BE CONSIDERED VALID.

FIX: WHEN EXPERIENCING THE DESCRIBED SYMPTOMS, THE FOLLOWING PROCEDURE SHOULD BE USED FOR PROBLEM DETERMINATION:

USING ADVANCED DIAGNOSTICS, SELECT THE 4250 PRINT ADAPTER/A FROM THE "DEVICE TEST MENU". ANY ERROR YOU RECEIVE WHEN YOU TEST THE 4250 PRINT ADAPTER/A BY ITSELF SHOULD BE CONSIDERED VALID.

THIS PROBLEM WILL BE CORRECTED WITH THE VERSION 1.1 4250 PRINT ADAPTER/A OPTION DISKETTE.

SAS KEYWORDS:

PSY2	PSY2DIAG	8550SYSDIAG	8560SYSDIAG
8570SYSDIAG	8580SYSDIAG	PSY2ERR	8550SYSERR
8560SYSERR	8570SYSERR	8580SYSERR	PSY2ADPT
8550SYSADPT	8560SYSADPT	8570SYSADPT	8580SYSADPT
PSY2PRT	8555SYSDIAG	8555SYSERR	8555SYSADPT
8565SYSERR	8565SYSADPT	8565SYSDIAG	8570SYSDIAG
8570SYSERR	8570SYSADPT	8573SYSADPT	8573SYSERR
8573SYSDIAG	D/T8555	D/T8560	D/T8565
D/T8570	D/T8573	D/T8580	

1.2.124 FALSE 301 ERRORS WHEN RUNNING DIAGNOSTICS

Record number: H034941

Device: D/T8555
Model: M
Tip key: 002
Date created: 089/05/01
Date last altered: A92/05/11

FALSE 301 ERRORS MAY BE EXPERIENCED WHEN RUNNING CUSTOMER OR ADVANCED LEVEL DIAGNOSTICS USING THE IBM PERSONAL SYSTEM/2 MODEL 55 REFERENCE DISKETTE VERSION 1.00.

THESE FALSE 301 ERRORS WILL BE INTERMITTENT AND ONLY OCCUR WHILE RUNNING DIAGNOSTICS. IF THIS INTERMITTENT 301 ERROR OCCURS AND THE USER HAS NOT REPORTED ANY KEYBOARD PROBLEMS, THEN THE 301 DIAGNOSTIC ERRORS SHOULD BE CONSIDERED FALSE. ANY 301 POST ERROR SHOULD BE CONSIDERED VALID.

FIX: THIS FALSE DIAGNOSTIC ERROR WAS CORRECTED IN VERSION 1.03 (AND ABOVE) OF THE MODEL 55/65 REFERENCE DISKETTE.

SAS KEYWORDS:

PSY2	8555SYSDIAG	8555SYSERR	PSY2ERR
PSY2DIAG	8555SYSKBD	PSY2KBD	

1.2.125 FALSE 301 ERRORS WHEN RUNNING DIAGNOSTICS

Record number: H125282

Device: D/T8555
Model: M
Tip key: 026
Date created: 093/03/15
Date last altered: A93/03/15

FALSE 301 ERRORS MAY BE EXPERIENCED WHEN RUNNING CUSTOMER OR ADVANCED LEVEL DIAGNOSTICS USING THE IBM PERSONAL SYSTEM/2 MODEL 55 REFERENCE DISKETTE VERSION 1.00.

THESE FALSE 301 ERRORS WILL BE INTERMITTENT AND ONLY OCCUR WHILE RUNNING DIAGNOSTICS. IF THIS INTERMITTENT 301 ERROR OCCURS AND THE USER HAS NOT REPORTED ANY KEYBOARD PROBLEMS, THEN THE 301 DIAGNOSTIC ERRORS SHOULD BE CONSIDERED FALSE. ANY 301 POST ERROR SHOULD BE CONSIDERED VALID.

FIX: THIS FALSE DIAGNOSTIC ERROR WAS CORRECTED IN VERSION 1.03 (AND ABOVE) OF THE MODEL 55/65 REFERENCE DISKETTE.

SAS KEYWORDS:

PSY2	8555SYSDIAG	8555SYSERR	PSY2ERR
PSY2DIAG	8555SYSKBD	PSY2KBD	

1.2.126 FALSE 4620 008E ERROR ON X.25 ARTIC CARD

Record number: H065627

Device: D/T8550
 Model: M
 Tip key: 079
 Date created: 091/04/24
 Date last altered: A91/04/24

WHEN RUNNING THE ARTIC X.25 DIAGNOSTICS IN CONTINUOUS MODE, USE THE 37 PIN (CARD) WRAP PLUG FRU P/N16F1884. IF CONTINUOUS TESTS ARE RUN WITH ANY OF THE INTERFACE CABLES AND CABLE WRAP PLUGS, THE TESTS WILL FAIL WITH A FALSE 4620 008E ERROR. IF YOU WANT TO TEST THE CABLE, SELECT THE RUN TESTS ONE TIME OPTION ON THE TEST SELECTION MENU.

SAS KEYWORDS:

PSY2	PSY2COMM	8550SYSCOMM	8555SYSCOMM
8560SYSCOMM	8565SYSCOMM	8570SYSCOMM	8580SYSCOMM
8590SYSCOMM	8595SYSCOMM	PSY2ERR	8550SYSERR
8555SYSERR	8560SYSERR	8565SYSERR	8570SYSERR
8580SYSERR	8590SYSERR	8595SYSERR	PSY2ADPT
8550SYSADPT	8555SYSADPT	8560SYSADPT	8565SYSADPT
8570SYSADPT	8580SYSADPT	8590SYSADPT	8595SYSADPT
PSY2DIAG	8550SYSDIAG	8555SYSDIAG	8560SYSDIAG
8570SYSDIAG	8580SYSDIAG	8590SYSDIAG	8595SYSDIAG
D/T8555	D/T8560	D/T8565	D/T8570
D/T8580	D/T8590	D/T8595	D/T7538

1.2.127 FAST/WIDE SCSI-2 ADAPT & 2GB F/W SCSI-2 HDD INFO

Record number: H125078

Device: D/T8550
 Model: M
 Tip key: 204
 Date created: 094/08/24
 Date last altered: A94/08/31

The IBM 2.0GB Fast/Wide SCSI-2 Hard Disk Drive should be used with the dual bus of the IBM SCSI-2 Fast/Wide Adapter/A. This combination of adapter and drive is required to utilize the exceptional performance of this drive.

In the February 28, 1994 Product Announcement, "Options by IBM: Storage Products," reference was made that Non-IBM Computers could use the IBM 16 - Bit AT Fast SCSI Adapter Kit (#70G8496/FC 1963) to support the IBM 2.0GB Fast/Wide SCSI Hard Disk Drive. This statement is in error. Refer to the September 20, 1993 Product Announcement for the IBM SCSI-2 Fast/Wide Adapter/A and IBM 2.0GB Fast/Wide SCSI Hard Disk Drive for correct information pertaining to this Fast/Wide combination and its usage.

Compatibility:
 The IBM SCSI-2 Fast/Wide SCSI Adapter/A is supported in the 8590/95 & 9576/77/85/90/95. BIOS on earlier 32bit systems (8570 & 8580) do not support this Adapter.
 The IBM 2.0GB Fast/Wide SCSI-2 Hard Disk Drive is supported internally or externally in the 8590/95 & 9576/77/85/90/95.

Note: 9576 support "Wide" (16 bit) devices externally only.

	FRU #	Mkt #	F/C
SCSI-2 Fast/Wide Adapter/A	P/N 92F0160	6451280	1284
2GB Fast/Wide SCSI-2 HDD	P/N 92F0407	32G3796	7128

SAS KEYWORDS:

PSVP	PSY2	PSY2ADAPT	PSY2FDSK
D/T8550	D/T8555	D/T8560	D/T8565
D/T8570	D/T8580	D/T8556	D/T8557
D/T8590	D/T8595	D/T9556	D/T9557
D/T9576	D/T9577	D/T9590	D/T9595
P/N6451280	F/C1284	P/N32G3769	F/C7128
P/N92F0160	P/N92F0407		

1.2.128 FAST/WIDE SCSI-2 ADAPTER CONFIGURATION CONFLICT

Record number: H021000

Device: D/T8595
Model: M
Tip key: 016
Date created: 094/04/15
Date last altered: A94/06/20

A configuration conflict may occur when upgrading a SCSI adapter w/cache (FRU P/N85F0000*), with a SCSI-2 FAST/WIDE adapter on Type 3 8595/9595 systems. After this change, fixed disks greater than 1 GB will no longer be recognized.

The only systems known to be affected are 8595/9595 model OMT, (80486 50 Mhz processor, FRU P/N57F1597*) which uses the Type 3 Reference Diskette with a hardfile greater than 1GB installed.

8595 and 9595 systems, which use the Type 1,2 or 4 IML Diskette and other PS/2 systems are not affected.

A self executing software fix is now available from the National Support Center by calling 1-800-772-2227 and requesting the Server Support Group.

* FRU P/N85F0000 will automatically substitute to P/N85F0063 and FRU P/N57F1597 will automatically substitute to P/N82G2484.

SAS KEYWORDS:

PSY2	D/T9595	PSY2FDSK	PSY2ADPT
PSY2	FAST	WIDE	

FINE HORIZONTAL LINES ON VARIOUS MONITORS

1.2.129 FINE HORIZONTAL LINES ON VARIOUS MONITORS

Record number: H034811

Device: D/T8517
 Model: M
 Tip key: 003
 Date created: 093/01/19
 Date last altered: A95/07/14

IN SOME APPLICATION PANELS, TWO FINE HORIZONTAL LINES MAY BE SEEN ACROSS THE SCREEN LOCATED APPROXIMATELY ONE THIRD AND TWO THIRDS OF THE DISTANCE FROM THE TOP TO THE BOTTOM OF THE SCREEN. THE LINES CAN BE SEEN IN THE TEST RASTER (SIGNAL CABLE DISCONNECTED).

THESE LINES ARE DUE TO THE CRT TECHNOLOGY USED IN THE 8517, 9517 6553*, 6554, 6555 AND 9521* MONITORS.
 SEE ADDITIONAL INFORMATION ON TRINITRON MONITORS BELOW.

THIS IS 'NOT' A DEFECT OF THE CRT. THE CRT SHOULD 'NOT' BE REPLACED IF THESE LINES ARE DETECTED.

THIS INFORMATION IS ALSO PROVIDED FOR THE CUSTOMER IN THE "GUIDE TO INSTALLING AND USING " DOCUMENT THAT WAS SHIPPED TO THE CUSTOMER WITH THE MONITOR.

* The phenomenon described in the above text occurs also on the 9521 monitor. The Tension Mask used in manufacturing by Mitsubishi Corp. is similar to the TRINITRON CRT described below and the horizontal lines are also NOT a product defect.

* The 6553 Monitor has only one wire and will show only one line

TRINITRON

Developed by the Sony Corporation of Japan, Trinitron CRTs are markedly different to conventional CRTs. Most noticeable is the fact that the CRT is completely flat in the vertical plane and only slightly curved in the horizontal plane. The Trinitron does not have a conventional shadow mask. Instead, it has an aperture grille, formed by an array of tensioned vertical wires. In order to ensure correct spacing of these wires there are usually one or two horizontal tie wires which keep the vertical wires in position.

These horizontal wires may be just visible as thin dark lines across the picture when a bright uniform screen is displayed. These lines can sometimes be confused with being part of the image. Although this may cause concern when using the monitor for certain applications, such as CAD and desk top publishing, this is a normal phenomenon for ALL trinitron CRTs, not just those used in IBM monitors, and does not indicate a defect.

Advantages

Doming cannot occur on Trinitrons under normal conditions as the tensioned wires simply relax slightly under bright screen conditions and do not move.

Trinitron CRTs have a radically different electron gun assembly design compared to conventional CRTs. This tends to give a smaller spot size and hence better focus performance.

The other main advantage of the Trinitron is that it produces considerably more brightness, for the same beam current, than a conventional CRT. This is due to the higher transmission of its aperture grille.

Arguably, Trinitron CRTs give better convergence performance than conventional CRTs.

TRINITRON is a registered trademark of SONY Corporation of Japan.

SAS KEYWORDS:

PSY2	PSY2DISP	D/T9517	D/T8517
WIRES	9517	8517	D/T6091
6091	D/T9521	D/T6553	D/T6554
D/T6555	P50	P70	P200
P201			

PSY2 RETAIN TIPS
FIXED DISK DRIVES IN 6384 F2X MODELS

1.2.130 FIXED DISK DRIVES IN 6384 F2X MODELS

Record number: H20717

Device: D/T6384
Model: M
Tip key: 018
Date created: 093/03/18
Date last altered: A94/04/01

The F2x models of the PS/ValuePoint 425SX were originally announced with an 80Mb disk drive installed. On later production models of this machine the configuration was changed to use a 120Mb disk drive.

When replacing failing drives, replace like for like. Replace an 80Mb drive with an 80Mb drive and a 120Mb with a 120Mb using the FRU# on the drive or listed in the HMM for that drive size.

Information regarding this change in system model configuration is also documented in PS/ValuePoint marketing literature and the HONE system.

SAS KEYWORDS:

PSVP	VALUE POINT	93F0076	95F4721
PSY2	PSVFFDSK	PSY2FDSK	85MB
129MB	130MB		

1.2.131 FIXED DISK OPTION TRAYS MAY NOT FIT, OR ARE TOO TIGHT

Record number: H037265

Device: D/T8595
Model: M
Tip key: 004
Date created: 091/06/13
Date last altered: A91/06/25

A SMALL NUMBER OF 3.5 INCH FIXED DISK OPTION TRAYS FOR THE 8595 SYSTEM UNIT OR 3511 SCSI EXPANSION UNIT MAY BE SLIGHTLY OVERSIZE AND REQUIRE EXCESSIVE FORCE TO FIT INTO THE RAILS OF THE 5.25 INCH WIDE OPTION BAYS OF THE REFERENCED MACHINES.

THIS PROBLEM HAS BEEN CORRECTED, HOWEVER SOME 3.5 INCH FIXED DISK OPTIONS MAY HAVE BEEN PACKED WITH OVERSIZE TRAYS.

THE NORMAL FIT OF THE TRAY IS "SNUG," BUT CAN BE ACCOMPLISHED WITH NOMINAL HAND PRESSURE. IF AN OVERSIZED TRAY IS ENCOUNTERED EXCESSIVE PRESSURE OR "HAMMERING" SHOULD NOT BE USED TO FORCE THE TRAY INTO THE SYSTEM. DAMAGE TO THE FIXED DISK ASSEMBLY COULD RESULT.

IN THIS SITUATION, ORDER FRU P/N64F0141, WHICH WILL PROVIDE A REPLACEMENT TRAY OF CORRECT DIMENSIONS.

SAS KEYWORDS:

PSY2	PSY2FDSK	8595SYSFDSK	3511SYSFDSK
D/T8595	D/T3511		

1.2.132 FLASH BIOS CORRUPTION / DEAD SYSTEM

Record number: H127334

Device: D/T68XX
 Model: M
 Tip key: 007
 Date created: 095/04/28
 Date last altered: A95/08/10

It is possible to install flash BIOS for one machine type on a different machine type. For example, it is possible to install PC300-486 flash on a PC300 Pentium system and vice versa or install PC700 flash on a 64xx. Once the incorrect flash BIOS is installed, and the system re-booted, the system board will no longer function and there is no field procedure to reinstall the correct flash. The system board will have to be replaced.

If the flash diskette is not labeled, the most reliable method to determine what system it applies to is to view the diskette volume label. The first 2 digits of the volume label define code's applicable machine type. Once you have determined the first two digits on the diskette, compare it with the BIOS level reported in the Configuration/Setup utility before continuing with the flash install.

The following table can be used to decode the flash code titles.

AABCDDE.xxx

AA = Machine type or product code
 B = Release type
 C = Reserved for development/engineering
 DD = Level of Code
 E = Build stage
 xxx = File ship format

PRODUCT CODE	MACHINE TYPE
L6	6382/S ALL MODELS 6384/D ALL MODELS EXCEPT P-60 (PENTIUM) 6387/T ALL MODELS

L8 6381/SI 486SX

L9 6381/SI 486DX

Note: L8 and L9 are provided on the same diskette. The flash install program will install the appropriate code for the system.

LA 6384/D P-60 PENTIUM

LD ValuePoint Performance Series
 6472/P
 6482/P
 6484/P
 6492/P
 6494/P

LE PC300-486
 6571
 6573
 6581
 6583

LP PC300 Pentium
 6576
 6586

N1 PC300 Pentium
 6575
 6585

N1 PC700 PCI/ISA
 6875
 6885

N2 PC700 PCI/Micro Channel
 6876 ALL MODELS
 6886 "

RELEASE TYPE (B)

PSY2 RETAIN TIPS
FLASH BIOS CORRUPTION / DEAD SYSTEM

B OEM FLASH/BIOS/POST UPDATE DISKETTE
E EPROM OR EARLY FLASH/BIOS/UPDATE DISKETTE
J FLASH/POST/BIOS UPDATE DISKETTE
K FLASH/POST/BIOS UPDATE CODE

LEVEL OF BUILD (DD)
INCLUDES ALL CHANGES FROM PREVIOUS LEVELS

BUILD STAGE (E)
A OFFICIAL BUILD

FILE SHIP FORMAT (xxx)
IMG DISKETTE IMAGE EMT FORMAT
DTA DISKETTE IMAGE EMT FORMAT
DSK DISKETTE LOADDSKF/LOADDISK FORMAT

SAS KEYWORDS:

PSVP	PS/VP	PSY2	PC300
PC700	D/T6381	D/T6382	D/T6384
D/T6787	D/T6472	D/T6482	D/T6484
D/T6492	D/T6494	D/T6571	D/T6573
D/T6575	D/T6581	D/T6583	D/T6585
D/T6875	D/T6876	D/T6885	D/T6886
DEAD	HUNG	D/T8640	D/T8641
D/T9595A	8640	8641	SERVER 500
SERVER 300	SERVER 720	D/T8642	8642
IBMPC	IDENTIFICATION	ID	FLASH TYPES

1.2.133 FLASH DISKETTES FAIL AFTER VIEWING WITH "DIR" COMMAND

Record number: H132711

Device: D/T6885
 Model: M
 Tip key: 007
 Date created: 096/02/20
 Date last altered: A96/07/09

Performing a "DIR" command in the Windows95 environment on a Flash BIOS update diskette or a PS/2 Reference Diskette may cause the diskette to become inoperative. This affects ALL PS/ValuePoint, IBM PC 300/700 Series and PS/2 systems.

Microsoft uses an 8 byte block on the diskette for labelling purposes in Windows95. When a "DIR" command is executed, this 8 byte block is written to by Windows95.

The "Diskette Drive A: " Icon under the "My Computer" folder in Windows95 has the same affect as the "DIR" command.

IBM uses this same 8 byte block for Flash BIOS updates and PS/2 Reference Diskettes to ensure that the Flash is occurring in a stable environment.

Once the 8 byte block has been written to by the Windows95 "DIR" command, the Flash diskette or Reference Diskette will display an error indicating that "This is not a valid Flash Diskette" or "This is not the correct Reference Diskette for this system."

Recent releases of Flash BIOS updates instruct the user to read the "read me" file on the Flash diskette BEFORE beginning the update process. With the number of ways to name a "read me" file, the customer is likely to do a "DIR" to get the actual file name before viewing the file with an editor.

Inform Servicicers and Customers to write-protect their Flash diskettes to prevent this problem from occurring.

Windows95 is a trademark of the Microsoft Corporation.

SAS KEYWORDS:

PSY2	PSVP	PSY2PROG	PSVPPROG
IBMPC	PC 700	PC 300	PC700
PC300	D/T68XX	D/T65XX	D/T6575
D/T6585	D/T6576	D/T6586	D/T6875
D/T6885	D/T6876	D/T6886	D/T6384
D/T6382	D/T6387	D/T6381	D/T6472
D/T6482	D/T6484	D/T6492	D/T6494
D/T6598	D/T8640	D/T6571	D/T6573
D/T6581	D/T6583	PSY2DSKT	PSVPDSKT
SERVER 95	500	520	720
310	D/T8641	D/T8642	D/T8639
D/T8595	D/T9595	9595	8642
8641	8590	8595	8639

FLASH DISKETTES NO LONGER SHIP W/PLANAR FRU

1.2.134 FLASH DISKETTES NO LONGER SHIP W/PLANAR FRU

Record number: H131599

Device: D/T6875
 Model: M
 Tip key: 010
 Date created: 095/11/07
 Date last altered: A95/11/07

IBM PC 300/700 Series system board FRU's formerly contained a Flash BIOS update diskette that at times caused the BIOS level of a new system board replacement to be downgraded as part of the installation process.

The level of Flash BIOS installed on the system board at the time of manufacture and the BIOS level of the Flash diskette shipped with the system board FRU have been inconsistent.

The following machine types will NO LONGER contain a Flash BIOS diskette as part of the system board FRU:

6575 6585
 6576 6586
 6875 6885
 6876 6886

Obtain the latest PC 300/700 Series Flash BIOS updates from the IBM PC Company BBS system by calling 1-919-517-0001. Locate the "IBM PC 300/700 Files" section (section #21) for the updates.

The Flash BIOS updates may also be downloaded via the Internet from the IBM Personal Computer File Library by searching the following Internet URL:

<http://www.pc.ibm.com/files.html>

SAS KEYWORDS:

PSY2	PSVP	PSY2PART	PSVPPART
IBMPC	PC 700	PC 300	PC700
PC300	D/T68XX	D/T65XX	D/T6575
D/T6585	D/T6576	D/T6586	D/T6875
D/T6885	D/T6876	D/T6886	PSVPMCD
PSY2MCD	PSVPBRD	PSY2BRD	

1.2.135 FLICKER SEEN WHEN USING XGA DISPLAY ADAPTER IN 1024*768 MODE

Record number: H091339

Device: D/T8550
 Model: M
 Tip key: 086
 Date created: 091/07/10
 Date last altered: A92/07/27

IF FLICKER IS EXPERIENCED WHEN RUNNING CUSTOMERS SOFTWARE, BUT THE XGA ADVANCED DIAGNOSTICS RUN ERROR-FREE, THE DISPLAY AND THE XGA ADAPTER ARE FUNCTIONING CORRECTLY AND NO HARDWARE SHOULD BE REPLACED. HOWEVER, A MIS-MATCH BETWEEN THE SOFTWARE AND THE DISPLAY VIDEO BUFFER SIZE SHOULD BE SUSPECTED.

FLICKER EXPERIENCED DURING SYSTEM OPERATION MAY BE CAUSED BY EITHER A MIS-MATCH BETWEEN THE SOFTWARE AND THE XGA HARDWARE CONFIGURATION, OR PROGRAMMING WHICH USE DISPLAY MODES/COLOR PATTERNS THAT CAUSE THE FLICKER EFFECT.

SOFTWARE IS MORE LIKELY TO "FLICKER" WITH 512K BYTES OF VIDEO MEMORY (VRAM) THAN IF THE FULL 1M BYTE OF VRAM IS INSTALLED (SEE ADDITIONAL INFORMATION BELOW FOR DETAILS). IN THE USA, THE XGA ADAPTER COMES WITH 512K BYTES OF DISPLAY VIDEO MEMORY INSTALLED. AN ADDITIONAL 512K BYTE OPTION IS AVAILABLE AT EXTRA COST.

 BECAUSE DISPLAY SUB-SYSTEMS ARE SOFTWARE DRIVEN OUTPUT DEVICES, THEY ARE SUBJECT TO EXHIBITING UNEXPECTED RESULTS DUE TO PROGRAMMING AND/OR CONFIGURATION ERRORS. FOR THIS REASON, ONLY THE ADVANCED DIAGNOSTICS ARE VALID TO DETERMINE THE PROPER FUNCTIONING OF ANY PS/2 DISPLAY SUB-SYSTEM.

DIAGNOSTICS DETAILS:

THE XGA ADVANCED DIAGNOSTICS WILL DETERMINE THE AMOUNT OF VIDEO MEMORY INSTALLED, AND TEST IT APPROPRIATELY. IF AN ERROR IS DETECTED ON THE FIRST 512K OF VIDEO MEMORY (VRAM). THE ENTIRE ADAPTER MUST BE REPLACED, AS THIS BLOCK OF MEMORY IS SOLDERED TO THE ADAPTER. IN THE SECOND 512K OF VRAM, THE DIAGNOSTIC CAN DIAGNOSE ERRORS TO A SINGLE FAILING 128K MEMORY MODULE, AS THEY ARE INSTALLED IN (4) PLUGGABLE CONNECTORS. ALL FOUR PLUGGABLE CONNECTORS WILL BE POPULATED ON A 1MB VRAM XGA ADAPTER.

THE XGA VIDEO MEMORY FRU, P/N75X5894, PROVIDES ONLY ONE 128K MODULE.

IF AN ADDITIONAL 512K OF VRAM MEMORY CORRECTS THE "FLICKER," MARKETING ASSISTANCE SHOULD BE SOUGHT, AS THIS ADDITIONAL MEMORY IS AN EXTRA CHARGE OPTIONAL FEATURE.

***** ADDITIONAL INFORMATION *****

IF 1 MB OF VIDEO BUFFER IS INSTALLED AND FLICKER STILL EXISTS USING SOME COLORS OR PATTERNS, THE FOLLOWING INFORMATION MAY BE HELPFUL.

THERE ARE TWO TYPES OF FLICKER EFFECT:

A. FULL SCREEN FLICKER

THIS TYPE OF FLICKER CAN BE OBSERVED IN NON-INTERLACED MODES. IT IS CAUSED BY THE SCREEN REFRESH RATE BEING SLOW ENOUGH TO BE DETECTABLE BY THE USER. INDIVIDUALS VARY WIDELY IN THEIR ABILITY TO SEE FLICKER, YOUNG PEOPLE BEING MOST SENSITIVE.

B. INTERLACE FLICKER.

INTERLACE MEANS THAT A FULL SCREEN PICTURE (A "FRAME" IS REFRESHED IN TWO "FIELDS", THE ODD SCAN LINE "FIELD" AND THE EVEN SCAN LINE "FIELD." WHEN THE FRAME IS REFRESHED, ALL THE ODD SCAN LINES (1,3,5 ETC.) ARE DISPLAYED, THEN ON THE NEXT FIELD ALL THE EVEN SCAN LINES (2,4,6 ETC.) ARE DISPLAYED, THIS METHOD OF REDUCING FULL SCREEN FLICKER IS USED IN TELEVISION SETS.

XGA DETAILS:

XGA SUPPORTS SEVERAL DISPLAY MODES. THEY ARE LISTED BELOW WITH THE APPROPRIATE SCREEN REFRESH INFORMATION:

VGA MODE _____(60 OR 70 HZ NON-INTERLACED)

132 COLUMN TEXT MODE _____ (60 HZ NON-INTERLACED)
 EXTENDED GRAPHICS MODE(640*480) _____ (60HZ NON-INTERLACED)
 EXTENDED GRAPHICS MODE(1024*768) _____ (43HZ INTERLACED)

ONLY THE 1024*768 RESOLUTION IS INTERLACED AND SUBJECT TO FLICKER. ALL OTHER MODES ARE NON-INTERLACED AND HAVE THE SAME SCREEN REFRESH RATES AS VGA.

THE SIZE OF VRAM PROVIDES MODE COLORS AS CAN BE SEEN BELOW:

1. 512K VRAM, PROVIDES:

- 640*480 RESOLUTION WITH 256 COLORS.
- 1024* 768 RESOLUTION WITH 16 COLORS.

NOTE:

WITH 512KB OF VRAM INSTALLED, THE SMALL NUMBER OF COLORS AVAILABLE FOR EACH PEL (16) IN 1024*768 MODE RESULTS IN A POSSIBILITY OF FLICKER.

2. 1MB VRAM, PROVIDES:

- 640*480 RESOLUTION WITH 65536 COLORS (NOT AVAILABLE USING THE XGA DEVICE DRIVERS, 256 COLORS STILL (AVAILABLE)
- 1024*768 RESOLUTION WITH 256 COLORS.

NOTE:

AN UPGRADE OF THE XGA TO ITS FULL 1MB OF VRAM WILL INCREASE THE NUMBER OF COLORS AVAILABLE TO 256, GREATLY REDUCING THE FLICKER EFFECT POSSIBILITY.

3. IF BOTH 1 AND 2 ABOVE, ARE NOT ACCEPTABLE, IT IS NOT NECESSARY TO REVERT BACK TO VGA MODE, WHICH IS LIMITED TO 16 COLORS. THE XGA EXTENDED GRAPHICS (NON VGA) MODE HAS 640*480 RESOLUTION AND IS NON-INTERLACED. IT PROVIDES 256 COLORS PER PEL, IS SIGNIFICANTLY FASTER THAN VGA MODE AND HAS ALL THE OTHER XGA BENEFITS.

NOTE:

EVEN WITH THE 1MB OF VRAM INSTALLED, FLICKER MAY RESULTS IF A USER SPECIFIES A PATTERN WHICH HAS BRIGHT PELS ON ONE FIELD AND DIM PELS ON THE OTHER. A BLACK AND WHITE CROSSHATCH PATTERN IN AN APPLICATION OR A BACKGROUND BITMAP, FOR EXAMPLE, MAY HAVE THIS EFFECT. IF THE USER HAS AN ABSOLUTE REQUIREMENT TO USE A PATTERN WHICH CAUSES UNACCEPTABLE FLICKER, THEN THE CURRENT, BEST XGA SOLUTION IS TO REVERT TO OPTION 3 ABOVE (NON VGA MODE).

SAS KEYWORDS:

PSY2	PSY2ADPT	PSY2DISP	PSY2PROG
D/T8595	D/T8570	D/T8580	D/T8590
D/T8565	D/T8565		

FORMAT PROCEDURE FOR PRIAM ID60-AT-D2 HARD DRIVE

1.2.136 FORMAT PROCEDURE FOR PRIAM ID60-AT-D2 HARD DRIVE

Record number: H026677

Device: D/T5170
 Model: M
 Tip key: 110
 Date created: 088/04/19
 Date last altered: A88/06/30

AT ADVANCED DIAGNOSTICS SHOULD NOT BE USED TO FORMAT OR TEST THE ID60-AT-D2 (PRIAM) HARD DRIVE. THIS OEM HARD DRIVE CAN BE SUPPORTED UNDER IBM MAINTENANCE AGREEMENTS. THE MA SHOULD LIST FEATURE CODE 0723 TO BE A VALID MA. SET-UP PROCEDURE: THE INNERSPACE SUPPORT PROGRAM MUST BE USED TO PREPARE THE DRIVE FOR USE. THE EFMT.EXE FILE SHOULD BE TRANSFERRED TO A DOS FORMATTED DISKETTE, AND USED TO PERFORM SURFACE ANALYSIS, FORMAT DRIVE, AND TEST THE DRIVE. A RECORD OF THESE FUNCTIONS ARE WRITTEN TO THE "A" DRIVE AS THEY ARE BEING PERFORMED. THE EDISK.EXE FILE IS USED TO SETUP THE DRIVE FOR OPERATION UNDER DOS. (CREATE VOLUME STRUCTURE) DOS UTILITIES RESTRICTIONS: FDISK--REPLACED BY INNERSPACE EDISK FORMAT-NOT REQUIRED, SHOULD NOT BE USED
 COMPAQ DISKINIT- DO NOT USE TO INSTALL MS-DOS NOTE... THE INNERSPACE SUPPORT PROGRAMS ARE SUPPLIED WITH THE PRIAM 60 AND IS THE CUSTOMERS RESPONSIBILITY.

SAS KEYWORDS:

POEM	PCOMOEM	5170SYSOEM	OEMFDSK
5170SYSFDSK	PSY2OEM	OEMOPER	

1.2.137 FORMATTING TAPES IN PS/2 INTERNAL TAPE BACKUP UNIT

Record number: H017978

Device: D/T8550
 Model: MCP1
 Tip key: 166
 Date created: 093/03/08
 Date last altered: A94/08/18

WHEN FORMATTING TAPES IN THE IBM PS/2 INTERNAL TAPE BACKUP UNIT (FC 5279, P/N87F9787), BEST RESULTS WILL BE OBTAINED IF THE TAPES ARE BULK-ERASED BEFORE ATTEMPTING TO FORMAT. SHOULD A FAILURE OCCUR BEFORE FORMATTING IS COMPLETE, THE TAPE MUST BE re-BULK-ERASED BEFORE ANOTHER ATTEMPT TO FORMAT.

THE PROPER METHOD FOR BULK ERASING THESE TAPES IS TO:

- 1) PLACE THE BULK ERASER ON THE TAPE, TURN ON THE ERASER FOR 45 TO 60 SECONDS - slowly moving the eraser in a circular pattern - to cover the entire tape.
- 2) Pull the eraser away from the tape - with the switch in the on position.
- 3) Turn the bulk-eraser off when you are 12 to 15 inches away from the tape.
- 4) TURN THE TAPE over AND REPEAT THE PROCESS ON THE BACK OF THE TAPE.

IF PROBLEMS ARE STILL ENCOUNTERED FORMATTING TAPES, THE 45 TO 60 SECONDS PER SIDE MAY NEED TO BE INCREASED. SOME TAPES MAY NEED 2 MINUTES PER SIDE.

 Technical Explanation

RHOMAT FORMAT

Pre-formatted Rhomat tape is recorded at a lower bit density and a higher write current. If the Format Program sees any remnant signals from a previous format or on a blank tape it will fail the format.

Bulk-Erasing

- Most Tape Bulk-Erasers are operated from an Alternating current (AC) line Thus the field reverses 60 times per second. So, there are peaks and valleys of effective magnetic strength.
- There is also a large variance in the GAUSS strength of each manufacturers bulk-eraser, and many of them will have several models.
- Bulk-Erasing pre-formatted or blank tapes requires that the any remnant magnetic signals be changed rapidly as the peak strength of the field is reduced. The reduction of field strength is achieved in two ways:
 - * distance of the tape from the bulk-eraser
 - * where the effective strength zones are in the 60HZ cycle

Most Bulk-erasers have a relatively small high field strength zones (effective magnetic working area). This equates to a small slice in the cycle where the magnetic strength is at it's peak. A longer bulk-erase time ensures that all areas of tape are covered by high strength zones of the eraser.

In conclusion, the true issue of bulk-erasing is NOT the amount of time, but is being sure that the erasers high field strength zone passes over the ENTIRE tape to remove any remnant signals. End users should keep in mind that it may take 2 or 3 or possibly more tries to successfully bulk-erase and format a tape.

That is why we suggest to all our customers to use PRE-FORMATTED Rhomat format tapes. Our driver for the tape software in DOS, Windows, and OS/2 operating systems has the ability to deal with media defects that may be encountered while backing up.
 IE: multiple re-trys are attempted.

If you must format your own tapes, the current recommendation from the originator of the Rhomat format is a GENEVA Model PF-211 bulk-eraser. Their number is below:
 - Geneva Group - Minneapolis MN - (612) 546-5620 -

- The Format program that exists on the diagnostics disk is sufficient to format, provided the End-User bulk-erases

PSY2 RETAIN TIPS

FORMATTING TAPES IN PS/2 INTERNAL TAPE BACKUP UNIT

a tape properly. This process may take several attempts before running to completion. This is why we recommend the use of pre-formatted Rhomat tapes (DC2080 or DC2120).

- We have discovered the following problems when working with customers that are trying to format tapes

- * No bulk-erasers on-site at customer
- * Bulk-erase is not properly performed by End-User
- * Most End-User attempts have been less than 2 passes

SAS KEYWORDS:

PSY2TAPE	PSY2ERR	PSY2	PSY2MISC
P/N87F9787	FORMAT	ITBU	P/N30F5277

1.2.138 FORMER PS/2 SIM&COLON. OBSOLETE HMR/HMS PUBLICATIONS

Record number: H006568

Device: D/T8550
 Model: M
 Tip key: 187
 Date created: 093/08/18
 Date last altered: A94/01/24

THIS TIP CONTAINS A LISTING OF PS/2 DOCUMENTATION (HMR/HMS) WHICH HAS BEEN REMOVED FROM THE PS/2 SERVICE INFORMATION MANUAL (PS/2 SIM), SBOF-2480, AND HAS BEEN CONSOLIDATED INTO THE NEW PS/2 LIBRARY. THE NEW LIBRARY INCLUDES THE PS/2 HARDWARE MAINTENANCE MANUAL (PS/2 HMM), THE PS/2 DISPLAY HMM, THE IBM MONITOR HMM, THE PS/VALUEPOINT HMM AND THE CONSOLIDATED LAPTOP/NOTEBOOK/PORTABLE HMM AND THINKPAD HMM (MOBILE SYSTEMS).

THE FOLLOWING COMPONENTS ARE REMOVED FROM THE PS/2 SIM MANUAL BUT EACH OF THE FORM NUMBERS CAN BE ORDERED INDIVIDUALLY FROM MECHANICSBURG AS REQUIRED.

IT IS STRONGLY RECOMMENDED THAT YOU PERIODICALLY REFER TO TDR #H031685 FOR THE MOST CURRENT PS/2 SIM INFORMATION.

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*****
DESCRIPTION:                                REMOVE FORM NUMBER:
*****
PS/2 HMM SUPPLEMENT - PARTS UPDATE          S61G1549-00*
PS/2 SERVER 85 ENHANCEMENTS                 S61G1566-00*
PS/2 HMM SUPPLEMENT - SECURITY SWITCH/PARTS UPDATE S60G9487-00*
PS/2 HMM SUPPLEMENT - PROCESSOR UPGRADE     S71G4102-00*
IBM ISA INTERNAL/EXTERNAL CD-ROM DRIVES     S71G4115-00*
PS/2 HMM SUPPLEMENT - PARTS UPDATE          S71G4116-00*
PS/2 ENERGY WORKSTATION HMM SUPPLEMENT     S71G1587-00*
PS/2 IMAGE ADAPTER/A                        S71G2238-00*
PS/2 SERVER 85 HMR/HMS MANUAL                S52G9981-00*
PS/VP HMR/S (INCLUDED IN S61G1423)          S42G2450-00*
PS/VP SUPPLEMENT (INCLUDED IN S61G1423)     S60G9470-00*
PS/2 MODEL 90/95 DIAG.DSKT. (TYPE 1,2,3) V.2.01 S42G2006-01*
PS/VALUEPOINT HMM SUPPLEMENT                S71G6781-00*
PS/VALUEPOINT HMM SUPPLEMENT                S82G3896-00*
PS/2 MODEL 25/35/40 ADV.DIAG., V.1.20      S91F8644-02*
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HARDWARE MAINTENANCE REFERENCE (HMR):
GENERAL INFORMATION                          S64F3983-00*
DIAGNOSTIC INFORMATION FOR MICRO CHANNEL     S64F3984-01*
DIAGNOSTIC INFORMATION FOR NON-MICRO CHANNEL S64F3985-00*
EXTERNAL STORAGE ENCLOSURE FOR SCSI DEVICES S15F2158-00*
PS/2 MODEL 25                               S64F3986-00*
PS/2 MODEL 25 286                           S64F3811-00*
PS/2 MODEL 25 SX                             S10G6609-00*
PS/2 MODEL 30                               S64F3987-00*
PS/2 MODEL 30 286                           S64F3988-00*
PS/2 MODEL 35 SX, 35 LS, 35 SLC              S84F9845-02*
PS/2 MODEL 40 SX & 40 SLC                    S84F7768-01*
PS/2 MODEL L40SX (8543)                      S15F2267-00*
PS/NOTE MODEL N45SL                          S42G0485-00*
PS/2 MODEL N51SX & SLC (8551)                 S04G5111-01*
PS/2 MODEL CL57 SX (8554)                    S10G4419-00*
PS/2 MODEL 50                               S64F3989-00*
PS/2 MODEL 55SX                              S15F2250-00*
PS/2 MODEL 56 SX & SLC (8556)                 S04G3295-01*
PS/2 MODEL 57 SX, SLC & M57 SLC (8557)       S92F1677-01*
PS/2 MODEL 56 SLC2 (9556), 57 SLC2 (9557),
M57 SLC2 (9557)                              S42G0557-00*
PS/2 MODEL 60                               S64F3991-00*
PS/2 MODEL 65SX                              S64F3992-00*
PS/2 MODEL 70                               S64F3993-00*
PS/2 MODEL P70 386 (8573)                    S64F3994-00*
PS/2 MODEL P75 486                           S84F8525-00*
PS/2 MODEL 76 (9576), 77 AND M77 (9577)     S42G0573-00*
PS/2 MODEL 80                               S64F3995-01*
PS/2 MODEL 90/95 XP 486                      S10G6475-00*
IBM THINKPAD 300 (M/T 2615)                   S33G9361-00*
IBM THINKPAD 350/350C (M/T 2618) & PS/NOTE 425/425C GA211000-00*
IBM THINKPAD 500 (M/T 2603)                   S71G3701-00*
IBM THINKPAD 700 (M/T 9552)                   S42G2015-00*
IBM THINKPAD 700C (M/T 9552)                  S42G2021-00*
IBM THINKPAD 720/720C (M/T 9552)             S61G1187-00*
IBM 3550 EXPANSION UNIT MODEL 002            S42G2331-00*
IBM 3550 EXPANSION UNIT MODEL 001            S42G2335-00*
IBM THINKPAD EXPANSION CARTRIDGE (M/T 3550)  S42G2338-00*
PS/2 OPTIONS, ADAPTERS AND DISPLAYS         S64F3996-00*
    
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PS/2 SCSI EXTERNAL STORAGE ENCLOSURE	S91F9233-00*
PS/2 5.25 - INCH SLIM-HIGH DISKETTE DRIVE	S15F2274-00*
PS/2 ADAPTER/A FOR ETHERNET NETWORKS	S15F2290-00*
PS/2 2.3GB FULL-HIGH SCSI TAPE DRIVE SUPP	S84F9802-00*
PS/2 2.3GB FULL-HIGH SCSI TAPE DRIVE HML	S91F9250-00*
PS/2 1 - 8MB MEMORY EXPANSION OPTION SUPPLEMENT	S85F1672-00*
PS/2 FAXCONCENTRATOR ADAPTER/A SUPPLEMENT	S15F2262-00*
PS/2 2.88MB DISKETTE DRIVE HML	S85F1648-00*
PS/2 MONOCHROME DISPLAY 8504 HML	S15F2241-00*
PS/2 8515 COLOR DISPLAY HML	S92F2679-00*
PS/2 9515 COLOR DISPLAY HMR	S41G3311-00*
PS/2 8516 TOUCH DISPLAY HML	S92F2674-00*
PS/2 8517/9517 COLOR DISPLAY HMR	S41G3307-00*
PS/2 8511/8518 COLOR DISPLAY HMR	S41G2914-00*
PS/2 9518 COLOR DISPLAY HMR	S41G3315-00*
PS/2 JAPANESE DISPLAY ADAPTER AND KEYBOARD HML	S10G3305-00*
PS/2 COMMUNICATIONS CARTRIDGE I	S10G5992-00*
PS/2 COMMUNICATIONS CARTRIDGE II HML (N51SX)	S04G5109-00*
PS/2 COMMUNICATIONS CARTRIDGE II HML (CL57SX)	S10G4421-00*
HMR BINDER AND SLEEVE (2 PER INITIAL ORDER)	S15F2277-00*

HARDWARE MAINTENANCE SERVICE (HMS):

GENERAL INFORMATION	S15F2189-00*
PS/2 EXTERNAL SCSI DEVICES	S64F1426-03*
PS/2 EXTERNAL DEVICES PARTS CATALOG	S64F4022-00*
PS/2 MODEL 25/30	S15F2191-00*
PS/2 MODEL 25 286	S15F2181-00*
PS/2 MODEL 25 SX	S10G6610-00*
PS/2 MODEL 30 286	S15F2192-01*
PS/2 MODEL 35 SX, 35 LS, 35 SLC	S84F9846-02*
PS/2 MODEL 40 SX & SLC	S84F7767-01*
PS/2 MODEL L40SX (8543)	S15F2266-00*
PS/NOTE MODEL N45SL	S42G0486-00*
PS/2 MODEL N51 SX & SLC (8551)	S04G5112-01*
PS/2 MODEL CL57 SX (8554)	S10G4420-01*
PS/2 MODEL P70 386 (8573)	S15F2198-00*
PS/2 MODEL P75 486	S84F7593-00*
PS/2 MODEL 50	S15F2193-00*
PS/2 MODEL 55 SX	S15F2195-02*
PS/2 MODEL 56 SX & SLC (8556)	S04G3296-02*
PS/2 MODEL 57 SX, SLC & M57 SLC (8557)	S92F1678-01*
PS/2 MODEL 56 SLC2 (9556), 57 SLC2 (9557), M57 SLC2 (9557)	S42G0556-00*
PS/2 MODEL 60	S15F2194-01*
PS/2 MODEL 65SX	S15F2196-01*
PS/2 MODEL 70	S15F2197-01*
PS/2 MODEL 70 HMS SUPPLEMENT	S42G0293-00*
PS/2 MODEL 76 (9576), 77 AND M77 (9577)	S41G8347-00*
PS/2 MODEL 80	S15F2199-01*
PS/2 MODEL 90/95 XP 486 HMS SUPPLEMENT	S10G6474-00*
PS/2 MODEL 90/95 XP 486 HMS SUPPLEMENT	S42G2004-00*
IBM THINKPAD 300 (M/T 2615)	S33G9361-00*
IBM THINKPAD 700 (M/T 9552)	S42G2016-00*
IBM THINKPAD 700C (M/T 9552)	S42G2022-00*
IBM THINKPAD 720/720C (M/T 9552)	S61G1193-00*
IBM 3550 EXPANSION UNIT MODEL 002	S42G2332-00*
IBM 3550 EXPANSION UNIT MODEL 001	S42G2336-00*
IBM THINPAD EXPANSION CARTRIDGE (M/T 3550)	S42G2339-00*
PS/2 9515 COLOR DISPLAY	S41G3312-00*
PS/2 8517/9517 COLOR DISPLAY	S41G3308-00*
PS/2 8511/8518 COLOR DISPLAY	S41G2925-00*
PS/2 9518 COLOR DISPLAY	S41G3316-00*
IBM 170MB & 212MB AT HARD DISK DRIVES	S42G2343-00*
PS/2 104MB & 212MB SCSI HARD DISK DRIVES HMS SUPP	S42G2345-00*
PS/2 ENHANCED 2.88MB DISKETTE DRIVE HMS SUPP	S42G2346-00*
PS/2 1GB DASD DRIVE HML SUPPLEMENT	S42G0299-00*
PS/2 2.3GB FULL HIGH SCSI TAPE DRIVE	S84F9803-00*
PS/2 ADAPTER/A FOR ETHERNET TWISTED PAIR NETW.	S42G0352-00*
PS/2 ADAPTER/A FOR ETHERNET NETWORKS SUPPLEMENT	S15F2289-00*
PS/2 FAXCONCENTRATOR ADAPTER/A SUPPLEMENT	S84F8541-00*
PS/2 486SLC2 PROCESSOR UPGRADE	S42G2179-00*
PS/2 COMMUNICATIONS CARTRIDGE I	S10G5993-00*
PS/2 KEYBOARD AID	S92F2748-00*
PS/2 CACHED PROCESSOR OPTION HML SUPPLEMENT	S04G5106-00*
RECOVERY PROCEDURE FOR PREINSTALLED OS/2 2.0	S41G8689-00*
OPTION COMPATIBILITY AND REF. DSMT. INFORMATION	SA380081-01*
TOKEN RING LAN GENERAL INFORMATION	SA380092-00*
PS/2 ECA PAMPHLET (OBSOLETE)	SA380093-03*

SAS KEYWORDS:

APPM	PSY2	PCOMDOC	PSY2DOC
8525SYSDOC	8530SYSDOC	8550SYSDOC	8560SYSDOC
8570SYSDOC	8580SYSDOC	8555SYSDOC	8573SYSDOC
8565SYSDOC	8590SYSDOC	8595SYSDOC	8543SYSDOC

PSY2 RETAIN TIPS

FORMER PS/2 SIMCOLON. OBSOLETE HMR/HMS PUBLICATIONS

8535SYSDOC	8540SYSDOC	8557SYSDOC	8556SYSDOC
8551SYSDOC	8554SYSDOC	9556SYSDOC	9557SYSDOC
9576SYSDOC	9577SYSDOC	9590SYSDOC	9595SYSDOC
9552SYSDOC	2615SYSDOC	6384SYSDOC	D/T8525
D/T8530	D/T8550	D/T8560	D/T8580
D/T8555	D/T8573	D/T8543	D/T8565
D/T8590	D/T8595	D/T8535	D/T8540
D/T8557	D/T8556	D/T8551	D/T8554
D/T9556	D/T9557	D/T9576	D/T9577
D/T9590	D/T9595	D/T9552	D/T2615
D/T6384	D/T8570	D/T9585	

1.2.139 FRU NUMBER FOR 8557 - 9577 AIR BAFFLE

Record number: H026836

Device: D/T8557
Model: M
Tip key: 007
Date created: 093/03/27
Date last altered: A93/04/05

The 8557 model 05F, and 9577 model 0UF & 0NF, utilize an air baffle for the fixed disk in drive bay 4C. The fixed disk can overheat and fail without this baffle installed. FRU number for this baffle is 92F0251.

This FRU number will be added to the next release of the PS/2 HMM.

SAS KEYWORDS:

PSY2PART	D/T9577	D/T8557	P/N92F0251
PSY2	PSY2FDSK		

FRU PARTS FOR CANADIAN MANUFACTURED PCMCIA MODEMS

1.2.140 FRU PARTS FOR CANADIAN MANUFACTURED PCMCIA MODEMS

Record number: H123216

Device: D/T9545
 Model: M
 Tip key: 006
 Date created: 094/03/30
 Date last altered: A95/06/30

IBM Canada has released two PCMCIA modems without the FRU part numbers on them. This is being corrected on the manufacturing line. The new modems will have a label with the IBM FRU P/N number on it

Description	FRU P/N	Manufacturing P/N
14.4 PCMCIA MODEM	P/N87G8991	87G9075
14.4 DAA/Minidin Cable	P/N87G8993	87G9066 or 934049
2.4/9.6 PCMCIA MODEM	P/N87G8990	87G9780
2.4/9.6 DAA/Minidin Cable	P/N87G8992	934120

The FRU part numbers will be included in the next available release of the Mobile HMM.

SAS KEYWORDS:

PSY2 PSY2ADPT PSY2PART PC CARD
 PCCARD

1.2.141 FULL & 3/4 LENGTH ADAPTERS NOT SUPPORTED IN SLOT #1

Record number: H133498

Device: D/T6560
Model: M
Tip key: 001
Date created: 096/08/02
Date last altered: A96/08/02

Due to the Industry Standard design characteristics of the IBM PC 340 Series 6560 and PC 100 Series 6260 machine types, full and 3/4 length ISA adapters are not supported in slot #1.

Installing full or 3/4 length ISA adapters in slot 1 may cause the adapter to make contact with the memory SIMMs. Slot 1 should be reserved for shorter length ISA adapters. Install full and 3/4 length adapters in slots 2 or 3.

This information will be documented in the Users Guide and service documentation.

SAS KEYWORDS:

PSVP	PSY2	PSVPADPT	PSY2ADPT
PSVPMEM	PSY2MEM	47674	PC 300
IBMPC			

1.2.142 GREEK WINDOWS95 LISTS ONLINE BOOKS AS PC300GL

Record number: H161958

Device: D/T6562
Model: M
Tip key: 007
Date created: 097/11/24
Date last altered: A97/11/24

Users may notice that the preloaded Greek Windows95 image lists the Online Books as being for an IBM PC300GL Series system.

The Online Books section contained in the preload are correct in that they are for the IBM PC300PL Series system.

Windows and Windows95 are trademarks of Microsoft Corporation.

SAS KEYWORDS:

PSY2	PSY2MISC	PSY2DOC	PSVP
PSVPMISC	PSVPDOC	D/T6562	D/T6592
6562	6592	77438	UNCLASSIFIED

PSY2 RETAIN TIPS
GTSI M/T-MODEL NUMBERS

1.2.143 GTSI M/T-MODEL NUMBERS

Record number: H125726

Device: D/T6384
 Model: M
 Tip key: 074
 Date created: 094/12/08
 Date last altered: A95/10/23

The following table can be used to cross reference GTSI Models to ValuePoint models.

GTSI MODEL	IBM D/T-MODEL
0783 - SFA	6384-F30
0783 - SFB	6384-F30
0783 - SM1	6384-M70
0783 - SM2	6384-M70
0783 - SM3	6384-M70
0783 - SM4	6384-M70
0783 - AC2	6482-C3B (model most similar)
0783 - ACB	6482-C3B (model most similar)
0783 - AH3	6482-H4F
0783 - AHC	6482-H4F
0783 - AM5	6482-X5F
0783 - AME	6482-X5F
0783 - LP1	6586-47H
0783 - LP2	6586-47H
0783 - LP3	6586-47H
0783 - LP4	6586-47H
0783 - LP9	6586-47H
0783 - LPA	6586-47H
0783 - LPB	6586-47H
0783 - LPC	6586-47H
0783 - LQ1	6586-57H
0783 - LQ2	6586-57H
0783 - LQ3	6586-57H
0783 - LQ4	6586-57H
0783 - LQ9	6586-57H
0783 - LQA	6586-57H
0783 - LQB	6586-57H
0783 - LQC	6586-57H
0783 - LQ5	6586-50U
0783 - LQ6	6586-50U

NOTE 1: MODEL MOST SIMILAR BUT WITH AN SX/25 PROCESSOR

SAS KEYWORDS:

PSY2	PS/VP	PS/VALUEPOINT	VALUE POINT
SPVPMISC	PSY2NLGO	PSVPNLGO	PSY2MISC
6384	PSVP	IBMPC	PSVP

HANDICAP SCREEN READER KEYPAD HANGS SYSTEM IN DOS

1.2.144 HANDICAP SCREEN READER KEYPAD HANGS SYSTEM IN DOS

Record number: H104672

Device: D/T9576
 Model: M
 Tip key: 001
 Date created: 092/09/24
 Date last altered: A92/09/24

WHEN THE HANDICAP SCREEN READER KEYPAD, FRU P/N1393515, IS ATTACHED TO THE MOUSE PORT OF A SYSTEM, THE SYSTEM MAY FAIL TO COMPLETE POST. THIS MAY OCCUR WHILE BOOTING THE SYSTEM UNDER DOS 5.0.

THIS PROBLEM IS CAUSED BECAUSE THE MOUSE.COM DRIVER IS INCOMPATIBLE WITH THE HANDICAP SCREEN READER KEYPAD. TO ELIMINATE THIS PROBLEM, THE CUSTOMER SHOULD REMOVE THE MOUSE.COM STATEMENT FROM THE AUTOEXEC.BAT FILE, ON THE BOOT DRIVE, PRIOR TO INSTALLING THE HANDICAP SCREEN READER KEYPAD INTO THE MOUSE PORT.

THE CUSTOMER SHOULD BE REFERRED TO THEIR SOFTWARE SUPPORT FOR ASSISTANCE IN REMOVING THE MOUSE.COM STATEMENT, IF REQUIRED.

IF OTHER PROBLEMS OCCUR, NORMAL PROBLEM DETERMINATION SHOULD BE CONTINUED.

SAS KEYWORDS:

PSY2	PSY2PROG	KEYBOARD	HANG
SOFTWARE	DRVRS	D/T8550	D/T8555
D/T8556	D/T8557	D/T8560	D/T8565
D/T8570	D/T8573	D/T8580	D/T8590
D/T8595	D/T9576	D/T9577	PSY2KBRD

HARD FILE READ VERIFY TEST MAY SHOW SOFT ERRORS.

1.2.145 HARD FILE READ VERIFY TEST MAY SHOW SOFT ERRORS.

Record number: H101534

Device: D/T8530
Model: M
Tip key: 046
Date created: 087/10/12
Date last altered: A93/01/22

THE 8530 ADVANCED DIAGNOSTIC HARD FILE READ VERIFY TEST MAY REPORT BOTH SOFT ERRORS AND HARD ERRORS. IF THE FOLLOWING MESSAGE APPEARS RUN THE TEST AGAIN.

CYLINDER - XXX
HEAD - Y
COULD NOT BE READ

IF THE MESSAGE APPEARS AGAIN WITH THE SAME CYLINDER AND HEAD NUMBERS, THEN IT IS A HARD ERROR AND NORMAL MAINTENANCE PROCEDURES SHOULD BE FOLLOWED. OTHERWISE, IT WAS A SOFT ERROR.

SAS KEYWORDS:

PSY2 PSY2FDSK 8530SYSFDSK 8530SYSDIAG
PSY2DIAG

HARDFILE LIGHT STAYS ON SOLID WITH CONFIG. ERROR

1.2.146 HARDFILE LIGHT STAYS ON SOLID WITH CONFIG. ERROR

Record number: H004055

Device: D/T8555
Model: M
Tip key: 003
Date created: 089/05/01
Date last altered: A89/05/10

A CONFIGURATION ERROR (E.G. 162 , 165) ON A PERSONAL SYSTEM/2 MODEL 55 WILL CAUSE THE HARDFILE LED TO REMAIN ON AND MAKE THE HARDFILE INACCESSIBLE. PRESSING F1 WILL ALLOW THE SYSTEM TO BOOT FROM DRIVE "A"; HOWEVER, THE HARDFILE WILL REMAIN INACCESSIBLE.

THIS SYMPTOM WILL ONLY OCCUR ON SYSTEMS WITH ESDI HARDFILES.
UNTIL THE CONFIGURATION ERROR IS CORRECTED, THIS CONDITION
WILL EXIST.

SAS KEYWORDS:

PSY2 PSY2FDSK 8555SYSFDSK PSY2ERR
8555SYSERR

1.2.147 *HARDWARE MAINTENANCE LIBRARY PUBLICATION NUMBERS*

Record number: H027175

Device: D/T6152
Model: M
Tip key: 001
Date created: O88/05/24
Date last altered: A88/05/24

REFER TO D/T8550 001 FOR ORDERING PROCEDURES FOR HARDWARE MAINTENANCE SERVICE AND HARDWARE MAINTENANCE REFERENCE MANUALS AND SUPPLEMENTS. THE ACADEMIC SYSTEM 6152 IS A PERSONAL SYSTEM/2 8560 BASED MACHINE.

SAS KEYWORDS:
PSY2 PSY2DOC 6152SYSDOC

1.2.148 HARDWARE MAINTENANCE LIBRARY PUBLICATION NUMBERS

Record number: H034940

Device: D/T8555
Model: M
Tip key: 001
Date created: 089/05/01
Date last altered: A92/08/19

REFER TO RETAIN TIP "D/T8550 001" FOR ORDERING PROCEDURES FOR HARDWARE MAINTENANCE SERVICE AND HARDWARE MAINTENANCE REFERENCE MANUALS AND SUPPLEMENTS.

SAS KEYWORDS:

PSY2

PSY2DOC

8555SYSDOC

1.2.149 HELP TOPIC NOT FOUND IN QAPLUS/WIN-WIN

Record number: H133212

Device: D/T6877
Model: M
Tip key: 021
Date created: 096/03/25
Date last altered: A96/03/25

An error message indicating that the "Help Topic Not Found" may appear when attempting to access the HELP information in QAPLUS/WIN-WIN. This problem affects IBM PC 700 Series 6877 and 6887 systems preloaded with Microsoft Windows95.

The problem occurs when the user starts the QAPLUS/WIN-WIN program and clicks on the Icon depicting a printed document. When the Help Icon for the Print Information window is accessed the message "Help Topic Not Found" is displayed.

A new version of QAPLUS/WIN-WIN is being released to resolve this problem. Version 1.13 will be released during March 1996 and will be available from the IBM PC Company BBS.

Windows95 is a trademark of the Microsoft Corporation.
QAPLUS/WIN-WIN is a trademark of DiagSoft, Inc.

SAS KEYWORDS:

PSY2	D/T68XX	6887	6877
IBMPC	PSVP	PSVPDIAG	PSY2DIAG
D/T6887	PSVPPROG	PSY2PROG	PSVPERR
PC 750	PC750	PC700	PC 730
PSY2ERR	PC730	41134	

1.2.150 HMM CORRECTION&COLON. BEZEL FRU PART NUMBERS SWITCHED

Record number: H131072

Device: D/T8595
 Model: M
 Tip key: 019
 Date created: 095/09/27
 Date last altered: A95/09/29

The HMM (Hardware Maintenance Manual), S52G-9971-02, dated October 1994 has bezel FRU part numbers switched (crossed) on page 276.

The FRU part numbers affected are the DASD bay bezels, index 10 and 11. The illustrations for these FRU's are on page 273.

It should read:

Index	Description	FRU P/N
10	DASD Bezel(small, lower bezel)	33F8425
11	DASD Bezel(medium upper bezel)	64F4136

Pages 278, index 12 & 13, and 281, index 11 & 12, are correct as printed.

Servicers should make this correction in their HMM.

SAS KEYWORDS:

PSY2	SERVER	95	PSY2PART
PSY2DOC	8595	D/T9595	9595
P/N64F4136	P/N33F8425		

HMM CORRECTION, FALSE LISTING OF a FLASH RECOVERY JUMPER.

1.2.151 HMM CORRECTION, FALSE LISTING OF a FLASH RECOVERY JUMPER.

Record number: H16892

Device: D/T8638
Model: M
Tip key: 002
Date created: 097/08/21
Date last altered: A97/08/25

The Hardware Maintenance Manual Supplement dated May 1997 S84H-7201 - 00 (PC Server 315 Type: 8638, Models: KJO, KSO, PJO, PSO, PSV) lists a Flash Recovery Jumper which does not exist on the PC Server 315. Disregard the "Flash Recovery Jumper" listing located on page 55 as well as the 7 associated steps that end at page 56.

This listing will be deleted in the next update of the HMM.

SAS KEYWORDS:

PSY2 PSY2DOC UNCLASSIFIED BIOS
CMOS

1.2.152 HMM CORRECTION, 9521 SERVICE INFORMATION

Record number: H127062

Device: D/T9521
Model: M
Tip key: 005
Date created: 095/04/07
Date last altered: A95/04/07

The 9521 Specific Repair Update Supplement, S82G-3773, for the Monitor Maintenance Manual Volume 2, S71G-4197-02 incorrectly states on page 9-28 that servicers should call 1 - 800-PS2 - 2227 for support. Servicers that require assistance should use their normal support structure. This number is for end user customer support only.

A correction will be made in the next release of this document.

SAS KEYWORDS:

PSY2

HMM

HMS

1.2.153 HMM MANUALS ON THE INTERNET ARE NOW UPDATED EACH WEEK.

Record number: H103763

Device: D/T9547
Model: M
Tip key: 009
Date created: 097/03/10
Date last altered: A97/12/05

As of April 1 1997, all Personal Computer Company Hardware Maintenance Manuals will be updated on a weekly basis. All updates will be identified and will be included in the next hardcopy update of the manual.

The Internet URAL is: <http://www.pc.ibm.com/us/cdt/hmm.html>

SAS KEYWORDS:

PSY2 PSY2DOC THINKPAD UNCLASSIFIED

HORIZONTAL MOUNTING OF PS/2 8560, 8565 AND 8580 SYSTEMS

1.2.154 HORIZONTAL MOUNTING OF PS/2 8560, 8565 AND 8580 SYSTEMS

Record number: H022320

Device: D/T8580
 Model: M
 Tip key: 012
 Date created: 090/11/07
 Date last altered: A93/07/23

BASED UPON THE REQUIREMENTS OF THE VARIOUS APPROVAL AGENCIES TO WHICH OUR PRODUCTS ARE CERTIFIED, IBM DOES NOT SUPPORT THE MOUNTING OF PS/2 MODELS 8560, 8565 8580, 8595, 9585 AND 9595 IN ANY ORIENTATION OTHER THAN VERTICAL. IBM'S CONCERN IS AS FOLLOWS:

THE MACHINE'S SIDE COVER LOUVERS WILL NOT MEET VARIOUS REQUIREMENTS DESIGNED TO RESTRICT THE INTRODUCTION OF CONDUCTIVE MATERIELS (SUCH AS PAPER CLIPS, ETC.) INTO THE MACHINE ENCLOSURE.

HORIZONTAL MOUNTING OF THESE SYSTEMS DOES NOT INVALIDATE THE LIMITED WARRANTY.

SAS KEYWORDS:

PSY2	8560SYSMISC	8565SYSMISC	8580SYSMISC
D/T8560	D/T8565	PSY2MISC	D/T8595
D/T9595	D/T9585		

1.2.155 HOT-SWAP TRAY FITS TIGHTLY IN DASD BAY

Record number: H123235

Device: D/T8640
Model: M
Tip key: 012
Date created: 096/04/18
Date last altered: A98/01/20

The hot-swap tray assembly may fit tightly into the hot-swap shell assembly of some PC Server 320 systems (M/T8640). In severe cases, it is possible for an excessively tight fit to prevent a good connection between the hot-swap tray and backplane card.

When diagnosing hardfile problems on these systems, either solid or intermittent, examine the fit of the hot-swap tray in the hot-swap shell assembly. If the fit is tight enough to potentially cause a poor drive connection, consider replacing the tray or shell.

If only one hot-swap tray is too tight, and is tight in all slots, try replacing the tray first, FRU p/n06H3956.

If all trays are too tight, try the hot-swap shell assembly first, FRU p/n06H5068.

SAS KEYWORDS:

8640	PSY2	300	320
PSY2FDSK	HARDFILE	DASD	RAID
ARRAY	CAGE	SLOT	HEALTH

1.2.156 HOTSWAP FIXED DISK DRIVE REPLACEMENT NOTES

Record number: H093102

Device: D/T8641
 Model: M
 Tip key: 008
 Date created: 095/10/10
 Date last altered: A96/02/19

The IBM SCSI and RAID adapters have been designed to allow hard disk drives in hot-swap bays to be removed or installed while the system is running. In some situations, hard disks may be powered down by a RAID Adapter prior to their removal from a hot-swap bay (e.g. failed disk drive); however, this is not a fundamental requirement prior to removing a drive.

Only persons trained and knowledgeable in RAID Array service procedures should attempt to service this type system, due to the exposure to possible customer data loss.

When removing drives which are still running, extra care needs to be taken. The following facts should be understood:

1. The drive needs to be part of a FAULT TOLERANT RAID 5 or RAID 1 Array or the operating system may be unable to access data after the disk drive has been removed.
2. Only RAID 1 or RAID 5 Arrays allow dynamic rebuilding on a drive that has been replaced.
3. Only one disk drive can be rebuilt at a time.
4. The current level of RAID Administration Utility for the specific operating system should be run during disk drive removal. The RAID Adapter marks the drive DDD in this Utility to indicate a command was issued to the drive with no response.
5. Once a drive's status appears as DDD, a replacement drive can be inserted into the bay.
 An operator can force a drive which has already been removed from a hot-swap drive bay to be marked DDD by invoking the Drive Information option in the RAID Administration utility. This option is available in all operating systems.
6. Fixed disk drives are fragile. Care should be taken to avoid rough handling of these devices. Care should also be used when plugging and unplugging hot swap drives to prevent damaging connectors, etc. Use ESD procedures.

When not installed in a system unit, drives must be protected by being packed in an antistatic bag and option/FRU pack or equivalent.

When drives are being handled outside of their packaging the must not be subjected to a shock greater than the equivalent of being dropped 1 inch onto a hard surface. Any shock greater than this level may damage the disks within the fixed disk assembly and could also result in motor bearing damage which may result in noisy operation.

7. When power is removed from a hot swap drive by the RAID Controller or by user action, the drive will immediately park the heads, lock the actuator in the "landing zone", and begin spinning down. However, the disk spin-down may require up to 20 seconds after power removal. Moving the drive during spin-down should be AVOIDED.

In the event a drive is to be removed from or inserted into a hot-swap bay, the following procedures should be followed.

Steps for Removal of Hot-Swap Drives:

1. Unlatch the drive and gently unseat the drive from the backplane, but do not remove the drive completely from the hot-swap bay.
2. Wait 20 seconds to allow the disk drive to spin-down completely before removing it from the hot-swap bay.
3. Carefully remove the drive from the hot-swap bay.

Steps for Insertion of Hot-Swap Drives:

1. Ensure the current RAID Administration Utility is running

for the specific operating system.

2. Verify the hot-swap bay where the drive is being inserted appears as DDD in the RAID Administration Utility.
3. Carefully insert the drive into this hot-swap bay.
4. Gently seat the drive completely in the backplane connector and latch the drive into the bay.
5. Follow the directions that came with the system documentation or RAID Adapter to activate the new disk drive and/or begin a data rebuild operation.

On IBM systems, where a Hot-Spare drive is available, the data rebuild operation will begin automatically without the requirement to replace the failed drive.

In cases where a Hot-Spare drive is not available, the user or system administrator must use the RAID Administration Utility to initiate the drive rebuild operation.

As stated earlier, this procedure may differ from implementation by other vendors. Some other vendors' systems may rebuild data automatically when a new drive is inserted. Our procedure requires the user to request the data be rebuilt through the RAID Adapter Utilities in the case where a hot spare drive is not available. This provides the flexibility to reuse the remaining drives as part of another array without performing a rebuild operation, or to start and monitor the rebuild operation when it is convenient for the customer. If automatic unattended rebuild support is desired, then a Hot-Spare drive should be defined.

Note 1:

It is recommended that RAID system users periodically perform an "Array Synchronization" (perhaps twice a month) in order to help prevent future rebuild failures. This can be done either via the standalone RAID Adapter Support Diskette in an off-line mode, or while the server is running via the Netfinity RAID services menu.

Note 2:

In situations where RAID hot-swap "demonstrations are being conducted, it is important that Drive Synchronization be done prior to forcing a drive "dead" via a "hot-pull" of a working drive.

The drive that was pulled "hot" must then be either replaced into the array and completely rebuilt, or it must be configured into another array and synchronized prior to being used to store data. This is because the act of "hot-pulling" a disk could result in a partially written sector which would then need to be re-written to correct the ECC bytes or else that partially written sector could cause a rebuild failure later, if used in another array that was not completely synchronized.

SAS KEYWORDS:

PSY2	RAID	SERVER	PSY2FDSK
SCSI	SCSI-2	ARRAY	D/T9595
D/T9595A	D/T8641	D/T3516	320
D/T8640	8640	9595	9595A
8641	500	95	EXPANSION
ENCLOSURE	720	8642	D/T8642
INITIALIZE	SYNCHRONIZE		

IBM DESKTOP SYSTEMS CAPABLE OF YEAR 2000 ROLLOVER

1.2.158 IBM DESKTOP SYSTEMS CAPABLE OF YEAR 2000 ROLLOVER

Record number: H01331

Device: D/T6384
 Model: M
 Tip key: 079
 Date created: 096/04/02
 Date last altered: A97/05/21

The following list contains IBM PC Company Commercial Desktop Products that are capable of the year 2000 rollover. Included in the list are those systems that are not capable.

M/T	Support Built-in	Update Required	Update Type	Update Level

PS/ValuePoint Family of Products				
6381	NO	YES	BIOS	L8JT45A & HIGHER
6384	NO	NO	N/A	N/A
6382/S	NO	YES	BIOS	L6JT69A & HIGHER
6384/D	NO	YES	BIOS	L6JT69A & HIGHER
6387/T	NO	YES	BIOS	L6JT69A & HIGHER
6384 P60/D	NO	YES	BIOS	1.00.06 & HIGHER
M/T	Support Built-in	Update Required	Update Type	Update Level

PS/ValuePoint Performance Series Products				
6472	NO	YES	BIOS	LDJT71A & HIGHER
6482	NO	YES	BIOS	LDJT71A & HIGHER
6484	NO	YES	BIOS	LDJT71A & HIGHER
6492	NO	YES	BIOS	LDJT71A & HIGHER
6494	NO	YES	BIOS	LDJT71A & HIGHER
M/T	Support Built-in	Update Required	Update Type	Update Level

IBM PC 300 Series Products				
6571	NO	YES	BIOS	LEJT62A & HIGHER
6573	NO	YES	BIOS	LEJT62A & HIGHER
6581	NO	YES	BIOS	LEJT62A & HIGHER
6583	NO	YES	BIOS	LEJT62A & HIGHER
6575	NO	YES	BIOS	N1JT63A & HIGHER
6585	NO	YES	BIOS	N1JT63A & HIGHER
6576	YES	NO	N/A	N/A
6586	YES	NO	N/A	N/A
6598	YES	NO	N/A	N/A
M/T	Support Built-in	Update Required	Update Type	Update Level

IBM PC 700 Series Products				
6875	NO	YES	BIOS	N1JT63A & HIGHER
6885	NO	YES	BIOS	N1JT63A & HIGHER
6876	NO	YES	BIOS	N2JT38A & HIGHER
6886	NO	YES	BIOS	N2JT38A & HIGHER
6877	YES	NO	N/A	N/A
6887	YES	NO	N/A	N/A
M/T	Support Built-in	Update Required	Update Type	Update Level

IBM PS/2 MICRO CHANNEL & AT BUS PRODUCTS				
8525	NO	N/A	N/A	N/A
8530	NO	N/A	N/A	N/A
8535	NO	N/A	N/A	N/A
8540	NO	N/A	N/A	N/A
8550	NO	NO	N/A	N/A
8555	NO	NO	N/A	N/A
8556	NO	NO	N/A	N/A
8557	NO	NO	N/A	N/A
8560	NO	NO	N/A	N/A
8565	NO	NO	N/A	N/A
8570	NO	NO	N/A	N/A
8580	NO	NO	N/A	N/A
8590	NO	NO	N/A	N/ADING
9553	YES	NO	N/A	N/A
9556	NO	NO	N/A	N/A
9557	NO	NO	N/A	N/A
9576	NO	NO	N/A	N/A
9577	NO	NO	N/A	N/A
9576 I&S	NO	YES	BIOS	G7JT59AUS
9577 I&S	NO	YES	BIOS	G7JT59AUS

Items that have no built-in support AND no update level pending or available do not support the year 2000 rollover.

SAS KEYWORDS:

PSVP	PSY2	PSVPMCD	PSY2MCD
D/T8525	D/T8530	D/T8535	D/T8540
D/T8550	D/T8555	D/T8556	D/T8557
D/T8560	D/T8565	D/T8570	D/T8580
D/T8590	D/T9556	D/T9557	D/T9576
D/T9577	D/T6381	D/T6382	D/T6384
D/T6387	D/T6472	D/T6482	D/T6484
D/T6492	D/T6494	D/T6571	D/T6573
D/T6581	D/T6583	D/T6575	D/T6585
D/T6576	D/T6586	D/T6598	D/T6875
D/T6885	D/T6876	D/T6886	D/T6877
D/T6887	IBMPC	D/T65XX	D/T68XX

1.2.159 IBM FAST SCSI-2 ADAPTER SWITCH SETTINGS

Record number: H123591

Device: D/T6384
 Model: M
 Tip key: 056
 Date created: 094/04/01
 Date last altered: A95/03/31

THE IBM FAST SCSI-2 ISA Adapter FRU P/N92f0330 has been replaced by FRU P/N82G4879. The old adapter had jumpers for setting options. The new adapter has switches. The following tables contain the information required to set the switches:

INTERRUPT SELECTION SWITCHES

IRQ-0	IRQ-1	IRQ-2	FUNCTION
OFF	OFF	OFF	IRQ=3
ON	OFF	OFF	IRQ=5
OFF	ON	OFF	IRQ=10 (DEFAULT)
ON	ON	OFF	IRQ=11
OFF	OFF	ON	IRQ=DISABLED
ON	OFF	ON	IRQ=14
OFF	ON	ON	IRQ=15
ON	ON	ON	IRQ=DISABLED

ROM ADDRESS SELECTION

MEM-0	MEM-1	FUNCTION
OFF	OFF	MEM=C800h
ON	OFF	MEM=CA00h
OFF	ON	MEM=CE00h
ON	ON	MEM=DE00h

I/O ADDRESS SELECTION

IO-0	IO-1	FUNCTION
OFF	OFF	IO=140h
ON	OFF	IO=150h
OFF	ON	IO=160h
ON	ON	IO=170h

A switch is ON when it is down (towards the circuit board).

FRU P/N82G4879 automatically determines if adapter termination is required. Adapter termination is always enabled unless devices are attached to both the internal and external connectors. There is no termination switch or jumper on this adapter.

For additional information on the switches, refer to the installation instructions provided with the old adapter. The following table can be used to compare jumpers to switch settings:

FUNCTION	FRU 92F0330 JUMPER	FRU 82G4879 SWITCH
INTERRUPT	IS0	IRQ-0
"	IS1	IRQ-1
"	IS2	IRQ-2
ROM ADDRESS	MS0	MEM-0
"	MS1	MEM-1
I/O ADDRESS	IOS0	I/O-0
"	IOS1	I/O-1

A jumper installed on two pins equals a switch in the ON position.

An errata sheet will be added to the FRU B/M.

SAS KEYWORDS:

PSY2	PSVP	PS/VALUEPOINT	VALUE POINT
6381	6382	6387	6384
D/T6381	D/T6382	D/6387	PSY2ADPT
PSVPADPT	92F0330	FUTURE DOMAIN	82G4879
D/T8525	D/T8530	D/T8535	D/T8540
8525	8530	8535	8540

IBM INTERNAL TAPE DRV DUALSTOR DRIVE NOT INTERCHANGEABLE

1.2.160 IBM INTERNAL TAPE DRV & DUALSTOR DRIVE NOT INTERCHANGEABLE

Record number: H123546

Device: D/T6384
Model: MCP1
Tip key: 055
Date created: 094/04/12
Date last altered: A94/04/12

THE IBM DUALSTOR INTERNAL TAPE BACKUP UNIT FRU P/N82G7106 IS NOT INTERCHANGEABLE WITH THE IBM INTERNAL TAPE BACKUP UNIT FRU P/N87F9787. BOTH OF THESE DRIVES SHOULD BE REPLACED WITH THE CORRESPONDING FRU P/N IF A REPLACEMENT IS NECESSARY.

SAS KEYWORDS:

PSY2	PSY2TAPE	ITBU	PSY2MISC
PSY2ERR	TAPE	BACKUP	INTERNAL
D/T8557	D/T8556	D/T9595	D/T9585
DUALSTOR	PSVPTAPE	PSVPMISC	P/N82G7106
P/N87F9787			

1.2.161 IBM ISA ARTIC ADAPTERS NOT SUPPORTED IN 6560 & 6260

Record number: H133507

Device: D/T6560
Model: M
Tip key: 002
Date created: 096/08/02
Date last altered: A96/08/02

IBM PC 340 Series 6560 and PC 100 Series 6260 machine types do not support the following IBM ISA ARTIC Communication adapters:

IBM REALTIME INTERFACE CO-PROCESSOR (512KB)
IBM REALTIME INTERFACE CO-PROCESSOR MULTIPORT
IBM REALTIME INTERFACE CO-PROCESSOR MULTIPORT 8-PORT 232
IBM REALTIME INTERFACE CO-PROCESSOR MULTIPORT MODEL 2
IBM X.25 INTERFACE CO-PROCESSOR (512KB)

There is a timing incompatibility between the 6560 and 6260 systems and the ARTIC adapters which prevents stable operation.

SAS KEYWORDS:

PSVP	PSY2	PSVPADPT	PSY2ADPT
PSVPCOMM	PSY2COMM	48283	PC 300
IBMPC			

IBM MEMORY FAILING IN OEM EQUIPMENT

1.2.162 IBM MEMORY FAILING IN OEM EQUIPMENT

Record number: H064508

Device: D/T8550
Model: M
Tip key: 067
Date created: 090/11/06
Date last altered: A94/03/14

IBM MEMORY SIPS/SIMMS HAVE BEEN DESIGNED TO OPERATE IN IBM SYSTEM BOARDS AND OPTIONS. ARCHITECTURAL DIFFERENCES IN THE DESIGN OF OF IBM MEMORY AND OEM EQUIPMENT MAY RESULT IN INCOMPATIBILITY. THIS INCOMPATIBILITY MAY SHOW UP AS AN IMMEDIATE FAILURE AT INSTALLATION, OR AS A MEMORY FAILURE WHILE THE SYSTEM IS OPERATING IN AN APPLICATION.

IBM DOES NOT SUPPORT THE USE OF IBM MEMORY IN OEM EQUIPMENT. IF THE HARDWARE/SOFTWARE CONFIGURATION HAS NOT PREVIOUSLY WORKED SUCCESSFULLY, CUSTOMERS SHOULD VERIFY THAT THEIR OEM EQUIPMENT IS COMPATIBLE WITH IBM MEMORY BEFORE PARTS ARE REPLACED.

SAS KEYWORDS:

PSY2	PSY2MEM	D/T8560	D/T8565
D/T8570	D/T8555	D/T8580	D/T8595
D/T8590	D/T8573	ERROR	SIM
SIMM	SIP		

1.2.163 IBM PC MUSIC FEATURE - PRODUCT INFORMATION

Record number: H005831

Device: D/T5150
 Model: M
 Tip key: 125
 Date created: 087/06/12
 Date last altered: A87/06/12

PRODUCT DESCRIPTION:

 THE IBM PC MUSIC FEATURE IS A FULL LENGTH (13 INCH) PC OPTION CARD THAT PROVIDES MUSICAL INSTRUMENT DIGITAL INTERFACE (MIDI) CAPABILITIES AND FM STEREO SOUND. THE CARD CAN GENERATE 336 DIFFERENT MUSICAL SOUNDS, 240 PRESET AND 96 THAT ARE USER PROGRAMMABLE. UP TO 8 SOUNDS MAY BE PLAYED SIMULTANEOUSLY.

THE IBM PC MUSIC FEATURE ALSO CONTAINS FOUR EXTERNAL CONNECTORS: 1 FOR HEADPHONE LISTENING, 2 FOR AUDIO OUTPUT (RIGHT AND LEFT STEREO CHANNELS), AND 1 FOR THE MIDI DEVICE INTERFACE.

FOR ADDITIONAL PERFORMANCE, A MAXIMUM OF UP TO 2 CARDS MAY BE INSTALLED IN A SYSTEM UNIT, ASSUMING AVAILABLE CARD SPACE, BRINGING THE TOTAL NUMBER OF SOUNDS WHICH MAY BE PLAYED SIMULTANEOUSLY TO 16. THE FEATURE IS SUPPORTED BY ALL MODELS OF THE IBM PC 5150, IBM PC XT 5160, IBM PC XT-286 5162, IBM PC AT 5170, AND IBM PERSONAL SYSTEM/2 MODEL 30. THE FEATURE IS NOT SUPPORTED BY THE IBM PCJR 4860, IBM PC PORTABLE 5155, AND IBM PC CONVERTIBLE 5140.

THE CUSTOMER SHIP GROUP CONSISTS OF THE FOLLOWING:

GUIDE TO OPERATIONS (GTO) SUPPLEMENTAL DOCUMENTATION

- 1 - MUSIC ADAPTER CARD
- 1 - MIDI ADAPTER UNIT - PROVIDES CONNECTORS TO ATTACH MIDI DEVICES FOR INPUT/OUTPUT
- 3 - CUSTOMER DIAGNOSTIC DISKETTES - ONE 3.5 INCH, TWO 5.25 INCH
- 1 - CARD GUIDE

FIELD DOCUMENTATION AND INFORMATION

 THERE IS NO PRODUCT SPECIFIC TRAINING REQUIRED TO SERVICE THE IBM PC MUSIC FEATURE. THE HARDWARE MAINTENANCE LIBRARY (HML) UPDATE (FORM NUMBER SA231029, P/N75X1049) CONSISTS OF THE FOLLOWING:

- 1 - DIAGNOSTIC WRAP PLUG (P/N81X8625)
 - 3 - ADVANCED DIAGNOSTIC DISKETTES - ONE 3.5 INCH, TWO 5.25 INCH
- SUPPLEMENTAL DOCUMENTATION FOR THE HML UPDATE

FRU PART NUMBERS ARE:

P/N81X8620 - MUSIC ADAPTER CARD
 P/N81X8624 - MIDI ADAPTER UNIT
 P/N81X8625 - DIAGNOSTIC WRAP PLUG (COMES WITH HML UPDATE)

SAS KEYWORDS:

5150SYSADPT	5150SYSPART	5150SYSDOC	5160SYSADPT
5160SYSPART	5160SYSDOC	5170SYSADPT	5170SYSPART
5170SYSDOC	8530SYSADPT	8530SYSPART	8530SYSDOC
PCOMADPT	PCOMPART	PCOMDOC	PCOM
PSY2ADPT	PSY2PART	PSY2DOC	PSY2

1.2.164 IBM PC 300/700 FLASH EEPROM CODE LEVELS

Record number: H082883

Device: D/T68XX
 Model: M
 Tip key: 010
 Date created: 095/07/25
 Date last altered: A97/02/11

The purpose of this tip is to list the FLASH BIOS updates for IBM PC 300 and PC 700 Commercial Desktop Systems and provide a method of obtaining the latest FLASH update diskette.

There are four FLASH products for PC300/700 Commercial Desktop Systems.

System	Flash Product Code	Machine Type
PC340-P100 - P166	LX	6560
PC3xx-486	LE	6571, 6573, 6581, 6583
PC3xx-P75, P90	LP	6576, 6586
PC3xx-P60	N1	6575, 6585
PC360	LT	6598
PC7xx PCI/ISA	N1	6875, 6885
PC7xx Micro Channel	N2	6876, 6886

NOTE - Flash code must be installed after installing a replacement system board FRU. System board from FRU stock may not have the necessary vital product data (VPD) to function properly as an IBM PC 300/700 system.

----- IMPORTANT -----

THESE FLASH UPDATES ARE CUSTOMER INSTALLABLE. CUSTOMERS SHOULD BE ADVISED TO CONTACT THE PC COMPANY HELPCENTER AT 800-772 - 2227 IF ASSISTANCE IS REQUIRED IN GETTING OR INSTALLING THE APPROPRIATE UPDATE. CUSTOMERS IN CANADA SHOULD CALL IBM'S HELPPC AT 800 565-3344.

The update diskettes may be downloaded from the IBM PC Company Bulletin Board System by calling 919-517-0001.

Customers and dealers in Canada may download the FLASH code from their respective IBM regional bulletin board service.

PC340-P100, P133 & P166 (Flash Product Code LX)

The flash BIOS levels that have been formally released for machine types 6560 are as follows:

18A - LXJT18A (first customer ship level)

20A - LXJT20A

21A - LXJT21A

22A - LXJT22A (Current Level)

The problems resolved with 18A level are as follows:

LXJT18A

1 - INITIAL SHIP LEVEL. INCLUDES ALL DEVELOPMENT UPDATES.

The problems resolved with 20A level are as follows:

LXJT20A

1 - Some 6X & 8X IDE CDROMs get 1762 error when used as slave.

The problems resolved with 21A level are as follows:

LXJT21A

1 - Interrupt assignment to allow VGA to use interrupts other than IRQ9.

2 - Add Synchronous Cache and 166 MHz support.

3 - System hangs with some PCI network cards with L2 cache installed.

The problems resolved with 21A level are as follows:

LXJT22A

1. RESET ALL PNP CARDS DURING A COLD OR WARM BOOT TO RELEASE RESOURCES.

2. ADD BOOTABLE CD SUPPORT FOR WINDOWS NT

3. FAILS TO SUSPEND WITH SUSPEND BUTTON IN WIN95 -

Suspend fails in WINDOWS/95 with certain hardfiles installed.

The system spins down the hardfile, appears to go to suspend for approximately 2 seconds and then spins back up. This only fails with 2 hardfiles on the same controller and then only with some IBM hardfiles. It has not been seen with other files. Also, automatic suspend works properly.

4. PRINT SCREEN HANGS INTERMITTENTLY.

5. CANNOT INSTALL AUTO 16/4 TOKEN RING WITH SOUNDBLASTER PNP

- CARD.
- 6.NMI ERROR - UNEXPECTED INTERRUPT 2 HANGS SYSTEM -
Some older programs issued an interrupt 2 to detect the co-processor which causes the system to hang.
 - 7.SET BI-DIRECTIONAL MODE AS DEFAULT ON PARALLEL PORT.
 - 8.ADMINISTRATIVE PASSWORD NEEDED DURING POWER ON -
With administrative password enabled, but not the power-on password enabled, a password prompt occurred during a normal boot. Should only prompt for administrator password during a flash boot or entering the Setup Utility.
 - 9.ADD SUPPORT FOR INTEL P54CTB UPGRADE PROCESSOR.
 - 10.PASSWORD PROMPT WHEN PROMPT IS SET TO OFF -
The power on password setup menu has an option to set the prompt to 'OFF'. This allows the boot to complete without the password being entered. The keyboard will be locked until the password is entered to maintain security. This feature was not working.
 - 11.I/O ADDRESS 100-107 SHOULD NOT BE RESERVED BY THE SYSTEM.
 - 12.BOOTABLE ADAPTER CARDS BYPASS SECURITY -
Adapter cards that perform a boot, such as network boot or bootable SCSI adapters, could take control of the boot process before the password checking is performed. This bypassed password security.
-

PC300-486 (Flash Product Code LE)

The flash BIOS levels that have been formally released for machine types 6571, 6573, 6581, and 6583 are as follows:

- 47A - LEJT47A/LEKT47A (first customer ship level)
- 48A LEJT48A/LEKT48A
- 49A LEJT49A/LEKT49A
- 52A LEJT52A/LEKT52A
- 55A LEJT55A/LEKT55A
- 59A LEJT59A/LEKT59A
- 60A LEJT60A/LEKT60A
- 62A LEJT62A/LEKT62A
- 63A LEJT63A/LEKT63A
- 65A LEJT65A/LEKT65A (Current Level)

The problems resolved with 48A level are as follows:

LEJT48A & LEKT48A

- 1 - Provide support for IBM Plug and Play token ring adapters.
- 2 - Fix for Wake Up event time change if CMOS is corrupted.
- 3 - Fix for intermittent hang when accessing cache memory.
- 4 - Fix for hangs after a Suspend/Resume with Windows preload.
- 5 - Fix for print failure after a Resume.

The problems resolved with 49A level are as follows:

LEJT49A & LEKT49A

- 1 - Fix intermittent hardfile hang in Rapid Resume.
- 2 - Speed up Rapid Resume with Multi-sector support.
- 3 - System hangs if mouse pin 2 and 4 are in contact with each other.
- 4 - Update Plug and Play device information.
- 5 - Correctly set the parity/non-parity bit on warm boot.

The problems resolved with 52A level are as follows:

LEJT52A & LEKT52A

- 1 - Fix for 2408 (video graphics mapping error) with four 8MB memory SIMMS installed.
- 2 - Fix serial port and parallel port problems.
- 3 - Fix for Plug and Play for WIN 95.
- 4 - Monitor DDC1 support
- 5 - Fix for Windows exiting to C: >.
- 6 - Fix for 1762 errors.
- 7 - Fix for QEMM386 stealth mode hang.
- 8 - Fix for 162 error after setting defaults.
- 9 - Fix for POST failing to recognize that a second hard disk drive is installed (with OEM drives that are slow to spin up to speed).

The problems resolved with 55A level are as follows:

LEJT55A & LEKT55A

- 1 - System intermittently fails to respond to F1 keystrokes.
 - 2 - System fails to recognize Panasonic and other IDE CD-ROM's.
- The problems resolved with 59A level are as follows:

LEJT59A & LEKT59A

- 1 - Change Virus checking to disabled
- 2 - Fix audio hangs on re-boot with soundblaster card installed.
- 3 - Fix Suspend/Resume timing with Modem installed.
- 4 - Configure additional OEM non-conforming CD-ROM drives.

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- 5 - Fix IRQ7 resource conflict between Audio and LPT1.
- 6 - Fix for AZERTY keyboard M key not usable for password.
- 7 - Fix for Warp not booting.
- 8 - Fix for system powering up when AC cord plugged in after shutting down Win95.
- 9 - Fix disable video code.
- 10 - Set PWR_STATE bit on Shutdown
- 11 - Fix for F1 keypress lost during POST.
- 12 - Full Setup menu on warm boot with PAP.
- 13 - Fixed Hang in PCI SCSI Adaptec full screen setup.

The problems resolved with 60A level are as follows:

LEJT60A & LEKT60A

- 1 - Skyline PCI Token Ring Adapter Fixes.
- 2 - Fix for mouse hang after rapid resume if mouse was moved during APM shutdown.

The problems resolved with 62A level are as follows:

LEJT62A & LEKT62A

- 1 - Cache size may be incorrectly set.
- 2 - Suspend/Resume fails with certain CDROM drives.
- 3 - Save/Restore Video Mode When Clearing Screen in POST.
- 4 - Power switch intermittently fails to function.
- 5 - Century will now roll to year 2000 during POST
- 6 - POST does not configure parallel port into ECP mode.
- 7 - PCI adapters not enabling memory
- 8 - PCI POST does not handle ROM images > 64kb
- 9 - SCSI card causes 164 (memory size) error
- 10 - Multifunction PCI adapters IRQs do not configure.
- 11 - Change IRQ 9 disable method.
- 12 - Spelling errors in German language
- 13 - Cache size is 0 after manufacturing auto config.
- 14 - 4X CDROM does not show up in system summary

The problems resolved with 63A level are as follows:

- 1 - PCI adapters with Real memory will not function.
- 2 - Drives on secondary controller may falsely report not busy.
- 3 - Int 15 Function E820 returns incorrect values
- 4 Change stack pointer during int. 19 to prevent stack overflows
- 5 - Add changes.new file to flash diskette.

The problems resolved with 65A level are as follows:

- 1 - Space Saver Keyboard may not recognize the ALT key.
- 2 - EMM386 Exception #12 error in the F000 block running DOS Extended applications.

PC300 PENTIUM 75,90,100,120,133 & 166Mhz (Flash Product Code LP)

The flash BIOS levels that have been formally released for machine types 6576 and 6586 are as follows:

- 34A - LPJT34A/LPKT34A (first customer ship level)
- 49A - LPJT49A/LPKT49A
- 51A - LPJT51A/LPKT51A
- 52A - LPJT52A/LPKT52A
- 56A - LPJT56A/LPKT56A
- 59A - LPJT59A/LPKT59A
- 60A - LPJT60A/LPKT60A (Current Level)

The problems resolved with 49A level are as follows:

LPJT49A/LPKT49A

- 1.Fixed a condition where an OS/2 installation could fail due to uninitialized CD-ROM media type. Now the media is defaulted to a hard disk if the CD-ROM is not used as a boot device.
- 2.Incorporated new Video BIOS for both the Trio 64 and 64'. These new revisions fix the interlace polarity bit and correct corruption at high refresh rates in 1280x1024 due to a slower VCO frequency.
- 3.Reworked core ATA/ATAPI initialization code to make it much faster and more robust when detecting devices that do not entirely comply with these standard specifications.
- 4.Incorporated a Power Management fix, that caused the Auto Halt feature to be permanently disabled, while the CPU is not active.
- 5.Corrected condition where a bad PnP card would not be flagged.
- 6.Corrected the IRQ 12 forced allocation that was originally attempted. This allows the mouse port to be used for other peripherals under DOS (such as the numeric keypad).
- 7.Corrected a problem in the BIOS Update Utility where Vital Product Data like the Machine Type and Serial Number data would be lost or corrupted. Also changed the unattended mode operation so that no output is displayed.
- 8.Changed the logging of memory types to report EDO if only

- one bank is stuffed. If the memory types are mixed, setup still reports Fast Page.
9. Incorporated new ATA/ATAPI initialization code. This greatly reduced boot time since "Shadowed" drives can be properly identified.
 10. Inserted patch so 386MAX memory manager will scan F000 region correctly.
 11. Incorporated APM Turbo/Deturbo bug fix.
 12. Fixed Win95 function 02h - setnode 0Bh. This function passed when the parallel port was set to standard, but failed with BAD PARAMETER when set to ECP or EPP. Corrected by initializing DMA field to 00h.
 13. Forced mouse resources to be enabled on the 306 controller so that other peripherals can use the mouse port.
 14. Corrected initialization of IBM monitor types in setup.
 15. Reworked floppy auto-configuration to flag installation/removal changes only. Installation defaults to 3.5, 1.44 MB until changed within setup.
 16. Incorporated S3 Video BIOS Version 1.3-08-12-57mhz with the following fixes:
 - 72 Hz and 75 Hz refresh rate support for VGA mode 12.
 - Increased timeout for DDC1 monitor detection.
 - M&N changes
 - 640x480x8 75 Hz (1 MB RAM) from 20 to 13
 - 600x800x8 60 Hz (1 MB RAM) from 14 to 12
 - Fixed Palette Snoop Feature
 17. Turned palette snoop on at startup by default.
 18. Added support for PCI burst control in Setup.
 19. Added floppy autodetection.
 20. Added change symbol for floppy or IDE configuration changes.
 21. Added support for CD-ROM boot.
 22. Added Win95 compliant mouse device node.
 23. Fixed problem where a PCI BIOS could fail to install.
 24. Removed code that prevented special check for video IRQ enable/disable for secondary PCI video cards.
 25. Removed delays apparent when Sony CD-ROM drives are initialized.
 26. Added auto configuration of Trio 64 Feature Connector based on the amount of video DRAM that is detected.
 27. Fixed time/date format in Product Data window.
 28. Fixed problem where system would report an error message stating "Read-error on hd2" if a CDROM drive is installed and boot manager is being used.
 29. Fixed problem where IRQ 15 would fail to recognize an adapter even though the secondary IDE port was disabled and the setup showed that IRQ 15 was "Not Available."
 30. Fixed setup problem with IBM Auto 16/4 Token Ring adapter and LANAIID 1.4. Adapter could not be configured to run on IRQ 3 or 11.

The problems resolved with 51A level are as follows:

 - 1 - Incorporated a new S3 Trio 64' compatible Video BIOS, version 1.3 - 08 - 19. This video BIOS corrects problem of not using 2mb of video memory.

The problems resolved with 52A level are as follows:

 - 1 - Incorporated modified core code that correctly calls a wait loop for status to keyboard input buffer full. This wait loop is to allow the KBC to keep up with faster processors.
 - 2 - Fixes remote booting problems with the Token Ring II Adapter.
 - 3 - Fixed four language files (2 sweden 2 italian).
 - 4 - Changed setup code to correctly show DDC1 Monitor Product ID.
 - 5 - Incorporated new core drive detection algorithm code.
 - 6 - Changed setup code to correctly display 166MHz processor speed.

The problems resolved with 56A level are as follows:

 - 1 - Fixed corrupted logo on Artist Graphics card and Matrox Millennium card.
 - 2 - Enabled setup to correctly recognize 85Hz refresh for DDC1 monitors.
 - 3 - Enabled 32-bit support for enhanced IDE.
 - 4 - Added 301 Keyboard Error when no K/B connected.
 - 5 - Incorporated a new S3 Trio 64' compatible Video BIOS.
 - 6 - Changed flash update utility to correctly filter keyboard input interactively inputting vital product data.
 - 7 - Anomalies in changing setup date/time fields corrected.
 - 8 - The VideoLogic Grafix Star 400 card fails in PC300 with the MPEG daughter card attached w/BIOS levels lower than 59A.

The problems resolved with 59A level are as follows:

 - 1 - Fix keystroke echo problem when using EXCELLNET software from Host end. Keyboard echoes "4" on each Host end keystroke.

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- 2 - Fixed IBM G41/G50 monitors not correctly displaying video modes and large borders on display at startup of Windows 3.1, Windows95 or OS/2 WARP.
- 3 - Made change so that video IRQ is assigned.
- 4 - Fixed code overrun where INT 14 AH=5 (Extended Communications Port Control) got clobbered. This enabled DOS MODE command work correctly when setting baud rate to 19200.
- 5 - Incorporated new S3 Trio 64 video BIOS version 1.3-08-23-57Mhz This corrected VESA standard monitor timings w/ Intel custom models.
- 6 - Updated CMOS Picks to match Manufacturing Default Spec. Specifically, CMOS bytes 19h, 60h, and 62h changed.
- 7 - Prevents Windows95 from enabling serial ports that are disabled via the Setup Utility.

The problems resolved with 60A level are as follows:

- 1 - Fix for systems booted with a 720kb diskette that subsequently will not format a 1.44mb diskette.
- 2 - Fixes 1024x768@43hz where this mode causes video compression due to the system not driving the correct horizontal frequency.

PC300 PENTIUM P60 AND PC700 PCI/ISA (Flash Product Code N1)

The flash BIOS levels that have been formally released for machine types 6575, 6585, 6875 and 6885 are as follows:

- 53A - N1JT53A/N1KT53A (SHIP LEVEL)
- 57A - N1JT57A/N1KT57A
- 58A - N1JT58A/N1KT58A
- 59A - N1JT59A/N1KT59A
- *60A - NEC MONITOR FIX -NOT AVAILABLE - USE 65A
- 61A - N1JT61A/N1KT61A
- 62A - N1JT62A/N1KT62A
- 63A - N1JT63A/N1KT63A
- 65A - N1JT65A/N1KT65A
- 68A - N1JT68A/N1KT68A
- 70A - N1JT70A/N1KT70A
- 76A - N1JT76A/N1KT76A
- 78A - N1JT78A/N1KT78A
- 79A - N1JT79A/N1KT79A
- 80A - N1JT80A/N1KT80A
- 81A - N1JT81A/N1KT81A
- 84A - N1JT84A/N1KT84A
- 85A - N1JT85A/N1KT85A (Current level)

The problems resolved with 53A level are as follows:

- 1 - Printing failure after a resume operation.
- The problems resolved with 57A level are as follows:

- 1 - Update to QAPLUS for Windows.
 - 2 - Correctly set the parity/non-parity bit on warm boot.
- The problems resolved with 58A level are as follows:

- 1 - S3 video BIOS updates.
- The problems resolved with 59A level are as follows:

- 1 - Plug and Play updates for future Microsoft Windows products.
 - 2 - Updates to Suspend/Resume and error reporting functions.
- The problem resolved with 60A level is as follows:

- 1 - Add delay in DDC1 for NEC monitors. Fix for OEM monitors that cause system to boot to configuration utility after one beep.
- The problems resolved with 61A level are as follows:

- 1 - Fix for system ID of certain 8MB memory SIMMS.
- 2 - Updated S3 video BIOS

The problems resolved with 62A Level are as follows:

- 1 - Plug and Play adapters conflict with IDE resources.
- 2 - ISA Config structure revision wrong
- 3 - 1762 POST ERRORS. Hardfile is lost from configuration if a PCI Adapter is being used on IRQ 14 or 15 and the BIOS level is 59A or 61A.
- 4 - Clear Shadow RAM Region From C000-DFFF
- 5 - Password entry forced on warm boot w/Prompt Off
- 6 - Serial/Parallel Port Fixes
- 7 - Password messages displayed in English only
- 8 - POST does not reset enhanced serial ports on re-boot.
- 9 - QEMM386 Stealth Mode hangs system
- 10 - CD-ROM message corrupt
- 11 - Trap 02 error during OS/2 CID install on 6575 and 6585.

The problems resolved with 63A level are as follows:

- 1 - Windows exits to C: > prompt intermittently
- 2 - Brazil translation
- 4 - Lockup after audio setup
- 5 - 1802 error with PCI video adapter
- 6 - LINK ISA HRDINIT.ASM with MicroChannel
- 7 - Clear software interrupt 67h during post.
- 8 - Update century byte to roll over to the year 2000.
- 9 - Force boot sector check sum to be updated if not initialized
- 10 - The F1 keystroke is intermittently lost.

Problems resolved with 65A level are as follows:

- 1 - Add delay in POST code DDC1 support to allow NEC monitors to synchronize with the system.
- 2 - Correct intermittent hang in Rapid Resume.
- 3 - Fix for a hang condition on a warm boot with a token ring adapter doing a CID install.
- 4 - Fix for a hang condition when doing a Rapid Resume with a modem installed.
- 5 - Configure additional OEM CD ROM devices. Allows certain CDROM drives that do not conform to the ATAPI CD-ROM specification to be recognized.
- 6 - Change default setting of Boot sector virus checking to disabled. Can be re-enabled through Setup Util.
- 7 - Correct audio hang condition on reboot w/Soundblaster card installed.
- 8 - Fixes for Windows95 and Business Audio.
- 9 - Fix for intermittent hang conditions running communication software.

Problems resolved with 68A level are as follows:

- 1 - S3 video BIOS updates
- 2 - PCI adapter fixes

Problems resolved with 70A level are as follows:

- 1 - Unable to enter Adaptec 2940 SCSI adapter configuration utility on warm boot.
- 2 - Fix for correct date after century rollover.
- 3 - Mode to timer 0 not correct. Fixed in CPU.ASM.

PROBLEMS RESOLVED WITH 76A

- 1 - 4X CDROM does not show up in system summary.

PROBLEMS RESOLVED WITH 78A

- 1 - Fix for Shutdown of Win95 with PnP cards.
- 2 - Suspend/Resume fails with certain CDROM drives
- 3 - Cache size may be incorrectly reported
- 4 - Keyboard password is lost during reboot
- 5 - IDE and SCSI Hardfile attachment hangs the system.
- 6 - Save/Restore Video Mode When Clearing Screen in POST

PROBLEMS RESOLVED WITH 79A

- 1 - Power switch becomes non-functional intermittently.
- 2 - Drives on secondary controller may falsely report not busy.
- 3 - Int 15 Function E820 returns incorrect values.
- 4 - Change stack pointer during int. 19 to avoid stack overflows.
- 5 - Add CHANGES.NEW file to flash diskette.
- 6 - Update video BIOS to fix erratic cursor.

PROBLEMS RESOLVED WITH 80A

- 1 - Fix highly intermittent 201 POST errors.

PROBLEMS RESOLVED WITH 81A

- 1 - PCI PCMCIA Adapter not recognized.
- 2 - Some PCI video cards conflict with other PCI devices.
- 3 - 162/184 config error.

PROBLEMS RESOLVED WITH 84A

- 1 - Some 6X & 8X IDE CDROM's POST 162 & 1762 error.

PROBLEMS RESOLVED WITH 85A

- 1 - Unexpected Int 2 NMI error showing up erroneously.

PC360 6598 (Flash Product Code LT)

The flash BIOS levels that have been formally released for machine type 6598 are as follows:

15A - LTJT15A (first customer ship level)

16A - LTJT16A (Current Level)

PROBLEMS RESOLVED WITH 15A

- 1 - Dates of Oct. 20-31 & Dec 30-31 cause system hang in POST.

PROBLEMS RESOLVED WITH 16A

- 1 - SCSI hardfiles will not allow the system to boot with the Future Domain Fast ISA SCSI controller card is installed. With only a SCSI CDROM attached, the system boots normally.

PC700 Micro Channel (Flash Product Code N2)

The flash BIOS levels that have been formally released for machine types 6876 and 6886 are as follows:

- 25A - N2JT25A/N2KT25A (first customer ship level)
- 38A - N2JT38A/N2KT38A
- 43A - N2JT43A/N2KT43A
- 44A - N2JT44A/N2KT44A
- 45A - N2JT45A/N2KT45A
- 47A - N2JT47A/N2KT47A (CURRENT LEVEL)

NOTE - Check that the reference diskette is also at the latest level when updating the Microchannel Flash. Version 1.2 reference diskettes should NOT be used with flash levels earlier than 38A. Reference Diskette updates may also be retrieved from the IBM PC Company BBS system.

Problems resolved with 38A level are as follows:

- 1 - Fix for correct date after century rollover.
- 2 - SKYLINE adapter hang on warm boot.
- 3 - Correct ECP/EPP Interrupt Modes for Microchannel.
- 4 - System powers up when AC cord plugged after shutting down.
- 5 - Add NEC Monitor support to DDC1.
- 6 - Suspend/Resume timing with Modem.
- 7 - System fails to recognize Panasonic and other IDE CD-ROM's.
- 8 - WARP IPL problem.
- 9 - Audio hangs on re-boot with Soundblaster installed.
- 10 - IRQ7 resource conflict between Audio and LPT1.
- 11 - No Audio with Win95.
- 12 - AZERTY keyboard M key not usable for password.
- 13 - 4X CDROM does not show up in system summary.

Problems resolved with 43A level are as follows:

- 1 - Update video BIOS to fix erratic cursor.
- 2 - Drives on secondary controller may falsely report not busy.
- 3 - Int 15 Function E820 returns incorrect values.
- 4 - Modify stack pointer during INT 19 to prevent stack overflows
- 5 - PCI Adapter take MicroChannel space when 64k buffer defined.
- 7 - Memory dump system reset always causes POST error 210.
- 8 - Add CHANGES.NEW file to flash diskette.
- 9 - Clear cmos byte 5f if cmos corrupt.
- 10 - POST hangs with XGA-2 installed in non-US countries.

Problems resolved with 44A level are as follows:

- 1 - Fix highly intermittent 201 POST errors.

Problems resolved with 45A level are as follows:

- 1 - Microchannel reset timing incorrect.
- 2 - Intermittent 162/184 config error.
- 3 - Some PCI video cards conflict with other PCI devices.
- 4 - Hang during warmboot with LANStreamer MCA card.

Problems resolved with 47A level are as follows:

- 1 - Changes for 32 bit APM fix not incorporated in MCA system.
- 2 - 1762 error after adding NEC/Toshiba 6X CDROM Drives.
- 3 - Matrox PG2-1281 Does not work on Mach MCA.
- 4 - Some 6X & 8X IDE CDROM's POST 162 & 1762 error.

SAS KEYWORDS:

PSY2	IBMPC	PC300	PC330
PC350	PC700	PC730	PC750
D/T6571	D/T6573	D/T6581	D/T6583
D/T6575	D/T6585	D/T6576	D/T6586
D/T6875	D/T6885	D/T6876	D/T6886
PSY2KBD	PSY2FDSK	PSY2MISC	PSY2MCD
PSVPMISC	EPROM	PSY2ADPT	PSVP
BANYON VINES	TRAP 2	HUMMINGBIRD	MICROCHANNEL
D/T65XX	PSY2CDROM	PSVPCDROM	PSY2AUDIO
PSVPAUDIO			

1.2.165 IBM PC 300/700 FLASH EEPROM CODE LEVELS

Record number: H082883

Device: D/T68XX
 Model: M
 Tip key: 010
 Date created: 095/07/25
 Date last altered: A97/02/11

The purpose of this tip is to list the FLASH BIOS updates for IBM PC 300 and PC 700 Commercial Desktop Systems and provide a method of obtaining the latest FLASH update diskette.

There are four FLASH products for PC300/700 Commercial Desktop Systems.

System	Flash Product Code	Machine Type
PC340-P100 - P166	LX	6560
PC3xx-486	LE	6571, 6573, 6581, 6583
PC3xx-P75, P90	LP	6576, 6586
PC3xx-P60	N1	6575, 6585
PC360	LT	6598
PC7xx PCI/ISA	N1	6875, 6885
PC7xx Micro Channel	N2	6876, 6886

NOTE - Flash code must be installed after installing a replacement system board FRU. System board from FRU stock may not have the necessary vital product data (VPD) to function properly as an IBM PC 300/700 system.

----- IMPORTANT -----

THESE FLASH UPDATES ARE CUSTOMER INSTALLABLE. CUSTOMERS SHOULD BE ADVISED TO CONTACT THE PC COMPANY HELPCENTER AT 800-772 - 2227 IF ASSISTANCE IS REQUIRED IN GETTING OR INSTALLING THE APPROPRIATE UPDATE. CUSTOMERS IN CANADA SHOULD CALL IBM'S HELPPC AT 800 565-3344.

The update diskettes may be downloaded from the IBM PC Company Bulletin Board System by calling 919-517-0001.

Customers and dealers in Canada may download the FLASH code from their respective IBM regional bulletin board service.

PC340-P100, P133 & P166 (Flash Product Code LX)

The flash BIOS levels that have been formally released for machine types 6560 are as follows:

18A - LXJT18A (first customer ship level)

20A - LXJT20A

21A - LXJT21A

22A - LXJT22A (Current Level)

The problems resolved with 18A level are as follows:

LXJT18A

1 - INITIAL SHIP LEVEL. INCLUDES ALL DEVELOPMENT UPDATES.

The problems resolved with 20A level are as follows:

LXJT20A

1 - Some 6X & 8X IDE CDROMs get 1762 error when used as slave.

The problems resolved with 21A level are as follows:

LXJT21A

1 - Interrupt assignment to allow VGA to use interrupts other than IRQ9.

2 - Add Synchronous Cache and 166 MHz support.

3 - System hangs with some PCI network cards with L2 cache installed.

The problems resolved with 21A level are as follows:

LXJT22A

1. RESET ALL PNP CARDS DURING A COLD OR WARM BOOT TO RELEASE RESOURCES.

2. ADD BOOTABLE CD SUPPORT FOR WINDOWS NT

3. FAILS TO SUSPEND WITH SUSPEND BUTTON IN WIN95 -

Suspend fails in WINDOWS/95 with certain hardfiles installed.

The system spins down the hardfile, appears to go to suspend for approximately 2 seconds and then spins back up. This only fails with 2 hardfiles on the same controller and then only with some IBM hardfiles. It has not been seen with other files. Also, automatic suspend works properly.

4. PRINT SCREEN HANGS INTERMITTENTLY.

5. CANNOT INSTALL AUTO 16/4 TOKEN RING WITH SOUNDBLASTER PNP

- CARD.
- 6.NMI ERROR - UNEXPECTED INTERRUPT 2 HANGS SYSTEM -
Some older programs issued an interrupt 2 to detect the co-processor which causes the system to hang.
 - 7.SET BI-DIRECTIONAL MODE AS DEFAULT ON PARALLEL PORT.
 - 8.ADMINISTRATIVE PASSWORD NEEDED DURING POWER ON -
With administrative password enabled, but not the power-on password enabled, a password prompt occurred during a normal boot. Should only prompt for administrator password during a flash boot or entering the Setup Utility.
 - 9.ADD SUPPORT FOR INTEL P54CTB UPGRADE PROCESSOR.
 - 10.PASSWORD PROMPT WHEN PROMPT IS SET TO OFF -
The power on password setup menu has an option to set the prompt to 'OFF'. This allows the boot to complete without the password being entered. The keyboard will be locked until the password is entered to maintain security. This feature was not working.
 - 11.I/O ADDRESS 100-107 SHOULD NOT BE RESERVED BY THE SYSTEM.
 - 12.BOOTABLE ADAPTER CARDS BYPASS SECURITY -
Adapter cards that perform a boot, such as network boot or bootable SCSI adapters, could take control of the boot process before the password checking is performed. This bypassed password security.
-

PC300-486 (Flash Product Code LE)

The flash BIOS levels that have been formally released for machine types 6571, 6573, 6581, and 6583 are as follows:

- 47A - LEJT47A/LEKT47A (first customer ship level)
- 48A LEJT48A/LEKT48A
- 49A LEJT49A/LEKT49A
- 52A LEJT52A/LEKT52A
- 55A LEJT55A/LEKT55A
- 59A LEJT59A/LEKT59A
- 60A LEJT60A/LEKT60A
- 62A LEJT62A/LEKT62A
- 63A LEJT63A/LEKT63A
- 65A LEJT65A/LEKT65A (Current Level)

The problems resolved with 48A level are as follows:

LEJT48A & LEKT48A

- 1 - Provide support for IBM Plug and Play token ring adapters.
- 2 - Fix for Wake Up event time change if CMOS is corrupted.
- 3 - Fix for intermittent hang when accessing cache memory.
- 4 - Fix for hangs after a Suspend/Resume with Windows preload.
- 5 - Fix for print failure after a Resume.

The problems resolved with 49A level are as follows:

LEJT49A & LEKT49A

- 1 - Fix intermittent hardfile hang in Rapid Resume.
- 2 - Speed up Rapid Resume with Multi-sector support.
- 3 - System hangs if mouse pin 2 and 4 are in contact with each other.
- 4 - Update Plug and Play device information.
- 5 - Correctly set the parity/non-parity bit on warm boot.

The problems resolved with 52A level are as follows:

LEJT52A & LEKT52A

- 1 - Fix for 2408 (video graphics mapping error) with four 8MB memory SIMMS installed.
- 2 - Fix serial port and parallel port problems.
- 3 - Fix for Plug and Play for WIN 95.
- 4 - Monitor DDC1 support
- 5 - Fix for Windows exiting to C: >.
- 6 - Fix for 1762 errors.
- 7 - Fix for QEMM386 stealth mode hang.
- 8 - Fix for 162 error after setting defaults.
- 9 - Fix for POST failing to recognize that a second hard disk drive is installed (with OEM drives that are slow to spin up to speed).

The problems resolved with 55A level are as follows:

LEJT55A & LEKT55A

- 1 - System intermittently fails to respond to F1 keystrokes.
 - 2 - System fails to recognize Panasonic and other IDE CD-ROM's.
- The problems resolved with 59A level are as follows:

LEJT59A & LEKT59A

- 1 - Change Virus checking to disabled
- 2 - Fix audio hangs on re-boot with soundblaster card installed.
- 3 - Fix Suspend/Resume timing with Modem installed.
- 4 - Configure additional OEM non-conforming CD-ROM drives.

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- 5 - Fix IRQ7 resource conflict between Audio and LPT1.
- 6 - Fix for AZERTY keyboard M key not usable for password.
- 7 - Fix for Warp not booting.
- 8 - Fix for system powering up when AC cord plugged in after shutting down Win95.
- 9 - Fix disable video code.
- 10 - Set PWR_STATE bit on Shutdown
- 11 - Fix for F1 keypress lost during POST.
- 12 - Full Setup menu on warm boot with PAP.
- 13 - Fixed Hang in PCI SCSI Adaptec full screen setup.

The problems resolved with 60A level are as follows:

LEJT60A & LEKT60A

- 1 - Skyline PCI Token Ring Adapter Fixes.
- 2 - Fix for mouse hang after rapid resume if mouse was moved during APM shutdown.

The problems resolved with 62A level are as follows:

LEJT62A & LEKT62A

- 1 - Cache size may be incorrectly set.
- 2 - Suspend/Resume fails with certain CDROM drives.
- 3 - Save/Restore Video Mode When Clearing Screen in POST.
- 4 - Power switch intermittently fails to function.
- 5 - Century will now roll to year 2000 during POST
- 6 - POST does not configure parallel port into ECP mode.
- 7 - PCI adapters not enabling memory
- 8 - PCI POST does not handle ROM images > 64kb
- 9 - SCSI card causes 164 (memory size) error
- 10 - Multifunction PCI adapters IRQs do not configure.
- 11 - Change IRQ 9 disable method.
- 12 - Spelling errors in German language
- 13 - Cache size is 0 after manufacturing auto config.
- 14 - 4X CDROM does not show up in system summary

The problems resolved with 63A level are as follows:

- 1 - PCI adapters with Real memory will not function.
- 2 - Drives on secondary controller may falsely report not busy.
- 3 - Int 15 Function E820 returns incorrect values
- 4 Change stack pointer during int. 19 to prevent stack overflows
- 5 - Add changes.new file to flash diskette.

The problems resolved with 65A level are as follows:

- 1 - Space Saver Keyboard may not recognize the ALT key.
- 2 - EMM386 Exception #12 error in the F000 block running DOS Extended applications.

PC300 PENTIUM 75,90,100,120,133 & 166Mhz (Flash Product Code LP)

The flash BIOS levels that have been formally released for machine types 6576 and 6586 are as follows:

- 34A - LPJT34A/LPKT34A (first customer ship level)
- 49A - LPJT49A/LPKT49A
- 51A - LPJT51A/LPKT51A
- 52A - LPJT52A/LPKT52A
- 56A - LPJT56A/LPKT56A
- 59A - LPJT59A/LPKT59A
- 60A - LPJT60A/LPKT60A (Current Level)

The problems resolved with 49A level are as follows:

LPJT49A/LPKT49A

- 1.Fixed a condition where an OS/2 installation could fail due to uninitialized CD-ROM media type. Now the media is defaulted to a hard disk if the CD-ROM is not used as a boot device.
- 2.Incorporated new Video BIOS for both the Trio 64 and 64'. These new revisions fix the interlace polarity bit and correct corruption at high refresh rates in 1280x1024 due to a slower VCO frequency.
- 3.Reworked core ATA/ATAPI initialization code to make it much faster and more robust when detecting devices that do not entirely comply with these standard specifications.
- 4.Incorporated a Power Management fix, that caused the Auto Halt feature to be permanently disabled, while the CPU is not active.
- 5.Corrected condition where a bad PnP card would not be flagged.
- 6.Corrected the IRQ 12 forced allocation that was originally attempted. This allows the mouse port to be used for other peripherals under DOS (such as the numeric keypad).
- 7.Corrected a problem in the BIOS Update Utility where Vital Product Data like the Machine Type and Serial Number data would be lost or corrupted. Also changed the unattended mode operation so that no output is displayed.
- 8.Changed the logging of memory types to report EDO if only

- one bank is stuffed. If the memory types are mixed, setup still reports Fast Page.
9. Incorporated new ATA/ATAPI initialization code. This greatly reduced boot time since "Shadowed" drives can be properly identified.
 10. Inserted patch so 386MAX memory manager will scan F000 region correctly.
 11. Incorporated APM Turbo/Deturbo bug fix.
 12. Fixed Win95 function 02h - setnode 0Bh. This function passed when the parallel port was set to standard, but failed with BAD PARAMETER when set to ECP or EPP. Corrected by initializing DMA field to 00h.
 13. Forced mouse resources to be enabled on the 306 controller so that other peripherals can use the mouse port.
 14. Corrected initialization of IBM monitor types in setup.
 15. Reworked floppy auto-configuration to flag installation/removal changes only. Installation defaults to 3.5, 1.44 MB until changed within setup.
 16. Incorporated S3 Video BIOS Version 1.3-08-12-57mhz with the following fixes:
 - 72 Hz and 75 Hz refresh rate support for VGA mode 12.
 - Increased timeout for DDC1 monitor detection.
 - M&N changes
 - 640x480x8 75 Hz (1 MB RAM) from 20 to 13
 - 600x800x8 60 Hz (1 MB RAM) from 14 to 12
 - Fixed Palette Snoop Feature
 17. Turned palette snoop on at startup by default.
 18. Added support for PCI burst control in Setup.
 19. Added floppy autodetection.
 20. Added change symbol for floppy or IDE configuration changes.
 21. Added support for CD-ROM boot.
 22. Added Win95 compliant mouse device node.
 23. Fixed problem where a PCI BIOS could fail to install.
 24. Removed code that prevented special check for video IRQ enable/disable for secondary PCI video cards.
 25. Removed delays apparent when Sony CD-ROM drives are initialized.
 26. Added auto configuration of Trio 64 Feature Connector based on the amount of video DRAM that is detected.
 27. Fixed time/date format in Product Data window.
 28. Fixed problem where system would report an error message stating "Read-error on hd2" if a CDROM drive is installed and boot manager is being used.
 29. Fixed problem where IRQ 15 would fail to recognize an adapter even though the secondary IDE port was disabled and the setup showed that IRQ 15 was "Not Available."
 30. Fixed setup problem with IBM Auto 16/4 Token Ring adapter and LANAIID 1.4. Adapter could not be configured to run on IRQ 3 or 11.

The problems resolved with 51A level are as follows:

 - 1 - Incorporated a new S3 Trio 64' compatible Video BIOS, version 1.3 - 08 - 19. This video BIOS corrects problem of not using 2mb of video memory.

The problems resolved with 52A level are as follows:

 - 1 - Incorporated modified core code that correctly calls a wait loop for status to keyboard input buffer full. This wait loop is to allow the KBC to keep up with faster processors.
 - 2 - Fixes remote booting problems with the Token Ring II Adapter.
 - 3 - Fixed four language files (2 sweden 2 italian).
 - 4 - Changed setup code to correctly show DDC1 Monitor Product ID.
 - 5 - Incorporated new core drive detection algorithm code.
 - 6 - Changed setup code to correctly display 166MHz processor speed.

The problems resolved with 56A level are as follows:

 - 1 - Fixed corrupted logo on Artist Graphics card and Matrox Millenium card.
 - 2 - Enabled setup to correctly recognize 85Hz refresh for DDC1 monitors.
 - 3 - Enabled 32-bit support for enhanced IDE.
 - 4 - Added 301 Keyboard Error when no K/B connected.
 - 5 - Incorporated a new S3 Trio 64' compatible Video BIOS.
 - 6 - Changed flash update utility to correctly filter keyboard input interactively inputting vital product data.
 - 7 - Anomalies in changing setup date/time fields corrected.
 - 8 - The VideoLogic Grafix Star 400 card fails in PC300 with the MPEG daughter card attached w/BIOS levels lower than 59A.

The problems resolved with 59A level are as follows:

 - 1 - Fix keystroke echo problem when using EXCELLNET software from Host end. Keyboard echoes "4" on each Host end keystroke.

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- 2 - Fixed IBM G41/G50 monitors not correctly displaying video modes and large borders on display at startup of Windows 3.1, Windows95 or OS/2 WARP.
- 3 - Made change so that video IRQ is assigned.
- 4 - Fixed code overrun where INT 14 AH=5 (Extended Communications Port Control) got clobbered. This enabled DOS MODE command work correctly when setting baud rate to 19200.
- 5 - Incorporated new S3 Trio 64 video BIOS version 1.3-08-23-57Mhz This corrected VESA standard monitor timings w/ Intel custom models.
- 6 - Updated CMOS Picks to match Manufacturing Default Spec. Specifically, CMOS bytes 19h, 60h, and 62h changed.
- 7 - Prevents Windows95 from enabling serial ports that are disabled via the Setup Utility.

The problems resolved with 60A level are as follows:

- 1 - Fix for systems booted with a 720kb diskette that subsequently will not format a 1.44mb diskette.
- 2 - Fixes 1024x768@43hz where this mode causes video compression due to the system not driving the correct horizontal frequency.

PC300 PENTIUM P60 AND PC700 PCI/ISA (Flash Product Code N1)

The flash BIOS levels that have been formally released for machine types 6575, 6585, 6875 and 6885 are as follows:

- 53A - N1JT53A/N1KT53A (SHIP LEVEL)
- 57A - N1JT57A/N1KT57A
- 58A - N1JT58A/N1KT58A
- 59A - N1JT59A/N1KT59A
- *60A - NEC MONITOR FIX -NOT AVAILABLE - USE 65A
- 61A - N1JT61A/N1KT61A
- 62A - N1JT62A/N1KT62A
- 63A - N1JT63A/N1KT63A
- 65A - N1JT65A/N1KT65A
- 68A - N1JT68A/N1KT68A
- 70A - N1JT70A/N1KT70A
- 76A - N1JT76A/N1KT76A
- 78A - N1JT78A/N1KT78A
- 79A - N1JT79A/N1KT79A
- 80A - N1JT80A/N1KT80A
- 81A - N1JT81A/N1KT81A
- 84A - N1JT84A/N1KT84A
- 85A - N1JT85A/N1KT85A (Current level)

The problems resolved with 53A level are as follows:

- 1 - Printing failure after a resume operation.
- The problems resolved with 57A level are as follows:

- 1 - Update to QAPLUS for Windows.
 - 2 - Correctly set the parity/non-parity bit on warm boot.
- The problems resolved with 58A level are as follows:

- 1 - S3 video BIOS updates.
- The problems resolved with 59A level are as follows:

- 1 - Plug and Play updates for future Microsoft Windows products.
 - 2 - Updates to Suspend/Resume and error reporting functions.
- The problem resolved with 60A level is as follows:

- 1 - Add delay in DDC1 for NEC monitors. Fix for OEM monitors that cause system to boot to configuration utility after one beep.
- The problems resolved with 61A level are as follows:

- 1 - Fix for system ID of certain 8MB memory SIMMS.
- 2 - Updated S3 video BIOS

The problems resolved with 62A Level are as follows:

- 1 - Plug and Play adapters conflict with IDE resources.
- 2 - ISA Config structure revision wrong
- 3 - 1762 POST ERRORS. Hardfile is lost from configuration if a PCI Adapter is being used on IRQ 14 or 15 and the BIOS level is 59A or 61A.
- 4 - Clear Shadow RAM Region From C000-DFFF
- 5 - Password entry forced on warm boot w/Prompt Off
- 6 - Serial/Parallel Port Fixes
- 7 - Password messages displayed in English only
- 8 - POST does not reset enhanced serial ports on re-boot.
- 9 - QEMM386 Stealth Mode hangs system
- 10 - CD-ROM message corrupt
- 11 - Trap 02 error during OS/2 CID install on 6575 and 6585.

The problems resolved with 63A level are as follows:

- 1 - Windows exits to C: > prompt intermittently
- 2 - Brazil translation
- 4 - Lockup after audio setup
- 5 - 1802 error with PCI video adapter
- 6 - LINK ISA HRDINIT.ASM with MicroChannel
- 7 - Clear software interrupt 67h during post.
- 8 - Update century byte to roll over to the year 2000.
- 9 - Force boot sector check sum to be updated if not initialized
- 10 - The F1 keystroke is intermittently lost.

Problems resolved with 65A level are as follows:

- 1 - Add delay in POST code DDC1 support to allow NEC monitors to synchronize with the system.
- 2 - Correct intermittent hang in Rapid Resume.
- 3 - Fix for a hang condition on a warm boot with a token ring adapter doing a CID install.
- 4 - Fix for a hang condition when doing a Rapid Resume with a modem installed.
- 5 - Configure additional OEM CD ROM devices. Allows certain CDROM drives that do not conform to the ATAPI CD-ROM specification to be recognized.
- 6 - Change default setting of Boot sector virus checking to disabled. Can be re-enabled through Setup Util.
- 7 - Correct audio hang condition on reboot w/Soundblaster card installed.
- 8 - Fixes for Windows95 and Business Audio.
- 9 - Fix for intermittent hang conditions running communication software.

Problems resolved with 68A level are as follows:

- 1 - S3 video BIOS updates
- 2 - PCI adapter fixes

Problems resolved with 70A level are as follows:

- 1 - Unable to enter Adaptec 2940 SCSI adapter configuration utility on warm boot.
- 2 - Fix for correct date after century rollover.
- 3 - Mode to timer 0 not correct. Fixed in CPU.ASM.

PROBLEMS RESOLVED WITH 76A

- 1 - 4X CDROM does not show up in system summary.

PROBLEMS RESOLVED WITH 78A

- 1 - Fix for Shutdown of Win95 with PnP cards.
- 2 - Suspend/Resume fails with certain CDROM drives
- 3 - Cache size may be incorrectly reported
- 4 - Keyboard password is lost during reboot
- 5 - IDE and SCSI Hardfile attachment hangs the system.
- 6 - Save/Restore Video Mode When Clearing Screen in POST

PROBLEMS RESOLVED WITH 79A

- 1 - Power switch becomes non-functional intermittently.
- 2 - Drives on secondary controller may falsely report not busy.
- 3 - Int 15 Function E820 returns incorrect values.
- 4 - Change stack pointer during int. 19 to avoid stack overflows.
- 5 - Add CHANGES.NEW file to flash diskette.
- 6 - Update video BIOS to fix erratic cursor.

PROBLEMS RESOLVED WITH 80A

- 1 - Fix highly intermittent 201 POST errors.

PROBLEMS RESOLVED WITH 81A

- 1 - PCI PCMCIA Adapter not recognized.
- 2 - Some PCI video cards conflict with other PCI devices.
- 3 - 162/184 config error.

PROBLEMS RESOLVED WITH 84A

- 1 - Some 6X & 8X IDE CDROM's POST 162 & 1762 error.

PROBLEMS RESOLVED WITH 85A

- 1 - Unexpected Int 2 NMI error showing up erroneously.

PC360 6598 (Flash Product Code LT)

The flash BIOS levels that have been formally released for machine type 6598 are as follows:

15A - LTJT15A (first customer ship level)

16A - LTJT16A (Current Level)

PROBLEMS RESOLVED WITH 15A

- 1 - Dates of Oct. 20-31 & Dec 30-31 cause system hang in POST.

PROBLEMS RESOLVED WITH 16A

- 1 - SCSI hardfiles will not allow the system to boot with the Future Domain Fast ISA SCSI controller card is installed. With only a SCSI CDROM attached, the system boots normally.

PC700 Micro Channel (Flash Product Code N2)

The flash BIOS levels that have been formally released for machine types 6876 and 6886 are as follows:

- 25A - N2JT25A/N2KT25A (first customer ship level)
- 38A - N2JT38A/N2KT38A
- 43A - N2JT43A/N2KT43A
- 44A - N2JT44A/N2KT44A
- 45A - N2JT45A/N2KT45A
- 47A - N2JT47A/N2KT47A (CURRENT LEVEL)

NOTE - Check that the reference diskette is also at the latest level when updating the Microchannel Flash. Version 1.2 reference diskettes should NOT be used with flash levels earlier than 38A. Reference Diskette updates may also be retrieved from the IBM PC Company BBS system.

Problems resolved with 38A level are as follows:

- 1 - Fix for correct date after century rollover.
- 2 - SKYLINE adapter hang on warm boot.
- 3 - Correct ECP/EPP Interrupt Modes for Microchannel.
- 4 - System powers up when AC cord plugged after shutting down.
- 5 - Add NEC Monitor support to DDC1.
- 6 - Suspend/Resume timing with Modem.
- 7 - System fails to recognize Panasonic and other IDE CD-ROM's.
- 8 - WARP IPL problem.
- 9 - Audio hangs on re-boot with Soundblaster installed.
- 10 - IRQ7 resource conflict between Audio and LPT1.
- 11 - No Audio with Win95.
- 12 - AZERTY keyboard M key not usable for password.
- 13 - 4X CDROM does not show up in system summary.

Problems resolved with 43A level are as follows:

- 1 - Update video BIOS to fix erratic cursor.
- 2 - Drives on secondary controller may falsely report not busy.
- 3 - Int 15 Function E820 returns incorrect values.
- 4 - Modify stack pointer during INT 19 to prevent stack overflows
- 5 - PCI Adapter take MicroChannel space when 64k buffer defined.
- 7 - Memory dump system reset always causes POST error 210.
- 8 - Add CHANGES.NEW file to flash diskette.
- 9 - Clear cmos byte 5f if cmos corrupt.
- 10 - POST hangs with XGA-2 installed in non-US countries.

Problems resolved with 44A level are as follows:

- 1 - Fix highly intermittent 201 POST errors.

Problems resolved with 45A level are as follows:

- 1 - Microchannel reset timing incorrect.
- 2 - Intermittent 162/184 config error.
- 3 - Some PCI video cards conflict with other PCI devices.
- 4 - Hang during warmboot with LANStreamer MCA card.

Problems resolved with 47A level are as follows:

- 1 - Changes for 32 bit APM fix not incorporated in MCA system.
- 2 - 1762 error after adding NEC/Toshiba 6X CDROM Drives.
- 3 - Matrox PG2-1281 Does not work on Mach MCA.
- 4 - Some 6X & 8X IDE CDROM's POST 162 & 1762 error.

SAS KEYWORDS:

PSY2	IBMPC	PC300	PC330
PC350	PC700	PC730	PC750
D/T6571	D/T6573	D/T6581	D/T6583
D/T6575	D/T6585	D/T6576	D/T6586
D/T6875	D/T6885	D/T6876	D/T6886
PSY2KBD	PSY2FDSK	PSY2MISC	PSY2MCD
PSVPMISC	EPROM	PSY2ADPT	PSVP
BANYON VINES	TRAP 2	HUMMINGBIRD	MICROCHANNEL
D/T65XX	PSY2CDROM	PSVPCDROM	PSY2AUDIO
PSVPAUDIO			

1.2.166 IBM PC300-GL DASD TRAY SERVICE AID

Record number: H16265

Device: D/T6282
 Model: M
 Tip key: 001
 Date created: 097/06/30
 Date last altered: A97/07/02

In the IBM PC300-GL 6272/6282 Commercial Desktop systems, care must be taken when the DASD tray is being reinstalled. Check to see that all LED and power cabling is routed correctly. If the wires are not routed correctly, the DASD tray may pinch one or more of the wires and cause a short. This short could potentially result in melted insulation and smoke.

If damage has occurred to one or more of the wires, replace with appropriate FRU part numbers.

Dual LED Cable Assembly, Hard Disk/Power P/N76H4463
 Power Switch and Cable P/N76H4485
 LED Cable Assembly, LAN Activity P/N12J5542

SAS KEYWORDS:

PSY2	PSY2MISC	PSY2PART	PSVP
PSVPMISC	PSVPPART	D/T6272	D/T6282
6272	6282	76H4463	76H4485
12J5542	UNCLASSIFIED		

1.2.167 IBM PC300GL MACHINE TYPE 6561/6591 SERVICE TIPS

Record number: H162603

Device: D/T6561
 Model: M
 Tip key: 003
 Date created: 098/01/30
 Date last altered: A98/02/02

When trouble-shooting hardware problems in the IBM PC300GL, machine types 6561 and 6591, always check the following items BEFORE replacing any hardware.

1. Verify the system board is fully inserted in the riser card.

There is an alignment mark on the system chassis which will be visible when the system board is fully seated. This alignment mark should line up with the edge of the front system board rail. See the HMM System Board Removal and Installation section for the diagram.

2. Verify the processor speed setting in the Configuration Setup Utility matches the correct processor speed for that model.

The processor speed on these systems is selected from the Setup Utility, not with system board jumpers. If the user selects the wrong processor speed in Setup, the system may fail with unpredictable symptoms. If necessary, inspect the text printed on the Pentium II processor for its actual rated speed.

3. Verify the BIOS was flashed if either the system board or processor was replaced.

Even if the system is at the most current BIOS level, the BIOS should be re-flashed. When flashing these systems, certain BIOS components are selected and loaded, depending on the hardware installed. Even if the system board or processor was replaced with the same speed and FRU number, it may still be at a different hardware (step) level, which would cause different BIOS components to load during the flash process.

4. Verify the Pentium II processor is fully seated.

If an error condition exists after replacing a processor, or, if an error condition exists in an "out-of-box" system, verify that the Pentium II processor is fully seated. The Pentium II type processor will provide an audible "click" when seated correctly into the socket. Press firmly and evenly on both ends of the processor when replacing or re-seating.

Pentium and Pentium II are trademarks of Intel Corporation.

SAS KEYWORDS:

PSY2	PSY2BRD	PSY2MCD	PSY2PART
PSVP	PSVPBRD	PSVPMCD	PSVPPART
D/T6561	D/T6591	6561	6591
UNCLASSIFIED			

1.2.168 IBM PC300XL/IBM PC6888 MATROX GRAPHICS ADAPTER (MGA) TIPS

Record number: H16371

Device: D/T6888
 Model: M
 Tip key: 001
 Date created: 097/07/10
 Date last altered: A97/07/10

Below is a list of items and corrections that should be considered when installing or configuring the Matrox Millenium video adapter in the IBM D/T6588 and D/T6888 systems.

- #1 The WindowsNT 3.51 driver README file contains inadequate information regarding the use of multiple monitors.

In order to operate multiple monitors, only one adapter may be VGA enabled. To disable VGA mode, switch 2 must be set to the ON position (switch moved toward components on the video card) on one of the adapters.

After the hardware and video drivers are installed, multiple monitor support is achieved by selecting the appropriate resolution. Multiple monitor resolution selections are those resolutions that contain a size DOUBLE the standard for one side and STANDARD for the other. For example, selecting a resolution of 1600x600 causes two side-by-side monitors to appear as one with a normal resolution of 800x600.

- #2 The OS/2 Warp 3.0 video driver version 2.04.039 README file is inadequate for switching the display driver from MGA mode back to VGA mode.

After selecting "Primary Display-VGA", the pop-up screen asks for Display Driver Diskette #1 to be inserted. Instead, insert the OS/2 Warp CD and point to the \OS2IMAGE subdirectory to continue.

- #3 The Windows95 video driver version 3.20.55 README file contains two inaccurate statements.

In the README file under "Installation", it is stated that Setup will ask you for the path where to install the Power Desk programs. This option is not available during a typical install as indicated. It is only available during a custom install.

In the README file under "Notes, Problems, and Limitations", the "VESA Modes" section states that a 32k Color Depth is available when using an IBM P200 or IBM P201 display. This color depth will not be available when selecting either of these displays.

-Matrox Millenium is a trademark of Matrox Corporation

-Windows95 and WindowsNT are trademarks of Microsoft Corporation

SAS KEYWORDS:

PSY2	PSY2DISP	PSY2OEM	PSY2DOC
PSY2OPER	PSY2PROG	PSVP	PSVPDISP
PSVPOEM	PSVPDOC	PSVPOPER	PSVPPROG
PC300XL	D/T6588	D/T6888	6588
6888	INTELLISTATION	M-PRO	63477
63479	63659F_1	UNCLASSIFIED	

1.2.169 IBM PC360-150 MATROX MILLENNIUM VIDEO ADAPTER TIPS

Record number: H132841

Device: D/T6598
 Model: M
 Tip key: 001
 Date created: 096/02/28
 Date last altered: A96/02/28

The IBM PC 360-150, machine type 6598 is a 150Mhz Pentium Pro (Intel P6) Desktop system. The 6598 system does not have integrated video on the system board. All models of the 6598 ship with a Matrox Millennium PCI Graphics adapter installed.

Below is a list of 10 items that should be considered when installing a PC 360-150 6598 system and determining monitor and device driver settings. Items 11-13 are early warning tips that pertain to specific operating systems and the PC 360-150.

- #1 The OS/2 Device Driver for the Matrox Millennium Graphics adapter is not CID enabled (it cannot be remotely installed). The device driver must be installed from the client.

This device driver is being updated to enable CID installation. Projected availability is 3/96 from the IBM PC Company BBS.

- #2 There are only a limited number of IBM monitor choices available when installing the Matrox Millennium device drivers for Windows 3.11 and Windows95. These device drivers are contained on the support CD provided with the PC 360.

The user selects the monitor type from a list of supported monitor types during the installation process. This step is not required if the monitor is DDC compliant.

An updated MGA.MON file for Windows 3.11 and Windows95 will be made available to add additional IBM monitor support. Projected availability is 3/96 from the IBM PC Company BBS.

- #3 A blank screen or corrupted video will be displayed if the customer is using an IBM 8515, IBM 8517 or IBM G40 display set at the 1024 X 768 resolution.

Any monitor which required interlaced mode for 1024 X 768 resolution may exhibit this failure when attached to the Matrox Millennium PCI Graphics adapter.

The solution is to set the monitor to 640 X 480 mode.

Engineering is currently investigating this design characteristic. This tip will be updated with additional information as it becomes available.

- #4 The Matrox Millennium device driver for Windows95 does not auto-recognize DDC monitors with 85Hz refresh rate capability. The monitor will actually run at 75hz.

Use the monitor setup utility in Windows95 to manually select the monitor following the sequence below:

- A. From the Windows95 Desktop, click the right mouse button.
- B. Select the "Properties" menu item.
- C. Select the "Settings" folder.
- D. Select "Change Display Type."
- E. Select monitor "Change Type."
- F. Select "Show All Devices."
- G. Select the monitor type that is attached, click OK.

The device driver for Windows95 will be updated to eliminate this failure. Projected availability is 3/96 from the IBM PC Company BBS.

- #5 The Matrox Millennium device driver for OS/2 WARP does not auto-recognize DDC monitors with 85Hz refresh rate capability. The monitor will actually run at 75hz.

Use the monitor setup utility in OS/2 WARP to manually select the monitor following the sequence below:

- A. Open a DOS Window.
- B. Change directory by entering "CD\MGA\OS2."
- C. Enter "MGAMON."
- D. Select the monitor from the list presented.
- E. Press ENTER to continue.
- F. Shutdown the system and reboot.
- G. Click the right mouse button on the OS/2 Desktop.
- H. Select "System Setup."
- I. Select the "System" icon.

- J. Open the "Screen" folder & select the desired resolution
- K. Close the "Screen" folder.
- L. Shutdown the system and reboot.

The device driver for OS/2 WARP will be updated to eliminate this failure. Projected availability is 3/96 from the IBM PC Company BBS.

- #6 During shutdown and restart of OS/2, the display may contain vertical lines overlaying the Shutdown screen dialog box for approximately 1 second.

This failure only occurs during a shutdown followed by a restart with the Matrox Millennium device drivers loaded. This is not a functional failure of the hardware or OS/2. No update is planned to eliminate the occurrence of the vertical lines.

- #7 The bottom portion of an IBM P70 Monitor may be blank or corrupted with Matrox Millennium device drivers for either OS/2 or Windows installed

This failure occurs if the monitor is set for 1600 X 1200 resolution. The 1280 X 1024 resolution and below do not exhibit this failure.

Engineering is currently investigating the cause of this failure. This tip will be updated with additional information as it becomes available.

- #8 System hangs may occur while switching rapidly between the OS/2 Desktop and a DOS Full Screen session with the Matrox Millennium device drivers loaded.

This failure has only been reported in automated testing at IBM. No customer reported failures have been reported. To reproduce the failure, the actual switching must be done at a rapid pace.

The Matrox Millennium OS/2 device driver will be updated to eliminate this exposure. Projected availability is 3/96 on the IBM PC Company BBS.

- #9 Selecting an unsupported video mode may cause a blank display when OS/2 is rebooted.

To recover from this situation, perform the following steps:

- A) Reboot the system with a DOS bootable diskette.
- B) Enter X: (X=the drive containing OS/2).
- C) Enter "CD\MGA\OS2"
- D) Either delete the "MGA.INF file OR enter "MGAMON" and select a supported monitor type.
- E) Remove the diskette and reboot the system.

- #10 Internal Processing Error or SYS3175 dialog box may be displayed after rebooting the system following the installation of Novell NetWare Client 2.11 from the WARP Connect CD. This failure occurs only if the Matrox Millennium device drivers for OS/2 are loaded.

The Matrox Millennium OS/2 device driver will be updated to eliminate this exposure. Projected availability is 2/96 on the IBM PC Company BBS.

- #11 IBM G40, G41 or G50 may exhibit screen "wobble" if the display is powered off/on while the system unit power remains on. The "wobble" occurs only if the display is connected to a Matrox Millennium Graphics adapter.

To recover from the "wobble", power the system and display off. Power the system unit on THEN power-on the display.

- Novell NetWare & Novell UnixWare are trademarks of Novell, Inc.
- Matrox Millennium PCI Graphics Adapter is a trademark of Matrox Electronic Systems Ltd.
- Windows, Windows95 and WindowsNT are trademarks of the Microsoft Corporation.
- Pentium Pro & Intel P6 are trademarks of the Intel Corporation

SAS KEYWORDS:

IBMPC	PSVP	PSY2	D/T65XX
6598	PC360	PENTIUMPRO	PSVDPDISP
PSY2DISP	PSVPADPT	PSY2ADPT	PSVPOEM
PSY2OEM	PSVPPROG	PSY2PROG	PSVPERR
PSY2ERR	PSVPKBD	PSY2KBD	PSVPDSKT
PSY2DSKT			

PSY2 RETAIN TIPS
IBM PS/2 INTERNAL TAPE DIAGS

1.2.170 IBM PS/2 INTERNAL TAPE DIAGS

Record number: H12304

Device: D/T8550
Model: MCP1
Tip key: 176
Date created: 093/06/09
Date last altered: A93/06/09

WHEN RUNNING THE PS/2 INTERNAL TAPE BACKUP UNIT DIAGNOSTICS, INSERT THE BLANK FORMATTED TAPE BEFORE BOOTING THE DISKETTE. OTHERWISE, INVALID ERROR CODES WILL RESULT. THIS BUG WILL BE ADDRESSED IN THE NEXT RELEASE OF THE DIAGNOSTIC PROGRAM.

SAS KEYWORDS:

ITBU	TAPE	PSY2DIAG	BACKUP
PSY2	PSY2ERR	PSY2TAPE	PSY2MISC
D/T8550	8550SYSTAPE	8550SYSMISC	8550SYSERR
D/T8570	8570SYSTAPE	8570SYSMISC	8570SYSERR
D/T8580	8580SYSTAPE	8580SYSMISC	8580SYSERR
D/T8590	8590SYSTAPE	8590SYSMISC	8590SYSERR
D/T8560	8560SYSTAPE	8560SYSMISC	8560SYSERR

1.2.171 IBM PS/2 INTERNAL TAPE INSTALLED IN 95XX

Record number: H12308

Device: D/T95XX
 Model: MCP1
 Tip key: 008
 Date created: 093/06/09
 Date last altered: A94/05/12

Customers that have installed a IBM Internal tape drive
 in the following machines

9557
 9577
 **PS/2's that have a third berg connector on floppy
 cable

And are having trouble using thir tape drive. Check to see
 if the tape drive is connected to the third berg connector
 (usually the nearest connector to the motherboard). This
 cable will usually have a mark on the connector with the
 following labels:

P2-2
 D
 3

The Customer's tape drive generally will be connected to
 the second berg, but to be correct it should be installed
 in the 3rd connector and the 3rd drive bay of these boxes
 9577, 9557.

Installation documentation does not point this out. It
 makes more sense to logically connect tape drive to third
 connector because a second floppy could connect in 2nd berg.

**PS/2's that have 3 berg connectors on them could also be
 8590 and 8595.

NOTE: In the case of machines running 4680 OS, the 2nd
 connector of the cable should be used. Keep in mind
 that DIAGNOSTICS MAY FAIL WHEN THE TAPE DRIVE IS
 ATTACHED TO THE 2ND DROP. If you are experiencing
 problems with this tape drive under 4680 OS, contact
 the 4680 OS Support Center.

SAS KEYWORDS:

ITBU	TAPE	MAGIC	BACKUP
PSY2	PSY2ERR	PSY2TAPE	PSY2MISC
D/T8590	8590SYSTAPE	8590SYSMISC	8590SYSERR
D/T8595	8595SYSTAPE	8595SYSMISC	8595SYSERR
D/T95XX	95XXSYSTAPE	95XXSYSMISC	95XXSYSERR

1.2.172 IBM PS/2 INTERNAL TAPE RUNNING UNDER SCO XENIX/UNIX

Record number: H12309

Device: D/T8550
 Model: MCP1
 Tip key: 177
 Date created: 093/06/09
 Date last altered: A93/09/20

If Customer is running SCO XENIX/UNIX software with a IBM Internal Tape Drive FC 5279, P/N87F9787 and is having problems:

First always run the IBM TAPE DRIVE DIAGNOSTICS (Place tape in first). If it passes, DO NOT REPLACE THE DRIVE, but follow the steps below to determine if their XENIX/UNIX Software is configured properly.

```
*****
*
*                               NOTE
*
* THE FOLLOWING PROCEDURE IS INTENDED TO BE PERFORMED BY
* THE SYSTEM OPERATOR, END-USER OR SOFTWARE SUPPORT
* PERSON. IT IS NOT INTENDED TO BE PERFORMED BY THE CE
*
*****
```

If IBM INTERNAL TAPE DIAGNOSTICS run error-free, DO NOT REPLACE THE DRIVE. If the customer's software configuration checks out OK, have them try the following:

- Try a different tape
- Clean tape drive head and capstan
- Have customer call their Operating System provider for support

```
*****
```

A. STEPS TO DETERMINE PROPER CONFIGURATION OF XENIX/UNIX SOFTWARE AND IRWIN MINI CARTRIDGE DEVICE DRIVER IN ISA-BUS SYSTEMS.

 The following instructions are needed to identify certain files necessary for the IBM Internal Tape Drive (FRU# 87F9787) to run under XENIX/UNIX on ISA Bus machines.

```
*****
```

Note - When you type at the XENIX/UNIX command line use lowercase unless specified Do not type QUOTES unless specified to do so.

```
*****
```

TO DETERMINE THAT THE IRWIN DEVICE DRIVER IS PRESENT

- Have user Login as root in lowercase (this logs you in as supervisor)
- Press the 'ESCAPE KEY' until a '#' sign appears on screen
- Type "mcart h" and press enter
- A list of mcart commands should appear followed by a number sign.
 If they do not appear, then the Irwin Device Driver is not installed

TO DETERMINE IF THE MCONFIG FILE IS PRESENT AND WHERE IT IS LOCATED

- Have user Login as root in lowercase (this logs you in as supervisor)
- Press the 'ESCAPE KEY' until a '#' sign appears on screen
- Type in "find / -name mconfig -print" and press enter
- The file and path should appear below the commands entered previously

IF FILE IS PRESENT INSTRUCTIONS

- Type "cp mconfig mconfig1" and press enter. This will make a backup copy.
- Type "vi mconfig" and press enter, move cursor to the letter "I"
- Press the letter "I" key on keyboard in lowercase, this will put you insert mode.
- Type the letter "m", this will insert a lowercase "m", representing AT bus.
- Press "SPACE BAR" to insert a space between the "m" and "I".

IBM PS/2 INTERNAL TAPE RUNNING UNDER SCO XENIX/UNIX

- Press the 'ESCAPE KEY' until a beep sounds, this will remove you from insert mode.

The line should look EXACTLY as follows: iropt=m I

- If this correct press and hold SHIFT key, and press the ":" key one time.
- A ":" should appear in the bottom of screen
- To save and exit press the letter "x" key on your keyboard and then hit enter.
- If you had an error during this copy the mcconfig1 back to mcconfig
(example: "cp mcconfig1 mcconfig" then press enter
- If there were no errors press "cd" and enter, then shutdown system and reboot for changes to take effect.

IF FILE IS NOT PRESENT INSTRUCTIONS

- Type vi mcconfig and press enter. This will list the create the file if not present.
- Press the letter "I" key on keyboard in lowercase, this will put you insert mode
- Type the following EXACTLY at it appears (case is important)

Iropt=m I

- Press the 'ESCAPE KEY' until a beep sounds, this will remove you from insert mode.
- If this is correct press and hold SHIFT key, and press the ":" key one time.
- A ":" should appear in the bottom of screen
- To save and exit press the letter "x" key on your keyboard and then hit enter.
- If you made an error you can remove the file by typing the following command:
"rm mcconfig" then press enter
- If there were no errors press "cd" and enter, then shutdown system and reboot for changes to take effect.

B. STEPS TO DETERMINE PROPER CONFIGURATION OF XENIX/UNIX SOFTWARE AND IRWIN MINI CARTRIDGE DEVICE DRIVER IN MICROCHANNEL PS/2 SYSTEMS

- Follow above steps but use a uppercase "M" where a lowercase "m" was used.

SAS KEYWORDS:

ITBU	TAPE	XENIX	BACKUP
PSY2	PSY2ERR	PSY2TAPE	PSY2MISC
D/T8550	8550SYSTAPE	8550SYSMISC	8550SYSERR
D/T8570	8570SYSTAPE	8570SYSMISC	8570SYSERR
D/T8580	8580SYSTAPE	8580SYSMISC	8580SYSERR
D/T8590	8590SYSTAPE	8590SYSMISC	8590SYSERR
D/T8560	8560SYSTAPE	8560SYSMISC	8560SYSERR
SCO	UNIX		

1.2.173 IBM PS/2 LOGO AVAILABILITY

Record number: H125675

Device: D/T8550
Model: M
Tip key: 207
Date created: 094/11/23
Date last altered: A95/01/31

LOGOs for IBM products are not generally available as FRUs. Servicers that need a replacement LOGO for an IBM PC Company Product should request it through their normal support structure.

The servicer's name and address should be included in the Problem Management Record.

SAS KEYWORDS:

PSY2	D/T9590	D/T9595A	D/T9533
D/T8525	D/T8530	D/T8535	D/T8540
D/T8543	D/T8551	D/T8554	D/T8550
D/T8555	D/T8556	D/T8557	D/T8573
D/T8560	D/T8565	D/T8570	D/T9576
D/T8580	D/T8590	D/T8595	D/T9585
D/T9577	D/T9556	D/T9557	D/T9595
D/T6384	D/T6381	D/T6382	D/T6387
D/T2603	D/T2614	D/T2615	D/T2618
D/T9552	D/T9545	D/T2521	D/T8508
D/T8503	D/T8504	D/T8506	D/T8507
D/T8511	D/T8513	D/T8515	D/T8516
D/T8517	D/T8518	D/T9515	D/T9517
D/T9518	D/T9524	D/T9525	D/T9507
D/T9521	D/T9527	D/T6312	D/T6314
D/T6317	D/T6319	D/T6324	D/T6325
D/T6327	PSY2MISC	PSY2PART	PSY2DISP

1.2.174 IBM PS/2 MONITOR SCREW AVAILABILITY

Record number: H127985

Device: D/T95XX
Model: M
Tip key: 022
Date created: 095/06/08
Date last altered: A95/06/08

Some screws for IBM Monitors are not available as FRUs.
Servicers that need replacement screws for an IBM PC Company
Monitor may request them through their normal support
structure.

The servicer's name, address and phone should be included
in the Problem Management Record, and sent to PS2PS, L081.

SAS KEYWORDS:

PSY2	D/T8508	D/T8503	D/T8504
D/T8506	D/T8507	D/T8511	D/T8513
D/T8515	D/T8516	D/T8517	D/T8518
D/T9515	D/T9517	D/T9518	D/T9524
D/T9525	D/T9507	D/T9521	D/T9527
D/T6312	D/T6314	D/T6317	D/T6319
D/T6324	D/T6325	D/T6327	PSY2MISC
PSY2PART	PSY2DISP	DISPLAY	

1.2.175 IBM RAID CONTROLLER SUPPORT DISKETTE, VER. 2.00

Record number: H123231

Device: D/T9595
 Model: M
 Tip key: 009
 Date created: 094/03/16
 Date last altered: A95/06/07

Version 2.00 of the IBM RAID Controller Support Diskette is available.

Customers who have purchased PS/2 Server 95 RAID Array systems (9595A, models 3Nx, 3Px or 3Qx *) may obtain this version of the RAID Controller Support Diskette by calling 1-800-845-4263. The part number for the diskette is 83G7707. There is no charge for this update and it will be shipped within 24 hours by regular UPS/RPS surface delivery.

* The "x" may be any number.

In addition to the currently supported operating systems (IBM OS/2 2.1 and Novell Netware versions 3.12, 4.0 and 4.01) The RAID Controller Support Diskette version 2.00 provides the utility programs and device drivers to support the following operating systems:

Banyan Vines 5.53 (utilities only**)
 Windows NT 3.1
 Windows NT 3.1 Advanced Server

** The device drivers needed to support Banyan Vines Version 5.5 are provided with the Banyan Vines software.

The package consists of one diskette and a license agreement. Installation instructions are on the diskette in a README file.

If there is an immediate need to obtain the diskette, customers may register with the IBM PC Company Bulletin Board System at 1 - 919 - 517-0001 and obtain instructions for downloading the diskette electronically.

NOTE: Authorized servicers may request "next day" shipment. However, persons requiring "next day" service are advised to seek electronic delivery through the IBM National Support Center, 1 - 800-426-7763.

Current versions, later than 2.00, of the RAID SUPPORT DISKETTE are available on the IBM PCCO BBS and can be downloaded via the 1 - 919 - 517-0001 number. (6/07/95)

Note: The registered trademarks of the Operating systems listed above the property of the respective vendor.

SAS KEYWORDS:

PSY2	PSY2PROG	D/T9595A	PSY2FDSK
SCSI	SERVER	SERVER95	95
ARRAY	CONFIGURATION		

IBM VOICETYPE VIAVOICE NOT SUPPORTED ON SOME THINKPAD MODS

1.2.176 IBM VOICETYPE & VIAVOICE NOT SUPPORTED ON SOME THINKPAD MODS

Record number: H16547

Device: D/T9547
 Model: M
 Tip key: 010
 Date created: 097/07/28
 Date last altered: A97/08/12

The IBM VoiceType and ViaVoice products are not supported on the current following ThinkPad Models:

- 365X, 365XD
- 701C, 701CS
- 760L, 760LD, 760EL, 760ELD, 760XL

The IBM VoiceType and ViaVoice software products allow users to enter text data and to execute commands using voice input through a microphone headset. These products are sold separately as IBM software products.

These products will not work properly on the above models when using the ThinkPad built-in audio device. The VoiceType and ViaVoice products may work on these ThinkPad models when using alternate Audio adapters such as the .WAVjammer PCMCIA Sound card from New Media Corporation. For more information about audio adapters that may be supported, view the speech homepage at:

www.software.ibm.com/is/voicetype

From this page, select your language version, then "technical support", then the VoiceType/ViaVoice product you are using, and finally the systems tested list.

WaveJammer is a trade mark of the New Media Corporation.

SAS KEYWORDS:

PSY2	PSY2ADPT	PSY2OEM	THINKPAD
UNCLASSIFIED	D/T2630	D/T2625	D/T9546

1.2.177 IBM/COMPUTONE TECHNICAL SUPPORT AGREEMENT

Record number: H122300

Device: D/TOEMF
 Model: MEAT
 Tip key: 044
 Date created: 093/12/22
 Date last altered: A94/02/11

ON NOVEMBER 15, 1993 IBM ANNOUNCED THAT COMPUTONE CORPORATION AND IBM HAD SIGNED A TECHNICAL SUPPORT AGREEMENT TO PROVIDE MAINTENANCE SERVICE ON A VARIETY OF COMPUTONE MULTI-PORT COMMUNICATION PRODUCTS.

PREREQUISITES:

UNDER THE AGREEMENT, IBM SERVICE REPRESENTATIVES WILL PROVIDE ON-SITE SERVICE BEGINNING JANUARY 1, 1994 ON SELECTED COMPUTONE PRODUCTS THAT ARE INSTALLED IN PC'S AND PS/2 SYSTEM UNITS. THE SYSTEM UNITS MUST BE COVERED BY AN IBM ON-SITE WARRANTY OR AN IBM ON-SITE MAINTENANCE AGREEMENT. THE COMPUTONE PRODUCTS MUST HAVE BEEN PURCHASED AND INSTALLED AFTER JUNE 30, 1993 TO QUALIFY FOR THIS SERVICE.

FOR THE FIRST YEAR AFTER PURCHASE AND INSTALLATION, THESE COMPUTONE PRODUCTS WILL RECEIVE MAINTENANCE SERVICE AT NO ADDITIONAL CHARGE TO THE CUSTOMER. AFTER ONE YEAR, THESE PRODUCTS WILL BE ELIGIBLE FOR IBM SERVICE THROUGH THE IBM MUTI-VENDOR SERVICE OFFERING.

INSTALL ACTIVITY:

THERE IS NO INSTALLATION ACTIVITY INCLUDED IN THIS SERVICE.

TRAINING:

THERE IS NO ADDITIONAL TRAINING REQUIRED FOR THIS SERVICE.

IMI BILLING:

IBM MARKETING OFFICES SHOULD ADD THE APPROPRIATE FEATURE CODES TO THE SYSTEM UNIT CONTRACT, WITH AN EFFECTIVE DATE OF PRODUCT INSTALLATION.

PRODUCTS SUPPORTED:

DESCRIPTION	MODEL	IBM P/N	FEATURE CODE
INTELLIPORT II	MC-8	90G6700	8174
INTELLIPORT II	MC-CEX	93F8682	8117
VALUEPORT	V6-MC	90G6698	8175

FOR FURTHER INFORMATION REGARDING THIS RETAIN TIP, PLEASE CONTACT GERALD S. BECK AT T/L 443-0052 OR OV/VM BCRVM1(GSBECK).

SAS KEYWORDS:

POEM	COMPUTONE	INTELLIPORT	VALUEPORT
PCOM	PSY2	PSVP	PSY2COMM
PCOMCOMM	PSVPCOMM		

1.2.178 IBM/OEM SUPPORTED VENDORS-TECHNICAL SUPPORT AGREEMENTS (TSA)

Record number: H121690

Device: D/TOEMF
 Model: MEAT
 Tip key: 039
 Date created: 093/11/03
 Date last altered: A96/04/10

IBM NOW SUPPORTS THE FOLLOWING MANUFACTURER PRODUCTS. UNDER A TECHNICAL SUPPORT AGREEMENT (TSA).

PLEASE SEE INDIVIDUAL TSA DESCRIPTIONS BY SEARCHING RETAIN FOR A MANUFACTURER LISTED BELOW.

MANUFACTURER	PRODUCT DESCRIPTION
Artist Graphics, Inc.	Graphic Accelerator Cards
Centon Electronics, Inc.	Memory Products
Champion Computer Tech.	PCMCIA (Comm.,Card Reader,Hd.Dr.)
H.Co. Computer Products	Memory Products
Kingston Tech.,Corp.	Memory Products
Kofax Image Products,Inc.	Graphic Accelerator Cards
Madge Networks,Inc.	Network Adapters
Memory Products & More	Memory Products/Hard Drive upgrades
Microtech Computers	Compatible Computers
Sigma Data,Inc.	Microprocessor/Hard Drive upgrades
Southland Micro Systems	Memory Products
Storage Dimensions,Inc.	Storage Arrays
Tangent Computers, Inc.	Compatible Computers
Unigen Corporation	Memory Products
Visiontek	Memory Products
3COM Corporation	Communication Products

Additional information can be obtained by requesting the GET xxxxx PACKAGE, at the OV/VM command line type the the following and hit enter.

TOOLS SENDTO BCRVM1 SPDOC SPGMVS GET XXXXX PACKAGE

XXXXX IS THE MANUFACTURER NAME, LISTED IS THE FOLLOWING NAMES TO SEARCH:

ARTIST / CENTON / CHAMPION / HCO / KINGSTON / MADGE / MARCO / MPM / MTECH / SIGMA / SLAND / STORDIM / TANGENT / VISIONTK / 3COM

IBM/TSS CSR'S WILL SUPPORT THESE PRODUCTS AS THEY WOULD ANY IBM PART PROVIDING THE HOST SYSTEM IS UNDER IBM IOR/IOE ON-SITE WARRANTY OR IBM ON-SITE MAINTENANCE AGREEMENT.

ALL PRODUCTS FROM THESE MANUFACTURERS MUST HAVE THEIR PRODUCTS REPLACED WITH LIKE PRODUCTS. I.E. KINGSTON PARTS ARE TO BE USED TO REPLACE KINGSTON PARTS.

THESE CONTRACTS DO NOT COVER CCR (CUSTOMER CARRY IN REPAIR). THIS SERVICE IS TO BE PERFORMED FOR THE WARRANTY PERIOD OF THE OEM PRODUCT. THESE PRODUCTS MUST BE SUBMITTED THROUGH THE SPECIAL BID PROCESS AFTER WARRANTY EXPIRATION FOR SUPPORT THROUGH AN IBM/TSS ON-SITE MAINTENANCE AGREEMENT.

THIS TIP WILL BE UPDATED AS MANUFACTURERS ARE ADDED OR DELETED.

THE FOLLOWING ARE TRADEMARKS OR REGISTERED TRADEMARKS OF THE INDICATED COMPANIES:

Artist Graphics, Inc.
 Centon Electronics, Inc.
 Champion Computer Technologies
 H. Co. Computer Products
 Kingston Tech.,Corp.
 Kofax Image Products, Inc.
 Madge Networks,Inc.
 Marco International, Inc.
 Memory Products & More
 Microtech Computers, Inc.
 Sigma Data,Inc.
 Southland Micro Systems
 Storage Dimensions,Inc.
 Tangent Computers, Inc.
 VisionTek

SAS KEYWORDS:

POEM

MICRONET

SIGMA DATA

HYPERTEC

PSY2 RETAIN TIPS

IBM/OEM SUPPORTED VENDORS-TECHNICAL SUPPORT AGREEMENTS (TSA)

KINGSTON	OEM SERVICE	OEM SUPPORT	VENDOR
PSY2	PSVP	HYPERTECH	MPM
MEMORY PRODUCTS	ARTIST GRAPHICS	MADGE	VISIONTEK
SOUTHLAND	H.CO.	CENTON	KMS
MARCO	ARTIST GRAPHICS	STORAGE SOLUTIO	SDI
TANGENT	CHAMPION	HCO	MICROTECH
STORAGE DIMENSI	SDI		

IDENTIFYING ARTIC MULTIPORT/2 INTERFACE BOARDS

1.2.179 IDENTIFYING ARTIC MULTIPORT/2 INTERFACE BOARDS

Record number: H063791

Device: D/T7538
 Model: M
 Tip key: 010
 Date created: 090/10/11
 Date last altered: A92/05/18

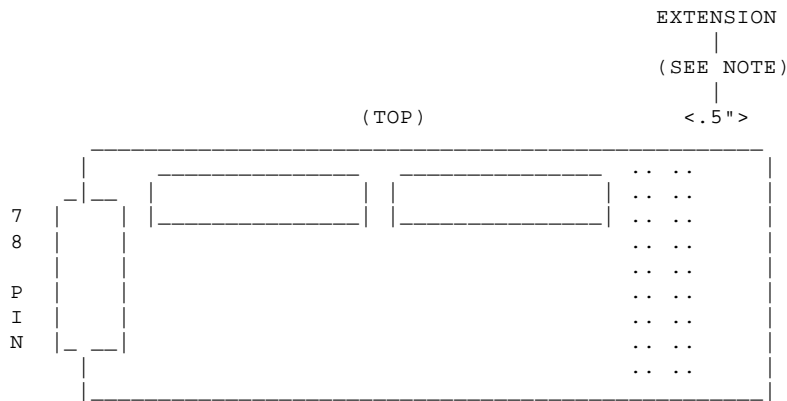
THERE ARE FIVE ELECTRICAL INTERFACE BOARDS AVAILABLE FOR THE ARTIC MULTIPORT/2 ADAPTER. CURRENT PRODUCTION BOARDS WILL HAVE THE FRU PART NUMBER ON THE BOARD. USE OF THE FOLLOWING INFORMATION AND ILLUSTRATIONS SHOULD AID IN IDENTIFYING BOARDS MANUFACTURED PRIOR TO THE INCLUSION OF FRU NUMBERS.

THREE MAY HAVE AN EXTENSION BEYOND THE PINS THAT ATTACH TO THE BASE CARDS. THESE ARE THE 6 PORT SYNCHRONOUS, 8 PORT RS-232 AND 8 PORT RS-422.

THE 6 PORT SYNCHRONOUS BOARD (FRU P/N15F8864) HAS THE WORDS 6 PORT ON THE BLACK PLASTIC PIECE OF THE 78 PIN CONNECTOR AND ONE LARGE (40 PIN) COMPONENT ON THE TOP EDGE OF THE CARD CLOSEST TO THE PINS THAT ATTACH TO THE BASE CARD.

THE 8 PORT RS-422 BOARD (FRU P/N15F8858) HAS THE WORDS 8 PORT RS-422 ON THE EXTENSION NEXT TO THE PINS THAT ATTACH TO THE BASE CARD.

THE 8 PORT RS-232 BOARD (FRU P/N09F1889) HAS TWO LARGE (40 PIN) COMPONENTS LOCATED ON THE TOP EDGE OF THE BOARD.

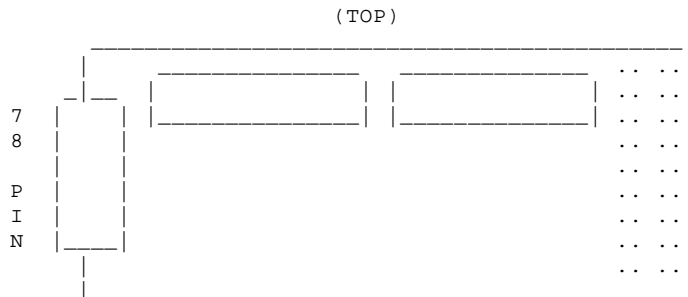


NOTE: THIS EXTENSION MAY NOT BE PRESENT ON LATER PRODUCTION BOARDS.

THE REMAINING TWO INTERFACE BOARDS DO NOT HAVE AN EXTENSION NEXT TO THE PINS THAT ATTACH IT TO THE BASE CARD. THESE ARE THE FOUR PORT RS-232 PLUS FOUR PORT RS-422 INTERFACE BOARD AND THE FOUR PORT RS-232 INTERFACE BOARD.

THE 4 PORT RS-232 PLUS 4 PORT RS-422 BOARD (FRU P/N09F1890) CAN BE IDENTIFIED BY THE PRESENCE OF TWO LARGE (40 PIN) COMPONENTS ON THE TOP EDGE OF THE BOARD.

THE 4 PORT RS-232 INTERFACE BOARD (FRU P/N09F1957) CAN BE IDENTIFIED BY THE ABSENCE OF THE LARGE (40 PIN) COMPONENTS.



EIB DESCRIPTION	40 PIN COMP.	OLD FRU PART NUMBER	NEW FRU PART NUMBER
8 PORT RS232	2	09F1889	91F7974
8 PORT RS422	0	15F8858	NO CHANGE

PSY2 RETAIN TIPS

IDENTIFYING ARTIC MULTIPORT/2 INTERFACE BOARDS

6 PORT SYNC	1	15F8864	91F7963
RS232 + RS422	2	09F1890	91F7966
4 PORT RS232	0	09F1957	91F7976

SAS KEYWORDS:

PSY2ADPTR

PSY2SYS

IMAGE ADAPTER/A FRU PART NUMBER INFORMATION

1.2.180 IMAGE ADAPTER/A FRU PART NUMBER INFORMATION

Record number: H096039

Device: D/T8550
 Model: M
 Tip key: 104
 Date created: 092/01/22
 Date last altered: A94/04/22

THERE HAVE BEEN SEVERAL REVISIONS TO THE IMAGE ADAPTER/A CARD.
 CERTAIN FIELD SERVICE DOCUMENTATION MAY CONTAIN ERRONEOUS
 FRU PART NUMBER INFORMATION. THE FOLLOWING TIP CONTAINS
 CURRENT FRU NUMBERS, DESCRIPTIONS AND SERVICE INFORMATION.

IMAGE ADAPTER/A CARD FRU NUMBERS:

P/N	DESCRIPTION	COMMENTS
06G8224	IMAGE ADAPTER/A 1MB	CURRENT LEVEL - REQUIRES IMAGE ADAPTER/A VERSION 1.04 OPTION DISKETTE

PRIOR RELEASED VERSIONS OF THE IMAGE ADAPTER/A CARD

P/N07F4401 WAS REPLACED BY P/N07F2508
 P/N07F2508 WAS REPLACED BY P/N06G8221

P/N06G8221 - SAME AS P/N06G8223 WITHOUT THE IMAGE ADAPTER/A
 VERSION 1.03 OPTION DISKETTE. P/N06G8221 IS
 NO LONGER AVAILABLE.

P/N06G8221 - WAS REPLACED BY 06G8223

P/N06G8223 - WAS REPLACED BY 06G8224 (CONTAINS 1.03 OPTION DSKT)

*P/N07F2481 HAS BEEN REPLACED BY P/N06G8224 + P/N75X5894
 (8 VRAMS)

*P/N07F2481 IS NO LONGER AVAILABLE AS A SINGLE 3MB FRU.
 P/N06G8224 AND EIGHT VRAM MODULES P/N75X5894 MUST BE ORDERED
 WHEN REPLACING THIS DOWNLEVEL CARD. THE EIGHT DRAM MODULES
 MUST BE TRANSFERRED FROM P/N07F2481 TO P/N06G8224.

IMAGE ADAPTER/A MEMORY MODULES:

FRU P/N	QTY	DESCRIPTION	COMMENTS
07F4407	1	DRAM MODULE	128K EACH
75X5894 *	1	VRAM MODULE	128K EACH

* This memory module is used in both the XGA Adapter/A and
 the Image Adapter/A. Page 243 of the HMS, S52G-9971-01,
 erroneously shows this FRU is for the XGA adapter only.

ASSOCIATED FRU PART INFORMATION:

P/N07F4403	PRINTER/SCANNER CARD
P/N07F4411	OEM SCANNER CABLE
P/N07F4413	3812-002 PRINTER CABLE
P/N07F4417	"Y" CABLE
P/N07F2474	4216-020 PRINTER CABLE
P/N58F2901	6091-019 VIDEO CABLE

PART NUMBER ERRORS IN THE HMS DOCUMENTS WILL BE CORRECTED IN
 FUTURE RELEASES OF THOSE DOCUMENTS.

ADDITIONAL INFORMATION

VRAM AND DRAM MODULE INSTALLATION:

THE IMAGE ADAPTER/A FRU CONTAINS ONE MEGABYTE OF VRAM SOLDERED
 ONTO THE CARD. THERE ARE EIGHT VRAM AND EIGHT DRAM SOCKETS
 AVAILABLE TO UPGRADE THE IMAGE ADAPTER/A CARD TO THREE
 MEGABYTES OF MEMORY.

THE VRAM MODULES ARE PHYSICALLY LONGER THAN THE DRAM MODULES.
 REPLACEMENT VRAM MODULES ARE INSTALLED NEXT TO THE EIGHT
 EXISTING SOLDERED VRAM MODULES. THEY ARE INSERTED INTO THE
 MODULE INSERTION GUIDE SUPPLIED WITH THE IMAGE ADAPTER/A CARD
 WITH THE BEVELED END OF THE MODULE FACING THE BOTTOM EDGE OF
 THE CARD.

THE DRAM MODULES ARE INSTALLED DIRECTLY TO THE RIGHT OF THE
 PLUGGABLE VRAM MODULES. THERE ARE EIGHT SOCKETS PRESENT FOR
 THE DRAM MODULES. THEY ARE INSTALLED WITH THE NOTCH ON THE
 MODULE FACING THE BOTTOM EDGE OF THE CARD.

IMAGE ADAPTER/A FRU PART NUMBER INFORMATION

IMPORTANT

THE IMAGE ADAPTER/A CARD MUST BE EITHER 1MB OR 3MB. ON THE 3MB IMAGE ADAPTER/A ALL EXPANSION MODULE SOCKETS MUST CONTAIN EITHER A VRAM OR DRAM MODULE IN THEIR APPROPRIATE LOCATION. THERE IS NO 2MB VERSION OF THE IMAGE ADAPTER/A CARD.

 THE IMAGE ADAPTER IS AVAILABLE AS AN OPTION IN THREE VERSIONS:

1. THE IMAGE ADAPTER/A 1MB - CONTAINS ONE MEGABYTE OF VIDEO MEMORY (VRAM).
2. THE IMAGE ADAPTER/A 3MB - CONTAINS TWO MEGABYTES OF VRAM AND ONE MEGABYTE OF DYNAMIC RANDOM ACCESS MEMORY (DRAM).
3. THE IMAGE ADAPTER/A 3MB 6091 - IS THE SAME AS THE IMAGE ADAPTER/A 3MB, BUT UTILIZES A CABLE THAT ATTACHES TO AN IBM 6091 - 019 COLOR DISPLAY.

NOTE

THE CUSTOMER MAY UPGRADE THE 1MB IMAGE ADAPTER/A CARD BY ORDERING THE IMAGE ADAPTER/A MEMORY EXPANSION KIT AND THE PS/2 VIDEO MEMORY EXPANSION OPTION.

PRINTER/SCANNER OPTION

THE PRINTER/SCANNER OPTION ALLOWS THE ATTACHMENT OF A PRINTER OR AN OPTICAL SCANNER, OR BOTH TO THE IMAGE ADAPTER/A CARD. THE PRINTER/SCANNER OPTION ATTACHES TO THE IMAGE ADAPTER/A CARD AND DOES NOT REQUIRE AN ADDITIONAL EXPANSION SLOT.

SAS KEYWORDS:

PSY2	PSY2ADPT	PSY2PART	8550SYSADPT
8555SYSADPT	8557SYSADPT	8560SYSADPT	8565SYSADPT
8570SYSADPT	8580SYSADPT	8590SYSADPT	8595SYSADPT
8550SYSPART	8555SYSPART	8557SYSPART	8560SYSPART
8565SYSPART	8570SYSPART	8580SYSPART	8590SYSPART
8595SYSPART	D/T8555	D/T8557	D/T8560
D/T8565	D/T8570	D/T8580	D/T8590
D/T8595	75X5894	06G8224	

1.2.181 IMAGE ADAPTER/A INSTALLATION INSTRUCTIONS FOR 8590 & 8595

Record number: H063157

Device: D/T8590
 Model: M
 Tip key: 002
 Date created: 090/10/31
 Date last altered: A92/11/02

USE THE FOLLOWING INFORMATION TO INSTALL THE IMAGE ADAPTER/A
 IN PS/2 8590 AND 8595:

FOR INSTALLATION IN 8590 USE MICROCHANNEL SLOT 3.
 FOR INSTALLATION IN 8595 USE MICROCHANNEL SLOT 7.

USERS INSTALLING THE IMAGE ADAPTER/A IN AN 8590 MAY CONFIGURE
 THEIR SYSTEM IN ONE OF TWO WAYS:

1. ATTACH A DISPLAY (8503 OR EQUIVALENT) TO THE GRAPHICS PORT
 ON THE SYSTEM PLANAR.
2. ATTACH A DISPLAY (6091 COLOR DISPLAY) TO THE IMAGE ADAPTER/A
 POSITIONED IN SLOT #3.

THERE IS A UNIQUE REQUIREMENT FOR CONFIGURING THE IMAGE
 ADAPTER/A ON THE 8595. THERE MUST BE A DISPLAY (8503 OR
 EQUIVALENT) ATTACHED TO THE STANDARD XGA DISPLAY ADAPTER/A
 LOCATED IN SLOT 5 OF THE 8595 DURING IMAGE CONFIGURATION OF THE
 IMAGE ADAPTER/A. ATTACHMENT OF A 6091 COLOR DISPLAY TO THE
 IMAGE ADAPTER/A IN SLOT 7 DURING CONFIGURATION OF THE ADAPTER
 IS OPTIONAL ON THE MODEL 8595.

SINCE THE PS/2 8590 AND 8595 SYSTEM PROGRAMS RESIDE IN WRITE-
 PROTECTED PORTION OF THEIR FIXED DISKS, IT IS NOT NECESSARY TO
 UPDATE THE BACK-UP REFERENCE DISKETTES (BUT IT IS RECOMMENDED).
 SEE THE APPROPRIATE QUICK REFERENCE FOR THE PROCEDURE ON UP-
 DATING THE SYSTEM PROGRAM FILE WITH THE OPTION DISKETTE FOR
 THE IMAGE ADAPTER/A.

DOS ADAPTER INTERFACE DRIVER INSTALLATION:

WHEN INSTALLING THE DOS ADAPTER INTERFACE DRIVER FROM DISKETTE 1
 AND ATTEMPTING TO ACCESS ITS "READ.ME" FILE OR PERFORMING THE
 INSTALLATION PROCEDURE, USERS MAY ENCOUNTER THE MESSAGE "ACCESS
 DENIED."

TO AVOID THIS CONDITION, FIRST BOOT THE SYSTEM FROM THE DOS
 "INSTALL" DISKETTE (INCLUDED WITH EACH COPY OF DOS). THEN
 PERFORM THE PROCEDURE FOR INSTALLING THE DOS ADAPTER INTERFACE
 DRIVER AS DETAILED IN THE IMAGE ADAPTER/A PUBLICATION.

SAS KEYWORDS:

PSY2	PSY2DISP	PSY2ADPT	8590SYSDISP
8590SYSADPT	8590SYSPROG	8595SYSDISP	8595SYSADPT
8595SYSPROG	D/T8595		

1.2.182 IMAGE ADAPTER/A OPTION & DEVICE DRIVERS FOR 95XX SYSTEMS

Record number: H106860

Device: D/T95XX
 Model: M
 Tip key: 001
 Date created: 092/10/01
 Date last altered: A94/07/11

THE PS/2 9556, 9557, 9576 AND 9577 MAY HANG WITH A BLINKING CURSOR IN THE UPPER LEFT CORNER OF THE DISPLAY DURING OPTION CONFIGURATION IF THE CURRENT VERSION OF IMAGE ADAPTER/A OPTION FILES ARE NOT USED.

ALL MODELS OF THE PS/2 9556, 9557, 9576 AND 9577 REQUIRE THE FOLLOWING VERSIONS (OR HIGHER) OF OPTION AND DEVICE DRIVERS FOR CONFIGURING AND PROPER FUNCTION OF THE IMAGE ADAPTER/A CARD:

VERSION 2.10 OF THE IMAGE ADAPTER/A OPTION DISKETTE
 VERSION 2.10 OF THE DEVICE DRIVERS

THE OPTION DISKETTE AND DEVICE DRIVERS CAN BE DOWN-LOADED VIA THE FOLLOWING METHODS:

- MODEM DOWNLOAD FROM OUR ON LINE BBS AT 1-919-517-0001
 - ISSUE 'REF DISK' COMMAND
 - GET FILE 'LDF.COM' AND THE DRIVER FILE NEEDED
 - RUN LDF.COM TO CREATE FILE 'LOADDSKF.COM'
 - USE LOADDSKF.COM TO CREATE DISKETTE FROM DRIVER FILE
- VM/OV SYSTEM DOWNLOAD:
 - A LIST OF THE AVAILABLE DRIVERS MAY BE OBTAINED WITH:

>> TOOLS SENDTO BCRVM1 SERC DISPLAY LIST * PACKAGE

- DEVICE DRIVER AND OPTION DISKS MAY BE OBTAINED BY:

>> TOOLS SENDTO BCRVM1 SERC DISPLAY GET IAAV210 PACKAGE
 (DEVICE DRIVER)

>> TOOLS SENDTO BCRVM1 SERC DISPLAY GET IAAOV210 PACKAGE
 (OPTION DISK)

NOTE

THESE FILES USE EMTCOPY OR EMT4OS2 TO CREATE DISKS

SAS KEYWORDS:

PSY2	PSY2ADPT	PSY2DISP	D/T9556
D/T9557	D/T9576	D/T9577	PS2

1.2.183 IML UPDATE PROCEDURE FOR PS/2 8590 AND 8595 (REFERENCE DISK)

Record number: H022785

Device: D/T8590
 Model: M
 Tip key: 005
 Date created: 091/05/10
 Date last altered: A93/10/18

THE FOLLOWING STEPS ARE REQUIRED TO INSTALL A NEW REFERENCE DISKETTE ON EXISTING PS/2 8590 AND 8595 SYSTEMS. THIS SHOULD BE FOLLOWED EXACTLY TO PREVENT ERRONEOUS INSTALLATION OF THE UPDATE AND POSSIBLE LOSS OF CUSTOMIZED CONFIGURATION.

1. MAKE A BACKUP COPY OF THE CURRENTLY RUNNING SYSTEM PARTITION. (THIS DISKETTE WILL BE USED LATER TO RE-INSTALL YOUR OPTION FILES).
2. INSERT THE NEW REFERENCE DISKETTE IN THE DISKETTE DRIVE AND BOOT THE SYSTEM FROM THAT REFERENCE DISKETTE (TO DO A RESTORE THE SYSTEM MUST BE BOOTED FROM A REFERENCE DISKETTE).
3. SELECT BACKUP/RESTORE SYSTEM PROGRAMS FROM THE MAIN MENU.
4. CHOOSE THE RESTORE OPTION. THIS ACTION WILL CREATE A NEW SYSTEM PARTITION (REFERENCE PARTITION) AND FILL IT WITH ZEROES. ALL PREVIOUS DATA WILL BE OVERWRITTEN. THEN, ALL FILES, PROGRAMS, AND IML CODE THAT ARE ON THE NEW REFERENCE DISKETTE ARE COPIED FROM THE REFERENCE DISKETTE ONTO THE SYSTEM PARTITION (REFERENCE PARTITION).
5. REMOVE THE NEW REFERENCE DISKETTE FROM THE DISKETTE DRIVE AND BOOT THE SYSTEM FROM THE SYSTEM PARTITION (USING THE CTL/ALT/INS KEYS).
6. SELECT "COPY AN OPTION" FROM THE MAIN MENU AND USE THE BACKUP COPY OF THE ORIGINAL SYSTEM PARTITION (CREATED IN STEP 1.) AS YOUR "OPTION" DISKETTE.
 THIS SELECTION COPIES THE FOLLOWING FILES:

*.ADF
 *.DGS
 *.PEP
 SC.EXE
 UPDATE.EXE
 DIAGS.COM
 CMD.COM
 COMMAND.COM
 SYSCONF

THESE FILES ARE COPIED FROM THE OPTION DISKETTE (REALLY, YOUR BACKUP COPY OF THE ORIGINAL SYSTEM, IN THIS CASE) TO THE SYSTEM PARTITION (THEY ARE COPIED THERE BECAUSE THE SYSTEM HAS BEEN BOOTED FROM THE SYSTEM PARTITION - REMEMBER "COPY AN OPTION," COPIES TO THE BOOT SOURCE). THE FILES ARE COPIED UNDER TWO CONDITIONS:

- A. THE FILE DOES NOT EXIST ON THE SYSTEM PARTITION, OR;
- B. THE DATE OF THE FILE ON THE DISKETTE IS LATER THAN THE DATE OF A FILE FOUND ON THE SYSTEM PARTITION.

7. BACKUP THE SYSTEM PARTITION AND USE THE DISKETTE CREATED HERE AS YOUR "NEW" CURRENT BACKUP COPY OF THE SYSTEM PARTITION.

NOTE: THE FOLLOWING STEP IS VERY IMPORTANT, AND SHOULD NOT BE OMITTED.

8. SELECT "SET CONFIGURATION" AND THEN, "VIEW CONFIGURATION" (THIS WILL RESTORE THE CUSTOMIZED CONFIGURATION FILES, IN CASE THE CUSTOMER HAS A "CUSTOMIZED CONFIGURATION." WHEN "SET CONFIGURATION," IS EXITED (PF3), THE FILES, "@CMOS" AND "@NVRAM" ARE CREATED ON THE SYSTEM PARTITION. THESE TWO FILES ARE THE CUSTOMIZED CONFIGURATION.)

NOTE: USE OF "AUTO CONFIGURATION" WILL CAUSE LOSS OF CUSTOMIZED CONFIGURATION, AS AUTO CONFIGURATION USES DEFAULTS.

THE CURRENT BACKUP DISKETTE OF THE SYSTEM PARTITION (REFERENCE PARTITION SHOULD BE KEPT IN A SAFE LOCATION FOR FUTURE USE.

SAS KEYWORDS:

PSY2 PSY2PROG D/T8590 D/T8595
 PSY2DIAG

IMPORTANT THINKPAD KEYBOARD REPLACEMENT INFORMATION.

1.2.184 IMPORTANT THINKPAD KEYBOARD REPLACEMENT INFORMATION.

Record number: H136767

Device: D/T9547
 Model: M
 Tip key: 005
 Date created: 097/02/25
 Date last altered: A97/02/26

The ThinkPad keyboard is designed to be a robust input device during operation, but extreme care must be taken when handling the FRU during removal from the FRU carton, installation in a system, and during its removal for access to other FRUs.

The main areas of concern are the keyboard cables. There are three signal cables coming from the keyboard, the two wide cables are for keyboard operation and the narrow one is for TrackPoint operation.

A number of failing keys is one symptom of damaged keyboard signal cables. TrackPoint cable damage could result in 86xx errors, trackpoint movement error, or left and right mouse button problems.

Note: "xx" indicates any number.

When handling a ThinkPad keyboard use following tips along with the ThinkPad's HMM removal and replacement instructions.

1. When the keyboard FRU is removed from the FRU packaging be careful to keep the cables from bending or tearing.
2. The two keyboard signal cables have a graphite coating that can be damaged if the coating is scratched when handled.
3. The cable coating can also be removed if the cable is pulled out of the Zero Insertion Force (ZIF) connector without releasing the connector lock down tab.
4. The cable can also tear at the keyboard if ZIF lock-down tab is not released during keyboard removal.
5. Do not put a permanent crease in the cables by bending them.
6. Do not bend the cable during installation.
7. Ensure the cable is not pinched by the top cover. This can cause subsequent intermittent or solid failures.
8. The keyboard trackpoint device can be effected by high static discharge levels, so even though most keyboards have no electronic components, they should be handled as an ESD sensitive device.

SAS KEYWORDS:

PSY2	THINKPAD	PSY2KBD	D/T9546
D/T9545	D/T9552	D/T2640	D/T2630
D/T2625	D/T2610	D/T2620	D/T2619
D/T2618	D/T2604	D/T2603	

IMPROVING IDE HARDFILE PERFORMANCE ON PC340

1.2.185 IMPROVING IDE HARDFILE PERFORMANCE ON PC340

Record number: H16240

Device: D/T6560
Model: M
Tip key: 005
Date created: 097/06/27
Date last altered: A97/06/30

In the IBM PC340 Series 6560 systems, IDE hardfile performance can be improved in BIOS levels 23 and above by adjusting the IDE Prefetch setting in the F1 Setup utility.

During post, press F1 to enter the Setup utility. Highlight "Devices and I/O Ports" and press enter. Highlight "IDE Drives Setup" and press enter. The screen should be as follows:

```
Hard Disk Drive 0
Hard Disk Drive 1
Hard Disk Drive 2
Hard Disk Drive 3
Drive 0 & 1 Prefetch (Disabled)
Drive 2 & 3 Prefetch (Disabled)
```

The IDE hardfile Prefetch is set to "Disabled" by default. IDE hardfile performance will be improved by highlighting the setting and changing it to "Enabled."

Note that the setting cannot be changed to "Enabled" if there are any other IDE devices (e.g. IDE CDROM or tape drive) attached to the same cable as the hardfile. These will need to be attached to the secondary IDE controller on their own cable.

SAS KEYWORDS:

PSY2	PSY2FDSK	PSY2OPER	PSVP
PSVPFDSK	PSVPOPER	D/T6560	UNCLASSIFIED

INCORRECT CABLING OF DISKETTE DRIVE DAMAGES SYSTEM BOARDS

1.2.186 INCORRECT CABLING OF DISKETTE DRIVE DAMAGES SYSTEM BOARDS

Record number: H023801

Device: D/T8580
Model: M
Tip key: 013
Date created: 090/11/30
Date last altered: A90/12/18

8580 MODELS A21, A31 AND A16 MAY BE DAMAGED BY INCORRECT POSITIONING OF THE DISKETTE DRIVE CABLE ON THE DISKETTE DRIVE(S).

DETAIL: THE CABLE CONNECTOR FOR THE DISKETTE DRIVE IS "KEYED" TO PREVENT INCORRECT INSTALLATION OF THE CONNECTOR. HOWEVER, IT IS STILL POSSIBLE TO PLUG IT IN INCORRECTLY BY INADVERTANTLY TWISTING THE CABLE AND INVERTING OR OFFSETTING THE CONNECTOR. THIS FREQUENTLY CAUSES DAMAGE WHICH REQUIRES REPLACEMENT OF THE SYSTEM BOARD FRU (FIELD REPLACEABLE UNIT).

CARE SHOULD BE EXERCISED DURING REMOVALS AND REPLACEMENTS OF THE DISKETTE DRIVE TO AVOID THIS SITUATION.

"HOT PLUGGING" (CONNECTING THE DRIVE WHILE POWER IS ON) IS NOT RECOMMENDED, AS THIS PRACTICE MAY ALSO CAUSE DAMAGE.

SAS KEYWORDS:

PSY2	PSY2DSKT	PSY2MISC	8580SYSDSKT
8580SYSMISC	8580SYSBRD	PSY2BRD	

INCORRECT FLYER INFORMATION FOR WINDOWS95 INSTALLATION

1.2.187 INCORRECT FLYER INFORMATION FOR WINDOWS95 INSTALLATION

Record number: H162744

Device: D/T6898
Model: M
Tip key: 007
Date created: 098/02/12
Date last altered: A98/02/12

Some IBM IntelliStation M-Pro systems, machine type 6898, were packaged with a flyer (PN 05L1869) that contained an incorrect Internet URL address directing customers where to find instructions for installing retail Windows95.

The incorrect Internet URL address shown on this flyer entitled "Important Operating System Information" is

www.us.pc.ibm.com/intellistation/support

This information has been corrected in the replacement flyer (PN 10L9801) now packaged with IBM IntelliStation M-Pro systems, machine type 6898.

For those customers who may have received the incorrect flyer, the correct Internet URL address and information can be found via the following steps:

1. Go to www3.pc.ibm.com/support?page=IBM+IntelliStation
2. Click on "Hints and Tips"
3. Click on "IBM IntelliStation M-Pro Installation of Windows95 Retail Version Fixes with SCSI/IDE Drives (6898)"

Windows and Windows95 are trademarks of Microsoft Corporation.

SAS KEYWORDS:

PSY2	PSY2DOC	PSVP	PSVPDOC
D/T6898	UNCLASSIFIED		

INCORRECT FRU NUMBER IN VITAL PRODUCT DATA AREA

1.2.188 INCORRECT FRU NUMBER IN VITAL PRODUCT DATA AREA

Record number: H123518

Device: D/T9595
Model: M
Tip key: 011
Date created: 094/04/04
Date last altered: A95/06/07

Servicers should not relay on the information shown in the Vital Product Data area of the System Partition. The "Processor board" information area may contain erroneous data.

Systems with the Enhanced 486 DX/2 33/66 MHZ processor card may display an incorrect FRU part number. The FRU number displayed "92F0306" should be "61G2343". (This incorrect number is also displayed in the system utilities and diagnostics.)

The "Processor Unique part identifier" and "Manufacturing ID" also may contain all zeros.

To view the Vital Product Data, boot the system partition and at the main menu, select "More Utilities," then select "Set System Identification." This will bring up the "Set and View System Identification" screen. Now select "View System Identification."

Systems affected are the Server 95 and 95A, models xNx and all 8590, 9590, 8595 and 9595 systems with this upgrade option installed. Systems with Pentium* processors are not affected.

The Vital Product Data information is coded into the hardware during manufacturing. Therefore, parts installed in systems or in FRU stock cannot be altered in the field. As new parts are manufactured, current information will be incorporated in the Vital Product Data area.

SAS KEYWORDS:

PSY2	PSY2MISC	PSY2PART	D/T8595
D/T8590	D/T9590	D/T9595A	VPD

1.2.189 INCORRECT FRU P/N FOR 8515 DISPLAY ASSY. IN 8515 HMS

Record number: H0959

Device: D/T8515
 Model: M
 Tip key: 002
 Date created: 091/12/09
 Date last altered: A91/12/09

THE FRU PART NUMBER FOR THE 8515 MODEL 021 DISPLAY ELEMENT ASSEMBLY IN INCORRECT IN THE PS/2 8515 HMS.

DETAIL:

THE FRU PART NUMBER FOR THE 8515 MODEL 021 DISPLAY ASSEMBLY IS INCORRECT IN THE PERSONAL SYSTEM/2 COLOR DISPLAY HARDWARE MAINTENANCE SERVICE PAMPHLET WITH A REVISION DATE OF SEPTEMBER 1991. THE PART NUMBER LISTED FOR THE MODEL 021 DISPLAY ASSEMBLY IS P/N07G4752. THE PART NUMBER SHOULD BE P/N07G4759.

FUTURE RELEASES OF THE 8515 HMS WILL BE CORRECTED.

PART NUMBERS FOR 8515 MONITOR ASSEMBLIES:

8515 MODEL 001 - 38F3911 (U.S. AND CANADA) - SEE NOTE 1 BELOW
 8515 MODEL 002 - 38F3912 (NORTHERN HEMISPHERE)
 8515 MODEL 003 - 38F3913 (SOUTHERN HEMISPHERE)
 8515 MODEL A01 - 38F3914 (JAPAN, SOUTH KOREA, TAIWAN)
 8515 MODEL 021 - 07G4759 (U.S. AND CANADA)
 8515 MODEL 022 - 07G4761 (NORTHERN HEMISPHERE)
 8515 MODEL 023 - 07G4762 (EQUATORIAL)
 8515 MODEL 024 - 07G4763 (SOUTHERN HEMISPHERE)
 8515 MODEL A21 - 07G4760 (JAPAN, SOUTH KOREA, TAIWAN)

NOTE 1 - P/N07G4759 (MODEL 021 ELEMENT) IS BEING SUBSTITUTED FOR P/N38F3911 (MODEL 001 ELEMENT). FRU ORDERS FOR P/N38F3911 ARE BEING ADJUSTED AUTOMATICALLY TO BE FILLED WITH P/N07G4759.

SAS KEYWORDS:

PSY2	PSY2DISP	8515DISP	PSY2DOC
8515SYSDOC	PSY2PART	8515SYSPART	

INCORRECT FRU PART IN 9527 ANALOG CARD FRU BOX

1.2.190 INCORRECT FRU PART IN 9527 ANALOG CARD FRU BOX

Record number: H126532

Device: D/T9527
Model: M
Tip key: 007
Date created: 095/02/23
Date last altered: A95/02/24

A small number of 9527-001 Analog Card FRUs have been mis-labeled. The FRU cards were marked and packaged as FRU P/N68G2540, but are actually FRU P/N95G8971, which is for the 9527 - 011.

These two analog cards are NOT interchangeable.

The following manufacturer's part numbers are printed on the card assembly which has the FBT (FlyBack Transformer; often referred to as the high voltage transformer) mounted on it:

SMB053 FRU P/N68G2540

SMB054 FRU P/N95G8971

This information can be used to determine the correct card part. Actions have been taken to correct the problem, However, a small number of the affected FRU part number could be in servicer's hands.

SAS KEYWORDS:

PSY2	PSY2DISP	9527	MONITOR
PSVP	PSY2PART		

1.2.191 INCORRECT INFO DISPLAYED ON 9585 CONFIG MENU

Record number: H20781

Device: D/T9585
Model: M
Tip key: 002
Date created: 093/03/18
Date last altered: A95/07/11

AFTER UPGRADING A SERVER 85 (9585) WITH A 486 DX2-66/33 MHz PROCESSOR, "VIEW CONFIGURATION" MAY REPORT THE PROCESSOR AS, "ODP486SX." THE REPORTED INFORMATION INDICATES THAT THE PROCESSOR IS INSTALLED PROPERLY, HOWEVER THE CONTENT OF THE INFORMATION MAY BE MISLEADING.

THE CONTENT OF THE INFORMATION BEING REPORTED WILL BE CHANGED IN A FUTURE RELEASE OF THE REFERENCE IMAGE/DISKETTE. THE NEW INFORMATION WILL MORE CLEARLY REFLECT THAT THIS IS A DX2 - 66/33 UPGRADE.

IF THE UPGRADED PROCESSOR IS NOT INSTALLED PROPERLY, THE PROCESSOR WILL NOT BE SHOWN IN CONFIGURATION.

The 9585 contains a 486 SX processor which is soldered to the system board. Since the SX processor does not have math processor functions, customers may wish to install the 486 DX2 - 66/33 over drive processor upgrade. When the DX2 processor is installed the SX processor is disabled. Only one processor is used at a time. Diagnostics will test only the DX2 processor, when installed, or the SX processor if it is not installed.

SAS KEYWORDS:

PSY2	OVER	DRIVE	OVERDRIVE
PSY2PROC	PS2	DIAGNOSTICS	OPTION
UPGRADE	INTEL	ODP	

INCORRECT INTERNET URL ADDRESS IN USER GUIDES

1.2.192 INCORRECT INTERNET URL ADDRESS IN USER GUIDES

Record number: H162742

Device: D/T6561
Model: M
Tip key: 004
Date created: 098/02/13
Date last altered: A98/02/13

Two user guides supplied with the IBM PC300GL, machine types 6561 and 6591, contain an incorrect Internet URL address directing users where to find information entitled "IBM PC300GL-Installing retail Windows 95 (Type 6561, 6591)."

1. "About Your Software - Windows 95" (PN 05L1881, Page 17)
2. "About Your Software - WindowsNT 4.0" (PN 05L1883, Page 19)

The incorrect information directs the user to Internet URL www.us.pc.ibm.com/support/desktop/desktop_support.html

The correct Internet URL address and steps to locate the document are:

1. Go to www3.pc.ibm.com/support?page=IBM+PC
2. Click on Hints & Tips
3. Click on "IBM PC300GL - Installing retail Windows 95 (Type 6561, 6591)"

Windows95 and WindowsNT are trademarks of Microsoft Corporation

SAS KEYWORDS:

PSY2	PSY2DOC	PSVP	PSVPDOC
D/T6561	D/T6591	6561	6591
UNCLASSIFIED			

INCORRECT JUMPER POSITION SHOWN ON COVER LABEL

1.2.193 INCORRECT JUMPER POSITION SHOWN ON COVER LABEL

Record number: H162830

Device: D/T6561
Model: M
Tip key: 006
Date created: 098/02/23
Date last altered: A98/03/03

On some IBM PC300GL Series 6561/6591 systems, jumper position J7H1, identified on the cover label as "Recovery Jumper," contains misidentified settings.

The incorrect label identifies Pins 1-2 as "Recovery" and Pins 2 - 3 as "Operate." The corrected cover label properly identifies this jumper with Pins 1-2 as "Operate" and Pins 2 - 3 as "Recovery."

The silk screen diagram on all system planars shows the correct jumper positions.

SAS KEYWORDS:

PSY2	PSY2DOC	PSVP	PSVPDOC
D/T6561	D/T6591	6561	6591
UNCLASSIFIED			

INCORRECT KEYBOARD FRU NUMBERS FOR 8525SX

1.2.194 INCORRECT KEYBOARD FRU NUMBERS FOR 8525SX

Record number: H101935

Device: D/T8525
 Model: M
 Tip key: 016
 Date created: 092/10/15
 Date last altered: A92/10/15

THE PS/2 MODEL 25 SX HARDWARE MAINTENANCE SERVICE (HMS)
 PAMPHLET DATED MARCH 10, 1992, PUBLICATION NUMBER
 S10G-6610 - 00, CONTAINS INCORRECT FRU PART NUMBERS FOR
 THE KEYBOARD ASSEMBLIES.

ENHANCED KEYBOARD (101/102 KEY)

DESCRIPTION	INCORRECT FRU P/N	CORRECT FRU P/N
U.S. ENGLISH	P/N1393990	P/N1392090
U.S. ENGLISH - (FIXED KEYTOPS)	P/N1397660	P/N1397675
CANADIAN FRENCH	P/N1394800	P/N1392011
LATIN AMERICAN SPANISH	P/N1391506	P/N1392015

SPACE-SAVING KEYBOARD (84/85 KEY)

DESCRIPTION	INCORRECT FRU P/N	CORRECT FRU P/N
U.S. ENGLISH	P/N1396050	P/N1393290
U.S. ENGLISH - (FIXED KEYTOPS)	P/N1397680	P/N1397685
CANADIAN FRENCH	P/N1396051	P/N1396046
LATIN AMERICAN SPANISH	P/N1396052	P/N1396047

FUTURE REVISIONS OF THE 8525SX SERVICE DOCUMENTATION, INCLUDING
 THE CONSOLIDATED HMS DOCUMENT WILL BE UPDATED TO CONTAIN THE
 CORRECT FRU PART NUMBERS.

SAS KEYWORDS:

PSY2 PSY2KBD PSY2PART PSY2DOC
 25SX

1.2.195 INCORRECT KEYBOARD SETTING IN WINDOWSNT 4.0 ON PC 365

Record number: H134923

Device: D/T6589
Model: M
Tip key: 005
Date created: 096/11/05
Date last altered: A96/11/05

IBM PC 365 Series 6589 systems preloaded Microsoft WindowsNT 4.0 operating system and configured with language support for Asia Pacific South, may contain an incorrect keyboard configuration.

PC 365 Systems preloaded with language support for "English (Australian)" may be configured for "English (United States)", and the keyboard layout set for "US" instead of "US International."

To change the keyboard Locales and Layout, perform the following steps:

- 1) IPL WindowsNT 4.0 and double click on "My Computer."
- 2) Double click on "Control Panel."
- 3) Double click on "Keyboard."
- 4) Click on "Input Locales."
- 5) Click on "Add."
- 6) Choose "English (Australian)" and click "OK."
- 7) Click on "Properties."
- 8) Choose "US-International" and click "OK."
- 9) Highlight "English(Australian)."
- 10) Click on "Set As Default."
- 11) Click on "OK."
- 12) The user will be prompted to insert the WindowsNT 4.0 CD which ships with the system or to insert a diskette containing keyboard locales. This is a requirement to complete the installation.

WindowsNT is a trademark of the Microsoft Corporation.

SAS KEYWORDS:

PSY2	PSVP	IBMPC	PSVPPROG
PSY2PROG	PSVPKYBD	PSY2KYBD	57958
PC365			

INCORRECT SPEAKER CABLE SHIPPED WITH 50/50Z UPGRADES

1.2.196 INCORRECT SPEAKER CABLE SHIPPED WITH 50/50Z UPGRADES

Record number: H122836

Device: D/T8550
Model: M
Tip key: 196
Date created: 094/02/22
Date last altered: A94/02/22

AN INCORRECT SPEAKER CABLE WAS SHIPPED WITH SOME IBM PS/2
486SLC 50/50Z UPGRADE OPTIONS.

A LIMITED NUMBER OF SPEAKER CABLES WERE MANUFACTURED WITH
A 4 PIN CONNECTOR AT THE SYSTEM BOARD END RATHER THAN A 2
PIN CONNECTOR.

THIS PROBLEM HAS BEEN FIXED IN MANUFACTURING. THE CABLE PART
NUMBER REMAINS FRU P/N90X6752. FRU STOCK WILL CONTAIN CABLES
WITH THE CORRECT CONNECTOR.

SAS KEYWORDS:

PSY2	PSY2PART	PSY2BRD	90X6752
PSY2OEM	REPLY		

1.2.197 INCORRECT SPEED MARKED ON 60NS DIMM'S IN 6577/6587

Record number: H133529

Device: D/T6577
 Model: M
 Tip key: 008
 Date created: 096/08/05
 Date last altered: A96/08/05

A limited number of IBM PC 300 Series 6577 & 6587 systems were manufactured with a 16Mb DIMM (Dual in-line memory module) with a label which incorrectly states that the DIMM is 70ns instead of 60ns.

All 16Mb DIMM's used in the manufacture 6577 & 6587 systems are 60ns.

The white labels attached to affected DIMM's reads as follows:

Front label: J10910E05X2 05H0933 SAM 602
 16MB 2M X 64 70NS 5.0V 1091
 IBM

Back label: SEC KMM264E213AJ-6
 9604 KOREA 2MX64-6P
 P/N: 05H0933

Printed
 on Chips: SEC Korea
 604Y
 KM48C2104AJ-6

SAS KEYWORDS:

PSY2	D/T65XX	6577	6587
IBMPC	PSVP	PSVPMEM	PSY2MEM
D/T6587	PC 350	PC350	PC300
PC 330	PC330		

INCORRECT UK SUPPORT INFORMATION IN IBM WELCOME CENTER

1.2.198 INCORRECT UK SUPPORT INFORMATION IN IBM WELCOME CENTER

Record number: H161280

Device: D/T6562
Model: M
Tip key: 005
Date created: 097/09/30
Date last altered: A97/09/30

IBM PC Model PC300PL, machine type 6562, preloaded with Microsoft WindowsNT 4.0 for the United Kingdom (UK) contains incorrect telephone support information for the UK geography.

In the IBM Welcome Center, under "Exclusively IBM," the text for phone support states:

"For questions concerning the operation of your IBM Personal Computer or if you require technical assistance or warranty service, please contact IBM. In the U.S., please call IBM at 1 - 800-772 - 2227. In Canada, please call IBM at 1-800-565-3344."

The correct UK text should read:

"During your warranty period, you can get phone assistance 7 days a week. For questions concerning the operation of your IBM Personal Computer, or if you require technical assistance or warranty service, please contact IBM or your place of purchase for support information."

Telephone support information contained in the IBM Welcome Center for the UK will be corrected and updated in a future release of the preload image.

WindowsNT is a trademark of Microsoft Corporation.

SAS KEYWORDS:

PSY2	PSY2OPER	PSY2DOC	PSVP
PSVPOPER	PSVPOC	D/T6562	D/T6592
6562	6592	74626	UNCLASSIFIED

INCORRECT 6387/T SYSTEM BOARD FRU IN HMS/R

1.2.199 INCORRECT 6387/T SYSTEM BOARD FRU IN HMS/R

Record number: H013714

Device: D/T6384
 Model: M
 Tip key: 038
 Date created: 093/09/07
 Date last altered: A93/11/03

THE PS/VALUEPOINT 6387/T HMS/R SUPPLEMENTS (MARCH 1993 AND JULY 1993) CONTAIN AN INCORRECT PART NUMBER FOR THE 6387/T 466DX2 SYSTEM BOARD.

THE SUPPLEMENTS INCORRECTLY INDICATE THAT P/N92F0395 IS THE FRU NUMBER FOR THE 466DX2 SYSTEM BOARD W/O MEMORY (P/N92F0395 SUBS TO P/N71G3161).

THE CORRECT PART NUMBER FOR THE PS/VALUEPOINT 6387/T 466DX2 SYSTEM BOARD IS P/N61G3181. P/N61G3181 UTILIZES THE "WRITE BACK" CACHE FEATURE. P/N71G3161 (FOR THE 6384/D 466DX2) SUPPORTS "WRITE THROUGH" CACHE ONLY. IF THE "WRITE BACK" CACHE IS INSTALLED ON THIS BOARD, 12904 POST ERRORS MAY RESULT.

CORRECTIONS WILL BE INCLUDED IN THE NEXT REVISION OF THE PS/VALUEPOINT HMS/R.

SAS KEYWORDS:

PSVP	PSVPPART	PSVPDOC	PSY2
PSY2PART	PSY2DOC	PSVPBRD	PSY2BRD
6387	61G3181	VALUE POINT	SIMM
71G3161	33/66		

INCORRECT/MISSING FRU NUMBERS IN 6384 HMS/R

1.2.200 INCORRECT/MISSING FRU NUMBERS IN 6384 HMS/R

Record number: H031285

Device: D/T6384
 Model: M
 Tip key: 005
 Date created: 092/11/23
 Date last altered: A93/04/13

THE PS/VALUEPOINT HARDWARE MAINTENANCE SERVICE AND REFERENCE MANUAL, PUBLICATION NUMBER S42G-2450-00, DATED SEPTEMBER 1992, HAS INCORRECT AND MISSING FRU PART NUMBERS FOR THE 486DX SYSTEM BOARDS.

THERE IS AN INCORRECT FRU NUMBER FOR THE 6384 433DX SYSTEM, MODELS (M00, M40, M50 AND W52) LISTED ON PAGE 19, INDEX 3, OF THE HMS/R. THE HMS/R INCORRECTLY SHOWS THE 486DX 33MHZ SYSTEM BOARD W/O SIMM'S TO BE FRU P/N93F0008.

THE CORRECT NUMBERS ARE AS FOLLOWS:

SYSTEM BOARD 486DX (33MHz) W/O SIMM'S FRU P/N52G8780
 SYSTEM BOARD 486DX2 (66/33MHz) W/O SIMM'S FRU P/N52G8770
 (MISSING FROM THE HMS/R PARTS LISTING)
 CORRECTIONS ARE INCLUDED IN AN HML SUPPLEMENT (PUBLICATION NUMBER S60G-9470) THAT WILL BE SHIPPED TO PS/2 SERVICE INFORMATION MANUAL (SIM) SUBSCRIBERS.

THE PART NUMBER FOR THE DASD TRAY/RISER SUPPORT BRACKET IN THE HMS/R, P/N93F2387, IS INCORRECT. THE CORRECT NUMBER IS P/N61G2176. THIS PART WILL FIT THE 6382 AND 6384 SYSTEMS. THIS ERROR APPEARS IN DOCUMENT NUMBERS S42G-2450-00 AND S61G-1302 - 00.

PART NUMBER 93F2387 IS A VALID PART NUMBER FOR THE ADAPTER CARD GUIDE.

CORRECTIONS WILL BE MADE IN THE NEXT REVISION OF THE PS/VALUEPOINT HMS/R DOCUMENT.

SAS KEYWORDS:

PSVP	PSY2	VALUE	PSY2PART
VALUEPOINT	PSY2BRD	PSY2DOC	PSVPPART
PSVPBRD	PSVPDOC	D/T6382	93F2387
61G2176	DASD	TRAY	

INCORRECT/MISSING FRU PART NUMBERS IN 8535 HMS

1.2.201 INCORRECT/MISSING FRU PART NUMBERS IN 8535 HMS

Record number: H092087

Device: D/T8535
 Model: M
 Tip key: 002
 Date created: 091/08/16
 Date last altered: A92/04/15

THE FOLLOWING LIST SHOULD BE USED TO LOCATE THE CORRECT FRU PART NUMBERS FOR THE 8535 HMS. THE HMS WILL BE UPDATED TO INCLUDE THESE UPDATED/NEWLY LISTED ITEMS AND PART NUMBERS.

PAGE 25:

INDEX SYSTEM UNIT

10	3.5 - INCH DISKETTE DRIVE TRAY	85F0097
10	DISKETTE DRIVE CABLE	79F3453
13	4MB MEMORY MODULE KIT	92F3337
16	5.25 - INCH DISKETTE DRIVE BEZEL	85F0068
5	CONTROL PANEL ASSY(INCLUDES SPKR & PWR SW)	92F0002
15	DASD RETAINER PLATE	79F3451
4	REAR PANEL	79F3477

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8504	MONOCHROME DISPLAY(WITH TILT/SWIVEL STAND)	
110	VAC NORTHERN HEMISPHERE MODEL WITH VLMF	44F9807

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	SHIPPING CARTON	74F8998
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SAS KEYWORDS:

PSY2	8504DISP	D/T8504	PSY2DOC
PSY2PART	PSY2MISC	PSY2DISP	8535SYSPART
8535SYSDOC	8535SYSMISC		

1.2.202 INCORRECT/MISSING FRU PART NUMBERS IN 8540 HMS

Record number: H093734

Device: D/T8540
 Model: M
 Tip key: 003
 Date created: 091/08/16
 Date last altered: A92/03/23

THE FOLLOWING LIST SHOULD BE USED TO LOCATE THE CORRECT FRU PART NUMBERS FOR THE 8540 HMS. THE HMS WILL BE UPDATED TO INCLUDE THESE UPDATED/NEWLY LISTED ITEMS AND PART NUMBERS.

PAGE 21:

INDEX	SYSTEM UNIT	CORRECT P/N
4	4MB MEMORY MODULE KIT	92F3337
5	REAR FRAME PANEL 92F0012 (REF.#10 BELOW)	DELETED
8	3.5 - INCH DISKETTE DRIVE TRAY(BAY 1,2,3)	85F0097
10	BASE FRAME/REAR PANEL ASSEMBLY	92F0011
16	3.5 - INCH DISKETTE DRIVE BEZEL(BAY 4)	85F0069
16	TAPE BACKUP BEZEL (BAY 4)	85F0070
18	3.5 - INCH DISKETTE DRIVE BEZEL(BAY 2,3)	85F0003
18	5.25 - INCH DISKETTE DRIVE BEZEL(BAY 2,3)	64F4125
19	3.5 - INCH DISKETTE DRIVE BEZEL(BAY 1)	85F0093
19	5.25 - INCH DISKETTE DRIVE BEZEL(BAY 1)	85F0068

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SPACE-SAVING KEYBOARDS(84/85 KEY)	
U.S. ENGLISH	1393290
CABLE ASSEMBLY, EXTERNAL	1393082

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8504 MONOCHROME DISPLAY(WITH TILT/SWIVEL STAND)	
110 VAC NORTHERN HEMISPHERE MODEL WITH VLMP	44F9807

PAGE 29

2.88MB DISKETTE DRIVE ASSEMBLY	64F4148
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SAS KEYWORDS:

PSY2	8504DISP	D/T8504	PSY2KBD
PSY2DOC	PSY2PART	PSY2MISC	PSY2DISP
8540SYSPART	8540SYSDOC	8540SYSKBD	8540SYSMISC

1.2.203 INFO WINDOW DISPLAY (D/T4050) FLASHES

Record number: H023252

Device: D/T8570
Model: M
Tip key: 012
Date created: 090/08/13
Date last altered: A90/09/04

A 1/10 OF A SECOND FLASH MAY APPEAR ON INFO WINDOW DISPLAYS CHANGING FROM HIGH DENSITY TO TEXT MODE WHEN THEY ARE ATTACHED TO THE 8570 SYSTEMS LISTED BELOW. THIS IS NORMAL OPERATION AND NO REPAIR ACTION IS REQUIRED.

8570 MODELS E61 & U61 THAT USE THE 16MHZ SYSTEM BOARD, FRU P/N33F5834, AND 8570 061 AND 121 MODELS THAT USE THE 20MHZ SYSTEM BOARD, FRU P/N33F5835.

SAS KEYWORDS:

PSY2	8570SYSMISC	PSY2MISC	4050DISP
PSY2DISP	PSY2BRD	8570SYSBRD	PSY2ERR
8570SYSERR			

1.2.204 INFO WINDOW SUPPORT FOR MODEL 8530 E01 AND E21

Record number: H034487

Device: D/T8530
Model: M
Tip key:
Date created: 089/03/27
Date last altered: A95/03/31

WHEN A MODEL 8530 E01 OR E21 IS CONNECTED TO AN INFOWINDOW DISPLAY, MODEL 4055, SUPPORT IS PROVIDED THROUGH THE IBM INFOWINDOW HELPLINE.

THE PHONE NUMBER FOR THE HELP LINE IS 1-800-627-0920.

ALL QUESTIONS WILL BE ADDRESSED BY THIS HELPLINE.

SAS KEYWORDS:

PSY2 PSY2DISP 4055INFO WINDOW
INFO

1.2.205 INFORMATION ON CLEANING IBM PC AND PS/2 SYSTEMS

Record number: H107225

Device: D/T8550
 Model: M
 Tip key: 133
 Date created: 092/08/28
 Date last altered: A93/05/18

INTERNAL CLEANING

REMOVING THE COVERS AND CLEANING THE INTERNAL COMPONENTS OF ANY PC INVOLVES A RISK OF DOING MORE HARM THAN GOOD TO THE SYSTEM. THE INTERNAL PARTS OF THE SYSTEM ARE SENSITIVE TO SUCH THINGS AS STATIC ELECTRICITY, MECHANICAL DISRUPTION, AND CORROSIVE CHEMICALS.

A STATIC CHARGE MAY DESTROY A PLANAR, HARDFILE, OR AN ADAPTER WITHIN THE SYSTEM, VERY EASILY. UNNECESSARY HANDLING OF A HARDFILE PRESENTS A RISK OF DAMAGE, RESULTING UNRECOVERABLE DATA. CHEMICALS FOUND IN CLEANING FLUIDS MAY DEGRADE PLASTIC MATERIALS USED FOR COMPONENT PACKAGING. METALLIC SURFACES, SUCH AS CONNECTOR PINS, MAY CORRODE IF THEY COME IN CONTACT WITH A CLEANING SOLUTION. THESE ARE JUST A FEW EXAMPLES OF HOW THE SYSTEM MAY BE AFFECTED BY AN INTERNAL CLEANING.

ENGINEERING'S POSITION IS TO AVOID ANY INTERNAL PC OR PS/2 CLEANING, IF AT ALL POSSIBLE. IN THE SITUATION WHERE THERE IS A LARGE BUILD UP OF DUST WITHIN THE SYSTEM, SUCTION IS THE RECOMMENDED WAY TO REMOVE THE DUST. THE USE OF HIGH PRESSURE AIR IS NOT RECOMMENDED.

DUST CAN CONSIST OF MATERIALS THAT WILL CONDUCT ELECTRICITY. THE USE OF HIGH PRESSURE AIR COULD FORCE DUST INTO AREAS THAT WOULD DEGRADE THE SYSTEM'S OPERATING PERFORMANCE.

EXTERNAL CLEANING

FOR EXTERNAL CLEANING, THE USE OF ISOPROPYL ALCOHOL IS RECOMMENDED. THIS IS THE SOLVENT OUR POLYMER VENDORS USE TO CLEAN THE TOP COVERS AND BEZELS.

SAS KEYWORDS:

PSY2	D/T8525	PSY2MISC	PCOM
8525	D/T8530	8530	D/T8535
8535	D/T8540	8540	D/T8550
8550	D/T8555	8555	D/T8556
8556	D/T8557	8557	D/T8560
8560	D/T8565	8565	D/T8570
8570	D/T8573	8573	D/T8580
8580	D/T8590	8590	D/T8595
PCOMMISC	D/T5150	D/T5160	D/T5170
5150	5160	5170	5155
D/T5155	5161	D/T5161	5162
D/T5162	D/T9585	D/T9576	D/T9577

INSTALLATION OF ARTIC ADAPTERS IN 8590 AND 8595.

1.2.206 INSTALLATION OF ARTIC ADAPTERS IN 8590 AND 8595.

Record number: H083231

Device: D/T8595
Model: M
Tip key: 003
Date created: 091/03/26
Date last altered: A94/03/16

THE ARTIC MULTIPORT/2 AND PORTMASTER ADAPTER/A CARDS SHOULD NOT BE INSTALLED NEXT TO THE PROCESSOR CARD IN THE 8590 AND 8595 IF THEY HAVE AN ELECTRICAL INTERFACE BOARD (EIB) ATTACHED. THE CLEARANCE BETWEEN THE ARTIC EIB AND THE PROCESSOR CARD IS SUCH THAT THEY MAY TOUCH, CAUSING DAMAGE TO THE SYSTEM. THE X.25 INTERFACE CO-PROCESSOR/2 MAY BE INSTALLED NEXT TO THE PROCESSOR, AS MAY THE MULTIPORT/2 AND PORTMASTER ADAPTER/A IF THEY DO NOT HAVE INTERFACE BOARDS ATTACHED. IT IS NOT COMMON FOR THE MULTIPORT/2 AND PORTMASTER ADAPTER/A TO BE USED WITHOUT AN EIB, BUT IT IS CONCEIVABLE THAT A CUSTOMER MAY DO SO.

SAS KEYWORDS:

PSY2ADPT PSY2MISC PSY2 D/T8590

1.2.207 INSTALLATION OF 5.25 DISKETTE DRIVE OPTION 32G3947.

Record number: H124307

Device: D/T6384
Model: M
Tip key: 066
Date created: 092/12/15
Date last altered: A94/06/14

On a small number of early production 6384 there may be difficulties in installing the 5.25 diskette drive option P/N32G3947.

The problem is that the cable P/N52G8589 may have been fitted incorrectly. The cable is thus not long enough to reach the newly installed 5.25 diskette drive.

This happens because the wrong berg connector has been connected to the system board. The berg connector in the middle of the cable is the connector that must be attached to the system board not the one at the end of the cable. (There is a label 'PLANAR' beside this end connector which has caused the problem. The cable is now changed). This connector at the end of the cable should have been connected to the 3.5 Diskette Drive. There is no problem until this option is being fitted.

SAS KEYWORDS:

PSY2	INSTALLATION	VALUE POINT	VALUEPOINT
PSVP	PSVPDSKT	PSY2DSKT	

INSTALLING FDDI COMMUNICATIONS ADAPTER IN 8600 SYSTEMS

1.2.208 INSTALLING FDDI COMMUNICATIONS ADAPTER IN 8600 SYSTEMS

Record number: H034308

Device: D/T8600
Model: M
Tip key: 004
Date created: 093/06/08
Date last altered: A93/10/05

The FDDI Adapter/A cards have been tested for compatibility on the Servers 195/295 and found to be functional, However the cards will require the blue tab to be removed from the end of the card (snapped off) before they will physically fit into the 8600 model 195/295 systems.

FDDI Copper Base Adapter/A FRU P/N58G6407 FC 0347
FDDI Fiber Base Adapter/A FRU P/N58G6406 FC 0345

SAS KEYWORDS:

PSY2 D/T8600 295 195
PSY2ADPT 295ADPT PSY2COMM

1.2.209 INSTALLING NT 3.51 ON 325/330 TO RUN MULTIPROCESSOR MODE

Record number: H161539

Device: D/T8639
 Model: M
 Tip key: 005
 Date created: 097/10/22
 Date last altered: A97/10/29

This tip pertains to the following IBM PC Servers:

IBM PC Server 325 type 8639 model PT0/PTW/PB0/RB0
 -- or --
 IBM PC Server 330 type 8640 model PT0/PB0/PM0

Use the following procedure to install Windows NT 3.51 running "Multiprocessor mode" on a PC Server 325 or 330.

IMPORTANT: Ensure that only one processor is installed in the server.

- 1 - Download the 325/330 Utility Diskette from the IBM Website. The description is: "PC Server 325 (8639-PT0,PTW,PB0,RB0 / 330 (8640-PT0,PB0,PM0) Utility Diskette". The file image is a self-extracting file that will create a floppy diskette. Copy the contents of the diskette to a new directory of your choice on the hard drive.
- 2 - Install Windows NT 3.51 running "Standard PC" mode (not as a Uniprocessor or Multiprocessor PC) on the server (see the ADDCPU.TXT on the 325/330 utility diskette for details).

NOTE: This utility is not required for the Japanese version of NT3.51 as this will install correctly as a Multiprocessor PC.

- 3 - NT3.51 Service pack 5 (SP5) must be obtained. Download SP5 from the Microsoft Website (the filename on the Website is SP5_351I.EXE), copy the file to a new directory of your choice (not the same directory as the 325/330 utility) on the server hard drive, expand the file using the following syntax from a command prompt:
 SP5_351I.EXE -d
 SP5 may be installed before or after running ADDCPU but UPDATE.EXE of the service pack must always be run after running ADDCPU.

NOTE: Both SP5 and the 325/330 utility directories contain a addcpu.exe file. Always use the addcpu.exe located in the directory containing the 325/330 utility files.

NOTE: There are two variations to complete the upgrade to multiprocessor mode operation. Only apply the contents of step 4 or step 5.

- 4 - Without SP5 already installed:

A- The server machine currently has NT 3.51 Server installed w/one processor.
 B- Plug in the second processor.
 C- Run addcpu.exe from the 325/330 utility. Do not reboot.
 D- Run 'update.exe' from SP5
 E- Reboot
 The NT blue screen will identify 2 system processors as well as the Multiprocessor Kernel.

----- OR -----

- 5 - With SP5 already installed:

A- The server machine currently has NT 3.51 SP5 installed w/one processor.
 B- Plug in the second processor.
 C- Run addcpu.exe from the 325/330 utility. Do not reboot.
 D- Run 'update.exe' from SP5
 E- Reboot
 The NT blue screen will identify 2 system processors as well as the Multiprocessor Kernel.

Windows NT is a trademark of Microsoft Corporation

SAS KEYWORDS:

PSY2

NT 3.51

WINDOWS NT

UNCLASSIFIED

PSY2 RETAIN TIPS

INSTALLING NT 3.51 ON 325/330 TO RUN MULTIPROCESSOR MODE

MICROSOFT	SP5	SERVICE PACK 5	MULTIPROCESSOR
SMP	325	330	D/T8639
D/T8640	3.51	325/330 UTILITY	SP5_351I.EXE
ADDCPU.EXE	UNIPROCESSOR		

1.2.210 INSTALLING RETAIL WIN95 IN INTELLISTATION M-PRO, M/T6898

Record number: H161701

Device: D/T6898
 Model: M
 Tip key: 004
 Date created: 097/11/05
 Date last altered: A97/11/05

For those customers who wish to install the retail version of Windows95 (OSR1) in the IBM IntelliStation M-Pro, M/T6898, several additional steps must be taken to insure a successful installation. Included in these steps are the installation and configuration of specific device drivers. Among them are:

PIIX4 PCI/ISA Bridge
 BUS Mastering
 Adaptec 7800 Adapter Family (SCSI Only)
 INTEL Ethernet
 Permedia Glyder MAX-2 video
 Crystal Audio

Instructions for the installation and configuration of these drivers and utilities can be found on the IBM IntelliStation support page at the following Internet URL:

www.us.pc.ibm.com/intellistation/support

SAS KEYWORDS:

PSY2	PSY2ERR	PSY2ADPT	PSY2OEM
PSY2OPER	PSY2COMM	PSVP	PSVPERR
PSVPADPT	PSVPOEM	PSVPOPER	PSVPCOMM
D/T6898	M/T6898	6898	UNCLASSIFIED
75957	75957F_1	75987	75987F_1
78371	78371F_1		

1.2.211 INSTALLING RETAIL WIN95 IN IBM PC300GL, M/T 6561/6591

Record number: H162590

Device: D/T6561
Model: M
Tip key: 001
Date created: 097/12/16
Date last altered: A98/02/03

For those customers who wish to install the retail version of Windows95 (OSR1) in the IBM PC300GL, M/T6561 and M/T6591, several additional steps must be taken to insure a successful installation. Included in these steps are the installation and configuration of specific device drivers. Among them are:

PIIX4 PCI/ISA Bridge
BUS Mastering IDE/Smart Disk
IBM PCI Token Ring adapter
IBM 10/100 Ethernet Controller
Cirrus Logic GD5465 video drivers
Crystal Audio

Instructions for the installation and configuration of these drivers and utilities can be found on the IBM Internet support page at the following Internet URL:

www.us.pc.ibm.com/support

Windows and Windows95 are trademarks of Microsoft Corporation.

SAS KEYWORDS:

PSY2	PSY2ERR	PSY2ADPT	PSY2OEM
PSY2OPER	PSY2COMM	PSVP	PSVPERR
PSVPADPT	PSVPOEM	PSVPOPER	PSVPCOMM
D/T6561	M/T6591	6561	6591
81398	UNCLASSIFIED		

1.2.212 INSTALLING RETAIL WIN95 IN INTELLISTATION M-PRO, M/T6889

Record number: H163401

Device: D/T6889
 Model: M
 Tip key: 001
 Date created: 098/04/02
 Date last altered: A98/04/18

For those customers who wish to install the retail version of Windows95 (OSR1) in the IBM IntelliStation M-Pro Series 6889, several additional steps must be taken to insure a successful installation. Included in these steps are the installation and configuration of specific device drivers. Among them are:

PIIX4 PCI/ISA Bridge
 BUS Mastering
 Adaptec 7800 Adapter Family (SCSI Only)
 INTEL Ethernet
 Crystal Audio

Instructions for the installation and configuration of these drivers and utilities can be found on the IBM IntelliStation support page at the following Internet URL:

www.us.pc.ibm.com/intellistation/support

Locate the document entitled "IBM IntelliStation M-Pro - Installation of Windows 95 Retail Version fixes with SCSI/IDE drives (6889)"

Windows and Windows95 are trademarks of Microsoft Corporation.

SAS KEYWORDS:

PSY2	PSY2ERR	PSY2ADPT	PSY2OEM
PSY2OPER	PSY2COMM	PSVP	PSVPERR
PSVPADPT	PSVPOEM	PSVPOPER	PSVPCOMM
D/T6889	M/T6889	6889	UNCLASSIFIED
85307	85307F_1	WIN95	OSR1

INSTALLING THE OS2 PCMCIA MODEM DRIVER ON DCOLON.

1.2.213 INSTALLING THE OS2 PCMCIA MODEM DRIVER ON D&COLON.

Record number: H124945

Device: D/T9545
Model: M
Tip key: 022
Date created: 094/08/19
Date last altered: A94/08/19

If your customer is trying to install the PCMCIA modem client driver on fixed disk drive D, they should do the following. Insert the 9545 Utility Diskette 1.21 or later in drive A. Run and select "Install OS/2 PCMCIA device drivers." They will then be asked to select the fixed disk drive that the driver will be loaded to.

SAS KEYWORDS:

PSY2

PSY2ADPT

PSY2COMM

1.2.214 INSTALLING WARP ON SERVER 500 P/390

Record number: H095719

Device: D/T8641
Model: M
Tip key: 009
Date created: 095/11/07
Date last altered: A95/11/15

Although the PC Server 500 S/390 Systems (8641-MYS, 8641-NYV, 8641 - MYF), ship with Serverguide, it is recommended that ServerGuide NOT be used to install OS/2 Warp. ServerGuide will only install onto a FAT file system. However, in order to get the best performance from OS/2 with the S/390 Adapter, HPFS is needed because it allows for larger cache buffers.

The Server 500 S/390 also ships with a shrinkwrapped box of OS/2 Warp. The shrinkwrapped package or OS/2 should be used.

Note: You will still need to modify Diskette 1 by adding the following statement to the config.sys file:

```
BASEDEV=IBMRAID.ADD
```

In addition, you must copy IBMRAID.ADD to diskette 1 from NEWRAID1.DSK, which is available on the IBM PC Company Bulletin Board System by calling 919-517-0001. The file may be found in section 22 on SERVERS.

SAS KEYWORDS:

PSY2	SERVER	500	PSY2PROG
8641	OS2	P390	390
MAIN	FRAME	S390	17H5372
FRU	P/N17H5372		

INSUFFICIENT NETBIOS RESOURCES RUNNING COSESSION

1.2.215 INSUFFICIENT NETBIOS RESOURCES RUNNING COSESSION

Record number: H01566

Device: D/T6577
 Model: M
 Tip key: 002
 Date created: 096/06/19
 Date last altered: A96/06/19

When using CoSession for Windows with the NetBIOS network protocol selected, the user may encounter "insufficient NetBIOS resources." CoSession for Windows supports asynchronous, Netware IPX, and NetBIOS protocols.

The insufficient NetBIOS resource error may be eliminated by adding the following line to the Windows SYSTEM.INI file located in the \WINDOWS directory:

```
"NETHEAPSIZE=30"
```

If failures persist, continue normal problem determination procedures to isolate the failing application or FRU.

Netware is a trademark of the Novell, Inc.

Windows is a trademark of the Microsoft Corporation.

SAS KEYWORDS:

PSY2	D/T65XX	6577	6587
IBMPC	PSVP	PSVPPROG	PSY2PROG
D/T6587	PC 350	PC350	PC300
PC 330	PC330	43958	PSVPCOMM
PSY2COMM	PSY2ERR	PSVPERR	

1.2.216 INTEL PENTIUM OVERDRIVE PROCESSOR IN IBM SYSTEMS

Record number: H132354

Device: D/T6571
 Model: M
 Tip key: 004
 Date created: 096/01/25
 Date last altered: A96/01/29

Intel has developed Pentium OverDrive Processors that allow an Intel 486 based system to be upgraded with Pentium OverDrive Technology:

Intel Product No.

PODP5V63 63Mhz Intel Pentium OverDrive Processor
 PODP5V83 83Mhz Intel Pentium OverDrive Processor

The following IBM Commercial Desktop Systems are compatible with the Pentium OverDrive Processor upgrades:

IBM PS/ValuePoint & PS/ValuePoint Performance Series

6382/S 6472 6492
 6384/D 6482 6494
 6387/T 6484 6381 (486DX models only)

IBM PC 300 Series

See NOTE 1 below

6571 6581
 6573 6583

IBM PS/2

9576i 9576s
 9577i 9577s

SYSTEM REQUIREMENTS:

Following are hardware and software prerequisites that MUST be met PRIOR to installing the Pentium OverDrive upgrade. Failure to install the prerequisites WILL result in a non-functional system and/or damage to the Pentium OverDrive Processor.

- Flash BIOS updates. ALL systems listed above require the latest level Flash BIOS to be installed. These Flash BIOS updates enable the system to support the transition from Intel 486 technology to Intel Pentium technology.

Flash BIOS updates may be obtained from the IBM PC Company Bulletin Board system at (919)517-0001. The Flash updates may also be downloaded via the Internet from the IBM Personal Computer File Library by searching the following URL:
<http://www.pc.ibm.com/files.html>

- Interposer adapter. The Interposer adapter is 235 pin socket adapter that is installed between the Pentium OverDrive Processor and the processor socket on the system board.

See NOTE 2 below for information on obtaining an interposer adapter.

The following systems from the list above REQUIRE an interposer adapter:

PS/ValuePoint	IBM PC 300 Series	IBM PS/2
See NOTE 3 below		
-----	-----	-----
6472 6492	6571 6581	9576i 9576s
6482 6494	6573 6583	9577i 9577s
6484		

- Check the User's Guide that ships with the system for information on installing upgrades in the OverDrive socket. Jumper changes are required on some models when upgrading to an OverDrive Processor.

IBM PC COMPANY WARRANTY SUPPORT:

Installation of this upgrade is considered a non-IBM modification of the system. Support for system or software related failures as a result of installing the Intel Pentium OverDrive upgrade should be directed to the point of purchase or the manufacturer of the upgrade, Intel.

The IBM PC Company will not reimburse IBM Authorized Servicers or Remarketers for the installation or maintenance of the Intel Pentium OverDrive Processor or the interposer adapter. BIOS updates are customer installable.

TSS/IBM servicers that perform the installation of the upgrade at a customers request should record their time using service code 44. This is a billable activity.

NOTE 1 - IBM PC 300 Series PCI models may require additional configuration assistance. Contact the IBM PC Company HelpCenter at 1-800-772-2227 for information.

NOTE 2 - The IBM PC Company HelpCenter will provide the interposer adapter on request as a courtesy to IBM customers free of charge. System specific installation assistance will also be provided by the HelpCenter.

NOTE 3 - IBM PS/ValuePoint 6381/Si, 6382/S, 6384/D and 6387/T systems DO NOT require an interposer.

OverDrive Processor and Pentium are trademarks of the Intel Corporation.

SAS KEYWORDS:

VALUE POINT	PS/VP	PSVP	D/T6472
D/T6482	D/T6492	D/T6494	D/T6484
D/T6382	D/T6384	D/T6387	D/T6571
D/T6573	D/T6581	D/T6583	PSVPOEM
PSY2OEM	IBMPC	PSY2	VALUEPOINT
OVER DRIVE	D/T9576	D/T9577	D/T6381
D/T65XX	UPGRADE	PC 330	PC 350
PC330	PC350		

1.2.217 INTEL 486DX4 OVERDRIVE UPGRADES NOT SUPPORTED

Record number: H131933

Device: D/T6484
 Model: M
 Tip key: 009
 Date created: 095/12/11
 Date last altered: A95/12/11

PS/ValuePoint Performance Series 6472, 6482, 6484, 6492 and 6494 systems DO NOT support the following Intel OverDrive Processor upgrades due to cache and IDE timing incompatibilities:

Intel OverDrive Processor DX4ODPR100 (486 DX4 100MHZ)
 Intel OverDrive Processor DX4ODP100 (486 DX4 100MHZ)
 Intel OverDrive Processor DX4ODPR75 (486 DX4 75MHZ)
 Intel OverDrive Processor DX4ODP75 (486 DX4 75MHZ)

Customers that have purchased either of these upgrades and are experiencing system failures should be directed back to their point of sale.

Intel OverDrive is a trademark of the Intel Corporation.

SAS KEYWORDS:

VALUE POINT	PS/VP	PSVP	D/T6472
D/T6482	D/T6492	D/T6494	PSVPOEM
PSY2OEM	PSVPADPT	PSY2ADPT	PSY2BRD
PSVPBRD	PSVPMEM	PSY2MEM	PSVPFDSK
PSY2	PSY2FDSK	PC/3270	VALUEPOINT
OVER DRIVE			

1.2.218 INTERMITTENT ERRORS AND FILE SERVER HANGS

Record number: H001590

Device: D/T8570
Model: M
Tip key: 015
Date created: 090/11/01
Date last altered: A92/01/16

8570 MODELS A61, A21, A81 AND A16 WITH NOVELL ARCNET* NETWORK INTERFACE CARDS (NICS) INSTALLED MAY EXHIBIT INTERMITTENT ERRORS AND SERVER "HANGS". AFFECTED CUSTOMERS SHOULD BE ADVISED TO CONTACT NOVELL INC. FOR ASSISTANCE IN OBTAINING ANY NEEDED SOFTWARE PATCHES OR OTHER FIX INFORMATION.

CUSTOMERS SHOULD REFER TO NOVELL TECHNICAL BULLETIN NUMBER "1 - 274".

* REGISTERED TRADEMARK OF NOVELL, INC.

SAS KEYWORDS:

PSY2	8570SYSCOMM	PSY2COMM	PSY2ERR
8570SYSERR	PSY2ADPT	8570SYSADPT	

INTERMITTENT POWER-ON RESET DURING OPERATION

1.2.219 INTERMITTENT POWER-ON RESET DURING OPERATION

Record number: H034838

Device: D/T8525
Model: M
Tip key: 006
Date created: 089/04/26
Date last altered: A89/04/28

IF A PS/2 MODEL 8525 EXPERIENCES INTERMITTENT POWER-ON RESETS, CHECK FOR IMPROPER SEATING OF THE POWER CORD AT THE SYSTEM UNIT.

IF EXCESSIVE FORCE IS REQUIRED TO FULLY SEAT THE MOLDED FEMALE END OF THE POWER CORD INTO THE APPLIANCE COUPLER, REPLACE THE POWER CORD WITH FRU P/N62X0663.

SAS KEYWORDS:

PSY2	8525SYSPWR	8530SYSPWR	8550SYSPWR
8560SYSPWR	8570SYSPWR	8580SYSPWR	PSY2MISC

1.2.220 INTERMITTENT VIDEO POST ERRORS ON 8590

Record number: H094498

Device: D/T8590
Model: M
Tip key: 016
Date created: 092/07/23
Date last altered: A92/07/24

AFTER ADDING OPTIONS, POST STOPS WITH ONE LONG AND TWO SHORT BEEPS AND/OR AN ERROR CODE OF 2401.

DEFECTIVE OPTION CARDS HAVE BEEN IDENTIFIED AS CAUSING ERRONEOUS POST VIDEO ERRORS ON THE 8590. ONE LONG AND TWO SHORT BEEPS AND/OR AN ERROR CODE OF 2401, ARE VIDEO ERROR MESSAGES.

FIX:

REMOVE THE OPTION CARDS ONE AT A TIME UNTIL THE SOURCE OF THE PROBLEM IS ISOLATED.

IF THE PROBLEM IS NOT IDENTIFIED, NORMAL PROBLEM DETERMINATION SHOULD BE CONTINUED.

SAS KEYWORDS:

PSY2	PSY2ERR	D/T8590	PSY2ADPT
8590SYSADPT	8590SYSERR		

PSY2 RETAIN TIPS
INTERMITTENT 4869 READ ERRORS

1.2.221 INTERMITTENT 4869 READ ERRORS

Record number: H037905

Device: D/T4869
Model: M
Tip key: 004
Date created: 090/05/22
Date last altered: A93/06/07

THE 4869, MODEL 001 AND 002 MAY FAIL TO OPERATE PROPERLY WHEN A USER PLACES THE EXTERNAL DISKETTE DRIVE TOO CLOSE TO A DISPLAY OR MONITOR.

IF DIAGNOSTICS AND THE CUSTOMERS APPLICATION PROGRAMS FAIL INTERMITTENTLY, RELOCATE THE EXTERNAL DISKETTE DRIVE AWAY FROM THE DISPLAY.

IF DIAGNOSTICS STILL FAIL ON THE EXTERNAL DISKETTE DRIVE, FOLLOW NORMAL PROBLEM DETERMINATION PROCEDURES.

LOW FREQUENCY FLUCTUATING MAGNETIC FIELDS GENERATED BY DISPLAYS CAN CAUSE READ ERRORS IN THE 4869.

SAS KEYWORDS:

PSY2	4869SYSDISP	PSY2DISP	4869SYSDSKT
PSY2DSKT	D/T4869	D/T8550	D/T8555
D/T8565	D/T8560	D/T8570	D/T8580
D/T8590	D/T8595	D/T8525	D/T8530
D/T8535	D/T8540	D/T8540	D/T8556
D/T8557	D/T8565	D/T8570	D/T8573

INTERMITTENT, DIFFICULT-TO-DIAGNOSE SYSTEM PROBLEMS

1.2.222 INTERMITTENT, DIFFICULT-TO-DIAGNOSE SYSTEM PROBLEMS

Record number: H032934

Device: D/T8550
 Model: M
 Tip key: 031
 Date created: 088/03/15
 Date last altered: A93/12/22

INTERMITTENT AND VERY DIFFICULT TO DIAGNOSE SYSTEM PROBLEMS,
 MAY BE CAUSED BY LINE CORDS WHICH ARE NOT FULLY SEATED, OR
 ARE TOO LOOSE TO MAKE A TIGHT CONNECTION.

WHEN TROUBLESHOOTING INTERMITTENT POST ERRORS, OR ANY UNUSUAL,
 SYSTEM PROBLEMS, (FOR EXAMPLE; SYSTEM PERFORMS POWER-ON RESET
 UNEXPECTEDLY DURING OPERATION) CHECK THE LINE CORD FOR PROPER
 SEATING. SLIGHT FORMING OF THE MALE CONTACTS IN THE SYSTEM
 UNIT POWER SUPPLY CONNECTOR MAY CORRECT THE PROBLEM.
 REPLACING THE LINE CORD MAY BE NECESSARY IN SOME CASES.
 BOTH ENDS OF THE LINE CORD SHOULD BE CHECKED.

SLIGHT VARIATIONS, DUE TO MANUFACTURING TOLERANCES, MAY EXIST
 BETWEEN LINE CORDS FROM DIFFERENT SOURCES.

SAS KEYWORDS:

PCOM	PSY2	PSY2PWR	PCOMPWR
5170SYSPWR	5160SYSPWR	5170SYSPWR	8525SYSPWR
8530SYSPWR	8550SYSPWR	8560SYSPWR	8570SYSPWR
8580SYSPWR	D/T8560	D/T8580	D/T5170
D/T5160	D/T8570	D/T8590	D/T8595
D/T8557	D/T8530	D/T8540	D/T8555
D/T8565	POWER	CABLE	PSY2POWR
D/T9590	D/T9595	D/T9585	D/T9595A
D/T9577	D/T9576	D/T9557	

PSY2 RETAIN TIPS

INTERNAL TAPE PROBLEMS WHEN USING OS2TAPE SOFTWARE ON PS/2

1.2.223 INTERNAL TAPE PROBLEMS WHEN USING OS2TAPE SOFTWARE ON PS/2

Record number: H036884

Device: D/T8550
Model: MCP1
Tip key:
Date created: 093/03/02
Date last altered: A93/03/02

THERE IS A PROBLEM WITH THE PS/2 INTERNAL TAPE BACK UP UNIT WHEN USING THE OS2TAPE BACK UP PROGRAM. SYMPTOMS INCLUDE TRAP 000D, TRAP 000E, "SHOE SHINING" (TAPE CONSTANTLY CHANGING DIRECTION), AND VERY LONG BACK UP TIMES. 8580 AND 8570 ARE THE ONLY MACHINE TYPES AFFECTED. THIS IS A SOFTWARE PROBLEM. HAVE YOUR CUSTOMER CONTACT IBM SOFTWARE SUPPORT AT 800-237-5511 TO TO OPEN A PROBLEM UNDER 'OS2TAPE' OR THEY MAY CONTACT THEIR SE OR PLACE OF PURCHASE. EMEA LOCATIONS CONTACT NORMAL SOFTWARE SUPPORT CHANNELS.

SAS KEYWORDS:

8550SYSMISC	8570SYSMISC	8580SYSMISC	8570SYSTAPE
8580SYSTAPE	8570SYSERR	8580SYSERR	PSY2MISC
PSY2ERR	PSY2	PSY2TAPE	D/T8580
D/T8570			

INVALID ERROR "TAPE NOT FORMATTED" ON IBM PS/2 ITBU

1.2.224 INVALID ERROR "TAPE NOT FORMATTED" ON IBM PS/2 ITBU

Record number: H06448

Device: D/T8550
 Model: MCP1
 Tip key: 184
 Date created: 093/08/02
 Date last altered: A93/08/02

ITBU DIAGNOSTIC ERROR "TAPE NOT FORMATTED" WILL BE ENCOUNTERED WHEN DIAGS ARE RUN ON THE IBM PS/2 INTERNAL TAPE BACKUP UNIT FRU P/N87F9787 WHICH HAS BEEN INSTALLED USING INSTALLATION KIT D. THIS ERROR IS NOT VALID. VERSION 1.01 IS AFFECTED. WHEN A FIX TO THE DIAGS IS COMPLETED, THE NEW VERSION OF THE DISKETTE WILL BE AVAILABLE ON THE STATES TOOLS DISK.

TO DETERMINE IF KIT D WAS USED TO INSTALL THE TAPE DRIVE, LOOK FOR A SHORT 34-PIN ADAPTER CABLE FRU P/N34F2717 BETWEEN THE TAPE DRIVE AND THE DISK/DISKETTE DRIVE RIBBON CABLE. IF THE ADAPTER CABLE IS PRESENT, ANY "TAPE NOT FORMATTED" ERRORS SHOULD BE DISREGARDED

DO NOT REPLACE THE DRIVE OR TAPE UNDER THE ABOVE CONDITIONS. IF YOU HAVE ANY QUESTIONS, CALL ITBU FIELD SUPPORT AT 704 - 594 - 3792 OR T/L 794-3792.

SAS KEYWORDS:

ITBU	TAPE	KIT D	BACKUP
PSY2	PSY2ERR	PSY2TAPE	PSY2MISC
D/T8550	8550SYSTAPE	8550SYSMISC	8550SYSERR
D/T8570	8570SYSTAPE	8570SYSMISC	8570SYSERR
D/T8580	8580SYSTAPE	8580SYSMISC	8580SYSERR
D/T8590	8590SYSTAPE	8590SYSMISC	8590SYSERR
D/T8560	8560SYSTAPE	8560SYSMISC	8560SYSERR

IRWIN 245-P OR 2040 INTERNAL TAPE BACK-UP -DIFFERENT LEVELS.

1.2.225 IRWIN 245-P OR 2040 INTERNAL TAPE BACK-UP -DIFFERENT LEVELS.

Record number: H103542

Device: D/TOEMF
 Model: MEAT
 Tip key: 023
 Date created: 092/08/24
 Date last altered: A94/04/29

THE IRWIN 245-P , PRODUCT ID# CD-03 OR CD-01, P/N11F9169, WITH A 4 PRONG POWER PLUG, IS NO LONGER MANUFACTURED. WHEN ORDERING P/N11F9169 THE TAPE DRIVE RECEIVED MAY BE EITHER CD-03, CD-01 (WITH A 4 PRONG POWER PLUG) OR THE NEW STYLE ZC-02 (P/N31F0708 WITHOUT A 4 PRONG POWER PLUG). WHEN REPLACING THIS DRIVE IN A 8560, OR 8580 YOU MUST ORDER THE FOLLOWING ADAPTER KITS. ORDER BOTH KITS 1 AND 2, THEN ORDER EITHER KIT 3 OR 4 ACCORDING TO THE MACHINE MODEL REQUIRED.

- 1.) IRWIN 8460 ADAPTER KIT, P/N11F9167 FOR TAPE DRIVES WITH A 4 PRONG POWER PLUG.
- 2.) IRWIN 8470 ADAPTER KIT, P/N31F0581 FOR TAPE DRIVES WITHOUT A 4 PRONG POWER PLUG.
- 3.) IF INSTALLED IN AN 8560 OR 8580 MODEL 041,071,111, OR 311 ORDER P/N 72X8543 DISKETTE DRIVE CABLE 1/2 HIGH (SEE NOTE).
- 4.) IF INSTALLED IN AN 8580 MODEL 081,121,161,321,A21,A31, OR A61 ORDER P/N 34F0036 DISKETTE DRIVE CABLE AND P/N 34F2717 CONVERTER KIT. (SEE NOTE).

NOTE: IF REPLACING THE IRWIN 245-P, PRODUCT ID# CD-03 OR CD-01 WITH A CURRENT IRWIN 245-P, PRODUCT ID# ZC-02, YOU MUST REMOVE IRWIN CABLES FROM THE MACHINE AND REPLACE THEM WITH THE ORIGINAL IBM FLOPPY DRIVE CABLES. THE MANUFACTURER MODEL NUMBER AND PRODUCT ID# IS LOCATED ON THE REAR OF THE DRIVE. THE DRIVE MUST BE REMOVED FROM THE SYSTEM FOR PROPER IDENTIFICATION.

SAS KEYWORDS:

IRWIN	P/N11F9169	11F9169	245-P
IRWIN245P	POEM	D/T5170	PCOM
245P	2040	P/N31F0708	31F0708
OEMFEAT	P/N31F0581	P/N11F9167	31F0581
11F9167	PSY2	D/T8580	D/T8570
D/T8550	D/T8560		

1.2.226 ISA CDROM DIAGNOSTICS

Record number: H024683

Device: D/T6384
Model: M
Tip key: 068
Date created: 094/08/03
Date last altered: A95/11/16

The IBM ISA CDROM Drive Diagnostics are located on the ISA CDROM Option diskette that ships with the system if the option is preinstalled. If the CDROM option is purchased separately, the diskette is part of the option package.

The Diagnostic program may be accessed by booting the system to DOS or a DOS window and running "CDROMDGS.EXE".

SAS KEYWORDS:

VALUE POINT	PS/VP	PSVP	6384
6382	6387	6381	6472
6482	6484	6492	6494
D/T6381	D/T6382	D/T6387	D/T6472
D/T6482	D/T6484	D/T6492	D/T6494
P60/D	P60D	VALUE POINT	PSY2
PSVPDIAG	PSY2DIAG	CD-ROM	CD ROM
D/T8640	PSY2CDROM	PSVPCDROM	

ITC CABLE WILL NOT ATTACH TO ANALOG CD TRAY

1.2.227 ITC CABLE WILL NOT ATTACH TO ANALOG CD TRAY

Record number: H125163

Device: D/T9527
Model: M
Tip key: 005
Date created: 094/08/30
Date last altered: A95/07/26

A limited number of 9527-011 monitors were manufactured with a different size tilt cable connector on the Analog Card Tray. The connector is in position Q8. (Reference HMM S71G-4197-02, page 4 - 31 for location.)

When replacing the Analog Card Tray, FRU P/N95G8971, the existing tilt cable, coming from the ITC, may not fit the connector on the Analog Card Tray FRU.

A replacement tilt cable is available which will allow connection of the replacement Analog Card Tray FRU to the existing ITC FRU assembly.

To obtain the adapter cable, servicers should contact RTP Level 2 through their normal technical support structure. Manufacturing is aware of this problem and has taken corrective action. The cable is now included with the new Analog Card Tray FRU. The cable supplied through L2 should only be required for FRU inventory located at distribution centers.

IF A CABLE IS REQUIRED, LEVEL 2 HARDWARE SUPPORT SHOULD BE CONTACTED VIA THE ESTABLISHED SUPPORT STRUCTURE.

THE SERVICERS NAME, ADDRESS AND PHONE NUMBER SHOULD BE INCLUDED IN THE PMR SO THAT A CABLE MAY BE SENT.

SAS KEYWORDS:

PSY2

PSY2DISP

PSY2PART

P/N95G8967

JUMPER SETTINGS FOR 1GB IDE HARD FILE

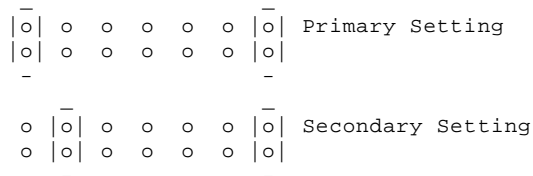
1.2.228 JUMPER SETTINGS FOR 1GB IDE HARD FILE

Record number: H127458

Device: D/T6875
 Model: M
 Tip key: 004
 Date created: 095/05/09
 Date last altered: A95/05/09

The jumper settings for the 1Gb IDE hardfile used in the IBM PC 300/700 Series systems, FRU P/N06H6111, are not pictured in the Hardware Maintenance Manual (HMM).

The jumper settings for Primary/Secondary are as follows:



The jumper settings for this drive will be illustrated in the next revision of the HMM.

SAS KEYWORDS:

PSY2	PSVP	PSY2PART	PSVPPART
IBMPC	PC 700	PC 300	PC700
PC300	06H6111	D/T65XX	D/T68XX
D/T6571	D/T6573	D/T6585	D/T6886
D/T6876	D/T6581	D/T6583	D/T6575
D/T6885	PC350	PC 350	PC330
PC 330	PC750	PC 750	PC 730
PC730	65XX	68XX	PSY2FDSK
PSVPFDSK			

1.2.229 JUMPERS ON 270,360,540, & 728MB SCSI DRIVES

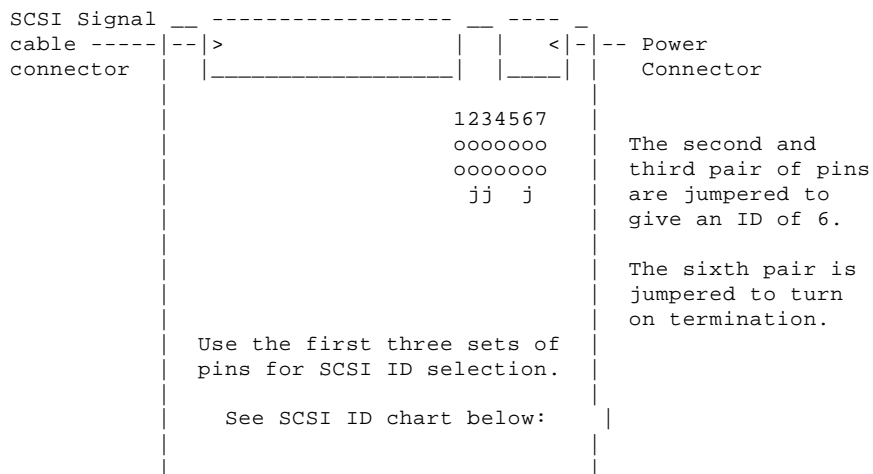
Record number: H127303

Device: D/T8550
 Model: M
 Tip key: 209
 Date created: 095/04/18
 Date last altered: A95/10/16

There are no terminating resistors, or pluggable modules to be added or removed, on the IBM Satsuma 270MB, 360MB, 540MB, and 728MB hardfiles. They can be identified by the following text on the drive label:

"FRU P/NXXXXXXX" (82G5930, 82G5931, 82G5932, or 82G5933)
 "MADE BY IBM JAPAN LTD.S "
 "MADE IN THAILAND "

The SCSI ID address and termination are changed by moving jumpers on the hardfile controller board. The drive is shipped as a FRU and option with the SCSI ID address set to ID-6 and is terminated.



SCSI ID CHART

SCSI ID	JUMPERS		
	1	2	3
BINARY VALUE	1	2	4
6		X	X
5	X		X
4		X	
3	X	X	
2		X	
1	X		
0			

NOTE:
 FRU orders for the IBM 320MB and 400MB SCSI drives may sub to IBM

320MB P/N85F0011
 subs to
 360MB P/N82G5931
 400MB P/N85F0012
 subs to
 540MB P/N82G5932

SAS KEYWORDS:

PSY2	PSY2FDSK	FDSK	HARDDISK
SWITCH	SETTINGS	FDISK	D/T9590
540	FIXED DISK	360	T-RES
D/T9595	T RES	TERMINATOR	DISK
TERMINATE	66G9748	P/N82G5930	9576
9577	9577S	9576S	D/T9577
D/T9576	85F0011	85F0012	364
D/T8590	D/T8595	270	728
P/N82G5933			

KEYBOARD LOCKS AFTER ENTERING POWER-ON PASSWORD

1.2.230 KEYBOARD LOCKS AFTER ENTERING POWER-ON PASSWORD

Record number: H124865

Device: D/T6384
 Model: M
 Tip key: 069
 Date created: 094/08/12
 Date last altered: A94/08/12

PS/ValuePoint 6384 P60/D systems may lock the keyboard after the Power-on password is entered.

If the system is configured for a Power-On and/or an Administrator's password, and the CAPS LOCK key is pressed before the correct password is entered, the system software will IPL successfully, however, the keyboard will not accept input. To clear the keyboard lock, the system must be powered off/on, and the correct password entered without pressing CAPS LOCK. No parts should be replaced as a result of this power-on procedure.

SAS KEYWORDS:

VALUE POINT	PS/VP	PSVP	P60D
PSVPOPER	PSY2OPER	193	199
PSY2	189	HANG	PSVPKBD
PSY2KBD			

KEYBOARD PASSWORD INSTALLATION PROBLEMS WITH DOS 4.00

1.2.231 KEYBOARD PASSWORD INSTALLATION PROBLEMS WITH DOS 4.00

Record number: H033717

Device: D/T8550
 Model: M
 Tip key: 038
 Date created: 089/04/06
 Date last altered: A91/11/25

THE PERSONAL SYSTEM/2 REFERENCE DISKETTE KEYBOARD PASSWORD INSTALLATION MAY GIVE THE FOLLOWING ERROR MESSAGE ON SYSTEMS RUNNING UNDER DOS 4.00 OR HIGHER:

" THE DRIVE LETTER YOU SELECTED IS INCORRECT. SELECT ANOTHER. "

IF THIS MESSAGE OCCURS, REFER TO THE "GETTING STARTED WITH DISK OPERATING SYSTEM VERSION 4.00" BOOKLET WHICH COMES WITH DOS 4.00. IT PROVIDES THE USER WITH SPECIAL INSTALLATION INSTRUCTIONS (PG. 109, CHAPTER 5) FOR INSTALLING THE KEYBOARD PASSWORD.

SAS KEYWORDS:

PSY2	PSY2PROG	8530SYSPROG	8550SYSPROG
8560SYSPROG	8525SYSPROG	8570SYSPROG	8580SYSPROG
PCOMPROG	5170SYSPROG	5160SYSPROG	5150SYSPROG
PSY2ERR	8525SYSERR	8530SYSERR	8550SYSERR
8560SYSERR	8570SYSERR	8580SYSERR	5150SYSERR
5160SYSERR	5170SYSERR	8555SYSERR	8555SYSPROG
8565SYSPROG	8565SYSERR	8573SYSERR	8573SYSPROG
D/T8560	D/T8570	D/T8580	D/T8590
D/T8595	DT/8555	D/T8530	D/T8540
D/T8565			

1.2.232 KEYBOARD SETUP NOT AVAILABLE IN COSESSION

Record number: H133204

Device: D/T6877
Model: M
Tip key: 019
Date created: 096/03/25
Date last altered: A96/03/25

IBM PC 700 Series 6877 and 6887 systems preloaded with Microsoft Windows95 may lose the ability to alter the keyboard setup when CoSession is loaded.

To regain the ability to alter the keyboard setup in CoSession, perform the following steps:

- Ensure that CoSession Host is loaded.
- Click on the Start button.
- Click on Programs.
- Click on IBM On-Line Call/CoSession.
- Click on CoSession Host for Windows.
- Click on Ok.

When the CoSession Host Control Center screen appears, click on "File," then "Exit." Shutdown or restart the system. When CoSession is restarted, the Language screen will appear with the ability to alter the keyboard setup.

Windows95 is a trademark of the Microsoft Corporation.

SAS KEYWORDS:

PSY2	D/T68XX	6887	6877
IBMPC	PSVP	PSY2PROG	PSVPPROG
D/T6887	PC750	PC700	PC 730
PC 750	PC730	41104	PSVPKBD
PSY2KBD			

1.2.233 KEYLOCK ASSEMBLY FAILS ON IBM PC 330 & 730

Record number: H126996

Device: D/T6875
Model: M
Tip key: 002
Date created: 095/03/31
Date last altered: A95/07/21

The front keylock assembly on some IBM PC 330 and 730 series systems may not adequately secure the system top cover.

Affected front bezel assemblies (with keylock) are identified as FRU P/N06H5725, and have a pearl white keylock. Chrome plated keylocks are not affected.

Front bezel FRU P/N06H6994 is the replacement for P/N06H5725 and FRU P/N06H5737 and contains the chrome plated keylock.

SAS KEYWORDS:

PSY2	PSVP	PSY2PART	PSVPPART
IBMPC	PC 700	PC 300	PC700
PC300	06H5725	D/T65XX	D/T68XX
D/T6571	D/T6573	D/T6585	D/T6875
D/T6876	KEY LOCK		

KEYPAD FLEX CABLE IS PART OF FRONT BEZEL

1.2.234 KEYPAD FLEX CABLE IS PART OF FRONT BEZEL

Record number: H122867

Device: D/T6324
 Model: M
 Tip key: 004
 Date created: 094/02/23
 Date last altered: A94/08/04

The keypad and keypad flex cable are part of the front bezel assembly on the 6324, 6325, 9524, 9525 and 9521.

If the key pad or the flex cable is required for the above monitors the front bezel should be replaced

D/T6324 - Front Cover P/N39G6262
 D/T6325 - Front Cover P/N39G6294
 D/T9524 - Front Cover P/N39G6262
 D/T9525 - Front Cover P/N39G6294
 D/T9521 - Front Cover P/N68G2638

This information will be added to the next release of the HMM.

SAS KEYWORDS:

PSY2	PSY2DISP	PSY2PART	DISPLAY
RIBBON	6324	6325	9524
9525	KEY	PAD	9521
D/T9521	D/T9524	D/T6325	

1.2.235 KING'S QUEST VI VIDEO DISTORTION WITH XGA-2

Record number: H124487

Device: D/T95XX
Model: M
Tip key: 020
Date created: 094/06/27
Date last altered: A94/07/11

King's Quest VI CD-ROM contains motion video segments which become distorted on systems with IBM's XGA-2 graphics subsystem. This problem is amplified when moving the mouse during the motion video segment.

In some cases the video may work if the mouse is not moved during the motion video segments.

King's Quest VI can still be played since the distorted video segments are only part of an introduction at the start of this game.

SAS KEYWORDS:

PSY2	PSY2PROG	KINGS	D/T8556
D/T8557	D/T8560	D/T8565	D/T8570
D/T9576	D/T8580	D/T8590	D/T8595
D/T9585	D/T9577	D/T9556	D/T9557
D/T9595	D/T9590	D/T9595A	PSY2DISP

1.2.236 LANAID DISPLAYS INCORRECT INTERRUPT USAGE

Record number: H132794

Device: D/T6877
 Model: M
 Tip key: 002
 Date created: 096/02/27
 Date last altered: A96/02/27

The LANAID application, preloaded on IBM PC 700 Series 6877 and 6887 containing an IBM EtherJet Ethernet adapter may display incorrect interrupt (IRQ) status.

The LANAID application, which provides the configuration functions for the IBM EtherJet Ethernet adapter, takes a one time snapshot of active and inactive interrupt status. The status may be invalid if the IRQ is in use but not active, or if the IRQ is not in use but left active.

Use the Configuration/Setup Utility to get an accurate status of IRQ's available to adapters and that are not in use by the system. The Configuration/Setup Utility can be accessed by pressing F1 during the memory count after powering the system on. View the interrupt status in the section titled "ISA Legacy Resources."

This is a design characteristic of the LANAID application due to the variety of systems that IBM Communication adapters are used. There are no plans to provide a unique LANAID version for the IBM PC 700 6877 and 6887 systems at this time.

SAS KEYWORDS:

PSY2	D/T68XX	6887	6877
IBMPC	PSVP	PSVPCOMM	PSY2COMM
D/T6887	PSVPPROG	PSY2PROG	PSVPADPT
PSVPERR	PC750	PSY2ERR	PSY2ADPT
PC 750	PC730	PC700	PC 730
40572			

LARGER FUSE APPROVED FOR F3 ON COLOR PRINTER CONTROLLER CARD

1.2.237 LARGER FUSE APPROVED FOR F3 ON COLOR PRINTER CONTROLLER CARD

Record number: H025509

Device: D/T5182
Model: M
Tip key: 012
Date created: 088/01/21
Date last altered: A88/01/22

A HIGHER CURRENT FUSE HAS BEEN APPROVED FOR USE IN THE F3 FUSE POSITION OF THE CONTROLLER CARD P/N8654344. (REF: 5182 HARDWARE MAINTENANCE AND SERVICE MANUAL; PAGE 7-12, INDEX 10 AND 11.)

IF FREQUENT ELEMENT EXCHANGES, OR SERVICE CALLS ARE BEING EXPERIENCED, AND FUSE F3 IS FOUND TO BE BLOWN FOR NO APPARENT REASON, (REPLACEMENT OF F3 FIXES THE PRINTER). A 3.2 AMP SLO-BLO FUSE P/N5393558 SHOULD BE SUBSTITUTED FOR THE ORIGINAL 2.8 AMP FUSE. ONLY F3 IS AFFECTED BY THIS SERVICE MEMO; FUSES F1 AND F2 MUST REMAIN AT 2.8 AMPS.

FUSES F1 THRU F3 ARE LOCATED IN THE CENTER OF THE CONTROLLER CARD, WITH F3 NEXT TO THE LARGE HEAT SINK.

REFER TO THE 5182 HARDWARE MAINTENANCE AND SERVICE MANUAL (HMS), OR GROUP 819, 5182 SERVICE MEMORANDUMS, FOR REMOVAL/REPLACEMENT PROCEDURES, AND LOCATIONS.

NO UPDATE TO THE HMS IS PLANNED TO REFLECT THIS SERVICE AID. THERE WILL BE NO CHANGES MADE TO "FUSE KIT B" P/N6323470. UPDATE THE PARTS CATALOG SECTION AS APPROPRIATE, WITH THE PART NUMBER AND RATING OF THE SUBSTITUTE FUSE, AND REFERENCE IT TO 5182 SERVICE MEMORANDUM #3. USE SERVICE CODE 01 TO RECORD TIME.

SAS KEYWORDS:

PCOM

PCOMPRT

PSY2

5182PRT

1.2.238 LEFT EDGE OF DISPLAY LIGHTER ON PC 300/700

Record number: H101938

Device: D/T6877
Model: M
Tip key: 026
Date created: 096/07/24
Date last altered: A96/07/24

Displays attached to IBM PC 300 and 700 Series 6577, 6587, 6877 and 6887 may exhibit brighter image along the left edge of the display if the video refresh rate is set above 75Hz.

The problem reported to IBM was that the left edge of the display is brighter than other areas of the screen if the refresh rate is set higher than 75Hz.

This problem may be seen on applications which contain a solid color background such as OS/2 and Windows.

The IBM PC 300 and 700 Series systems were tested to be ISO 9241 Part 3 compliant at a 75Hz refresh rate. Displays which are capable of refresh rates that exceed 75Hz are compatible with the IBM PC 300/700 Series systems and may be used at those higher refresh rates. Adjustments to the screen background color or changing to a refresh rate 75Hz or lower may be used to minimize the impact of any screen distortions on the left edge of the display.

SAS KEYWORDS:

PSVP	PSY2	PSVPDISP	PSY2DISP
D/T6887	D/T6577	D/T6587	PC 330
PC 350	PC 730	PC 750	

PSY2 RETAIN TIPS
LEXMARK TRACKBALL KEYBOARD "STICKY"

1.2.239 LEXMARK TRACKBALL KEYBOARD "STICKY"

Record number: H123167

Device: D/T9603
Model: M01X
Tip key: 016
Date created: 094/03/16
Date last altered: A94/03/28

Personal Computer, Personal Systems/2 and EduQuest users may experience a "sticky" trackball problem on their Lexmark Trackball keyboards.

Analysis of field returned keyboards have revealed that the trackballs in these keyboards could have been cleaned and this would have prevented replacement.

Please use the following procedure to clean the trackball portion of the keyboard as part of your problem determination before FRU replacement.

Please note that these procedures are the responsibility of the customer FIRST. If on site assistance is needed, it may be a billable service activity.

Care and Cleaning of your Trackball Keyboard

If you have a trackball on the keyboard, it may be cleaned with a soft damp cloth. Rotate the ball with one hand while cleaning it with the other. Should the ball need to be removed for more thorough cleaning, follow these steps:

1. Using a small pointed device approximately the size of the end of a paper clip, turn the retaining ring counterclockwise. (The retaining ring encircles the ball.)
2. Remove the ring and the ball with your fingertips or by tipping the keyboard. DO NOT STICK OBJECTS INTO THE BALL SOCKET.
3. Clean the ball with mild soap and soft damp cloth. Clean the two rollers in the mechanism with a moist cotton swab by wiping parallel to the shafts. Rotate the roller with the swab and continue wiping. Continue this process until each roller has been completely rotated and cleaned. DO NOT TRY AND REMOVE ANY PART OF THE MECHANISM.
4. Re-install ball and ring making sure that the ring has been rotated firmly clockwise. Check the rotation of the ball, if the ball does not rotate, remove the ring, check the ball and rollers, and reinstall the ring.

NOTE: The ball may bind if the ring has not been fully rotated clockwise.

SAS KEYWORDS:

KEYBOARD	9603	9604	9605
TRACKBALL	PS2	PS/2	EDUQUEST
8550	PSY2	PSY2KBD	PSY2DIAG
PSY2OPER	PSY2DOC	D/T8550	D/T85XX
D/T95XX	PSVP	D/T63XX	

LOGIC CARDS MOUNTED ON FIXED DISK DRIVES ARE AVAILABLE

1.2.240 LOGIC CARDS MOUNTED ON FIXED DISK DRIVES ARE AVAILABLE

Record number: H064597

Device: D/T8550
 Model: M
 Tip key: 090
 Date created: 091/08/27
 Date last altered: A96/09/20

IN ORDER TO MINIMIZE THE IMPACT OF HARDFILE FAILURES TO PS/2 SYSTEMS CUSTOMERS WHO HAVE NO BACK-UP COPY OF CRITICAL DATA, THE LOGIC CARDS AND ELECTRONICS ASSEMBLIES WHICH ARE ATTACHED TO CERTAIN FIXED DISK DRIVES (MANUFACTURED BY IBM ONLY) ARE AVAILABLE FOR FIELD REPLACEMENT.

FIXED DISK DRIVES MANUFACTURED BY IBM CAN BE IDENTIFIED BY THEIR BLACK COVER AND A LABEL ON THE UNIT WHICH SAYS, "MANUFACTURED BY IBM CORP."

THE FOLLOWING LIST OF FIXED DISK DRIVE ELECTRONIC FRU'S ARE AVAILABLE IN MECHANICSBURG:

FIXED DISK TYPE & FRU P/N	LOGIC BOARD FRU
44MB ST-506 72X8541	P/N6493875
70MB ESDI 72X8519	P/N6370793
115MB ESDI 90X7392	P/N6370951
314MB ESDI 90X8745	P/N21F4580
320MB SCSI 85F0011	P/N93X0901
400MB SCSI 85F0012	P/N73F8994
1GB SCSI 92F0428 (1/2 INCH)	P/N55F5000
1GB SCSI 92F0089 (1 INCH)	P/N45G9470
2GB SCSI 92F0440	P/N86F0110
2GB SCSI-2 F/W 92F0407	P/N86F0112

(SEE NOTE BELOW)

NO DIAGNOSTICS ARE AVAILABLE WHICH CAN DIFFERENTIATE BETWEEN ELECTRONICS FAILURES AND MECHANICAL FAILURES, THEREFORE THIS PROCEDURE IS NOT INTENDED TO BE A PRIMARY REPAIR PROCESS. IT'S PURPOSE IS TO BE AN ALTERNATE STEP PRIOR TO REPLACING A FIXED DISK DRIVE WHICH CONTAINS CRITICAL CUSTOMER DATA.

IF REPLACEMENT OF THE LOGIC BOARD DOES NOT CORRECT THE PROBLEM, PROCEED WITH NORMAL REPLACEMENT OF THE FIXED DISK DRIVE.

NOTE 1: THE LOGIC CARDS MAY BE SECURED WITH TORX SCREWS. FRU P/N39F8407 CONTAINS 7 TORX BITS AND AN ADAPTER WHICH ALLOWS THE BITS TO ATTACH TO A 1/4" SOCKET WRENCH.

NOTE 2: THE 320MB AND 400MB SCSI FIXED DISK ELECTRONICS FRU B/M'S INCLUDE INSTRUCTIONS AND SPECIAL TOOLS TO REMOVE THE SHOCK MOUNTS WHICH ATTACH THE FIXED DISK ASSEMBLY TO THE FRAME OF THE ELECTRONICS KIT.

SAS KEYWORDS:

PSY2	PSY2MISC	PSY2FDSK	PSY2PART
D/T8560	D/T8580	D/T8590	D/T8595
D/T8557	CIRCUIT CARD	HARDFILE	HARD FILE
FIXED DISK	DASD	8580	CONTROL
CARD	ADAPTER	GIG	GIGABYTE
SERVER	95	85	CIRCUIT
CARD			

LOOSE CABLES CAUSING DISKETTE OR HARDFILE ERRORS

1.2.241 LOOSE CABLES CAUSING DISKETTE OR HARDFILE ERRORS

Record number: H10633

Device: D/T95XX
 Model: M
 Tip key: 006
 Date created: 093/04/23
 Date last altered: A93/04/26

ON 9556, 9557, 9576 AND 9577 A NUMBER OF LOOSE CABLE INCIDENTS HAVE BEEN REPORTED BY THE FIELD. ALTHOUGH A HIGH PERCENTAGE OF THESE INCIDENTS SHOW UP DURING INSTALLATION, DO NOT OVERLOOK THE POSSIBILITY OF A LOOSE CABLE CAUSING A PROBLEM AFTER INSTALLATION.

THE CABLES APPEAR TO BE COMING LOOSE DURING SHIPMENT. MANUFACTURING IS AWARE OF THE PROBLEM AND HAS TAKEN STEPS TO ELIMINATE IT.

BEFORE REPLACING DISKETTE DRIVES, HARDFILES, OR SYSTEM BOARDS, CHECK FOR LOOSE CABLES. THIS IS CONSISTENT WITH STEP 001 OF THE HMM GENERAL CHECKOUT PROCEDURE.

SAS KEYWORDS:

PSY2	PSY2SYS	PSY2DSKT	D/T9557
PSY2ERR	PSY2FDSK	D/T9556	D/T9576
D/T9577	CABLE		

1.2.242 LOOSE PLASTIC SPACER IN IBM PC6888

Record number: H16858

Device: D/T6888
Model: M
Tip key: 002
Date created: 097/08/21
Date last altered: A97/08/21

When unpacking the IBM PC6888-36U IntelliStation M-Pro system unit, the user may find a white or black wedge shaped plastic spacer loose in the system unit.

The purpose of this spacer is to support the Intergraph Intense 3D video adapter during shipping.

The spacer is not needed for the proper function of the Intergraph adapter and may be discarded.

Intense 3D is a trademark of Intergraph Corporation.

SAS KEYWORDS:

PSY2	PSY2MISC	PSVP	PSVPMISC
D/T6888	688836U	6888	INTENSE3D
UNCLASSIFIED			

LOW BATTERY VOLTAGE MAY CAUSE CONFIG ERRORS

1.2.243 LOW BATTERY VOLTAGE MAY CAUSE CONFIG ERRORS

Record number: H024809

Device: D/T8550
 Model: M
 Tip key: 016
 Date created: 087/11/04
 Date last altered: A93/06/07

INTERMITTENT CONFIGURATION ERRORS (161, 162, AND 163) MAY BE CAUSED BY LOW BATTERY VOLTAGE OR A DEFECTIVE SPEAKER BATTERY ASSEMBLY, FRU P/N33F5950.

TO CHECK BATTERY VOLTAGE:

- TURN OFF THE SYSTEM UNIT POWER
- REMOVE THE BATTERY FROM THE SPEAKER BATTERY ASSEMBLY.
- SET YOUR METER TO THE 12V DC SCALE
- CHECK THE BATTERY FOR A MINIMUM VOLTAGE OF 5.5V DC

THE BATTERY, FRU P/N72X8498 SHOULD BE REPLACED IF IT IS BELOW 5.5V DC.

NOTE:

WHEN CHECKING BATTERY VOLTAGE YOU MUST REMOVE THE BATTERY FROM THE SPEAKER BATTERY ASSEMBLY TO ENSURE AN ACCURATE VOLTAGE READING.

SAS KEYWORDS:

8550SYSMISC	8560SYSMISC	8580SYSMISC	PSY2MISC
PSY2	D/T8560	D/T8580	BATTERY
8580	8560		

1.2.244 LOW LEVEL FORMAT OF 527MB IDE DRIVE FAILS

Record number: H122527

Device: D/T6384
 Model: M
 Tip key: 047
 Date created: 094/01/31
 Date last altered: A94/01/31

THE 527MB IDE HARDFILE CANNOT BE "UNCONDITIONALLY" LOW LEVEL FORMATTED WHEN INSTALLED IN A PS/VALUEPOINT 6382/S, 6384/D OR 6387/T SYSTEM IF DIAGNOSTIC DISKETTE VERSIONS 1.00 AND 1.10 ARE USED. THE ADVANCED DIAGNOSTICS REPORT THAT "THIS FUNCTION IS NOT SUPPORTED ON THIS DRIVE" IF THE UNCONDITIONAL FORMAT OPTION (ERASE GROWN DEFECT LIST) IS SELECTED FROM THE HARD FILE FORMAT MENU.

PS/VALUEPOINT ADVANCED DIAGNOSTIC DISKETTE VERSION 1.2 CONTAINS THE SOFTWARE SUPPORT NECESSARY TO PERFORM AN UNCONDITIONAL FORMAT PROCEDURE.

ALL PS/VALUEPOINT ADVANCED DIAGNOSTIC VERSIONS SUPPORT THE "CONDITIONAL FORMAT" (RETAIN GROWN DEFECT LIST) OPTION WHICH MAY BE SELECTED FROM THE HARDFILE FORMAT MENU.

SAS KEYWORDS:

PSVP	PSY2	PSVPFDSK	PSY2FDSK
PSVPPART	PSY2PART	PSVPDIAG	PSY2DIAG
D/T6387	D/T6382	6382	6384
6387	VALUE POINT	PS VP	527

1.2.245 L40 SX BATTERY CHARGE & DISCHARGE INFORMATION

Record number: H001600

Device: D/T8543
 Model: M
 Tip key: 004
 Date created: 091/06/14
 Date last altered: A92/08/31

The amount of time the 8543 will operate on the main battery is directly tied to the:

1. Correct conditioning of the battery.
2. Setup and configuration of the system

If the diagnostics run error free, the following steps should be taken by the user to increase battery "POWER ON TIME." Most of this information is contained in the Customer's L40 SX QUICK REFERENCE MANUAL.

TO MAXIMIZE THE BATTERY POWER ON TIME FOLLOW THESE BATTERY CHARGING TIPS.

The main battery will have to be fully charged and discharged from 3 to 6 times after its initial use. The battery will then be conditioned to accept a full charge. If a battery is recharged before it is fully discharged it will not condition properly and will not obtain a full charge. This could happen if a system, running on a partly discharged internal battery, is plugged into an external power source.

If improper battery conditioning is suspected the following process will allow the battery to accept a full charge.

To recondition the battery properly have the user follow this procedure.

- a. Run the system until it goes into suspend because of low battery power.
- b. Shut the system off for about 15 minutes.
- c. Turn the system on until it again goes into suspend because of low battery power.
 - The battery is now fully discharged.
- d. Fully charge the battery.
 - Complete charging occurs when:
 - on trickle charge; the battery ICON arrow will be "outlined" in lieu of being "solid".
 - on quick charge; the green indicator on the charger will stop flashing and become solid green.
- e. Repeat the above discharge procedure a minimum of 3 times. Then follow the normal recharging method that is stipulated in the Customer Quick Reference manual (Charge the battery after it has gone into suspend mode because of a low battery condition.)

TO MINIMIZE BATTERY DISCHARGE FOLLOW THESE TIPS.

1. Using the brightness control set the LCD screen to the darkest viewing level that is comfortable. An overly bright screen will consume more power.
2. The reference diskette has various programs that put the system in a minimal battery load condition. They are TRAVEL.BAT for DOS and TRAVEL.CMD for OS/2.

The customer Quick Reference Manual lists a program called EXT_PWR.EXE that will detect what power source the system is using, and return a signal to adjust automatically for battery conservation or maximum performance and function. This program uses TRAVEL.BAT, TRAVEL.CMD and the DEFAULT.BAT, DEFAULT.CMD commands to do this.

NOTE THERE IS A SEQUENCE PROBLEM IN THE TRAVEL.BAT AND THE TRAVEL.CMD PROGRAMS ON REFERENCE DISKETTE 1.00. THE SEQUENCE OF THE COMMANDS IN THESE TWO PROGRAMS WILL CAUSE THE SYSTEM PROCESSOR SPEED TO BE SET TO HIGH PERFORMANCE INSTEAD OF LONG BATTERY LIFE. THIS WILL CONSUME MORE POWER. TO CORRECT THE SEQUENCING ERROR THE CUSTOMER MUST CHANGE THE CURRENT PROGRAM FROM:

```

      PS2 SET AUTO BATTERY
REM   PS2 SET MANUAL 5
      PS2 SET MANUAL 10

```

TO:

```

      PS2 SET MANUAL 5

```


REM PS2 SET MANUAL 10
 PS2 SET AUTO BATTERY

THE SEQUENCE PROBLEM HAS BEEN CORRECTED IN LATER LEVEL REFERENCE DISKETTES.

3.

Performance and battery discharge time can also be altered manually using the SET FEATURES area of the REFERENCE DISKETTE. The travel and default commands do this automatically. Boot the REFERENCE DISKETTE; select "SET FEATURES" from the main menu; select the "SET FEATURES MENU"; advance to the next page by pressing the F8 key; this page allows the customer to select options that will conserve battery power or maximize system performance. There are three functions on this screen that can be powered off with a timer, The "DISPLAY OFF AFTER" command, the "FIXED DISK OFF AFTER" command and the "SYSTEM POWER OFF" command. The SYSTEM POWER OFF command puts the L40 into suspend mode.

The AUTOMATIC POWER OFF TIME starts after the last action of the feature. (FIXED DISK, LCD, OR SYSTEM POWER)
 If the time is set to "02 MIN. The feature will go inactive 2 MINUTES after its last action occurs. A low number in this area will minimize power consumption

Set the SELECT SPEED auto feature to "LONG BATTERY LIFE" and the MANUAL FEATURE to "20". This will conserve power when the blue switch on the panel is in the auto mode and increase performance when the switch is in MANUAL MODE. The 20mhz setting will drain the battery faster than the automatic mode will in "LONG BATTERY LIFE" setting.

Set the "SELECT POWER ON/OFF" features on the SERIAL, PARALLEL and FAX MODEM to OFF if they are not going to be used during each session.
 Press the F1 key to obtain more detail while making changes on this page.

4.

Make sure all power saving drivers for programs or operating systems are loaded on the 8543.

5.

Install the correct amount of memory for the system's software. Running with too little memory will cause the system to "PAGE." This uses more power. Running with too much memory for the application will also use more power. If the user is not sure how much memory they should have to optimize power savings they should contact their SE or POINT OF SALE.

SAS KEYWORDS:

PSY2	PSY2MISC	D/T8543	8543SYSMISC
PSY2PWR	8543SYSPWR	PSY2OPER	8543SYSOPER

M-MOTION VIDEO ADAPTER FRUS AND PUBLICATION

1.2.246 M-MOTION VIDEO ADAPTER FRUS AND PUBLICATION

Record number: H1268

Device: D/T8550
 Model: MCP1
 Tip key: 170
 Date created: 093/04/01
 Date last altered: A93/04/01

THE M-MOTION VIDEO ADAPTER/A ALLOWS MICRO CHANNEL PS/2S TO DISPLAY FULL MOTION, INTERACTIVE COLOR VIDEO ON STANDARD PS/2 VGA DISPLAYS. THIS ADAPTER ALSO PROVIDES FULL LINE AUDIO AND LIMITED DIGITAL AUDIO CAPABILITIES.

THIS HARDWARE PRODUCT IS MANUFACTURED BY TECMAR, INC. FOR EXCLUSIVE RESALE AND SERVICE BY IBM.

FOLLOWING IS A LIST OF FRUS AND PUBLICATIONS. PLEASE NOTE THAT THE CUSTOMER RECEIVES ALL OF THE FOLLOWING COMPONENTS WITH EACH ADAPTER AT THE TIME OF PURCHASE.

M-MOTION VIDEO ADAPTER	P/N34F3091
VGA TERMINATOR	P/N34F3088
VIDEO I/O CABLE	P/N34F3089
DIAGNOSTIC DISKETTE	P/N34F3093
USER'S GUIDE (INCLUDES SERVICE INFORMATION) IBM FORM # G571-0187	P/N34F3090

HARDWARE SUPPORT FOR THE M-MOTION VIDEO ADAPTER IS THROUGH THE IBM INDUSTRY SYSTEMS SUPPORT CENTER IN ATLANTA AT 1 - 800-241 - 1620.

SAS KEYWORDS:

PSY2DOC	PSY2	8550SYSDOC	8560SYSDOC
8570SYSDOC	8580SYSDOC	8550SYSADPT	8560SYSADPT
8570SYSADPT	8580SYSADPT	PSY2MISC	

1.2.247 MATROX GRAPHIC ADAPTER PROGRAMS FAIL IN OS/2

Record number: H133203

Device: D/T6877
 Model: M
 Tip key: 018
 Date created: 096/03/25
 Date last altered: A96/03/25

The Matrox Millennium Graphics adapter program group in the Windows Program Manager will fail when run in an OS/2 environment (WIN-OS2). This affects IBM PC 700 Series 6877 and 6887 systems with a Select-a-System preload.

The applications included in the Matrox Millennium Graphics adapter program group are native DOS/Windows programs. They WILL NOT run in OS/2.

There are no plans in place at this time to update those applications to support the OS/2 environment.

- Matrox Millennium is a trademark of Matrox Electronic Systems Ltd.

SAS KEYWORDS:

PSY2	D/T68XX	6887	6877
IBMPC	PSVP	PSY2PROG	PSVPPROG
D/T6887	PC750	PC700	PC 730
PC 750	PC730	42571	PSVPDISP
PSY2DISP	PSVPADPT	PSY2ADPT	

1.2.248 MATROX MARVEL 1 ADAPTER FAILS IN PC300

Record number: H127377

Device: D/T6571
Model: M
Tip key: 001
Date created: 095/04/18
Date last altered: A95/05/16

The Matrox Marvel 1 adapter does not support the Cirrus Logic video controller and is not compatible with PC300-486 systems (6571, 6573, 6581, 6583). Matrox has a new adapter, Marvel 2, that is compatible with these systems. Customers should be referred to Matrox point of sale for assistance.

* Matrox and Marvel are Trademarks of Matrox Electronic Systems Limited.

SAS KEYWORDS:

PSY2	PSVP	D/T6571	D/T6583
D/T6881	D/T6583	6571	6573
6581	6583	PSY2ADPT	PSVPADPT
PSY2NLGO	PSVPNLGO	IBMPC	

1.2.249 MAXTOR OEM FIXED DISK DRIVE COMPATIBILITY

Record number: H033084

Device: D/T8580
 Model: M
 Tip key: 014
 Date created: 091/01/18
 Date last altered: A93/09/13

THE VENDOR, OFF THE SHELF, "MAXTOR XT 4380 E," (*) 338 MB FIXED DISK DRIVE, SUPPORTED BY THE COMPLIMENTARY PRODUCTS GROUP, IS NOT COMPATIBLE WITH THE IBM ESDI FIXED DISK ADAPTER USED IN THE PS/2 8560 AND 8580. THIS DISK DRIVE, WHICH IS COMPATIBLE WITH OTHER NON-IBM ESDI ADAPTERS, IS LISTED IN THE SERVICE INFORMATION MANUAL (SIM) SA38-0041, OEM PARTS CATALOG AS FRU (FIELD REPLACEABLE UNIT) P/N31F0959.

THE MAXTOR (*) FIXED DISK WAS USED IN THE MANUFACTURE OF 8580 MODEL 311 SYSTEMS. HOWEVER, THE DISK DRIVES USED BY IBM AS ORIGINAL EQUIPMENT HAVE BEEN SPECIALLY FORMATTED TO BE COMPATIBLE WITH PS/2 SYSTEMS. THESE FILES HAVE A LABEL AFFIXED TO THE SIDE OF THE DISK HOUSING WHICH SAYS, "MANUFACTURED FOR IBM," AND ARE FORMATTED FOR A CAPACITY OF 314 MB, RATHER THAN 338 MB WHICH IS INDICATED BY THE VENDOR MODEL TYPE. ONLY FRU P/N90X8745 SHOULD BE ORDERED AS A REPLACEMENT PART FOR PS/2 8580 SYSTEMS USING THE IBM ESDI FIXED DISK ADAPTER. ALL FRU'S P/N90X8745 WILL BE 314 MB FIXED DISKS "MANUFACTURED BY IBM," AS THE MAXTOR (*) FIXED DISK WAS ONLY USED DURING MANUFACTURING.

NOTE: IN 1993 AN ALTERNATE SUPPLIER OF HARDFILES WAS IDENTIFIED AND IS BEING UTILIZED. THIS SUPPLIER, SEQUEL, HAS CHOSEN MAXTOR TO PROVIDE THESE FRU HARD FILES. THESE FILES ARE IDENTIFIED WITH THE SEQUEL NAME AND SHOULD NOT BE CONFUSED WITH THE OEM MAXTOR FILE IDENTIFIED IN THIS TIP. THE FRU PART NUMBER REMAINS THE SAME. JUMPERS AND SWITCHES SHOULD NOT BE MOVED ON THE FRU DRIVE. IF THE DRIVE AND PS/2 DOES NOT PERFORM AS EXPECTED, NORMAL PROBLEM DETERMINATION SHOULD BE FOLLOWED.

USE OF THE MAXTOR (*) OEM DISK DRIVE FRU PART IN PS/2 SYSTEMS WITH IBM ESDI FIXED DISK ADAPTERS WILL CAUSE CONFIGURATION ERRORS DUE TO A MISSING "MANUFACTURER'S IDENTIFICATION RECORD," WHICH CAN ONLY BE CREATED AT THE FACTORY WITH SPECIAL EQUIPMENT.

* REGISTERED TRADE MARK OF MAXTOR INCORPORATED.

SAS KEYWORDS:

PSY2	PSY2FDSK	PSY2OEM	D/T8560
D/T8565	MAXSTORE	HARDFILE	311
MAXSTOR	MAXSTORE	DISK	

1.2.250 MEDIA CONVERSION CONNECTOR WILL NOT FIT 8530 286

Record number: H031701

Device: D/T8530
Model: M
Tip key: 021
Date created: 088/12/02
Date last altered: A88/12/02

THE MEDIA CONVERSION CONNECTOR P/N61X8936 FOR THE DATA MIGRATION FACILITY DOES NOT FIT THE 8530 286 PARALLEL PORT.

INSTALL THE MEDIA CONVERSION CONNECTOR FOR THE DATA MIGRATION FACILITY ON THE SENDING END (I.E., PC XT, PC AT, ETC...) OF THE PARALLEL CABLE P/N8529214 INSTEAD OF THE RECEIVING END (8530 286) OF THE CABLE.

THE MEDIA CONVERSION CONNECTOR CAN BE PLUGGED AT "EITHER" END END OF THE CABLE.

SAS KEYWORDS:
8530SYSPART 8530SYSDOC PSY2 PSY2DOC
PSY2PART

1.2.251 MEMORY ABOVE 16MB NOT RECOGNIZED BY SOFTWARE

Record number: H067699

Device: D/T8550
Model: M
Tip key: 140
Date created: 092/10/15
Date last altered: A92/11/12

Software is unable to recognize the system memory above 16 megabytes, yet all installed memory is correctly recognized and tested by POST, diagnostics, and system configuration. This limitation is seen when the software "memory size" command is executed.

There are known compatibility problems with some OEM software programs, as well as early levels of DOS and OS/2 1.X, functioning on systems with more than 16 megabytes of memory installed.

FIX:

There are two methods of correcting this situation:

- A. A BIOS change implemented through the IML contained on the Reference Diskette.
- B. A BIOS change implemented by a CSD for DOS (Disk Operating System). This change is currently in development and this tip will be updated when it is available.

There are new reference diskette packages available for the 8590/8595/9595 systems to provide the BIOS change that will report more than 16 megabytes of memory through the compatible BIOS function. These Reference Diskette images are available on the DOSCSD tools disk.

The following VM command will allow access to these packages:

TOOLCAT DOSCSD

Systems requiring a Type 1 Reference diskette package must have reference diskette version 1.31 or greater.
Download package RF90951A.

Systems requiring a Type 2 Reference diskette package must have reference diskette version 1.21 or greater.
Download package RF90952A.

Systems requiring a Type 3 Reference diskette package must have reference diskette version 1.11 or greater.
Download package RF90953A.

NOTE: When installing the reference diskette update referenced above, the 8590/95 "Common Diagnostic Diskette" version 1.10 or higher will also be required and may be accessed and downloaded by requesting package RD9095A. No changes were required to the Common diagnostic diskette.

ADDITIONAL INFORMATION:

Upon discovery of these problems, IBM developed a change in system BIOS to enable these applications to continue working. The change allowed a maximum of only 16 Mb of extended memory to be reported, for software incompatible with memory sizes greater than 16MB.

Later, a new BIOS function was added, which reports the actual memory size, to support software compatible with greater than 16MB of total system memory. Information about this new BIOS function was provided to non-IBM application and operating system software vendors.

Many of these vendors have not changed their code to use the new (enhanced) BIOS function to properly support more than 16 megabytes of memory.

Due to problems associated with this compatibility situation, the original BIOS function has been modified to report the full installed memory, and maintain compatibility with competitive systems.

Note:

With this change back to the previous BIOS reporting method, there could be functional problems with some applications or operating systems when more than 16 megabytes of memory are installed.

An IBM DOS 5.0 CSD will be available at a future date, which

PSY2 RETAIN TIPS

MEMORY ABOVE 16MB NOT RECOGNIZED BY SOFTWARE

will provide correct support for systems with more than 16 megabytes of installed memory, without the reference diskette update being required.

If the Reference Diskette update is installed, the DOS 5.0 CSD is not required.

SAS KEYWORDS:

PSY2	PS2	PS/2	PSY2PROG
PSY2MEM	D/T8590	D/T8595	

MEMORY ADAPTERS ARE NOT SUPPORTED ON 9553

1.2.252 MEMORY ADAPTERS ARE NOT SUPPORTED ON 9553

Record number: H122059

Device: D/T9553
Model: M
Tip key: 001
Date created: 093/12/15
Date last altered: A93/12/15

Adapter card memory is not supported on the Model 9553.
Memory can only be installed in the three memory SIMM connectors
located on the system board. Refer to Model 9553 documentation
for a list SIMM modules that are supported.

SAS KEYWORDS:

PSY2 9553 SIM ADAPT/A
PSY2MEM

1.2.253 MEMORY LIMITATIONS ON 8580 / 8570 SYSTEMS

Record number: H121028

Device: D/T8580
Model: M
Tip key: 026
Date created: 093/08/30
Date last altered: A95/08/11

8570/80 systems support a maximum of 16MB of memory. Installing more than 16MB may cause unexpected results with diagnostics and/or machine operation.

The 8570/80 diags are not intended to operate in any machine with more than 16MB installed. False errors may be generated.

If errors or unexpected results are encountered, the amount of memory that exceeds 16MB must be removed before performing Problem Determination (PD), running diagnostics, or replacing any FRUS.

Additional information is contained in the IBM Personal System/2 Hardware Maintenance Manual (HMM) (S52G-9971.)

SAS KEYWORDS:

PSY2	MEGABYTE	PSY2MEM	16 MB
LIMIT	REBOOT	POST	PSY2ERR
PSY2DIAG	RE-BOOT	BOOT	D/T8570

1.2.254 MEMORY UPGRADES MAY CAUSE POST ERRORS

Record number: H035904

Device: D/T8530
Model: M
Tip key: 030
Date created: 089/08/10
Date last altered: A90/01/17

CONFIGURING ADDITIONAL MEMORY ON 8530 MODELS E01 AND E21,E31 WITH OPTION ADAPTERS ALREADY INSTALLED, MAY CAUSE 164 OR 201 POST ERRORS.

FOR EXAMPLE: AFTER THE MEMORY IS ADDED, THE 8530 WILL ONLY COUNT TO 512K AND MEMORY ERRORS ARE POSTED.

THE FOLLOWING STEPS WILL AID IN THE INSTALLATION OF MEMORY:

1. REMOVE THE OPTION CARDS.
2. ADD THE ADDITIONAL MEMORY.
3. CONFIGURE THE BASE SYSTEM BY RUNNING AUTOMATIC CONFIGURATION WITHOUT THE OPTIONS INSTALLED.
4. REINSTALL THE OPTION CARDS. (AUTOMATIC CONFIGURATION NEED NOT BE RUN AGAIN)

SAS KEYWORDS:

PSY2 8530SYSADPT PSY2ADPT PSY2MEM
8530SYSTEMEM

1.2.255 MICRO CHANNEL TO MAINFRAME CONNECTION (MMC) GENERAL INFO TIP

Record number: H097313

Device: D/T8550
 Model: M
 Tip key: 113
 Date created: 092/03/09
 Date last altered: A92/12/04

THE MICROCHANNEL TO MAINFRAME CONNECTION ADAPTER (MMC)
 FORMERLY CALLED THE S/370 CHANNEL ADAPTER (PCA)

THE FOLLOWING INFORMATION IS PROVIDED TO DESCRIBE THE
 DIFFERENCES BETWEEN THE S/370 CHANNEL EMULATOR (FRU
 P/N06F3160, OPTION P/N1674899) AND THE MMC
 ADAPTER (FRU P/N12G8067, FC 1436)

THE S/370 CHANNEL EMULATOR SIMULATES A S/370 PROCESSOR AND
 PROVIDES AN I/O CHANNEL FROM THE PS/2 TO A S/370 DEVICE
 OR CONTROL UNIT. THE S/370 CHANNEL EMULATOR (ACTING LIKE
 A S/370 CHANNEL) IN A PS/2, CAN BE USED TO DRIVE AN MMC
 ADAPTER (ACTING LIKE A 3088 OR OTHER DEVICE,
 DEPENDING ON HOW IT IS PROGRAMMED) OR OTHER CHANNEL ATTACHED
 CONTROL UNITS OR DEVICES.
 THE ORIGINAL MMC ADAPTER (COMMONLY CALLED THE PCA, AND THE
 PsCA BEFORE THAT)
 WAS RELEASED AS A FEATURE IN THE 3172 CONTROLLER. A
 FUNCTIONALLY IDENTICAL, MORE RELIABLE, REDUCED COST, LOW POWER,
 PS/2 FORM FACTOR VERSION OF THE PsCA AND PCA WAS DESIGNED AND IS
 NOW CALLED THE MMC.

THE MICROCHANNEL TO MAINFRAME CONNECTION ADAPTER (MMC) CAN BE
 PROGRAMMED TO PERFORM THE FUNCTIONS OF MANY DIFFERENT S/370
 CONTROL UNITS OR DEVICES.

THE MMC IS AVAILABLE AS A GENERAL AVAILABILITY PS/2 OPTION.
 LEVEL I SUPPORT IS PROVIDED BY THE ATLANTA SUPPORT CENTER.
 LEVEL II SUPPORT IS PROVIDED BY THE ATLANTA ISSC
 LEVEL III SUPPORT IS PROVIDED BY THE INTERCONNECT PRODUCTS FIELD
 PERFORMANCE GROUP IN KINGSTON, NY. QUEUE NAME PCA AT LOCATION
 O31.

PUBLICATIONS AVAILABLE FROM MECHANICSBURG FOR THE MMC ADAPTER
 INCLUDE:
 INSTALLATION INSTRUCTIONS, FORM NUMBER G571-0244
 HARDWARE MAINTENANCE LIBRARY SUPPLEMENT, FORM NUMBER G571-0239
 TECHNICAL REFERENCE, FORM NUMBER G571-0245 (AVAILABLE 4Q92)

PS/2 SOFTWARE AVAILABLE FOR THE MMC AS OF JAN. 1992:

PROGRAM NAME:	MMC FUNCTIONS	DESCRIPTION:
	AS:	

LANRES/VM, 5684-142	3088 CTC	HOST TO MMC TO LAN COMMUNICATION
THRUSH, 5621-264	3422 TAPE DRIVE	HOST TO MMC TO OPTICAL DISK READER

NOTE: MMC ADAPTERS ARE ALSO AVAILABLE FOR RS/6000'S AND 3172
 INTERCONNECT CONTROLLERS. THESE VERSIONS OF THE MMC CARD
 MAY NOT BE PS/2 COMPATIBLE, DEPENDING ON THE DATE OF
 MANUFACTURE.

*****WARNING*****
 PS/2 SYSTEMS WITH MMC ADAPTERS INSTALLED AND CABLED TO MAIN-
 FRAME SYSTEMS, SUCH AS S/370 OR S/390, SHOULD NOT BE POWERED
 OFF WITHOUT FIRST CHECKING WITH THE MAINFRAME SYSTEM OPERATOR
 AND HAVING THE PS/2 "VARIED OFFLINE" AND THE BYPASS SWITCH ON
 THE "V CABLE" ATTACHED TO THE MMC ADAPTER MOVED TO THE "BYPASS"
 POSITION. FAILURE TO DO THIS WILL RESULT IN THE MAINFRAME
 SYSTEM EXPERIENCING CHANNEL FAILURES WHEN THE PS/2 POWERS
 DOWN OR THE "V CABLE" IS DISCONNECTED FROM THE MMC ADAPTER.

SAS KEYWORDS:

PSY2	PCA	S370	370
PSY2ADPT	8580SYSADPT	8590SYSADPT	8590SYSADPT
8570SYSADPT	D/T8570	D/T8580	D/T8590
D/T8595	PCA	MMC	

MICROCHANNEL TO MAINFRAME (MMC) PERFORMANCE DEGRADATION

1.2.256 MICROCHANNEL TO MAINFRAME (MMC) PERFORMANCE DEGRADATION

Record number: H12201

Device: D/T8580
 Model: MCP1
 Tip key: 022
 Date created: 093/05/25
 Date last altered: A93/05/25

WHEN THE IBM MICROCHANNEL TO MAINFRAME CONNECTION (MMC) ADAPTER CARD (P/N31G9211) OR THE PARALLEL CHANNEL ADAPTER (PCA) CARD (P/N12G7880), IS INSTALLED IN CERTAIN 8595s, PERFORMANCE MAY SUFFER. THE PERFORMANCE DEGRADATION IS SEEN IN LOWER RATINGS OF EITHER THE "SPEED" COMMAND IF NOVELL NETWORK IS INSTALLED, OR THE NORTON "SI" COMMAND IF DOS IS INSTALLED

IF THE NORTON "SI" COMMAND OR THE NOVELL NETWORK "SPEED" COMMAND SHOW A PERFORMANCE DROP WHEN THE ADAPTER CARD IS INSTALLED, CHECK THAT:

- 1) THE ADAPTER CARD IS CONFIGURED INTO PS/2 MEMORY ABOVE 16 MEG
- 2) THE SCSI CARD CONFIGURATION IS SET FOR "NO WAIT STATES"

NOTE 1: IF OS/2 1.3 IS THE OPERATING SYSTEM IN USE, THEN THE ADAPTER CARD WILL NEED TO BE CONFIGURED BELOW 16 MEG, AND SUGGESTION #1 ABOVE DOES NOT APPLY.

NOTE 2: BOTH THE MMC ADAPTER AND THE PCA CARD ARE IBM FRU P/N12G8067

SAS KEYWORDS:

PSY2	D/T8595	PCA	MMC
PSY2ADAPT	8595SYSADAPT	S370	P/N12G8067
P/N31G9211	P/N12G7880		

1.2.257 MICROPOLIS* DRIVE & TRAP 000D/SYS1502 ERRORS

Record number: H101782

Device: D/T8580
 Model: M
 Tip key: 019
 Date created: 092/05/15
 Date last altered: A92/08/17

8580 SYSTEMS CONFIGURED WITH A "MICROPOLIS"* OEM
 SCSI HARDFILE MAY EXHIBIT TRAP 000D OR SYS1502
 ERRORS WHILE RUNNING OS/2.

IF THE OEM MICROPOLIS* HARDFILE IS IDENTIFIED BY
 A LABEL CONTAINING:

Machine Number (M/N) 1588
 Part Number (P/N) FS0024-02-4A

AND

THE HARDFILE HAS AN EPROM, LOCATED ON THE CIRCUIT BOARD,
 IDENTIFIED WITH:
 FIRMWARE LEVEL 800-574-03 OR LOWER,

THE CUSTOMER SHOULD BE ADVISED TO CONTACT THE MICROPOLIS*
 TECHNICAL HOTLINE AT 818-709-3325 FOR ASSISTANCE.

IF FIRMWARE LEVEL 800-574-04 OR HIGHER IS INSTALLED,
 AND PROBLEMS STILL OCCUR, NORMAL PROBLEM DETERMINATION
 SHOULD BE FOLLOWED.

* MICROPOLIS IS A TRADEMARK OF MICROPOLIS CORPORATION.

SAS KEYWORDS:

PSY2	8580SYSADPT	PSY2SYSADPT	8580FDSK
PSY2FDSK	POEM	PSY2SYSERR	8580SYSERR
PSY2OEM	8580SYSOEM		

MICROSOFT MOUSE CAUSES DIAGNOSTIC ERRORS WHEN USED ON 8580

1.2.258 MICROSOFT MOUSE CAUSES DIAGNOSTIC ERRORS WHEN USED ON 8580

Record number: H001914

Device: D/T8580
Model: M
Tip key: 009
Date created: 088/09/21
Date last altered: A94/03/14

DIAGNOSTIC ERRORS WILL OCCUR WHEN A MICROSOFT MOUSE IS INSTALLED ON THE 8580 SYSTEM BOARD MOUSE / POINTING DEVICE PORT. FAILURES MAY INDICATE A SYSTEM BOARD OR MEMORY PROBLEM. THE MOUSE DOES NOT FAIL WHEN USED ON THE SERIAL PORT, ONLY WHEN USED ON THE MOUSE PORT USING THE ADAPTER CABLE SUPPLIED WITH THE MOUSE. THE MOUSE DOES NOT CAUSE ANY OPERATIONAL PROBLEMS, ONLY DIAGNOSTIC FAILURES.

SAS KEYWORDS:

PSY2OEM	POEM	OEMMOUSE	OEMDIAG
OEMERR	PSY2	PSY2DIAG	PSY2ERR
MS MOUSE			

1.2.259 MISLEADING "QUERY FAILED" MESSAGE IN FLOPPY TEST

Record number: H01588

Device: D/T6577
Model: M
Tip key: 004
Date created: 096/06/19
Date last altered: A96/06/19

When running the Diskette Drive Test in QAPLUS/2 on IBM PC 300 Series 6577 or 6587, the user may receive a "Query Failed" message during the test with no further explanation of the cause or recommended action.

If the user suspects a diskette drive hardware problem exists, the IBM Personal Computer Diagnostic diskette (QAPLUS/PRO) should be used to diagnose the failure. With QAPLUS/PRO, the user can select certain tests to isolate the failure to the system board, cable or diskette drive.

The IBM PC 300/700 Diagnostic diskette (QAPLUS/PRO) is created by using the Diskette Factory included in the systems preloaded software.

QAPLUS/2 & QAPLUS/PRO are trademarks of Diagsoft, Inc.

SAS KEYWORDS:

PSY2	D/T65XX	6577	6587
IBMPC	PSVP	PSVPDSKT	PSY2DSKT
D/T6587	PC 350	PC350	PC300
PC 330	PC330	42526	PSVPDIAG
PSY2DIAG			

1.2.260 MISSING HELP SCREENS IN PC 300 6588/6888 SETUP

Record number: H137870

Device: D/T6588
 Model: M
 Tip key: 001
 Date created: 097/05/23
 Date last altered: A97/05/28

IBM PC 300 Series 6588 and Intellistation M Pro 6888 systems contain limited HELP text in the systems Setup Utility. The following areas of the Setup Utility do not contain HELP information:

No HELP Screen for: ISA Legacy Resources
 Advanced Power Management
 - IDE Drive Power Down
 Devices & I/O Ports
 - Ethernet Setup
 - Serial Port Setup
 - Infrared Port Address
 - Parallel Port Setup
 - Parallel Port Interface
 Advanced Setup
 - Floppy Interface
 - Advanced Chipset Configuration
 Start Options
 - Fourth Startup Device
 Date and Time

When attempting to access any of the HELP screens listed above, the user may see a blank HELP text box or no indication at all when the F1 key is pressed.

Refer to the systems User's Guide for assistance in setting up any of the features listed above.

SAS KEYWORDS:

PSY2	PSVP	IBMPC	PSVPOC
PSY2DOC	61502	PSY2MCD	PSVPMCD
PC 330	PC 350	D/T6888	UNCLASSIFIED

PSY2 RETAIN TIPS
MOBILE HMM FRU CORRECTIONS.

1.2.261 MOBILE HMM FRU CORRECTIONS.

Record number: H01891

Device: D/T9546
Model: M
Tip key: 007
Date created: 096/06/18
Date last altered: A96/10/16

The Mobile Systems HMM Volume 3, S82G-1503-03 requires the following corrections:

Page 226:
Header should read: Parts Listing (560)

Page 313:
Index 18a Base Cover 29H9181

Page 316:
Index 16b Hard Disk Drive (1.2GB, 17mm) 29H9228
16b Hard Disk Drive (720Mb, 12.7mm) 29H9229
18a Base Cover 29H9182

Page 341:
The AC power cords listed on page 341 will not fit the new slimline power adapters that are now shipping with the 9547 760E ED EL & ELD and 2640 560 Model systems. The Slim Line Adaptor uses a 2 wire AC line cord unique to the adaptor. The AC power cord for the slim line adapt is FRU P/N04H6908. This cord/adaptor is only for use in Canada and US.

This TIP will be updated with a complete list of cord FRU part numbers when available

SAS KEYWORDS:
PSY2 PSY2PART PSY2PUB PSY2PRW
THINKPAD D/T2630 D/T9546 D/T2640
D/T9547 P/N39H7054 P/N29H9228 P/N29H9229
P/N29H9181 P/N29H9182

1.2.262 MOD 350/425 SYSTEM BOARD PART NUMBERS

Record number: H124751

Device: D/T2618
 Model: M
 Tip key: 015
 Date created: 094/07/27
 Date last altered: A97/02/28

THE FOLLOWING FRU NUMBERS SHOULD BE USED WHEN ORDERING
 SYSTEM BOARDS FOR M/T 2618.

2618 - PS/2 PCMCIA MOD 350 SYSTEM BOARD FRU NUMBERS:

- MONO-FRU P/N73G2495 FLASHABLE
- MONO-FRU P/N10H3981 NON-FLASHABLE (*)
- COLOR-FRU P/N73G2497 FLASHABLE
- COLOR-FRU P/N10H3983 NON-FLASHABLE (*)

2618 - PS/1 NON-PCMCIA MOD 425 SYSTEM BOARD FRU NUMBERS:

- MONO-FRU P/N73G2496 FLASHABLE
- MONO-FRU P/N10H3982 NON-FLASHABLE (*)
- COLOR-FRU P/N73G2498 FLASHABLE
- COLOR-FRU P/N10H3984 NON-FLASHABLE (*)

(*) INDICATES NEW FRU NUMBERS THAT WERE RELEASED FOR U.S.
 ONLY. THESE BOARDS CANNOT BE FLASHED TO UPDATE BIOS,
 HOWEVER, THEY WILL BE AT THE LATEST LEVEL "1I." BOTH
 SYSTEM BOARDS, FLASHABLE OR NON-FLASHABLE, WILL HAVE
 THE SAME FUNCTION. EITHER BOARD MAY BE ORDERED BUT
 ORDER FULFILLMENT WILL DEPEND ON AVAILABILITY.

SAS KEYWORDS:

PS2	PSY/2	PS/2	PLANAR
PSY2PART	2618	PS1	PSY2
PSY2BRD	THINKPAD	UNCLASSIFIED	

MONITOR CARD TRAY MAY BE DAMAGED DURING SERVICE

1.2.263 MONITOR CARD TRAY MAY BE DAMAGED DURING SERVICE

Record number: H122038

Device: D/T6324
 Model: M
 Tip key: 003
 Date created: 093/12/10
 Date last altered: A94/05/10

Damage may occur to the Card Tray Assembly of the 6324, 6325, 9524 and the 9525 monitors, if the instructions on page 2 - 24 of the HMM Volume 2 (S71G-4197-02) are not followed.

These instructions identify that a piece of NON-CONDUCTIVE material MUST be placed between the video and analog cards before power is applied with the rear cover removed.

This will prevent damage to the monitor, due to shorting, when power is applied without the rear covers in place.

Note: NON-CONDUCTIVE material is defined as "BROWN" cardboard, a HMM, or screwdriver handle. Do not use pink foam from the box or your ESD mat, they are conductive.

Contact occurs between the metal video card enclosure and two heat sinks sticking up on the analog card.

SAS KEYWORDS:

PSY2	PSY2DISP	D/T9524	D/T6325
D/T9525	RASTER	G2	POT
FOCUS	SHORTS	SHORT	DEAD
NEW			

MONITOR GROUND STRAP MAY BE INCORRECTLY INSTALLED

1.2.264 MONITOR GROUND STRAP MAY BE INCORRECTLY INSTALLED

Record number: H123897

Device: D/T9525
 Model: M
 Tip key: 003
 Date created: 094/05/11
 Date last altered: A95/06/07

*****IMPORTANT*****

The analog card tray FRU for the following monitors includes an errata sheet (P. No. 73G0683), a grounding wire and a tie-wrap cable. The purpose of the grounding wire is to prevent damage to the analog card due to a build up of static charges on the ITC (CRT) assembly.

6325 - 001	FRU P/N68G1321
9525 - 005	FRU P/N68G1323
9525 - 001/4	FRU P/N68G1324
9525 - 002	FRU P/N68G1325

The drawing indicates one end of the wire is to be connected to a screw on the deflection yoke assembly mounting clamp of the ITC. There are two clamps on this assembly where the wire may be physically attached. The CORRECT ATTACHMENT POINT IS THE CLAMP CLOSEST TO THE FRONT OF THE ITC (CRT).

If the wire is attached to the rear clamp, it will be ineffective and the analog card tray will be subject to future failure due to ESD discharge.

Engineering action has been initiated to clarify the errata sheet information. The updated errata sheet will be inserted into the FRU boxes at the earliest opportunity.

SAS KEYWORDS:

PSY2	PSY2DISP	D/T6325	D/T9525
D/T6324	DISPLAY	PSVP	DAG
STRAP	LEAD		

1.2.265 MONITOR HMM, PROBLEM WITH UPDATES

Record number: H126235

Device: D/T8550
Model: M
Tip key: 208
Date created: 095/01/26
Date last altered: A95/01/31

The Hardware Maintenance Manual (HMM) for Monitors, Form number S71G-4197-02, has had several recent updates that are either too large, or the tabs do not line up properly in the binder.

Engineering is aware of this problem and is currently producing a HMM that will contain all products.

At this time, a date for delivery of this document is unknown. This tip will be updated with new information when available.

SAS KEYWORDS:

PSY2	PSY2DISP	D/T9524	D/T9525
D/T9521	D/T9527	D/T6324	D/T6325
D/T6327	D/T6321	PSY2TBD	

1.2.266 MONITOR JITTER ON 17 INCH OR LARGER DISPLAYS

Record number: H015074

Device: D/T2620
Model: M
Tip key: 003
Date created: 095/06/13
Date last altered: A96/11/11

DO NOT REPLACE HARDWARE, THIS IS A NORMAL OPERATING CHARACTERISTIC.

A small amount of jitter may occur on 17 inch or larger displays attached to ThinkPad 360 systems. The Jitter may be barely noticeable on the right hand side of the display next to the left side of vertical bars or lines.

SAS KEYWORDS:

PSY2	PSY2DISP	SHAKE	QUIVER
D/T9517	D/T9527	D/T9521	D/T6327
FLICKER	THINKPAD	UNCLASSIFIED	

MONITOR PROBLEMS MAY BE CAUSED BY CONNECTOR PINS

1.2.267 MONITOR PROBLEMS MAY BE CAUSED BY CONNECTOR PINS

Record number: H025182

Device: D/T8513
 Model: M
 Tip key: 001
 Date created: 087/12/10
 Date last altered: A95/06/06

IF YOUR MONITOR PASSES SELF TEST AND DIAGNOSTICS SUCCESSFULLY BUT FAILS WITH A BLANK SCREEN OR OTHER VISUAL FAILURE, THE CAUSE OF THE DEFECT MAY BE A PUSHED OR BENT PIN WITHIN THE SIGNAL CABLE CONNECTOR. THE PIN MAY BE PUSHED BACK FAR ENOUGH THAT IT CANNOT BE OBSERVED.

EXAMINE THE CABLE END(S) CAREFULLY FOR PUSHED PINS.

CARE SHOULD BE USED WHEN CONNECTING PS/2 AND PS/VALUEPOINT MONITORS OR DISPLAYS TO HOST SYSTEMS. BENT OR PUSHED PINS HAVE BEEN THE CAUSE OF MANY FAILURES. BENT PINS, IF FOUND, MAY BE CAREFULLY STRAIGHTENED.

SOME DISPLAYS SUCH AS THE 6314, 6319, 8511, 8513, 8515, 8516, 8517, 8518, 9515, 9517 AND 9518 HAVE SIGNAL CABLES THAT ARE REPLACEABLE.

IF NORMAL PD DOES NOT RESOLVE THE PROBLEM CONSIDER REPLACING THE SIGNAL CABLE.

HMS DOCUMENTATION SHOULD BE CONSULTED FOR THE CORRECT SIGNAL CABLE PART NUMBER.

SAS KEYWORDS:

PSY2	PSY2DISP	PSY2MISC	PCVPDISP
D/T8511	D/T8513	D/T8515	D/T8516
D/T8517	D/T8518	D/T9515	D/T9517
D/T9518	D/T8503	D/T8504	D/T8506
D/T8507	D/T8508	D/T6312	D/T6314
D/T6317	D/T6319	RASTER	WRONG
SYNC	BLACK	COLOR	VALUE
POINT	D/T8517	D/T8518	D/T9515
D/T9517	D/T9518	D/T9524	D/T9525
D/T9507	D/T9521	D/T9527	D/T6327

MOUSE HANGS WHILE USING THE IGC VM386 PROGRAM

1.2.268 MOUSE HANGS WHILE USING THE IGC VM386 PROGRAM

Record number: H011881

Device: D/T8570
Model: M
Tip key: 017
Date created: 090/11/30
Date last altered: A90/12/11

MOUSE HANG SYMPTOMS MAY OCCUR USING THE VM386 PROGRAM FROM THE "IGC CORPORATION" IF A MOUSE IS HAVING THIS TYPE OF FAILURE WHEN USING THE VM386 PROGRAM THE SYSTEM OPERATOR SHOULD CONTACT THEIR IGC PROGRAM POINT OF SALE OR IGC CUSTOMER SUPPORT AT 408-441-0366.

IGC AND VM386 ARE TRADEMARKS OF THE IGC CORPORATION.

SAS KEYWORDS:

PSY2	PSY2PROG	PSY2MOUSE	PSY2MISC
8570SYSPROG	8570SYSMISC	8570SYSMOUSE	

1.2.269 MOUSE NOT SEEN DURING INITIAL WIN95 SETUP ON IBM PC300XL

Record number: H16503

Device: D/T6588
Model: M
Tip key: 003
Date created: 097/07/22
Date last altered: A97/07/22

Users may find that during the initial setup of Windows95 on IBM PC300XL Series 6588 systems, that the mouse is not recognized by the operating system.

This is not a defect. During the initial setup of Windows95 the <Tab>, <Enter>, and arrow keys can be used to navigate through the setup windows (e.g. Keyboard, Date/Time Zone, Printer Setup) to complete the first phase of the Windows95 initialization.

After the user has pressed the <Enter> key to restart the system, the mouse will be recognized by the operating system and be fully functional.

-Windows95 is a trademark of Microsoft Corporation.

SAS KEYWORDS:

PSY2	PSY2OPER	PSY2MISC	PSVP
PSVPOPER	PSVPMISC	D/T6588	UNCLASSIFIED

1.2.270 MOUSE PORT DISABLED BY UNATTENDED START MODE*

Record number: H067449

Device: D/T8550
 Model: M
 Tip key: 141
 Date created: 092/11/10
 Date last altered: A94/03/14

USE OF THE UNATTENDED START MODE* ON PS/2 SYSTEMS WILL DISABLE THE MOUSE PORT. THIS IS NORMAL SYSTEM OPERATION AND SHOULD NOT BE CONSIDERED A DEFECT. DISABLING THE MOUSE PORT IS REQUIRED TO MAINTAIN SECURITY OF THE SYSTEM WHEN USING UNATTENDED START MODE.

* ALSO CALLED "NETWORK SERVER MODE".

MORE INFORMATION:

WHEN THE UNATTENDED START MODE IS SELECTED THE KEYBOARD/MOUSE CONTROLLER IS DISABLED UNTIL A PASSWORD IS ENTERED. WHILE DISABLED THE SYSTEM CAN NOT RECOGNIZE A POINTING DEVICE ATTACHED TO THE MOUSE PORT, AND CONSEQUENTLY DOES NOT LOAD THE APPROPRIATE DEVICE DRIVER. SINCE THE DRIVER DID NOT LOAD, THE POINTING DEVICE WILL CONTINUE TO BE INOPERATIVE EVEN AFTER THE PASSWORD IS ENTERED. LOADING THE CORRECT DEVICE DRIVER AFTER THE PASSWORD IS ENTERED WILL ALLOW NORMAL OPERATION OF THE POINTING DEVICE.

SPECIAL CONSIDERATIONS MUST BE TAKEN WHEN USING THE UNATTENDED START MODE. CUSTOMERS SHOULD BE ADVISED TO CONSULT THEIR HARDWARE AND SOFTWARE REFERENCE DOCUMENTATION FOR SET-UP REQUIREMENTS RELATED TO THE USE OF UNATTENDED START MODE.

SAS KEYWORDS:

D/T8525	D/T8530	D/T8535	D/T8540
D/T8543	D/T8551	D/T8554	D/T8550
D/T8555	D/T8556	D/T8557	D/T8573
D/T8560	D/T8565	D/T8570	D/T9576
D/T8580	D/T8590	D/T8595	D/T9585
D/T9577	D/T9556	D/T9557	D/T9595
D/T9533	PSY2	D/T6384	D/T6381
D/T6382	D/T6387		

MOUSE PORT DISABLED WHEN PASSWORD PROMPT IS OFF

1.2.271 MOUSE PORT DISABLED WHEN PASSWORD PROMPT IS OFF

Record number: H127025

Device: D/T6875
 Model: M
 Tip key: 003
 Date created: 095/04/04
 Date last altered: A95/04/04

SETTING THE *PASSWORD PROMPT "OFF" ON PC 300 & 700 SYSTEMS
 WILL DISABLE THE MOUSE PORT.

THIS IS NORMAL SYSTEM OPERATION AND SHOULD NOT BE
 CONSIDERED A DEFECT. DISABLING THE MOUSE PORT IS REQUIRED
 TO MAINTAIN SECURITY OF THE SYSTEM WHEN THE PASSWORD PROMPT IS
 SET TO "OFF."

* ALSO CALLED "NETWORK SERVER MODE" OR "UNATTENDED START MODE."

MORE INFORMATION:

WHEN THE PASSWORD PROMPT IS OFF, THE KEYBOARD/MOUSE
 CONTROLLER IS DISABLED UNTIL A PASSWORD IS ENTERED. WHILE
 DISABLED THE SYSTEM CAN NOT RECOGNIZE A POINTING DEVICE
 ATTACHED TO THE MOUSE PORT, AND CONSEQUENTLY DOES NOT LOAD THE
 APPROPRIATE DEVICE DRIVER. SINCE THE DRIVER DID NOT LOAD, THE
 POINTING DEVICE WILL CONTINUE TO BE INOPERATIVE EVEN AFTER THE
 PASSWORD IS ENTERED. LOADING THE CORRECT DEVICE DRIVER AFTER THE
 PASSWORD IS ENTERED WILL ALLOW NORMAL OPERATION OF THE POINTING
 DEVICE.

SPECIAL CONSIDERATIONS MUST BE TAKEN WHEN SETTING THE PASSWORD
 PROMPT OFF. CUSTOMERS SHOULD BE ADVISED TO CONSULT THEIR
 HARDWARE AND SOFTWARE REFERENCE DOCUMENTATION FOR SET-UP
 REQUIREMENTS RELATED TO THE USE OF THIS MODE.

SAS KEYWORDS:

PSVP	PSY2	PSVPPROG	PSY2PROG
D/T65XX	D/T6571	D/T6573	D/T6583
D/T6585	D/T6575	D/T6885	D/T6886
D/T6876	D/T68XX	IBMPC	6571
6573	6583	D/T6581	6581
6575	6585	6875	6885
6876	6886		

1.2.272 MPCA ADAPTER CARD APPEARS DEFECTIVE/PASSES DIAGNOSTICS

Record number: H017325

Device: D/T8580
 Model: M
 Tip key: 011
 Date created: 089/11/01
 Date last altered: A94/03/14

WHAT APPEARS TO BE HARDWARE FAILURES, MAY BE CAUSED BY A FAILURE TO OBSERVE CERTAIN PROGRAMMING CONSIDERATIONS.

INTERMITTENT AND DIFFICULT TO DIAGNOSE COMMUNICATIONS FAILURES INVOLVING THE MPCA (MULTIPROTOCOL COMMUNICATIONS ADAPTER) FREQUENTLY RESULTING IN MULTIPLE HARDWARE REPLACEMENTS WITHOUT A RESULTING FIX, MAY BE CAUSED BY THE FOLLOWING SITUATION:

SOME DEVICE DRIVERS (NOTE 1) FOR THE MPCA FAIL TO PROVIDE THE NECESSARY READ/WRITE DELAY TIMES WHEN THE SYSTEM PROCESSOR COMMUNICATES TO THE ADAPTER.

THE INCOMPATIBILITY AND RESULTING SYSTEM ERRORS ARE DUE TO THE INCREASED SPEED WITH WHICH THE NEWER SYSTEMS OPERATE THE DEVICE DRIVER CODE. AS A RESULT, CODE THAT DEPENDED ON THE CPU CLOCK TO PROVIDE A SPECIFIC READ/WRITE DELAY TIME RUNS MORE QUICKLY AND VIOLATES THE MPCA PROGRAMMING TIMINGS. IN THIS CASE, THE MPCA SYSTEM DIAGNOSTICS WILL RUN ERROR FREE, BECAUSE THERE IS HARDWARE FAILURE, BUT THE CUSTOMER'S SOFTWARE WILL EXPERIENCE OPERATIONAL FAILURES. THESE FAILURES MAY BE INTERMITTENT, AND APPEAR TO BE HARDWARE FAILURES. (NOTE 2)

THIS SITUATION WILL USUALLY APPEAR ON NEW EQUIPMENT INSTALLS, OR WHEN THE SOFTWARE DRIVER AND/OR MPCA ADAPTER HAS BEEN MIGRATED FROM A SLOWER RUNNING SYSTEM TO A FASTER RUNNING SYSTEM. OFTEN THE SOFTWARE WAS WRITTEN FOR A SPECIFIC SYSTEM AND DEPENDS UPON THE CLOCK SPEED OF THAT SPECIFIC MACHINE TO DETERMINE ITS TIMINGS. ON THE FASTER MACHINE, THE TIMINGS ARE DIFFERENT AND THE SOFTWARE IS INCOMPATIBLE.

AS AN EXAMPLE, A TYPICAL DELAY INSTRUCTION IN A PC/XT RUNNING AT 6 MHZ IS 2.5 MICROSECONDS. THE SAME LINE OF CODE RUNNING IN A 20MHZ PS/2 8580-111 EXECUTES IN 350 NANOSECONDS. THIS IS APPROXIMATELY 7 TIMES FASTER. THE ADAPTER REQUIRES 850 NANO-SECONDS WRITE/READ DELAY.

TO PROPERLY PROGRAM THE ADAPTER, THE DEVICE DRIVER MUST DETERMINE WHAT SYSTEM IT IS RUNNING ON AT POWER-ON TIME. DEPENDING UPON THE SPEED OF THE MACHINE, A CERTAIN DELAY SHOULD BE USED WHEN PROGRAMMING INSTRUCTIONS ARE WRITTEN AND READ TO OR FROM THE COMMUNICATION PERIPHERAL ON THE ADAPTER. OS/2 COMMUNICATIONS MANAGER PROPERLY PROGRAMS THE ADAPTER TO THE SPECIFICATIONS BY USING THE METHOD DESCRIBED ABOVE.

NOTES:

1. THERE IS NO BIOS (BASIC INPUT/OUTPUT SYSTEM) CODE FOR MPCA IN ANY PS/2 PRODUCT, THEREFORE DIRECT DRIVER SOFTWARE IS REQUIRED. GENERALLY, DIRECT DRIVER SOFTWARE IS MACHINE SPECIFIC AND MAY REQUIRE MODIFICATION OR PATCHES (PTF'S) WHEN USED ON SYSTEMS OTHER THAN THE ONE FOR WHICH THE SOFTWARE WAS ORIGINALLY WRITTEN.

2. THESE TIMINGS MAY BE MARGINAL. IN SOME CASES CHANGING THE MPCA ADAPTER MAY GIVE THE "APPEARANCE OF A FIX" BECAUSE THE CUSTOMERS JOB STARTS RUNNING. TYPICALLY IN THIS CASE, THE THE SERVICER WILL REPORT A "QUALITY" PROBLEM WITH MPCA, "BECAUSE OUT OF X NUMBER OF FRU'S, ONLY 1 WORKED," YET DIAGNOSTICS RAN ERROR-FREE ON ALL OF THEM. ATTEMPTING TO FIND "WORKABLE FRU'S" SHOULD BE AVOIDED, AS THIS PROBLEM MAY AGAIN MANIFEST ITSELF WHEN ADDITIONAL HARDWARE OR SOFTWARE CHANGES ARE MADE TO THE SYSTEM. THE SYSTEM FAILURES ARE THE RESULT OF INCORRECT SOFTWARE PARAMETERS. IF DIAGNOSTICS RUN ERROR-FREE AND THE APPLICATION SOFTWARE FAILS, SOFTWARE ASSISTANCE SHOULD BE SOUGHT.

SAS KEYWORDS:

D/T8590	PSY2	PSY2ADPT	PSY2COMM
D/T8573	D/T8595	D/T8550	D/T8555
D/T8556	D/T8557	D/T8560	D/T8565
D/T8570	D/T8580		

MULTI PROTOCOL ADAPTER NOT SUPPORTED

1.2.273 MULTI PROTOCOL ADAPTER NOT SUPPORTED

Record number: H121991

Device: D/T3550
Model: M
Tip key: 005
Date created: 092/12/02
Date last altered: A96/11/12

The docking station (IBM 3550 Expansion Unit) Mod 001 does not support the Multi-Protocol Adapter/A F/C 1548. This is contrary to announcement letter ZG92-0369.

SAS KEYWORDS:

PSY2	MPA	D/T8551	D/T8554
PSY2ADPT	THINKPAD	UNCLASSIFIED	

1.2.274 MULTI-FUNCTION PCI CARDS NOT SUPPORTED IN PC 300/700

Record number: H126162

Device: D/T68XX
 Model: M
 Tip key: 003
 Date created: 095/01/27
 Date last altered: A95/01/27

The IBM PC 300/700 Series PCI/ISA systems are incompatible with adapter cards that utilize a "PCI to PCI" Bridge chip.

PCI adapters that utilize a "PCI to PCI" Bridge chip are adapters that provide multiple PCI functions on one adapter. For example, a PCI Ethernet adapter with four Ethernet controllers on a single adapter utilizes a "PCI to PCI" Bridge chip for control.

Any PCI adapter with a "PCI to PCI" Bridge chip will be ignored by the system and will not function.

SAS KEYWORDS:

PSY2	6875	D/T6875	D/T6885
D/T6876	D/T6886	6885	6876
6886	PSY2ADPT	PSY2OEM	PSY2PART
IBMPC	PSY2ERR	PC 750	PC 730
PC 330	PC 300	PC 350	D/T65XX
D/T6571	D/T6573	D/T6581	D/T6583
D/T6585	D/T6575	6571	6573
6581	6583	6575	6585
PSVP			

1.2.275 MULTISYNC MONITORS MAY BLANK OUT

Record number: H121895

Device: D/T6324
Model: M
Tip key: 002
Date created: 093/11/29
Date last altered: A93/11/29

Multisync monitors with internal microprocessor controllers, such as the IBM 6324, exhibit a normal characteristic called blanking. Blanking appears as a momentary blank screen, and occurs during mode changes. It may be accompanied by an audible click generated by a relay in the monitor.

Mode changes and the resulting momentary blanking are generally controlled by software applications. Usually, the user is not aware of the changing modes.

A blanking operation occurs every time there is a mode change, and happens very quickly; the screen only blinks. More noticeable blanking occurs when the microprocessor in the monitor is instructed to perform multiple consecutive blanking operations. When a second consecutive blanking operation occurs the screen may go blank for approximately one second.

Blanking, as described above, should be considered a function of normal operation and no FRUs should be replaced.

SAS KEYWORDS:

PSY2	D/T9527	D/T6325	D/T9524
D/T9525	DISPLAY	PSY2DISP	D/T6322
D/T6327	D/T9521	D/T6314	D/T6317
D/T6319			

1.2.276 MWAVE DRIVERS FAIL TO INSTALL IN WINDOWS95

Record number: H133197

Device: D/T6877
 Model: M
 Tip key: 014
 Date created: 096/03/25
 Date last altered: A96/03/25

IBM PC 700 Series 6877 and 6887 preloaded with Windows95 may fail to install the Mwave device drivers on the first IPL following the installation of the Mwave adapter.

Power the system off/on. The Mwave drivers will then install properly.

Windows95 is a trademark of the Microsoft Corporation.

SAS KEYWORDS:

PSY2	D/T68XX	6887	6877
IBMPC	PSVP	PSY2PROG	PSVPPROG
D/T6887	PC750	PC700	PC 730
PC 750	PC730	41345	PSY2OPER
PSVPOPER	PSVPERR	PSY2ERR	

1.2.277 MWAVE FOR WINDOWS FAILS IN OS/2

Record number: H133195

Device: D/T6877
Model: M
Tip key: 012
Date created: 096/03/25
Date last altered: A96/03/25

IBM PC 700 Series 6877 and 6887 systems with the Select-A-System preload may exhibit Mwave errors if the user installs Mwave for Windows in OS/2 (WIN-OS/2 Group). Mwave for Windows is not installed in the WIN-OS/2 Group on preloaded systems.

The user may encounter various Mwave related errors when attempting to run OS/2 Mwave applications after installing Mwave for Windows in the OS/2 environment.

To eliminate the conflict between Mwave for Windows in the WIN-OS/2 Group and the OS/2 Mwave application, use either OS/2 Mwave or Mwave for Windows from the Windows Program Manager.

Windows is a trademark of the Microsoft Corporation.

SAS KEYWORDS:

PSY2	D/T68XX	6887	6877
IBMPC	PSVP	PSY2PROG	PSVPPROG
D/T6887	PC750	PC700	PC 730
PC 750	PC730	41608	PSY2OPER
PSVPOPER	PSVPERR	PSY2ERR	

1.2.278 MWAVE MODEM NOT LISTED IN REPRINT PLUS MENU

Record number: H133218

Device: D/T6877
 Model: M
 Tip key: 024
 Date created: 096/03/25
 Date last altered: A96/03/25

There are no IBM Mwave modems listed in the FirstByte RePrint Plus application for supported modems. RePrint Plus is an application preloaded in addition to Windows95 on IBM PC 700 Series 6877 and 6887 Audio systems.

To use the Mwave modem in RePrint Plus, perform the following steps:

- Click on Start
- Click on Select Programs
- Click on RePrint Plus
- Click on OK
- Click on Modem
- Select the 14.4 Hayes Accura modem

NOTE: FirstByte RePrint Plus is a Windows based application. To run this application in OS/2, it must be run from the Windows Program Manager. It will not run in a WIN-OS/2 window or the WIN-OS/2 Group.

Windows95 is a trademark of the Microsoft Corporation.
 RePrint Plus is a trademark of FirstByte, Inc.

SAS KEYWORDS:

PSY2	D/T68XX	6887	6877
IBMPC	PSVP	PSY2PROG	PSVPPROG
D/T6887	PC750	PC700	PC 730
PC 750	PC730	41467	PSY2OPER
PSVPOPER	PSVPCOMM	PSY2COMM	42291

1.2.279 NEC XP21 DISPLAY NOT DDC2B COMPATIBLE WITH PC 700

Record number: H104713

Device: D/T6877
 Model: M
 Tip key: 025
 Date created: 096/04/17
 Date last altered: A96/04/17

The NEC XP21 Color Display is not DDC2B compatible with the IBM PC 700 Series 6877 and 6887. The 6877 and 6887 are DDC2B compatible, however, the NEC XP21 only supports DDC2B via an ACCESS bus connector on the rear of the display, not the standard video cable.

When the NEC XP21 Color Display is attached to a PC 700 6877 or 6887 using the standard video cable, the Setup Utility does not indicate that a DDC compatible monitor is attached.

For optimum performance of NEC XP21 display on a PC 700 6877 or 6887, the user must enter the refresh rates of the display into the Custom Monitor selection in the Setup Utility.

NEC XP21 is a trademark of NEC Technologies, Inc.

SAS KEYWORDS:

PSY2	D/T68XX	6887	6877
IBMPC	PSVP	PSVPDISP	PSY2DISP
PSVPOEM	PSY2OEM	D/T6887	D/T6885
D/T6875	D/T6876	D/T6886	PC 750
PC750	PC 730	PC730	

NETFINITY 3500 (8644) MEMORY FRU PART NUMBERS IN HMM

1.2.280 NETFINITY 3500 (8644) MEMORY FRU PART NUMBERS IN HMM

Record number: H162508

Device: D/T8644
 Model: M
 Tip key: 001
 Date created: 098/01/19
 Date last altered: A98/02/02

Two different FRU part numbers exist for each of the supported memory sizes in the Netfinity 3500 (8644).

Both "MFG" (Manufacturing) and "OBI" (Options By IBM) FRU numbers are supported and may be mixed in a system.

The table below summarizes the part number information:

MFG FRU	OBI FRU	Opt. p/n	Description
01K1112	01K1125	04K0073	32MB 66MHz 3.3V SDRAM (ECC)
01K1113	01K1126	04K0074	64MB 66MHz 3.3V SDRAM (ECC)
01K1114	01K1127	04K0075	128MB 66MHz 3.3V SDRAM (ECC)

These "OBI" FRU part numbers will be added to page 118 of the Netfinity 3500 HMM S05L-1908.

Note: The System (Type 6898) at the top of pages 118 and 119 is not correct; it should read (Type 8644). The part number information on these pages is correct.

The next release of the HMM will contain these corrections.

SAS KEYWORDS:

PSY2	PSY2MEM	UNCLASSIFIED	05L1908
S05L1908	S05L190800	S05L-1908-00	

1.2.281 NETFINITY 3500&COLON. PLANAR REPLACEMENT AND BIOS UPDATE PROCEDURE

Record number: H162579

Device: D/T8644
 Model: M
 Tip key: 002
 Date created: 098/01/30
 Date last altered: A98/02/02

When replacing the System Board (planar) FRU p/n93H7269 on the Netfinity 3500 type 8644 model 10U/10X/20U/20X/21U/21X/30U/30X, the BIOS MUST be updated and initialized. Failure to do so, can result in a system malfunction.

Use the procedure below to replace, flash, initialize and reconfigure CMOS to customer preferences.

Note: Before going on site, be sure to download the current "Netfinity 3500 BIOS Flash Update Diskette" from the IBM Website at the following URL:

Http: //www.pc.ibm.com/files.html

SEARCH for: 3500 BIOS Flash

The file is a self-extracting executable file that will create the BIOS diskette.

Print the README.1ST file. The file contains the following:

- 1 - Basic Installation Instructions
- 2 - Guidelines for replacement start up screen images
- 3 - Program Options of interest to system support people
- 4 - CMOS save/restore utility
- 5 - Important Instructions when replacing the 8644's system board.

Note: The BIOS level may be listed in any of the following formats. In the example below, all formats refer to the same level of BIOS.

Format	Description
BIOS 25A	Common usage
V1.25	BBS/WEB file name description
NNJT25Axx	<F1> Setup, Product Data, Flash EEPROM Level
Build ID NNJT25A	(Netfinity Manager, System Information, model and processor information)

Planar Replacement:

1. If the original system board is still functional, save the CMOS configuration to diskette, using the procedure listed in section 4 of the Readme.lst file on the BIOS diskette.
2. When installing a replacement planar, or re-installing the existing planar, care must be taken to avoid bending the metal "fingers" on the EMC shield. When properly seated, thin metal "fingers" will be in place over the USB, mouse/keyboard, and Ethernet port connectors. For installation of the system board, first, angle the system board downward and under the EMC shield "fingers" to prevent bending or damaging the "fingers."

BIOS Update:

3. After the system is reassembled, insert the Netfinity 3500 BIOS Flash Update Diskette in the floppy drive, then turn the power on.
4. (If the message "The POST/BIOS code in the system is a newer version than in the diskette..." appears during this procedure, disregard it and press <Enter> to continue)
5. Resolve any configuration or POST startup error messages following the on screen instructions.
6. When the BIOS update is complete, remove the diskette from the floppy drive, and press <Enter> to restart the system.

Initialization and Setting Defaults:

7. When the "Press F1 for Configuration/Setup" message appears on the IBM logo screen, press <F1>.
8. At the "Configuration/Setup Utility" menu, highlight "Load Default Settings" and press <Enter>.
9. Press <Enter> again to continue.

10. (At this point, you might also set the correct date and time).
11. Highlight "Exit Setup" and press <Enter>.
12. Highlight "Yes, save and exit the Setup Utility", then press <Enter> to restart the system.
13. When the Adaptec SCSISelect message appears, press <Ctrl><A>
14. Highlight "00: 09: A" at the "Bus: Device: Channel" menu; press <Enter> to display the "Options" menu.
15. Highlight "Configure/View Host Adapter Settings"; press <Enter> to display the "Configuration" menu.
16. Press <F6> "Reset to Host Adapter Defaults" to reset the SCSI settings.
17. Highlight "Yes" to "Reset All Options to Default Settings?"; press <Enter> to reset defaults.
18. Press <Esc>.
19. Highlight "Yes" to "Save Changes Made?"; press <Enter> to return to the "Options" menu.
20. Press <Esc> to return to the "Bus: Device: Channel" menu.
21. Highlight "00: 09: B" at the "Bus: Device: Channel" menu; press <Enter> to display the "Options" menu.
22. Highlight "Configure/View Host Adapter Settings"; press <Enter> to display the "Configuration" menu.
23. Press <F6> "Reset to Host Adapter Defaults" to reset the SCSI settings.
24. Highlight "Yes" to "Reset All Options to Default Settings?"; press <Enter> to reset defaults.
25. Press <Esc>.
26. Highlight "Yes" to "Save Changes Made?"; press <Enter> to return to the "Options" menu.
27. Press <Esc> to return to the "Bus: Device: Channel" menu.
28. Press <Esc> again.
29. Highlight "Yes" to "Exit Utility"; press <Enter>.
30. Press any key to restart the system.

Restore Customer's CMOS if backed up in step 1:

31. Follow the procedure in Section 4 of the readme.lst
32. Initialization of the replacement system board is now complete.

The following standard defaults will now be set:

Start Options: CD-ROM, Diskette, Hard Disk, Disabled
 Adaptec SCSI (Max Sync Transfer Rate): 20.0MB/s (Fast/Wide)

Future planar FRUs will include a Netfinity 3500 BIOS diskette and detailed instructions.

Adaptec and SCSISelect are trademarks of Adaptec, Inc.

SAS KEYWORDS:

PSY2	D/T8644	93H7269	SERVICER ONLY
CMOS	D/T8644BIOS	BIOS	93H7269
D/T6898	HEALTH		

1.2.282 NETWARE SERVER NMI PROBLEM DETERMINATION PROCEDURE

Record number: H13823

Device: D/T9595
 Model: M
 Tip key: 025
 Date created: 095/09/12
 Date last altered: A95/09/14

NMI (Non-Maskable Interrupt) errors which occur while running Novell Netware are difficult to diagnose because they may be caused by 4 different error conditions. However, the attached information is very useful in identifying the actual error condition which caused the NMI and providing a more efficient resolution to the problem.

The following facts should be understood:

1. The four causes of NMI's are:
 - a. Main memory (or possibly L2 cache) parity error.
 - b. Channel check (Micro Channel systems).
 - c. Watchdog timeout.
 - d. DMA (Direct Memory Access) time-out error.
2. Various operating systems refer to NMI's using different terms. OS/2 calls them "TRAP 0002", SCO UNIX refers to them as "Panic errors." Novell Netware references them as NMI's.
3. NMI's ARE NOT ALWAYS caused by system memory!
 Servicers SHOULD NOT automatically replace memory while performing problem determination of NMI errors.

Current technology produces a more reliable memory than that available only a few years ago. This is particularly true in the case of systems using ECC memory.

Note: Erroneous information has been distributed in certain operating system appendices which gives 3 causes of NMI errors, one being the power supply, the other two being channel and memory parity. That information is not consistent with the facts on IBM products and should be disregarded.

4. The operating systems currently available are limited in their ability to differentiate the four causes of an NMI.

An NMI is a catastrophic error detected by the system which then raises the NMI line to the processor. The processor executes the NMI handler and tries to save the information as to what caused the NMI. Usually, the software interrogates the registers to try and find the cause of the NMI. Sometimes the system cannot do this because the error is too severe. (IE. an adapter "hanging" on the bus.) Not all operating systems even try to do this.

Because of this limitation, some operating system error handling routines DEFAULT to pointing out memory as the most likely cause of any NMI. Hence, inappropriate service practices have developed around the fallacy that, "All NMI errors are caused by memory."

With this information in mind, the following procedure is the most efficient method of identifying the actual cause of the NMI, when Novell Netware is the operating system.

1. Check the hardware System Error Log (available in the system partition at the main menu under "More Utilities." It is not available on some models of 8590/8595.) If the System Error Log is empty, the NMI error was probably NOT CAUSED by a memory parity error. The logging feature is not available on the 8580 or 8640.

Furthermore, if ECC memory is installed in the system, all single bit errors are corrected (and will not cause NMI's, but are logged in the system error log). Double bit errors are detected and logged in the hardware System Error Log and will cause an NMI, just as a parity error does. So, IF THE SYSTEM ERROR LOG IS EMPTY, DO NOT REPLACE MEMORY, continue the NMI problem resolution procedure below.

2. Run diagnostics on the system. If they run error-free do not replace any hardware at this time.
3. It is possible to identify the NMI error source by using

PSY2 RETAIN TIPS

NETWARE SERVER NMI PROBLEM DETERMINATION PROCEDURE

PSY2
D/T8580
D/T8641

PSY2PROG
D/T8595

PSY2ERR
D/T8590

PSY2COMM
D/T9595A

1.2.283 NEW ADF FILES FOR FDDI AND TOKEN RING ADAPTERS

Record number: H014865

Device: D/T8590
 Model: M
 Tip key: 024
 Date created: 093/05/05
 Date last altered: A93/06/16

Data streaming failures may be experienced during operation on 8590 and 8595 and 9595 systems with the 50MHZ processor (models OMT) and either an FDDI Optical Interface Adapter/A or a Token Ring 16/4 Bus Master Adapter/A installed. (The failure to "data stream" may not be noticeable.)

In addition to the data steaming failures, diagnostic failures (hangs) may also be experienced on the FDD Adapter/A, However POST (Power-On System Test) and configuration do not fail.

An Option Update Diskette (version 1.10) containing new adapter configuration files that enable the data streaming feature has been released. The update diskette will also correct the FDDI adapter diagnostic problems encountered with the 50MHZ (model OMT) 8595/9595.

The update diskette may be obtained in the USA by calling toll free 1 - 800-845-4263 and requesting part number 60G9458. The update will be shipped at no cost to the customer.

The update diskette is self booting and self installing and comes with instructions.

The FDDI Adapter/A is FRU P/N93F0377
 OPT P/N93F0345

The Token Ring 16/4 Bus Master Adapter/A is FRU P/N74F4149.

SAS KEYWORDS:

PSY2	D/T8595	PSY2ADPT	PSY2PROG
PSY2ERR	PSY2COMM	OPTICAL	INTERFACE
D/T9595	D/T8590		

NEW COMBINED IBM WAKE-ON-LAN ADAPTER CABLE

1.2.284 NEW COMBINED IBM WAKE-ON-LAN ADAPTER CABLE

Record number: H161204

Device: D/T6562
 Model: M
 Tip key: 003
 Date created: 097/09/25
 Date last altered: A97/10/23

This notice is in regards to the following IBM Wake-On-LAN adapters:

Auto Wake 16\4 ISA Token Ring
 PCI 16\4 Token Ring with Wake-On-LAN
 Etherjet PCI 100\10 with Wake-On-LAN

These adapters shipped with a single Wake-On-LAN cable, IBM P/N42H2397.

Starting in August 1997, the IBM PC Company will begin to ship new models of Wake On LAN capable systems. Customers intending to use the Wake On LAN feature of these new systems with either of these Wake On LAN capable IBM Token-Ring adapters will require the use of a new combined Wake On LAN signal and power cable, IBM part number P/N76H7254.

If you have successfully connected the Wake On LAN cable shipped with your adapter as described in the product's documentation, then you do not need the combined Wake On LAN cable.

The combined Wake on LAN cable is required only for IBM PCs that are scheduled to ship in the third quarter of 1997, in which the customer will want to use the IBM PCI Wake On LAN Token-Ring adapter or the IBM Auto Wake 16/4 Token-Ring ISA adapter and its Wake on LAN function. These new IBM PCs will have a different type of connector for the Wake on LAN cable's connection to the PC. The adapter side of the connection will be the same.

How to Get the New Cable

Future shipments of these adapters will include the combined Wake on LAN cable in addition to the original Wake On LAN Cable. These will begin shipping in the same time frame as the new IBM PCs that require the combined cable begin shipping.

If you require the combined Wake On LAN cable, call IBM Product Support at 1 - 800-426-7299 (in the USA) or any one of the other support numbers listed in the documentation shipped with the adapter. Tell the calltaker that you wish to be sent the combined Wake on LAN signal and power cable, IBM part number 76H7254, for use with either the IBM PCI Wake On LAN Token-Ring adapter or the IBM Auto Wake 16/4 Token-Ring ISA adapter. Be sure to provide your name, your company's name, your shipping address, your telephone number, and the quantity of cables required to the calltaker. The calltaker will escalate your request to the Level3 Product Support Organization in the Networking Hardware Division who will ship the cables to you.

SAS KEYWORDS:

PSY2	PSY2COMM	PSY2ADPT	PSY2PART
PSY2MISC	PSVP	PSVPADPT	PSVPPART
PSVPCOMM	PSVPMISC	D/T6562	6562
UNCLASSIFIED	P/N42H2397	P/N76H7254	42H2397
76H7254	WOL		

1.2.285 NEW EPROM MODULE, ESDI FIXED DISK ADAPTR/A

Record number: H12389

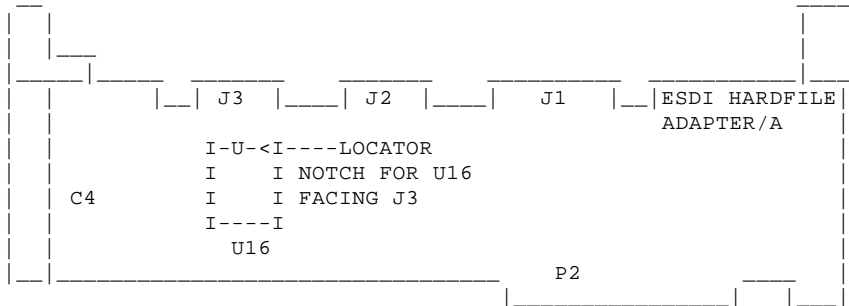
Device: D/T8580
 Model: M
 Tip key: 024
 Date created: 093/06/16
 Date last altered: A93/06/17

THIS RETAIN TIP IDENTIFIES THE LATEST VERSION OF MICROCODE ON AN EPROM FOR THE ESDI FIXED DISK ADAPTER/A.

THE CURRENT VERSION MODULE, FRU P/N92F0062, CORRECTS HIGHLY INTERMITTENT FIXED DISK FAILURES.

INSPECT THE MODULE IN LOCATION U16 FOR P/N04G3759 PRINTED ON THE TOP SURFACE. IF PRESENT, THIS EPROM HAS ALREADY BEEN INSTALLED. MODULES WITH ANY OTHER P/N SHOULD BE REPLACED BY THE CURRENT VERSION.

THE MODULE LOCATION, U16, IS NOTED BELOW:



INSTALL THE NEW EPROM WITH THE LOCATOR NOTCH TOWARD EDGE CONNECTOR J3.

ON SOME ESDI ADAPTERS, U16 MAY BE MOUNTED HORIZONTALLY. IN THIS CASE, THE LOCATOR WILL FACE THE LEFT SIDE OF THE CARD (THE NOTCH WILL FACE COMPONENT C4).

DOWN-LEVEL MODULES ARE IDENTIFIED AS FOLLOWS:

P/N90X7399, P/N90X8635, P/N15F6587, P/N15F6807 AND P/N91F7430.

- MODULE P/N15F6587: CAUSED A DIAGNOSTIC FORMATTING PROBLEM AND AN INTERMITTENT HARDFILE DELAY DURING SYSTEM OPERATION (THE HARDFILE LIGHT WOULD REMAIN "ON" FOR APPROX. 13 SECONDS). ALSO, IN RARE INSTANCES, A WRITE FAULT COULD RESULT IN A DATA SHIFT PROBLEM DURING ERROR RECOVERY, WHICH WOULD BE DETECTED DURING READ OPERATIONS AND DURING DIAGNOSTICS AS A "10473" ERROR (ECC ERROR; READ ERROR).
- MODULE P/N15F6807: CAUSED A HIGHLY INTERMITTENT PROBLEM OF UNDETECTED WRITE FAULTS ON THE LAST 1/3 OF THE LAST SECTOR WRITTEN (DETECTED DURING SYSTEM READ OPERATIONS AND BY DIAGNOSTICS AS ERROR CODE 10473, ECC READ ERRORS).
- MODULE P/N91F7430: EXPERIENCED A HIGHLY INTERMITTENT SYSTEM "HANG" ONLY ON 115MB ESDI FIXED DISKS.

 WARNING:

 SOME OLDER VERSIONS OF DIRECT DRIVER SOFTWARE, WHICH BYPASS BIOS (BASIC INPUT/OUTPUT SYSTEM) MAY EXPERIENCE FAILURES ACCESSING THE FIXED DISK AFTER INSTALLATION OF THE EPROM. THIS MAY OCCUR BECAUSE CHANGING THIS MODULE MAY ALTER HOW THE FIXED DISK SUBSYSTEM "APPEARS" TO THE SOFTWARE. SOFTWARE WHICH USES BIOS IS NOT AFFECTED AND WILL FUNCTION NORMALLY. DOS AND OS/2 USE BIOS.
 IF THE USER SOFTWARE FAILS AFTER THIS MODULE IS CHANGED, THE ORIGINAL MODULE SHOULD BE RE-INSTALLED, AND THE APPROPRIATE SOFTWARE SUPPORT FUNCTION SHOULD BE CONTACTED FOR ANY POSSIBLE SOFTWARE PATCHES OR UPDATES.

AFTER REPLACEMENT OF THE MODULE, FRU P/N92F0062, ADVANCED DIAGNOSTICS (ESDI FIXED DISK(S) ROUTINE) SHOULD BE RUN TO INSURE PROPER HARDFILE OPERATION.

SAS KEYWORDS:

PSY2 RETAIN TIPS

NEW EPROM MODULE, ESDI FIXED DISK ADAPTR/A

PSY2
PSY2ERR

PSY2FDSK

PSY2ADPT

D/T8560

NEW INSTALLATION OF 120MB INTERNAL TAPE DRIVE NOT SUPPORTED

1.2.286 NEW INSTALLATION OF 120MB INTERNAL TAPE DRIVE NOT SUPPORTED

Record number: H124867

Device: D/T6384
 Model: MCP1
 Tip key: 070
 Date created: 094/08/12
 Date last altered: A94/08/12

NEW INSTALLATIONS OF THE IBM 120MB INTERNAL TAPE DRIVE (OPTION P/N30F5279, F/C #5279, FRU P/N87F9787) ARE NO LONGER SUPPORTED IN PS/VALUEPOINT (OR ANY) SYSTEMS. THE FEATURE HAS BEEN WITHDRAWN FROM MARKETING AND REPLACED BY THE IBM DUALSTOR 250 TAPE DRIVE AND THE DUALSTOR SOFTWARE.

TO ENSURE SERVICE FRU STOCK OF THE 120MB DRIVE IS NOT DEPLETED BY NEW INSTALLATIONS, THE IBM INTERNAL TAPE BACKUP UNIT INSTALLATION KIT D (FRU P/N64G3675) IS NO LONGER AVAILABLE THROUGH MECHANICSBURG.

MARKETING DOCUMENTATION WILL BE UPDATED TO INCLUDE THIS INFORMATION.

SAS KEYWORDS:

PSY2	PSVP	VALUE POINT	30F5273
30F5279	PSY2TAPE	PSVPTAPE	PSVPDOC
64G3675	TAPE	PSVPADPT	PSY2ADPT
PSVPPART	PSY2PART	87F9787	

NEW LEVEL MULTIPROTOCOL ADAPTER

1.2.287 NEW LEVEL MULTIPROTOCOL ADAPTER

Record number: H024674

Device: D/T8550
 Model: M
 Tip key: 015
 Date created: 087/11/03
 Date last altered: A94/03/21

MULTIPROTOCOL ADAPTER FRU P/N90X8995 (OPTION #6451003) REPLACES FRU P/N72X8530 (OPTION #6450348). FRU P/N90X8995 IS SUPPORTED IN THE FOLLOWING MACHINE TYPE/MODELS.

8550-A00	8550-B00	8550-C00	8550-021	8550-031	8550-061
8550-900	8560-041	8560-071	8580-041	8580-071	8580-111
8580-311	8570-E61	8570-121	8570-A21	8573-061	8573-121
8555 - 031	8555-061	8565-061	8565-121	8590-XXX	8595-XXX

CAUTION:

OLD LEVEL MULTIPROTOCOL ADAPTER FRU P/N72X8530 (OPTION #6450348) IS STILL SUPPORTED IN THE 8550-021, 8560-041, 8560-071, 8580-041 AND 8580-071.

OLD LEVEL CARDS MAY DISPLAY ERROR CODE 10062 OR INTERMITTENT ERROR CODES 10029, 10030, AND 10031 IF INSTALLED IN ANY OF THE REMAINING MACHINE TYPE/MODELS LISTED ABOVE THIS CAUTION.

THE NEW LEVEL CARD IS DOWNWARD COMPATIBLE (CAN BE USED ON ALL MODELS) AND WILL BE SUBSTITUTED IF AN OLD LEVEL CARD IS ORDERED.

HOW TO IDENTIFY THE TWO ADAPTER CARDS:

1. RAW CARD ASSEMBLY P/N6278226 OR P/N72X6821 ARE USED ON THE DOWN LEVEL ADAPTER. RAW CARD ASSEMBLY P/N90X8459 IS USED ON THE NEW ADAPTER. (RAW CARD PART NUMBER IS LOCATED NEAR THE CARD RETAINER).

2. NO COMPONENT IS INSTALLED AT LOCATION ZM1 ON THE DOWN LEVEL ADAPTER (ZM1 IS LOCATED ON THE UPPER RIGHT HAND CORNER OF THE ADAPTER). THERE IS A COMPONENT INSTALLED AT LOCATION ZM1 ON THE NEW ADAPTER.

SAS KEYWORDS:

PSY2	PSY2ADPT	PSY2COMM	PSY2ERR
MPCA			

1.2.288 NEW LEVEL 8514/A CARD AND OPTION DISKETTE VERSION 1.01

Record number: H035157

Device: D/T8550
 Model: M
 Tip key: 042
 Date created: 089/05/31
 Date last altered: A94/01/13

A NEW VERSION OF THE 8514/A ADAPTER CARD OPTION DISKETTE HAS BEEN RELEASED TO SUPPORT CHANGES MADE TO THE 8514/A CARD. THE 8514/A ADAPTER CARD NOW USES ONLY 8K OF SYSTEM ROM. THIS CARD HAD PREVIOUSLY USED 16K OF ROM. THE NEW LEVEL 8514/A CARD CAN BE IDENTIFIED BY THE ASSEMBLY NUMBER OF 07F2519 PRINTED ON THE CARD.

"OR"

THE BASE CARD CAN BE IDENTIFIED AS CURRENT IF IT IS IDENTIFIED WITH A PART NUMBER OF 38F4041.
 THE DAUGHTER CARD CAN BE IDENTIFIED AS CURRENT IF IT IS IDENTIFIED WITH A PART NUMBER OF 38F4042.

THE 8514/A FRU NUMBER REMAINS P/N1887971.
 IF A UP-LEVEL ADAPTER IS REQUIRED AND CAN NOT BE OBTAINED THROUGH NORMAL CHANNELS A PHONE CALL SHOULD BE PLACED TO GERRY GRECO IN THE REUTILIZATION AND LIQUIDATION SERVICES DEPARTMENT IN SOMERS NEW YORK AT 914-899-3435 TO OBTAIN AN UP-LEVEL CARD.

THE 8514/A ADAPTER UTILIZES AN ATTACHED DAUGHTER CARD, WHICH HOLDS THE VIDEO MEMORY MODULES. THIS DAUGHTER CARD IS NOT INTERCHANGEABLE BETWEEN THE NEW LEVEL ADAPTER AND THE OLD LEVEL ADAPTER. THE INDIVIDUAL MEMORY MODULES MAY BE MOVED FROM THE OLD LEVEL DAUGHTER CARD TO THE NEW LEVEL DAUGHTER CARD.

OPTION DISKETTE VERSION 1.01 IS COMPATIBLE WITH BOTH LEVELS OF THE 8514/A ADAPTER CARD, AND WILL AUTOMATICALLY DIFFERENTIATE BETWEEN THE TWO CARDS AND LOAD THE PROPER CONFIGURATION FILES. IF THE NEW LEVEL ADAPTER CARD IS CONFIGURED WITH THE OLD LEVEL OPTION DISKETTE (VERSION 1.0), THE 8514/A ADAPTER CARD WILL FUNCTION PROPERLY, BUT THE SYSTEM WILL NOT UTILIZE THE ROM CHANGES OF THE NEW LEVEL ADAPTER CARD.

THE NEW OPTION DISKETTE SHOULD BE COPIED TO THE SERVICER'S AND THE CUSTOMER'S REFERENCE DISKETTE.

THE 8514/A OPTION DISKETTE VERSION 1.01 IS AVAILABLE THROUGH MECHANICSBURG AS FORM NUMBER G68X2366.

SAS KEYWORDS:

PSY2	PSY2ADPT	PSY2DISP	8514DISP
PSY2DOC	D/T8514	D/T8550	D/T8560
D/T8570	D/T8580	D/T8555	8514

NEW RISER CARD FOR ADAPTER COMPATIBILITY

1.2.289 NEW RISER CARD FOR ADAPTER COMPATIBILITY

Record number: H122544

Device: D/T6384
 Model: M
 Tip key: 049
 Date created: 094/01/12
 Date last altered: A96/03/07

VALUEPOINT 6382/S, 6384/D (EXCEPT P60/D) AND 6387/T WERE DESIGNED TO THE PCAT BUS SPECIFICATION. DEPENDING ON THE TOTAL SYSTEM CONFIGURATION, OPTION CARDS DESIGNED TO THE IEEE BUS SPECIFICATION MAY NOT FUNCTION IN THESE SYSTEMS DUE TO DIFFERENT "I/O CHANNEL READY" TIMING REQUIREMENTS. SYMPTOMS INCLUDE "ADAPTER NOT FOUND" AND "ADAPTER FAILED TO INITIALIZE" MESSAGES OR SYSTEM HANGS.

TO SUPPORT OPTIONS THAT REQUIRE THE IEEE "I/O CHANNEL READY" TIMING, IBM HAS MADE THE FOLLOWING RISER CARDS AVAILABLE THROUGH NORMAL DISTRIBUTION PROCESSES:

6382/S FRU P/N82G3507
 6384/D FRU P/N82G3509
 6387/T FRU P/N82G3511

THESE RISER CARDS HAVE A CONNECTOR THAT CAN BE JUMPED FOR 60NS IEEE OR 20NS PCAT I/O CHANNEL READY TIMING. THE DEFAULT SETTING, THE BOTTOM TWO PINS, IS 60NS AND WILL SUPPORT BOTH PCAT AND IEEE CARDS.

THE FOLLOWING LIST INCLUDES ADAPTERS THAT MAY REQUIRE THE ABOVE RISER. IBM ADAPTERS THAT ARE NOT ON THIS LIST MEET THE PCAT BUS TIMINGS AND DO NOT REQUIRE THIS RISER. ADAPTERS THAT MAY REQUIRE THIS RISER WILL BE ADDED TO THE LIST AS INFORMATION BECOMES AVAILABLE.

IBM PRODUCT:	OPTION NUMBER	FRU NUMBER
IBM 16 - BIT AT FAST SCSI ADAPTER KIT (1)	32G4088	92F0330
IBM LAN ADAPTER FOR ETHERNET TP	60G0605	60G0611
IBM LAN ADAPTER FOR ETHERNET CX (2)	60G0615	60G0621
IBM LAN ADAPTER FOR ETHERNET (2)	48G7169	48G7170

OEM PRODUCTS:

ADAPTEC 1542, 1542C, 1542CF	N/A	N/A
ARTISOFT ETHERNET	N/A	N/A
EIZO OMNIVERSE 50 VIDEO ADAPTER	N/A	N/A
HEWLET PACKARD ETHERNET PLUS	N/A	N/A
MADGE SMART 16/4 AT RINGNODE	N/A	N/A
MADGE SMART 16/4 ISA CLIENT	N/A	N/A
NOVELL NE2000T ETHERNET	N/A	N/A
UNGERMAN BASS 10BASE-T ETHERNET	N/A	N/A

NOTE #1: OPTION P/N32G4088 WITH EC D30941 ON THE OPTION PACKAGE (FRU P/N82G4879) DOES NOT REQUIRE THIS RISER. THIS LEVEL IBM FAST SCSI-2 ADAPTER CAN BE IDENTIFIED BY THE PRESENCE OF DIP SWITCHES.

NOTE #2: THE NEW RISER CARD IS REQUIRED FOR I/O MODE OPERATION ONLY. IT IS NOT REQUIRED FOR SHARED MEMORY MODE OPERATION. INFORMATION ON THESE MODES IS AVAILABLE IN THE USER GUIDE SHIPPED WITH THE OPTION.

IF THE CORRECT RISER CARD IS INSTALLED AND THE JUMPER IS INSTALLED CORRECTLY, CONTINUE FAILURE ANALYSIS USING NORMAL

PROBLEM DETERMINATION.

SAS KEYWORDS:

PSY2	PSVP	VALUE POINT	PS/VP
PSY2ADPT	PSVPADPT	PSVNLGO	PSY2NLGO
PSY2MISC	PSVPMISC	PSY2PART	PSVPPART
D/T6382	D/T6387	6382	6384
6387	32G4088	82G4879	P/N60G0605
P/N92F0330	P/N60G0615	P/N60G0611	PS/VALUEPOINT
P/N48G7169	P/N48G7170	P/N60G0621	

NEW STYLE SCSI ADAPTER WITHOUT CACHE

1.2.290 NEW STYLE SCSI ADAPTER WITHOUT CACHE

Record number: H123161

Device: D/T8550
 Model: M
 Tip key: 197
 Date created: 094/03/15
 Date last altered: A94/03/31

When ordering a SCSI Adapter/A without cache FRU P/N85F0002, servicers may receive either the original full-length adapter or a new half length version. After supplies of the original full length adapter are exhausted, only the new half-length version will be available.

The new short adapter is functionally equivalent to the earlier full length version and the on-board termination scheme is the same.

The adapter is shipped with an update diskette which contains the .ADF and .DGS files for various supported languages. The "copy an option" utility on the reference diskette (or system partition) should be used to update the customer's Reference diskette or IML partition.

SAS KEYWORDS:

PSY2	PSY2PART	PSY2ADPT	PSY2FDSK
MICRO	CHANNEL	MICROCHANNEL	D/T8555
D/T8560	D/T8565	D/T8570	D/T9553
D/T8590	D/T9590	D/T8595	D/T9595
D/T9585	D/T8580	D/T8556	D/T9557
D/T9556	TRIBBLE		

1.2.291 NEW SYSTEM BOARD FRU PART NUMBERS FOR PC700

Record number: H131955

Device: D/T6885
 Model: M
 Tip key: 005
 Date created: 095/12/12
 Date last altered: A96/03/11

The IBM PC 700 Series product line has been refreshed with new models that support the Intel Pentium 100Mhz, 120Mhz, and 133Mhz processors.

These new models require an updated system board FRU that supports the faster processor speeds. The system boards listed below are the previous and current levels, with notations indicating which processor the board supports.

FRU P/N88G4270 - 90Mhz ISA Models
 FRU P/N11h5545 - 90Mhz Microchannel Models
 FRU P/N12H1947 - 100Mhz ISA Models
 FRU P/N40H4744 - 100Mhz ISA Models
 FRU P/N12H1954 - 100Mhz Microchannel Models
 FRU P/N40H4760 - 100,120,133Mhz ISA Models
 FRU P/N40H4759 - 100,120,133Mhz Microchannel Models

P/N12H1947 will eventually replace P/N88G4270 when inventory is at an acceptable cutover level.

P/N12H1954 will eventually replace P/N11H5545 when inventory is at an acceptable cutover level.

NOTE - When system board replacement is necessary, replace with like for like FRU part numbers.

Do not install P/N88G4270 as a replacement for either of the two 100Mhz or higher ISA system boards.

Do not install P/N11H5545 as a replacement for either of the two 100Mhz or higher Microchannel boards.

Pentium is a trademark of the Intel Corporation.

SAS KEYWORDS:

PSY2	PSVP	PSY2BRD	PSVPBRD
PSY2PART	PSVPPART	D/T68XX	D/T6875
D/T6885	D/T6876	D/T6886	PC730
PC750	PC700	IBMPC	

1.2.292 NEW USE FOR IBM CABLING SYSTEM MAY CHANGE P/D METHODS

Record number: H20591

Device: D/T8550
Model: MCP1
Tip key: 162
Date created: 093/03/02
Date last altered: A93/03/02

ON OCTOBER 17, 1991, IBM ANNOUNCED A NEW ACCESSORY FOR THE IBM CABLING SYSTEM. THIS ACCESSORY IS NAMED THE "F-COUPLER". THE F-COUPLER'S FUNCTION IS TO COMBINE VIDEO SIGNALS WITH THE DATA SIGNALS ALREADY PRESENT ON THE IBM CABLING SYSTEM, AND TO SEPARATE THE TWO SIGNALS AT THE END-USER'S CABLING SYSTEM FACE- PLATE. ALTHOUGH THE IBM CABLING SYSTEM IS NOT DIRECTLY SUPPORTED BY SERVICE OPERATIONS, PROBLEM DETERMINATION PROCEDURES MAY BE VALUABLE IN RULING OUT HARDWARE PROBLEMS IN IBM MACHINES. THE FOLLOWING PUBLICATIONS HAVE BEEN WRITTEN OR UPDATED TO INCLUDE INFORMATION REGARDING THE F-COUPLER:

IBM CABLING SYSTEM PLANNING AND INSTALLATION GUIDE
FORM NUMBER GA27-3361

IBM TOKEN RING NETWORK PROBLEM DETERMINATION GUIDE
FORM NUMBER SX27-3710
F-COUPLER PLANNING GUIDE
FORM NUMBER GA27-3949

SAS KEYWORDS:

PSY2SYSMISC	PSY2DOC	9404MISC	9406MISC
9404DOC	9406DOC	9404WS	9406WS
CABLE	ICS		

1.2.293 NEW VERSION OF SCSI ADAPTER WITH CACHE IS NOW AVAILABLE

Record number: H021535

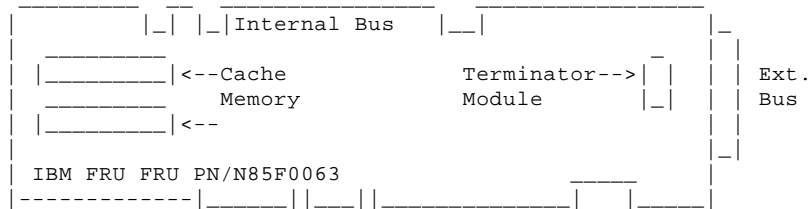
Device: D/T8550
 Model: M
 Tip key: 122
 Date created: 092/05/22
 Date last altered: A94/05/23

A NEW VERSION OF THE SCSI ADAPTER WITH CACHE IS NOW BEING SHIPPED WITH PS/2 PRODUCTS. ORDERS FOR THE ORIGINAL FRU P/N85F0000 WILL AUTOMATICALLY SUBSTITUTE TO THE NEW FRU (P/N 85F0063).

THE NEW VERSION IS FUNCTIONALLY EQUIVALENT TO THE EARLIER VERSION WITH THE FOLLOWING CHANGES:

1. THE TERMINATION SCHEME HAS CHANGED AND IS NOW THE SAME AS USED ON THE SCSI ADAPTER WITHOUT CACHE MEMORY. THERE IS A 20 - PIN TERMINATOR MODULE INSTALLED IN A SOCKET NEAR THE EXTERNAL SCSI BUS CONNECTOR (REFER TO DIAGRAM BELOW). THE EXTERNAL TERMINATOR (FRU P/N33F8464) IS NO LONGER REQUIRED, AND IS NOT SUPPLIED WITH THIS OPTION, OR WITH PRODUCTS WHICH USE THIS ADAPTER AS A STANDARD FEATURE. TERMINATION OF THIS ADAPTER IS ACCOMPLISHED WHEN THE 20 PIN T-RES MODULE IS INSERTED IN ITS SOCKET. (THIS MODULE IS USUALLY ORANGE IN COLOR) THE T-RES MODULE IS TO BE REMOVED FROM THE ADAPTER IF BOTH INTERNAL AND EXTERNAL DEVICES ARE ATTACHED TO THE ADAPTER. IN THIS SITUATION, THE SCSI BUS IS TERMINATED AT THE LAST DEVICE ON THE INTERNAL CABLE AND THE LAST DEVICE ON THE EXTERNAL CABLE. THE TERMINATOR MODULE SHOULD BE LEFT IN PLACE IF EITHER THE INTERNAL OR EXTERNAL SCSI BUS IS UNUSED.

NOTE: THE TERMINATOR MODULE MAY BE REMOVED AND THE "OLD STYLE" EXTERNAL TERMINATOR USED, IF AVAILABLE AND REQUIRED BY A CUSTOMER THAT "MIGRATES" EXTERNAL SCSI DEVICES BETWEEN SYSTEMS. THE "OLD STYLE" TERMINATOR MUST NOT BE USED IF THE T-RES MODULE IS INSERTED IN ITS SOCKET AND THERE ARE DEVICES ATTACHED TO THE INTERNAL SCSI BUS, AS THIS CAUSES "DOUBLE TERMINATION" AND PROBABLE SYSTEM FAILURES.



2. THIS ADAPTER WILL SUPPORT SCSI FIXED DISKS GREATER THAN 1 GB. TO SUPPORT THESE HIGH CAPACITY DEVICES, THE BIOS CODE ON THE ADAPTER HAS BEEN MODIFIED TO ALLOW TWICE AS MANY HEADS AND SECTORS AS PREVIOUSLY USED.
- * THE TERMINATOR MODULE, FRU P/N57F2870, IS ALSO USED ON THE SCSI ADAPTER WITH OUT CACHE.

NO FUNCTIONAL OPERATIONAL PROBLEMS WILL BE EXPERIENCED BY:

- A. USERS OF NOVELL * 3.11 WITH ANY SIZE DISK(S) AND USING NOVELL'S UTILITIES TO PREPARE THE DISK, RATHER THAN DOS.
- B. USERS OF OPERATING SYSTEMS WHICH DO NOT USE BIOS, SUCH AS UNIX, XENIX, AND IBM'S AIX, ETC.
- C. USERS OF DOS AND OS/2, AND OTHER OPERATING SYSTEMS WHICH USE BIOS, AND FIXED DISKS OF LESS THAN OR EQUAL TO 1 GIGABYTE. (SET AND VIEW SCSI CONFIGURATION SHOULD SHOW 1024 CYLINDERS OR LESS.)

IF REPLACING THE EARLIER VERSION ADAPTER WITH THE NEW VERSION, THE FOLLOWING PROBLEMS MAY BE ENCOUNTERED ONLY ON FIXED DISKS LARGER THAN 1 GIGABYTE.

- A. NON-IML SYSTEMS WITH FIXED DISK "C" GREATER THAN 1 GIGABYTE, FORMATTED /S WITH THE EARLY VERSION SCSI ADAPTER WITH CACHE (OLD VERSION OF BIOS) WILL EXPERIENCE "UNABLE TO BOOT OPERATING SYSTEM" MESSAGE. THIS IS BECAUSE THE IBMBIO.COM AND IBMDOS.COM (HIDDEN FILES) ARE PLACED IN ABSOLUTE POSITIONS ON THE FIXED DISK, NOT RELATIVE. IF A BOOT FROM A DOS DISKETTE IS DONE, DRIVE "C" IS STILL ACCESSIBLE. A BACKUP OF THE FIXED DISK SHOULD BE DONE, THEN A LOW-LEVEL

PSY2 RETAIN TIPS

NEW VERSION OF SCSI ADAPTER WITH CACHE IS NOW AVAILABLE

FORMAT, FOLLOWED BY AN OPERATING SYSTEM FORMAT. THIS WILL REORGANIZE THE FIXED DISK WITH THE NEW VERSION BIOS ON THE THE NEW SCSI ADAPTER.

- B. FULL CAPACITY OF GREATER THAN 1 GIGABYTE WILL NOT BE ACCESSIBLE ON FIXED DISKS WHICH WERE ORIGINALLY ATTACHED TO THE OLD VERSION SCSI ADAPTER WITH CACHE UNTIL THE FIXED DISK IS OPERATING SYSTEM FORMATTED, (DOS, OS/2, ETC.) BY THE NEW VERSION ADAPTER (NEW BIOS CODE).

* NOVELL AND NETWARE ARE REGISTERED TRADEMARKS OF NOVELL INC.

SAS KEYWORDS:

PSY2	PS/2	PS2	PSY2ADPT
PSY2FDSK	D/T8550	D/T8555	D/T8560
D/T8565	D/T8570	D/T8580	D/T8590
D/T8595	D/T9557	D/T9556	D/T9577
PSY2SYSADPT	D/T9595	D/T9590	D/T9595A
D/T9585			

1.2.294 NEW 9552 FRUS FOR UPGRADE OPTIONS

Record number: H12326

Device: D/T9552
 Model: M
 Tip key: 014
 Date created: 093/06/04
 Date last altered: A95/10/25

The 9552 has two options that require FRU upgrades when they are installed. The options are the processor upgrade from 25MHz to 50MHz and the 240Mb / 340Mb fixed disk upgrade. When either of these options are installed a plugable module is replaced on the system board along with a new system board FRU number which is placed over the old FRU number. The 240Mb and 340Mb fixed disk option also comes with a new HDD door, FRU P/N53G9172. The new door is needed to allow for the longer fixed disk drive. It is identical from the outside, but spacers are removed on the inside to allow for the longer length of the drive. It replaces the existing door FRU P/N44G3777.

NOTE: When replacing a Fixed disk drive door on a 700 or 700C system the 720 door, FRU P/N53G9172, must be used, if a 240Mb or 340Mb fixed disk is installed.

NOTE

The Bios Rom part numbers listed in the matrix below can be used to identify the system board, if the sysbrd FRU label was not installed during an upgrade. These can not be ordered as FRUs. The Bios Rom module is located on the system board in a 3/4" by 5/8" plugable socket. If the system board fails because of the upgrade installation a system board FRU must be ordered.

The IBM ThinkPad 700/700C/720/720C Ref/Diagnostic Diskette must be at version 1.20 or later to support the 240Mb disk upgrade. The diskettes are available on DOS CSD, PCPROD and the NSC BBS.

The 486 processor upgrade option for the 700 and 700C 9552 systems upgrades the system speed from 25MHz to 50MHz. The option allows the customer to choose battery saver, 25MHz or 50MHz speeds. If the option is installed the new power management screen will look like this:

```
"AUTO(LONG BATTERY LIFE)"
|
v
"MAX(HIGH PERFORMANCE)"
|
v
"DOUBLE(50MHz)"
```

NOTE: Only systems with the upgrade will have "Double (50MHz)"

The following chart documents the correct system board and processor FRU based on model and options. To use this chart find the system model on the top line and the option in question under the "MODEL Speed" column. The vertical and horizontal intersection of these columns contains the appropriate option, FRU and BIOS part numbers. Note: Option part numbers and BIOS numbers can not be ordered as replacement parts. The FRU contains the correct BIOS level.

O/N=OPTION PART NUMBER

SYSTEM BOARD / PROCESSOR FRUS

MODEL Speed	700 25Mhz	700C 25Mhz	720 50Mhz	720C 50Mhz
NO OPTION				
SYSBRD FRU	P/N44G3780	P/N49G1975	P/N53G9204	P/N53G9205
PROC FRU	P/N44G3781	P/N44G3781	P/N54G1045	P/N54G1045
PROC UPGRD	O/N54G1032	O/N54G0935	N/A No Proc	N/A No Proc
SYSBRD FRU	P/N54G1046	P/N54G1047	Upgrade is	Upgrade is
BIOS ROM	59G3301	39G9998	available	available
50MHZ FRU	P/N54G1045	P/N54G1045	on the 720.	on the 720C
240 UPGRAD	O/N66G3219	O/N66G3220	O/N53G9263	O/N53G9275
SYSBRD FRU	P/N53G7822	P/N53G7823	P/N53G7826	P/N53G7827
BIOS ROM	59G3655	59G3656	59G3653	59G3654
PROC FRU	P/N44G3781	P/N44G3781	P/N54G1045	P/N54G1045

SYSTEM BOARD / PROCESSOR FRUS

MODEL Speed	700 25Mhz	700C 25Mhz	720 50Mhz	720C 50Mhz
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PSY2 RETAIN TIPS
NEW 9552 FRUS FOR UPGRADE OPTIONS

240MB & PROC UPGRD	O/N66G3221	O/N66G3222	N/A No Proc Upgrade is	N/A No Proc Upgrade is
SYSBRD	P/N53G7824	P/N53G7825	available	available
BIOS ROM	59G3657	59G3658	on the 720.	on the 720C
50MHZ PROC	P/N54G1045	P/N54G1045		
340 UPGRAD	O/N53G7858	O/N53G7859	O/N53G7856	O/N53G7857
SYSBRD FRU	P/N53G7822	P/N53G7823	P/N53G7826	P/N53G7827
BIOS ROM	59G3655	59G3656	59G3653	59G3654
PROC FRU	P/N44G3781	P/N44G3781	P/N54G1045	P/N54G1045
340MB & PROC UPGRD	O/N53G7860	O/N53G7861	N/A No Proc Upgrade is	N/A No Proc Upgrade is
SYSBRD	P/N53G7824	P/N53G7825	available	available
BIOS ROM	59G3657	59G3658	on the 720.	on the 720C
50MHZ PROC	P/N54G1045	P/N54G1045		

240MB HDD FRU P/N66G3200 (Requires 720 door P/N53G9172 on 700)
 340MB HDD FRU P/N53G7862 " " " " " "

SAS KEYWORDS:

PSY2	PSY2PROC	PSY2BRD	PSY2PART
MOD 300	301	30B	54G1047
54G1046	54G1045	REF DISKETTE	DIAGNOSTIC
REFERANCE	PLANAR	PSY2FDSK	

1.2.295 NE1000 ADAPTER FAILS IN 6381/SI

Record number: H124174

Device: D/T6381
Model: M
Tip key: 005
Date created: 094/06/06
Date last altered: A94/06/06

THE NE1000 COMMUNICATION ADAPTER FROM EAGLE TECHNOLOGIES MAY FAIL TO LOAD THE NE1000 AND NOVELL DEVICE DRIVERS INTERMITTENTLY WHEN INSTALLED IN A PS/VALUEPOINT 6381/SI SYSTEM.

INTERMITTENT FAILURES OF THE NE1000 ADAPTER MAY BE REDUCED BY THE FOLLOWING:

1. INSTALL THE NE1000 ADAPTER IN THE LOWEST SLOT ON THE 6381/SI RISER CARD.
2. USE THE LATEST DEVICE DRIVERS FROM NOVELL.

OR

3. REPLACE THE NE1000 CARD WITH THE LATEST LEVEL CARD FROM EAGLE TECHNOLOGIES. THE NE1000 ADAPTER WAS NOT TESTED AND IS NOT RECOMMENDED FOR USE IN PS/VALUEPOINT SYSTEMS. IBM HAS TESTED AND SUPPORTS THE USE OF THE NE2000 ADAPTER IN PS/VALUEPOINT SYSTEMS.

FOR THOSE CUSTOMERS THAT MUST USE THE NE1000 ADAPTER, INTERMITTENT FAILURES MAY STILL BE OBSERVED AFTER FOLLOWING THE ABOVE RECOMMENDATIONS.

SAS KEYWORDS:

PSVP	PSY2	PS/VP	6381
PSVPERR	PSY2ERR	PSVPADPT	PSY2ADPT
PSVPPART	PSY2PART	VALUEPOINT	PSVPOEM
PSY2OEM	PSVPCOMM	PSY2COMM	

NO ERROR MESSAGE IF KEYBOARD TEST FAILS IN QAPLUS/2

1.2.296 NO ERROR MESSAGE IF KEYBOARD TEST FAILS IN QAPLUS/2

Record number: H01609

Device: D/T6577
 Model: M
 Tip key: 005
 Date created: 096/06/19
 Date last altered: A96/06/19

When running the Keyboard Test in QAPLUS/2 on IBM PC 300 Series 6577 or 6587, the user is prompted to press keys to verify that the keyboard is functioning properly via a graphical interface on the display.

If the user presses a key and no response is indicated on the display, the QAPLUS/2 Keyboard Test does not give the user an opportunity to indicate that the test failed. The test will continue to function until the user exits the routine.

If the user suspects a keyboard hardware problem exists, the IBM Personal Computer Diagnostic diskette (QAPLUS/PRO) should be used to diagnose the failure. QAPLUS/PRO does ask the user at the end of the Keyboard Test whether the responses were correct.

The IBM PC 300/700 Diagnostic diskette (QAPLUS/PRO) is obtained by using the Diskette Factory included in the systems preloaded software.

QAPLUS/2 & QAPLUS/PRO are trademarks of Diagsoft, Inc.

SAS KEYWORDS:

PSY2	D/T65XX	6577	6587
IBMPC	PSVP	PSVPKBD	PSY2KBD
D/T6587	PC 350	PC350	PC300
PC 330	PC330	42527	PSVPDIAG
PSY2DIAG			

1.2.297 NO IBM LOGO & QAPLUS FAILS ON 64XX SYSTEMS

Record number: H125637

Device: D/T6484
 Model: M
 Tip key: 007
 Date created: 094/11/23
 Date last altered: A94/11/23

There are two versions of Flash BIOS released by IBM for the PS/ValuePoint 6472, 6482, 6484, 6492 and 6494 Performance Series systems, the IBM version and the OEM version. Both versions are functionally compatible with the Performance Series systems, however, the OEM version will prevent the IBM logo from being displayed during POST and prevent QAPlus diagnostics from functioning.

When attempting to run QAPlus, which is part of the Diskette Factory preloaded on certain models, the system returns an error which states that "This program must be run on a PS/ValuePoint system."

The OEM Flash BIOS is released by IBM for use on systems which are labeled with something other than the IBM logo. There were no IBM PS/ValuePoint Performance Series systems shipped with the OEM Flash BIOS. The OEM Flash BIOS update has been removed from the IBM PC Company BBS system and the IBM Internal "VALUE" disk.

The OEM versions can be identified by viewing the Configuration Utility Flash EPROM Revision Level. The OEM version will show the EPROM level to be "LDBT61AUS" (flash level 61A). The IBM version Flash update will display as "LDET61AUS" (61A).

The OEM version Flash BIOS update can be overwritten by the IBM version which will allow the IBM logo to appear and also allow QAPlus to be used.

QAPlus and QAPlus/WIN are trademarks of DiagSoft, Inc.

SAS KEYWORDS:

VALUE POINT	PS/VP	PSVP	D/T6472
D/T6482	D/T6492	D/T6494	PSVPPROG
PSY2PROG	PSY2DIAG	PSVPDIAG	PSY2MCD
PSY2	PSVPMCD	PSY2NLGO	PSVPNLGO
VALUEPOINT	VPP	EEPROM	QA PLUS

NO INDICATION OF LOW UPS BATTERY VOLTAGE

1.2.298 NO INDICATION OF LOW UPS BATTERY VOLTAGE

Record number: H006090

Device: D/T8600
 Model: M
 Tip key: 005
 Date created: 093/10/04
 Date last altered: A93/10/06

This condition occurs only on a 195/295 system running Novell Netware*, with a UPS (Uninterruptable Power Supply) attached via the mouse port and the UPS battery voltage is low. There is no obvious failure symptom unless the status of the UPS battery can be monitored by another device, such as a voltmeter or battery condition indicator.

Normally, a battery condition problem would be reported to the user by two warning messages from the software:

The first, indicates that AC input power to the UPS is missing or interrupted.

The second, indicates that the UPS batteries are almost discharged (exhausted).

The following configurations of Server 195 or 295 systems running Novell Netware are affected:

- A. 50mhz processor board revision level 24 or lower.
- b. 33mhz processor board revision level 39 or lower.

When this condition occurs, there are no adverse effects on the 8600 system itself and it functions normally in all other respects.

THIS TIP DOES NOT APPLY IF EITHER OF THE FOLLOWING ARE TRUE:

- 1. OS/2 is installed.
- 2. The UPS not installed via mouse port

If this condition is being experienced, and the processor board(s) are not at the referenced level, they should be replaced with the current FRU.

Note: If a processor board is replaced, ensure that the new processor firmware is "flashed" to the customer's current level.

The processor board FRU part numbers are:

50mhz FRU P/N92F0189
 33mhz FRU P/N92F0219

If the processor boards are at the current level, normal problem isolation procedures should be followed.

* Netware is a trademark of Novell Inc.

SAS KEYWORDS:

PSY2	295	PARALLAN	195
PSY2PWR	SERVER	NOVEL	NOVELLE

1.2.299 NO VIDEO ON NEW 8517 COLOR DISPLAYS

Record number: H083047

Device: D/T8517
Model: M
Tip key: 001
Date created: 092/10/28
Date last altered: A92/10/30

THE PS/2 8517 COLOR DISPLAY MAY EXHIBIT THE FOLLOWING SYMPTOMS WHEN POWERED ON AT THE TIME OF INSTALLATION, OR WITHIN A FEW DAYS AFTER THE INITIAL INSTALLATION:

POWER ON LED IS ILLUMINATED

*** AND ***

NO VISIBLE WHITE RASTER WHILE DISCONNECTED FROM THE SYSTEM UNIT

*** OR ***

DIAGNOSTICS FAIL TO PRODUCE A VIDEO IMAGE ON THE 8517 WHILE CONNECTED TO A FUNCTIONING SYSTEM UNIT.

PROBLEM ISOLATION AIDS:

REFER TO THE PERSONAL SYSTEM/2 8517 AND 9517 COLOR DISPLAYS HARDWARE MAINTENANCE SERVICE (HMS) PAMPHLET* AND PERFORM THE FOLLOWING SERVICE CHECKS:

- VISUAL CHECKS
- POWER CHECKS
- SELF TESTS
- BASIC FUNCTION CHECKS
- PATTERN CHECKS

THE ABOVE PROCEDURES SHOULD BE UTILIZED PRIOR TO ANY PARTS REPLACEMENT.

AFTER REPLACING EITHER THE VIDEO CARD, ANALOG CARD OR ITC ASSEMBLY, ALL GEOMETRY AND ALIGNMENT ADJUSTMENTS SHOULD BE MADE IN THE SEQUENCE GIVEN IN THE PS/2 8517 AND 9517 HMS.

***PUBLICATIONS:**

- PERSONAL SYSTEM/2 8517 AND 9517 COLOR DISPLAYS HARDWARE MAINTENANCE SERVICE (S41G-3308, CURRENT HMS DOCUMENT).
- PERSONAL SYSTEM/2 8517 COLOR DISPLAY HARDWARE MAINTENANCE SERVICE (S92F-3007, NO LONGER AVAILABLE, REPLACED BY PUBLICATION S41G-3308).
- ALIGNMENT PROCEDURES FOR A PS/2 8517 COLOR DISPLAY ATTACHED TO AN RS6000 7011/220 (S42G-0473).

SAS KEYWORDS:

PSY2 PSY2DISP

1.2.300 NON-IBM MODIFICATIONS, ALTERATIONS AND UPGRADES

Record number: H103163

Device: D/T8550
 Model: M
 Tip key: 139
 Date created: 092/10/19
 Date last altered: A95/07/20

System failures which are caused by non-supported modifications to IBM's basic product designs, such as "accelerators," "turbo" enhancements, non IBM BIOS, cable switching devices and other "after market" type products, including some processor upgrades, may be experienced on PC systems.

There are three basic types of accelerator options which may be encountered in the field:

1. The type that replaces the processor plugged into the planar board.

This type accelerator may, or may not, be physically different than the processor originally supplied with the system. Heat sinks (cooling fins) may be mounted on top of the processor chip covering the indentifying markings.

2. The type that plugs into a processor upgrade socket, in addition to the original processor on the system board, i.e., "Overdrive" socket, etc.

3. The type which plugs into a system I/O adapter slot.

This type uses the system architecture to "capture" the bus and may begin to execute code as if it were the planar (original) processor. There is no easy method of identification.

This type "accelerator" may execute code that was intended to operate on a processor that either has a different clock speed or uses a different number of wait states, or a different processor architecture.

The use of system configuration utilities could be useful to determine which type upgrade is installed.

These modifications and/or alterations may cause problems which could be intermittent and difficult to diagnose. The IBM diagnostics and configuration routines were designed to function on the original unmodified designs, or IBM supported modifications. IBM diagnostics may give erroneous results when run on systems with non-supported modifications.

I9990042, I9990044 and/or I9990045 errors indicating an incorrect reference disk are common symptoms. However, other symptoms, unknown at the time of this writing, may also occur. If a problem, as described above, is being experienced, the system should be returned to its original configuration for diagnosing failures. If the problem only manifests itself when the alteration is installed, no failure of the IBM hardware system is indicated.

Many upgrades currently available as after-market enhancements by various vendors will not work in various PC Company products. This is because they were never planned for or tested by IBM. BIOS and other firmware, required for proper operation, may not be available to support the function of the specific upgrade or "accelerator" in question.

Certain upgrades are marketed and supported by IBM. The information concerning these upgrades is available through normal IBM marketing sources.

In resolving these problems, the following information is useful and in some cases critical:

- A. IBM DOES NOT TEST, APPROVE, QUALIFY OR CERTIFY OTHER SUPPLIERS HARDWARE ALTERATIONS, BIOS DESIGNS OR ATTACHMENTS. IBM PC and PS/2 systems have undergone stringent testing for performance under environmental stress including: temperature, vibration, acoustic noise and Radio Frequency Interference (RFI). Some alterations (cable lengths, etc.), may alter system performance characteristics.

NON-IBM MODIFICATIONS, ALTERATIONS AND UPGRADES

The open architecture design means the interface specifications are made available to other suppliers, so they may manufacture and market their own designs. Each supplier is responsible for the correct function, performance, compatibility and compliance to existing performance criteria of their unique product.

- B. SOME SOFTWARE APPLICATIONS MAY FAIL TO PERFORM AS EXPECTED.
Some software is written to operate on specific hardware. An unsupported modification in the hardware may cause problems, which "appear" to be system hardware failures, due to the software being unable to properly function with the modification. Recently developed software, or revisions, may also be incompatible with earlier hardware designs.

In Summary: Problems which can be attributed to the addition of "accelerator boards, chips, non-IBM BIOS and other speed or performance enhancements," are the responsibility of the original hardware supplier.

- * BIOS (Basic Input-Output System):
BIOS is a layer of software which provides a consistent interface between the system hardware and the user application software and operating system. BIOS guarantees compatibility and flexibility of software across the hardware model line, by compensating for minor variations in hardware which may exist from system to system.

SAS KEYWORDS:

PSY2	PS2	PS/2	PSY2PROG
PSY2ERR	D/T8535	D/T8540	D/T8556
ZENIX	WINDOW	D/T8560	NOVELLE
D/T8570	D/T8565	D/T8580	D/T8590
D/T8595	D/T8555	NOVELLE	PSY2TAPE
D/T8590	D/T8595	D/T8555	D/T8573
PSY2TAPE	NOVEL	AB	A & B
D/T8525	D/T8530	D/T8557	INTEL
386	OEM	UPS	MOUSE
PSY2OEM	NON-IBM	9577	D/T9577
9576	D/T9576	CLONE	

1.2.301 NON-SUPPORTED MEMORY SIMMS FOR IBM PC 700

Record number: H095767

Device: D/T6875
 Model: M
 Tip key: 001
 Date created: 095/03/31
 Date last altered: A95/07/07

The IBM PC 700 series systems are designed to function with "Industry Standard" parity or non-parity memory SIMMS.

Below is a memory matrix of SIMMS that are not supported for use in PC 700 systems. The use of OEM brand SIMMS or IBM memory SIMMS that are listed below may result in memory related failures which appear as either software or hardware failures.

Reliable problem determination of suspected memory failures in the IBM PC 700 series systems can only be performed when utilizing supported memory SIMMS.

MEMORY UNAPPROVED FOR USE IN IBM PC 700 SYSTEMS

4 MB (NOT APPROVED)	ASM P/N	FRU P/N
-----	-----	-----
HYUNDAI, HY514400A J-70 (datecode before 9441)	74G1187	73G3233

8 MB (NOT APPROVED)	ASM P/N	FRU P/N
-----	-----	-----
TOSHIBA, (THM3620C0ASG-70 9432YAA Japan)	05H0910	92G7521
HITACHI, (HM514400BS7 HB56D 236BS-7B), REV "B"	05H0910	92G7521
HITACHI, (HB56D236BW-7BIB), REV "B"	05H0910	92G7521
BTV/TOR, PRODUCT CODES V6DX,V6DF,V6AX,V6DU,V6AY	05H0910	92G7521
HYUNDAI, 70ns, 1.25", 4.25" wide	74G1188	73G3234
TORONTO, KMM44C1003CJ-7,KM416C1200AJ-6	74G1188	73G3234
CELESTICA/TOR, "V6DX", 26H2364 PQ, IBM 9314	05H0910	92G7521
P11F05VF 014440J1E, IBM70 9314 P12S01N0PQ		
Raw Card 03H7646		

CELESTICA/TOR, 014400J2E IBM70 9314 N50I0F1PQ	05H0910	92G7521
Product Code "V6DU"		

16 MB (NOT Approved)	ASM P/N	FRU P/N
-----	-----	-----
TOSHIBA, (THM364020BSG-70)	57G8901	60G2950
HITACHI, HM5117400J7 9314, HM514100AS7 9321	57G8901	60G2950
HYUNDAI, (HYM536410MG-70BCQ HY514100AJ-70)	57G8901	60G2950

SAS KEYWORDS:

PSY2	PSVP	PSY2PART	PSVPPART
IBMPC	PC 700	PC 730	PC750
6885	6886	6876	D/T68XX
D/T6885	D/T6886	D/T6876	6875
PSVPMEM	PSY2MEM	4MB	8MB
16MB	32MB	68XX	UNSUPPORTED

NON-SUPPORTED MEMORY SIMMS FOR PC 300 SERIES

1.2.302 NON-SUPPORTED MEMORY SIMMS FOR PC 300 SERIES

Record number: H127538

Device: D/T6575
 Model: M
 Tip key: 001
 Date created: 095/05/24
 Date last altered: A95/10/26

The IBM PC 300 Series systems are designed to function with "Industry Standard" parity or non-parity memory SIMMS.

Below is a memory matrix of SIMMs that are not supported for use in PC 300 Series systems. The use of OEM brand SIMMS or IBM memory SIMMS that are listed below may result in memory related failures which appear as either software or hardware failures.

Reliable problem determination of suspected memory failures in the IBM PC 300 Pentium Series systems can only be performed when utilizing supported memory SIMMS.

MEMORY UNAPPROVED FOR USE IN IBM PC 300 PENTIUM SYSTEMS			
Capacity	Configuration	ASM P/N	FRU P/N
4 MB	(NOT APPROVED) PARITY		

	HYUNDAI, HY514400A J-70 (datecode before 9441)	74G1187	73G3233
4 MB	(NOT APPROVED) NON PARITY		

	TORONTO	05H0905	92G7540
8 MB	(NOT APPROVED) PARITY		

	TOSHIBA, (THM3620C0ASG-70 9432YAA Japan)	05H0910	92G7521
	HITACHI, (HM514400BS7 HB56D 236BS-7B), REV "B"	05H0910	92G7521
	HITACHI, (HB56D236BW-7BIB), REV "B"	05H0910	92G7521
	TORONTO, KMM44C1003CJ-7, KM416C1200AJ-6	74G1188	73G3234
8 MB	(NOT APPROVED) NON PARITY		

	BURLINGTON V3AT, V3AQ, V3AJ B14RH	05H0906	92G7542
16 MB	(NOT APPROVED) PARITY		

	TOSHIBA, (THM364020BSG-70)	57G8901	60G2950
	HITACHI, HM5117400J7 9314, HM514100AS7 9321	57G8901	60G2950
	HYUNDAI, (HYM536410MG-70BCQ HY514100AJ-70)	57G8901	60G2950

SAS KEYWORDS:

PSY2	PSVP	PSY2PART	PSVPPART
IBMPC	PC300	PC 330	PC350
6585	6575	D/T65XX	PSVPMEM
PSY2MEM	4MB	8MB	16MB
32MB	68XX	UNSUPPORTED	D/T6585

Record number: H123894

Device: D/T8550
 Model: MCP1
 Tip key: 200
 Date created: 094/05/12
 Date last altered: A94/05/12

When using the Norton Anti-Virus program, the IBM 5250 emulation Program files DP5250.COM and DE5250.COM show infection with the MTE VIRUS. This report, as generated by the NORTON/SYMANTEC anti-virus program has been found to be incorrect. As of May 11, 1994 the Symantec Virus Support Center has a CSD for their software.

SUGGESTED STEPS for PROBLEM RESOLUTION

Have the customer Call Symantec Support at
 503 - 465 - 8420 (virus line).

--- They will confirm the following information: ---

- 1) Version 3.0 is their latest Virus Protection program.
- 2) A CSD is available to resolve this problem.
- 3) They have never found a verified virus in any IBM 5250 emulation program.

The Support queue for 5250 Emulation is 36WSEM L153

SAS KEYWORDS:

DP5250	DE5250	DP5250.COM	DE5250.COM
NORTON	VIRUS	SYMANTEC	EMULATION
MTE	MTE VIRUS	DW5250	DW5250.COM
ANTI VIRUS	ANTI-VIRUS	5250	PSY2SYSMISC
PSVPSYSMISC			

1.2.304 NORTON UTILITIES RELEASE 6.01

Record number: H093075

Device: D/T8550
Model: M
Tip key: 094
Date created: 091/10/01
Date last altered: A91/10/01

NORTON UTILITIES RELEASE 6.01 HAS BEEN PLACED INTO MECHANICSBURG STOCK. THE P/N FOR NEW USERS OF THE UTILITY IS P/N74F9651. FOR CE'S WHO ALREADY ARE USING RELEASE 5.0 THE P/N TO UPGRADE TO 6.01 IS P/N74F9654. PLEASE RETURN THE LICENSE REGISTRATION CARD TO SYMANTEC WHEN YOU HAVE RECEIVED A COPY OF NORTON UTILITIES. THIS REGISTRATION ENTITLES YOU TO TECHNICAL SUPPORT FROM SYMANTEC. THE SUPPORT PHONE NUMBER IS IN THE DOCUMENTATION. RELEASE 5.0 WILL NO LONGER BE AVAILABLE FROM MECHANICSBURG BUT TECHNICAL SUPPORT WILL STILL BE AVAILABLE FROM SYMANTEC. THE ATLANTA INDUSTRY SYSTEMS SUPPORT CENTER WILL ALSO PROVIDE ASSISTANCE ON NORTON UTILITIES.

THE NEW RELEASE INCLUDES SUPPORT FOR THE 2.88MB DISKETTE DRIVES, CAPABILITY OF HANDLING MORE DIRECTORIES AND FILES ASSOCIATED WITH LARGER DASD, AND INCREASED SPEED IN DEFRAGMENTATION OF DASD FILES. ALTHOUGH THE UTILITY CONTAINS NUMEROUS SYSTEM AIDS, IT IS RECOMMENDED THAT CE'S USE ONLY THE FOLLOWING TOOLS AS A SUPPLEMENT TO THE IBM DIAGNOSTIC PACKAGE.

- . NORTON DISK DOCTOR
- . CALIBRATE
- . SPEED DISK
- . UNERASE
- . UNFORMAT
- . SYSTEM INFORMATION

THESE TOOLS STAYED FUNCTIONALLY THE SAME BETWEEN RELEASE 5.0 AND 6.01.

THERE WILL BE A BRANCH OFFICE EDUCATION COURSE AVAILABLE (COURSE CODE 87017) ON LSI DURING NOVEMBER, 1991. THE NEW COURSE WILL PROVIDE GUIDANCE FOR CE USE OF NORTON UTILITIES AND HELP THE CE MAKE A BOOTABLE DISKETTE WITH THE RECOMMENDED TOOLS.

SAS KEYWORDS:

PSY2 PSY2TOOL

1.2.305 NUMBER 9 VIDEO CONFIGURATION AND FIXES IN OS/2 WARP

Record number: H161504

Device: D/T6898
 Model: M
 Tip key: 002
 Date created: 097/10/21
 Date last altered: A97/10/21

The following are suggested fixes for errors encountered when configuring the Number 9 video driver in OS/2 Warp on the IBM IntelliStation M-Pro, machine type 6898.

1. OS/2 Desktop becomes unreadable with Warp Server and SMP.

After installing Warp Server SMP and the Number 9 video driver, the OS/2 Desktop is unreadable after the system is shut down and restarted. This applies to systems equipped with two Pentium II processors. To correct the condition, download and install the current OS/2 Warp Service Pack.

2. WIN-OS/2 session fails to open.

After changing the desktop resolution, a full-screen WIN-OS/2 session fails to open. This is an intermittent error. Subsequent closing and opening of full-screen WIN-OS/2 sessions occur normally. To correct the condition, download and install the current OS/2 Warp Service Pack.

The current OS/2 Warp Service Pack may be obtained via the Internet from the OS/2 Warp Download Library at the following URL: www.software.ibm.com/os/warp/downloads

SAS KEYWORDS:

PSY2	PSY2ERR	PSY2OPER	PSY2OEM
PSVP	PSVPERR	PSVPOPER	PSVPOEM
NUMBER9	FIXPACK	D/T6898	6898
75322	77137	UNCLASSIFIED	

1.2.306 ODORS FROM IBM EQUIPMENT

Record number: H015718

Device: D/T3191
 Model: M
 Tip key: 016
 Date created: 092/07/02
 Date last altered: A93/05/03

1. Health Effects Hotline

It is important to treat customer concerns regarding odors in areas near IBM equipment with sensitivity. Unresponsive or insensitive behavior on the part of field personnel has the potential to provoke needless customer dissatisfaction and complaints, as well as to impair IBM's reputation.

When odors thought or alleged to be coming from IBM equipment generate customer concerns that include reports of headaches, nausea, skin-nose-throat irritation, or other health complaints, you should promptly notify the IBM Health Effects Hotline, (303-924-5621 or tieline 263-5621). IBM has qualified people answering this hotline who are ready and able to help you understand and deal with any health-effects issues.

2. Background

Some odors are common to most electronic equipment and generally come from the circuit boards and plastics used. These odors are usually more noticeable when the equipment is new, but none of the odors in IBM equipment are present in quantities that exceed any regulatory or consensus standards, nor are they found in amounts known to cause any adverse long-term health effects.

3. Ventilation

To avoid customer concern, you should recommend to your customers that new electronic equipment be used only in a well ventilated areas. For office environments, the American Society of Heating, Refrigerating and Air-Conditioning (ASHRAE), in its standard 62-1989, recommends that indoor air contain a minimum of 20 cubic feet of outdoor air per person, per minute. Other environments may require a different amount of outdoor air per person.

SAS KEYWORDS:

D/T3161	3161	D/T3163	3163
D/T3196	3196	AROMA	NAUSEA
NAUSEOUS	NAUSEATED	ODORS	ODOROUS
ODORIFEROUS	SMELL	SMELLY	SMELLING
STINK	TOXIC	ODOR	D/T8512
PSY2	D/T8503	D/T8504	D/T8511
D/T8513	D/T8514	D/T8515	D/T8516
D/T8517	D/T8518	D/T8550	PSY2DISP
D/T4216	D/T4019	D/T4029	D/T4028
SAFETY			

1.2.307 OEM "TDS PC MIS ADAPTER" INCOMPATIBLE WITH 6384

Record number: H023895

Device: D/T6384
Model: M
Tip key: 021
Date created: 093/04/03
Date last altered: A93/04/03

THE "TDS HEALTHCARE PC MIS NETWORK ADAPTER" IS INCOMPATIBLE WITH ALL MODELS OF PS/VALUEPOINT SYSTEMS. THIS ADAPTER WILL FAIL TO OPERATE IN ALL VALUEPOINT MODELS DUE TO THE BUS SPEED OF THE 6384 SYSTEMS.

EACH CUSTOMER ACCOUNT THAT USES THE TDS ADAPTER HAS AN ACCOUNT MANAGER THAT REPRESENTS THE TDS COMPANY. CUSTOMERS THAT HAVE PURCHASED THE TDS HEALTHCARE PC MIS NETWORK ADAPTER SHOULD CONTACT THE TDS COMPANY VIA THEIR TDS ACCOUNT MANAGER.

SAS KEYWORDS:

PSVP	VALUE POINT	PSVPOEM	PSVPCOMM
PSVPADPT	PSY2OEM	PSY2COMM	PSY2ADPT
PSY2MISC	PSVPMISC	PSY2ERR	PSVPERR
PSY2			

1.2.308 OEM ADAPTER COMPATIBILITY IN VALUEPOINT

Record number: H121946

Device: D/T6384
 Model: M
 Tip key: 041
 Date created: 093/11/16
 Date last altered: A94/05/18

OEM ADAPTERS THAT ARE DESIGNED FOR A SYNCHRONOUS BUS MAY FAIL TO FUNCTION OR GIVE INTERMITTENT ERRORS WHEN INSTALLED IN A VALUEPOINT SYSTEM. SOME OF THESE ADAPTERS CONTAIN A JUMPER OR SWITCH TO PROVIDE FOR OPERATING IN EITHER A SYNCHRONOUS OR ASYNCHRONOUS (NON-SYNCHRONOUS) MODE. SET THIS JUMPER OR SWITCH IN THE ASYNCHRONOUS POSITION FOR OPERATION IN VALUEPOINT SYSTEMS.

SOME OEM ADAPTERS HAVE A SWITCH OR JUMPER FOR BUS SPEED. THIS SWITCH OR JUMPER MUST BE SET FOR "NORMAL AT BUS TIMING."

WHEN AN OEM ADAPTER CAN BE CONFIGURED FOR "EDGE TRIGGERED" OR "LEVEL SENSITIVE" INTERRUPTS, SET THE ADAPTER FOR "EDGE TRIGGERED."

FOR ADDITIONAL INFORMATION ON ADAPTER CONFIGURATION, REFER TO THE DOCUMENTATION PROVIDED BY THE MANUFACTURER.

SAS KEYWORDS:

PSVP	MADGE	PS/VP	THOMAS CONRAD
VALUE POINT	UNGERMANN-BASS	PSY2ADPT	PSY2COMM
UNGERMANN BASS	PSVPADPT	PSVPCOMM	UNGERMAN
CABLETRON	CABLETRON T2015	MADGE	3C0M
3 - COM			

OEM DEVICE TYPES AND PRODUCT DESCRIPTIONS

1.2.309 OEM DEVICE TYPES AND PRODUCT DESCRIPTIONS

Record number: H026056

Device: D/T5150
 Model: M
 Tip key: 126
 Date created: 088/03/08
 Date last altered: A93/12/30

THE FOLLOWING IS A LIST OF IBM NON-LOGO DEVICE TYPE AND PRODUCT DESCRIPTIONS. TDR'S WILL BE MAINTAINED ON EACH OF THE FOLLOWING DEVICE TYPES. SAS KEYWORDS USED ARE THE SAME TYPE KEYWORDS FOR PC'S. THE KEYWORD "POEM" WILL BE USED IN ALL OEM TDR'S. DEVICE TYPE PRODUCTS ASSIGNED

D/T1503 ----- DISKETTE DRIVES-EXTERNAL
 D/T1504 ----- EXT. OTHER COMMUNICATIONS
 D/T1507 ----- HARDFILES-EXTERNAL
 D/T1508 ----- PRINTER SHARING DEVICE TYPES
 D/T1509 ----- KEYBOARDS
 D/T1513 ----- DISPLAYS-MONO
 D/T1514 ----- PRINTERS, LETTER QUALITY
 D/T1515 ----- PRINTERS, NEAR LETTER QUAL
 D/T1516 ----- PLOTTERS
 D/T1517 ----- DISPLAYS-COLOR
 D/T1537 ----- OTHER HAYES EXTERNAL MODEMS
 - SEE 1539 EXCEPTIONS -
 D/T1539 ----- MODEMS-EXTERNAL
 D/T1543 ----- OTHER HP THINKJET PRINTERS
 - SEE 1514 EXCEPTIONS -
 D/T1545 ----- UNIVERSAL POWER SUPPLIES
 D/T1546 ----- TAPE DRIVES-EXTERNAL
 D/T1547 ----- LASER DRIVES-EXTERNAL
 D/T1548 ----- OPTICAL CHARACTER READERS
 D/T1549 ----- MISC. DEVICES (MOUSE, CHASI
 DIGITIZERS, JOYSTICKS, ETC.)
 D/T1550----- OTHER NEC PRINTERS
 - SEE 1514,1515 EXCEPTIONS -
 D/T1551----- OTHER EPSON PRINTERS
 - SEE 1514,1515 EXCEPTIONS -
 D/T1552----- OTHER OKIDATA PRINTERS
 - SEE 1514,1515 EXCEPTIONS -
 D/T1556----- OTHER AMDEK MONO DISPLAY
 - SEE 1513 EXCEPTIONS -
 D/T1560----- OTHER EXT TECMAR TAPE DRIVE
 - SEE 1546 EXCEPTIONS -
 D/T1561----- OTHER EXT TECMAR TAPE DRIVE
 - SEE 1546 EXCEPTIONS -
 D/T1575----- OTHER EXT HAYES MODEMS
 - SEE 1539 EXCEPTIONS -
 D/T1580----- OTHER AMDEK MONO DISPLAY
 - SEE 1513 EXCEPTIONS -
 D/T1586----- OTHER MONITHERM MONO DISPLAY
 - SEE 1513 EXCEPTIONS -
 OEM FEATURES----- SEE TDR #'S - H003936 &
 H003708

SAS KEYWORDS:

5150SYSOEM	8550SYSOEM	PSY2OEM	PCOMOEM
POEM	OEMMISC	PSY2MISC	PCOMMISC
OEMPART	PCOEM	PARTNUMBERS	OEMPARTNUMBERS

1.2.310 OEM SUPPLIED MEMORY IN 8595

Record number: H097217

Device: D/T8595
Model: M
Tip key: 008
Date created: 092/04/09
Date last altered: A92/04/13

The 8595 may contain 2MB Memory-Module Kits that are not identified with a IBM FRU part number.

If the 2MB Memory-Module Kits are identified with a part number of 71F7008 or 87F5041, they were manufactured for IBM by a vendor.

If a replacement is required, FRU P/N92F0102, should be ordered through normal channels.

Current inventory in Mechanicsburg is identified with the correct FRU part number.

SAS KEYWORDS:

PSY2 PSY2MEM 8595SYSTEM PSY2OEM
TOSHIBIA

1.2.311 OEM VIDEO ADAPTERS FAIL ON 6384 SYSTEMS

Record number: H001538

Device: D/T6384
 Model: M
 Tip key: 001
 Date created: 092/10/21
 Date last altered: A92/12/04

SOME OEM VIDEO ADAPTER VENDORS HAVE ELECTED TO USE A NON-SUPPORTED CONNECTION ON THE 6384 SYSTEM BOARD. THESE ADAPTERS MAY NOT FUNCTION PROPERLY IF THEY ARE CONNECTED TO SYSTEM BOARD CONNECTOR J15 ON ANY MODEL OF THE PS/VALUEPOINT 6384 PRODUCTS. FAILURE SYMPTOMS ON THE ATTACHED DISPLAY COULD RANGE FROM THE LACK OF ANY VIDEO IMAGE TO DISTORTED VIDEO IMAGES.

ALL MODELS OF THE 6384 PRODUCTS CONTAIN A SET OF PINS LOCATED ALONG THE EDGE OF THE SYSTEM BOARD, NEAR THE SVGA PORT, IN POSITION J15. THE PIN ASSIGNMENT OF THIS CONNECTOR IS NOT CONSISTENT ACROSS ALL MODELS OF THE 6384, AND DOES NOT PROVIDE AN IBM SUPPORTED FUNCTION TO THE 6384 SYSTEM.

SERVICERS ATTEMPTING TO DIAGNOSE SYSTEM FAILURES ASSOCIATED WITH ADAPTERS USING THESE PINS SHOULD DISCONNECT THE ADAPTER AND CABLE, AND PERFORM SYSTEM DIAGNOSTICS USING THE SVGA PORT.

CUSTOMERS USING THE J15 PINS FOR ANY PURPOSE SHOULD BE ADVISED THAT THERE IS NO SUPPORT PROVIDED BY IBM FOR THE USE OF THESE PINS. CUSTOMERS WITH VIDEO ADAPTERS THAT USE J15 SHOULD BE DIRECTED BACK TO THEIR POINT OF SALE FOR ADAPTER COMPATIBILITY VERIFICATION AND PROBLEM DETERMINATION.

SAS KEYWORDS:

PSY2	VALUE	PSY2BRD	PSY2DISP
VALUEPOINT	VALUE POINT	D/T6312	D/T6314
D/T6319	PSVP	PSVPBRD	PSVPDISP

OEM VIDEO ADAPTERS FAIL IN SECONDARY PCI SLOTS

1.2.312 OEM VIDEO ADAPTERS FAIL IN SECONDARY PCI SLOTS

Record number: H136887

Device: D/T6899
 Model: M
 Tip key: 002
 Date created: 097/03/18
 Date last altered: A97/06/06

Several OEM video adapters have failed to function in the secondary PCI slots of the IBM IntelliStation Z Pro 6899 and the PC Server 315 (8638-Pxx, Kxx).

The secondary PCI slots are labelled on the riser card as:
 PCI Slot 3
 PCI Slot 4
 PCI Slot 5

The remaining PCI slots are considered Primary PCI slots.

OEM video adapters that have exhibited failures are as follows:

- Diamond Stealth 3D 2000
 (functions in VGA mode only in the secondary PCI slots)
- Number Nine Reality 332
 (functions in VGA mode only in the secondary PCI slots)
- ATI Graphics Pro Turbo
- ATI 3D Xpression

Customers requiring the use of any of the adapters listed above should either use a Primary PCI slot or contact the manufacturer and/or point of purchase for the adapter for additional information.

Number Nine Reality 332 is a trademark of Number Nine Visual Technologies, Inc.

Diamond Stealth 3D 2000 is a trademark of Diamond Computer Systems.

ATI Graphics Pro Turbo is a trademark of ATI Technologies, Inc.

ATI 3D Xpression is a trademark of ATI Technologies, Inc.

SAS KEYWORDS:

PSVP	PSY2	IBMPC	PSY2OEM
PSVPOEM	PSVPADPT	PSY2ADPT	PSY2DISP
PSVPDISP	UNCLASSIFIED	60050	PWS
61511	D/T8638		

1.2.313 OEM VIDEO CAPTURE ADAPTER FAILS IN 6381/SI

Record number: H124683

Device: D/T6381
 Model: M
 Tip key: 006
 Date created: 094/07/20
 Date last altered: A94/07/20

PS/ValuePoint 6381/Si 433DX and 466DX2 systems may fail with a blank display or incorrect colors with a Video Logic DVA-4000 adapter or a Creative Labs VideoBlaster adapter installed.

The Tseng ET4000/W32 graphics controller which is integrated into the system board is incompatible with these adapters. The Tseng ET4000/W32 graphics controller is a local bus device and does not shadow local bus video data onto the ISA bus.

Customers that require the use of these video capture adapters in the 6381/Si should use a video adapter card instead of the system board video connector. The video adapter card used should have a feature connector for attaching the Video Logic or VideoBlaster cards.

The 6381/Si 425SX and 433SX models are not affected. These systems use the Cirrus video chipset.

SAS KEYWORDS:

PSVP	PSY2	PS/VP	6381
PSVPADPT	PSY2ADPT	VALUEPOINT	PSVPOEM
PSY2OEM	PSVPDISP	PSY2DISP	

1.2.314 OKIDATA ML-320 & ML-321 STOPS PRINTING OR WON'T RUN

Record number: H082053

Device: D/T1515
Model: M
Tip key: 029
Date created: 091/05/09
Date last altered: A96/02/05

IF A OKIDATA ML-320 & ML-321 STARTS PRINTING UNIDIRECTIONAL AND THEN STOPS PRINTING AND THE MENU LIGHT STARTS FLASHING IT IS OVERHEATED. THIS IS A FEATURE DESIGNED TO PROTECT THE PRINthead. THIS USuALLY OCCURS WHILE THE PRINTER IS RUNNING A LONG PRINT JOB. WHEN THE PRINthead REACHES A CERTAIN TEMPeRATURE IT WILL SWITCH TO UNIDIRECTIONAL PRINTING TO ALLOW IT TO COOL. IF THE TEMPeRATURE CONTINUES TO RISE, IT WILL STOP UNTIL IT HAS COOLED DOWN; THEN IT WILL RESUME PRINTING.

SAS KEYWORDS:

5150SYSPART	8550SYSPART	PSY2PART	POEM
OEMPART	OEMPRT	OEMPRINTER	OKIDATA
OKIDATAML320	OKIDATAML321	OKIML320	OKIML321
ML320	ML321	ML-320	

1.2.315 OKIDATA PRINTER COMPATIBILITY TESTS

Record number: H027379

Device: D/T1515
 Model: M
 Tip key: 003
 Date created: 088/05/24
 Date last altered: A90/11/19

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 MICROLINE 292/293/294 PAGE 9 (+7)
 MICROLINE 320/321 PAGE 10 (+8)

OKIDATA PRINTERS ARE VERY POPULAR OEM PRINTERS AND ARE USED BY A SIGNIFICANT NUMBER OF IBM PC AND PS/2 CUSTOMERS. THE OKIDATA PRINTERS ARE AVAILABLE IN TWO DIFFERENT VERSIONS OF SOFTWARE COMPATIBILITIES. THE FIRST IS OKIDATA'S OWN VERSION WHICH THEY CALL "MICROLINE" OR SOMETIMES "STANDARD". THE OTHER IS KNOWN AS THE "IBM". EACH VERSION HAS ITS OWN UNIQUE COMMAND LANGUAGE, WHICH MEANS IT CAN ONLY BE USED BY SOFTWARE THAT RECOGNIZES THIS LANGUAGE.

IF THE SOFTWARE IS A COMMERCIALY AVAILABLE PACKAGE, SUCH AS LOTUS 1 - 2 - 3 OR IBM'S ASSISTANT SERIES, THEN THE USER CAN CHOOSE WHICH VERSION THEY WANT TO USE. THIS IS SIMPLY DONE BY CHANGING THE PRINTER OPTIONS WITHIN THE SOFTWARE PACKAGE (USUALLY FROM A SELECTION MENU OF THE MOST POPULAR PRINTERS). IF THE CUSTOMER IS USING A CUSTOM SOFTWARE APPLICATION, THEN IT IS IMPOSSIBLE TO CHANGE THE CHOICE OF VERSIONS.

IN ADDITION TO THE SOFTWARE COMPATIBILITY, THESE OKIDATA PRINTERS ARE AVAILABLE WITH EITHER A PARALLEL OR SERIAL INTERFACE, OR BOTH, IF IT IS A LARGER HIGH-FUNCTION MODEL. THEREFORE, ONE OKIDATA PRINTER MODEL MAY HAVE FOUR DIFFERENT IBM PART NUMBERS

ON-LINE TESTING

FOLLOWING ARE SPECIFIC INSTRUCTIONS FOR PERFORMING ON-LINE TESTS FOR ALL OKIDATA PRINTERS. THESE TESTS CLEARLY INDICATE WHETHER THE PRINTER IS MICROLINE OR IBM COMPATIBLE.

MICROLINE 84 - 2

IF YOU ARE SERVICING A MICROLINE 84-2 PRINTER, YOU MUST DETERMINE WHETHER IT IS A STANDARD OR IBM COMPATIBLE:

- BEFORE POWERING ON THE PRINTER, SET THE YELLOW FORMS DIAL TO "0".
- PRESS AND HOLD THE LINE FEED BUTTON WHILE POWERING ON. AFTER THREE SECONDS RELEASE THE BUTTON.
- THE PRINTER WILL PRINT THE SELF TEST. IF THE SELF TEST RUNS THE CHARACTERS STRAIGHT ACROSS THE PAGE, IT IS AN IBM COMPATIBLE, IF THE TEST LEAVES A WHITE GAP IN THE MIDDLE OF THE PAGE, STANDARD.

MICROLINE 92/93

IF YOU ARE SERVICING A MICROLINE 92/93 PRINTER, YOU MUST DETERMINE WHETHER IT IS A STANDARD, IBM, OR APPLE COMPATIBLE:

- PRESS AND HOLD THE LINE FEED BUTTON WHILE POWERING ON. AFTER THREE SECONDS, RELEASE THE BUTTON.
- THE PRINTER WILL PRINT THE SELF TEST. THE FIRST LINE OF THE TEST IS THE REVISION NUMBER OF THE PRINTER. ONCE THE LINE IS PRINTED POWER OFF THE PRINTER. IF THE TEST PRINTS REV. 3, 4, OR 5, IT IS A STANDARD PRINTER. IF IT PRINTS REV. 1, 2 OR 2.1, IT IS EITHER AN IBM OR APPLE COMPATIBLE. USE THE FOLLOWING PROCEDURE TO DETERMINE WHICH:
 - PRESS AND HOLD THE FF BUTTON WHILE POWERING ON. RELEASE THE BUTTON.
 - USE THE FOLLOWING BASIC PROGRAM TO DETERMINE IF THE PROCEDURE PRINTS THE DATA IT RECEIVES IN CORRESPONDENCE QUALITY. IF YOUR PRINTOUT IS CORRESPONDENCE QUALITY, IT IS AN IBM COMPATIBLE. IF NOT, IT IS AN APPLE COMPATIBLE PRINTER.
- IBM COMPATIBLE:


```
10 LPRINT "THIS IS A TEST OF THE MICROLINE 92/93 PRINTER"
RUN
```
- APPLE COMPATIBLE:


```
10 PR#1
20 PRINT "THIS IS A TEST OF THE MICROLINE 92/93 PRINTER"
30 PR#0
```


MICROLINE 182/183

IF YOU ARE SERVICING A MICROLINE 182/183 PRINTER, YOU MUST DETERMINE WHETHER IT IS A STANDARD OR IBM COMPATIBLE:

- USE THE FOLLOWING BASIC PROGRAM TO DETERMINE IF THE PRINTER THE DATA IT RECEIVES IN CONDENSED PRINT. IF THE PRINTOUT IS CONDENSED, IT IS AN IBM COMPATIBLE. IF NOT, IT IS A STANDARD COMPATIBLE PRINTER.
- IBM COMPATIBLE:
10 LPRINT CHR\$(15)
20 LPRINT "THIS IS A TEST OF THE MICROLINE 182/183 PRINTER"
RUN

MICROLINE 192/193

IF YOU ARE SERVICING A MICROLINE 192/193 PRINTER, YOU MUST DETERMINE WHETHER IT IS A STANDARD, IBM OR APPLE COMPATIBLE:

- PRESS AND HOLD THE FORM FEED BUTTON WHILE POWERING ON. RELEASE THE BUTTON. THE PRINTER WILL PRINT THE WORDS MENU
- NOW PRESS THE SELECT BUTTON ONCE. THE CURRENT PRINT MENU BE PRINTED WITH THE VALUES OF ALL THE MENU OPTIONS LISTED. THE TOF BUTTON ONCE. THE WORDS MENU END WILL PRINT.
- LOOK FOR THE OPTION "PROP SP". IF THIS OPTION IS NOT LISTED IT IS AN APPLE COMPATIBLE PRINTER. TO DETERMINE IF IT IS STANDARD OR IBM, FOLLOW THE PROCEDURE BELOW:
- LOOK FOR THE OPTION "APA-7/8". IF THIS OPTION IS NOT LISTED IT IS AN IBM COMPATIBLE. IF IT IS LISTED, IT IS A STANDARD COMPATIBLE.

MICROLINE 192/193 PLUS

IF YOU ARE SERVICING A MICROLINE 192/193 PLUS PRINTER, YOU MUST DETERMINE WHETHER IT IS A STANDARD OR IBM COMPATIBLE:

- PRESS AND HOLD THE FORM FEED BUTTON WHILE POWERING ON. RELEASE THE BUTTON. THE PRINTER WILL PRINT THE WORDS MENU
- NOW PRESS THE SELECT BUTTON ONCE. THE CURRENT PRINT MENU PRINTED WITH THE VALUES OF ALL THE MENU OPTIONS LISTED. NOW THE TOF BUTTON ONCE. THE WORDS MENU END WILL PRINT.
- LOOK FOR THE OPTION "COMPATIBILITY". IF IT IS LISTED, IT IS IBM COMPATIBLE. IF IT IS NOT LISTED, IT IS A STANDARD COMPATIBLE.

MICROLINE 292/293/294

IF YOU ARE SERVICING A MICROLINE 292/293/294 PRINTER, YOU MUST DETERMINE WHETHER IT IS A STANDARD OR IBM COMPATIBLE:

- PRESS AND HOLD THE LINE FEED BUTTON WHILE POWERING ON. AFTER THREE SECONDS, RELEASE THE BUTTON.
- THE PRINTER WILL PRINT THE SELF TEST. THE FIRST LINE OF THE TEST WILL PRINT THE MODEL NUMBER FOLLOWED BY THE VERSION IN STD (FOR STANDARD). ONCE THE FIRST LINE HAS PRINTED, PRESS SELECT BUTTON TO STOP THE TEST.

MICROLINE 320/321

IF YOU ARE SERVICING A MICROLINE 320/321 PRINTER, YOU MUST DETERMINE WHETHER IT IS A STANDARD OR IBM COMPATIBLE:

- PRESS AND HOLD THE LINE FEED BUTTON WHILE POWERING ON. AFTER THREE SECONDS, RELEASE THE BUTTON.
- THE PRINTER WILL PRINT THE SELF TEST. THE FIRST LINE OF THE THE PRINTER MODEL, EMULATION, I.E., EI = EPSON/IBM AND ML STANDARD VERSION AND REVISION NUMBER.
- PRESS THE MODE BUTTON TO STOP THE TEST.

SAS KEYWORDS:

POEM	PSY2OEMALL	PCOMOEM	OEMPRT
OEMPART	OKIDATA	OKITEST	ONLINETESTS
PRINTER	OEMPRINTER		

ON-OFF SWITCH CHANGING TO WHITE COLOR

1.2.316 ON-OFF SWITCH CHANGING TO WHITE COLOR

Record number: H03297

Device: D/T8560
 Model: M
 Tip key: 003
 Date created: 088/05/13
 Date last altered: A93/09/01

TO CONFORM TO INTERNATIONAL SAFETY REGULATIONS THE COLOR OF THE ON-OFF MAIN POWER SWITCH ON MANY IBM PC AND RELATED SYSTEM UNITS, DISPLAYS AND PRINTERS WILL BE CHANGED FROM RED TO WHITE. THIS CHANGE WILL BE PHASED IN BY MANUFACTURING DURING 1988. SOME FRU STOCK WILL ALSO BE CHANGED.

SAS KEYWORDS:

PCOM	PSY2	PSY2PWR	PSY2MISC
PCOMPWR	PCOMMISC	D/T8525	D/T8530
D/T8535	D/T8540	D/T8543	D/T8551
D/T8554	D/T8550	D/T8555	D/T8556
D/T8557	D/T8573	D/T8560	D/T8565
D/T8570	D/T9576	D/T8580	D/T8590
D/T8595	D/T9585	D/T9577	D/T9556
D/T9557	D/T9595	D/T9533	D/T8503
D/T8504	D/T8506	D/T8507	D/T8508
D/T8517	D/T8518	D/T8511	D/T8513
D/T8515	D/T8516	D/T9515	D/T9517
D/T9518	D/T9524	D/T9525	D/T9507
D/T6312	D/T6314	D/T6317	D/T6319
D/T6324	D/T6325		

1.2.317 OPTICAL DRIVE DUST CONTAMINATION (CLEANING)

Record number: H127072

Device: D/T9595
 Model: M
 Tip key: 022
 Date created: 095/04/07
 Date last altered: A95/06/06

Engineering failure analysis on returned 3.5" IBM Rewritable Optical Drives, FRU P/N92F0167, (Option No.s 6450162 & 6451295) have shown considerable particle contamination (dust, smoke, etc.) interfering with the optical path of the drives laser, effecting the drives ability to read and write to the Optical disk. These problems are primarily associated with systems installed in the following environments:

- Directly on carpeted or tiled floors in high traffic areas (the amount of dust near the floor is much greater than on a desktop or table).
- Offices where cigarette smoke is present.
- Non-air conditioned offices.

These problems may appear as:

- Optical disk cannot be accessed ("Drive Not Ready" message)
- Information on Optical disks cannot be read.
- "Write failure" messages returned by the operating system.

Optical Disk Corruption

In some extreme cases, previously written data on Optical disks can be corrupted. This corruption can appear as:

- Lost clusters
- Lost files
- Disk Format error
- Missing or Incomplete directories/sub-directories
- "Sector not found" or "Track 0 error" messages

IBM has developed a new set of device driver software (OPTICAL.SYS ver. 2.1 for OS/2 and IBMRWOPT.SYS ver. 2.1 for DOS) that will prevent disk corruption. Customers may download these files from the IBM PC Company Bulletin Board System at 919 - 517-0001. Both files are contained in a file, on the BBS, identified as OPTICAL.DSK. The device driver will detect conditions that may cause disk corruption and fail the "WRITE" command in process and any future WRITE commands until another disk is inserted.

```

=
= THESE FILES ARE CUSTOMER INSTALLABLE. CUSTOMERS
= SHOULD BE ADVISED TO CONTACT THE PC COMPANY HELPCENTER AT
= 800-772 - 2227 IF ASSISTANCE IS REQUIRED IN GETTING OR USING
= THE APPROPRIATE FILES.
=
=

```

Contaminated Drive Check

A simple way to test for dust contamination is to check for excessive drive calibration. This is done in the following manner:

1. Load Optical Disk.
2. Begin timing the drive calibration sequence, the time from disk insertion to drive ready (drive is ready when the LED goes off.)

Note: During the drive calibration sequence, you can hear the drive perform many seeks and an audible noise from motor start/stop.

3. If drive calibration sequence exceeds 45 seconds, the drive or optical disk may be dirty. Also, if the drive/disk is very dirty, the optical disk may not be accessible ("Drive Not Ready") message or file access may take excessive period of time.

Corrective Action for Dirty Optical Drives

| Note:

OPTICAL DRIVE DUST CONTAMINATION (CLEANING)

The correct cleaners must be used on the 3.5" IBM Rewritable Optical Drive. If the drive is identified with FRU P/N92F0167 or an Option Number of 6450162 or 6451295, Optical drive Lens cleaner, P/N38F8681 and Optical drive Prism Lens cleaner, P/N38F8682 must be used. If the drive is identified with FRU P/N66G7510 or Option Number 62G2908, Optical drive Prism/Lens cleaner, P/N66G7444, must be used. Failure to use the correct cleaners will cause damage to the Optical drive.

1. Install the new OPTICAL.SYS device driver.
 - Prevents media corruption due to dust contamination.
 - Enhances drive reliability by setting 5 minute inactivity power down of the drive.
2. Clean drive with correct Optical drive Lens cleaner.
3. Reload Optical disk. If problem persists, clean drive with correct Optical drive Prism Lens cleaner.
4. Reload Optical disk. If problem persists, replace drive.
5. If the Optical disk appears visibly dirty, clean the disk with a 3.5" Optical Cartridge cleaning kit.
 (This kit is not available at this time, 6/6/95. This tip will be updated when it is)

Cleaning supplies identified above are available from IBM by calling 1-800-388-7080 and following the Voice

Dust Contamination Prevention Techniques

There are several ways to reduce the effects of dust contamination on the Optical drive:

1. Turn system power off (if possible) when not in use.
2. Do not leave optical disk in drive when not needed.
3. Move system from dust producing sources (copiers, heavy traffic areas, etc.).
4. Lift floor standing system off floor at least 30 cm (1 foot).

SAS KEYWORDS:

8595	9595	OPTICAL	ERIMO
6450162	6451295	8959	OPTIONS
PRIME	127MB	128MB	3.5 INCH
THREE	ONE	HALF	PSY2

1.2.318 OPTICAL DRIVE INSTALLATION IN 8590/9590

Record number: H127488

Device: D/T8590
Model: M
Tip key: 026
Date created: 095/05/02
Date last altered: A95/05/09

A limited number of Enhanced Rewritable Optical drive FRUs, P/N92F0167, were shipped without a slide. The slide is required for installation into a Model 8590 or 9590 system. The FRU may contain either of the following bill of materials:

1) - Enhanced Rewritable Optical drive (Mfg. P/N 06G8900)

Or

2) - 1 inch high Rewritable Optical drive FRU P/N66G7510
- 5.25 inch half-high expansion kit
- 2 sets of mounting rails

If you receive FRU P/N92F0167 and it contains the second bill of materials, a slide, FRU P/N92F0162 is required to complete the installation.

The slide will screw to the bottom of the FRU assembly. The assembly can now be slid and latched into the 8590. Since there is no custom bezel for this FRU, a space of about 3/8" between the drive bezel and the system cover will exist.

Note:

If the second bill of materials identified above has already been installed, the Optical drive can be replaced by ordering FRU P/N66G7510.

SAS KEYWORDS:

PSY2	TOPCAT	ERIMO	PRIME
PSY2PART	D/T9590	9590	8590

PSY2 RETAIN TIPS
OPTION COMPATIBILITY CHART

1.2.319 OPTION COMPATIBILITY CHART

Record number: H021639

Device: D/T5150
 Model: M
 Tip key: 122
 Date created: 087/04/09
 Date last altered: A93/08/18

THE FOLLOWING COMPATIBILITY CHART WAS DERIVED FROM "A GUIDE TO IBM PERSONAL COMPUTERS" FORM NUMBER GC20-8210-03. THIS CHART REPRESENTS ITEMS THAT ARE SOLD BY IBM MARKETING TO FUNCTION IN THE STATED MACHINE TYPE. AS NOTED IN THE LEGEND, CERTAIN ITEMS MAY NOT FUNCTION OR WERE NOT TESTED IN CERTAIN MODELS OF THE NOTED MACHINES.

OPTION NAME	OPTION #	FRU #	MACHINE TYPE (VERTICAL)						
			5	5	5	5	5	8	
			1	1	1	1	1	5	
			5	5	6	6	7	3	
			0	5	0	2	0	0	
COLOR GRAPHICS	1504910	8286097	X	X	X	X	X		
MONO/PRINTER	1504900	8529148	X		X	X	X		
PRINTER ADAPTER	1505200	8529149	X	X	X				
SDLC (OLD)	1502090	8286099	X	X	X				
SDLC (NEW)	1501205	8286099	X	X	X	X	X	X	
BISYNC (OLD)	1502075	8286098	X	X	X				
BISYNC (NEW)	1501204	8286098	X	X	X	X	X	X	
ASYN	1502074	8529150	X	X	X				
DISKETTE ADAPTER	1503780	8529152	X	X	X				
64/256K MEMORY CD	1501013	8286096	X	X	1				
256K MEMORY CARD	1501209	6134136	X	X	1				
GAME CONTROL ADPT	1501300	8529151	X	X	X		X	X	
PROTOTYPE CARD	1501400	8529213	X	X	X			X	
PROTOTYPE CARD	6450220	8286138				X	X		
SERIAL/PARALLEL	6450215	8286147				X	X	X	
3295 DISPLAY ADPT	6487863	1497249	X		X		X		
EGA CARD	1501200	8654215	X		X	X	X		
DAC ADAPTER	6451502	6181768	X	X	X	X	X	X	
GPIB ADAPTER	6451503	6181770	X	X	X	X	X	X	
1200 BPS MODEM	6164805	6164804	X	X	X	X	X		
2400 BPS MODEM	6164829	6164828	X	X	X	X	X		
VOICE COMM ADPT	2684839	2684438	X		X	X	X		
PERSONAL TELE MANAGER ADAPTER	6428982	6428171	X		X	X	X		
3117 PC ADAPTER	65X2017	6456806	X		X	X	X	X	
DSEA	6072534	6851206	X	X	X	2	2		
EDSEA	55X3365	64F7148	X	X	X	X	X	X	
PS/2 3278/79 EMUL	83X9670	53F6424	X		X	X	X	X	
3278/79 EMUL	8665789	53F6424	X		X	X	X	X	
3278 ATTACHMENT	8501206	1899619	X		X				
3279 ATTACHMENT	4418820	6931963	X						

OPTION COMPATIBILITY CHART

8100 PC ATTACH	6113477	6113477	X		1		X	
CLUSTER ADAPTER	1501206	6323472	X	X	X		X	
PC NETWORK ADPT	6450213	8286171	X	X	X	X	X	X
TOKEN RING ADPT	6339100	16F0463	X	X	X	X	X	X
TOKEN RING II	67X0438	83X9147	X	X	X	X	X	X
4700 INPUT ADPT	6236049	6236047	X		X		X	
4700 OUTPUT ADPT	6236052	6236050	X		X		X	
4700 SECURITY CD	6236054	6236053	X		X		X	
5161 EXTENDER CD	N/A	6323445	X	X	1			
PGA	6451501	62X0912	X		X	X	X	
AT MATH CO-PROC	6450211	8286127				X	X	
PC MATH CO-PROC	1501002	8529147	X	X	X			
512K/2MB MEM CD	6450343	59X7294				X	X	
128/640KB MEM CD	6450338	59X7316				X	X	
1/6MB MEM CD	55X3679	30F5447				X	X	
2MB EXPD MEM CARD	2685193	30F5447			X		X	X
.5/6MB MEM CD	55X3560	30F5447				X	X	
512K MEM CARD	6450203	8286115					3	
128K MEM CARD	6450209	8286116					3	
10/20 F/DISK ADPT	1602501	6489914			X			
10/20 F/DISK ADPT	6450327	6489914			X			
HIGH SPEED CARD	6456730	6456750	X		X	X	X	X
PC NETWORK II	1501220	72X8105	X	X	X	X	X	X
PC NET BASEBAND	1501221	72X8101	X	X	X	X	X	X
4869 DSKT DR ADP	6450245	72X6757						X
8530 MATH CO-PROC	1501217	61X8922						X
PS/2 SPEECH ADPT	1501216	61X8921						X
4055 IEGA	56X2412	8654215						X
4055 EGA JUMPER	8565146	8575153						X
MUSIC ADAPTER	81X8630	81X8620	X		X	X	X	X
MUSIC MIDI ADPT	81X8630	81X8624	X		X	X	X	X
4250/PC PRINT ADP	6193065	6193068				X	X	X
S/370 CHAN EMUL	70X5061	70X5061					X	
ARTIC	76X1013	76X1013	X	X	X	X	X	X
6157 TAPE ADPT	59X4156	92X6063	X		X	X	X	X
5364 DRIVER CD	4234548	4234520			X	X	X	X

LEGEND:

- X = OPTION IS SUPPORTED IN INDICATED MACHINE
- 1 = NOT SUPPORTED IN 5160 MODELS WHICH CONTAIN 256/640K SYSTEM BOARDS
- 2 = TESTED IN 5170 MODELS 068, 099 AND 239 ONLY
- 3 = SUPPORTED IN MODELS 068, 099 AND 239 ONLY
- 4 = SUPPORTED IN 5160 MODELS WITH 256/640K SYSTEM BOARDS

NOTE; THE 5150 SYSTEM BOARD BIOS MODULE DATE MUST BE LATER THAN 10/19/81 TO SUPPORT SOME FEATURES.

PSY2 RETAIN TIPS
OPTION COMPATIBILITY CHART

SAS KEYWORDS:

5150SYSADPT	5160SYSADPT	5155SYSADPT	5162SYSADPT
5170SYSADPT	8530SYSADPT	PCOMSYSADPT	PSY2ADPT
5150SYSPART	5155SYSPART	5160SYSPART	5162SYSPART
5170SYSPART	PCOMSYSPART	PSY2PART	PCOM
PSY2	PCOMPART	PCOMADPT	8530SYSPART

1.2.320 OS/2 "SYS 1202" ERROR AFTER REINSTALLING QAPLUS/2

Record number: H133213

Device: D/T6877
Model: M
Tip key: 022
Date created: 096/03/25
Date last altered: A96/03/25

A SYS 1202 error may be displayed during IPL of OS/2 WARP after reinstalling QAPLUS/2 using the diskette created with the Diskette Factory application.

The SYS 1202 error, indicating that the QAPLUS/2 Device Driver failed to install, occurs because the reinstallation process inserted a duplicate line in the CONFIG.SYS file.

Edit the CONFIG.SYS file to remove the second occurrence of the following statement: C: \QAPLUS2\QAP2DRVR.SYS

QAPLUS/2 is a trademark of DiagSoft, Inc.

SAS KEYWORDS:

PSY2	D/T68XX	6887	6877
IBMPC	PSVP	PSVPDIAG	PSY2DIAG
D/T6887	PSVPPROG	PSY2PROG	PSVPERR
PC 750	PC750	PC700	PC 730
PSY2ERR	PC730	42206	

1.2.321 OS/2 INSTALLATION IN INTELLISTATION M-PRO, M/T6898

Record number: H161999

Device: D/T6898
 Model: M
 Tip key: 005
 Date created: 097/12/01
 Date last altered: A97/12/01

Installing OS/2 on the IBM IntelliStation M-Pro, M/T6898, with IDE hardfiles equal to, or greater than 4.0GB, requires the use of modified install diskettes. In addition, installing OS/2 on SCSI hardfiles also requires the use of modified installation diskettes.

The diskettes and their file names required for individual versions of OS/2 are listed below.

To obtain a special user ID and password required to download these files from the IBM Personal Systems Group BBS, contact the IBM PC HelpCenter at 1-800-772-2227.

The files listed below are self-extracting diskette images. After creating the diskettes, use them in place of the original installation diskettes supplied with your version of OS/2.

** NOTE **

While OS/2 is not a supported operating system on the IBM IntelliStation M-Pro, M/T 6898, these files are provided for those customers wishing to utilize OS/2 as their operating system.

IBM Business Partners and AAP Dealers should be aware that there are currently no OS/2 video drivers available that support the IBM supplied Intergraph and Permedia Glyder MAX-2 video adapters. Prior to the installation of OS/2, these systems must be configured with another model of video adapter that supports the OS/2 operating system.

OS/2 WARP 3.0 IDE HARDFILE INSTALLATION:

W3IDE1.EXE WARP 3 IDE INSTALLATION DISK 1 OF 2
 Replaces Installation Diskette
 W3IDE2.EXE WARP 3 IDE INSTALLATION DISK 2 OF 2
 Replaces Disk 1

OS/2 WARP CONNECT IDE HARDFILE INSTALLATION:

WCIDE1.EXE WARP CONNECT IDE INSTALL DISK 1 OF 2
 Replaces Installation Diskette
 WCIDE2.EXE WARP CONNECT IDE INSTALL DISK 2 OF 2
 Replaces Disk 4

OS/2 WARP 4 IDE HARDFILE INSTALLATION:

W4IDE1.EXE WARP 4 IDE INSTALLATION DISK 1 OF 1
 Replaces Installation Diskette
 W4IDE2.EXE WARP 4 IDE INSTALLATION DISK 2 OF 2
 Replaces Disk 1

OS/2 WARP 3.0 SCSI INSTALLATION:

W3SCSI1.EXE WARP 3 SCSI INSTALL DISK 1 OF 1
 Replaces Installation Diskette
 W3SCSI2.EXE WARP 3 SCSI INSTALL DISK 2 OF 2
 Replaces Disk 1

OS/2 WARP CONNECT SCSI INSTALLATION:

WCSCSI1.EXE WARP CONNECT SCSI INSTALL DISK 1 OF 2
 Replaces Installation Diskette
 WCSCSI2.EXE WARP CONNECT SCSI INSTALL DISK 2 OF 2
 Replaces Disk 1

OS/2 WARP 4 SCSI INSTALLATION:

W4SCSI1.EXE WARP 4 SCSI INSTALL DISK 1 OF 3
 Replaces Installation Diskette
 W4SCSI2.EXE WARP 4 SCSI INSTALL DISK 2 OF 3
 Replaces Disk 1
 W4SCSI3.EXE WARP 4 SCSI INSTALL DISK 3 OF 3
 Replaces Disk 2

PSY2 RETAIN TIPS

OS/2 INSTALLATION IN INTELLISTATION M-PRO, M/T6898

SAS KEYWORDS:

PSY2	PSY2ERR	PSY2OPER	PSVP
PSVPERR	PSVPOPER	D/T6898	6898
69815F_1	76708F_1	69928F_1	68237
63441	MERLIN	UNCLASSIFIED	

1.2.322 OS/2 TRAP 0002/NMI PROBLEM DETERMINATION

Record number: H131814

Device: D/T9595
 Model: M
 Tip key: 027
 Date created: 095/11/29
 Date last altered: A95/11/29

NMI (Non-Maskable Interrupt) errors which occur while running OS/2 are difficult to diagnose because they may be caused by 4 different error conditions. However, the attached information is very useful in identifying the actual error condition which caused the NMI and providing a more efficient and timely resolution to the problem.

The following facts should be understood:

1. Various operating systems refer to NMI's using different terms. OS/2 calls them "TRAP 0002", SCO UNIX, refers to them as "Panic errors." Novell Netware references them as NMI's.
2. NMI's ARE NOT always caused by system memory and ARE NOT always caused by HARDWARE!
 Servicicers SHOULD NOT automatically replace memory while performing problem determination of NMI errors.
3. The four causes of NMI's are:
 - A. Main memory parity error (Usually a hardware failure)
 - b. Channel check (Usually a hardware failure)
 - c. Watchdog timeout (can be caused by software)
 - d. DMA (Direct Memory Access) arbitration time-out error.
 (This error is often caused by software/device drivers and incorrect software setup, etc.)
4. The operating systems currently available are limited in their ability to differentiate the four causes of an NMI.

An NMI is a catastrophic error detected by the system which then raises the NMI line to the processor. The processor executes the NMI handler and tries to save the information as to what caused the NMI. Usually the software interrogates the registers to try and find the cause of the NMI. Sometimes the system cannot do this because the error is too severe. (IE. an adapter "hanging" on the bus.) Not all operating systems even try to

Do this. (See notes below.)

Because of this limitation, some operating system error handling routines DEFAULT to pointing out memory as the most likely cause of any NMI. Hence, inappropriate service practices have developed around the fallacy that, "All NMI errors are caused by memory," or "All Trap 0002's are hardware errors."

Current memory is much more reliable than memory available only a short time ago. This is particularly true in the case of systems using ECC memory.

With this information in mind, the following procedure is the most efficient method of identifying the actual cause of the NMI, when OS/2 is the operating system.

1. Check the hardware System Error Log (available in the system partition at the main menu under "More Utilities"). If the System Error Log is empty, the NMI error was PROBABLY NOT CAUSED by a memory parity error. This logging feature is not available on 8580 or 8640 and on some models of 8590/9595 systems.

Furthermore, if ECC memory is installed in the system, all single bit errors are corrected (and will not cause NMI's, but are logged in the system error log). Double bit errors are detected and also logged in the hardware System Error Log and will cause an NMI, just as a parity error does. So, IF THE SYSTEM ERROR LOG IS EMPTY, THE NMI WAS PROBABLY NOT CAUSED BY MEMORY.

2. Run diagnostics on the system. If they run error-free do not replace any hardware at this time. (Note: Do not replace hardware under direction of software support without concurrence from Hardware Support.)
3. It is possible to identify the NMI error source by using the following process and collecting information from

NVRAM (Non-Volatile Random Access Memory).

Have this information available for the PC Company HelpCenter Level 2 Support organization.

Customer Name: _____ Date: ___ ___ ___
 Location: _____ Time: ___ ___ ___
 Telephone# _____ FAX# _____
 Contact name: _____

UPON GETTING THE TRAP 0002 ERROR DISPLAYED ON THE SCREEN:

 1. If there are no Hardware errors logged in the system, contact OS/2 Software Support (800-237-5511) and request assistance by way of the OS/2 Kernel Debugger.

2. Enter the following key sequences followed by the ENTER key. Write down the REGISTER INFORMATION DISPLAYED ON THE SCREEN after each entry in the space provided below!

The following three commands are functional on all PS/2 and Server 95/500/720 systems.

I (SPACE) 61 (ENTER) Port 61 = _____
 i (SPACE) 90 (ENTER) Port 90 = _____
 i (SPACE) 92 (ENTER) Port 92 = _____

3. At the time of failure, call OS/2 Software Support and ask them to read the following registers (which are functional on 8590/95, 9590/95 and 8641 (Server 500) systems only:

Note: This data can also be retrieved by using a laptop computer attached to the server serial port to serial port an a communications program. (OS/2 Software Support can provide additional details.)

O (SPACE) E0 = B1 (ENTER) _____
 i (SPACE) E4 (ENTER) _____
 o (SPACE) E0 = B2 (ENTER) _____
 i (SPACE) E4 (ENTER) _____
 i (SPACE) E0 = B3 (ENTER) _____
 o (SPACE) E4 (ENTER) _____
 i (SPACE) E0 = B4 (ENTER) _____
 o (SPACE) E4 (ENTER) _____
 i (SPACE) E0 = B7 (ENTER) _____
 o (SPACE) E4 (ENTER) _____
 i (SPACE) E0 = C0 (ENTER) _____
 o (SPACE) E4 (ENTER) _____
 i (SPACE) E0 = C1 (ENTER) _____
 o (SPACE) E4 (ENTER) _____
 i (SPACE) E0 = C2 (ENTER) _____
 o (SPACE) E4 (ENTER) _____
 i (SPACE) E0 = C3 (ENTER) _____
 o (SPACE) E4 (ENTER) _____

Note: This routine will readout 5 bytes of error information B1 - B4, B7, and the address information C0 - C3.

Note: For SERVER 300/310/320/520 systems:
 This procedure will also work for these systems if the first two steps are as follows:

I (SPACE) 61 (ENTER) Port 61 = _____
 i (SPACE) 461 (ENTER) Port 461 = _____

3. Print out the SYSTEM CONFIGURATION:

A. Use the appropriate method to access the System Partition or CMOS/EISA configuration screens. Use the "PRINT SCREEN" key on the keyboard and copy ALL of the hardware configuration screens to a printer (attached to the printer port).

BE CERTAIN to include the "DISPLAY REVISION LEVELS" screen, which may be found under "Other Utilities" at the system partition MAIN MENU. This provides the IML Reference Diskette and BIOS versions and other machine information.

Dumping the hardware configuration screens to a printer will provide exact information regarding the adapters installed, such as the Micro Channel slot, interrupt setting, arbitration level, etc., which is essential for problem diagnosis.

NOTES:

It should be noted that OS/2 may exhibit an obscure from of

Trap 0002, the message is:

OS2 !! 000001915.

It is only known to occur when some application, or possibly an adapter, is holding the bus too long. It has been seen on Faulty Busmastering systems, and Faulty DMA controller chips. There is a software APAR (PJ09096) on this situation.

Refer to Hardware RETAIN tip Record number # H127459 which provides a replacement 486DX2-33/66 MHZ processor card for 9595 model xNx systems experiencing:

- Intermittent 01291500 errors and system hangs, and/or
- SYS0001915 errors running OS/2.

Machines affected:

9595 model xNx systems, and upgraded 8595/9595 systems, with an affected TYPE 4, 486DX2 33/66 Processor board, FRU P/N61G2343.

SAS KEYWORDS:

PSY2	PSY2PROG	PSY2ERR	PSY2COMM
D/T8580	D/T8595	D/T8590	D/T9595A
D/T8641	WARP	RESOLUTION	PROCEDURE
DETERMINATION	SERVICE	AID	1915
SYS	0001915	OS2	02
2	002	SERVER	95
500	D/T8595	8595	D/T8641
8641	8640	300	320
D/T8640	310	520	8639
D/T8639			

1.2.323 OUT OF DATE , INFO NOW AVAIL IN HMM

Record number: H006439

Device: D/T8550
Model: M
Tip key: 014
Date created: 087/08/04
Date last altered: A94/09/12

NONE

SAS KEYWORDS:
PSY2

P/N ERRORS IN COMMUNICATION CARTRIDGE

1.2.324 P/N ERRORS IN COMMUNICATION CARTRIDGE

Record number: H05523

Device: D/T3541
Model: M
Tip key: 001
Date created: 092/09/04
Date last altered: A92/09/04

There is an error on Page 3 of the IBM Personal System/2 Communications Cartridge 1 Manual P/N10G5993, S10G-5993-00. It gives the P/N for the EXTERNAL BUS CABLE Mod 003 or 004 as 06G8673. This is incorrect. P/N06G8673 is the REAR COVER. The correct P/N for the cable is 07G0015. The SPL Lists are correct so P/Ns should be available.

SAS KEYWORDS:

PSY2 D/T8533 LAPTOP NOTEBOOK
PSY2COMM

1.2.325 P/N'S FOR OEM "LIMITED REPAIR" PRINTERS

Record number: H066974

Device: D/T1515
 Model: M
 Tip key: 018
 Date created: 090/06/13
 Date last altered: A96/12/05

THE FOLLOWING IS A LIST OF PART NUMBERS THAT CAN BE USED TO REPAIR SOME OEM PRINTERS THAT HAVE AN IOE SERVICE OFFERING. THIS INFORMATION WAS DISTRIBUTED TO THE FIELD ON 6/12/90. UPDATES WILL BE RELEASED TO SUBSCRIBERS TO THE PS/2 SIM FORM NUMBER SA38-0041.

 OEM RPI KITS ARE NOW AVAILABLE, THEY CAN BE ORDERED VIA THE FOLLOWING WAYS: ORDER 'OEMRPI' VIA AEFORM, PROFS NOTE TO: USERID - RPI29K ON NODE -- MBGVMH, FAX TO 717-691-6316 (TL-528) OR MAIL THE ORDER TO: IBM CORP
 180 KOST RD.
 ATTN: DEPT 7RE/C02
 MECHANICSBURG, PA 17055

IF AN "*" LEADS THE PART NUMBERS BELOW--THAT PART IS INCLUDED IN THE OEMRPI KIT ***

LIMITED REPAIR PART NUMBERS

MANUFACTURER MODEL	PRINT- HEAD	PLATEN KNOB	PRINT MASK	CARD HOLDER	PAPER GUIDE BRACKET
--------------------	-------------	-------------	------------	-------------	---------------------

C. ITOH

C 310P/310XP & 310R/310XR	*86F4570	*86F4589	N/A(1)	*86F4607	N/A
(1) PRINT MASK IS INCLUDED WITH THE CARD HOLDER					

C 315P/315XP & 315R/315XR	*86F4570	*86F4589	N/A(1)	*86F4607	N/A
(1) PRINT MASK IS INCLUDED WITH THE CARD HOLDER					

DATASOUTH

MANUFACTURER MODEL	PRINT- HEAD	PLATEN KNOB	PRINT MASK	CARD HOLDER	PAPER GUIDE BRACKET
DS-180+	45F4888	N/A	N/A	N/A	N/A

EPSON

MANUFACTURER MODEL	PRINT- HEAD	PLATEN KNOB	PRINT MASK	CARD HOLDER	PAPER GUIDE BRACKET
DS-180+	45F4888	N/A	N/A	N/A	N/A
EX-1000	45F4873	*86F4586	86F4602	N/A	N/A
FX-86/286	(2) 86F4544	*86F4584	*86F4599	N/A	N/A
FX-86E/286E	(3) 45F4747	*86F4585	N/A	N/A	N/A
FX-100/100+/185	(1) 45F4748	45F4749	N/A	N/A	N/A
FX-850/1050	(4) 86F4550	*86F4583	*86F4610	N/A	N/A
LQ-1000	86F4545	*86F4585	86F4600	N/A	N/A
LQ-850/950/1050	(4) 86F4546	86F4583	*86F4601	N/A	N/A
LQ-1500	86F4551	*86F4609	*86F4608	N/A	N/A
LQ-2500	86F4547	*86F4586	86F4602	N/A	N/A
LX-800	86F4548	86F4587	*86F4611	N/A	N/A
LX-810	45F5246	45F5245	N/A	N/A	N/A
MX-100	86F4549	*86F4588	86F4599	N/A	N/A

(1) TRACTOR FEED ASSEMBLY - P/N45F4751 FX-100/100+/185
 (2) TRACTOR FEED ASSEMBLY - P/N93F5953 FX-86/286
 (3) TRACTOR SPROCKETS: LEFT-45F5202, RIGHT-45F5203 FX-86E/286E
 (4) TRACTOR TRUCKS: LEFT-45F5240, RIGHT-45F5239 FX-850/1050
 LQ-850/950/1050

FUJITSU

MANUFACTURER MODEL	PRINT- HEAD	PLATEN KNOB	PRINT MASK	CARD HOLDER	PAPER GUIDE BRACKET
DL 3400	45F4880	45F4882	N/A	N/A	45F4883
DX 2300	45F4879	45F4882	N/A	N/A	45F4881
DL 5600	61H6108				

GENICOM

MANUFACTURER MODEL	PRINT- HEAD	PLATEN KNOB	PRINT MASK	CARD HOLDER	PAPER GUIDE BRACKET
3410	45F4887	N/A	N/A	N/A	N/A

HEWLETT PACKARD

MANUFACTURER MODEL	PRINT- HEAD	PLATEN KNOB	PRINT MASK	CARD HOLDER	PAPER GUIDE BRACKET
480 RUGGEDWRITER	86F4571	N/A	N/A	N/A	N/A
LASERJET IIP (1)	N/A	N/A	N/A	N/A	N/A
LASERJET IIP+ (1)	N/A	N/A	N/A	N/A	N/A
LASERJET IIIP (1)	N/A	N/A	N/A	N/A	N/A

(1) MEMORY BOARDS: 1MB-45F4774, 2MB-45F4775

NEC

MANUFACTURER MODEL	PRINT- HEAD	PLATEN KNOB	PRINT MASK	CARD HOLDER	PAPER GUIDE BRACKET
P5200/P5300	86F4554	*86F4581	N/A	*86F4604	N/A
P 760/765	86F4552	*86F4582	N/A	*86F4605	N/A
P 960XL/965XLP	86F4553	*86F4582	N/A	*86F4606	N/A

OKIDATA

MANUFACTURER MODEL	PRINT- HEAD	PLATEN KNOB	PRINT MASK	CARD HOLDER	PAPER GUIDE BRACKET
ML 83A	86F4558	*86F4580	N/A	N/A	N/A
ML 84/92/93	86F4559	*86F4580	N/A	N/A	N/A
ML 100 SERIES	86F4577	*86F4578	N/A	N/A	N/A
ML 292/293 (1)	86F4556	*86F4578	N/A	86F4612	N/A
ML 294 (1)	86F4557	*86F4578	N/A	86F4612	N/A
ML 320/321 (2)	86F4562	*86F4579	N/A	*86F4590	N/A
ML 390/391	86F4561	*86F4579	N/A	*86F4590	N/A
ML 393/393C/393+	86F4560	45F5183	N/A	*86F4591	N/A

(1) PAPER BAIL SPRINGS: LEFT 45F5181, RIGHT 45F5182

(2) IDLER GEAR: 45F5209

PRINTER PRODUCTS

MANUFACTURER MODEL	PRINT- HEAD	PLATEN KNOB	PRINT MASK	CARD HOLDER	PAPER GUIDE BRACKET
S7200 (1)	45F5096	N/A	N/A	N/A	N/A

(1) FEED ROLLERS (PLATENS): LEFT-45F5199, RIGHT-45F5200,
ROLLER SPACER-45F5198, FEED ROLLER SPRINGS (2)-45F5197.

PANASONIC

MANUFACTURER MODEL	PRINT- HEAD	PLATEN KNOB	PRINT MASK	CARD HOLDER	PAPER GUIDE BRACKET
KX-P1524	45F4872	45F4877	45F4878	N/A	N/A
KX-P1595	45F4875	45F4877	45F4876	N/A	N/A

STAR MICRONICS

MANUFACTURER MODEL	PRINT- HEAD	PLATEN KNOB	PRINT MASK	CARD HOLDER	PAPER GUIDE BRACKET
DP-8340 (1)	N/A	N/A	N/A	N/A	N/A

(1) LINE CORD POWER SUPPLY FUSE-45F5169

TEXAS INSTRUMENTS

MANUFACTURER MODEL	PRINT- HEAD	PLATEN KNOB	PRINT MASK	CARD HOLDER	PAPER GUIDE BRACKET
TI-850XL	86F4563	86F4603	N/A	N/A	N/A
TI-855	86F4592	N/A	N/A	N/A	N/A
TI-865	86F4564	*86F4603	N/A	N/A	N/A
TI-875/877	86F4565	*86F4576	N/A	N/A	N/A
TI-885	45F4526	N/A	N/A	N/A	N/A

TOSHIBA

MANUFACTURER	PRINT- HEAD	PLATEN KNOB	PRINT MASK	CARD HOLDER	PAPER GUIDE BRACKET
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PSY2 RETAIN TIPS

P/N'S FOR OEM "LIMITED REPAIR" PRINTERS

MODEL	HEAD	KNOB	MASK	HOLDER	BRACKET
P 341SL	86F4566	*86F4573	86F4613(1)	86F4613(1)	N/A
P 341E	86F4569	86F4574	86F4615(1)	86F4615(1)	N/A
P 351	86F4568	86F4574	86F4615(1)	86F4615(1)	N/A
P 351C	86F4568	86F4574	86F4617(1)	86F4617(1)	N/A
P 351SX	86F4567	*86F4575	*86F4619(1)	86F4619(1)	N/A

(1) INCLUDES PRINTMASK & CARDHOLDER

XEROX

MANUFACTURER MODEL	PRINT- HEAD	PLATEN KNOB	PRINT MASK	CARD HOLDER	PAPER GUIDE BRACKET
34LQ	45F4884	45F4886	N/A	N/A	45F4885
SAS KEYWORDS:					
4860SYSPART	5160SYSPART		5170SYSPART		5155SYSPART
8530SYSPART	8550SYSPART		8560SYSPART		8580SYSPART
PSY2PART	POEM		OEMPART		OEMPC
SYS2OEM	OEMPRT		PCOEM		OEMPRINTER
LIMITEDREPAIR	LIMITEDIOR		OEMPARTS		LIMITED
IOE	OEM		C. ITOH		DATASOUTH
EPSON	FUJITSU		GENICOM		HEWLETTPACKARD
HP	NEC		OKIDATA		PANASONIC
TEXASINSTRUMENT	TI		TOSHIBA		XEROX
PRINTERPRODUCT	LIOR		PT		1515PT

1.2.326 PAGE FAULT ERRORS IN WINDOWS 3.1 USING LANAID

Record number: H132877

Device: D/T6887
 Model: M
 Tip key: 002
 Date created: 096/03/04
 Date last altered: A96/03/04

Page Fault errors may occur intermittently on IBM PC 700 Series 6877 or 6887 systems using the EtherJet LANAID configuration program and Windows 3.1.

The next revision of the EtherJet LANAID program will resolve the intermittent Page Fault errors while using LANAID in a Windows 3.1 environment.

The updated version of EtherJet LANAID will be available from the IBM PC Company BBS in March 1996.

Windows is a trademark of the Microsoft Corporation.

SAS KEYWORDS:

PSY2	D/T68XX	D/T6877	6887
6877	PC 750	PC700	PC750
68XX	IBMPC	PSVP	PC730
PC 730	PSVPERR	PSY2ERR	40873
PSY2COMM	PSVPCOMM		

1.2.327 PARALLAN MODEL 290 SERVICE STRATEGY

Record number: H082134

Device: D/T8600
Model: M
Tip key: 006
Date created: 093/10/20
Date last altered: A93/10/21

The PARALLAN 290 is the predecessor to the IBM 8600-295 and is eligible for service via special bid only.

CEs servicing the Parallan 290 must complete 8600-295 training.

FRUs for the 8600-295 will be used to service entitled machines. FRUs need not be identical to original equipment part. For example, an IBM 1GB drive FRU may be used to replace a Seagate 780MB drive. The minimum size DASD is the common denominator size of all DASD in the array therefore the 1GB would only be seen as a 780MB drive.

Software support for the PARALLAN 290 remains the responsibility of the customer and PARALLAN. Customers should have the latest level of software to permit usage of mixed capacity drives. CEs should record QSARs using M/T 8600 and the PARALLAN s/n.

SAS KEYWORDS:
PSY2

1.2.328 PARALLEL PORTS LPT1, LPT2, LPT3 INOPERATIVE

Record number: H001923

Device: D/T8530
 Model: M
 Tip key: 023
 Date created: 088/11/02
 Date last altered: A89/01/10

THE 8530 286 CAN HAVE UP TO THREE PARALLEL PORT ADDRESSES, 03BC 378 AND 278. THESE ADDRESSES ARE ASSIGNED BY THE USER, VIA PARALLEL PORT SELECTION, FROM THE CHANGE CONFIGURATION MENU OF THE IBM PS/2 MODEL 8530 286 STARTER DISKETTE. THE SYSTEM BOARD PARALLEL PORT ADDRESS IS 03BC, THE PRIMARY SERIAL PARALLEL ADAPTER CARD IS ALWAYS 378 AND THE ALTERNATE SERIAL PARALLEL IS ALWAYS 278. WHEN THESE ADDRESSES ARE POLLED THEY ARE ASSIGNED TO LPT1, LPT2, AND/OR LPT3 DEPENDING ON HOW MANY PARALLEL PORTS ARE INSTALLED.

REFER TO THE FOLLOWING CHART TO DETERMINE WHAT LPT SETTINGS WILL BE ACHIEVED IF PARALLEL PORT SELECTION, FROM THE CHANGE CONFIGURATION MENU, IS SET TO PARALLEL PORT 1, PARALLEL PORT 2, OR PARALLEL PORT 3:

	ADDRESS	PRINTER PORT ASSIGNED
NO SERIAL PARALLEL CARDS INSTALLED		
IF SET TO PARALLEL 1	SYSTEM BOARD IS (03BC)	LPT1
IF SET TO PARALLEL 2	SYSTEM BOARD IS (378)	LPT1
IF SET TO PARALLEL 3	SYSTEM BOARD IS (278)	LPT1
PRIMARY SERIAL PARALLEL CARD INSTALLED		
IF SET TO PARALLEL 1	SYSTEM BOARD IS (03BC) PRIMARY CARD IS (378)	LPT1 LPT2
IF SET TO PARALLEL 2	SYSTEM BOARD IS (378) PRIMARY CARD IS (378)	0000 * 0000 *
IF SET TO PARALLEL 3	SYSTEM BOARD IS (278) PRIMARY CARD IS (378)	LPT2 LPT1
PRIMARY AND ALTERNATE SERIAL PARALLEL CARD INSTALLED		
IF SET TO PARALLEL 1	SYSTEM BOARD IS (03BC) PRIMARY CARD IS (378) ALTERNATE CARD IS (278)	LPT1 LPT2 LPT3
IF SET TO PARALLEL 2	SYSTEM BOARD IS (378) PRIMARY CARD IS (378) ALTERNATE CARD IS (278)	0000 * 0000 * LPT2
IF SET TO PARALLEL 3	SYSTEM BOARD IS (278) PRIMARY CARD IS (378) ALTERNATE CARD IS (278)	0000 * LPT1 0000 *

* PORT IS DISABLED OR INOPERATIVE BECAUSE HARD WIRED ADDRESSES ON THE ADAPTER CARDS WILL OVERRIDE CHOICES MADE FROM A PARALLEL PORT SELECTION ON THE CHANGE CONFIGURATION MENU.

SAS KEYWORDS:
 PSY2 8530SYSADPT 8530SYSBRD 8530SYSDOC
 PSY2BRD PSY2DOC PSY2ADPT

1.2.329 PARTITION INFORMATION INCORRECT W/IBM NETFINITY

Record number: H132832

Device: D/T6877
 Model: M
 Tip key: 007
 Date created: 096/02/28
 Date last altered: A96/02/28

IBM PC 700 Series 6877 and 6887 with a Windows95 Preload may display incorrect partition information when using IBM Netfinity.

To test for this problem, perform the following steps:

- Select Start
- Select IBM Netfinity
- Select Netfinity Service Manager
- Select System Information
- Select Disk Information
- Select Physical Drive
- Select Unallocated Partition
- Select Partition Information

The "Partition Information" entry shows no information for the partition even though there is free space.

Use FDISK or other applications capable of viewing and altering partition information.

There is no planned update for this problem.

Windows95 is a trademark of the Microsoft Corporation.

SAS KEYWORDS:

PSY2	D/T68XX	6887	6877
IBMPCL	PSVP	PSVPFDSK	PSY2FDSK
D/T6887	PSVPPROG	PSY2PROG	PSVPDSKT
LOCKUP	PC750	HUNG	PSY2DSKT
PC 750	PC730	PC700	PC 730
40175			

PSY2 RETAIN TIPS
PC PS2 FRU IDENTIFICATION CHART

1.2.330 PC & PS2 FRU IDENTIFICATION CHART

Record number: H022143

```
Device:           D/T5150
Model:            M
Tip key:          123
Date created:     087/06/15
Date last altered: A92/04/30
```

ASSEMBLY # TO FRU P/N CROSS REFERENCE

THE FOLLOWING IS A LIST OF PERSONAL COMPUTER PARTS, LISTED IN NUMERIC ORDER BY ASSEMBLY NUMBER. THE ASSEMBLY NUMBER IS A SEVEN DIGIT NUMBER LOCATED ON THE PART AND CAN BE IN INK OR IN SOLDER. THIS LIST DOES NOT INCLUDE ALL ASSEMBLY AND FRU NUMBERS FOR ALL PC PARTS, HOWEVER IT WILL BE UPDATED AS MORE INFORMATION IS MADE AVAILABLE.

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ASSEM #	FRU P/N	DESCRIPTION
55X9503	P/N8529254	PLANAR BOARD XT
55X9504	P/N8529254	PLANAR BOARD XT
55X9532	P/N8286112	PLANAR AT
55X9532	P/N6480170	PLANAR AT
55X9580	P/N6480170	PLANAR AT
59X7182	P/N8286112	PLANAR AT
59X7184	P/N8286130	DISKETTE DRIVE
59X7192	P/N6489914	10 MEG FIXED DISK ADAPTER
59X7254	P/N6278099	20 MEG HARD FILE
59X7255	P/N6278099	20 MEG HARD FILE
59X7284	P/N6278099	20 MEG HARD FILE
59X7285	P/N83X1520	AQUISITION PLANAR
59X7289	P/N8286216	30 MEG HARD FILE
59X7290	P/N83X1520	AQUISITION PLANAR
59X7295	P/N6489914	HARD FILE ADAPTER CARD
59X7296	P/N6480170	256K PLANAR
59X7302	P/N59X7316	128-640K MEMORY EXPANSION CARD
59X7308	P/N59X7316	128-640K MEMORY EXPANSION CARD
59X7310	P/N83X1520	PLANAR XT
61X6799	P/N72X8519	70 MEG HARD FILE
62X0345	P/N72X8519	70 MEG HARD FILE
62X0361	P/N8286216	30 MEG HARD FILE
62X0407	P/N72X8540	HARD FILE CONTROL CARD
62X0415	P/N72X8541	42 MEG HARD FILE
62X0642	P/N6278099	20 MEG HARD FILE
62X0670	P/N6489922	PLANAR AT
62X0705	P/N8286130	DRIVE
62X0778	P/N59X7316	128-640K MEMORY EXPANSION CARD
62X0780	P/N59X7316	128-640K MEMORY EXPANSION CARD
62X0783	P/N6278099	20 MEG HARD FILE
62X0785	P/N83X1520	PLANAR XT
62X0786	P/N6489914	20 MEG FIXED DISK ADAPTER
62X0789	P/N62X1036	DISKETTE DRIVE
62X0790	P/N62X1028	DISKETTE DRIVE
62X0916	P/N8286130	DISKETTE DRIVE
62X0917	P/N8286131	DISKETTE DRIVE
62X0918	P/N6489910	DISKETTE DRIVE
62X0942	P/N62X1025	PLANAR XT286
62X1016	P/N6278099	20 MEG HARD FILE
62X1017	P/N8286216	30 MEG HARD FILE
62X1052	P/N83X1520	PLANAR XT
62X1054	P/N83X1520	PLANAR XT
62X1088	P/N62X1025	PLANAR XT286
62X1132	P/N62X1032	DUAL DRIVE CARD
62X1134	P/N62X1025	PLANAR XT256
62X1142	P/N62X1025	PLANAR XT 256
62X1155	P/N83X1520	PLANAR XT
62X1156	P/N83X1520	PLANAR XT
62X1157	P/N83X1520	PLANAR XT
62X1168	P/N62X1025	PLANAR
62X1170	P/N83X1520	PLANAR XT
62X1172	P/N83X1520	PLANAR XT
62X7025	P/N8286130	DISKETTE DRIVE
68X3750	P/N68X3752	DRIVE
68X3751	P/N68X3753	DRIVE
68X3756	P/N8286125	DUAL DRIVE CARD AT
68X3806	P/N6489922	PLANAR AT
68X3832	P/N6489922	PLANAR AT
72X7777	P/N92F0061	HARD FILE CONTROL CARD
79X3904	P/N61X6942	70 MEG HARD FILE
83X1499	P/N6278099	20 MEG HARD FILE
83X1511	P/N62X1025	PLANAR XT286
1130490	P/N8529254	PLANAR XT
1501002	P/N8529147	MATH CO-PROCESSOR
1501013	P/N8286096	64-256K MEMORY EXPANSION CARD

PSY2 RETAIN TIPS
PC PS2 FRU IDENTIFICATION CHART

1501201	P/N6323468	GRAPHICS MEMORY EXPANSION CARD
1501204	P/N8286098	BYSYNC ADAPTER CARD
1501205	P/N8286099	SDLC CARD
1501206	P/N6323472	CLUSTER CARD
1501209	P/N6134136	256K MEMORY EXPANSION CARD
1501300	P/N8529151	GAME CARD
1501400	P/N8529213	PROTOTYPE CARD
1501412	P/N8529153	DRIVE
1501413	P/N8529206	DISKETT DRIVE
1501426	P/N8529251	EXPANSION UNIT RECEIVER CARD
1501428	P/N8529254	PLANAR XT
1501429	P/N8529254	PLANAR XT
1501452	P/N8529254	PLANAR XT
1501460	P/N8529275	10 MEG HARD FIL
1501485	P/N8529150	ASYN ADAPTER CARD
1501486	P/N8286097	COLOR GRAPHICS ADAPTER CARD
1501492	P/N8529254	PLANAR XT
1501518	P/N8286116	128K MEMORY EXPANSION CARD
1501518	P/N8286115	512K MEMORY EXPANSION CARD
1501530	P/N6323468	EGA MEMORY EXPANSION CARD
1501551	P/N8286129	HARD FILE
1501693	P/N8285978	DISKETTE DRIVE
1501693	P/N8285997	DISKETTE DRIVE
1501741	P/N8286112	PLANAR AT
1501868	P/N8286125	DUAL DRIVE CARD AT
1501870	P/N8286144	LED CARD
1501904	P/N8286130	DRIVE
1501923	P/N8286131	DRIVE
1501924	P/N8286112	PLANAR AT
1501976	P/N8529151	GAME CARD
1501985	P/N8529148	MONO DISPLAY AND PRINTER CARD
1501987	P/N8529149	PRINTER ADAPTER CARD
1502060	P/N8529206	DISKETTE DRIVE
1502074	P/N8529150	ASYN CARD
1503087	P/N8286116	128K MEMORY EXPANSION CARD
1503421	P/N8654227	64KMEMORY EXPANSION CARD
1503693	P/N8285978	DRIVE
1503693	P/N8285997	DRIVE
1504910	P/N8286097	COLOR GRAPHICS ADAPTER CARD
1602501	P/N8529254	PLANAR XT
1804057	P/N8529148	MONO DISPLAY AND PRINTER CARD
1804456	P/N8286097	COLOR GRAPHICS ADAPTER CARD
1804464	P/N8286097	COLOR GRAPHICS ADAPTER CARD
1804472	P/N8286097	COLOR GRAPHICS ADAPTER CARD
2682916	P/N6820821	3.5" DISK DRIVE
6119927	P/N6134137	64K MEMORY MODUAL, 32 PIN
6131020	P/N8286216	30 MEG HARD FILE
6133818	P/N6480170	PLANAR AT
6133874	P/N8286099	SDLC ADAPTER CARD
6133899	P/N8286130	DISKETTE DRIVE
6133903	P/N8286112	PLANAR AT
6133904	P/N8286112	PLANAR AT
6133905	P/N8286112	PLANAR AT
6133906	P/N8286112	PLANAR AT
6133919	P/N8286112	PLANAR AT
6133920	P/N8286112	PLANAR AT
6133921	P/N8286125	DUAL DRIVE CARD
6133976	P/N8286098	BYSNC ADAPTER CARD
6134008	P/N8285987	PARALLEL CARD
6134154	P/N8654213	PLANAR PC
6134155	P/N8654213	PLANAR PC
6135713	P/N8654213	PLANAR PC
6135718	P/N8654213	PLANAR PC
6135933	P/N8286147	SERIAL PARALLEL CARD
6136024	P/N6135678	SPEECH ATTACHMENT
6137366	P/N8286171	PC NETWORK CARD
6137397	P/N8286099	SDLC ADAPTER CARD
6137398	P/N8529238	PLANAR PC
6137399	P/N8654213	PLANAR PC
6137400	P/N8529238	PLANAR PC
6137403	P/N8654213	PLANAR PC
6137405	P/N8529254	PLANAR XT
6137407	P/N8529254	PLANAR XT
6137446	P/N6480170	PLANAR AT
6137974	P/N8286099	SDLC ADAPTER CARD
6181001	P/N8286112	PLANAR AT
6181002	P/N8286112	PLANAR AT
6181009	P/N8285997	DISKETTE DRIVE
6181011	P/N8286131	DISKETTE DRIVE
6181022	P/N6278099	20 MEG HARD FILE
6181035	P/N8654227	64K MEMORY EXPANSION
6181147	P/N8529206	DISKETTE DRIVE
6181680	P/N8529152	DISKETTE DRIVE ADAPTER CARD
6181682	P/N8529152	DISKETTE DRIVE ADAPTER CARD

PSY2 RETAIN TIPS
PC PS2 FRU IDENTIFICATION CHART

6181685	P/N8529238	PLANAR PC
6181696	P/N8529254	PLANAR XT
6181697	P/N8529254	PLANAR XT
6181765	P/N62X0912	PROFESSIONAL GRAPHICS CONTROLLER
6278173	P/N8654215	ENHANCED GRAPHICS ADAPTER CARD
6278202	P/N6135679	128K MEMORY EXPANSION
6278224	P/N72X8522	20 MEG HARD FILE
6278296	P/N8286125	HARD FILE ADAPTER CARD
6278550	P/N8286097	COLOR GRAPHICS ADAPTER CARD
6279184	P/N6480170	PLANAR AT
6279216	P/N72X8505	HARD FILE CONTROL CARD
6279241	P/N72X8523	DRIVE
6279374	P/N6480008	256K RAM MODUAL
6298404	P/N6299235	40 MEG HARD FILE
6320092	P/N8654344	CONTROLLER LOGIC BOARD
6320096	P/N8654345	I/O CARD
6320152	P/N8529254	PLANAR XT
6320155	P/N8529254	PLANAR XT
6320174	P/N8286034	CONTROLLER PANEL BOARD
6320973	P/N6323471	CLUSTER CARD PCJR
6321015	P/N8286017	COLOR SHIFT MODUAL ASSEMBLY
6321154	P/N8529254	PLANAR XT
6323001	P/N8286138	PROTOTYPE CARD
6323008	P/N8286138	PROTOTYPE CARD
6323028	P/N8286147	SERIAL PARALLEL CARD
6323030	P/N8286125	DUAL DRIVE CARD
6323032	P/N6480170	PLANAR AT
6323033	P/N6480170	PLANAR AT
6323361	P/N8529254	PLANAR XT
6323362	P/N8529254	PLANAR XT
6323468	P/N6323468	EGA MEMORY EXPANSION CARD
6323555	P/N8286125	DUAL DRIVE CARD AT
6323559	P/N8529254	PLANAR XT
6323560	P/N8529254	PLANAR XT
6323705	P/N6181770	GPIB ADAPTER CARD
6323740	P/N8529238	PLANAR PC
6323747	P/N8529238	PLANAR PC
6323752	P/N8529238	PLANAR PC
6361062	P/N8529250	EXPANSION UNIT BOARD
6369881	P/N59X4098	DRIVE
6407740	P/N6134136	256K MEMORY EXPANSION CARD
6447058	P/N8286097	COLOR GRAPHICS ADAPTER CARD
6447095	P/N8286173	TRANSLATOR BOARD
6447117	P/N8286216	30 MEG HARD FILE
6447177	P/N8286216	30 MEG HARD FILE
6448111	P/N8286125	DUAL DRIVE CARD AT
6448800	P/N8286147	SERIAL PARALLEL CARD AT
6448856	P/N6480072	PLANAR AT
6448860	P/N8286125	DUAL DRIVE CARD AT
6448871	P/N8286216	30 MEG HARD FILE
6448893	P/N6480072	PLANAR AT
6449015	P/N8529238	PLANAR PC
6449016	P/N8529238	PLANAR PC
6449017	P/N8654213	PLANAR PC
6449018	P/N8654213	PLANAR PC
6449019	P/N8529254	PLANAR XT
6449020	P/N8529254	PLANAR XT
6450206	P/N8286130	DISKETTE DRIVE
6450207	P/N8286131	DISKETTE DRIVE
6450209	P/N8286116	128K MEMORY EXPANSION CARD
6450252	P/N59X7316	128-640K MEMORY EXPANSION CARD
6451501	P/N62X0912	PROFESSIONAL GRAPHICS ADAPTER CARD
6451502	P/N6181768	DATA ACQUISITION ADAPTER CARD
6451503	P/N6181770	GPIB ADAPTER CARD
6451504	P/N6181769	DATA ACQUISITION DISTRIBUTION PANEL
6451509	P/N62X0912	PROFESSIONAL GRAPHICS ADAPTER CARD
6480070	P/N6480072	PLANAR AT
6480097	P/N6323468	EGA MEMORY EXPANSION CARD
6480099	P/N6323468	EGA MEMORY EXPANSION CARD
6480122	P/N8286112	PLANAR AT
6480123	P/N8286112	PLANAR AT
6480148	P/N6480072	PLANAR AT
6480162	P/N83X1520	PLANAR
6480174	P/N6489910	DISKETTE DRIVE
6480182	P/N59X7294	512K MEMORY EXPANSION CARD
6480188	P/N6489922	PLANAR AT
6480790	P/N6323468	EGA MEMORY EXPANSION CARD
6481064	P/N6489907	20 MEG HARD FILE
6489924	P/N83X1520	PLANAR XT
6489934	P/N6278099	20 MEG HARD FILE
6489940	P/N6489922	PLANAR AT
6504003	P/N8285987	PARALLEL CARD
6523461	P/N70X8891	DISKETTE DRIVE
6523462	P/N70X8892	DISKETTE DRIVE

PSY2 RETAIN TIPS

PC PS2 FRU IDENTIFICATION CHART

8286128 P/N8529211 64K MEMORY MODUAL
8286168 P/N8529211 64K MEMORY MODUAL

SAS KEYWORDS:

PCOM	PSY2	PCOMPART	PSY2PART
5150SYSPART	5160SYSPART	5170SYSPART	8530PSY2PART
5162SYSPART	8550PSY2PART	8560PSY2PART	8580PSY2PART

PC AND PS/2 HARDWARE MAINTENANCE LIBRARY CHANGES

1.2.331 PC AND PS/2 HARDWARE MAINTENANCE LIBRARY CHANGES

Record number: H001971

Device: D/TPCPS
 Model: MPUB
 Tip key: 001
 Date created: 089/02/07
 Date last altered: A89/03/15

THIS ENTRY CONTAINS INFORMATION RELEASED AFTER 2/1/89, ABOUT ADDITIONS, DELETIONS, AND CORRECTIONS FOR THE FOLLOWING MANUALS:

- PC HARDWARE MAINTENANCE REFERENCE (FORM NUMBER S2299604)
- PC HARDWARE MAINTENANCE SERVICE (FORM NUMBER S2299603)
- PS/2 HARDWARE MAINTENANCE REFERENCE (FORM NUMBER S68X2221)
- PS/2 HARDWARE MAINTENANCE SERVICE (FORM NUMBER S68X2222)

IF A SUPPLEMENT IS AVAILABLE THAT CONTAINS NEW INFORMATION FOR A MANUAL, THE SUPPLEMENT NAME AND FORM NUMBER ARE INCLUDED IN THE TDR LISTED BELOW. IF A SUPPLEMENT IS NOT AVAILABLE, REFER TO THE TDR, AND WRITE THE NEW INFORMATION IN YOUR MANUAL.

SEE H02379 AND H087876 FOR A LISTING OF PRESENT PUBLICATIONS.

TABLE OF CONTENTS:

TDR NO. SUBJECT

H016959 MODEL 50 MEMORY MODULE PART NUMBER DELETION

SAS KEYWORDS:

5150SYSDOC	5155SYSDOC	PCOMDOC	5162SYSDOC
5160SYSDOC	PCOM	PSY2	6152SYSDOC
5170SYSDOC	8525SYSDOC	8530SYSDOC	8550SYSDOC
8560SYSDOC	8570SYSDOC	8580SYSDOC	PSY2DOC

1.2.332 PC AND PS/2 VIRUSES

Record number: H08642

Device: D/T5150
Model: M
Tip key: 155
Date created: 091/05/06
Date last altered: A95/02/03

PERSONAL COMPUTER VIRUSES ARE SHOWING UP ON DISKETTES USED BY SERVICE REPRESENTATIVES, AND OTHER IBMERS. IN SOME CASES, VIRAL SYMPTOMS HAVE BEEN MISINTERPRETED AS HARDWARE PROBLEMS, CAUSING CUSTOMER OUTAGES AND UNNECESSARY PARTS USAGE.

THE FOLLOWING ACTIONS ARE RECOMMENDED TO PREVENT IMPORTING AND EXPORTING KNOWN VIRUSES BETWEEN SERVICE REPRESENTATIVES AND CUSTOMERS:

1. OBTAIN THE LATEST VERSION OF IBMAV (FOR DOS SYSTEMS) OR IBMAV2 (FOR OS/2 SYSTEMS). THESE VIRUS DETECTION PROGRAMS ARE ON THE "PCTOOLS" AND "OS2TOOLS" VM REPOSITORIES.
2. SERVICE PERSONNEL SHOULD USE THE LATEST VERSION OF THESE PROGRAMS TO ENSURE THAT THEIR DISKETTES, AND THE CUSTOMER MACHINES THEY WORK ON, ARE FREE FROM THE KNOWN PC VIRUSES. SERVICES PERSONNEL SHOULD MAKE THIS THE FIRST STEP ON ALL CUSTOMER CALLS BEFORE USING ANY OTHER DIAGNOSTIC PROCEDURES.
3. DISKETTES CARRIED BY SERVICES PERSONNEL SHOULD BE WRITE-PROTECTED, WHENEVER POSSIBLE, TO AVOID THE RISK OF BECOMING INFECTED.
4. ALL DETECTED VIRUSES SHOULD BE REPORTED IMMEDIATELY BY MANAGEMENT TO RHQVM14(FEDELI).

SAS KEYWORDS:

PCOM PSY2

PC CARD MEMORY ALLOCATION RESTRICTIONS

1.2.333 PC CARD MEMORY ALLOCATION RESTRICTIONS

Record number: H065681

Device: D/T9545
 Model: M
 Tip key: 015
 Date created: 094/05/18
 Date last altered: A94/06/16

WARNING WARNING WARNING

On some 9545 and 2620 systems, a memory address restriction exists for PC cards using the following memory ranges.

RESTRICTED ADDRESS RANGES: C0000-C0FFF or D0000-D0FFF

The ranges may have been set in the CONFIG.SYS file or other files that allocate memory.

PC cards (PCMCIA) using memory within the restricted ranges may experience lost or changed data during operation.

 Following is an example of device driver statements that use an acceptable memory range of C1000-CFFF0 for PC cards. The first example excludes the range from use by the extended memory manager and the second example reserves the range for a particular driver. (NOTE) the CONFIG statements do not require the last character in the range.

1. MEMORY EXCLUSION Example from CONFIG.SYS:

DEVICE=C: \DOS\EMM386.EXE NOEMS X=C100-CFFF

EMM386.EXE is the file / program using the memory area mentioned. The X parameter indicates that C100-CFFF will be excluded from use by EMM.

2. MEMORY ALLOCATION Example from CONFIG.SYS:

DEVICE=C: THINKPAD DICRMU01.SYS /MA=C100-CFFF

The utility file DICRMU01.SYS is using memory allocated (MA) to the memory address of C100 through CFFF within the EMM area.

A "Supplement to User's Guide" detailing this restriction has shipped with affected 9545 and 2620 systems.

If your customer is experiencing any data corruption or loss, ensure the above restricted address ranges are not being used by device drivers or pointers before replacing any FRUs.

To do this key "TYPE CONFIG.SYS" after the C: \ prompt and check the data for driver addresses within the restricted ranges.

SAS KEYWORDS:

PSY2	PSY2ADPT	PSY2PROG	755CS
THINKPAD	755	755C	D/T2620
360P	360	360CS	360C

1.2.334 PC DOCTOR QUICK/FULL ERASE UTILITY AND FORMATTING

Record number: H162849

Device: D/T6561
 Model: M
 Tip key: 007
 Date created: 098/02/25
 Date last altered: A98/02/25

The updated IBM PC Enhanced Diagnostic program, PC Doctor version 1.8.362 (P/N05L1930), offers two fixed disk utilities equal in function to traditional DOS low level format utilities. These two utilities are:

- Quick Erase Hard Drive
- Full Erase Hard Drive

The Quick Erase Hard Drive provides a DOS utility that performs the following:

- Destroys the Master Boot Record (MBR) on the hard drive.
- Destroys all copy of the FAT Table on all partitions (both the master and backup).
- Destroys the partition table.
- Provides messages that warn the user that this is a non-recoverable process.

The Full Erase Hard Drive provides a DOS utility that performs the following:

- Performs all the above steps in Quick Erase.
- Provides a DOS utility that writes random data to all sectors of the hard drive. (provides a more secure erasure of the hard drive)
- Provides an estimate of time to completion along with a visual representation of completion status.
- Provides messages that warn the user that this is a non-recoverable process.

** WARNING **

When running either of these utilities, it should be noted that Quick & Full Erase DO NOT perform a simple re-format of a particular partition (C: , D: , etc.), but destroys all data including ALL partitions on the fixed disk drive.

The PC Doctor Enhanced Diagnostic diskette does not include the FDISK and FORMAT DOS utilities. After running the Quick or Full Erase utilities, it will be necessary to re-partition and re-format the fixed disk drive using the installation disks provided with the desired operating system.

For a complete listing of supported machine types, refer to the SAS KEYWORDS section below.

PC Doctor is a trademark of Watergate Software.

SAS KEYWORDS:

PSY2	PSVP	IBMPC	PSVPDIAG
PSY2DIAG	PSY2PROG	PSVPPROG	PSVPECA
PSY2ECA	UNCLASSIFIED	D/T6575	D/T6585
ECAVALID	D/T6576	D/T6586	D/T6560
D/T6260	D/T6272	D/T6282	D/T6577
D/T6587	D/T6588	D/T6589	D/T6598
D/T6875	D/T6885	D/T6876	D/T6886
D/T6877	D/T6887	D/T6888	D/T6899
D/T6562	D/T6592	D/T6898	D/T6561
D/T6591			

PSY2 RETAIN TIPS

PC SERVER INFO! IMPORTANTCOLON. PLEASE READ AND RESPOND TODAY!

1.2.335 PC SERVER INFO! IMPORTANT&COLON. PLEASE READ AND RESPOND TODAY!

Record number: H16477

Device: D/T8638
Model: M
Tip key: 001
Date created: 097/07/18
Date last altered: A97/08/07

Even if you've responded to my PROFS survey, please respond AGAIN today. Reply to:

IBMUSM27(CLIFFRAY) or CLIFFRAY@US.IBM.COM or FAX 919-547-4901

- 1. I viewed this RETAIN tip on this date:
2. I viewed this RETAIN tip on which application:
- RETAIN
- PROFS
- Lotus Notes
- World Wide WEB
- Other (specify:)

Name:
Country:

Job Function:

Thank you.

(IBMUSM27)CLIFFRAY cliffray@us.ibm.com FAX 919-547-4901

- PC SERVER 310 TRAP TRAPS HANG HANGS ABEND ABENDS BLUE SCREEN
PC SERVER 315 MONITOR DISPLAY KEYBOARD PRINTER TOKEN RING
PC SERVER 320 ETHERNET DISKETTE DIAGNOSTIC DIAGNOSTICS
PC SERVER 330 HARD DRIVE HARD DISK SYSTEM BOARD PLANAR MEMORY
PC SERVER 500 POWER CD-ROM CDROM
PC SERVER 520 8638 8639 8640 8641 8642 8650 3516 3517 3518
PC SERVER 720 8600 8595 9595 9585
PC SERVER 704

SAS KEYWORDS:

Table with 4 columns of keywords: PSY2, D/T8638, D/T8639, D/T8640, D/T8641, D/T8642, D/T8650, D/T8595, D/T9595, D/T9585, D/T8600, SERVICER ONLY, PSY2PRT, PSY2ERR, PSY2KBD, PSY2COMM, PSY2DSKT, PSY2DIAG, PSY2FDSK, PSY2BRD, PSY2MEM, PSY2DOC, PSY2OPER, PSY2PROG, PSY2ADPT, PSY2PART, PSY2PART, PSY2PWR, PSY2ECA, PSY2MISC, PSY2CDROM, PSY2AUDIO, 310, 315, 320, 325, 330, 500, 520, 720

Record number: H163307

Device: D/T8639
 Model: M
 Tip key: 007
 Date created: 098/03/31
 Date last altered: A98/04/09

ABSTRACT

PC SERVER 325/330 does not operate if IRQs 9-15 are assigned to to ISA cards. Therefore the ASMA card must use IRQ5, leaving no IRQs available to the 2nd ISA slot.

SYMPTOM:

If the ASMA* card is configured to use IRQ9 or above, the service processor manager fails to start and results in the Error "Serial port present, cannot access serial connection" To solve this the ASMA card must be configured to use IRQ5. Consequently there are no IRQs left available to ISA cards.

PROBLEM ISOLATION AIDS:

All of the following must be true for this Tip to apply:

The system is a PC Server 8640 model PT0/PB0/PM0/ OR
 the system is a PC Server 8639 model PT0/PTW/PB0/RB0

- ASMA adapter installed in system.
- The operating system installed is NT or Novell

FIX: (To allow installation of an additional ISA adapter card)

1 - The ASMA card must be left at it's default setting of IRQ5.

2 - An ISA IRQ can be made available by one of the following;

Disable Serial Port A
 Disable Serial Port B
 Disable Parallel Port
 Remove ASMA adapter

Disabling Parallel Port will free up IRQ7.

Disabling Serial Port A or Serial Port B can free IRQ3 or IRQ4

Removing ASMA adapter will free up IRQ5.

3 - When prompted during POST hit F1 to enter setup.

4 Use cursor keys to highlight "Devices and I/O Ports"
 press Enter key

5 - Use cursor keys to highlight "Parallel Port Setup"
 press Enter key, use cursor keys to select disabled,
 hit escape key 4 times, and hit Enter key when prompted
 "Yes, save and exit the Setup Utility"
 IRQ7 is now available for the 2nd ISA card.

---- OR ----

6 - Steps 3 and 4, then select "Serial Port Setup...", press enter key.

Disable Serial Port A or B using the cursor keys, and assign IRQ3 or 4 to the remaining Serial port.
 hit escape key 4 times, and hit Enter key when prompted
 "Yes, save and exit the Setup Utility"
 IRQ3 or IRQ4 is now available for the 2nd ISA card.

* Advanced Systems Management Adapter

SAS KEYWORDS:

D/T8639	ASMA	IRQ	UNCLASSIFIED
ISA	PSY2	D/T8640	PSY2OPTION
P/N94G5570	P/N76H3240	P/N94G7578	P/N12J4743

1.2.337 PC SERVER 325/330&COLON. FALSE LED ACTIVITY FOR 2ND CPU

Record number: H161348

Device: D/T8639
 Model: M
 Tip key: 004
 Date created: 097/10/08
 Date last altered: A97/10/08

This issue is relevant to the following model systems:

- PC Server 325 type 8639 model EJ0/ES0/ESV/RS0
- PC Server 330 type 8640 model ES0/ES2/ESS/EM2

The CPU activity indicating LED for the 2nd CPU may light intermittently without a 2nd CPU present. This condition has been observed to occur mostly during POST. This occurrence does not effect system stability or performance ie: there are no functionality failures associated with this occurrence. The activity of the LED is correct when a 2nd CPU is configured in the system. This TIP is intended as a source of information, and there is no field action required.

SAS KEYWORDS:

PSY2	PC SERVER	UNCLASSIFIED	SINGLE
MONO	PROCESSOR	MODE	INDICATOR
D/T8639	D/T8640	LED	INTERMITTENT
325	330		

1.2.339 PC SERVER 720 (8642) PROCESSOR CARD SUPPORT

Record number: H136237

Device: D/T8642
Model: M
Tip key: 004
Date created: 097/01/20
Date last altered: A98/01/20

The Processor card support FRU p/n06H8683 is now manufactured with metal instead of plastic. This metal support provides better support for the bridge card, memory cards, and processor cards.

If a PC Server 720 will be moved, shipped, or serviced, it is recommended that this metal card support be installed.

SAS KEYWORDS:

PSY2	UNCLASSIFIED	PSY2PART	PSY2ADPT
BRACKET	06H8683	76H6852	76H6850
75H9686	75H9688	76H3545	FALL
DROP	76H6852	76H6850	75H9686
75H9688	76H3545	75H9690	94G2724
94G6054	94G6055	94G6056	94G6057
71G0696	71G0694	76H7134	94G5352
76H7147	HEALTH		

1.2.340 PC SERVER 720&COLON. INSTALLING LONG ADAPTERS

Record number: H16452

Device: D/T8642
 Model: M
 Tip key: 005
 Date created: 097/07/16
 Date last altered: A97/07/16

It is important to adjust the two card guides (which are independent from each other) when installing long adapters. Improper adjustment and/or installation of the card guides can cause long adapters to be improperly seated. This can cause the adapter to pop up on one end causing intermittent errors and hangs.

Be sure to review pages 72 to 75 of the PC Server 720 User's Handbook entitled "Installing Long Adapters". Reviewing these pages will ensure proper installation of adapters.

Refer to the five(5) diagrams on page 74: They are referenced below as TOP LEFT, TOP RIGHT, CENTER, BOTTOM LEFT, and BOTTOM RIGHT.

TOP LEFT - This diagram shows how to remove the card guide from the system for adjustment. There are two card guides per system and each card guide can be adjusted independent of the other one.

TOP RIGHT - This diagram shows the two possible locations for re-installing the card guides if the length of the card changed but the width did not. The CENTER, BOTTOM LEFT, and BOTTOM RIGHT diagrams show the adjustment of the card guide to accommodate adapters of different widths.

CENTER - This diagram shows how to position each slot of the card guide. Each card guide has 4 individual adjustable retainers. These retainers snap/unsnap for removal/installation and can be adjusted for different widths as shown in the BOTTOM LEFT and BOTTOM RIGHT diagrams.

BOTTOM LEFT - This diagram shows how to separate the individual position retainer into its component pieces. The pieces are held together by snaps and this diagram shows how to unsnap them.

BOTTOM RIGHT - This diagram shows a position retainer separated into its component pieces. The arrow in the diagram shows how to resnap the component pieces to accommodate adapters of different widths.

SAS KEYWORDS:

PSY2	PSY2BRD	PSY2DOC	SERVICER ONLY
PSY2PART	PSY2ADPT		

1.2.341 PC 300 6576 & 6586 SYSTEM BOARD FRU DETAIL

Record number: H003989

Device: D/T6576
 Model: M
 Tip key: 002
 Date created: 096/03/29
 Date last altered: A96/10/31

Listed below is a system board chart for the IBM PC 300 Series 6576 and 6586 systems. There are 3 system board FRU part numbers for the 6576 and 6586 which are model dependent.

System boards should be replaced with the same part number removed (like for like), with the exception of P/N11H9622. P/N11H9622 has been replaced by FRU P/N96G3576.

DO NOT replace a system board with a board designed for a different model. The differences in the capabilities of the system boards will cause a system failure if not matched to the appropriate model.

FRU P/N	Models	Processor Speed	Video	Multi I/O Chip	Board Chipset
11H9623	3XX 4XX	75 & 90Mhz	S3 Trio64	National 306A	Triton 60
11H9622 subs to	5XX ONLY	100Mhz	S3 Trio64 Prime	National 306B	Triton 66
 v					
96G3576					
96G3573	6XX 7XX 8XX 9XX	120/133/150 166Mhz	S3 Trio64+	National 306B	Triton 66

Triton is a trademark of the Intel Corporation
 Trio64 & Trio64+ are trademarks of S3, Inc.

SAS KEYWORDS:

PSY2	PSVP	PSY2PART	PSVPPART
IBMPC	PC300	PC 330	PC350
6586	6576	PSY2BRD	PSVPBRD
D/T65XX	D/T6586		

1.2.342 PC 300 6577 & 6587 DOES NOT SUPPORT 70NS MEMORY

Record number: H017784

Device: D/T6577
Model: M
Tip key: 001
Date created: 096/06/19
Date last altered: A96/06/19

The IBM PC 300 Series 6577 and 6587 systems were designed to operate with 60ns Industry Standard memory SIMMs only.

Installation of any other speed or type of memory is not supported by IBM.

The "Installing Options in Your Personal Computer" document that ships with the PC 300 does contain a chapter on "Installing a 70ns Memory Upgrade." As part of the 70ns installation, the user is instructed to access the systems Setup Utility, which contains a setting under "Memory Option" in the Advanced Setup area that allows the user to select a setting for slower memory (70ns). Using this setting MAY allow the system to recognize SOME 70ns SIMMs and will appear to function normally. The operation of the system in with this configuration is not supported even if the system does recognize and function with the 70ns memory SIMM(s).

SAS KEYWORDS:

PSY2	D/T65XX	6577	6587
IBMPC	PSVP	PSVPMEM	PSY2MEM
D/T6587	PC 350	PC350	PC300
PC 330	PC330		

1.2.343 PC 300/700 PRELOADED SOFTWARE PROBLEM/FIXES

Record number: H13650

Device: D/T6885
 Model: M
 Tip key: 002
 Date created: 095/08/22
 Date last altered: A96/01/16

The purpose of the tip is to provide a list of problems which may be encountered using the preloaded OS/2, DOS/Windows software on PC 300 and 700 Series systems.

The format of this tip will list a problem description and a workaround or resolution where applicable.

Item #1 Problem Description (30754) PC300/700 DOS/Windows QAPLus/WIN version 1.01 may fail the RTC/CTS COM Port test when all four tests are selected.

Item #1 Workaround/resolution

The RTC/CTS test runs error free when run by itself. Problem fixed in version 1.03 and higher.

Item #2 Problem Description (31452) PC300/700 DOS/Windows Middle Mouse Button Test hangs with QAPLus/WIN Mouse Test being performed on a Logitech Mouse.

Item #2 Workaround/resolution

Problem resolved in QAPLus/WIN version 1.03 and higher.

Item #3 Problem Description (32211) PC700 DOS/Windows After deleting the Voyetra Audio drivers using the undelete icon and then installing the Crystal Audio drivers, the Windows logo will display and then drop out to the DOS Prompt.

Item #3 Workaround/resolution

Note: the undelete utility does not remove the Voyetra info in the Windows "SYSTEM.INI" file. This must be done manually using a text editor.

Item #4 Problem Description (31195) PC300 486 DOS/Windows The Reprint uninstall utility leaves the Reprint directory on the hardfile as well as the uninstall.exe file itself. This problem was found using level 2.1 of the software.

Item #4 Workaround/resolution

Manually delete files from the Reprint directory if desired.

Item #5 Problem Description (31348) PC300 486 DOS/Windows Select 256 or 16M colors in Windows setup. Run QAPLus/WIN Video test. The color setting is not shown or is shown as 0.

Item #5 Workaround/resolution

Problem resolved in QAPLus/WIN Version 1.03 and higher.

Item #6 Problem Description (31783) PC300 486 DOS/Windows Workgroup for Windows fails to install after diskette #2 if the 32bit disk access drivers (device=*int13 & device=*wdctrl) are commented out of the SYSTEM.INI file and the Cirrus video resolution is changed from VGA to a higher mode.

Item #6 Workaround/resolution

Change to VGA mode and do not comment out the 32 bit disk access drivers. The video resolution can be reset to a higher mode following the installation.

Item #7 Problem Description (31784) PC300 DOS/Windows CPBackup fails with "Application Error" or "Integer Divide By Zero" on 60Mhz or faster Pentium based systems.

Item #7 Workaround/resolution

This failure was only seen in preload testing. The failure is resolved in ship level preloads. Users with an early level preload that experience the failure should set the DMA Speed to low using the CPBackup options.

Item #8 Problem Description (32393) PC700 DOS/Windows Upon loading a UK or U.S. preload the first time on a system with an IBM 1Gb hardfile, with Rapid Resume ENABLED, the system returns the following error after powering off/on:
 ERROR - Check hard drive.

After displaying the error above, the following error is received when the operating system is started:

"EMM386 has detected error #06 in an application at memory address 00B8: 0BA2. To minimize the chance of data loss, EMM386 has halted your computer. For more information, see the README.TXT file. To restart your computer, press ENTER."

Item #8 Workaround/resolution

The failure may be due to a defective hardfile or a defective preload image. Reload preloaded files.

Item #9 Problem Description (36522) PC700 DOS/Windows

After re-installation of NETFINITY 2.0 from Diskette Factory, the following error message is displayed "System Error - Cannot read Drive A: ."

Item #9 Workaround/resolution

1. Create a TEMPORARY DIRECTORY on drive C: (MD TMP)
2. Change directory to C: \TMP (CD TMP)
3. Insert disk #2 in drive A: .
4. XCOPY A: *. * /V.
5. Insert disk #1 in drive A: .
6. Change to drive A:
7. Type INSTALL
8. When prompted for disk #2, insert disk #2 in drive A: and type C: \TMP for the path.

Item #10 Problem Description: PC700 OS/2 WARP Preload

OS/2 WARP S3 864/868 Device Driver does not show a second page in the Video Setup if the device driver was installed with a DDC1 monitor (Display Data Channel, version 1) installed. The second page allows the user to select a specific monitor type.

Item #10 Workaround/resolution:

With a DDC1 monitor, the second page is not needed. There is no fix because the video setup is working as designed.

Item #11 Problem Description: PC300 & pc700 WARP Preload (38662)

The WARP Remove Program (WARPREMV.EXE) located in the "OS/2 WARP" group on the Windows Desktop does not remove all of the WARP files.

Item #11 Workaround/resolution:

Remove the remaining WARP files and directories manually.

Common files to delete for all countries:

```
ATTRIB c: \wp?root.?sf -h -s -r
ERASE c: \wp?root.?sf
ATTRIB c: \ea?data.?sf -h -s -r
ERASE c: \ea?data.?sf
DELTREE c: \os2
```

Files to delete for specific countries:

Brazil:

```
DELTREE c: \ambient1
DELTREE c: \ambiente
```

Canadian French:

```
DELTREE c: \bureau
DELTREE c: \bureau_t
```

Danish:

```
DELTREE c: \arbejdsp
DELTREE c: \deskto1
DELTREE c: \ingen_st
DELTREE c: \ingen_s1
DELTREE c: \midlerti
```

French:

```
DELTREE c: \bureau
DELTREE c: \bureau_t
```

Italian:

```
DELTREE c: \scrivan1
DELTREE c: \senza_u1
DELTREE c: \senza_uB
DELTREE c: \scrivani
```

LA Spanish:

```
DELTREE c: \escritol
DELTREE c: \nada1
DELTREE c: \escritor
DELTREE c: \nada
```

Netherlands:

```
DELTREE c: \werkplek
DELTREE c: \nergens1
DELTREE c: \tijdelij
DELTREE c: \nergens
```

Norwegian:

```
DELTREE c: \arbeidso
```

DELTREE c: \reservea
 DELTREE c: \bortel
 DELTREE c: \borte

Portuguese:

DELTREE c: \ambient1
 DELTREE c: \agora_al
 DELTREE c: \ambiente
 DELTREE c: \agora_aq

Spanish:

DELTREE c: \escritol
 DELTREE c: \nadal
 DELTREE c: \escritor
 DELTREE c: \nada

Finnish:

DELTREE c: \ty p yt
 DELTREE c: \poissal
 DELTREE c: \poissa
 DELTREE c: \tilap in

Swedish:

DELTREE c: \skrivbor
 DELTREE c: \tillf ll

Item #12 Problem Description: PC300 6576/6586 Windows95 Preload
 The Brazilian Portuguese preload image does not contain WordPad
 on the Desktop under the Start/Program/Accessories path. The
 WordPad Icon will not appear under the Start/Program/Accessories
 group.

Item #12 Workaround/resolution:

Click at Start/Setting/Control Panel. Select Add/Remove Program
 from the Control Panel pop up screen. Select Window Setup from
 Add/Remove Programs Properties. Double click on Accessories.
 Select WordPad from Accessories popup window. Click on OK
 button on Accessories pop up screen. Click on OK button on
 Add/Remove Program properties.

SAS KEYWORDS:

PSY2	D/T68XX	D/T6573	D/T6583
D/T6571	D/T6581	D/T6575	D/T6585
D/T6876	D/T6886	D/T6875	D/T6885
68XX	6573	6583	6571
6581	6575	6585	6876
6886	6875	6885	PSVP
D/T6576	D/T6586	6576	6586
D/T65XX	65XX	PSY2MCD	PSVPMCD
PSVPPROG	PSY2PROG	IBMPC	QA PLUS

1.2.344 PC 340 PROCESSOR TYPE JUMPER SETTINGS

Record number: H135070

Device: D/T6560
 Model: M
 Tip key: 004
 Date created: 096/11/12
 Date last altered: A96/11/12

Listed below are the processor type jumper settings for the IBM PC 340 Series 6560 system. All models of the 6560 contain a label attached to the underside of the top cover assembly that, depending on the model, may or may not show ALL of the processor type jumpers settings up through 166Mhz.

Processor	JP14	JP17
P75 Mhz	1-2	Open
P90 Mhz	3-4	Open
P100 Mhz	1-2,3-4	Open
P120 Mhz	3-4	1-2
P133 Mhz	1-2,3-4	1-2
P166 Mhz	1-2,3-4	1-2,3-4

The System Board layout section of the PC 300/700 HMS is being updated to include all of the processor type jumper settings.

SAS KEYWORDS:

PSVP	PSY2	PSVPBRD	PSY2BRD
PSVPPART	PSY2PART	PSVPDOC	PSY2DOC
IBMPC	PC340	PSVPOEM	PSY2OEM
UNCLASSIFIED			

1.2.345 PC 340 SETUP UTILITY SHOWS 166MHZ OVERDRIVE AS 0MHZ

Record number: H134928

Device: D/T6560
Model: M
Tip key: 003
Date created: 096/11/05
Date last altered: A96/11/05

IBM PC 340 Series 6560 systems may display the 166Mhz Intel Pentium OverDrive processor upgrade as a "0Mhz" processor in the systems Setup Utility.

The processor functions normally under program control.

Engineering is currently investigating the cause of this problem. A Flash BIOS update is being considered to provide the PC 340 system with the ability to properly display the Intel 166Mhz OverDrive processor upgrade in the Setup Utility.

This tip will be updated with information regarding an update as soon as it becomes available.

Pentium & OverDrive are trademarks of the Intel Corporation.

SAS KEYWORDS:

PSVP	PSY2	PSVPOEM	PSY2OEM
PSVPPART	PSY2PART	PSVPADPT	PSY2ADPT
IBMPC	PC340		

1.2.346 PC 350/750 COVER BENDS & SHIFTS W/LARGE MONITOR ON TOP

Record number: H135118

Device: D/T6885
 Model: M
 Tip key: 011
 Date created: 096/11/13
 Date last altered: A96/11/13

A large display installed on top of an IBM PC 300/700 Series 6581, 6583, 6585, 6586, 6587, 6885, 6886 or 6887 (all 5x5 chassis models) system unit may cause the top cover assembly to bend and/or shift if the cover is not installed properly.

When installing the top cover assembly, ensure that the cover tabs on each side of the cover line up with the openings on the base frame assembly, and that the cover top front is flush against the front panel. The rear latch should be held down while installing the top cover and locked into place to secure the cover assembly.

The proper installation of the top cover assembly will prevent the appearance of bent sides due to the cover tabs not being aligned with the base frame openings and eliminate the improper fit caused by the cover being moved whenever the monitor is shifted.

SAS KEYWORDS:

PSVP	PSY2	IBMPC	PSY2DISP
PSVPDISP	BENT	D/T6581	D/T6583
D/T6585	D/T6586	D/T6885	D/T6886
D/T6887	D/T6587	PC750	PC300
PC350	UNCLASSIFIED		

PC 360 6598 NON-SUPPORT OF 2.88 DISKETTE DRIVE

1.2.347 PC 360 6598 NON-SUPPORT OF 2.88 DISKETTE DRIVE

Record number: H066617

Device: D/T6598
Model: M
Tip key: 002
Date created: 096/04/12
Date last altered: A96/04/12

IBM PC 360 6598 systems do not support 2.88Mb diskette drives at this time.

Some user documentation and service material may indicate that the 2.88Mb diskette drive is supported. This information will be updated to remove any reference to the 6598 supporting a 2.88Mb diskette drive option.

SAS KEYWORDS:

IBMPC	PSVP	PSY2	D/T65XX
6598	PC360	PENTIUMPRO	PSVPDSKT
PSY2DSKT			

1.2.348 PC-PS/2 SERVICE INFORMATION MANUAL (SIM) CORRECTIONS

Record number: H016112

Device: D/T5150
 Model: M
 Tip key: 144
 Date created: 089/03/14
 Date last altered: A90/01/05

PERSONAL COMPUTER-PERSONAL SYSTEM/2 FAMILY SERVICE INFORMATION
 MANUAL, SR28 - 0280, VERSION 3.

THIS MANUAL IS OBSOLETE AS OF 1/89

TO OBTAIN THE LATEST SERVICE INFORMATION MANUALS (SIM)
 ORDER THE FOLLOWING BILL OF FORM NUMBERS (BOF):
 SBOF-2480 PERSONAL SYSTEM/2 FAMILY SIM MANUAL
 SBOF-2481 PERSONAL COMPUTER FAMILY SIM MANUAL
 ORDER VIA SLSS SUBSCRIPTION TO AUTOMATICALLY RECEIVE NEW PRODUCT
 UPDATES, ADDITIONS AND CORRECTIONS TO EACH BILL OF FORM.

SAS KEYWORDS:

5150SYSDOC	4455SYSDOC	4456SYSDOC	4860SYSDOC
5150SYSDOC	5155SYSDOC	5160SYSDOC	5170SYSDOC
5271SYSDOC	5371SYSDOC	5273SYSDOC	PCOMDOC
PCOM	5531SYSDOC	PSY2	PSY2DOC
8550SYSDOC	8560SYSDOC	8580SYSDOC	8530SYSDOC
7552SYSDOC			

PCI IDE ADAPTERS NOT SUPPORTED IN PC 300/700 SYSTEMS

1.2.349 PCI IDE ADAPTERS NOT SUPPORTED IN PC 300/700 SYSTEMS

Record number: H126045

Device: D/T68XX
 Model: M
 Tip key: 002
 Date created: 095/01/18
 Date last altered: A95/01/19

The IBM PC 300/700 Series systems are incompatible with PCI IDE adapter cards.

PCI IDE adapter cards require access to the "floppy diskette change" signal to be 100% compatible. The "floppy diskette change" signal is not available to the PCI bus in the IBM PC 300/700 Series systems.

SAS KEYWORDS:

PSY2	6875	D/T6875	D/T6885
D/T6876	D/T6886	6885	6876
6886	PSY2ADPT	PSY2OEM	PSY2PART
IBMPC	PSY2ERR	PC 750	PC 730
PC 330	PC 300	PC 350	D/T65XX
D/T6571	D/T6573	D/T6581	D/T6583
D/T6585	D/T6575	6571	6573
6581	6583	6575	6585
PSVP			

1.2.350 PCSERVER HMM DOCUMENTATION ERRORS

Record number: H124471

Device: D/T8640
 Model: M
 Tip key: 001
 Date created: 094/06/22
 Date last altered: A95/02/09

Servicers should make the following corrections to the 8640 PCSERVER HMM (Hardware Maintenance Manual) supplement, Form # S83G-8084-00, dated May 1994.

1. Page 32; Bullet "#4" implies the SCSI LED connection is on the system board. The referenced connector is for a PCI-IDE fixed disk only. When an IBM SCSI option is installed in a 8640-xnx, the SCSI LED connection is on the SCSI adapter card as pointed out by the option installation r manual (IBM SCSI-II card). Refer to the user documentation for LED connection(s) on OEM SCSI adapters.
2. Page 33; The jumper setting (W2) for the 486SX should be 2-3, not Pins 1 - 2 as shown in the manual.
3. Page 34; J20, J19, and J18 have "PCI+1, PCI+2, PCI+3" shown. The "+" symbol is incorrect and should be replaced with "#" ("PCI #1," etc.).
4. Page 35; Jumper location "W8/19" is incorrect. It should say "W8".
5. Page 36; he HMM shows the following additional statement at bullets 2 and 18:
 "SCSI hard disk drive adapter connector"
 These statements should be deleted.

GENERAL NOTES:

- 1). To enter the PC SERVER BIOS Setup Screen, press "CTL-ATL-S"
- 2). For complete details on using the EISA CONFIGURATION DISKETTE, Refer to the user documentation shipped with the system.
- 3). FRU PN 06H3397 is a Real Time Clock (RTC) with an internal lithium battery. Proper Safety considerations must be observed when discarding this part.

SAS KEYWORDS:

PSY2	PSY2DOC	8640	PC
SERVER	PCSERVER	300	

1.2.351 PC300 RISER INSTALLATION PROCEDURE

Record number: H127483

Device: D/T6571
 Model: M
 Tip key: 002
 Date created: 095/04/18
 Date last altered: A95/05/16

An improperly installed riser card may cause many problems including, but not limited to, adapter card failures, 161, 162, and 163 errors, system hangs, trap errors, etc. Before replacing any parts for any apparent hardware problem, insure the riser is completely seated in the system board and any adapters are completely seated in the riser.

The following procedure should be followed when installing the riser card in a 6571 or 6573 to insure the riser remains fully seated in the system board.

- 1) Remove the screw which holds the riser support (DASD mounting bracket) to the rear of system (important).
- 2) Insert the riser in the system board connector.
- 3) Screw the riser to the riser support.
- 4) Screw the bracket to rear of frame without lifting the riser support.

SAS KEYWORDS:

PSY2	PSVP	6571	6573
D/T6573	PSY2MISC	PSVPMISC	PSY2ADPT
PSVPADPT	P/N88G4255	P/N88G4250	PC330
IBMPC	PC300		

1.2.352 PC300 486 JUMPER CORRECTIONS

Record number: H132166

```
Device:           D/T6571
Model:            M
Tip key:          003
Date created:     096/01/11
Date last altered: A96/02/08
```

Below are items that have been reported to IBM as errors and/or missing information in the area of PC 300 (486) jumpering and configuration.

This tip will be periodically updated with additional information as required.
IBM PC 300 486 based systems may contain a label on the underside of the top cover assembly that shows incorrect PCI/VL-Bus jumper settings.

Selection	JP3	JP4	JP13	JP7
VESA	1-2	1-2	Close	Open
Local Bus				
PCI BUS	2 - 3	2-3	Open	Close

When the PCI riser card is removed from the system board, the system will not power up unless the PCI jumpers on the system are installed in the VESA position.

PROCESSOR SPEED jumpers or CPU SPEED SELECTION jumpers:

Some earlier field documentation was misleading or incorrect when addressing the CPU Speed Selection jumpers. The chart below illustrates the correct orientation of the jumpers depending on the processor installed.

Speed	J35	J36	J37
20Mhz	ON	OFF	OFF
25Mhz (D)	OFF	ON	ON
33Mhz	OFF	ON	OFF
40Mhz	OFF	OFF	ON
50Mhz	OFF	OFF	OFF

NOTE - Incorrect placement of the speed selection jumper may cause system failures and an incorrect Processor Speed designation in the systems Setup Utility.

Always check the jumper settings on replacement system board FRU's to match the processor installed. The default setting for replacement boards is the 25Mhz setting.

SAS KEYWORDS:

PSY2	PSVP	PSY2PART	PSVPPART
IBMPC	PC300	PC 330	PC350
6571	6573	6581	6583
D/T6571	D/T6573	D/T6581	D/T6583
PSVPERR	PSY2ERR	PSVPBRD	PSY2BRD
DEAD	HANG	HANGS	

1.2.353 PC300/700 FRONT BEZEL REMOVAL PROCEDURE

Record number: H00298

Device: D/T68XX
 Model: M
 Tip key: 009
 Date created: 095/07/18
 Date last altered: A95/08/29

The recommended procedure for removing the PC300 and PC700 5x5 front bezel (FRU p/n06H1775) from the system base assembly is as follows.

- (1) Release the center latch (under 3.5" DASD tray).
- (2) Release the 2 left side latches while keeping the bottom away from the base assembly.
- (3) Release the 2 DASD latches (under 5.25" DASD tray) while keeping the bottom and left side of the bezel away from the base assembly.
- (4) Lift the bezel up from bottom and rotate away from the base assembly.

This will prevent damaging three tabs on the bezel above the diskette drive opening.

The bezel is installed by inserting two guide pins, located on the bezel, into the alignment holes on the base assembly and pressing the bezel straight onto the base.

SAS KEYWORDS:

PSY2	IBMPC	PSY2MISC	PSVPMISC
PC300	PC350	PC700	PC750
D/T6583	D/T6573	D/T6585	D/T6886
D/T6885	D/T6586	D/T6581	PSVP

1.2.354 PC300/700 HMM (83G7789-01) UPDATES

Record number: H127821

Device: D/T6885
Model: M
Tip key: 001
Date created: 095/05/25
Date last altered: A95/05/30

The following updates should be added to the PC300/700
Hardware Maintenance Manual, publication number S83G-7789-01.

Page:

113 Processor type "W" identifies a DX4-100, not a DX4-75.
All PC300-486 DX4 systems are 100Mhz.

SAS KEYWORDS:

PSY2	IBMPC	PC300	PC700
D/T6571	D/T7573	D/T6581	D/T6583
D/T6576	D/T6576	D/T6585	D/T6586
D/T6875	D/T6885	D/T6876	D/T6886
PSY2PART	PSY2DOC	82G5059	P/N82G5059

1.2.355 PC300/700 HMM PARTS & INFORMATION UPDATES

Record number: H031336

Device: D/T6583
 Model: M
 Tip key: 001
 Date created: 095/02/07
 Date last altered: A95/11/02

The PC300/700 Hardware Maintenance Manual, publication number S83G-7789 - 00, dated October 1994, requires the following FRU part number corrections:

Page	Index	Description	Correct P/N
31	5	L2 CACHE, 1MB (6875 6876, 6885, 6886)	p/n92G7552
33		MULTIMEDIA, AUDIO CARD ASSEMBLY, 16 Bit (6571, 6573, 6575, 6581, 6583, 6585)	p/n10H3157
N/a		MICROPHONE, 65xx	p/n06H3616
N/a		MICROPHONE, 68xx	p/n66G1246

The following part numbers are correct as listed in the HMM. Additional information has been added to the descriptions.

Page	Index	Description	Correct P/N
29	7	(1)Cover Lock Assembly 5x5 Without latch (6581, 6583, 6585, 6885, 6586)	p/n06H1776
29	7	Cover Lock Assembly 3x3 With Latch (6571, 6573, 6575, 6875, 6876)	p/n06h5737
32		Audio Front Panel Assm (6875, 6876, 6885, 6886) with cable	p/n06H5749

Note (1): The 5x5 front cover latch is included with Front Bezel Assembly p/n06H1775.

75 Jumper designations 9 & 10 are reversed. The P24T jumper is J24 and has only 2 pins.

The next release of the HMM will contain these changes.

SAS KEYWORDS:

PSY2	6875	D/T6875	D/T6885
D/T6876	D/T6886	6885	6876
6886	6575	6585	PSY2PART
PC 750	PC 730	PSVP	PC 330
PC 300	PC 350	D/T65XX	D/T6571
D/T6573	D/T6581	D/T6583	D/T6585
D/T6575	6571	6573	6583
IBMPC	6581	06H6056	P/N06H6056
1031576	P/N1031576	06H6062	P/N06H6062
KEYLOCK	KEYLOCK	D/T68XX	

PSY2 RETAIN TIPS
PC300/700 HMM PARTS UPDATES

1.2.356 PC300/700 HMM PARTS UPDATES

Record number: H127170

Device: D/T68XX
 Model: M
 Tip key: 006
 Date created: 095/04/17
 Date last altered: A95/11/02

The PC300/700 Hardware Maintenance Manual, publication number S83G-7789 - 00, dated October 1994, requires the following FRU part number corrections:

Page	Index	Description	Correct P/N
31	5	L2 CACHE, 1MB (6875, 6876, 6885, 6886)	p/n92G7552
33		MULTIMEDIA, AUDIO CARD ASSEMBLY, 16 Bit (6571, 6573, 6575, 6581, 6583, 6585)	p/n10H3157
N/a		MICROPHONE, 65xx	p/n06H3616
N/a		MICROPHONE, 68xx	p/n66G1246

The following part numbers are correct as listed in the HMM. Additional information has been added to the descriptions.

Page	Index	Description	Correct P/N
29	7	(1)Cover Lock Assembly 5x5 Without latch (6581, 6583, 6585, 6885, 6586)	p/n06H1776
29	7	Cover Lock Assembly 3x3 With Latch (6571, 6573, 6575, 6875, 6876)	p/n06h5737
31	5	L2 CACHE: 128KB (6571, 6573, 6581, 6583) 5 modlues 256KB (6571, 6573, 6581, 6583) 9 modules 256KB (6875, 6876, 6885, 6886) 9 modules	p/n06H4759 p/n06H4760 p/n06H6052
32		Audio Front Panel Assm (6875, 6876, 6885, 6886) with cable	p/n06H5749

Note (1): The 5x5 front cover latch is included with Front Bezel Assembly p/n06H1775.

The next release of the HMM will contain these changes.

SAS KEYWORDS:

PSY2	6875	D/T6875	D/T6885
D/T6876	D/T6886	6885	6876
6886	6575	6585	PSY2PART
PC 750	PC 730	PSVP	PC 330
PC 300	PC 350	D/T65XX	D/T6571
D/T6573	D/T6581	D/T6583	D/T6585
D/T6575	6571	6573	6583
IBMPC	6581	06H6056	P/N06H6056
1031576	P/N1031576	06H6062	P/N06H6062
KEYLOCK	KEYLOCK	D/T68XX	06H4759
06H4760	06H6052		

1.2.357 PENTIUM PRO REPLACEMENT PROCEDURE IN SERVER 325/330

Record number: H136522

Device: D/T8640
 Model: M
 Tip key: 015
 Date created: 097/02/06
 Date last altered: A98/01/20

Before replacing, upgrading, or adding an additional Pentium Pro Processor in the IBM PC Server 325 (8639) and PC Server 330 (8640), it is important to verify that Server has the latest BIOS level.

The latest BIOS for the PC Server 325 and 330 can be found on the IBM PC Co. BBS by searching for "PC Server 325/330 BIOS."

Use the following procedure BEFORE replacing, upgrading or adding an additional Pentium Pro processor:

1. Perform a shutdown of the operating system and then reboot.
2. When the IBM logo screen appears, check the BUILD ID in the lower left hand corner of the screen. An example of a BUILD ID is RAET29AUS. The 29A is the BIOS level. Compare this level with the latest BIOS level on the IBM PC Company BBS.
3. If the system BIOS level is at a lower level (lower numeric value) than the latest BIOS level available on the BBS, download the latest BIOS image from the BBS, and update the system BIOS prior to installing the processor.

-----IMPORTANT-----

Diskette images are customer installable. Customers should review any "README" files located on the diskette for installation information. Contact the IBM PC HelpCenter at 800-772 - 2227 if download/installation assistance is needed.

IBM PC Server files are located in Directory 22 on the PC Company Bulletin Board Service (BBS) at 1-919-517-0001 or tieline 255-0001.

The files may also be downloaded via the Internet from the IBM PC File Library by searching the following Internet URL:
<http://www.pc.ibm.com/files.html>

The Intel Pentium Pro processor has an area to store microcode patches. This microcode is stored in the BIOS of the PC Server 325/330 and is loaded into the Pentium Pro during POST.

Each Pentium Pro processor has a stepping level. Each stepping level requires a specific microcode patch. The latest level BIOS will contain all the microcode patches for all processor stepping levels.

When the Server POSTs, a specific microcode is loaded to the Pentium Pro processor depending on its stepping level.

If the BIOS is downlevel, the processor may not receive the correct microcode because it is not present in the downlevel BIOS. The processor will not operate properly without the correct microcode patch.

Intel and Pentium are trademarks of Intel Corporation.

SAS KEYWORDS:

PSY2	UNCLASSIFIED	PSY2BRD	PSY2PART
PENTIUMPRO	D/T8639	12J2680	P/N12J2680
75H9831	P/N75H9831	12J3501	P/N12J3501
HEALTH			

1.2.358 PENTIUM PROCESSOR DEFECT, REPLACEMENT OVERVIEW

Record number: H015530

Device: D/T6384
 Model: M
 Tip key: 073
 Date created: 094/12/02
 Date last altered: A97/07/13

DETAIL:

Intel has acknowledged a defect in its Pentium microprocessor that can cause inaccurate results in some mathematical applications. In some cases the precision of the Pentium divide operation may be reduced.

Any IBM PC product utilizing the Pentium processor may be subject to this error. This includes, but is not limited to, all models of the ValuePoint P60/D, and certain models of PS/2, PCServer, PC-300, PC-700, Aptiva, and Ambra systems.

IBM is committed to providing a solution to any of our customers affected by this problem, including customers with systems that are beyond the original warranty period.

PROBLEM ISOLATION AIDS:

System diagnostics run without errors.

There is no physical method of identifying an affected Pentium Processor at this time, however, all systems shipped prior to announcement of this defect were manufactured with the flawed processor.

TO VERIFY THE PROCESSOR IS AFFECTED, A PROCESSOR TEST PROGRAM HAS BEEN MADE AVAILABLE BY IBM. THIS BOOTABLE PROGRAM WILL DISPLAY PROCESSOR ID INFORMATION AND TEST THE PROCESSOR'S FLOATING POINT DIVISION FUNCTION. THE TEST RESULTS WILL BE DISPLAYED TO THE USER, AND CLEARLY IDENTIFY IF THE PROCESSOR HAS THE FLOATING POINT DIVIDE (FDIV) DEFECT.

THE CPUIDIBM PROGRAM MAY BE OBTAINED FROM THE IBM PC COMPANY BBS SYSTEM BY CALLING 1-919-517-0001. LOCATE THE "MISCELLANEOUS FILES" SECTION (SECTION #7) FOR THE FILE TITLED "CPUIDIBM.DSK."

THE CPUIDIBM PROGRAM MAY ALSO BE DOWNLOADED VIA THE INTERNET FROM THE IBM PERSONAL COMPUTER FILE LIBRARY BY SEARCHING THE FOLLOWING INTERNET URL:
<http://www.us.pc.ibm.com/files.html>

THE PROGRAM IS LOCATED IN THE "MISCELLANEOUS FILES" SECTION OR BY USING THE SEARCH FACILITY TO LOCATE THE FILE BY THE NAME "CPUIDIBM.DSK."

Numerous publications and bulletin boards services are publishing methods for users to recreate the failure. While capable of demonstrating this divide operation anomaly, these calculations may not utilize the same processor operations as the user's software.

FIX:

THE ORIGINAL FIELD PLAN REQUIRED CUSTOMERS AND SERVICERS TO CONTACT THE IBM PC COMPANY HELPCENTER FOR PARTS AND INFORMATION. EFFECTIVE IMMEDIATELY, THIS PROCEDURE HAS BEEN CHANGED FOR ALL PENTIUM PARTS ORDERS.

TO ACQUIRE A REPLACEMENT PENTIUM MODULE FOR ANY AFFECTED IBM PC, ORDER THE PROCESSOR VIA NORMAL FRU ORDERING PROCEDURES. FOR CORRECT FRU PART NUMBERS AND FURTHER INSTRUCTION, SEE THE APPROPRIATE ECA (LISTED BELOW).

The following ECA's, which previously covered labor only, have been modified to provide reimbursement for parts and labor.

ECA	D/T's	RETAIN Record:
---	-----	-----
6384 - ECA001	6384 (P60/D)	H062600
8640-ECA001	8640 (Server 300)	H126291
6575 - ECA001	6575-85 (PC300)	H126326
6875 - ECA001	6875-85 (PC700)	H126327
0958 - ECA001	0958 (AMBRA)	H127568
2144 - ECA001	2144 (APTIVA)	H127566
9595 ECA003	8590, 8595, 9590, 9595, 8641	H126407

- All systems should be tested for proper operation prior to replacing the processor or processor complex card.

IBM customers in the U.S. that feel they are exposed to this problem should contact their IBM service provider.

Customers in Canada should call IBM's HelpPC at 800-565-3344 for assistance.

PENTIUM is a trademark of the Intel Corporation.

SAS KEYWORDS:

PSY2	D/T6384D	P60	P60D
6384D	300	700	VALUE POINT
D/T6585	D/T6575	D/T8590	D/T8595
D/T9590	D/T9595	D/T9595A	9595A
D/T8640	D/T8641	D/T8600	D/T6875
D/T6885	193	PSY2	189
199	PSVPBRD	PSY2BRD	IBMPC
SERVER	500	PSVP	PENT

1.2.359 PERFORMANCE ENHANCEMENTS

Record number: H092479

Device: D/T8543
Model: M
Tip key: 005
Date created: 091/06/10
Date last altered: A92/03/10

DURING MANUFACTURE OF THE 8543 LAPTOP SYSTEM THE FUNCTION SETTINGS ARE SET TO DEFAULT VALUES. THESE DEFAULT VALUES ARE REFERENCE STARTING VALUES AND SHOULD BE CHANGED BY THE END USER TO ENSURE THAT THE SETTINGS GIVE THE BEST POSSIBLE RESULTS FOR THE SOFTWARE AND APPLICATION. THESE SETTINGS AFFECT SOME SCREEN AND POWER MANAGEMENT FUNCTION. THE RESULT CAN BE HIGH POWER DRAIN ON THE BATTERY AND DEFAULT LCD SETTINGS THAT COULD BE IMPROVED ON TO PRODUCE A BETTER IMAGE ON THE LCD SCREEN.

RETAIN TIP H001600 HAS MORE DETAILED INFORMATION ON BATTERY SETTINGS AND RETAIN TIP H037735 CONTAINS LCD INFORMATION.

A FULL BREAKDOWN OF THE SETTINGS AND THEIR FUNCTION IS PROVIDED IN THE PUBLICATIONS SUPPLIED WITH THE SYSTEM (QUICK REFERENCE) CUSTOMERS SHOULD BE MADE AWARE OF THESE PARAMETERS AND THAT BY EXPERIMENTING WITH THE SETTINGS THEY CAN ENSURE THAT THE SYSTEM BEST SUITS THEIR NEEDS. THE DEFAULT SETTINGS CAN BE RESET TO THE ORIGINAL SETTING BY BOOTING A DOS DISKETTE, INSERTING A BACK UP COPY OF THE DIAGNOSTIC DISKETTE INTO DRIVE A AND TYPING 'DEFAULT' AT THE COMMAND PROMPT.

SAS KEYWORDS:

D/T8543	PSY2	PSY2DISP	PSY2PWR
8543SYSDISP	8543DISP	8543SYSPWR	PSY2OPER
8543SYSOPER			

1.2.360 PERFORMANCE ENHANCEMENTS FOR SERVERAID II ADAPTER/CONTROLLER

Record number: H163649

Device: D/T8640
 Model: M
 Tip key: 024
 Date created: 098/05/11
 Date last altered: A98/05/11

Performance enhancements for the ServeRAID II Adapter and the Onboard ServeRAID II Controller can be achieved (and not limited to) as follows:

- 1 - The "IBM ServeRAID and ServeRAID II BIOS Flash Diskette version 2.70"* offers several performance enhancements for RAID Levels 0, 1, and 5.
- 2 - Changing the Write Policy to Write-Back Mode will improve performance for RAID Levels 0, 1, and 5 with RAID 5 yielding the greatest performance.
- 3 - Selecting the optimum Stripe Unit size with respect to the System I/O Request will maximize overall performance
 Note: The Users Guide that shipped with the System or Option as well as the HMM (Hardware Maintenance Manual) for the System lists existing ways (to include item 2 and 3 above) to increase performance of the ServeRAID II Adapter / Onboard ServeRAID II Controller.

*Note: The "IBM ServeRAID and ServeRAID II BIOS and Flash diskette version 2.70" is available at the IBM Website at the following URL:

Http: //www.pc.ibm.com/us/files.html

- Select "Search"
- Type "BIOS 2.70" in the keywords box
- Select "Search"
- Select the Readme file associated with the "IBM ServeRAID and ServeRAID II BIOS and Flash diskette version 2.70"
- Print out the contents for directions to apply the BIOS update and Firmware Flash
- Select the "IBM ServeRAID and ServeRAID II BIOS and Flash diskette version 2.70" to download (the diskette is a self-extracting executable file that will create a bootable diskette)

SAS KEYWORDS:

PSY2	UNCLASSIFIED	D/T8638	D/T8640
D/T8641	D/T8642	D/T8650	D/T8651
D/T8644	MICROCODE	STRIPE SIZE	WRITE-BACK
BIOS	FIRMWARE	2.70	

PERSONAL PAGEPRINTER ADAPTER/A RUN IN LOOP MODE WILL FAIL.

1.2.361 PERSONAL PAGEPRINTER ADAPTER/A RUN IN LOOP MODE WILL FAIL.

Record number: H026393

Device: D/T8550
Model: M
Tip key: 021
Date created: 088/03/28
Date last altered: A92/10/02

IF THE PERSONAL PAGEPRINTER ADAPTER/A DIAGNOSTICS ARE RUN IN LOOP MODE (RUN MULTIPLE TIMES), THE DIAGNOSTICS WILL FAIL ON RUN 256, (OR ANY MULTIPLE OF 256). IF THIS IS THE ONLY FAILURE DETECTED ON THE PERSONAL PAGEPRINTER ADAPTER/A TESTS DO NOT REPLACE THE ADAPTER CARD.

SAS KEYWORDS:

8550SYSERR	8550SYSDIAG	PSY2	8560SYSERR
8560SYSDIAG	PSY2DIAG	8580SYSERR	8580SYSDIAG
PSY2ERR	8555SYSDIAG	8555SYSERR	8565SYSDIAG
8565SYSERR	8573SYSDIAG	8573SYSERR	D/T8560
D/T8580			

PERSONAL PAGEPRINTER ADAPTER/A AND 3270 ADAPTER CARD FAIL.

1.2.362 PERSONAL PAGEPRINTER ADAPTER/A AND 3270 ADAPTER CARD FAIL.

Record number: H026395

Device: D/T8580
Model: M
Tip key: 007
Date created: 088/03/28
Date last altered: A94/04/25

IF A 3270 CONNECTION ADAPTER CARD AND A PERSONAL PAGE PRINTER ADAPTER/A CARD ARE INSTALLED IN A PS/2 MODEL 80, THE PERSONAL PAGEPRINTER ADAPTER/A DIAGNOSTICS MAY FAIL WITH A 7602 ERROR CODE.

TO CHECK THE PERSONAL PAGEPRINTER ADAPTER/A CARD FOR FAILURES, REMOVE THE 3270 CONNECTION ADAPTER CARD FROM THE SYSTEM UNIT AND RERUN SETUP AND THE PERSONAL PAGEPRINTER ADAPTER/A DIAGNOSTICS. ONLY REPLACE THE PERSONAL PAGEPRINTER ADAPTER/A CARD IF IT FAILS WITHOUT THE 3270 CONNECTION ADAPTER CARD INSTALLED.

SAS KEYWORDS:

PSY2

PSY2DIAG

PSY2ERR

PSY2ADPT

1.2.363 PERSONAL PAGEPRINTER ADAPTOR PROBLEMS ON PS/2 8570 MOD A21

Record number: H036874

Device: D/T8570
Model: M
Tip key: 007
Date created: 088/10/18
Date last altered: A89/11/06

THE IBM PERSONAL PAGEPRINTER ADAPTER/A MAY EXPERIENCE
COMPATABILITY PROBLEMS WHEN INSTALLED IN AN IBM PS/2
8570 MODEL A21 WHILE CONFIGURED TO PORTS 2 OR 4.
IN ORDER TO AVOID POSSIBLE PROBLEMS IT IS RECOMMENDED
THAT THE ADAPTER IS CONFIGURED TO EITHER PORT 1 OR 3.

SAS KEYWORDS:

8570SYSADPT

PSY2PRT

PSY2

PSY2ADPT

1.2.364 PERSONAL PUBLISHING SYSTEM ERRORS & HMS INFO

Record number: H022590

Device: D/T5170
 Model: M
 Tip key: 101
 Date created: 087/08/07
 Date last altered: A91/09/03

THE PERSONAL PAGEPRINTER ADAPTER HARDWARE MAINTENANCE SERVICE MANUAL FOR THE PERSONAL PUBLISHING SYSTEM IS NOT YET AVAILABLE IN THE FIELD. A CORRECTED VERSION OF THIS MANUAL IN A PACKAGE WITH A DIAGNOSTIC DISKETTE AND WRAP CONNECTOR WILL BE AVAILABLE BY 09/01/87.

HMS INFORMATION SUCH AS HARDWARE REQUIRMENTS, INTRODUCTION TO DIAGNOSTICS AND MAINTENANCE ANALYSIS PROCEDURES CAN BE OBTAINED FROM YOUR SUPPORT CENTER. THE DIAGNOSTIC DISKETTE AND WRAP CONNECTOR SHIPPED IN THE CUSTOMER OPTION ARE THE SAME AS IN THE DIAGNOSTIC PACKAGE.

POST ERROR CODES CALL OUT HARDWARE FRUS OR DIRECT THE SERVICER TO THE FAILING UNIT.

SYMPTOM	CAUSE	ACTION
ERROR CODE 7601	BATS ERROR	EXCHANGE YOUR PERSONAL PAGE- PRINTER ADAPTER
ERROR CODE 7602	DOWNLOAD TEST	EXCHANGE YOUR PEROSNAL PAGE-
ERROR CODE 7603	PRINTER PROBLEM	REFER TO THE PRINTER HMS
ERROR CODE 7604	CABLE TEST ERROR	EXCHANGE THE PRINTER CABLE
POOR PRINT QUALITY	PRINTER PROBLEM	REFER THE THE PRINTER HMS

PART NUMBERS

PERSONAL PAGEPRINTER ADAPTER P/N75X8247
 CABLE FOR PERSONAL PAGEPRINTER ADAPTER P/N75X8249
 WRAP PLUG FOR PERSONAL PAGEPRINTER ADAPTER P/N75X8257

SAS KEYWORDS:

PCOM	PCOMDIAG	5170SYSDIAG	5162SYSDIAG
8530SYSDIAG	5170SYSPART	5162SYSPART	8530SYSPART
PSY2	PSY2DIAG	PSY2PART	PCOMPART
PCOMDOC	PSY2DOC	5170SYSDOC	5162SYSDOC
8530SYSDOC	D/T5170	D/T5162	D/T8530

PERSONALITY MODULE FOR OKIDATA ML292, 3 & 4 PRINTERS.

1.2.365 PERSONALITY MODULE FOR OKIDATA ML292, 3 & 4 PRINTERS.

Record number: H027199

Device: D/T1515
Model: M
Tip key: 002
Date created: 088/05/20
Date last altered: A90/03/13

THE OKIDATA ML-292, 3 & 4 PRINTERS HAVE A MODULE THAT THE PRINTER CABLE PLUGS INTO. THE MODULE IS LOCATED ON THE PLATEN KNOB SIDE BEHIND AN OUTER LOCKING COVER. THIS COVER IS INSTALLED TO REVEAL ONLY THE CABLE CONNECTOR PORTION. TO REMOVE LOCKING COVER, PULL DOWN AND SWING OUT. THE MODULE SLIDES INTO GROOVES AND PLUGS INTO AN INNER CONNECTOR. THIS MODULE MAY BE EITHER A SERIAL OR PARALLEL INTERFACE BUT AT THIS TIME ONLY PARALLEL PRINTERS ARE STOCKED. IF YOUR CUSTOMER HAS A SERIAL CONFIGURATION YOU MUST REMOVE THE MODULE AND SWAP IT WITH THE PARALLEL MODULE IN THE REPLACEMENT PRINTER.

THE PARALLEL INTERFACE WILL ATTACH WITH THE WIRE LOCKING TABS WHILE THE SERIAL INTERFACE WILL HAVE LOCKING SCREWS.

SAS KEYWORDS:

POEM	PSY2OEMALL	PCOMOEM	OEMPRT
OEMPART	OKIDATA	ML-292	ML292
OKIML292	OKIPRINTER	PRINTER	OEMPRINTER

PERSONALITY MODULE FOR OKIDATA ML290 SERIES PRINTER.

1.2.366 PERSONALITY MODULE FOR OKIDATA ML290 SERIES PRINTER.

Record number: H027563

Device: D/T1515
Model: M
Tip key: 005
Date created: 088/06/27
Date last altered: A90/03/13

THIS MODULE MAY BE EITHER A SERIAL OR PARALLEL INTERFACE. THE MODULE IS LOCATED ON THE PLATEN KNOB SIDE AND SLIDES INTO THE GROOVES INSIDE THE PRINTER. IT MUST SEAT FIRMLY INTO THE SLOT. AN OUTER LOCKING COVER IS INSTALLED TO REVEAL ONLY THE CABLE CONNECT PORTION OF THE INTERFACE. TO REMOVE LOCKING COVER, PULL DOWN AND SWING OUT.

THE PERSONALITY MODULE SHOULD BE REMOVED UPON ELEMENT EXCHANGE IN ORDER TO SUPPORT USER APPLICATION.

THE PARALLEL INTERFACE WILL ATTACH WITH THE WIRE LOCKING TABS WHILE THE SERIAL INTERFACE WILL HAVE LOCKING SCREWS.

SAS KEYWORDS:

POEM	PSY2OEMALL	PCOMOEM	OEMPRT
OKIDATA	OKIDATAPRINTER	OEMPART	PRINTER
ML290	ML-290	OKIML290	OKIDATAML290

1.2.367 PHOTOMORPH NT PERFORMANCE IMPROVES W/WINDOWSNT 4.0

Record number: H134108

Device: D/T6589
Model: M
Tip key: 004
Date created: 096/09/23
Date last altered: A96/09/23

PhotoMorph for WindowsNT graphics manipulation program by North Coast Software, may run up to 30% faster on a PC 360 Series 6598 as compared to a PC 365 Series 6589 system.

The performance of PhotoMorph NT may be improved to run up to twice as fast on a PC 365 Series 6589 by upgrading to WindowsNT version 4.0. Software updates in WindowsNT v4.0 are more compatible with the combination of PhotoMorph NT and the PC 365 Series 6589.

PhotoMorph is a trademark of North Coast Software.
WindowsNT is a trademark of the Microsoft Corporation.

SAS KEYWORDS:

PSY2	PSVP	IBMPC	PSVPPROG
PSY2PROG	PSVPDISP	PSY2DISP	52879
PC365	PHOTO MORPH	PHOTOMORPH/NT	

Record number: H161693

Device: D/T6898
Model: M
Tip key: 003
Date created: 097/11/04
Date last altered: A97/11/04

Attention Servicicers:

This notice is for the system board and separate EMC shield in the IntelliStation M-Pro, Type 6898 computers.

When installing a replacement planar, or re-installing the existing planar, care must be taken to avoid bending the metal "fingers" on the EMC shield.

When properly seated, thin metal "fingers" will be in place over the USB, mouse/keyboard, and Ethernet port connectors.

For installation of the system board, first, angle the system board downward and under the EMC shield "fingers" to prevent bending or damaging the "fingers."

NOTE:

Servicers and IBM AAP Business Partners should be aware of a F-shaped foam bracket in M/T6898 systems which hold the full-length video adapter card in place. This F-shaped bracket does not restrict air flow and is fireproof.

After servicing the system, this bracket should be replaced in order to prevent movement of the video adapter in the event the system is moved, or transported to a different location.

SAS KEYWORDS:

PSY2	PSVP	D/T6898	6898
M/T6898	SERVICER ONLY		

PLASTIC DISKETTE HOLDERS AVAILABLE FROM MECHANICSBURG PUBS

1.2.369 PLASTIC DISKETTE HOLDERS AVAILABLE FROM MECHANICSBURG PUBS

Record number: H027595

Device: D/T5150
 Model: M
 Tip key: 131
 Date created: 088/06/23
 Date last altered: A88/06/23

PLASTIC DISKETTE HOLDERS ARE AVAILABLE FROM MECHANICSBURG PUBLICATIONS. ORDER THE DESIRED FORM NUMBER VIA YOUR BRANCH OFFICE SLSS COORDINATOR.

DESCRIPTION	SIZE	FORM NUMBER
5.25" DSKT HOLDER-QTY 3	5 1/2" X 8 1/2"	SR280629
5.25" DSKT HOLDER-QTY 2	8 1/2" X 11"	SA380015
3.5" DSKT HOLDER-QTY 8	8 1/2" X 11"	SX244166

SAS KEYWORDS:

PCOM	PSY2	PSY2TOOL	PCOMTOOL
5150SYSTOOL	5160SYSTOOL	5155SYSTOOL	5162SYSTOOL
5170SYSTOOL	5140SYSTOOL	8525SYSTOOL	8530SYSTOOL
8550SYSTOOL	8560SYSTOOL	8570SYSTOOL	8580SYSTOOL
PCOMPART	PSY2PART		

1.2.370 PLASTIC RIVET USED ON 6387/T SYSTEM BOARD

Record number: H121807

Device: D/T6387
 Model: M
 Tip key: 001
 Date created: 093/11/17
 Date last altered: A93/11/17

ONE OF THE SCREWS USED TO MOUNT THE PS/VALUEPOINT 6387/T SYSTEM BOARD TO THE SYSTEM BASE FRAME HAS BEEN REPLACED BY A PLASTIC RIVET. THIS RIVET IS ONLY PRESENT ON SYSTEM BOARDS WITH A BLACK OVERDRIVE PROCESSOR SOCKET (POSITION U10).

THE PLASTIC RIVET WAS USED ON A LIMITED NUMBER OF SYSTEM BOARDS TO PREVENT VIBRATION DURING SHIPPING. THE RISER CARD COULD VIBRATE LOOSE FROM THE SYSTEM BOARD CONNECTOR, AND CAUSE SYSTEM AND/OR ADAPTER FAILURES.

LOCATE THE OVERDRIVE SOCKET ON THE 6387/T SYSTEM BOARD. THE PLASTIC RIVET IS LOCATED DIRECTLY IN FRONT OF THE OVERDRIVE PROCESSOR SOCKET, ALONG THE EDGE OF THE BOARD.

IF THE SYSTEM BOARD HAS A BLUE OVERDRIVE PROCESSOR SOCKET IN POSITION U10, THIS TIP DOES NOT APPLY.

REMOVAL OF THE SYSTEM BOARDS WITH THE PLASTIC RIVET SHOULD BE DONE AS FOLLOWS:

METHOD #1

POWER-OFF THE SYSTEM. DISCONNECT THE POWER CORD FROM THE ELECTRICAL OUTLET. REMOVE ALL ADAPTERS AND THE RISER CARD FROM THE SYSTEM BOARD. REMOVE THE POWER SUPPLY CONNECTORS, THE LED CABLES AND THE SPEAKER CONNECTOR. REMOVE ALL SYSTEM BOARD MOUNTING SCREWS.

THIS STEP SHOULD BE PERFORMED WITH THE 6387/T BASE FRAME ON ITS SIDE.

GRASP THE EDGE OF THE SYSTEM BOARD DIRECTLY IN FRONT OF THE PLASTIC RIVET AND GENTLY PULL UP ON THE SYSTEM BOARD. CARE SHOULD BE TAKEN TO PREVENT DAMAGE TO THE BOARD. DO NOT JERK THE SYSTEM BOARD FROM THE FRAME.

IF THE RIVET DOES NOT PULL OUT OF THE BASE FRAME, USE THE FOLLOWING METHOD:

METHOD #2

POSITION THE BASE FRAME SO THAT THE FRONT OF THE SYSTEM FACES THE CEILING. FROM THE FRONT OF THE SYSTEM, LOCATE THE CUTOUT ON THE RIGHT SIDE OF THE BASE FRAME APPROXIMATELY ONE INCH ABOVE THE PLASTIC RIVET.

PLACE A SCREWDRIVER OR SIMILAR TOOL THROUGH THE CUTOUT AND AS CLOSE TO THE PLASTIC RIVET AS POSSIBLE. IF USING A SCREWDRIVER, WRAP THE SHAFT WITH A CLOTH TO PREVENT DAMAGING THE SYSTEM BOARD. CAREFULLY LEVER THE SYSTEM BOARD AWAY FROM THE BASE FRAME.

AFTER THE SYSTEM BOARD HAS BEEN REPLACED, IT IS NOT NECESSARY TO INSTALL A MOUNTING SCREW OR REPLACE THE PLASTIC RIVET. THE SYSTEM BOARD IS SECURE WITH THE REMAINDER OF THE MOUNTING SCREWS.

SAS KEYWORDS:

PSVP	PSY2	PSVPMISC	PSY2MISC
PSVPBRD	PSY2BRD	6387	VALUE POINT
PSVPPART	PSY2PART		

1.2.371 PLUG N PLAY ADAPTER FAILS TO CONFIGURE IN 6577/87

Record number: H01573

Device: D/T6577
 Model: M
 Tip key: 003
 Date created: 096/06/19
 Date last altered: A96/06/19

IBM Plug 'n Play Token Ring or EtherJet adapters may not configure in IBM PC 300 Series 6577 and 6587 systems with Windows95 preloaded.

A resource conflict may exist between the adapter and the systems video I/O address region and/or IRQ's that are in use by other system hardware.

When installing an IBM Plug n Play communication adapter such as the EtherJet or Token Ring in a PC 300 Series system, ensure that the adapter is configured for the "enhanced" mode of operation using LANAID. This provides the adapter additional choices of I/O address areas for configuration.

If the adapter continues to fail to configure, verify that the latest level of LANAID is being used and continue normal problem determination procedures.

Windows95 is a trademark of the Microsoft Corporation.

SAS KEYWORDS:

PSY2	D/T65XX	6577	6587
IBMPC	PSVP	PSVPPROG	PSY2PROG
D/T6587	PC 350	PC350	PC300
PC 330	PC330	44016	PSVPCOMM
PSY2COMM	PSY2ERR	PSVPERR	

POST ERROR CODES FOR SERVERAID AND SERVRAID II CONTROLLERS

1.2.372 POST ERROR CODES FOR SERVERAID AND SERVRAID II CONTROLLERS

Record number: H163474

Device: D/T8640
 Model: M
 Tip key: 023
 Date created: 098/04/13
 Date last altered: A98/04/23

This Document is provided as a Service Aid. Error Codes listed are true to the date that this document was created. Future Firmware / BIOS updates to the associated Adapters / Controllers may likely add to the Error Codes listed.

The POST Error codes listed in this document apply to the following Adapters and Onboard Controller:

ServeRAID Adapter FRU p/n06H9334
 Opt. p/n70G8489

ServeRAID Adapter FRU p/n76H6875
 Opt. p/n70G8489

ServeRAID II Adapter FRU p/n76H3587
 Opt. p/n76H3584

ServeRAID Onboard Controller (Integrated in System Planar)

The Error codes for the Adapters / Controllers listed above should be a primary consideration when diagnosing any PC Server / Netfinity server that supports and is configured with any of these Adapters / Controllers

If a POST Error exists at the Adapter, the Error code(s)* are displayed in a line of text immediately following the Adapter/ Controller's Firmware version. See the following example:

+++++

```

| IBM PC ServeRAID Adapter BIOS |
| Copyright IBM Corp. 1995,1997 |
| BIOS Ver. x.xx.x xx/xx/xx |
|-----|
    
```

<< << Press <Ctrl + I> for MiniConfig Utility >> >>

Initializing Adapter Number 1. Please Wait. Starting Drives.
 Firmware Version: x.xx.xx

* Adapter POST Codes: ISPR=xxxx

+++++

The ISPR (Interrupt Status Port Register) code identifies the Adapter / Controller State.

NOTE: DO NOT replace the ServeRAID, ServeRAID II Adapter, or a System Planar with the integrated Onboard ServeRAID Controller unless such a replacement is identified in the recommended "FRU Actions" listed respective to each Error code below:

POST(ISPR) ERROR/DESCRIPTION	FRU Action
EF10 (Default ISPR)	1-No ISPR Error Present.
1xxx (Microcode Checksum Error)	1-Replace ServeRAID, ServeRAID II, or System Planar (Integrated Onboard ServeRAID II Controller).
2xxx thru 8xxx (Code DRAM Error)	1-Install download jumpers** and Flash the Adapter/Controller with the latest IBM ServeRAID BIOS /Firmware from the IBM Website*** then restore the jumpers to their default positions. 2-If error still persists, then replace ServeRAID, ServeRAID II, or System Planar(Integrated Onboard ServeRAID II Controller).
9xxx thru Bxxx(hex)	1-Isolate between SCSI subsystem

POST ERROR CODES FOR SERVERAID AND SERVRAID II CONTROLLERS

(SCSI bus error caused
by either defective
drives, termination,etc.)

and adapter by disconnecting all
SCSI cables and reboot. IF ISPR
error IS STILL PRESENT, perform
the following actions until the
error is eliminated:

- Reseat the Adapter
- Replace the Adapter/Controller

NOTE: REFER TO THE HMM(HARDWARE
MAINTENANCE MANUAL) SPECIFIC TO
THE SYSTEM COMPRISING THE SCSI
CHANNEL FOR SCSI CABLE DETAILS.

NOTE: THE ADAPTER/CONTROLLER WILL
DETECT A CONFIGURATION CHANGE, DO
NOT SELECT "SAVE CHANGES", RATHER
PRESS F10 TO BYPASS ANY OPTIONS
TO THIS EFFECT.

2-IF ISPR error IS NOT PRESENT
after disconnecting cables,
follow the steps below until the
error is eliminated:

A-Identify which channel is
causing the error by the lower
nibble of byte 1 in the error
code ie:

ISPR=BXXX



- 1 = Channel 1
- 2 = Channel 2
- 3 = Channel 1 and 2
- 4 = Channel 3
- 5 = Channel 1 and 3
- 6 = Channel 2 and 3
- 7 = Channel 1,2, and 3
- F = Channel not identified

B-Confirm that the channel(s)
identified from the error in
step a. is the cause of the
error by verifying that the
error presents itself ONLY when
the offending channel is
reconnected.

c-Check termination of identified
channel in step b.

NOTE: REFER TO THE HMM(HARDWARE
MAINTENANCE MANUAL) SPECIFIC TO
THE SYSTEM COMPRISING THE SCSI
CHANNEL FOR TERMINATION DETAILS.

D-Check for proper Backplane
Jumper configuration.

NOTE: REFER TO THE HMM(HARDWARE
MAINTENANCE MANUAL) SPECIFIC TO
THE SYSTEM COMPRISING THE SCSI
CHANNEL FOR JUMPER DETAILS

E-Check for proper cabling config.
(in systems that use DASD status
cables, Channel 1 DASD status
cable should beconnected to the
backplane to which the Channel 1
SCSI signal cable is connected,
same for all other Channels
used.

F-Replace cable of channel in step
b.

G-Replace Backplane of channel
identified in step b.

H-Disconnect one drive at a time
attached to the channel

POST ERROR CODES FOR SERVERAID AND SERVRAID II CONTROLLERS

identified in step b, then
reboot to determine which drive
is causing the error.

EF10
(Default ISPR)

1-Adapter/Controller is functioning properly, DO NOT replace Adapter / or Planar with Integrated Controller.

2-Note the resulting BCS and or ECS Error codes and see the FRU actions respective to those codes (EF10 IS A DEFAULT POST CODE FOR ISPR INDICATING THAT THERE IS NO ISPR ERROR PRESENT).

EFEE
(Firmware code corrupt or download jumpers are in place)

1-Verify download jumpers** are in their default locations

2-If Download jumpers are NOT in place and error still persists, then Flash the Adapter/Controller Firmware WITH the Jumpers in place, then move the download Jumpers** to their default locations.

3-If error still persists after steps 1 and 2, replace the ServeRAID, ServeRAID II, or System Planar (Integrated onboard ServeRAID II Controller).

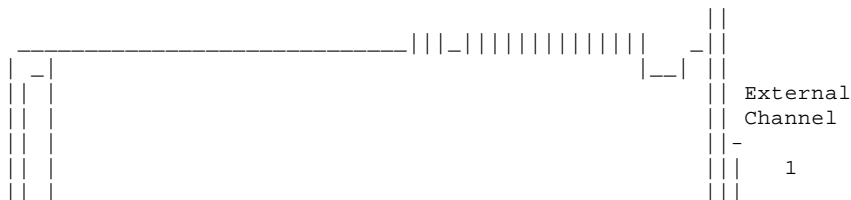
FFFF

1-Isolate between SCSI Subsystem and Adapter / Controller by disconnecting all attached SCSI cables and reboot. IF ISPR code is NOT PRESENT after disconnecting cables, follow the steps below until the error is eliminated:

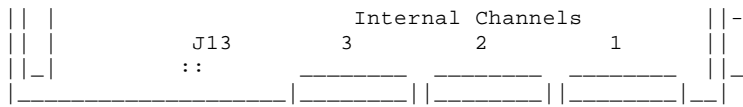
- A-Identify which channel is causing the error by reconnecting cables one at a time and rebooting until the error returns.
 - B-Check termination of identified channel in step a.
 - C-Replace SCSI Cable attached to channel identified in step a.
 - D-Replace Backplane attached to channel identified in step a.
 - E-Disconnect one drive at a time attached to channel identified in step a. and reboot to determine which drive is causing the problem.
- 2-If ISPR code is still present after disconnecting all SCSI cables then rebooting, perform the following actions until the error is no longer present:
- Reseat the Adapter
 - Replace the Adapter/Controller

** Download Jumper Locations:

ServeRAID Adapter:



POST ERROR CODES FOR SERVERAID AND SERVRAID II CONTROLLERS



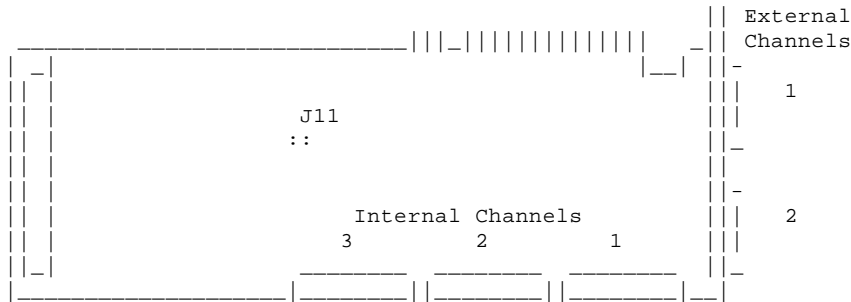
- J13 consists of 4 pins which will accept 2 jumper blocks.
- Install jumper blocks as follows (with respect to the card layout above to enable Download via Bootlock):



- The Default position for each jumper block is on one of each pair of pins.

**Download Jumper locations:

ServeRAID II Adapter:



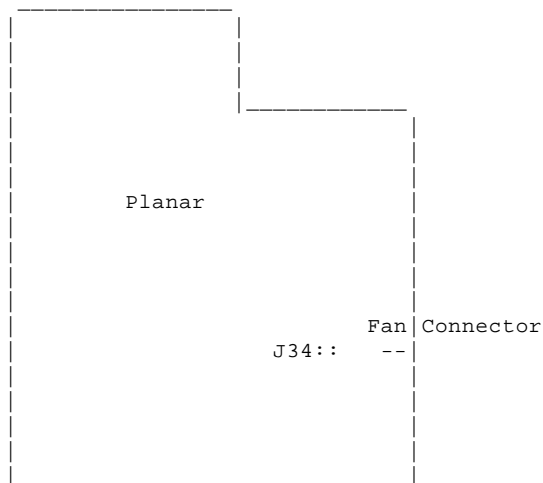
- J11 consists of 4 pins which will accept 2 jumper blocks.
- Install jumper blocks as follows (with respect to the card layout above to enable Download via Bootlock):



- The Default positions for each jumper block is on one of each pair of pins.

**Download Jumper Locations:

ServeRAID II Controller:
(Integrated on System
Planar)



- J34 consists of 4 pins which will accept 2 jumper blocks.
- Install jumper blocks as follows (with respect to the card layout above to enable Download via Bootlock):



- The Default position for each jumper block is on one of each pair of pins.

*** The IBM Website file download area is available at the following URL:

Http: //www.pc.ibm.com/files.html

SAS KEYWORDS:

PSY2	PSY2ERROR	SERVERAID	SERVERAIDII
UNCLASSIFIED	D/T8638	D/T8640	D/T8641
D/T8642	D/T8650	D/T8651	D/T8644
MICROCODE	FIRMWARE	BIOS	ERROR CODES
ERROR	CODES		

1.2.373 POST 301 ERROR

Record number: H107867

Device: D/T8551
Model: M
Tip key: 001
Date created: 092/08/21
Date last altered: A92/08/21

FALSE 301 POST ERRORS MAY OCCUR DURING POWER UP IF AN EXTERNAL DEVICE SUCH AS A PRINTER IS ALREADY POWERED ON.

THIS CONDITION CAUSES A DIFFERENCE IN GROUND POTENTIAL BETWEEN THE AC AND DC POWER SOURCE AND A 301 ERROR IS POSTED. THIS IS A SEQUENCING CONDITION AND NOT A HARDWARE PROBLEM.

TO PREVENT THE FALSE ERROR POWER THE SYSTEM ON BEFORE POWERING ON ANY PERIPHERALS.

SAS KEYWORDS:

PSY2	PSY2KBRD	PSY2ERR	8551SYSERR
8551SYSKBD	KEYBOARD		

1.2.374 POST 301 ERROR

Record number: H131946

Device: D/T6384
Model: M
Tip key: 078
Date created: 094/12/16
Date last altered: A95/12/12

False 301 Post errors may occur during power up with an external device such as a Printer, Scanner, Modem or other connected device containing it's own power source.

An external device may feed enough voltage back thru the system board to prevent the keyboard controller from resetting.

To prevent this false error, power the system on before powering on any peripherals.

SAS KEYWORDS:

PSY2	PSY2KBRD	PSY2ERR	PSY2SYSERR
PSVPSYSKBD	PSVPKBRD	PSVPERR	PSVPSYSERR
PSVP			

1.2.375 POTENTIAL DATA LOSS USING 160M FIXED DISK

Record number: H12385

Device: D/T8550
 Model: M
 Tip key: 179
 Date created: 093/06/09
 Date last altered: A93/06/17

THIS TIP APPLIES TO IBM MANUFACTURED 160 MB FIXED DISK DRIVES.

SOME OF THE SYSTEMS IN THE FOLLOWING SYSTEM SERIAL NUMBER RANGES MAY HAVE HAD THE AFFECTED DRIVES INSTALLED DURING THE MANUFACTURE OF THE SYSTEM.

- 8580 161 23-TV259 23-TY577
 - 8590 OJ9 23-CGVCZ 23-CHPRD
 - 8595 OJ9 23-AA145 23-AB006

FOR THE FOLLOWING REASONS, SOME SYSTEMS OUTSIDE OF THE SERIAL NUMBER RANGES MAY ALSO BE AFFECTED.

- * ANY SYSTEM THAT HAS HAD A 160MB REPLACEMENT FRU INSTALLED. (SOME FRU STOCK WAS AFFECTED.)
- * ANY CANADIAN SYSTEM THAT HAS HAD A 160MB OPTION OR 160MB REPLACEMENT FRU INSTALLED. (SOME CANADIAN OPTION AND FRU STOCK WAS AFFECTED.)

NOTE: IF THE SYSTEM IS OPENED, THE 160MB DRIVES WITH THE WRONG VALUES CAN BE IDENTIFIED BY DRIVE SERIAL NUMBER RANGES. THE RANGE IS FROM B1WC3-05227 THROUGH B1WC3-043980. THIS NUMBER IS LOCATED ON TOP OF THE DRIVE IN A WHITE LABEL THAT ALSO CONTAINS A BAR CODE STRIP.

CUSTOMERS OR SERVICERS MAY INSTALL THE "IBM PS/2 160MB SCSI FIXED DISK MODE-SELECT RESTORATION DISKETTE" USING INSTALLATION INSTRUCTIONS CONTAINED IN THE DISKETTE/FRU PACKAGE. THEY MAY OBTAIN THIS DISKETTE AND INSTALLATION INFORMATION BY CALLING CALLING 1 - 800-845-4263.

THE FIXED DISK RESTORATION INSTALLATION IS DESIGNED TO CORRECT VALUES GIVEN TO MODE SELECT PAGES OF DISK CODE INSTALLED DURING THE MANUFACTURE OF THE AFFECTED DISK DRIVES. THE INSTALLATION IS PERMANENT AND CAN NOT BE ERASED DURING A FORMAT. THE INCORRECT VALUES COULD CAUSE DATA LOSS WHEN SOFT FIXED DISK ERRORS OCCUR. WHERE NEEDED, THE MODE SELECT PAGE VALUES WILL BE RESTORED TO THE DEFAULT RANGE AFTER THIS DISKETTE IS BOOTED. OTHER DISK DRIVES OUTSIDE THE AFFECTED DRIVE RANGE WILL NOT BE ALTERED IF THIS DISKETTE IS USED ON THEM.

TO INSTALL THE CORRECT VALUES INSERT THE DISKETTE IN DRIVE "A" AND BOOT THE SYSTEM. THE FOLLOWING MESSAGES CAN OCCUR DURING THE EXECUTION OF THE PROGRAM:

1. "WARNING! SHARE SHOULD BE LOADED FOR LARGE MEDIA."
THIS MESSAGE IS PRODUCED BY THE DISKETTE'S OPERATING SYSTEM AND IS NOT APPLICABLE FOR THIS SITUATION. DISREGARD THIS MESSAGE!
2. "RESTORATION COMPLETE. REMOVE THE DISKETTE, THEN RESTART THE SYSTEM."
3. "RESTORATION NOT REQUIRED FOR THIS SYSTEM. REMOVE THE DISKETTE, THEN RESTART THE SYSTEM."
4. "UNEXPECTED ERROR, RUN SYSTEM CHECKOUT."

NOTE: THE FIX PROGRAM WILL NOT LOAD TO DRIVES THAT DO NOT REQUIRE THE RESTORATION.

THE INCORRECT VALUES GIVEN TO THE DISK DRIVE IS A CODE PROBLEM, NOT A HARDWARE FAILURE. THEREFORE, HARDWARE FAILURES WILL BE RESOLVED BY USING THE CUSTOMER'S CURRENT SERVICE AGREEMENT TO REPLACE DEFECTIVE FRUS.

NOTES:

SUBSCRIBERS TO THE SLSS SIM SUBSCRIPTION NUMBER SB0F-2480 HAVE AUTOMATICALLY RECEIVED THE FIX DISKETTE PACKAGE. OTHER SERVICERS CAN ORDER THE DISKETTE FRU PACKAGE, P/N92F0618, THROUGH NORMAL PARTS CHANNELS.

SAS KEYWORDS:

PSY2

PSY2FDSK

8580SYSFDSK

8590SYSFDSK

PSY2 RETAIN TIPS

POTENTIAL DATA LOSS USING 160M FIXED DISK

8595SYSFDSK
ZENIX
SOFTWARE

D/T8580
ZENIX
UNIX

D/T8590
161

D/T8595
AIX

1.2.376 POUND SIGN ("#") IN SCSI ERROR CODE

Record number: H031649

Device: D/T95XX
 Model: M
 Tip key: 024
 Date created: 096/04/04
 Date last altered: A96/04/04

When a Diagnostic or Power-On-Self-Test SCSI error code occurs, some SCSI hardfiles may display a pound sign ("#") in place of the error code Drive Capacity character. This may occur on any PC or PS/2 system which utilizes a MicroChannel SCSI adapter or system board SCSI controller.

POST or Diagnostic error codes of the format 0210XXX# XXXX, 0210XXX#0 XXXX, or 0210XXX#1 XXXX indicate that the failing hard disk's capacity is unspecified. In these cases, it is necessary to check the drive for capacity.

When the drive is functioning properly, the capacity can be obtained via the Set and View SCSI Device Configuration screen.

The "#" should not be confused with the "U" capacity digit, which will be displayed when a SCSI disk drive is broken and cannot report its capacity. The "#" is only displayed when the disk is capable of reporting it back to the system.

IBM FRUs which currently use the # capacity identifier are p/n07H1118 (2.1GB SCSI) and p/n07H0390 (1.2GB SCSI) drives. Future SCSI drives will also use the "#" capacity identifier.

SAS KEYWORDS:

PSY2	PSY2FDSK	D/T8580	D/T8590
D/T8595	D/T9590	D/T9595	D/T8640
D/T8641	D/T8642	D/T8639	PSY2ERR
PSY2DIAG	210	300	310
320	500	520	720
D/T6876	D/T6886	700	1GB
2GB	07H1118	07H0390	

1.2.377 POWER BUTTON FAILS IF COVER NOT LOCKED

Record number: H127069

Device: D/T6384
Model: M
Tip key: 076
Date created: 095/04/10
Date last altered: A95/04/10

PS/ValuePoint 6384, 6384/D, 6384 P60/D, 6484 and 6482 desktop 5x5 systems utilize the same basic design for the top cover assembly.

This design requires that the top cover is mounted on the side rails and the cover release latch is in the flush/latched position.

The cover keylock assembly should be in the locked position to properly mate the push button with the power supply switch mounted on the base frame assembly.

Failure to install the top cover assembly in this manner could allow the top cover to be moved out of position enough to cause the power on/off button not to function.

This information is contained in the "Installing Options" publication shipped with each system.

SAS KEYWORDS:

VALUE POINT	PS/VP	PSVP	D/T6484
D/T6482	P60D	IPO	PSVPPART
PSY2	PSVPPWR	PSY2PART	PSY2PWR
6384			

POWER SUPPLY COOLING AIR DEFLECTOR (BAFFLE)

1.2.378 POWER SUPPLY COOLING AIR DEFLECTOR (BAFFLE)

Record number: H126293

Device: D/T9595
Model: M
Tip key: 021
Date created: 094/11/17
Date last altered: A95/02/03

FRU P/N06H3272 has been released to provide an air deflection baffle for 9595 systems. This baffle was incorporated in recently manufactured systems to enhance the flow of cooling air. The baffle attaches to the top of the power supply by "snapping" it in place.

This information will be included in future updates to the HMM (Hardware Maintenance Manual, S52G-9971-02).

SAS KEYWORDS:

PSY2	PSY2DOC	PSY2PART	9595A
PSY2POWR	06H3272		

POWER SUPPLY FAULT ISOLATION ON NETFINITY 7000

1.2.379 POWER SUPPLY FAULT ISOLATION ON NETFINITY 7000

Record number: H161771

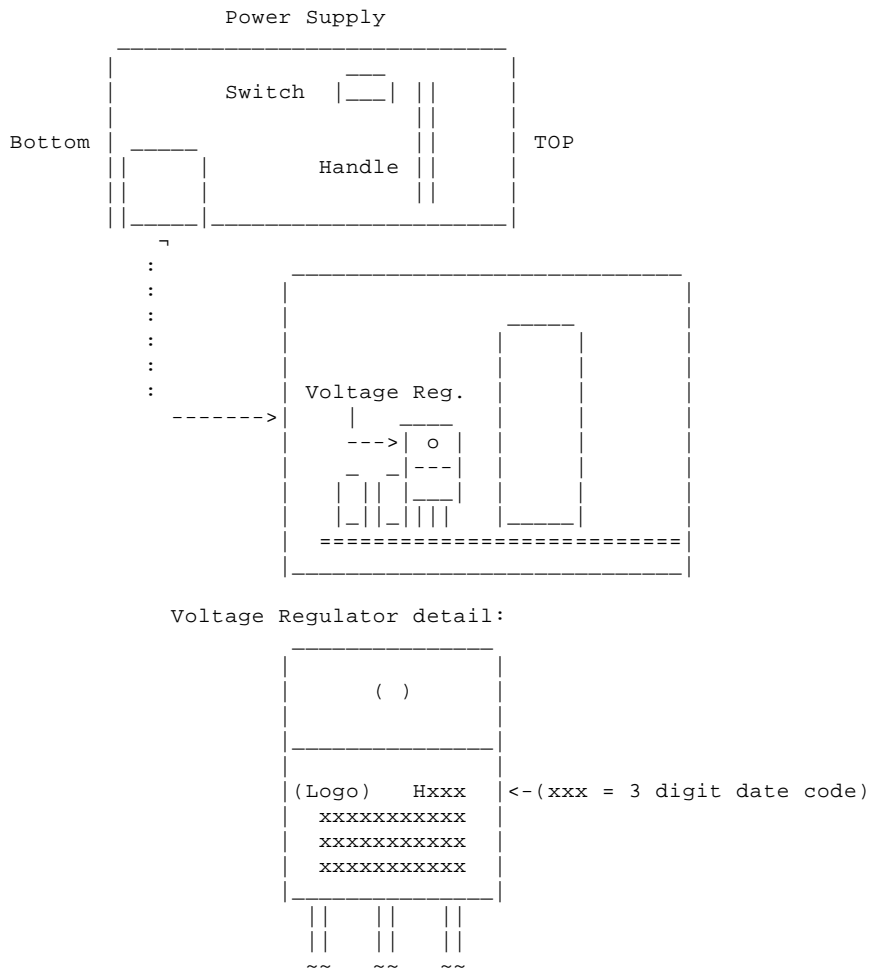
Device: D/T8651
 Model: M
 Tip key: 001
 Date created: 097/11/04
 Date last altered: A97/11/10

Recent product evaluation testing has revealed that approximately 15 to 20 Hot-Pluggable power supplies offered in the Netfinity 7000 may be experiencing higher than normal failure rates that do not meet IBM quality expectations.

A suspect power supply may simply fail. A Power Fault Light located at the front of the Server indicates a power supply failure. Each of the power supply's in the server have two green LED's located behind the airflow vent at the back of the power supply; one indicates AC input to the power supply, the other indicates DC output from the power supply. To ensure that a power supply is operational, both lights on the power supply must be on. Make sure that the Power switch on each installed power supply is in the On position. Refer to the "Identifying Problems through Status Indicators" chart in chapter 6 of the Netfinity 7000 "Users Handbook" for further details about determining the status of power supplies.

A suspect power supply may be identified by the date code on a voltage regulator that can be viewed (with the help of a flashlight) through the vented plate located at the back of the power supply without having to remove it from the server. See the following diagram for details:

NOTE: DO NOT attempt to open a power supply assembly, it is not a serviceable item. Doing so will void the HI-POT test, becomes a safety issue, and will void the Warranty on the power supply.



The Voltage Regulator in the suspect power supply will have a 3 digit Date Code lower than 707.

The FRU p/n76H6589 of the power supply has not changed and all suspect power supplies have been purged from FRU stock in distribution channels.

PSY2 RETAIN TIPS
POWER SUPPLY FAULT ISOLATION ON NETFINITY 7000

In the rare instance that a confirmed suspect power supply is found in a server, replace it.

NOTE: Avoid pulling Hot-Pluggable power supplies while powered on. Use the power switch on the power supply to power it down prior to removing it from the server.

NOTE: The Netfinity 7000 is capable of running on one power supply but limited to only one bank of DASD and no more than 2 processors. Two power supplies are required if the Server is configured with more than one bank of DASD and/or more than two processors.

SAS KEYWORDS:

PSY2	SERVICER ONLY	POWER SUPPLY	D/T8651
HOT PLUGGABLE	FAILURE	8651-RH0	8651-TH0
8651 - RM0	8651-TM0	REGULATOR	

POWER SUPPLY LEADS TOO SHORT FOR OEM OPTION

1.2.380 POWER SUPPLY LEADS TOO SHORT FOR OEM OPTION

Record number: H103299

Device: D/T8540
Model: M
Tip key: 010
Date created: 092/12/08
Date last altered: A92/12/08

SOME OEM OPTIONS REQUIRE THAT A SYSTEM UNIT POWER SUPPLY LEAD INTENDED FOR DASD BE PLUGGED INTO A DEVICE LOCATED OUTSIDE THE DASD BAYS (SUCH AS AN ADAPTER).

IF THE DASD CONNECTOR WILL NO LONGER REACH THE DEVICE AFTER REPLACING THE POWER SUPPLY, AN 8580 HARDFILE POWER CABLE FRU P/N72X8521 CAN BE USED AS AN EXTENSION.

SAS KEYWORDS:

PSY2	95XX	PSY2PWR	PSY2FDSK
D/T8535	D/T8556	D/T8557	D/T9556
D/T9557	D/T9576	D/T9577	

1.2.381 POWER SUPPLY TEST - MODELS 35, 40, 56, 57, 76, 77

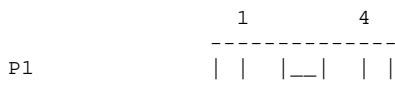
Record number: H067810

Device: D/T8550
 Model: M
 Tip key: 167
 Date created: 093/02/01
 Date last altered: A93/03/11

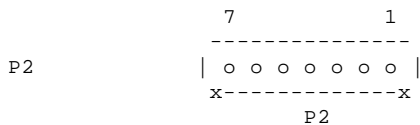
TEST; PAGE NUMBER 60 OF THE PS/2 HARDWARE MAINTENANCE MANUAL, FORM NUMBER S52G-9971-00 DATED SEPTEMBER 1992, CONTAINS ERRORS IN THE PIN/VOLTAGE DIAGRAMS. THIS TIP PROVIDES CORRECT PIN/VOLTAGE DIAGRAMS AND CLARIFIES TESTING INSTRUCTIONS.

MODELS 35, 40, 56, 57, 76, 77

1. DISCONNECT THE POWER CORD FROM THE POWER SUPPLY. PLACE THE ON/OFF SWITCH IN THE ON POSITION. CHECK FOR CONTINUITY BETWEEN PINS 4 AND 6 (SWITCH) ON P2 OF THE POWER SUPPLY.
2. IF THE SWITCH IS OK, DISCONNECT THE POWER SUPPLY CABLES FROM THE SYSTEM BOARD AND DRIVE(S) AND RECONNECT THE POWER CORD. SHORT PIN 4 TO 6 ON P2 AND CHECK THE POWER SUPPLY VOLTAGES ON P1, P2, AND DRIVE CONNECTORS.

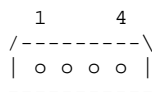


	-LEAD PIN	+LEAD PIN	V DC MIN	V DC MAX
P1	3,4	1,2	+3.75	+6.25



	-LEAD PIN	+LEAD PIN	V DC MIN	V DC MAX
	6	1,2	+9.0	+15.0
	6	5	-9.0	-15.0
	6	7	-4.75	-5.5

DRIVE CONNECTORS 1 THROUGH 4:



	-LEAD PIN	+LEAD PIN	V DC MIN	V DC MAX
	2,3	1	+9.0	+15.0
	2,3	4	+3.75	+6.25

IF THE VOLTAGES ARE NOT CORRECT, REPLACE THE POWER SUPPLY. IF THE VOLTAGES ARE CORRECT, CONTINUE PROBLEM DETERMINATION WITH THE HMM.

THESE CORRECTIONS WILL BE MADE IN THE NEXT RELEASE OF THE HMM.

SAS KEYWORDS:

PSY2	PSY2POWR	PSY2DOC	D/T8550
D/T8535	D/T8540	D/T8556	D/T8557
D/T9556	D/T9557	D/T9576	D/T9577
PSY2PWR			

PREVENT TRACKPOINT AND KEYBOARD 8611 - 8613 ERRORS.

1.2.382 PREVENT TRACKPOINT AND KEYBOARD 8611 - 8613 ERRORS.

Record number: H13693

Device: D/T9545
 Model: M
 Tip key: 043
 Date created: 095/08/29
 Date last altered: A95/09/08

Trackpoint II smooth rubber caps used on the Device type models in the following list may contain an abnormally high sulfur level that can cause corrosion of the trackpoint lands on the keyboard. Sulfur, in the correct amount, is a normal part of the manufacturing process and does not cause corrosion. The corrosion caused by the high sulfur content may, over time, contribute to a keyboard malfunction that disables the trackpoint and produces an 8611 or 8613 error.

The following actions are being taken to proactively prevent these failures.

1. The trackpoint cap kit FRU P/N84G6536 will now only contain the trackpoint III no-slip caps that are all within specifications. Trackpoint cap II kits FRU P/N54G0439 and P/N66G6444 substitute to FRU P/N84G6536.
2. Replace the smooth rubber cap with the newer no-slip trackpoint III rubber cap during any service action on the following device type models. Do not write a separate service action for cap replacement.
3. IBM is offering all ThinkPad owners (not device or model specific) a free no-slip replacement cap. The offer will be commutated via marketing outlets, mailings, and the internet.

NOTE: REPLACING THE OUT OF SPEC SMOOTH CAPS WILL PREVENT FUTURE KEYBOARD LAND CORROSION FAILURES.

CUSTOMERS CAN OBTAIN A CAP KIT BY CALLING 1800-520-8765 IN THE U.S. OR CANADA.

CEs AND DEALERS SHOULD OBTAIN CAP KITS THROUGH THEIR NORMAL PARTS ORDERING CHANNELS.

SMOOTH TRACKPOINT CAP REPLACEMENT LIST

9545	US Model #	Canadian Model #
750	006, 008	0Y6, 0C6, 0Y8, 0C8
750C	306, 308,	3Y6, 3C6, 3Y8, 3C8
750CS	206, 208	2Y6, 2C6, 2Y8, 2C8
750CE	908	908, 9Y8
750P	40C, 40E	4Y6, 4Y8
755C	FOC, LOC, FOE, LOE, FOG, LOG	LYG, LYE, LCE, FYC, FYE
755CS	EOC,K0C, E0E, K0E	EYE, EYC, ECE
370C	Not available in U.S.	QPC, QPD, QDD

SAS KEYWORDS:

PSY2

PSY2PART

THINKPAD

PRINTER DIP SWITCH SETTING CHANGED

1.2.383 PRINTER DIP SWITCH SETTING CHANGED

Record number: H101546

Device: D/T5152
Model: M
Tip key: 014
Date created: 086/05/02
Date last altered: A88/11/17

PRINTER DIP SWITCH SETTING CHANGED

STARTING WITH S/N0710159, THE PRINTER DIP SWITCH BLOCK 1, 04,
SWITCH NUMBER 3, IS BEING CHANGED FROM A PRESENT FACTORY 05
SETTING OF OFF TO ON. THE EFFECT OF THIS CHANGE IS:

NO AUTOMATIC LINE FEED WHEN A CARRIAGE RETURN (X'OD') IS
TRANSMITTED. THIS ALLOWS THE USER TO DO UNDERLINING AND
OVERPRINTING UNDER PROGRAM CONTROL.

SAS KEYWORDS:

5152PRT PCOMPRT PCOM PSY2

1.2.384 PRINTER WILL NOT ADVANCE PAPER WHEN ATTACHED TO 8530 286

Record number: H065374

Device: D/T8530
Model: M
Tip key: 038
Date created: 090/06/13
Date last altered: A90/07/13

PROBLEM:

THE PRINTER WILL NOT ADVANCE PAPER WHEN ATTACHED TO A POWERED OFF 8530 286 SYSTEM.

THIS IS NOT CONSIDERED A DEFECT. TO ADVANCE PAPER, THE SYSTEM UNIT SHOULD BE POWERED ON OR THE PAPER SHOULD BE ADVANCED BY HAND BY USING THE PRINTER'S FORMS FEED KNOB.

SAS KEYWORDS:

PSY2 PSY2PRT PSY2OPER 8530SYSPRT
8530SYSOPER

1.2.385 PROBLEM DIAGNOSTICS IN a SHARED DISK CLUSTER ENVIRONMENT_V02

Record number: H161480

Device: D/T8650
 Model: M
 Tip key: 002
 Date created: 097/10/06
 Date last altered: A97/12/19

Summary: Servicer Assistance Information for Shared Disk Clusters.

The intent of the document is to assist with the diagnosis of problems running the following on PC Servers and Netfinity Servers that support each:

- Novell NetWare 3.12 / 4.1 with IBM Cluster Pack for NetWare.
- Novell IntraNetware 4.11 with IBM Cluster Pack for Netware.
- Microsoft Windows NT 4.0 Enterprise Edition (Service Pack III required) with Microsoft Cluster Server.
- OS/2 Warp Server with IBM Cluster Pack for OS/2.
- OS/2 Warp Server SMP with IBM Cluster Pack for OS/2.

The IBM PC Servers and Netfinity Servers certified by IBM for clustering are:

- PC Server 325 type 8639 model RB0/PT0/PTW/PB0
- PC Server 330 type 8640 model PB0/PT0/PM0
- PC Server 704 (all models).
- Netfinity 7000

The IBM Storage Enclosures certified by IBM for clustering are:

- 3518 Enclosure.
- 3519 Rack Storage Enclosure.
- MetaSTOR DS-20E/RM-20E (Refer to Authorized MetaSTOR Retailer if a problem is isolated to the MetaStor disk enclosure).

NOTE: Current certified Server and Storage Enclosure configurations are listed at the following IBM Website URL:

[Http: //www.pc.ibm.com/us/compat/clustering/matrix.shtm](http://www.pc.ibm.com/us/compat/clustering/matrix.shtm)

- 1.0 Shared disk cluster identification
- 2.0 Strategies to prioritize where to begin problem diagnosis
- 2.1 Problem Determination Guidelines
- 2.2 Recovering a down cluster before problem determination
- 2.3 Specific Cluster/Node Strategies
- 3.0 Replacing a failed ServerRAID II Adapter
- 4.0 Contacting Support
- 5.0 Service tips
- 5.1 Diagnostics
- 5.2 Shared Disk Subsystems
- 5.3 Communication Link/LAN Adapters
- 6.0 Glossary of terms

This document should be used in conjunction with the Servicer Training Video Series Volume 19, Shared Disk Clustering.

This document will be updated as necessary. The latest version of this document can be found at:

[Http: //www.us.pc.ibm.com/support](http://www.us.pc.ibm.com/support)
 (You may search on the title of this document)

Maintaining Cluster High Availability requires the Cluster is always available for LAN attached users to access. With this in mind, always consider keeping at least one node supporting a cluster online while performing problem isolation/diagnostics on other nodes that are part of the cluster.

1.0 Shared disk cluster identification:

Provided below are ways to identify shared disk cluster configurations. Positive identification to one of the below tasks does not ensure that you will be working with an active shared disk cluster but should allow you to take appropriate steps as necessary. Problem determination steps outlined in this document are safe to use with stand-alone server configurations.

- 1) Ask the customer if they are using shared disk clustering.

- 2) Ask the customer if they are running one of the following packages:
 - Microsoft Windows NT.
 - IBM Cluster Pack for NetWare.
 - IBM Cluster Pack for OS/2.
 - Microsoft Cluster Server.
- 3) Look for cluster identifiers such as:
 - External disk enclosures cabled to two or more servers.
 - Disk enclosures maybe dual connected.
 - Disk enclosures may be daisy-chained.
 - Ethernet cables directly connecting two servers.
 - Close proximity of multiple servers.

2.0 Strategies to prioritize where to begin problem diagnosis:

When performing problem diagnosis on a node in a cluster or on a cluster, maintaining cluster high availability should be the greatest priority.

Remember:

Maintaining Cluster High Availability requires the Cluster is always available for LAN attached users to access. With this in mind, always consider keeping at least one node supporting a cluster online while performing problem isolation/diagnostics on other nodes that are part of the cluster.

- 1) Try to get cluster operations running on at least one node if multiple nodes are down.
- 2) Do problem determination that allows the cluster to continue to run.
- 3) Only if absolutely necessary should problem determination be implemented that requires the entire cluster to be shut down.

2.1 Problem determination guidelines:

The guidelines below can assist in maintaining cluster high availability and quick problem resolution.

Problem determination applied to a node that requires the node is NOT available for cluster operation:

- * Running diagnostics on a cluster node
 - Except for host adapter diagnostics, all cluster nodes should be shut down before running system diagnostics on host adapters which are attached to shared disk subsystems.
 - Looped diagnostics may run on a system but may invoke host adapter diagnostics.
- * Running diagnostics on the communications adapter.
- * Inspecting cables and connections of cluster nodes and shared disk components.

Problem determination requiring the shutdown of an entire Cluster:

- * Running diagnostics on shared disk subsystems.
- * Testing to determine if shared disk subsystem cables function.
- * Running diagnostics on shared disk subsystem host adapters.

2.2 Recovering a down cluster before problem determination

- Request the customer shut down all applications and operating system activities for both nodes, if applicable.
- Power off cluster nodes and shared disk subsystems.
- Power on one cluster node and shared disk subsystem.
- Request customer validate cluster operations are functioning shortly after operating system initialization.
- If cluster operations are still not functioning, request customer shut down the node's operating system.
- Power off cluster node and shared disk subsystems.
- Power on the other node and shared disk subsystems.
- Have the customer validate cluster operations.
- If the cluster still does not function, use problem determination strategy for down clusters.

2.3 Specific Cluster/Node Strategies:

If a cluster is down and each node is in a different node state use the strategy of the highest ranking node state:

Rank	Node State
------	------------

- 1 Node failure
- 2 Hang/Trap condition
- 3 Running with errors
- 4 Running without errors

The following Problem Determination Guideline Matrix references Cluster states in conjunction with Node states that reference their respective document sections that follow.

Cluster State	Node(s) State	Node(s) State	Node(s) State	Node(s) State
Cluster Down	Node failure 2.3.1	Node(s) in a Hang/Trap 2.3.2	Node(s) run with errors 2.3.3	Node(s) run w/o errors 2.3.4
Cluster in failover mode	Node failure 2.3.5	Node in a Hang/Trap 2.3.6	Node running with errors 2.3.7	Node(s) run w/o errors 2.3.8

The following strategies should be used in conjunction with the Problem Determination Guideline Matrix above.

Note: Items are rated "High" (most probable failure) to "LOW" (least probable failure).

- 2.3.1 Cluster down and node failure.
 - * Shared Disk Subsystem -----High
 - * Cables to shared disk systems ----- High
 - * Shared disk subsystem host adapter ----- Medium
 - * Node failure ----- Low
 - * Software errors or configuration ----- Low
 - * Communication Link ----- Low
- 2.3.2 Cluster down and node(s) in a hang trap condition.
 - * Software errors or configuration ----- High
 - * Cables to shared disk systems (termination)- High
 - * Subsystem host adapters (SCSI ID)----- High
 - * Shared disk subsystem ----- Medium
 - * Communication Link ----- Low
 - * Node failure ----- Low
- 2.3.3 Cluster down and node(s) running with errors.
 - * Shared disk subsystem ----- High
 - * Subsystem host adapters ----- High
 - * Cables to shared disk systems ----- High
 - * Software errors or configuration ----- Medium
 - * Node failure ----- Low
 - * Communication link ----- Low
- 2.3.4 Cluster down and node(s) running without errors.
 - * Communication link ----- High
 - * Software errors or configuration ----- High
 - * Shared disk subsystem ----- Low
 - * Cables to shared disk systems ----- Low
 - * Subsystem host adapters ----- Low
 - * Node failure ----- Low
- 2.3.5 Cluster in failover mode and node failure.
 - * Node failure ----- High
 - * Cables to shared disk systems ----- Medium
 - * Subsystem host adapters ----- Medium
 - * Communication line ----- Medium
 - * Software error or configuration ----- Low
 - * Shared disk subsystems ----- Low
- 2.3.6 Cluster in failover mode and a node in a hang trap condition.
 - * Software errors or configuration ----- High
 - * Node failure ----- High
 - * Subsystem host adapter ----- Medium
 - * Cables to shared disk systems ----- Medium (termination)
 - * Shared disk subsystems ----- Low
 - * Communication link ----- Low
- 2.3.7 Cluster in failover mode and a node running with errors.
 - * Communication link ----- High

- * Subsystem host adapters ----- High
- * Cables to shared disk systems ----- High
- * Node failure ----- Low
- * Software errors or configuration ----- Low
- * Shared disk subsystems ----- Low

2.3.8 Cluster in failover mode and node(s) running without errors.

- * Communication link ----- High
- * Cables to shared disk systems ----- High
- * Subsystem host adapters ----- Medium
- * Software errors or configuration ----- Medium
- * Shared disk subsystem ----- Low
- * Node failure ----- Low

3.0 Replacing a failed ServerRAID II adapter in a High-Availability configuration.

NOTE: The following procedure requires that specific configuration settings on the ServerRAID II adapter can be obtained from the adapter that is being replaced or were noted when the adapter was previously configured and are available for reconfiguring the new adapter.

NOTE: Obtaining the correct information for these settings is the responsibility of the user and is required to accomplish this procedure.

Step 1:

- Backup the system configuration using the system's SCU or System utility Diskette(whichever applies to the specific system) for restoring the configuration IF required.

Step 2:

- Depending upon the operational condition of the adapter being replaced, it may or may not be possible to obtain the following information by booting the ServerRAID configuration diskette and choosing the "Display/Change Adapter Params" item from the "Advanced Functions" menu. If the adapter is non-functional, the following information should have been noted when the adapter was originally configured:

- SCSI Bus Initiator_Ids
- Adapter Host_Id
- Cluster Partner's Host_Id

- IF the original settings were never noted and the adapter being replaced in non-functional, following tips MAY help:

Tip:

SCSI Bus Initiator_Ids for non-shared SCSI channels will normally be set to 7. However, for shared SCSI channels the ID's will usually be 7 or 6 and must be different than the SCSI Bus Initiator_Ids for the corresponding SCSI channels of the cluster partner adapter. You may obtain the SCSI Bus Initiator_Ids from the corresponding cluster partner adapter by booting the ServerRAID Configuration Diskette on the cluster partner system and selecting the "Display/Change Adapter Params" option from the "Advanced Functions" menu. From this information, the correct settings for the replacement adapter can be determined. For example, if the cluster partner's shared SCSI bus Initiator_Ids were set to 7, then the replacement adapter would typically need to be set to 6.

The proper settings for the Host_Id and Cluster Partner's Host_ID of the adapter being replaced may be determined by reading the settings from the cluster partner system by using the "Display/Change Adapter Params" option. In this case, the adapter being replaced should have it's Host_Id set to the same value as is defined for the Cluster Partner's Host_Id on the corresponding adapter in the cluster partner system. The Cluster Partner's Host Id of the replacement adapter should be set to the same value as is defined in the Host_Id of the corresponding adapter in the cluster partner system.

Example:

	Node A	Node B
SCSI Bus Initiator_Ids	7	6
Adapter Host_Id	Server001	Server002
Cluster Partner's Host_Id	Server002	Server001

Step 3:

- Power down the system, note which SCSI cables are connected to the SCSI channel connectors on the adapter, note which PCI slot the adapter is in, remove the cables from the adapter, then remove the ServeRAID II adapter from the system.

Step 4:

- Install the New ServeRAID II adapter into the same PCI slot. DO NOT reconnect SCSI channel cables to the adapter at this time.

Step 5:

- Boot the system to the "IBM ServeRAID, ServRAID II, and onboard ServeRAID configuration diskette" version 2.40 or higher. Initialize the adapter configuration as follows:
 - Select "Advanced Functions" from the main menu.
 - Select "Init/View/Synch Config"
 - Select "Initialize Config"

Step 6:

- Ensure that the adapter is at the latest BIOS/Firmware levels. The latest BIOS/Firmware levels are available from the IBM Website at URL:

Http: //www.pc.ibm.com/us/files.html

- Search on: RAID BIOS
- Download the .txt to determine the latest levels available, and apply them if the adapter is downlevel (the actual BIOS/Firmware level of the adapter is displayed after system post when the adapter BIOS loads).

Step 7:

- Update the configuration parameters as follows:
 - Boot to the "IBM ServeRAID, ServRAID II, and onboard ServeRAID configuration diskette" version 2.40 or higher.
 - Select the "Advanced Functions" from the main menu.
 - Select "Display/Change Adapter Params".
 - Select and configure each of the following with the original settings that were noted when the original adapter was last configured (see step 2 above):
 - SCSI Bus Initiator_Ids
 - Adapter Host_Id
 - Cluster Partner's Host_Id

Step 8:

- Shutdown the system and reconnect the SCSI channel cables to the adapter. Be sure to connect the cables to the correct SCSI channels as noted in step 3.

NOTE: If the adapter being replaced is not the adapter which attaches the server's boot disk array or other non-shared disk arrays, then the following steps may not apply and the system may now be restarted normally.

Step 9:

- If the adapter that was replaced was the adapter that attached the operating system boot disk array for the system or if other non-shared disk arrays are attached to this adapter, then boot the system using the "IBM ServeRAID, ServRAID II, and onboard ServRAID onboard controller diskette" version 2.40 or higher.
 - Select "Advanced Functions" from the main menu.
 - Select "Merge Group Management"
 - Follow the steps below to restore the adapter's disk array configuration:
 - To restore non-shared disk array configurations, select the "Merge Own Non-Shared Drives" option from the merge group management menu. Enter the "merge group ID" for the array as 20X (normally 206 or 207) where X is the value of the shared SCSI Bus Initiator_Id that was used to configure the replacement adapter in step 7 above. If this was the boot adapter, the system should now be able to boot to the operating system.
 - Select the Merge Own Shared Drive option for each shared Array (merge group IDs in the range from 1 to 8) which has not failed over to the cluster partner system (e.g. RAID-5

Arrays in critical/degraded state) in order to restore the configuration of these shared Arrays. Typically all shared Arrays have failed over and should not be merged now.

- Repeat Merging shared drives which have not failed over if multiple shared drives with different Group_Ids exist that have not failed over to the cluster partner system.

NOTE: The "IBM ServeRaid, ServeRAID II, and onboard ServeRAID configuration diskette" MUST NOT be used to perform failover/rollback to merge/unmerge drives belonging to the other node.

Failover/rollback to merge/unmerge drives belonging to the other Node is normally handled by the Operating System software and/or Cluster Support Software.

Step 10:

- Once all array configurations have been restored, the server may be restarted.

4.0 Contacting support

When it is necessary to contact IBM support for assistance in resolving the cluster problem, the below information will help support more quickly understand the cluster environment and problem.

- Machine type & model of all nodes
- Shared disk subsystems connected and how they are attached.
- Cluster software and operating system platform
- Private interconnect
- State of the cluster

5.0 Service tips

5.1 Diagnostics

- Running host adapter or shared disk diagnostics while the shared disk host adapter is still connected to the shared disk enclosure may interrupt the operation of the surviving node or cause the system running diagnostics to report false error conditions.
- Looped diagnostics should only be run on one component at a time when a cluster is running in failover state. Looped diagnostics for more than one test will run all tests, including shared disk subsystem tests.

5.2 Shared Disk Subsystems

- Booting system diagnostics hangs at the screen:
"Booting PC DOS" If the MetaStor host adapter BIOS is not disabled when attempting to run diagnostics, some diagnostic programs will hang while booting. Request the customer verify that the MetaStor host adapters do not have BIOS enabled.
- Fault Isolation on cluster with connected MetaStor disk subsystems.
- If the MetaStor unit exhibits blinking and / or amber colored lights, have the customer contact MetaStor service or support for assistance.
- Errors reported in MetaStor's SYMplicity program should be handled by authorized MetaStor service personnel.
- Host adapters that are connected to the same bus should not have the same SCSI ID. One adapter should be set to ID 6 and the other to ID 7.

5.3 Communication Link/LAN Adapters

- LAN Adapter diagnostics and LAN Adapter diagnostics for IBM EtherJet 10/100 adapters may be run on a node while the surviving node is operating in failover mode.

6.0 Glossary of terms

Cluster:

A collection of interconnected whole computers utilized as a single unified computing resource.

Node:

A server participating in a cluster.

Communication Link:

The link between the nodes of the cluster used for Cluster communication. This is usually an Ethernet link.

Failover:

The action where processes and applications are stopped on one node and restarted on the other node.

Failback:

The action where processes and/or applications return back to the node they are configured to run on during normal cluster operation.

Cluster down:

A state where either multiple nodes are physically not functioning or clients cannot access the cluster or virtual servers configured on the cluster.

Failover mode:

A state where one node in the cluster is handling cluster activity while the other node is offline or not functioning.

Node failure:

A state where a node hardware failure is exhibited by one of the following attributes:

- * Post errors
- * Failure to power on
- * Video failure

Hang trap condition:

A state where a software failure has halted operation of a node exhibited by any of the following:

- * Blue screen in Windows NT
- * ABEND (Abnormal END)
- * OS/2 Trap
- * NMI (Non Maskable Interrupt)
- * System unresponsive to Keyboard and / or Mouse

Running with errors:

The operating system on the node is capable of running and is reporting errors. Cluster activity on this node has ceased to function.

Running without errors:

The operating system on the node is capable of running and is NOT reporting errors. Cluster activity on this node is not functioning.

Windows NT, and Microsoft Cluster Server are trademarks of Microsoft Corporation.

Microsoft is a registered trademark of Microsoft Corporation.

NetWare and IntranetWare are trademarks of Novell, Inc.

SYMplicity is a trademark of Symbios Logic, Inc.

MetaStor is a trademark of Symbios Logic, Inc.

SAS KEYWORDS:

PSY2	CLUSTER	D/T8640	D/T8650
D/T8651	UNCLASSIFIED	PD	DASD
CLUSTERING	STANDBYSERVER	VINCA	METASTOR
INTRANETWARE	MICROSOFT	CLUSTER PACK	NOVELL
WINDOWS NT	INTRANETWARE	NODE FAILURE	CLUSTER DOWN
CLUSTER FAILURE	TRAP	HANG	SERVICEPACK III
SERVERAID II			

PROBLEM WITH PS/2 INTERNAL TAPE DIAGS ON 8556, 8557 AND 8595

1.2.386 PROBLEM WITH PS/2 INTERNAL TAPE DIAGS ON 8556, 8557 AND 8595

Record number: H037403

Device: D/T8550
Model: MCP1
Tip key: 154
Date created: 093/03/02
Date last altered: A93/03/02

A PROBLEM HAS BEEN IDENTIFIED IN THE DIAGNOSTIC PROGRAM FOR THE IBM PS/2 INTERNAL TAPE BACKUP UNIT (FC 5279, FRU P/N87F9787). IT IS POSSIBLE THAT "INTERNAL TAPE BACKUP UNIT" MAY NOT SHOW UP ON THE INSTALLED DEVICES LIST WHEN RUNNING DIAGNOSTICS IN THE ADVANCED MODE. THIS PROBLEM HAS NOT BEEN SEEN WHEN RUNNING DIAGNOSTICS IN THE CUSTOMER MODE. IF IT IS NECESSARY TO VIEW THE INSTALLED DEVICES, THE CUSTOMER MODE SHOULD BE USED. THIS PROBLEM WILL BE ADDRESSED IN THE NEXT VERSION OF THE ITBU DIAGNOSTICS (FORM NUMBER G571-0164)

NOTE: 8556, 8557 AND 8595 ARE THE ONLY MACHINES AFFECTED.

SAS KEYWORDS:

PSY2	PSY2TAPE	ITBU	PSY2MISC
PSY2ERR	TAPE	BACKUP	INTERNAL
D/T8557	D/T8556	D/T8595	

1.2.387 PROBLEMS RUNNING QUICKLINK MESSAGE CENTER

Record number: H133191

Device: D/T6877
 Model: M
 Tip key: 010
 Date created: 096/03/25
 Date last altered: A96/03/25

Below is a list of 5 items to consider if the user is having problems running the Quicklink Message Center application. This application is preloaded on the IBM PC 700 Series 6877 and 6887 systems with the Audio Options installed.

- 1) Quicklink Message Center is a Windows based application. To run this application in OS/2, it must be run from the Windows Program Manager. It will not run in a WIN-OS/2 window or the WIN-OS/2 Group.
- 2) The first time Quicklink Message Center is run, the user is prompted to make a choice of registering now or later. If the user closes the application WITHOUT making a choice, one of the following errors may occur:
 - a) The system may hang when the user closes Windows 3.11 and goes to the C: \WINDOWS prompt.
 - b) The system will display a General Protection Fault (GPF) in Windows95. The GPF data displayed is "General Protection Fault in module user.exe at 0003: 00006073."

The error condition only occurs the first time Quicklink Message Center is run. The second time Quicklink is started, the problem no longer exists.

- 3) A GPF may be displayed while using Quicklink to send a FAX. The GPF data displayed is "General Protection Fault in module smlog.exe at 0002: 11ab."

Click on "Close" after the GPF is displayed. The FAX will continue to process and Quicklink will still be in a useable state.

- 4) A GPF may be displayed while using Testmode to check the Quicklink voice messaging function.

The GPF is displayed if the user chooses the "Cancel" key when Quicklink prompts the user to record a message in Testmode. This error only occurs in Testmode, not in the function that records voice files for actual use (System Voice Files).

- 5) When a FAX is cancelled in Quicklink Message Center, the application or system may hang.

Do not cancel a FAX while the connection is being established. To cancel a FAX, wait until the connection and transmission has started.

Windows & Windows95 are trademarks of the Microsoft Corporation.

SAS KEYWORDS:

PSY2	D/T68XX	6887	6877
IBMPC	PSVP	PSY2PROG	PSVPPROG
D/T6887	PC750	PC700	PC 730
PC 750	PC730	PSVPCOMM	PSY2COMM
42050	42333	41490	42896
41013			

1.2.388 PROCESSOR SPEED INCORRECT ON 6384 P60/D

Record number: H122110

Device: D/T6384
 Model: M
 Tip key: 043
 Date created: 093/12/20
 Date last altered: A93/12/20

PS/VALUEPOINT 6384 P60/D MODELS MAY INCORRECTLY SHOW THE PROCESSOR SPEED TO BE 66 MHZ WHEN VIEWED IN THE CONFIGURATION UTILITY. THE PROCESSOR SPEED ON THE P60/D MODELS 189 AND 199 IS 60 MHZ.

PROBLEM ISOLATION AIDS:

ACCESS THE CONFIGURATION UTILITY BY PRESSING F1 DURING THE MEMORY COUNT. VIEW THE PROCESSOR ENTRY ON PAGE 1. IF THE PROCESSOR SPEED SHOWS 66 MHZ, LOCATE JUMPER POSITION J7A1. J7A1 IS LOCATED ON THE LEFT EDGE OF THE SYSTEM BOARD, IN FRONT OF THE VIDEO MEMORY MODULES.

ENSURE THE JUMPER IS POSITIONED AS FOLLOWS:

```
J7A1:  o  |o|
        |  | 60MHz - (Upper right pins jumpered)
        o  |o|
        |  | 66MHz - (Lower right pins jumpered)
        o  |o|
        o  o
```

MOVING THE J7A1 JUMPER TO THE "66" POSITION DOES NOT INCREASE THE PROCESSOR SPEED OF THE 6384 P60/D. THE SPEED REMAINS AT 60 MHZ UNLESS THE CUSTOMER HAS CHANGED THE PROCESSOR.

SAS KEYWORDS:

PSVP	PSY2	PSVPBRD	PSY2BRD
PSVPPART	PSY2PART	P60	71G3232
P/N71G3232	PENTIUM	586	

PSY2 RETAIN TIPS
PRODUCTS MAY CONTAIN SHARP EDGES

1.2.389 PRODUCTS MAY CONTAIN SHARP EDGES

Record number: H121086

Device: D/T95XX
Model: M
Tip key: 010
Date created: 093/09/02
Date last altered: A93/09/03

DURING THE MANUFACTURE OF IBM PRODUCTS, OPERATIONS SUCH AS SHEET METAL PUNCHING, STAMPING, DRILLING AND GRINDING MAY PRODUCE SHARP OR BURRED EDGES. ADDITIONAL STEPS ARE TAKEN IN THE MANUFACTURING PROCESS, SUCH AS DEBURRING AND ABRASIVE TUMBLING OF PARTS, TO KEEP SHARP EDGES TO A MINIMUM.

HOWEVER, SOME PARTS MAY MEET IBM CORPORATE SAFETY STANDARDS BUT DUE TO MECHANICAL DESIGN CONSIDERATIONS, SUCH AS SMALL SIZE, THINNESS OF METAL PARTS, ETC., CUTS MAY STILL BE INCURRED BY CONTACT WITH EDGES OR CORNERS WITH SUFFICIENT FORCE (FOR EXAMPLE, THIN SHEET METAL EMI/RFI SHIELDS AND SPRING FINGERS).

NOTE:

A SERVICER'S EXPOSURE TO SHARP PARTS IS GENERALLY GREATER THAN AN OPERATOR'S, AS THE INTERIOR COMPONENT ASSEMBLIES TYPICALLY PRESENT A GREATER POSSIBILITY FOR SHARP OR BURRED EDGES. IT IS THE SERVICER'S RESPONSIBILITY TO BE AWARE OF THESE POSSIBLE HAZARDS AND TO EXERCISE APPROPRIATE CARE.

ADDITIONAL INFORMATION IS CONTAINED IN "GENERAL SAFETY FOR IBM CUSTOMER ENGINEERS," FORM # S241-5493-07 AND "ELECTRICAL SAFETY FOR IBM CUSTOMER ENGINEERS," FORM # S229-8124-05.

SERVICERS SHOULD BE FAMILIAR WITH THE SAFETY INFORMATION CONTAINED IN THESE PUBLICATIONS.

SAS KEYWORDS:

D/T8525	D/T8530	D/T8535	D/T8540
D/T8543	D/T8551	D/T8554	D/T8550
D/T8555	D/T8556	D/T8557	D/T8573
D/T8560	D/T8565	D/T8570	D/T9576
D/T8580	D/T8590	D/T8595	D/T9585
D/T9577	D/T9556	D/T9557	D/T9595
D/T8503	D/T8504	D/T8506	D/T8507
D/T8508	D/T8511	D/T8513	D/T8515
D/T8516	D/T8517	D/T8518	D/T9525
D/T9515	D/T9517	D/T9518	D/T9524
D/T6312	D/T6314	D/T6317	D/T6319
D/T6324	D/T6325	PSY2	PSY2DISP
PSY2PART	PSY2ADPT		

1.2.390 PS-2 TRAP OR NMI ERROR GUIDELINES

Record number: H083121

```
Device:           D/T8550
Model:           M
Tip key:         076
Date created:    091/03/21
Date last altered: A93/09/08
```

THE PURPOSE OF THIS TIP IS TO GUIDE THE SERVICER THROUGH THE VARIOUS TRAP ERRORS THAT CAN OCCUR ON PS/2 SYSTEMS. IT SHOULD BE USED ONLY AS A GUIDE AND DOES NOT COVER ALL TRAP ERRORS THAT COULD OCCUR.

THIS TIP IS IN SEVEN SECTIONS:

- A. GENERAL INFORMATION.
- B. GATHERING INFORMATION.
- C. TRAP NUMBER TABLE.
- D. MEMORY IDENTIFICATION TABLE.
- E. NOTES.
- F. NMI TABLE.
- G. TRAP 0002 SERVICE AID
- H. ERRONEOUS TRAP ERRORS

SECTION A. | GENERAL INFORMATION

A "TRAP" IS THE METHOD THE PROCESSOR USED TO INFORM THE OPERATING SYSTEM THAT AN UNACCEPTABLE CONDITION HAS BEEN DETECTED.

TRAP ERRORS CAN BE CAUSED BY BOTH SOFTWARE AND HARDWARE. SOME OF THE ERRORS ARE DOUBLE FAULT, PROTECTION VIOLATION, ETC. THE MOST COMMON OF THESE IS A TRAP 0002 WHICH IS CAUSED BY AN NMI (NON-MASKED INTERRUPT). AN NMI CAN BE CAUSED BY A MEMORY PARITY ERROR, A CHANNEL ERROR, A BUS TIMEOUT, OR A WATCHDOG TIMER TIMEOUT. THE MOST COMMON OF THESE IS MEMORY PARITY ERROR.

A TRAP 0002 MEMORY PARITY ERROR EXPERIENCED WHILE RUNNING OS/2 WILL BE ACCOMPANIED BY AN ERROR MESSAGE SCREEN WHICH WILL INFORM THE OPERATOR THAT THE ERROR WAS ON THE SYSTEM BOARD MEMORY, OR AN OPTION CARD (EXPANSION MEMORY).

NOTE 1. THE DATA REGISTERS DISPLAYED ON THE SCREEN BY OS/2 DO NOT CORRELATE TO AN ACTUAL FAILING MEMORY MODULE OR ADDRESS AND ARE INVALID FOR HARDWARE PROBLEM DETERMINATION. HOWEVER, THIS INFORMATION IS MEANINGFUL FOR SOME TYPES OF SOFTWARE PROBLEM DETERMINATION, SUCH AS TRAP 000D ERRORS.

NOTE 2. PS/2 SYSTEMS HAVE NO MEMORY ERROR CORRECTION HARDWARE, THEREFORE ANY PARITY ERROR WILL CAUSE A SYSTEM HALT WITH THE APPROPRIATE FAILURE INDICATIONS DEPENDING UPON THE OPERATING SYSTEM.

SECTION B. | GATHERING INFORMATION ABOUT THE TRAP.

THE FOLLOWING INFORMATION WILL BE REQUIRED TO ARRIVE AT THE CORRECT POSITION IN THE TABLE IN SECTION C. IT WILL ALSO BE HELPFUL TO SOFTWARE SUPPORT CENTER PERSONNEL IF ASSISTANCE IS REQUIRED.

1. WHICH TRAP ERROR(S)? 0002
 0006
 0007 ETC.

NOTE: IF MORE THAN ONE TRAP ERROR IS DISPLAYED, THEN THE FOLLOWING ANSWERS ARE REQUIRED FOR EACH TRAP:

2. WHAT IS THE FULL ERROR DISPLAYED ON THE SCREEN?
INCLUDE:
 - ALL REGISTERS DISPLAYED (TRAP 000D ERRORS).
 - THE MESSAGE AT THE TOP OR BOTTOM OF THE SCREEN.
 - EG. HARDWARE MEMORY ERROR AT LOCATION XXXX,YYYY (SEE SECTION A, NOTE 1.)
 - HARDWARE ERROR ON LOCATION CARD
 - INTERNAL PROCESSING ERROR AT LOCATION XXXX,YYYY
 - RECORD THE "ERRCD" REGISTER ON A TRAP 0002, THEN USE THE TABLE IN SECTION F. TO AID IN PROBLEM DETERMINATION.
3. HOW DOES THE CUSTOMER RECOVER ? HAVE ALL OPTIONS BEEN TRIED?
eg POWER OFF/ON ?
CTRL + ALT + DEL ?
PRESSING ANY KEY OR KEYS....RECORD ANY RESULTING MESSAGE.
4. WHAT IS THE HARDWARE CONFIGURATION ?

PSY2 RETAIN TIPS
PS-2 TRAP OR NMI ERROR GUIDELINES

INCLUDE: ADAPTERS INSTALLED.
 WHICH SLOTS THE ADAPTERS ARE IN.
 TOTAL MEMORY INSTALLED? SYSTEM BD. / OPTION CARDS?
 PS-2 MODEL AND TYPE ie 85XX-ZZZ
 ANY OEM CARDS AND THEIR LOCATIONS.
 ETC.,ETC.

**** IF IN ANY DOUBT, VIEW THE CONFIGURATION BY RUNNING
 THE REFERENCE DISKETTE AND THEN DO SCREEN PRINTS.

5. WHAT IS THE SYSTEM CONFIGURATION?

INCLUDE:
 TYPE OF LAN.
 NUMBER OF MACHINES ON LAN.
 THE SOFTWARE BEING USED TO RUN THE LAN.
 ETC., ETC.

6. WHAT IS THE SOFTWARE CONFIGURATION ?

INCLUDE:
 VERSION OF OPERATING SYSTEM (OS2, DOS, ETC.).
 CSD LEVEL (TYPE 'SYSLEVEL' AT C> PROMPT) (OS/2).
 OTHER SOFTWARE(S) AND VERSION(S).

7. CAN THE CUSTOMER REPRODUCE THE PROBLEM AT WILL?

IF YES, HAVE AN EXACT UNDERSTANDING OF HOW IT IS DONE.

8. WHAT WERE THE SEQUENCE OF EVENTS PRIOR TO THE ERROR?

9. WHAT WAS HAPPENING / CUSTOMER DOING AT TIME OF ERROR?

10. ANY RECENT CHANGES, OR OTHER RELEVANT INFORMATION?

EG: THIS IS A NEW INSTALL?
 RECENTLY ADDED EXTRA MEMORY/ADAPTER TO MACHINE?
 RECENTLY ADDED LATEST LEVEL OF CSD?
 RECENTLY PUT NEW SOFTWARE ON?
 NUMBER OF REQUESTERS ASSOCIATED WITH THE SERVER?
 ETC., ETC.

11. SIZE OF THE PROBLEM FROM THE CUSTOMER VIEW?

NUMBER OF MACHINES AFFECTED (BY TYPE)?
 TOTAL INSTALLED BASE (BY TYPE)?
 SEVERITY OF IMPACT?
 POTENTIAL FUTURE IMPACT TO CUSTOMER'S and IBM'S
 BUSINESS?

SECTION C.		TRAP NUMBER TABLE.
TRAP	SYSTEM	ACTIONS
0002	ALL	WITH MESSAGE 'EXCEPTION IN DEVICE DRIVER ' 1. REFER TO NOTE 4. 2. RUN CHKDSK /F- REPAIR ANY CORRUPT FILE(S) 3. REFER TO NOTES 6 AND 8. 4. REFER TO SECTION G. OF THIS TIP
0002	ALL ONLY ON IPL	OCCURS WITH TOKEN RING INSTALLED AND WHEN INITIALIZING THE LAN AT IPL? 1. INSTALL LATEST TRNETDD.SYS (IF RUNNING OS/2 1.2 AT A CSD LEVEL BELOW CSD 4098. THIS IS NOT REQUIRED ON OS/2 1.3 OR LATER) 2. CHECK ALL H/W MEMORY PER SECTION "D." 3. REFER TO NOTES 6 AND 8.
0002	ALL	WITH ALL OTHER MESSAGES 1. WITH 113 ERRORS.. REFER TO 8550 ECA024. SEE NOTE 9. 2. CHECK ALL H/W MEMORY PER SECTION "D." 3. RUN CHKDSK /F- ANY CORRUPT FILE(S)? 4. REFER TO NOTES 6 AND 8.
0006	ALL	1. CHECK ALL H/W MEMORY PER SECTION "D." 2. RUN CHKDSK /F- REPAIR ANY CORRUPT FILE(S)? 3. OEM S/W - IF YES, REFER TO SOURCE.
0007	ALL	1. RUN CHKDSK /F- REPAIR ANY CORRUPT FILE(S)? 2. OEM S/W - IF YES, REFER TO SOURCE.
0008	ALL	1. CHECK ALL H/W MEMORY PER SECTION "D." 2. RUN CHKDSK /F -REPAIR ANY CORRUPT FILE(S)? 3. OEM S/W - IF YES, REFER TO SOURCE.
		WITH THE MESSAGE:

PS-2 TRAP OR NMI ERROR GUIDELINES

000C	ALL	'SYS1942: A PROGRAM ATTEMPTED TO REFERENCE STORAGE OUTSIDE THE LIMITS OF A STACK SEGMENT' -- INDICATES A STACK OVERFLOW OCCURED IN USER WRITTEN CODE OR APPLICATION. 1. CONTACT SOFTWARE SUPPORT
000C	ALL	WITH THE MESSAGE: 'EXCEPTION IN DEVICE DRIVER' 1. REFER TO NOTE 4. 2. RUN CHKDSK /F -REPAIR ANY CORRUPT FILE(S)?
000C	ALL	WITH ALL OTHER MESSAGES: 1. WITH 113 ERRORS .. REFER TO 8550 ECA024. 2. CHECK ALL H/W MEMORY PER SECTION "D." 3. RUN CHKDSK /F -REPAIR ANY CORRUPT FILE(S)?
000D	ALL	WITH THE MESSAGE: 'SYS1943: A PROGRAM CAUSED A PROTECTION VIOLATION' - MSG MAY INCLUDE NAME OF PROGRAM THAT CAUSES ERROR. - INDICATES A GENERAL S/W ERROR IN EITHER USER WRITTEN CODE,APPLICATION OR OS/2. 1. CONTACT SOFTWARE SUPPORT.
000D	ALL	WITH THE MESSAGE: 'INTERNAL PROCESSING ERROR OCCURED AT 0220: 3557' 1. SET TOKEN RING RAM MEMORY WINDOW TO 16K. REF TDR H052921 AND H053510. 2. INSTALL LATEST TRNETDD.SYS (APAR JR01657)
000D/ 000D	ALL	DOUBLE TRAP 000D WITH THE MESSAGE: 'INTERNAL PROCESSING ERROR OCCURRED AT 0220: 3557' 1. INSTALL LATEST NETBDD AND ASCNETB MODULES (APAR IC00096)
000D	8570-A21 ONLY	1. WITH 113 ERRORS...REFER TO 8550 ECA024. 2. CHECK ALL H/W MEMORY PER SECTION "D." 3. CHECK SYSTEM BOARD LEVEL PER 8550 ECA059. 4. RUN CHKDSK /F -REPAIR ANY CORRUPT FILE(S)? 6. OEM S/W - IF YES, REFER TO SOURCE.
000D	ALL EXCEPT 8570-A21	WITH ALL OTHER MESSAGES: 1. WITH 113 ERRORS ...REFER TO 8550 ECA024. 2. CHECK ALL H/W MEMORY PER SECTION "D." 3. RUN CHKDSK /F -REPAIR ANY CORRUPT FILE(S)? 5. OEM S/W - IF YES, REFER TO SOURCE.

SECTION D. MEMORY IDENTIFICATION TABLE

SOME TRAP ERRORS HAVE BEEN CAUSED BY INCORRECT MEMORY BEING USED. THE TABLE BELOW GIVES THE MANUFACTURING P/N'S, RESISTORS PRESENT AT THE TOP RIGHT (IBM MANUFACTURED) OR MANUFACTURER CODE MARKING ON THE SIMM CASING MADE BY VENDOR FOR THE DIFFERENT SPEEDS AND SYSTEMS WHERE USED.

P/N23F9779 IS THE IBM MANUFACTURED 100NS MEMORY AND IS RECOGNIZED BY THE R1 AND R2 RESISTORS AT THE TOP RIGHT. P/N68X6254 IS THE VENDOR MANUFACTURED EQUIVALENT AND HAS ONE OF THE MARKINGS. EITHER ONE CAN BE USED IN THE 8570 16MHZ OR 8555.

PART NUMBER	SPEED	MARKINGS	WHERE USED
23F9779 (IBM)	100	R1 AND R2 RESISTORS	8570 16MHZ
68X6254 (OEM)		MSC2321-10YS18A HB56D512361B-10 MH512361B-10 ZA3617 THM265102S-10	AND 8555
65X6249 (IBM)	85	ONLY R1 RESISTER	8570 20MHZ
68X6127 (OEM)		MNB36512S85 THM365120S-85 MSC2321-85YS18A HB56D512361B-8	8555 8570 16MHZ OPTION 6450605/9

68X5806 (IBM)	80	ONLY R2 RESISTOR	8570-A21
			8570-R21

SECTION E. | NOTES

NOTE 1.

MEMORY INTENSIVE OPERATING SYSTEMS, SUCH AS OS/2, AIX AND OTHERS ARE CAPABLE OF REVEALING HIGHLY INTERMITTENT MEMORY BIT FAILURES WHICH DIAGNOSTICS MAY NOT REVEAL.

NOTE 2.

HIGHLY INTERMITTENT ERRORS MAY GO UNDETECTED BY ANY MEMORY DIAGNOSTIC IF NO FAILURE ACTUALLY OCCURS DURING THE TEST. MULTIPLE REPLACEMENTS MAY BE NECESSARY TO ISOLATE THE FAILURE IN EXTREME CASES.

NOTE 3.

IF POSSIBLE, THE OPERATING SYSTEM SHOULD HAVE ALL SOFTWARE UPDATES INSTALLED, PRIOR TO EXTENSIVE HARDWARE TROUBLESHOOTING. SOFTWARE "BUGS" HAVE BEEN KNOWN TO BE A CAUSE, OR CONTRIBUTE, TO TRAP ERRORS. THE APPROPRIATE SOFTWARE SUPPORT ORGANIZATION SHOULD BE CONTACTED CONCERNING THE AVAILABILITY OF UPDATES.

NOTE 4.

SYSTEMS WHICH HAVE THE ENHANCED 80386 MEMORY EXPANSION ADAPTER INSTALLED (FRU P/N34F2825) MAY ALSO EXPERIENCE OS/2 TRAP ERRORS IF THE ENHANCED 80386 MEMORY ADAPTER DOES NOT HAVE RESISTORS LOCATED DIAGONALLY ACROSS THE MODULES LOCATED IN POSITIONS U21, U22, U23, AND U24. RETAIN RECORD #H037481 SHOULD BE REFERENCED FOR ADDITIONAL DETAILS.

NOTE 5.

INTERMITTENT SYSTEMS ERRORS CAN BE CAUSED BY OUTSIDE SOURCES OF NOISE, STATIC, AND SEVERE POWER-LINE DISTURBANCES.

NOTE 6. TRAP 0002

MEMORY FAILURES UNDER DOS COULD DISPLAY A 110 MEMORY FAILURE, WHILE FAILURES RUNNING UNDER OS/2 COULD DISPLAY A TRAP 0002 OR A TRAP 000C ERROR MESSAGE. AIX WILL GIVE AN NMI ERROR. THE OS/2 ERROR MESSAGE WILL INFORM THE USER THAT THE OPERATING SYSTEM HAS DETECTED A HARDWARE MEMORY ERROR ON THE SYSTEM BOARD OR ON AN OPTION CARD. (REFER TO SECTION G. OF THIS TIP)

THE MOST COMMON TYPE OF TRAP 0002 ERROR IS CAUSED BY MEMORY, BUT IT MAY ON SOME OCCASIONS BE CAUSED BY A SYSTEM BOARD OR A MICRO CHANNEL ADAPTER FAILURE. IT MAY ALSO BE CAUSED BY OTHER HARDWARE FAILURES OR SOFTWARE ERRORS. REFER TO SECTION G. FOR ADDITIONAL SERVICE AID INFORMATION.

THE MOST EFFECTIVE TROUBLESHOOTING METHOD FOR MEMORY ERRORS IS TO READ THE ERROR MESSAGE FROM THE OPERATING SYSTEM CAREFULLY. IF IT INDICATES A TRAP 0002 ON THE SYSTEM BOARD, REPLACE THE MEMORY ON THE SYSTEM BOARD. IF IT INDICATES A TRAP 0002 ERROR ON AN OPTION CARD, THE MEMORY ON THE EXPANSION ADAPTER SHOULD BE REPLACED. CONTINUE THE REPLACEMENT PROCESS WITH THE MEMORY EXPANSION SIMS UNTIL THE FAILURE NO LONGER OCCURS.

NOTE 7. TRAP 000D

(TRAP000D) ERRORS ARE USUALLY RELATED TO SOFTWARE PROBLEMS AND MAY BE CAUSED BY SEVERAL DIFFERENT PROGRAMMING ERRORS. THE APPROPRIATE SOFTWARE SUPPORT GROUP SHOULD BE CONSULTED FOR TRAP 000D ERRORS.

NOTE 8.

FOR 8570 MODELS A61, A21, B61, B21 OR 8580 MODELS A21, A31 AND A16 EXPERIENCING TRAP 0002 ERRORS, ECA059 AND ECA051 RESPECTIVELY, SHOULD BE REFERENCED.

NOTE 9.

TRAP 0002 IS AN OS/2 ERROR MSG; THE SAME FAILURE ON OTHER OPERATING SYSTEMS WILL PRODUCE DIFFERENT DMA TIMEOUT FAILURE SYMPTOMS, SUCH AS "PANIC" HANGS, NMI ERRORS, ETC., YET THE SYSTEM HARDWARE DIAGNOSTICS COMPLETE WITHOUT ERROR.

SOME PS/2'S HAVE DMA CONTROLLED (ARBITRABLE) PARALLEL AND SERIAL PORTS. AUTO-CONFIG WILL DEFAULT TO SOME ARBITRATION LEVEL. CHANGING THIS SETTING TO ANOTHER LEVEL OR TO "DISABLE" MAY CORRECT DMA ARBITRATION CONFLICTS OR TIMEOUTS (TRAP 0002). USE THE REFERENCE DISKETTE OR SYSTEM PARTITION TO MAKE THE CHANGES. REFER TO RETAIN RECORD #'S H121109, H022722 & H025847.

SECTION F. | NMI TABLE

PSY2 RETAIN TIPS
PS-2 TRAP OR NMI ERROR GUIDELINES

NMI TYPES	MESSAGE DISPLAYED BY OS/2
0	THE SYSTEM DETECTED A INTERRUPT THAT CANNOT BE MASKED
1	THE SYSTEM DETECTED A HARDWARE MEMORY ERROR ON THE SYSTEM BOARD. (THIS NORMALLY INDICATES A MEMORY ERROR ON THE SYSTEM BOARD MEMORY. SEE SECTION E., NOTE 8)
2	THE SYSTEM DETECTED A HARDWARE MEMORY ERROR ON AN OPTION CARD. RUN OPTION CARD DIAGNOSTICS (MEMORY EXPANSION DIAGNOSTICS, ETC.)
3	THE SYSTEM DETECTED A TIMEOUT ON THE DMA CHANNEL. SEE NOTE 9, IN SECTION E, ABOVE.
4	THE SYSTEM DETECTED A TIMEOUT BY THE WATCHDOG TIMER.

SECTION G. | TRAP 0002 SERVICE AID DISKETTE (SAD) IS AVAILABLE.

A NEW SERVICE AID DISKETTE UTILITY IS NOW AVAILABLE WHICH WILL PROVIDE ADDITIONAL HELP IN DETERMINING WHICH OF FOUR POSSIBLE CAUSES OF TRAP 0002 ERRORS OCCURED. REFER TO RETAIN RECORD # H006086 FOR INFORMATION ON HOW TO OBTAIN THIS SERVICE AID.

THE FOUR CAUSES TRAP 0002 ERRORS ARE:

- 110 ERROR- SYSTEM BOARD MEMORY PARITY ERROR
- 111 ERROR- MEMORY EXPANSION ADAPTER PARITY ERROR
- 112 ERROR- WATCHDOG TIMER ERROR (COULD BE HARDWARE OR SOFTWARE)
- 113 ERROR- DMA ARBITRATION ERROR (COULD BE HARDWARE OR SOFTWARE)

INSTRUCTIONS FOR USE OF THE DISKETTE ARE ON THE DISKETTE AND IT IS SELF-BOOTING.

SECTION H. | ERRONEOUS TRAP ERRORS

An erroneous Trap Error may be caused by the occurrence of multiple Non Maskable Interrupt (NMI) errors. The first NMI error puts the machine into its error recovery process. While the PS/2 is in the error recovery process, a second NMI error occurs. The second error happening before the first error is completely processed, results in an erroneous TRAP error larger than '00FF' being displayed by the error handler (ie, Trap 0458 or Trap 01FF).

The servicer should use their Service Aid Diskette to determine the correct Trap Error located in NVRAM. The last error logged in NVRAM is the TRAP Error that needs to be addressed. Normal Trap Error guidelines should be used to determine what action should be taken based on the error listed in NVRAM.

SAS KEYWORDS:

PSY2	PSY2MEM	8570SYSTEMEM	8580SYSTEMEM
8570SYSERR	8580SYSERR	8595SYSTEMEM	8565SYSERR
8570SYSPROG	8555SYSTEMEM	8560SYSTEMEM	8580SYSPROG
8590SYSPROG	8595SYSPROG	8590SYSTEMEM	8590SYSERR
8595SYSERR	8595SYSADPT	8590SYSADPT	8565SYSTEMEM
8565SYSPROG	8555SYSPROG	8580SYSADPT	8555SYSERR
8555SYSADPT	8550SYSTEMEM	8550SYSERR	8550SYSPROG
8550SYSADPT	8560SYSPROG	8560SYSERR	8560SYSADPT
8573SYSTEMEM	8573SYSERR	8573SYSPROG	8573SYSADPT
PSY2ADPT	8570SYSADPT	8590SYSERR	D/T8580
PSY2ERR	PSY2PROG	D/T3892	D/T3891
3892XP	3891XP	D/T9595	D/T9585
D/T9590	D/T9556	D/T9576	D/T9577
D/T9557	CONFIG		

1.2.391 PS/VALUEPOINT PARTS AND MODEL INFORMATION

Record number: H105892

Device: D/T6384
 Model: M
 Tip key: 023
 Date created: 093/04/19
 Date last altered: A94/03/18

THE FOLLOWING CHART IS AN AID TO DETERMINE THE SYSTEM BOARD, MEMORY, AND DIAGNOSTIC LEVEL FOR DIFFERENT MODELS OF PS/VALUEPOINT SYSTEMS.

THERE MAY BE SOME SPECIAL BID MODELS THAT DO NOT APPEAR IN THIS CHART. UTILIZE THE SERVICE DOCUMENTATION PROVIDED WITH THOSE MODELS.

M/T	MODEL	DIAGNOSTIC DISKETTE	SYSTEM BOARD FRU P/N	PROCESSOR TYPE	MEMORY SIMM FRU P/N
6381/Si	425SX-F00 F30 F50	TYPE 3	52G7023	486SX 25MHZ	73G3233 4MB 60G2950 16MB
6381/Si	433SX-K00 K30 K50	TYPE 3	52G7022	486SX 33MHZ	73G3233 4MB 60G2950 16MB
6381/Si	433DX-M00 M30 M50	TYPE 3	52G7017	486DX 33MHZ	73G3233 4MB 60G2950 16MB
6381/Si	466DX2-W00 W30 W50	TYPE 3	52G7016	486DX2 33/66MHZ	73G3233 4MB 60G2950 16MB

M/T	MODEL	DIAGNOSTIC DISKETTE	SYSTEM BOARD FRU P/N	PROCESSOR TYPE	MEMORY SIMM FRU P/N
6384	325T- C00 C20 C40	TYPE 1	52G8751	386SLC 25MHZ	90X8624 1MB 92F0103 2MB 92F3337 4MB 64F3607 8MB
6384	425SX-F00 F20 F23 F40 F43	TYPE 1	60G9713	486 SX 25MHZ	93F0058 1MB 96F9289 4MB
6384	466DX2 - W52 W53	TYPE 1	60G9711	486 DX2 33/66MHZ	93F0058 1MB 96F9289 4MB
6384	433DX -M00 M40 M43 M50 M53	TYPE 1	60G9712	486 DX 33MHZ	93F0058 1MB 96F9289 4MB
6382/S	425SX -FZ0* FZ1* FY0** F00 F30 F50 F51	TYPE 2	61G3215	486 SX 25MHZ	92F0103 2MB 92F3337 4MB 64F3607 8MB 60G2950 16MB (70NS) 92F0102 2MB (70NS) 92F0105 4MB (70NS) 64F3606 8MB (70NS)
6384/D	425SX -F02 F30 F50 F51 G00 G40 G41 G50 G53				

M/T	MODEL	DIAGNOSTIC DISKETTE	SYSTEM BOARD FRU P/N	PROCESSOR TYPE	MEMORY SIMM FRU P/N
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PS/VALUEPOINT PARTS AND MODEL INFORMATION

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6382/S 433SX -K00   TYPE 2   61G2205   486 SX   92F0103 2MB
                K30                33MHZ   92F3337 4MB
                K50                64F3607 8MB
                K51                60G2950 16MB (70NS)
                KY0**              92F0102 2MB (70NS)
                KZ0*              92F0105 4MB (70NS)
                KZ1*              64F3606 8MB (70NS)
    
```

```

6384/D 433SX -K00
                K30
                K50
                K51
                K70
                K71
                L00
                L40
                L41
                L50
                L53
    
```

```

-----
6382/S 433DX -M00   TYPE 2   71G3154   486 DX   92F0103 2MB
                M30                33MHZ   92F3337 4MB
                M50                64F3607 8MB
                M51                60G2950 16MB (70NS)
    
```

```

6384/D 433DX -M01
                M30                92F0102 2MB (70NS)
                M70                92F0105 4MB (70NS)
                M71                64F3606 8MB (70NS)
    
```

```

                N00
                N50
                N51
                N53
                N70
                N73
6387/T 433DX -M00
                M70
                M71
                N00
                N50
                N70
                N71
                N73
    
```

```

-----
                SYSTEM
                BOARD   PROCESSOR   MEMORY
M/T   MODEL   DIAGNOSTIC DISKETTE   FRU P/N   TYPE   FRU P/N
-----
6384/D 450DX2 - V00   TYPE 2   71G6462   486 DX2  92F0103 2MB
                V50                25/50MHZ 92F3337 4MB
                V51                64F3607 8MB
                V70                60G2950 16MB (70NS)
                V73                92F0102 2MB (70NS)
6387/T 450DX2 - V00
                V50                92F0105 4MB (70NS)
                V81                64F3606 8MB (70NS)
                V83
    
```

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-----
6384/D 466DX2 - W00   TYPE 2   71G3161   486 DX2  92F0103 2MB
                W50                33/66MHZ 92F3337 4MB
                W70                64F3607 8MB
                W71                60G2950 16MB (70NS)
                X00                92F0102 2MB (70NS)
                X50                92F0105 4MB (70NS)
                X51                64F3606 8MB (70NS)
                X70
                X73
    
```

```

-----
6387/T 466DX2 - W00   TYPE 2   61G3181           92F0102 2MB (70NS)
                W90                486 DX2   92F0105 4MB (70NS)
                W91                33/66MHZ 64F3606 8MB (70NS)
                X00                92F0103 2MB
                X70                92F3337 4MB
                X91                64F3607 8MB
                X93                60G2950 16MB (70NS)
    
```

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-----
6384 P60/D - 189   TYPE 4   71G3232           73G3233 4MB (70NS)
                199                PENTIUM 60MHZ 73G3234 8MB (70NS)
                                   73G3235 32MB (70NS)
    
```

```

* - MEDIALESS ETHERNET MODELS
**- MEDIALESS TOKEN RING MODELS
    
```

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TYPE 1 - PS/VALUEPOINT 6384 ADVANCED DIAGNOSTICS
TYPE 2 - PS/VALUEPOINT 6382/S, 6384/D, 6387/T ADVANCED DIAG.
    
```

PSY2 RETAIN TIPS

PS/VALUEPOINT PARTS AND MODEL INFORMATION

TYPE 3 - PS/VALUEPOINT 6381/Si ADVANCED DIAGNOSTICS
TYPE 4 - PS/VALUEPOINT 6384 P60/D ADVANCED DIAGNOSTICS

SAS KEYWORDS:

PSVP	VALUE POINT	PSVPPART	PSVPDIAG
PSY2DIAG	PSY2	PSVPBRD	PSVPMEM
PSY2BRD	PSY2MEM	70NS	70 NS
PART NUMBER	PART NUMBERS	FRU NUMBER	FRU NUMBERS
6381	6382	6387	D/T6381
D/T6382	D/T6387		

PS/VALUEPOINT SYSTEM BOARDS APPEAR TOO LONG

1.2.392 PS/VALUEPOINT SYSTEM BOARDS APPEAR TOO LONG

Record number: H12985

Device: D/T6384
 Model: M
 Tip key: 037
 Date created: 093/08/26
 Date last altered: A93/10/25

REPLACEMENT SYSTEM BOARDS FOR THE 6382/S, 6384/D AND 6387/T
 ARE LONGER THAN THE BOARDS USED IN SOME EARLY PRODUCTION
 SYSTEMS.

SYSTEM BOARD FRU P/N71G3161 REPLACES SYSTEM BOARD P/N92F0395
 SYSTEM BOARD FRU P/N71G3154 REPLACES SYSTEM BOARD P/N92F0396
 SYSTEM BOARD FRU P/N61G2205 REPLACES SYSTEM BOARD P/N92F0388
 SYSTEM BOARD FRU P/N61G3215 REPLACES SYSTEM BOARD P/N92F0394

THE NEW SYSTEM BOARDS ARE AN 1 1/2 INCHES LONGER. THERE ARE
 TWO PLASTIC STANDOFFS ON THE BASE FRAME THAT NEED TO BE
 REMOVED PRIOR TO INSTALLATION OF THE NEW BOARDS. THE NEW BOARDS
 DO FIT INTO THE SYSTEMS AND ARE FUNCTIONALLY EQUIVALENT TO
 THE OLDER LEVELS.

THE JUMPER POSITION "NUMBERING" ON THE NEW SYSTEM BOARDS IS NOT
 THE SAME AS THE OLDER LEVEL BOARDS. THE POSITIONS OF THE
 JUMPERS AND THEIR FUNCTION IS THE SAME. THE NEXT REVISION OF
 THE PS/VALUEPOINT HMS/R WILL HAVE THE CORRECT NUMBERING FOR BOTH
 LEVELS OF SYSTEM BOARDS.

SAS KEYWORDS:

PSVP	PSVPBRD	PSVPPART	71G3161
92F0395	PSY2	PSY2BRD	PSY2PART
92F0394	92F0396	92F0388	61G3215
61G2205	71G3154		

1.2.393 PS/VALUEPOINT SYSTEMS NOT POWERING ON

Record number: H20240

Device: D/T6384
Model: M
Tip key: 011
Date created: 093/02/03
Date last altered: A93/02/03

PS/VALUEPOINT SYSTEMS WILL NOT POWER ON IF THE VOLTAGE
SELECTOR SWITCH IS NOT SET TO MATCH THE AC INPUT VOLTAGE.

PS/VALUEPOINT SYSTEMS ARE MANUFACTURED WITH THE POWER SUPPLY
VOLTAGE SELECTOR SWITCH SET TO THE 230V POSITION. POWER
SUPPLY FRU'S FOR VALUEPOINT ARE ALSO SET FOR 230V OPERATION.
THE SELECTOR SWITCH IS LOCATED ON THE REAR OF THE SYSTEM
ABOVE THE AC INPUT RECEPTACLE.

DAMAGE TO THE SYSTEM UNIT MAY RESULT IF THE VOLTAGE SELECTOR IS
SET AT "115" WHILE THE INPUT AC VOLTAGE IS IN THE 220VAC RANGE.

IF THE SELECTOR SWITCH IS SET PROPERLY AND THE SYSTEM UNIT
WILL NOT POWER ON, UTILIZE NORMAL PROBLEM DETERMINATION
PROCEDURES TO ISOLATE AN INPUT POWER PROBLEM OR A FAILING
FRU.

THIS INFORMATION IS CONTAINED IN THE PS/VALUEPOINT HMS/R AND
WILL BE ADDED TO FUTURE RELEASES OF THE PS/VALUEPOINT USER
DOCUMENTATION.

SAS KEYWORDS:

PSVP	PSY2	VALUE POINT	PSVPPWR
PSY2PWR	VALUEPOINT	52G8741	P/N52G8741
DEAD	PSY2DOC	PSVDOC	

1.2.394 PS/VALUEPOINT 6384 PUBLICATION NUMBERS

Record number: H10412

Device: D/T6384
Model: M
Tip key: 003
Date created: 092/11/10
Date last altered: A92/12/04

THE PS/VALUEPOINT HARDWARE MAINTENANCE SERVICE AND REFERENCE MANUAL, DATED SEPTEMBER 1992, MAY HAVE BEEN RECEIVED WITH AN INVALID OR MISSING PUBLICATION NUMBER.

THE CORRECT PUBLICATION NUMBER FOR THE PS/VALUEPOINT HMS/R IS S42G-2450 OR P/N42G2450.

SAS KEYWORDS:

PSVP	PSY2	VALUE	PSY2DOC
PSY2PART	PSVPDOC	PSVPPART	

1.2.395 PS/2 ADAPTER COMPATIBILITY (MICRO CHANNEL AND OTHERS)

Record number: H024054

Device: D/T8590
 Model: M
 Tip key: 006
 Date created: 091/05/06
 Date last altered: A95/06/28

SERVICERS MAY EXPERIENCE SITUATIONS WHERE ADAPTERS WILL WORK CORRECTLY IN ONE OR MORE PERSONAL COMPUTER SYSTEM MODEL/TYPE, BUT THE SAME ADAPTER FAILS TO FUNCTION CORRECTLY IN A DIFFERENT SYSTEM TYPE OR MODEL. THIS CAN OCCUR ON MICRO CHANNEL, PCI, ISA, EISA, PCMCIA AND AND OTHER BUS ARCHITECTURES.

THE FAILURES EXPERIENCED MAY BE A CONFIGURATION ERROR, A SYSTEM BOARD ERROR, OR AN ADAPTER ERROR. THE DIAGNOSTICS FOR THE ADAPTER IN QUESTION MAY RUN ERROR-FREE, BUT THE SYSTEM UNIT APPEARS TO FAIL WHEN RUNNING THE APPLICATION SOFTWARE.

*****NOTICE*****
 THE SERVICER SHOULD NOT ASSUME A SYSTEM HARDWARE FAILURE ON THE HOST SYSTEM, IF THE OTHER ADAPTERS WORK CORRECTLY, THE SYSTEM UNIT DIAGNOSTICS RUN ERROR-FREE AND OTHER APPLICATIONS/ SOFTWARE FUNCTIONS CORRECTLY WITH THE SUSPECT ADAPTER REMOVED.

THIS SITUATION MAY OCCUR WHEN AN ADAPTER IS MOVED FROM A SLOWER PS/2 SYSTEM UNIT (USUALLY ALONG WITH THE SOFTWARE) TO A FASTER PS/2 UNIT (THE CONVERSE MAY ALSO BE TRUE), OR DURING AN INITIAL INSTALLATION. THE CAUSES MAY BE ONE OR MORE OF THE FOLLOWING:

- A. THE ADAPTER IN QUESTION MAY NOT MEET THE APPROPRIATE INTERFACE SPECIFICATIONS. THE POSSIBLE DISCREPANCY IS MADE APPARENT WHEN THE ADAPTER IS RUNNING ON A FASTER SYSTEM. ON THE SLOWER SYSTEM, THE SITUATION MAY NOT MANIFEST ITSELF.
- B. THE ADAPTER IN QUESTION USES SOFTWARE WHICH USES PROCESSOR SPEED DEPENDENT CODE. OPERATION IN A FASTER SYSTEM UNIT CAUSES FAILURES DUE TO THE SPEED DEPENDENT CODE.
- C. SOME ADAPTERS ARE NOT SUPPORTED ON ALL SYSTEMS IN THE PRODUCT LINE.

KNOWN PROBLEMS MAY OCCUR WITH SPECIFIC MODELS OR EC LEVELS OF SYSTEMS AND/OR PARTICULAR ADAPTERS OR TYPES OF ADAPTERS. PRIOR TO REPLACING ANY FRU'S, RETAIN SHOULD BE SEARCHED FOR MODEL OR ADAPTER SPECIFIC INFORMATION.

IN THE ABSENCE OF SPECIFIC DIRECTION FOR THE PRODUCT SET IN QUESTION, AND THE ADAPTER IS EITHER AN IBM ADAPTER, OR AN IBM SUPPORTED OEM (OTHER EQUIPMENT MANUFACTUROR) ADAPTER, THE APPROPRIATE LEVEL 2 SUPPORT ORGANIZATION SHOULD BE CONTACTED FOR ASSISTANCE.

IF THE ADAPTER IN QUESTION IS NOT AN IBM SUPPORTED OEM ADAPTER, THE CUSTOMER SHOULD BE REFERRED BACK TO THEIR OEM POINT OF SALE TO DETERMINE IF THE ADAPTER IS SUPPORTED (TESTED, AND WORKS) ON THE SYSTEM TYPE IN WHICH THE FAILURES ARE BEING EXPERIENCED.

SAS KEYWORDS:

PSY2	PSY2ADPT	PSY2OEM	8550SYSADPT
D/T8525	D/T8530	D/T8535	D/T8540
D/T8543	D/T8551	D/T8554	D/T8550
D/T8555	D/T8556	D/T8557	D/T8573
D/T8560	D/T8565	D/T8570	D/T9576
D/T8580	D/T8590	D/T8595	D/T9585
D/T9577	D/T9556	D/T9557	D/T9595
D/T9577I	D/T9577S	D/T9576I	D/T9577S
D/T9590	D/T9595A	D/T8641	D/T8642
D/T9533	D/T8640	VALUE	POINT
D/T6384	D/T6381	D/T6382	D/T6387
D/T6492	D/T6484	D/T6494	D/T6472
D/T6482	D/T6583	D/T6581	D/T6573
D/T6571	D/T6585	D/T6575	D/T6886
D/T6885	D/T6876	D/T6875	D/T6576
D/T6586	OEM	PSY2OEM	CLONE
PSVP	VALUEPOINT	BUS	AT
THINKPAD			

PSY2 RETAIN TIPS
PS/2 COMPONENT DAMAGE

1.2.396 PS/2 COMPONENT DAMAGE

Record number: H02673

Device: D/T8550
Model: M
Tip key: 003
Date created: 087/04/14
Date last altered: A93/09/01

ON ALL PS/2 PRODUCTS, DO NOT PLUG OR UNPLUG CIRCUIT CARDS,
DISPLAYS OR OTHER PERIPHERAL EQUIPMENT WITHOUT FIRST REMOVING
POWER OR PERMANENT DAMAGE TO THE COMPONENTS MAY RESULT.

SAS KEYWORDS:

PSY2	PSY2MISC	PSY2DISP	HOTPLUGGING
D/T8503	D/T8504	D/T8506	D/T8507
D/T8525	D/T8530	D/T8535	D/T8540
D/T8543	D/T8551	D/T8554	D/T8550
D/T8555	D/T8556	D/T8557	D/T8573
D/T8560	D/T8565	D/T8570	D/T9576
D/T8580	D/T8590	D/T8595	D/T9585
D/T9577	D/T9556	D/T9557	D/T9595
D/T9533	D/T8508	D/T8517	D/T8518
D/T8511	D/T8513	D/T8515	D/T8516
D/T9515	D/T9517	D/T9518	D/T9524
D/T9525	D/T9507	SCSI	ESDI
ADAPTER	INTERMITTENT	D/T6312	D/T6314
D/T6317	D/T6319	D/T6324	D/T6325

1.2.397 PS/2 DIAGS MAY FAIL W/THE 4216 PERSONAL PAGEPRINTER ADPT/A

Record number: H026394

Device: D/T8550
 Model: M
 Tip key: 022
 Date created: 088/03/28
 Date last altered: A92/10/02

IF THE PS/2 MOD 50, 60, 70, OR 80 DIAGNOSTICS ARE RUN IN LOOP MODE ON A PS/2 CONTAINING A 4216 PERSONAL PAGEPRINTER ADAPTER/A, ON THE SECOND AND SUBSEQUENT PASSES THROUGH THE TESTS, THE DIAGNOSTICS MAY FAIL, POSSIBLY WITH A DISKETTE SPEED ERROR.

BEFORE REPLACING THE DISKETTE DRIVE(S) OR ADAPTER, REMOVE THE PERSONAL PAGEPRINTER ADAPTER/A FROM THE INSTALLED DEVICE LIST AND RERUN THE TEST IN LOOP MODE. IF THE TEST NOW DO NOT DETECT A PROBLEM WITH THE DISKETTE DRIVE OR ADAPTER, THE PROBLEM WAS CAUSED BY INTERACTION BETWEEN THE PERSONAL PAGEPRINTER ADAPTER/A DIAGNOSTICS AND THE DISKETTE ADAPTER.

THE PERSONAL PAGEPRINTER ADAPTER/A CAN BE TESTED IN LOOP MODE WITH THE REST OF THE SYSTEM IF THE DISKETTE DRIVE(S) ARE REMOVED FROM THE INSTALLED DEVICES MENU AND "RUN MULTIPLE TIMES" AND "TEST ALL DEVICES" SELECTED.

SAS KEYWORDS:

8550SYSERR	8550SYSDIAG	PSY2ERR	8560SYSERR
8560SYSDIAG	PSY2DIAG	8580SYSERR	8580SYSDIAG
PSY2	8570SYSDIAG	8570SYSERR	8555SYSDIAGS
8555SYSERR	8565SYSDIAG	8565SYSERR	8573SYSDIAG
8573SYSERR	D/T8550	D/T8560	D/T8565
D/T8570	D/T8573	D/T8580	

PSY2 RETAIN TIPS
PS/2 DISPLAY ODORS

1.2.398 PS/2 DISPLAY ODORS

Record number: H09592

Device: D/T8550
Model: M
Tip key: 084
Date created: 091/04/19
Date last altered: A93/09/10

SOME PS/2 DISPLAYS MAY EXHIBIT A NOTICEABLE ODOR WHEN FIRST POWERED ON. THIS ODOR IS TYPICAL OF MANY NEW ELECTRONIC COMPONENTS DURING AN INITIAL "BURN-IN" PERIOD. THE ODOR IS A RESULT OF RESIDUAL SOLVENTS USED IN THE MANUFACTURING PROCESS AND RESINS CURING AS HEAT IS GENERATED DURING THIS "BURN-IN" PERIOD. THE CHEMICALS ASSOCIATED WITH THIS ODOR ARE NOT PRESENT AT LEVELS KNOWN TO BE TOXIC, AND DISAPPEAR USUALLY WITHIN THE FIRST TWO WEEKS OF OPERATION.

THIS SITUATION MAY BE EXPERIENCED WITH NEW INSTALLS, FRU REPLACEMENTS, OR MAY BE EXPERIENCED WITH DISPLAYS WHICH HAVE HAD LONG PERIODS OF NON-USE (IN STORAGE, ETC.).

THERE IS NO "FIX" FOR THIS ODOR, HOWEVER INCREASING THE VENTILATION DURING THE "CURING, OR BURN-IN" PERIOD MAY BE USEFUL TO MINIMIZE THE TEMPORARY DISCOMFORT.

REPLACEMENT OF THE DISPLAY WILL PROBABLY NOT PROVIDE RELIEF BECAUSE THE REPLACEMENT WILL LIKELY GO THROUGH THE "BURN-IN" PROCESS ALSO. HOWEVER, LEAVING THE DISPLAY POWERED-ON FOR SEVERAL DAYS WILL ACCELERATE THE BURN-IN PROCESS.

IF YOU OR YOUR CUSTOMER HAVE QUESTIONS REGARDING THE CHEMICAL EMISSIONS OF IBM PRODUCTS OR SUPPLIES AND THEIR POTENTIAL TOXICITY, YOU MAY DIRECT YOUR QUESTIONS TO IBM'S CENTER FOR PROCESS AND PRODUCT TOXICOLOGY AT 1-800-745-2200, OR T/L 263-2200. THE CCPT CONTACT IS DR. BRADFORD BROOKS.

SAS KEYWORDS:

PSY2	D/T8503	D/T8504	D/T8512
D/T8513	D/T8514	PSY2DISP	D/T8515
D/T8516	SMELL	D/T8511	D/T8517
D/T6312	D/T6314	D/T6317	D/T6319
D/T9515	D/T9517	D/T9518	D/T8506
D/T6324	MONITOR	D/T6325	D/T9524
D/T9525			

1.2.399 PS/2 E DOES NOT RESUME IMMEDIATELY FROM STANDBY MODE

Record number: H135939

Device: D/T9533
Model: M
Tip key: 001
Date created: 097/01/06
Date last altered: A97/01/06

IBM PS/2 E 9533 Energy Workstation systems connected to an IBM 9524 Display, may not resume immediately from standby mode following a key depression. The 9524 does return to operation eventually, but the response may take a few seconds.

This is not a defect within the system unit or the display. The device drivers to enable Power Management for the PS/2 E 9533 were released with this design characteristic.

SAS KEYWORDS:

PSY2	IBMPC	PS/2E	PSY2DISP
PSY2MCD	UNCLASSIFIED	D/T9524	

1.2.400 PS/2 ETHERNET ADAPTER/A FRU P/N92F0005 INSTALLATION

Record number: H08136

Device: D/T8550
 Model: M
 Tip key: 125
 Date created: 092/07/09
 Date last altered: A94/10/05

THE PS/2 ETHERNET ADAPTER/A FRU P/N64F0217 HAS BEEN REPLACED BY FRU P/N92F0005. OPERATION OF THE NEW CARD IS FUNCTIONALLY EQUIVALENT TO THE DOWNLEVEL FRU P/N64F0217.

THE FRU PACKAGE CONTAINS THE FOLLOWING ITEMS:

- PS/2 ETHERNET ADAPTER/A
- ETHERNET ADAPTER/A OPTION DISKETTE
- OPTION IDENTIFICATION LABELS
- INSTALLATION INSTRUCTIONS

THE LAN ADMINISTRATOR SHOULD BE PRESENT WHEN REPLACING THE ADAPTER/A FOR ETHERNET NETWORKS. THE ADAPTER ADDRESS MAY NEED TO BE UPDATED IN THE LAN SERVER. THE CUSTOMER OR LAN ADMINISTRATOR SHOULD ALSO UPDATE THEIR REFERENCE DISKETTE USING THE "COPY AN OPTION DISKETTE" FUNCTION ON THE MAIN MENU.

THE DEVICE DRIVERS MUST BE UPDATED ON THE SYSTEM USING THE INSTRUCTIONS CONTAINED WITH THE NEW ETHERNET ADAPTER/A FRU.

ADVANCED DIAGNOSTICS SHOULD BE PERFORMED ON THE SYSTEM FOLLOWING INSTALLATION. IF A FAILURE IS REPORTED, VERIFY THE ETHERNET ADAPTER/A INSTALLATION USING THE INSTALLATION INSTRUCTIONS FOLLOWED BY NORMAL PROBLEM DETERMINATION PROCEDURES.

SAS KEYWORDS:

PSY2	D/T8555	D/T8556	D/T8557
D/T8560	D/T8565	D/T8570	D/T8580
D/T8590	D/T8595	PSY2ADPT	PSY2COMM
PSY2OPER	PSY2PART	D/T8573	ETHERNET
92F0005			

PS/2 ETHERNET ADAPTER/A FAILS TO COMMUNICATE

1.2.401 PS/2 ETHERNET ADAPTER/A FAILS TO COMMUNICATE

Record number: H096693

Device: D/T8550
 Model: M
 Tip key: 107
 Date created: 092/02/27
 Date last altered: A93/12/22

THE IBM PS/2 ADAPTER/A FOR ETHERNET NETWORKS MAY FAIL TO COMMUNICATE THROUGH THE 15 PIN AUXILIARY UNIT INTERFACE (AUI) PORT WHEN ATTACHED TO AN EXTERNAL TWISTED PAIR TRANSCEIVER P/N6209 MANUFACTURED BY DAVID SYSTEMS, INC.

THE SYSTEM MAY DISPLAY THE MESSAGE "SERVER NOT FOUND."

IBM ETHERNET ADAPTER/A AFFECTED:

FRU - P/N92F0005
 OPTION - P/N6451091
 OPTION - P/N6451098 (EUROPEAN VERSION)
 ASSEMBLY P/N - 84F9491 (THIS NUMBER CAN BE FOUND ON THE SOLDER SIDE OF THE CARD IN THE UPPER RIGHT CORNER ON A PRINTED LABEL.)

PROBLEM ISOLATION AIDS:

ENSURE THAT THE ETHERNET ADAPTER/A CARD IS FUNCTIONING PROPERLY BY VERIFYING THAT THE JUMPERS AT THE W3 LOCATION ON THE ADAPTER CARD ARE SET TO THE J2 POSITION FOR AN AUI CONNECTION. PERFORM THE ADVANCED DIAGNOSTIC ROUTINES FOR THE ETHERNET ADAPTER/A USING THE ETHERNET WRAP PLUG P/N85F0036.

IF THE IBM PS/2 ADAPTER/A FOR ETHERNET NETWORKS TESTS SUCCESSFULLY, THE CUSTOMER SHOULD CONTACT THEIR PLACE OF PURCHASE OR DAVID SYSTEMS, INC. TECHNICAL SUPPORT AT (408)-720 - 6867 FOR ADDITIONAL PROBLEM DETERMINATION ASSISTANCE.

SAS KEYWORDS:

PSY2	D/T8555	D/T8556	D/T8557
D/T8560	D/T8565	D/T8570	D/T8580
D/T8590	D/T8595	PSY2SYSADPT	8555SYSADPT
8556SYSADPT	8557SYSADPT	8560SYSADPT	8565SYSADPT
8570SYSADPT	8580SYSADPT	8590SYSADPT	8595SYSADPT
8550SYSADPT	8550SYSCOMM	8555SYSCOMM	8556SYSCOMM
8557SYSCOMM	8560SYSCOMM	8565SYSCOMM	8570SYSCOMM
8580SYSCOMM	8590SYSCOMM	8595SYSCOMM	PSY2OEM
D/T9595	D/T9590	D/T9585	PSY2COMM

1.2.402 PS/2 FAILS RUNNING OS/2 WITH KINGSTON MEMORY

Record number: H065340

Device: D/T8550
Model: MOEM
Tip key: 128
Date created: 092/07/16
Date last altered: A92/07/16

PROBLEM: MICROCHANNEL PS/2'S RUNNING OS/2 2.0 WITH KINGSTON MEMORY BOARDS KTM-3011 OR KTM-3077 HAVE EXPERIENCED MANY DIFFERENT TYPES OF PROBLEMS WHEN TRYING TO RUN OS/2 2.0.

ISOLATION: KINGSTON MEMORY BOARDS KTM-3011 OR KTM-3077 MUST BE A REVISION C1.

FIX: IF THE CUSTOMER DOES NOT HAVE A REVISION C1, GET IN TOUCH WITH THE OEM SUPPORT CENTER SO THEY MAY CONTACT KINGSTON MEMORY WHO WILL SEND OUT THE CORRECT REVISION BOARD IN EXCHANGE FOR THE EXISTING ONE THE CUSTOMER HAS.

SAS KEYWORDS:

D/T8550 D/T8555 D/T8556 D/T8557
D/T8560 OEM PSY2 D/T8565
D/T8570 D/T8573 D/T8580 D/T8590
D/T8595 PSY2SYSERR PSY2SYSTEM

1.2.403 PS/2 FIXED DISK READ VERIFY ERRORS

Record number: H006140

Device: D/T8550
Model: M
Tip key: 062
Date created: 090/09/21
Date last altered: A93/04/19

10473 IS A READ VERIFY ERROR, WHICH MAY SHOW UP DURING DIAGNOSTIC TESTING OF PS/2 FIXED DISK DRIVES, DURING POST, OR DURING CUSTOMER OPERATION. OTHER ERRORS 10480 OR 10490 MAY ALSO OCCUR.

THIS CONDITION INDICATES THAT THE ECC (ERROR CORRECTION CHECK) BYTES WRITTEN ON THE FIXED DISK DO NOT AGREE WITH THE ECC CHECK BYTES GENERATED BY THE FIXED DISK CONTROLLER DURING A READ OPERATION.

NORMALLY THE 10473 ERROR IS CAUSED BY CORRUPTION OF THE DATA OR FORMAT ON THE FIXED DISK, THEREFORE IT DOES NOT ALWAYS INDICATE AN ACTUAL MECHANICAL OR ELECTRICAL FAILURE HAS OCCURRED.

THE MOST LIKELY CAUSES OF THE CORRUPTION ARE:

A. A WRITE FAULT DURING A SECTOR WRITE OPERATION.

A WRITE FAULT CONDITION, SENSED BY THE HARDFILE, WILL RESULT IN THE STOPPAGE OF A WRITE OPERATION PART-WAY THROUGH THE SECTOR. THE SECTOR NOW CONTAINS SOME DATA FROM THE WRITE OPERATION THAT JUST FAILED AND SOME DATA FROM THE PREVIOUSLY WRITTEN RECORD. WHEN THE OPERATING SYSTEM OR DEVICE DRIVER RECEIVES A WRITE FAULT ERROR, IT MUST RETRY THE ERROR TO INSURE DATA INTEGRITY. IF THE OPERATING SYSTEM OR DEVICE DRIVER DOES NOT RETRY THE ERROR, OR DOES SO INCORRECTLY, THEN THE SECTOR WILL REMAIN CORRUPTED. ATTEMPTING TO READ THIS SECTOR WILL RESULT IN A SOLID ECC ERROR AND DIAGNOSTICS WILL INDICATE A 10473 ERROR.

NOTE: A WRITE FAULT ERROR DOES NOT INDICATE ANY DEFECT. A WRITE FAULT IS AN INFREQUENT, BUT EXPECTED EVENT. IT INFORMS THE SYSTEM THAT THE HARDFILE HAS DETECTED SOMETHING LIKE VIBRATION, MECHANICAL SHOCK, OR A POWER FLUCTUATION THAT COULD RESULT IN A BAD WRITE.

B. A POWER FAILURE DURING A WRITE OPERATION.

AS IN THE WRITE FAULT CONDITION, A POWER FAILURE DURING A WRITE OPERATION CAN RESULT IN THE FIRST PART OF THE SECTOR CONTAINING DATA FROM THE WRITE OPERATION IN PROGRESS WHEN THE POWER WENT OFF, WHILE THE LAST PART OF THE SECTOR STILL CONTAINS THE PREVIOUS DATA AND ECC BYTES. IN THIS CASE, SINCE THE MACHINE HAS LOST POWER, THE SECTOR WRITE CANNOT BE RETRIED. WHEN THE MACHINE IS RESTARTED, A SINGLE SECTOR ON THE DISK NOW HAS BAD ECC. RUNNING DIAGNOSTICS AT THIS TIME WILL RESULT IN A 10473 ERROR, INDICATING THE BAD ECC.

C. SOFTWARE

SOFTWARE CAN CAUSE A SECTOR TO BE CORRUPTED. IF ERROR RECOVERY (LIKE WRITE FAULT) IS NOT PROPERLY RETRIED, THEN THIS ERROR CAN OCCUR. IF AN OPERATING SYSTEM OR APPLICATION DOES NOT USE BIOS (I.E. WRITES DIRECTLY TO THE HARDWARE), THEN PROTECTIONS BUILT INTO BIOS AND THE TESTING TO INSURE CORRECTNESS OF BIOS IS LOST. SUCH SOFTWARE MAY ATTEMPT OPERATIONS NOT INTENDED OR INCORRECTLY OPERATE THE HARDFILE AND CREATE PROBLEMS.

DIRECT DRIVERS WHICH BYPASS BIOS MAY HAVE THE ADVANTAGE OF FASTER THROUGHPUT, BUT THE DISADVANTAGE OF LIMITED ERROR HANDLING CAPABILITY AND REDUCED SOFTWARE AND HARDWARE COMPATIBILITY AND FLEXIBILITY. (REFER TO PS/2 BIOS INTERFACE TECHNICAL REFERENCE MANUAL PAGE 1-3, "INTRODUCTION TO BIOS.")

WHILE 10473 IS THE MOST COMMON ERROR POSTED AS A RESULT OF A CORRUPTED FIXED DISK, OTHER ERROR CODES MAY ALSO BE POSTED DEPENDING ON WHAT OPERATION WAS IN PROGRESS WHEN THE ERROR WAS DETECTED, AND EXACTLY WHERE ON THE FIXED DISK THE CORRUPTION OCCURRED. OTHER ERRORS EXPERIENCED ARE: 10463, 10480 AND 10490.

REPLACING THE FIXED DISK FRU AND RESTORING THE SOFTWARE WILL CORRECT THE PROBLEM, HOWEVER AN ADVANCED DIAGNOSTIC FORMAT WILL ALMOST ALWAYS CORRECT THE PROBLEM WITHOUT FRU REPLACEMENT.

PSY2 RETAIN TIPS

PS/2 FIXED DISK READ VERIFY ERRORS

IF MULTIPLE EVENTS OF CORRUPTION ARE EXPERIENCED, AND FIXED DISK ERRORS ARE FREQUENT, SOFTWARE SHOULD BE SUSPECTED AS THE SOURCE OF THE PROBLEM. IF FORMATTING THE DISK AND RESTORING THE SOFTWARE RESULTS IN THE SYSTEM RUNNING AGAIN (UNTIL THE NEXT EVENT), SOFTWARE ASSISTANCE SHOULD BE SOUGHT. THIS IS PARTICULARLY TRUE UNDER THE FOLLOWING CIRCUMSTANCES:

1. THE SYSTEM WAS NOT EXPERIENCING ERRORS PRIOR TO A CHANGE IN EITHER SOFTWARE OR HARDWARE CONFIGURATION.
2. DURING AN INITIAL OPERATING SYSTEM (SOFTWARE) INSTALLATION.

REPLACEMENT OF THE FIXED DISK UNDER THESE CIRCUMSTANCES IS NOT FIXING THE PROBLEM, BUT ONLY PROVIDING TEMPORARY RELIEF.

IF THE ADVANCED DIAGNOSTIC FORMAT TERMINATES NORMALLY AND THE ADVANCED DIAGNOSTICS THEN RUN ERROR-FREE, THE FIXED DISK SUB-SYSTEM IS OPERATIONAL.

EFFORTS TO IMPROVE THE FIXED DISK DIAGNOSTIC CAPABILITY TO PROVIDE IMPROVED ERROR DEFINITION IS IN PROCESS. THIS RETAIN TIP WILL BE UPDATED AS FURTHER INFORMATION BECOMES AVAILABLE.

SAS KEYWORDS:

PSY2	PSY2FDSK	PSY2ERR	8550SYSERR
8550SYSFDSK	8555SYSERR	8560SYSERR	8565SYSERR
8570SYSERR	8573SYSERR	8580SYSERR	8550SYSFDSK
8555SYSFDSK	8560SYSFDSK	8565SYSFDSK	8570SYSFDSK
8573SYSFDSK	8580SYSFDSK	D/T8525	D/T8530
D/T8535	D/T8540	D/T8543	D/T8550
D/T8555	D/T8556	D/T8557	D/T8560
D/T8565	D/T8570	D/T8573	D/T8580
D/T8590	D/T8595	READ	VERIFY

1.2.404 PS/2 HANGS WITH XGA, SCSI AND IMAGE ADAPTER INSTALLED

Record number: H122316

Device: D/T8580
 Model: M
 Tip key: 030
 Date created: 094/01/12
 Date last altered: A94/01/12

ANY 8 SLOT PS/2 MAY FAIL TO COMPLETE POST WHEN CERTAIN ADAPTERS ARE INSTALLED IN SPECIFIC SLOTS. THIS MAY RESULT IN A SYSTEM HANG DURING POST.

IF AN XGA OR XGA-2 ADAPTER IS INSTALLED IN SLOT 5, AN IMAGE ADAPTER/A IN SLOT 7, AND A SCSI ADAPTER IN SLOT 8, AND YOU ARE OBSERVING HANGS DURING POST, RELOCATE THE SCSI ADAPTER TO ANOTHER SLOT.

IF THE PROBLEM STILL EXISTS AFTER MOVING THE ADAPTER, NORMAL PROBLEM DETERMINATION PROCEDURES SHOULD BE FOLLOWED.

SAS KEYWORDS:

PSY2	PSY2ADPT	PSY2MISC	P/N87F4774
P/N96F7657	P/N06G8224	87F4774	96F7657
06G8224	HUNG	STOPS	D/T8565
D/T8560	D/T9585	D/T8595	D/T9595

Record number: H096168

Device: D/T8550
 Model: M
 Tip key: 114
 Date created: 092/04/17
 Date last altered: A92/07/06

INTERMITTENT CHANNEL HANGS OR HOST TIMEOUTS MAY BE EXPERIENCED ON PS/2 SYSTEMS WHICH HAVE THE MICROCHANNEL TO MAINFRAME CONNECTION ADAPTER (MMC). THIS ADAPTER WAS PREVIOUSLY AVAILABLE AS AN RPQ AND WAS CALLED THE S/370 CHANNEL ADAPTER (OR PCA). IT IS NOW FRU P/N 12G8067 AND FEATURE CODE 1436.

THE MMC ADAPTER CARD ALLOWS MICRO CHANNEL BASED SYSTEMS TO BE ATTACHED TO A SYSTEM 370 OR A SYSTEM 390 MAINFRAME SYSTEM BLOCK MULTIPLEX CHANNEL. IT IS CAPABLE OF PROVIDING S/370 CONTROL UNIT FUNCTIONS UNDER MICROCODE CONTROL

COMBINED WITH OTHER I/O ADAPTER CARDS AND ASSOCIATED SOFTWARE, THE PCA ALLOWS A MICRO CHANNEL BASED SYSTEM TO ACT AS A S/370 CONTROL UNIT CAPABLE OF TRANSFERRING DATA BETWEEN ITSELF AND A PROCESSOR CHANNEL AT UP TO 4.5 MEGABYTES PER SECOND.

THE MMC CARD REQUIRES APPROPRIATE APPLICATION SOFTWARE TO BE LOADED BOTH ON THE HOST AND ON THE PS/2. REFER TO THE "PERSONAL SYSTEM/2 MICROCHANNEL TO MAINFRAME CONNECTION ADAPTER INSTALLATION AND TEST INSTRUCTIONS, FORM NUMBER G571-0244.

THE PROCESSOR CHANNEL CONTROL I/O PROGRAM MUST BE CONFIGURED WITH "SHARED=N"

SAS KEYWORDS:

PSY2	PSY2ADPT	D/T8570	D/T8580
D/T8595	D/T8590	8590SYSADPT	8595SYSADPT
8570SYSADPT	8580SYSADPT	PCA	MMC

1.2.406 PS/2 HANGS&COLON. ERRORS WITH MICROCHANNEL TO MAINFRAME CONNECTION

Record number: H096799

Device: D/T8550
 Model: MCP1
 Tip key: 156
 Date created: 093/03/02
 Date last altered: A93/03/02

INTERMITTENT CHANNEL HANGS OR HOST TIMEOUTS MAY BE EXPERIENCED ON PS/2 SYSTEMS WHICH HAVE THE MICROCHANNEL TO MAINFRAME CONNECTION ADAPTER (FORMERLY THE SYSTEM/370 CHANNEL ADAPTER) FRU PART NUMBER 12G8067.

THE MMC ADAPTER CARD ALLOWS MICRO CHANNEL BASED SYSTEMS TO BE ATTACHED TO A SYSTEM 370 OR A SYSTEM 390 MAINFRAME SYSTEM BLOCK MULTIPLEX CHANNEL. IT IS CAPABLE OF PROVIDING S/370 CONTROL UNIT FUNCTIONS UNDER MICROCODE CONTROL

COMBINED WITH OTHER I/O ADAPTER CARDS AND ASSOCIATED SOFTWARE, THE MMC ALLOWS A MICRO CHANNEL BASED SYSTEM TO ACT AS A S/370 CONTROL UNIT CAPABLE OF TRANSFERRING DATA BETWEEN ITSELF AND A PROCESSOR CHANNEL AT UP TO 4.5 MEGABYTES PER SECOND. THE MMC CARD REQUIRES APPROPRIATE APPLICATION SOFTWARE TO BE LOADED BOTH ON THE HOST AND ON THE PS/2. REFER TO THE "PERSONAL SYSTEM/2 SYSTEM/370 CHANNEL ADAPTER INSTALLATION AND TESTING INSTRUCTIONS" (Document # GC23-0594-01).

THE PROCESSOR CHANNEL CONTROL I/O PROGRAM MUST BE CONFIGURED WITH "SHARED=N"

SAS KEYWORDS:

PSY2	PSY2ADPT	D/T8570	D/T8580
D/T8595	D/T8590	8590SYSADPT	8595SYSADPT
8570SYSADPT	8580SYSADPT	PCA	MMC

1.2.407 PS/2 INSTALLATION PLANNING GUIDE-REVISION

Record number: H032878

Device: D/T8550
 Model: M
 Tip key:
 Date created: 092/03/18
 Date last altered: A95/02/22

THE PERSONAL SYSTEMS/2 INSTALLATION PLANNING GUIDE HAS BEEN UPDATED AND IS NOW AVAILABLE. IT MAY BE ORDERED ON LINE, USING THE "PUBORDER" FUNCTION ON VM AND FORM # S41G-2927-01. (THE FORM # WAS PREVIOUSLY, G41G-2927-00.)

THIS DOCUMENT PROVIDES COMPREHENSIVE INFORMATION USEFUL TO INSTALLATION PLANNERS, MARKETING, SERVICE AND SYSTEM ENGINEERS. MUCH OF THE INFORMATION IS PREVIOUSLY UNPUBLISHED. OF SPECIAL INTEREST IS THE SECTION ON PS/2 SYSTEM SOFTWARE, WHICH DESCRIBES THE HARDWARE/BIOS/SOFTWARE RELATIONSHIP. THIS SECTION HAS RECEIVED A MAJOR REVISION AND EXPANSION.

THE FOLLOWING IS A PARTIAL LIST OF TOPICS:

HEALTH AND SAFETY
 PHYSICAL SPECIFICATIONS
 POWER REQUIREMENTS
 SURGE PROTECTION
 ENVIRONMENT
 ELECTROSTATIC DISCHARGE
 ELECTROMAGNETIC INTERFERENCE AND SUSCEPTIBILITY
 PS/2 SYSTEM SOFTWARE
 ADAPTER CONSIDERATIONS
 STORAGE MEDIA AND DEVICES
 LINE CURRENT CALCULATION
 EXTERNAL AGENCIES (UL, CSA, ETC.)
 NON-OFFICE COMPUTER ENVIRONMENTS

THE ENVIRONMENTAL CONSIDERATIONS RELATING TO DISPLAYS AND THE POWER PLANNING SECTION ARE VERY INFORMATIVE. AN INDEX AND GLOSSARY ARE INCLUDED TO PROVIDE EASE OF USE.

SAS KEYWORDS:

PS/2	D/T8525	D/T8530	D/T8535
D/T8540	D/T8550	D/T8557	D/T8556
D/T8560	D/T8570	D/T8580	D/T8590
D/T8595	D/T8573	PSY2	PSY2PWR
D/T8503	D/T8512	D/T8513	D/T8514
PS2	PSY2DISP	PSY2MISC	PSY2DOC
PSY2MCD	PSY2NLGO	PSY2ADPT	8525
8503	8512	8513	8514
8530	8535	8540	8550
8555	8560	8570	8573
8580	8590	8595	3511
3510	PSY2FDSK	SCSI	CD ROM
CD-ROM	CABLE	CABLES	8515
8518	D/T8515	D/T8518	8516
D/T8516	SERVER	PC	500
300	D/T9595	D/T8640	D/T8641
9595	8640	8641	RAID
PSVP	VALUEPOINT	VALUE	POINT

1.2.408 PS/2 INTERNAL MODEM DIAGNOSTICS HANG PROBLEM

Record number: H007779

Device: D/T8550
Model: M
Tip key: 030
Date created: 088/11/01
Date last altered: A93/09/01

TWO POTENTIAL PROBLEMS EXIST THAT WILL CAUSE A HANG CONDITION WHILE RUNNING THE PS/2 INTERNAL MODEM DIAGNOSTICS.

ONE OF THESE CONDITIONS IS INITIATED BY KEYBOARD ENTRIES OCCURRING WHILE THE MODEM DIAGNOSTICS ARE RUNNING. TO AVOID THIS PROBLEM, DO NOT PRESS ANY OF THE KEYBOARD KEYS (INCLUDING THE CTRL-C SEQUENCE) WHILE THE PS/2 INTERNAL MODEM DIAGNOSTICS ARE RUNNING.

THE SECOND HANG CONDITION CAN OCCUR WHEN A TOKEN RING ADAPTER AND A PS/2 INTERNAL MODEM ARE BOTH PRESENT IN THE SYSTEM AND THE TOKEN RING ADAPTER IS CONFIGURED TO USE INTERRUPT REQUEST LEVEL 10. TO AVOID THIS PROBLEM, REMOVE THE TOKEN RING ADAPTER WHILE TESTING THE INTERNAL MODEM. IT IS NOT NECESSARY TO RECONFIGURE THE SYSTEM TO RUN THE INTERNAL MODEM DIAGNOSTICS.

SAS KEYWORDS:

PSY2

PSY2COMM

PSY2DIAG

1.2.410 PS/2 LAN STATION FAILS W/ NOVELL AND TOKEN RING

Record number: H0233

Device: D/T8550
 Model: M
 Tip key: 063
 Date created: 090/10/09
 Date last altered: A92/11/02

THE FOLLOWING INFORMATION IS PROVIDED AS AN AID FOR DIAGNOSING TYPICAL PROBLEMS EXPERIENCED IN THE INSTALLATION OF NOVELL NETWARE IN PS/2 LAN WORKSTATIONS USING A TOKEN RING ADAPTER. THIS INFORMATION IS NOT PROVIDED AS INSTRUCTIONS FOR HARDWARE SERVICERS TO PERFORM SOFTWARE INSTALLATION.

CUSTOMERS EXPERIENCING SOFTWARE INSTALLATION PROBLEMS SHOULD BE DIRECTED TO THEIR APPROPRIATE SOFTWARE SUPPORT OR SOFTWARE POINT OF SALE.

1. FAILURE TO REMOTE IPL

 IF A PS/2 LAN WORKSTATION WITH A TOKEN RING ADAPTER AND NOVELL NETWARE 386 WILL NOT REMOTE IPL (REMOTE IPL SCREEN IS NOT DISPLAYED), CHECK THE AUTOEXEC.NCF FILE. IT IS RECOMMENDED THAT THE AUTOEXEC.NCF FILE CONTAIN THE FOLLOWING:

```
LOAD TOKEN SLOT=<SLOT>
LOAD TOKENRPL
BIND TOKRPL TO TOKEN
BIND IPX TO TOKEN NET=<NETWARE>
```

NOTE:

<SLOT> IS THE SLOT NUMBER OF THE TOKEN RING CARD.
 <NETWARE> IS THE NETWORK NUMBER FOR THE ADAPTER.

THE DRIVERS FOR TOKEN RING ARE:

```
TOKEN.LAN      (THE BASE DRIVER FOR TOKEN RING)
TOKENRPL.NLM  (THE NETWORK LOADABLE MODULE WHICH PROVIDES
               THE RPL SERVICE TO WORKSTATIONS)
```

2. ERROR MESSAGE: "ERROR RESETTING THE IBM TOKEN RING BOARD"

 WHEN USING NOVELL NETWARE 386 VERSION 3.1, ATTEMPTING TO CONNECT TO A REMOTE SERVER MAY FAIL. IF THE MESSAGE "ERROR RESETTING THE IBM TOKEN RING BOARD" IS DISPLAYED AFTER REMOTE IPL, VERIFY THAT THE OPTIONAL ROM ADDRESS, RAM ADDRESS, AND INTERRUPT LEVEL ARE SET. THIS SHOULD BE SET AT THE SERVER, AS DESCRIBED IN THE NOVELL NETWARE SUPPLEMENT MANUAL.

THE FOLLOWING IS AN EXAMPLE:

```
ROM BIOS ADDRESS:  CC000-CFFFF
RAM ADDRESS:       D8000-DBFFF
INTERRUPT LEVEL:  2
```

SAS KEYWORDS:

PSY2	PSY2COMM	PSY2ADPT	PSY2PROG
8550SYSCOMM	8550SYSADPT	8550SYSPROG	8555SYSCOMM
8555SYSADPT	8555SYSPROG	8560SYSCOMM	8560SYSADPT
8560SYSPROG	8565SYSCOMM	8565SYSADPT	8565SYSPROG
8570SYSCOMM	8570SYSADPT	8570SYSPROG	8580SYSCOMM
8580SYSADPT	8580SYSPROG	D/T8550	D/T8555
D/T8556	D/T8557	D/T8560	D/T8565
D/T8570	D/T8573	D/T8580	

1.2.411 PS/2 LAN WORKSTATION HANGS WHEN PRINTING W/ DLR 1.2

Record number: H06678

Device: D/T8550
Model: M
Tip key: 065
Date created: 090/10/09
Date last altered: A93/09/01

ATTEMPTING TO PRINT TO A LOCALLY ATTACHED PRINTER FROM A PS/2 LAN WORKSTATION MAY RESULT IN A SOFTWARE CONFLICT, CAUSING THE SYSTEM TO HANG. THIS CAN HAPPEN IF THE WORKSTATION IS RUNNING DOS LAN REQUESTER (DLR) 1.2 AND THE OPERATOR USES THE DOS "PRINT" COMMAND.

THE NET PRINT COMMAND SHOULD BE USED TO PRINT TO NETWORK AND LOCAL PRINTERS.

SAS KEYWORDS:

PSY2	PSY2PRT	PSY2PROG	D/T8550
D/T8555	D/T8560	D/T8565	D/T8570
D/T8580	D/T8590	D/T8595	D/T9585
D/T9577	D/T9556	D/T9557	D/T9595
D/T9533			

1.2.412 PS/2 LAN WORKSTATION USING NOVELL W/ ETHERNET

Record number: H06671

Device: D/T8550
 Model: M
 Tip key: 064
 Date created: 090/10/09
 Date last altered: A94/03/14

THE FOLLOWING INFORMATION IS PROVIDED AS AN AID FOR DIAGNOSING TYPICAL PROBLEMS EXPERIENCED IN THE INSTALLATION OF NOVELL NETWARE IN PS/2 LAN WORKSTATIONS USING AN ETHERNET ADAPTER/A. THIS INFORMATION IS NOT PROVIDED AS INSTRUCTIONS FOR HARDWARE SERVICERS TO PERFORM SOFTWARE INSTALLATION.

CUSTOMERS EXPERIENCING SOFTWARE INSTALLATION PROBLEMS SHOULD BE DIRECTED TO THEIR APPROPRIATE SOFTWARE SUPPORT OR SOFTWARE POINT OF SALE.

INSTALLING NETWARE 286 DEVICE DRIVERS

 THE ETHERNET ADAPTER/A OPTION DISKETTE CONTAINS THE FOLLOWING DEVICE DRIVERS THAT ARE NEEDED WHEN USING NOVELL NETWARE 286, VERSION 2.15 REVISION C.

- IBMETH.LAN
- IBMETHSH.LAN
- IBMETHAD.LAN
- IBMETHBD.LAN
- IBMETHCD.LAN
- IBMETHDD.LAN
- ETHER.RPL

AFTER INSTALLING THE DEVICE DRIVERS, THE LAN DRIVER LIST MUST BE UPDATED TO INCLUDE THE ETHERNET ADAPTER DEVICE DRIVERS. A SHELL MAY THEN BE GENERATED FOR THE WORKSTATION.

TO UPDATE THE LAN DRIVER LIST:

1. START THE SHGEN UTILITY PROGRAM. (INSTRUCTIONS ARE PROVIDED IN THE NETWARE MANUAL)
2. WHEN THE LAN DRIVER OPTIONS SCREEN APPEARS, SELECT "CUSTOM CONFIGURATION."
3. FROM THE TEXT MENU, SELECT "LOAD INTO LIST FROM LAN_DRV???.DISK."
4. WHEN ASKED FOR A LAN_DRV???. DISKETTE, INSERT THE ETHERNET ADAPTER OPTION DISKETTE INTO THE DISKETTE DRIVE.
5. WHEN THE MESSAGE APPEARS STATING THAT THE IBM DRIVERS HAVE BEEN LOADED, CHOOSE THE "SELECT LAN DRIVER FROM LIST" OPTION.
6. WHEN THE UPDATED LIST APPEARS, SELECT THE "IBM PS/2 ETHERNET ADAPTER."
7. SAVE THE SELECTION.

INSTALLING A VALUE ADDED PROCESS (VAP)

 NETWARE 286 ALSO REQUIRES THE VALUE-ADDED PROCESS (VAP) FILE, RPL.VP1. THIS FILE PROVIDES ETHERNET PROTOCOL SUPPORT FOR THE REMOTE WORKSTATION. THE RPL.VP1 FILE CAN BE OBTAINED FROM THE "NETWIRE" BULLETIN BOARD.

TO INSTALL THE RPL.VP1 FILE:

- COPY THE RPL.VP1 FILE TO THE SYS: SYSTEM DIRECTORY AND REBOOT
- ANSWER "YES" WHEN ASKED IF YOU WANT TO INSTALL A VAP.
- FOLLOW ANY ADDITIONAL INSTRUCTIONS THAT APPEAR ON THE SCREEN.

INSTALLING NETWARE 386 DEVICE DRIVERS

 THE ETHERNET ADAPTER/A OPTION DISKETTE CONTAINS THE FOLLOWING DEVICE DRIVERS THAT ARE NEEDED WHEN USING NOVELL NETWARE 386, VERSION 3.1.

- IBMETHSH.LAN
- IBMETHR.LAN (THE BASE DRIVER FOR ETHERNET)
- ETHERRPL.NLM (THE NETWORK LOADABLE MODULE WHICH PROVIDES THE RPL SERVICE TO WORKSTATIONS)

AFTER INSTALLING THE DEVICE DRIVERS, THE LAN DRIVER LIST MUST BE UPDATED TO INCLUDE THE ETHERNET ADAPTER DEVICE DRIVERS. A SHELL MAY THEN BE GENERATED FOR THE WORKSTATION.

TO UPDATE THE LAN DRIVER LIST:

1. START THE SHGEN UTILITY PROGRAM. (INSTRUCTIONS ARE PROVIDED IN THE NETWARE MANUAL)
2. WHEN THE LAN DRIVER OPTIONS SCREEN APPEARS, SELECT "LOAD INTO LIST FROM LAN_DRV???.DISK."
3. WHEN ASKED FOR A LAN_DRV???. DISKETTE, INSERT THE ETHERNET ADAPTER OPTION DISKETTE INTO THE DISKETTE DRIVE.
4. WHEN THE MESSAGE APPEARS STATING THAT THE IBM DRIVERS HAVE BEEN LOADED, CHOOSE THE "SELECT LAN DRIVER FROM LIST" OPTION.

PS/2 LAN WORKSTATION USING NOVELL W/ ETHERNET

6. WHEN THE UPDATED LIST APPEARS, SELECT THE "IBM PS/2 ETHERNET ADAPTER."
7. SAVE THE SELECTION.

AUTOEXEC.NCF FOR NOVELL 386

IT IS RECOMMENDED THAT THE AUTOEXEC.NCF FILE CONTAIN THE FOLLOWING:

```
LOAD IBMETHR FRAME=ETHERNET_802.3 SLOT=<SLOT>
LOAD IBMETHR FRAME=ETHERNET_802.2 SLOT=<SLOT>
LOAD ETHERRPL
BIND ETHRPL TO IBMETHR @FRAME=ETHERNET_802.2#
BIND IPX TO IBMETHR @FRAME=ETHERNET_802.3# NET=<NETWARE>
```

NOTE - IN THE ABOVE FILE TEXT:

"@" REPRESENTS A LEFT SQUARE BRACKET.
 "#" REPRESENTS A RIGHT SQUARE BRACKET.
 "_" IS AN UNDERLINE.
 <SLOT> IS THE SLOT NUMBER OF THE ETHERNET CARD.
 <NETWARE> IS THE NETWORK NUMBER FOR THE ADAPTER.

EXTERNAL BRIDGES

- THE BRIDGE DISKETTE SHOULD CONTAIN BRIDGE.EXE AND RPL.VP1.
- THE FILE ETH.RPL SHOULD BE PRESENT IN THE SYS: LOGIN DIRECTORY ON THE WORKSTATION.

SAS KEYWORDS:

PSY2	PSY2COMM	PSY2ADPT	PSY2FROG
D/T8543	D/T8550	D/T8555	D/T8556
D/T8557	D/T8560	D/T8565	D/T8570
D/T8573	D/T8580	D/T8590	D/T8595
D/T9556	D/T9557	D/T9576	D/T9577
D/T9585	D/T9595		

1.2.413 PS/2 MEMORY IDENTIFICATION/CLARIFICATION

Record number: H122447

Device: D/T8550
 Model: M
 Tip key: 195
 Date created: 092/07/23
 Date last altered: A93/06/08

From time to time IBM purchases memory components from outside sources. However, these purchases are controlled through Corporate Component Procurement (CCP) and the components or assemblies are built to IBM specifications and considered to be IBM Memory.

To assist with identification of IBM supplied memory, the follow information should be used:

IBM memory (manufactured by IBM) will normally have the IBM logo or the letters IBM on the chips themselves. You should first look at the chips. If they have IBM on them, then they are IBM built SIMMs. If not, the following information should be used.

Memory procured through CCP after December 1991 will have a label with the Part Number, FRU Number, and Configuration/Speed.

Memory procured prior to December 1991 will have an assembly number etched, printed or affixed on the SIMM. Valid IBM assembly number will have the following layout:

NNANNNN Where N equals a numeric and A is an alpha

The following assembly numbers represent a sample of the assembly numbers that apply to PS/2* SIMMs.

1MB	68X6065	FRU	90X8624
	65X6264		90X8624
2MB	68X6127	90X8625	92F0104
	08G4806		
	65X5806	15F7658	92F0103
	71F7008	64F3604	92F0102
	87F5041	64F3604	92F0102
	71F7014	79F1002	
		64F3604	
4MB	82F5510		
	08G4807		
	68X6343	92F3337	
	71F7010	64F3605	92F0105
	71F7010	64F3605	92F0105
	31F2314	64F3605	92F0105
	71F7015	79F1003	
	42G3072	92F0097	
8MB	68X6344	64F3607	
	08G4808		
	71F7011	64F3606	
	42G3073	92F0098	
	71F7016	79F1004	

NOTE:

CCP procured memory SIMMs CAN be replaced with IBM built memory SIMMs. You should order the FRU number and use the SIMM that you receive since both are considered IBM SIMMs.

* Registered trademark of International Business Machines Corporation.

SAS KEYWORDS:

PSY2	PS2	PS/2	D/T8595
D/T8590	D/T8580	D/T8570	D/T8557
D/T8560	D/T8565	D/T8556	PSY2MEM
OEM			

1.2.414 PS/2 MOD 56/57 REFERENCE & DIAGNOSTIC DISKETTES

Record number: H02451

Device: D/T9557
 Model: M
 Tip key: 002
 Date created: 094/03/23
 Date last altered: A95/01/09

The following identifies current Reference and Diagnostic Diskette levels for the Model 56-57 systems.

8556/57 Reference Diskette, Version 2.10
 8556/57 Diagnostic Diskette, Version 2.04
 Supports all 8556/57 386SX & 386SLC systems, including
 8556/57 systems with the following processor options:
 386SLC - 486SLC-2 - 486SLC-3

9556/57 Reference Diskette, Version 1.10
 9556/57 Diagnostic Diskette, Version 2.04
 Supports all 9556/57 486SLC-2 & 486SLC-3 systems,
 Including 9556/57 systems with 486SLC-3 Processor Options.

These Reference and Diagnostic diskette images are available internally via the STATES Tools Disk, Images are also available on the IBM PC Company Buletin Board System at 919-517-0001. Diskettes are distributed hardcopy through SLSS to SP/2 SIMM (SBOF-2480) subscribers.

For STATES users, they can be obtained by entering the following command from your VM terminal:

```
TOOLS SENDTO RALVM6 SERC STATES GET filename filetype
```

Where filename/filetype is type

```
(855657RF DSKBIN) FOR PS/2 8556/57 Reference Diskette, Ver 2.10
(855657DG DSKBIN) FOR PS/2 8556/57 Diagnostic Diskette, Ver 2.04
(955657RF DSKBIN) FOR PS/2 9556/57 Reference Diskette, Ver 1.10
(955657DG DSKBIN) FOR PS/2 9556/57 Diagnostic Diskette, Ver 2.04
Instructions for receiving the files are provided online in the STATES PS2REF Package.
```

After receiving the files, download them to your PC workstation's hardfile. Use LOADDISKF to unpack them to a physical diskette. LOADDISKF may be obtained through "TOOLCAT PCTOOLS".

SAS KEYWORDS:

PSY2	D/T9556	D/T8556	D/T8557
REF	DISK	UPDATE	UPGRADE
PSY2MCD	8556	8557	9556
7546	D/T7546	DISKETTE	IMAGE
BIOS			

1.2.416 PS/2 MODEL 55 SYSTEM USES 80286 MEMORY ADAPTER

Record number: H034945

Device: D/T8555
Model: M
Tip key: 004
Date created: 089/05/08
Date last altered: A89/05/09

THE IBM PERSONAL SYSTEM/2 MODEL 55 (8555) IS AN 80386SX BASED SYSTEM. WHILE THE 80386SX MICROPROCESSOR IS A 32-BIT PROCESSOR, THE PS/2 MODEL 55 FEATURES A 16-BIT BUS; THEREFORE, THE IBM PERSONAL SYSTEM/2 MODEL 55 SUPPORTS ONLY 80286 (16-BIT) MEMORY ADAPTERS.

SAS KEYWORDS:

PSY2 8555SYSTEM 8555SYSADPT PSY2MEM
PSY2ADPT

PSY2 RETAIN TIPS

PS/2 REFERENCE DISKETTE REQUIRES COLD START

1.2.417 PS/2 REFERENCE DISKETTE REQUIRES COLD START

Record number: H022195

Device: D/T8550
Model: M
Tip key: 018
Date created: 087/12/02
Date last altered: A93/09/01

THE CORRECT PROCEDURE FOR USING THE PERSONAL SYSTEM/2 REFERENCE DISKETTE IS TO POWER ON THE SYSTEM WITH THE DISKETTE INSERTED IN THE DISKETTE DRIVE. SOFT BOOTING THE REFERENCE DISKETTE (IE. CTRL-ALT-DEL) MAY CAUSE FALSE ERRORS AS WELL AS A FALSE INDICATION THAT A POWER-ON PASSWORD IS ALREADY PRESENT WHEN YOU TRY TO SET ONE.

SAS KEYWORDS:

PSY2	D/T8525	D/T8530	D/T8535
D/T8540	D/T8543	D/T8555	D/T8556
D/T8557	D/T8560	D/T8565	D/T8570
D/T8573	D/T8580	D/T8590	D/T8595

DIAGNOSTIC

1.2.418 PS/2 SERVER 295, GENERAL INFORMATION

Record number: H10997

Device: D/T8600
 Model: M
 Tip key: 001
 Date created: 092/08/12
 Date last altered: A92/08/12

DESCRIPTION:

The IBM Personal System/2 Server 295 is a full function 486 network server designed for client/server applications supporting a range of users requiring high performance as well as maximum system up time. In addition to high availability, the system provides new levels of network control both on site and and remote, allowing management from anywhere in a customer's organization.

The IBM Personal System/2 Server 295 is positioned to be the application server for mission critical applications.

MODELS: 8600-001 and 8600-002

Processor 80486
 Speed 33MHz (mod 001) 50MHz (mod 002)
 Memory (70ns) 32MB
 Diskette Drive 1.44MB
 Hardfile SCSI in PDA (Parallel Disk Array)
 Drive Capacity 400MB or 1GB
 VGA 1
 RMP 1
 SCSI 1
 Token Ring Option
 Ethernet Option
 Modem 7855-010 2400 Baud (with cable)

DOCUMENTATION:

This documentation is shipped with the Server 295, and remains on-site with the system.

Model	Form No.	Description
ALL	S53G-0214	PS/2 Server 295 Documentation Set - PS/2 Server 295 Reference Diskette - LAN Administrator's Guide - Installation Guide - Hardware Reference

7855 - 010	GA33-0160	IBM 7855-010 Guide to Operations
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SERVICE INFORMATION:

- Customer Engineer Installed
- Machine Level Control
- Remote Support
- IBM Onsite Repair
- 1 Year Warranty
- Eligible for MRSO, CSO, EMO, VMO

CE service support is available via the Area Designated Specialist (ADS) and the Atlanta Network Support Center (NSC).
 NSC: 800-426-2472 tie line 596-5070

EDUCATION:

IBM Personal System/2 Server 295 Training (T/L 04212)
 5 day lab lecture course (cc 14725) at the Atlanta Education Center.

Prerequisites include PS/2 model 50 - 80, 90/95, LAN PD, and 7855 - 010 V.32 Modem Product Training.

SAS KEYWORDS:

PSY2	PS2	PS/2	D/T8600
PSY2SYSMISC	INSTALL	8600	

PS/2 SYSTEM USE OF DOTS VS SLASHES IN THE ZERO CHARACTER

1.2.419 PS/2 SYSTEM USE OF DOTS VS SLASHES IN THE ZERO CHARACTER

Record number: H095642

Device: D/T8550
 Model: M
 Tip key: 085
 Date created: 091/08/06
 Date last altered: A94/08/09

PS/2 SYSTEM UNITS MAY EXHIBIT EITHER A DOT OR A SLASH INSIDE THE ZERO CHARACTER. THE ZERO CHARACTER WITH EITHER A DOT OR A SLASH IS CONSIDERED TO BE A VALID AND FUNCTIONAL CHARACTER. BOTH DOT AND SLASH ZEROES MAY BE OBSERVED ON THE SAME TYPE/MODEL SYSTEM, THIS IS DUE TO A ENGINEERING CHANGE DRIVEN BY THE REQUIREMENT OF WORLDWIDE CHARACTER SET CHANGES.

A COMPLETE CHARACTER SET IS LOCATED IN THE SYSTEM BIOS AND CANNOT BE ALTERED. TO VERIFY WHICH ZERO CHARACTER IS IN BIOS LOOK AT THE ZERO CHARACTER DURING THE SYSTEM POST OPERATION.

SYSTEM BOARDS SHOULD NOT BE REPLACED TO TRY TO CHANGE A DOTTED ZERO TO A SLASHED ZERO OR VISA VERSA AS BOTH ARE VALID ZERO CHARACTERS.

SAS KEYWORDS:

D/T8525	D/T8530	D/T8535	D/T8540
D/T8550	D/T8555	D/T8560	D/T8565
D/T8570	D/T8580	D/T8590	D/T8595
PSY2	PSY2KBD	D/T8557	PSY2MISC
D/T8573	PSY2BRD	8557SYSKBD	8570SYSKBD
8573SYSKBD	8580SYSKBD	8590SYSKBD	8595SYSKBD

1.2.420 PS/2 WIZARD ADAPTER DATA INTEGRITY

Record number: H08618

Device: D/T8550
 Model: M
 Tip key: 181
 Date created: 093/06/15
 Date last altered: A93/06/17

AFFECTED WIZARD ADAPTERS MAY FAIL DURING OPERATION, RESULTING IN POSSIBLE UNDETECTED DATA MODIFICATION WHEN THE ADAPTER WRITES TO SYSTEM MEMORY AS A BUSMASTER.

NOT ALL IBM WIZARD ADAPTERS ARE AFFECTED. INSPECT SYSTEMS WITH THE ADAPTER INSTALLED AND REPLACE ANY ADAPTER MEETING THE CRITERIA IDENTIFIED BELOW.

AFFECTED WIZARD ADAPTERS CAN BE IDENTIFIED BY A PRINTED LEVEL NUMBER, LOCATED ON EACH CARD. VIEW THE ADAPTER WITH THE COMPONENT SIDE UP, AND THE "INTEL I860" CHIP ON THE LEFT SIDE OF THE CARD. THE LEVEL NUMBER OF THE ADAPTER IS PRINTED ON A WHITE LABEL, LOCATED TO THE LEFT SIDE OF THE INTEL I860 CHIP.

ANY WIZARD ADAPTER WITH A LEVEL NUMBER PBA600391-004 OR PBA600391 - 005 SHOULD BE REPLACED.

REPLACEMENT WIZARD ADAPTER.....FRU P/N88F0063

ADAPTER LEVELS PBA600391-006 AND HIGHER ARE NOT SUSCEPTIBLE TO THE DATA MODIFICATION PROBLEM, AND SHOULD NOT BE REPLACED.

IF THE WIZARD MEMORY EXPANSION OPTION IS INSTALLED ON THE WIZARD ADAPTER, IT DOES NOT NEED TO BE REPLACED AND MAY BE TRANSFERRED TO THE NEW ADAPTER.

SAS KEYWORDS:

PSY2	PSY2ADPT	D/T8543	D/T8551
D/T8554	D/T8550	D/T8555	D/T8556
D/T8557	D/T8573	D/T8560	D/T8565
D/T8570	D/T9576	D/T8580	D/T8590
D/T8595	D/T9585	D/T9577	D/T9556
D/T9557	D/T9595		

1.2.421 PS/2 8516 TOUCH SCREEN DISPLAY

Record number: H016110

Device: D/T8516
Model: M
Tip key: 003
Date created: 091/10/01
Date last altered: A91/11/25

THE 8516 TOUCH SCREEN DISPLAY IS AVAILABLE IN THREE MODELS;
ALL ARE ELEMENT EXCHANGE DEVICES.

8516 MODEL 001.....FRU P/N44F9759, US AND CANADA
8516 MODEL 002.....FRU P/N70F9129, NORTHERN HEMISPHERE
8516 MODEL 004.....FRU P/N70F9132, SOUTHERN HEMISPHERE

ALL MODELS REQUIRE A CABLE ATTACHMENT TO THE MOUSE PORT ON
THE SYSTEM UNIT. IF A MOUSE IS REQUIRED, IT CAN BE CONNECTED
TO THE MOUSE PORT ON THE DISPLAY.

ALL MODELS OF THE 8516 TOUCH SCREEN DISPLAY REQUIRE CALIBRATION
DURING INSTALLATION. INSTALLATION IS COMPLETE WHEN THE
CUSTOMER HAS PLACED THE 8516 ON A FLAT STABLE SURFACE, CONNECTED
THE DISPLAY UNIT, SUCCESSFULLY RUN SET-UP, COMPLETED POST, AND
CALIBRATED THE DISPLAY.

IF CALIBRATION IS NOT PERFORMED, TOUCH OPERATION MAY NOT
FUNCTION PROPERLY, DEPENDING ON THE APPLICATION BEING USED.
THE ACCURACY OF THE TOUCH FUNCTION IS DEPENDENT UPON THE
ACCURACY OF THE CALIBRATION. IT IS THE CUSTOMER'S
RESPONSIBILITY TO ENSURE THAT THE REQUIRED CALIBRATION IS
PERFORMED.

IF THE DISPLAY HAS BEEN MOVED, EITHER FROM ONE WORKPLACE TO
ANOTHER OR BY PUSHING THE DISPLAY ACROSS THE WORKING SURFACE,
THE TOUCH ACCURACY MIGHT HAVE BEEN AFFECTED AND THE CUSTOMER
MAY NEED TO RE-CALIBRATE THE DISPLAY.

DIAGNOSTIC PROCEDURES FOR THE 8516 DISPLAY REQUIRE THE USE OF
SUPPLEMENTS TO THE HML. SERVICE DOCUMENTATION IS AVAILABLE
THROUGH MECHANICSBURG:

- * 8516 TOUCH SCREEN HML SUPPLEMENT, FORM NUMBER S92F-2674,
P/N92F2674, INCLUDES THE FOLLOWING PUBLICATIONS:
 - 8516 TOUCH SCREEN HMS SUPPLEMENT
 - 8516 TOUCH SCREEN HMR SUPPLEMENT
 - 8516 TOUCH SCREEN OPTION DISKETTE, CONTAINS DIAGNOSTICS
FOR ALL PS/2 MICRO CHANNEL SYSTEMS.
 - 8516 TOUCH SCREEN DIAGNOSTIC DISKETTE FOR PS/2 8530-286,
8535, AND 8540.

SAS KEYWORDS:
PSY2 PSY2DISP 8516DISP PSY2DOC
8516SYSDOC

1.2.422 PS/2 8518/8511 - FIELD REPAIRABLE COLOR DISPLAYS

Record number: H026044

Device: D/T8518
 Model: M
 Tip key: 001
 Date created: 091/10/15
 Date last altered: A93/07/12

THE IBM 8518 AND 8511 ARE 14" FIELD REPAIRABLE COLOR DISPLAYS. THE 8518 AND 8511 ARE SERVICED BY REPLACING FRU'S AND/OR MAKING INTERNAL ADJUSTMENTS. THE REPLACEABLE FRU'S ARE THE CARD TRAY ASSEMBLY, INTEGRATED TUBE COMPONENT (ITC) ASSEMBLY, COVER ASSEMBLY AND TILT SWIVEL STAND ASSEMBLY.

THE 8511 COLOR DISPLAY PROBLEM DETERMINATION, ALIGNMENT PROCEDURES AND COMPONENT LOCATIONS ARE THE SAME AS THOSE FOR THE 8518 COLOR DISPLAY. THE 8518 SETUP DISKETTE SHOULD BE USED TO ADJUST THE 8511 DISPLAY. THE SETUP DISKETTE P/N91F8838 IS CURRENTLY AVAILABLE ONLY WITH THE 8518 HML, PUBLICATION NUMBER S85F-1692.

ALL BRANCH OFFICES HAVE BEEN PROVIDED AN 8518 AND A VIDEO FOR CE TRAINING. DUE TO THE UNIQUE SAFETY REQUIREMENTS INHERENT IN SERVICING DISPLAYS, THE 8518 AND 8511 ARE TO BE REPAIRED BY TRAINED SERVICE PERSONNEL ONLY.

ALL REPAIR PARTS ARE AVAILABLE IN MECHANICSBURG, AND ARE LISTED IN THE 8518 HMS. HMS SUPPLEMENT S41G-3322 CONTAINS SERVICE INFORMATION SPECIFICALLY FOR THE 8511. THIS INFORMATION WILL BE COMBINED WITH THE 8518 SERVICE INFORMATION IN FUTURE UPDATES.

***** IMPORTANT *****

DO NOT ASSUME THAT A REPLACEMENT FRU IS DEFECTIVE BY THE INITIAL FRONT-OF-SCREEN CHARACTERISTICS FOLLOWING THE FRU INSTALLATION. UPON REPLACEMENT OF A DEFECTIVE CARD TRAY ASSEMBLY OR AN ITC ASSEMBLY, IT IS NECESSARY TO PERFORM THE ALIGNMENT PROCEDURES OUTLINED IN THE PS/2 8518 HMS PAMPHLET IN THE PROPER SEQUENCE.

DO NOT ADJUST THE G2 POT PRIOR TO APPLYING POWER TO A NEW CARD TRAY ASSEMBLY. DAMAGE TO THE CARD TRAY ASSEMBLY MAY RESULT IF G2 IS TURNED UP PRIOR TO POWER BEING APPLIED. THE G2 IS SET TO MINIMUM BY THE MANUFACTURER TO PREVENT THIS PROBLEM.

CORRECTIONS TO THE 8518 DOCUMENTATION

HMS - THE PART NUMBER LISTED FOR THE METER LEAD KIT IS INCORRECT. P/N6405261 IS ACTUALLY AN EXPENSIVE COLOR TV ANALYZER. THE METER LEAD KIT PART NUMBER IS 6428104.

HMS - THE PART NUMBER FOR THE RID TAG ON PG.19 OF THE 8518 HMS HMS IS INCORRECT. THE RID TAG THAT IS PART OF THE PARTS RETURN FORM BOOKLET (Z150-0406-9) SHOULD BE USED FOR THE 8518/8511.

HMS - THE PART NUMBER FOR THE HEX 2MM TRIMMING TOOL ON PG.17 OF THE 8518 HMS IS INCORRECT. THE HMS SHOWS THIS NUMBER TO BE P/N572855 OR 2572882. THE CORRECT NUMBER IS P/N39F8405.

ERRORS CONTAINED IN THE 8518 DOCUMENTATION WILL BE CORRECTED IN FUTURE UPDATES.

8518/8511 ADJUSTMENT AND COVER TOOLS MAY BE ORDERED SEPARATELY:

- HEX HEAD 2MM TRIMMING TOOL P/N39F8405
- COVER DELATCHING TOOL P/N59X6319

SAS KEYWORDS:

D/T8518	PSY2DISP	PSY2DOC	8518DOC
PSY2	8518	D/T8511	8511DOC
8518DISP	8511DISP	TOOLS	

1.2.423 PS/2 8525 AND 8525-286 DISPLAY FRU INFORMATION

Record number: H031961

Device: D/T8525
 Model: M
 Tip key: 011
 Date created: 091/10/29
 Date last altered: A91/11/14

INSTALLATION INFORMATION:

IF THE SYSTEM BOARD DOES NOT HAVE A RECEPTACLE FOR DISPLAY CONNECTOR P6, DO NOT USE P6 (TIE IT BACK TO THE CABLE ASSEMBLY).

HANDLING:

WHEN HANDLING 8525 DISPLAYS, CARE SHOULD BE TAKEN TO INSURE THAT ACCIDENTAL INJURY DOES NOT OCCUR ON THE METAL EDGES OF THE SHEET METAL HOUSING. WHILE THESE METAL PARTS MEET IBM CORPORATE SAFETY SPECIFICATIONS, CUTS CAN BE INCURRED IF YOUR HAND COMES IN CONTACT WITH THESE EDGES WITH SUFFICIENT FORCE.

SHIPPING:

ALL 8525 DISPLAY FRU'S ARE PACKAGED IN THE UPSIDE-DOWN POSITION. WHEN REPACKAGING, BE SURE TO INSERT THEM THE SAME WAY. DAMAGE MAY OCCUR IF INCORRECTLY REPACKAGED. ALSO, THE LARGE FOAM PAD GOES AGAINST THE FACE OF THE DISPLAY. THERE WILL BE A DIAGRAM INCLUDED IN THE FRU BOX DESCRIBING THE INSTALLATION OF THE PACKAGING MATERIAL.

DISPLAY FRU IDENTIFICATION:

THE FOLLOWING LIST MAY BE USED TO DETERMINE THE CORRECT DISPLAY FRU IF THE SERVICER HAS ACCESS TO THE HARDWARE. TO USE THE LIST, LOCATE THE MANUFACTURING PART NUMBER (LOCATED ON YELLOW LABEL ON BOTTOM OF DISPLAY), THEN USE LIST TO DETERMINE CORRECT DISPLAY FRU PART NUMBER.

MODEL TYPE	DISPLAY TYPE	DISPLAY MFG P/N	DISPLAY FRU P/N
8525 MONOCHROME	NORTHERN HEMISPHERE	78X8905, OR 78X8907	00F2052
8525 MONOCHROME	SOUTHERN HEMISPHERE	78X8908	00F2055
8525 COLOR	NORTHERN HEMISPHERE	78X8906, OR 78X8909 92F0620 (VLMF)	00F2053 92F0692
8525 COLOR	SOUTHERN HEMISPHERE	78X8910 92F0621 (VLMF)	00F2057 92F0693
8525 - 286	NORTHERN HEMISPHERE	8509178 92F0620 (VLMF)	64F0181 92F0692
8525 - 286	SOUTHERN HEMISPHERE	57F2224 92F0621 (VLMF)	64F0186 92F0693

NOTES:

- 8525 - 286 DISPLAY FRU P/N92F0692 OR P/N92F0693 CONTAIN TWO LOGO'S INSIDE THE FRU BOX. YOU MUST SELECT THE CORRECT LOGO AND INSTALL IT ON THE UPPER LEFT CORNER OF THE BEZEL ON THE REPLACEMENT DISPLAY. THIS LOGO SHOULD MATCH THE LOGO ON THE DISPLAY BEING REPLACED.
- VERY LOW MAGNETIC FIELD (VLMF) DISPLAYS SHOULD NOT BE REPLACED WITH STANDARD DISPLAYS AND STANDARD DISPLAYS SHOULD NOT BE REPLACED WITH VLMF DISPLAYS. ALTHOUGH THE VLMF AND STANDARD DISPLAYS MAY LOOK ALIKE THERE ARE DIFFERENCES IN THE MOUNTING AND GROUNDING SURFACES ON THE FRAMES OF THE DISPLAY AND ELECTRONICS TRAY, WHICH IF INTERCHANGED MAY CAUSE ASSEMBLY AND/OR OPERATIONAL PROBLEMS. USE "ALTERNATE METHOD" TO DETERMINE CORRECT DISPLAY FRU PART NUMBER IF THE FRU BEING REPLACED IS IN QUESTION.

ALTERNATE METHOD TO DETERMINE CORRECT DISPLAY FRU PART NUMBERS.

THE FOLLOWING DISPLAY FRU PART NUMBERS ARE USED IN ALL THE MODEL TYPE'S AND SERIAL NUMBERS LISTED BELOW:

92F0692 - NORTHERN HEMISPHERE

92F0693 - SOUTHERN HEMISPHERE

MODEL TYPE	SERIAL NUMBER RANGE
8525 - 004	23-000AA THRU 23-554AG
8525 - 004	78-554AH THRU 78-567XL
8525 - F04	23-567XM THRU 23-632GB
8525 - N04	23-623GC THRU 23-678RT
8525 - S04	23-678RV THRU 23-734BH
8525 - C05	23-734BK THRU 23-789LZ
8525 - L04	23-789MA THRU 23-844XP
8525 - E04	23-844XR THRU 23-900GF
8525 - N04	78-900GG THRU 78-927ZN
8525 - S04	78-927ZP THRU 78-983KD
8525 - NM4	78-00AAA THRU 78-04KBY
8525 - SM4	78-07GMP THRU 78-14PAC
8525 - RB4	23-14PAD THRU 23-36LMX
8525 - RT4	23-36LMY THRU 23-58HAP
8525 - 006	23-RGZZT THRU 23-TBNZW
8525 - 006	78-VFLMP THRU 23-VPVAC
8525 - 036	23-TBNZX THRU 23-VFLMN
8525 - 036	78-VPVAD THRU 78-WAAMT

- FOR ALL OTHER MONOCHROME 8525 SYSTEMS NOT LISTED ABOVE, USE THE FOLLOWING DISPLAY FRU PART NUMBERS:
00F2052 - NORTHERN HEMISPHERE
00F2055 - SOTHHERN HEMISPHERE
- FOR ALL OTHER COLOR 8525 SYSTEMS NOT LISTED ABOVE, USE THE FOLLOWING DISPLAY FRU PART NUMBERS:
00F2053 - NORTHERN HEMISPHERE
00F2057 - SOUTHERN HEMISPHERE
- FOR ALL OTHER 8525-286 SYSTEMS NOT LISTED ABOVE, USE THE FOLLOWING DISPLAY FRU PART NUMBERS:
64F0181 - NORTHERN HEMISPHERE
64F0186 - SOUTHERN HEMISPHERE

THE ABOVE FRU IDENTIFICATION LISTS WILL BE ADDED TO THE NEXT RELEASE OF THE 8525 SERVICE DOCUMENTATION.

SAS KEYWORDS:

PSY2	PSY2DISP	PSY2PART	8525SYSPART
8525SYSDISP	8525DISP		

1.2.424 PS/2 8540 WILL NOT BOOT FROM 2ND HARDFILE

Record number: H097710

Device: D/T8540
Model: M
Tip key: 006
Date created: 092/04/16
Date last altered: A92/05/08

BEFORE AN 8540 CAN BE CONFIGURED TO BOOT FROM THE SECOND HARDFILE, THE HARDFILE PARTITION MUST BE MADE ACTIVE USING THE FDISK COMMAND. TO DO THIS, THE SECOND HARDFILE MUST FIRST BE SELECTED AS THE STARTUP (PRIMARY,BOOTABLE) HARDFILE.

SELECTION OF THE 2ND HARDFILE AS THE STARTUP HARDFILE CAN BE ACCOMPLISHED WITH THE STARTER OR ADVANCED DIAGNOSTIC DISKETTE BY SELECTING "SET FEATURES" AND THEN "SET STARTUP SEQUENCE."

NOTE:

WHEN USING "SET STARTUP SEQUENCE," THE FIRST HARDFILE IS DESIGNATED AS DRIVE "0" AND THE SECOND HARDFILE IS DESIGNATED AS DRIVE "1."

CUSTOMERS SHOULD BE REFERED TO THEIR 8540 GUIDE TO OPERATIONS FOR HARDFILE INSTALLATION AND STARTUP SEQUENCE INSTRUCTIONS.

SAS KEYWORDS:

PSY2 PSY2FDSK PSY2DIAG 8540SYSFDSK
8540SYSDIAG

1.2.425 PS/2 95XX 63XX COLOR MONITORS FLICKER

Record number: H20154

Device: D/T9517
Model: M
Tip key: 001
Date created: 093/01/28
Date last altered: A94/05/19

THE PS/2 9515, 9517, 9518, OR 9521 MAY SHOW NOTICEABLE FLICKERING, JITTERING OR WAVY IMAGES IF NOT CONNECTED TO AN XGA-2 ADAPTER OR A 95XX SYSTEM WITH THE XGA-2 CHIPSET ON THE SYSTEM BOARD. DISTORTED IMAGES MAY ALSO BE SEEN IF THE CORRECT DEVICE DRIVERS ARE NOT INSTALLED.

CUSTOMERS USING A 95XX OR 63XX DISPLAY ON A SYSTEM RUNNING OS/2 SHOULD BE USING AT LEAST VERSION 2.00.1. OF THE OPERATING SYSTEM. THE LEVEL OF THE OPERATING SYSTEM CAN BE DETERMINED BY TYPING THE COMMAND "SYSLEVEL" AT AN OS/2 FULL SCREEN "C" PROMPT. VERSION 2.00.1 IS PRELOADED ON CERTAIN PS/2 PREMIUM MODELS AND IS ALSO THE VERSION THAT THE OS/2 SERVICE PAC CONTAINS. OS/2 2.00.1 CONTAINS THE NECESSARY DRIVERS TO RECOGNIZE THE 95XX OR 63XX DISPLAY TYPES.

*****NOTE*****
THERE IS A NEW LEVEL OF XGA-2 DRIVER THAT PROVIDES ENHANCED SUPPORT FOR THE 95XX OR 63XX DISPLAY UNDER DOS, AIX, WINDOWS OR OS/2. THE NEW WINDOWS DRIVER IS VERSION 2.11 AND CONTAINS THE DGS FILES ALSO USED BY OS/2.

IF THE SYSTEM IS PROPERLY CONFIGURED WITH AN XGA-2 ADAPTER AND THE APPROPRIATE DRIVERS FOR THE OPERATING SYSTEM ARE USED, AND FLICKER OR DISTORTED IMAGES ARE STILL PRESENT, USE THE FOLLOWING PROCEDURE TO DOWNLOAD A COPY OF THE VERSION 2.11, WHICH CONTAIN THE ENHANCED DISPLAY SUPPORT, DRIVERS. TYPE THE FOLLOWING COMMAND AT THE VM PROFS/OFFICE-VISION COMMAND LINE:

"TOOLS SENDTO BCRVM1 SERC DISPLAY GET XGAV211 PACKAGE"
THE DRIVERS WILL BE SENT TO YOUR VM ID. RECEIVE AND DOWNLOAD THE "82G5378 EMTBIN" FILE TO YOUR PERSONAL COMPUTER. "EMTCOPY.EXE" SHOULD BE USED TO CREATE THE DISKETTE FROM THE PACKED IMAGE FILE. THE "EMTCOPY" PROGRAM MAY BE DOWNLOADED FROM THE PCTOOLS DISK.

VIEW THE "README" FILE CONTAINED ON THE DISKETTE FOR INSTRUCTIONS ON UPDATING THE "DMQS" FILES. THE "DMQS" FILES CONTAIN UPDATED INFORMATION TO DETECT THE PRESENCE OF THE 95XX DISPLAYS AND ENABLE THE XGA-2 ADAPTER TO DRIVE THE DISPLAYS AT THE APPROPRIATE RATES.

| THE DISKETTE CAN BE DOWNLOADED FROM THE IBM PC COMPANY
| BULLETIN BOARD SYSTEM. THE PHONE NUMBER FOR THE BBS IS
| 919 - 517 - 0001. THE DISKETTE IS LISTED ON THE BBS AS
| FILE "XGA211.DSK". A DOCUMENT IS ALSO AVAILABLE THAT
| EXPLAINS INSTALLATION, IT IS IDENTIFIED AS "XGADOC.TXT".
|

| IF CUSTOMERS DO NOT HAVE A MODEM TO DOWNLOAD THE IMAGE
| IMAGE, THE CUSTOMER MAY CALL THE IBM HELP CENTER AT
| 1 - 800-PS2 - 2227 AND REQUEST THAT A DISKETTE BE MAILED.

IF FLICKERING IS STILL OBSERVED AFTER UPDATING THE XGA-2 DRIVERS, UTILIZE NORMAL PROBLEM DETERMINATION PROCEDURES TO ISOLATE THE FAILING FRU, SOFTWARE OR ENVIRONMENTAL INTERFERENCE.

NOTE - PS/2 XGA-2 ADAPTER/A AND PS/2 95XX COLOR DISPLAY HARDWARE AND SOFTWARE REQUIREMENTS ARE DOCUMENTED IN THE MARKETING LITERATURE FOR THOSE PRODUCTS.

NOTE -
IBM 63XX and 95XX displays are capable of "FLICKER FREE" operation. However systems and software MUST be configured to run in the flicker free modes; typically with vertical refresh rates greater than 70Hz.

For information on enabling these modes please refer to the 'Read me First' documentation shipped with the products and the relevant system manual which explains system configuration and software requirements.

SAS KEYWORDS:

PSY2 PSY2DISP PSY2ADPT D/T63XX

PSY2 RETAIN TIPS

PS/2 95XX 63XX COLOR MONITORS FLICKER

D/T95XX	D/T6312	FLICKER	PSY2DISP
DISPLAY	D/T9515	D/T9517	D/T9518
D/T9524	D/T9525	D/T9507	D/T9521
D/T9527	D/T6312	D/T6314	D/T6317
D/T6319	D/T6324	D/T6325	D/T6327
XGA	DRIVERS	D/T9553	D/T9585
BLANK	GREY		

1.2.426 PS/2 9585 REFERENCE & DIAGNOSTIC LEVELS

Record number: H122446

Device: D/T9585
 Model: M
 Tip key: 005
 Date created: 094/01/20
 Date last altered: A94/01/26

The following information identifies the BIOS part numbers and dates for the 9585 server.

Reference Disk Version	1.0	1.11	1.12	1.32
BIOS P/N *	52G9715	61G2399	61G2399	82G3542
Date	10/20/92	02/14/93	02/14/93	11/10/93
Model	F8	F8	F8	F8
Submodel	48	48	48	B4
Revision Level	0	2	2	0
Diag Disk Vers	2.02	2.03	2.04	2.04
Config Util Vers	2.50	2.51	2.51	2.64

* BIOS Part numbers and dates are observed in configuration.

1.0 9585 - 0Xx original release (No ECC support)
 1.11 9585 - 0Xx with ECC (ECC support provided by a Diagnostic and Reference update diskette)
 1.12 EMEA Machines only (SCSI-2 Fast Wide adapter in a 9585)
 System was known as a 9585-1XG
 1.32 9585 - 0Kx or 0Nx models only.

SAS KEYWORDS:

PSY2

PSY2DIAG

SERVER 85

PS/2, 1/3-HIGH VS 1/2-HIGH DISKETTE DRIVE IDENTIFICATION

1.2.427 PS/2, 1/3-HIGH VS 1/2-HIGH DISKETTE DRIVE IDENTIFICATION

Record number: H095519

Device: D/T8550
Model: M
Tip key: 087
Date created: 091/08/19
Date last altered: A94/08/09

PS/2 MODELS 8580, 8570, 8550, 8530, AND 8525 MAY HAVE EITHER A 1/2 - HIGH OR A 1/3-HIGH DISKETTE DRIVE INSTALLED. TO AID IN VISUAL IDENTIFICATION OF THESE DRIVES, WITHOUT THEIR REMOVAL FROM THE SYSTEM UNIT, THE FOLLOWING METHOD MAY BE USED ON BOTH 720KB AND 1.44MB DISKETTE DRIVES:

IF THE DISKETTE DRIVE IN-USE LIGHT IS BELOW THE DISKETTE SLOT THE DISKETTE DRIVE IS A 1/3-HIGH. IF THE DISKETTE DRIVE IN-USE LIGHT IS ABOVE THE DISKETTE SLOT, THE DISKETTE DRIVE IS A 1/2 - HIGH.

SAS KEYWORDS:

PSY2	D/T8530	D/T8525	D/T8570
D/T8580	PSY2DSKT		

1.2.428 QAPLUS FE DIAGNOSTICS NOT COMPATIBLE W/PC300 & 700

Record number: H126531

Device: D/T68XX
 Model: M
 Tip key: 005
 Date created: 095/02/24
 Date last altered: A95/12/05

QAPLUS/FE version 5.20 SP diagnostic is not compatible with IBM PC 300 and PC 700 series systems. This diagnostic is distributed and in use by servicers on OEM and some IBM systems.

The use of QAPLUS/FE may result in system hangs or false errors usually when testing system memory.

Servicers diagnosing suspected hardware problems on IBM PC 300 and 700 series systems should utilize the IBM Personal Computer Diagnostic diskette (QAPLUS/Pro) version 5.22 or higher. This diskette ships with the system under the "Diskette Factory" icon or may be ordered from Mechanicsburg using publication number S83G-7787.

IBM PC 300 Series 6576 and 6586 require QAPLUS/Pro version 5.28 or higher.

SAS KEYWORDS:

PSY2	6875	D/T6875	D/T6885
D/T6876	D/T6886	6885	6876
6886	PSY2ADPT	PSY2OEM	PSY2PART
PSY2BRD	PSY2DIAG	IBMPC	PSY2ERR
PC 750	PC 730	PSVP	PSVPMEM
PC 330	PC 300	PC 350	D/T65XX
D/T6571	D/T6573	D/T6581	D/T6583
D/T6585	D/T6575	6571	6573
6581	6583	6575	6585
TSS	QAPLUS	WINDOWS	EMM386

1.2.429 QAPLUS WIN-WIN STOPS FOR WINDOWS95 SCREENSAVER

Record number: H133198

Device: D/T6877
Model: M
Tip key: 015
Date created: 096/03/25
Date last altered: A96/03/25

When running the QAPLUS/WIN-WIN application preloaded on IBM PC 700 Series 6877 and 6887 systems, the application stops while the Windows95 screensaver is running.

QAPLUS/WIN-WIN will continue operation when the screensaver is interrupted. Disable the screensaver function if additional diagnostics are required that will exceed the screensaver time setting.

A new version of QAPLUS/WIN-WIN will be available in March 1996 to eliminate this problem.

QAPLUS/WIN-WIN is a trademark of DiagSoft, Inc.

SAS KEYWORDS:

PSY2	D/T68XX	6887	6877
IBMPCL	PSVP	PSY2PROG	PSVPPROG
D/T6887	PC750	PC700	PC 730
PC 750	PC730	41346	PSVPDIAG
PSY2DIAG			

1.2.430 QAPLUS/PRO HANGS WITH JAPANESE 106-KEY KEYBOARD

Record number: H132796

Device: D/T6877
 Model: M
 Tip key: 003
 Date created: 096/02/27
 Date last altered: A96/02/27

When running QAPlus/Pro version 5.32 on an IBM PC 700 Series 6877 or 6887, the diagnostic program may lock-out the keyboard. This occurs only if the keyboard is an IBM Japanese 106-key keyboard AND if the Lap Count (number of times the test is configured to run) is set greater than 1. The hang does not occur if the Lap Count is set for 1.

This problem will be resolved in the next release of QAPlus/Pro which is scheduled to be available during May 1996. The update will be available from the IBM PC Company BBS or through the Internet in the PC Company File Library at the following URL: <http://www.pc.ibm.com/files.html>

QAPlus/Pro is a trademark of DiagSoft, Inc.

SAS KEYWORDS:

PSY2	D/T68XX	6887	6877
IBMPC	PSVP	PSVPKBD	PSY2KBD
D/T6887	PSVPPROG	PSY2PROG	HUNG
LOCKUP	PC750	PSY2DIAG	PSVPDIAG
PC 750	PC730	PC700	PC 730
40395			

QUANTUM SCSI-2 F/W JUMPERS AND LED INDICATORS

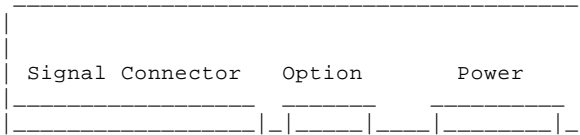
1.2.431 QUANTUM SCSI-2 F/W JUMPERS AND LED INDICATORS

Record number: H13633

Device: D/T8641
 Model: M
 Tip key: 005
 Date created: 095/08/24
 Date last altered: A95/08/28

This tip provides information concerning LED (Light Emitting Diode) indicators and jumpering for the Quantum 2.25 GB SCSI-2 Fast/Wide fixed disk, FRU P/N06H8561.

Back View of Drive



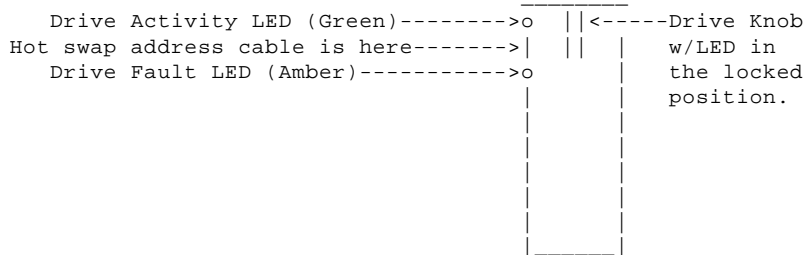
Notes:

Observe the label on the drive for correct Address and option jumpering information. DO NOT jumper the pins in the Option Connector (see diagram above). This connector is to be used only for an external cable (not used in PC Co. products).

Refer to the PCBA (Printed Circuit Board Assembly) diagram on the label for the correct jumpering information. The option and address jumpering pins are located on the FRONT of the drive, not the rear.

There are two LED's mounted on the front edge of the logic board on this drive, which are difficult to identify due to their small size. The LED meanings and locations are as follows:

View as mounted in a "Hot swap Tray" and installed in an 8641 (Server 500),



The Drive Activity LED (Green) will be on when the drive is active on the SCSI bus.

The Fault LED (Amber) is normally off and will come on if a fatal drive error condition is detected by internal self tests during POST and normal operation.

SAS KEYWORDS:

PSY2	PSY2FDSK	SCSI	2
FAST	WIDE	D/T8641	D/T8640
8641	8640	06H8561	

1.2.432 Q5 PIN MISSING ON 9527 VIDEO CARD

Record number: H126309

Device: D/T9527
Model: M
Tip key: 006
Date created: 095/02/02
Date last altered: A95/03/09

A small number of 9527-001 Card Tray FRUs were manufactured without a "Q5" ground pin on the video card.

When replacing the Card Tray, FRU P/N68G2540, the ground cable that would normally attach to "Q5" can be soldered to the ground cable that attaches to "Q6". The soldered pair of cables can now be connected to the "Q6" pin.

If servicicers do not have soldering skills or tools, a replacement "Y" ground cable may be requested from Level 2 Support.

LEVEL 2 HARDWARE SUPPORT SHOULD BE CONTACTED VIA THE ESTABLISHED SUPPORT STRUCTURE (LEVEL 1 to LEVEL 2.) THE SERVICERS NAME, ADDRESS AND PHONE NUMBER MUST BE INCLUDED IN THE PMR SO THAT A CABLE MAY BE SENT.

Manufacturing is aware of this problem and has taken corrective action.

SAS KEYWORDS:

PSY2	PSY2DISP	PSY2PART	68G2550
SOLDER	Q5	WIRE	

1.2.433 RAID ADAPTER FIRMWARE CHART (MICROCHANNEL)

Record number: H127686

Device: D/T9595
 Model: M
 Tip key: 023
 Date created: 095/05/23
 Date last altered: A96/09/23

Current MicroChannel RAID firmware levels:

RAID Adapter	firmware	BBS filename
FRU p/n92F0335	1.63	RAID163A.EXE
FRU p/n06H3059	2.21	RAID221A.EXE

This tip provides the following information:

1. The levels of firmware supported with the two Micro Channel RAID Array Controllers currently available.
2. Comments relating to specific versions of the RAID Support Diskette.
3. Known diagnostics problems associated with the RAID Array Controllers.

FIRMWARE CHART

RAID Array Controller (Adapter)	RAID BIOS FIRMWARE (FLASH) (Version)	RAID Support Diskette (Version)	Diskette P/N and Comments/Remarks (Diskette is NOT a FRU)
FRU P/N92F0335 (No external SCSI connector)	1.61	1.00	Only Supports OS/2 & Novell
	1.62 & 1.63	2.00	P/N 83G7631 Windows NT & Vines
		2.11	P/N 83G9796 Support added
FRU P/N06H3059 (Has External SCSI connector and enhanced functions)	2.14 & 2.19	2.12	P/N 83G7980
		2.20	
	2.21	2.21	P/N 30H1865
		2.23	P/N 30H1943 & P/N 30H2551
		2.30	

Notes:

When using the RAID config utility, if you want to replace a DDD (defunct) drive, you MUST use the Replace/Rebuild option. If it is a defunct HSP (Hot Spare) drive, you can replace it (with a new FRU) using this menu.

---CAUTION----- CAUTION: -----CAUTION---
 NEVER SWAP FIXED DISKS WITHIN A CONFIGURED RAID ARRAY to troubleshoot drive problems, such as DDD. Swapping drives which contain customer data will almost always result in LOST DATA.

THE FOLLOWING SECTION PROVIDES COMMENTS RELATING TO SPECIFIC VERSIONS OF THE RAID SUPPORT DISKETTE VERSIONS 2.11 THRU 2.30.

1. IBMRAID.ADD

- A. DOS: ASPI - NOT SUPPORTED UNDER WINDOWS
- B. OS/2: SOME PROBLEMS W/ NETWARE FOR OS/2, OS/2 WARP AND OPTICAL DRIVES. FIXED IN VER 2.23.
- C. NETWARE: NO KNOWN PROBLEMS
- D. WinNT 3.1: & WinNT 3.5 with FRU P/N 92F0335:
 TAPE AND CDROM CAN'T BE ACTIVE AT THE SAME TIME. WILL HANG WHEN CDROM IS EMPTY. FIXED IN FIRMWARE VERSION 1.63. FIRMWARE VER 1.63 CAN BE OBTAINED FROM THE IBM PC COMPANY HELPCENTER 1-800-772-2227.
 NOTE: FRU P/N 06H3059 DOES NOT HAVE THIS PROBLEM.
- E. NWASPI: RAIDASPI - MAY HANG WHEN MORE THAN ONE RAID ADAPTER IS INSTALLED IN THE SYSTEM. YOU CAN WORK AROUND THIS PROBLEM BY UNLOAD AND RELOAD. RAIDASP3.DSK FOR NETWARE 3.1X AND RAIDASP4.DSK FOR

RAID ADAPTER FIRMWARE CHART (MICROCHANNEL)

NETWARE 4.XX CAN BE OBTAINED FROM THE IBM PC Company HELPCENTER 1-800-772-2227. IF YOU HAVE ANOTHER ADAPTER REQUIRING ASPI_ENTRY, THAT ADAPTER CAN'T BE USED IF RAIDASPI IS LOADED.

- F. RAIDDCDB.NLM - SAME AS RAIDASPI WITHOUT EXPORT OF ASPI_ENTRY, YOU CAN'T USE TAPE AND CDROM.
 - G. RAIDASP3.DSK, RAIDASP4.DSK AND RAIDDCB.NLM IS SHIPPED WITH DISKETTE VER 2.23.
2. RAIDADM.EXE - DISKETTE VER 2.11
- A. OS/2: - DOES NOT DISPLAY PFA (Predictive Failure Analysis) MESSAGE; (FIXED IN VER 2.12)
 - B. ERRONEOUS MESSAGES ARE GIVEN IN THE RAIDADM LOG, WHEN USED ON 9595 models 3Nx, 3Px & 3Qx. THE DRIVES IN BAYS 5,6 & 7 ARE CALLED ERRONEOUSLY; BAYS 2,3 & 4 ARE CALLED CORRECTLY (FIXED IN VERSION 2.12).
 - C. THE REBUILD PROGRESS BAR COLOR IS THE SAME COLOR AS THE BACKGROUND COLOR, MAKING IT DIFFICULT TO SEE; (FIXED IN VERSION 2.21)
3. RAIDADM.EXE - DISKETTE VER 2.12
- A. THE REBUILD PROGRESS BAR COLOR IS THE SAME COLOR AS THE BACKGROUND COLOR, MAKING IT DIFFICULT TO SEE; (FIXED IN VERSION 2.21)
4. RAID SUPPORT DISKETTE - V2.30 adds the following features:
- 1. Power Cycling Upon Boot
 - 2. Option to force the drive ONL if fails during Rebuild
 - 3. Disk Surface Test under Advanced Functions -- This test can only be performed on drives not defined in an array (RDY) in order to determine if all sectors are good.
 - 4. Rebuild status bar was enhanced with greater contrast in order for the progress to be seen more clearly and easily. Instead of Blue vs White, V2.3 is Bright White vs Black.

THE FOLLOWING SECTION PROVIDES COMMENTS RELATING TO THE 9595 COMMON DIAGNOSTICS DISKETTE P/N 83G9782 VER 2.31: (VERSION 2.32 IS NOW AVAILABLE FROM THE PC COMPANY BULLETIN BOARD SYSTEM BY CALLING 919-517-0001.

- 1. RAID.DGS
 - a. WHEN USED WITH RAID SUPPORT DISKETTES VER 2.11 AND 2.12:
 - PROBLEM WITH CDROM AND TAPE(NON DISK DEVICE) WHEN USING SINGLE TEST MODE FROM SYSTEM TEST MENU.
 - B. WHEN USED WITH RAID SUPPORT DISKETTE VER 2.20:
 - ERRONEOUS ERRORS ON DISK READABILITY DIAGNOSTIC TEST (DIAGNOSTIC PROBLEM ONLY, CUSTOMER OPERATION UNAFFECTED.)
 - PROBLEM WITH CDROM AND TAPE (NON DISK DEVICE) WHEN USING SINGLE TEST MODE FROM SYSTEM TEST MENU.
 - C. WHEN USED WITH RAID SUPPORT DISKETTE VER 2.21:
 - ERRONEOUS ERRORS ON DISK READABILITY DIAGNOSTIC TEST (DIAGNOSTIC PROBLEM ONLY, CUSTOMER OPERATION UNAFFECTED.)

SAS KEYWORDS:

PSY2	RAID	SERVER	95
BIOS	MICRO	CODE	MICROCODE
REFERENCE	DISKETTE	SUPPORT	D/T9595A
DGS	D/T8641	500	FLASH
8641	9595A	9595	3516
D/T3516	D/T8642	720	FIRMWARE
D/T8640			

1.2.434 RAID ADAPTER FIRMWARE CHART (PCI)

Record number: H134109

Device: D/T8640
 Model: M
 Tip key: 013
 Date created: 096/09/23
 Date last altered: A96/09/23

This tip is for the IBM PCI RAID Adapter (FRU p/n06h5078) only.

Current PCI RAID Adapter firmware levels:

RAID Adapter	firmware	BBS filename
FRU p/n06H5078	2.43	RAID243.EXE

Firmware Revision Levels for the IBM PCI RAID Adapter:

Firmware level 2.21
 - Initial firmware release for Savannah 1 only

Firmware level 2.35
 - Initial firmware release for Savannah 2 only

Firmware level 2.41
 - For both Savannah 1 and Savannah 2
 Changes: 1. Provide one firmware for Savannah 1 and Savannah 2
 2. Changes to Synchronization code

Firmware level 2.43 * Current Firmware level *
 Changes: 1. Changes to Synchronization code
 2. Enhancements to error recovery

```

-----IMPORTANT-----
|
| Diskette images are customer installable. Customers should
| review any "README" files located on the diskette for
| installation information. Contact the IBM PC HelpCenter at
| 800-772 - 2227 if download/installation assistance is needed.
|
| IBM PC Server files are located in Directory 22 on the PC
| Company Bulletin Board Service (BBS) at 1-919-517-0001 or
| tieline 255-0001.
| The files may also be downloaded via the Internet from the
| IBM PC File Library by searching the following Internet URL:
| http: //www.pc.ibm.com/files.html
|

```

SAS KEYWORDS:

PSY2	PSY2ADPT	RAID	SERVER
BIOS	MICRO	CODE	MICROCODE
SUPPORT	D/T8641	FLASH	8641
8640	8642	3516	D/T3516
D/T8642	720	FIRMWARE	320
520			

1.2.435 RAID ARRAY: DATA SCRUBBING, PREVENT RAID REBUILD FAILURES

Record number: H134082

Device: D/T8641
 Model: M
 Tip key: 016
 Date created: 096/09/18
 Date last altered: A97/11/14

Read and understand this document prior to applying any steps/ procedures.

Before installing software or data for the first time on an IBM PC Server RAID system, the following must be performed:

- 1 - UPDATE THE RAID ADAPTER FIRMWARE TO THE FOLLOWING MINIMUM FIRMWARE LEVEL OR HIGHER.

ADAPTER	FIRMWARE	BIOS
A. Micro Channel RAID Adapter FRU p/n06H3059 (Opt. p/n70G9263)	2.21	
B. PCI RAID Adapter FRU p/n06H5078 (Opt. p/n94G2764)	2.43	
C. ServerRAID Adapter FRU p/n06H9334 (Opt. p/n70G8489)	2.23s.6*	2.30.04*
D. ServerRAID Adapter FRU p/n76H6875 (Opt. p/n70G8489)	2.23s.6*	2.30.04*
E. ServerRAID II Adapter FRU p/n76H3587 (Opt. p/n76H3584)	2.30.04*	2.30.04*
F. ServerRAID Onboard Controller	97239*	2.30.04*

* The Firmware/BIOS diskette 2.30 contains the BIOS flash 2.30.04 as well as the Firmware flashes.

NOTE: These Firmware and BIOS versions are to date at the time this document was released. Firmware and BIOS levels are subject to change over time. Always check for the latest BIOS and Firmware utility on the IBM Website URL:

[Http: //www.us.pc.ibm.com/files.html](http://www.us.pc.ibm.com/files.html)

NOTE: Be sure that the latest version of the corresponding RAID utility diskette is used to ensure compatibility with the latest Firmware and BIOS on the corresponding adapter.

- 2 - INITIALIZE RAID LEVEL 0, 1, AND 5 LOGICAL DRIVES (ALL RAID ADAPTERS)
- 3 - SYNCHRONIZE ALL RAID 5 LOGICAL DRIVES AFTER INITIALIZATION (PRIOR TO INSTALLING SOFTWARE AND DATA) ON THE SERVERAID ADAPTER, SERVERAID II ADAPTER, SERVERAID ONBOARD CONTROLLER, OR DATA LOSS MAY OCCUR.

NOTE: Synchronization is done automatically when initializing RAID 5 logical drives on the following adapters:

Micro Channel RAID Adapter FRU p/n92F0335 (Opt. p/n none)
 Micro Channel RAID Adapter FRU p/n06H3059 (Opt. p/n70G9263)
 PCI RAID Adapter FRU p/n06H5078 (Opt. p/n94G2764)

- 4 - DATA SCRUB ALL RAID 5 LOGICAL DRIVES USING THE SYNCHRONIZE UTILITY WEEKLY (AFTER SOFTWARE AND DATA ARE INSTALLED) TO PROVIDE A HIGH LEVEL OF PROTECTION AGAINST DATA LOSS.

NOTE: "Data Scrubbing" of the drives may be accomplished one of two ways on the following adapters:

- Micro Channel RAID Adapter
FRU p/n06H3059 (Opt. p/n70G9263)
- PCI RAID Adapter FRU p/n06H5078 (Opt. p/n94G2764)
- ServerRAID Adapter FRU p/n06H9334 (Opt. p/n70G8489)
- ServerRAID Adapter FRU p/n76H6875 (Opt. p/n70G8489)

- The Raid Utility Diskette may be used to apply "Data Scrubbing" of Raid level 1 and 5 Logical drives using the "Synchronize" utility. This method requires that you "down" the server.

- Netfinity Manager 5.0 or higher may be used to

RAID ARRAY: DATA SCRUBBING, PREVENT RAID REBUILD FAILURES

allow "Data Scrubbing" via Synchronization to be run in the background while the server is up. This will allow users to access data on the Logical drive.

NOTE: See the matrix of utilities vs. adapters vs. Network Operating Systems in the White Paper; "Using IBM RAID Adapters to Avoid Data Loss". The WEB URL to search for this White Paper is:

[Www.us.pc.ibm.com/support.html](http://www.us.pc.ibm.com/support.html)

Click on "Search" at the top of the page and use "White Paper" as Keywords.

NOTE: "Data Scrubbing" runs automatically in the background on the ServeRAID II Adapter. The Firmware of the adapter must be at 2.30.04 or higher to include this feature.

DETAILS:

When a hard drive fails and is replaced in a RAID-1 or RAID-5 array, Data loss may occur if a sector on one of the remaining working drives cannot be read.

RAID-5 logical drives must be synchronized immediately after they are created to ensure that the parity data stripe units (RAID 5)accurately reflect the data.

The IBM ServeRAID Adapter, IBM ServeRAID II Adapter and the ServeRAID Onboard controller requires the user to synchronize the RAID 5 Logical drives after initialization before any data is stored on the drives.

"Data Scrubbing" is recommended as a preventative maintenance procedure to reduce the risk of an array Rebuild failure, or possible data loss if using the ServeRAID adapter. IBM recommends that "Data Scrubbing" be run weekly to provide a high level of protection. The level of protection increases as more frequent "Data Scrubbing" is performed. To reduce the frequency of "Data Scrubbing" to once or twice a month and still maintain a high level of protection, schedule "Data Scrubbing" along with other preventative maintenance procedures like regular tape backups.

Over time a hard disk may accumulate grown defects. This is normal. Defects are corrected on accessed files by the hardfile ECC or RAID subsystem.

If a grown defect is encountered when a file is accessed, the data is reconstructed using either the ECC on the hardfile or the RAID redundant information.

However, if a grown defect appears on an area that is not accessed (the area is free space, or because the file is accessed from cache), then "Data Scrubbing" is required to detect it. Once detected, the hardfile will reallocate the sector. In the case where all drives are online, the ECC on the hardfile or the RAID redundant information is used to reconstruct the lost stripe unit. However, if a drive has a grown defect, and another drive has failed completely, then there is not enough information to reconstruct the data and data loss may occur after the Rebuild.

Predictive Failure Analysis (PFA) has been developed to monitor performance of drives, analyze data from periodic internal measurements, and recommend replacement when specific thresholds are exceeded. The data from periodic internal measurements is collected when actual accesses of the data sectors occur.

"Data Scrubbing" , which forces all data sectors to be read, provides more data to improve the accuracy of PFA.

IBM recommends that customers read the following White Papers to ensure a thorough understanding of RAID and hardfile technologies:

Document	Faxback Document #
- Using IBM RAID Adapters to Avoid Data Loss	11202
- Understanding Hard Disk drive Media Defects.	11205
- Ensuring High Availability of Your Raid Subsystem with: > IBM SCSI-2 Fast/Wide PCI-Bus RAID Adapter.	11204

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> IBM Fast/Wide Streaming
RAID Adapter.

- Ensuring High Availability 11203
Using the PC ServeRAID Adapter.

The IBM Faxback system may be accessed by calling 1-800-IBM-3395

- - - - - OR - - - - -

- The IBM Website at URL: <http://www3.pc.ibm.com/support>
Choose Servers , then choose Hints and Tips.

NOTE: WITH THE SERVERAID ADAPTER, SERVERAID ONBOARD CONTROLLER AND SERVERAID II ADAPTER, SYNCHRONIZATION IS REQUIRED TO ENSURE THE PARITY ACCURATELY REFLECTS THE DATA. IF SYNCHRONIZATION OR DATA SCRUBBING IS PERFORMED ON AN ARRAY THAT WAS NEVER PREVIOUSLY SYNCHRONIZED, THEN ANY MEDIA DEFECTS FOUND THAT REQUIRE RAID RECONSTRUCTION MAY BE REBUILT USING INCORRECT PARITY WHICH MAY RESULT IN DATA LOSS.

NOTE: Use the "IBM PC ServeRAID Synch Verify Update Diskette" ver 1.10 or higher to determine the status of any RAID arrays on the ServeRAID adapter ONLY. Be sure to read the README file prior to executing any programs on the diskette. The diskette can be located at and downloaded from the IBM Website at URL:

[Http://www.us.pc.ibm.com/files.html](http://www.us.pc.ibm.com/files.html)

SAS KEYWORDS:

PSY2	PSY2ADPT	D/T8640	D/T8642
320	06H5078	06H3059	92F0335
06H9334	DDD	DEFUNCT	520
720	SERVER	500	SYNCHRONIZE
RAID	320	SCRUB	D/T8639
325	330	704	D/T8650
DATA SCRUBBING	REBUILD FAILS	DATA LOSS	HARDFILE
PARITY	D/T8639	D/T8640	D/T8641
D/T8642	D/T8650	D/T8651	RAID BIOS
RAID FIRMWARE	UNCLASSIFIED	NETFINITY 7000	HEALTH

1.2.436 RAID ARRAY FIXED DISK DRIVE REPLACEMENT PROCESS

Record number: H13697

Device: D/T8641
 Model: M
 Tip key: 006
 Date created: 095/08/31
 Date last altered: A96/04/05

The following procedure was developed to assist in implementing fixed disk replacement under 8641 ECA002, which provides for the replacement of specific 2.25 GB fixed disk drives. (Refer to RETAIN record # H13646 for important additional information.) However, this process may prove to be beneficial at any time multiple fixed disks are being replaced in a RAID Array.

VERY IMPORTANT NOTES:

NOTE 1:

The most important points of this procedure are:

- a. The Rebuild Procedure is only for RAID 1 and RAID 5 configurations. For RAID 0 configurations, all data must be backed up to tape. Then, after replacing the drives, a restore from tape will be required.
- b. Keeping track of which drives are located in which bays and,
- c. To have a backup copy of the customer's RAID configuration.

NOTE 2:

The drives may have been swapped out quite a bit. In the event of drive failure, inspect the connectors for damage.

NOTE 3:

If the fixed disks are being replaced due to suspected STICTION problems, the MAIN IDEA IS NOT TO POWER DOWN THE SERVER. If the IBM F/W Streaming RAID Adapter Option Diskette is at version 2.3 it is STRONGLY RECOMMENDED that version 2.23. be obtained and used during this procedure. Version 2.3 TURNS OFF ALL THE FIXED DISKS in the Array during the rebuild process. This will expose the remaining drives to possible stiction. Reinstall version 2.3 after all drives have been replaced.

"REBOOT," in this procedure refers to soft boots (CTRL-ALT-DEL).

1. Make a Chart of Bays 1 through 6 and write in each bay the original disk drive Serial Number and the New disk drive serial number for that particular bay.
2. While still installed in the system, place stickers on the drives indicating what bays they are in. Do the same to the new drives once they are installed.
3. Soft Boot the IBM F/W Streaming RAID Adapter Option Diskette Version 2.23. (DO NOT USE V2.3. See important note above). Select "Initialize/Synchronize Array." Select Synchronize Logical Drive. Press the spacebar to select each logical drive. Once all logical drives are highlighted, Press enter to begin synchronization.
4. After the synchronization completes, Return to the Main Menu. Select "Advanced Options." Then, select "Backup Configuration to Diskette" from this menu. Insert a blank diskette into drive A: and put in a filename for this backup. The default filename is "config." If you use the same backup diskette for more than one system, be sure to give each system a different filename and keep track of the specific filenames.
5. Exit out of Advanced Options. Select "View Configuration" from the "Main Menu." Identify which bay contains the Hot Spare drive, if applicable.
6. Pull the Hot Spare drive out of its bay. Exit out of "View Configuration" and the "Main Menu."
7. Reboot, Press Y to update the configuration with the HSP bay as "DDD".
8. You are now ready to pull out the first drive to be replaced. The first drive to replace should be the drive SUSPECTED of having the highest probability of stiction. If there is not a SUSPECT drive, then choose an order you would like to replace them in, such as Bays 1, 2, 3, 4, etc. Just remember what order that is. Checking off the bays on your chart after they have completed is very helpful in keeping track.

NOTE:

Remember, the HOT SPARE drive is pulled out first and is left out during replacement/rebuilding of the other drives. It then becomes the last drive replaced and its status turns to HSP. The HOT Spare doesn't require rebuilding (it's a spare)

In order you have chosen, follow steps 8 and 9 for each drive.

9. Pull out Drive and reboot the RAID Support Diskette. "Y" to update configuration as DDD. Reboot. Install new drive into the bay. Select "Rebuild Drive" off the "Main Menu." Then, select "Replace Drive." Highlight correct DDD Drive in the bay you are replacing. The system will start the drive. After starting successfully, the drive status will change from DDD to OFL.
10. Select "Rebuild Drive" on the Rebuild Menu off the Main Menu Highlight correct OFL Drive in the bay you are rebuilding. System will rebuild the drive from 0 to 100%. After it has completed successfully, it will change the drive from OFL to ONL.

IF SOFT ERRORS OCCUR, DO THE FOLLOWING:

1. Before rebooting, select Drive information to determine which drive had Soft Errors. Take note of the drive that had Soft errors.

Note: Soft errors initialize to zero upon reboot.
2. The Quantum drive that failed to rebuild will display OFL status Replace this Quantum with the starfire drive that was originally in this bay.
3. Restore the configuration that was backed up in Step 4 by selecting Advanced Functions on Main Menu. Then, choose Restore Configuration from Diskette. Enter the filename of the saved configuration for this server.
4. Once the RAID configuration has completed being restored, all drives should indicate ONL. At this time, remove the drive that was noted as causing Soft Errors.
5. Reboot to RAID utility. Say "Yes" to update the RAID configuration with the Empty Bay as DDD. When the update completes, the RAID utility will prompt you to Reboot the system to the RAID utility.
6. Install the Quantum in the DDD bay and rebuild it. When this drive completes rebuilding, your Soft Error drive will be replaced. You are now past the Soft Errors and can begin replacing the rest following the procedures.

IF FATAL ERROR OCCURS DO THE FOLLOWING:

Replace only the original drive back into the system that has not been rebuilt successfully yet. Then, restore the configuration from diskette by rebooting to Option Diskette. Select "Restore Configuration" from diskette on the Advanced Options Menu off the Main Menu. Put the diskette with the backup configuration into the diskette drive and type in the filename for that particular system. Then, proceed replacing and rebuilding drives wherever you left off.

If during the restoring from diskette an, "ADAPTER IS NOT RESPONDING TO CONTROLLER COMMANDS" message appears, do the following:

Reboot and Restore the configuration from the backup RAID Support Diskette again until it comes back and says restoration completed successfully.

11. Once all drives are replaced and rebuilt successfully, power off the server and Cold Boot the system. The system should now be ready to return to the customer.

SAS KEYWORDS:

PSY2	RAID	SERVER	D/T9595
D/T8641	8641	9595A	500
320	DASD	PSY2FDSK	PSY2ADPT
ECA	P/N06H7360	06H7360	STICKTION
FAILS	TO	COME	READY
D/T3516	SYNCHRONIZE	INITIALIZE	8640
D/T8640	720	8642	D/T8642

D/T8641

1.2.437 RAID BIOS/DEVICE DRIVER INSTALLATION/VERIFICATION PROCEDURES

Record number: H127775

Device: D/T9595
 Model: M
 Tip key: 024
 Date created: 095/05/23
 Date last altered: A95/05/25

BIOS AND DEVICE DRIVER VERIFICATION AND INSTALLATION PROCEDURES
 FOR RAID SYSTEMS (SERVERS 95 & 500) RUNNING OS/2.

In order to update the system firmware and device drivers the following diskettes are required to provide complete support for 9595 and 8641 RAID systems:

Diskettes	Current Versions
1. Reference Diskette	V1.33
2. Diagnostic Diskette	V2.32
3. Post BIOS Diskette (Flash)	5
4. Raid Controller Support Diskette	V2.22
5. Raid Controller (Flash) Bios	V1.62 (Bios 1.05)
6. IBM SCSI-2 Fast and Wide Adapter Option	

NOTE: The Diskette versions above are current as this tip is released. Servicers should check for later versions.

NOTE: Prior to flashing any of the above BIOS, the DDINSTAL Program is used to install each software driver. These steps must be done sequentially.

1. VERIFICATION OF DEVICE DRIVERS

_ From the OS2 C: prompt:
 _ Type CD OS2.
 _ Type DIR IBM*.ADD (To display RAID and SCSI Drivers).

FILENAME	OLD SIZE, DATE & TIME	NEW SIZE, DATE & TIME
IBM2SCSI.ADD	25261 1/29/94 1: 17: 08a	33201 9/16/94 4: 45: 38p
IBMRAID.ADD	15488 5/31/93 4: 46: 00p	15058 5/12/94 2: 58: 04p

NOTE: IF any of the above files have OLD dates, you will need to run the DDINSTAL program for each driver, one at a time.

2. UPDATE PROCEDURE FOR THE IBM SCSI-2 FAST/WIDE ADAPTER DEVICE DRIVER (IBM2SCSI.ADD).

_ C:
 _ Type DDINSTAL.
 _ Insert POST (FLASH) BIOS diskette in Drive A.
 _ Accept the default drives and click on INSTALL.
 _ In the popup window, highlight IBMPS2 SCSI-2 FAST/WIDE Adapter Support installation.
 _ Installation complete; select exit.
 _ Perform operating system shutdown procedure and reboot the system to activate the changes.

3. UPDATE PROCEDURE FOR RAID ARRAY ADAPTER DEVICE DRIVER

_ C:
 _ Type DDINSTAL.
 _ Insert IBM RAID CONTROLLER Ver 2.2X Diskette in Drive A.
 _ Accept the default drives and click on INSTALL.
 _ In the popup window, highlight IBM RAID CONTROLLER ADD INSTALLATION.
 _ Installation complete; select exit.
 _ Perform operating system shutdown procedure and reboot the system to activate the changes.

4. FOR MACHINES WITH DOWN LEVEL POST (FLASH) BIOS

(ex: sure path 02) or (ex: Bios 01).
 _ Boot the system with the POST BIOS DISKETTE after DDINSTAL is completed and follow the screen prompts.

NOTE: The README files will instruct you to perform the Device driver installation first.

NOTE: If a 174 error occurs, update using the Reference Diskette procedure in step 5.

5. UPDATE DOWN LEVEL REFERENCE DISKETTE

_ PS/2 9595 v1.33 or greater.
 _ Copy any options onto the Back/Up Reference Diskette.
 _ Update the system programs.

RAID BIOS/DEVICE DRIVER INSTALLATION/VERIFICATION PROCEDURES

- _ Set and view scsi configuration.
- _ F10 to save.
- _ Manually set the system configuration data.
- _ F10 to save.
- _ Exit and reboot the system.

NOTE: Do not answer 'YES' to Automatically Configure because this will change any configuration data back to their defaults.

6. RAID CONTROLLER FIRMWARE AND BIOS UPDATE

- _ Boot the RAID Controller Support Diskette.
- _ Follow the screen prompts to update both firmware and BIOS.
- _ When complete remove the diskette and reboot the system

NOTE: The readme files will instruct you to perform the DDINSTALL FIRST.

MAKE SURE THE FOLLOWING BACKUPS HAVE BEEN COMPLETED.

1. Make a backup copy of the Reference Diskette with options installed.
2. Backup the hardware configuration onto the Reference Diskette
3. Backup the Raid configuration onto the RAID Support Diskette.

SAS KEYWORDS:

PSY2	PSY2PROG	PSY2ERR	RAID
D/T8641	9595	FLASH	

1.2.438 RAID OPTIONS JUMPERED INCORRECTLY

Record number: H123382

Device: D/T9595
 Model: M
 Tip key: 010
 Date created: 094/02/01
 Date last altered: A95/06/07

Some fixed disk options for the 9595 RAID system, were shipped with the SCSI bus termination, address, and auto-start jumpers still installed on the drive. When added to a system, the option should not have these jumpers installed (enabled).

The excess terminators will cause signal degradation and may result in highly intermittent and difficult to diagnose system configuration errors or operating system failures.

The 9595A RAID ARRAY system is manufactured with a 3 fixed disk configuration. A total of 4 additional fixed disk options may be installed. NO ADDRESS OR TERMINATION JUMPERS SHOULD BE INSTALLED ON ANY OF THE ADDITIONAL OPTION FIXED DISKS. These options will be automatically addressed and correctly terminated by the "hot plug rack" which is part of the basic 9595A RAID ARRAY system.

The auto-start jumper should not be installed because it allows the drive motor to spin-up immediately with system power-on. The jumper allows a choice of either the motor starting immediately with system power-on, or to be sequence started one at a time by POST. The total starting surge current of all the fixed disks starting simultaneously may cause the system power supply to "self-protect"* by shutting down.

* Note: The 9595A power supply, and other PS/2 system power supplies are designed to "self-protect" if current surges beyond certain limits are exceeded. As options are added, the power supply may be unable to provide sufficient starting surge current for all drives during initial power-on. In this case, the power supply "self-protect" will activate, resulting in the system shut down. This may be corrected by removing the Auto-Start jumper from all the option drives. The "self-protect" action by the power supply will not cause damage.

SAS KEYWORDS:

PSY2	PSY2FDSK	PSY2ERR	D/T9595A
SERVER	95	PSY2POWR	9595

RAPID RESUME FAILS WITH SCSI DRIVE AS PRIMARY

1.2.439 RAPID RESUME FAILS WITH SCSI DRIVE AS PRIMARY

Record number: H131944

Device: D/T6885
 Model: M
 Tip key: 004
 Date created: 095/12/12
 Date last altered: A95/12/12

IBM PC 300/700 Series and PS/ValuePoint Performance Series systems do not support the Rapid Resume function from a SCSI device.

Rapid Resume, which is a function that allows the system to be powered off/on and return to the same point in an application is only supported from the IDE hardfile configured as the "master" drive.

The Rapid Resume feature and the limitation of functioning with the IDE hardfile is a design characteristic of the PC 300/700 Series and PS/ValuePoint Performance Series. There are no plans to add support for Rapid Resume from a SCSI hardfile at this time.

SAS KEYWORDS:

PSY2	PSVP	PSY2FDSK	PSVPFDSK
PSY2ADPT	PSVPADPT	PSVPOEM	PSY2OEM
D/T6571	D/T6573	D/T6581	D/T6583
D/T6575	D/T6585	D/T6576	D/T6586
D/T6875	D/T6885	D/T6876	D/T6886
D/T68XX	D/T65XX	IBMPC	PC330
PC350	PC730	PC750	D/T6472
D/T6482	D/T6484	D/T6492	D/T6494
IBMPC			

REFERENCE DISKETTE IMAGES AVAILABLE ON PCPROD

1.2.440 REFERENCE DISKETTE IMAGES AVAILABLE ON PCPROD

Record number: H107628

Device: D/T8550
Model: M
Tip key: 132
Date created: 092/08/05
Date last altered: A94/08/09

Reference diskette images are also available on a VM depository called PCPROD. This enables servicers to down load the reference diskette images directly to their own three and one half inch diskettes.

SAS KEYWORDS:

PSY2	PSY2DOC	PSY2DIAG	D/T8525
D/T8530	D/T8535	D/T8540	D/T8543
D/T8545	D/T8550	D/T8551	D/T9585
D/T8554	D/T8555	D/T8556	D/T8557
D/T8560	D/T8565	D/T8570	D/T8573
D/T8580	D/T8590	D/T8595	D/T9577
D/T9556	D/T9557	D/T9595	

1.2.441 REMOTE IPL FAILS ON 55LS WITH FIXED DISK

Record number: H06695

Device: D/T8555
Model: M
Tip key: 015
Date created: 090/10/09
Date last altered: A90/10/09

A 55LS (8555 MODEL LT0 OR LE0) EQUIPPED WITH A FIXED DISK DRIVE WILL NOT PERFORM A REMOTE IPL UNLESS THE "RIPL" PROGRAM HAS BEEN COPIED TO THE DISK. BY DEFAULT, THE SYSTEM WILL ATTEMPT TO READ A DISKETTE OR FIXED DISK DRIVE BEFORE PERFORMING A REMOTE IPL. THE "RIPL" PROGRAM, LOADED TO THE FIXED DISK FROM THE REFERENCE DISKETTE (VERSION 1.05 OR HIGHER), ALLOWS THE SYSTEM TO BY-PASS THE FIXED DISK AND PERFORM IPL FROM THE LAN.

IF THERE IS A DISKETTE DRIVE INSTALLED, THE USER CAN COPY THE RIPL PROGRAM FROM THE 8555 REFERENCE DISKETTE.

IF NO DISKETTE DRIVE IS INSTALLED, THE FIXED DISK BOOT PROCEDURE CAN BE CIRCUMVENTED BY DOING THE FOLLOWING:

- INSTALL A DISKETTE DRIVE AND LOAD THE RIPL PROGRAM FROM THE REFERENCE DISKETTE - OR -
- HAVE THE LAN ADMINISTRATOR SET UP A DISKETTE IMAGE WHICH HAS DOS AND THE RIPL PROGRAM. FORCE A CONFIGURATION ERROR (FOR EXAMPLE, MOVE AN ADAPTER CARD TO A DIFFERENT SLOT) WHICH WILL FORCE A REMOTE IPL. THE RIPL PROGRAM CAN THEN BE RUN.

NOTE:

THE RPLBOOT.COM UTILITY PROGRAM IS FOR USE ON IBM COMPUTERS SHIPPED WITH A FIXED DISK INSTALLED. DO NOT ATTEMPT TO USE THE RPLBOOT.COM UTILITY ON A MEDIALESS WORKSTATION, SUCH AS A MODEL 55LS, THAT HAS A FIXED DISK DRIVE OPTION INSTALLED.

SAS KEYWORDS:

PSY2	PSY2COMM	PSY2PROG	PSY2FDSK
8555SYSCOMM	8555SYSPROG	8555SYSFDSK	

REMOTE SCSI ID CABLE MAY BE KEYED INCORRECTLY

1.2.442 REMOTE SCSI ID CABLE MAY BE KEYED INCORRECTLY

Record number: H094403

Device: D/T3510
 Model: M
 Tip key: 003
 Date created: 091/09/06
 Date last altered: A93/09/27

A LIMITED NUMBER OF SCSI REMOTE ADDRESS CABLES SHIPPED WITH 3510 MODEL 0V0 MAY BE KEYED INCORRECTLY.

THIS CABLE MAY CAUSE CONFIGURATION FAILURES OF THE 3510, BECAUSE THE SCSI IDENTIFICATION WILL NOT BE RECOGNIZED.

THE DEFECTIVE CABLES MAY BE RECOGNIZED BY THE INITIALS "C.A.I." OR CAROLINA AND (MANUFACTURERS PART NUMBER) P/N92F1376, ON A LABEL ATTACHED TO THE CABLE.

CABLES WITHOUT AN ATTACHED LABEL, OR WITH MARKINGS OTHER THAN THOSE REFERENCED ABOVE ARE NOT AFFECTED.

THE FOLLOWING TEMPORARY WORK-AROUND MAY BE USED UNTIL THE FRU CABLE ARRIVES:

REMOVE THE SCSI ID CABLE FROM THE DRIVE AND SET THE SCSI ID WITH THE SCSI ID JUMPERS PROVIDED. THE SWITCH WILL BE NON-FUNCTIONAL, HOWEVER THE CUSTOMER WILL BE ABLE TO USE THEIR EXTERNAL DEVICE.

NOTE:

THERE ARE THREE DIFFERENT REMOTE SCSI ID CABLES.

- FRU P/N64F4107 CABLE AND SWITCH ASSEMBLY
USED ON SCSI FILES & 1GB HARDFILE (2 IN HIGH)(FRU P/N92F0089)
- FRU P/N92F0086 CABLE
USED ON THE CD-ROM DRIVE (FRU P/N61G1901) OR (FRU P/N92F0084)
- FRU P/N61G2390 CABLE
USED FOR THE 1GB HARDFILE (1 INCH HIGH) (FRU P/N92F0428)
AND THE 2 GIGABYTE HARDFILE (FRU P/N92F0440)

SAS KEYWORDS:

PSY2	PSY2FDSK	PSY2ADPT	D/T8550
D/T8555	D/T8560	D/T8565	D/T8570
D/T8580	D/T8590	D/T8595	D/T8557
CD-ROM	CD ROM	2 GB	1 GB
2GB	1GB	GIG	

1.2.443 REPAIR ID TAG COVERS SERIAL NUMBER PREFIX

Record number: H092307

Device: D/T8513
Model: M
Tip key: 005
Date created: 093/03/26
Date last altered: A95/03/09

Displays that have been exchanged by IBM will have a Repair Identification Tag (RID Tag) placed over the original serial number label. This tag usually covers the 2-digit serial number prefix (plant-of-manufacture code).

On the 8513, identification of a serial number prefix can be determined from the UL label on the rear of the display.

- Displays labeled "Manufactured BY IBM" will have a serial number prefix of "23"
- Displays labeled "Manufactured FOR IBM" will have a serial number prefix of "72"

SAS KEYWORDS:

PSY2 PSY2DISP RID RIDTAG
8513

REPORTING PS/2 MACHINE SERIAL NUMBERS

1.2.444 REPORTING PS/2 MACHINE SERIAL NUMBERS

Record number: H035558

Device: D/T8550
 Model: M
 Tip key: 081
 Date created: 091/06/13
 Date last altered: A91/06/17

THE FOLLOWING IS AN EXAMPLE OF A "CURRENTLY" MANUFACTURED PERSONAL SYSTEM/2 MACHINE SERIAL NUMBER LABEL:

TYPE 8595-0JD
 S/N 23-FPMAZ

IN THIS EXAMPLE, REPORT THE MACHINE SERIAL NUMBER AS "23FPMAZ" WITHOUT USING A HYPHEN OR SPACE. THE MACHINE SERIAL NUMBER INCORRECTLY REPORTED AS "FPMAZ" CREATES AN INCIDENT/INVENTORY MISMATCH ("00FPMAZ") REQUIRING CORRECTIVE ADMINISTRATIVE ACTION. WHEN ONLY FIVE ALPHA/NUMERIC CHARACTERS FOLLOW THE PLANT OF MANUFACTURE CODE, REPORT THE PLANT OF MANUFACTURE CODE AS THE FIRST TWO DIGITS OF THE MACHINE SERIAL NUMBER.

THE FOLLOWING ARE EXAMPLES OF "PREVIOUSLY" MANUFACTURED PERSONAL SYSTEM/2 MACHINE SERIAL NUMBER LABELS:

TYPE 8550-021
 S/N 72-8209955

IN THIS EXAMPLE, REPORT THE MACHINE SERIAL NUMBER AS "8209955" WITHOUT USING A HYPHEN OR SPACE.

TYPE 8514
 S/N 1039114

IN THIS EXAMPLE, REPORT THE MACHINE SERIAL NUMBER AS "1039114" WITHOUT USING A HYPHEN OR SPACE.

SAS KEYWORDS:

PSY2	PSY2MISC	8525SYSMISC	8530SYSMISC
8535SYSMISC	8540SYSMISC	8543SYSMISC	8550SYSMISC
8555SYSMISC	8557SYSMISC	8560SYSMISC	8565SYSMISC
8570SYSMISC	8573SYSMISC	8580SYSMISC	8590SYSMISC
8595SYSMISC	D/T8525	D/T8530	D/T8535
D/T8540	D/T8543	D/T8550	D/T8555
D/T8557	D/T8560	D/T8565	D/T8570
D/T8573	D/T8580	D/T8590	D/T8595

1.2.445 REVISED PS/2 SIM AND PC SIM MANUALS

Record number: H031685

Device: D/T8550
Model: M
Tip key: 035
Date created: 088/11/30
Date last altered: A95/09/22

THIS TIP CONTAINS GENERAL INFORMATION, CORRECTIONS AND UPDATES TO THE PS/2 SERVICE INFORMATION MANUAL (SBOF-2480) AND THE PC SERVICE INFORMATION MANUAL (SBOF-2481). REFER TO THIS TIP OFTEN FOR CURRENT DATA.

IMPORTANT!! A HIGH NUMBER SBOF-2480 SLSS SUBSCRIPTIONS WERE +
UNEXPECTEDLY CANCELLED AND REQUIRED SERVICE DOCUMENTATION AND +
DIAGNOSTICS ARE NOT BEING RECEIVED BY TSS CSRS. YOU MUST +
RESUBSCRIBE TO THIS PUBLICATION TO RECEIVE AUTOMATIC SHIPMENTS +
DIRECTLY TO A CURRENT ADDRESS (EITHER HOME OR OFFICE). YOUR +
SUBSCRIPTION PROFILE MUST INCLUDE DIVISION 12 WITH AN EXTERNAL +
CUSTOMER NUMBER (DIV 60 AND THE INTERNAL S/N NO LONGER APPLY). +
YOU WILL BE BILLED AT THE EXTERNAL COST MINUS 50%. YOU MUST +
HAVE A VALID CMR NUMBER FOR BILLING (CONTACT YOUR REGIONAL +
ADMINISTRATOR). ORDER THROUGH RALEIGH PUBLICATIONS CUSTOMER +
SUPPORT AT 1 - 800-879-2755. +

THE DOCUMENTATION CONTENTS OF THE PS/2 SIM HAS BEEN REVISED TO COMBINE SERVICE AND REFERENCE PAMPHLETS INTO COMPACT AND PORTABLE MANUALS. THIS STRATEGY IS DESIGNED TO MAINTAIN A CONSOLIDATED LIBRARY OF IMPROVED DOCUMENTATION FOR PC & PS/2 PRODUCTS, COMMERCIAL DESKTOP, SERVERS, MOBILE SYSTEMS, DISPLAYS, EDUCATIONAL COMPUTERS AND POWERPC/RISC6000.

THE NEW PS/2 SIM CONTENTS INCLUDES THE PS/2 HARDWARE MAINTENANCE MANUAL (PS/2 HMM) FOR THE MODELS 25 THROUGH 95; THE PS/2 DISPLAY HARDWARE MAINTENANCE MANUAL, VOL. 1, THE IBM MONITOR HARDWARE MAINTENANCE MANUAL (2 VOLS.), THE PS/VALUEPOINT HMM, THE PC 300/700 SERIES HMM, THE IBM EDUCATIONAL COMPUTERS HMM, AND THE POWERPC SERIES 440 HMM. THE CONSOLIDATED MOBILE SYSTEMS HMM INCLUDES TWO VOLUMES, VOL. 1 FOR LAPTOP/NOTEBOOK/PORTABLE AND VOL. 2 FOR THINKPAD COMPUTERS. SUPPLEMENTS TO UPDATE EACH HMM WITH NEW SERVICE INFORMATION WILL SHIP AUTOMATICALLY THROUGH SLSS.

REFERENCE/OPTION DISKETTES MUST CONTINUE TO BE MAINTAINED. ALSO, CERTAIN OPTION HMLS MUST BE MAINTAINED SINCE THEY CONTAIN BOTH DOCUMENTATION AND DISKETTES.

IMPORTANT: REFER TO RETAIN TDR #H006568 FOR ALL DOCUMENTATION WHICH HAS BEEN REMOVED FROM THE ORIGINAL PS/2 SIM CONTENTS BASED ON HMM CONSOLIDATION.

NOTE:
THE PS/2 SIM CONTINUES TO BE AVAILABLE FOR ORDER THROUGH SLSS UNDER FORM NUMBER SBOF-2480. CSR'S WHO SERVICE PC COMPANY PRODUCTS ARE ENCOURAGED TO SUBSCRIBE OR RESUBSCRIBE TO THIS PUBLICATION VIA SLSS. THIS GUARANTEES AN AUTOSHIPMENT OF NEW DOCUMENTATION AND DISKETTES TO EACH SUBSCRIBER. CONTACT PUBLICATIONS CUSTOMER SUPPORT AT 1-800-879-2755 FOR ASSISTANCE.

THE PC SIM WILL CONTINUE TO BE PUBLISHED IN ITS PRESENT FORMAT. ANY UPDATES WILL BE AUTOSHIPPED TO CURRENT PC SIM SUBSCRIBERS. NEW ORDERS CAN BE PLACED VIA SLSS USING FORM NUMBER SBOF-2481.

PUBLICATIONS SHOULD BE RECEIVED WITHIN 7-10 WORK DAYS. BACKORDERED DOCUMENTATION WILL BE AUTOSHIPPED WHEN AVAILABLE.

NOTE: FORMS MARKED WITH A PLUS (+) ARE NEW TO THE PACKAGE.

THE FOLLOWING COMPONENTS ARE INCLUDED IN THE PS/2 SIM MANUAL WHEN SBOF-2480 IS ORDERED, OR THESE COMPONENTS MAY BE ORDERED SEPARATELY BY THE APPROPRIATE FORM NUMBER:

DESCRIPTION	FORM NUMBER
PS/2 SIM BILL OF FORMS	SBOF2480-00
PS/2 HARDWARE MAINTENANCE MANUAL (PS/2 HMM)	S52G9971-02
OPTIONS BY IBM (OBI) PARTS SUPPLEMENT	S52H3677-00+
PC SERVER 320 (TYPE 8640) MODELS MXO, MXT, MYO,	

MYT, AND MYR COMPUTERS HMM SUPPLEMENT	S30H2440-00+
PC SERVER 500 SYSTEM/390 (TYPE 8641) AND S/390 SERVER OPTION HMM SUPPLEMENT	S30H2413-00+
PC SERVER 320 (TYPE 8640) COMPUTERS HMM SUPPLEMENT	S30H1660-00
PC SERVER 320 (TYPE 8640) MODELS OYO,OYT,LYO,LYT COMPUTERS HMM SUPPLEMENT	S30H2452-00
OPTIONS BY IBM HMM SUPPLEMENTS FOR MOBILE HMMS, PS/2 HMM, PC HMM AND PS/VALUEPOINT HMM	S19H1277-00
OPTIONS BY IBM AND 24/48GB TAPE AUTOLOADER SUPPLEMENTS FOR PS/2 HMM, MOBILE HMMS, PC HMM, AND PS/VALUEPOINT HMM	S30H1714-00
OPTIONS BY IBM HMM SUPPLEMENTS FOR MOBILE HMMS, PS/2 HMM, COMMERCIAL DESKTOP HMM, AND PS/VALUEPOINT HMM	S83G8275-00
OPTIONS BY IBM PARTS SUPPLEMENTS FOR PS/2 HMM, MOBILE HMM, VOL. 1/2, PS/VALUEPOINT	S83G9902-00
PS/2 HMM SUPPLEMENT - 3.5 IN REWRITABLE OPT. DR.	S42G0366-00
PC 300/700 SERIES HMM (TYPE 65XX/68XX)	S83G7789-01
PC HMM SUPPLEMENT (TYPE 6876/6886)	S83G8298-00
PPS POWER SERIES HMM	S30H1703-00
PC POWER SERIES 440 (6015) & RISC/6000 (7020)	S83G7698-00
PS/2 DISPLAY HARDWARE MAINTENANCE MANUAL, VOL. 1	SA380053-00
PS/2 DISPLAY HMM TNL	SN680432-00
IBM MONITOR HARDWARE MAINTENANCE MANUAL, VOL. 1	S68G2484-00
IBM MONITOR HARDWARE MAINTENANCE MANUAL, VOL. 1	S71G4197-02
IBM MONITOR HMM SUPPLEMENT - 6321 REPAIR	S82G3770-01
IBM MONITOR HMM SUPPLEMENT - 6327 REPAIR	S19H1083-00
IBM MONITOR HMM SUPPLEMENT - 6327 REPAIR	S82G3771-00
IBM MONITOR HMM SUPPLEMENT - 9521 REPAIR	S82G3773-00
IBM MONITOR HMM SUPPLEMENT - 6324/25 9524/25 REPAIR	S19H1238-00
IBM MONITOR HMM SUPPLEMENT - 9524/9525 REPAIR	S82G5414-00
IBM MONITOR HMM SUPPLEMENT - 9527 REPAIR	S82G5409-00
IBM MONITOR HMM SUPPLEMENT - 9527 SPECIFIC REPAIR	S83G7827-01
IBM MOBILE SYSTEMS HMM (LAP/NOTE/PORT) VOL.1	S82G1501-01
IBM MOBILE SYSTEMS HMM (THINKPAD PRODUCTS), VOL.2	S82G1502-03
IBM THINKPAD HMM SUPPLEMENT...	
**Model 355x (IBM 2619) / Model 360x (IBM 2620)	S30H1644-00
IBM THINKPAD DOCK II HMM	S83G8284-00
IBM MOBILE COMMUNICATIONS MODULE HMM	S71G2573-00
PS/VALUEPOINT (M/T 6381/6382/6384/6387) HMM	S61G1423-01
PS/VALUEPOINT COLOR DESKTOP PUBLISHING KIT HMM SUPP	S19H1278-00
IBM VALUEPOINT HMM SUPPLEMENT (6472/82/84/92/94)	S83G7790-00
PS/VALUEPOINT 6387 HMM SUPPLEMENT/DSKT.	S71G1875-00
IBM HIGH SPEED INTERNAL & PCMCIA DATA/FAX MODEMS	S61G1556-00
IBM HMM EDUCATIONAL COMPUTERS	S5445205-04

HARDWARE MAINTENANCE REFERENCE:	
PS/2 MODEL 76, 77 AND M77 IML Update	S53G1836-00
PS/2 XGA DISPLAY ADAPTER/A HML SUPPLEMENT	S15F2244-00
PS/2 XGA-2 DISPLAY ADAPTER/A HML SUPPLEMENT	S41G3324-00
PS/2 REWRITABLE OPTICAL DRIVE HML	S91F9234-00
ALIGNMENT PROCEDURES FOR PS/2 8517 COLOR DISPLAY ATTACHED TO RS6000 7011/220	S42G0473-00
ISDN INTERFACE COPROCESSOR HML	SK2T0728-00
ISDN INTERFACE COPROCESSOR/2 MODEL 2	SK2T0721-00
PS/2 CD-ROM-II DRIVE HML SUPPLEMENT	S10G6461-01
PS/2 DATA/FAX MODEM HML SUPPLEMENT	S04G5110-00

HARDWARE MAINTENANCE SERVICE (HMS)	
TOUCHSELECT HMS (OPTION & STARTER DISKETTE)	SA337001-01

DIAGNOSTIC DISKETTES:	
IBM EDUCATIONAL COMPUTER DIAGS(9603/4/5/6/8/13)V2.2	S5445205-04
IBM EDUCATIONAL COMPUTER DIAGS (9614/9615), V.3.00	S5445205-04
IBM EDUCATIONAL COMPUTER DIAGS. (M/T 7386), V.1.10	S5445205-04
PS/2 E TYPE 9533 ADVANCED DIAGNOSTICS, V.1.00	S71G2254-00
IBM PC 300/700 SERIES DIAG. DSKT., V.5.28	S83G7787-01
IBM PC 700 SERIES 6876/6886 REF/DIAG DSKTS., V.1.00	S83G7788-00
IBM DIAGNOSTIC DISKETTE PACKAGE (25SX/35/40 & VP)	S71G2240-00
PS/VP ADV.DIAGS. (TYPE 1) M/T 6384, V.1.02 -----	S71G4162-00
*(NOTE: REPLACES DEFECTIVE VP DISKT. V.1.01 INCLUDED	
*IN S71G2240-00 PACKAGE (MFG.P/N 71G1937) AND VP	
*6384 ADV.DIAG. V.1.00 (MFG.P/N 42G2497)*****	
PS/VP 425SX/433SX/433DX/466DX2 DIAGS (TYPE 2),V1.20	
*(REPLACES V1.00 (MFG. P/N61G1282) DIAGS. AND	S82G1495-00
*V1.10 (MFG. P/N71G1982)*****	
PS/VP 6381 /Si DIAGNOSTICS (TYPE 3), V.1.02	S71G4226-01
PS/VP 6384 /P60 DIAGNOSTICS (TYPE 4), V.1.00	S82G1489-00
IBM VALUEPOINT DIAGNOSTICS DSKT. (TYPE 5), V.1.00	S83G7720-00
PS/2 MODEL 25 ADVANCED DIAGNOSTICS, VER. 1.00	S84F8539-00
PS/2 MODEL 25 286 ADVANCED DIAGNOSTICS, VER. 1.00	S84F8538-00
PS/2 MODEL 25 SX/35/40 ADV. DIAGS., VER. 1.30	S71G2240-00
PS/2 MODEL 25 SX ETHERNET NETWORK ADAPTER FEATURE DISKETTE, VER. 1.00	S10G6612-00

PS/2 MODEL 30 ADVANCED DIAGNOSTICS, VER. 1.05	S84F8537-00
PS/2 MODEL 30 286 ADVANCED DIAGNOSTICS, VER. 1.02	S84F8536-00
PS/2 ADAPTER FOR ETHERNET TWISTED-PAIR NETWORKS FEATURE DISKETTE, VER. 1.00	S10G3306-00
PS/2 MODEL L40SX REF. DSKT., VER. 1.02	S10G5991-00
PS/NOTE MODEL N45SL ADV. DIAGS., V.1.00	S42G0495-00
PS/2 MODEL N51 SX/SLC REFERENCE DISKETTE, V. 1.20	S04G5117-02
PS/2 MODEL N51 SX/SLC DIAGNOSTIC DISKETTE, V. 1.20	S04G5117-02
PS/2 MODEL CL57 SX REFERENCE DISKETTE, V. 1.00	S10G4422-02
PS/2 MODELS 50/50Z/55 SYS.BD.UPGRADE DSKT.V.1.01	S71G4104-00
PS/2 MODEL 50/50Z/60 PROC. UPGRADE OPT.DSKT.,V.1.00	S82G3897-00
PS/2 MODELS 60/65/80 486 SYS.BD.UPGRADE DSKT.V.1.00	S82G3899-00
PS/2 MODEL 50/60 REF. DSKT., VER. 1.06	SA380021-02
PS/2 53 486SLC2 REFERENCE DISKETTE, V.1.00	S82G3888-00
PS.2 53 486SLC2 DIAGNOSTIC DISKETTE, V.1.00	S82G3889-00
PS/2 MODEL 55/65 REF. DSKT., VER. 1.05	SA380061-02
PS/2 MODEL 8556/57 REF. DSKT., VER. 2.10	S42G3297-02
PS/2 MODEL 8556/57 DIAG.DSKT., VER. 2.10	S82G3866-00
IBM PC SERVER (M/T 8640) DIAG. DSKT., V.5.27	S19H1177-00
PS/2 TYPE 9556/9557 (56/57) REF.DSKT., V.1.10	S42G0555-01
PS/2 TYPE 9556/9557 (56/57) DIAG.DSKT., V.1.10	S42G0554-01
PS/2 MODEL 70/80 REF. DSKT., VER. 1.10	SA380022-02
PS/2 70/80 486DX33 PROC. UPGRADE, V.1.00	S71G4103-00
PS/2 MODEL 70 486 REF. DSKT., VER. 1.06	SA380089-01
PS/2 MODEL 70 486 SYS BD UPGR. REF.DSKT., V.1.00	S82G3898-00
PS/2 MODEL P70 386 (8573) REF. DSKT., VER. 1.04	SA380062-01
PS/2 MODEL P75 486 REF. DSKT., VER. 1.00	SA380102-00
PS/2 TYPE 9576/9577 (76/77/M77) REF.DSKT., V.3.00	S82G5090-00
PS/2 TYPE 9576/9577 (76/77/M77) DIAG.DSKT., V.3.00	S82G5091-00
PS/2 SERVER 85 (9585) REF. DSKT., V.1.32	S71G3719-00
PS/2 SERVER 85 (9585) DIAG. DSKT., V.1.30	S71G3720-00
PS/2 MODEL 90/95 XP 486 REF.DSKT. (TYPE 1), V.1.31	S42G2001-01
PS/2 MODEL 90/95 XP 486 REF.DSKT. (TYPE 2), V.1.21	S41G8337-02
PS/2 MODEL 90/95 XP 486 REF.DSKT. (TYPE 3), V.1.11	S10G6471-02
IBM 90/95/95A/500 REF.DSKT. (TYPE 4), V.1.32	S19H1255-01
IBM 90/95/95A/500 DIAG.DSKT., TYPES 1,2,3,4, V.2.32	S19H1255-01
IBM PC SERVER 320 SYSTEM DISKETTES	S30H2442-00+
- PC SERVER 320 REFERENCE DISKETTE, V.2.00	"
- PC SERVER 320 SYSTEM BOARD DIAG. DSKT., V.5.30	"
- PC SERVER 320 MICROCHANNEL DIAG. DSKT., V.2.00	"
IBM PC SERVER 500 S/390 DISKETTE PACKAGE	S30H1750-00+
- PROGRAM DISKETTE 1 OF 3, V.2.0.1	"
- PROGRAM DISKETTE 2 OF 3, V.2.0.1	"
- PROGRAM DISKETTE 3 OF 3, V.2.0.1	"
- ADVANCED DIAGNOSTICS/OPTION DISKETTE, V.1.01	"
SYSTEM MANAGEMENT SERVICES DSKT. (TYPE 7020/6015)	S19H1246-00
IBM THINKPAD 300 (M/T 2615) ADV.DIAG., V.1.00	S33G9361-00
IBM THINKPAD 500 (M/T 2603) ADV.DIAG., V.1.00	S71G3702-00
IBM THINKPAD 510CS (M/T 2604) ADV.DIAG., V.1.00	S83G8095-00
IBM THINKPAD 700 (M/T 9552) REF.DSKT., V.1.00	S42G2017-00
IBM THINKPAD 700 (M/T 9552) DIAG.DSKT., V.1.00	S42G2017-00
IBM THINKPAD 700C REFERENCE DISKETTE, V.1.00	S42G2023-00
IBM THINKPAD 700C DIAGNOSTIC DISKETTE, V.1.00	S42G2023-00
IBM THINKPAD 720/720C REF./DIAG. DSKTS., V.1.00	S61G1194-00
IBM THINKPAD 750 SERIES MAINTENANCE DSKT., V.1.10	S82G3891-00
IBM PS/NOTE 425/425C & THINKPAD 350/350C (M/T 2618) ADV.DIAG.DSKT., V.1.00 (INCL.IN HMR/S DOC.PKG.)	GA211000-00
IBM PC SERVER SCSI-2 FAST/WIDE PCI-BUS RAID SUPPORT DISKETTES (3)	S30H1750-00+
IBM PS/2 SCSI-2 FAST/WIDE SUPPORT DSKT., V.3.20	S82G5396-01
IBM SCSI-2 FAST/WIDE STREAMING RAID ADAPTER/A OPTION DISKETTES 1 AND 2	S30H1732-00
IBM PS/2 SERVERGUARD ADAPTER OPT. DSKT., V.1.00	S83G7898-00
IBM VOICETYPE DICTATION ADAPTERS OPT.DSKT., V.1.10	S83G8276-00
PERSONAL DICTATION ADAPTER /A OPTION DSKT., V.1.00	S82G5496-00
IBM DATA/FAX MODEM DISKETTE, V.1.00	S61G1556-00
OPTICAL MEDIA TEST PACKAGE	S60G9463-00
PS/2 IMAGE ADAPTER/A OPTION DISKETTE, V.1.00	S71G2237-00
IBM 3550 DOCKING STA. OPTION DISKETTE, V.1.00	S42G2428-00
PS/2 COLOR DISPLAY TEST-PATTERN DISKETTE	S41G3317-00
PS/2 5.25 INCH DSKT. ADAPTER/A OPTION DSKT., V1.10	S42G0287-00
PS/2 SCSI ADAPTER W/CACHE OPTION DSKT., V. 1.00	S91F9492-00
PS/2 ADAPTER/A E'NET TWISTED-PAIR NETW. OPT. DSKT.	S42G0298-00
PS/2 M-AUDIO CAPTURE/PLAYBACK ADAPTER, V.2.03	S10G5981-00
PS/2 SCSI TAPE DRIVE SERVICE DSKT., VER. 1.00	S91F9250-00
PS/2 ADAPTER/A FOR ETHERNET NETWORKS SERVICE DSKT.	S15F2288-00
TOKEN-RING NETWORK 16/4 ADAPTER DISKETTE, V. 1.00	S10G6607-00
PS/2 XGA-2 DISPLAY ADAPTER/A OPT. DSKT., V.2.0	S41G3324-00
PS/2 XGA DEVICE DRIVER INSTALL INSTR/DSKT., V.2.11	S71G1601-00
PS/2 FAXCONCENTRATOR ADAPTER/A OPT. DSKT., V.1.00	S84F8540-00
PS/2 REWRITABLE OPTICAL DRIVE OPT. DSKT., V.1.01	S91F9234-00
PS/2 60MB FIXED DISK SCREENING DISKETTE, V.1.00	G04G5145-00
PS/2 SYSTEM UPDATE DISKETTE, V. 1.00	S64F1500-01
PS/2 SERVICE AID DISKETTE, V. 2.10	S10G6311-02

PSY2 RETAIN TIPS
REVISED PS/2 SIM AND PC SIM MANUALS

PS/2 8570 MODELS A81/A16 BIOS PATCH, V.1.00	G41G2930-00
VINYL BINDER	S84F8542-00
PLASTIC DISKETTE HOLDER (PKG. OF 8)	S52G9972-00

FEATURE PAMPHLETS:

NON-IBM PARTS CATALOG	SA380041-05
NON-IBM PRINTER CATALOG	SA380138-00
OEM SERVICE INFORMATION	SA380096-00
LASERPRINTER SERVICE INFO & PARTS CAT.	SA380098-01
PROPRINTER SERVICE INFORMATION & PARTS CATALOG	SA380099-02
MISCELLANEOUS PRINTER SERVICE INFO & PARTS CAT.	SA380100-00

THE FOLLOWING COMPONENTS ARE INCLUDED IN THE PC SIM MANUAL WHEN SBOF-2481 IS ORDERED, OR THESE COMPONENTS MAY BE ORDERED SEPARATELY BY THE APPROPRIATE FORM NUMBER:

DESCRIPTION:	FORM NUMBER:
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PC SERVICE INFORMATION MANUAL BILL OF FORMS	SBOF2481-00
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PC SERVICE INFORMATION MANUAL (TEXT)	SA380037-01
5150/55/60 ADVANCED DIAGNOSTIC DSKT., VER. 2.25	SA380033-00
5162/70 ADVANCED DIAGNOSTIC DSKT., VER. 2.07	SA380034-00
5150/55/60 SERVICE SUMMARY CARD	SA380036-01
5162/70 SERVICE SUMMARY CARD	SA380035-01
PLASTIC DISKETTE HOLDERS (2)	SA380015-00
DIVIDER TABS	SA380038-00
SIM BINDER	SA380045-00
VELCRO FASTENERS (2)	SA280627-01

GENERAL INFORMATION:

08/22/95: A NEW HMM SUPPLEMENT AND SEVERAL DIAGNOSTIC PACKAGES ARE BEING DISTRIBUTED. REFER TO THE LISTING ABOVE, MARKED WITH A PLUS (+) SIGN. MORE TO COME...

08/10/95: TWO NEW HMM SUPPLEMENTS HAVE BEEN RELEASED, FOR THE PC SERVER 320 AND PC SERVER 500 SYSTEM/390. MORE ARE SCHEDULED FOR AVAILABILITY SOON. SEE ABOVE.

07/13/95: A NEW VERSION (-01) OF THE IBM MOBILE SYSTEMS HMM, VOL. 1 IS BEING DISTRIBUTED, ALONG WITH A NEW IBM PPS POWER SERIES HMM (6015/6050/6070) AND A REVISED EDUCATIONAL COMPUTER HMM (WITH DIAGNOSTICS). SUPPLEMENTS ALSO BEING RELEASED ARE FOR THE SCSI-2 FAST/WIDE STREAMING RAID ADAPTER/A (OPTION DISKETTES) AND FOR THE PC SERVER 320 (TYPE 8640). CHECK LISTING ABOVE...

05/16/95: SUPPLEMENTS FOR THE PS/2, MOBILE, PC AND PS/VALUEPOINT HMMS HAVE BEEN RELEASED, ALONG WITH A VARIETY OF SYSTEM AND DIAGNOSTIC DISKETTES FOR THE 90/95/95A/500, PC SERVER AND PC 700 SERIES. A SUPPORT DISKETTE FOR THE PS/2 SCSI-2 FAST/WIDE OPTION HAS ALSO BEEN RELEASED (SLSS DISTRIBUTION HAS BEEN DELAYED SLIGHTLY). SEE ABOVE...

03/17/95: TWO SUPPLEMENTS HAVE BEEN ADDED, ONE FOR THE THINKPAD HMM AND ONE FOR THE PC HMM. ALSO ADDED ARE THE SYSTEM MANAGEMENT SERVICES DISKETTE (7020/6015) AND A REPLACEMENT DIAGNOSTIC DISKETTE FOR THE PC SERVER SYSTEM (8640). ALSO, A NEW TNL IS AVAILABLE FOR THE EDUCATIONAL COMPUTER HMM. SEE ABOVE...

12/09/94: HMM SUPPLEMENTS, A NEW POWER SERIES HMM AND A NEW OPTION DISKETTE ARE BEING DISTRIBUTED THROUGH SLSS. REFER TO THE LISTING ABOVE...

PS/2 SIM MANUAL CORRECTIONS:

DOCUMENT:	NON-IBM PARTS CATALOG, F/N SA38-0041-04
PAGE #/I.D.:	P.157
ERROR:	SEAGATE ST125-1 5.25" DRIVE
CORRECTION:	DESCRIPTION IS SEAGATE ST125-1 3.5" DRIVE

PC SIM MANUAL CORRECTIONS:

DOCUMENT:	PC SIM MANUAL, SA38-0037-01
PAGE #/I.D.:	CHAPTER 17 (PG. 17-2), PARTS CATALOG
ERROR:	TOKEN-RING ADAPTER FRU P/N46F0463
CORRECTION:	CORRECT PART NUMBER IS P/N16F0463

PAGE#/I.D.:	CHAPTER 17 (PG. 17-36), PARTS CATALOG
ERROR:	P/N69X7856, TOKEN-RING NETWORK PC ADAPTER
CORRECTION:	CORRECT FRU IS P/N16F0463

SAS KEYWORDS:

PSY2 RETAIN TIPS
REVISED PS/2 SIM AND PC SIM MANUALS

APPM	PSY2	PCOMDOC	PSY2DOC
8525SYSDOC	8530SYSDOC	8550SYSDOC	8560SYSDOC
8570SYSDOC	8580SYSDOC	8555SYSDOC	8573SYSDOC
8565SYSDOC	8590SYSDOC	8595SYSDOC	8543SYSDOC
8535SYSDOC	8540SYSDOC	8557SYSDOC	8556SYSDOC
8551SYSDOC	8554SYSDOC	9556SYSDOC	9557SYSDOC
9576SYSDOC	9577SYSDOC	9590SYSDOC	9595SYSDOC
9552SYSDOC	2615SYSDOC	6384SYSDOC	D/T8525
D/T8530	D/T8550	D/T8560	D/T8580
D/T8555	D/T8573	D/T8543	D/T8565
D/T8590	D/T8595	D/T8535	D/T8540
D/T8557	D/T8556	D/T8551	D/T8554
D/T9556	D/T9557	D/T9576	D/T9577
D/T9590	D/T9595	D/T9552	D/T2615
D/T6384	D/T8570	D/T9585	

1.2.446 RIPL FAILS ON 50MHZ 8590/8595 W/TOKEN RING

Record number: H106182

Device: D/T8590
 Model: M
 Tip key: 019
 Date created: 092/09/04
 Date last altered: A92/09/04

INTERMITTENT HANGS AND FAILURES TO RIPL (REMOTE INITIAL PROGRAM LOAD) MAY BE EXPERIENCED ON 8590 AND 8595 SYSTEMS, WITH 50MHZ PROCESSOR BOARDS INSTALLED, RUNNING DOS LAN REQUESTER 1.2 ON AN EARLY VERSION (LONG) TOKEN RING ADAPTER/A.

THIS FIX ONLY APPLIES TO THE ORIGINAL (LONG) TOKEN RING ADAPTER/A WHEN USED WITH THE RIPL OPTION AND DOS LAN REQUESTOR.

REPLACEMENT OF THE LONG ADAPTER WITH THE NEWER "SHORT" VERSION OF THE TOKEN RING 16/4 ADAPTER/A (FRU P/N93F0331) RESOLVES THE PROBLEM.

A TEMPORARY WORK-AROUND WHICH MAY HELP IS TO MOVE THE TOKEN RING ADAPTER TO A HIGHER NUMBERED MICRO CHANNEL EXPANSION SLOT

SAS KEYWORDS:

PSY2	PSY2ADPT	PSY2COMM	8590SYSADPT
8590SYSCOMM	8595SYSADPT	8595SYSCOMM	D/T8595
PS2	PS/2		

ROM ADDRESS FOR ESDI ADAPTER CAN NOT BE CHANGED

1.2.447 ROM ADDRESS FOR ESDI ADAPTER CAN NOT BE CHANGED

Record number: H017566

Device: D/T8580
 Model: M
 Tip key: 015
 Date created: 091/04/11
 Date last altered: A91/04/12

RELEASE 1.10 OF THE MODEL 70/80 REFERENCE DISKETTE DOES NOT ALLOW THE USER TO CHANGE THE "ADAPTER MEMORY LOCATION" FOR THE ESDI FIXED DISK CONTROLLER. THIS IS DUE TO THE REQUIREMENT OF THE SCSI ADAPTER/A TO ALWAYS BE CONFIGURED AT A HIGHER ADAPTER MEMORY LOCATION. IF YOUR CUSTOMER IS NOT USING A SCSI ADAPTER/A, AND HAS A REQUIREMENT TO CHANGE THE "ADAPTER MEMORY LOCATION" OF THE ESDI FIXED DISK CONTROLLER, RELEASE 1.06 OF THE MODEL 70/80 REFERENCE DISKETTE CAN BE UTILIZED.

IF YOUR CUSTOMER IS USING A SCSI ADAPTER AND AN ESDI FIXED DISK CONTROLLER, RELEASE 1.10 OF THE REFERENCE IS REQUIRED. IF OEM HARDWARE/SOFTWARE REQUIRE THAT THE "ADAPTER MEMORY LOCATION" BE CHANGED, THE CUSTOMER SHOULD BE REFERRED TO THEIR OEM POINT OF SALE FOR INSTRUCTIONS.

SAS KEYWORDS:

PSY2	8580SYSDSKT	PSY2DSKT	8580SYSDIAG
PSY2DIAG	PSY2FDSK	8580SYSFDSK	8580SYSOPER
PSY2OPER	8580SYSADPT	PSY2ADPT	

1.2.448 RPL TYPE PS2 FAILS TO INSERT ON TOKEN RING THROUGH 8230

Record number: H102385

Device: D/T8230
Model: M
Tip key: 004
Date created: 092/06/05
Date last altered: A92/06/10

AN RPL PS2 INSERTING TO A TOKEN RING PRESENTS A MESSAGE
"F4 - 4MEG F6 - 16MEG" IF THE TOKEN RING ADAPTOR SPEED DOES NOT
MATCH THE RING SPEED.

WHEN AN RPL (MEDIALESS) PS2 IS ADDED TO A 16MBPS TOKEN RING
VIA AN 8230 LAM, YOU WILL NOT BE PROMPTED TO CHANGE THE RING
SPEED. THE DEFAULT SPEED OF THE TOKEN RING CARD IS 4MBPS.
THE 8230 SENSES THE WRONG SPEED AND DISABLES THE LAM PORT
BEFORE THE PS2 GIVES THE OPERATOR THE CHANCE TO CORRECT THE
SPEED. THERE ARE TWO WAYS TO WORK AROUND THIS PROBLEM.

1. DISABLE THE LAM AND POWER ON THE WORKSTATION, CHANGE THE
ADAPTOR SPEED WHEN THE "F4 - F6" MESSAGE IS PRESENTED,
THEN ENABLE THE LAM.
2. PLUG THE WORKSTATION INTO AN 8228, CHANGE THE ADAPTOR SPEED
WHEN THE "F4 - F6" MESSAGE IS PRESENTED, THEN CONNECT TO THE
8230 LAM.

NOTE: AFTER SELECTING THE SPEED, DOWNLOAD A COPY OF THE
REFERENCE DISKETTE AND CONFIGURE THE ADAPTOR TO MAKE THE
CHANGE PERMANENT.

A FIX FOR THIS PROBLEM IS UNDER INVESTIGATION.

SAS KEYWORDS:

D/T8230 TOKEN RING PSY2RPL

1.2.449 SAS KEYWORDS FOR IBM PC PRODUCTS

Record number: H064491

Device: D/T8550
 Model: M
 Tip key: 169
 Date created: 093/04/26
 Date last altered: A96/02/06

RETAIN TIPS RELEASED BY PC COMPANY LEVEL-2 TECHNICAL SUPPORT FOR MOBILE, DESKTOP, SERVER, AND MONITOR PRODUCTS WILL HAVE CONSISTENT SAS (SYSTEM ASSISTED SEARCH) KEYWORDS TO MAKE YOUR RETAIN SEARCH MORE EFFECTIVE. THERE ARE THREE KEY ELEMENTS APPLIED TO EACH TIP. THEY ARE: 1. THE MAIN SAS WORD. 2. THE MAIN SAS WORD, WITH AN APPLICABLE SUFFIX. 3. THE D/T OF ALL OTHER MACHINE TYPES THAT THE TIP APPLIES TO AT THE TIME OF WRITING.

THESE THREE ARE DESCRIBED BELOW IN DETAIL.

---1 - --

ALL PC PRODUCT HARDWARE TIPS WILL HAVE THE MAIN SAS WORD: PSY2, PSVP OR IBMPC

---2 - --

IN ADDITION TO THE MAIN SAS WORD, EACH TIP WILL HAVE OTHER SAS WORDS. THESE OTHER SAS WORDS WILL CONSIST OF THE MAIN SAS WORD PLUS AN APPROPRIATE SUFFIX. FOR EXAMPLE, "PSY2FDSK" OR "PSY2KBD". THESE SUFFIXES ARE AS FOLLOWS:

(**** = MAIN SAS WORD)
 ****DISP DISPLAY TIP
 ****PRT PRINTER TIP
 ****ERR ERROR CODE OR ERR SYMPTOM TIP
 ****KBD KEYBOARD TIP
 ****COMM COMMUNICATION TIP (EXAMPLE: TOKEN RING OR 3270)
 ****DSKT DISKETTE DRIVE TIP
 ****DIAG DIAGNOSTICS RELATED TIP
 ****FDSK FIXED DISK TIP
 ****BRD SYSTEM BOARD TIP
 ****MCD MICROCODE TIPS
 ****MEM MEMORY TIP
 ****DOC DOCUMENTATION TIP
 ****OPER USER OPERATION TIP
 ****PROG PROGRAM/SOFTWARE TIP
 ****ADPT ADAPTER TIP
 ****PART PARTS INFORMATION TIP
 ****PWR POWER & POWER SUPPLY TIP
 ****ECA ECA
 ****MISC MISCELLANEOUS TIPS
 ****CDROM CDROM RELATED TIPS
 ****AUDIO AUDIO/SOUND RELATED TIPS

SOME TIPS WILL HAVE MORE THAN ONE OF THE ABOVE. FOR EXAMPLE, A TIP ABOUT A MEMORY ADAPTER ERROR CODE WILL HAVE THE SEARCH WORDS: PSY2 PSY2ADPT PSY2MEM PSY2ERR

---3 - --

IN ADDITION TO 1 AND 2 ABOVE, EACH TIP WILL HAVE THE APPLICABLE MACHINE TYPES (FOR THAT TIP) LISTED IN THE SAS KEYWORD SECTION. THEY WILL ALWAYS BE IN THE "D/TXXXX" FORMAT (WHERE XXXX = THE MACHINE TYPE.) THIS IS NECESSARY BECAUSE SOME TIPS, SUCH AS THOSE FOR ADAPTER CARDS, APPLY TO A RANGE OF MACHINE TYPES. BECAUSE RETAIN REQUIRES THE TIP TO BE WRITTEN ON ONE SPECIFIC MACHINE TYPE, THE OTHER AFFECTED SYSTEMS WILL BE LISTED IN THE SAS KEYWORDS.

FOR EXAMPLE, AN ADAPTER CARD TIP THAT IS APPLICABLE TO SEVERAL DIFFERENT PS/2 MACHINE TYPES MAY BE WRITTEN AS A "D/T8550" TIP. THE REST OF THE AFFECTED MACHINE TYPES WILL BE LISTED IN THE SAS KEYWORDS.

- - - - - EXAMPLES - - - - -

FOR ALL TIPS APPLICABLE TO MOBILE, DESKTOP, SERVER, AND MONITOR PRODUCTS, SEARCH:

==> P;PSY2

FOR TIPS APPLICABLE TO DISKETTE DRIVES, SEARCH:

==> P;PSY2DSKT

FOR ALL TIPS APPLICABLE TO THE 9595, SEARCH:

==> P;PSY2 D/T9595

FOR TIPS APPLICABLE TO AN 6384 DISKETTE DRIVE PROBLEM, SEARCH:

==> P;PSY2DSKT D/T6384

PSY2 RETAIN TIPS

SAS KEYWORDS FOR IBM PC PRODUCTS

FOR TIPS APPLICABLE TO A 9545 HARDFILE ERROR CODE, SEARCH:

==> P;PSY2FDSK PSY2ERR D/T9545

FOR CURRENT PC PRODUCT ECA'S (NON-EXPIRED ECA'S) SEARCH:

==> P;PSY2ECA ECAVALID

SAS KEYWORDS:

PSY2	PSY2DOC	PS2	PCOM
PCOMDOC	PC	PSVP	PSVPDOC
D/T5155	D/T5160	D/T5162	D/T5170
D/T2521	D/T2614	D/T2615	D/T3510
D/T3511	D/T3532	D/T3550	D/T3541
D/T4869	D/T6152	D/T8525	D/T8530
D/T8540	D/T8543	D/T8550	D/T8551
D/T8554	D/T8555	D/T8556	D/T8557
D/T8560	D/T8565	D/T8570	D/T8573
D/T8580	D/T8590	D/T8595	D/T8600
D/T9552	D/T9556	D/T9557	D/T9576
D/T9577	D/T9585	D/T9595	D/T8503
D/T8504	D/T8511	D/T8512	D/T8513
D/T8514	D/T8515	D/T8516	D/T8517
D/T8518	D/T9515	D/T9517	D/T9518
D/T6312	D/T6314	D/T6319	D/T6384
D/T8535	D/T6318	D/T9590	D/T6382
D/T6387	D/T95XX	D/T6571	D/T6573
D/T6581	D/T6583	D/T6575	D/T6585
D/T6576	D/T6586	D/T6875	D/T6885
D/T6876	D/T6886	D/T6598	PSY2SAS

SCO UNIXWARE 2.1 CANNOT ACCESS GREATER THAN 128MB

1.2.450 SCO UNIXWARE 2.1 CANNOT ACCESS GREATER THAN 128MB

Record number: H134032

Device: D/T6589
Model: M
Tip key: 001
Date created: 096/09/18
Date last altered: A96/09/18

SCO Unixware v2.1 only recognizes up to 128Mb of physical memory in the PC 365 Series 6589. The PC 365 supports a maximum of 512Mb of memory.

The MEMRANGE parameter must be added to the Unixware v2.1 boot program. Add the following command to the boot program in /STAND/BOOT:

"MEMRANGE=0-640K: 256,1M-512M: 8704"

The use of the MEMRANGE parameter can be found in the "Boot" manager section of the Unixware v2.1 customer documentation shipped with the product.

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SAS KEYWORDS:

PSY2	PSVP	IBMPC	PSVPPROG
PSY2PROG	PSVPERR	PSY2ERR	51707
PC365	UNIX	PSY2MEM	PSVPMEM

SCREEN READER HANGS PLANAR DIAGNOSTICS ON THE 8570

1.2.451 SCREEN READER HANGS PLANAR DIAGNOSTICS ON THE 8570

Record number: H007178

Device: D/T8570
Model: M
Tip key: 002
Date created: 088/06/02
Date last altered: A90/07/11

IF THE SCREEN READER DEVICE IS ATTACHED TO THE MOUSE PORT OF THE 8570 SYSTEM, A HANG CONDITION WILL RESULT DURING THE RUNNING OF ADVANCED DIAGNOSTICS SYSTEM UNIT TESTING. TO RUN ADVANCED DIAGNOSTICS, DISCONNECT THE SCREEN READER DEVICE FROM THE MOUSE PORT, REBOOT THE SYSTEM USING THE REFERENCE DISKETTE THEN INITIATE ADVANCED DIAGNOSTICS. A FIX WILL BE AVAILABLE IN A LATER RELEASE OF THE REFERENCE DISKETTE.

SAS KEYWORDS:

PSY2 PSY2MISC 8570SYSDIAG PSY2DIAG
8570SYSMISC

SCREWS MAY CAUSE SCSI FIXED DISK FAILURES

1.2.452 SCREWS MAY CAUSE SCSI FIXED DISK FAILURES

Record number: H03256

Device: D/T8595
 Model: M
 Tip key: 011
 Date created: 092/10/05
 Date last altered: A95/04/24

A LIMITED NUMBER OF FIXED DRIVE OPTIONS AND FRUS MAY HAVE BEEN SHIPPED WITH LONG SCREWS USED TO MOUNT THE DISK ASSEMBLY IN ITS DISK TRAY. (CORRECT SHORT SCREWS ARE 5/32 INCH LONG, FRU P/N1621176)

IF THE SCREWS ARE TOO LONG, THEY MAY CONTACT THE DRIVE ASSEMBLY COVER AND FLEX THE COVER INTO THE SPINNING DISK MECHANISM. THIS MAY RESULT IN A CLICKING AND/OR PINGING SOUND AND HARDFILE FAILURES. SCREWS THAT TOUCH THE DISK ASSEMBLY MAY ALSO CAUSE FAILURES BY CREATING AN ELECTRICAL PATH TO GROUND. NORMALLY THE DISK ASSEMBLY IS INSULATED FROM FRAME GROUND.

WHEN INSTALLING THE OPTION OR FRU, CARE SHOULD BE TAKEN TO OBSERVE THAT THE SCREWS DO NOT CONTACT THE DRIVE ASSEMBLY. IF IF THIS IS OBSERVED, THE SCREWS MUST BE SHORTENED OR REPLACED. THIS PROBLEM MAY OCCUR ON 320MB, 400MB, 1GB, AND 2GB DRIVES.

P/Ns of OPTIONS AND FRU DRIVES AFFECTED ARE:

DRIVE	OPTION P/N	FRU
2GB (8 BIT)	P/N32G4336	P/N92F0440
2GB (16 BIT)	P/N32G3796	P/N92F0407
1GB	P/N6451052	P/N92F0089
400MB	P/N6451235	P/N85F0012
320MB	P/N6451108	P/N85F0011

REPLACEMENT SCREWS ARE ALSO AVAILABLE IN THE MISCELLANEOUS SCREW AND JUMPER KIT, FRU P/N92F0141.

THIS PROBLEM IS CURRENTLY BEING ADDRESSED AND WILL BE FIXED IN FUTURE OPTIONS AND FRUS.

SAS KEYWORDS:

PSY2	SCSI	HARD FILE	FIXED
D/T3510	D/T3511	D/T8556	D/T8557
D/T8590	D/T8595	D/T9576	D/T9577
D/T9556	D/T9557	D/T9585	D/T9595
02100501U	MEDIA	ERROR	MOUNTING
PSY2FDISK	FDISK	GIGABYTE	GIG
1GIG	PSY2FDSK	2GIG	2
1	95A	ARRAY	CLUNKING
CLUNKS	CLUNK		

1.2.453 SCSI ADAPTER IN 8550,8555 MODELS 031

Record number: H005069

Device: D/T8550
Model: M
Tip key: 049
Date created: 090/03/05
Date last altered: A90/03/07

CERTAIN PERSONAL SYSTEM/2 SCSI ADAPTERS MAY FAIL WHEN INSTALLED IN AN 8550 OR 8555 CONFIGURED WITH A 30MB (ST506 INTERFACE) FIXED DISK DRIVE AND AN ATTACHED EXTERNAL SCSI FIXED DISK DRIVE. AFFECTED SCSI ADAPTERS FAIL AT POWER ON AND WHEN USING DOS, A 'BAD OR MISSING COMMAND INTERPRETER' MESSAGE APPEARS. A SIMILAR APPROPRIATE MESSAGE APPEARS WHEN USING OTHER OPERATING SYSTEMS.

AFFECTED SCSI ADAPTERS ARE MARKED WITH 64F1356 LOCATED IN THE TOP RIGHT CORNER ON THE COMPONENT SIDE OF THE CARD.

SHOULD THE ABOVE CONDITIONS EXIST, REPLACE THE PERSONAL SYSTEM/2 SCSI ADAPTER, FRU P/N15F6561.

SAS KEYWORDS:

PSY2	PSY2ADPT	PSY2FDSK	8550SYSADPT
8550SYSFDSK	8555SYSADPT	8555SYSFDSK	8550SYSDIAG
8555SYSDIAG	PSY2DIAG		

SCSI ADDRESS SWITCH/CABLES FOR 3510 SCSI ENCLOSURES

1.2.454 SCSI ADDRESS SWITCH/CABLES FOR 3510 SCSI ENCLOSURES

Record number: H034570

Device: D/T3510
 Model: M
 Tip key:
 Date created: 093/11/12
 Date last altered: A95/06/09

Standard IBM SCSI address switch cables, FRU P/N64F4107, used on DT/3510, have been reworked to facilitate connecting OEM scsi devices. The reworked cable is identified with FRU P/N75G8704.

The 3.5" Enhanced 127MB Read/Write Optical Drive, FRU P/N92F0167 is addressed with the use of DIP switches and does not support the use of a remote ID switch and has no connection for one.

SAS KEYWORDS:

SCSI	OEM	POEM	75G8704
64F4107	PSY2	P/N64F4107	3510
85F0015	PSY2PART	READ	WRITE

1.2.455 SCSI BUS TERMINATION GUIDELINES

Record number: H092645

Device: D/T8550
Model: M
Tip key: 101
Date created: 091/12/12
Date last altered: A93/06/15

FAILURE TO PROPERLY TERMINATE THE SCSI BUS CAN RESULT IN POOR
SIGNAL QUALITY AND NOISE ON THE BUS. ERRORS CAUSED BY THIS
CONDITION MAY BE INTERMITTENT, AND DIFFICULT TO DIAGNOSE.
DIFFICULT TO UNDERSTAND OPERATING SYSTEM BOOT PROBLEMS AND
IML FAILURES HAVE BEEN CAUSED BY IMPROPER SCSI BUS TERMINATION.

THE SCSI BUS IS A HIGH-SPEED BUS WHICH HAS THE CAPABILITY OF
OPERATING AT DATA RATES UP TO 5/mb PER SECOND. BECAUSE OF
THIS CAPABILITY, THE BUS MUST BE TERMINATED PROPERLY AT THE
PHYSICAL ENDS OF EXTERNAL AND INTERNAL INTERFACE CABLES. THE
TERMINATOR RESISTOR NETWORKS MINIMIZE SIGNAL REFLECTIONS ON
THE BUS AND INSURE PROPER VOLTAGE LEVELS.

THE FOLLOWING SCSI TERMINATION SCHEMES MAY BE ENCOUNTERED
IN THE FIELD.

- A. SCSI ADAPTER/A (THIS ADAPTER HAS NO CACHE MEMORY)
A T-RES TERMINATOR IS ON THE ADAPTER AND IS DESCRIBED IN
#4 BELOW.
- B. SCSI ADAPTER/A WITH CACHE (NO ON-BOARD TERMINATOR)
THIS ADAPTER HAS NO T-RES TERMINATOR ON-BOARD AND IS
DESCRIBED IN #5 BELOW.
- C. SCSI ADAPTER/A WITH CACHE (WITH ON-BOARD TERMINATOR)
(NEW VERSION; AUTOMATICALLY SUBSTITUTES FOR "B" ABOVE)
THIS ADAPTER HAS A T-RES TERMINATOR ON-BOARD AND IS
DESCRIBED IN #4 BELOW.
- D. INTEGRATED SCSI CONTROLLER (PART OF THE SYSTEM PLANAR)
A T-RES TERMINATOR IS ON THE PLANAR AND IS DESCRIBED IN
#6 BELOW.

THE FOLLOWING RULES ARE A GUIDE FOR PROPER SCSI TERMINATION:

- 1. THE SCSI BUS MUST ALWAYS HAVE A TERMINATOR ON THE DEVICE AT
THE PHYSICAL END OF THE SCSI BUS. THESE DEVICES INCLUDE
HARDDISKS, TAPE DRIVES, CD-ROM DRIVES, ETC., AND THE SCSI
ADAPTER ITSELF, IF NO DEVICES ARE CONNECTED TO ONE OF THE
INTERFACES.
- 2. TERMINATORS ARE INSTALLED ONLY AT THE ENDS OF THE SCSI BUS.
TERMINATORS WHICH ARE INSTALLED ON DEVICES WHICH ARE NOT AT
THE END OF THE BUS MUST BE REMOVED FROM THE DEVICES.
FAILURE TO DO SO, WILL RESULT IN EXCESSIVE CURRENT ON THE
SCSI BUS. THIS CAN CAUSE EARLY LIFE FAILURE OF ANY ATTACHED
SCSI DEVICE, IF OPERATED FOR EXTENDED PERIODS OF TIME. THE
FAILURE IS CAUSED BY THE BUS DRIVERS ON THE SCSI DEVICES
BREAKING DOWN DUE TO EXCESSIVE POWER DISSIPATION.
- 3. WHEN INSTALLING SCSI DEVICES ON THE INTERNAL INTERFACE,
ALWAYS ATTACH THE DEVICE TO THE LAST PHYSICAL CONNECTOR ON
THE CABLE.
- 4. FOR THE IBM PS/2 SCSI ADAPTER/A WITH THE ONBOARD T-RES
MODULE (TERMINATOR), TERMINATION OF THE ADAPTER IS
ACCOMPLISHED WHEN THE 20 PIN T-RES MODULE IS IN ITS SOCKET.
(THIS MODULE IS USUALLY ORANGE IN COLOR) THE T-RES MODULE
NEEDS TO BE REMOVED FROM THE ADAPTER IF BOTH INTERNAL AND
EXTERNAL DEVICES ARE ATTACHED TO THE ADAPTER. IN THIS
SITUATION, THE SCSI BUS IS TERMINATED AT THE LAST DEVICE
ON THE INTERNAL CABLE AND THE LAST DEVICE ON THE EXTERNAL
CABLE.
- 5. FOR THE IBM PS/2 SCSI ADAPTER/A (W/CACHE) WHICH DOES NOT HAVE
AN ONBOARD T-RES MODULE, TERMINATION OF THE ADAPTER IS DONE
IN ONE OF THE FOLLOWING THREE WAYS:
 - A. IF ONLY EXTERNAL DEVICES ARE CONNECTED TO THE ADAPTER,
ATTACH THE INTERNAL TERMINATOR TO THE EDGE CARD CONNECTOR
ON TOP OF THE ADAPTER AND TERMINATE THE LAST DEVICE ON
THE EXTERNAL SCSI CABLE.

SCSI BUS TERMINATION GUIDELINES

- B. IF ONLY INTERNAL DEVICES ARE CONNECTED TO THE ADAPTER, ATTACH THE EXTERNAL TERMINATOR PLUG TO THE CONNECTOR AT THE REAR OF THE ADAPTER AND TERMINATE THE LAST DEVICE ON THE INTERNAL SCSI CABLE.
 - C. IF BOTH INTERNAL AND EXTERNAL DEVICES ARE CONNECTED, TERMINATION IS DONE ON THE LAST DEVICE ON THE INTERNAL CABLE AND TERMINATION IS DONE ON THE LAST DEVICE ON EXTERNAL CABLE.
6. FOR THE SCSI CONTROLLER WHICH IS BUILT INTO THE SYSTEM PLANAR THERE IS ALSO A T-RES MODULE (TERMINATOR) ON THE SYSTEM PLANAR (REFER TO THE HMR MANUAL FOR EXACT LOCATION). THE TERMINATION OF THE SCSI BUS IS ACCOMPLISHED WHEN THE 20 PIN T-RES MODULE IS IN ITS SOCKET. (THIS MODULE IS USUALLY ORANGE IN COLOR) THE T-RES MODULE NEEDS TO BE REMOVED FROM THE PLANAR IF BOTH INTERNAL AND EXTERNAL DEVICES ARE ATTACHED TO THE CONTROLLER. IN THIS SITUATION, THE SCSI BUS IS TERMINATED AT THE LAST DEVICE ON THE INTERNAL CABLE AND THE LAST DEVICE ON THE EXTERNAL CABLE.

NOTE:

THE FOLLOWING PUBLICATION IS AVAILABLE BY ORDERING GG24-4002-00: "IBM PS/2 AND PS/VALUEPOINT SUBSYSTEMS," THIS BOOK PROVIDES VALUABLE INFORMATION ABOUT SCSI AND XGA-II SUBSYSTEMS AND SUPERSEDES EARLIER DOCUMENT, "SCSI ARCHITECTURE AND IMPLEMENTATION."

SAS KEYWORDS:

PSY2	PSY2FDSK	PSY2ADPT	8550SYSFDSK
8557SYSFDSK	8560SYSFDSK	8565SYSFDSK	8570SYSFDSK
8580SYSFDSK	8590SYSFDSK	8595SYSFDSK	8550SYSADPT
8557SYSADPT	8560SYSADPT	8565SYSADPT	8570SYSADPT
8580SYSADPT	8590SYSADPT	8595SYSADPT	D/T8557
D/T8555	D/T8560	D/T8565	D/T8570
D/T8573	D/T8580	D/T8590	D/T8595
D/T8556	D/T8556SYSFDSK	8556SYSADPT	D/T9595
D/T9590	D/T9585	D/T9576	D/T9577
D/T9556	D/T9557	PSVP	D/T6382
D/T6384	D/T6387		

SCSI CABLE TOO SHORT WHEN USED WITH CD ROM DRIVE

1.2.456 SCSI CABLE TOO SHORT WHEN USED WITH CD ROM DRIVE

Record number: H011329

Device: D/T8550
 Model: M
 Tip key: 072
 Date created: 090/03/06
 Date last altered: A95/11/16

A LIMITED NUMBER OF 8580 MODELS 121, 131, A21 AND A31 AND 8565 MODELS 061 AND 121 SYSTEMS, WITH AN INTERNAL CD-ROM DISK DRIVE AND A SECOND SCSI ADAPTER INSTALLED IN SLOTS 1 THRU 4, MAY FIND THE SCSI CABLE PROVIDED WITH THE SYSTEM IS TOO SHORT TO REACH SLOTS 1 THRU 4.

FIX:

1. DISCONNECT THE STANDARD SCSI CABLE, PROVIDED WITH THE SYSTEM, FROM THE CD-ROM AND THE STANDARD SCSI ADAPTER.
2. CONNECT THE P1 CONNECTER ON THE STANDARD SCSI CABLE TO THE SCSI ADAPTER IN THE LOWEST I/O SLOT.
3. THE TERMINATOR RESISTOR BLOCK SHOULD BE INSTALLED ON THE CD-ROM (IT WILL BE LAST ON THE INTERFACE). THEN CONNECT ONE END OF THE CABLE, PROVIDED IN THE CD-ROM KIT "A", TO THE CD-ROM. THE OTHER END (P1) GOES TO THE STANDARD SCSI ADAPTER PROVIDED WITH THE SYSTEM (SLOT 7 FOR 8580'S, OR SLOT 8 FOR 8565'S).

CABLES IN LATER PRODUCTION SYSTEMS HAVE BEEN LENGTHED AN ADDITIONAL 100 M/M TO CORRECT THIS SITUATION.

A NEW LONGER CABLE IS AVAILABLE UNDER FRU P/N34F0035.

SAS KEYWORDS:

PSY2	PSY2ADPT	8580SYSADPT	8565SYSADPT
PSY2FDSK	8565FDSK	8580FDSK	CDROM
D/T8580	D/T8565	PSY2CDROM	

1.2.457 SCSI DEVICES NOT REMOVED DURING AUTO-CONFIGURATION

Record number: H09805

Device: D/T8550
 Model: M
 Tip key: 097
 Date created: 091/10/16
 Date last altered: A91/11/05

AUTO CONFIGURATION WILL NOT REMOVE SCSI NON-FIXED DISK DEVICES FROM THE CONFIGURATION TABLE, EVEN WHEN THE DEVICE HAS BEEN PHYSICALLY DISCONNECTED. A 162 OR 174 POST ERROR WILL BE DISPLAYED IF AUTO CONFIGURATION IS USED TO DE-CONFIGURE A DISCONNECTED, NON-FIXED DISK DEVICE, SUCH AS A TAPE DRIVE OR CD-ROM.

THE ERRORS MAY BE ELIMINATED BY UNDERSTANDING THE FOLLOWING:

- A. SCSI AUTO CONFIGURATION WILL CONFIGURE ANY ATTACHED SCSI DEVICE.
- B. SCSI AUTO CONFIGURATION WILL DE-CONFIGURE FIXED DISK DRIVE, ONLY.
- C. NON-FIXED DISK SCSI DEVICES MUST BE MANUALLY REMOVED FROM THE CONFIGURATION TABLE WHEN THE DEVICE IS DISCONNECTED.

TO REMOVE A NON-FIXED DISK SCSI DEVICE FROM THE CONFIGURATION TABLE AFTER IT IS DISCONNECTED, THE FOLLOWING STEPS SHOULD BE FOLLOWED:

- A. BOOT THE REFERENCE DISKETTE OR IML THE SYSTEM PARTITION.
- B. AT THE MAIN MENU SELECT OPTION #3, "SET CONFIGURATION."
- C. SELECT OPTION #6, "SET AND VIEW SCSI DEVICE CONFG."
- D. FIND THE APPROPRIATE SCSI DEVICE ON THE LIST AND MOVE THE SELECTOR BAR TO THE "PRESENCE ERROR REPORTING" LINE.
- E. USING THE F5/F6 KEYS, TOGGLE TO "REMOVE."
- F. SAVE THE CONFIGURATION WITH THE F10 KEY.
- G. FOLLOW THE INSTRUCTIONS ON THE SCREEN AND RE-BOOT THE SYSTEM.

THE DISCONNECTED SCSI DEVICE SHOULD NOW BE REMOVED FROM THE CONFIGURATION TABLE AND NORMAL OPERATION SHOULD OCCUR.

SAS KEYWORDS:

PSY2	D/T8555	D/T8557	D/T8590
D/T8595	D/T8580	D/T8570	D/T8565
PSY2ERR	D/T8556	8695SYSERR	8590SYSERR
8580SYSERR	8570SYSERR	8565SYSERR	8560SYSERR
8550SYSERR	8555SYSERR		

SCSI DEVICES WILL NOT CONFIGURE OR COME READY

1.2.458 SCSI DEVICES WILL NOT CONFIGURE OR COME READY

Record number: H092920

Device: D/T8550
 Model: M
 Tip key: 178
 Date created: 093/06/15
 Date last altered: A93/11/29

THE SCSI (SMALL COMPUTER SYSTEMS INTERFACE) IS NOT A FIXED DISK CONTROLLER. IT IS A CHANNEL ATTACHMENT THAT MEETS INDUSTRY STANDARDS AND IS CAPABLE OF CONTROLLING ANY DEVICE WHICH MEETS THE SCSI SIGNAL PROTOCOL. IN TROUBLESHOOTING PROBLEMS, WHEN THE SCSI DEVICE(S) WILL NOT CONFIGURE OR COME "READY", THERE ARE A NUMBER OF POSSIBLE CAUSES. THIS TIP IS TO HELP PROVIDE A BASIC UNDERSTANDING OF SCSI OPERATION AND TO AID IN PROBLEM DETERMINATION.

FOR A SCSI DEVICE TO COME "READY" AND BE CONFIGURED, THE FOLLOWING EVENTS MUST OCCUR:

- A. UPON POWER-ON-RESET, SCSI POST ISSUES AN "INQUIRY" COMMAND TO EACH SCSI ADDRESS TO POLL ALL DEVICES PRESENT.
- B. ALL SCSI DEVICES ATTACHED TO THE SCSI BUS MUST ANSWER WITH THEIR INQUIRY DATA.
- C. A "TEST UNIT READY" COMMAND IS ISSUED TO ALL DEVICES WHICH RESPONDED TO THE "INQUIRY" COMMAND.
- D. IF A HARD DISK DRIVE ANSWERS "NOT READY," A "START UNIT" COMMAND IS THEN ISSUED TO SEQUENTIALLY START THE DRIVE (MOTOR START). THE DEVICES MUST THEN RUN "SELF TEST" AND REPORT THEIR STATUS.
- E. ONCE THE DRIVE IS READY, THE "READ DEVICE CAPACITY" COMMAND IS ISSUED TO DETERMINE THE DEVICE SIZE (320MB, 1GB, ETC.).
- F. ALL DEVICES RESPONDING ARE COMPARED WITH THE CONFIGURATION DATA.
- G. PS/2 POST BEEPS TWICE AND DISPLAYS ERRORS IF THERE ANY ARE NEW, MISSING, OR DEFECTIVE SCSI DEVICES.
- H. FOLLOWING A SUCCESSFUL POST (ONE BEEP), THE SYSTEM WILL ATTEMPT TO LOAD THE OPERATING SYSTEM .

IF SCSI POST OR CONFIGURATION ERRORS OCCUR, THE FOLLOWING ITEMS SHOULD BE CHECKED:

- A. DIAGNOSTICS SHOULD BE RUN TO TEST THE EQUIPMENT. IF A FAILURE IS INDICATED, USE THE ERROR CODE EXTENSION TO ISOLATE THE CAUSE. COMPLETE SCSI DEVICE ERROR CODES ARE 12 CHARACTERS LONG.
 *****NOTE THE FOLLOWING*****
 THE FIRST EIGHT CHARACTERS OF THE SCSI ERROR CODE ARE DEVICE INFORMATION, NOT ERROR INFORMATION. THE ERROR INFORMATION IS IN THE NEXT 4 CHARACTERS (ERROR EXTENSION BYTES). FAILURE TO USE THE ENTIRE ERROR CODE MAY RESULT IN INCORRECT FRU PARTS REPLACEMENT.
- B. EACH DEVICE MUST BE SET FOR A UNIQUE SCSI ID VIA JUMPERS, SWITCHES OR REMOTELY WITH A CABLE CONNECTED SWITCH. RUN "SET AND VIEW SCSI CONFIGURATION," FROM THE CONFIGURATION MENU, TO CONFIGURE NEW OR POWERED-OFF DEVICES.
- C. ARE ALL DEVICES RECEIVING POWER?
 1. IS THE "POWER GOOD" (GREEN) LIGHT ON THE SYSTEM UNIT TURNED ON?
 "POWER GOOD" IS MORE COMPLEX THAN A "POWER-ON" LIGHT. IT INDICATES THE POWER SUPPLY IS DELIVERING ALL THE CORRECT DC OUTPUT VOLTAGES WITHIN SPECIFICATIONS. (+5 VDC FOR LOGIC AND +12 VDC FOR MOTOR, THOUGH SOME SCSI FIXED DISKS MAY USE +5 VDC FOR THE MOTOR ALSO.) ANY MISSING OR INCORRECT VOLTAGE WILL CAUSE THE SYSTEM TO SHUT DOWN (SELF-PROTECT).
 2. IS THE POWER CABLE CORRECTLY CONNECTED (NOT INVERTED)?
 ARE ANY CONTACTS PUSHED BACK INTO THE CONNECTOR? CHECK ALL CABLE CONNECTIONS. ARE ANY FEMALE CONTACTS EXPANDED

SCSI DEVICES WILL NOT CONFIGURE OR COME READY

(DEFORMED), THEREFORE MAKING INTERMITTENT CONTACT? IF SO, REFORM THEM USING THE TIP OF A SMALL SCREWDRIVER, ETC.

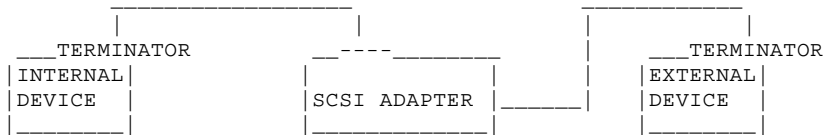
- D. ALL CONNECTIONS AND CABLING MUST BE CORRECT.
 - 1. IS THE SCSI ADAPTER FULLY SEATED?

TENSION ON THE EXTERNAL SCSI INTERFACE CABLE MAY CAUSE THE SCSI ADAPTER TO PARTIALLY UNPLUG (UNSEAT) FROM THE SYSTEM BOARD. (SYSTEMS JAMMED AGAINST THE WALL ARE SUBJECT TO THIS.)

- 2. ARE THE CABLES FULLY SEATED?

- E. IT IS CRITICAL THAT THE SCSI BUS IS PROPERLY TERMINATED.

- 1. THE PHYSICAL ENDS OF THE INTERNAL AND EXTERNAL SCSI BUS MUST BE TERMINATED AT THE LAST DEVICE. DEVICES CONNECTED TO THE MIDDLE OF THE BUS MUST NOT BE TERMINATED.



- 2. TERMINATOR TYPES INCLUDE:

- SOCKETED DIP (DUAL IN-LINE PACKAGE) ON THE ADAPTER.
- CONNECTOR PLUG ON ADAPTER'S INTERNAL OR EXTERNAL CONNECTOR OR CABLE
- TWO OR MORE SOCKETED SIPS (SINGLE IN-LINE PACKAGE) ON A DEVICE.
- IN-LINE TERMINATOR ATTACHED BETWEEN THE DEVICE AND CABLE.
- ENABLED VIA A JUMPER

- 3. THE POLARITY OF TERMINATORS MUST BE CORRECT.

- PIN 1 ON DIPS AND SIP ARE USUALLY INDICATED BY A DOT OR ARROW.
- PIN 1 ON SOCKETS ARE USUALLY INDICATED BY A 1, DOT, OR SQUARE SOLDER PAD.

- F. READ ERRORS MAY BE CAUSED BY A BAD OR INTERRUPTED WRITE IF THE DRIVE WAS BUMPED OR POWER FAILED DURING THE WRITE OPERATION (SECTOR INCOMPLETELY WRITTEN).

- 1. IF ONLY THE DATA IS CORRUPTED, REWRITING THE DATA WILL CORRECT THE ERROR.
- 2. IF THE ERROR OCCURS IN THE DIRECTORY OR THE OPERATING SYSTEM'S FILE STRUCTURE, IT MAY BE NECESSARY TO PERFORM A HIGH LEVEL FORMAT (FORMAT C:), OR EVEN RECREATE THE PARTITION WITH FDISK.
- 3. IF THE SECTOR ID IS CORRUPTED (ID OR SECTOR NOT FOUND ERRORS), AN ADVANCED DIAGNOSTIC FORMAT SHOULD BE ATTEMPTED PRIOR TO REPLACEMENT OF THE FIXED DISK. THE ADVANCED DIAGNOSTIC FORMAT WILL REWRITE ALL SECTOR ADDRESS AND DATA FIELDS. WHEN THE FORMAT COMPLETES, THE DIAGNOSTICS SHOULD BE RERUN. IF THE DIAGNOSTICS THEN RUN ERROR-FREE, IT IS UNLIKELY A HARDWARE FAILURE HAS OCCURRED.

- G. IF FAILURES RETURN AFTER A PARTICULAR SOFTWARE APPLICATION HAS BEEN LOADED, SOFTWARE MAY BE CORRUPTING THE FIXED DISK. ASSISTANCE SHOULD BE SOUGHT FROM THE APPROPRIATE SOFTWARE SOURCE.

NOTE:

FAILURES MAY OCCUR DURING SYSTEM OPERATION, YET DIAGNOSTICS MAY RUN ERROR-FREE. THIS COULD BE DUE TO IMPROPER TERMINATION. THE TERMINATOR IS CONSIDERED PART OF THE "CABLING BEING INTACT" ASSUMPTIONS, AS NOTED ABOVE. FOR ADDITIONAL INFORMATION ON TERMINATION OF SCSI DEVICES, REFER TO RETAIN RECORD # H092645 OR "IBM PS/2 AND PS/VALUEPOINT SUBSYSTEMS, GG24-4002-00, WHICH SUPERSEDES "SCSI-ARCHITECTURE AND IMPLEMENTATION, GG24-3507-00, WHICH IS NO LONGER AVAILABLE.

SAS KEYWORDS:

PSY2	PSY2ADPT	PSY2FDSK	PSY2ERR
8560ADPT	8580ADPT	8560FDSK	8580FDSK
8560ERR	8580ERR	D/T8560	D/T8580
D/T8590	D/T8595	D/T8585	D/T9595
D/T8557	D/T8556	D/T8577	PSVP

PSY2 RETAIN TIPS

SCSI DEVICES WILL NOT CONFIGURE OR COME READY

D/T8560
D/T9590
D/T9577
24MB

D/T8565
D/T9556
????
24

D/T8570
D/T9557
?????
MB

D/T9585
D/T9576
24MEG

1.2.459 SCSI DRIVE FAILS TO BOOT W/16 BIT AT FAST SCSI

Record number: H136903

Device: D/T6899
Model: M
Tip key: 005
Date created: 097/03/18
Date last altered: A97/03/18

IBM IntelliStation Z Pro 6899 systems may not recognize a SCSI device when attached to an IBM 16 Bit AT Fast SCSI PCI PnP adapter if there are no devices attached to the system board IDE controller.

For example, if the boot device (C:) is a SCSI drive attached to the IBM 16 Bit AT Fast SCSI PCI PnP adapter, and an IDE CDROM drive is attached to the system board IDE controller, removing the cable from the IDE CDROM drive will cause the system not to recognize the SCSI boot drive.

This problem does not occur with the Adaptec 2940-UW SCSI adapter.

Customers requiring use of the IBM 16 Bit AT Fast SCSI PCI PnP adapter should be made aware that the use of this adapter requires an IDE device to be installed on the system board IDE controller.

Adaptec 2940-UW is a trademark of Adaptec, Inc.

SAS KEYWORDS:

PSVP	PSY2	IBMPC	PSY2OEM
PSVPOEM	PSVPADPT	PSY2ADPT	PSY2PART
PSVPPART	UNCLASSIFIED	60266	PWS

SCSI FIXED DISK DIAGNOSTIC ERROR RETURN CODES

1.2.460 SCSI FIXED DISK DIAGNOSTIC ERROR RETURN CODES

Record number: H00727

```
Device:           D/T8550
Model:            M
Tip key:          186
Date created:     093/07/28
Date last altered: A94/01/11
```

In many cases, unnecessary replacement of SCSI fixed disk drives may be avoided by interpreting the ERROR RETURN CODE which is provided by the ADVANCED DIAGNOSTICS.

The SCSI error codes for Advance Diagnostics are different from the SCSI POST error (QEET) codes provided in the HMM, Form # S52G-9971 - 01. If SCSI errors occur during POST, the Advanced Diagnostics should be run prior to any parts being replaced.

When the SCSI Fixed Disk Diagnostic Test detects a failure in a hard file, a 12 character error code is generated which consists of the 8 digit SCSI ERROR CODE, plus the 4 digit ERROR RETURN CODE.

Error code 0210401H 9231 is an error code which was provided by the Advanced Diagnostics during an actual service incident. This error is decoded using the following format:

```
0210401H 9231      (actual error code)
0210PLSC 9XYY      (decoding key)
```

```
0210 - means non-removal fixed disk media (hard file).
P    - PUN (Physical unit number, ie. SCSI ID=4)
L    - LUN (Logical unit number, 0 on fixed disks)
S    - micro channel slot of the SCSI adapter
C    - capacity code of the specific fixed disk being tested
```

```
9    --> UNIT REFERENCE CODE      (Important, See note below)
X    --> SENSE KEY                  (Refer to Chart 1, below)
Y |----> ADDITIONAL SENSE CODE      (Refer to Chart 2, below
Y |                                00 - 5D are valid codes)
```

The information contained in the first 8 characters is not error specific and only points to the device under test. The RETURN CODE is more specific to the failure and may be decoded by first referring to the SENSE KEY in Chart 1 and then referring to the ADDITIONAL SENSE CODES from chart 2 (attached below). Some of the SENSE KEY and ADDITIONAL SENSE CODES represent a probable software problem. Operating System software has the capability of receiving this information and using it to provide detailed error information to the user, or to execute error recovery processes. The use of this capability varies by design from operating system to operating system.

Note:

If the Unit Reference Code is other than a '9', the following SENSE KEY and ADDITIONAL SENSE CODES (Charts 1 and 2) have DIFFERENT meanings and SHOULD NOT be used.

```
*****          CHART 1          *****
*****          SENSE KEY DESCRIPTION *****
```

- 0 NO SENSE KEY No sense key information is available
- 1 RECOVERED ERROR The last command completed successfully with recovery action performed by the device.
- 2 NOT READY The logical unit addressed cannot be selected.
- 3 MEDIA ERROR The command terminated with a non-recoverable error condition caused by either an error in the recorded data, or a flaw in the media (disk).
- 4 HARDWARE ERROR The device detected a non-recoverable hardware error while performing a command or during a diagnostic test.
- 5 ILLEGAL REQUEST There was an illegal parameter in the command descriptor block or additional parameter supplied as data. This is a probable software error.
- 6 UNIT ATTENTION The device has been RESET by either a power-on sequence, a bus DEVICE RESET message, a HARD RESET, removable media

SCSI FIXED DISK DIAGNOSTIC ERROR RETURN CODES

was removed/inserted, or a Mode Select command was issued.

7 - A N/A (Unused)
 B ABORTED COMMAND The device aborted the command.
 C-D N/A (Unused)
 E MISCOMPARE Indicates that the source data did not match the data read from the media on a Write Verify or Verify command.
 F N/A (Unused)

***** CHART 2 *****
 ***** ADDITIONAL SENSE CODE DESCRIPTION *****

- 00 - NO ADDITIONAL SENSE INFORMATION IS AVAILABLE.
- 01 - NO INDEX OR SECTOR WAS FOUND. Low-level format the drive. If the diagnostics then run error-free, the drive is serviceable.
- 02 - SEEK INCOMPLETE. The time required to physically move the head/arm assembly or switch heads exceeds the specified limits. Probably a hardware failure.
- 03 - WRITE FAULT. A write fault error occurs when a track position or write circuit fault is detected during a write operation. This is not always a hardware failure. A physical jolt to the drive during a write operation could cause this situation. An isolated occurrence does not indicate a hardware failure.
- 04 - DRIVE NOT READY. Occurs when the spindle motor speed is out of specifications, or if the device requires a motor start command and the command was not issued. Do a Power-off-on and retest the drive.
- 09 - TRACK FOLLOWING ERROR. Occurs when the actuator position cannot be maintained over a given track. This is probably a hardware failure.
- 0C - WRITE ERROR. A failure occurred during write operation (probably with Verify on) and auto-reallocation of the sector failed or is not supported on this type drive. A low-level format should be done, or the sector re-assigned. If the diagnostics then run error-free, the drive is serviceable.
- 10 - ID CRC. A read error was detected in the ID field of the sector during a read or write operation. A low-level format should be done. If the diagnostics then run error free, the fixed disk is serviceable.
- 11 - UNRECOVERABLE READ ERROR. Occurred in the data field of the sector that could not be corrected. The sector should be re-written, reassigned, or a low-level format done. If the diagnostics then run error-free, the drive is serviceable.
- 14 - NO RECORD FOUND. Occurs when the SCSI device cannot find the requested record. Low-level format the drive, then retest. If no errors occur, the drive is serviceable.
- 15 - SEEK POSITIONING ERROR. Occurs when the positioning of the head/arm assembly to a new location failed. This is probably a hardware failure.
- 16 - DATA SYNCHRONIZATION MARK ERROR. Occurs when the sync byte at the data field cannot be detected. A low-level format should be done. If diagnostics then run error-free, the fixed disk is serviceable.
- 17 - RECOVERED READ DATA WITHOUT ECC. Occurs when the ECC check bytes, calculated from the read data during the first read operation, doesn't match the ECC check bytes appended to the data field and did match on a subsequent read operation. This can result from minor media defect. Rewrite, re-assign the sector or low level format the drive and re-run diagnostics. If no error is detected, the fixed disk is serviceable.
- 18 - RECOVERED READ DATA WITH ECC. Occurs when the ECC check bytes calculated from the read data during the

SCSI FIXED DISK DIAGNOSTIC ERROR RETURN CODES

first read doesn't match the ECC check bytes appended to the data field and had ECC correction applied on a subsequent read. Possibly, a minor media defect. Rewrite, re-assign the sector or low level format the drive and re-run diagnostics. If no error is detected, the fixed disk is serviceable.

- 19 - DEFECT LIST ERROR. Occurs when a data error is detected while reading the manufacturing defect list or while reading or writing the grown defect list. Low-level format and ignoring the grown defect list and retest the drive. If no errors occur the drive is serviceable.
- 1A - PARAMETER LIST LENGTH ERROR. Occurs when the command operation code received by the device is invalid. Probable software problem.
- 1B - SYNCHRONOUS DATA TRANSFER ERROR. An error during data transmission occurred. Check cable connections, cable termination, and for excessive cable length, and retest.
- ID - COMPARE ERROR. Occurs when the data read from the media doesn't match the data written to the media on a Write with Verify command. Probably a hardware problem.
- 20 - INVALID COMMAND OPERATION CODE. Occurs when the command operation code received by the device is not supported.
- 21 - ILLEGAL LOGICAL BLOCK ADDRESS. Occurs when the logical block address requested is outside the range supported by the device. Probable software problem.
- 24 - ILLEGAL FIELD IN THE CDB. Occurs when the device detects unexpected values in any field of the CDB (Command Descriptor Block) Probable software problem.
- 25 - ILLEGAL LUN. Occurs when the LUN field in the CDB is not supported. Probable software problem.
- 26 - ILLEGAL FIELD IN THE PARAMETER LIST. Occurs when the device detects values other than expected in any field of the parameter list. Probable software problem.
- 28 - REMOVABLE MEDIUM CHANGED. (Not applicable for fixed disk drives.)
- 29 - POWER-ON RESET or BUS DEVICE RESET. A power-on reset or a bus device reset sense code indicates that the device (drive) was reset. A reset may have been issued by software or may be defective hardware.
- 2A - MODE SELECT PARAMETERS CHANGED. Not a hardware failure. This could be due to either software or diagnostic code problems.
- 31 - MEDIA FORMAT CORRUPTED. The format of the media appears to be corrupted, or was interrupted (power down, reset, etc.) prior to completion of a Format Unit command. The Format Unit command should be re-issued and must complete successfully for this error condition to be removed.
- 32 - NO DEFECT SPARE LOCATION AVAILABLE. Indicates that the Reassign Block Command cannot successfully complete because all available spare sectors have been used. A Low-level format should be done ignoring the grown defect list and the drive retested. If no errors occur the drive is serviceable.
- 3F - OPERATING CONDITION ON THE DEVICE HAS BEEN CHANGED. This is probably a software error.
- 40 - COMPONENT FAILURE. The drive self-test diagnostics detected a failure (Hardware) in the device.
- 43 - MESSAGE REJECT ERROR. Occurs when an inappropriate or unexpected Message Reject is received from the SCSI Adapter/A or the SCSI Adapter/A rejects a message twice.
- 44 - INTERNAL CONTROLLER ERROR. Occurs when an internal microprocessor detects incorrect status or receives an illegal request from the device electronics. This is a hardware failure.
- 45 - SELECT/RE-SELECT FAILED. Occurs when the SCSI Adapter fails to respond to a re-selection within 250 milli-

SCSI FIXED DISK DIAGNOSTIC ERROR RETURN CODES

seconds after the device gains bus arbitration. The re-selection is attempted a second time before setting select/re-select failed status.

- 47 - SCSI INTERFACE PARITY ERROR. Occurs when the device detects incorrect parity on the SCSI data bus (CABLE). Check cable connections, cable termination, and cable length (maximum 6 meters, or approx. 20 feet).
- 48 - INITIATOR DETECTED ERROR. Occurs when the SCSI Adapter/A detects an error, sends a message to retry, detects the error again, and sends the retry message a second time. This is probably a hardware problem.
- 49 - INAPPROPRIATE/ILLEGAL MESSAGE. Occurs when the SCSI Adapter/A sends a message that either is not supported or is not in a logical sequence. Probably a software error.
- 4C - LOGICAL UNIT FAILED SELF CONFIGURATION. This is probably a hardware failure in the device being tested.
- 4E - OVERLAPPED COMMANDS ATTEMPTED. Probably a software error.
- 5D - PREDICTIVE FAILURE ANALYSIS THRESHOLD REACHED. When a predetermined number of errors is reached, this error message will prompt the user to take action to prevent loss of data (back-up the data and have fixed disk serviced/replaced as appropriate.)

SAS KEYWORDS:

PSY2	PSY2FDSK	PSY2ERR	D/T8570
D/T3511	D/T9595	D/T8595	D/T8590
D/T8560	D/T8580	D/T9585	D/T9577
D/T9576	D/T8556	D/T8557	D/T8565
D/T8555	210	ERROR	

SCSI INLINE TERMINATOR NOW AVAILABLE

1.2.461 SCSI INLINE TERMINATOR NOW AVAILABLE

Record number: H09137

Device: D/T8550
 Model: M
 Tip key: 116
 Date created: 092/02/24
 Date last altered: A93/12/13

A SCSI "INLINE" TERMINATOR IS NOW AVAILABLE.

THE TERMINATOR MAY BE OBTAINED THROUGH NORMAL CHANNELS BY ORDERING FRU P/N92F0142. THIS TERMINATOR, WHICH WAS RELEASED ON THE 320MB AND 400MB SCSI DRIVES, MAY ALSO BE USED FOR TERMINATION ON OTHER SCSI DEVICES, SPACE PERMITTING.

THE FRU PART NUMBER FOR THE TERMINATOR, WILL BE PUBLISHED IN THE NEXT RELEASE OF THE APPROPRIATE HMS DOCUMENTATION.

WHEN USING THE "INLINE" TERMINATOR, OTHER SCSI TERMINATION MUST NOT BE PRESENT ON THE DRIVE.

SAS KEYWORDS:

PSY2	8557SYSFDSK	8560SYSFDSK	8595SYSFDSK
8570SYSFDSK	8580SYSFDSK	8590SYSFDSK	D/T8540
8555SYSFDSK	8565SYSFDSK	D/T8530	D/T8590
D/T8557	D/T8560	D/T8565	D/T8555
D/T8595	D/T8570	D/T8580	IN-LINE

1.2.462 SCSI-2 FAST/WIDE ADAPTER SUPPORT DISK MISSING.

Record number: H124811

```

Device:           D/T95XX
Model:           M
Tip key:         021
Date created:    094/08/08
Date last altered: A94/08/11

```

A limited number of SCSI-2 Fast/Wide Adapters, Option part number 6451280, FRU P/N92F0160 were shipped without the required support diskette. End users may obtain this diskette by calling 1-800-845-4263 and request diskette part number 82G5396.

Customers may also download this diskette image from the IBM PC Company Bulletin Board System at 919-517-0001. The file is identified as SCSI2FW.DSK. LDF.COM is also required to extract the needed information.

```

##### IMPORTANT #####
#
# THIS DISKETTE IS CUSTOMER OBTAINABLE. CUSTOMERS SHOULD #
# BE ADVISED TO CONTACT THE PC COMPANY HELPCENTER AT #
# 1 - 800-772 - 2227 IF ASSISTANCE IS REQUIRED IN GETTING THE #
# APPROPRIATE DISKETTE IMAGE. #
# #
#####

```

```

SAS KEYWORDS:
PSY2           D/T9585           D/T8590           D/T8595
D/T9576       D/T9577           ADF               OPTION
PSY2ADPT

```

PSY2 RETAIN TIPS
SCSI/RAID ADAPTER LIST

1.2.463 SCSI/RAID ADAPTER LIST

Record number: H132850

Device: D/T95XX
Model: M
Tip key: 023
Date created: 096/02/29
Date last altered: A96/03/04

SCSI/RAID CONTROLLER MATRIX

SCSI / RAID Adapter	FRU P/N	Source	Name	Supported Systems
SCSI-2 Fast/Wide PCI RAID Adapter	06H5078	Mylex	Savannah	320, 520, 720
SCSI-2 Fast/Wide PCI Adapter	06H8574	Adeptec 2940W	Foxtown	300, 320, 520 720
SCSI-2 Fast PCI-bus Adapter	06H5250	Adeptec 2940		310 PC 350, 750
SCSI-2 Fast PCI-bus Adapter	53G0382	IBM	Diamond-back	300
SCSI-2 Fast/Wide Adapter/A (micro channel)	92F0160	IBM	Corvette	95, 500, 720
SCSI F/W Streamin RAID Adapter/A (micro channel)	06H3059	Mylex	Cheetah	500, 720
SCSI Fast RAID Adapter/A (micro channel)	92F0335	Mylex	Passplay	95
SCSI 8 - bit W/O Cache Adpt/A (micro channel)	85F0002	IBM	Tribble	All PS/2
SCSI 16 - bit W/Cache Adpt/A (micro channel)	85F0063	IBM	Spock	All PS/2
16 Bit AT-bus Fast SCSI Adpt. (ISA)	82G4879	Future Domain		ValuePoint
SCSI-2 Fast (micro Channel)	71G3576	Future Domain		9576, 9577

SAS KEYWORDS:

PSY2	PSY2FDSK	D/T8580	D/T8590
D/T9595	D/T8595	D/T9576	D/T9577
D/T9595A	D/T6384	PSVPFDSK	D/T8640
D/T8641	D/T8642	SERVER	PC-SERVER
PCSERVER	ARRAY	PSY2ADPT	P/N06H5078
P/N06H8574	P/N06H5250	P/N53G0382	P/N92F0160
P/N06H3059	P/N92F0335	P/N85F0002	P/N85F0063
P/N82G4879	P/N71G3576	PSY2SCSI	8640
8641	8642		

1.2.464 SDLC ADAPTERS FAIL IN PC 700 SYSTEMS

Record number: H13419

Device: D/T6875
 Model: M
 Tip key: 007
 Date created: 095/07/12
 Date last altered: A95/11/21

SDLC adapters may fail to function properly or fail to be recognized by the system when installed in an IBM PC 700 Series system.

The Business Audio function of the PC 700 system board is hardwired at I/O address 388-38B. This I/O address may conflict with most SDLC adapters. For example, the IBM Multi-Protocol Adapter (MPCA) defaults to I/O address 380-38F which conflicts with the Business Audio feature. The MPCA adapter can be reset to 3A0-3AF to eliminate the conflict.

Change the I/O address (Mode) of the SDLC adapter to an address that does not conflict with I/O address 388-38B or disable the Business Audio feature via the Setup Utility.

SAS KEYWORDS:

PSY2	D/T68XX	PSY2ADPT	PSVPADPT
D/T6876	D/T6886	D/T6875	D/T6885
68XX	6876	PSY2COMM	PSVPCOMM
6886	6875	6885	PSY2PROG
PSY2ERR	PSVPERR	PSVP	IBMPC

SDLC FAILS IN 6384 W/SOUNDBLASTER PRO ADAPTER

1.2.465 SDLC FAILS IN 6384 W/SOUNDBLASTER PRO ADAPTER

Record number: H20752

Device: D/T6384
 Model: M
 Tip key: 019
 Date created: 093/03/22
 Date last altered: A93/09/17

THE PS/VALUEPOINT 6384 WILL FAIL TO CONNECT TO AN SDLC NETWORK IF AN IBM SDLC ADAPTER AND A CREATIVE LABS SOUNDBLASTER PRO ADAPTER ARE INSTALLED IN THE SAME SYSTEM. THIS FAILURE WILL OCCUR ON ANY MODEL OF PS/VALUEPOINT USING THIS COMBINATION OF ADAPTERS.

THE FAILURE IS CAUSED BY AN I/O ADDRESS CONFLICT BETWEEN THE SDLC ADAPTER AND THE SOUNDBLASTER PRO CARD. THE SOUNDBLASTER PRO ADAPTER USES I/O ADDRESS: 388-39F

THERE IS NO WAY TO CHANGE OR DISABLE THE CONFLICTING I/O ADDRESS RANGES OF THE SOUNDBLASTER PRO OR THE SDLC ADAPTER. THESE TWO ADAPTERS ARE INCOMPATIBLE IN THE SAME SYSTEM.

IF THE CUSTOMER IS EXPERIENCING THIS PROBLEM, THEY SHOULD BE REFERRED BACK TO THEIR PLACE OF PURCHASE FOR THE SOUNDBLASTER PRO ADAPTER OR TO CREATIVE LABS TECHNICAL SUPPORT AT
 1 - 800-998 - 5227.

THIS PROBLEM MAY ALSO OCCUR IN OTHER IBM AT BUS SYSTEMS SUCH AS THE IBM PC/AT AND PS/2 8530, 8535 AND 8540.

IBM SDLC FRU P/N'S ARE: 8529295 (OLD STYLE)
 8286099 (NEW STYLE)

SAS KEYWORDS:

PSVP	VALUE POINT	PSVPOEM	PSVPCOMM
PSVPADPT	PSY2OEM	PSY2COMM	PSY2ADPT
PSY2MISC	PSVPMISC	D/T8530	D/T8535
D/T8540	D/T5170	PSY2	

1.2.466 SECOND PROCESSOR INSTALLATION IN INTELLISTATION M-PRO

Record number: H007583

Device: D/T6898
 Model: M
 Tip key: 006
 Date created: 098/01/07
 Date last altered: A98/02/27

When preparing to install a second Pentium II processor, it IS NOT necessary to reinstall WindowsNT. Use the supplied utility, ADDCPU.EXE to update the WindowsNT operating system for dual processor operation.

NOTE: The ADDCPU.EXE utility is also used when adding a second Pentium Pro processor to the IBM IntelliStation Z-Pro Series 6899 systems, and the IBM PC365 Series 6589 systems.

ADDCPU.EXE, and its companion text file ADDCPU.TXT, are located in the \Winnt\Multipro directory on the Ready-To-Configure (RTC) CDROM supplied with the IntelliStation M-Pro Series 6898 system.

For machine types 6589 and 6899, ADDCPU.EXE and ADDCPU.TXT may be downloaded from the following locations.

***** IMPORTANT! *****
 *
 * See the updated ADDCPU.TXT file for the most current *
 * upgrade and installation instructions BEFORE running *
 * the ADDCPU.EXE utility. *

ADDCPU.EXE and ADDCPU.TXT may be downloaded via the Internet from the IBM Personal Systems Group file library by searching the following URL: www.us.pc.ibm.com/files.html

ADDCPU.EXE and ADDCPU.TXT may also be downloaded from the IBM Personal Systems Group BBS by dialing 919-517-0001.

NOTE: The ADDCPU.TXT file lists the steps necessary PRIOR to physically installing the second Pentium II processor. It is extremely important that these steps be followed in their correct order. Skipping steps may render the operating system unusable and facilitate reloading the WindowsNT operating system.

Windows and WindowsNT are trademarks of Microsoft Corporation. Pentium, Pentium Pro, and Pentium II are trademarks of Intel Corporation.

SAS KEYWORDS:

PSY2	PSY2DOC	PSY2OPER	PSY2PART
PSVP	PSVPDOC	PSVPOPER	PSVPPART
D/T6898	D/T6589	D/T6899	6898
6589	6899	PC365	PENTIUM II
PENTIUM PRO	UNCLASSIFIED		

SELECT a DOCK REPLACEMENT KEY ORDERING.

1.2.467 SELECT a DOCK REPLACEMENT KEY ORDERING.

Record number: H16579

Device: D/T3547
Model: M
Tip key: 002
Date created: 097/07/30
Date last altered: A97/08/14

The Compu-Lock Web site is now enabled and active for ordering docking station replacement keys. The web site URL is

Http: //www.compu-lock.com

Compu-Lock
470 Washingtonsuite 4
Norwood, MA
PHONE 617-440-9900
FAX 617-440-9903
1 - 800 448-4455

SAS KEYWORDS:

PSY2 PSY2PART DOCKING STATION THINKPAD
UNCLASSIFIED

PSY2 RETAIN TIPS
SERIAL PORTS MISLABELED ON 6381/SI

1.2.468 SERIAL PORTS MISLABELED ON 6381/SI

Record number: H024617

Device: D/T6381
Model: M
Tip key: 003
Date created: 094/05/24
Date last altered: A97/07/13

A LIMITED NUMBER OF 6381/SI SYSTEMS WERE SHIPPED TO THE FIELD WITH SERIAL PORTS LABELED IMPROPERLY.

THE ILLUSTRATION BELOW SHOWS THE INCORRECT LABELING OF THE SERIAL PORTS:

()	()	()	()	()	()
KYBD	MOUSE	SERIAL A	SERIAL B	PARALLEL	DISPLAY
				PORT	

THE LABEL INDICATES THAT SERIAL PORT "A" IS POSITIONED NEXT TO THE MOUSE PORT AND SERIAL PORT "B" IS POSITIONED NEXT TO THE PARALLEL PORT. THIS IS NOT CORRECT

THE ILLUSTRATION BELOW SHOWS THE CORRECT LABELING OF THE SERIAL PORTS:

()	()	()	()	()	()
KYBD	MOUSE	SERIAL B	SERIAL A	PARALLEL	DISPLAY
				PORT	

THE PS/VALUEPOINT HMM DATED SEPTEMBER 1993, PAGES 74 AND 76 ALSO SHOWS THE SERIAL PORT POSITIONS INCORRECTLY. PAGES 75 AND 77 OF THE SAME HMM, UNDER THE SYSTEM BOARD LOCATION NUMBER AND NAME LISTINGS, SHOW THE SERIAL PORTS IN THEIR PROPER LOCATION.

THE ERRORS IN THE PS/VALUEPOINT HMM WILL BE CORRECTED IN THE NEXT REVISION.

LABELS WITH THE APPROPRIATE DESIGNATION MAY BE OBTAINED FROM THE IBM PC COMPANY TECHNICAL SUPPORT GROUP IN RALEIGH AT 919 - 254 - 8020 OR TIE LINE 444-8020.

SAS KEYWORDS:

PSVP	PSY2	PS/VP	6381
PSVPDIAG	PSY2DIAG	PSVPERR	PSY2ERR
PSVPPART	PSY2PART	VALUEPOINT	COMM A
COMM B			

1.2.469 SERVER FAILURES/TRAP/NMI/HANG PROBLEM APPROACH

Record number: H13824

Device: D/T9595
 Model: M
 Tip key: 026
 Date created: 095/09/12
 Date last altered: A95/11/29

The following information is provided to assist in resolving SYSTEM FAILURES. To resolve system failures, both hardware and software must be examined and considered as a whole. This tip is a companion tip to RETAIN records, H13823 (Novell) and H131814 (OS/2, released 11/29/95). All Three records should be reviewed to provide maximum information.

The following actions are to be taken by the servicer to obtain as much information as possible concerning the system failure. The information gathered should be available if assistance is required from either the established hardware or software support structure.

Note:

Various operating systems refer to NMI's using different terms. OS/2 calls them "TRAP 0002", SCO UNIX, refers to them as "Panic errors." Novell Netware references them as NMI's.

- O If the operating system is Novell, then refer to RETAIN Records H13823 and H104541 which provide specific information regarding Non-Maskable Interrupt Errors, and the Hardware/Software dependencies of this operating system.
- O If the operating system is IBM OS/2 refer to RETAIN records H123587, H124992 and H20560 for additional information.

HELPFUL HINTS:

- 1) Record the EXACT error message or indication.
Is there an error message in the LED panel or monitor, etc?
- 2) If the failing system is an 8595, 9595 or 8641 with a Type 3 or 4 Processor board installed, view the hardware error log and record any information it may contain. RETAIN record H061444 provides important details. Servers 300 and 320 (8640), 9585, 8595 Types 1 and 2 and non-IML servers do not provide hardware error logging capability.

Once the error log information is obtained, utilize the appropriate hardware support structure as required, to interpret the codes.

- 3) Record the hardware and software configuration of the machine, including:
 - A. All adapters, including memory SIMM brands and types.
 - b. Operating system versions and levels.
 - c LAN and application versions and levels.
 - d. Configuration settings.

Use PRINT SCREEN to dump ALL HARDWARE CONFIGURATION screens to a printer attached to the printer port, or use one of the software configuration utilities (PC TOOLS) to dump the configuration to a file. This information should be available to be FAX'd to the support center if requested.

- 4) Hardware RETAIN should be searched for any known problems. The hardware support centers have RETAIN search capability. There are over 1400 RETAIN tips concerning PC Co. products, see RETAIN record H064491 for instructions to make your search more effective.
- 5) If you are experiencing what appears to be memory related errors on 8595/9595 systems, refer to RETAIN Records, H126999 and H083955, which refers to 118 ERRORS DURING POST ON 8590 AND 8595 SYSTEMS, and to false Trap 0002 memory problems.

Does the system have hardware error logging capability?
 If so, and the hardware error log is empty, and trap 0002 is the failure symptom, contact OS/2 Support and request assistance. DO NOT REPLACE MEMORY.

- 6) RETAIN record H107774 provides explanations for the most common OS/2 trap errors and general direction to obtain the most effective assistance (hardware, software).

SERVER FAILURES/TRAP/NMI/HANG PROBLEM APPROACH

Additional RETAIN searches should be made by machine type, memory type, symptom and operating system.

- 7) Run current hardware Advanced diagnostics (CONTROL-A).
Record all error codes COMPLETELY.

SCSI BUS TERMINATION

FAILURE TO PROPERLY TERMINATE THE SCSI BUS CAN RESULT IN POOR SIGNAL QUALITY AND NOISE ON THE BUS. ERRORS CAUSED BY THIS CONDITION MAY BE INTERMITTENT, AND DIFFICULT TO DIAGNOSE DIFFICULT TO UNDERSTAND OPERATING SYSTEM BOOT PROBLEMS AND IML FAILURES HAVE BEEN CAUSED BY IMPROPER SCSI BUS TERMINATION. Verify the SCSI bus is correctly terminated. Refer to RETAIN record H092645 for details.

SYSTEM HANGS

If the system hangs, have the following information available:

- A. Under what application/conditions does the failure occur?
- b. Has the failing application ever worked? Initial install?
- c. How often does the failure occur?
- d. Can the failure be re-created at will?
- e. Have there been any recent changes (Hardware or software)?
- f. Do keyboard lights toggle? (Scroll Lock, Caps Lock, etc?)
- g. Does mouse cursor move?
- h. Will Warm boot work?
- i. Is hardware Error log information available?

BIOS/FIRMWARE/DEVICE DRIVER LEVELS

System hangs can be caused by incompatible levels of firmware, BIOS and device drivers. Refer to RETAIN record H104541.

IDENTICAL MACHINES:

In multiple machine environments, where only a few systems are failing the following comment is often heard:

"All our machines are exactly alike."

While offered in a spirit of good intentions, this is rarely correct. For systems to be truly identical, all of the following must be identical (No variations allowed):

1. Hardware setup (physical and configuration).
All identical hardware at the same engineering levels, installed in the same positions, and configuration options set exactly the same.
2. Software setup. (Config.Sys, Startup.CMD, etc.).
Identical entries in the same exact sequence.
3. BIOS, Firmware and Device Drivers should be at the same level.
4. Identical workloads. (comparable number of workstations).

Any variation of any of the above, should be suspect. Use the method related in "Helpful Hints" # 3 above to compare. A comparison between working and failing systems will often point out a difference in one of the above, resolving the problem.

Netware is a trademark of Novell Inc.

SAS KEYWORDS:

PSY2	PSY2PROG	TRAP	SYSERR
NETWARE	HANGS	PSY2ERR	PSY2COMM
D/T8580	D/T8595	D/T8590	D/T9595A
D/T8641	WARP	RESOLUTION	PROCEDURE
DETERMINATION	SERVICE	AID	1915
SYS	0001915	OS2	02
2	002	SERVER	95
500	D/T8642	8595	D/T8641
8641	8640	300	320
D/T8640	310	520	720

1.2.470 SERVER 295 SOFTWARE INSTALLATION

Record number: H10437

Device: D/T8600
Model: M
Tip key:
Date created: 092/11/04
Date last altered: A93/01/11

8600 Servers that are ordered with OS/2, LAN Server, MASS/2 and/or Multiprocessing Extensions/2 and Parallel Disk Array (PDA), will be preloaded for the customers convenience.

If the customer does not order LAN Server and plans on using LAN Manager, IBM will not preload MASS/2 and Multiprocessing Extensions/2, as it is necessary to install a network operating system prior to installing these applications. OS/2 and the PDA (if ordered) will be preloaded for the customer's convenience.

Assure that the customer understands the sequence of installation is LAN Manager, MASS/2, and Multiprocessing Extensions/2. The latter must be installed in uni-processor (single processor) mode.

Documentation will be included with the 8600 ship group to assist the customer with the proper steps of loading their software.

SAS KEYWORDS:

PSY2	PS2	PS/2	295
PARALLAN	INSTALL	PSY2PROG	PARALAN

1.2.471 SERVER 300 AND SERVER 320 DOCUMENTATION

Record number: H127987

Device: D/T8640
Model: M
Tip key: 008
Date created: 095/06/08
Date last altered: A96/01/22

This tip is to clarify the documentation required when servicing the Server 320. The Server 300 and the SERVER 320 are both machine type 8640.

The HMM (Hardware Maintenance Manual) form #S52G-9971-02, dated October 1994, includes the 8640 Server 300, models xNx (486DX2 - 66 Mhz) and xPx (Pentium 60 Mhz).

The HMM supplement (S30H-1660-00, dated March 1995) provides the information necessary to service Server 320, which is an 8640-xYx (Dual Pentium Processors).

The HMM supplement (S30H-2501-00, dated Oct. 1995) provides the information necessary to service Server 320 models OYx, ONx, OPx, OXx, OYx as well as Micro Channel Models MXx, & MYx. This same manual provides Server 310 and 520 HMM Supplements (8640 and 8641 machine types).

SAS KEYWORDS:

PSY2	SERVER	300	320
PSY2DOC	310	520	8640
8641			

1.2.472 SERVER 300 PENTIUM PROCESSOR HEAT SINK CHANGED

Record number: H131650

Device: D/T8640
Model: M
Tip key: 011
Date created: 095/11/03
Date last altered: A95/11/10

Servicers may receive Server 300 Pentium system boards, FRU P/N06H8756, from Mechanicsburg stock which do not have molded latch tabs on the processor socket. These tabs hold the processor heat sink retaining clip in place.

There are tabs molded onto the processor ZIF (Zero Insertion Force) socket of early level system boards, but the ZIF socket of the newer boards may not have these tabs.

Engineering is investigating this problem and required action. Until this investigation is completed, a Heat Sink Kit is available by ordering FRU P/N06H2180. The kit contains two clips and a heat sink which works on new level boards which have no tabs molded onto the ZIF socket.

Note: CAUTION SHOULD BE EXERCISED WHILE INSTALLING THE HEAT SINK RETAINING CLIPS. SAFETY GLASSES OR OTHER EYE PROTECTION SHOULD BE WORN TO PREVENT INJURY. THE CLIPS ARE UNDER SPRING TENSION AND COULD UNEXPECTEDLY UNLATCH DURING INSTALLATION.

This tip will be updated as additional information is available.

SAS KEYWORDS:

PSY2	SERVER	300	PSY2PART
06H8756	06H2180	PSY2TBD	

1.3 Chapter 3. Parts Information Tips

Subtopics

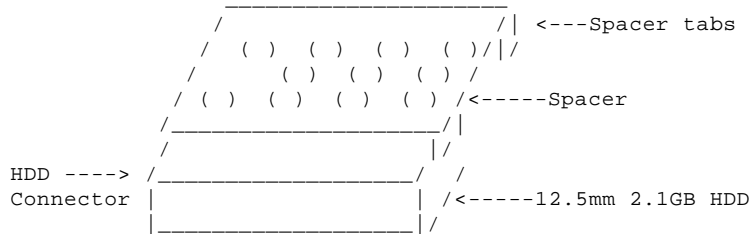
- 1.3.1 2635 HDD SPACER RELEASED FOR USE WITH 12.5MM HDDS
- 1.3.2 SERVER 500 FIXED DISK FAILS TO SPIN UP
- 1.3.3 SERVER 500 P390 DOCUMENTATION INCORRECT
- 1.3.4 SERVER 500 S/390 OPTIONS MAY BE SET INCORRECTLY
- 1.3.5 SERVER 720 BIOS REVISIONS (8642)
- 1.3.6 SERVER 720 DOCUMENTATION CORRECTION
- 1.3.7 SERVER 85 / SCO UNIX COMPATIBILITY
- 1.3.8 SERVERGUIDE OS/2 RECOVERY DISKETTE CREATION PROCEDURE
- 1.3.9 SERVICE AID DISKETTE - VERSION 2.10, NOW AVAILABLE
- 1.3.10 SERVICE AID FOR PS/2 AND VALUEPOINT MONITORS
- 1.3.11 SERVICE OF AOX CARD IN 8550 AND 8560
- 1.3.12 SHIFT/CTRL OPERATION FAILS WITH WORD PERFECT
- 1.3.13 SHIPPING INSERTS FOR 3.5" 1.44MB DISKETTE DRIVES
- 1.3.14 SHRINKWRAP OS/2 SMP WILL NOT INSTALL ON 8642
- 1.3.15 SIGMA DATA,(TSA) TECHNICAL SUPPORT AGREEMENT
- 1.3.16 SLOW LOADING KENSINGTON TRACK BALL DRIVER
- 1.3.17 SOME HELP TOPICS NOT AVAILABLE IN WINDOWS NT V4.0
- 1.3.18 SOME OEM MODEMS FAIL WITH 8525 AND 8530 SYSTEMS
- 1.3.19 SPECIAL NOVELL DRIVERS ARE REQUIRED FOR SCSI DEVICES
- 1.3.20 SPEECH RECOGNITION FAILS IN WIN-OS/2
- 1.3.21 STB GLYDER MAX-2 INSTALLATION AND CONFIGURATION TIPS
- 1.3.22 STORE SYSTEM LOOP ADAPTER CARD MOVING
- 1.3.23 SURGE SUPPRESSORS AND INTERMITTENT PROBLEMS
- 1.3.24 SUSPEND/RESUME NOT SUPPORTED ON 9552 WHILE DOCKED.
- 1.3.25 SUSPICIOUS 8MB SIMMS IN IBM PACKAGING
- 1.3.26 SWITCHES ON ADAPTER CARD MOD 002 EXTERNAL DISKETTE DRIVE
- 1.3.27 SWITCHES ON FRU P/N15F7996 - 4869 ADAPTER CARD
- 1.3.28 SYSTEM BOARD CABLE CONNECTOR STANDOFF AVAILABILITY
- 1.3.29 SYSTEM BOARD MEMORY ERROR IN PC 300/700 HMM
- 1.3.30 SYSTEM BOARD MEMORY SIMM RETAINING CLIPS
- 1.3.31 SYSTEM ERROR LOG UPDATE AVAILABLE
- 1.3.32 SYSTEM HANG USING "CREATE LAN IMAGE" W/WINDOWS95
- 1.3.33 SYSTEM HANG W/ACTIONMEDIA II STARTER/DIAG DISKETTE
- 1.3.34 SYSTEM HANGS AND FAILURES DUE TO EXCESSIVE HEAT
- 1.3.35 SYSTEM HANGS WITH DI/DO ADAPTER
- 1.3.36 SYSTEM HANGS WITH LAN ADAPTERS & PC SUPPORT PROGRAM
- 1.3.37 SYSTEM UPDATE DISKETTE VERSION 1.02 NOW AVAILABLE
- 1.3.38 SYSTEM WILL NOT POST (POWER-ON SYSTEM TEST)
- 1.3.39 S3 WINDOWS95 VIDEO DRIVER README.TXT FILE ERROR
- 1.3.40 S36/38 WORKSTATION EMULATION ADAPTER DIAGNOSTICS
- 1.3.41 TAKE THESE STEPS BEFORE REPLACING ITBU P/N87F9787
- 1.3.42 TAPE DRIVE FAILS TO OPERATE PROPERLY
- 1.3.43 TAPE ERRORS DUE TO NON-STANDARD TAPE AND CLEANING CARTRIDGES
- 1.3.44 TFT LCD PIXEL FAILURE CRITERIA
- 1.3.45 THERE ARE TWO DIFFERENT ENHANCED 80386 MEMORY EXPANSION
- 1.3.46 THINKPAD AC ADAPTER CONNECTORS
- 1.3.47 THINKPAD HMM FORM # S82G1502 03 PARTS CORRECTION
- 1.3.48 THINKPAD MAINTENANCE DISKETTE AVAILABLE VIA WEB.
- 1.3.49 THINKPAD NUMERIC KEYPADS
- 1.3.50 THINKPAD SCREW TORQUING PROCESS.
- 1.3.51 THINKPAD 300 BIOS UPDATE FOR VIDEO CARD
- 1.3.52 THINKPAD 350 AC ADAPTER FRU P/N'S
- 1.3.53 THINKPAD 350 BATTERY PACK INFORMATION
- 1.3.54 THINKPAD 350 BIOS LEVEL "1I"
- 1.3.55 THINKPAD 350 PLANAR BOARD, MISSING CONNECTORS
- 1.3.56 THINKPAD 500 BATTERY UPGRADE

1.3.1 2635 HDD SPACER RELEASED FOR USE WITH 12.5MM HDDS

Record number: H16253

Device: D/T2635
 Model: M
 Part number: P/N73H9936
 Tip key: 005
 Date created: 097/06/30
 Date last altered: A97/07/01

The Hard Disk Drive Bracket FRU P/N73H9936 can accommodate an HD of 17mm and 12.5mm. A spacer must be used with the 12.5mm high HDD. The Spacer and spacer installation instructions are include with the HDD bracket FRU. This FRU must be ordered if a 2.1GB 12.5mm HDD is received as a replacement FRU for a 2.1GB 17mm HDD.



1. Place the HDD spacer on the HDD (Note: the spacer tabs should be on the side opposite the HDD connector.)
2. Install the HDD and spacer assembly into the bracket.
3. Attach the HDD and spacer assembly to the bracket using screws removed from the old HDD.
4. Install the complete HDD bracket assembly into the ThinkPad making sure the connector is fully seated.

This information will be included in the on-line Hardware Maintenance Manual (HMM) and in the next revision of the hardcopy HMM.

SAS KEYWORDS:

PSY2 PSY2PART PSY2FDISK UNCLASSIFIED
 THINKPAD

1.3.2 SERVER 500 FIXED DISK FAILS TO SPIN UP

Record number: H127358

Device: D/T8641
Model: M
Tip key: 002
Date created: 095/05/01
Date last altered: A96/10/03

Recent product evaluation testing has revealed that some IBM 1.12, 2.25, and 4.5 GB (GigaByte) disk drives, offered in certain models of PC Servers and as hard disk drive options, are experiencing failure rates that do not meet IBM quality expectations. Only a limited number of disk drives are affected, and corrections to our manufacturing processes are now in place.

Systems affected include the following PC Server 320's and Server 500's:

8640 models MXT, MX0, MYT, MY0, MYR (1GB drives),
Non-RAID array model 8641-0YV (one 2.25 GB disk drive),
RAID array model 8641-0YS (three 2.25 GB disk drives),
The 2.25 GB FastWide SCSI-2 Hot-Swap Hard Disk Option,
part number 94G2650.
The 4.5 GB FastWide SCSI-2 Hard Disk Option, part number
94G2651. e

The affected drives are known to have been shipped in the above system models, however not all of these systems will have the affected fixed disks installed.

A self booting utility diskette which contains a firmware update is available and applicable to all the fixed disks referenced in the following paragraph. It corrects the failure to spin-up for the 1 GB fixed disk, and greatly reduces the exposure to spin-up failures on the 2.25 and 4.5 GB drives, by briefly enhancing the amount of available motor start current available to the drive. All currently manufactured drives in this product series have this firmware update already installed. All PC Server 500 (0YV, 0YS models) production since June 9, 1995 now contain the Quantum 2.25 GB fixed disk drives that have not experienced this fly-stiction problem.

The following is a list of affected FRU's and corrective actions:

1.12 GB FRU P/N06H3371 (Micro code update only)
2.25 GB FRU P/N06H3372 (Micro code update & ECA replacement)
4.5 GB FRU P/N06H5709 (Micro code update & warranty rep.)

A new FRU P/N is now available to replace the affected 2.25 GB fixed disks. The new "Unique FRU" P/N 06H7360, provides a 2.25 GB Quantum fixed disk mounted in a "hot swap"tray assembly. This unique FRU part number is to be used for 8641 ECA002 only. Details are available in RETAIN record number H13646.

The 4.5 GB fixed disk option should be replaced under normal warranty.

A NEW SELF-BOOTING UTILITY DISKETTE is required to examine the customers fixed disk sub-systems. The NEW VERSION 2.00 utility diskette will survey all fixed disks installed, and create a list of disks in that system by drive serial number and physical location. The user is then requested to contact the HelpCenter and provide the list of serial numbers to the PC Company for identification of affected drives. For customers using the utility diskette, the HelpCenter will arrange for a service call if any of the drives should be replaced. The servicer is to order and install replacement drives.

The utility diskette functions on all 8641 PC-Server 500 models, and on all NON-Array 8640 PC-Server 320 models.
THE UTILITY DISKETTE DOES NOT FUNCTION ON RAID ARRAY MODELS OF THE 8640 PC-SERVER 320.

Customers or servicers with the RAID Array Server 320, should contact the PC Company HelpCenter for assistance in identifying affected drives installed. The serial numbers for the 2.25 GB fixed disk are located on a bar code label on the front edge of the drive. The label, located under the handle, just behind the green power-on LED, may be read without powering down or physically removing the drive. It appears as follows:

1.3.3 SERVER 500 P390 DOCUMENTATION INCORRECT

Record number: H091285

Device: D/T8641
Model: M
Tip key: 007
Date created: 095/10/03
Date last altered: A95/10/04

The Server 500 S/390 HMM (Hardware Maintenance Manual), S30H-2413 - 00, page 16, shows an incorrect FRU P/N for the 32MB ECC memory card.

It is listed as FRU P/N26H2631. The correct FRU P/N is 26H2931.

The 96MB ECC memory card is listed correctly as FRU P/N26H2978. The P390 Processor w/micro code is FRU P/N17H5372.

Note: This Processor is not available as a marketing option. It is not supported in any PS/2 product except the Server 500 P/390 and is only marketed as an entire system, including software/firmware and software licensing.

Do not attempt to build this feature using FRU parts for any system.

SAS KEYWORDS:

PSY2	SERVER	500	390
MAIN	FRAME	8641	PSY2PART
PSY2DOC	26H2631	26H2931	

1.3.4 SERVER 500 S/390 OPTIONS MAY BE SET INCORRECTLY

Record number: H132238

Device: D/T8641
 Model: M
 Tip key: 013
 Date created: 096/01/17
 Date last altered: A96/01/18

The following letter was distributed to IBM PC Server 500 System/390 Customers, Resellers and Business Partners and is made available here for Servicer reference.

 TO: IBM PC Server 500 System/390 Customers
 IBM PC Server 500 System/390 Resellers and Business Partners

IBM has determined that a limited number of PC Server 500 System/390 systems were delivered to our customers with initial configuration settings that do not fully optimize the PC Server S/390's data protection capabilities.

This letter will specify which systems might be affected and it will explain how to view the configuration settings and, if necessary, how to change them.

A PC Server 500 System/390 can be identified by removing the front cover and viewing the label on the metal handle near the top of the machine. The label shows 8641-(model) and S/N (serial number).

If NetFinity is installed on the PC Server S/390, you can determine the system serial number without removing the front cover. From the NetFinity Service Manager window, double click on the System Information icon, then double click on the Vital Product Data (VPD) icon. The system serial number will be displayed at the bottom of the VPD window in the form '8641mmmmsssssss' where 'mmmm' is the model (MYC, MYF, MYS, NYV) and sssssss is the serial number.

You need NOT (repeat NOT) take any action if your system is designated as:

Model MYS with serial numbers between 23D5500 and 23D7499,
 model NYV with serial numbers between 23D7800 and 23D9999.
 model MYF with serial numbers between 23W5800 and 23W9999,
 model MYC with serial numbers between 23AA300 and 23CP999,

On affected systems, the S/390 Microprocessor Complex (P/390) adapter's "Micro Channel Parity Checking" and "Selected Feedback Return" configuration settings may be "Disabled". The IBM Server Development Engineering team strongly recommends that you operate your system with these P/390 adapter configuration settings "Enabled", unless you have a specific requirement to intentionally operate with them "Disabled".

The attached instructions describe how to view the current settings and modify them if necessary. We apologize for the inconvenience this configuration change may cause you. However, we believe it is our responsibility at IBM to ensure you have the opportunity to fully utilize the excellent data protection capabilities of your Server/390.

If you have any questions, or require assistance with the attached procedures, you can contact the IBM PC HelpCenter 24 hours a day 7 days a week at the following phone numbers:

- * In the U.S.A., 1-800-772-2227
- * In Canada, 1-800-565-3344

Outside the USA and Canada, contact your IBM authorized reseller or IBM marketing representative.
 Thank You.

Page 2 ATTACHMENT

There are two procedures to determine the current configuration settings.

- A. If NetFinity is installed on your machine, you can determine (but not change) the settings without having to restart the server. You need to follow procedure B to change the settings.

1. From the Netfinity Service Manager window
 - Double click on the System Information icon
 - Double click on the Adapter Information icon
 - Double click on the P390 Adapter to view the settings
 2. If the settings for "Micro Channel Parity Checking" and "Selected Feedback Return" are both set to "ENABLE", no further action is required. Close the NetFinity windows and proceed normally.
 3. If either of the above settings are "DISABLE", use the following procedure B to change them to "ENABLE".
- B. This procedure can be used to view and change the settings if required. However, this procedure requires you to restart the server.

Use a backup copy of the PC Server 90/95/95A/500 reference diskette. If you do not have one, make them now. For information on how to make a backup copy, refer to the documentation that comes with your system.

1. Set write-protection of the backup copy of the Reference Diskette to off and insert it in the default diskette drive
2. Power on the server. If the server is already on, do a normal shutdown and then restart the system (press Ctrl+Alt+Del).
3. When the main menu appears, select "Set Configuration" and then press ENTER. At this point you might be prompted to insert option diskettes if you had not previously copied them to the backup copy of your Reference Diskette. If you are prompted to insert an Option Diskette, insert it and then press ENTER. Information prompts inform you when to reinsert the Reference Diskette.

Note: The P/390 adapter originally shipped in slot 7 of your server requires the IBM PC Server 500 S/390 Advanced Diagnostics and Option Diskette that came with your system.
4. When "Set Configuration" menu appears, select "Change Configuration" and press ENTER.
5. Use F8=Fwd to page down until you see the "System/390 Microprocessor Complex (P/390)" selection, then press the Down Arrow key until "Selected Feedback Return" is highlighted. If it is already set to "ENABLE", go to step 6. Otherwise, press F6=Next until "ENABLE" appears and then go to the next step.
6. Press the Down Arrow key until "Micro Channel Parity Checking" is highlighted. If it is already set to "ENABLE", go to step 7. Otherwise, press F6=Next until "ENABLE" appears and then go to the next step.
7. If you did NOT change any parameters, go to step 8. Otherwise, press F10=Save to save the configuration. When an information screen appears stating "Save Configuration is Complete", press ENTER.
8. Press F3=Exit and then press F3=Exit again to return to Main Menu.
9. If you did not change either one of the parameters, press F3=Exit and follow the instructions on the screen. Press ENTER and go to step 11.
10. When information appears stating "The System will restart", remove the copy of the Reference Diskette from the diskette drive and press ENTER. Reset write-protection (for your copy of the backup Reference Diskette) to on.
11. The new configuration becomes active when the system restarts.

SAS KEYWORDS:

PSY2	SERVER	390	P390
500	PSY2ADPT	S390	MAIN
FRAME	CONFIG	S/390	8641

PSY2 RETAIN TIPS
SERVER 720 BIOS REVISIONS (8642)

1.3.5 SERVER 720 BIOS REVISIONS (8642)

Record number: H131754

Device: D/T8642
Model: M
Tip key: 003
Date created: 095/11/21
Date last altered: A97/01/21

Note: This tip only applies to Server 720, which incorporates multiple processor slots on the system board for up to six Pentium processor cards to support Symmetric Multiprocessing (SMP).

Server 720 (8642) systems are currently manufactured in four basic models:

Models 0Z0, A single Pentium proc., Non-RAID.
Models 1Z0, A single Pentium proc., RAID.
Models 2ZS, Dual Pentium proc., RAID.
Models 4ZS, Four Pentium proc., RAID.

All models use the same PCI/Micro Channel system board, FRU P/N06H1810 (without memory and processor). All servicers should have the PC Server 720 Hardware Maintenance Manual, form # S30H-2352-00, or the IBM PC Server HMM, form # S30H-2501 - 01, available when servicing this system.

BIOS REVISIONS FOR THE SERVER 720

Revision level 03 - Early Ship Program Version 1.00

Revision level 04 - Limited Availability Version. Version 1.01

Revision level 05 - General Availability Version. Version 1.02

Changes:

1. A problem in re-configuring after a security tamper condition was detected and fixed.
2. Removed an unnecessary second request to reboot the Reference Diskette.

Revision level 06 - Dated 11/24/95 Version 1.03
(Never officially released and supported)

Revision level 07 - Dated 02/23/96 Version 1.04

Changes:

1. Additional operating systems support for date change to year 2000.
2. Adds support for Server 720 in a Rack-Mount with shared keyboard.

Revision level 08 - Dated 06/21/96 Version 1.05

Changes:

Revision level 09 - Dated 08/29/96 Version 1.06

Note: BIOS level 09 requires the use of the following diskettes:

- Reference Diskette Version 1.11 or later
- Diagnostic Diskette Version 1.11 or later
- Network Operating System Diskette Version 1.10 or later

Changes:

1. Fix 164 configuration error with non-system memory adapters.
2. Support for bootable Windows NT CD-ROM
3. Support for SIMM isolation using Diagnostic diskette v1.11
4. CPU failure recovery if primary CPU goes off line.

Revision level 10 - Dated 11/19/96 Version 1.07
CURRENT VERSION - BBS FILENAME: 720UPD.EXE

Note: 720UPD.EXE contains BIOS10.EXE, REF.EXE and DIAGS.EXE
BIOS10.EXE creates the BIOS revision level 10 diskette

Changes:

1. Enhanced POST messages
2. Runs Extended Test Program in video mode when testing with Diagnostics version 1.12
3. Renewable bridge card LED functionality

|-----IMPORTANT-----|

PSY2 RETAIN TIPS
SERVER 720 BIOS REVISIONS (8642)

Diskette images are customer installable. Customers should review any "README" files located on the diskette for installation information. Contact the IBM PC HelpCenter at 800-772 - 2227 if download/installation assistance is needed.

IBM PC Server files are located in Directory 22 on the PC Company Bulletin Board Service (BBS) at 1-919-517-0001 or tieline 255-0001.

The files may also be downloaded via the Internet from the IBM PC File Library by searching the following Internet URL:
<http://www.pc.ibm.com/files.html>

SAS KEYWORDS:

PSY2	SERVER	8642	PCSERVER
720	PC	PSY2ADPT	RAID
FLASH	FIRMWARE	PSY2DOC	78A

1.3.6 SERVER 720 DOCUMENTATION CORRECTION

Record number: H131546

Device: D/T8642
 Model: M
 Tip key: 001
 Date created: 095/10/31
 Date last altered: A96/02/20

The Server 720 (8642) Hardware Maintenance Manual Supplement, S30H-2352 - 00, dated October 1995, page 28, index 22 lists an incorrect FRU part number for the DASD Hot-Swap Backplane Assembly (FRU P/N71G8388).

The correct FRU part number is 06H8388.

The illustration on page 27 also does not correctly identify the DASD Backplane part (index 22).

There is also an error on page 29. The descriptions of the adapters are reversed.

Ethernet Peermaster BT adapter P/N06H4220
 (with coax cable connector) <====Should be Twisted Pair
 Ethernet Peermaster B2 adapter P/N06H6042
 (with twisted-pair cable connector) <====Should be Coax

This will be corrected in future updates of the manual.

SAS KEYWORDS:

PSY2	SERVER	720	8642
71G8388	P/N06H8388	PSY2DOC	PSY2ADPT
06H4220	06H6042		

1.3.7 SERVER 85 / SCO UNIX COMPATIBILITY

Record number: H124812

Device: D/T9585
Model: M
Tip key: 007
Date created: 094/08/05
Date last altered: A94/08/09

SERVER 85 9585-0KG, 0KT, 0NG AND 0NT SYSTEMS HAVE BEEN CERTIFIED BY SCO(1) FOR UNIX(2) 3.2V4.2 AND OPEN DESKTOP/OPEN SERVER 3.0. TO INSTALL SCO SOFTWARE, THE FOLLOWING ITEMS MUST BE COMPLETED:

1 - THESE SYSTEMS CONTAIN AN EXTERNAL (LEVEL 2) CACHE. THIS CACHE MUST BE REMOVED TO PERFORM THE SOFTWARE INSTALLATION. ONCE THE SOFTWARE IS INSTALLED THE CACHE MAY BE RE-INSTALLED.

2 - ADDITIONAL SOFTWARE SUPPLEMENTS FROM SCO ARE REQUIRED FOR INSTALLATION. EITHER THE COMBINATION OF SUPPLEMENTS DESCRIBED IN "A" OR THE SINGLE SUPPLEMENT DESCRIBED IN "B" MAY BE USED TO INSTALL SCO UNIX 3.2V4.2 OR SCO OPEN DESKTOP/OPEN SERVER 3.0 ON SERVER 85 SYSTEMS:

A. THE IBM COMPATIBILITY EFS FOR SCO UNIX AND SCO OPEN DESKTOP RELEASE 1.0.0C OR HIGHER, ALSO KNOWN AS EFS-130. EFS-130 CONTAINS SPECIAL SOFTWARE TO LOCATE THE IMBEDDED SCSI ADAPTER ON THE SERVER 85'S PLANAR.

AND

ADVANCED HARDWARE SUPPLEMENT AHS 3.3. AHS 3.3 CONTAINS THE BOOT TIME LOADABLE DEVICE DRIVER (BTLD) FOR THE SCSI-2 FAST/WIDE ADAPTER USED IN THE SERVER 85.

OR

B. SUPPORT LEVEL SUPPLEMENT SLS-UOD383. THIS SUPPLEMENT COMBINES THE FUNCTIONS OF THE SUPPLEMENTS DESCRIBED ABOVE ON A SINGLE DISKETTE. THESE SUPPLEMENTS INCLUDE DIRECTIONS FOR THEIR USE DURING INSTALLATION OF SCO UNIX AND SCO OPEN DESKTOP/OPEN SERVER. THEY ARE ARE AVAILABLE FROM AUTHORIZED SCO RETAILERS AND FROM SCO TECHNICAL SUPPORT.

WHEN THE ABOVE CONDITIONS ARE MET AND THE CUSTOMER CONTINUES TO HAVE PROBLEMS INSTALLING SCO UNIX OR SCO OPEN DESKTOP/OPEN SERVER, THE CUSTOMER SHOULD BE REFERRED TO THE DEALER WHERE THE SOFTWARE WAS PURCHASED AND/OR SCO TECHNICAL SUPPORT.

- (1) SCO IS A TRADEMARK OF THE SANTA CRUZ OPERATION, INC.
- (2) UNIX IS A REGISTERED TRADEMARK OF UNIX SYSTEM LABORATORIES.

SAS KEYWORDS:

PSY2PROG PSY2 PSY2OPER XENIX
PSY2MCD

SERVERGUIDE OS/2 RECOVERY DISKETTE CREATION PROCEDURE

1.3.8 SERVERGUIDE OS/2 RECOVERY DISKETTE CREATION PROCEDURE

Record number: H122974

Device: D/T8641
 Model: M
 Tip key: 011
 Date created: 096/01/04
 Date last altered: A96/01/09

The following procedure will create the OS/2 Installation Diskette and Disk 1, to be used to recover from various system problems where OS/2 was installed from the ServerGuide CD:

1. Format 2 1.44MB diskettes with volume labels, "DISK 0" and "DISK 1".
2. Put the OS/2 2.11 SMP CD in the drive and open an OS/2 Window.
3. Change to the W drive by typing, W: <enter>
4. Type CD OS21_001 DISK_0 <enter>
5. Put the disk with the label "DISK 0" in drive A and type:

```
XCOPY *.* /H /E /R /T /S A: <enter>.
```

6. Take this diskette out and label it "Installation diskette".
7. Type CD.. <enter> Then CD DISK_1 <enter>
8. Now put in the disk with the label "DISK 1" in drive A and type:

```
XCOPY *.* /H /E /R /T /S A: <enter>
```

9. Remove this diskette out and label it, "Diskette 1".

You may create "Diskette 2" by the same process to provide access to "Chkdsk".

SAS KEYWORDS:

PSY2	SERVER	PSY2PROG	SERVER
GUIDE	D/T8641	D/T8642	500
720	OS2		

1.3.9 SERVICE AID DISKETTE - VERSION 2.10, NOW AVAILABLE

Record number: H006086

Device: D/T8550
 Model: M
 Tip key: 099
 Date created: 091/08/30
 Date last altered: A95/04/04

VERSION 2.10 OF THE SERVICE AID DISKETTE (SADA) IS NOW AVAILABLE ON THE OS2CSD AND DOSCSD TOOLS DISK.

THE SECOND VERSION OF THE IBM PS/2 SERVICE AID DISKETTE CONTAINS UTILITIES WHICH ASSIST IN THE RESOLUTION OF TRAP 0002 ERRORS AND OTHER NON-MASKABLE INTERRUPT (NMI) ERRORS ON PS/2 SYSTEMS BY INDICATING WHICH OF 4 POSSIBLE SOURCES ACTUALLY CAUSED THE ERROR.

UNNECESSARY HARDWARE SWAPPING AND/OR REPLACEMENT IS MINIMIZED BY THE USE OF THIS UTILITY WHEN DIAGNOSING TRAP 0002 ERRORS.

THE SERVICE AID DISKETTE IS SUPPORTED ON ALL MODELS OF THE FOLLOWING SYSTEMS:
 8535, 8540, 8543(L40SX), 8555, 8565, 8570, 8573(P70, P75), 8580

ENHANCEMENTS TO THE SERVICE AID INCLUDE THE FOLLOWING FOUR UTILITIES DESIGNED TO:

1. READ THE NON-MASKABLE INTERRUPT (NMI) ERROR LOG TO DETERMINE THE CAUSE OF TRAP 0002 ERRORS. THIS FUNCTION WORKS ON SYSTEMS WHICH HAVE OS/2 VERSION 1.2, 1.3 AND 2.0 INSTALLED AS THEIR PRIMARY OPERATING SYSTEM. THIS FUNCTION IS ONLY APPLICABLE TO SYSTEMS WHICH HAVE NON-VOLATILE MEMORY (NVRAM) AND IS THEREFORE NOT COMPATIBLE WITH THE 8535, 8540, 8543 (L40SX), OR THE 8555 (SX) SYSTEMS.
2. INSTALL AND REMOVE A TRAP 0002 DEVICE DRIVER DESIGNED TO REPORT SYSTEM BOARD MEMORY PARITY ERROR LOCATIONS. THIS FUNCTION WORKS ONLY ON SYSTEMS WHICH HAVE OS/2 VERSION 1.3 AND CORRECTIVE SERVICE DISKETTE (CSD) LEVEL WR05000 OR HIGHER INSTALLED AS THEIR PRIMARY OPERATING SYSTEM. THIS DEVICE DRIVER IS NOT INSTALLABLE ON SYSTEMS RUNNING OS/2 2.0. THIS FUNCTION IS INCLUDED IN THE OS/2 2.0 NON-MASKABLE INTERRUPT HANDLER.
3. IDENTIFY THE TYPE OF MEMORY INSTALLED ON THE SYSTEM BOARD. THIS FUNCTION WORKS ON ALL IBM PS/2 COMPUTERS SUPPORTED BY THE SERVICE AID DISKETTE REGARDLESS OF WHAT TYPE OF OPERATING SYSTEM IS INSTALLED ON THE SYSTEM.
4. CONVERT HEX ADDRESSES ASSOCIATED WITH SYSTEM BOARD PARITY ERRORS TO MEMORY CONNECTOR LOCATIONS ON THE SYSTEM BOARD. THIS FUNCTION WORKS ON SYSTEMS RUNNING DOS, ETC. WHICH PRINT THE FAILING ADDRESS TO THE SCREEN WHEN A SYSTEM BOARD PARITY ERROR OCCURS.

THE 4 POSSIBLE CAUSES OF TRAP 0002, ARE LISTED BELOW:

- 110 PLANAR MEMORY PARITY ERROR: USUALLY A MEMORY SIMM ERROR, BUT COULD POSSIBLY BE A SYSTEM PLANAR ERROR.
- 111 I/O CHANNEL CHECK: ANY MICRO CHANNEL ADAPTER COULD CAUSE THIS ERROR, BUT USUALLY IT IS A MEMORY ADAPTER, OR SIMM MOUNTED ON IT. THE APPROPRIATE MICRO CHANNEL SLOT IS INDICATED. USUALLY A HARDWARE FAILURE; CAN BE SOFTWARE.
- 112 WATCHDOG TIMEOUT: COULD BE EITHER HARDWARE OR SOFTWARE. IF THE SYSTEM BOARD (PLANAR) HAS BEEN SWAPPED, SUSPECT SOFTWARE.
- 113 DMA TIMEOUT: USUALLY A HARDWARE FAILURE; CAN BE SOFTWARE. IF THE SYSTEM BOARD (PLANAR) HAS BEEN SWAPPED, SUSPECT SOFTWARE.

DIAGNOSTICS SHOULD BE RUN PRIOR TO ANY HARDWARE SWAPPING AND RETAIN SHOULD BE SEARCHED FOR ANY APPLICABLE ECA'S.

 * THE ADVANCED DIAGNOSTICS MUST NOT BE RUN PRIOR TO RUNNING *
 * THIS SERVICE AID DISKETTE, AS THIS WILL RESET NVRAM. *

SERVICE AID DISKETTE - VERSION 2.10, NOW AVAILABLE

THE TRAP2LOG SERVICE AID DISKETTE (SADA) IS AVAILABLE FOR USE BY SERVICERS WORLD-WIDE. IT MAY BE DOWNLOADED FROM THE OS2CSD DISK ON VM, OR THE AUTHORIZED DEALERS TECHNICAL ADVISORS BULLETIN BOARD. THE SERVICE AID DISKETTE IS SELF BOOTING AND ALL NECESSARY INFORMATION IS INCLUDED IN THE TEXT FILES.

THE FILE MUST BE DOWN-LOADED IN BINARY FORMAT AND UNPACKED USING "LOADDSKF." (ALSO AVAILABLE ON TOOLCAT, PCTOOLS), TO CREATE DISKETTE IMAGES.

THE DISKETTE IS AVAILABLE BY THE FOLLOWING DOCUMENT ORDER:
S10G-6311.

THE DISKETTE WILL AUTOMATICALLY SHIP TO SLSS SIM SUBSCRIBERS.

SAS KEYWORDS:

PSY2	PSY2MEM	PSY2DIAG	PSY2PROG
8570SYSTEMEM	8570SYSDIAG	8570SYSPROG	8580SYSTEMEM
8580SYSDIAG	8580SYSPROG	D/T8570	D/T8580
D/T8565	8565SYSPROG	8565SYSDIAG	8565SYSTEMEM
D/T8573	8573SYSTEMEM	8573SYSDIAG	8573SYSPROG
D/T8540	D/T8535	D/T8555	8535SYSTEMEM
8535SYSPROG	8540SYSTEMEM	8540SYSPROG	8555SYSTEMEM
8555SYSPROG	D/T8543	8543SYSTEMEM	8543SYSPROG
SAD			

1.3.10 SERVICE AID FOR PS/2 AND VALUEPOINT MONITORS

Record number: H12816

Device: D/T9517
 Model: M
 Tip key: 003
 Date created: 093/07/09
 Date last altered: A95/03/06

The following information is offered as a supplement to the currently available PS/2 Display Hardware Maintenance Manual Vol. 1, SA38 - 0053-00, dated January, 1993 and Vol. 2, S71G-4197-02 dated Sept. 1993, to provide added detail and clarification.

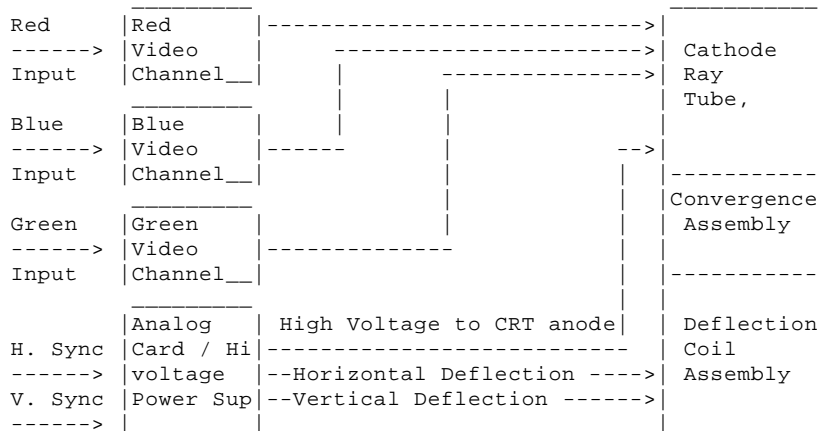
1. The basic functional units of the display.
2. Importance of Self Test.
3. Using the monitor to diagnose itself.
4. Sequence of adjustments
5. Correct tool.
6. Definition of "color point".
7. Degaussing
8. "New Defective" analog cards/card tray assemblies
9. Burned spot on the screen.

1. The basic functional units of a display are:

- A. The power supplies. The low voltage P.S. must be working to provide input to the High voltage P.S. which provides anode or screen voltage to the display. If anything is "visible" on the screen, both power supplies are functional.
- B. The video amplifier board. The analog video signals from the system unit display adapter are amplified and controlled on this board. The red, green and blue signal channels are separate, but nearly identical circuits. All three must be adjusted properly to provide the correct color balance. (example: RED, BLUE, and GREEN, at the proper intensity or "gain" = WHITE).
- C. The deflection circuits (analog board). This board controls the deflection (movement) of the electron beams controlled by the three video channels (red, green, blue) and the final geometry (shape) of the raster on the screen.
- D. The ITC (Integrated Tube Component, or CRT assembly). This assembly is adjusted at the factory for color convergence. These adjustments are sealed. There is no requirement to adjust them in the field and this should NOT BE ATTEMPTED!

The deflection coil on the ITC is an "electro-magnet" that controls the electron beam deflection.

The following block diagram is representative of most PS/2 and Valuepoint monitors:



* ITC

* Integrated Tube Component Assembly

2. Page 2 - 4, "SELF TEST"

This test is SIGNIFICANT in that it provides a great deal of information concerning not only the operational condition of the display, but also the "state" of its color purity (color point) adjustments.

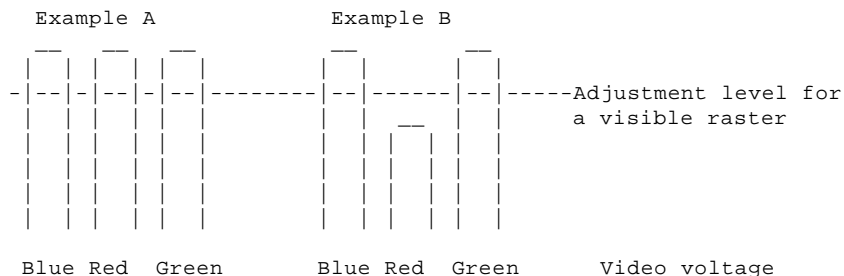
IMPORTANT:

The most difficult and complex operation a color display must perform is to produce a full "white" screen (raster). The appearance of the Self-Test raster provides a direct indication of the following display functions:

- A. Both power supplies are functioning. (If either fails, the screen would be totally blank.)
- B. The horizontal and vertical deflection circuits (analog board) are working. During self-test (Display signal cable disconnected), the horizontal and vertical deflection circuits (oscillators) are "free running". This is why the edges of the self-test raster are poorly defined. The display adapter in the system unit provides precise vertical and horizontal Sync signals that "synchronize" the deflection circuits and produce the sharply defined edges of the raster during normal operation.
- C. The general condition of the video board and the ITC (Cathode Ray Tube assembly).

To produce the self test "white" screen, the display must be "in sync" (no horizontal or vertical rolling, etc.) and all three video channels (red, green blue) must be in proper signal balance (Video Level and Cutoff Voltage, Page 8-20).

If the self test raster does not appear "white", it is most likely due to a mal-adjustment of one or more of the video level or cutoff voltages. Refer to page 8-20 of the Display Hardware Maintenance Manual and perform these adjustments prior to doing the Geometry adjustments.



Note: In example A, a white self test raster is visible because RED, BLUE and GREEN video gains are in close balance, therefore the human eye actually perceives "White". Without this balance, a color other than white will be seen.

In example B, a non-white raster is visible because the Red video gain is too low for proper "white balance." In extreme cases of mal-adjustment, the Self-Test raster may not be visible. Adjusting one of the video gains "up" may provide a visible raster, which by following the adjustment procedure on page 8-20, can be adjusted to meet all functional criteria without FRU parts replacement.

3. Using the monitor to diagnose itself:

Diagnosis Example: A "White line" failure.

The symptom is a horizontal white scan line across the center of the monitor. It is usually caused by a component failing in the vertical oscillator or deflection circuits of the monitor. Using the block diagram above, we can often determine the missing functions and the most likely failing unit.

- 1. Both power supplies are working. (Any image on the screen indicates BOTH power supplies are functional.)
- 2. The line is "white," therefore all three video channels (red, blue, and green,) appear to be working.
- 3. The horizontal deflection circuits are working (The electron beam is being deflected across the screen.)
- 4. No vertical deflection is apparent. (All of the horizontal scans are in one place). If the white line was vertical and in the center of the screen, horizontal circuits would be suspect.
- 5. The missing vertical deflection control comes from the Analog card, therefore it is suspect of being defective.

4. Sequence of Adjustments.

The adjustments of magnetically deflected displays tend to

be somewhat interactive. Some adjustments may interact with others which have already been done. This can require more than one pass through the adjustments to obtain the best resolution.

In many cases, such as dim or off-color self test, adjusting the "Video Levels and Cutoff Voltages" prior to doing the geometry adjustments may be required.

5. Correct Tool for Adjustments.

Only Plastic tools should be used for adjusting the display, with the exception of P/N6247769. The metal tip on one end of this trimming tool is correct for adjusting the Video Levels and Cutoff Voltages, as referenced on Page 8-20.

6. "Colorpoint" refers to the combination of adjustments that provide the best color purity to the observer (reds that are the most pure, etc.).

7. Degaussing:

Any outside magnetic interference may cause color or image irregularities. An automatic degaussing coil surrounds the CRT to demagnetize the ITC if it becomes magnetized. In addition to the information provided on page 2-5 of the manual, it should be noted that in some circumstances several degaussing cycles may be required to eliminate the effects of a magnetized ITC assembly.

Sometimes, the physical relocation of a display from one area to another or its orientation relative to magnetic north, may require more than one degaussing cycle to clear up the effects of the display being magnetized by its environment. (The Earth's magnetic field, though weak, will cause objects to become slightly magnetized. This is why degaussing is sometimes necessary after a physical move.) If appliances, transformers, or any device that creates a magnetic field, are in close proximity to a display, color variations or distortions should be expected. Eliminating the source of the magnetic interference or relocation of the display to a non-affected area, is the only way to correct extreme problems.

8. New "Defective" Analog Card/Card tray assembly FRU's:

Analog cards and card tray assemblies are shipped from the plant with the G2 Pot and the "screen" pots turned all the way down (CCW). This is to prevent circuit damage during initial power-on. This necessary plant adjustment sometimes results in the appearance of a new defective FRU..(The screen will be blank-no raster visible and the power-on indicator will be green (on). A slight Adjustment of this control will often be necessary to see the raster in self-test. Video Levels and cutoff voltages should be checked first, then proceed to the geometry adjustments. Refer to page 2-25 in Volume 2 of the Hardware Maintenance Manual, S71G-4197-02 dated September 1993 for additional information.

9. Burned spot(s) in the center of the CRT screen:

A small burned spot in the phosphor coating of a CRT screen of some monitors will occur if the monitor power is turned on and the Deflection Yoke (located on the CRT neck) is NOT connected to the proper location on the analog card.

Leaving the Deflection Yoke connector disconnected with power on may allow full CRT beam current on some monitors. This beam current is normally intended to be scanned over the entire screen area, however, when the Deflection Yoke is not connected it can be directed to a single spot. The result is a phosphor burn which will occur quicker than the power can be turned off.

Replacement of the ITC will be required once such damage to the CRT screen phosphor has been done.

Note: Additional information on displays and their magnetic environment may be found in "PS/2 Installation Planning and Beyond," form # G41G-2927-00, which is available through normal publications ordering procedures.

SAS KEYWORDS:

PSY2	PS2	PSY2DISP	PSVP
PSVPDISP	D/T8517	D/T8515	D/T9515
DJAM	TUBE	MONITOR	D/T8506

PSY2 RETAIN TIPS

SERVICE AID FOR PS/2 AND VALUEPOINT MONITORS

D/T8503	D/T8512	D/T8513	D/T8514
D/T8515	D/T8517	D/T9517	D/T8508
D/T8504	D/T6312	D/T6314	D/T6319
D/T9507	D/T9524	D/T9525	D/T6317
D/T9518	D/T6325	D/T6324	HMM
D/T9521	D/T6327	D/T6321	D/T9527
G2	FRU	SPOTS	PELS

1.3.11 SERVICE OF AOX CARD IN 8550 AND 8560

Record number: H032151

Device: D/T8560
Model: M
Tip key: 007
Date created: 090/10/02
Date last altered: A94/08/15

SOME 8550 AND 8560 SYSTEMS, SHIPPED TO INTERNAL IBM CUSTOMERS, ARE EQUIPPED WITH AN "AOX MICROMASTER" 386 20MHZ PROCESSOR CARD. THIS CARD CONTAINS AN ADDITIONAL 8MB OF MEMORY (TWO 4MB SIMMS).

FRU CONTAINS THE CARD (WITHOUT MEMORY SIMMS), DIAGNOSTICS, AND INSTALLATION DOCUMENTATION. FRU P/N87F9980 SHOULD BE USED TO ORDER REPLACEMENT 4MB MEMORY SIMMS.

CE'S SERVICING THESE SYSTEMS SHOULD HAVE PRIOR PS/2 TRAINING, (TRAINING LEVEL 02919 OR 03875) AND SHOULD UTILIZE THE AOX VENDOR SUPPLIED SERVICE DOCUMENTATION AND DIAGNOSTICS SHIPPED WITH THE SYSTEMS.

SAS KEYWORDS:

PSY2	PSY2ADPT	8550SYSADPT	8560SYSADPT
PSY2OEM	8550OEM	8560OEM	

SHIFT/CTRL OPERATION FAILS WITH WORD PERFECT

1.3.12 SHIFT/CTRL OPERATION FAILS WITH WORD PERFECT

Record number: H085587

Device: D/T8550
Model: M
Tip key: 129
Date created: 092/06/01
Date last altered: A94/08/15

If you experience a problem during a SHIFT/CTRL operation with a PS/2 running WordPerfect, that has a release date earlier than 3/9/92, and IBM diagnostics run without error, have your customer contact WordPerfect Support at 1 - 800-533 - 9605 for assistance in obtaining a fix for this problem.

WordPerfect is a trademark of WordPerfect Corporation

SAS KEYWORDS:

PSY2	BOARD	STICKY	KEYS
STICKING	KEYBOARD	D/T8550	D/T8555
D/T8556	D/T8557	D/T8560	D/T8565
D/T8570	D/T8573	D/T8580	D/T8590
D/T8595	D/T8525	D/T8530	D/T8535
D/T8540	D/T8543	SOFTWARE	PSY2KBD

SHIPPING INSERTS FOR 3.5" 1.44MB DISKETTE DRIVES

1.3.13 SHIPPING INSERTS FOR 3.5" 1.44MB DISKETTE DRIVES

Record number: H034797

Device: D/T8550
Model: M
Tip key: 040
Date created: 089/04/26
Date last altered: A93/09/01

3.5" 1.44MB DISKETTE DRIVES DO NOT REQUIRE SHIPPING INSERTS. THESE DRIVES ARE DESIGNED WITH LEADSCREW READ/WRITE HEAD MOUNTINGS AND CAN WITHSTAND SHIPPING VIBRATIONS WITHOUT THE PROTECTION OF A SHIPPING INSERT.

SAS KEYWORDS:

PSY2

PSY2PART

PSY2DSKT

1.3.14 SHRINKWRAP OS/2 SMP WILL NOT INSTALL ON 8642

Record number: H131584

Device: D/T8642
Model: M
Tip key: 002
Date created: 095/11/03
Date last altered: A96/06/06

The shrinkwrap version of OS/2 for SMP 2.11 cannot be installed on the Server 720 without fixes.

If a customer has an existing license for OS/2 SMP and does not want to install it from ServerGuide, they may call PSP Software Support, 1-800-237-5511 and reference APAR II08627. PSP will send them an installable CD or FixPak for the PC Server 720.

SAS KEYWORDS:

PSY2	PSY2PROG	SERVER	720
OS2	8642	D/T8642	

1.3.15 SIGMA DATA,(TSA) TECHNICAL SUPPORT AGREEMENT

Record number: H122134

Device: D/TOEMF
 Model: MEAT
 Tip key: 042
 Date created: 093/12/22
 Date last altered: A96/03/11

IBM AND SIGMA DATA,INC.* HAVE MODIFIED THEIR TECHNICAL SUPPORT AGREEMENT FOR SIGMA DATA PRODUCTS. PREVIOUSLY, THE AGREEMENT ALLOWED IBM CUSTOMER ENGINEERS (CEs) TO INSTALL AND REPAIR SIGMA DATA PRODUCTS. THE NEW AGREEMENT ONLY COVERS REPAIR OF SELECTED SIGMA DATA PRODUCTS.

PREREQUISITES:

 QUALIFIED PRODUCTS ARE ELIGIBLE FOR ONE (1) YEAR OF IBM ON-SITE SERVICE. THE SYSTEM UNIT THESE PRODUCTS ARE INSTALLED IN MUST BE COVERED BY IBM WARRANTY OR AN IBM ON-SITE MAINTENANCE AGREEMENT. PRODUCTS MUST HAVE BE PURCHASED AND INSTALLED ON OR AFTER JANUARY 1, 1993 TO QUALIFY.

THIS AGREEMENT IS NOT VALID FOR SIGMA DATA PRODUCTS INSTALLED IN POINT OF SALE SYSTEMS.

INSTALL ACTIVITY:

 NONE. NO INSTALLATION ACTIVITY IS INCLUDED IN THIS SERVICE.

IMI BILLING:

 THE FEATURE CODE, IF APPLICABLE, SHOULD BE LOADED TO THE APPROPRIATE BILLING SYSTEM. SEE YOUR LOCAL BRANCH OFFICE IMI CONTACT FOR FURTHER INFORMATION ON FEATURE CODE BILLING.

TRAINING:

 NONE REQUIRED.

PARTS: MEMORY UPGRADES

 SIGMA DATA / HYPERTEC PROCESSOR UPGRADE P/N

MODEL	DESCRIPTION	IBM P/N
HY200	HYPERACE 486, PROCESSOR UPGRADE BOARD FOR THE 8570. HAS AN EIGHT SWITCH BLOCK ON ONE CORNER AND HYPERACE 486 WRITTEN ON THE BOARD. BOARD IS VERSION 2.00, COMES WITH COPROCESSOR PLUG AND ADAPTER FOR PROCESSOR SOCKET. OEM P/N= SDH011D433	P/N93F8762
HY201	HYPERACE 486, PROCESSOR UPGRADE MODULE FOR THE 8580. PLUGS INTO THE PROCESSOR SOCKET ON THE SYSTEM BOARD. VERSION 2.00 COMES WITH A COPROCESSOR AND AN ADAPTER SOCKET FOR THE UPGRADE OEM P/N= SDH017S425	P/N93F8761
HY205	HYPERACE 486, PROCESSOR UPGRADE MODULE FOR THE 8573 (P70). PLUGS INTO THE PROCESSOR SOCKET ON THE SYSTEM BOARD. OEM P/N= SDH026D433	P/N90G6356
QEP/486 - D301	486 PROCESSOR UPGRADE FOR IBM PS/2 MODEL 70 AND 80, UTILIZING BLUE LIGHTNING PROCESSOR WITH 16KB OF INTERNAL CACHE AND TRIPLE CLOCK SPEED. ***** *** NOT TO BE USED AT TRIPLE SPEED *** *** IN A 25Mhz MACHINE. ONLY *** *** CONFIGURE FOR DOUBLE SPEED IN *** *** A 25MHZ MACHINE. *** *****	P/N90G8724
QEP/486 - 302	486 PROCESSOR UPGRADE FOR IBM PS/2 MODEL 70 AND 80, UTILIZING BLUE LIGHTNING PROCESSOR WITH 16KB OF INTERNAL CACHE AND TRIPLE CLOCK SPEED.	P/N90G8725

PARTS: HARD DRIVE UPGRADES

SIGMA DATA CORPORATION HAS A SERIES OF HARD DRIVE UPGRADES
THAT IBM WILL BE SERVICING. FOLLOWS IS THE LIST OF SIGMA CHANGE
ASSEMBLY NUMBERS:

8550Z

QED/50Z-120 120MB HARD DRIVE CHANGE FOR 8550Z
QED/50Z-240 240MB HARD DRIVE CHANGE FOR 8550Z
QED/50Z-340 340MB HARD DRIVE CHANGE FOR 8550Z
QED/50Z-540 540MB HARD DRIVE CHANGE FOR 8550Z

8570

QED/70-120 120MB HARD DRIVE CHANGE FOR 8570
QED/70-240 240MB HARD DRIVE CHANGE FOR 8570
QED/70-340 340MB HARD DRIVE CHANGE FOR 8570
QED/70-540 540MB HARD DRIVE CHANGE FOR 8570

8560/8580

QED/6080-120 120MB HARD DRIVE CHANGE FOR 8560/80
QED/6080-240 240MB HARD DRIVE CHANGE FOR 8560/80
QED/6080-340 340MB HARD DRIVE CHANGE FOR 8560/80
QED/6080-540 540MB HARD DRIVE CHANGE FOR 8560/80

8580 ONLY

QED/80S-245 - B 245MB HARD DR. CHANGE FOR 8580 WITH 3.5" RAILS
QED/80S-245 - D 245MB HARD DR. CHANGE FOR 8580 WITH 5.25" RAILS
QED/80S-345 - B 345MB HARD DR. CHANGE FOR 8580 WITH 3.5" RAILS
QED/80S-345 - D 345MB HARD DR. CHANGE FOR 8580 WITH 5.25" RAILS
QED/80S-540-B 540MB HARD DR. CHANGE FOR 8580 WITH 3.5" RAILS
QED/80S-540-D 540MB HARD DR. CHANGE FOR 8580 WITH 5.25" RAILS
QED/80S-1.2 - B 1.2GB HARD DR. CHANGE FOR 8580 WITH 3.5" RAILS
QED/80S-1.2 - D 1.2GB HARD DR. CHANGE FOR 8580 WITH 5.25" RAILS

8580/8590/8595

QEDSCS/3600E EXTERNAL DUAL HARD DRIVE CABINET WITH A 65 WATT
POWER SUPPLY AND 26 CFM FAN. WILL HOUSE 1 OR 2
MICROPOLIS 1936 DRIVES. (SEE BELOW)

9545/2620

QED/TP701 - 1080 1.08GB HARD DRIVE FOR THINKPAD
QED/TP750-170 170MB HARD DRIVE FOR THINKPAD
QED/TP750-340 340MB HARD DRIVE FOR THINKPAD
QED/TP750-360E 360MB HARD DRIVE FOR THINKPAD
QED/TP750-540 540MB HARD DRIVE FOR THINKPAD
QED/TP750-810 810MB HARD DRIVE FOR THINKPAD
QED/TPMCA-300 340MB MCA HARD DRIVE, THINKPAD 700/720 SERIES
QED/TPMCA-500 528MB MCA HARD DRIVE, THINKPAD 700/720 SERIES

THE FOLLOWING IS THE SIGMA DATA TO IBM P/N LIST:

SIGMA COMPONENT P/N	DESCRIPTION	IBM P/N
QED/TP750-170	170MB HARD DRIVE FOR THINKPAD	P/N22H0783
QED/TP750-340	340MB HARD DRIVE FOR THINKPAD	P/N90G8727
QED/TP750-360E	360MB HARD DRIVE FOR THINKPAD	P/N62H2645
QED/TP750-540	540MB HARD DRIVE FOR THINKPAD	P/N90G8726
QED/TP750-810	810MB HARD DRIVE FOR THINKPAD	P/N20H6592
	(IBM P/N FOR ABOVE P/N85G0961)	
QED/TP701 - 1080	1.08GB HARD DRIVE FOR THINKPAD	P/N62H2646
QED/TPMCA-300	340MB HARD DRIVE FOR THINKPAD	P/N22H1256
QED/TPMCA-500	528MB HARD DRIVE FOR THINKPAD	P/N22H1255
QED/50Z-BRD	INTERPOSER CARD (8550Z)	P/N93F9299
QED/70-BRD	INTERPOSER CARD (8570)	P/N93F9298
QED/6080-BRD	INTERPOSER CARD (8560/8580)	P/N93F9300
QED120 - DRV3	MAXTOR (7131A) 120MB IDE	(1) P/N93F9301
QED240-DRV3	MAXTOR (7245A) 240MB IDE	P/N93F9302
QED340-DRV3	MAXTOR (7345A) 340MB IDE	P/N93F9303
QED/420I-DRV	MAXTOR (7420A) 420MB IDE	P/N92H1253
QED540-DRV3	MAXTOR (MXT-540A) 540MB IDE OBS	P/N93F9304
QED540-DRV3	SEAGATE (ST3655A) 521MB IDE (2)	P/N20H6561
QED/850I-DRV	MAXTOR (7850A) 850MB IDE	P/N22H1254
QED/2100S-DRV	2.1GB SCSI HARD DRIVE	P/N62H2639
QED/4200S-DRV	4.2GB SCSI HARD DRIVE	P/N62H2640
QED/9000S-DRV	9.0GB SCSI HARD DRIVE	P/N62H2641
QED/2100WS-DRV	2.1GB WIDE SCSI HARD DRIVE	P/N62H2642
QED/4200WS-DRV	4.2GB WIDE SCSI HARD DRIVE	P/N62H2643
QED/9000WS-DRV	9.0GB WIDE SCSI HARD DRIVE	P/N62H2644

SIGMA DATA,(TSA) TECHNICAL SUPPORT AGREEMENT

QED/80S-245 - B/D	MAXTOR (7245S) 245MB SCSI	(3)	P/N90F6084
QED/80S-345 - B/D	MAXTOR (7345S) 345MB SCSI	(3)	P/N90F6085
QED/80S-540-B/D	MAXTOR (MXT-540SL)540MBSCSI	OBS	P/N90G6086
QED/80S-540-B/D	SEAGATE(ST3655N)521MBSCSI	(3,5)	P/N20H6560
QED/80S-1.2 - B/D	MAXTOR(MXT-1240S)1.2GBSCSI	OBS	P/N90G6087
QED/8S-105 - B	1.05GB HARD DRIVE, SCSI		P/N22H0784
QED/80S-1.05 - B/D	HITACHI(DK-3226-C10)	(3,6)	P/N20H6178
	1.0GB SCSI		
QED/50Z-IDECBL	IDE CABLE (8550Z)		AS REQD
QED/70-IDECBL	IDE CABLE (8570)		AS REQD
QED/6080-IDECBL	IDE CABLE (8560/8580)		AS REQD
DC/S50-2	2 DRIVE CABLE/ NON-IBM SCSI		AS REQD
DC/S50-3	3 DRIVE CABLE/ NON-IBM SCSI		AS REQD
DC/1501 - 2	2 DRIVE CABLE/ IBM SCSI		AS REQD
DC/1501 - 3	3 DRIVE CABLE/ IBM SCSI		AS REQD
QED/50Z-PWRCBL	POWER CABLE (8550Z)		AS REQD
QED/70-PWRCBL	POWER CABLE (8570)		AS REQD
QED/6080-PWRCBL	POWER CABLE (8560/8580)		AS REQD
PL/80-2	POWER CABLE (2 DRIVE-8580)		AS REQD
QED/50Z-MAN	50Z QED MANUAL		AS REQD
QED/70-MAN	70 QED MANUAL		AS REQD
QED/6080-MAN	60/80 QED MANUAL		AS REQD
QED/50Z-DSK	50Z QED DRIVER DISKETTE		AS REQD
QED/70-DSK	70 QED DRIVER DISKETTE		AS REQD
QED/6080-DSK	60/80 QED DRIVER DISKETTE		AS REQD
QED/50Z-RL	MOUNTING RAIL (8550Z)		AS REQD
QED/70-RL	MOUNTING RAIL (8570)		AS REQD
QED/6080-RL	MOUNTING RAIL (8560/8580)		ORDER AS REQ
6/32 x 1/2 FH PLATED STEEL MACHINE SCREWS			LOCAL PURCHASE

QEDSCS/3600E CABINET ENCLOSURE (NOTE 4) P/N93F9214
 MICROPOLIS 1936 HDRV (NOTE 4) P/N90G6631

- (1) THIS DRIVE WILL BE USED TO REPLACE ANY MAXTOR 7120A DRIVE ENCOUNTERED.
- (2) THIS DRIVE WILL BE USED TO REPLACE ANY MAXTOR LXT-535A OR MXT-540A DRIVES ENCOUNTERED.
- (3) THE "B" VERSION IS THE 3.5" VERSION AND THE "D" VERSION IS THE 5.25" VERSION. WHEN THE CHANGE IS ORIGINALLY SHIPPED FROM SIGMA DATA, THEY WILL HAVE THE CORRECT RAILS ATTACHED IF REPLACING A DRIVE, PLEASE REMOVE RAILS FROM THE DRIVE THAT IS BEING REMOVED FROM THE MACHINE.
- (4) THE LION CABINET ENCLOSURE COMES WITH POWER SUPPLY AND FAN PLEASE WRITE OFF TIME TO M/T=1376/L01 (IOE). THE MICROPOLIS 1936 WILL COME SEPERATELY AND SHOULD ALSO BE WRITTEN OFF AGAINST M/T=1376/L01 (IOR).
- (5) THIS DRIVE SHOULD BE USED TO REPLACE ANY MAXTOR MXT-540SL DRIVES ENCOUNTERED.
- (6) THIS DRIVE SHOULD BE USED TO REPLACE ANY MAXTOR MXT-1240SL DRIVES ENCOUNTERED.

THOSE PARTS LISTED AS ORDER AS REQUIRED SHOULD BE ORDERED THROUGH MECHANICSBURG WHEN NECESSARY.

THE MANUALS AND DRIVER DISKETTES WILL BE WITH THE MACHINE WHEN THE UPGRADE IS COMPLETED AND SHOULD BE LEFT ONSITE FOR FUTURE SERVICE CALLS.

FOR FURTHER INFORMATION REGARDING THIS RETAIN TIP, PLEASE CONTACT LEE KEEN AT T/L 443-8752 OR VIA OV/VM BCRVM1(LGKEEN).

* TRADEMARK OR REGISTERED TRADEMARK OF SIGMA DATA, INC.

SAS KEYWORDS:

POEM SIGMA DATA SIGMA PSY2
 PSVP

SLOW LOADING KENSINGTON TRACK BALL DRIVER

1.3.16 SLOW LOADING KENSINGTON TRACK BALL DRIVER

Record number: H014921

Device: D/T8570
Model: M
Tip key: 016
Date created: 090/11/30
Date last altered: A90/11/30

CUSTOMERS EXPERIENCING A 25 SECOND DRIVER LOAD TIME ON A KENSINGTON MOUSE/TRACKBALL CONNECTED TO THE SYSTEM MOUSE PORT SHOULD CONTACT THE KENSINGTON CORPORATION AT 1-800-535-4242 AND REQUEST DRIVER SOFTWARE VERSION 2.05 TO CORRECT THIS SITUATION.

KENSINGTON MOUSE/TRACKBALL IS A REGISTERED TRADEMARK OF THE KENSINGTON CORPORATION.

SAS KEYWORDS:

PSY2	PSY2OEM	PSY2MISC	PSY2PROG
8570SYSOEM	8570SYSPROG	8570SYSMISC	

1.3.17 SOME HELP TOPICS NOT AVAILABLE IN WINDOWS NT V4.0

Record number: H136895

Device: D/T6899
 Model: M
 Tip key: 003
 Date created: 097/03/18
 Date last altered: A97/07/08

Microsoft Windows NT v4.0 may display a "Topic does not exist" message when the HELP function is accessed for the following topics:

1. START

HELP

Introduction to Windows NT

Software Support

Software Support again = Topic Does not exist

2. START

HELP

How to...

Use a Network

Backing up files over a network = Topic does not exist

3. START

HELP

How to...

Setup Windows Accessibility Features

Change how NT looks

Displaying high-contrast colors & fonts for easy reading

Cancel = Topic Does not exist

4. START

HELP

Tips and Tricks

For Networking

Customizing your network neighborhood = Topic does not exist

These are the areas that displayed the message during testing at IBM. There may be other areas of the HELP feature that may also post the "Topic does not exist" message. This message also appeared using Windows NT v4.0 with Service Pack #1 installed.

For additional information and resolution for this situation, contact Microsoft Windows NT Technical Support.

Windows NT is a trademark of the Microsoft Corporation.

SAS KEYWORDS:

PSVP	PSY2	IBMPC	PSY2PROG
PSVPPROG	PWS	PSVPOEM	PSY2OEM
UNCLASSIFIED	58865	PSVPERR	PSY2ERR
PC SERVER			

SOME OEM MODEMS FAIL WITH 8525 AND 8530 SYSTEMS

1.3.18 SOME OEM MODEMS FAIL WITH 8525 AND 8530 SYSTEMS

Record number: H063688

Device: D/T8530
 Model: M
 Tip key: 037
 Date created: 090/06/13
 Date last altered: A90/06/25

SOME EXTERNAL OEM MODEMS MAY NOT WORK WITH 8525, 8525 286, 8530 AND 8530 286 SYSTEMS.

THESE MODEMS MAY REQUIRE THAT PIN 11 OF THE SERIAL PORT BE USED FOR CHECKING SIGNAL DATA QUALITY. 8525 AND 8530 SYSTEMS HAVE PINS 11 AND 20 OF THE SERIAL PORT TIED TOGETHER FOR DATA TERMINAL READY.

IF THE OEM MODEM WORKS WITH MICRO CHANNEL SYSTEMS, BUT FAILS WITH 8525 AND 8530 SYSTEMS AND HARDWARE DIAGNOSTICS PASS, THE CUSTOMER SHOULD BE REFERRED TO THEIR APPROPRIATE POINT OF SALE FOR THE MODEM.

UNDER NO CIRCUMSTANCE SHOULD ANY MODIFICATIONS BE MADE TO THE SYSTEM BOARD TO ALLOW OPERATION OF THE MODEMS.

SAS KEYWORDS:

PSY2	8530SYSCOMM	8525SYSCOMM	8530SYSBRD
8525SYSBRD	PSY2COMM	PSY2BRD	POEM
PSY2NLGO	8525SYSNLGO	8530NLGO	8530SYSNLGO

SPECIAL NOVELL DRIVERS ARE REQUIRED FOR SCSI DEVICES

1.3.19 SPECIAL NOVELL DRIVERS ARE REQUIRED FOR SCSI DEVICES

Record number: H021432

Device: D/T8550
Model: M
Tip key: 069
Date created: 090/11/08
Date last altered: A94/08/09

PS/2 MICROCHANNEL SYSTEMS CONFIGURED WITH SCSI DEVICES REQUIRE
UNIQUE DEVICE DRIVERS WHEN RUNNING THE NOVELL NETWARE+ OPERATING
SYSTEM.

AFFECTED CUSTOMERS SHOULD BE ADVISED TO CONTACT NOVELL, INC. FOR
ASSISTANCE IN OBTAINING AND INSTALLING THE APPROPRIATE DEVICE
DRIVERS. HAVE THE CUSTOMER REFER TO NOVELL TECHNICAL BULLETIN
NUMBER 1 - 274.

+ REGISTERED TRADEMARK OF NOVELL, INC.

SAS KEYWORDS:

PSY2	PSY2PROG	D/T8565	D/T8560
D/T8580	D/T8595	D/T8570	D/T8590
D/T8573	D/T9577	D/T9556	D/T9557
D/T9595	D/T9533		

PSY2 RETAIN TIPS
SPEECH RECOGNITION FAILS IN WIN-OS/2

1.3.20 SPEECH RECOGNITION FAILS IN WIN-OS/2

Record number: H124556

Device: D/T6877
Model: M
Tip key: 023
Date created: 096/03/25
Date last altered: A96/03/25

VoiceType Control program diskettes created using the Diskette Factory application cannot start the Speech Recognition Engine in WIN-OS/2 when installed in a PC 700 Series 6877 or 6887.

After installing VoiceType Control version 2 diskettes and rebooting the system, an error indicating that "the Speech Recognition engine has not been started" will be displayed.

Do not use this application in WIN-OS/2. This is a Windows based application that should be run in a native Windows environment or from the Windows Program Manager in OS/2.

Windows & Windows95 are trademarks of the Microsoft Corporation.

SAS KEYWORDS:

PSY2	D/T68XX	6887	6877
IBMPC	PSVP	PSY2PROG	PSVPPROG
D/T6887	PC750	PC700	PC 730
PC 750	PC730	42217	PSY2OPER
PSVPOPER			

1.3.21 STB GLYDER MAX-2 INSTALLATION AND CONFIGURATION TIPS

Record number: H161501

Device: D/T6898
 Model: M
 Tip key: 001
 Date created: 097/10/20
 Date last altered: A97/11/11

The following is a list of Hints & Tips when configuring the STB Glyder MAX-2 video adapter under Windows95 and WindowsNT 4.0:

1. Windows95 "Mars Rover" Color Distortion.

Users may notice that the sky and terrain colors do not blend smoothly, but instead have a choppy appearance when video is set to 800x600 at 64k colors. Download and install the current STB Glyder MAX-2 Windows95 video driver for machine type 6898.

2. WindowsNT 4.0 README.TXT Installation Errors.

The WindowsNT 4.0 README.TXT may incorrectly state that the user must click on the browse button to find the device driver instead of simply clicking on the "Have Disk" button. The README.TXT file may also fail to mention that the second disk is needed to complete the installation. Download and install the current STB Glyder MAX-2 WindowsNT video driver for machine type 6898.

3. Unable to change refresh rates in Windows95 OSR1.

After selecting "Display Properties," "Permedia Setup," and "Preferred Refresh Rate," the user is unable to change to a new refresh rate after clicking on "Apply" or "OK." The updated driver will notify the user via a pop-up window that the system must be rebooted for the new refresh rates to take effect. Download and install the current STB Glyder MAX-2 Windows95 video driver for machine type 6898.

4. Sentences in README.TXT are cut off when printed in Win95.

Users may notice that some sentences are cut off when printing the README.TXT file under Windows95. This formatting error is corrected in the current Windows95 video driver. Download and install the current Windows95 STB Glyder MAX-2 video driver for machine type 6898.

5. 640x480x256 at 60HZ not shown in README.TXT.

The README.TXT file may not list 640x480x256 at 60HZ as a valid optional resolution and refresh rate in Windows95. This resolution and refresh rate is supported. The corrected README.TXT is contained in the current Windows95 video driver. Download and install the current STB Glyder MAX-2 Windows95 video driver for machine type 6898.

6. P201 blacks out at 1024x768x256 with 100Hz refresh rate.

Under WindowsNT 4.0, the screen may intermittently black out for several minutes when the resolution and refresh rate are set to 1024x768 at 100Hz. This condition may be seen at all color depths. For resolutions of 1024x768 and 1152x870, the highest supported refresh rate on the IBM P201 display type 6555 - 803 and 6555-8E3 with the STB Glyder MAX-2 is 85Hz.

7. Cornerstone displays limited to 640x480 resolution.

Some models of Cornerstone monitors may display corrupted video when configured under Windows95 OSR1. The condition is most often seen when setting resolutions above 640x480. This condition is corrected in the current Windows95 video driver. Download and install the current STB Glyder MAX-2 Windows95 video driver for machine type 6898.

8. Vertical lines displayed in Hellbender DEMO mode.

When Hellbender is opened and the DEMO button is selected, a row of vertical lines appears across the top of the display. The lines are only seen at resolutions of 320x200 and 320x400. To correct the condition, select 640x480 in the game's setup area, set all options to maximum, and select the "Hardware Accelerator" option.

9. "Out of Display List Memory" error in Computer Associates.

When attempting to run Computer Associates "Unicenter," the error "Out of Display List Memory" is displayed. The error message is due to Unicenter's use of Texture Swapping. Texture Swapping is not available for the STB Glyder MAX-2 video adapter at this time, but may be included in a future release of the STB Glyder MAX-2 Windows drivers. Contact your appropriate technical support center for information.

10. Startup Color Distortion in DOOM95 and Corel Draw

When starting the DOOM95 and Corel Draw programs, the screen is discolored. DOOM95 may be discolored at all resolutions. Corel Draw is discolored at 640x480x16 at 75Hz. Download and install the current STB Glyder MAX-2 Windows95 video driver for machine type 6898.

The current STB Glyder MAX-2 Windows video drivers may be downloaded via the Internet from the IBM Personal Computer File Library by searching the following Internet URL:
www.us.pc.ibm.com/files.html

The drivers may also be obtained from the IBM PC Company BBS system by calling 919-517-0001.

Windows, Windows95, and WindowsNT are trademarks of Microsoft Corporation.

Glyder MAX-2 is a trademark of STB Systems, Inc.

SAS KEYWORDS:

PSY2	PSY2ERR	PSY2DISP	PSY2OPER
PSY2OEM	PSVP	PSVPERR	PSVPDISP
PSVPOPER	PSVPOEM	PERMEDIA	D/T6898
6898	75686F_1	75685F_1	73106F_2
76016F_1	75914F_1	78859F_1	78858F_1
76202F_2	75999F_1	75914F_2	81424
UNCLASSIFIED			

STORE SYSTEM LOOP ADAPTER CARD MOVING

1.3.22 STORE SYSTEM LOOP ADAPTER CARD MOVING

Record number: H014163

Device: D/T5170
 Model: M849
 Tip key: 122
 Date created: 090/04/06
 Date last altered: A92/10/20

THE LOOP ADAPTER CARD USED IN THE PC-AT AND PS/2 STORE CONTROLLERS HAS DATA AND POINTERS STORED IN THE "CMOS" MODULE. THE DATA AND POINTERS, STORED IN THE "CMOS", ARE RETAINED AND PROTECTED BY A BATTERY MOUNTED ON THE MODULE, THUS REMOVING THE LOOP CARD FROM THE MACHINE DOES NOT RESET THE FOLLOWING INFORMATION:

1. VITAL PRODUCT DATA
2. CONTROLLER ID
3. OPERATING SYSTEM DEFAULTS
4. POINTERS THAT SHOW THE LATEST ENTRY INTO ERROR LOGS
5. POWER LINE DISTURBANCE (PLD) RECOVERY DATA WHEN USING THE IBM STORE SYSTEM SOFTWARE AS THE OPERATING SYSTEM

AS A PRECAUTION AGAINST INVALID DATA AND POINTERS THE FOLLOWING PROCEDURE IS RECOMMENDED WHEN SWAPPING, REPLACING, OR REINSTALLING THE LOOP ADAPTER CARD.

1. WAIT UNTIL ALL WRITE OPERATIONS ON ALL DRIVES HAVE COMPLETED BEFORE POWERING OFF THE CONTROLLER.
2. WHEN THE LOOP ADAPTER CARD IS REPLACED WITH A NEW ONE OR WHEN A LOOP ADAPTER CARD IS MOVED TO A DIFFERENT LOCATION (SUCH AS LOOP 1 EXCHANGED WITH LOOP 2), THE SET SERIAL NUMBER PROCEDURE MUST BE DONE. THIS PROCEDURE IS FOUND IN THE LOOP ADAPTER GUIDE TO OPERATION (GTO) FOR THE PC-AT AND IN THE "SUPPLEMENT FOR THE HARDWARE MAINTENANCE LIBRARY FOR THE PS/2. THIS PROCEDURE WILL WRITE THE 11 DIGIT SERIAL NUMBER INTO "CMOS" AND WILL CLEAR ALL OTHER DATA.
3. IF THE LOOP ADAPTER CARD IS REMOVED THEN REINSTALLED AFTER ONLY DIAGNOSTICS HAVE BEEN RUN (AN OPERATING SYSTEM HAS NOT BEEN IPL'D) THEN "CMOS" DATA IS NOT ALTERED.
4. IF THE SET SERIAL NUMBER PROCEDURE IS TO BE DONE DETERMINE THAT THE OPERATOR KNOWS THE CONTROLLER node id acting master / alternate, acting file server / alternate, and loop backup enabled / disabled. this information can be viewed via controller status screens. customer central site should be consulted for assistance.

SAS KEYWORDS:

5170SYS	5170SYSADPT	8550SYSADPT	8560SYSADPT
8570SYSADPT	8580SYSADPT	PSY2ADPT	

SURGE SUPPRESSORS AND INTERMITTENT PROBLEMS

1.3.23 SURGE SUPPRESSORS AND INTERMITTENT PROBLEMS

Record number: H095558

Device: D/T8550
 Model: M
 Tip key: 098
 Date created: 091/07/22
 Date last altered: A96/07/22

THERE IS NO REQUIREMENT FOR EXTERNAL SURGE SUPPRESSION DEVICES ON IBM PC (PERSONAL COMPUTER) OR PERSONAL SYSTEM/2 PRODUCTS. THE POWER SUPPLIES IN THESE SYSTEMS HAVE BEEN DESIGNED TO MEET IBM CORPORATE REQUIREMENTS THAT INCLUDE FACTORS CONSIDERED ADEQUATE FOR PRODUCT PROTECTION.

IF INTERMITTENT PROBLEMS ARE BEING EXPERIENCED, AND NORMAL TROUBLESHOOTING EFFORTS HAVE FAILED TO ISOLATE THE SOURCE OF THE PROBLEM, AND AN EXTERNAL "SURGE SUPPRESSION DEVICE" IS BEING USED, TRY RUNNING THE SYSTEM WITHOUT IT. IF THE PROBLEMS NO LONGER OCCUR, SUSPECT THE SURGE SUPPRESSION DEVICE TO BE THE SOURCE OF THE PROBLEM.

SURGE SUPPRESSOR FACTS:

1. EXTERNAL SURGE SUPPRESSION DEVICES HAVE BEEN KNOWN TO BE THE SOURCE OF DIFFICULT TO DIAGNOSE SYSTEM PROBLEMS.
2. NO UNIVERSALLY ACCEPTED DESIGN OR PERFORMANCE STANDARDS, SUCH AS IEEE OR ANSI, HAVE BEEN ESTABLISHED FOR THESE DEVICES, THEREFORE DESIGN AND PERFORMANCE VARY BETWEEN VENDORS, OR MODELS.
3. THERE IS NO PRACTICAL WAY TO TEST THEM IN THE FIELD.
4. RECENT RESEARCH REVEALS SURGE PROTECTORS MAY CONTRIBUTE TO LAN CRASHES BY DIVERTING SURGE PULSES TO GROUND, THEREBY CONTAMINATING THE REFERENCE USED BY DATA CABLING.

THERE ARE SEVERAL SURGE SUPPRESSION DEVICES AVAILABLE ON THE MARKET, HOWEVER THE MOST COMMONLY ENCOUNTERED DEVICE IS THE MOV (METAL OXIDE VARISTOR). MOV'S HAVE A FAILURE MODE OF "SHORTING" WHEN SUBJECTED TO SURGES BEYOND THEIR PEAK RATINGS, AND ARE SUBJECT TO "MOV DEGRADATION" OVER TIME, WHICH REDUCES THEIR VALUE AS SURGE SUPPRESSORS.

SAS KEYWORDS:

PSY2	PSY2PWR	PSY2COMM	8525SYSPWR
8530SYSPWR	8535SYSPWR	8540SYSPWR	8550SYSPWR
8555SYSPWR	8557SYSPWR	8560SYSPWR	8570SYSPWR
8573SYSPWR	8580SYSPWR	8590SYSPWR	8595SYSPWR
8525SYSCOMM	8530SYSCOMM	8535SYSCOMM	8540SYSCOMM
8550SYSCOMM	8555SYSCOMM	8560SYSCOMM	8565SYSCOMM
8570SYSCOMM	8573SYSCOMM	8580SYSCOMM	8590SYSCOMM
8595SYSCOMM	D/T8580	D/T8590	D/T8595
D/T8525	D/T8530	D/T8535	D/T8540
D/T8543	D/T8570	D/T8573	D/T8540
D/T8550	D/T8555	D/T8556	D/T8557
D/T8560	D/T8565	D/T8570	D/T8573
D/T8580	D/T8590	D/T8595	D/T9533
D/T9556	D/T9557	D/T9576	D/T9577
D/T9585	D/T9590	D/T9595	D/T8600
D/T8640	D/T8641	D/T8642	D/T8650

1.3.24 *SUSPEND/RESUME NOT SUPPORTED ON 9552 WHILE DOCKED.*

Record number: H12509

Device: D/T9552
Model: M
Tip key: 015
Date created: 093/06/28
Date last altered: A93/07/02

****THE FOLLOWING IS NORMAL OPERATION DO NOT REPLACE PARTS****

The 9552 system does not support suspend / resume while it is installed in the 3550 docking station. This is normal. The 9552 is designed to install in the 3550 with its LCD closed to allow placement of a CRT on the 3550 docking station's display shelf which is located directly above the installed 9552 system.

Note: Your customer can turn the closed LCD off when using the external CRT by using the power program on the fixed disk.

SAS KEYWORDS:

PSY2 PSY2MISC

1.3.25 SUSPICIOUS 8MB SIMMS IN IBM PACKAGING

Record number: H132011

Device: D/T6885
 Model: M
 Tip key: 006
 Date created: 095/12/15
 Date last altered: A95/12/15

8MB 70ns industry-standard parity memory SIMMs of questionable origin are being discovered in containers that very closely resemble genuine "Options by IBM" (OBI) packaging. These suspect SIMMs, used in PC 300/700 Series systems and PS/ValuePoint Performance Series systems, bear labels with IBM part numbers and the IBM logo.

Packaging/Cartons

Suspicious-origin OBI Memory cartons have the following characteristics:

- 1) The tamper-evident label, when discernible, contains a light colored oval with the IBM logo in a dark color.

Genuine IBM tamper-evident labels contain a dark colored oval with a white IBM logo in the background under the "Quality" overprint.

- 2) The tamper-evident label does not leave "VOID" in adhesive residue when removed. In addition, the suspect labels show some signs of "VOID" while still undisturbed.

Genuine IBM tamper-evident labels show no signs of "VOID" while intact, and will leave "VOID" in adhesive residue when lifted.

- 3) On cartons of suspect origin, the bottom line of the product identification label contains the characters "0594" in the center position.

Genuine IBM cartons with "0594" in this position on the label should be very rare at this point in time.

- 4) The PRICE at some point in the distribution chain may be very attractive, possibly below wholesale.

Note: The suspicious carton design, as well as the genuine, may be either in the original carton artwork OR the newer design which includes some French text.

Items 1 through 4 above apply to any IBM OBI Memory option.

SIMMs

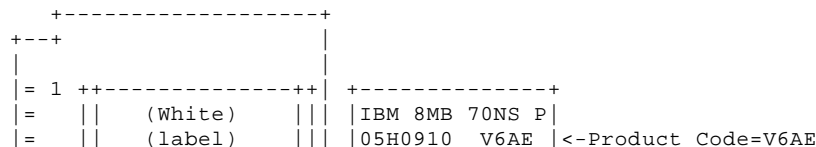
The part numbers on suspect 8MB memory SIMMs are the same as the authentic IBM version:

Option P/N92G7520
 FRU P/N92G7521
 Manufacturing P/N05H0910

Note: These are the part numbers found in previously investigated incidents; it is possible that other part numbers are affected.

- A) Genuine IBM SIMMs with Option P/N92G7520 do not have the 8 - bar IBM logo label applied to them.
- B) All genuine IBM SIMMs with Option P/N 92G7520 will contain a serialization bar code label IF the characters '091' and 'V6AE' appear on the label as described below. The bar code label may vary in size.
- C) Below is an illustration of an 8MB memory SIMM which, IF PURCHASED IN AN "OPTIONS BY IBM" CONTAINER, should be considered suspicious:

NOTE: Other variations may exist. If A and B are not satisfied, consider the SIMM suspicious.



SUSPICIOUS 8MB SIMMS IN IBM PACKAGING

=	(See ==>	FRU 92G7521 *
=	++-----++	OPT 92G7520 * <- ** = '091'rotated
=	-----	+-----+ 90 degrees clockwise
=	(various)	
=	-----	
=	-----	"Du-Logic components are NOT used on
=	Du-Logic	any authentic IBM Memory product. In
=	VP4100G-6	addition, 'no-name' components with
=	9510FMC	P/N's beginning with "VP41..." in
=	-----	these positions are also NOT
=	-----	authentic IBM products.
=	(various)	
=	-----	
=	-----	
=	(various)	
+++	-----	
+++	-----	
=	(various)	
=	-----	
=	-----	
=	(various)	
=	-----	
=	-----	
=	Du-Logic	
=	VP4100G-6	
=	9510FMC	
=	-----	
=	-----	
=	-----	
=	-----	
=	+++	
=	(IBM logo)	(IBM 8-bar logo)
=		
=	72++-----++	
=	-----	

IMPORTANT:

Incidents involving suspicious IBM packaging and SIMMs, as described above, should be reported to the IBM PC Company WHEN and ONLY WHEN the original packaging and supplier information is still available. Contact the IBM PC Company HelpCenter at 1 - 800-772 - 2227 (reference this tip number) or IBM PC Company Security at 919-543-8416.

SIMMs that meet the 'suspicious' identification criteria above are NOT covered under the terms and conditions of the warranty for the system unit or the warranty provided by "Options by IBM."

SAS KEYWORDS:

PSY2	6875	D/T6875	D/T6885
D/T6876	D/T6886	6885	6876
6886	D/T6472	D/T6482	D/T6484
D/T6492	D/T6492	D/T6384	IBMPC
PSVPMEM	PSY2MEM	PSVPOEM	PSY2OEM
FRAUDULENT	FAKE	COPY	PSVP
IMITATION	COUNTERFEIT		

SWITCHES ON ADAPTER CARD MOD 002 EXTERNAL DISKETTE DRIVE

1.3.26 SWITCHES ON ADAPTER CARD MOD 002 EXTERNAL DISKETTE DRIVE

Record number: H015935

Device: D/T8580
 Model: M
 Tip key: 010
 Date created: 089/03/13
 Date last altered: A92/05/01

EARLY LEVEL DISKETTE ADAPTER/A CARDS HAVE BIT SWITCHES,
 MOUNTED ON THE CARD, WHICH ARE NOT USED IN DOMESTIC
 APPLICATIONS.

THERE IS A PLASTIC SHIELD OVER THE SWITCHES TO
 DISCOURAGE TAMPERING. THE SWITCHES WERE ELIMINATED IN A
 LATER VERSION OF THE ADAPTER. THE FRU NUMBER OF THE DISKETTE
 ADAPTER CARD FOR THE MOD 002 1.2 EXTERNAL DISKETTE DRIVE
 IS P/N15F7996.

SAS KEYWORDS:

PSY2	PSY2DSKT	4869DSKT	8560SYSDSKT
8570SYSDSKT	8580SYSDSKT	D/T4869	D/T8560
D/T8565	D/T8570	D/T8580	D/T8555
1.2MB	1.2	EXTERNAL	5.25

SWITCHES ON FRU P/N15F7996 - 4869 ADAPTER CARD

1.3.27 SWITCHES ON FRU P/N15F7996 - 4869 ADAPTER CARD

Record number: H031729

Device: D/T4869
Model: M
Tip key: 001
Date created: 089/01/26
Date last altered: A92/01/13

THE SWITCHES ON FRU P/N15F7996 FOR THE 4869 ARE NOT USED.

A PLASTIC SHIELD IS ON THE CARD AND IS MOUNTED OVER THE SWITCHES TO DISCOURAGE TAMPERING. THE SWITCHES WERE USED DURING THE DEVELOPEMENT OF THE ADAPTER.

A NEWER RELEASE OF THE CARD WILL NOT HAVE ANY SWITCHES.

THE CARD WILL FUNCTION EXACTLY THE SAME REGARDLESS OF THE SWITCH SETTINGS.

THE INTERNAL 5.25" 1.2MB DRIVE ALSO USES ADAPTER FRU P/N15F7996.

SAS KEYWORDS:

PSY2

PSY2ADPT

PSY2DSKT

4869DSKT

SYSTEM BOARD CABLE CONNECTOR STANDOFF AVAILABILITY

1.3.28 SYSTEM BOARD CABLE CONNECTOR STANDOFF AVAILABILITY

Record number: H022325

Device: D/T8550
 Model: M
 Tip key: 070
 Date created: 090/11/29
 Date last altered: A92/05/01

OPTION CABLES ARE ATTACHED TO SYSTEM BOARDS WITH TWO SCREWS SECURED TO METAL STANDOFFS ON THE CABLE CONNECTORS. TO DATE IF CABLES COULD NOT BE SECURED DUE TO MISSING OR DAMAGED STANDOFFS, SYSTEM BOARD REPLACEMENT WAS NECESSARY.

TWO STANDOFFS ARE NOW INCLUDED IN THE MISCELLANEOUS PARTS KITS P/N00F2113 (8525), P/N61X8915 (8530), P/N72X8525 (8550 & 8570), AND P/N 72X8578 (8560, 8565, & 8580). THESE SCREWS OR STANDOFFS ARE ALSO CALLED JACKNUTS OR CABLE SCREWS.

HOWEVER, DUE TO THE FACT THAT MISCELLANEOUS PARTS KITS FOR THE 8550, 8560, 8565, 8570, & 8580 CONTAINING THESE STANDOFFS HAVE NOT REACHED THE FIELD DUE TO EXCESSIVE KIT STOCK, PLEASE ORDER THE 8525 OR 8530 MISCELLANEOUS PARTS KITS (P/N00F2113 OR P/N61X8915) IF STANDOFFS ARE REQUIRED. THIS IS A TEMPORARY SOLUTION UNTIL NEW KITS CAN BE MADE AVAILABLE.

SAS KEYWORDS:

PSY2	8525SYSBRD	8530SYSBRD	8550SYSBRD
8560SYSBRD	8565SYSBRD	8570SYSBRD	8580SYSBRD
PSY2MISC	8525MISC	8530MISC	8550MISC
8560MISC	8565MISC	8570MISC	8580MISC
8555SYSBRD	PSY2BRD	8525SYSMISC	8530SYSMISC
8550SYSMISC	8555SYSMISC	8560SYSMISC	8565SYSMISC
8570SYSMISC	8580SYSMISC	D/T8550	D/T8555
D/T8556	D/T8557	D/T8560	D/T8565
D/T8570	D/T8573	D/T8580	D/T8590
D/T8595	D/T8525	D/T8530	D/T8535
D/T8540			

1.3.29 SYSTEM BOARD MEMORY ERROR IN PC 300/700 HMM

Record number: H13420

Device: D/T6875
 Model: M
 Tip key: 008
 Date created: 095/07/12
 Date last altered: A95/08/07

The PC300/700 Hardware Maintenance Manual, publication number S83G-7789 - 01, dated May 1995, page 90, section titled "System Board Memory" states that the PC 300/700 Series Systems support only tin-lead Simms.

This is an incorrect statement. All PC 300 and 700 Series systems, except the 6576 and 6586, support ONLY gold plated memory SIMMs. The 6576 and 6586 support ONLY tin-lead SIMMs. Refer to RETAIN tips H095767 and H127538 for a list of unsupported memory SIMMs.

The correction will be included in future updates of the PC 300/700 HMM.

SAS KEYWORDS:

PSY2	D/T68XX	D/T6573	D/T6583
D/T6571	D/T6581	D/T6575	D/T6585
D/T6876	D/T6886	D/T6875	D/T6885
68XX	6573	6583	6571
6581	6575	6585	6876
6886	6875	6885	PSY2PROG
D/T6576	D/T6586	6576	6586
D/T65XX	65XX	PSY2MEM	PSVPMEM
PSY2DOC	PSVPDOC	PSVPPART	PSY2PART
PSVP	TIN LEAD		

1.3.30 SYSTEM BOARD MEMORY SIMM RETAINING CLIPS

Record number: H021298

Device: D/T8550
 Model: M
 Tip key: 068
 Date created: 090/11/05
 Date last altered: A92/09/04

CURRENTLY WHEN REMOVING/REPLACING MEMORY SIMM'S ON 8550Z AND 8570 SYSTEM BOARDS, IT IS POSSIBLE TO BREAK ONE OR BOTH PLASTIC RETAINING TABS THAT LOCK A MEMORY SIMM IN THE VERTICAL POSITION IN ITS SIMM CONNECTOR. TO DATE IT HAS BEEN NECESSARY TO REPLACE THE ENTIRE SYSTEM BOARD FOR THIS CONDITION.

THERE ARE TWO STYLES OF SIMM CONNECTORS CURRENTLY FOUND ON SYSTEM BOARDS THAT ARE AFFECTED. ONE STYLE IS BLACK AND THE OTHER STYLE IS WHITE.

EFFECTIVE IMMEDIATELY A FRU KIT CONTAINING FOUR PLASTIC SLIP-ON REPLACEMENT CLIPS (PLUS INSTRUCTIONS) IS AVAILABLE FROM MECHANICSBURG UNDER P/N84F6863.

EACH FRU KIT CONTAINS A SET OF TWO CLIPS PER CONNECTOR STYLE. THERE IS A LEFT AND RIGHT BLACK CLIP AND A LEFT AND RIGHT WHITE CLIP. THESE CLIPS ARE TO BE USED ON THEIR RESPECTIVE COLORED SIMM CONNECTORS, (I.E. BLACK TO BLACK, WHITE TO WHITE). INSTRUCTIONS ARE INCLUDED IN THE KIT FOR PROPER INSTALLATION.

SAS KEYWORDS:

PSY2	PSY2MISC	PSY2BRD	8550SYSBRD
8570SYSBRD	8550SYSMISC	8570SYSMISC	PSY2ECBM
8550SYSECBM	8570SYSECBM	MEMORY	CLIPS
PSY2MEM			

1.3.31 SYSTEM ERROR LOG UPDATE AVAILABLE

Record number: H061444

Device: D/T9595
 Model: M
 Tip key: 016
 Date created: 094/09/29
 Date last altered: A95/03/03

On models of the 8595, and 9595 which have the System Error Log feature, some error conditions are not being reported correctly.

This feature may be accessed by booting the system partition and selecting "More Utilities" from the Main Menu. It has the capability of storing three unique error logs. When three error logs have been stored, the next POST will display a 00017900 error code.

A later version of the error log software is now available which corrects this problem. In addition, the text for the F1 function key has been changed from "Help" to "More information", to more accurately describe this function.

Additional information about the error logging facility is found on pages 301 and 302 of the HMM (Hardware Maintenance Manual), S52G-9971-01, dated September 1993.

The new executable NVRAMELG.EXE replaces the older version on the Reference Diskette and displays the error log information in a more usable format. The new NVRAMELG.EXE has a date of 05/06/94 and a file size of 78978 bytes.

The new NVRAMELG.EXE may be obtained from the IBM PC Company BBS (919) 517 - 0001 (9600,8,N,1). The file name to download is NVRAMELG.ZIP. This is a self-extracting ZIP file that contains following files:

NVRAMELG.EXE - new error log utility
 NVRAMELG.TXT - text file explaining the utility and installation instructions

INSTALLATION INSTRUCTIONS:

1. Copy NVRMAELG.EXE to your backup copy of the Reference Diskette (This file over-writes the existing NVRAMELG.EXE)

Installation is now complete for the Reference Diskette only. To update the system partition, perform the following steps:

1. Backup your system partition to diskettes.
2. Copy the NVRAMELG.EXE file to the Reference Diskette that you created during the backup of your system partition.
3. Boot the Reference Diskette you just created and modified.
4. Restore your system partition from your modified Reference Diskette.

The System Partition will now contain the new NVRAMELG.EXE.

SAS KEYWORDS:

PSY2	PSY2PROG	PSY2ERR	D/T8595
D/T8590	D/T9590	OS2	8595
9595	8590		

1.3.32 SYSTEM HANG USING "CREATE LAN IMAGE" W/WINDOWS95

Record number: H132822

Device: D/T6877
 Model: M
 Tip key: 005
 Date created: 096/02/28
 Date last altered: A96/02/28

IBM PC 700 Series 6877 and 6887 may exhibit a system hang condition while processing the "Create LAN Image" option on systems preloaded with Windows95.

The "Create LAN Image" starts running in the background. The Task Bar must be used to bring the window to the foreground. During the copying process, the system may hang.

This failure was found on a limited number of systems manufactured as part of an Early Ship Program. Not all systems will be affected.

This problem will be resolved in future updates of the Windows95 system preload. Contact the IBM PC Company HelpCenter for questions regarding updates to preloaded software. Windows95 is a trademark of the Microsoft Corporation.

SAS KEYWORDS:

PSY2	D/T68XX	6887	6877
IBMPC	PSVP	PSVPCOMM	PSY2COMM
D/T6887	PSVPPROG	PSY2PROG	PSVPDSKT
LOCKUP	PC750	HUNG	PSY2DSKT
PC 750	PC730	PC700	PC 730
40703			

1.3.33 SYSTEM HANG W/ACTIONMEDIA II STARTER/DIAG DISKETTE

Record number: H132821

Device: D/T6877
 Model: M
 Tip key: 004
 Date created: 096/02/28
 Date last altered: A96/02/28

IBM PC 700 Series 6877 and 6887 systems may exhibit a system hang condition while attempting to boot the IBM ActionMedia II Starter/Diagnostic Diskette.

The ActionMedia II Starter/Diagnostic Diskette is not compatible with the 6877 and 6887, however, applications that use the adapter should function normally. This symptom only affects the Starter/Diagnostic diskette. The adapter itself is functional in the PC 700 Series.

There are no plans to update the Starter/Diagnostic Diskette at this time. A diagnostic approach for a suspected failing adapter should be to isolate the system from the adapter and attempt to recreate the failure. Any error codes posted by the system or applications should also be used to determine if the adapter is failing.

SAS KEYWORDS:

PSY2	D/T68XX	D/T6887	6887
6877	PC 750	PC700	PC750
68XX	IBMPC	PSVP	PC730
PC 730	PSVPADPT	PSY2ADPT	PSY2ERR
PSVPERR	PSVPDIAG	PSY2DIAG	39831

1.3.34 SYSTEM HANGS AND FAILURES DUE TO EXCESSIVE HEAT

Record number: H122900

Device: D/T9595
 Model: M
 Tip key: 006
 Date created: 094/01/24
 Date last altered: A95/06/08

Difficult to diagnose system failures and operating system hangs have been observed on PS/2 8595, 9595 and 9595A systems operating with the base frame (cabinet) side cover removed. The side cover contains a fan assembly which is required to be in place to provide proper cooling air flow for the system.

When servicing the system, running diagnostics or other tasks which require system power-on for more than a few minutes, the side cover should be reinstalled before power is turned on.

Observing the above precaution is particularly important for the Pentium* processor systems and the RAID array systems. The RAID controller, like the Pentium processor, uses very dense micro controller technology which requires proper cooling. Insufficient cooling of the RAID controller has been known to cause difficult to diagnose RAID configuration failures and fixed disk DDD ** and other disk errors. No troubleshooting should be attempted on this system until the side cover is reinstalled and the system has been allowed to cool, to prevent unnecessary fixed disk FRU replacements.

The side cover fan assembly FRU is P/N64F4115 and the side cover fan cable (connector) assembly is FRU P/N61G3824.

* Registered trademark of INTEL Inc.

**Refer to "Configuring Your Disk Array," page 28, for more detail on fixed disk drive status code, including DDD.

This document is shipped with each 9595A system (Form # S82G-1506 - 00).

SAS KEYWORDS:

PSY2	PSY2ERR	PSY2MISC	D/T8595
D/T9595A	PSY2PWR	PSY2PROG	COOLING
OVERHEAT	BTU	DASD	PSY2FDSK
HARD	FILE	SCSI	SERVER
95	D/T8641	8641	500

PSY2 RETAIN TIPS
SYSTEM HANGS WITH DI/DO ADAPTER

1.3.35 SYSTEM HANGS WITH DI/DO ADAPTER

Record number: H092421

Device: D/T7568
Model: M
Tip key: 006
Date created: 091/11/26
Date last altered: A91/12/04

THE DIGITAL I/O BOARD MADE BY INDUSTRIAL COMPUTER SOURCE (MC/DI072) CAUSES THE 7568 TO HANG UP AND UNPREDICTABLE RESULTS IN OTHER MICROCHANNEL SYSTEMS. THE MANUFACTURER HAS BEEN NOTIFIED THAT A COMPONENT ON THIS CARD VIOLATES THE MICROCHANNEL SPECIFICATION AND HOPEFULLY WILL RECTIFY THIS SITUATION QUICKLY.

SAS KEYWORDS:

7568	INDPC	GEARBOX 800	PSY2
D/T8580	8580SYSADPT	D/T8550	D/T8555
D/T8556	D/T8557	D/T8560	D/T8565
D/T8570	D/T8573	D/T8580	D/T8590
D/T8595	8550SYSADPT	8555SYSADPT	8556SYSADPT
8557SYSADPT	8560SYSADPT	8565SYSADPT	8570SYSADPT
8573SYSADPT	8580SYSADPT	8590SYSADPT	8595SYSADPT

1.3.36 SYSTEM HANGS WITH LAN ADAPTERS & PC SUPPORT PROGRAM

Record number: H123732

Device: D/T6384
 Model: M
 Tip key: 057
 Date created: 094/04/28
 Date last altered: A94/04/29

PS/VALUEPOINT 6384/D, 6382/S AND 6387/T SYSTEMS MAY EXPERIENCE SYSTEMS HANGS USING A COMBINATION OF A LAN ADAPTER, LAN SUPPORT PROGRAM AND THE IBM PC SUPPORT/400 PROGRAM.

THE FOLLOWING STEPS MAY BE TAKEN TO REDUCE THE POSSIBILITY OF A SOFTWARE SETUP/COMPATIBILITY RELATED PROBLEM:

- 1) INSTALL THE LATEST LEVEL PTF'S FOR THE IBM PC SUPPORT/400 PROGRAM. INFORMATION REGARDING THE LATEST LEVEL MAY BE OBTAINED FROM IBM PC SUPPORT/400 TECHNICAL SUPPORT AT 800-237 - 5511.
- 2) ENSURE THAT THE LATEST VERSION OF IBM LAN SUPPORT PROGRAM (LSP) IS INSTALLED (VERSION 1.35 OR HIGHER). FOLLOW THE INSTALLATION GUIDELINES OUTLINED IN "CHAPTER SEVEN" OF THE LAN SUPPORT PROGRAM USER'S GUIDE.
- 3) IF THE CUSTOMER IS USING WINDOWS 3.1, VIEW THE "NETWORKS.WRI" FILE PROVIDED WITH WINDOWS FOR ADDITIONAL MODIFICATIONS WHICH MAY BE REQUIRED WHEN USING A LAN ADAPTER.

IF SYSTEM HANGS PERSISTS AFTER THE STEPS ABOVE HAVE BEEN VERIFIED, CONTINUE NORMAL PROBLEM DETERMINATION.

SAS KEYWORDS:

PSVP	PSY2	PSVPPROG	PSY2PROG
PSVPADPT	PSY2ADPT	D/T6382	D/T6387
D/T6381	6381	6382	6384
6387	VALUE POINT	PS VP	PSVPOEM
PSY2OEM	PSVPCOMM	PSY2COMM	

1.3.37 SYSTEM UPDATE DISKETTE VERSION 1.02 NOW AVAILABLE

Record number: H037906

Device: D/T8550
 Model: M
 Tip key: 053
 Date created: 090/05/21
 Date last altered: A95/06/06

THE IBM PERSONAL SYSTEM/2 SYSTEM UPDATE DISKETTE IS PROVIDED TO RESOLVE CERTAIN PROBLEMS THAT CAN OCCUR ON SOME IBM PERSONAL SYSTEM/2 MODELS USING IBM DOS, VERSION 3.3 OR HIGHER. THE DISKETTE CONTAINS A DEVICE DRIVER PROGRAM (DASDDRVR.SYS, 1.56 OR HIGHER) AND AN INSTALLATION PROGRAM (INSTALL.COM).

THE FOLLOWING TABLE LISTS THE PROBLEMS ADDRESSED BY THE SYSTEM UPDATE DISKETTE, VERSION 1.02.

PROBLEM	SYSTEMS
1. FAILURES OCCUR WHEN READING SOME 720KB PROGRAM DISKETTES	8530 E01, E21; 8550 021 8560 041, 071; 8580 041 8580 071
2. INTERMITTENT "NOT READY" OR "GENERAL FAILURE" ERROR MESSAGES	8550 021; 8560 041, 071 8580 041, 071
3. 3.5 - INCH DISKETTE FORMAT FAILURE WHEN ATTEMPTING TO FORMAT MORE THAN ONE DISKETTE	8550 021; 8560 041, 071 8580 041, 071
4. COMBINED 301 AND 8602 ERROR MESSAGES AT POWER ON OR AFTER POWER INTERRUPTION	8550 021; 8560 041, 071
5. SYSTEM CLOCK LOSES TIME OR COMBINED 162 AND 163 ERRORS DURING SYSTEM INITIALIZATION	8550 021; 8560 041, 071
6. UNABLE TO INSTALL POWER-ON PASSWORD PROGRAM WITH DASDDRVR.SYS INSTALLED	8550 021; 8560 041, 071 8580 041, 071
7. DEVICE ATTACHED TO COM2, COM3, OR COM4 IS NOT DETECTED	8530 E01, E21
8. FAILURES OCCUR WITH DEVICES THAT USE INTERRUPT REQUEST LEVEL 2 (IRQ2)	8530 E01, E21
9. 3.5 - INCH DISKETTE FORMAT FAILURE WHEN ATTEMPTING TO FORMAT MORE THAN ONE DISKETTE	8570 A21, A61
10. SYSTEM PERFORMANCE DEGRADATION FROM PROCESSOR-INTENSIVE DEVICES	8550 021, 031, 061 8555 031, 061 8560 041 8560 071
11. ERROR IN MICROCODE ROUTINE THAT ENHANCES LONG-TERM RELIABILITY FOR 60MB AND 120MB FIXED DISK DRIVE DRIVES	8550, 8555, 8570, 8573
12. TIME AND DATE ERRORS OCCUR WHEN RESETTING TIME OR DATE. INTERMITTENT DATE CHANGES CAN OCCUR WHEN SYSTEM IS RESTARTED BY PRESSING CTRL+ALT+DEL	8530

THE CUSTOMER MAY OBTAIN A COPY OF THE SYSTEM UPDATE DISKETTE BY CONTACTING IBM AT 1-800-426-7282 AND REQUESTING A COPY OF PART NUMBER 04G3288. A DISKETTE WILL BE SENT FREE OF CHARGE. THE INFORMATION IS ALSO AVAILABLE ON IBM'S PCPROD DATABASE. IT CAN BE DOWNLOADED BY IBM INTERNAL USERS.

THE CUSTOMER IS ULTIMATELY RESPONSIBLE FOR THE INSTALLATION OF THE UPDATES. INSTALLATION INSTRUCTIONS ARE PROVIDED.

ONCE THE DASDDRVR.SYS FILE IS INSTALLED, THE APPROPRIATE UPDATES FOR THE CUSTOMERS SYSTEM WILL BE LOADED DURING POST.

IF INSTALLATION ASSISTANCE IS REQUIRED THE CUSTOMER SHOULD BE INSTRUCTED TO CONTACT THEIR PS/2 POINT OF SALE.

PSY2 RETAIN TIPS

SYSTEM UPDATE DISKETTE VERSION 1.02 NOW AVAILABLE

SAS KEYWORDS:

PSY2	PSY2ERR	PSY2DSKT	PSY2DIAG
PSY2COMM	PSY2NLGO	PSY2OPER	PSY2PROG
D/T8550	DT/8560	D/T8580	D/T8570
D/T8530	D/T8555	D/T8565	FULFILMENT
HOUSE			

1.3.38 SYSTEM WILL NOT POST (POWER-ON SYSTEM TEST)

Record number: H006547

Device: D/T8550
 Model: M
 Tip key: 202
 Date created: 094/06/13
 Date last altered: A95/02/09

Note: This tip is to be used only in unusual situations where routine problem determinations methods have failed. Consideration should be given to the customer's situation and the customer's environment. This procedure might be better utilized in a "service shop" type environment.

Symptom:

POST will not run. The monitor screen is blank. There is no audible or visual signals. Multiple FRU replacements, including the system board, have failed to fix this "dead system."

At this point, all HMM (Hardware Maintenance Manual) service procedures and "Undertermined Problem" steps should have already been taken.

The following procedure has proven effective in isolating "dead system" problems that have not been resolved by the established service procedures:

"Bread-board*" the system, using the following procedure:

1. Remove the system board, power supply, base memory, diskette drive and cable, etc. from the system unit cabinet.
2. Re-assemble the basic ** system outside the cabinet, on a non-conductive surface, using care to prevent the individual parts from coming into contact (shorting against each other).

*****NOTE: *****

a. DO NOT place a system board on top of the ESD mat or the foam which is used to pack FRU parts. The ESD mat is CONDUCTIVE. Some foam (pink & black) used to pack FRUs is treated with a conductive agent to protect the parts from ESD (Electro-Static Discharge).

B. Cardboard, linoleum or a tile floor is acceptable to support the system board. (Be aware, the bottom side of a system board may scratch wooden office furniture, and some "black" cardboard may be conductive!)

3. Turn on the system power and observe the system for signs of POST activity (cursor on monitor, memory count, activity lights flashing, or audible sound).

A. If the system POST runs correctly, inspect the interior of the cabinet or anything that might be touching the backside of the system board. Look for bent ESD/RFI shields, loose foreign objects, screws, or even tiny slivers of conductive paint near screw heads.

B. If the system still fails to run POST, escalation of problem through the hardware support structure is recommended.

* "Bread-boarding" is a term which refers to the assembly of an electronic device without a cabinet or other enclosure. This procedure is routine during the development of a product to prove that a given design is functional.

The advantage of this process is:

1. It provides visibility to areas that are not easily seen inside the cabinet.
2. It allows easy access to all the functional system parts.

** Note: It is presumed that all optional adapters have been removed from the system during this process and the system is at a MINIMUM configuration to run POST and provide audible and visual indications of system activity.

SAS KEYWORDS:

PSY2	PSVP	BREAD	BOARD
D/T8535	D/T8540	D/T8543	D/T8551
D/T8554	D/T8550	D/T8555	D/T8556
D/T8557	D/T8573	D/T8560	D/T8565

PSY2 RETAIN TIPS

SYSTEM WILL NOT POST (POWER-ON SYSTEM TEST)

D/T8570	D/T9576	D/T8640	D/T9590
D/T8580	D/T8590	D/T8595	D/T9585
D/T9577	D/T9556	D/T9557	D/T9595
D/T9533	D/T6384	D/T6381	D/T6382
D/T6387	D/T2603	D/T2614	D/T2615
D/T2618	D/T9552	D/T9545	D/T2521
D/T6384	PS/VALUEPOINT	D/T8590	D/T8595
D/T9595	D/T9585	D/T8525	D/T8530
SERVER	300		

1.3.39 S3 WINDOWS95 VIDEO DRIVER README.TXT FILE ERROR

Record number: H161052

Device: D/T6588
Model: M
Tip key: 004
Date created: 097/09/16
Date last altered: A97/09/16

The S3 Trio64V2 Windows95 video driver version 2.30.21, file name Q63T04A.EXE, contains an error in the README.TXT file.

Section 1.0, "Supported Color Depths and Refresh Rates," incorrectly states that the only supported refresh rate for a resolution of 1600x1200x256 is 48Hz interlaced.

In addition to the 48Hz interlaced refresh rate shown, the user may select "Optimal" for the refresh rate at a resolution of 1600x1200x256. The supported refresh rate will then be 60Hz interlaced.

WINDOWS95 is a trademark of Microsoft Corporation.
S3 and Trio64V2 are trademarks of S3 Incorporated.

SAS KEYWORDS:

PSY2	PSY2DOC	PSY2OPER	PSVP
PSVPDOC	PSVPOPER	D/T6588	D/T6888
66966	6588	6888	UNCLASSIFIED
TRIO64V2			

S36/38 WORKSTATION EMULATION ADAPTER DIAGNOSTICS

1.3.40 S36/38 WORKSTATION EMULATION ADAPTER DIAGNOSTICS

Record number: H026184

Device: D/T8550
 Model: M
 Tip key: 020
 Date created: 087/12/03
 Date last altered: A92/10/02

THE S36/38 WORKSTATION EMULATION ADAPTER CANNOT BE TESTED WITH
 ADVANCED DIAGNOSTICS IN LOOP MODE.

A S36/38 WORKSTATION ADAPTER INSTALLED IN A 8550, 8560, OR 8580
 CAN ONLY BE TESTED WITH ADVANCED DIAGNOSTICS IF YOU CHOOSE "RUN
 TESTS ONE TIME" FROM THE TEST SELECTION MENU.

RUNNING THE DIAGNOSTIC TESTS CONTINUOUSLY (LOOP MODE) WILL
 HANG THE SYSTEM UNLESS YOU DELETE THE WORKSTATION ADAPTER
 FROM THE INSTALLED DEVICES LIST PREVIOUS TO RUNNING THE TESTS.

TO DELETE THE WORKSTATION ADAPTER, ANSWER THE DIAGNOSTIC PROMPT
 'IS THIS LIST CORRECT?' WITH A 'NO'. FOLLOW THE PROMPTS FROM
 THE ADD/DELETE MENU TO DELETE THE WORKSTATION ADAPTER TESTS.

NOTE: THE WORKSTATION ADAPTER TESTS REQUIRE THE REFERENCE
 DISKETTE TO BE INSERTED IN DRIVE A: DURING THE TESTS. YOU
 CANNOT LOG TO DISKETTE WHEN RUNNING THE ADAPTER TESTS. IF
 LOGGING IS REQUIRED, LOG TO A PRINTER.

THE S36/38 WORKSTATION ADAPTER DIAGNOSTIC WILL BE FIXED IN THE
 NEXT RELEASE.

SAS KEYWORDS:

8550SYSADPT	8550SYSCOMM	8560SYSADPT	8560SYSCOMM
8580SYSADPT	8580SYSCOMM	PSY2ADPT	PSY2COMM
PSY2	8550SYSDIAG	8560SYSDIAG	8580SYSDIAG
PSY2DIAG	D/T8580	D/T8560	

1.3.41 TAKE THESE STEPS BEFORE REPLACING ITBU P/N87F9787

Record number: H121544

Device: D/T8550
 Model: MCP1
 Tip key: 191
 Date created: 093/10/20
 Date last altered: A95/01/11

This TIP is to address the replacement of the Internal Tape Backup Unit on a Service Call. The CE should always run the Diagnostics and insert an unused RHOMAT format tape before they begin diagnostics. If the Diagnostics fail take the appropriate action:

- * Clean tape Head and Capstan with cotton swap and 90% ISOPROPYL
- * Verify that you have a UNUSED RHOMAT FORMAT TAPE DC2080 or DC2120 (A tape used ONLY with diagnostics is OK)
- * Verify you are running Version 2.0 Diagnostics on ValuePoints.
- * Rerun Diags after cleaning and tape verify.
- * If they still fail take the appropriate REPAIR ACTION (ie.. Replace Drive)

If Diags run clean do the following:

```

*****
*
*   DO NOT REPLACE TAPE DRIVE!!!!
*
*   Make note of customer problem then
*
*   Call ITBU Support at (704) 594-3792
*           or
*           Tie Line 794-3792
*
*   Again, DON'T REPLACE TAPE DRIVE!
*
*****
    
```

SAS KEYWORDS:

ITBU	TAPE	PSY2DIAG	BACKUP
PSY2	PSY2ERR	PSY2TAPE	PSY2MISC
D/T8550	8550SYSTAPE	8550SYSMISC	8550SYSERR
D/T8570	8570SYSTAPE	8570SYSMISC	8570SYSERR
D/T8580	8580SYSTAPE	8580SYSMISC	8580SYSERR
D/T8590	8590SYSTAPE	8590SYSMISC	8590SYSERR
D/T8560	8560SYSTAPE	8560SYSMISC	8560SYSERR

1.3.42 TAPE DRIVE FAILS TO OPERATE PROPERLY

Record number: H103736

Device: D/T8550
Model: M
Tip key: 144
Date created: 092/12/09
Date last altered: A92/12/14

IF HARDWARE DIAGNOSTICS COMPLETE WITHOUT ERROR ON A FAILING PS/2 TAPE DRIVE UTILIZING SYTOS* SOFTWARE, THE LEVEL OF THE SOFTWARE MAY BE CAUSING THE PROBLEM.

CORRECT OPERATION OF THE TAPE DRIVE MAY REQUIRE A LATER LEVEL OF SYTOS* DEPENDING ON THE CUSTOMER'S HARDWARE AND/OR SOFTWARE CONFIGURATION.

ACCORDING TO THE USER DOCUMENTATION, SHIPPED WITH THE SYTOS* PRODUCT, CUSTOMERS MAY CONTACT SYTRON, INC. FOR TECHNICAL SUPPORT AND ASSISTANCE AT 508-898-0193.

IBM SOFTWARE SUPPORT IS AVAILABLE BY CALLING 1-800-237-5511.

* REGISTERED TRADEMARK OF THE SYTRON CORPORATION.

SAS KEYWORDS:

PSY2	PSY2TAPE	D/T6157	2.3 GIG
2.3GIG	D/T3532	INTERNAL	6157TAPE
3532TAPE	OS/2	OS2	SYTOS

TAPE ERRORS DUE TO NON-STANDARD TAPE AND CLEANING CARTRIDGES

1.3.43 TAPE ERRORS DUE TO NON-STANDARD TAPE AND CLEANING CARTRIDGES

Record number: H094778

Device: D/T8550
Model: M
Tip key: 092
Date created: 091/03/18
Date last altered: A91/06/03

USERS AND SERVICERS OF PS/2 SYSTEMS USING 8MM CASSETTE
TAPE DRIVES MAY EXPERIENCE ERRORS IF TAPE CARTRIDGES USED
DO NOT MEET THE REQUIRED STANDARDS.

EXCESSIVE SOFT ERROR RATE AND EXCESSIVE RETRYs MAY BE
EXPERIENCED, ALONG WITH SOME SOLID FAILURES.

ONLY TAPES MEETING
ANSI XB35 STANDARDS ARE SUPPORTED ON THE PS/2 2.3 GIGABYTE
FULL HIGH SCSI TAPE DRIVE.

USE OF INCORRECT CLEANING TAPE CARTRIDGES MAY DRASTICALLY
REDUCE R/W HEAD LIFE.

SAS KEYWORDS:

PSY2

PSY2TAPE

PSY2ADPT

SCSI

1.3.44 TFT LCD PIXEL FAILURE CRITERIA

Record number: H20721

Device: D/T9552
Model: M
Tip key: 012
Date created: 092/11/23
Date last altered: A96/11/01

The LCDs for the ThinkPad TFT panels contain over 921,000 thin film transistors (TFTs). A small number of missing, discolored or lit dots (on at all times) is characteristic of TFT technology, but excessive pixel problems can cause viewing concerns. To address these conditions the following replacement criteria has been released.

The LCD should be replaced if the number of dots satisfies the following condition:

- The number of missing, discolored or lighted dots in any back ground is 21 or more. .

SAS KEYWORDS:

PSY2	700C	PSY2DISP	FAIL
720C	750C	D/T9545	755C
D/T9546	D/T2625	THINKPAD	

THERE ARE TWO DIFFERENT ENHANCED 80386 MEMORY EXPANSION

1.3.45 THERE ARE TWO DIFFERENT ENHANCED 80386 MEMORY EXPANSION

Record number: H20590

Device: D/T8550
 Model: MCP1
 Tip key: 161
 Date created: 093/03/02
 Date last altered: A93/03/02

THE ENHANCED 80386 MEMORY EXPANSION "ADAPTER" AND THE ENHANCED 80386 MEMORY EXPANSION "OPTION" ARE TWO DIFFERENT FEATURES. IT IS IMPORTANT TO NOTE THE DIFFERENCE, SINCE THE TWO ARE NOT ALWAYS INTERCHANGEABLE. THE "OPTION" CAN BE REPLACED WITH THE "ADAPTER", BUT THE REVERSE IS NOT TRUE. THE "ADAPTER" FRU COMES WITH A DISKETTE CONTAINING THE ADAPTER DEFINITION FILES (OPTION DISKETTE).

THEY CAN BE DISTINGUISHED BY:

- 1) OPTION- POSSIBLE ERROR CODES ARE 231, 241 AND 251.
THERE ARE NO COMPONENTS BETWEEN THE SIMM SOCKETS.
- 2) ADAPTER- POSSIBLE ERROR CODES ARE 18431, 18441 AND 18451.
COMPONENTS ARE MOUNTED BETWEEN THE SIMM SOCKETS.

PUBLICATIONS:

- 1) OPTION- INSTALLATION INSTRUCTIONS FORM NUMBER G571-0183
HARDWARE MAINTENANCE SUPPLEMENT FORM # G571-0184
TECHNICAL REFERENCE FORM NUMBER G571-0185
- 2) ADAPTER- INSTALLATION INSTRUCTIONS FORM NUMBER G571-0226
HARDWARE MAINTENANCE SUPPLEMENT FORM # G571-0225
TECHNICAL REFERENCE FORM NUMBER G571-0227

FRU PART NUMBERS:

- 1) OPTION- P/N87F9916
- 2) ADAPTER- P/N88F0075

NOTE: WHEN P/N87F9916 IS REPLACED BY P/N88F0075, THE SYSTEM UNIT
MUST BE RECONFIGURED. P/N88F0075 COMES WITH THE OPTION
DISKETTE WHICH IS REQUIRED FOR THIS RECONFIGURATION.

SAS KEYWORDS:

8570SYSADPT	8573SYSADPT	8580SYSADPT	PSY2SYSADPT
8570SYSTEM	8573SYSTEM	8580SYSTEM	PSY2SYSTEM
8570SYSERR	8573SYSERR	8580SYSERR	PSY2SYSERR
PSY2SYSMISC	D/T8570	D/T8573	D/T8580
PSY2			

THINKPAD AC ADAPTER CONNECTORS

1.3.46 THINKPAD AC ADAPTER CONNECTORS

Record number: H13932

Device: D/T9545
Model: M
Tip key: 046
Date created: 095/09/18
Date last altered: A96/02/21

The Thinkpad 35W AC Adapter FRU P/N 85G4952 is supplied with 2 connectors which allow it to be used with the 9545, 2630 and 2610 systems.

- 1) The 4 pin "square" connector is used for the 9545.
- 2) The "Barrel" connector is used for 2630 701 and 2610 340 enhanced models: 2yd, j3d, 2zd, 2jd, 23d, ds2, kyf, kzf, kjf, k3f, ds2.

The connectors are also available as a separate FRU P/N85G6664. This FRU contains a barrel and a square connector.

SAS KEYWORDS:

PSY2	D/T2630	PSY2PWR	D/T2619
THINKPAD	P/N85G6689		

1.3.47 THINKPAD HMM FORM # S82G1502 03 PARTS CORRECTION

Record number: H13431

Device: D/T9545
Model: M
Tip key: 040
Date created: 095/07/13
Date last altered: A95/07/13

755CD/CDV area on page 384 reversed the FRU part numbers for the
"Connection Cable Microphone and the Internal Microphone Cable".

WRONG OLD LISTING WRONG
Connection Cable, Microphone P/N85G8495
Internal Microphone Cable P/N84G6559

CORRECT NEW LISTING CORRECT
Connection Cable, Microphone P/N84G6559
Internal Microphone Cable P/N85G8495

The next release of the HMM will contain this correction. Please
note the above change in your April 95 edition.

SAS KEYWORDS:

PSY2

PSY2PART

PSY2DOC

THINKPAD

1.3.48 THINKPAD MAINTENANCE DISKETTE AVAILABLE VIA WEB.

Record number: H162738

Device: D/T9549
 Model: M
 Tip key: 002
 Date created: 098/02/13
 Date last altered: A98/02/13

The ThinkPad Maintenance Diskette v1.40 can be used on: the 340, 355, 360, 365X/XD, 370, 380, 385, 560, 750, 755, 760, 765, and 770 ThinkPad systems. It is no longer available as FRU P/N82G3891, but it can be down loaded by IBM authorized services via the internet at URL location:

Http: //w3.pc.ibm.com/cgi-bin/files/listftp?dir=30&sorttype=date

This is an Authorized Dealer Support File area and can only be accessed with the appropriate authorization codes.

Other Non-authorized servicers may order this diskette for non-warranty service via IBM publication ordering. The publication Form number is S78H-5384.

The Maintenance Diskette part number has been deleted from all on-line HMM manuals and will be removed from the hardcopy manuals when they are reprinted.

The diskette contains servicer only information that is not required for customer operation.

SAS KEYWORDS:

PSY2	PSY2PART	PSY2DOC	THINKPAD
UNCLASSIFIED	FORMAT	AUDIO	D/T2610
D/T2619	D/T2620	D/T2625	D/T2635
D/T2640	D/T9545	D/T9746	D/T9547

1.3.49 THINKPAD NUMERIC KEYPADS

Record number: H122688

Device: D/T2618
Model: M
Tip key: 009
Date created: 094/02/11
Date last altered: A96/11/11

THE IBM THINKPAD 350 IS DESIGNED TO OPERATE WITH INDUSTRY
STANDARD EXTERNAL NUMERIC KEYPADS, MANUFACTURED AND AVAILABLE
FROM MULTIPLE OEM VENDORS. THESE KEYPADS ARE NOT INTERCHANGEABLE
WITH THE IBM NUMERIC KEYPAD OPTIONS DESIGNED FOR USE WITH THE
THINKPAD 700, 720, AND 750 SYSTEMS.

SAS KEYWORDS:

PSY2	PSY/2	2618	KEYBOARD
PAD	KEYPAD	THINKPAD	UNCLASSIFIED

THINKPAD SCREW TORQUING PROCESS.

1.3.50 THINKPAD SCREW TORQUING PROCESS.

Record number: H161290 Number of altered copies: 1

Device: D/T9547
 Model: M
 Tip key: 011
 Date created: 097/09/16
 Date last altered: A97/10/03

Loose screws can cause a verity of problems with ThinkPad systems - from intermittent failures to broken parts. To prevent this a torque process has been developed that pertains to all screws in ThinkPad devices.

TORQUE PROCESS

ThinkPad screws should be tightened another 90 or 180 degrees once the items to be clamped are touching with no discernible space between them. The number of degrees is based on the composition of the material being clamped.

This chart details the number of degrees needed to further tighten the screw to obtain the correct amount of torque.

Material to be clamped	Degrees to turn the screw after the items are together with no space between them.
Plastic	90
Metal	90
Solder	180

SAS KEYWORDS:

PSY2	PSY2PART	THINKPAD	UNCLASSIFIED
D/T9546	D/T9545	D/T9552	D/T2635
D/T2625	D/T2640	D/T2630	D/T2620
D/T2619	D/T9548		

1.3.51 THINKPAD 300 BIOS UPDATE FOR VIDEO CARD

Record number: H124443

Device: D/T2615
 Model: M
 Tip key: 005
 Date created: 094/04/18
 Date last altered: A96/11/11

VERSION 4.4 SYSTEM LEVEL BIOS IS REQUIRED FOR CORRECT OPERATION OF THE VIDEO ADAPTER CARD FRU P/N33G9296 (LEVEL 04) FOR THE THINKPAD 300. CARD LEVEL 04 CAN BE IDENTIFIED BY CHECKING THE MANUFACTURING LEVEL NUMBER EMBOSED ON THE CARD. THE CURRENT LEVEL NUMBER IS 239 - 1071 - 04. THE LAST TWO DIGITS INDICATE THE LEVEL.

ALL FRU BOXES WHICH CONTAIN FRU P/N33G9296 AT LEVEL 04 HAVE A WARNING LABEL WHICH STATES THAT SYSTEM BIOS MUST BE UPDATED TO LEVEL 4.4 FOR CORRECT OPERATION.

IF VERSION 4.4 BIOS IS NOT INSTALLED ON THE SYSTEM AND MANUFACTURING VERSION 04 VIDEO CARD IS INSTALLED, THE LCD MAY BE BLANK OR APPEAR DIM. THINKPAD 300 BIOS LEVEL 4.4 IS AVAILABLE ON THE IBM PC COMPANY BULLETIN BOARD SYSTEM. THE PHONE NUMBER IS 919 - 517 - 0001. THE FILE IS NAMED 2615_44.EXEBIN.

```
***** IMPORTANT *****
*
* THESE FLASH UPDATES ARE CUSTOMER INSTALLABLE. CUSTOMERS
* SHOULD BE ADVISED TO CONTACT THE PC COMPANY HELPCENTER AT
* 800-772 - 2227 IF ASSISTANCE IS REQUIRED IN GETTING THE
* APPROPRIATE UPDATE.
*****
```

To determine the BIOS Level:

1. Insert the update disk into the floppy drive.
2. Enter Ctrl-Alt-Ins to go to the Monitor menu.
3. Select 5, "BIOS Update".
4. The BIOS level will be displayed in the top portion of the screen.

To update the BIOS:

1. Insert the update disk into the floppy drive.
2. Enter Ctrl-Alt-Ins to go to the Monitor menu.
3. Select 5, "BIOS Update".
4. Select 1, "Yes".
5. When instructed to cycle power, remove the update disk and perform a cold boot by holding the reset button down while cycling the power switch.

IF THE 2615 VIDEO CARD LEVEL 239-1071-04 IS INSTALLED AND THE SYSTEM BIOS HAS BEEN UPGRADED TO VERSION 4.4, ANY FAILURES SHOULD BE RESOLVED USING NORMAL PROBLEM DETERMINATION PROCEDURES.

SAS KEYWORDS:

PSY2	PSY/2	PSY2PART	DISPLAY
2615	BIOS	THINKPAD	UNCLASSIFIED

1.3.52 THINKPAD 350 AC ADAPTER FRU P/N'S

Record number: H123665

Device: D/T2618
 Model: M
 Tip key: 013
 Date created: 094/04/19
 Date last altered: A95/09/08

THE FOLLOWING FRU LIST AND DESCRIPTIONS SHOULD BE USED TO CLARIFY P.54 ITEM-26 IN THE HMM S82G-1502 AND P.7-15 ITEM-3 IN THE HMM 59G7508 (BLACK BOOK).

FRU P/N33G9616 - EMEA AC ADAPTER FOR D/T2618 AND D/T2141. 110V./220V. REQUIRES A SEPARATE POWER CORD.

FRU P/N33G9657 - EMEA AC ADAPTER (NORDIC COUNTRIES ONLY) FOR D/T2618 AND D/T2141. 110V./220V. REQUIRES A SEPARATE POWER CORD. THIS FRU SUBS TO WORLD WIDE ADAPTER 33G6022.

FRU P/N60G1684 - U.S./CANADA AC ADAPTER D/T2618. DOES NOT REQUIRE A SEPARATE POWER CORD.

FRU P/N33G6022 - WORLD WIDE AC ADAPTER FOR D/T2618 AND D/T2141. 110V./220V. THIS PART REQUIRES A SEPARATE POWER CORD FOR THE USING COUNTRY.

NOTE: POWER CORD FRU PART NUMBERS ARE LISTED ON PAGE 230 IN THE HMM S82G-1501 - 01

SAS KEYWORDS:

PARTS	2618	PSY2PARTS	POWER
PSY2	PSY/2	THINKPAD	

1.3.53 THINKPAD 350 BATTERY PACK INFORMATION

Record number: H10434

Device: D/T2618
 Model: M
 Tip key: 011
 Date created: 094/03/09
 Date last altered: A97/11/07

BATTERY CARE

OCCASIONALLY, A FILM MAY BUILD UP ON THE CONTACTS OF THE BATTERY PACK OR THE SYSTEM PLANAR BOARD. THIS FILM CAN PREVENT A GOOD ELECTRICAL CONNECTION, AND COULD IMPACT PERFORMANCE (EXAMPLE: SYSTEM MAY OCCASIONALLY REBOOT). KEEPING THE BATTERY PACK AND SYSTEM BOARD CONTACTS CLEAN WILL HELP INSURE A GOOD ELECTRICAL CONNECTION AND CAN ALSO INCREASE BATTERY LIFE.

TO CLEAN THE CONTACTS, LIGHTLY DAMPEN A COTTON SWAB WITH RUBBING ALCOHOL AND RUB THE CONTACTS WITH THE SWAB UNTIL THEY ARE CLEAN. WHEN CLEANING THE CONTACTS ON THE SYSTEM BOARD, BE CAREFUL NOT TO BEND THE CONTACTS.

CHARGING PROCEDURES

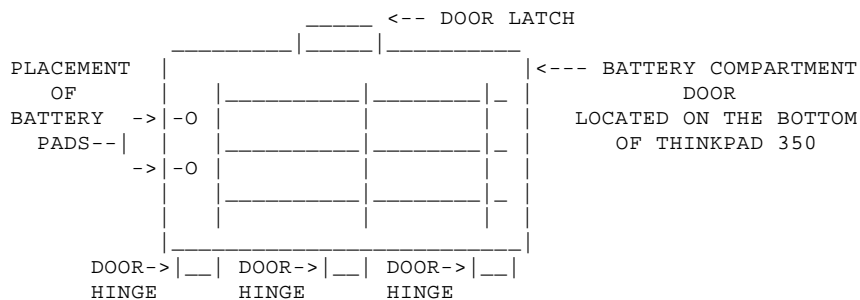
TO FULLY CHARGE YOUR BATTERY PACK, COMPLETE THE FOLLOWING STEPS:

1. MAKE SURE THAT THE BATTERY PACK IS INSTALLED IN THE COMPUTER.
2. ATTACH THE COMPUTER TO AC POWER.
3. SET THE POWER SWITCH SET TO ON (|).
4. CHOOSE YOUR CHARGING METHOD:
 - A. WHILE USING THE SYSTEM, A NORMAL CHARGE RATE WILL OCCUR.
 - B. TO QUICK CHARGE THE BATTERY, PLACE THE COMPUTER IN SUSPEND MODE.

NOTE: WHILE THE BATTERY PACK STATUS GAUGE IS HELPFUL IN DETERMINING HOW MUCH POWER YOU HAVE LEFT, IT IS NOT AN ACCURATE WAY TO DETERMINE IF THE BATTERY PACK IS FULLY CHARGED. THE BATTERY PACK IS FULLY CHARGED ONLY WHEN THE COMPUTER IS CONNECTED TO AC POWER AND THE CHARGING LIGHT GOES OFF.

BATTERY PADS - FRU P/N92G9418

BATTERY PADS CAN BE USED TO INSURE A GOOD CONTACT BETWEEN THE BATTERY AND SYSTEM BOARD CONTACTS. PADS SHOULD BE ADDED TO THE BATTERY COMPARTMENT DOOR AS SHOWN BELOW.



NOTE: IN SOME CASES IT MAY BE NECESSARY TO ADD AN ADDITIONAL PAD TO THE NON-CONTACT END OF THE BATTERY, TO PROVIDE BETTER CONTACT TENSION. HOWEVER, IF YOUR EXISTING BATTERY PACK FITS TIGHTLY OR IS HARD TO REMOVE, THE ADDITIONAL PAD IS NOT REQUIRED.

SAS KEYWORDS:

PSY2 D/T2618 2618 DISCHARGE
 CHARGING LIFE THINKPAD UNCLASSIFIED

1.3.54 THINKPAD 350 BIOS LEVEL "1I"

Record number: H034035

Device: D/T2618
Model: M
Tip key: 008
Date created: 093/12/21
Date last altered: A97/02/28

THE PURPOSE OF THIS TIP IS TO LIST PROBLEMS THAT MAY BE FIXED WITH FLASH EEPROM CODE LEVEL "1I".

VIEW THE FLASH EEPROM LEVEL BY ACCESSING THE CONFIGURATION UTILITY PROGRAM USING THE FOLLOWING PROCEDURE:

1. AFTER POST, PRESS THE "FN" AND "F1" KEYS TOGETHER TO SELECT THE CONFIGURATION UTILITY.
2. PRESS THE "PAGE DOWN" KEY TWICE TO SELECT PAGE 3.
3. THE "BIOS REVISION" LEVEL WILL BE THE SECOND ITEM LISTED UNDER THE SYSTEM CONFIGURATION.

EXAMPLE: AF4US1A - THIS INDICATES A REVISION LEVEL OF "1A" FOR THE U.S.

THE PROBLEMS RESOLVED WITH LEVEL "1I" ARE AS FOLLOWS:

1. INTERMITTENT 117 ERRORS (FLOPPY DISK) ON POST
2. IN SUSPEND MODE, THE PCMCIA CARD DRAWS TOO MUCH CURRENT, WHICH RESULTS IN A SHORT BATTERY LIFE.
3. INTERMITTENTLY, NUMLOCK DOES NOT FUNCTION WHEN USING AN EXTERNAL KEYBOARD.
4. THE SERIAL PORT WILL NOT STAY DISABLED AFTER A MANUAL CHANGE.
5. 301 ERRORS WHEN USING "SPECIAL-NEEDS" KEYBOARD
6. THE BATTERY GAUGE DOES NOT ACCURATELY REPORT BATTERY CHARGE STATE.
7. THE SYSTEM DISPLAYS GARBLED TEXT OR IMAGE, OR THE IMAGE SHIFTS WHILE RUNNING A VIDEO APPLICATION.

IF UPGRADING BIOS TO LEVEL "1I" DOES NOT RESOLVE THE FAILURE, UTILIZE NORMAL PROBLEM DETERMINATION PROCEDURES.

NOTE:

REFERENCE RETAIN RECORD H122224 FOR ADDITIONAL INFORMATION ABOUT UPGRADING BIOS ON THINKPAD 350 SYSTEMS.

SAS KEYWORDS:

PSY2	2618	ERROR	ROM
EPROM	PSY2ERR	THINKPAD	UNCLASSIFIED

THINKPAD 350 PLANAR BOARD, MISSING CONNECTORS

1.3.55 THINKPAD 350 PLANAR BOARD, MISSING CONNECTORS

Record number: H123502

Device: D/T2618
Model: M
Tip key: 012
Date created: 094/04/08
Date last altered: A96/11/11

A LIMITED NUMBER OF SYSTEM BOARDS (FRU P/N73G2497), FOR THE THINKPAD 350C, WERE SHIPPED WITH EITHER A MISSING:

1. P9A COLOR LCD CABLE CONNECTOR.
OR
2. PCMCIA CONNECTOR.

IF THE P9A CONNECTOR IS MISSING, THE COLOR LCD CABLE CANNOT BE INSERTED INTO THE PLANAR BOARD. DO NOT ASSUME THIS IS A MONO SYSTEM BOARD (MONO PLANARS NORMALLY HAVE TWO CONNECTORS AND COLOR PLANARS HAVE THREE CONNECTORS).

STEPS HAVE BEEN TAKEN TO RESOLVE THIS QUALITY PROBLEM. RETURN AFFECTED FRUS AS "NEW DEFECTIVE" AND REORDER.

SAS KEYWORDS:

PSY2PARTS	PARTS	2618	PSY2
PSY/2	PLANAR	THINKPAD	SERVICER ONLY

1.3.56 THINKPAD 500 BATTERY UPGRADE

Record number: H122686

Device: D/T2603
 Model: M
 Tip key: 003
 Date created: 094/02/04
 Date last altered: A97/11/07

IBM ThinkPad 500 (2603) Models 081 and 171 are withdrawn from marketing and manufacturing. Customers with 081 and 171 models are being notified to contact IBM for a factory engineering change. Affected models are being reworked in Raleigh to accommodate a Nickel Metal Hydride battery. This battery replaces the existing Lead Acid battery. After rework the models will be labeled 08N and 17N.

To work properly with the new battery, several other system parts must be replaced.

If you encounter a ThinkPad 500 Model 081 or 171, please contact The IBM PCCO at 1-800 PS2-2227 for further instructions.

Do not attempt field repair if the following parts are found to be failing.

The following FRU numbers are being discontinued.

Old Fru Part Numbers:

System Board - P/N52G7290
 Power Card - P/N59G7922
 Base Cover Assy - P/N59G7921
 AC Adapter - P/N59G7923
 SLA Self-charging battery - P/N59G7924
 SLA Rechargeable battery - P/N59G7946

The following FRU part numbers are for upgraded units (Mod. 08N and 17N). They should not be used in combination with the above FRU numbers.

New FRU Part Numbers Are:

System Board - P/N65G8741
 Power Card - P/N59G7993
 Base Cover Assy. - P/N59G7995
 AC Adapter - P/N59G7991
 NIMH Rechargeable battery - P/N59G7976

This information will be included in a supplement to the Thinkpad 2603 HMM (S82G-5495).

**** IMPORTANT NOTE FOR CANADA ONLY ****

MODELS C71 AND C81 ALREADY HAVE THE UPGRADE AND ONLY THE FRU NUMBERS LISTED ABOVE AS "NEW FRU PART NUMBERS" SHOULD BE USED.

SAS KEYWORDS:

PSY2	PS2	PSY/2	PSY2PART
2603	PARTS	UPGRADE	THINKPAD
UNCLASSIFIED			

1.4 Chapter 4. Symptom/Fix Tips

Subtopics

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- 1.4.2 THINKPAD 510 16MB DRAM
- 1.4.3 THINKPAD 560 FRU UPDATES
- 1.4.4 THINKPAD 700/720/750 MISCELLANEOUS PARTS KITS
- 1.4.5 THINKPAD 720/720C PCMCIA INSTALLATION
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- 1.4.13 TP760 EXTERNAL MONITOR FLICKER IN WINDOWS 95.
- 1.4.14 TRAP ERRORS - EXPLANATIONS
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 1.4.899 NETFINITY V2.01 ERROR, "UNABLE TO CONNECT NETBASE.EXE"
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 1.4.906 NETWARE LAN FAILURE WITH PS/2 IBM ETHERNET ADAPTER/A
 1.4.907 NETWARE 3.12&COLON. LOST HARDWARE INTERRUPT
 1.4.908 NETWARE 3X / 4X WILL NOT AUTO REGISTER >16MB OR >64MB RAM
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- 1.4.922 NO VIDEO OR VIDEO FADES ON PC SERVER 320/520
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- 1.4.934 NOVELL NETWARE FAILS ON PS/2 8535/8540 SYSTEMS
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- 1.4.952 OS/2 TRAP 0002 ERRORS OCCUR DURING 6157 TAPE BACKUP
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- 1.4.958 OS/2 2.1 INSTALL FAILS W/ISA CD-ROM DRIVE
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- 1.4.960 OS/2 3.0 INSTALL IS SLOW, OR HANGS ON SCSI MODELS
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- 1.4.962 PANASONIC CD-ROM FAILS IN PC300/700
- 1.4.963 PARALLEL PORT OPERATIONS ON IML SYSTEMS
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- 1.4.965 PC DOCTOR DIAGNOSTICS SKIPS / HANGS TESTING WITH TAPE DRIVE
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- 1.4.972 PC SERVER 310 HANGS WHEN ACCESSING SC5ISELECT UTILITY
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- 1.4.976 PC SERVER 315 HANGS AT <CTRL-A> PROMPT DURING BOOT.
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- 1.4.997 PC SERVER 704 HANGS WITH PCI BRIDGE TO BRIDGE ADAPTERS
- 1.4.998 PC SERVER 704 PARALLEL PORT NOT FUNCTIONING IN EPP/ECP MODE.
- 1.4.999 PC SERVER 704 POST ERROR 0303 (ECC SIMMS INCOMPATIBLE)
- 1.4.1000 PC SERVER 704 RAID DRIVES FAIL TO FORMAT
- 1.4.1001 PC SERVER 704 TRAPS, HANGS, OR REBOOTS
- 1.4.1002 PC SERVER 704&COLON. FALSE CPU FAILURE AT POST
- 1.4.1003 PC SERVER 704&COLON. SYS0281 DURING BOOT OF WARP SERVER SMP
- 1.4.1004 PC SERVER 704&COLON. 0176, 0177, 0178, 0179 POST ERRORS
- 1.4.1005 PC SERVER 720 HANGS WITH PEERMASTER OR ARTIC ADAPTERS

1.4.1006 PC SERVER 720 HANGS WITH WINDOWS NT SERVER
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1.4.1008 PC 100 SETUP INCORRECTLY SHOWS 2 CDROM DRIVES
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1.4.1011 PC 300 HARDFILES ENTER APM MODE PREMATURELY
1.4.1012 PC 300 REBOOTS OR BOOTS TO SETUP UTILITY
1.4.1013 PC 300 6576/6586 FAILS TO BOOT W/FVC ATM ADAPTER
1.4.1014 PC 300 6576/6586 W/WINDOWS95 BOOTS TO SETUP UTILITY
1.4.1015 PC 300 6586 FAILS TO POWER ON WITH 220V
1.4.1016 PC 300/700 ERRORS WITH PCI LAN CARD INSTALLED
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1.4.1018 PC 300/700 FAILS TO DISPLAY GRAY SHADES W/4707
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1.4.1022 PC 700 FAILS TO BOOT AFTER UPDATING FLASH BIOS
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1.4.1426 1101 POST ERROR
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1.4.1459 2401 ERRORS CAUSED BY SYSTEM BOARD VIDEO CABLE
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1.4.1463 2618 FLOATING MOUSE POINTER
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1.4.1465 2625 FAILS TO RESUME WHEN STANDBY IS DISABLED.
1.4.1466 2630 DOCK II ADAPTER OPTION FAILS AT INSTALLATION
1.4.1467 2630 FAILS POWER UP ON FIRST SWITCH DEPRESSION.
1.4.1468 2630 HANGS WHEN RESUME PASSWORD & 640X480X 16M ARE ENABLED.
1.4.1469 2630 LONG POST TIME AND DISCOLORED WHITE ON THE LCD.
1.4.1470 2630. CANNOT ENTER MORE THAN a 40 CHARACTER STRING.
1.4.1471 3.5 INCH DISKETTE WILL NOT EJECT FROM DISKETTE DRIVE
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1.4.1473 3COM ETHERLINK III ADAPTER NOT RECOGNIZED IN 6381
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1.4.1478 3270/B CARD, NO HOST COMM, OR FEMALE SYMBOLS DISPLAYED
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1.4.1480 3270/5250 DIAGNOSTIC FAILURES ON VALUE POINT SYSTEMS
1.4.1481 3278/79 ADAPTER NOT FOUND OR 2810 S ERROR
1.4.1482 3516 ON/OFF BUTTON STICKS WHEN PRESSED
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1.4.1486 370 CHANNEL ATTACH UNABLE TO ALLOCATE MEMORY
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1.4.1489 4/10GB TAPE DRIVE&COLON. CLEANING PROCEDURES
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1.4.1491 4MM TAPE DRIVE ON SCSI-2 FAST WIDE FAILS DIAGS
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1.4.1494 4029 PRINTER FAILS ON 8570 SYSTEM BOARD UPGRADE
1.4.1495 4680 STORE LOOP ERRORS B4/S008/E023 RC=68
1.4.1496 486 & 386SLC PROCESSOR HANGS USING LOTUS 3.1 & DOS 5.0
1.4.1497 4869 EXTERNAL DRIVE FAILS ON 8525
1.4.1498 5250 ADAPTER DROPS LINE WHEN 6384 IS POWERED ON
1.4.1499 5250 CARD FAILS IN 64XX SYSTEM
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1.4.1501 5250 MSG&COLON. "DIAG ERROR ON COMMUNICATION ADAPTER"
1.4.1502 540MB DISK APPEARS AS 340MB IN a 9545.
1.4.1503 55LS HANGS AT POST W/ REPLACEMENT SYSTEM BOARD
1.4.1504 6157 FAILS AFTER SYSBRD IS REPLACED
1.4.1505 6157 FAILS AFTER SYSBRD IS REPLACED
1.4.1506 6157 TAPE ADAPTER CAUSES TRAP OR HANG SYMPTOMS
1.4.1507 6272/6282 SYSTEMS HANG DURING POST AT CHECKPOINT 60
1.4.1508 63XX/95XX MONITORS APPEAR TO BOOT IN 40 COLUMN MODE
1.4.1509 63XX/95XX MONITORS GEOMETRY / COLOR PROBLEMS

1.4.1510 6318, IMAGE IS NARROW OR JITTERS
1.4.1511 6327 EXHIBITS BLANKING
1.4.1512 6327, IMAGE SHIFTS TO THE LEFT
1.4.1513 6381 FAILS TO CONNECT TO SERVER W/SMC ARCNET
1.4.1514 6381 HANGS WITH WINDOWS FOR WORKGROUPS 3.11
1.4.1515 6381 POST HANG WHEN 1ST 128KB L2 CACHE IS INSTALLED
1.4.1516 6381 PS/VALUEPOINT POWER ON PASSWORD FAILS
1.4.1517 6381 SYSTEM HANG LOADING OS/2 FROM SERVER
1.4.1518 6382/84/87 FAILS TO RECOGNIZE COM3 OR COM4
1.4.1519 6384 HANGS AFTER INSTALLING ATI VIDEO ADAPTER
1.4.1520 6384 HANGS WITH DIALOGIC ADAPTER INSTALLED
1.4.1521 6384 P60/D BEEPS 3 TIMES THEN HANGS
1.4.1522 6384 P60/D HANGS DURING OS/2 INSTALLATION
1.4.1523 6384 P60/D HANGS W/ATI DRIVERS & WINDOWS OR OS/2
1.4.1524 6384 P60/D INTERMITTENT HANGS DURING MEMORY COUNT
1.4.1525 64XX FAILS WITH MORE THAN 16MB MEMORY INSTALLED
1.4.1526 64XX HANGS AFTER INSTALLING PCI ADAPTER
1.4.1527 64XX SYSTEM FAILURES W/128KB CACHE INSTALLED
1.4.1528 64XX SYSTEM HANG OR OPERATING SYSTEM ERROR
1.4.1529 64XX VIDEO PROBLEMS
1.4.1530 64XX WITH QUATECH CARD HANGS
1.4.1531 6553 MONITOR - 2401 POST ERROR WITH DDC ENABLED
1.4.1532 6554/6555 MONITOR DISPLAYS a GREEN TINT
1.4.1533 6562 HMC / SASE POWERON VIDEO/SYSTEM FAILURE ON IBM PC300PL
1.4.1534 6577/6587 SYSTEM W/2.5GB DRIVE SHOWS 2.0GB AVAILABLE
1.4.1535 6598 FAILS WHEN AN AUDIO ADAPTER IS INSTALLED
1.4.1536 6877/6887 FAILS TO LOAD APPLICATIONS FROM a SERVER
1.4.1537 6899 FAILS TO BOOT W/3COM ETHERLINK XL CARD
1.4.1538 6899 FAILS TO POWER ON/OFF
1.4.1539 800X600 RESOLUTION CAUSES BLANK SCREEN IN WINDOWSNT
1.4.1540 8513 CONNECTED TO a PS-2 8530 MAY DROP POWER.
1.4.1541 8514/8515/8516 JITTER IN HIGH RESOLUTION MODES
1.4.1542 8515/8516 EXHIBITS DISTORTED VIDEO WHEN ATTACHED TO 8530
1.4.1543 8525 DISPLAY EXHIBITS CURVED, SHADOWY LINES
1.4.1544 8525 DISPLAY IMAGE ROLL
1.4.1545 8525-286,1.44MB DISKETTE DRIVE OPTION INSTALLATION PROBLEM
1.4.1546 8525SX HARD DISK ERRORS 1780, 1712, NOISE
1.4.1547 8525SX, 8535, 8540 COM1/LPT1 DISABLED AFTER AUTO-CONFIG
1.4.1548 8530 CURSOR KEYS PRODUCE CHARACTERS ON SCREEN
1.4.1549 8535 W/OEM DISK SHUTS DOWN JUST AFTER POWER ON
1.4.1550 8535/40 W/OEM HAS BLANK SCREEN, NO POWER ON LED
1.4.1551 8543 KEYBOARD ENTRY GIVES UNEXPECTED RESULTS
1.4.1552 8550 LOSS OF TIME
1.4.1553 8550Z HANGS ON POST WITH 3270 ADAPTER
1.4.1554 8550Z W/PROCESSOR UPGRADE HANGS DURING POST
1.4.1555 8551 MOUSE FAILS CUSTOMER OPERATION. DIAGS WORK.
1.4.1556 8551 SUSPENDS AFTER POWER ON
1.4.1557 8555 HANGS WITH MICROSOFT WINDOWS 2.11
1.4.1558 8555/8570 HARDFILE ERRORS/NMI'S WITH WINDOWS 3.0
1.4.1559 8555, 8565 DISKETTE FORMAT & COPY PROBLEMS W/ WINDOWS 386
1.4.1560 8555, 8565 POWER ON PASSWORD PROBLEMS
1.4.1561 8556 / 8557 "TYPE MANAGER V2.0 FOR WINDOWS BY ADOBE
1.4.1562 8556 OR 8557 1200/2400 INTERNAL MODEM HANG
1.4.1563 8556/57 FAILS WITH "STB" OEM VIDEO ADAPTER
1.4.1564 8556/57 POST MEMORY COUNT MISSING 256KB
1.4.1565 8557 & 9557 BACKGROUND SPEAKER NOISE
1.4.1566 8560 W/PROCESSOR UPGRADE HANGS DURING POST
1.4.1567 8560 8565 8580 9585 CONFIG PROBLEMS WITH 5 OR MORE ADAPTERS
1.4.1568 8560/8580 DISK FORMAT AND 1755 ERRORS
1.4.1569 8560, 8565, 8580 UPGRADE PLANAR / MEMORY REQUIREMENTS
1.4.1570 8565 FALSE 201 ERROR DURING SOFT BOOT (CTL-ALT-DEL)
1.4.1571 8565 HANGS DURING TAPE BACKUP
1.4.1572 8570 / DOS 4.01 (DOSSHELL) TIME DELAYS, SCREEN ERRORS
1.4.1573 8570 / 4680 OPERATING SOFTWARE HANGS ON SOFT IPL
1.4.1574 8570 DISKETTE DATA ERRORS USING MICROSOFT * WINDOWS/386
1.4.1575 8570 ERROR CODES 10483 AND 10458 FRU CALL OUT
1.4.1576 8570 EXPERIENCING INTERMITTENT 165 POST ERRORS W/ TOKEN RING
1.4.1577 8570 HOT KEY ERRORS USING GRAPHICS WORKSTATION PROGRAM
1.4.1578 8570 MOD A21 DOS 3.3 ERROR FORMATTING MULTIPLE DSKTS
1.4.1579 8570 MOD 061,121 "RACAL INTERLAN" NI9210 COM FAILURE
1.4.1580 8570 MOD 061,121 EMERALD SYSTEMS* TAPE DRIVE FAILURE
1.4.1581 8570 MODEL A21 OR 121 10463 HARDFILE ERROR CODE
1.4.1582 8570 OEM EXTERNAL DISKETTE DRIVE ERRORS
1.4.1583 8570 OR 8580 COMM LINK FAILURE W/ 486 UPGRADE
1.4.1584 8570 POWER PLATFORM MES UPGRADE INFORMATION
1.4.1585 8570 UPGRADE PLANAR 006 ERROR / MEMORY REQUIREMENTS
1.4.1586 8570 W/4700 KEYBRD HANGS SELECTING DOSSHELL COMMAND PROMPT
1.4.1587 8570, NO DISPLAY AT POST W/ OEM MOUSE AND KEYBOARD.
1.4.1588 8570, 8573 MOD 061,121 EVEREX EVERCOM 24* MODEM PROBLEM
1.4.1589 8573 HANGS OR 110 ERRORS ON COLD BOOT.
1.4.1590 8573 162 ERRORS WITH TOKEN RING INSTALLED
1.4.1591 8580 SYSTEM DOES NOT COUNT MEMORY, HANGS AT POST
1.4.1592 8580 W/486 UPGRADE HANGS W/TWO ESDI HARDFILES
1.4.1593 8580 W/486 UPGRADE WITH TWO SCSI ADAPTERS

1.4.1594 8580 80386/80387 CONFLICT CAUSES SYS HANG
 1.4.1595 8580, 110 PARITY ERRORS, WIZARD / BUSMASTER
 1.4.1596 8590 AND 8595 50MHZ SYSTEMS HANG WITH 36/38 ADAPT
 1.4.1597 8600 REDUNDANT POWER SUPPLY
 1.4.1598 8600 SYSTEM FIXED DISK GO OFF-LINE OR NOT READY
 1.4.1599 8600 SYSTEM POWER FAILURES
 1.4.1600 8640 ERROR 020860FU 61EI DURING SYSTEM BOOT
 1.4.1601 8640 HANGS OR TRAP 000D RUNNING NTS/2
 1.4.1602 8640 HANGS WHILE BOOTING OS/2 V2.1
 1.4.1603 8641 (SERVER 500) WILL NOT POWER OFF
 1.4.1604 95XX SYSTEM HANGS WHILE INSTALLING OS/2 2.1
 1.4.1605 9507 MONITOR GOES BLANK
 1.4.1606 9524 TOUCH SCREEN MONITOR DEAD OR BLANK
 1.4.1607 9527 IMAGE SHIFTS WHEN CONNECTED TO a 3483 OR 3488.
 1.4.1608 9545 (ALL MODS) KEYBOARD HANGS USING WP 6.1
 1.4.1609 9545 BLANK SCREEN DURING RESUME ON AC POWER.
 1.4.1610 9545 FAILS TO HIBERNATE USING OS2 2.1
 1.4.1611 9545 HANGS WHEN WORD PERFECT IS USED.
 1.4.1612 9545 KEYBOARD HANGS
 1.4.1613 9545 LCD IMAGES SMEARING OR BLEEDING IN 640X480 MODE.
 1.4.1614 9545 LCD SHIFTS ONE PIXEL OFF LEFT SIDE OF SCREEN.
 1.4.1615 9545 LI-ION BATTERY INFORMATION.
 1.4.1616 9545 PC CARD MODEM FAILS TO RESUME
 1.4.1617 9545 SLOW BOOTING TO OS/2 2.11
 1.4.1618 9545 755C & 755CS EXTERNAL CRT FLICKER ON 640X480
 1.4.1619 9545 755CSE. LINES ON LCD AFTER SUSPEND/RESUME.
 1.4.1620 9545/46/47 & 2625 POST 8603 OR 8611 AND KYBD RESETS.
 1.4.1621 9546 & 9547 THINKPAD 760 12.1 LCD FLICKER.
 1.4.1622 9546 FALSE LCD DIAGNOSTIC ERROR IN EASY SETUP
 1.4.1623 9546 POST FAILURE AT FRU OR OPTION INSTALLATION.
 1.4.1624 9546 760CD. AUDIO BUT NO VIDEO DURING MPEG CLIP PLAY BACK.
 1.4.1625 9546/9547 32MB SO DIMM FAILURES MAY APPEAR AS PROG HANG.
 1.4.1626 9552 "PS2" COMMAND WILL NOT CHANGE MODEM (ON/OFF).
 1.4.1627 9552 HANGS WITH POST CP80 USING NE-2 NOVELL ADAPTER.
 1.4.1628 9552 MOUSE ARROW FLOATS ACROSS THE SCREEN.
 1.4.1629 9552 POST BEEP INFORMATION
 1.4.1630 9552 POST ERROR 173 & 11350 CAN NOT BE BYPASSED OR CLEARED
 1.4.1631 9552 720 (C), OS2 2.1 TRAP 000D AFTER RESUME.
 1.4.1632 9552 720 LOOSE SCREW
 1.4.1633 9552&COLON. ERROR CODE 00861000 OR 00861XXX
 1.4.1634 9552,8554,8551&COLON. NOISE USING HIGH SPEED MODEM.
 1.4.1635 9553 DOES NOT POWER UP
 1.4.1636 9553 RUNNING NOVELL HANGS AFTER INSTALLING 540MB DASD
 1.4.1637 9556 / 9557 SYSTEM WILL NOT POWER UP
 1.4.1638 9556 SLC3 W/CDROM FAILS AT POST
 1.4.1639 9556-57 WITH 1184 DIAGNOSTIC ERROR AND/OR HANG
 1.4.1640 9576 9556 SYSTEMS WITH 212MB HARDFILE ERRORS
 1.4.1641 9576/77 & 9576/77 S&I MODELS WON'T LOAD OS/2
 1.4.1642 9576/77 NOVELL LAN FAILURES WITH SAA ADAPTER INSTALLED
 1.4.1643 9576/77 S MODEL CONFIGURES SCSI HARDFILE AS 6,1
 1.4.1644 9576/77 S&I MODEL HANGS EXITING DPM, BLANK SCREEN
 1.4.1645 9576/77 S&I MODEL OS/2 CID DOWNLOAD FAILS
 1.4.1646 9576/77 S&I MODELS BLACK SPOT, REVERSED IMAGE
 1.4.1647 9576/77 S&I MODELS HARD DISK LIGHT DOES NOT WORK
 1.4.1648 9576/77 S&I MODELS HARDFILE LED DOES NOT LIGHT
 1.4.1649 9576/77 S&I MODELS SCREEN SYMPTOMS OR SYSTEM ERRORS
 1.4.1650 9576/77 S&I MODELS SYSTEM HANG OR OPERATING SYSTEM ERROR
 1.4.1651 9576/77 S&I MODELS TRAP W/5250 OR SYSTEM 36/38 ADPT.
 1.4.1652 9576/77 S&I MODELS 118 ERRORS
 1.4.1653 9576I/9577I HANGS DURING AUTO CONFIGURATION
 1.4.1654 9576S/77S INTERNAL 270MB SCSI DRIVE NOT RECOGNIZED
 1.4.1655 9577 9576 DISPLAYS a 605 POST ERROR
 1.4.1656 9577 9576 HANGS DURING POST W/IMAGE-I ADAPTER/A
 1.4.1657 9585 ERROR CODE 00015300 STEP 140
 1.4.1658 9585 TRAP, FAST CURSOR, DISKETTE, MOUSE OS/2 PROBLEMS
 1.4.1659 9595 SYSTEM FAILS TO POWER-ON
 1.4.1660 9595A FIXED DISK ACTIVITY LIGHT

TRAP 0 ERRORS ON 8590 OR 8595 WITH 50 MHZ PROCESSORS

1.4.1 TRAP 0 ERRORS ON 8590 OR 8595 WITH 50 MHZ PROCESSORS

Record number: H096638

Device: D/T8590
 Model: M
 Tip key:
 Date created: 092/02/13
 Date last altered: A93/12/03

SYMPTOM:

TRAP 0 (0000) ERRORS MAY OCCUR ON PS/2 8590 & 8595 SYSTEMS WITH 80486/50MHZ PROCESSOR BOARDS WHEN RUNNING OS/2 VERSION 1.3.

THIS SITUATION IS CAUSED BY TIMING DEPENDENT CODE IN THE OS/2 DEVICE DRIVER (DASEDDO2.SYS). THE SOFTWARE TRIES TO DETERMINE THE SPEED OF THE SYSTEM BY EXECUTING A COMMAND, THEN SUBTRACTING THE TIME OF THE START OF THE COMMAND, FROM THE TIME OF THE END OF COMMAND. THE RESULT IS THEN USED AS A DIVISOR. THE 50MHZ PROCESSOR SPEED IS SO FAST, THE DIVISOR MAY BE ZERO! A DIVIDE BY ZERO IS INVALID AND CAUSES A TRAP 0 ERROR.

THIS IS NOT A HARDWARE FAILURE. FRU REPLACEMENT IS UNNECESSARY IF DIAGNOSTICS RUN ERROR FREE.

NOTE:

IF POSITIVE IDENTIFICATION OF THE PROCESSOR IS REQUIRED, THE 80486/50MHZ PROCESSOR BOARD FRU IS P/N92F0048.

PROBLEM ISOLATION AIDS:

IF THE SYSTEM WILL BOOT OS/2, SELECT OS/2 FULL SCREEN MODE, THEN TYPE "SYSLEVEL" AT THE OS/2 PROMPT. IF THE CSD NUMBER DISPLAYED IS LESS THAN 05050, THEN CSD 05050 OR HIGHER IS NEEDED.

FIX:

THE CUSTOMER SHOULD BE DIRECTED TO CONTACT OS/2 SUPPORT AT 1 - 800-992 - 4777. OS/2 CORRECTIVE SERVICES DISKETTE (CSD) 05050 OR HIGHER WILL CORRECT THIS CONDITION.

SAS KEYWORDS:

PSY2	PSY2PROG	PSY2ERR	D/T8595
D/T8590	8590SYSPROG	8590SYSERR	8595SYSERR
8595SYSPROG	PS2		

1.4.2 THINKPAD 510 16MB DRAM

Record number: H124960

Device: D/T2604
Model: M
Tip key: 001
Date created: 094/08/22
Date last altered: A94/09/02

THE FRU PART NUMBER FOR A 16MB DRAM IS P/N19H8061.

THIS INFORMATION WILL BE INCLUDED IN THE NEXT RELEASE
OF THE MOBILE HMM.

SAS KEYWORDS:

PSY2	PSY/2	PSY2PART	PS2
MEMORY	2604		

PSY2 RETAIN TIPS
THINKPAD 560 FRU UPDATES

1.4.3 THINKPAD 560 FRU UPDATES

Record number: H161001

```
Device:           D/T2640
Model:            M
Tip key:          006
Date created:     097/07/08
Date last altered: A97/12/05
```

The following changes have been made to the TP560 and TP560E FRU Part Numbers. The on-line HMM will be update with this information. LOCATION: <http://www.pc.ibm.com/us/cdt/hmm.html>

Old P/N	Cards	New P/N
NONE	THINKPAD 560 DC/DC FRU	P/N05K4300
NONE	THINKPAD 560E DC/DC FRU	P/N05K4301
P/N46H4146	Planar 100MHz FRU	P/N05K4302
P/N46H4147	Planar 120MHz FRU	P/N05K4303
P/N46H4148	Planar 133MHz FRU	P/N05K4304

```
46H3893 PLANNAR133 Planar 133MHz FRU - 3 ** NONE ** 05K4305
11J8913 PLAN 150 Planar 150MHz FRU          ** NONE ** 05K4306
11J8912 PLAN 166 Planar 166MHz FRU          ** NONE ** 05K4307
```

SAS KEYWORDS:

```
D/T2640           PSY2           PSY2PARTS           PSY2DOC
THINKPAD          UNCLASSIFIED
```

1.4.4 THINKPAD 700/720/750 MISCELLANEOUS PARTS KITS

Record number: H122946

Device: D/T9552
 Model: M
 Tip key: 026
 Date created: 094/03/01
 Date last altered: A94/03/01

FRU MISC PARTS GROUP FOR TP700M P/N 44G3790
 contents =====

	QTY

BRACKET SUPPORT FOR KBD	1
MODEM INSULATOR	1
HEAT SINK ASM W/RUBBER	1
BATTERY TERMINAL CLIP	1
HOLDER DC-IN	1
GROUND FINGER MEMORY	1
2.6X4 DEFORMING SCREW	2
MOUSE BRACKET SHIELD CONNECTOR	1
LCD CABLE CLIP	1
STUD	1

FRU MISC PARTS GROUP FOR TP700C P/N 48G8944
 contents =====

	QTY

BRACKET SUPPORT FOR KBD	1
MODEM INSULATOR	1
HEAT SINK ASM W/RUBBER	1
BATTERY TERMINAL CLIP	1
HOLDER DC-IN	1
GROUND FINGER MEMORY	1
2.6X4 DEFORMING SCREW	2
MOUSE BRACKET SHIELD CONNECTOR	1
LCD CABLE CLIP	1
STUD	1

FRU MISC PARTS GROUP FOR TP720M P/N 53G9197
 contents =====

	QTY

BRACKET SUPPORT FOR KBD	1
HEAT SINK ASM W/RUBBER	1
BATTERY TERMINAL CLIP	1
HOLDER DC-IN	1
MOUSE BRACKET SHIELD CONNECTOR	1
LCD CABLE CLIP	1
STUD	1
BRACKET HOOK BASE COVER	1

FRU MISC PARTS GROUP FOR TP720C P/N 53G9198
 contents =====

	QTY

BRACKET SUPPORT FOR KBD	1
HEAT SINK ASM W/RUBBER	1
BATTERY TERMINAL CLIP	1
HOLDER DC-IN	1
MOUSE BRACKET SHIELD CONNECTOR	1
LCD CABLE CLIP	1
STUD	1
BRACKET HOOK BASE COVER	1

FRU MISC PARTS GROUP FOR TP750 M/C/P P/N 66G5039
 contents =====

	QTY

DC-IN HOLDER	1
PCB SPACER	1
INSULATOR	1
SCREW COVER	2

SAS KEYWORDS:

PSY2PARTS	PSY2	THINKPAD	PARTS
9545	D/T9545	9552	MISC

1.4.5 THINKPAD 720/720C PCMCIA INSTALLATION

Record number: H121512

Device: D/T9552
 Model: M
 Tip key: 021
 Date created: 093/10/08
 Date last altered: A94/07/20

THE THINKPAD 720/720C PCMCIA DEVICE DRIVER DISKETTE IS AVAILABLE TO CUSTOMERS/SERVICERS THROUGH THE FOLLOWING CHANNELS:

1. The diskette can be downloaded from the IBM PC Company Bulletin Board System. The phone number for the BBS is 919 - 517 - 0001. The diskette is listed as file TPPCM112.EXE under directory 37. This service is free, except for the telephone toll.
 The communication parameters for the BBS are: 8 data bits, 1 stop bit, and no parity. The BBS supports speeds up to 14,400 bps.
2. The diskette may be obtained through the VM DOSCS D repository. This can be accessed by IBM internal customers and servicers with VM access. Issue the TOOLCAT DOSCS D command and select the GET PACKAGE function key for the package titled "RUT720A Version 1.12."
3. If the customer is unable to obtain the diskette through the electronic channels above, he may call the Help Center at 1 - 800-PS2 - 2227 and request the diskette. The Help Center will then send a diskette to the customer via mail free of charge.

1. HISTORY OF 720 PCMCIA DRIVER DISKETTE:

Version 1.00 - Original Release level

Version 1.10 - Fixes problems associated with the power on process of some PCMCIA I/O Cards, such as machine re-booting when some cards power on.

Version 1.12 - Fixes Trap D error on OS/2 2.1 or higher
 - IBM DOSCS.SYS is updated
 - This fix corrects a speed mismatch problem and allows future client drivers, that come with OEM PCMCIA options, to operate correctly with Dos Card Services.

2. INSTALLATION OF 720 PCMCIA DRIVER DISKETTE

Installation instructions can also be found in chapter 2 of the "Thinkpad 720 Quick Reference Manual."

FOR DOS SYSTEMS, VERSION 5.02 OR HIGHER:

- A. Start the operating system and insert the Driver diskette into the diskette drive. (If you are using Windows, exit Windows and return to Dos)
- b. Enter the following command at the DOS C prompt:
 A:
 A: UINSTALL
- c. Select "Install Dos PCMCIA Device Drivers."
- d. Follow the directions on the screen.
- e. You must reboot your computer for the changes to take effect.

NOTE: After installing the PCMCIA Device Drivers (Card Services and Socket Services) the Modem Client Driver Diskette must be installed. The Client Driver Diskette that comes with the IBM Data/Fax Modem is labeled "IBM DATA/FAX MODEM DISKETTE." The PCMCIA Modem Client Driver selects Com Port 2 (slot 1) as default. Slot 1 is referred to as "Slot A" in diagnostics.

FOR OS/2 SYSTEMS, VERSION 2.1 OR HIGHER:

Same as above EXCEPT Step c:

- C. Select "Install OS/2 PCMCIA Device Drivers"

NOTE: For OS/2 Installations the "Uinstall" only installs Socket Services. OS/2 2.1 contains the Card Services Driver. OS/2 Card Services can be installed from the OS/2 setup and installation menu using "OS/2 Selective Installation." "PCMCIA Support" is the selection you must make when installing Card Services. Install the Client Driver that comes with the PCMCIA option. If the "IBM DATA/FAX MODEM" is being installed, insert the "IBM DATA/FAX MODEM DISKETTE" in drive A and type "Install."

3. VERIFICATION OF INSTALLATION

To Verify a complete PCMCIA DATA/FAX MODEM installation, from the DOS C prompt key the following:

```
C: DEBUG (press enter)
D 40: 0 (enter)
```

If the value for the starting address of com2 is "00 00" as the following example indicates, Card Services, Socket Services and/or Client Drivers have not been installed or have been installed incorrectly.

```
0040 : 0000 f8 03 00 00 00 00 00
      |  |  |  |
      Com1 Com2
```

IF THIS OCCURS CHECK THE CONFIG.SYS FOR AN EMM.386 STATEMENT. IF THE STATEMENT READS: DEVICE=C: \DOS\EMM386.SYS IT MUST BE CHANGED. An exclude statement must be added to this line to set aside memory for the DICRMU02.SYS file. Edit the config.sys file and use the following example.

```
DEVICE=C: \DOS\EMM386.EXE 1024 FRAME=C000 X=D000-DFFF
```

Next find: DEVICE=C: \DICRMU02.SYS and add this parameter.
 DEVICE=C: \DICRMU02.SYS /MA=D000-DFFF

The excluded address values of D000-DFFF are examples. Values other than D000-DFFF can be used, but the values excluded (x=) but must be the same as the values placed after the DICRMU02.SYS parameter.

Save the changed file and reboot the system (CTL ALT DELETE is okay.)

Load the DEBUG program:

```
C: DEBUG (press enter)
D 40: 0 (enter)
```

If Card Services, Socket Services, and the Client Driver have been installed correctly, the following characters will be displayed.

```
0040 : 0000 f8 03 f8 02 00 00 (Note: The characters in DEBUG are
      |  |  |  | listed in reverse order). This is
      Com1 Com2 not an error.
```

03f8=starting address of com1 data (com1 is on system board)
 02f8=starting address of com2 data (pcmcia data fax modem)

NOTE: The Modem Client Driver defaults to com2 port. If the config.sys or autoexec.bat is altered, the starting address could be a different value than shown in the example above. However, if the values are other than "00 00" Card Services, Socket Services, and the Client Driver are probably installed correctly. If the modem does not function after all drivers have been installed, continue normal problem determination procedures.

SAS KEYWORDS:

D/T9552 PSY2 PSY2COMM PSY2OPER

1.4.6 THINKPAD 750 KEYBOARD DIAGNOSTICS

Record number: H122889

Device: D/T9545
Model: M
Tip key: 004
Date created: 094/02/24
Date last altered: A94/02/25

TO RUN KEYBOARD DIAGNOSTICS DO THE FOLLOWING:

1. PRESS AND HOLD THE F1 KEY, THEN POWER-ON THE COMPUTER. HOLD THE F1 KEY DOWN UNTIL THE EASY-SETUP SCREEN APPEARS.
2. SELECT TEST ICON AND PRESS ENTER.
3. START THE ADVANCED DIAGNOSTIC TEST BY PRESSING CTL+A.
4. START THE KEYBOARD TEST BY PRESSING CTL+K.
5. TO EXIT THIS TEST AT ANY TIME PRESS ESC.

FOR OTHER DIAGNOSTIC TECHNIQUES SUCH AS "LOOP TEST" AND "ERROR LOG" SEE PAGE 199 IN THE THINKPAD HMM (S82G-1502).

USE EITHER THE TRACKPOINT II OR THE CURSOR MOVE KEYS TO INTERACT WITH THE TESTS. WHEN ASKED FOR AN "OK" RESPONSE, WHILE RUNNING TESTS, THE ENTER KEY FUNCTIONS THE SAME AS SELECTING THE "OK" ICON.

KEYBOARD DIAGNOSTIC INFORMATION WILL BE INCLUDED IN THE NEXT RELEASE OF THE THINKPAD HMM (S82G-1502).

SAS KEYWORDS:

PSY2	PSY/2	PSY2DIAG	9545
KEY	KEYBOARD	DIAG	

1.4.7 THINKPADS - ENSURE BIOS FIXES ARE APPLIED BEFORE FRU INSTALL

Record number: H136809

Device: D/T9547
 Model: M
 Tip key: 006
 Date created: 097/02/28
 Date last altered: A97/02/28

Ensure the ThinkPad system BIOS is at the latest level before replacing FRUs. Many conditions fixed by system (BIOS) updates can appear to be hardware failures.

Updates are released on an as needed bases. They are located on the IBM PCCO BBS and are available through the Internet or by modem. Each Update has a corresponding data file or readme file with update details and installation instructions.

The main consideration when loading BIOS updates is NOT to interrupt the load. If this occurs the system board will have to be replaced. For this reason, it is important to have the system on AC power with a fully charged battery before a BIOS update is performed.

----- IMPORTANT -----

Diskette based fixes are customer installable. Customers should be advised to contact the IBM PC Company HelpCenter at 800-772 - 2227 if assistance is required in getting or installing this information.

Files are located on the PC company's Bulletin Board Service (BBS). The direct line for modem connection to The PC Company BBS is 1-919-517-0001 or tieline 255-0001.

Customers in Canada should call IBM's HelpPC at 800-565-3344 for Assistance or down load information. The Canadian BBS phone numbers are:
 Montreal-514-938-3022, Toronto-905-316-4255,
 Winnipeg-204-934-2735, Vancouver-604-664-6464.

The data may also be downloaded via the Internet from the IBM Personal Computer File Library by searching the following Internet URL: <http://www.pc.ibm.com/files.html>

SAS KEYWORDS:

PSY2	PSY2MCD	PSY2PROG	THINKPAD
UNCLASSIFIED	D/T9546	D/T9545	D/T2640
D/T2630	D/T2625		

TIME OF DAY CLOCK IN PS/2 AND PS/VALUEPOINT

1.4.8 TIME OF DAY CLOCK IN PS/2 AND PS/VALUEPOINT

Record number: H061964

Device: D/T8550
 Model: M
 Tip key: 058
 Date created: 090/08/10
 Date last altered: A94/05/27

THE SOFTWARE TIME OF DAY (TOD) CLOCK IN THE PS/2 AND VALUEPOINT SYSTEMS IS NOT INTENDED TO BE A PRECISION TIME KEEPING DEVICE. ITS PURPOSE IS FOR OPERATOR CONVENIENCE.THERE ARE NO WRITTEN TOD SPECIFICATIONS AND THE ACCURACY OF THE CLOCK VARIES DEPENDING ON SYSTEM ACTIVITY. THE TOD CLOCK IS INTERRUPT DRIVEN, THEREFORE VARIATIONS MAY OCCUR WHICH ARE NOT HARDWARE FAILURES.

IN CIRCUMSTANCES WHERE CRITICAL TIMING IS REQUIRED, AN ALTERNATE TIME KEEPING DEVICE SHOULD BE CONSIDERED.

SAS KEYWORDS:

PSY2	PSY2MISC	PSY2BRD	PSVP
VALUEPOINT	LOSING	VALUE POINT	PS2
D/T6384	PS/VALUEPOINT	D/T8590	D/T8595
D/T9595	D/T9585	D/T8525	D/T8530
D/T8535	D/T8540	D/T8543	D/T8551
D/T8554	D/T8550	D/T8555	D/T8556
D/T8557	D/T8573	D/T8560	D/T8565
D/T8570	D/T9576	DATE	LOST
D/T8580	D/T8590	D/T8595	D/T9585
D/T9577	D/T9556	D/T9557	D/T9595
D/T9533	D/T6384	D/T6381	D/T6382
D/T6387	D/T2603	D/T2614	D/T2615
D/T2618	D/T9552	D/T9545	D/T2521

1.4.9 TIPS ON REINSTALLATION OF NETFINITY IN OS/2

Record number: H133205

Device: D/T6877
 Model: M
 Tip key: 020
 Date created: 096/03/25
 Date last altered: A96/03/25

When reinstalling IBM Netfinity from diskettes created using the Diskette Factory application, the following items need to be addressed:

- 1) The reinstalled Netfinity folder may lack the Network Driver Configuration Icon.

Resolution: The number of reinstalled icons depends on a single choice on the installation menu. The user chooses "Active," "Passive," or "Stand Alone" Netfinity modes.

If the user requires the Network Configuration Icon, the "Active" mode must be chosen during installation.

- 2) The reinstalled Netfinity folder may have a name that is different from the original folder name.

Resolution: The Netfinity folder preloaded on the PC 700 6877 & 6887 is titled "Netfinity for OS/2." The title of the reinstalled folder is "Net Finity Folder."

The user may change the title by pressing the right mouse button at the Netfinity folder icon and click on "Settings." From the Settings window, choose "General" and type the desired folder title.

SAS KEYWORDS:

PSY2	D/T68XX	6887	6877
IBMPC	PSVP	PSY2PROG	PSVPPROG
D/T6887	PC750	PC700	PC 730
PC 750	PC730	42147	

TOKEN RING ADAPTER SWITCH SETTINGS FOR 6384

1.4.10 TOKEN RING ADAPTER SWITCH SETTINGS FOR 6384

Record number: H032967

Device: D/T6384
 Model: M
 Tip key: 015
 Date created: 093/02/24
 Date last altered: A93/02/24

FOLLOWING ARE RECOMMENDED CONFIGURATION SETTINGS FOR THE IBM TOKEN RING ADAPTERS USED IN ANY MODEL PS/VALUEPOINT 6384 SYSTEM.

THESE SWITCH SETTINGS ASSUME THERE ARE NO MEMORY ADDRESS OR INTERRUPT CONFLICTS WITH OTHER ADAPTERS.

TOKEN RING ADAPTER (LONG CARD P/N83X9144 AND P/N83X9147)

- SET INTERRUPT LEVEL TO "2"
- SET ROM ADDRESS TO "D400"

SWITCH BLOCK 1	-	1	2	3	4	5	6	7	8		
		0	1	0	1	0	1	1	1		

0=OFF 1=ON

SWITCH BLOCK 2	-	1	2	3	4	5	6	7	8		
		0	0	1	0	1	1	1	1		

TOKEN RING ADAPTER (SHORT CARD P/N16F0463)

- SET INTERRUPT LEVEL TO "2"
- SET ROM ADDRESS TO "D400"

SWITCHES	-	1	2	3	4	5	6	7	8	9	10	11	12	0=OFF
		0	1	0	1	0	1	1	1	0	0	X	X	1=ON

X-NOT USED

TOKEN RING 16/4 ADAPTER W/O RPL (SHORT CARD P/N93F0334)

- SET INTERRUPT LEVEL TO "2"
- SET ROM ADDRESS TO "D400"

SWITCHES	-	1	2	3	4	5	6	7	8	9	10	11	12	0=OFF
		0	1	0	1	0	1	1	1	0	0	1	X	1=ON

X=RING SPEED

NOTE - THESE SETTINGS ARE ONLY RECOMMENDED. OTHER INTERRUPT LEVELS AND ROM ADDRESS SETTINGS ARE AVAILABLE. REFER TO THE GUIDE TO OPERATIONS FOR THE ADAPTER BEING USED FOR FURTHER INFORMATION.

USE OF THESE CONFIGURATION SETTINGS MAY CONFLICT WITH USER APPLICATIONS AND/OR ADAPTERS. PLEASE CONSULT YOUR CUSTOMER/LAN ADMINISTRATOR BEFORE ALTERING EXISTING CONFIGURATION SETTINGS.

IF THE CUSTOMER IS USING "EMM386.EXE", THE FOLLOWING COMMAND USED IN THE "CONFIG.SYS" FILE IS RECOMMENDED IF THE ABOVE CONFIGURATION IS USED.

"DEVICE=C: \DOS\EMM386.EXE X=D400=DAFF"

SAS KEYWORDS:

PSVP	VALUE POINT	93F0334	16F0463
PSY2	PSVPADPT	PSVPCOMM	PSY2ADPT
PSY2COMM			

1.4.11 TOKEN RING DIAGNOSTICS ON PS/2 SERVER 295

Record number: H103331

Device: D/T8600
 Model: M
 Tip key: 002
 Date created: 092/10/08
 Date last altered: A92/10/27

THE SERVER 295 IS A MULTI-PROCESSOR MACHINE AND NEEDS SPECIAL DRIVERS TO BOOT. HENCE, THE IBM OPTION DISKETTE CAN NOT BE USED TO BOOT THE SERVER.

IN ORDER TO RUN THE TOKEN-RING DIAGNOSTIC UTILITIES ON THE PS/2 SERVER 295, TWO MINOR CHANGES ARE REQUIRED TO THE SYSTEM REFERENCE DISKETTE.

- A. COPY THE ANSI.SYS DRIVER FROM THE SYSTEM FIXED DISK TO THE REFERENCE DISKETTE FOR THE SERVER 295 WITH THE FOLLOWING COMMAND:

```
COPY C: \DOS\ANSI.SYS A: *.*
```

- B. USING ANY TEXT EDITOR, ADD THE ANSI.SYS DEVICE STATEMENT (DEVICE=ANSI.SYS) TO THE CONFIG.SYS FILE OF THE SERVER 295. INSERT THE ANSI.SYS STATEMENT BETWEEN THE DOS=HIGH AND FILES=10 STATEMENTS, AS FOLLOWS:

```
DEVICE=HIMEM.SYS
DOS=HIGH
DEVICE=ANSI.SYS
FILES=10
```

NOW, BY BOOTING TO THE IBM SERVER 295 REFERENCE DISKETTE AND ESCAPING TO THE A: PROMPT, YOU CAN INSERT THE IBM OPTION DISKETTE AND RUN THE TOKEN RING DIAGNOSTIC UTILITY:

```
DFTRUN.BAT
```

SAS KEYWORDS:

PSY2	PS2	PS/2	PSY2COMM
D/T8600	PARALAN	PARALLAN	PSY2DIAG
PSY2ADPT			

1.4.12 TOP COVER REMOVAL & REPLACEMENT ON PC300PL (6562)

Record number: H161205

Device: D/T6562
 Model: M
 Tip key: 004
 Date created: 097/09/26
 Date last altered: A97/09/26

The following tip is provided as a supplement to top cover removal and replacement in the IBM PC model PC300PL, machine type 6562. Particular emphasis is made to avoid damaging the front audio panel assembly during top cover removal and replacement.

REMOVING THE TOP COVER:

Locate both tabs on the rear of the computer cover and, while gently lifting them up, pull the cover toward you approximately 1/2" to release the back edge.

Next, while holding the cover by both sides, lift the rear of the cover up and towards you. Slide the cover forward until it comes free. Caution: DO NOT lift the entire cover straight up until the front of the cover is free. Doing so may damage the front audio panel assembly and volume control knob.

REPLACING THE TOP COVER:

With a hand on either side of the top cover, set the front edge of the top cover on the table in front of the computer. Prop the back edge on top of the computer and gently push the cover toward the rear of the computer until the back of the cover drops down.

IMPORTANT: Make sure you can see the volume control knob through its hole in front of the computer BEFORE pushing the cover back. The top cover should catch and fit the computer snugly. You will hear the tabs on the back of the cover click into place.

If the volume control knob doesn't line up with the hole, the audio panel assembly may be out of position and needs to be adjusted. You can adjust the position of the audio panel assembly by gently lifting or lowering the front edge, before you replace the top cover.

SAS KEYWORDS:

PSY2	PSY2MISC	PSY2OPER	PSVP
PSVPMISC	PSVPOPER	D/T6562	6562
CASE	SHELL	UNCLASSIFIED	

1.4.13 TP760 EXTERNAL MONITOR FLICKER IN WINDOWS 95.

Record number: H126788

Device: D/T9546
Model: M
Tip key: 015
Date created: 097/01/07
Date last altered: A97/03/03

Before replacing any FRU parts ensure your customer has set the external monitor refresh rates correctly.

The following procedure details how the external monitor refresh rates should be set to eliminate flicker under Windows 95 on the Thinkpad 760 series. If this does not solve the problem follow the normal problem determination process.

1. Use Thinkpad Features to open the display object.
2. Click on "ADVANCED" for setup and select the refresh rate for the external display's resolution.

It is advised to use the highest rate that both the system and CRT support. In some cases a user may need to consult documentation for their display to determine the supported rates.

NOTE:

It is normal for the Resolution, Virtual Screen, and Color Depth settings to be grayed out in Windows 95. These settings are controlled by the operating system.

NOTE:

If the settings are done through Thinkpad Features and this does not adjust the screen refresh, disable the monitor DCC support if it is present. The customer may have to consult the monitor's users guide or their point of sale for this information.

NOTE:

If the settings for "Refresh Rate" are grayed out, ensure that the system has current BIOS and Thinkpad Features (Update Utility Diskettes) applied.

SAS KEYWORDS:

PSY2 PSY2PROG D/T9546 THINKPAD
UNCLASSIFIED

PSY2 RETAIN TIPS
TRAP ERRORS - EXPLANATIONS

1.4.14 TRAP ERRORS - EXPLANATIONS

Record number: H002039

Device: D/T3892
 Model: M
 Tip key: 141
 Date created: 093/10/11
 Date last altered: A93/10/11

THE PUPOSE OF THIS TIP IS TO PROVIDE GUIDANCE FOR SERVICERS AND CUSTOMERS EXPERIENCING "TRAP ERRORS." IT IS BEYOND THE SCOPE OF THIS TIP TO PROVIDE DETAILED FAULT RESOLUTION. THE CORRECT SUPPORT STRUCTURE SHOULD BE USED TO RESOLVE THE PROBLEM.

THERE ARE A MAXIMUM OF 255 POSSIBLE TRAPS. TRAP ERRORS CONSIST OF INTERRUPTS AND EXCEPTIONS. AN INTERRUPT IS AN EVENT EXTERNAL TO THE PROCESSOR THAT CAN OCCUR AT RANDOM TIMES DURING SYSTEM OPERATION. AN EXCEPTION IS A SPECIAL CONDITION WHICH IS DETECTED BY THE PROCESSOR DURING THE EXECUTION OF INSTRUCTIONS. EXCEPTIONS ONLY OCCUR WHEN THE PROCESSOR IS EXECUTING INSTRUCTIONS.

TRAPS 0 THRU 16, WITH THE EXCLUSION OF TRAP 2, ARE SPECIAL EXCEPTIONS THAT ARE DETECTED BY THE PROCESSOR. TRAP 2 IS A NON-MASKABLE INTERRUPT ERROR INDICATING A CATASTROPHIC SYSTEM FAILURE. TRAPS 17-31 ARE EXCEPTIONS RESERVED BY INTEL.* AND TRAPS 32 - 255 ARE MASKABLE INTERRUPTS THAT ARE USER DEFINED. A SUMMARY OF THE TRAPS IS SHOWN BELOW.

TRAP NUMBER		DESCRIPTION
decimal	(hex)	
0	0000	DIVIDE BY ZERO ERROR
1	0001	DEBUG EXCEPTION
2	0002	NMI INTERRUPT
3	0003	DEBUG BREAKPOINT
4	0004	OVERFLOW DETECTED
5	0005	BOUND RANGE EXCEEDED
6	0006	INVALID OPCODE INSTRUCTION
7	0007	COPROCESSOR NOT AVAILABLE
8	0008	DOUBLE FAULT
9	0009	COPROCESSOR SEGMENT OVERRUN
10	000A	INVALID TASK STATE SEGMENT
11	000B	SEGMENT NOT PRESENT
12	000C	STACK FAULT
13	000D	GENERAL PROTECTION
14	000E	PAGE FAULT
15	000F	INTEL RESERVED - DO NOT USE
16	0010	COPROCESSOR ERROR
17 - 31	0011-1F	INTEL RESERVED - DO NOT USE
32 - 255	0020-FF	MASKABLE INTERRUPTS

NOTE:

THIS TIP ONLY DEALS WITH THE FIRST 16 TRAPS, WHICH CONCERN THE SERVICER. TRAPS 0 THROUGH 16 ARE "EXCEPTIONS," WHICH MEANS IF THEY OCCUR THE PROCESSOR TAKES THE APPROPRIATE ACTION ACCORDING TO THE INSTRUCTIONS IN THE INTERRUPT HANDLER ROUTINE OF THE USER'S OPERATING SYSTEM. THE EXCEPTION HANDLER CAN VARY WIDELY ACCORDING TO THE SOFTWARE VENDOR.

THE FOLLOWING LIST GIVES A DESCRIPTION OF TRAPS 0 - 16 AND PROVIDES DIRECTION FOR THE MOST EFFICIENT PROBLEM RESOLUTION:

TRAP 0000 - DIVIDE ERROR. A program attempted to divide a number by zero. Contact software support.

TRAP 0001 - DEBUG EXCEPTION. Contact software support.

TRAP 0002 - NMI INTERRUPT. An NMI interrupt is generated by the system when a catastrophic error occurs. There are four possible causes of this problem. These are summarized below:

- 110 error - system board memory parity error
- 111 error - I/O channel check (adapter card error)
- 112 error - watchdog timeout (may be hardware or software)
- 113 error - DMA timeout (may be hardware or software)

The Service Aid Diskette (SADA) may be useful to determine whether the problem was a 110, 111, 112 or 113 error. Note, if a 112 or 113 error cannot be resolved by hardware troubleshooting, software support should be contacted. (Some operating systems do not support this service aid.)

TRAP 0003 - BREAKPOINT. This is a special instruction (INT 3)

TRAP ERRORS - EXPLANATIONS

used in "debugging" software, which was left in the code either accidentally or by design. Contact software support.

- TRAP 0004 - OVERFLOW. An overflow occurred while doing an arithmetic operation. Contact software support.
- TRAP 0005 - BOUND RANGE EXCEEDED. A BOUND instruction exceeded the specified limits. Contact software support.
- TRAP 0006 - INVALID OP CODE. The processor tried to execute an unreserved invalid opcode. Contact software support.
- TRAP 0007 - COPROCESSOR NOT AVAILABLE. If coprocessor diagnostics run error-free, contact software support.
- TRAP 0008 - DOUBLE FAULT. The processor detected an exception while processing an exception. It could be caused by either hardware or software. If trap 0002 is also being experienced, Contact hardware support.
- TRAP 0009 - COPROCESSOR OVERRUN. The middle portion of a coprocessor operand is protected or not-present. Contact software support.
- TRAP 000A - INVALID TASK STATE SEGMENT. A task switch to an invalid task switch segment was attempted. Contact software support.
- TRAP 000B - SEGMENT NOT PRESENT. The segment being referenced is not present. Contact software support.
- TRAP 000C - STACK FAULT. Contact software support.
- TRAP 000D - GENERAL PROTECTION EXCEPTION. All protection violations which do not cause another exception cause a TRAP 000D. Contact software support.
- TRAP 000E - PAGE FAULT. The page being referenced is not present in memory or the procedure referencing the page does not have enough privilege to access the page. Contact Software support.
- TRAP 000F - RESERVED BY INTEL.
- TRAP 0010 - COPROCESSOR ERROR. The processor detected an error from the coprocessor. This could be caused by hardware or software.

* Trademark of Intel Corporation

SAS KEYWORDS:

PSY2	PS2	PS/2	PSY2PROG
PSY2ERR	D/T8550	D/T8555	D/T8560
D/T8565	D/T8570	D/T8580	D/T8590
D/T8595	D/T8600	D/T8556	D/T8557
D/T9556	D/T9557	D/T9576	D/T9577
D/T9585	D/T9595	D/T95XX	OS/2
OS2	D/T3892	3892	D/T3891
3891APP			

PSY2 RETAIN TIPS
TRAP ERRORS - EXPLANATIONS

1.4.15 TRAP ERRORS - EXPLANATIONS

Record number: H10536

Device: D/T3892
Model: M
Tip key: 093
Date created: 092/11/20
Date last altered: A92/12/03

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TRAP 0002 - NMI INTERRUPT. An NMI interrupt is generated by the system when a catastrophic error occurs. There are four possible causes of this problem. These are summarized below:
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TRAP 0003 - BREAKPOINT. This is a special instruction (INT 3)

TRAP ERRORS - EXPLANATIONS

used in "debugging" software, which was left in the code either accidentally or by design. Contact software support.

- TRAP 0004 - OVERFLOW. An overflow occurred while doing an arithmetic operation. Contact software support.
- TRAP 0005 - BOUND RANGE EXCEEDED. A BOUND instruction exceeded the specified limits. Contact software support.
- TRAP 0006 - INVALID OP CODE. The processor tried to execute an unreserved invalid opcode. Contact software support.
- TRAP 0007 - COPROCESSOR NOT AVAILABLE. If coprocessor diagnostics run error-free, contact software support.
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PSY2	PS2	PS/2	PSY2PROG
PSY2ERR	D/T8550	D/T8555	D/T8560
D/T8565	D/T8570	D/T8580	D/T8590
D/T8595	D/T8600	D/T8556	D/T8557
D/T9556	D/T9557	D/T9576	D/T9577
D/T9585	D/T9595	D/T95XX	OS/2
OS2	D/T3892	3892	D/T3891
3891APP			

PSY2 RETAIN TIPS
TRAP ERRORS - EXPLANATIONS

1.4.16 TRAP ERRORS - EXPLANATIONS

Record number: H104959

Device: D/T3892
 Model: M
 Tip key: 097
 Date created: 092/12/21
 Date last altered: A92/12/28

THE PUPOSE OF THIS TIP IS TO PROVIDE GUIDANCE FOR SERVICERS AND CUSTOMERS EXPERIENCING "TRAP ERRORS." IT IS BEYOND THE SCOPE OF THIS TIP TO PROVIDE DETAILED FAULT RESOLUTION. THE CORRECT SUPPORT STRUCTURE SHOULD BE USED TO RESOLVE THE PROBLEM.

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D/T8595	D/T8600	D/T8556	D/T8557
D/T9556	D/T9557	D/T9576	D/T9577
D/T9585	D/T9595	D/T95XX	OS/2
OS2	D/T3892	3892	D/T3891
3891APP	D/T3890	3890	

PSY2 RETAIN TIPS
TRAP ERRORS - EXPLANATIONS

1.4.17 TRAP ERRORS - EXPLANATIONS

Record number: H107774

Device: D/T8550
Model: M
Tip key: 137
Date created: 092/08/14
Date last altered: A93/12/03

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7	0007	COPROCESSOR NOT AVAILABLE
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NOTE:

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Note:

TRAP ERRORS - EXPLANATIONS

Recent PS/2 Systems have DMA arbitrable Serial and Parallel ports. If DMA arbitration errors are encountered during I/O operations to these ports, changing the arbitration to another level, or to "disable" may correct the problem. Also see RETAIN record # H121109.

TRAP 0003 - BREAKPOINT. This is a special instruction (INT 3) used in "debugging" software, which was left in the code either accidentally or by design. Contact software support.

TRAP 0004 - OVERFLOW. An overflow occurred while doing an arithmetic operation. Contact software support.

TRAP 0005 - BOUND RANGE EXCEEDED. A BOUND instruction exceeded the specified limits. Contact software support.

TRAP 0006 - INVALID OP CODE. The processor tried to execute an unreserved invalid opcode. Contact software support.

TRAP 0007 - COPROCESSOR NOT AVAILABLE. If coprocessor diagnostics run error-free, contact software support.

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D/T9585	D/T9595	D/T95XX	OS/2
OS2	8600	295	195
PARALAN	PARALLAN		

PSY2 RETAIN TIPS
TRAP ERRORS - EXPLANATIONS

1.4.18 TRAP ERRORS - EXPLANATIONS

Record number: H124729

Device: D/T3892
 Model: M
 Tip key: 174
 Date created: 094/07/26
 Date last altered: A94/07/26

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- TRAP 000E - PAGE FAULT. The page being referenced is not present in memory or the procedure referencing the page does not have enough privilege to access the page. Contact Software support.
- TRAP 000F - RESERVED BY INTEL.
- TRAP 0010 - COPROCESSOR ERROR. The processor detected an error from the coprocessor. This could be caused by hardware or software.

* Trademark of Intel Corporation

SAS KEYWORDS:

PSY2	PS2	PS/2	PSY2PROG
PSY2ERR	D/T8550	D/T8555	D/T8560
D/T8565	D/T8570	D/T8580	D/T8590
D/T8595	D/T8600	D/T8556	D/T8557
D/T9556	D/T9557	D/T9576	D/T9577
D/T9585	D/T9595	D/T95XX	OS/2
OS2	D/T3892	3892	D/T3891
3891APP			

TV TUNER PACK FRU PART NUMBERS

1.4.19 TV TUNER PACK FRU PART NUMBERS

Record number: H124111

Device: D/T9545
 Model: M
 Tip key: 012
 Date created: 094/05/31
 Date last altered: A94/08/30

The following FRU part numbers support the TV Tuner Pack Option.

Description	FRU part number
TV Tuner Unit	P/N66G6681
Active Antenna Unit	P/N66G6685
Antenna Cable	P/N66G6683
AV Cable	P/N66G6684
Miscellaneous Parts Kit	P/N84G1305
Front Bezel	
Antenna Connector	
Gasket	
Dark Shield	

SAS KEYWORDS:

PSY2	PSY2PART	UNIT	BEZEL
ANTENNA	CABLE	SHIELD	HEADPHONE
GASKET	PSY2TBD		

1.4.20 TWINAX ATTACHED DEVICES DROPPING OFF LINE

Record number: H12761

Device: D/T8550
 Model: MCP1
 Tip key: 185
 Date created: 093/08/05
 Date last altered: A93/08/05

5250 EMULATION ADAPTER/A OPTION KITS
 P/N 64G3496 (EMEA), P/N 64G3494 (USA), AND
 P/N 64G3495 (FRU) SHIPPED AFTER MAY 1993 MAY
 CAUSE OTHER TERMINALS OR SYSTEMS TO DROP OFF THE
 COMMUNICATIONS LINE WHEN THE 5250 ADAPTER CARD'S
 SYSTEM UNIT IS POWER OFF. THE LINE MAY DROP
 MOMENTARILY OR MAY REMAIN DOWN UNTIL POWERED OFF
 UNIT IS TURNED BACK ON. THIS PROBLEM MAY OCCUR
 IN ANY MICROCHANNEL BUS MACHINE.

THIS PROBLEM MAY ALSO SHOW UP IF CUSTOMER IS
 EXPERIENCING TROUBLE TRYING TO ESTABLISH HOST
 SESSIONS WITH OTHER TWINAXIAL DEVICES ON THE
 LINE. IF A POWERED OFF 5250 CARD IS ON THE
 SAME LINE AS THE TROUBLED DEVICE, CHECK THE
 LEVEL OF THE 5250 CARD FOR THE PROBLEM CARD
 ASSEMBLY LISTED BELOW.

AFFECTED 5250 ADAPTERS CAN BE IDENTIFIED BY
 CARD ASSEMBLY P/N 64G3513 ON A LABEL ON THE CARD.
 AFFECTED CARDS CAN ALSO BE IDENTIFIED BY THE FRU
 P/N 64G3495 LABELED ON THE BLUE CARD HOLDER.
 THIS LEVEL OF CARD IS THE ONLY CARD WITH THE
 PROBLEM.

NOTE: P/N 64G3513 IS A MANUFACTURING PART NUMBER
 AND NOT THE FRU NUMBER.

AFFECTED CARDS CAN BE REWORKED TO NEW LEVEL CARD
 ASSEMBLY P/N 64G3508 IN THE FIELD BY REMOVING
 SMT (SURFACE MOUNT TECHNOLOGY)
 RESISTORS R35 AND R34. THESE CAN BE REMOVED
 BY USING NEEDLE NOSE PLIERS TO BREAK OFF THESE
 RESISTORS. THE PADS FOR THESE COMPONENTS MAY
 COME OFF DURING THIS OPERATION BUT THIS WILL
 NOT AFFECT THE PERFORMANCE OF THE CARD.
 R34 AND R35 ARE LABELED ON THE CARD AND ARE
 LOCATED NEAR THE BOTTOM RIGHT SIDE IF THE CARD
 BELOW DIODES D3,D5,D6. BOTH OF THE RESISTORS
 SHOULD BE COMPLETELY REMOVED.

FRU STOCK IS BEING REWORKED TO NEW LEVEL
 P/N 64G3506 AND WILL BE AVAILABLE THROUGH NORMAL
 CHANNELS.

SAS KEYWORDS:

D/T6384	PSY2	PSY2COMM	PSY2MISC
PSY2ADPT	VALUE POINT	VALUEPOINT	PSVP
PSVPADPT	PSVPCOMM	POWER	5360WSA
5360INP	5362WSA	5362INP	9406WS
9406CPU	9406MISC	9406MCD	9404WS
9404CPU	9404MISC	9404MCD	9404INP
9406INP	9402MISC	64G3496	ERRORS
TWINAX	COMMUNICATION	TIMEOUTS	64G3494
64G3495	64G3513		

1.4.21 TWINAX ATTACHED DEVICES DROPPING OFF LINE

Record number: H12787

Device: D/T6384
 Model: MCP1
 Tip key: 035
 Date created: 093/08/05
 Date last altered: A93/08/05

REFERENCE RETAIN TIP H12177 WHICH APPLIES TO
 CARDS IN PS/VALUEPOINT MACHINES.

ENHANCED 5250 DISPLAY STATION EMULATION ADAPTERS
 P/N 30F5384 (EMEA), P/N 30F5383 (USA), AND
 P/N 64G3956 (FRU) SHIPPED AFTER APRIL 1993 MAY
 CAUSE OTHER TERMINALS OR SYSTEMS TO DROP OFF THE
 COMMUNICATIONS LINE WHEN THE 5250 ADAPTER CARD'S
 SYSTEM UNIT IS POWER OFF. THE LINE MAY DROP
 MOMENTARILY OR MAY REMAIN DOWN UNTIL POWERED OFF
 UNIT IS TURNED BACK ON. THIS PROBLEM MAY OCCUR
 IN ANY ISA OR EISA BUS MACHINE.

THIS PROBLEM MAY ALSO SHOW UP IF CUSTOMER IS
 EXPERIENCING TROUBLE TRYING TO ESTABLISH HOST
 SESSIONS WITH OTHER TWINAXIAL DEVICES ON THE
 LINE. IF A POWERED OFF 5250 CARD IS ON THE
 SAME LINE AS THE TROUBLED DEVICE, CHECK THE
 LEVEL OF THE 5250 CARD FOR THE PROBLEM CARD
 ASSEMBLY LISTED BELOW.

AFFECTED 5250 ADAPTERS CAN BE IDENTIFIED BY
 CARD ASSEMBLY P/N 64G3953 ON A LABEL ON THE CARD.

NOTE: P/N 64G3953 IS A MANUFACTURING PART NUMBER
 AND NOT THE FRU NUMBER.

AFFECTED CARDS CAN BE REWORKED TO NEW LEVEL CARD
 ASSEMBLY P/N 82G7060 IN THE FIELD BY REMOVING
 SMT (SURFACE MOUNT TECHNOLOGY)
 RESISTORS R28 AND R27. THESE CAN BE REMOVED
 BY USING NEEDLE NOSE PLIERS TO BREAK OFF THESE
 RESISTORS. THE PADS FOR THESE COMPONENTS MAY
 COME OFF DURING THIS OPERATION BUT THIS WILL
 NOT AFFECT THE PERFORMANCE OF THE CARD.
 R28 IS LABELED ON THE CARD AND LOCATED
 NEAR THE TOP OF THE BACK OF THE 15 PIN
 CONNECTOR. R27 IS LABELED AND LOCATED ABOVE
 CAPACITOR C2 AND BETWEEN SMT CAPACITOR C6 AND THE
 LEAD OF DIODE D16. BOTH OF THE RESISTORS SHOULD
 BE COMPLETELY REMOVED.

FRU STOCK IS BEING REWORKED TO NEW LEVEL
 P/N 82G7061 AND WILL BE AVAILABLE THROUGH NORMAL
 CHANNELS.

SAS KEYWORDS:

D/T6384	PSY2	PSY2COMM	PSY2MISC
PSY2ADPT	VALUE POINT	VALUEPOINT	PSVP
PSVPADPT	PSVPCOMM	POWER	5360WSA
5360INP	5362WSA	5362INP	9406WS
9406CPU	9406MISC	9406MCD	9404WS
9404CPU	9404MISC	9404MCD	9404INP
9406INP	9402MISC	64G3953	ERRORS
TWINAX	COMMUNICATION	TIMEOUTS	30F5384
92F3190			

1.4.22 TYPE 4 REFERENCE DISKETTE FOR 9595 SYSTEMS

Record number: H121914

Device: D/T9595
 Model: M
 Tip key: 002
 Date created: 093/11/24
 Date last altered: A96/02/13

The TYPE 4 Reference diskette set which supports the Pentium processor models of the Server 95 is available and may be down loaded from the IBM PC Company BBS.

The diskette is identified as "RF90954A.DSK" The current Reference Diskette is version 1.34. The companion Common Diagnostic Diskette current version is 2.33.

The processor boards of Type 4 systems contain Flash BIOS. The current Flash level is 8. Refer to Retain Record # H126229 for additional information on Type 4 BIOS.

The IBM PC Company Bulletin Board System can be accessed by calling 919 - 517-0001.

The package will provide the Reference Image and Diagnostic diskette for systems using a Type 4 processor board.

The diskettes will be distributed through normal SLSS channels.

```

=
= THESE UPDATES ARE CUSTOMER INSTALLABLE. CUSTOMERS
= SHOULD BE ADVISED TO CONTACT THE PC COMPANY HELPCENTER AT
= 800-772 - 2227 IF ASSISTANCE IS REQUIRED IN GETTING THE
= APPROPRIATE DISKETTE IMAGE.
=
=

```

SAS KEYWORDS:

PSY2	PSY2DSKT	PSY2PROG	D/T9595A
D/T8595	D/T9590	D/T8590	BIOS
SYSTEM	9595	8590	8595
DIAGNOSTIC	9595A	8641	D/T8641
SERVER	500	95	

UNABLE TO CHANGE ETHERNET ADAPTER MAC ADDRESS

1.4.23 UNABLE TO CHANGE ETHERNET ADAPTER MAC ADDRESS

Record number: H161961

Device: D/T6562
Model: M
Tip key: 008
Date created: 097/11/24
Date last altered: A97/11/24

When using the preloaded INTEL PROSet ethernet utilities, the user may notice that the local MAC address, or LAA (Locally Administered Address) is not available as a configurable parameter.

This missing parameter is a known limitation of the current INTEL ethernet driver, file name Q37T07A.EXE.

The ability to change the local MAC address, or LAA, will be included in a future update if the INTEL ethernet device driver. Users can check for the availability of the updated driver by searching on "Intel Ethernet 6562, 6592."

When available, the updated driver may be downloaded via the Internet from the IBM Personal Computer File Library by searching the following Internet URL:

www.us.pc.ibm.com/files.html

The updated driver may also be obtained from the IBM Personal Systems Group BBS system by calling 919-517-0001.

SAS KEYWORDS:

PSY2	PSY2ADPT	PSY2COMM	PSVP
PSVPADPT	PSVPCOMM	D/T6562	D/T6592
6562	6592	74755	UNCLASSIFIED

1.4.24 UNABLE TO INITIALIZE MODEM ERROR IN PC 300/700/PWS

Record number: H136904

```
Device:           D/T6899
Model:           M
Tip key:         006
Date created:    097/03/18
Date last altered: A97/03/18
```

IBM PC 300/700 or IBM IntelliStation Z Pro 6899 systems may exhibit an "Unable to initialize modem" error message in OS/2 WARP 3.x or OS/2 WARP 4.x when attempting to use a serial communications adapter.

When installing an adapter, ensure that the system resources for the adapter are available. For modems, ensure that the serial port to be used by the adapter (COM1 or COM2) are disabled via the Setup Utility prior to installing the adapter.

Other resource considerations are I/O address, memory resources, DMA, and IRQ assignments.

If the adapter is to be used as either COM3 or COM4, the "DEVICE=C: \OS2\BOOT\COM.SYS" line in the OS/2 WARP CONFIG.SYS file must be edited to enable support for COM3 or COM4 as follows:

```
DEVICE=C: \OS2\BOOT\COM.SYS (PORT,ADDRESS,IRQ)
example:  DEVICE=C: \OS2\BOOT\COM.SYS (4,2e8,10)
          |  |  |
          |__|__|__COM4
          |____|__I/O address
          |____|__IRQ
```

For additional information on the COM.SYS command, refer to the online Command Reference within OS/2 WARP or the OS/2 WARP Users Guide.

The IBM PC 300/700 or IBM IntelliStation Z Pro 6899 systems Users Guide contains additional information on the use of the Setup Utility.

SAS KEYWORDS:

PSVP	PSY2	IBMPC	PSY2PROG
PSVPPROG	PSVPADPT	PSY2ADPT	PSV2OEM
PSVPOEM	UNCLASSIFIED	59996	D/T6571
D/T6573	D/T6581	D/T6583	D/T6575
D/T6585	D/T6576	D/T6586	D/T6560
D/T6260	D/T6577	D/T6587	D/T6598
D/T6875	D/T6876	D/T6885	D/T6886
D/T6877	D/T6887	PWS	

1.4.25 UNDETECTED MEMORY PARITY ERROR ON 6384 325T MODELS

Record number: H20265

Device: D/T6384
 Model: M
 Tip key: 013
 Date created: 093/02/05
 Date last altered: A93/02/05

IBM has determined that a limited number of IBM PS/ValuePoint Model 325T systems may experience an error under specific conditions. The IBM PS/ValuePoint is designed to detect certain error conditions and provide the user an error message when they occur. During additional laboratory testing we have detected that under specific conditions, one of these detection mechanisms may not provide an error message.

The error condition can only occur in Model 325T, running an application in a DOS only environment (without Windows*, Novell** or OS/2). During certain conditions a memory parity error will not be detected and the system will not post an error message.

The problem can be eliminated by the one time use of a self loading diskette unless the hardfile is replaced. If the hardfile is replaced or reformatted, the diskette will have to be used again to install the fix. The diskette will automatically update the CONFIG.SYS file on the boot disk to allow the system to halt in the event of a parity error.

Customers with the following configurations should call 1 - 800-845 - 4263 to receive a customer installable PS/ValuePoint Service Diskette, P/N61G1415 and installation instructions:

DOS Operating system (without Windows, Novell or OS/2)

AND

Model 6384 C00 serial numbers 23A0000 through 23A3204
 Model 6384 C20 serial numbers 23AA000 through 23AX574
 Model 6384 C40 serial numbers 23GG000 through 23GG441

*Trademark of Microsoft Corporation

**Trademark of Novell Corporation

SAS KEYWORDS:

PSVP	PSY2	PSVPERR	PSVPMEM
PSY2ERR	PSY2MEM	VALUE POINT	VALUEPOINT

UNFORMATTED TAPES GENERATE FALSE ERRORS

1.4.26 UNFORMATTED TAPES GENERATE FALSE ERRORS

Record number: H034130

Device: D/T8550
 Model: MCP1
 Tip key: 153
 Date created: 093/03/02
 Date last altered: A93/03/02

PRE-FORMATTED TEST TAPES, FRU P/N30F5277, FOR THE INTERNAL TAPE BACKUP (ITBU) HAVE BEEN MIXED WITH UNFORMATTED TEST TAPES. THE CONTAMINATED INVENTORY HAS BEEN SORTED.

BEFORE REPLACING THE INTERNAL TAPE BACKUP UNIT, FRU P/N30F5273, ENSURE THAT DIAGNOSTICS WERE RUN USING A PRE-FORMATTED TAPE.
 (p/n30F5273 now subs to p/n87F9787)

PRE-FORMATTED TAPES ARE IDENTIFIED WITH " RHOMAT DC2080 RHOMAT 80 " IN THE UPPER CENTER OF THE TAPE CARTRIDGE.
 UNFORMATTED TAPES ARE IDENTIFIED WITH " DC2000 " .

SAS KEYWORDS:

PSY2	8580SYSTAPE	PSY2TAPE	8550SYSTAPE
8565SYSTAPE	8570SYSTAPE	8560SYSTAPE	8590SYSTAPE
8595SYSTAPE	D/T8580	D/T8550	D/T8565
D/T8570	D/T8560	D/T8590	D/T8595
PSY2MISC	8550SYSMISC	8560SYSMISC	8570SYSMISC
8580SYSMISC	8590SYSMISC	8595SYSMISC	8565SYSMISC

PSY2 RETAIN TIPS
UNIQUE SERVICE TOOLS FOR PC AND PS/2

8550, 8560,
 8570, 8580 IBM PS/2 INTERNAL TAPE
 BACKUP SYSTEM 80MB
 FORMATTED TAPE P/N30F5277

THE FOLLOWING PLASTIC DISKETTE HOLDERS ARE AVAILABLE FROM
 MECHANICSBURG PUBLICATIONS AND SHOULD BE ORDERED VIA YOUR
 BRANCH OFFICE SLSS COORDINATOR:

DESCRIPTION	SIZE	FORM NUMBER
-----	----	-----
5.25" DISKETTE HOLDER (QTY 3)	5 1/2" X 8 1/2"	SR280629
5.25" DISKETTE HOLDER (QTY 2)	8 1/2" X 11"	SA380015
3.5" DISKETTE HOLDER (QTY 8)	8 1/2" X 11"	SX244116

UPDATES WILL BE MADE TO THIS LIST AS APPLICABLE.

SAS KEYWORDS:

5155SYSPART	5160SYSPART	5162SYSPART	5170SYSPART
4860SYSPART	5531SYSPART	8525SYSPART	8530SYSPART
8535SYSPART	8540SYSPART	8550SYSPART	8555SYSPART
8557SYSPART	8560SYSPART	8565SYSPART	8570SYSPART
8580SYSPART	8590SYSPART	8595SYSPART	D/T5150
D/T5155	D/T5160	D/T5162	D/T5170
D/T4860	D/T5531	D/T8525	D/T8530
D/T8535	D/T8540	D/T8550	D/T8555
D/T8557	D/T8560	D/T8565	D/T8570
D/T8580	D/T8590	D/T8595	PCOM
PSY2	PCOMTOOL	PSY2TOOL	5150SYSTOOL
5155SYSTOOL	5160SYSTOOL	5162SYSTOOL	5170SYSTOOL
5531SYSTOOL	4860SYSTOOL	8525SYSTOOL	8530SYSTOOL
8535SYSTOOL	8540SYSTOOL	8550SYSTOOL	8555SYSTOOL
8557SYSTOOL	8560SYSTOOL	8565SYSTOOL	8570SYSTOOL
8580SYSTOOL	8590SYSTOOL	8595SYSTOOL	5150SYSPART
PCOMPART	PSY2PART		

1.4.28 UNKNOWN PROCESSOR TYPE IN PC300 SETUP UTILITY

Record number: H13185

Device: D/T65XX
 Model: M
 Tip key: 002
 Date created: 095/06/20
 Date last altered: A95/06/20

IBM PC 300 systems may exhibit a symptom of displaying an "Unknown Processor" and "Speed 0" in the Setup Utility after installing the replacement system board, FRU P/N65G4152.

Reseat (remove/reinstall) the J35, J36 and J37 CPU Speed Selection jumpers and the J23 and J24 CPU Type Selection jumpers. Reboot the system and press F1 to access the Setup Utility. View the System Summary to verify the correct processor type and CPU speed.

If the Processor and CPU Speed are still incorrect, continue normal problem determination to isolate the failing FRU.

SAS KEYWORDS:

PSY2	PSVP	PSY2PART	PSVPPART
IBMPC	PC300	PC 330	PC350
6571	6573	6581	6583
D/T6571	D/T6573	D/T6581	D/T6583
PSVPERR	PSY2ERR		

1.4.29 UNREADABLE DISPLAY W/OEM VIDEO ADAPTER IN PS/VALUEPOINT

Record number: H012528

Device: D/T6484
 Model: M
 Tip key: 002
 Date created: 094/06/10
 Date last altered: A94/06/10

PS/ValuePoint 6472, 6482, 6484, 6492 and 6494 Performance Series system units may display distorted and/or unreadable video images with an OEM video adapter installed if the system unit and the application(s) being used are not properly configured.

The Video Enable/Disable jumper located on the left side of the system board toward the center, approximately one inch away from the left edge must be moved to the "Disable" position if a video adapter card is used. See the PS/ValuePoint HMM "64XX System Board" section for specific jumper locations.

Applications must also be configured to use an OEM video adapter and drivers. For example; Microsoft Windows 3.x users should run the "Windows Setup" program to configure the video device drivers for the adapter and monitor capabilities.

Failure to properly configure the adapter and drivers may result in an unreadable displayed image or a hang condition when attempting to start an application.

SAS KEYWORDS:

VALUE POINT	PS/VP	PSVP	D/T6472
D/T6482	D/T6492	D/T6494	PSVPDISP
PSY2DISP	JUMPERS	VGA	SVGA
PSY2	PSVPBRD	PSY2BRD	PSVPPROG
PSY2PROG	PSVPOPER	PSY2OPER	D/T8511
D/T8513	D/T8515	D/T8516	D/T8517
D/T8518	D/T9515	D/T9517	D/T9518
D/T9524	D/T9525	D/T9507	D/T9521
D/T9527	D/T6324	D/T6325	D/T6327
D/T6312	D/T6314	D/T6317	D/T6319

UNSUCCESSFUL 50 MHZ PROCESSOR INSTALLATION

1.4.30 UNSUCCESSFUL 50 MHZ PROCESSOR INSTALLATION

Record number: H097075

Device: D/T8590
Model: M
Tip key: 012
Date created: 092/03/31
Date last altered: A94/04/25

THE INSTALLATION INSTRUCTIONS FOR THE 50 MHZ PROCESSOR BOARD, FRU P/N92F0048, USED IN THE 8590 AND 8595 ARE INCOMPLETE.

NOTE THE FOLLOWING:

AFTER REMOVING THE EXISTING PROCESSOR CARD, MOVE THE OVERRIDE JUMPER, J10 ON THE 8590 AND J16 ON THE 8595, SO THAT IT CONNECTS THE CENTER PIN AND THE PIN ON THE OPPOSITE END OF THE CONNECTOR. LEAVE THE OVERRIDE JUMPER IN THIS POSITION.

THE SYSTEM WILL DETECT THIS CHANGE AND READ THE INITIAL MACHINE LOAD (IML) IMAGE FROM THE NEW REFERENCE DISKETTE.

CONTINUE WITH THE REMAINING STEPS OF THE INSTALLATION.

THE INSTALLATION INSTRUCTIONS WILL BE MODIFIED TO REFLECT THIS CHANGE IN THE NEXT RELEASE OF THE PUBLICATION.

SAS KEYWORDS:

PSY2	D/T8595	PSY2ERR	PSY2DOC
50MHZ	PS2	PS/2	

UPDATE CONNECTOR 2.0/2.01 DOES NOT WORK WITH PROXY SERVERS

1.4.31 UPDATE CONNECTOR 2.0/2.01 DOES NOT WORK WITH PROXY SERVERS

Record number: H163270

Device: D/T8644
Model: M
Tip key:
Date created: 098/03/31
Date last altered: A98/04/10

The "Update Thyself" feature included in Update Connector versions 2.0 and 2.01 results in a "bad magic number" error or a lockup when properly configured and connected to a Proxy Server.

Similar problems exist during any update activity using Update Connector to connect to a Proxy Server.

The problem will be fixed in the next release of Update Connector (version 3.0) due to release after June 1998.

The problem does not exist when connected to a Socks Server.

SAS KEYWORDS:

PSY2	D/T8644	PSY2CODE	SERVICER ONLY
UPDATE	CONNECTOR	D/T8638	D/T8639
D/T8640	D/T8641	D/T8642	D/T8650

UPGRADE COPROCESSOR COMPATIBILITY PLUG FRU P/N'S

1.4.32 UPGRADE COPROCESSOR COMPATIBILITY PLUG FRU P/N'S

Record number: H065138

Device: D/T8550
 Model: M
 Tip key: 205
 Date created: 094/06/02
 Date last altered: A94/12/09

THIS EC RELEASES THE FRU'S FOR THE FOLLOWING:

- 1) MOD 70 PROC UPGRADE SOCKET EXTENDER FRU# 06H3016
- 2) MOD 70/80 COPROC COMPATIBILITY PLUG FRU# 06H3015
- 3) MOD 50/50Z/60 COPROC COMPATIBILITY PLUG FRU#06H3014

.

THESE FRU'S WILL BE STOCKED BY MECHANICSBURG AND SOURCED BY IBM WANGARATTA THROUGH PURCHASE FROM HYPERTEC IN WANGARATTA, AUSTRALIA.

SAS KEYWORDS:

PSY2	PSY2ADPT	D/T8580	D/T8570
HYPERTEC	PSY2PART	UPGRADE	D/T8560

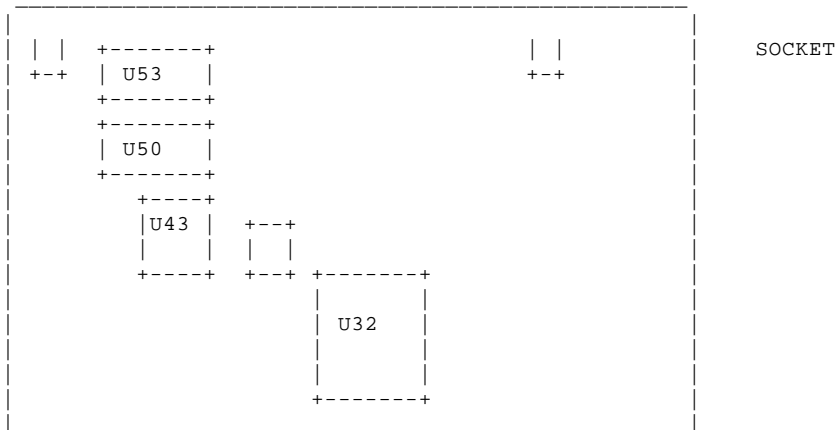
1.4.33 UPGRADING THINKPAD 350 BIOS

Record number: H122224

Device: D/T2618
 Model: M
 Tip key: 007
 Date created: 093/12/15
 Date last altered: A96/11/11

SOME THINKPAD 350 SYSTEMS HAVE AN UPGRADEABLE FLASH BIOS MODULE. NOT ALL SYSTEMS WERE MANUFACTURED WITH THIS FEATURE.

TO DETERMINE IF YOUR SYSTEM BOARD HAS FLASH OR ONE TIME PROGRAMMABLE (OTP) BIOS, OPEN THE ACCESS DOOR COVERING THE MODEM AND MEMORY SIMM. YOU SHOULD SEE SOMETHING LIKE THIS:



U43 IS THE FLASH OR OTP MODULE. THERE SHOULD BE A STICKER ON THE TOP OF U43 WITH A PART NUMBER ON IT. IF THE PART NUMBER IS 60G1850 YOU HAVE A FLASH DEVICE. ANY OTHER PART NUMBER (ie. 60G1851) INDICATES AN OTP DEVICE. EXCEPTION: IF THE STICKER DOES NOT HAVE A PART NUMBER BUT CONTAINS THE FOLLOWING INFORMATION "SCI 54C IBM 1993" REMOVE THIS STICKER TO DETERMINE IF "FLASH" IS WRITTEN ON THE BIOS MODULE. THIS INDICATES A FLASHABLE BIOS. IF THE IBM MODULE IDENTIFICATION STICKER IS NOT PRESENT, A FLASH DEVICE WILL HAVE "FLASH" IN FANCY PRINT ON TOP OF THE MODULE.

THE FLASH DEVICE ALLOWS YOU TO INSTALL BIOS UPDATES FROM DISKETTE. OTP DEVICES REQUIRE SYSTEM BOARD REPLACEMENT TO UPDATE BIOS. ALL FRU PLANAR BOARDS WILL HAVE FLASH CAPABILITY.

IMPORTANT NOTE:

BEFORE A BIOS UPDATE IS ATTEMPTED, BE SURE THAT THE SYSTEM IS OPERATING ON A.C. AND THAT THE BATTERY IS FULLY CHARGED. THIS WILL INSURE POWER TO THE SYSTEM IF THERE IS AN A.C. POWER FAILURE. IF POWER IS LOST DURING A BIOS UPDATE, IT MAY BE NECESSARY TO REPLACE THE SYSTEM BOARD.

THE BIOS UPGRADE DISKETTE IS SELF BOOTING. WHEN FOLLOWING THE INSTRUCTIONS YOU WILL BE ASKED TO PRESS THE WRITE PROTECT BUTTON. THERE IS NO VISIBLE WRITE PROTECT BUTTON. INSTEAD, INSERT A THIN CONDUCTIVE OBJECT, SUCH AS AN OPENED PAPER CLIP, THROUGH THE SMALL HOLE IN THE BACK OF THE MACHINE. THIS HOLE, WHICH IS LOCATED UNDER THE REAR ACCESS DOOR, PROVIDES ACCESS TO A CIRCUIT CARD CONTACT. BY GROUNDING THE CONTACT TO THE FRAME, THE FLASH BIOS PROTECTION IS BYPASSED, ENABLING THE BIOS UPDATE TO COMPLETE. THERE IS NO SHOCK HAZARD DURING THIS STEP.

WHILE THE PAPER CLIP IS FULLY INSERTED AND TOUCHING THE SIDE OF THE HOLE, PRESS ANY KEY TO CONTINUE THE BIOS UPGRADE. AFTER PRESSING A KEY, THE PAPER CLIP MAY BE REMOVED, WHILE THE BIOS UPDATE IS COMPLETED.

IMPORTANT

Diskette fixes are customer installable. Customers should be advised to contact the IBM PC Company HelpCenter at 800-772 - 2227 if assistance is required in getting or installing this information. Files are located on the PC company's Bulletin Board Service (BBS). The direct line for modem connection to The PC Company BBS is 1-919-517-0001 or tieline 255-0001.

PSY2 RETAIN TIPS
UPGRADING THINKPAD 350 BIOS

Customers in Canada should call IBM's HelpPC at 800-565-3344 for Assistance or down load information. The Canadian BBS phone numbers are:
Montreal-514-938-3022, Toronto-905-316-4255,
Winnipeg-204-934-2735, Vancouver-604-664-6464.

The data may also be downloaded via the Internet from the IBM Personal Computer File Library by searching the following Internet URL: <http://www.pc.ibm.com/files.html>

NOTE:

REFER TO RETAIN RECORD H034035 TO DETERMINE BIOS REVISION LEVEL AND A LIST OF PROBLEMS FIXED WITH BIOS UPGRADES.

SAS KEYWORDS:

PSY2	PSY2BRD	PSY2MCD	2618
EEPROM	EPROM	ROM	THINKPAD
UNCLASSIFIED			

1.4.34 UPS NOT SENSED BY NOVELL OPERATING SYSTEM

Record number: H015012

Device: D/T8570
Model: M
Tip key: 018
Date created: 090/12/10
Date last altered: A90/12/11

THE NOVELL NETWARE OPERATING SYSTEM MAY REQUIRE A PATCH WHEN OPERATING IN AN 8570 SYSTEM WITH AN OEM UNINTERRUPTABLE POWER SUPPLY ATTACHED. CUSTOMER'S EXPERIENCING AN APPLICATION GENERATED WARNING OF "LOW BATTERY, SYSTEM WILL SHUT DOWN NETWORK IN 5 MIN." SHOULD CONTACT NOVELL AND REFER THEM TO THE NOVELL TECHNICAL BULLETIN NUMBER 1-274 FOR ASSISTANCE.

SAS KEYWORDS:

PSY2	8570SYSPWR	PSY2PWR	PSY2OEM
8570SYSOEM	8570SYSBRD	PSY2BRD	

USER'S MANUAL CONTAINS INCORRECT WARRANTY INFORMATION

1.4.35 USER'S MANUAL CONTAINS INCORRECT WARRANTY INFORMATION

Record number: H126723

Device: D/T6324
Model: M
Tip key: 005
Date created: 095/03/01
Date last altered: A95/03/13

A limited number of User Manuals, P/N 95G9098, for the 14V/P and 15V/P were shipped with incorrect warranty information.

Page iii, "Statement of Limited Warranty," shows four monitor types and incorrectly states that the warranty period is three (3) years.

The correct warranty on the 14V (6324) and 15V (6325) is one year. Only the 14P (9524) and 15P (9525) have a three (3) year warranty.

The marketing announcement, published in HONE, correctly states the warranty for these monitors.

SAS KEYWORDS:

PSY2	PSY2DOC	PSY2DISP	DISPLAY
D/T9525	D/T9525	D/T6325	D/T6324
USERS	BOOK		

1.4.36 USERS HANDBOOK CORRECTIONS COLON. PC SERVER 325 / 330

Record number: H162908

Device: D/T8640
Model: M
Tip key:
Date created: 098/02/24
Date last altered: A98/02/24

The PC Server 325 User's Handbook p/n84H5967 dated September 1997 and the PC Server 330 Users's Handbook p/n 84H5972 contain incorrect listings for minimum memory.

The PC Server 325 User's Handbook ships with the type 8639 model PT0/PTW/PB0/RB0/1RY.

On page 3 under "Features at a Glance", under "Memory", the 325 User's Handbook lists: "Standard: 64MB (min). This is only correct for the models PB0/RB0/1RY. The "Standard minimum for the models PT0/PTW is 32MB.

The PC Server 330 User's Handbook ships with the type 8640 model PT0/PB0/PM0/11Y.

On page 3 under "Features at a Glance", under "Memory", the 330 User's Handbook lists: "Standard: 32MB (min)" which is incorrect. The Standard Minimum for the models PT0/PB0/PM0/11Y is 64MB.

SAS KEYWORDS:

PSY2	PSY2DOC	SERVICER ONLY	P/N84H5967
P/N84H5972	D/T8640	D/T8639	

1.4.37 VALUEPOINT / SCO UNIX COMPATIBILITY

Record number: H121691

Device: D/T6384
 Model: M
 Tip key: 040
 Date created: 093/10/27
 Date last altered: A93/12/03

VALUEPOINT 6382/S, 6384/D AND 6384/T SYSTEMS HAVE BEEN CERTIFIED BY SCO* FOR UNIX* PROVIDED THE FOLLOWING CONDITIONS ARE MET:

- 1 - IF THE SYSTEM CONTAINS AN EXTERNAL (LEVEL 2) CACHE, THIS CACHE MUST BE REMOVED TO PERFORM THE INSTALLATION. ONCE UNIX IS INSTALLED THE CACHE MAY BE RE-INSTALLED.
- 2 - A SPECIAL BOOT DISKETTE FROM SCO* IS REQUIRED FOR INSTALLATION. THE DISKETTE IS TITLED "IBM COMPATIBILITY EFS FOR SCO UNIX* AND SCO OPEN DESKTOP" RELEASE 1.0.0C. (OR HIGHER). THE DISKETTE INCLUDES DIRECTIONS TO INSTALL SCO UNIX AND SCO OPEN DESKTOP USING THE DISKETTE. THIS DISKETTE IS AVAILABLE FROM AUTHORIZED SCO UNIX RETAILERS AND FROM SCO TECHNICAL SUPPORT.
- 3 - THE VALUEPOINT FLASH EEPROM REVISION LEVEL MUST BE L6ET51AUS (51A) OR HIGHER.

WHEN THE ABOVE CONDITIONS ARE MET AND THE CUSTOMER CONTINUES TO HAVE PROBLEMS INSTALLING SCO UNIX OR SCO OPEN DESKTOP, THE CUSTOMER SHOULD BE REFERRED TO THE DEALER WHERE THE SOFTWARE WAS PURCHASED AND SCO TECHNICAL SUPPORT.

- * SCO IS A TRADEMARK OF THE SANTA CRUZ OPERATION, INC.
- * UNIX IS A REGISTERED TRADEMARK OF UNIX SYSTEM LABORATORIES.

SAS KEYWORDS:

PSVP	PSY2PROG	6384	6382
PSY2	PSVPPROG	D/T6387	D/T6382
PS/VP	6387	VALUE POINT	PSY2OPER
PSVPOPER	XENIX	PSVPMCD	PSY2MCD

1.4.38 VALUEPOINT DIAGNOSTICS DISKETTES

Record number: H20900

Device: D/T6384
Model: M
Tip key: 024
Date created: 093/04/14
Date last altered: A93/04/26

THERE ARE TWO DIAGNOSTICS DISKETTES FOR VALUEPOINT. THE DISKETTES ARE NOT INTERCHANGEABLE.

USE THE ADVANCED DIAGNOSTICS DISKETTE LABELED "IBM PS/VALUEPOINT ADVANCED DIAGNOSTICS MACHINE TYPE 6384" FOR THE FOLLOWING MACHINE NUMBERS:

325T - 6384 - C00, C20, C40
425SX - 6384 - F00, F20, F23, F40, F43
433DX - 6384 - M00, M40, M43, M50, M53
466DX2 - 6384 - W52, W53

USE THE ADVANCED DIAGNOSTICS DISKETTE LABELED "IBM PS/VALUEPOINT 6382, 6384, AND 6387 MODELS /S, /D, AND /T DIAGNOSTICS" FOR THE FOLLOWING MACHINE MODELS:

425SX - 6382 - F00, F30, F50, F51, FY0*, FZ0*, FZ1*
6384 - F02, F30, F50, F51
433SX - 6382 - K00, K30, K50, K51, KY0*, KZ0*, KZ1*
6384 - K02, K30, K70, K71
433DX - 6382 - M00, M30, M50, M51
6384 - M01, M30, M70, M71
6387 - M00, M70, M71
466DX2 - 6384 - W01, W50, W70, W71
- 6387 - W00, W90, W91

*MEDIALESS MODELS

THE ADVANCED DIAGNOSTICS INFORMATION ON PAGE 'V' OF THE PS/VALUEPOINT HMS&R (MARCH 1993) IS INCORRECT. IT WILL BE CORRECTED IN THE NEXT RELEASE.

SAS KEYWORDS:

PSVP	VALUE POINT	D/T6387	PSY2
PSY2DIAG	PS/VP	PSVPDIAG	PSY2DOC
PSVPDOC	D/T6382		

VALUEPOINT DISKETTE DRIVE CABLE INSTALLATION

1.4.39 VALUEPOINT DISKETTE DRIVE CABLE INSTALLATION

Record number: H122646

Device: D/T6384
 Model: M
 Tip key: 050
 Date created: 094/02/07
 Date last altered: A94/02/08

ONE END OF VALUEPOINT DISKETTE DRIVE CABLES HAS A SEVEN WIRE TWIST ENTERING THE BERG CONNECTOR. THIS END OF THE CABLE MUST BE INSTALLED IN THE 3.5" "A" DRIVE.

6382/S, 6384/D AND 6387/T USE DISKETTE DRIVE CABLE FRU P/N92F0423. INSTALL THE END, WITHOUT THE TWIST IN THE CABLE, IN THE SYSTEM BOARD.

6381 AND 6384 USE DISKETTE DRIVE CABLE FRU P/N52G8748. INSTALL THE CENTER CONNECTOR IN THE SYSTEM BOARD.

SAS KEYWORDS:

PSY2	PSVP	PS/VP	VALUE POINT
PSY2DSKT	PSVPDSKT	52G8748	92F0423
ERROR	ERRORS	6384	D/T6381
D/T6382	D/T6387	6381	6382
6387			

1.4.40 VALUEPOINT MICROPROCESSOR UPGRADE JUMPERS

Record number: H124005

Device: D/T6384
 Model: M
 Tip key: 060
 Date created: 094/02/10
 Date last altered: A95/05/08

The following table contains the microprocessor upgrade jumper positions for ValuePoint 6382/S, 6387/T, and 6384/D (except P60) systems.

Installed Processor(s)	System Board			
	Type 1		Type 2	
	J10	J11	J17	J18
80486SX only	R	R	R	R
80486SX & 80487SX	R	R	R	R
80486SX & OVERDRIVE	R	R	R	R
80486SX & DX	F	F	F	F
80486SX & DX2	F	F	F	F
80486DX only	F	X	F	X
80486DX2 only	F	X	F	X
OVERDRIVE only	R	R	R	R
80486SX & DX4 Overdrive (1)	R	R	R	R
DX4 OVERDRIVE only (1)	R	R	R	R

R = Rear two pins (labeled OD and closest to I/O connectors)
 F = Front two pins
 X = Front or rear two pins

Microprocessors can be identified by the following characteristics:

80486SX - Soldered to system board; no heat sink
 80487SX - Intel 80487 printed on heat sink
 80486DX* - Heat sink without identification
 80486DX2* - Heat sink without identification
 IBM Overdrive - "IBM FRU P/N92F2582" printed on heat sink
 Intel Overdrive - "Intel Overdrive" printed on heat sink
 Intel DX4 Overdrive (1) - "Intel DX4 Overdrive" printed on heat sink and an attached voltage regulator board.

Note 1: The IBM PCCO has not tested the Intel DX4 Overdrive on these models. If problems are suspected with the DX4, refer customer to the point of purchase or Intel support.

*Use the system Configuration Utility to differentiate the DX and DX2 processors.

Intel is a trademark of Intel Corporation.

SAS KEYWORDS:

PSVP	PS/VP	VALUEPOINT	6382
6384	D/T6382	PSVPBRD	PSY2BRD
OVER DRIVE	D/T6387	6387	DX/4

VALUEPOINT REMOTE INITIAL PROGRAM LOAD

1.4.41 VALUEPOINT REMOTE INITIAL PROGRAM LOAD

Record number: H123099

Device: D/T6384
Model: M
Tip key: 052
Date created: 094/03/11
Date last altered: A94/03/14

Remote Initial Program Load* (RIPL) is not supported when a fixed disk drive is installed in the following ValuePoint models.

6384 - C00, C20, C40
6384 - F00, F20, F23, F40, F43
6384 - M00, M40, M43, M50, M53
6384 - W52, W53

*Note: Remote Initial Program Load, often called Remote Program Load, allows the workstation to load an operating system from the network, making it unnecessary to have a fixed disk or diskette drive installed in the system.

SAS KEYWORDS:

PSVP	PS/VP	PS/VALUEPOINT	VALUE POINT
PSY2MISC	PSVPMISC	RIPL	RPL
6384			

1.4.42 VALUEPOINT SETUP TIPS FOR LAN SUPPORT PROGRAM

Record number: H123736

Device: D/T6384
 Model: M
 Tip key: 058
 Date created: 094/04/28
 Date last altered: A94/06/01

The following items have been found to resolve problems associated with the installation of IBM LAN Support Program with Windows 3.1 or memory managers (eg., QEMM and EMM386) or both. Prior to making any changes, original settings should be stored in case future reference is necessary.

1) Ensure that a current version of LAN Support Program is being used (version 1.3x or higher). Follow the installation guidelines outlined in "Chapter Seven" of the LAN Support Program User's Guide. If the customer is using Windows 3.1, set the "Call Far" parameter to "YES" for the "DXMT0" module.

2) If the LAN adapter is sharing memory with the system, then set the starting RAM address for the adapter at a location that is contiguous in upper memory. See the adapter user's guide on how to set the RAM address. For example if a customer is using the IBM 16/4 ISA-16 Token Ring adapter, LAN Support Program 1.3x provides the option of configuring the starting RAM address for the adapter. Set the Token Ring RAM address to start at a location that is contiguous in upper memory. For example; the ideal starting RAM address in a 6381/Si is C800. C800 is the first available upper memory address after the Video BIOS. In a 6382/S, 6384/D and 6387/T the ideal starting RAM address is C000.

3) If the customer is using a memory manager, change or add the EXCLUDE statements to exclude the VGA buffer portion of memory, Video BIOS and shared RAM addresses. The following are examples of CONFIG.SYS exclude statements for using memory managers with the IBM 16/4 ISA-16 Token Ring adapter (with the recommended starting RAM addresses):

6381/Si: X=A000-CDFF
 6382/S, 6384/D, 6387/T: X=A000-C5FF X=E000-E7FF

4) Set "DOS=HIGH,UMB" in the CONFIG.SYS if memory managers are being used.

5) Update the Windows 3.1 SYSTEM.INI file per the instructions in the NETWORKS.WRI readme file supplied with the Windows 3.1. Special attention should be paid to the following parameters:

INDOSpolling
 EMMExclude
 EMMPageFrame

SAS KEYWORDS:

PSVP	PSY2	PSVPPROG	PSY2PROG
PSVPADPT	PSY2ADPT	D/T6382	D/T6387
D/T6381	6381	6382	6384
6387	VALUE POINT	PS VP	PSVPCOMM
PSY2COMM			

1.4.43 VALUEPOINT 64XX BATTERY REPLACEMENT

Record number: H125115

Device: D/T6482
 Model: M
 Tip key: 002
 Date created: 094/09/02
 Date last altered: A94/09/02

Use the following procedure when replacing a battery for POST 161, 162 or 163 errors on ValuePoint Performance Series 6472, 6482, 6484, 6492, and 6494 systems.

1 - Measure the battery voltage. A new battery will provide approximately 3 volts.

A - If the battery voltage is higher than 2.7v, it is unlikely the battery has caused the POST error. Continue with normal problem determination.

B - If the battery voltage is 2.7v or lower, replace the battery. Then, with the system powered off, measure the voltage across resistor #1 on the system board. This resistor is located next to the battery socket and is labeled R1. Place a VOM lead on each end of R1 and measure the voltage (if the voltage is negative, reverse the meter leads).

A - If the voltage across R1 is lower than .025v DC, no further action is required.

B - If this voltage is .025v DC or higher, replace the system board.

SAS KEYWORDS:

PSVP	PS/VALUEPOINT	PSY2	VALUEPOINT
D/T6472	D/T6484	D/T6492	D/T6494
6472	6484	6492	6494
6482	PSY2BRD	PSY2MISC	PSVPMISC
PSY2ERR	PSVPBRD	PSVPERR	

1.4.44 VERSION 1.02 LOOP ADAPTER DIAGNOSTIC 8580 MODEL A21

Record number: H033234

Device:	D/T4683	Date created:	091/04/08
Model:	M001	Date last altered:	A92/11/18
Diagnostic ID:	DIAGSK2T031802	Owning B.U.:	USA
Tip key:	090		

Additional diagnostic IDs and online tests:

STORE LOOP ADAPTER/A DIAGNOSTIC OPTION DISKETTE VERSION 1.02

8580 MODEL A21 AND ALL HIGH SPEED PS/2 PROCESSORS WILL NEED
VER 1.02 OF THE LOOP ADAPTER DIAGNOSTICS. FORM SK2T-0318
MUST BE ORDERED TO GET THE VER 1.02 DISK AT P/N74F5257.
IF OLD VERSION 1.01 OPTION DISK P/N83X8133 IS USED WITH THE
FASTER PS/2 PROCESSOR AN ERROR OF 62xx WILL RESULT.

THE CURRENT PS/2 STORE LOOP ADAPTER OPTION DISKETTE VER.1.02
SUPERCEDES ANY VERSION OF THE DISKETTE BEING USED TODAY.

THIS NEW LOOP DIAGNOSTIC IS MANDATORY FOR USE ON ANY STORE
CONTROLLER OPERATING AT PROCESSOR SPEEDS ABOVE 20 MHZ AND
ALL PS/2 USING A 486 CO-PROCESSOR.

SAS KEYWORDS:

4683SAS03	468303	4683SU.	4683LP.
4683LP04	8580A21	8580	LOOP
PSY2ADPT	PSY2DIAG		

1.4.45 VERTICAL LINES OVER SHUTDOWN BOX DURING OS/2 IPL

Record number: H132825

Device: D/T6877
Model: M
Tip key: 006
Date created: 096/02/28
Date last altered: A96/02/28

IBM PC 700 Series 6877 and 6887 may display vertical lines overlaying the Shutdown screen dialog box for approximately 1 second during the IPL sequence. This occurs only during shutdown and restart of OS/2 WARP Connect.

This symptom only occurs during a shutdown followed by a restart with the Matrox Millennium device drivers loaded. This is not a functional failure of the hardware or OS/2. No update is planned to eliminate the occurrence of the vertical lines and dialog box.

SAS KEYWORDS:

PSY2	D/T68XX	6887	6877
IBMPC	PSVP	PSVPDISP	PSY2DISP
D/T6887	PSVPPROG	PSY2PROG	PSVPADPT
LOCKUP	PC750	HUNG	PSY2ADPT
PC 750	PC730	PC700	PC 730
40212			

1.4.46 VERTICAL MOUNTING OF 8530, 8550, 8555 AND 8570 NOT SUPPORTED

Record number: H067576

Device: D/T8550
 Model: M
 Tip key:
 Date created: 090/07/06
 Date last altered: A94/03/21

BASED ON THE REQUIREMENTS OF THE VARIOUS APPROVAL AGENCIES TO WHICH OUR PRODUCTS ARE CERTIFIED, IBM DOES NOT SUPPORT THE MOUNTING OF PS/2 MODELS 8530, 8550, 8555, 8570 OR 8590 IN ANY ORIENTATION OTHER THAN HORIZONTAL. IBM'S CONCERNS ARE THREEFOLD:

1. ABSENT A STABILIZING BRACE, THE PHYSICAL STABILITY OF THE MACHINES WILL NOT MEET U/L SAFETY STANDARDS.
2. THE MACHINE'S SIDE COVER LOUVERS WILL NOT MEET VARIOUS REQUIREMENTS DESIGNED TO RESTRICT THE INTRODUCTION OF CONDUCTIVE MATERIALS (SUCH AS PAPER CLIPS, ETC.) INTO THE MACHINE ENCLOSURE.
3. THE MACHINE'S SIDE COVER LOUVERS DO NOT MEET BOTTOM ENCLOSURE REQUIREMENTS DESIGNED TO PREVENT THE ESCAPE OF MOLTEN MATERIALS FROM A MACHINE THAT HAS BEEN SUBJECT TO AN INTERNAL FIRE OR SEVERE ELECTRICAL SHORT CIRCUIT.

VERTICAL MOUNTING DOES NOT SUBJECT THESE MACHINES TO FUNCTIONAL PROBLEMS AND THEREFORE WILL NOT VOID THE END USER LIMITED WARRANTY. HOWEVER, CUSTOMERS WHO HAVE MOUNTED SUCH MACHINES IN AN ORIENTATION OTHER THAN HORIZONTAL SHOULD BE MADE AWARE THAT SUCH USE MAY INVALIDATE UL AND/OR CSA SAFETY LISTINGS. REFERENCE UNDERWRITERS LAB 478, SECTIONS 5.15 THROUGH 5.19; CANADIAN STANDARDS ASSOCIATION NO. CANADIAN STANDARDS 220, SECTION 4.2.3.2 AND 4.2.7.4-5.

PS/2 MODELS 8535/40, 8556/57, 9556/57, AND 9576/77 ARE SUPPORTED IN A HORIZONTAL OR VERTICAL POSITION WHEN USING THE SUPPLIED FLOOR STAND.

SAS KEYWORDS:

PSY2	PSY2MISC	D/T8530	D/T8535
D/T8540	D/T8555	D/T8557	D/T8570
D/T8590	D/T8556	D/T9556	D/T9557

1.4.47 VGA DIAGNOSTICS MAY FORCE MONITOR SHUTDOWN

Record number: H016363

Device: D/T8550
 Model: M
 Tip key: 044
 Date created: 089/10/18
 Date last altered: A92/03/11

THE VGA DIAGNOSTICS ON IBM PS/2 REFERENCE DISKETTES MAY CAUSE THE DISPLAY TO TEMPORARILY SHUT DOWN. THE VGA DIAGNOSTICS GENERATE A TEST SYNCH SIGNAL WHICH CAN OVERDRIVE THE DISPLAY. IF THIS FORCED FAILURE OCCURS, THE MONITOR'S POWER GOOD LIGHT WILL MOMENTARILY POWER OFF AND THEN BACK ON AGAIN. IN SOME CASES, IT MAY BE NECESSARY TO POWER THE DISPLAY OFF AND BACK ON TO RESET THE MONITOR. THIS DIAGNOSTIC PROBLEM WILL NOT HARM THE MONITOR.

THIS MOMENTARY LOSS OF VIDEO WILL NOT GENERATE AN ERROR CODE. ANY VIDEO ERROR CODES DISPLAYED DURING DIAGNOSTICS SHOULD BE CONSIDERED VALID.

ALTHOUGH THE IBM 55SX REFERENCE DISKETTE VERSION 1.0 CONTAINS THE AFFECTED VGA DIAGNOSTICS, OTHER IBM PS/2 REFERENCE DISKETTES MAY ALSO CONTAIN THE AFFECTED VGA DIAGNOSTICS IF THEY HAVE BEEN UPDATED WITH THE IBM PS/2 DIAGNOSTIC UPDATE DISKETTE VERSION 1.00 OR 1.01.

TO DETERMINE IF AN IBM PS/2 REFERENCE DISKETTE HAS THE POTENTIAL TO CAUSE THIS VGA DIAGNOSTIC FAILURE, LOOK AT THE DATE ON THE VGA.DGS FILE CONTAINED ON THE REFERENCE DISKETTE.

TO DO THIS, TYPE "DIR A: VGA.DGS" AT THE A> OR C> PROMPT.

IF THE VGA.DGS FILE HAS A DATE OF 10-01-88 THRU 11-02-88, IT CONTAINS THE AFFECTED DIAGNOSTICS.

THIS PROBLEM HAS BEEN CORRECTED ON CURRENT RELEASES OF IBM PS/2 REFERENCE DISKETTES.

SAS KEYWORDS:

PSY2	PSY2DISP	8550SYSDIAG	8560SYSDIAG
8555SYSDIAG	8570SYSDIAG	8580SYSDIAG	8512DISP
8513DISP	8514DISP	8503DISP	8565SYSDIAG
D/T8580	D/T8560	D/T8565	

1.4.48 VIDEO ADAPTER INITIALIZE ERROR WITH WINDOWS 3.11

Record number: H123162

Device: D/T6384
 Model: M
 Tip key: 053
 Date created: 094/03/17
 Date last altered: A94/03/22

PS/VALUEPOINT 6382/S, 6384/D, 6384 P60/D AND 6387/T MAY EXPERIENCE VIDEO ADAPTER INITIALIZATION ERRORS WHEN USING THE VIDEO DRIVERS PROVIDED BY WINDOWS VERSION 3.11.

"AN ERROR OCCURRED WHILE TRYING TO INITIALIZE THE VIDEO ADAPTER -PRESS ENTER TO CONTINUE" WILL BE RECEIVED IF ONE OF THE FOLLOWING VIDEO MODES PROVIDED BY THE WINDOWS 3.11 PACKAGE IS SELECTED:

SUPER VGA 640x480x256 LARGE FONTS
 SUPER VGA 640x480x256 SMALL FONTS
 SUPER VGA 800x600x256 LARGE FONTS
 SUPER VGA 800x600x256 SMALL FONTS
 SUPER VGA 1024x768x256 LARGE FONTS
 SUPER VGA 1024x768x256 SMALL FONTS

THE ABOVE VIDEO MODES ARE NOT COMPATIBLE WITH THE S3 CHIPSET INTEGRATED INTO THE PS/VALUEPOINT 6382/S, 6384/D AND 6387/T OR WITH S3 BASED GRAPHICS ADAPTERS. THE DRIVERS ARE ALSO NOT COMPATIBLE WITH THE ATI CHIPSET INTEGRATED INTO THE 6384 P60/D SYSTEM BOARD.

UTILIZE THE S3 OR ATI (MACH32) DEVICE DRIVER SELECTIONS WHEN PERFORMING THE WINDOWS DISPLAY SETUP. THE DRIVERS ARE PROVIDED WITH THE PS/VALUEPOINT SYSTEM AND WILL ELIMINATE THIS ERROR.

SAS KEYWORDS:

PSVP	PSY2	PSVPDISP	PSY2DISP
PSVPADPT	PSY2ADPT	D/T6382	D/T6387
PSVPPROG	PSY2PROG	6382	6384
6387	VALUE POINT	PS VP	PSVPERR
PSY2ERR			

VIDEO DISTORTION EXITING FROM IBM REGISTRATION SCREEN

1.4.49 VIDEO DISTORTION EXITING FROM IBM REGISTRATION SCREEN

Record number: H1094

Device: D/T6577
 Model: M
 Tip key: 007
 Date created: 096/07/23
 Date last altered: A96/07/23

IBM PC 300 Series 6577 and 6587 systems preloaded with Microsoft WindowsNT 3.51 software may exhibit video corruption when exiting from the IBM Registration in the Welcome Center application.

The video corruption will last approximately 5 seconds when exiting from the IBM Registration screen.

The distortion occurs as a result of a minor conflict with the S3 video device driver and the IBM Registration bitmap. No other area of the system is affected by this problem.

Wait until the temporary distortion corrects itself and continue normal operation. The problem may be eliminated by installing the latest level S3 Trio64V+ video device drivers. Obtain version 1.13B4 or higher S3 Trio64V+ video device drivers for WindowsNT. The current version of the driver is titled:

Z04T01A.EXE - S3 Trio 64/64V+ WindowsNT driver 1.13B4

The update may be obtained from the IBM PC Company BBS system by calling 1 - 919-517-0001. Locate the "IBM PC 300/700 Files" section (section #21) for the driver.

The driver may also be downloaded via the Internet from the IBM Personal Computer File Library located at the following Internet URL:

<http://www.pc.ibm.com/files.html>

The search facility may be used to locate the file using the filename stated above.

WindowsNT is a trademark of the Microsoft Corporation.

SAS KEYWORDS:

PSVP	PSY2	PSVPPROG	PSY2PROG
6877	PC 700	PC730	PSVPERR
PSY2ERR	50473	D/T6887	D/T6877
6887			

VIDEO FAILURES W/OS/2 DIAMOND STEALTH ADAPTER

1.4.50 VIDEO FAILURES W/OS/2 & DIAMOND STEALTH ADAPTER

Record number: H124179

Device: D/T6384
 Model: M
 Tip key: 063
 Date created: 094/06/07
 Date last altered: A94/06/07

PS/ValuePoint 6384 P60/D systems with a Diamond Stealth 24 ISA adapter running OS/2 may fail with blank or distorted video during the following operation:

- Access an OS/2 or DOS Full Screen
- Control+ESC to the OS/2 Desktop
- Re-access the OS/2 or DOS Full Screen

When the OS/2 or DOS Full Screen is accessed again, the display may either be blank or distorted.

A conflict exists between the PS/ValuePoint P60/D parallel port address and the Diamond Stealth 24 ISA adapter. The conflict may be eliminated using the following steps:

- Access the Configuration Utility by pressing F1 during the memory count.
- Set the parallel port base address to 278 or 378.

SAS KEYWORDS:

VALUE POINT	PS/VP	PSVP	P60D
PSVPOEM	PSY2OEM	PSVPADPT	PSY2ADPT
193	PSY2	189	199

1.4.51 VIDEO FEATURE CONNECTOR DISABLED ON 6272 & 6282

Record number: H123252

Device: D/T6272
Model: M
Tip key: 002
Date created: 097/04/15
Date last altered: A97/05/09

The 26 pin video feature connector on the IBM PC 300GL Series 6272 and 6282 system board defaults to a disabled state. Video adapters that use this connector typically contain the necessary drivers to enable the connector.

For video adapters that contain a device driver that is not capable of enabling the video feature connector, obtain and install FCON.ZIP.

FCON.ZIP is available from the IBM PC Company BBS at 919 - 517 - 0001 and from the IBM PC Company File Library via the Internet at the following URL:
<http://www.pc.ibm.com/files.html>

SAS KEYWORDS:

PSVP	PSY2	PSVPBRD	PSY2BRD
IBMPC	61475	PSVPADPT	PSY2ADPT
UNCLASSIFIED	PC 330	PC 340	PSVPDISP
PSY2DISP	PC300GL		

VIDEO RASTER OR COLOR BARS DISPLAYED ON SYSTEM POWER UP

1.4.52 VIDEO RASTER OR COLOR BARS DISPLAYED ON SYSTEM POWER UP

Record number: H02909

Device: D/T8530
Model: M
Tip key: 005
Date created: 087/04/03
Date last altered: A87/04/23

EARLY LEVEL 8530'S MAY EXHIBIT RASTER OR COLOR BARS ON THE DISPLAY DURING POST. BIOS PRIOR TO 12/12/86 DID NOT TAKE CONTROL OF THE CGA+ VIDEO CHIP UNTIL AFTER POST. THIS DOES NOT AFFECT MACHINE OPERATION.

SAS KEYWORDS:

PSY2

PSY2BRD

8530SYSBRD

PSY2DISP

1.4.53 WAVY IMAGES AND JITTER ON PC AND PS2 DISPLAYS

Record number: H005185

Device: D/T5151
 Model: M
 Tip key: 007
 Date created: 086/07/18
 Date last altered: A92/01/21

SINCE COMPUTER DISPLAY IMAGES ARE CREATED BY CONTROLLING AN ELECTRON BEAM WITH A MAGNETIC FIELD, THEY ARE SUBJECT TO INTERFERENCE FROM OTHER SOURCES OF MAGNETIC ENERGY.

PC, PS2, AND OEM DISPLAYS MAY EXHIBIT WAVY IMAGES IN CLOSE PROXIMITY TO SMALL APPLIANCES SUCH AS FANS, CLOCKS, FLORESCENT LIGHTS, AND OTHER DISPLAYS. MOVING THE APPLIANCE A SHORT DISTANCE FROM THE DISPLAY SHOULD FIX THE PROBLEM.

INCIDENTS OF INTERFERENCE HAVE BEEN CAUSED BY LARGE POWER TRANSFORMERS, AND OTHER SOURCES OF LOW FREQUENCY FLUCTUATING MAGNETIC FIELDS. MOVING THE DISPLAY TO ANOTHER LOCATION MAY BE NECESSARY TO CORRECT THESE EXTREME CASES.

WAVY IMAGES AND JITTER HAVE ALSO BEEN CAUSED BY FAULTY POWER LINE SURGE SUPPRESSORS. TO TEST FOR THIS CONDITION, BY-PASS THE SURGE SUPPRESSOR BY PLUGGING THE DISPLAY DIRECTLY INTO THE POWER RECEPTACLE.

SAS KEYWORDS:

PCOM	5151DISP	5153DISP	5154DISP
5175DISP	4863DISP	PCOMDISP	8503DISP
8512DISP	8513DISP	8514DISP	PSY2
PSY2DISP	8503	8512	8513
8514	5379	5279	5153
5154	5175	8515	8515DISP
8516	8516DISP	8518	8518DISP

1.4.54 WAVY IMAGES AND JITTER ON PC AND PS2 DISPLAYS

Record number: H122383

Device: D/T95XX
 Model: M
 Tip key: 015
 Date created: 094/01/20
 Date last altered: A94/01/20

SINCE COMPUTER DISPLAY IMAGES ARE CREATED BY CONTROLLING AN ELECTRON BEAM WITH A MAGNETIC FIELD, THEY ARE SUBJECT TO INTERFERENCE FROM OTHER SOURCES OF MAGNETIC ENERGY.

PC, PS2, AND OEM DISPLAYS MAY EXHIBIT WAVY IMAGES IN CLOSE PROXIMITY TO SMALL APPLIANCES SUCH AS FANS, CLOCKS, FLORESCENT LIGHTS, AND OTHER DISPLAYS. MOVING THE APPLIANCE A SHORT DISTANCE FROM THE DISPLAY SHOULD FIX THE PROBLEM.

INCIDENTS OF INTERFERENCE HAVE BEEN CAUSED BY LARGE POWER TRANSFORMERS, AND OTHER SOURCES OF LOW FREQUENCY FLUCTUATING MAGNETIC FIELDS. MOVING THE DISPLAY TO ANOTHER LOCATION MAY BE NECESSARY TO CORRECT THESE EXTREME CASES.

WAVY IMAGES AND JITTER HAVE ALSO BEEN CAUSED BY FAULTY POWER LINE SURGE SUPPRESSORS. TO TEST FOR THIS CONDITION, BY-PASS THE SURGE SUPPRESSOR BY PLUGGING THE DISPLAY DIRECTLY INTO THE POWER RECEPTACLE.

SAS KEYWORDS:

PCOM	5151DISP	5153DISP	5154DISP
5175DISP	4863DISP	PCOMDISP	8503DISP
8512DISP	8513DISP	8514DISP	PSY2
PSY2DISP	8503	8512	8513
8514	5379	5279	5153
5154	5175	8515	8515DISP
8516	8516DISP	8518	8518DISP
FLICKER			

WHEN REPLACING a TI 850 PRINTER ROM MUST BE SWAPPED

1.4.55 WHEN REPLACING a TI 850 PRINTER ROM MUST BE SWAPPED

Record number: H015038

Device: D/T1515
 Model: MT18
 Tip key: 041
 Date created: 089/06/16
 Date last altered: A92/07/15

WHEN REPLACING A TEXAS INSTRUMENTS MODEL 850 PRINTER IN A "SYSTEM ONE" AIRLINE TICKET AGENCY A SPECIAL ROM MUST BE REMOVED FROM THE OLD PRINTER AND BE REINSTALLED IN THE NEW PRINTER. CHECK WITH THE AGENCY TO SEE IF THEY WERE USING 3.5 INCH PAGING ON THE OLD PRINTER. IF THEY WERE USING 3.5 INCH PAGING REMOVE THE ROM LOCATED ON THE PRINTER ELECTRONICS BOARD UNDER THE PRINT HEAD AND INSTALL IT IN THE NEW PRINTER. PLACE THE ROM FROM THE NEW PRINTER IN THE DEFECTIVE PRINTER TO BE SHIPPED BACK. CHECK THE NEW PRINTER FOR 3.5 INCH PAGE ADVANCE.

TI 850 MODELS AFFECTED ARE: T18 AND T01 (IBM M/T1515)
 VERIFY THE BAUD RATE IS 4800 IN THE SWITCH SETTINGS AS FOLLOWS:
 SWITCH 2 - 5 - 7 - 8 ON FOR 4800 BAUD. SWITCH 2-7-8 ON FOR 1200 BAUD.

SAS KEYWORDS:

1515SYS	1515	1515PRT	PSY2
PSY2PRT	PSY2DIAG	PSY2MISC	PSY2NLGO
PSY2PART	8530NLGO	8550SYS	8530SYS
8550SYSNLGO	POEM	PSY2OEM	OEMPRT
OEMPRINTER	OEM PRINTER	PRINTER	

WINDOWS 32-BIT DISK ACCESS ON PS / VALUEPOINT

1.4.56 WINDOWS 32-BIT DISK ACCESS ON PS / VALUEPOINT

Record number: H03583

Device: D/T6384
 Model: M
 Tip key: 039
 Date created: 093/10/15
 Date last altered: A94/05/12

ALL PS/VALUEPOINT 6382/S, 6384/D, 6387/T AND 6381/Si SYSTEMS WITH PRELOADED WINDOWS 3.1 SOFTWARE ARE NOT CONFIGURED TO USE THE WINDOWS 32-BIT DISK ACCESS FEATURE.

TO ALLOW THESE SYSTEMS TO UTILIZE THE WINDOWS 32-BIT DISK ACCESS FEATURE, MODIFY THE "SYSTEM.INI" FILE LOCATED IN THE \WINDOWS SUBDIRECTORY AS FOLLOWS:

LOCATE THE "386ENH" SECTION OF THE SYSTEM.INI FILE USING A TEXT EDITOR. ADD THE FOLLOWING STATEMENTS TO THE "386ENH" SECTION OF THE SYSTEM.INI FILE: 32BITDISKACCESS=ON
 DEVICE=*INT13
 DEVICE=*WDCTRL

THE 6382/S, 6384/D AND 6387/T SYSTEMS MUST BE AT FLASH EEPROM LEVEL L6ET51AUS (51A) OR HIGHER TO UTILIZE THE 32 - BIT DISK ACCESS FEATURE.

SAS KEYWORDS:

PSVP	PSY2	PSVPPROG	PSY2PROG
PSVPFDSK	PSY2FDSK	PSVPOPER	PSY2OPER
6387	6381	6382	PS/VP
VALUE POINT	D/T6381	D/T6387	D/T6382
32 BIT			

1.4.57 WINDOWS 32BIT ACCESS DRIVER FOR DASD ABOVE 527MB

Record number: H124173

Device: D/T6384
 Model: M
 Tip key: 062
 Date created: 094/06/06
 Date last altered: A97/07/13

A new version of the Windows 3.1/3.11 32Bit Disk Access device driver has been released for PS/ValuePoint systems with IDE hardfiles larger than 527MB. The prior version of this driver would only support IDE hardfiles up to 527MB.

This driver is only used with Windows 3.1/3.11 if the 32 Bit Disk Access is enabled. Following is a method of determining if this new driver is required:

BOTH of the following conditions must be met:

#1 An IDE Hardfile 528MB or larger

The simplest way to check the hardfile capacity is power-on the system and PRESS F1 during the memory count to access the Configuration Utility. The IDE DASD size(s) are on Page 1 of the Utility.

#2 Microsoft Windows 3.1/3.11 32-Bit Disk Access mode is enabled

To determine if 32-Bit Disk Access mode is enabled, perform the following steps:

- Select the "Control Panel" ICON from the "Main group"
- Select the "386 Enhanced" ICON from the "Control Panel"
- Select the "Virtual Memory..." button from the "386 Enhanced" dialog box.
- See if the "Use 32-Bit Disk Access" button is X'ed (enabled). If 32-Bit Disk Access is not enabled, the device driver is not required for large disk support.

The 32 - Bit Disk Access device driver may be obtained using either of the following methods:

The driver may be downloaded from the IBM PC Co. Bulletin Board System by calling (919) 517-0001.

The driver is titled: VPWINBHF.DSK

The updated 32-Bit Disk Access device driver is not available from Microsoft at this time.

```
***** IMPORTANT *****
*
* THIS DEVICE DRIVER IS CUSTOMER INSTALLABLE. CUSTOMERS
* SHOULD BE ADVISED TO READ THE "README" FILE LOCATED ON
* DEVICE DRIVER DISKETTE FOR INSTALLATION INFORMATION.
* CONTACT THE PERSONAL SYSTEMS HELPCENTER AT 1-800-772-2227
* IF ASSISTANCE IS REQUIRED IN OBTAINING THE DEVICE DRIVER.
*****
```

SAS KEYWORDS:

VALUE POINT	PS/VP	PSVP	D/T6382
6382	6387	PSVPMCD	PSY2MCD
D/T6381	6381	D/T6387	P60D
PSY2	P60/D		

1.4.58 WINDSURFER MCA MWAVE ADAPTER FOR MICROCHANNEL SYSTEMS

Record number: H011966

Device: D/T8550
 Model: MCP1
 Tip key: 193
 Date created: 093/11/02
 Date last altered: A94/09/08

THE IBM M-WAVE WINDSURFER ADAPTER, FC 7058 WAS ANNOUNCED 10/19/93. THIS FEATURE INSTALLS IN MICROCHANNEL MACHINES AND DELIVERS DATA/FAX MODEM, AUDIO, VOICE MESSAGING, AND TELEPHONE ANSWERING CAPABILITIES ON ONE ADAPTER CARD.

FRU PART NUMBER P/N82G7035

HMM SUPPLEMENT FORM NUMBER G571-0290 P/N82G7042

USER'S/INSTALLATION GUIDE G571-0289 P/N82G7014

NOTE: PUBLICATION PART NUMBERS ARE NOT ORDERABLE AS FRUs

THE DIAGNOSTIC DISKETTE IS A COMPREHENSIVE DISKETTE. ALL SERVICE INFORMATION IS CONTAINED IN THE DISKETTE. THE DISKETTE IMAGE IS AVAILABLE ON THE STATES TOOLS DISK. THE IMAGE IS NAMED SURFB1_0 DSKFBIN.

SAS KEYWORDS:

D/T8580	D/T8570	D/T8590	MWAVE
M-WAVE	P/N92G7035	FC7058	PSY2SYSMISC
PSY2SYSADAPT	PSY2	PSY2DIAG	PSY2DOC
PSY2ADPT	PSY2MISC	WINDSURFER	

PSY2 RETAIN TIPS

WITH 2 80386 ENHANCED MEM. ADPT CARDS INSTALLED, DIAGS FAIL

1.4.59 WITH 2 80386 ENHANCED MEM. ADPT CARDS INSTALLED, DIAGS FAIL

Record number: H016335

Device: D/T8580
Model: M
Tip key: 017
Date created: 091/07/17
Date last altered: A94/03/14

WHEN TWO ENHANCED 80386 MEMORY ADAPTERS ARE INSTALLED IN ONE MACHINE, AN INVALID 202 MEMORY ERROR WILL OCCUR ON THE SECOND PASS WHEN RUNNING DIAGNOSTICS IN LOOP MODE. IF DIAGNOSTICS PASS AFTER REMOVING EACH ADAPTER, ONE AT A TIME, THERE IS NO MEMORY FAILURE. THIS IS A PROBLEM WITH THE DIAGNOSTIC PROGRAM. A FUTURE RELEASE OF ENHANCED 80386 MEMORY ADAPTER DIAGNOSTICS WILL ADDRESS THIS SITUATION.

SAS KEYWORDS:

PSY2	PSY2ERR	PSY2MEM	D/T8580
D/T8570	D/T8573		

1.4.60 WOL DIAGRAM IS INCORRECT IN INSTALLING OPTIONS GUIDE

Record number: H161800

Device: D/T6562
Model: M
Tip key: 006
Date created: 097/11/12
Date last altered: A97/11/12

In some earlier versions of the "Installing Options in Your PC300PL Personal Computer" user's guide, the Riser Card illustration in chapter 4, page 27, may show a 1x4 WOL connection. This section is titled "Adapters and the Riser Card."

The incorrect diagram shows the older 1x4 Wake-On-LAN header. This header is no longer populated and has been replaced with a 1x3 header located approximately 1/2" above the older 1x4 header location.

Users questioning this diagram should be instructed that the correct header is now 1x3 and is located in the same general area on the Riser Card.

In addition, early Riser Cards may cause some confusion because the silkscreen "LAN WU" was originally located directly above the 1x4 header which has been removed. The silkscreen is now located directly below the 1x3 header.

SAS KEYWORDS:

PSY2	PSY2DOC	PSVP	PSVPDOC
D/T6562	D/T6592	6562	6592
80545	UNCLASSIFIED		

WRONG FRU # ON MODEL 76/77 66 MHZ SYSTEM BOARD

1.4.61 WRONG FRU # ON MODEL 76/77 66 MHZ SYSTEM BOARD

Record number: H002748

Device: D/T9576
 Model: M
 Tip key: 004
 Date created: 094/03/18
 Date last altered: A94/03/18

A limited number of 9576 and 9577 66 MHz system boards were manufactured with a 33 MHz FRU part number on the board, instead of the correct 66 MHz FRU part number.

All 66 MHz system boards can be identified by a processor in position U49. 33 MHz boards will have a processor only in position U48. Current production boards have the correct FRU number.

FRU Part numbers:

33 Mhz Ultimedia Systems	P/N39G5698
33 Mhz Non-Ultimedia Systems	P/N39G2668
66 Mhz Ultimedia Systems	P/N39G6086
66 Mhz Non-Ultimedia Systems	P/N39G2669

SAS KEYWORDS:

PSY2	D/T9577	9576	9577
39G5698	39G2668	39G2669	39G6086
INCORRECT			

WRONG FRU NUMBER ON 8530 SYSTEM BOARDS

1.4.62 WRONG FRU NUMBER ON 8530 SYSTEM BOARDS

Record number: H012651

Device: D/T8530
 Model: M
 Tip key: 031
 Date created: 089/10/24
 Date last altered: A92/01/08

A LIMITED NUMBER OF 8530 SYSTEMS WERE SHIPPED WITH AN INCORRECT FRU NUMBER ON THE SYSTEM BOARD. THE MISLABELED SYSTEM BOARDS WILL BE FOUND ONLY IN AN 8530 MODEL 001, OR IN AN 8530 MODEL 021 ABOVE SERIAL NUMBER 2500000.

THE SYSTEM BOARDS WERE MISTAKENLY LABELED WITH "FRU # 61X8907." FRU P/N61X8907 IS AN 8530 SYSTEM BOARD, BUT SHOULD NOT BE INSTALLED IN ANY 8530 MODEL 001, OR 021 ABOVE SERIAL NUMBER 2499999.

WHEN ORDERING A SYSTEM BOARD FOR AN 8530 MODEL 001 OR 021, USE CURRENT SERVICE PUBLICATIONS ALONG WITH THE MACHINE MODEL AND SERIAL NUMBER TO RECEIVE THE CORRECT SYSTEM BOARD.

THE FOLLOWING FRU NUMBERS SHOULD BE ORDERED TO RECEIVE THE APPROPRIATE 8530 SYSTEM BOARD:

8530 MODEL 001 (ALL).....FRU P/N33F8474
 8530 MODEL 021 (BELOW SER# 2500000).....FRU P/N61X8907
 8530 MODEL 021 (SER# 2500000 AND ABOVE)...FRU P/N33F8474

SAS KEYWORDS:

PSY2	PSY2SYSBRD	8530SYSBRD	PSY2PART
8530SYSPART	D/T8530		

1.4.63 WRONG FRU P/N ON 4X IDE CDROM DRIVE IN PC300

Record number: H132040

Device: D/T6576
 Model: M
 Tip key: 001
 Date created: 095/12/18
 Date last altered: A95/12/18

4X IDE CDROM drives in PC 300 Series 6576 or 6586 may contain a label on the drive with manufacturing part number 42H2644 and FRU part number 06H7654.

P/N06H7654 is a Mitsumi 4X IDE CDROM drive. This drive has been replaced by a Panasonic drive under FRU P/N07H0636.

The label on the Panasonic CDROM drive may still contain a label that shows FRU P/N06H7654. ONLY THE PANASONIC (FRU P/N07H0636) SHOULD BE ORDERED FOR THE PC300 SERIES 6576/6586 SYSTEMS.

Maintenance documentation for the 6576/6586 will be updated to contain the correct information. The parts ordering system does substitute P/N07H0636 for P/N06H7654 for the 6576/6586.

SAS KEYWORDS:

PSY2	PSVP	PSY2PART	PSVPPART
IBMPC	PC300	PC 330	PC350
6586	6576	D/T6576	D/T65XX
PSVPCDROM	PSY2CDROM		

1.4.64 XGA-2 OPTION INSTALLATION

Record number: H12258

Device: D/T8550
 Model: M
 Tip key: 174
 Date created: 093/05/26
 Date last altered: A95/06/06

THE XGA-2 OPTION DISKETTE, VERSION 2.0 AND HIGHER, IS A BOOTABLE DISKETTE. WHEN INSTALLING THE XGA-2 OPTION, BOOT FROM THE OPTION DISKETTE WHICH IS LABELED "IBM PS/2 XGA-2 DISPLAY ADAPTER/A STARTUP OPTION DISKETTE."

A MESSAGE APPEARS INSTRUCTING YOU TO PLACE THE SOURCE MEDIUM IN DRIVE "A". IN THIS CASE IT IS REFERRING TO THE XGA-2 OPTION DISKETTE WHICH IS ALREADY IN THE SYSTEM. PRESS ENTER TO CONTINUE. THE NEXT SCREEN "INSTALLATION OPTIONS" ALLOWS YOU TO UPDATE THE REFERENCE DISKETTE OR SYSTEM PARTITION. SELECT THE CORRECT ACTION FOR THE SYSTEM YOU ARE WORKING WITH TO INSURE A PROPER UPDATE.

NOTE:

IF COPYING THE SOURCE DISKETTE TO THE REFERENCE DISKETTE, THE SOURCE DISKETTE (STARTUP OPTION DISKETTE) IS USUALLY PLACED IN DRIVE "A" AND THE REFERENCE DISKETTE IS PLACED IN DRIVE "B".

IF THE SYSTEM HAS ONLY ONE DISKETTE DRIVE, THE SOURCE AND THE TARGET WILL BE DRIVE "A". IN THIS CASE IT MAY TAKE FROM 50 TO 60 INSERTIONS BEFORE ALL THE FILES ARE COPIED TO THE REFERENCE DISKETTE. ALSO, WHEN RUNNING AUTOMATIC CONFIGURATION WITH THE UPDATED REFERENCE DISKETTE, IT MAY TAKE 3 - 5 MINUTES TO COMPLETE.

THIS ABNORMALLY HIGH NUMBER OF DISKETTE INSERTIONS WILL BE CORRECTED ON THE NEXT VERSION (V2.2 OR HIGHER) OF THE "IBM PS/2 XGA-2 DISPLAY ADAPTER/A STARTUP OPTION DISKETTE."

SAS KEYWORDS:

PSY2	PSY2DIAG	PS/2	XGA-II
D/T8555	D/T8560	D/T8565	D/T8570
D/T8573	D/T8580	D/T9585	D/T8590
D/T8595	D/T9556	D/T9557	D/T9576
D/T9577	D/T9595	D/T8556	D/T8557
D/T95XX	XGA2	PSY2ADPT	D/T85XX
P/N87F4774	P/N87F4773	PS2	XGA
FRU	II		

1.4.65 014617X0 ERROR WITH MMC (S/370 CHANNEL ADAPTER) ON 8590/95

Record number: H097459

Device: D/T8550
 Model: M
 Tip key: 117
 Date created: 092/04/27
 Date last altered: A92/07/16

THE FOLLOWING ERROR MAY BE SEEN ON PS/2 8590 AND 8595
 DISPLAYS WHEN TESTING THE MICROCHANNEL TO MAINFRAME
 CONNECTION ADAPTER (MMC) FORMERLY CALLED THE S/370
 CHANNEL ADAPTER (PCA)
 ADAPTER DIAGNOSTICS FROM THE SYSTEM PARTITION OR
 REFERENCE DISKETTE:

ERROR CODE 014617X0 "SHARED RAM NOT INITIALIZED"

THIS IS A FALSE DIAGNOSTIC ERROR AND NOT AN MMC ADAPTER FAILURE.

THIS PROBLEM HAS BEEN RESOLVED IN THE LATEST EDITION OF THE MMC
 DIAGNOSTIC. IF THE OPTION DISKETTE IS VERSION 1.0 OR HIGHER AND
 HAS P/N 95F1433 ON THE LABEL, YOU WILL NOT HAVE THIS PROBLEM.

SAS KEYWORDS:

PSY2	PSY2ADPT	PSY2ERR	D/T8595
8590SYSERR	8590SYSADPT	8595SYSERR	8595SYSERR
D/T8570	D/T8580	8570SYSERR	8580SYSERR
8580SYSADPT	8570SYSADPT	PCA	

1.4.66 1 GB FAST/WIDE SCSI-2 DISK SUPPORTED IN 9595A

Record number: H125259

Device: D/T9595
Model: M
Tip key: 017
Date created: 094/10/12
Date last altered: A94/12/02

The information on page 191 of the PS2 Hardware Maintenance Manual, S52G-9971-01, dated Sept. 1993, does not include:

1GB Fast/Wide SCSI-2 fixed disk, FRU P/N71G5040.
Hot Plug Rack Rail for 1GB F/W fixed disk, FRU P/N71G0212.

The affected machine is the 9595A (Server 95) RAID Array system.

This will be corrected in a future update of the HMS.

SAS KEYWORDS:

PSY2	RAID	D/T9595A	PSY2FDSK
PSY2FDSK	PSY2DOC	FAST	SCSI
WIDE			

1.4.67 1 LONG, 3 SHORT BEEPS WITH INFOTRON DISPLAY ATTACHED

Record number: H134394

Device: D/T6885
 Model: M
 Tip key: 010
 Date created: 096/10/10
 Date last altered: A96/10/10

Any IBM PC 300/700 Series or PS/ValuePoint system may exhibit a 1 long, 3 short POST beep code with an InfoTron SVGA 14" Monochrome display attached.

The system and display combination may function normally after POST completes.

The InfoTron display is incompatible with the VESA specification incorporated in the IBM PC 300/700 Series and PS/ValuePoint system design.

Customers experiencing failures with the InfoTron 14" SVGA Monochrome display should be directed back to their point of purchase.

SAS KEYWORDS:

PSVP	PSY2	IBMPC	PSY2DISP
PSVPDISP	PSY2ERR	PSVPERR	PSY2OEM
PSVPOEM	D/T6382	D/T6384	D/T6387
D/T6472	D/T6482	D/T6484	D/T6492
D/T6494	D/T6571	D/T6573	D/T6581
D/T6583	D/T6575	D/T6585	D/T6576
D/T6586	D/T6875	D/T6885	D/T6876
D/T6886	D/T6877	D/T6887	PC 360
D/T6598	D/T6560	D/T6577	D/T6587
PC750	PC730	PC300	PC330
PC350	D/T6260	PC 340	PC 365
D/T6381	D/T6589		

1.4.68 1 MB VRAM APERTURE BASE ADDRESS DISABLED

Record number: H107321

Device: D/T95XX
 Model: M
 Tip key: 003
 Date created: 093/01/13
 Date last altered: A95/07/06

AFTER INSTALLING MORE THAN 8MB OF MEMORY IN A MODEL 95XX, 85XX, YOU MAY OBSERVE THAT THE 1 MB VRAM APERTURE, LISTED UNDER THE XGA-2 DISPLAY ADAPTER, HAS BEEN DISABLED.

THIS IS NORMAL AND IS NOT A DEFECT. NO PARTS SHOULD BE REPLACED.

FURTHER INFORMATION ABOUT THE APERTURE MAY BE OBTAINED BY USING ON-LINE HELP FROM THE CHANGE CONFIGURATION MENU (F1 KEY).

PS/2 SYSTEM VIDEO MEMORY APERTURES ARE DISCUSSED IN DETAIL IN THE PERSONAL SYSTEM/2 HARDWARE INTERFACE TECHNICAL REFERENCE - VIDEO SUBSYSTEMS MANUAL. THIS MANUAL, S42G-2193, MAY BE ORDERED ON-LINE THROUGH PUB ORDER.

IF 16 MB OF MEMORY IS INSTALLED, THE SYSTEM WILL COUNT LESS THAN THE 16 MB. THIS OCCURS AFTER DISABLING THE VIDEO APERTURE.

SAS KEYWORDS:

PSY2	XGA	PS2	ENABLE
D/T9577	D/T9576	XGA/2	D/T9595
D/T9585	APERATURE	1MB	9577
9576	9595	9557	D/T9557
D/T8557	D/T8556	8557	8556
D/T8595	8595	8580	D/T8580

1.4.69 1.12GB AND 2.25GB HARD DRIVE SUBSTITUTIONS

Record number: H162764

Device: D/T8640
 Model: M
 Tip key: 022
 Date created: 098/02/11
 Date last altered: A98/02/18

When ordering a FRU part to replace certain Hard Drives, a drive with different capacity and or model may be substituted dependent upon availability.

Orders for 1.12GB Hard Drive FRU p/n76H0957 will yield EITHER the FRU p/n76H0957 OR a 2.25GB Hard Drive FRU p/n42H1821.

Orders for 2.25GB Hard Drive FRU p/n76H0958 will yield EITHER the FRU p/n76H0958 OR a 2.25GB Hard Drive FRU p/n42H1821.

Example: A order for FRU p/n76H0957 will result in the shipment of a package labeled FRU p/n76H0957 that may contain Hard Drive FRU p/n42H1821.

The substitute 2.25GB Hard Drive FRU p/n42H1821 has the following p/n's listed on a attached label:

< IBM P/N: 07H0831 FRU: 42H1821 >

Note: The IBM P/N: 07H0831 is NOT a Option p/n, it is a Manufacturing p/n.

ALL Option p/n's that use the 1.12GB Hard Drive FRU p/n76H0957 as well as those that use the 2.25GB Hard Drive FRU p/n76H0958 may be affected dependent upon availability.

RAID arrays incorporating drive FRU p/n's 76H0957 and 76H0958 will successfully rebuild the substitute 2.25GB Hard Drive FRU p/n42H1821.

SAS KEYWORDS:

PSY2	D/TDASD	SERVICER ONLY	76H0957
76H0958	42H1821	07H0831	SUBSTITUTE

1.4.70 1.44MB DISKETTE DRIVE AND OEM SOFTWARE INCOMPATIBILITY

Record number: H023110

Device: D/T8550
 Model: M
 Tip key: 034
 Date created: 088/11/11
 Date last altered: A90/07/19

SOME PERSONAL SYSTEM/2 1.44MB DISKETTE DRIVES AND CERTAIN OEM SOFTWARE MAY BE INCOMPATIBLE. THE SYMPTOMS ARE AS FOLLOWS:

THE SOFTWARE PROGRAM PROMPTS THE USER TO REMOVE OR INSERT A DISKETTE, THE DISKETTE DRIVE SELECT LIGHT REMAINS ON, AND THE PROGRAM DOES NOT RECOGNIZE WHEN THE USER HAS REMOVED OR INSERTED A DISKETTE.

IF THESE CONDITIONS EXIST, THE CUSTOMER SHOULD BE DIRECTED TO THEIR SOFTWARE POINT OF SALE OR TO THE APPLICABLE OEM SOFTWARE DEVELOPER TO OBTAIN A SOFTWARE PATCH OR DRIVER.

OEM SOFTWARE PROGRAMS KNOWN TO BE AFFECTED ARE "FASTBACK", BY FIFTH GENERATION SOFTWARE; "BACKIT", BY GAZELLE SYSTEMS; AND "PCTOOLS" HARDFILE BACKUP PROGRAM, BY CENTRAL POINT SOFTWARE.

SAS KEYWORDS:

8550SYSDSKT	PSY2	PSY2DIAG	PSY2PROG
8560SYSDSKT	8580SYSDSKT	PSY2DSKT	8550SYSDIAG
8570SYSDSKT	8560SYSDIAG	8550SYSPROG	8570SYSDIAG
8570SYSPROG	8580SYSDIAG	8580SYSPROG	8525SYSDIAG
8525SYSDSKT	8530SYSDSKT	8530SYSDIAG	8555SYSDIAG
8555SYSDSKT	8565SYSDIAG	8565SYSDSKT	8573SYSDSKT
8573SYSDIAG			

1.4.71 104MB TO 400MB DISK IN 3550 DOCKING STATION

Record number: H027551

Device: D/T3550
Model: M
Tip key: 001
Date created: 093/08/06
Date last altered: A96/11/12

When installing a SCSI Fixed Disk option in a 3550 Docking Station/Expansion Unit Model 001 or 002, use the drive Slide assembly, P/N64F4863, OR P/N85F0035 included with the option kit.

DO NOT use the drive tray assembly, as there is insufficient clearance between the drive logic card and the base frame assembly. The drive tray and drive slide are both included with the drive options:

- 104MB Fixed Disk, Option# 6451241, FC# 1241, FRU p/n95F4748
- 212MB Fixed Disk, Option# 6451242, FC# 1242, FRU p/n95F4749
- 320Mb Fixed Disk, Option# 6451235, FC# 1108, FRU p/n85F0011
- 400Mb Fixed Disk, Option# 6451235, FC# 1081, FRU p/n85F0012
- Fixed disk slide assembly: FRU p/n64F4863 for 104 & 212
- Fixed disk slide assembly: FRU p/n85F0035 for 320 & 400

SAS KEYWORDS:

PSY2	PSY2SYS	PSY2DSKT	PSY2ERR
PSY2FDSK	85F0011	85F0012	THINKPAD
UNCLASSIFIED			

1.4.72 104XX ERRORS IN a PS/2 55SX (MODEL 061 ONLY)

Record number: H035587

Device: D/T8555
Model: M
Tip key: 006
Date created: 089/07/26
Date last altered: A89/10/12

IF A 104XX ERROR OCCURS IN AN 8555 MODEL 061, INSPECT THE POWER SUPPLY BARCODE LABEL FOR A NUMBER BEGINNING WITH K1DLXXXXXX (X = ANY NUMBER). IF THE POWER SUPPLY BAR CODE MATCHES THE SPECIFIED NUMBER, REPLACE THE POWER SUPPLY (THIS POWER SUPPLY CAN ALSO BE IDENTIFIED BY A PLASTIC POWER SUPPLY FAN GRILLE). IF THE POWER SUPPLY DOES NOT MATCH THE ABOVE DESCRIPTION, FOLLOW THE NORMAL PROBLEM DETERMINATION PROCEDURE.

IMPORTANT: THIS POWER SUPPLY SHOULD BE REPLACED IN 8555 MODEL 061'S ONLY.

SAS KEYWORDS:

PSY2	PSY2PWR	8555SYSPWR	8555SYSFDSK
PSY2FDSK	PSY2ERR	8555SYSERR	

1.4.73 10473 ERROR ON 8580 4680 SYSTEM W/ 115 MEG HD

Record number: H091074

Device: D/T4683
Model: M
Tip key: 100
Date created: 091/08/16
Date last altered: A91/10/02

ALL 8580 WITH 115M HARD DRIVE INSTALLED AS A STORE SYSTEM
CONTROLLER SHOULD ORDER A NEW MODULE FOR THE ESDI ADAPTER
CARD. ORDER MODULE P/N92F0062 AND REPLACE ON SC 33 ECA 052
OTHER OFFICE WORKED 990. THIS ECA IS "AS REQUIRED".

FOR SPECIFIC DETAILS SEE 8550 TIP ECA052.
W754 IS THE HD ERROR THAT LOGS JUST BEFORE THE 10473 ERROR
SHOWS ON THE 8580.

SAS KEYWORDS:

4680SAS	4683SAS	4683SU.	4683PA.
8580SAS	8580	PSY2	

1.4.74 1101 ERROR W/OEM HDWR ATTACHED TO PARALLEL PORT

Record number: H105018

Device: D/T8540
 Model: M
 Tip key: 008
 Date created: 092/07/22
 Date last altered: A92/09/28

OEM HARDWARE MAY CAUSE AN INTERMITTENT 1101* POST ERROR WHEN CONNECTED TO THE PARALLEL PORT OF A PS/2 8535 OR 8540 SYSTEM. THIS FAILURE SYMPTOM MAY BE CAUSED BY AN INCORRECT VOLTAGE OR CURRENT BEING APPLIED BY OEM HARDWARE TO THE PS/2 PARALLEL PORT. FURTHER, THE INCORRECT VOLTAGE OR CURRENT CAN CAUSE PERMANENT DAMAGE TO THE PS/2 SYSTEM BOARD.

PS/2 SYSTEMS THAT EXHIBIT AN 1101* ERROR SHOULD BE RETESTED WITH THE PARALLEL PORT DEVICE DISCONNECTED. IF THE 1101 ERROR IS REMOVED AND THE ADVANCED DIAGNOSTICS WRAP TEST PASSES, THE PROBLEM IS NOT WITH THE 8535 OR 8540. PROBLEM DETERMINATION SHOULD FOCUS ON THE OEM DEVICE. THE DEVICE SHOULD NOT BE RECONNECTED UNTIL THE PROBLEM IS RESOLVED.

ON SYSTEMS CONTINUING TO EXHIBIT AN 1101* ERROR (SOLID OR INTERMITTENT) OR THAT HAVE HAD MULTIPLE SYSTEM BOARD REPLACEMENTS FOR AN 1101* ERROR, PERFORM THE SYSTEM POWER OFF VOLTAGE CHECK (BELOW), TO DETERMINE IF AN ATTACHED OEM DEVICE COULD BE THE ROOT CAUSE OF THE PROBLEM.

*NOTE:

AN 1101 FAILURE SYMPTOM MAY CHANGE TO A BLANK SCREEN (NO CURSOR), AFTER MULTIPLE POWER ON CYCLES.

---POWER OFF VOLTAGE CHECK-----
 PS/2 VOLTAGE READINGS MUST BE TAKEN AT THE POWER SUPPLY DRIVE CONNECTOR WITH THE PS/2 POWER OFF, POWER CORD DISCONNECTED. THE OEM DEVICE MUST BE CONNECTED TO THE SYSTEM PARALLEL PORT AND POWERED ON. REFERENCE THE 8535 OR 8540 HMS FOR MORE INFORMATION.

8535 POWER OFF VOLTAGE CHECK: (+12VDC BUS CHECK ONLY)
 1. CONNECT METER FROM PIN 2 (-MINUS) TO PIN 4 (+PLUS).
 A VOLTAGE OF 0.6VDC OR HIGHER MAY CAUSE AN 1101* ERROR. IT MAY APPEAR INTERMITTENTLY. HOWEVER, OVER TIME, THIS CONDITION WILL CAUSE PERMANENT DAMAGE TO SYSTEM COMPONENTS. THE OEM DEVICE CONNECTED TO THE SYSTEM IS CAUSING THIS CONDITION AND SHOULD BE DISCONNECTED AND NOT RECONNECTED UNTIL THE PROBLEM IS FIXED. THIS COMPLETES THE 8535 POWER OFF VOLTAGE CHECK.

8540 POWER OFF VOLTAGE CHECK: (READ BOTH +5VDC AND +12VDC BUS)
 1. 5VDC BUS MEASUREMENT:
 -CONNECT METER FROM PIN 2 (-MINUS) TO PIN 1 (+PLUS).
 2. 12VDC BUS MEASUREMENT:
 -CONNECT METER FROM PIN 2 (-MINUS) TO PIN 4 (+PLUS).

IF THE VOLTAGES RECORDED ARE HIGHER THAN EITHER:

1. +2.7VDC ON THE +5VDC BUS

----- OR -----

2. +1.8VDC ON THE +12VDC BUS

THE SYSTEM MAY EXHIBIT AN 1101* ERROR. IT MAY APPEAR INTERMITTENTLY. HOWEVER, OVER TIME, THIS CONDITION WILL CAUSE PERMANENT DAMAGE TO SYSTEM COMPONENTS. THE OEM DEVICE CONNECTED TO THE SYSTEM IS CAUSING THIS CONDITION AND SHOULD BE DISCONNECTED AND NOT RECONNECTED UNTIL THE PROBLEM IS FIXED. THIS COMPLETES THE 8540 POWER OFF VOLTAGE CHECK.

 CUSTOMERS EXPERIENCING THE ABOVE SYMPTOMS SHOULD BE DIRECTED TO THE POINT OF SALE OR TO THE MANUFACTURER OF THE DEVICE FOR RESOLUTION.

***** ADDITIONAL INFORMATION *****

OEM HARDWARE THAT IS KNOWN TO HAVE CAUSED 1101 ERRORS AND/OR BLANK SCREEN FAILURE SYMPTOMS WHEN CONNECTED TO THE SYSTEM PARALLEL PORT ARE AS FOLLOWS:

1. WEIGH-TRONICS (PRINTERS AND SCALES)
 DUE TO ABSENCE OF A CURRENT LIMITING INTERFACE ON SOME MODELS OF WEIGH-TRONICS PRINTERS AND SCALES, THE 8535 OR 8540 SYSTEM MAY SUSTAIN PERMANENT DAMAGE WHEN THESE DEVICES ARE CONNECTED TO SYSTEM BOARD PORTS.

WEIGH-TRONICS DOES NOT CURRENTLY PLAN TO IMPLEMENT A CHANGE TO FIX THIS PROBLEM. HOWEVER, THEY WILL INSTALL CURRENT

PSY2 RETAIN TIPS

1101 ERROR W/OEM HDWR ATTACHED TO PARALLEL PORT

LIMITING RESISTORS IF THE PRINTER OR SCALE IS RETURNED TO WEIGH-TRONICS FOR MODIFICATION. CUSTOMERS THAT REQUIRE ASSISTANCE SHOULD BE ADVISED TO CALL THE WEIGH-TRONICS HELP DESK AT 1 - 800-358-9088.

2. CITIZEN (PRINTERS)

SOME CITIZEN PRINTERS MAY HAVE JUMPERS INCORRECTLY SET. THESE INCORRECTLY SET JUMPERS CAN CAUSE UP TO 0.95 AMPS TO BE APPLIED ON PIN 13 (SLCT LINE) OF THE PARALLEL PORT. UNDER THIS CONDITION THE SYSTEM BOARD MAY SUSTAIN PERMANENT DAMAGE. CUSTOMERS THAT REQUIRE ASSISTANCE SHOULD BE ADVISED TO CALL THE CITIZEN HELP DESK AT 1 - 800-421-6516 FOR ASSISTANCE.

SAS KEYWORDS:

PSY2	D/T8535	PSY2PRT	8535SYSPRT
8540SYSPRT	PSY2BRD	8535SYSBRD	8540SYSBRD
PSY2ERR	8535SYSERR	8540SYSERR	PSY2OEM
8535SYSOEM	8540SYSOEM		

1.4.75 113 ERRORS USING 3270 WORKSTATION EMULATION 3.0 OR HIGHER.

Record number: H013215

Device: D/T8550
Model: M
Tip key: 023
Date created: 088/04/19
Date last altered: A93/12/03

WHEN EXITING THE 3270 EMULATION PROGRAM VERSION 3.0 OR HIGHER, DEPRESSING THE "END TASK" KEY MAY RESULT IN AN ERROR CODE 113 BEING DISPLAYED. THE 113 ERROR CODE WOULD NORMALLY BE ASSOCIATED WITH A HARDWARE PROBLEM. HOWEVER, IN THIS CASE THE PROBLEM MAY BE WITH THE SOFTWARE. FOR INFORMATION REGARDING THE SOFTWARE FIX (SEE APAR IC00140), HAVE THE CUSTOMER CONTACT THE SOFTWARE SUPPORT CENTER IN TAMPA (1-800-992-4777).

SAS KEYWORDS:

PSY2	8550SYSERR	8560SYSERR	8580SYSERR
PSY2ERR	8550SYSPROG	8560SYSPROG	8580SYSPROG
PSY2PROG	8570SYSPROG	8570SYSERR	8555SYSERR
8555SYSPROG	8565SYSERR	8565SYSPROG	8573SYSERR
8573SYSPROG			

1.4.76 118 ERRORS DURING POST ON 8590 AND 8595 SYSTEMS

Record number: H083955

Device: D/T8595
 Model: M
 Tip key: 001
 Date created: 091/03/19
 Date last altered: A93/01/27

118 POST (POWER-ON SYSTEM TEST) ERRORS.

THE FOLLOWING INFORMATION IS PROVIDED TO EXPLAIN THE MEMORY ERROR LOGGING PROCESS OF THE PS/2 8590 AND 8595 SYSTEMS:

DURING NORMAL SYSTEM OPERATION, IF A MEMORY PARITY ERROR OCCURS, THE PS/2 8590 AND 8595 SYSTEM BIOS NMI (NON-MASKABLE INTERRUPT) HANDLER CAPTURES AND STORES THE LOCATION (A1, B1 ETC.) OF THE MEMORY SIM WHICH WAS BEING ADDRESSED WHEN THE FAILURE OCCURRED. THIS INFORMATION IS TRANSFERRED FROM THE HARDWARE REGISTERS AND LOGGED INTO NVRAM (NON-VOLATILE RANDOM ACCESS MEMORY). THE SYSTEM HALTS AND A RE-IPL IS REQUIRED.

UPON REBOOTING, THE PRESENCE OF A PARITY CHECK ENTRY IN NVRAM IS DETECTED BY POST, A 118 ERROR IS DISPLAYED AND THE REFERENCE PARTITION IS ACCESSED. FROM HERE, THREE THINGS CAN BE DONE:

- A. Regular Diagnostics can be run. Choose "Test the computer" from the main menu.
- B. Advanced Diagnostics can be run. Type Ctrl-A and choose "System checkout" from the menu.
- C. The operating system can be loaded. Choose "Start Operating System" from the main menu.

WHEN THE MEMORY DIAGNOSTIC IS RUN, IT MOVES THE ENTRY FROM THE NVRAM ERROR LOG TO A PRIVATE ERROR LOG (MAINTAINED BY THE DIAGNOSTIC), ALLOWING POST TO ONCE AGAIN RUN, WITHOUT THE 118 POST ERROR.

THE FOLLOWING MESSAGE IS THEN DISPLAYED: "THE MEMORY MODULE IN LOCATION XX HAS PREVIOUSLY BEEN FOUND DEFECTIVE. HAS IT BEEN REPLACED?" (THIS MESSAGE IS NOT DISPLAY ON A RED SCREEN DUE TO A DIAGNOSTIC LIMITATION.)

THIS POINTS TO THE MEMORY MODULE LOCATION WHICH WAS BEING ADDRESSED WHEN THE PARITY ERROR OCCURRED (THE LOCATION OF THE FAILING MEMORY SIM).

THIS QUESTION IS ASKED IN ORDER TO DETERMINE WHEN TO ERASE THE FAILING MODULE LOCATION DATA. IF A "YES" RESPONSE IS NOT ENTERED, THE QUESTION WILL BE DISPLAYED EVERY TIME THE MEMORY DIAGNOSTIC IS RUN, UNTIL A "YES" RESPONSE IS GIVEN.

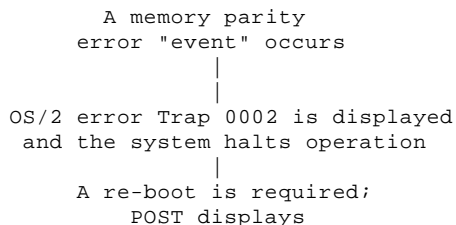
A RANDOM MEMORY PARITY ERROR (CAUSED BY A NOISE SPIKE, ETC., AS AN ISOLATED OCCURRANCE), DOES NOT NECESSARILY MEAN THAT A MEMORY SIM IS DEFECTIVE.

HIGHLY INTERMITTENT MEMORY ERRORS (A FAILURE ONCE A WEEK, ETC.) WILL PROBABLY LOG THE SAME FAILING SIM LOCATION CONSISTENTLY. A SECOND ERROR LOGGED AGAINST A SIM LOCATION WILL CAUSE THAT SIM TO BE DE-ALLOCATED (BY-PASSED) AND THE SYSTEM WILL REMAIN OPERATIONAL, IF THERE IS ENOUGH MEMORY REMAINING TO SUPPORT THE SOFTWARE INVOLVED. THE EXACT AMOUNT OF MEMORY DISABLED DEPENDS UPON SEVERAL FACTORS BEYOND THE SCOPE OF THIS TIP.

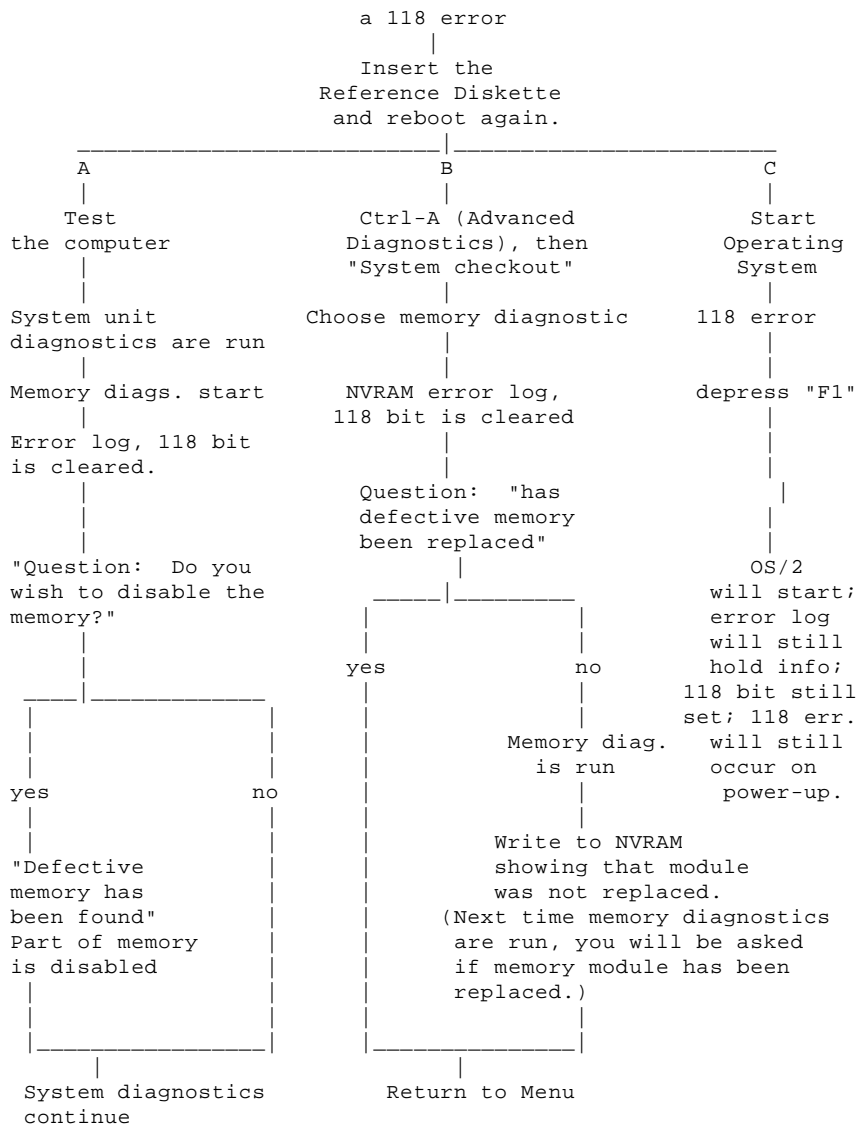
REPLACEMENT OF A SIM WHICH IS CONSISTENTLY IDENTIFIED AS FAILING IS RECOMMENDED.

THIS PROCESS ENABLES THE SERVICER TO KNOW WHICH MEMORY SIM IS SUSPECT, RATHER THAN REPLACING ALL OF THE MEMORY ON THE SYSTEM BOARD.

THE FOLLOWING CHART PROVIDES ADDITIONAL INFORMATION USEFUL IN CHOOSING THE CORRECT ACTION TO TAKE IN RESOLVING MEMORY PARITY AND 118 POST ERROR EVENTS.



118 ERRORS DURING POST ON 8590 AND 8595 SYSTEMS



SAS KEYWORDS:

PSY2	PSY2DIAG	PSY2MEM	PSY2ERR
8590SYSERR	8590SYSDIAG	8590SYSTEMEM	8595SYSDIAG
8595SYSTEMEM	8595SYSERR	D/T8590	PS2
PS/2	D/T9595	D/T9576	D/T9577

1.4.77 128KB UNUSEABLE MEMORY ON 8580

Record number: H011875

Device: D/T8580
Model: M
Tip key: 005
Date created: 087/12/17
Date last altered: A93/07/12

ON A PS/2 MODEL 8580 WITH 2 MB OF MEMORY INSTALLED,
THE INSTALLED RAM MEMORY IS EQUAL TO 2048KB, HOWEVER
THE USEABLE RAM MEMORY IS 1920KB. A 128KB AREA OF
RAM IS USED BY THE SYSTEM IN ORDER TO LOAD ROM BIOS CODE
TO ENHANCE SYSTEM PERFORMANCE. THEREFORE, IT IS NOT AN
ERROR OR DEFECT WHEN THE USER SEES THAT HE CAN ONLY USE 1920KB
OF THE 2048KB INSTALLED MEMORY. A SIMILAR AMOUNT OF MEMORY IS
ALSO USED, BY THE SYSTEM, WHEN MORE THAN 2 MB IS INSTALLED.

SAS KEYWORDS:

PSY2	8580SYSERR	8580SYSDIAG	PSY2ERR
PSY2DIAG	PSY2FDSK	8580SYSTEM	

1.4.78 128KB UNUSEABLE MEMORY ON THE 8570, 8573

Record number: H015358

Device: D/T8570
Model: M
Tip key: 004
Date created: 088/08/03
Date last altered: A90/04/11

ON ALL MODELS OF 8570 AND 8573 USEABLE MEMORY WILL BE 128KB LESS THAN INSTALLED MEMORY. THIS IS BECAUSE 128KB OF RAM IS USED BY THE SYSTEM IN ORDER TO LOAD ROM BIOS CODE TO ENHANCE SYSTEM PERFORMANCE. THEREFORE, IT IS NOT AN ERROR WHEN THE USER SEES 128KB IS MISSING. AN EXAMPLE WOULD BE A USER SEES 896KB ON A SYSTEM WITH 1024KB INSTALLED.

SAS KEYWORDS:

PSY2	PSY2ERR	PSY2DIAG	8570SYSERR
8570SYSDIAG	8570SYSTEMEM	PSY2MEM	8573SYSERR
8573SYSTEMEM	8573SYSDIAG		

1.4.79 128KB UNUSEABLE MEMORY ON THE 8555 (55SX)

Record number: H025123

Device: D/T8555
Model: M
Tip key: 008
Date created: 089/10/19
Date last altered: A90/12/17

ON THE 8555, USEABLE MEMORY WILL BE 128KB LESS THAN THE INSTALLED MEMORY. THIS IS BECAUSE 128KB OF RAM IS USED BY THE SYSTEM TO LOAD ROM BIOS CODE, ENHANCING SYSTEM PERFORMANCE. THEREFORE, IT IS NOT AN ERROR WHEN THE SYSTEM MEMORY COUNT DURING POST IS 128KB LESS THAN THE TOTAL AMOUNT OF MEMORY INSTALLED.

NOTE: THIS ALSO APPLIES TO MODELS OF THE 8565, 8570, AND 8580.

SAS KEYWORDS:

PSY2	PSY2DIAG	8555SYSDIAG	8555SYSTEMEM
PSY2MEM	8570SYSDIAG	8570SYSTEMEM	8580SYSTEMEM
8580SYSDIAG	8565SYSDIAG	8565SYSTEMEM	

1.4.80 128MB NOT SUPPORTED WITH DOS 6.X

Record number: H124217

Device: D/T6384
Model: M
Tip key: 065
Date created: 094/06/10
Date last altered: A94/06/10

PS/ValuePoint P60/D and PS/ValuePoint Performance Series models support up to 128MB of memory. Due to a limitation with the DOS operating system, these PS/ValuePoint systems can only address a maximum of 64MB when using DOS version 6.X.

The OS/2 operating system does not share this limitation.

SAS KEYWORDS:

VALUE POINT	PS/VP	PSVP	P60D
PSY2	PSVPPROG	PSY2PROG	D/T6472
193	189	199	D/T6482
D/T6484	D/T6492	D/T6494	PENTIUM

1.4.81 12902 POST ERROR W/PENTIUM UPGRADE

Record number: H126683

Device: D/T6384
 Model: M
 Tip key: 075
 Date created: 095/02/01
 Date last altered: A97/07/13

Intel has released a 25mhz Pentium P24-T processor upgrade that is supported in the following ValuePoint models:

6382/S 25MHZ F00, F30, F50, F51, FY1, FZ0, FZ1
 6384/D 25MHZ F00, F30, F50, F51, G00, G40, G41, G50, G53
 6384/D 25/50MHZ V00, V50, V51, V70, V73
 6387/T 25/50MHZ V00, V50, V81, V83

This option requires flash BIOS level 68 or higher.

Installing the Pentium P24-T option on systems with a flash BIOS level lower than 68 will result in POST disabling the level 1 cache and displaying error code 12902 (level 1 cache error). Level 1 cache cannot be re-enabled on a system using a P24 - T processor with BIOS level lower than 68.

With the P24 - T on the system board, use the following procedure to install flash BIOS.

Install the flash diskette in drive A and turn the system on. After the 12902 error is displayed, press Escape to bypass the Configuration Utility and system will boot from the the flash diskette. Follow the displayed messages to update the flash BIOS. Instructions for installing flash updates are also in a README file on the diskette.

Until flash level 68 (or higher) can be installed, the 12902 error can also be bypassed by depressing "ESC" after the error is displayed. This will allow the system to operate with the P24 - T installed with down level flash BIOS, but will result in substantially reduced performance and is not recommended.

P24 - T DIAGNOSTICS:

IBM Advanced Diagnostics were written to test the 80486 family of microprocessors and will return a false error during the system board test with the P24-T installed. Advanced Diagnostics can be used to test video, memory, and I/O with the P24 - T installed. To test the system board interfaces to the processor, it will be necessary to reinstall the 80486 before running diagnostics.

If a replacement P24-T is required, the customer should be referred to the place of purchase or Intel.

OBTAINING FLASH UPGRADES:

The FLASH EEPROM revision level can be viewed on page 1 of the configuration utility. The fifth and sixth positions of the FLASH EEPROM level represent the level of the code; for example LDJT68AUS is code level 68.

----- IMPORTANT -----

Flash updates are customer installable. Customers should be advised to contact the IBM PC Company HelpCenter at 800 772-2227 if assistance is required in getting or installing the appropriate update. Customers in Canada should call IBM's HelpPC at 800 565 - 3344.

Update diskettes may also be downloaded from the IBM PC Company Bulletin Board System by calling 919-517-0001. If the customer cannot receive the update by modem, the HelpCenter will send the customer a copy on diskette.

Customers and dealers in Canada may download FLASH codes from their respective IBM regional bulletin board service.

Note: Intel and Pentium are trademarks of Intel Corporation.

SAS KEYWORDS:

PSY2	6384	PSVP	VALUE POINT
PS/VALUEPOINT	PS/VP	D/T6382	6382
P24T	PSY2ERR	PSVPERR	PSY2DIAG
PSVPLGO	PSY2MLGO	PSVPLBRD	PSY2BRD

PSVPDIAG

1.4.82 16/4 TOKEN RING BUSMASTER DEGRADATION

Record number: H12396

Device: D/T8550
 Model: M
 Tip key: 183
 Date created: 093/06/15
 Date last altered: A93/06/17

A REPLACEMENT OPTION DISKETTE FOR 16/4 BUSMASTER TOKEN RING ADAPTER IS AVAILABLE TO CORRECT A PROBLEM WITH THE "FAIRNESS" PARAMETER.

CHECK THE LABEL ON THE CUSTOMER'S OPTION DISKETTE FOR THE TOKEN RING NETWORK BUSMASTER ADAPTER/A FOR P/N92F5693, VERSION 1.00.

IF THE PART NUMBER IS "92F5693" THEN DISKETTE IS DOWN LEVEL.

THIS TIP IDENTIFIES A PROBLEM WITH THE SETTING OF THE 'FAIRNESS' PARAMETER. WITH DISKETTE P/N92F5693 VERSION 1.00. SETTING 'FAIRNESS=ON' INCORRECTLY RESULTS IN 'FAIRNESS=OFF' AND SETTING IT TO 'OFF' RESULTS IN IT BEING IT SET TO 'ON'. THE CUSTOMER WOULD REPORT PERFORMANCE TYPE OF PROBLEMS. ORDER OPTION DISKETTE FRU P/N93F1260 VERSION 1.01 FROM PARTS DISTRIBUTION.

SCRAP THE OLD DISKETTE LOCALLY

SAS KEYWORDS:

D/T8550	PSY2ADPT	PSY2	D/T8555
D/T8556	D/T8557	D/T8573	D/T8560
D/T8565	D/T8570	D/T9576	D/T8580
D/T8590	D/T8595	D/T9585	D/T9577
D/T9556	D/T9557	D/T9595	FAIR
NESS	93F1260	FAIRNESS	

1.4.83 16/4 TOKEN RING SETUP ON VALUEPOINT P60/D

Record number: H122355

Device: D/T6384
 Model: M
 Tip key: 045
 Date created: 094/01/19
 Date last altered: A94/01/19

FOLLOWING IS A STEP-BY-STEP SETUP PROCEDURE USED TO DETERMINE IF THE IBM 16/4 TOKEN RING ADAPTER IS INSTALLED PROPERLY IN A PENTIUM BASED PS/VALUEPOINT P60/D SYSTEM. THE SETTINGS USED IN THIS TIP ARE ONLY RECOMMENDATIONS FOR AIDING IN PROBLEM DETERMINATION.

SOME CUSTOMERS MAY HAVE CUSTOM CONFIGURATIONS. ADVISE THE NETWORK ADMINISTRATOR OF CHANGES MADE TO THE ADAPTER AND THE SYSTEM CONFIGURATION PRIOR TO IMPLEMENTING THE CHANGES.

1. ACCESS THE CONFIGURATION UTILITY BY PRESSING F1 DURING THE MEMORY COUNT. ENSURE THAT THE SETTINGS ON EACH PAGE OF THE CONFIGURATION UTILITY MATCH THE FOLLOWING:

 Page 2 of 4
 System Setup:

Diskette Drive 0	1.44 MB 3.5"
* Diskette Drive 1	Not installed
Serial Port A	Serial_1 (3F8-IRQ4)
Serial Port B	Disabled
Parallel Port	Parallel_1 (3BC-IRQ 7)
Parallel Port Mode	PC/AT Compatible
Keyboard Speed	Fast

Startup Options:

First Startup Device	Diskette Drive 0
* Second Startup Device	Hard Disk 0
Unattended Start Mode	Disabled
Keyboardless Operation Mode	Disabled
Keyboard NumLock State	on

 Page 3 of 4
 Security:

Power-on Password	Enabled
Administrator Password	Disabled
Diskette Drive Access	Enabled
* Hard Disk Access	Enabled

PCI Bus:

Interrupt IRQ 9	Used by ISA Adapter Card
Interrupt IRQ 10	Used by ISA Adapter Card
Interrupt IRQ 11	Available to PCI Bus

 Page 4 of 4
 Memory Map Configuration:

Base Memory Above 512K	Enabled
------------------------	---------

ROM Shadowing at (C000-C3FFF)	Enabled
ROM Shadowing at (C4000-C7FFF)	Enabled
ROM Shadowing at (C8000-CBFFF)	Enabled
ROM Shadowing at (CC000-CFFFF)	Disabled
ROM Shadowing at (D0000-D3FFF)	Disabled
ROM Shadowing at (D4000-D7FFF)	Disabled
ROM Shadowing at (D8000-DBFFF)	Disabled
ROM Shadowing at (DC000-DFFFF)	Enabled

Adapter Card Buffer	Disabled
---------------------	----------

- * - SETTINGS DEPEND UPON PRESENCE OF HARDFILE AND/OR DISKETTE DRIVE.

2. CONFIGURE THE TOKEN RING ADAPTER AS FOLLOWS:

- SETTING INTERRUPT LEVEL TO "2"
- SETTING ROM ADDRESS TO "CC000"
- SETTING FOR PRIMARY ADAPTER

SWITCHES - 1 2 3 4 5 6 7 8 9 10 11 12 0=OFF

PSY2 RETAIN TIPS

16/4 TOKEN RING SETUP ON VALUEPOINT P60/D

0 1 1 0 0 1 1 1 0 0 1 * 1=ON

* - SET FOR RING SPEED (OFF=16MBPS/ON=4MBPS)

3. RUN TOKEN RING DIAGNOSTICS AND VERIFY/SET THE SHARED RAM STARTING ADDRESS FOR THE "D8000-DBFFF" RANGE.

THIS METHOD MAY ALSO BE USED TO VERIFY INSTALLATION SETTINGS OF OTHER TYPES OF TOKEN RING ADAPTERS, ETHERNET, 3270 AND 5250 ADAPTERS. THE SETTINGS FOR THE INDIVIDUAL ADAPTERS WILL VARY (#2 ABOVE); HOWEVER, THE P60/D CONFIGURATION UTILITY SHOULD MATCH THAT SHOWN ABOVE (#1 ABOVE). ENSURE THAT THE LATEST LEVEL DIAGNOSTICS ARE BEING USED TO TEST ADAPTERS INSTALLED IN THE P60/D.

SAS KEYWORDS:

PSVP	PSY2	PSVPCOMM	PSY2COMM
PSVPPART	PSY2PART	PSVPADPT	PSY2ADPT
D/T6387	D/T6382	6382	6384
6387	VALUE POINT	PS VP	D/T6381
6381	PSVPBRD	PSY2BRD	CONFIG
PSY2DIAG	PSVPDIAG		

1.4.84 16MB DIMMS SUPPORTED IN PC SERVER 310 (8639)

Record number: H137099

Device: D/T8639
Model: M
Tip key: 002
Date created: 097/03/28
Date last altered: A97/03/28

The 166MHz models of the PC Server 310 (8639-0Ex) are manufactured with a single DIMM socket containing a 16MB DIMM FRU p/n60H7832.

Another 16MB DIMM FRU p/n42H2783 (Option p/n92G7338) is also compatible in these models with BIOS 7A and later.

SAS KEYWORDS:

PSY2	PSY2PART	PSY2MEM	UNCLASSIFIED
42H2783	92G7338	TRAP	TRAPS
HANG	HANGS	MEMORY	

16MHZ SYS BRDS MAY HAVE 20MHZ PROCESSOR CHIP INSTALLED

1.4.85 16MHZ SYS BRDS MAY HAVE 20MHZ PROCESSOR CHIP INSTALLED

Record number: H026359

Device: D/T8580
Model: M
Tip key: 006
Date created: 088/03/15
Date last altered: A94/03/14

A LIMITED NUMBER OF 16MHZ 8580 SYSTEM BOARDS (FRU P/N72X6668) WERE PRODUCED USING THE 80386-20 PROCESSOR CHIP, INSTEAD OF THE 80386 - 16 PROCESSOR CHIP.

THERE IS NO FUNCTIONAL DIFFERENCE IN THESE TWO VERSIONS OF THE 16MHZ SYSTEM BOARD. WARNING: THE 8580 16MHZ SYSTEM BOARD CANNOT BE CONVERTED TO 20MHZ, EVEN IF IT HAS THE 80386 - 20 PROCESSOR CHIP, DUE TO OTHER CIRCUIT DIFFERENCES.

THE CURRENT FRU P/N33F8416 IS NOT AFFECTED.

SAS KEYWORDS:

PSY2	PSY2SYSBRD	PSY2BRD	8580SYSBRD
PSY2PART	16 MHZ		

1.4.86 160 POST ERROR ON 8555

Record number: H037796

Device: D/T8555
Model: M
Tip key: 011
Date created: 090/05/02
Date last altered: A90/05/08

A 160 POST ERROR WILL BE DISPLAYED IF THE BUS ADAPTER CARD IS NOT INSTALLED IN AN 8555.

IF THE BUS ADAPTER IS REMOVED FOR PROBLEM DETERMINATION, OR NOT RE-INSTALLED AFTER REPLACING THE SYSTEM BOARD, THE SYSTEM WILL NOT COMPLETE POST SUCCESSFULLY. THE BUS ADAPTER CARD IS REQUIRED BY THE 8555 FOR SYSTEM SELF-IDENTIFICATION.

160 POST ERROR MAY ALSO BE CAUSED BY A DEFECTIVE BUS ADAPTER.

8555 BUS ADAPTER.....FRU P/N27F4666

SAS KEYWORDS:

PSY2 PSY2ERR PSY2ADPT 8555SYSERR
8555SYSADPT

1614 ERROR WHEN RUNNING S36/38 WSE DIAGNOSTICS

1.4.87 1614 ERROR WHEN RUNNING S36/38 WSE DIAGNOSTICS

Record number: H037080

Device: D/T8550
 Model: M
 Tip key: 047
 Date created: 089/11/01
 Date last altered: A92/02/03

THE SHORT (5.5 INCH) S36/38 WORK STATION EMMULATION (WSE) ADAPTER REQUIRES OPTION DISKETTE VERSION 1.01 OR HIGHER TO RUN DIAGNOSTICS. A FALSE 1614 ERROR CAN OCCUR WHEN RUNNING VERSION 1.00 OPTION DISKETTE DIAGNOSTICS ON THE SHORT S36/38 WSE ADAPTER. THE VERSION OF OPTION DISKETTE FILES ARE IDENTIFIED BY THE FOLLOWING:

FILE NAME	V1.00	V1.01
@FFF8.ADF	09-09-87	12-01-88
@FFF8.DGS	09-09-87	11-16-88
DIAGLTC.PEP	09-09-87	11-15-88

VERSION 1.01 OPTION DISKETTE IS COMPATIBLE WITH BOTH THE SHORT AND THE LONG (FULL LENGTH) S36/38 WSE ADAPTER. VERSION 1.01 OPTION DISKETTE IS SHIPPED WITH THE SHORT S36/38 WSE ADAPTER (FRU P/N69X6281).

SAS KEYWORDS:

PSY2	PSY2ADPT	PSY2ERR	PSY2DIAG
8550SYSADPT	8550SYSERR	8550SYSDIAG	8550SYSCOMM
8555SYSADPT	8555SYSERR	8555SYSDIAG	8555SYSCOMM
8560SYSADPT	8560SYSERR	8560SYSDIAG	8560SYSCOMM
8570SYSADPT	8570SYSERR	8570SYSDIAG	8570SYSCOMM
8580SYSADPT	8580SYSERR	8580SYSDIAG	8580SYSCOMM
8573SYSADPT	8573SYSERR	8573SYSDIAG	8573SYSCOMM
D/T8555	D/T8560	D/T8565	D/T8570
D/T8580	D/T8590	D/T8595	D/T8573
D/T8557			

1.4.88 165 POST ERROR ON PS/2

Record number: H066802

Device: D/T8550
Model: M
Tip key: 059
Date created: 090/08/15
Date last altered: A92/08/10

A 165 POST ERROR CODE REPRESENTS A SYSTEM CONFIGURATION ERROR. IF CONFRONTED WITH A 165 ERROR, POSSIBLY FOLLOWED BY ANOTHER POST ERROR CODE, THE 165 ERROR SHOULD BE RESOLVED BEFORE DOING ANY OTHER PROBLEM DETERMINATION. IF ADVANCED DIAGNOSTICS ARE RUN BEFORE CORRECTING THE CONFIGURATION ERROR, FALSE ERRORS MAY BE GENERATED, LEADING TO UNNECESSARY PARTS REPLACEMENT.

THE FOLLOWING STEPS MAY HELP TO RESOLVE A 165 POST ERROR:

1. LOAD THE CUSTOMER'S BACKUP REFERENCE DISKETTE. THIS DISKETTE SHOULD HAVE THE NECESSARY OPTION FILES FOR THE INSTALLED ADAPTERS.
2. DO NOT RUN DIAGNOSTICS OR AUTO CONFIGURATION AT THIS POINT; SELECT VIEW CONFIGURATION
3. COMPARE THE ACTUAL MACHINE CONFIGURATION TO THE INFORMATION DISPLAYED DURING VIEW CONFIGURATION. MAKE NOTE OF ANY INSTALLED OPTIONS THAT DO NOT APPEAR IN VIEW CONFIGURATION.
4. RUN AUTO CONFIGURATION. IF THE 165 ERROR REMAINS, VERIFY THAT THE OPTION FILES FOR THE MISSING OPTION ARE COPIED TO THE CUSTOMER'S BACKUP REFERENCE DISKETTE. AUTO CONFIGURE AGAIN IF NECESSARY.
5. IF AN INSTALLED OPTION REMAINS MISSING FROM THE VIEW CONFIG LIST, YOU MAY HAVE ONE OF THE FOLLOWING CONDITIONS:
 - THE REFERENCE DISKETTE DOES NOT CONTAIN THE OPTION CODE TO SUPPORT THAT OPTION.
 - THE MISSING DEVICE OR ADAPTER IS DEFECTIVE.
 - THE MISSING DEVICE IS A 5.25" 360KB EXTERNAL DISKETTE DRIVE ADAPTER OR ANOTHER UNRECOGNIZABLE ADAPTER. (THIS IS NORMAL OPERATION AND WILL NOT CAUSE 165 POST ERRORS)

TO VERIFY THAT A SUSPECT OPTION IS CAUSING THE 165 ERROR, REMOVE THE OPTION AND ATTEMPT TO RECONFIGURE THE SYSTEM. IF CONFIGURATION IS SUCCESSFUL, THE REMOVED OPTION IS DEFECTIVE OR THE REQUIRED OPTION CODE IS MISSING.

SAS KEYWORDS:

PSY2	PSY2ERR	8550SYSERR	8555SYSERR
8560SYSERR	8565SYSERR	8570SYSERR	8573SYSERR
8580SYSERR	D/T8565	D/T8540	D/T8580
D/T8560	D/T8555	D/T8573	8590SYSERR
8595SYSERR	D/T8590	D/T8595	

1657 ERROR WHEN RUNNING S36/38 WSE DIAGNOSTICS

1.4.89 1657 ERROR WHEN RUNNING S36/38 WSE DIAGNOSTICS

Record number: H016657

Device: D/T8550
 Model: M
 Tip key: 046
 Date created: 089/11/01
 Date last altered: A90/04/27

A FALSE 1657 ERROR CAN OCCUR WHEN RUNNING DIAGNOSTICS WITH THE 50/60 REFERENCE DISKETTE V1.04 MARKED WITH MECHANICS- BURG ORDER NUMBER SA380021. THIS REFERENCE DISKETTE CONTAINS DOWN LEVEL FILES THAT ARE USED WHEN TESTING THE S36/38 WORK- STATION EMMULATION ADAPTER. INCORRECT LEVEL FILES ARE:

FILE NAME	DATED
@FFF8.ADF	08/28/87
@FFF8.DGS	08/28/87
DIAGLTC.PEP	01/12/87
WSEBOOT.PEP	01/12/87

CORRECT LEVEL FILES CAN BE FOUND ON THE P70 386 REFERENCE DISKETTE MARKED WITH MECHANICSBURG ORDER NUMBER SA380062 AND CAN BE COPIED ON TO THE 50/60 REFERENCE DISKETTE V1.04. CORRECT LEVEL FILES ARE:

FILE NAME	DATED
@FFF8.ADF	12/01/88
@FFF8.DGS	11/16/88
DIAGLTC.PEP	11/15/88
WSEBOOT.PEP	09/09/87

BOTH REFERENCE DISKETTE SA380021 AND SA380062 ARE SHIPPED WITH THE SERVICE INFORMATION MANUAL (SIM) MECHANICSBURG FORM NUMBER SA380039.

SAS KEYWORDS:

PSY2	PSY2MISC	PSY2ERR	PSY2DIAG
8550SYSADPT	8550SYSCOMM	8550PSY2ERR	8550SYSDIAG
8560SYSADPT	8560SYSCOMM	8560PSY2ERR	8560SYSDIAG
PSY2COMM			

1.4.90 168 POST ERROR ON 8555

Record number: H037795

Device: D/T8555
Model: M
Tip key: 010
Date created: 090/05/01
Date last altered: A91/03/20

IF A 168 POST ERROR CODE IS DISPLAYED AFTER REPLACING THE SYSTEM BOARD IN AN 8555, VERIFY THAT THE CORRECT SYSTEM BOARD IS INSTALLED. IF THE CORRECT SYSTEM BOARD IS INSTALLED, A 168 ERROR USUALLY REPRESENTS A TOKEN RING ADAPTER PROBLEM.

THE 8555 LAN SYSTEM BOARD P/N33F8159 IS INTENDED FOR USE IN SPECIAL BID 55SX MEDIALESS* WORKSTATIONS. IF INSTALLED IN AN 8555 MODEL 031 OR 061, THE MACHINE WILL POST A 168 ERROR AND WILL NOT BOOT FROM DRIVE A.

* NOTE: 8555 "MEDIALESS" MODELS MAY BE UPGRADED WITH DISKETTE AND FIXED DISK DRIVE OPTIONS. THE MODEL NUMBER SHOULD BE USED TO DETERMINE THE CORRECT SYSTEM BOARD FRU.

USE FRU P/N27F4667 IN 8555 MOD 031 AND 061 (55SX).
USE FRU P/N57F3003 IN 8555 MOD LT0 AND LE0 (55LS).
USE FRU P/N33F8159 IN 8555 MOD B00, C00, P00 (55SX MEDIALESS).

SAS KEYWORDS:

PSY2	PSY2BRD	PSY2ERR	PSY2DSKT
8555SYSBRD	8555SYSERR	8555SYSDSKT	ADP

1.4.91 1780 POST ERROR ON 8560 & 8580

Record number: H064300

Device: D/T8560
Model: M
Tip key: 004
Date created: 091/04/08
Date last altered: A94/04/25

WHEN A 1780 POST ERROR IS DISPLAYED ON AN 8560-041 OR 8580-041,
VERIFY THAT THE FIXED DISK CABLES ARE INSTALLED PROPERLY.
CORRECT INSTALLATION OF THE CABLES IS SHOWN IN THE MODEL 60 AND
MODEL 80 HMR.

INSTRUCTION TO CHECK ALL CABLES IS A REQUIREMENT OF STEP 001 IN
THE HMM MAPS.

SAS KEYWORDS:

PSY2

PSY2ERR

PSY2FDSK

D/T8580

1.4.92 2.3 GB SCSI TAPE DRIVE DATA MODIFICATION

Record number: H035593

Device: D/T3532
 Model: M
 Tip key: 001
 Date created: 093/06/30
 Date last altered: A93/07/01

AN UPDATED MICRO CODE MODULE IS AVAILABLE TO CORRECT AN EXPOSURE TO THE POSSIBILITY OF LOST DATA ON 2.3 GIGABYTE SCSI TAPE DRIVE OPTIONS USED IN PS/2 SYSTEMS.

DETAIL:

A LIMITED NUMBER OF TAPE DRIVES WERE SHIPPED WITH A VERSION OF MICRO CODE WHICH UNDER CERTAIN CONDITIONS COULD ALLOW A DATA BLOCK TO BE OVERWRITTEN ERRONEOUSLY, THEREBY CAUSING LOST DATA.

IF A CUSTOMER USES APPLICATIONS THAT RE-WRITE SELECTIVE PORTIONS OF A PREVIOUSLY WRITTEN TAPE, THE TAPE COULD BECOME UNREADABLE. IF PREVIOUSLY WRITTEN TAPES ARE APPENDED, DATA COULD BE OVER-WRITTEN.

FRU P/N21F8792 PROVIDES A BILL OF MATERIAL (B/M) WHICH INCLUDES AN UP-LEVEL EPROM, TORX T-8 AND T-10 WRENCHES, DETAILED INSTRUCTIONS AND UPGRADE IDENTIFICATION LABELS.

IMPORTANT NOTE:

AFTER THE INSTALLATION OF THIS MODULE, A SOFTWARE UPGRADE WILL BE REQUIRED BY USERS OF DOS VERSIONS OF THE "SYTOS PLUS" * DEVICE DRIVER.

OMISSION OF THIS REQUIRED SOFTWARE UPGRADE WILL RESULT IN OPERATIONAL FAILURES ONCE THIS NEW MICRO CODE IS INSTALLED.

DO NOT INSTALL THIS MODULE UNTIL THE REQUIRED SYTOS UPGRADE IS ON HAND AND READY FOR IMMEDIATE INSTALLATION.

MOST OF THE AFFECTED DRIVES WERE INSTALLED IN 3532-023 EXTERNAL SCSI TAPE DRIVES. A VERY SMALL QUANTITY (APPROX. 40) OF THE AFFECTED TAPE DRIVES MAY BE INSTALLED INTERNALLY IN 8595'S AND 3511 SCSI ENCLOSURES (OPTION 6451121, 2.3GB SCSI TAPE DRIVE).

THE AFFECTED EPROM MODULE, WHICH IS LOCATED ON THE "MX BOARD" INSIDE THE TAPE DRIVE, MAY BE POSITIVELY IDENTIFIED BY, "262S, P/N21F8723," ON THE LABEL ATTACHED TO THE MODULE. IF ANY OTHER LABEL IS FOUND ON THIS MODULE, THIS FIX IS NOT APPLICABLE.

- 8595 AND 3511 MACHINE TYPES:

IF THE LABEL ON THE TOP OF THE TAPE DRIVE (ABOVE AND TO THE LEFT OF THE INSPECTION WINDOW) IS P/N21F8641, EC894913, THIS FIX IS APPLICABLE AND SHOULD BE INSTALLED.

- MACHINE TYPE 3532:

THE 3532 - 023 SCSI TAPE DRIVES WITH FAULTY MICROCODE ARE CONFINED TO MACHINE SERIAL NUMBERS 2602533 THROUGH 2603446. NOT ALL OF THE 3532'S WITHIN THIS SERIAL NUMBER RANGE WILL REQUIRE THIS FIX, AS SOME WERE UPGRADED PRIOR TO SHIPMENT. THE PHYSICAL CHECK WILL REQUIRE REMOVING THE 3532 COVERS TO ACCESS THE REAR OF THE TAPE DRIVE.

IF THE LABEL LOCATED ON THE RIGHT SIDE OF THE REAR OF THE TAPE DRIVE SHOWS P/N21F8716, EC894908, THIS FIX SHOULD BE INSTALLED. THIS FIX IS NOT APPLICABLE TO ANY OTHER PART NUMBER OR EC LEVEL.

NOTE:

THE CUSTOMER SHOULD BE ADVISED OF THE FOLLOWING INFORMATION:

IN CONJUNCTION WITH THIS MICRO CODE PROBLEM, A CONFLICT WITH THE DOS VERSION OF THE "SYTOS PLUS FILE BACKUP MANAGER" HAS BEEN IDENTIFIED. ERRORS E130, E21 AND W32 ARE DISPLAYED WHEN RUNNING "SYTOS PLUS" WITH THE NEW VERSION (263X) MICRO CODE. NONE OF THESE ERRORS OR WARNINGS ARE DISPLAYED WITH PREVIOUS VERSIONS OF THE MICRO CODE.

IN BACKUP DEVICE SETUP: EDIT, AFTER SELECTING OK, W32 IS DISPLAYED. THIS DOES NOT APPEAR WITH PREVIOUS VERSIONS OF MICRO CODE (262S) IN THIS DRIVE.

TO RESOLVE THIS CONFLICT, "SYTOS PLUS" MUST BE UPGRADED FROM SPED-130IBA-927 TO SPED-130IBB-927. A DEALER CAN

PSY2 RETAIN TIPS

2.3 GB SCSI TAPE DRIVE DATA MODIFICATION

OBTAIN THE UPGRADE THROUGH THE IBM NDD NATIONAL SUPPORT

CENTER BULLETIN BOARD OR IT CAN ALSO BE OBTAINED FREE OF CHARGE BY CONTACTING THE CUSTOMER SERVICE DEPARTMENT AT SYTRON BY CALLING (508) 898-0100. INFORMATION ON HOW TO RETRIEVE FILES FROM THE BULLETIN BOARD IS PROVIDED IN THE BILL OF MATERIAL, FRU P/N21F8792.

* REGISTERED TRADEMARK OF SYTRON CORPORATION

THIS TIP PROVIDES INFORMATION AND INSTRUCTIONS PREVIOUSLY CONTAINED IN ECA094 (EXPIRED 6-30-93).

SAS KEYWORDS:

PSY2	PSY2ADPT	D/T3532	D/T8595
D/T3511	8595ADPT	3511ADPT	3532ADPT
PSY2PROG	8595PROG	8590PROG	3532PROG
PS2			

2.3 SCSI TAPE DRIVE MISSING SOFTWARE DRIVER

1.4.93 2.3 SCSI TAPE DRIVE MISSING SOFTWARE DRIVER

Record number: H094696

Device: D/T8595
Model: M
Tip key: 006
Date created: 091/09/09
Date last altered: A91/09/13

A LIMITED NUMBER OF 2.3GB SCSI TAPE DRIVE OPTIONS WERE SHIPPED TO THE FIELD WITHOUT A REQUIRED SOFTWARE DRIVER.

IF YOU HAVE THE IBM PERSONAL SYSTEM/2, 2.3GB TAPE DRIVE INSTALLED ON A PS/2 8595 OR 3511 SCSI EXPANSION UNIT AND ARE USING SYTOS PLUS* OS/2 BACKUP SOFTWARE, YOU MUST HAVE THE SCSI.SYS DRIVER INSTALLED ON YOUR SYSTEM.

THIS DEVICE DRIVER IS AVAILABLE FROM MECHANICSBURG BY ORDERING PUBS FORM #S91F9254.

* REGISTERED TRADEMARK OF SYTRON, INC.

SAS KEYWORDS:

PSY2 PSY2ADPT 3511ADPT 8595ADPT
SCSI

1.4.94 2.88 MB DISKETTE DRIVE PROBLEM DETERMINATION

Record number: H097490

Device: D/T8550
Model: M
Tip key: 118
Date created: 092/04/21
Date last altered: A92/04/28

WHEN RUNNING DIAGNOSTICS ON A 2.88 MB DISKETTE DRIVE, IT IS NOT NECESSARY TO TEST THE DRIVE WITH A 4MB SCRATCH DISKETTE. TESTING THE DRIVE WITH A 1 OR 2MB DISKETTE TESTS ALL COMPONENTS OF THE DRIVE AND ASSOCIATED ELECTRONICS.

WHEN RUNNING DIAGNOSTICS, AN IBM DISKETTE SHOULD BE USED TO VERIFY FAILURES BEFORE REPLACING THE DISKETTE DRIVE.

IN SOME CASES, UNNECESSARY FRU REPLACEMENT HAS BEEN ATTRIBUTED TO POOR QUALITY OR DAMAGED MEDIA BEING USED DURING TROUBLESHOOTING. SUBSEQUENT USE OF IBM BRAND MEDIA HAS RESULTED IN ERROR FREE DIAGNOSTICS AND SUCCESSFUL OPERATION OF DISKETTE DRIVES WHICH HAD BEEN "FAILING" PREVIOUSLY.

FOR ADDITIONAL INFORMATION ABOUT DISKETTE DRIVES, SEE RETAIN RECORD NUMBER H09135.

SAS KEYWORDS:

PSY2	PSY2DSKT	PSY2DIAG	D/T8535
D/T8540	D/T8556	D/T8557	8535SYSDIAG
8535SYSDSKT	8540SYSDIAG	8540SYSDSKT	8556SYSDIAG
8556SYSDSKT	8557SYSDIAG	8557SYSDSKT	

2MB EXPANDED MEMORY ADAPTER (2MB XMA) INFORMATION

1.4.95 2MB EXPANDED MEMORY ADAPTER (2MB XMA) INFORMATION

Record number: H02647

Device: D/T5271
 Model: M
 Tip key: 018
 Date created: 087/04/13
 Date last altered: A89/01/03

2MB EXPANDED MEMORY ADAPTER (2MB XMA) INFORMATION

DESCRIPTION:

THE 2MB EXPANDED MEMORY ADAPTER (2MB XMA) IS A FULL LENGTH ADAPTER THAT PROVIDES 2 MEGABYTES (MB) OF EXPANDED MEMORY FUNCTION AND A PARALLEL PRINTER PORT WHICH CAN BE CONFIGURED VIA JUMPER, AS LPT1 OR LPT2. THE 2MB XMA IS SUPPORTED IN THE 5160, 5170, 5271, 5273, AND THE 8530. WHEN INSTALLED IN A 5170 OR 5273, IT WILL ACHIEVE BEST PERFORMANCE IN A 16 BIT EXPANSION SLOT.**THE 2MB XMA IS NOT SUPPORTED IN THE 5162 (5160 MODEL 286) OR THE 8530 (MODEL 286)**

2MB XMA AND XMA DIFFERENCES:

1. THE XMA IS SUPPORTED IN THE 5271 AND 5273 ONLY.
2. THE XMA HAS 1MB OF STANDARD (SOLDERED IN) MEMORY AND 1MB OF OPTIONAL (PLUGGABLE) MEMORY, INCREASING THE TOTAL EXPANDED MEMORY TO 2MB. THE 2MB XMA HAS 2MB OF STANDARD (SOLDERED IN) MEMORY.

SERVICE TIPS:

THE 2MB XMA REQUIRES THAT THE SYSTEM BOARD BE CONFIGURED FOR 256KB. (IT IS NOT NECESSARY TO REMOVE ANY MEMORY MODULES FROM THE SYSTEM BOARD).

THE JP2 JUMPER ON THE 2MB XMA MUST BE POSITIONED OVER PINS 2 AND 3 TO SELECT THE 256KB STARTING ADDRESS.

ANY ADDITIONAL EXPANSION MEMORY MUST BE REMOVED TO INSTALL THE 2MB XMA.

IF DIAGNOSTICS FOR THE 5271 OR 5273 DIRECT YOU TO REPLACE A MEMORY MODULE, REPLACE THE SINGLE FRU P/N1497250 INSTEAD.

THE LPT2 SETTING IS NOT SUPPORTED IN THE 5160 OR 5271.

PRINTER FAILURES MAY OCCUR IF A SYSTEM HAS TWO ADAPTERS WITH THE SAME LPT SETTING. IF NECESSARY, THE JUMPER TO SELECT LPT1 OR LPT2, CAN BE REMOVED TO DISABLE THE 2MB XMA PRINTER PORT.

PARTS / FIELD DOCUMENTATION INFORMATION:

A SINGLE FRU, P/N1497250 IS USED AS A REPLACEMENT.

THE HMS SUPPLEMENT IS FORM # SA231031 (INCLUDES DIAGNOSTIC DISKETTE). CURRENT VERSIONS OF HMS FOR 5271 AND 5273 REQUIRE NO UPDATES TO SUPPORT THE 2MB XMA.

SAS KEYWORDS:

5271SYSTEMEM	5273SYSTEMEM	5160SYSTEMEM	5170SYSTEMEM
8530SYSTEMEM	PCOMMEM	PCOM	PSY2MEM
PSY2			

1.4.96 2MB-8MB 80286 MEMORY ADAPTER EMS FUNCTION / 8555 W/DOS 3.3

Record number: H02476

Device: D/T8555
Model: M
Tip key: 007
Date created: 089/08/28
Date last altered: A91/11/25

THE EXPANDED MEMORY FUNCTION OF THE 2MB-8MB 80286 MEMORY OPTION IS NOT SUPPORTED IN A 55SX UTILIZING DOS 3.3. IN ORDER TO USE THE EMS FUNCTION OF THE 2MB-8MB 80286 MEMORY OPTION IN A DOS ENVIRONMENT, THE 55SX REQUIRES DOS 4.0 OR HIGHER.

NOTE: THE 8550, 8550Z, AND 8560 WILL SUPPORT THE EMS FUNCTION WITH DOS 3.3 OR HIGHER.

THE MARKETING INFORMATION WILL BE UPDATED TO REFLECT THIS LIMITATION.

SAS KEYWORDS:

PSY2	PSY2MEM	8555SYSTEM	8555SYSADPT
PSY2ADPT	8555SYSPROG	PSY2PROG	D/T8560
D/T8555			

1.4.97 201 POST ERROR ON 8555 OR 8565 MEM LOCATION

Record number: H063320

Device: D/T8555
 Model: M
 Tip key: 017
 Date created: 090/10/30
 Date last altered: A93/02/11

IF AN 8555 OR 8565 DISPLAYS A 201 POST ERROR, VERIFY THAT THE SYSTEM BOARD MEMORY MODULE HAS BEEN INSTALLED IN THE CORRECT MODULE CONNECTOR. THERE MUST BE A MEMORY MODULE IN CONNECTOR 1 (J15) ON THE 8565.

IN THE 8555, CONNECTOR 1 IS CLOSEST TO THE EDGE OF THE SYSTEM BOARD, NEXT TO THE POWER SUPPLY. IN THE 8565, CONNECTOR 1 (J15) IS THE LEFT CONNECTOR, CLOSEST TO THE REAR OF THE SYSTEM BOARD.

THIS INFORMATION IS DOCUMENTED IN THE CUSTOMER'S "QUICK REFERENCE" AND IN THE 55SX AND 65SX HARDWARE MAINTENANCE REFERENCES.

(55SX HMR: FORM NUMBER S64F-3990).

(65SX HMR: FORM NUMBER S64F-3992).

IF THE MEMORY IS INSTALLED CORRECTLY, AND THE ERROR REMAINS, FOLLOW FRU ISOLATION PROCEDURES IN THE HARDWARE MAINTENANCE SERVICE PAMPHLET.

SAS KEYWORDS:

PSY2	PSY2ERR	PSY2MEM	8555SYSTEM
8555SYSERR	PSY2BRD	8555SYSBRD	8565SYSTEM
8565SYSERR	8565SYSBRD	D/T8565	SIM
SIMM	LOCATION		

1.4.99 24XX ERRORS ON VALUEPOINT

Record number: H12192

Device: D/T6384
Model: M
Tip key: 029
Date created: 093/05/14
Date last altered: A93/08/11

THE VIDEO DIAGNOSTICS ON THE VALUEPOINT DIAGNOSTICS DISKETTE ARE DESIGNED TO TEST SYSTEM BOARD VIDEO ONLY. IF THESE DIAGNOSTICS ARE RUN WITH A VIDEO CARD INSTALLED, YOU MAY RECEIVE 24XX ERRORS OR OTHER ERRORS.

THE MANUFACTURER OF THE OPTION CARD IS RESPONSIBLE FOR PROVIDING DIAGNOSTICS. WHEN DIAGNOSTICS ARE NOT AVAILABLE, AND YOU SUSPECT THE FAILURE IS CAUSED BY THE VIDEO CARD, USE THE FOLLOWING PROCEDURE TO ISOLATE THE FAILURE:

1. POWER OFF THE SYSTEM AND REMOVE VIDEO CARD.
2. SET THE SYSTEM BOARD VIDEO JUMPERS * TO "VGA ENABLE".
325T - J17, INSTALL ON FRONT TWO PINS. EARLY LEVEL 325T SYSTEM BOARDS DO NOT HAVE J17 AND DO NOT SUPPORT VIDEO OPTION CARDS.
425SX - JP10, INSTALL ON FRONT TWO PINS.
JP1, INSTALL ON BOTH PINS.
433DX & 433DX2 - JP10, INSTALL ON FRONT TWO PINS.
JP17, INSTALL ON BOTH PINS.
3. CONNECT THE DISPLAY TO THE SYSTEM BOARD VIDEO CONNECTOR.

* REFERENCE THE PS/VALUEPOINT HMSR FOR JUMPER LOCATIONS.

IF THE SYSTEM CONTINUES TO FAIL, USE NORMAL PROBLEM DETERMINATION, IF THE SYSTEM NOW FUNCTIONS NORMALLY, SUSPECT THE VIDEO CARD, VIDEO CARD SWITCH OR JUMPER POSITIONS, VIDEO DEVICE DRIVERS OR THE CUSTOMER'S SOFTWARE VIDEO SETTINGS.

SAS KEYWORDS:

PSY2	VALUE POINT	PS/VP	PSVP
PSVPDISP	D/T6382	D/T6387	PSVPBRD
2401	2402	2408	

1.4.100 2610 NEW BATTERY TEST MAP.

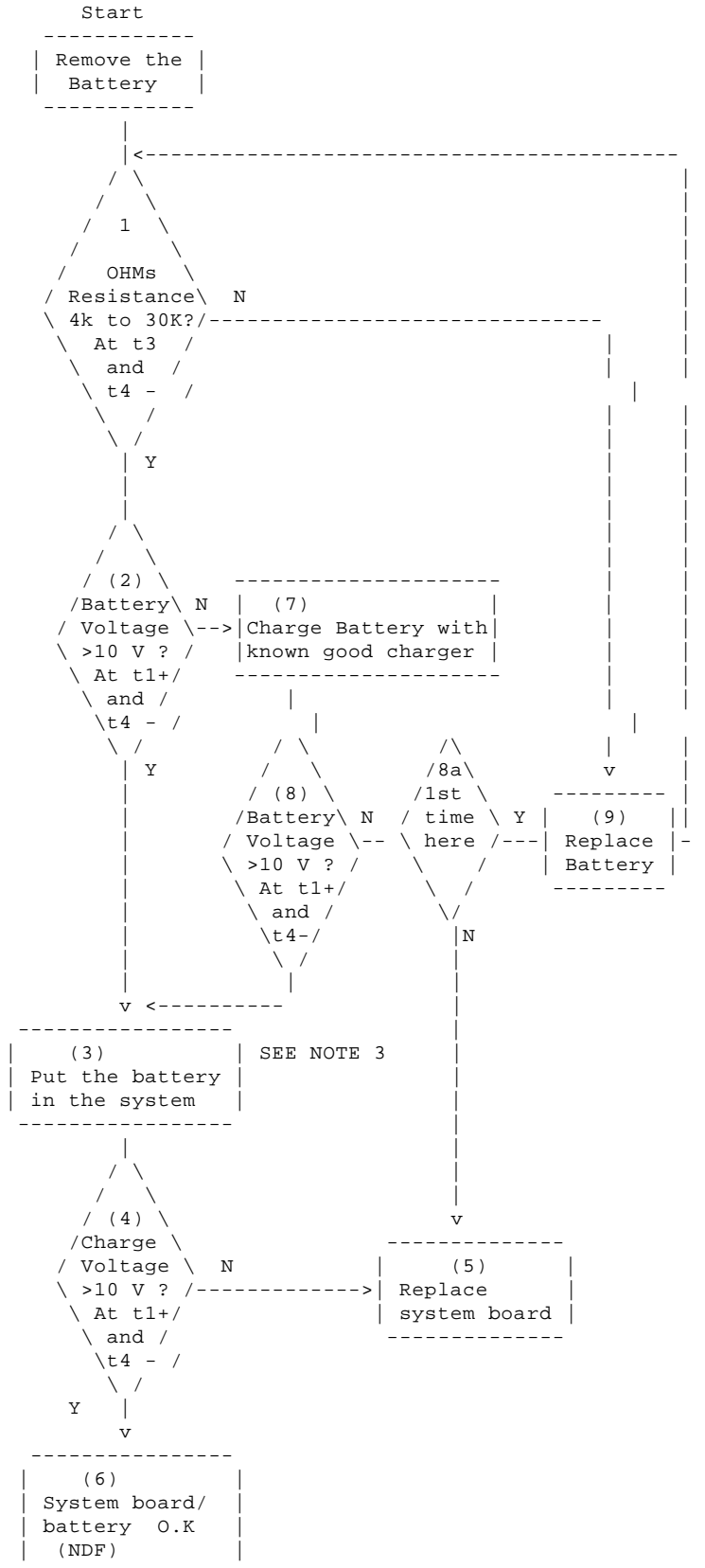
Record number: H131123

Device: D/T2610
Model: M
Tip key: 001
Date created: 095/09/26
Date last altered: A96/11/11

The following MAP steps replace the current HMM information on page 30 of IBM Mobile Systems HMM form number S82G-1502-03.

Future editions will have this update.

The section of 'Checking the Battery Pack' should be changed to the following procedure.



STEP NOTES:

3. Attach the system to AC power.
Model 340CSE (POWER ON) ENSURE THE POWER LED IS ON.
Model 340 (DO NOT POWER ON)

4. Measure the battery charge voltage between the (+) and(-)
terminal of the DC-DC converter that corresponds with the
battery terminal 1 (+) and 4 (-).

SAS KEYWORDS:

PSY2	THINKPAD	PSY2PWR	PSY2BD
CHARGER	UNCLASSIFIED		

1.4.101 2614&COLON. CORRUPTED FAT TABLES AND/OR EXCESSIVE LOST CLUSTERS

Record number: H20738

Device: D/T2614
Model: M
Tip key: 003
Date created: 093/03/18
Date last altered: A96/11/11

There has been some reports of corrupted FAT tables and or excessive lost clusters and chains on 2614 system using Windows 3.1.

Microsoft is changing the versions of SMARTDRV.EXE HIMEM.SYS to fix these problems, but the fix is not available yet.

HAVE YOUR CUSTOMER DO THE FOLLOWING WORK AROUND BEFORE ANY HARDWARE IS REPLACED.

Your customer should make the following changes to their system if they are using Windows 3.1:

Change the DEVICE=C line in the CONFIG.SYS to read:
DEVICE=C: \DOS\HIMEM.SYS /machine: 1
Change the SMARTDRV line in the AUTOEXEC.BAT to read:
SMARTDRV /e: 2048

Have your customer contact their Microsoft support center to obtain the release date of the Microsoft fix.

SAS KEYWORDS:

PSY2 PSY2PRO PSY2PART PSY2FDSK
UNCLASSIFIED

1.4.102 2615 THINKPAD 300 HMS PARTS UPDATE

Record number: H103034

Device: D/T2615
Model: M
Tip key: 001
Date created: 092/10/15
Date last altered: A97/11/07

The 2615 HMS manual S33G-9367-00 should be updated with the following information.

O Table 1 CHANGE - Battery pack from P/N33G9287 to P/N33G9298
O Table 1 CHANGE - AC Power cube from P/N33G9284 to P/N33G6490
O Table 1 ADD - Speaker P/N33G9475
O Table 4 CHANGE - New Zealand DAA from P/N33G9287 to P/N33G9387
O Table 4 DELETE - Port replicator P/N33G9477 w/token ring
O Table 4 DELETE - Port replicator P/N33G9476 with SCSI.

The manual will be updated with these correction in released 01.

SAS KEYWORDS:

PSY2 PSY2PART PSY2DOC PSY2MISC
UNCLASSIFIED THINKPAD

1.4.103 2615&COLON. CORRUPTED FAT TABLES AND/OR EXCESSIVE LOST CLUSTERS

Record number: H20739

Device: D/T2615
Model: M
Tip key: 002
Date created: 093/03/18
Date last altered: A96/11/11

There has been some reports of corrupted FAT tables and or excessive lost clusters and chains on 2615 system using Windows 3.1.

Microsoft is changing the versions of SMARTDRV.EXE HIMEM.SYS to fix these problems, but the fix is not available yet.

HAVE YOUR CUSTOMER DO THE FOLLOWING WORK AROUND BEFORE ANY HARDWARE IS REPLACED.

Change the DEVICE=C line in the CONFIG.SYS to read:

DEVICE=C: \DOS\HIMEM.SYS /machine: 1

Change the SMARTDRV line in the AUTOEXEC.BAT to read:

SMARTDRV /e: 2048

Have your customer contact their Microsoft support center to obtain the release date of the Microsoft fix.

SAS KEYWORDS:

PSY2 PSY2PRO PSY2PART PSY2FDSK
THINKPAD UNCLASSIFIED

1.4.104 2618 FRU INFORMATION

Record number: H12666

Device: D/T2618
Model: M
Tip key: 001
Date created: 093/07/23
Date last altered: A96/11/11

THE MEMORY SIMM FRUS CAN NOW BE ORDERED FROM MECHANICSBURG, WITH THE EXCEPTION OF THE 16MB. THE 16MB SIMM WAS ANNOUNCED, BUT NEVER MANUFACTURED BY IBM.

SIMM FRUS NOT INCLUDED IN HMM ARE:

4MB = P/N79F1003
8MB = P/N73G2375
16MB = P/N73G2376

SAS KEYWORDS:

PSY2	PSY2PART	KEYBOARD	MODEM CARD
FAX	DCA	TRACKPOINT CAPS	DAA
DISKETTES	DOS 5.02	MEMORY	DRAM
THINKPAD	UNCLASSIFIED		

2620 AND 2610 ERROR DOING SET SYSTEM IDENTIFICATION.

1.4.105 2620 AND 2610 ERROR DOING SET SYSTEM IDENTIFICATION.

Record number: H131120

```

Device:           D/T2620
Model:           M
Tip key:         004
Date created:    095/09/27
Date last altered: A96/11/11

```

Device type 2620 and 2610 do not support the Maintenance Diskette functions "Set system Identification or View System Identification".
 If these functions are attempted the following error occurs:

```

+++++
+   Error                               +
+ An error occurred while trying to     +
+ access the system data                +
+   Input Code (AX): D202               +
+   Output Code (AH): 86                 +
+++++

```

This is a permanent restriction on these systems, because the system identification data is not recorded in their system board hardware.

SAS KEYWORDS:

PSY2	D/T2610	MAINTENANCE	PSY2DSK
EPROM	PSY2BD	THINKPAD	UNCLASSIFIED

1.4.106 2620 LCD COMPONENT FRU PART NUMBERS.

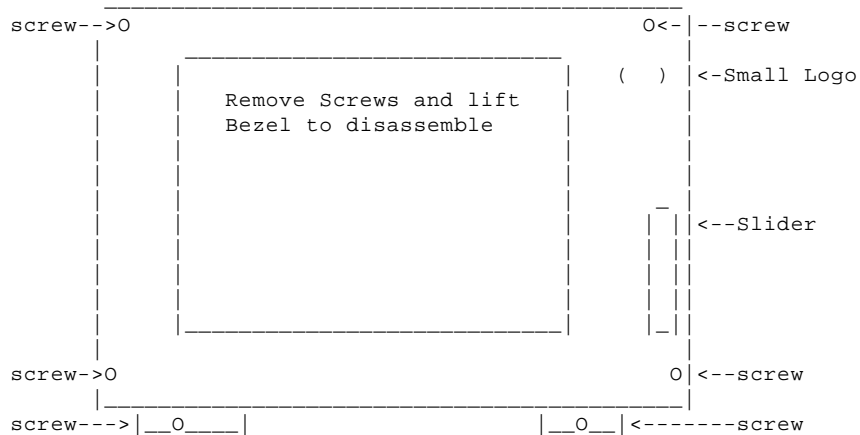
Record number: H136551

Device: D/T2620
Model: M
Tip key: 006
Date created: 097/02/07
Date last altered: A97/02/17

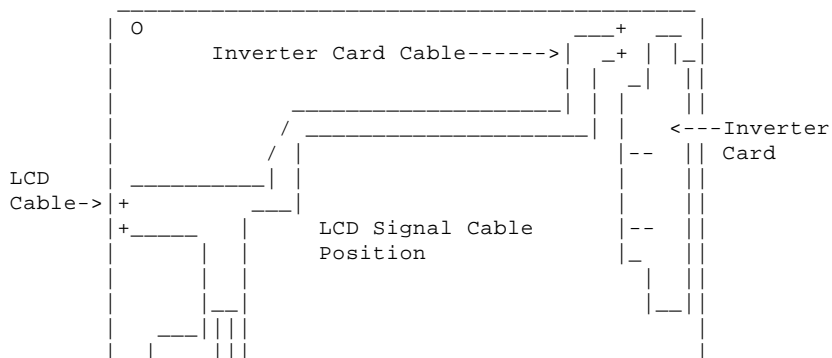
The following TFT and DSTN LCD components have been released as FRU part numbers for the 2620 systems.

TFT FRU COMPONENTS	DESCRIPTION	FRU P/N	SEPARATE FRU COMPONENTS OF THE KITS.
	TFT Hinge Kit	P/N11J9524 R&L in kit	P/N84G5661 R P/N84G5662 L
	2.5 x 6mm adhesive USE WITH TFT AND DSTN	P/N11J9527	P/N66G5124 SCREW KIT. USE WITH LOCTITE.
	TFT LCD Rear Cover Large Logo (Cover)	P/N11J9525 in kit	P/N84G5654 P/N66G5017
	TFT Bezel Small Logo (Bezel)	N/A N/A	P/N84G5655 P/N66G5018
	TFT Signal Cable	N/A	P/N84G5659
	TFT Inverter Card	N/A	P/N84G5658
	DSTN FRU COMPONENTS	DSTN Hinge Kit	P/N11J9522 R&L in kit
DSTN LCD Rear Cover Large Logo (Cover)		P/N11J9523 in kit	P/N84G5865 P/N66G5017
DSTN Bezel Small Logo (Bezel)		N/A N/A	P/N66G6200 P/N66G5018
DSTN Signal Cable		N/A	P/N66G6204
DSTN Inverter Card		N/A	P/N84G2395

Remove Replace Diagrams.



LCD Rear Cover



1.4.107 2625 MOD 365X/XD DISKETTE READ ERRORS

Record number: H133350

Device: D/T2625
Model: M
Tip key: 004
Date created: 096/04/23
Date last altered: A97/11/07

The 2625 internal or external diskette drive could experience read errors if it is in close proximity to the AC Adapter.

The read error is the result of the AC Adapter's expanding and collapsing magnetic field. This is a normal result of transforming AC voltages. The field is not large and it dissipates quickly as you move away from the AC Adapter.

Because there is no practical method of shielding magnetism the only alternative is to keep the diskette drive away from magnetic devices.

SAS KEYWORDS:

PSY2 PSY2PWR PSY2DSKT THINKPAD
UNCLASSIFIED

1.4.108 2625 OPERATOR'S MANUAL CORRECTION.

Record number: H00138

Device: D/T2625
Model: M
Tip key: 005
Date created: 096/04/30
Date last altered: A97/11/07

The battery charging statement on page 86 of the 365 Operator's Manual currently reads:

Repeatedly charging a battery pack that has been completely discharged shortens the battery operating time.

The statement should read:

Repeatedly charging a battery pack that has not been completely discharged shortens the battery operating time.

Please give this change to your customers.

SAS KEYWORDS:

PSY2 PSY2DOC PSY2PWR THINKPAD
UNCLASSIFIED

1.4.109 2625 USER'S GUIDE BATTERY STATUS INFO UPDATE.

Record number: H133146

Device: D/T2625
 Model: M
 Tip key: 003
 Date created: 096/03/19
 Date last altered: A97/11/07

The customer's User's Guide information on the Battery Status Indicator colors may be confusing in the following areas:

SYSTEM STATUS INDICATORS, located on or near page 19 and in USING THE BATTERY- POWER STATUS INDICATOR located on or near page 85 (Pages may vary with language.)

The System Status Indicator area states:

Battery Power Status	
GREEN	Sufficient Power remains for operation. Battery power status cannot be determined when the battery is not installed in the computer.

AND

The area for Using the Battery-Power Status Indicator states:

Using the Battery-Power Status Indicator		
STATUS	CONDITION	ACTION
-----	-----	-----
GREEN	Sufficient Power remains for operation.
OFF	The battery pack is not installed

The above is true, but not complete. It should state:

Battery Power Status without AC Adapter	
GREEN	Sufficient Power remains for operation.
AMBER	The battery has a minimal charge and should be charged immediately.
OFF	No battery installed or completely depleted state of charge with a battery installed.
	NOTE: Battery power status can only be determined when the battery is installed in the computer without an AC Adapter attached.
Battery Power Status with AC Adapter	
GREEN	The battery is in a state of charge above a minimum operational level.
AMBER	Not displayed when the AC Adapter is attached.
OFF	The battery is completely discharged or defective.
	NOTE: When the battery is removed the GREEN indicator color does not indicate a charge level - It indicates an AC Adapter is attached. This indication has no operational or battery condition significance.
	NOTE: The "Actions Required" section remains unchanged.

SAS KEYWORDS:

PSY2	PSY2DOC	PSY2DIAG	THINKPAD
365C	365CS	365CSD	365CD
365	UNCLASSIFIED		

1.4.110 2625 365X & 365XD HMM ADDITIONS & CORRECTION.

Record number: H014240

Device: D/T2625
 Model: M
 Tip key: 006
 Date created: 096/06/06
 Date last altered: A97/03/27

The Hardware Maintenance Manual S82G-1503-03 May 1996 requires the following additions and corrections in the LCD area on page 165 and 167. This tip also contains FRU information on the new 11.3 LCD and a complete list of FRUs for the 365X and XD systems.

NOTE:

The February 1997 S84H-8101-00 HMM should have both FRU P/N39H2220 and P/N07H0392 listed next to the 810MB fixed disk drive. These two FRUs are interchangeable.

S82G-1503 - 03 CHANGES:
 Page 165

TFT LCD FRU Parts List
 Index LCD Parts

DELETE --->	4	LCD Rear Cover 10.4 TFT	74H0621
ADD----->	4	LCD (10.4 TFT Panel)	74H0621
ADD----->	2	LCD Cover Kit (10.4 TFT)	74H0582
		Contents: TOP CVR SCREW	
		REAR LCD cover	NOTE that the rear
		FRONT LCD bezel	cover is in index 2
		RUBBER LID	
		INSLTR LCD UPPER	
		INSLTR LCD SIDE	
		ADHESIVE TAPE	

Page 164

Re-number reference 4 to 2.
 Number the LCD panel reference 4

Page 167

Index LCD Parts

DELETE --->	4	LCD Rear Cover 10.4 DSTN	74H0620
ADD----->	4	LCD (10.4 DSTN Panel)	74H0620
ADD----->	2	LCD Cover Kit (10.4 DSTN)	74H0581
		Contents: TOP CVR SCREW	
		REAR LCD cover	NOTE that the rear
		FRONT LCD bezel	cover is in index 2
		RUBBER LID	
		INSLTR LCD UPPER	
		INSLTR LCD SIDE	
		ADHESIVE TAPE	

Page 166

Re-number reference 4 to 2.
 Number the LCD panel reference 4

In addition the following lists the 11.3 LCD and a complete FRU listing for the 365X and XD.

LCD panel	TFT	10.4 A	10.4 B	11.3
Hinge Cover Assembly				
FDD		P/N74H0617	P/N74H0617	P/N74H0617
CD-ROM		P/N74H0618	P/N74H0618	P/N74H0618
LCD COVER KIT		P/N74H0582	P/N83H5355	P/N82H8165
LCD CABLE KIT		P/N74H0627	P/N83H5356	P/N82H8169
LCD UNIT		P/N74H0621	P/N83H5357	P/N82H8166
HINGES L and R	LCD Misc parts			
INVERTER CARD		P/N69H7959	P/N83H5358	P/N82H8167
SLIDE KNOB	LCD Misc parts			
LCD Misc Parts Kit		P/N74H0619	P/N74H0619	P/N74H0619
LCD panel		10.4	11.3	
	DSTN			
Hinge Cover Assembly				
FDD		P/N74H0617	P/N74H0617	

CD-ROM	P/N74H0618	P/N74H0618
LCD COVER KIT	P/N74H0581	P/N74H0583
LCD CABLE KIT	P/N74H0626	P/N74H0628
LCD UNIT	P/N74H0620	P/N74H0622
HINGES L and R		
INVERTER CARD	P/N69H7958	P/N69H7961
SLIDE KNOB		

LCD Misc Parts Kit	P/N74H0619	P/N74H0619
--------------------	------------	------------

LCD SLIDE KNOB, LCD FOAM SUPPORT, RIGHT AND LEFT HINGE,
CABLE CLAMP, BACK GASKET, TOP GASKET, COPPER TFT TAPE, RUBBER

365X

TOP COVER	P/N69H7919	
Battery Pack	P/N41H7438	
Hard Disk Drive (720MB)	P/N85G8371	
" (810MB)	P/N39H2220	or P/N07H0392
" (1.08GB)	P/N39H2221	
" (1.35GB)	P/N73H6419	

Bracket Kit (HDD)	P/N74H0238
Keyboard Card Assembly	P/N69H7913

Misc. Cable Kit

Contents: keyboard card
to system board, FDD to

system board (365X). P/N74H0574

CPU Card Assembly P100 P/N69H7912

" P120 P/N74H0237

" P133 P/N82H8162

System Board W/Audio P/N69H7908

Port Replicator Cap P/N69H7906

Base Cover P/N69H7903

PCMCIA Card Slot Cover P/N69H7904

Keyboard Latch (L/R) P/N82H8177

Rear I/O Conn. Cover P/N69H7905

Speaker/Vol. Cable P/N74H0573

Dskt Drive 2 Mode P/N69H7926

Dskt Drive 3 Mode JAPAN P/N74H0232

Cosmetic Shield P/N82H8172

TrackPoint III Cap Set P/N84G6536

LED Indicator Card P/N69H7914

Backup Battery (Clock) P/N46H4132

Misc. Base Parts: P/N69H7916

Cover Support Bracket,

Screw Caps, Power Switch

Knob, Power Switch Bracket,

EMI Bracket, EMI Top Plate,

System Insulator, Base

insulator, Base Right Clip.

Misc. Logic Parts: P/N69H7915

CPU Spacer, CPU Heat Sink

I/O Connector Bracket,

Port Replicator Bracket

Foot (Tilt) P/N74H0571

Common Misc. Parts Kit P/N74H0229

Contents:

M2 x 4 (bind head) (15)

M2 x 5 (pin head) (11)

M2 x 4 with washer (pan head) (2)

M2 x 8 (pan head) (2)

M2.5 x 4 (bind head) (4)

M2.5 x 3 (3.5D pan head) (2)

M3 x 3 (cross slotted pan head) (4)

M3 x 4 (pan head) (2)

M3 x 4 (flat head) (4)

M3 x 6 (pan head) (6)

M3 x 6 with washer (pan head) (4)

Hex stud M2.5 short length (6)

Screw St2.9 x 4.5 (pan head) (1)

M2 x 5 (bind head) (4)

M2 x 5 (cross slotted pan head) (2)

M3 x 5 (pn head) (6)

365XD UNIQUE PARTS:

CD-ROM Drive (X4 Speed) P/N69H7925

CD-ROM Drive (X6 Speed) P/N82H8160

NOTE: All other 365XD FRUs are equal to 365X model FRUs.

NOTE: The Option and Keyboard FRUs are listed in the current HMM

Volume 3 in the 365 area.

SAS KEYWORDS:

PSY2

PSY2PART

PSY2DSP

THINKPAD

DISPLAY

1.4.111 2630 MOD 701, SHADOWS ON STN LCD.

Record number: H131668

Device: D/T2630
Model: M
Tip key: 003
Date created: 095/11/10
Date last altered: A97/12/05

2630 701 STN systems may display a shadow image on the LCD, if the system is installed in a docking station or port replicator when using the combination LCD and CRT function.

Install the latest level BIOS to correct this condition. It can be down loaded from the IBM PC Company BBS from file area 37 for portable, notebook and laptop systems.

----- IMPORTANT -----

Diskette fixes are customer installable. Customers should be advised to contact the IBM PC Company HelpCenter at 800-772 - 2227 if assistance is required in getting or installing this information.

Files are located on the PC company's Bulletin Board Service (BBS). The direct line for modem connection to The PC Company BBS is 1-919-517-0001 or tieline 255-0001.

Customers in Canada should call IBM's HelpPC at 800-565-3344 for Assistance or down load information. The Canadian BBS phone numbers are:
Montreal-514-938-3022, Toronto-905-316-4255,
Winnipeg-204-934-2735, Vancouver-604-664-6464.

The data may also be downloaded via the Internet from the IBM Personal Computer File Library by searching the following Internet URL: <http://www.pc.ibm.com/us/files.html>

SAS KEYWORDS:

PSY2

PSY2PART

THINKPAD

PSY2MCD

UNCLASSIFIED

1.4.112 2630 NEW MULTIPORT LATCH FRU.

Record number: H134988

Device: D/T2630
Model: M
Tip key: 009
Date created: 096/11/07
Date last altered: A97/12/05

The 2630 mod 701 MultiPort II FRU P/N04H6915 now has a separate latch FRU P/N42H1512. The complete MultiPort II still contains a latch assembly, but the new latch FRU should be ordered separately if the MultiPort latch is damaged.

SAS KEYWORDS:

PSY2	PSY2PART	PSY2DOC	THINKPAD
CATCH	LOCK	LEVER	UNCLASSIFIED

1.4.113 2635 CD-ROM OPTION INSTALLATION WARNING

Record number: H123545

Device: D/T2635
Model: M
Tip key: 007
Date created: 097/07/10
Date last altered: A97/07/29

A small number of CD-ROM options P/N 73H9795 have mounting screws that may interfere with the drive's sliding tray. Do NOT install the black 3.5mm long mounting screws. The correct size are gold colored M2 x 2.4mm pan head screws.

If you do not have this size screw order Screw Kit P/N83H6522. This Kit contains the 4 M2 x 2.4mm screws needed to install the CD-ROM and various other size screws.

In the US, P/N 73H9755 containing only 4 M2 x 2.4 gold screws may be ordered from the IBM PCCO HELP CENTER by calling 1 - 800-772 - 2227. NOTE: this part number is not a FRU and can not be ordered directly from Mechanicsburg.

SAS KEYWORDS:

PSY2

PSY2PART

THINKPAD

UNCLASSIFIED

1.4.114 2635 MOD 380 / 385 HIBERNATION DOES NOT COMPLETE.

Record number: H1661 Number of altered copies: 1

Device: D/T2635
Model: M
Tip key: 002
Date created: 097/06/10
Date last altered: A97/06/12

The 2635 battery technology will display fuel gauge readings of 100%, 80%, 10%, and 0% during the discharge cycle and fuel gauge readings of 80% and 100% during the charge cycle. Because the fuel gauge starts at 80% during the charge cycle it is not possible to determine the percent of charge below 80%.

To ensure the battery charge is sufficient to allow completion of low battery hibernation the 2635 battery should be fully charged after a "Low Battery Hibernation" has occurred. A battery with a short (low) charge may not have enough battery power to ensure completion of hibernation. If hibernation does not complete the information in memory will be lost.

This is normal system operation. It is NOT a hardware failure. Do NOT replace FRU parts for this condition.

NOTE: Low Battery Hibernation is not the normal default. It is an option that can be selected by the operator.

SAS KEYWORDS:

PSY2 PSY2PWR PSY2BRD THINKPAD
UNCLASSIFIED

1.4.115 2635 MOD 380 / 385 SYSTEM NOISE.

Record number: H1663

Device: D/T2635
Model: M
Tip key: 004
Date created: 097/06/10
Date last altered: A97/12/05

The 2635 ThinkPad cooling fan is thermostatically controlled. During normal operation the fan will cycle on and and off. The whirling sound made by the fan is similar to the sound a hard file produces. Suspect normal fan noise, if the symptom is an intermitten HDD noise with no orange "Drive in use" system status indicator on.

Fan noise coming from the area of the fan duct at the rear of the system is normal. Do not replace FRUs.

SAS KEYWORDS:

PSY2	PSY2FDSK	THINKPAD	UNCLASSIFIED
BLOWER	COOLING		

1.4.116 2635 MOD 380/385 CD-ROM INSTALL TEST CORRECTION.

Record number: H137755

Device: D/T2635
 Model: M
 Tip key: 001
 Date created: 097/05/09
 Date last altered: A97/05/15

The Options by IBM ThinkPad 380/385 8X CD-ROM Drive Upgrade Kit documentation requires a change to the CD-ROM test procedure on page 3 - 20. Step 5 incorrectly states the following: "The Tool icon appears in the upper right corner of the menu." This does not occur during the Model 380 / 385 Easy Setup test procedure.

A corrected CD-ROM test is listed below. Use this to correct the Customer's User's Guide and run the test.

Doing The CD-ROM Test

NOTE: 1. The TrackPoint III, cursor move (arrow) keys or tab key can be used to highlight an Easy Setup action. The Enter Key or left mouse button can then be used to select the Action.

NOTE: 2. A CD-ROM disk is required for the Advanced Diagnostic test. It is NOT required for the standard CD-ROM test.

Steps:

1. Attach the AC Adapter to the computer. Press and hold the "F1" key while turning the computer on. Continue to hold down The "F1" key until the Easy-Setup screen appears.
2. Select the "Test" icon and press the "Enter" key or press the left TrackPoint III button. A list of items (icons and names) will appear.
3. Highlight the CD-ROM test icon and press the "Enter" key. A test progress screen appears and the term "OK" will appear under the CD-ROM icon if the test completes with out error. If a failure occurs an error code and FRU call out number will appear.
4. To start the Advanced Diagnostic test press and hold the "Ctrl" key while pressing the "A" key.
5. The ThinkPad FRU Connections screen appears. If a "Not Connected" message appears next to the CD-ROM, ensure the CD-ROM drive is properly connected. To do this reseal the drive.
6. Click the "Exit" block or press the "Esc" key to exit the screen.
7. The Keyboard test screen now appears. Test the keyboard by pressing each key or exit the screen by clicking on the "Exit" block or by pressing and holding the "Ctrl" key while pressing the "Pause" key.
8. To start the CD-ROM advanced diagnostic from the screen select the CD-ROM icon and press the "Enter" key or click on the CD-ROM icon with the left mouse button. Follow the detailed instructions that appear on the screen. (A CD-ROM Disk will be needed to complete this test.) When the test is finished an "OK" or an error code will be displayed under the CD-ROM icon.
10. Select "Test All" to ensure all devices operate correctly after the Upgrade.

NOTE: If an error occurs during any of the tests follow the problem determination steps in your system documentation to resolve the issue.

You have finished installing the 8X CD-ROM Drive Upgrade Option.

11. Return the ThinkPad, CD-ROM User's Guide and the above page 3 - 20 corrections to the customer.

SAS KEYWORDS:

PSY2	PSY2PART	THINKPAD	UNCLASSIFIED
PSY2DOC	PSY2OPER		

2635 SUBCARD (POWER CARD) INSTALLATION CAUTION.

1.4.117 2635 SUBCARD (POWER CARD) INSTALLATION CAUTION.

Record number: H16442

Device: D/T2635
Model: M
Tip key: 009
Date created: 097/07/15
Date last altered: A97/07/15

When installing the 2635 Power/Subcard, FRU P/N73H9928, be sure to press down firmly and evenly to install the power card straight DO NOT rock card into place, or install one side before the other as this may damage the connector and damage the system board electrically.

SAS KEYWORDS:

PSY2	PSY2PWR	PSY2PART	THINKPAD
PSY2ADPT	UNCLASSIFIED		

1.4.118 2635 380 / 385. NO MODEM SOUND.

Record number: H1662 Number of altered copies: 1

Device: D/T2635
Model: M
Tip key: 003
Date created: 097/06/09
Date last altered: A97/06/11

2635 systems installed in the port replicator, P/N84G1320, will not emit modem hand shake sounds during the initial modem connection with another system. All other speaker operations will still work and the modem will operate correctly.

This tip will be updated as new information is found. Do not replace FRU parts if the above symptom is present.

SAS KEYWORDS:

PSY2 PSY2BRD PSY2COM THINKPAD
UNCLASSIFIED

1.4.119 2635 380E/ED AND 385ED HANGS W/ 5250 EXPRESS PC CARD.

Record number: H021994

Device: D/T2635
Model: M
Tip key: 012
Date created: 098/03/25
Date last altered: A98/04/02

The new P/N05J4603 is not yet available in the FRU part system. This tip will be updated at availability.

There is no work around for this error condition.

The ThinkPad 380E, 380ED, and 385ED using an IBM 5250 Express PC card FRU P/N88H0253 may experience the following intermittent conditions:

- o Hangs during Win95 boot up.
- o 5250 diagnostic test failures.

Customers experiencing one or both of these conditions when a 5250 Express PC card is in the system should contact their point of sale for a new 5250 Express PC card FRU P/N05J4603.

NOTE: The 5250 Express PC card has a limited life time warranty that allows replacement for this failure.

SAS KEYWORDS:

PSY2	THINKPAD	UNCLASSIFIED	PSY2ADPT
LOCKUP	LOCK		

1.4.120 2635&COLON. COOL FAN EXERCISER INFORMATION.

Record number: H127667

Device: D/T2635
Model: M
Tip key: 006
Date created: 097/07/08
Date last altered: A97/07/10

The 2635 ThinkPad cooling fan is thermostatically controlled. During normal operation the fan will cycle on and off. To determine if the fan is operational cold boot the system. This will cause the cooling fan to start and run for about 10 seconds during POST.

SAS KEYWORDS:

PSY2 PSY2PART THINKPAD UNCLASSIFIED
PSY2DIAG

1.4.121 2640 HMM VOLUME 3 MEMORY CORRECTION.

Record number: H135699

Device: D/T2640
 Model: M
 Tip key: 003
 Date created: 096/12/12
 Date last altered: A97/04/22

The September 1996 Hardware Maintenance Manual Volume 3 requires a correction to the 2640 section on page 234.

DISCRIPTION	OLD INCORRECT	NEW CORRECT
8MB DIMM Memory	P/N29H9287	P/N42H2767
16MB DIMM Memory	P/N29H9288	P/N42H2768
32MB DIMM Memory	BLANK	P/N42H2769

The next change identifies memory to the correct 760 model.

On Page 398 of the same manual Add the words "760C and CD" next to "DIMM 8MB P/N29H9287" and next to "DIMM 16MB P/N29H9288".

On the same page add "760E, L, LD, EL, and ELD" next to "SO DIMM 8 MB P/N42H2767", "SO DIMM 16 MB P/N42H2768", and next to "SO DIMM 32 MB P/N42H2769".

SAS KEYWORDS:

PSY2 PSY2PART PSY2DOC THINKPAD
 UNCLASSIFIED D/T9546

1.4.122 2640 560 FALSE AUDIO ADAPTER FAILURE.

Record number: H136077

Device:	D/T2640	Date created:	097/01/13
Model:	M	Date last altered:	A97/01/14
Diagnostic ID:	DIAG999	Owning B.U.:	USA
Tip key:	004		

Additional diagnostic IDs and online tests:

The ThinkPad 560 audio diagnostic will experience a false failure if the Audio Adapter address is set to 240H. To ensure correct diagnostic operation use the ThinkPad Features program to change the Audio Adapter address to 220H. If the Audio diagnostic operates correctly return the adapter address to its original setting to allow correct customer operation. If the Audio Diagnostic fails at the 220H address replace the indicated FRU (System Board).

This condition will be corrected in the next BIOS release.

SAS KEYWORDS:

PSY2	PSY2DIAG	THINKPAD	UNCLASSIFIED
PSY2BRD			

1.4.123 2640 560 LCD COMPONENT FRU LIST & INSTRUCTIONS.

Record number: H136769

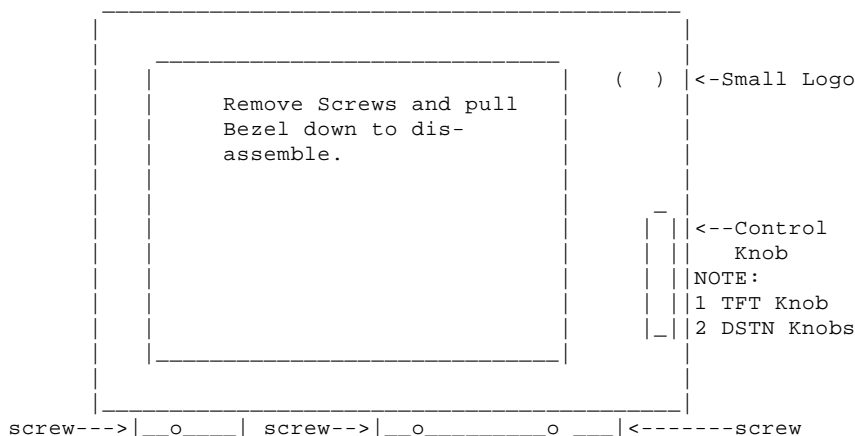
Device: D/T2640
 Model: M
 Tip key: 005
 Date created: 097/02/10
 Date last altered: A97/02/26

The new HMM S84H-8101-00 for the 365X, 365XD, and 560 ThinkPad contains the following FRU part numbers and LCD FRU component removal and replacement instructions.

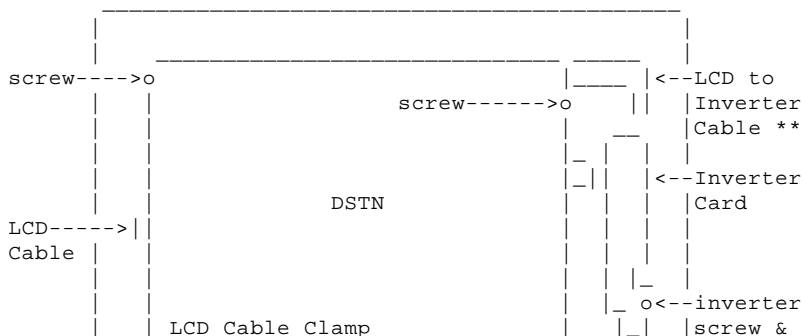
The following FRUS have been released for the 560 LCD components.

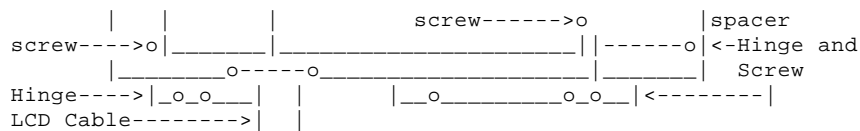
LCD		
DSTN COMPONENT FRUs	FRU PART NUMBER	
DSTN Assembly	P/N46H4139	
LCD Bezel	P/N46H4154	
Control Knob	P/N46H4158	
LCD Panel	Order Assembly	
Inverter Spacer	P/N46H4159	
Inverter Card	P/N46H4152	
Shield Sheet	P/N46H4157	
LCD Cable	P/N46H4156	
Hinges	P/N46H4155	
Rear Cover	P/N20H4263	New, update manual
TFT COMPONENT FRUs	FRU PART NUMBER	
TFT Assembly	P/N46H4140	
LCD Bezel	P/N46H4162	
Control Knob	P/N46H4224	
LCD Panel	Order Assembly	
Shield Sheet	P/N46H4165	
LCD Cable	P/N46H4164	
Hinges	P/N46H4163	
Rear Cover	P/N20H4264	New, update manual
COMMON PARTS	FRU PART NUMBER	
Screw Cover	P/N66G5046	
Screw 2.5x6mm	P/N46H4160	New, update manual

LCD front Cover: DSTN and TFT Removal.

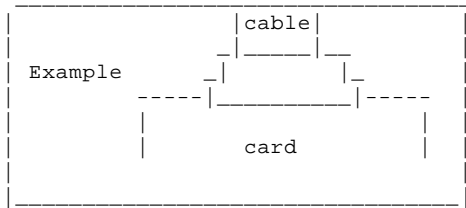


DSTN Panel, Inverter Card, LCD Cable, and Hinge Locations.

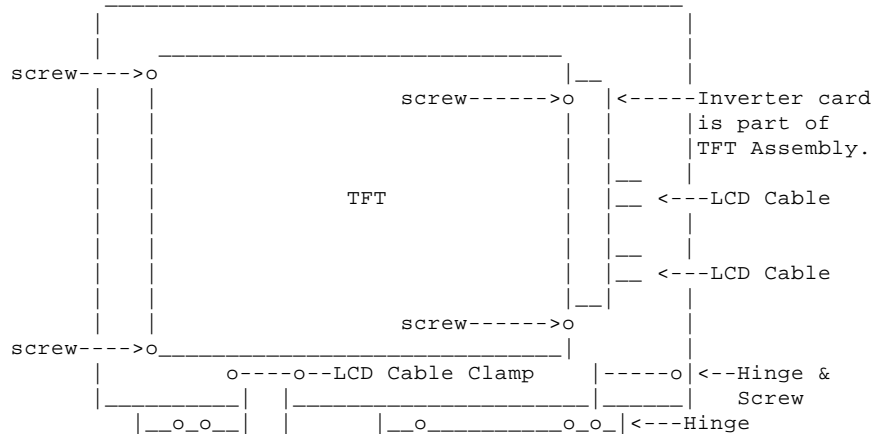




Note ** Ensure the LCD Inverter Cable is aligned correctly to the Inverter Card socket.

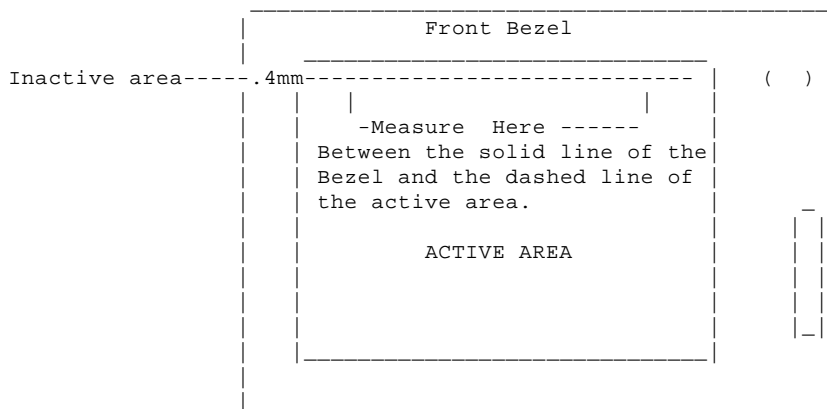


TFT Panel, Cable and Hinge Locations



NOTE: There are two types of rear covers for the ThinkPad 560 TFT LCD unit. Make sure which type you have before installing the replacement LCD panel.

1. If the rear cover has two alignment bosses ensure they are inserted into the LCD indentations. If this is not done the panel could crack.
2. If the cover has no alignment bosses snug the LCD panel screws and completely reassemble the system. Loosely place the Front Bezel on the panel and power on the system. The inactive area on a full white or color screen should measure 0.4mm as the following figure shows. When the space between the bezel and active area is within specifications tighten the panel screws and complete the installation of the Bezel and screw covers.



SAS KEYWORDS:

PSY2
UNCLASSIFIED

PSY2PART
PSY2DOC

PSY2DISP

THINKPAD

3.5" DISKETTE DRIVE INTERCHANGE PROBLEM

1.4.124 3.5" DISKETTE DRIVE INTERCHANGE PROBLEM

Record number: H12392

Device: D/T8550
 Model: M
 Tip key: 180
 Date created: 093/06/16
 Date last altered: A93/06/17

SOME 8550, 8560 AND 8580 SYSTEMS MAY REQUIRE A REPLACEMENT 3.5" DISKETTE DRIVE (1.44 MB) FOR DISKETTE INTERCHANGEABILITY PROBLEMS BETWEEN 720 KB DISKETTE DRIVES AND 1.44 MB DISKETTE DRIVES.

THE FOLLOWING STEPS WILL ASSIST IN ISOLATING CUSTOMER PROBLEMS WITH TRANSFERRING DATA ON 720 KB 3.5" DISKETTES BETWEEN THE PERSONAL SYSTEM/2 MODEL 30, PC CONVERTIBLE, 4865 EXTERNAL 3.5" DISKETTE DRIVE OR PC AT/XT INTERNAL 3.5" DISKETTE OPTION, AND THE PERSONAL SYSTEM/2 MODELS 50, 60, OR 80.

1. VERIFY THAT THE CUSTOMER HAS USED ONLY 3.5" DISKETTES LABELED "DOUBLE SIDED" OR "1.0 MB" IN THE PERSONAL SYSTEM/2 MODEL 30, PC CONVERTIBLE, 4865 EXTERNAL 3.5" AND PC AT/XT 3.5" DRIVE.

2. VERIFY THAT THE 3.5" DOUBLE SIDED DISKETTES WERE FORMATTED CORRECTLY. THE CORRECT DOS COMMANDS ARE:

PERSONAL SYSTEM/2 MODEL 30, PC CONVERTIBLE, PC AT/XT AND 3.5" EXTERNAL DRIVES: "FORMAT A: " (A: REPRESENTS LOGICAL DRIVE DESIGNATION)

PERSONAL SYSTEM/2 MODELS 50, 60, 80: "FORMAT A: /N: 9/T: 80" (A: REPRESENTS LOGICAL DRIVE DESIGNATION)

3. SOME CUSTOMERS HAVE REPORTED PROBLEMS WITH READING "DOUBLE SIDED" OR "1.0 MB" DISKETTES IN A PERSONAL SYSTEM/2 MODEL 30, PC CONVERTIBLE, PC AT/XT OR 3.5" EXTERNAL DISKETTE DRIVE WHICH HAVE BEEN BOTH:

A) FORMATTED (OR WRITTEN) IN A PERSONAL SYSTEM/2 MODEL 30, PC CONVERTIBLE, PC AT/XT OR EXTERNAL 3.5" DISKETTE DRIVE; AND,

B) WRITTEN (OR REFORMATTED) BY A PERSONAL SYSTEM/2 MODEL 50, 60, OR 80 1.44 MB DISKETTE DRIVE.

IF A FAILURE OF THIS TYPE IS ENCOUNTERED, THE FOLLOWING STEPS SHOULD BE TAKEN:

C) FIRST, TO ALLOW THE CUSTOMER TO RECOVER THEIR DATA, THEY MUST DO THE FOLLOWING: A NEW, BLANK 1.0 MB DOUBLE SIDED DISKETTE MUST BE FORMATTED IN THE PERSONAL SYSTEM/2 MODEL 50, 60 OR 80 USING THE "FORMAT A: /N: 9/T: 80" COMMAND. THE DISKETTE WHICH WAS UNREADABLE CAN BE COPIED TO THE NEW DISKETTE IN THE PERSONAL SYSTEM/2 MODEL 50, 60 OR 80 USING THE DOS COPY COMMAND. THE NEW DISKETTE WILL NOW BE FULLY INTERCHANGEABLE BETWEEN THE PC CONVERTIBLE, PC AT/XT, 3.5" EXTERNAL DISKETTE DRIVE, PERSONAL SYSTEM/2 MODEL 30 AND PERSONAL SYSTEM/2 MODELS 50, 60 OR 80.

D) SECOND, IF THE 1.44 MB DISKETTE DRIVE (FRU P/N 72X8523) IN THE PERSONAL SYSTEM/2 MODEL 50, 60 OR 80 HAS A STICKER IN THE LOWER LEFT REAR CORNER, LABELED D01, D02, D03, D04 OR D05, AND A BAR CODE LABEL BEGINNING WITH "B1BAO", IT SHOULD BE REPLACED.

ORDER DISKETTE DRIVES (FRU P/N 72X8523) THROUGH NORMAL CHANNELS.

SAS KEYWORDS:

PSY2 PSY2DIAG PSY2OPER PSY2MISC
 PSY2DSKT D/T8560 D/T8580

1.4.125 3.5" REWRITABLE OPTICAL BEZEL FRU NUMBERS

Record number: H20306

Device: D/T8550
 Model: M
 Tip key: 151
 Date created: 093/02/02
 Date last altered: A93/08/05

THE IBM PERSONAL SYSTEM/2 HARDWARE MAINTENANCE MANUAL (HMM) FORM # S52G-9971-00, CONTAINS INCORRECT PART NUMBERS FOR THE REWRITABLE OPTICAL DRIVE BEZELS AND TRAY. THESE INCORRECT PART NUMBERS ARE LOCATED ON PAGE 186. THE FOLLOWING LIST MAY BE USED TO IDENTIFY THE CORRECT FRU PART NUMBERS.

PART NAME	INCORRECT NUMBER	CORRECT FRU PART NUMBER
DRIVE BEZEL ASSEMBLY		
MODEL 8595	P/N10G7584	P/N92F0155
MODEL 8590-B BAY	P/N10G7588	P/N92F0157
MODEL 8590-D BAY	P/N10G7590	P/N92F0158
MODEL 8590-FILLER	N/A	P/N64F4149
MODEL 8580	P/N10G7586	P/N92F0156
MODEL 8557 - BAYS 2 & 3	P/N10G7586	P/N92F0159
OTHER		
MOUNTING TRAY	P/N64F5933	P/N92F0269
3510 MOUNTING TRAY & BEZEL	P/N85F0021	P/N92F0268

THE FOLLOWING BEZELS FOR THE REWRITABLE DRIVE ARE NOT LISTED IN THE HMM.

MODEL 8535/8540-BAYS 2 & 3	P/N92F0159
MODEL 8560/8565	P/N92F0156
MODEL 9556/9576	P/N92F0159
MODEL 9557/9577-BAYS 2 & 3	P/N92F0159

THE CORRECTIONS AND ADDITIONS WILL BE MADE IN THE NEXT RELEASE OF THE HMM DOCUMENT.

SAS KEYWORDS:

PSY2	D/T3510	D/T3511	D/T8540
D/T8556	D/T8557	D/T8560	D/T8565
D/T9576	D/T8580	D/T8590	D/T8595
D/T9577	D/T9556	D/T9557	REWRITEABLE
PSY2PART	PSY2DOC	CD ROM	CDROM
CD-ROM			

1.4.126 3.5" REWRITABLE OPTICAL DRIVE FIX

Record number: H20579

Device: D/T8550
Model: M
Tip key: 152
Date created: 093/03/01
Date last altered: A93/09/08

This RETAIN tip is to inform servicers of new device drivers and microcode that prevent possible data loss on the 3.5" Rewritable Optical Drive. Some NON-IBM "pre-formatted" optical cartridges are not compatible with some versions of the IBM 3.5" Rewritable Optical Drive. Writing to these optical cartridges may cause data loss.

This problem does NOT occur with IBM Optical cartridges.

DETAIL:

"Formatted" or "Pre-Formatted" optical cartridges have been "low-level formatted" during the manufacturing operation. A "low-level" format includes writing and reading to every sector on the optical cartridge and reassigning spare sectors to any defective sectors. This information is stored in a reserved area of the cartridge called the Disk Definition Structure (DDS)

There are several ways to create the DDS, and some are not compatible with the IBM 3.5" Rewritable Optical Drive. (Note: Optical Cartridges that have not been "pre-formatted" will not contain a DDS, and will not be exposed to data loss.)

For a cartridge to be usable by an operating system, it must also be "high-level formatted." This includes creating the File Allocation Tables (FAT), boot record, and root directory. When an affected Optical drive executes the DOS or OS/2 format operation, it will perform both low and high level formats if no previous format existed. If a previous low-level format existed, it will use information from the existing DDS and may incorrectly reassign bad sectors. This may create the possibility of two different "logical" sectors to be mapped to the same "physical" sector and may cause the loss of data.

Data loss will most likely appear as incomplete files, missing files, or programs that will not execute. The loss may also appear as empty sub-directories.

FIX:

There are two methods to correct the format problem:

1. For affected drives (see the IDENTIFICATION section below) new device drivers for DOS and OS/2 environments have been developed which prevent the data loss. A "test" diskette to screen for potentially affected cartridges is also included.

The customer must install the new device driver and then use the test program to identify any non-IBM optical cartridges that may have the data loss potential. These cartridges must be re-formatted using the DOS or OS/2 unconditional format, with the new device driver installed. The commands are for DOS: `FORMAT (d): /U`
and for OS/2: `FORMAT (d): /L`

The new device drivers and test diskette are available as form # G60G-9463, or by ordering part number 60G9463 from 1 - 800-845 - 4263. The software driver update and test diskette will be sent at no charge.

Each diskette has a "README.DOC" file which provides additional information to the user. These files should be read for a full understanding of the necessary actions.

2. A kit, FRU P/N61G2326, containing a new microcode module (PROM) will be available (approx. 4-1-93). The module is to be installed in the 3.5" Rewritable Optical Drive. The kit is necessary for customers that use operating systems other than DOS, OS/2 and Novell Netware. The kit contains a microcode module, installation instructions, special tool bit (TORX "tamper-proof") and updated labels for the optical drive.

CORRECTIVE ACTION

The customer/user should:

PSY2 RETAIN TIPS
3.5" REWRITABLE OPTICAL DRIVE FIX

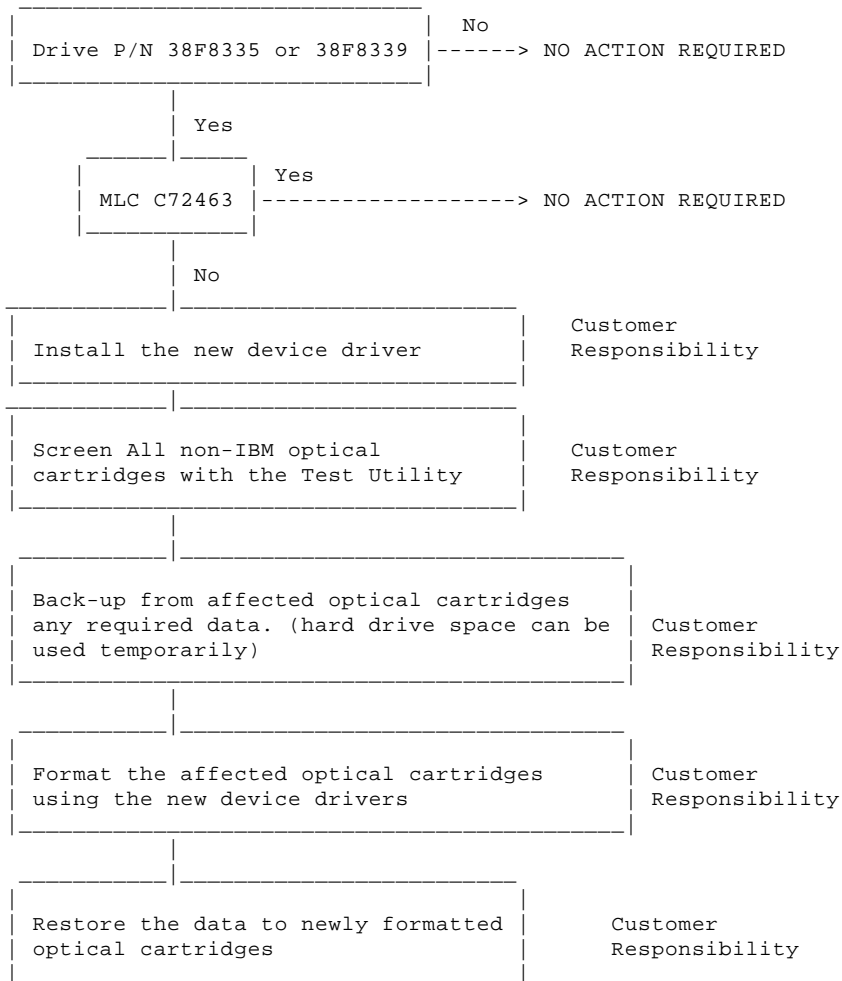
1. Obtain a copy of the package containing the cartridge test program and new device drivers by calling 1-800-845-4263, and asking for:
 IBM Personal System/2 3.5-Inch Rewritable Optical Drive Device Drivers and Cartridge Test Procedures P/N 60G9463.
 Includes two diskettes: PS/2 3.5 Device Driver Ver 2.0 and Cartridge Test Procedures Ver 1.0
2. Install the new DOS/OS2 device drivers to prevent any future data loss problems.
3. Screen ALL non-IBM optical cartridges with the Cartridge Test Utility contained in the publication to determine if optical cartridges contain incompatible formats.
4. Follow the instructions in the Cartridge Test Procedure (README.DOC on the test diskette) to eliminate the defect from affected non-IBM optical cartridges.

IDENTIFICATION OF AFFECTED DRIVES:

Examine the label on the top of the 3.5" Rewritable optical drive. Identify the "Drive P/N" and "MLC number."

Option Number:	6450162	
Model number:	MD3125A	
FRU Number:	85F0015	<--- sample label
Drive P/N:	38F8335	
MLC Number:	C72463	

Use the following MAP to determine appropriate action.



Notes:

1. All Optical cartridges formatted with the new device drivers on drives with the current microcode module are usable and no exposure to the problem will exist.
2. Current production Optical drives contain the new microcode module (MLC C72463).
3. Operating systems which do not use the DOS or OS/2 device

PSY2 RETAIN TIPS

3.5" REWRITABLE OPTICAL DRIVE FIX

drivers such as Xenix*, Unix*, AIX, etc. MUST install the new microcode module.

4. Some non-IBM "pre-formatted" Optical cartridges may be compatible with The IBM 3.5" Rewritable Optical drive. The Test program should be used on ALL non-IBM Optical cartridges to be sure.
5. Some data on affected non-IBM optical cartridges might be corrupted. The data should be re-created from the original source, if possible. If the original source is not available the data on the cartridge should be examined (executed if it is a program file, read if it's a text file, etc....)

SAS KEYWORDS:

PSY2	PSY2ERR	PS2	PS/2
D/T8590	D/T8595	D/T9595	D/T9576
D/T9577	D/T8556	D/T8557	PSY2DIAG
PSVP	VALUEPOINT	D/T9585	CD-ROM
CDROM	REWRITEABLE		

1.4.127 3COM ETHERNET ADAPTER FAILS IN 6384

Record number: H20753

Device: D/T6384
Model: M
Tip key: 020
Date created: 093/03/22
Date last altered: A94/03/14

THE 3COM ETHERNET II ADAPTER MAY FAIL THE 3COM SUPPLIED DIAGNOSTIC PROGRAM AND FAIL TO CONNECT TO THE NETWORK IF THE ADAPTER IS INSTALLED IN EITHER OF THE TOP FOUR RISER CARD SLOTS IN A 6384 486 PS/VALUEPOINT SYSTEM.

THE DIAGNOSTICS MAY FAIL WITH THE ERROR MESSAGE:
"ALL DMA CHANNELS FAILED"

THE DIAGNOSTIC PROGRAM WILL RUN SUCCESSFULLY IF THE 3COM ETHERNET II ADAPTER IS INSTALLED IN THE RISER CARD SLOT CLOSEST TO THE SYSTEM BOARD.

IF THE 3COM ETHERNET II ADAPTER CONTINUES TO FAIL WHILE INSTALLED IN THE LOWEST RISER CARD SLOT, UTILIZE NORMAL PROBLEM DETERMINATION PROCEDURES TO ISOLATE THE FAILING FRU.

THE 3COM ETHERNET II ADAPTER FUNCTIONS PROPERLY IF INSTALLED IN ANY ADAPTER SLOT OF THE 386SLC PS/VALUEPOINT MODELS.

SAS KEYWORDS:

PSVP	VALUE POINT	PSVPOEM	PSVPCOMM
PSVPADPT	PSY2OEM	PSY2COMM	PSY2ADPT
PSY2MISC	PSVPMISC	PSY2ERR	PSVPERR

1.4.128 300/1200/2400 PS/2 MODEM HANGS IN DIAGS

Record number: H004886

Device: D/T8555
Model: M
Tip key: 020
Date created: 090/12/07
Date last altered: A94/11/07

8555 SYSTEMS WILL HANG DURING ADVANCED OR CUSTOMER LEVEL DIAGNOSTICS IF AN IBM 300/1200/2400 BAUD MODEM IS INSTALLED. THIS PROBLEM IS A MODEM DIAGNOSTIC PROBLEM ONLY AND DOES NOT AFFECT MODEM OPERATION.

THIS PROBLEM CAN BE CIRCUMVENTED WHEN USING ADVANCED DIAGNOSTICS BY ELIMINATING THE MODEM DIAGNOSTICS TEST WHEN TESTING THE SYSTEM. THIS CAN BE DONE BY REMOVING THE MODEM FROM THE ADVANCED DIAGNOSTICS INSTALLED DEVICE LIST PRIOR TO RUNNING THE SYSTEM DIAGNOSTICS. CUSTOMER LEVEL DIAGNOSTICS CAN ONLY BE PERFORMED BY REMOVING THE MODEM AND RE-CONFIGURING THE SYSTEM PRIOR TO INVOKING DIAGNOSTICS. THIS WILL ELIMINATE THE MODEM DIAGNOSTICS TEST FROM THE CUSTOMER LEVEL DIAGNOSTICS.

CORRECTIONS TO THE MODEM DIAGNOSTICS ARE INCLUDED ON THE 300/1200/2400 MODEM/A OPTION DISKETTE VERSION 1.2 OR LATER.

SAS KEYWORDS:

PSY2	PSY2DIAG	8555SYSDIAG	PSY2COMM
8555SYSCOMM	8555SYSADPT	PSY2ADPT	

1.4.129 300/1200/2400 PS/2 MODEM HANGS IN DIAGS

Record number: H005242

Device: D/T8565
Model: M
Tip key: 002
Date created: 090/03/20
Date last altered: A94/11/07

8565 SYSTEMS WILL HANG DURING ADVANCED OR CUSTOMER LEVEL DIAGNOSTICS IF AN IBM 300/1200/2400 BAUD MODEM IS INSTALLED. THIS PROBLEM IS A MODEM DIAGNOSTIC PROBLEM ONLY AND DOES NOT AFFECT MODEM OPERATION.

THIS PROBLEM CAN BE CIRCUMVENTED WHEN USING ADVANCED DIAGNOSTICS BY ELIMINATING THE MODEM DIAGNOSTICS TEST WHEN TESTING THE SYSTEM. THIS CAN BE DONE BY REMOVING THE MODEM FROM THE ADVANCED DIAGNOSTICS INSTALLED DEVICE LIST PRIOR TO RUNNING THE SYSTEM DIAGNOSTICS. CUSTOMER LEVEL DIAGNOSTICS CAN ONLY BE PERFORMED BY REMOVING THE MODEM AND RE-CONFIGURING THE SYSTEM PRIOR TO INVOKING DIAGNOSTICS. THIS WILL ELIMINATE THE MODEM DIAGNOSTICS TEST FROM THE CUSTOMER LEVEL DIAGNOSTICS.

CORRECTIONS TO THE MODEM DIAGNOSTICS HAVE BEEN MADE, AND ARE INCLUDED IN THE 300/1200/2400 MODEM/A OPTION DISKETE VERSION 1.2 OR LATER.

SAS KEYWORDS:

PSY2	PSY2DIAG	8565SYSDIAG	PSY2COMM
8565SYSCOMM	8565SYSADPT	PSY2ADPT	

1.4.130 3084-20 DIAGNOSTIC ERRORS ON 8530 (286) MODELS E01 & E21

Record number: H026009

Device: D/T8530
Model: M
Tip key: 025
Date created: 089/02/23
Date last altered: A92/06/18

DIAGNOSTIC ERROR CODE 3084-20 MAY BE DISPLAYED WHILE RUNNING THE NETWORK ADVANCED DIAGNOSTICS ON A 8530-286 MODEL E01 OR E21.

THIS MAY BE A FAILURE OF THE DIAGNOSTICS AND NOT THE NETWORK ADAPTER CARD FRU P/N8286171.

PC NETWORK ADVANCED DIAGNOSTICS VERSION 1.02 WILL OR ABOVE ELIMINATE THE FALSE ERROR CAUSED BY THE DIAGNOSTICS.

SAS KEYWORDS:

8530SYSDIAG	PSY2DIAG	8530SYSERR	PSY2ERR
8530SYSADPT	PSY2ADPT	PSY2	8530SYSCOMM
PSY2COMM			

1.4.131 3119 ADAPTER/A CARD

Record number: H033400

Device: D/T3119
Model: M
Tip key: 004
Date created: 089/07/17
Date last altered: A92/05/27

A PROBLEM HAS BEEN IDENTIFIED WITH ONE OF THE 3119 ADAPTER/A CARDS WITH CARD ASSEMBLY P/N94X2488A. THE CARD ASSEMBLY PART NUMBER IS LOCATED ON THE TOP LEFT SIDE OF THE CARD AND IS PRINTED IN WHITE INK OR WRITTEN ON THE LABEL. THE IBM FRU PART NUMBER IS P/N94X2425. THIS IS NOT THE PART NUMBER OF THE CARD.

The adapter doesn't respond to any PS/2 with a 20 Mhz processor.
The advanced diagnostics" for 3119 Adapter/A returns the error code 11910 as the result of "Adapter test".

THE 3119 ADAPTER/A FRU CAN CONTAIN ONE OF THE FOLLOWING CARD ASSEMBLIES.

P/N94X2416B
P/N94X2416C
P/N94X2488A DEFECTIVE
P/N94X2488B
P/N94X2488

P/N94X2488A Will NOT COMMUNICATE WITH THE 3119 IF INSTALLED IN A PS/2 WITH A 20MHZ PROCESSOR.

PS/2 D/T	8556	80386SX	20MHz
PS/2 D/T	8557	80386SX	20MHz
PS/2 D/T	8570	121	20MHz
PS/2 D/T	8580	111	20MHz
PS/2 D/T	8590	XP 486	20MHz
PS/2 D/T	8595	XP 486	20MHz

IF THE CUSTOMER HAS THIS CONFIGURATION, THE CARD MUST BE REPLACED. REORDER A NEW FRU, P/N94X2425 AND CONFIRM THAT IT CONTAINS ONE OF THE FOLLOWING CARD ASSEMBLIES.

P/N94X2416B
P/N94X2416C
P/N94X2488B
P/N94X2488

SAS KEYWORDS:

PS/2	PSY2	3119/A	PSY2ADPT
D/T8570	D/T8580	8580SYSADPT	8570SYSADPT

1.4.132 320/400MB HARDFILES NOT SUPPORTED IN PS/2 56 & 76

Record number: H004659

Device: D/T95XX
 Model: M
 Tip key: 007
 Date created: 093/06/02
 Date last altered: A93/06/17

IMPORTANT

THE 320MB AND 400MB HARDFILE OPTIONS ARE NOT SUPPORTED IN THE 8556, 9556, OR THE 9576. MOUNTING THE DRIVE IN THESE SYSTEMS MAY CAUSE THERMAL OR ELECTRICAL HARDFILE FAILURES (THE DRIVE ELECTRONICS CAN TOUCH THE SYSTEM FRAME.)

MARKETING LITERATURE IS CURRENTLY UNDER REVIEW, AND WILL BE UPDATED TO REFLECT CORRECT OPTION INFORMATION.

THE 320MB AND 400MB HARDFILE OPTIONS ARE SUPPORTED IN THE 8557, 9557, AND 9577. THE 8557 MODEL O5F, AND 9577 MODEL OUF & ONF, ARE MANUFACTURED WITH THE HARDFILE IN BAY 4C(UPPER RIGHT). THESE MODELS UTILIZE AN AIR BAFFLE TO PREVENT THE HARDFILE FROM OVERHEATING. THIS AIR BAFFLE IS NOT PART OF THE 320MB OR 400MB OPTION KIT. THE AIR BAFFLE IS NOT REQUIRED IF THE ABOVE HARDFILES ARE MOUNTED IN ANY BAY OTHER THAN 4C.

SAS KEYWORDS:

D/T9556	D/T9557	D/T9576	D/T9577
P/N92F0251	D/T8556	D/T8557	PSY2
PS2	PS/2	PSY2FDSK	

1.4.133 320MB & 400MB SCSI HARDFILES SUB TO 360/540MB

Record number: H131285

Device: D/T8550
 Model: M
 Tip key: 210
 Date created: 095/10/16
 Date last altered: A95/11/16

Depending on parts availability, FRU orders for the 320MB P/N85F0011 may sub to 360MB P/N82G5931, and orders for the 400MB P/N85F0012 may sub to 540MB P/N82G5932.

The mounting screws are not the same size for the substitute drives. Engineering is aware of this problem and is taking action to have screws added to the hardfile FRUs. Until this occurs, order MISC SCREW AND JUMPER KIT, FRU P/N92F0141.

Additional jumper and termination information for the 360MB and 540MB SCSI drives can be found in Record H127303.

SAS KEYWORDS:

PSY2	D/T8590	D/T9590	D/T8595
D/T9595	D/T8557	D/T9557	D/T9577
D/T8580	D/T8565	D/T9585	SATSUMA
PSY2FDSK	PSY2PART	85F0011	85F0012
82G5932	82G5931	92F0141	FRU

1.4.134 3270 CONNECTION RESTRICTIONS, PERSONAL SYSTEM/2

Record number: H025467

Device: D/T3270
 Model: M
 Tip key: 114
 Date created: 088/01/19
 Date last altered: A88/01/19

WHEN YOU HAVE A 3270 CONNECTION CARD AND A NETWORK ADAPTER CARD INSTALLED IN THE SAME PS/2 THERE ARE CARD PLUGGING AND MEMORY ASSIGNMENT RESTRICTIONS THAT MUST BE FOLLOWED.

FIRST THE 3270 CONNECTION CARD MUST BE PLUGGED INTO A LOWER NUMBERED CARD SLOT THAN THE PC NETWORK ADAPT/A CARD.
 (3270 CONNECTION CARD FURTHER AWAY FROM THE POWER SUPPLY THAN THE NETWORK ADAPTER CARD)

SECOND THERE IS ONLY ONE VALID RESOURCE FOR THE 3270 CONNECTION PROMPT "RESOURCES USED"

CHOICE "ONLY ONE"

POS 0 = XXXXXXXXB
 IO 02DOH - 02DFH
 INT 2
 MEM 0CE00H- 0CFFFFH

THIRD IN ORDER TO AVOID CONFLICTS THE PC NETWORK ADAPTER MUST BE ASSIGNED TO ONE OF THE FOUR FOLLOWING OPTIONS.

CHOICE "PRIMARY, MEM 2, INT 3"
 CHOICE "PRIMARY, MEM 3, INT 3"
 CHOICE "ALTERNATE, MEM 2, INT 3"
 CHOICE "ALTERNATE, MEM 3, INT 3"

SAS KEYWORDS:

PSY2	PSY2ADPT	8550SYSADPT	8560SYSADPT
8580SYSADPT	PSY2PART	8550SYSPART	8560SYSPART
9580SYSPART	8550	8560	8580

1.4.135 33/66 MHZ PROCESSOR IML FAILURE (01293000 ERROR)

Record number: H103898

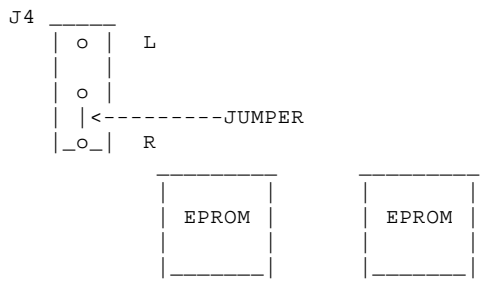
Device: D/T8590
Model: M
Tip key: 022
Date created: 092/12/08
Date last altered: A92/12/15

A POST error code of 01293000 may be experienced if a jumper is mis-located.

There is a three pin jumper at location J4 of the 33/66 MHZ processor board (FRU P/N92F0145), which is used in the 8590 & 8595 systems. This jumper is preset at the factory and is required to enable IML (Initial machine load).

THIS JUMPER SHOULD NOT BE REMOVED OR REPOSITIONED.

In case the jumper is missing or incorrectly positioned, it must be replaced between the center pin and R, as shown below:



SAS KEYWORDS:

PSY2 PS2 PS/2 PERSYS
D/T8595 D/T9595 BOOT PSY2ERR

1.4.136 340/527MB DIAGNOSTIC UPDATE, 1712 DISK ERROR

Record number: H102196

Device: D/T6384
 Model: M
 Tip key: 022
 Date created: 093/04/19
 Date last altered: A93/05/14

THE 340MB AND 527MB DISK OPTIONS FOR THE PS/VALUEPOINT 6384 AND PS/2 8535 AND 8540 SYSTEMS REQUIRE THE LATEST LEVEL DIAGNOSTIC DISKETTE IN ORDER TO TEST THE DRIVE(S). A "1712" DIAGNOSTIC ERROR WILL BE DISPLAYED DURING DISK DIAGNOSTICS IF THE WRONG LEVEL DISKETTE IS USED.

NEW LEVELS OF THE PS/VALUEPOINT AND PS/2 25SX/35/40 DIAGNOSTIC DISKETTES ARE AVAILABLE FROM MECHANICSBURG BY ORDERING PUBLICATION NUMBER S71G-2240. THE DIAGNOSTIC UPDATE PACKAGE CONTAINS BOTH THE PS/VALUEPOINT AND THE PS/2 25SX/35/40 DIAGNOSTIC DISKETTES. SLSS SUBSCRIBERS WILL ALSO RECEIVE THE UPDATE.

***** N O T E *****
 THE PS/VALUEPOINT ADVANCED DIAGNOSTIC DISKETTE THAT IS INCLUDED IN THE UPDATE PACKAGE, PUBLICATION NUMBER S71G-2240, MAY HAVE BEEN SHIPPED TO SLSS SUBSCRIBERS WITHOUT THE SYSTEM FILES NECESSARY TO ALLOW THE DISKETTE TO BOOT.

A REPLACEMENT PACKAGE IS BEING RELEASED THAT WILL CONTAIN A VERSION 1.02, TYPE 1, PS/VALUEPOINT ADVANCED DIAGNOSTIC DISKETTE. THE PUBLICATION NUMBER FOR THIS PACKAGE WILL BE S71G-4162.

 THE REQUIRED DIAGNOSTIC LEVELS ARE:

PS/VALUEPOINT
 ADVANCED DIAGNOSTICS M/T 6384, VERSION 1.01 OR HIGHER

IBM PERSONAL SYSTEM/2
 25SX/35/40 ADVANCED DIAGNOSTICS, VERSION 1.30 OR HIGHER

MARKETING DOCUMENTATION FOR THE DISK DRIVE OPTIONS ALSO CONTAINS INFORMATION REGARDING THE REQUIREMENTS FOR THE LATEST LEVEL DIAGNOSTICS.

SAS KEYWORDS:

PSVP	VALUE POINT	PSVPFDSK	PSVPDIAG
PSY2FDSK	PSY2DIAG	PSY2ERR	PSVPERR
D/T8535	D/T8540	PSY2	

1.4.137 3509 / 3510 TEST CD

Record number: H1390

Device: D/T3509
Model: M
Tip key: 001
Date created: 095/06/12
Date last altered: A95/06/12

To obtain the TEST CD for SCSI attached CD-ROMs, servicers should order the MEDIA KIT FOR CD-ROMs, FRU p/n31F4232.

The TEST CD is required when running diagnostics on the 3509.

The MEDIA KIT FOR CD-ROMs also contains a CD Carrier (required when servicing the IBM 3510).

SAS KEYWORDS:

PSY2	CDROM	CADDY	D/T3510
PSY2DGS	CD ROM		

3510 CDROM COVER SET INCLUDES INTERNAL CABLES

1.4.138 3510 CDROM COVER SET INCLUDES INTERNAL CABLES

Record number: H081678

Device: D/T3510
Model: M
Tip key: 001
Date created: 091/02/15
Date last altered: A92/02/03

THE CDROM EXTERNAL COVER SET, FRU P/N64F0135, INCLUDES THE
THE INTERNAL CABLES.

THE INTERNAL CABLES ARE NOT AVAILABLE AS A SEPARATE FRU .

SAS KEYWORDS:

PSY2 PSY2PART 3510SYSPART CD-ROM
CD ROM

1.4.139 3516 POWER SUPPLY SPECS (IBM FRU P/N52G7955)

Record number: H002094

Device: D/T3516
Model: M
Tip key: 001
Date created: 094/09/19
Date last altered: A94/09/19

The electrical specifications for the 3516 power supply are as follows:

INPUT:

100-125V AC - 8.0A
200-240V AC - 4.15A

OUTPUT:

+ 5V 20.0A MAX
+ 12V 8.0A MAX (11.0A 15 SEC)

- 12V 0.5A MAX (NOT USED BY DISK DRIVES)
- 5V 0.5A MAX (NOT USED BY DISK DRIVES)

MAX POWER 200 WATTS
FAN OPERATES ON + 12V

SAS KEYWORDS:

PSY2	PSY2PWR	3516	SPECS
52G7955	P/N		

3545 3546 CD ROM TRAY OPTION AND FRU PART NUMBERS.

1.4.140 3545 & 3546 CD ROM TRAY OPTION AND FRU PART NUMBERS.

Record number: H137500

Device: D/T3546
Model: M
Tip key: 007
Date created: 097/04/21
Date last altered: A97/04/21

A CD tray is required for the 3545 Dock I and 3546 Dock II, when a CD option is installed in either docking station. If a new CD option is being installed an option tray must be ordered. The IBM tray option numbers are as follows for US, EMEA, and Japan: US-39H3987, EMEA-39H3988, Japan-39H3989.

The CD tray FRU P/N73H8591 can only be used to replace a broken part.

NOTE: Option parts can not be ordered by IBM or TSS servicers, Options must be ordered by the system owner.

SAS KEYWORDS:

PSY2 PSY2PART THINKPAD UNCLASSIFIED
PSY2DOC

1.4.141 3545 & 3546. PATCH FOR MADGE TOKEN RING CARD

Record number: H131212

Device: D/T3545
 Model: M
 Tip key: 003
 Date created: 095/10/06
 Date last altered: A96/11/11

PATCH DISKETTE FOR MADGE TOKEN RING CARD PROBLEM

IMPORTANT

Diskette fixes are customer installable. Customers should be advised to contact the IBM PC Company HelpCenter at 800-772 - 2227 if assistance is required in getting or installing this information.

Files are located on the PC company's Bulletin Board Service (BBS). The direct line for modem connection to The PC Company BBS is 1-919-517-0001 or tieline 255-0001.

Customers in Canada should call IBM's HelpPC at 800-565-3344 for Assistance or down load information. The Canadian BBS phone numbers are:

Montreal-514-938-3022, Toronto-905-316-4255,
 Winnipeg-204-934-2735, Vancouver-604-664-6464.

The data may also be downloaded via the Internet from the IBM Personal Computer File Library by searching the following Internet URL: <http://www.pc.ibm.com/files.html>

If the Madge Token Ring card does not work in 3545 Dock I or 3546 Dock II, install file YPTF\$012.SYS in accordance with its read.me file for DOS/Windows systems (this includes Windows 95), or install YPTF\$022.SYS for OS2 based systems.

Models 755CD, CDV, CX, CE, CSE, CV must have the /M=T switch in their config.sys.

DEVICE=C: \path\YPTF\$012.SYS (for DOS)

or,

DEVICE=C: \path\YPTF\$022.SYS (for OS/2)

The DOS file should be installed at the top of the CONFIG.SYS FILE with a device= statement and the OS2 file should be installed at the end of its CONFIG.SYS in the same way.

NOTE: the \$ is not included in the BBS abstract, but is present in the actual file name.

Affected Systems are:

9545 TP750Ce
 9545 TP755C/CS
 9545 TP755 CD/CE/CX/CV/CDV
 2620 TP360C/CS
 2620 TP360CE/CSE

SAS KEYWORDS:

PSY2 PSY2ADPT THINKPAD D/T9545
 D/T2620 PSY2COMM UNCLASSIFIED

3546 DOCK II SUPPORTED FIXED DISK OPTIONS

1.4.142 3546 DOCK II SUPPORTED FIXED DISK OPTIONS

Record number: H127234

Device: D/T3546
 Model: M
 Tip key: 002
 Date created: 095/04/12
 Date last altered: A96/11/12

3546 Dock II Supported SCSI Fixed Disks

	OPTION PART	FRU PART
170MB Fast SCSI-2 1*	P/N 70G8480	P/N71G6550
340MB Fast SCSI-2 1*	P/N 70G8481	P/N71G6551
540MB Fast SCSI-2 1*	P/N 70G8491	P/N92F0406
1.0GB Fast SCSI-2 1*	P/N 70G8492	P/N92F0428
2.0GB Fast SCSI-2 2*	P/N 70G8493	P/N92F0440

(*1) Internal SCSI device installation kit P/N 66G3538 is required.

(*2) Floor standing kit (P/N 70G8506) is required.

NOTE: The above SCSI drives are supported. Other drives may cause over heating problems or contain circuitry that does not conform with the Docking station or its options.

SAS KEYWORDS:

PSY2	PSY2PART	PSY2DSK	THINKPAD
P/N70G8480	P/N70G8481	P/N70G8491	P/N70G8492
P/N70G8493	UNCLASSIFIED		

1.4.143 3546 FALSE FAILURE DURING DOCK II OPTION DISK TEST.

Record number: H13844

Device: D/T3546
Model: M
Tip key: 004
Date created: 095/09/13
Date last altered: A96/11/12

A false error condition occurs when a 2630 701x is installed in a Dock II 3546 docking station and the "Test Expansion Unit" choice is run using the Dock II Option Diskette.

Failure recreation:

- o Boot the 2630 with the Dock II option diskette
- o Choose "Test Expansion Unit."

Result:

The following statement is displayed:

"No expansion unit is attached to the system. Power off the system and connect it to the IBM ThinkPad Dock II, then try again."

Note: this is only a false error when a 2630 is installed in the Dock II.

Work Around: Use the following method to test the Docking station connection.

Test the connection by booting the system into EASYSET-UP by holding Fn+F1 during a cold boot. View the configuration utility under the User Port Setting to see if the Dock II is found. Its existence indicates a complete connection.

SAS KEYWORDS:

PSY2	THINKPAD	D/T2630	PSY2BD
PSY2DIAG	UNCLASSIFIED		

1.4.144 3546 HMM CORRECTION TO POWER SUPPLY AREA

Record number: H131126

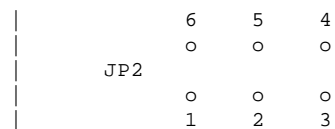
Device: D/T3546
 Model: M
 Tip key: 005
 Date created: 095/10/03
 Date last altered: A96/11/12

This tip corrects errors on pgs 398-400 of the IBM Mobile System HMM form number S82G-1501-01.

New editions of the manual will contain the changes. Please change your existing manuals to reflect the following steps:

A BAR (|) ABOVE OR NEXT TO A WORD OR CHARACTER INDICATES A CHANGE OR ADDITION.

1. no change
2. " "
3. Should read "Disconnect wire set P3 from connector CN56."
4. " "
5. Should read "Install jumper between pins 1 and 6, pins 2 and 5 and pin 3s and 4 of JP2 on the main card."



6. Should read "Jumper pin 2 and 7, and pin 1 and 9 of female connector P2.
7. old number 6
8. old number 7
9. old number 8

ADD the following to Page 399:

Power supply connector CN26=P1

Power supply connector CN25=P2

Change the CN25 chart's Signal description:

Pin 6 from System On to Power Good

Pin 9 from Security to CVCC off

Add the following to Page 400:

Power Supply Connector CN56=P3

SAS KEYWORDS:

PSY2 PSY2DOC THINKPAD PSY2PWR
 UNCLASSIFIED

1.4.145 3547 INTERNAL DISKETTE DRIVE EJECT PROBLEM

Record number: H134423

Device: D/T3547
Model: M
Tip key: 001
Date created: 097/02/17
Date last altered: A97/02/27

The 3547 mod 001 Selectadock may experience a diskette eject bind. If this occurs your customer should call the IBM PCCO Help Center and request a new diskette bezel FRU P/N73H8592.

This is a no cost Customer Installable Unit (CRU) that will be shipped directly to your customer for their installation.

| Customers should contact the IBM PC Company HelpCenter at |
| 800-772 - 2227. |
Customers in Canada should call IBM's HelpPC at 800-565-3344

SAS KEYWORDS:

PSY2 PSY2PART PSY2DSKT THINKPAD
UNCLASSIFIED

1.4.146 3550 EXTERNAL CD-ROM FAILS AFTER INSTALL.

Record number: H123648

Device: D/T3550
Model: M
Tip key: 006
Date created: 094/04/20
Date last altered: A96/11/12

ENSURE THAT THE CD ROM IS PLUGGED INTO THE SCSI PORT CORRECTLY.
THE CABLE CAN BE FORCED INTO THE SOCKET UPSIDE DOWN.

SAS KEYWORDS:

PSY2 PSY2ADPT PSY2CABLE THINKPAD
UNCLASSIFIED

1.4.147 3550 HMS ERROR P2 CONNECTOR

Record number: H025538

Device: D/T3550
Model: M
Tip key: 002
Date created: 093/03/31
Date last altered: A96/11/12

3550-001 and 3550-002 HMS manual's P2 Power Supply connector is drawn incorrectly. Refer to the arrow on the actual connector to locate Pin 1 and then reference the pin chart for voltages and signal levels.
The chart is on page 328 of the ThinkPad HMM (S82G-1501-01)

This correction will be in the next HMS release.

SAS KEYWORDS:

PSY2

PSY2DOC

PSY2PWR

THINKPAD

UNCLASSIFIED

1.4.148 370 CHANNEL EMULATION & MMC ADAPTER/A FALSE ERRORS

Record number: H121509

Device: D/T9585
 Model: M
 Tip key: 004
 Date created: 093/10/13
 Date last altered: A94/12/07

When running S/370 Channel Emulator Adapter/A diagnostics on the a micro channel PS/2 the following false error code may occur:

015302X0

"X" refers to the microchannel slot location of the adapter.

Replacing the adapter (FRU P/N06F3160) or system unit FRUs, will not resolve this problem.

The engineering support function for the S/370 Channel Emulator Adapter/a is currently investigating this problem. This tip will be updated when additional information is available.

Note:

This adapter should not be confused with the MicroChannel to Mainframe Connection Adapter (MMC) FRU P/N12G8067.

When running 9585 System Board Diagnostics or the IBM PS/2 Microchannel to Mainframe Connection Adaptor (MMC) Diagnostics with the IBM PS/2 Microchannel to Mainframe Connection Adaptor Feature Code 1436, Option P/N 95F1436, FRU P/N12G8067 installed, an error condition may occur. The 9585 System Board Diagnostics gives an 00015300 Step 140 error during the initial run after a cold or warm boot. This is a false error and should be ignored. A work around is to rerun the diagnostic without rebooting the system and it should run cleanly. No parts should be replaced.

A fix is being developed and will be distributed when available.

SAS KEYWORDS:

PSY2	PSY2ADPT	370	MAINFRAME
MAIN	FRAME	EMULATION	PSY2ERR
PSY2DIAG	9585	EMULATOR	01530210
01530220	01530230	01530240	01530250
01530260	01530270	01530280	D/T9595
D/T9595A	D/T9590	D/T8555	D/T8556
D/T8557	D/T8573	D/T8560	D/T8565
D/T8570	D/T9576	D/T8580	D/T8590
D/T8595	D/T9585	D/T9577	D/T9556
D/T9557	D/T9595	153	0015300
PSY2TBD	000153		

1.4.149 4MM TAPE OPTION KIT FOR SERVER 95

Record number: H124021

Device: D/T9595
 Model: M
 Tip key: 014
 Date created: 094/05/19
 Date last altered: A94/05/20

Two problems have been identified on a limited number of 4mm Tape Option Kits for Server 95 Array, feature code 7499, option number 74G8632. (Note: the option number was originally 8191339 and was recently changed to 74G8632.)

The two problems are:

1. The power cable missing from the kit: The power cable is required because the Server 95 does not supply power for SCSI devices in the A Bay.

2. The tape drive mounting slide may not fit correctly: The tabs on the mounting slide are too thick to fit into the tray of the Server 95 (9595A). Some trays are tight, others may not fit at all.

All option kit inventories under IBM's direct control have been inspected and reworked to include the power cable and a mounting slide which will fit correctly.

To replace the missing or defective components in the kits shipped prior to the problem being identified, the following "Hotline" has been set up to take customer/servicer calls.

By calling 1 - 800-426-7299, IBM will send the required parts "overnight" at no charge.

Current inventories are being inspected and reworked. Appropriate action is underway to assure the Mechanicsburg Distribution system FRU's are within specifications.

The tape drive power cable FRU is P/N74G8335.

The tape drive mounting slide FRU is P/N8191272.

SAS KEYWORDS:

PSY2	PSY2ADPT	PSY2MISC	PSY2TAPE
D/T9595A	SERVER	95	RAID
MAGNETIC	74G8335	8191272	TRAY
RAIL			

1.4.150 4216 ADAPTOR OPTION 07F4325 / FRU 75X8247

Record number: H056644

Device: D/T4216
Model: M
Tip key: 004
Date created: 092/10/09
Date last altered: A92/10/09

The 4216 Adaptor card has a thermally weak component, which can intermittently cause printing to stop ("hang") or a failure to initialize. This component can be identified in the U36 position on the daughter card, showing P/N 75X8102. Exposure to this problem appears to be greater when using it in the PS/2 Model 30 configuration - with the adaptor mounted horizontally. Problem occurrence can be minimised by removing the mylar shield from the daughter card and ensuring there are no obvious obstructions to good airflow. If this problem can not be contained as above, please open a PMH and flag the situation to Greenock, quoting this TDR number. RETAIN Queue to send the Incident to is PCRLQ5/L895.

SAS KEYWORDS:

8530SYSCOMM
4216DIAG

PSY2ADPT
4216MISC

PSY2COMM

8530SYSADPT

1.4.151 4216 ADAPTOR OPTION 07F4325 / FRU 75X8247

Record number: H105593

Device: D/T4216
Model: M
Tip key: 028
Date created: 090/06/19
Date last altered: A92/06/25

The 4216 Adaptor card has a thermally weak component, which can intermittently cause printing to stop ("hang") or a failure to initialize. This component can be identified in the U36 position on the daughter card, showing P/N 75X8102. Exposure to this problem appears to be greater when using it in the PS/2 Model 30 configuration - with the adaptor mounted horizontally. Problem occurrence can be minimised by removing the mylar shield from the daughter card and ensuring there are no obvious obstructions to good airflow. If this problem can not be contained as above, please open a PMH and flag the situation to Greenock, quoting this TDR number. RETAIN Queue to send the Incident to is PCRLQ5/L895.

SAS KEYWORDS:

8530SYSCOMM PSY2ADPT PSY2COMM 8530SYSADPT
4216DIAG 4216MISC

1.4.152 473X-P CONTROLLER SERVICE AIDS/HINTS

Record number: H045315

Device: D/T4731
 Model: M
 Tip key: 081
 Date created: 090/03/21
 Date last altered: A93/01/08

The IBM 473x 'P' models have a unique controller to permit various customer attachments otherwise not possible. This controller permits the customer to use the IBM 473x in an FBSS/DOS environment using X.25, Token-Ring or SDLC.

The MAPs for the 'P' Model: SY19-6210 for the 4731 'P' only and SY19 - 6305 for the 4738 and 4739.

The purpose of this HSF record is to provide a quick reference for the IBM 473x 'P' model CE to HSF items which apply to the controller, an IBM 8555SX PS/2.

This record is not intended to cover all 8555SX or other PS/2 items which affect the 473x 'P' model. Rather, it is intended to address those items known to 473x development that can save you time in failure analysis.

1. Important HSF search items (p;xxxx) for 473x 'P'

- D/T8555
- D/T4731 4731CU
- PSY2
- PSY2DIAG
- 8555SYSADPT
- 8555SYSCOMM
- PSY2ADPT
- PSY2DOC
- PSY2COMM
- ARTIC

2. Helpful support manual - Personal System/2 Family, Service Information Manual.

!!!DO NOT USE THE PART NUMBERS YOU FIND IN THAT MANUAL!!!
 !!!USE ONLY THE 473x PARTS CATALOG TO ORDER PARTS OR TAKE
 !!!THE P/Ns DIRECTLY OFF THE CARDS

2.1 Helpful reference for the customer if tests run OK but the

- Server does not run or the machine does not go on the net.
- IBM DOS 4.0 (5.0) Technical Reference (DOS error Codes)
- Using DOS Version 4.0 (5.0) (DOS Error Messages)
- IBM FBSS 2.x Installation and Customizing (FBSS errors)
- IBM 4731 PBM Software Customization & Programming Reference (SSIO Error Codes)
- 3070 xx logs, for example, point mostly to server/network problems and not an automatic exchange of the adapter. 3070 52 for example means a file is missing or the device status of a 473x hardware unit is not 'ready'.

3. Additional Service aids and hints

3.1 - No wrap possible for ARTIC Card in SLOT2. The EIB is a special card not supported by standard 8555 diagnostics. When running ADVANCED DIAGNOSTICS follow the menu and the questions very carefully.

For SLOT2 you do a 'card only' test (NO WRAP!!!)

3.2 - Although the 8555 Diagnostics show an option for 'moving the system' it is not required for the 473x. Fixed Disks automatically 'park' the heads with power off.

3.3 - Never use the option 'CONTINUOUS' to run a wrap test. This will cause false error indications especially with the ARTIC X.25 card.

3.4 - Do NOT use the 'B' model tool P/N 87X9171 to test the adapter used for SDLC. The MPCA card is *NOT* an SDLC-only card. Use TRIPLE WRAP PLUG P/N 72X8546!!!
 If your customer has an SDLC cable with a 'TEST/OPERATE' switch THIS WILL NOT WORK TO THE MPCA CARD AS IT WRAPS ONLY THE SDLC SIGNALS AND NOT THE COMPLETE MPCA INTERFACE. Your customer can still use an 'old' SDLC modem cable but you can NOT use the Test/Operate Switch or the 'old' SDLC Wrap Plug to wrap the MPCA Card!!!!

3.4.1 - Do NOT use ANY 25 pin wrap plug to wrap a customer cable plugged to the X.25 Card. The wrap plugs for V.24,

PSY2 RETAIN TIPS
473X-P CONTROLLER SERVICE AIDS/HINTS

V.35, and X.21 are to be ordered with the CABLE!!
 The marketing person does this. See HSF H055803 for info.

- 3.5 - Always use the backup copy of the Reference Diskette to run PS/2 diagnostics. Write Protect your original.
- 3.5.1 - For Version 1.00 of the 473x Reference Diskette, there is an option in the first menu called 'TEST THE SYSTEM'. Do NOT use this for your analysis. Failures are to be analyzed with ADVANCED DIAGNOSTICS which you select by holding 'CTRL' and pressing the 'A' key. In Version 1.2 this option is deleted. Due to the design of the Electrical Interface Board used in the 473x 'P' models, the Watchdog Timer will set four minutes after the 'Multiport/2' tests run and the controller will re-IPL. Only early ship 4731 'P' machines have this problem. An EC adds a grounding circuit when the the CE Switch is pulled out.
- 3.6 - If 4731 with COLOR display, the VGA test will 'see' this and identify your service monochrome display as a 'color display'. To correctly run VGA tests, power off and unplug the second CRT signal cable at the Service Display. Plug the special tool P/N 80X5114 to the open connector.
- 3.7 - The level of the 473x 'P' Reference Diskette is 1.30 as of September, 1991.
- 3.8 - After IPLing the Reference Diskette there is a README file shown as option 1. READ THIS!!!!!!!
- 3.9 - The System Board for the 8555 has unique BIOS EPROM sets in the 473x 'P'. Order the correct P/N. (a B/M which includes the standard 8555SX board, and special EPROMS (WITH or WITHOUT CRYPTOGRAPHIC FUNCTION!!!).
 473x 'P' - standard - P/N 57F5458 (BM 80X4570)
 473x 'P' Data Encryption Algorithm - P/N 80X4822 (BM 80X4826).
 Always check that you order the correct FBM for your System Board.

4. PS/2 HSF Records for the IBM 473x 'P'

Record ID	Brief Description
H044364 H063320	8555 Diagnostic Info
H006140	Temporary WRITE errors on the Fixed Disk
H036287	X.25 Co-Processor/2 fails to transmit in V.35
H042393 H043172	New P/N for Bus Adapter. FRU P/N 27F4666 is the new level which adds a logic module to the card. New 8555 TDR H043172 (4/91) - P/N is now 64F0809!
H004055	If 'CONFIG ERROR' 162 or 165 occurs the Fixed Disk remains 'locked out'. The fixed disk will not function until the reason for the CONFIG ERROR is found and removed. If '165' look at the CONFIG list. This list must ALWAYS show 1 ESDI FDISK installed. If the disk is not on the list: cable/bus adapter/FDISK bad.
H005965 H035418	If a device is attached to the Serial Port it can negatively affect the POST with error '1101'. Remove any serial device from the port before analyzing POST errors.
H037796	160 on POST - Occurs if Bus Adapter not plugged. Adapter required for 8555SX POST and if it IS installed and '160' occurs exchange it.
H034941	False '301' running PS/2 tests. Ignore this error *UNLESS* the customer sees '301' or has other keyboard problems.
H042028	False ARTIC errors if CTRL-ALT-DEL used.
H004785	10483 POST error - Fixed Disk assembly as FRU
H031099	SLOT2 or X.25 ARTIC shows 4620 or 4630 error - Observe the LED on these cards. The LED should

PSY2 RETAIN TIPS
473X-P CONTROLLER SERVICE AIDS/HINTS

	never be on or blink after the ARTIC test runs. Before exchanging the card, exchange first the two memory SIPs.
H063320	Error 201 during the POST - Ensure the System Board memory is in the slot nearest the edge of the board.

Search d/t4731 4731CU for other 'P' model TIPS

5. Miscellaneous 4731 'P' Model Controller Symptom Fix

This list will show either time-saving information for you or will list those items not found in the Controller MAPs which are taken directly from the 8555 HML.

- 5.1 - The System Board for the 4731 version of the 8555 is changed depending on what the customer uses for DES. Always order the P/N you find on the board label.
- 5.2 - The 30MB Hard File is NOT 6128277. Order 6128280 which parks the heads at power off. Do NOT install any 30MB drive which shows TYPE 33 on the label.

SYMPTOM	POSSIBLE CAUSE or FRU
IPL error showing 'RC=B0'	Likely the EPROMs on the Sys. Board are NOT 473x EPROMs. Verify before exchanging the SLOT 2 ARTIC Card!!!!
No POST - Display shows the 'all white' pattern, disk LED is 'on' but no Memory Test or 'beep'	System clock is not running - System Board - Real Time Clock Module - Voltage
IPL stops and shows: LOAD RIC PART I or PART II C: FBSS/DOS _ or PROD/DOS _	- SLOT2 ARTIC - Configuration Data wrong Test the SLOT2 ARTIC and see that the card LED is 'OFF' after the test. Ensure the configuration has SLOT2 as PHYSICAL CARD '1'
X.25 feature, IPL stops w/ 6C	See HSF H052114 (software support is required)
CU does not power on - 473x main power OK (fans run)	Suspect Power Relay 5 Suspect loose connection from CU ES2-48 to PWR-B11-B26. Use GLP to check for 'float'. Ensure the CU is not hanging (no POST / Disk LED 'ON') Use MAP 0900 if this is so
113 POST error	If 60MB Fixed Disk has EC label 'A79678' exchange it.
'RIC3 Error'	Your customer has the wrong version of RIC DOS SUPPORT PROGRAM (must be 1.01 or higher level!!!)
'RICx ARTICnnnnn load failed'	'nnnnn' identifies a bad or missing software file such as 'ICAAIM' or 'SSCPMS' Verify the SLOT2 ARTIC is Physical Card 1 w/32K window (use R 1.2 or later Reference Diskette and do 'restore')

PvS Boeblingen RAS / October 1991

SAS KEYWORDS:

4731CU

4738CU

4739CU

4869 ADAPTER CABLE FOR 8525 8530 W/BERG TYPE CONNECTORS

1.4.153 4869 ADAPTER CABLE FOR 8525 & 8530 W/BERG TYPE CONNECTORS

Record number: H031471

Device: D/T4869
Model: M
Tip key: 003
Date created: 089/11/15
Date last altered: A94/12/02

SOME 8525 AND 8530 SYSTEMS (D/T8525 & D/T8530) USE A DISKETTE DRIVE CABLE THAT HAS BERG TYPE PIN CONNECTORS. IN ORDER TO ATTACH THIS TYPE DISKETTE DRIVE CABLE TO A 4869 5.25" DISKETTE DRIVE ADAPTER CARD, A SHORT ADAPTER CABLE MUST BE USED. THE ADAPTER CABLE FITS BETWEEN THE BERG CONNECTOR OF THE DISKETTE DRIVE CABLE AND THE CARD-EDGE CONNECTOR OF THE 4869 ADAPTER CARD.
ADAPTER CABLE.....FRU P/N33F8472.

SAS KEYWORDS:

PSY2 PSY2PART PSY2DSKT 4869DSKT

1.4.154 4869 ADAPTER NOT SEEN IN CONFIGURATION

Record number: H022153

Device: D/T8550
Model: M
Tip key: 009
Date created: 087/06/25
Date last altered: A94/08/09

WHEN THIS ADAPTER, FRU P/N72X6758, IS INSTALLED IN A PS/2 MODEL 50, 60 70 OR 80, IT PHYSICALLY OCCUPIES ONE EXPANSION SLOT ON THE SYSTEM BOARD, BUT DOES NOT LOGICALLY ATTACH TO THE SYSTEM BUS. WHEN VIEWING THE SYSTEM CONFIGURATION SCREEN(S) DISPLAYED BY THE SYSTEM REFERENCE DISKETTE, THE EXPANSION SLOT WHICH CONTAINS THE 5.25" EXTERNAL DISKETTE DRIVE ADAPTER WILL BE SHOWN AS "EMPTY". THIS IS THE NORMAL OPERATING CONDITION, EVEN AFTER SYSTEM CONFIGURATION IS SET.

The drive will appear as a "B" drive and as a 5.25 x 360 drive. It is easily identified by the presence of the "B BOX" adapter installed in the "B" drive position. It will be attached to the adapter card with a long flat cable.

If the "B BOX" is installed without the adapter, and/or cable, you may get diskette drive errors and/or configuration errors.

Remove the "B BOX" or have the customer supply the remaining parts for installation to resolve these errors.

SAS KEYWORDS:

PSY2	PSY2OPER	PSY2MISC	4869DSKT
PSY2DSKT	PSY2ADPT	D/T8560	D/T8565
D/T8570	D/T8570	D/T8580	D/T4869001
D/T4869	EXTDSKDRV		

1.4.155 4869 FAILS DIAGS ON D/T8555 OR D/T8565

Record number: H065026

Device: D/T4869
Model: M
Tip key: 006
Date created: 090/07/13
Date last altered: A90/11/06

FALSE 10753 OR 10759 ERRORS MAY BE EXPERIENCED WHEN RUNNING CUSTOMER OR ADVANCED LEVEL DIAGNOSTICS USING THE IBM PS/2 MODEL 55/65 REFERENCE DISKETTE VERSION 1.00 OR 1.03.

THESE FALSE ERRORS WILL ONLY OCCUR WHILE RUNNING DIAGNOSTICS ON THE 4869 AND WILL OCCUR DURING THE WRITE PROTECT STEPS OF THE DIAGNOSTIC PROCEDURE.

IF THESE ERRORS OCCUR AND THE USER HAS NOT REPORTED ANY WRITE PROTECT PROBLEMS WITH THE EXTERNAL 5.25 DISKETTE DRIVE, THEN THE DIAGNOSTIC ERRORS SHOULD BE CONSIDERED FALSE.

FIX: THIS FALSE DIAGNOSTIC ERROR WILL BE CORRECTED IN A LATER RELEASE OF THE IBM PERSONAL SYSTEM/2 MODEL 55/65 REFERENCE DISKETTE.

SAS KEYWORDS:

PSY2	8555SYSDIAG	8555SYSERR	PSY2ERR
PSY2DIAG	8555SYSDSKT	PSY2DSKT	8565SYSDIAG
8565SYSERR	8565SYSDSKT		

1.4.156 4869 NOT SUPPORTED ON 8525SX MODELS

Record number: H096945

Device: D/T8525
Model: M
Tip key: 015
Date created: 092/09/14
Date last altered: A92/09/14

THE PS/2 4869 5.25-INCH EXTERNAL DISKETTE DRIVE MODEL 001 IS NOT A SUPPORTED OPTION FOR THE 8525SX MODELS K00, K01, AND L02. THESE MODELS ARE 80386SX MICROPROCESSOR VERSIONS OF THE PS/2 8525 PRODUCT FAMILY.

REFERENCES TO THE 4869, ADAPTER CARD AND CABLE WILL BE REMOVED FROM FUTURE REVISIONS OF THE PERSONAL SYSTEM/2 MODEL 25 SX HMS DOCUMENT.

SAS KEYWORDS:

PSY2

D/T4869

PSY2DSKT

8525SYSDSKT

1.4.157 5250 ADAPTER DROPS LINE WHEN 6384 IS POWERED OFF

Record number: H10647

Device: D/T6384
 Model: MCP1
 Tip key: 042
 Date created: 093/11/18
 Date last altered: A93/11/18

ENHANCED 5250 DISPLAY STATION EMULATION ADAPTERS P/N30F5384
 (THE FRU IS ALSO P/N30F5384)
 SHIPPED AFTER OCTOBER 1992 MAY CAUSE OTHER TERMINALS
 OR SYSTEMS TO DROP OFF THE COMMUNICATIONS LINE WHEN THE 6384
 VALUE POINT SYSTEM UNIT IS POWERED OFF. THE HOST WILL
 THEN RECYCLE/RESET THE COMMUNICATION LINE SO THAT THE
 LOGON SCREEN IS DISPLAYED. THE USER WILL BE ABLE TO
 LOG ON AGAIN.

AFFECTED 5250 ADAPTERS CAN BE IDENTIFIED BY P/N92F3190
 ON A LABEL ON THE CARD. ALSO, THE CARD MAY BE IDENTIFIED BY
 A 12 - PIN DIP MODULE DIRECTLY BELOW THE DIP SWITCHES.
 NO OTHER LEVELS OF THIS CARD ARE AFFECTED.

THE POTENTIAL FOR FAILURE OF AN AFFECTED CARD EXISTS
 ONLY WHEN IT IS INSTALLED IN A PS/VALUEPOINT MACHINE,
 NO OTHER MACHINE IS AFFECTED.

NOTE: P/N92F3190 IS A MANUFACTURING PART NUMBER AND NOT
 THE FRU NUMBER.

THE NEW FRU P/N64G3956 HAS BEEN MADE AVAILABLE ON THE PARTS
 SYSTEMS FOR D/T6384 AND IS AVAILABLE THROUGH NORMAL CHANNELS.

COUNTRY DISTRIBUTION STOCK OF OPTION P/N30F5384 IS BEING
 WITHDRAWN AND REWORKED TO THE WORKING LEVEL.

IF A POWER OFF PROBLEM STILL EXISTS AFTER
 INSTALLING THE NEW FRU CHECK THE CARD ASSEMBLY
 PART NUMBER LABELED ON THE CARD. IF THE PART
 NUMBER IS 64G3953 REWORK THE CARD PER INSTRUCTIONS
 IN RETAIN TIP # H12787. IF THE CARD IS ANY OTHER
 ASSEMBLY CONTACT THE APPROPRIATE SUPPORT GROUP.

SAS KEYWORDS:

D/T6384	PSY2	PSY2COMM	PSY2MISC
PSY2ADPT	VALUE POINT	VALUEPOINT	PSVP
PSVPADPT	PSVPCOMM	POWER	5360WSA
5360INP	5362WSA	5362INP	9406WS
9406CPU	9406MISC	9406MCD	9404WS
9404CPU	9404MISC	9404MCD	9404INP
9406INP	9402MISC	64G3953	ERRORS
TWINAX	COMMUNICATION	TIMEOUTS	30F5384
92F3190			

1.4.158 5250 ADAPTER DROPS LINE WHEN 6384 IS POWERED OFF

Record number: H12177

Device: D/T6384
 Model: MCP1
 Tip key: 027
 Date created: 093/05/21
 Date last altered: A93/08/05

ENHANCED 5250 DISPLAY STATION EMULATION ADAPTERS P/N30F5384
 (THE FRU IS ALSO P/N30F5384)
 SHIPPED AFTER OCTOBER 1992 MAY CAUSE OTHER TERMINALS
 OR SYSTEMS TO DROP OFF THE COMMUNICATIONS LINE WHEN THE 6384
 VALUE POINT SYSTEM UNIT IS POWERED OFF. THE HOST WILL
 THEN RECYCLE/RESET THE COMMUNICATION LINE SO THAT THE
 LOGON SCREEN IS DISPLAYED. THE USER WILL BE ABLE TO
 LOG ON AGAIN.

AFFECTED 5250 ADAPTERS CAN BE IDENTIFIED BY P/N92F3190
 ON A LABEL ON THE CARD. ALSO, THE CARD MAY BE IDENTIFIED BY
 A 12 - PIN DIP MODULE DIRECTLY BELOW THE DIP SWITCHES.
 NO OTHER LEVELS OF THIS CARD ARE AFFECTED.

THE POTENTIAL FOR FAILURE OF AN AFFECTED CARD EXISTS
 ONLY WHEN IT IS INSTALLED IN A PS/VALUEPOINT MACHINE,
 NO OTHER MACHINE IS AFFECTED.

NOTE: P/N92F3190 IS A MANUFACTURING PART NUMBER AND NOT
 THE FRU NUMBER.

THE NEW FRU P/N64G3956 HAS BEEN MADE AVAILABLE ON THE PARTS
 SYSTEMS FOR D/T6384 AND IS AVAILABLE THROUGH NORMAL CHANNELS.

COUNTRY DISTRIBUTION STOCK OF OPTION P/N30F5384 IS BEING
 WITHDRAWN AND REWORKED TO THE WORKING LEVEL.

IF A POWER OFF PROBLEM STILL EXISTS AFTER
 INSTALLING THE NEW FRU CHECK THE CARD ASSEMBLY
 PART NUMBER LABELED ON THE CARD. IF THE PART
 NUMBER IS 64G3953 REWORK THE CARD PER INSTRUCTIONS
 IN RETAIN TIP # H12787. IF THE CARD IS ANY OTHER
 ASSEMBLY CONTACT THE APPROPRIATE SUPPORT GROUP.

SAS KEYWORDS:

D/T6384	PSY2	PSY2COMM	PSY2MISC
PSY2ADPT	VALUE POINT	VALUEPOINT	PSVP
PSVPADPT	PSVPCOMM	POWER	5360WSA
5360INP	5362WSA	5362INP	9406WS
9406CPU	9406MISC	9406MCD	9404WS
9404CPU	9404MISC	9404MCD	9404INP
9406INP	9402MISC	64G3953	ERRORS
TWINAX	COMMUNICATION	TIMEOUTS	30F5384
92F3190			

5250 EMULATION ADAPTER TIMING PROBLEM IN 8550Z/8555/8570

1.4.159 5250 EMULATION ADAPTER TIMING PROBLEM IN 8550Z/8555/8570

Record number: H034788

Device: D/T8550
Model: M
Tip key: 039
Date created: 089/02/14
Date last altered: A90/04/24

THERE MAY BE A TIMING PROBLEM WHEN THE 5250 EMULATION ADAPTER CARD FRU P/N69X6292 IS INSTALLED IN AN 8550 (MODELS 031 AND 061), 8555 OR 8570. THE SYMPTOMS INCLUDE: THE SYSTEM UNIT WILL NOT IPL CORRECTLY, THE SYSTEM UNIT HANGS AFTER A PERIOD OF TIME, OR THE SYSTEM 36/38 HOST NETWORK IS BROUGHT DOWN. SHOULD THESE SYMPTOMS OCCUR INSURE THAT CORRECTIVE SERVICE DISKETTE WSE010004 OR LATER IS INSTALLED. CUSTOMERS SHOULD CONTACT THEIR DOS SUPPORT CENTER FOR THIS DISKETTE.

SAS KEYWORDS:

PSY2	8570SYSADPT	8550SYSADPT	8570SYSPART
8550SYSPART	8550SYSCOMM	PSY2COMM	8570SYSCOMM
PSY2ADPT	PSY2PART	8555SYSADPT	8555SYSCOMM
8555SYSPART			

1.4.161 540MB TERMINATION ON "CONNER" HARDFILES

Record number: H121456

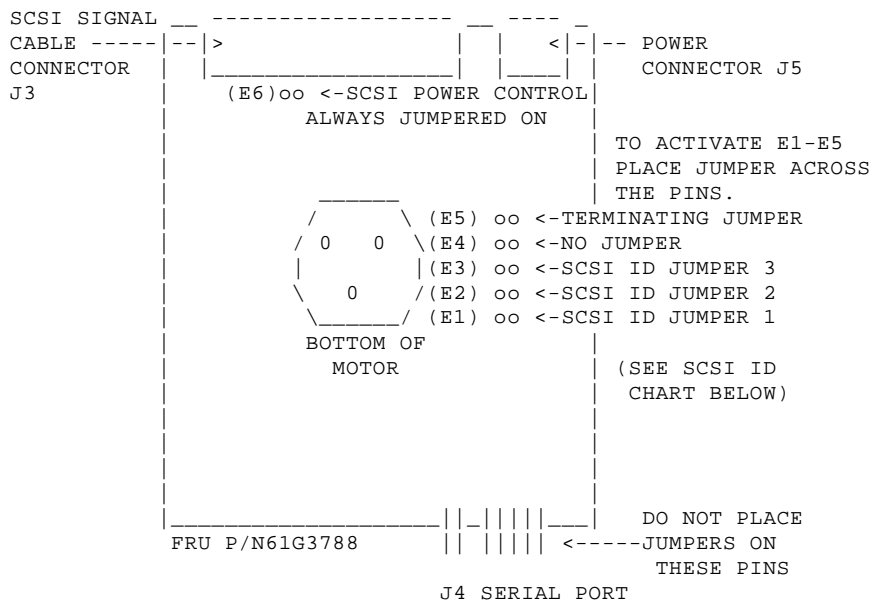
Device: D/T95XX
 Model: M
 Tip key: 013
 Date created: 093/10/06
 Date last altered: A94/05/12

THERE ARE NO TERMINATING RESISTORS OR PLUGGABLE MODULES TO BE ADDED OR REMOVED ON THE CONNORS 540MB SCSI HARDFILE. TO TERMINATE A 540MB SCSI HARDFILE, MANUFACTURED FOR IBM BY "CONNER," JUMPER "E5" ACROSS THE PINS SHOWN IN THE DIAGRAM BELOW. THIS ENABLES TERMINATION. ALL FRUS ARE SHIPPED WITH TERMINATION ENABLED (E5 JUMPERED ACROSS THE PINS).

"E5" IS LOCATED ON THE BOTTOM OF THE HARDFILE CONTROLLER BOARD AS SHOWN BELOW. TO DISABLE TERMINATION, MOVE THE JUMPER TO THE LEFT OR RIGHT IN A STORAGE POSITION.

THE DIAGRAMS AND INFORMATION BELOW MAY AID IN IDENTIFYING THE HARDFILE AND THE LOCATION OF THE SCSI ID JUMPERS AND TERMINATORS.

IDENTIFICATION ON DRIVE LABEL:
 CONNER CP 30540



SCSI ID CHART

SCSI ID	JUMPERS		
	3	2	1
BINARY VALUE	4	2	1
6	X	X	
5	X		X
4	X		
3		X	X
2		X	
1			X
0			

SAS KEYWORDS:

PSY2	D/T9556	D/T9576	D/T9557
D/T9577	PSY2FDSK	FDSK	HARDDISK
SWITCH	SETTINGS	FDISK	540MB
CONNOR	CONNORS	540	FIXED DISK
540 MB	T-RES	TERMINATION	T RES
TERMINATOR	DISK	TERMINATE	CONER
CONNER	CONNERS	61G3788	CONERS

55LS FAILS TO REMOTE IPL DUE TO CONFIGURATION ERRORS

1.4.162 55LS FAILS TO REMOTE IPL DUE TO CONFIGURATION ERRORS

Record number: H06680

Device: D/T8555
 Model: M
 Tip key: 014
 Date created: 090/10/09
 Date last altered: A90/10/09

INCORRECT CONFIGURATION OF A 55LS (8555 MODEL LE0 OR LT0) CAN PREVENT SUCCESSFUL REMOTE IPL. THIS PROBLEM CAN BE CAUSED BY THE FOLLOWING CONFIGURATION ERRORS:

- THE RPL TOKEN RING CARD IS CONFIGURED AS "ALTERNATE" INSTEAD OF "PRIMARY."
- THE 16/4MB TOKEN RING CARD DATA TRANSFER SPEED IS NOT SET TO MATCH THE SPEED OF THE NETWORK.
- THE ETHERNET ADAPTER "REMOTE PROGRAM LOAD" FEATURE IS SET AT "DISABLED."

TO ACCESS THE REFERENCE DISKETTE AND RECONFIGURE:

1. SET UP THE SERVER TO LOAD THE REFERENCE DISKETTE AT THE WORKSTATION. (THE LAN ADMINISTRATOR CAN DO THIS.)
2. IF THE ONLY ADAPTER IS THE LAN CARD (TOKEN RING OR ETHERNET), MOVE IT TO A DIFFERENT SLOT. IF THERE ARE OTHER ADAPTERS INSTALLED, REMOVE THEM - LEAVING ONLY THE LAN CARD. THIS WILL CAUSE A CONFIGURATION ERROR, WHICH WILL FORCE THE REFERENCE DISKETTE IMAGE TO LOAD.
3. START THE SYSTEM AS IS, AND RUN AUTO CONFIGURATION.
4. RESTORE THE MACHINE TO ITS ORIGINAL CONFIGURATION, REPLACING ANY MOVED OR REMOVED ADAPTERS TO THEIR ORIGINAL SLOTS.
5. START THE SYSTEM; YOU SHOULD EXPERIENCE A CONFIGURATION ERROR AGAIN. LOAD THE REFERENCE DISKETTE.
6. *** IMPORTANT *** WHEN THE REFERENCE DISKETTE IS LOADED, FOLLOWING THE INITIAL BLUE "IBM" SCREEN, YOU WILL BE ASKED, "AUTOMATICALLY CONFIGURE THE SYSTEM?" SELECT NO.
7. SELECT "SET CONFIGURATION" FROM THE MAIN MENU, AND RUN AUTOMATIC CONFIGURATION.
8. AFTER RUNNING AUTOMATIC CONFIGURATION, SELECT "CHANGE CONFIGURATION" AND MAKE ANY NECESSARY CHANGES. SAVE THE CHANGED CONFIGURATION USING F10.

SAS KEYWORDS:

PSY2 PSY2COMM PSY2ADPT 8555SYSCOMM
 8555SYSADPT

1.4.163 55LS INTERRUPT CONFLICT USING ETHERNET, MPCA, AND 5250

Record number: H06708

Device: D/T8555
Model: M
Tip key: 016
Date created: 090/10/09
Date last altered: A90/10/09

A 55LS (8555 MODEL LT0 OR LE0) MAY EXPERIENCE INTERRUPT CONFLICT MESSAGES DURING CONFIGURATION IF AN ETHERNET ADAPTER, MULTIPROTOCOL ADAPTER, AND 5250 EMULATION PROGRAM VERSION 2.0 ARE INSTALLED.

FOR SUCCESSFUL CONFIGURATION, THE ETHERNET ADAPTER MUST NOT BE SET AT INTERRUPT LEVELS 3, 4, OR 5. USE THE CHANGE CONFIGURATION OPTION OF THE REFERENCE DISKETTE TO CHANGE THE INTERRUPT LEVEL.

SAS KEYWORDS:
PSY2 PSY2COMM PSY2ADPT 8555SYSCOMM
8555SYSADPT

1.4.164 55LS PART NUMBERS (8555 MOD LT0 & LE0)

Record number: H063008

Device: D/T8555
Model: M
Tip key: 018
Date created: 090/10/31
Date last altered: A90/10/31

THE PS/2 55LS (8555 MODELS LT0 AND LE0) USE A DIFFERENT SYSTEM BOARD AND BUS ADAPTER THAN THE 55SX (8555 MODELS 031 AND 061). THE PARTS ARE NOT FUNCTIONALLY INTERCHANGEABLE.

SYSTEM BOARD, 55LS.....FRU P/N57F3003
BUS ADAPTER, 55LS.....FRU P/N64F3732
FRONT COVER W/LOGO, 55LS.....FRU P/N33F8230

SAS KEYWORDS:

PSY2	PSY2PART	PSY2BRD	PSY2ADPT
8555SYSPART	8555SYSBRD	8555SYSADPT	

1.4.165 60NS 32MB SIMM INCORRECTLY LABELED AS 70NS

Record number: H135913

Device: D/T8650
Model: M
Tip key: 001
Date created: 097/01/02
Date last altered: A97/01/02

The memory speed on the label of some 32MB (60ns) SIMMs FRU p/n75H9124 (Option p/n94G5878) for the PC Server 704 (8650) was incorrectly marked (70ns).

There is no functional problem with these SIMMs.

The affected SIMMs contain the following information:

White label: 70ns 8Mx36 5.0 v
WARRANTY VOID IF REMOVED
OPT: 94G5878

Vendor p/n: KMM5368103AK-6

Note: The -6 indicates that the memory SIMM is indeed 60ns. All PC Server 704 systems are manufactured with 60ns SIMMs.

Stock has been relabeled to reflect the correct memory speed.

SAS KEYWORDS:

PSY2	PSY2MEM	PSY2DOC	PSY2PART
UNCLASSIFIED	94G5878	75H9124	

1.4.166 601 DISKETTE DRIVE ERROR ON 8525

Record number: H017129

Device: D/T8525
 Model: M
 Tip key: 009
 Date created: 089/11/02
 Date last altered: A92/01/08

IF A 601 POST ERROR CODE IS DISPLAYED ON AN 8525 AFTER REPLACING OR INSTALLING A DISKETTE DRIVE, CHECK FOR CORRECT INSTALLATION OF THE DISKETTE DRIVE CABLE.

THE 8525 DISKETTE DRIVE CABLE HAS THREE CONNECTORS ON IT.

- ONE END OF THE CABLE CONNECTS AT THE SYSTEM BOARD.
- THE OTHER END CONNECTS TO DISKETTE DRIVE B (IF INSTALLED).
- THE CONNECTOR NEAR THE CENTER OF THE CABLE MUST ALWAYS BE ATTACHED TO DISKETTE DRIVE A.

IF CABLE CONNECTOR B IS ERRONEOUSLY ATTACHED TO DISKETTE DRIVE A, THE 8525 WILL DISPLAY A 601 POST ERROR AND WILL NOT ALLOW A DISKETTE TO BE LOADED FROM DRIVE A.

THE FOLLOWING SCREEN SHOWS A DIAGRAM OF THE DISKETTE DRIVE CABLE

.
 .
 .
 .
 .

8525 DISKETTE DRIVE CABLE



SAS KEYWORDS:
 PSY2 PSY2DSKT PSY2ERR 8525SYSDSKT
 8525SYSERR

Record number: H004581

Device: D/T6314
 Model: M
 Tip key: 001
 Date created: 093/03/18
 Date last altered: A93/11/16

THE FULL SCREEN RASTER SELF-TEST ON PAGE 7 OF THE PS/VALUEPOINT HARDWARE MAINTENANCE SERVICE AND REFERENCE MANUAL (SEPT 1992) IS VALID FOR THE 6312 DISPLAY ONLY. IT IS NOT VALID FOR THE 6314 AND 6319 DISPLAYS.

DO THE FOLLOWING TO RUN THE DISPLAY SELF-TEST ON 6314 AND 6319:

1. POWER-OFF THE SYSTEM UNIT AND DISPLAY.
2. DISCONNECT THE DISPLAY SIGNAL CABLE.
3. POWER-ON THE DISPLAY.
4. THE DISPLAY SHOULD BE BLANK (BLACK) AND THE LIGHT EMITTING DIODES ON THE DIGITAL CONTROL BOX SHOULD FLASH IN SEQUENCE FROM LEFT TO RIGHT, LOOPING CONTINUOUSLY.

IF THE SELF-TEST FAILS, REPLACE THE DISPLAY.

IF THE SELF-TEST PASSES, CONTINUE PROBLEM DETERMINATION.

- THE 6318 HAS A WHITE RASTER WHEN DISCONNECTED FROM THE PS/2.

- THE 6317 DOES NOT HAVE A WHITE RASTER WHEN DISCONNECTED FROM THE PS/2. THE ONLY INDICATION THAT THE 6317 IS WORKING WHEN DISCONNECTED FROM A PS/2 IS THAT THE GREEN POWER LED IS ON.

NOTE: IF THE GREEN POWER-ON LIGHT IS NOT ILLUMINATED, CHECK THE POWER CORD AND INPUT VOLTAGE BEFORE REPLACING THE DISPLAY.

THE VALUE POINT SERVICE DOCUMENTATION WILL BE CORRECTED IN THE NEXT RELEASE.

SAS KEYWORDS:

VALUEPOINT	VALUE POINT	PSY2	PSY2DISP
PSY2DOC	PSY2DIAG	D/T6312	D/T6319
PSVPDIAG	PSVPDISP	PSVDOC	PSVP
D/T6317	D/T6318	D/T63XX	MONITOR
SELF	TEST		

1.4.168 6317 TILT/SWIVEL NOT AVAILABLE AS a FRU

Record number: H121780

Device: D/T6317
Model: M
Tip key: 001
Date created: 093/09/21
Date last altered: A93/11/16

The 6317 does not have a replaceable or repairable tilt/swivel assembly. The tilt/swivel assembly is part of the cover.

The 6317 is an Element Exchange monitor. If the assembly is defective, the monitor must be replaced.

6317 Monitor: FRU P/N39G3359.

SAS KEYWORDS:

PSY2	PSY2DISP	DISPLAY	39G3359
TILT	SWIVEL	STAND	

1.4.169 6318 SERVICE INFORMATION AND P/N'S

Record number: H20866

Device: D/T6318
 Model: M
 Tip key: 001
 Date created: 093/04/14
 Date last altered: A93/10/25

UNLIKE THE 8511, THE 6318 HAS FRONT ACCESS OPERATOR CONTROLS FOR WIDTH, HEIGHT, HORIZONTAL CENTERING, AND PINCUSHION.

THE SERVICE INFORMATION IN THE PS/2 MONITOR HARDWARE MAINTENANCE MANUAL (FORM NUMBER SA38-0053-00) FOR THE 8518/8511 SHOULD BE USED WHEN SERVICING THE 6318 WITH THE FOLLOWING EXCEPTION:

PRIOR TO PERFORMING THE GEOMETRY ADJUSTMENTS THE SERVICER SHOULD CENTER THE FOUR FRONT OPERATOR CONTROL POTENTIOMETERS.

THEN PERFORM THE ADJUSTMENTS AS IF THEY WERE SERVICING AN 8511 MONITOR.

SERVICE PARTS

PART NAME	FRU PART NUMBER
ANALOG CARD	39G2727 (Includes Signal Cable)
BEZEL ASSEMBLY	68G2167
REAR COVER ASSEMBLY	68G2168
ITC	68G2164
TILT SWIVEL	38F3909
SIGNAL CABLE 5 FOOT	68G2735

THE 6318 HMM UPDATE (FORM NUMBER SN68-0429) WILL BE AVAILABLE TO SERVICERS APPROXIMATELY MAY 15, 1993.

SAS KEYWORDS:

PSY2	PSY2DISP	PSY2DOC	PSY2PART
VALUE POINT	VALUEPOINT	PSVP	PSVPDISP
PSVPPART	PSVPDOC	DISPLAY	PIN
CUSHION			

1.4.170 6381 VALUEPOINT FLASH EEPROM CODE UPDATES

Record number: H121620

Device: D/T6381
 Model: M
 Tip key: 001
 Date created: 093/10/26
 Date last altered: A97/02/18

THE PURPOSE OF THIS TIP IS TO LIST THE BIOS UPDATES FOR THE 6381/Si AND PROVIDE A METHOD OF OBTAINING THE LATEST LEVEL FLASH UPDATE DISKETTE. A DETAILED LIST OF THE CONTENTS OF THE BIOS UPDATES IS ALSO CONTAINED IN THIS TIP. THE FLASH UPDATES FOR THE 6381/Si ARE:

22A - (L8ET22AUS OR L9ET22AUS) - INITIAL SHIP LEVEL
 27A - (L8ET27AUS OR L9ET27AUS)
 30A - (L8ET30AUS OR L93T27AUS)
 31A - (L8ET31AUS OR L9ET31AUS)
 33A - (L8ET33AUS OR L9ET33AUS)
 39A - (L8ET39AUS OR L9ET39AUS)
 40A - (L8ET40AUS OR L9ET40AUS)
 42A - (L8ET42AUS OR L9ET42AUS)
 44A - (L8ET44AUS OR L9ET44AUS)
 48A - (L8ET48AUS OR L9ET48AUS) (Current level)
 ALL FLASH UPDATES INCLUDE FIXES/UPDATES FROM THE PREVIOUS LEVEL.
 FOR EXAMPLE: FLASH 33A CONTAINS ALL FIXES/UPDATES FROM LEVELS 27A, 30A, AND 31A.

VIEW THE FLASH EEPROM LEVEL BY ACCESSING THE CONFIGURATION UTILITY PROGRAM. THE FIFTH, SIXTH AND SEVENTH POSITIONS OF THE EEPROM LEVEL REPRESENT THE CODE LEVEL; FOR EXAMPLE: L8ET27AUS IS CODE LEVEL 27A.

THE CURRENT UPDATE IS TITLED: VPSIFL43.DSK - LEVEL 43A

THE CURRENT FLASH UPDATE MAY BE DOWNLOADED FROM THE TECHNICAL SUPPORT BULLETIN BOARD BY CALLING 919 517-0001.

***** IMPORTANT *****
 *
 * THESE FLASH UPDATES ARE CUSTOMER INSTALLABLE. CUSTOMERS *
 * SHOULD BE ADVISED TO CONTACT THE PC COMPANY HELPCENTER AT *
 * 800-772 - 2227 IF ASSISTANCE IS REQUIRED IN GETTING THE *
 * APPROPRIATE UPDATE. *

THE UPDATES INCLUDED IN LEVEL 27A ARE AS FOLLOWS:

- 1 - SCSI HARD FILE WILL NOT IPL WITHOUT THE PRESENCE OF AN IDE HARDFILE.
- 2 - CONNER BRAND HARDFILE CONTROLLER FAILURES (17XX ERRORS).
- 3 - EXCESSIVE TIME-OUT PERIOD DURING BOOT WITHOUT DISKETTE DRIVE INSTALLED. FLASH LEVEL 27A SHORTENS THE TIME UNTIL THE SYSTEM BOOTS TO THE HARDFILE OR NETWORK.
- 4 - MAXTOR 527MB (INSTALLED AS MASTER) CONFIGURES AS A 0MB SLAVE HARD FILE.
- 5 - TWO BEEPS AFTER COMPLETING POST.

THE UPDATES INCLUDED IN LEVEL 30A ARE AS FOLLOWS:

- 1 - LARGE BLOCK TRANSFER PROBLEM ON HARDFILE. CAUSES SYSTEM TO APPEAR TO BE LOCKED UP OR EXCESSIVE TIME PROCESSING.
- 2 - BLUEMAX FAILURES USING IRQ 15.
- 3 - "SPECIAL NEEDS" OPERATIONAL MOUSE PORT PROBLEM.
- 4 - CIRRUS VIDEO UPDATES.

THE UPDATES INCLUDED IN LEVEL 31A ARE AS FOLLOWS:

- 1 - INTERMITTENT 164 POST ERRORS

THE UPDATES INCLUDED IN LEVEL 33A ARE AS FOLLOWS:

- 1 - RESOLVED POWER-ON PASSWORD BYPASS FAILURE
- 2 - ADDED BRAZIL TO LANGUAGES SUPPORTED
- 3 - UPDATED ALL THE LANGUAGES SUPPORTED ON THE FLASH UPDATE DISKETTE TO INCLUDE THE POWER-ON PASSWORD SECURITY FIXES.

THE UPDATES INCLUDED IN LEVELS 39A & 40A ARE AS FOLLOWS:

- 1 - FIX FOR INTERMITTENT 162 POST ERRORS CAUSED BY WESTERN DIGITAL DRIVES SHOWING AS OMB DRIVE SIZE.
- 2 - UPDATE TO MOUSE PORT FOR SPECIAL NEEDS SYSTEMS DEVICES.
- 3 - THE HEADER HAS BEEN UPDATED TO INCLUDE THE IBM COPYRIGHT STATEMENT.
- 4 - UPDATED VIDEO BIOS FOR THE 486SX MODELS.
- 5 - FIX FOR 35 SECOND TIME DELAY DURING POST.

THE UPDATES INCLUDED IN LEVELS 42A AS FOLLOWS:

- 1 - FIX SERIAL PORT RESET DURING SOFT BOOT
- 2 - FIXES TO CORRECT HARDWARE DEFICIENCIES IN CERTAIN VENDOR HARDFILES.
- 3 - FIX SERIAL PORT COMMUNICATION PROBLEMS.

THE UPDATES INCLUDED IN LEVELS 44A ARE AS FOLLOWS:

- 1 - FIX CONFIGURATION UTILITY FAST KEYBOARD SPEED.

THE UPDATES INCLUDED IN LEVELS 48A ARE AS FOLLOWS:

- 1 - Problem with L2Cache and P24T Processor Upgrade.

SAS KEYWORDS:

VALUE POINT	PS/VP	PSVP	D/T6381
PSVPFDSK	PSY2FDSK	PSVPDSKT	PSY2DSKT
PSVPERR	PSY2ERR	EPROM	ROM
BIOS	PSY2		

1.4.171 6382/84/87 VALUEPOINT FLASH EEPROM CODE UPDATES

Record number: H063808

Device: D/T6384
 Model: M
 Tip key: 033
 Date created: 093/05/27
 Date last altered: A96/01/03

THE PURPOSE OF THIS TIP IS TO LIST ALL OF THE PROBLEMS FIXED WITH FLASH EEPROM CODE LEVELS:

51A (L6ET51AUS)
 53A (L6ET53AUS)
 54A (L6ET54AUS)
 58A (L6ET58AUS)
 61A (L6ET61AUS)
 62A (L6ET62AUS)
 65A (L6ET65AUS)
 66A (L6ET66AUS)
 68A (L6ET68AUS)

THESE UPDATES ARE FOR MACHINE TYPES 6382/S, 6384/D AND 6387/T.
 THIS TIP ALSO PROVIDES A METHOD OF OBTAINING THE LATEST FLASH
 UPDATE DISKETTE.

VIEW THE FLASH EEPROM LEVEL BY ACCESSING THE CONFIGURATION
 UTILITY PROGRAM. THE FIFTH, SIXTH AND SEVENTH POSITIONS
 OF THE EEPROM LEVEL REPRESENT THE CODE LEVEL; FOR EXAMPLE:
 L6ET51AUS IS CODE LEVEL 51A.

----- IMPORTANT -----

| THESE FLASH UPDATES ARE CUSTOMER INSTALLABLE. CUSTOMERS |
 | SHOULD BE ADVISED TO CONTACT THE PC COMPANY HELPCENTER AT |
 | 800-772 - 2227 IF ASSISTANCE IS REQUIRED IN GETTING THE |
 | APPROPRIATE UPDATE. |

 THE UPDATES MAY BE DOWNLOADED FROM THE IBM PC COMPANY
 BULLETIN BOARD SYSTEM BY CALLING 919-517-0001. IF THE CUSTOMER
 CAN NOT RECEIVE THE UPDATE BY MODEM, THE HELPCENTER WILL SEND
 THE CUSTOMER A COPY ON DISKETTE.

THE PROBLEMS RESOLVED WITH 51A LEVEL ARE AS FOLLOWS:

- 1 - LOSS OF VIDEO WHEN SWITCHING BETWEEN GRAPHICS MODE
 AND TEXT MODE WHEN USING A CUSTOM CHARACTER FONT
 SET IN ADDITION TO USING THE STANDARD CHARACTER FONT
 SET.
- 2 - UNREADABLE VIDEO AFTER INSTALLING SCO UNIX * OPERATING
 SYSTEM.
- 3 - 162/163 ERROR INSTEAD OF 8603 ERROR AFTER AN INSTALLED
 MOUSE IS REMOVED.
- 4 - DISKETTE DRIVE FAILURES WHILE RUNNING DOS 5.0 AND EMM386
 WHEN A BUSMASTER OPTION CARD IS INSTALLED.
- 5 - SYSTEM UNABLE TO RECOGNIZE AN INSTALLED 212MB MAXTOR
 (MADE FOR IBM) DISK DRIVE.
- 6 - WINDOWS 32 BIT DISK DRIVER USABILITY PROBLEMS RESOLVED.

* SCO UNIX IS A REGISTERED TRADEMARK OF SANTA CRUZ OPERATIONS.

 THE 53A LEVEL INCLUDES FIXES CONTAINED IN THE 51A LEVEL CODE,
 IN ADDITION TO THE FOLLOWING:

- 1 - ELIMINATE DISABLING ONE OF THE SERIAL PORTS AFTER "SOFT
 BOOT" (CTRL, ALT, DELETE).
 - 2 - CORRECT COLOR PROBLEMS RUNNING AUTOCAD IN 800 X 600 64K
 COLORS.
 - 3 - SUPPORT 8514 MONITOR 1024 X 768 43HZ INTERLACED MODE.
 - 4 - SUPPORT 1024 X 768 72HZ NON-INTERLACED MODE.
 - 5 - FIX VARIOUS MONITOR TIMING PROBLEMS THAT CAN CAUSE
 THE DISPLAYED IMAGE TO BE NARROW OR NOT CENTERED.
-

THE 54A LEVEL INCLUDES FIXES CONTAINED IN THE 51A AND 53A LEVEL CODE, IN ADDITION TO THE FOLLOWING:

- 1 - SYSTEM HANG WITH CONDITION WITH 128K WRITE-THRU L2 CACHE INSTALLED
- 2 - UPDATES TO THE S3 VIDEO CODE
- 3 - FIX FOR STACK UNDERFLOW OR FLOATING POINT ERRORS
- 4 - FIX FOR FAILING ADAPTERS UTILIZING INTERRUPT 2

THE 58A LEVEL INCLUDES FIXES CONTAINED IN 51A, 53A AND 54A LEVEL CODE, IN ADDITION TO THE FOLLOWING:

- 1 - SYSTEM HANG CONDITION CAUSED BY POST CHECKING FOR THE PRESENCE OF AN L2 CACHE OPTION WHEN THERE IS NO CACHE CARD INSTALLED IN THE SYSTEM. THIS FAILURE WAS FOUND IN MANUFACTURING TEST. NO FIELD FAILURES REPORTED.
- 2 - FIX FOR INTERMITTENT 102 POST ERRORS DURING A WARM BOOT (CNTRL + ALT + DEL).

THE 61A LEVEL INCLUDES FIXES CONTAINED IN PREVIOUS LEVELS PLUS THE FOLLOWING:

- 1 - FIX FOR LOSS OF VIDEO AFTER SWITCHING VIDEO MODES. REFER TO RETAIN TIP H123789 FOR ADDITIONAL INFORMATION.

THE 62A LEVEL INCLUDES FIXES CONTAINED IN PREVIOUS LEVELS PLUS THE FOLLOWING:

- 1 - FIXES PROBLEM WITH WORDPERFECT FOR DOS. REFER TO TIP H124314 FOR ADDITIONAL INFORMATION.
- 2 - UPDATE TO S3 VIDEO CODE FOR LINES AND DISTORTION.

THE 65A LEVEL INCLUDES FIXES CONTAINED IN PREVIOUS LEVELS PLUS THE FOLLOWING:

- 1 - Provides support for the ReelMagic multimedia adapter in the following video modes:
 - 640 x 480 256 colors
 - 640 x 480 32k colors
 - 640 x 480 64k colors
 - 800 x 600 16 colors
 - 800 x 600 256 colors
- 2 - Required component in the floating point fix described in tip H125280.
- 3 - POST ROM fixed for turning on L2 when not present.
- 4 - Video bios fixes for the new version of Word Perfect 6.0.
- 5 - S3 video BIOS updates.

THE 66A LEVEL INCLUDES FIXES CONTAINED IN PREVIOUS LEVELS PLUS THE FOLLOWING:

- 1 - Fixes checksum algorithm after ROM to RAM transfer.
- 2 - Fix for Danish language problem.

THE 68A LEVEL INCLUDES FIXES CONTAINED IN PREVIOUS LEVELS PLUS THE FOLLOWING:

- 1 - Provides support for Pentium P24-T micro-processor upgrade. See tip H126683.

SAS KEYWORDS:

VALUE POINT	PS/VP	PSVP	D/T6382
6382	6384	PSVPKBD	PSVPFDSK
PSVPMISC	PSVPMCD	162	163
XENIX	EPROM	ROM	PSY2
PSVPADP	L6ET51AUS	VP2FL51A	D/T6387
6387	12902		

1.4.172 6384 PLANAR VIDEO CONTROL JUMPERS

Record number: H10926

Device: D/T6384
 Model: M
 Tip key: 004
 Date created: 092/10/28
 Date last altered: A92/12/04

INSTALLATION OF AN IBM OR OEM VIDEO ADAPTER CARD IN MODELS 425SX AND 433DX OF THE 6384 PS/VALUEPOINT SYSTEMS REQUIRES THAT THE PLANAR VIDEO BE DISABLED.

6384 425SX MODELS (F00, F20, OR F40) ARE EQUIPPED WITH THE VIDEO DISABLE JUMPERS IN LOCATION JP10 AND JP1. FOR VIDEO ADAPTER CARD INSTALLATION, THE JP10 JUMPER SHOULD BE MOVED FROM PINS 2-3 (NORMAL) TO PINS 1-2 (VIDEO DISABLE). JP1 (*) SHOULD BE REMOVED FROM ONE OF THE PINS.

(*) JP1 IS NOT IDENTIFIED IN THE HMS/HMR. WHEN VIEWING THE SYSTEM BOARD WITH THE EXTERNAL CONNECTOR PORTS FACING AWAY, JP1 IS LOCATED ON THE RIGHT SIDE NEAR THE CENTER OF THE RISER CONNECTOR.

6384 433DX MODELS (M00, M40 OR M50) ARE EQUIPPED WITH THE VIDEO DISABLE JUMPERS IN LOCATION JP10 AND JP17. FOR VIDEO ADAPTER CARD INSTALLATION, THE JP10 JUMPER SHOULD BE MOVED FROM PINS 2-3 (NORMAL) TO PINS 1-2. JP17 (**) SHOULD BE REMOVED FROM ONE OF THE PINS.

(**) JP17 IS NOT IDENTIFIED IN THE HMS/HMR. IT IS LOCATED BETWEEN JP305 AND JP4 (JP305 & JP4 LOCATIONS ARE NOTED IN THE "SYSTEM BOARD LAYOUTS" SECTION OF THE HMS/HMR)

6384 325T MODELS (C00, C20 AND C40) DO NOT SUPPORT DISABLING PLANAR VIDEO AT THIS TIME. FOR FURTHER DETAILS, UTILIZE THE NORMAL SUPPORT STRUCTURE TO OBTAIN ASSISTANCE FROM BOCA RATON LEVEL 2 SUPPORT. THIS TIP WILL BE UPDATED WITH NEW INFORMATION REGARDING VIDEO DISABLING ON THE 325T MODELS AS IT BECOMES AVAILABLE.

NOTE: 6384 433DX AND 425SX MODELS WILL NOT COMPLETE POST AND IPL IF THE PLANAR VIDEO IS DISABLED WITH NO VIDEO ADAPTER INSTALLED.

SAS KEYWORDS:

PSY2	PSVP	VALUE	PSY2DISP
VALUEPOINT	PS/VALUEPOINT	D/T6312	D/T6314
D/T6319	PSY2ADPT	PSVPDISP	PSVPADPT
PSY2BRD	PSVPBRD		

1.4.173 6384 POWERGRAPH X-24 SVGA CARD DOCUMENTATION

Record number: H2090

Device: D/T6384
Model: M
Tip key: 010
Date created: 093/01/25
Date last altered: A93/01/25

THE POWERGRAPH X-24 SVGA/VGA ADAPTER CARD MAY BE INSTALLED IN ANY 486 BASED VALUEPOINT SYSTEM. THIS WOULD INCLUDE MODELS FXX, MXX AND WXX OF THE 6384.

A USERS GUIDE SUPPLEMENT IS AVAILABLE FROM MECHANICSBURG FOR SERVICE SUPPORT OF THIS ADAPTER. THE PUBLICATION NUMBER IS S61G-1418 - 00. SERVICE INFORMATION FOR THE POWERGRAPH X-24 ADAPTER WILL BE INCLUDED IN FUTURE RELEASES OF THE 6384 HMR/S.

THE FRU PART NUMBER FOR THE POWERGRAPH X-24 ADAPTER IS P/N60G9697.

SAS KEYWORDS:

PSVP	PSY2	PSY2ADPT	PSVPADPT
VALUE POINT	VALUEPOINT	PSVPOEM	PSY2OEM
PSY2PART	PSVPPART	60G9697	STB

1.4.174 6384 P60/D SYSTEM BOARD FRU MISSING PROCESSOR

Record number: H13784

Device: D/T6384
 Model: M
 Tip key: 077
 Date created: 095/09/11
 Date last altered: A96/05/01

PS/ValuePoint 6384 P60/D Pentium system board FRU P/N71G3232 (downlevel) and P/N06H2096 (current p/n) formerly contained a 60Mhz Pentium Processor as part of the system board FRU.

The current system board FRU P/N06H2096 has been changed to remove the processor. The processor from the failing board is to be installed onto the replacement board.

If the replacement system board FRU contains a processor when received from FRU stock, run the CPUIDIBM program to determine if the processor is at the level which does not contain the Pentium Floating Point defect.

The CPUIDIBM program may be obtained from the IBM PC Company BBS system by calling 919-517-0001. The file is titled "CPUIDIBM.DSK."

The CPUIDIBM program may also be downloaded via the Internet from the IBM Personal Computer File Library by searching the following Internet URL:
<http://www.pc.ibm.com/files.html>

The program is located in the "MISCELLANEOUS FILES" section or by using the Search facility to locate the file by the name "CPUIDIBM.DSK."

In situations that require a replacement processor, order FRU P/N06H6099 for the 60Mhz Pentium Processor. This processor has been updated to eliminate the floating point flaw.

SAS KEYWORDS:

VALUE POINT	PS/VP	PSVP	P60D
PSVPPART	PSY2PART	193	199
PSY2	189	1A9	PSVPBRD
PSY2BRD			

1.4.175 6384 P60/D VALUEPOINT FLASH EEPROM CODE UPDATES

Record number: H034880

Device: D/T6384
 Model: M
 Tip key: 061
 Date created: 094/06/02
 Date last altered: A95/10/30

THE PURPOSE OF THIS TIP IS TO LIST THE BIOS UPDATES FOR THE 6384 P60/D PENTIUM BASED VALUEPOINT MODELS AND PROVIDE A METHOD OF OBTAINING THE LATEST LEVEL FLASH UPDATE DISKETTE. A DETAILED LIST OF THE UPDATES/FIXES IS ALSO CONTAINED IN THIS TIP. THE FLASH UPDATES FOR THE 6384 P60/D ARE:

- 1.00.03 - INITIAL SHIP LEVEL
- 1.00.04
- 1.00.06 - CURRENT LEVEL

VERIFY THAT THE FLASH BIOS LEVEL OF THE SYSTEM IS AT THE CURRENT LEVEL PRIOR TO REPLACING PARTS FOR SYSTEM PROBLEMS THAT ARE NOT RESOLVED BY THE MAPS OR ADVANCED DIAGNOSTICS.

ALL FLASH UPDATES INCLUDE FIXES/UPDATES FROM THE PREVIOUS LEVEL. FOR EXAMPLE: FLASH 1.00.06 CONTAINS ALL FIXES/UPDATES FROM THE PREVIOUS LEVELS.

VIEW THE FLASH EEPROM LEVEL BY ACCESSING THE CONFIGURATION UTILITY PROGRAM. THE CONFIGURATION UTILITY CAN BE ACCESSED BY PRESSING F1 DURING THE MEMORY COUNT.

THE CURRENT UPDATE IS TITLED: LAJT05A.DSK (LEVEL 1.00.06)

THE CURRENT FLASH UPDATE MAY BE DOWNLOADED FROM THE TECHNICAL SUPPORT BULLETIN BOARD BY CALLING 919 517-0001.

***** IMPORTANT *****
 *
 * THESE FLASH UPDATES ARE CUSTOMER INSTALLABLE. CUSTOMERS *
 * SHOULD BE ADVISED TO CONTACT THE PC COMPANY HELPCENTER AT *
 * 800-772 - 2227 IF ASSISTANCE IS REQUIRED IN GETTING THE *
 * APPROPRIATE UPDATE. *

THE UPDATES INCLUDED IN LEVEL 1.00.04 ARE AS FOLLOWS:

- 1 - CODE UPDATE FOR ATI CONTROLLER FOR VIDEO FLICKER

THE UPDATES INCLUDED IN LEVEL 1.00.06 ARE AS FOLLOWS:

- 1 - UPDATED 2.88MB DISKETTE DRIVE SUPPORT

SAS KEYWORDS:

VALUE POINT	PS/VP	PSVP	P60D
PSVPFDSK	PSY2FDSK	PSVPDSKT	PSY2DSKT
PSVPERR	PSY2ERR	EPROM	ROM
BIOS	PSY2	189	199

PSY2 RETAIN TIPS
6384 SIMM MEMORY SIZE AND SPEED

1.4.176 6384 SIMM MEMORY SIZE AND SPEED

Record number: H20681

Device: D/T6384
Model: M
Tip key: 017
Date created: 093/02/11
Date last altered: A94/04/19

PS/VP 6384 MODELS 425SX, 433DX AND 433DX2 REQUIRE A BANK OF MEMORY TO CONTAIN FOUR 1MB SIMMS OR FOUR 4MB SIMMS TO FUNCTION CORRECTLY. BANK 0 DOES NOT NEED TO BE THE SAME SIZE AS BANK 1. BANKS MAY CONTAIN 70NS SIMMS, 80NS SIMMS OR 70NS AND 80NS SIMMS.

THIS INFORMATION WILL BE INCLUDED IN THE NEXT RELEASE OF THE HMM.

SAS KEYWORDS:

PSY2	VALUE POINT	VALUEPOINT	PSY2MEM
6384	PSVP	PSVPMEM	PSVP

1.4.177 64XX MODEL IDENTIFICATION

Record number: H124327

Device: D/T6484
 Model: M
 Tip key: 003
 Date created: 094/06/13
 Date last altered: A94/09/22

The following table can be used to decode the machine type and model information for the ValuePoint Performance Series.

The ValuePoint Hardware Maintenance Manual Supplement, form number S83G-7790, should be utilized for part number information.

64*X-XXX	*	=	7 = 3 x 3 Form Factor 8 = 5 x 5 Form Factor 9 = 8 x 6 Form Factor
64X*-XXX	*	=	2 = ISA and VESA local bus 4 = ISA and Peripheral Component Interconnect (PCI)
64XX-*XX	*	=	C = 486SX 33Mhz H = 486DX 33Mhz K = 486DX2 25/50Mhz L = 486DX2 33/66Mhz X = 486DX4 50/100Mhz
64XX-X*X	*	=	0 = 3.5" 1.44MB Diskette Drive only 2 = 170MB Hard Disk Drive 3 = 270MB Hard Disk Drive 4 = 364MB Hard Disk Drive 5 = 527MB Hard Disk Drive M = 170MB Hard Disk W/ Multimedia N = 270MB Hard Disk W/ Multimedia P = 364MB Hard Disk W/ Miltimedia R = 527MB Hard Disk W/ Multimedia
64XX-XX*	*	=	D = 4MB MEMORY B = 4MB MEMORY / DOS/Windows H = 8MB MEMORY F = 8MB MEMORY / DOS/Windows G = 8MB MEMORY / OS/2 2.11

SAS KEYWORDS:

PSY2	PSVP	PS/VALUEPOINT	6472
6482	6492	6494	6492
D/T6472	D/T6482	D/T6492	D/T6494
PSY2MISC	PSVPMISC	PS/VP	

1.4.178 64XX PCI RISER INSTALLATION AND DIAGNOSTICS

Record number: H125705

Device: D/T6484
 Model: M
 Tip key: 008
 Date created: 094/12/01
 Date last altered: A94/12/02

PCI RISER INSTALLATION

When installing a PCI riser card in ValuePoint Performance Series systems, do NOT plug anything into the 6-pin power supply type connector (J8) on the PCI riser card. This connector is for future expansion. Installing power supply connector P3 into this connector will prevent the system from powering up.

When the PCI riser card is removed from the system board, the system will not power up unless the 3 PCI jumpers on the system are installed in the VESA (rear) position.

There is a jumper on the PCI riser card that must be set to match the speed of system board.
 Systems with the PCI riser card installed must be at flash level 53 or higher.

DIAGNOSTICS

Advanced Diagnostics and QA-Plus do not provide unique error codes for riser card failures and may report a bad system board when the failure is in the PCI riser. To isolate this failure, remove the PCI riser, move the PCI jumpers to VESA, and run diagnostics. If diagnostics now complete without error, do not replace the system board; replace the PCI riser.

ERROR CODES

Post Error	Description	Probable Cause
1800	PCI interrupt conflict	Setup
1801	PCI ROM memory conflict	Setup
1802	PCI I/O address conflict	Setup
1803	PCI memory conflict (above 1mb)	Setup
1804	PCI memory conflict (1mb or below)	Setup
1805	PCI ROM memory error	Defective PCI adapter

REPAIR ACTIONS

Insure that there are no interrupt or memory conflicts before replacing any hardware. Refer to the documentation provided by the option adapter(s) for installation, configuration, and adapter problem solving information. Due to setup and other interactions between adapter cards it is often necessary to diagnose adapter problems with only one adapter installed at a time.

The appropriate FRU/ACTION for 18xx error codes or other problems suspected to be either the PCI riser card or PCI adapter(s) are as follows.

- 1 - Insure the PCI riser card speed jumper is in the 40/50mh position for 40 and 50 mhz systems and in the 25/33mhz position for 25 and 33mhz systems.
- 2 - Insure the 3 PCI jumpers on the system board are installed in the PCI (front) position.
- 3 - Insure the riser card and any adapters are completely seated in the appropriate connectors.
- 4 - If the 18xx error can be eliminated by removing a PCI adapter, replace the adapter.
- 5 - Replace the PCI riser.
- 6 - Replace the system board.

SAS KEYWORDS:

PSY2	PSVP	PS/VALUEPOINT	VALUEPOINT
D/T6492	D/6482	D/T6494	6492
6494	6484	6482	PSY2PWR
PSVPPWR	HANG	DEAD	1800
1801	1802	1803	1804
1805	PSVPDIAG	PSY2DIAG	PSY2BRD
PSVPBRD	PSY2MISC	PSVPMISC	PSY2ADAP
PSVPADAP	PSY2PWR	PSVPPWR	

1.4.179 64XX VALUEPOINT FLASH EEPROM LEVELS

Record number: H122782

Device: D/T6484
 Model: M
 Tip key: 004
 Date created: 094/07/01
 Date last altered: A96/01/15

The purpose of this tip is to list the FLASH BIOS updates for ValuePoint Performance Series systems and provide a method of obtaining the latest FLASH update diskette.

The FLASH EEPROM revision level can be viewed on page one of the configuration utility. The fifth and sixth positions of the FLASH EEPROM level represent the level of the code; for example LDJT61AUS is code level 61.

----- IMPORTANT -----
 Flash updates are customer installable. Customers should be advised to contact the IBM PC Company HelpCenter at 800 772-2227 if assistance is required in getting or installing the appropriate update. Customers in Canada should call IBM's HelpPC at 800 565 - 3344.

FLASH

REV. COMMENTS

- 44 - This the the first customer ship level.
- 46 - Added language support for Canadian English.
- 51 - Added support for PCI (Peripheral Component Interconnect).
- 53 - This level is functionally the same as 51. It ships with the PCI riser option and will not install over a higher level code.
- 56 - (1) Corrects a problem with WordPerfect for DOS. See TIP H122781 for details.
 (2) Eliminates fixed disk drive POST error 1780 after warm boot.
- 57 - Required on 433SX and 433DX when installing 128kb L2 cache memory option p/n92G7228 or FRU p/n92G7430. See tip H125116 for details.
- 58 - (1) Adds support for ReelMagic in the following video modes;
 640 x 480 256 colors
 640 x 480 64k colors
 800 x 600 256 colors
 (2) Adds support for the IBM Auto 16/4 Token Ring ISA adapter (Plug and Play).
- WARNING -----
 Beginning with flash BIOS level 60, hardware changes were made to the system board to facilitate manufacturing. Downlevel flash codes are not compatible with these changes and if installed on some systems will cause monitor synchronization problems, a blank display, or other display problems.

- 60 - (1) Prevents the system flash code from being corrupted by depressing a key button after the flash code begins to load or by attempting a warm boot at the completion of the flash install.
 (2) Provides S3 Vision864 video BIOS updates.
- 61 - Provides S3 Vision864 video BIOS updates.
- 63 - Provides a fix for TRAP E errors running OS/2 on DX/4 50/100mhz models.
- 64 - (1) Provides fix for system hang while exiting Advanced Diagnostics video tests.
 (2) Eliminates system hang condition on 6484, 6494, and 6482 and 6492 with PCI riser option.
 (3) Fix for NEC SCSI PCI adapter.
- 65 - Fix for Artist Graphics ISA video adapter failure after a warm boot.

64XX VALUEPOINT FLASH EEPROM LEVELS

- 67 - Fix for POST 162 error on systems with fixed disk drives made by Western Digital. The WD drive is not recognized by the configuration utility.
- 68 - Fixes for L2 cache disabled in configuration with Pentium P24T installed. Changed code to not power manage P24T.
- 70 - (1) Fix for dropping out of Windows.
(2) Updates to S3-864 video BIOS.

Note: Current S3 DOS/Windows drivers is 1.41.

The update diskettes may be downloaded from the IBM PC Company Bulletin Board System by calling 919-517-0001. If the customer cannot receive the update by modem, the HelpCenter will send the customer a copy on diskette.

Customers and dealers in Canada may download the FLASH code from their respective IBM regional bulletin board service.

SAS KEYWORDS:

VALUE POINT	PS/VP	PS/VALUEPOINT	PSY2
6472	D/T6472	6484	D/T6482
6482	6492	D/T6492	6494
D/T6494	BIOS	EPROM	ROM
PSVP	INTEGRITY	92G7228	92G7430
PSY2FDSK	PSVPFDSK	HANG	LOCK
D/T64XX			

1.4.180 64XX VALUEPOINT SHIPPED WITH TWO 4MB SIMMS

Record number: H125114

Device: D/T6482
 Model: M
 Tip key: 001
 Date created: 094/09/02
 Date last altered: A94/09/02

A small number of ValuePoint Performance Series systems were shipped with two 4mb SIMMs, limiting the number of memory SIMM sockets for expansion. Customers adding memory to these systems and requiring more than the available two SIMM sockets should call the IBM PC Company HelpCenter at 800-772-2227.

Customers in Canada should call IBM's HelpPC at 800-565-3344.

The model number and serial number of the system(s) affected will be required.

SAS KEYWORDS:

PSVP	PSY2	PS/VALUEPOINT	VALUE POINT
PSVPMEM	PSY2MEM	D/T6484	D/T6472
D/T6492	D/T6494	6472	6482
6492	6494	6482	

1.4.181 72 PIN / 70NS SIMM FRU P/N'S FOR VALUEPOINT

Record number: H12481

Device: D/T6384
Model: M
Tip key: 032
Date created: 093/06/29
Date last altered: A93/06/29

THE PS/VALUEPOINT HMS/R, DATED MARCH 1993 DOES NOT CONTAIN THE FRU PART NUMBERS FOR THE 70NS MEMORY SIMMS THAT THE 6382/S, 6384/D AND 6387/T SYSTEM ARE SHIPPED WITH. THE SIMMS LISTED IN THAT HMS/R ARE 80NS SIMMS. THE 70NS FRU PART NUMBERS ARE:

P/N92F0102 2MB (70NS)
P/N92F0105 4MB (70NS)
P/N64F3606 8MB (70NS)

THESE NUMBERS WILL BE INCLUDED IN THE NEXT REVISION OF THE PS/VALUEPOINT HMS/R.

SAS KEYWORDS:

PSVP	PSVPMEM	PSVDOC	PSY2
PSY2MEM	PSY2DOC	6382	6384
6387	70 NS	VALUE POINT	SIMM

1.4.182 750/755/360 FAMILY DISKETTE PACKAGE V1.31 FIXES.

Record number: H124831

Device: D/T9545
 Model: M
 Tip key: 021
 Date created: 094/08/10
 Date last altered: A94/08/15

IMPORTANT

Diskette fixes are customer installable. Customers should be advised to contact the IBM PC Company HelpCenter at 800-772 - 2227 if assistance is required in getting or installing the Utility, Video or Audio diskettes. These files are located on the PC company's Bulletin Board Service (BBS). The direct line for modem connection to The PC Company BBS is 1-919-517-0001 or tieline 255-0001.

Customers in Canada should call IBM's HelpPC at 800-565-3344 for Assistance or down load information. The Canadian BBS phone numbers are:
 Montreal-514-938-3022, Toronto-905-316-4255,
 Winnipeg-204-934-2735, Vancouver-604-664-6464.

Ensure the following fixes are installed before replacing FRUs for any symptoms listed below.

This tip identifies previous and current versions of the following ThinkPad diskettes, and lists the fixes and enhancements contained in each version. Where applicable all fixes and enhancements from prior versions are included in the current versions of these diskettes.

IBM ThinkPad Utility Diskette V1.31
 IBM ThinkPad Video Features Diskette V1.32
 IBM ThinkPad Audio Features Diskette V1.31

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UTILITY DISKETTE UPDATES

The following is a list of problems fixed by the IBM ThinkPad Utility Diskette.

Utility Diskette Version

1.00	07/08/93	Initial Release ThinkPad 750/750C/750P
1.20	12/03/93	2nd Release ThinkPad 750/750C/750P/750Cs/750Ce
1.21	02/15/94	3rd Release ThinkPad 750
1.30	02/22/94	4th Release ThinkPad 750/755/360

1.31 04/18/94 5th Release ThinkPad 750/755/360

Note: (Enh) = Enhancement to existing function.
(New) = New function.

INSTALLATION PROGRAM

- 1.20 (New) ThinkPad 750Cs and 750Ce are supported.
- 1.20 The installation program for Windows doesn't work in Win-OS/2 session.
- 1.20 The Fuel-Gauge program for DOS can't be installed at the DOSSHELL.
- 1.30 (New) ThinkPad 755/360 families are supported.
- 1.30 The installation program for Windows doesn't allow long path names.

DOS UTILITY

- 1.20 (New) ThinkPad 750Cs and 750Ce are supported.
- 1.20 (New) A warning is displayed when IRQ15 is selected.
- 1.20 (New) A warning is displayed when IRQ11 is selected with the Port Replicator with PCMCIA.
- 1.20 (New) "Enable/Disable the speaker indicator" added.
- 1.20 Resume timer can be selected if Hibernation Timer is On.
- |1.20 Set Display Feature Menu selection isn't saved correctly.
- |1.20 Display High Performance Mode should be always On (750C).
- 1.20 Items in Suspend and Resume Menu can't be selected by the space bar when the Dock-1 is attached.
- 1.30 (New) ThinkPad 755/360 families are supported.
- 1.30 (New) Three 'Incoming call' items in the Resume options are integrated into one item.
- 1.31 The Help menu indicates invalid items.

DOS FUEL-GAUGE PROGRAM

- 1.20 Incorrect Japanese char. displayed with 8MB IC DRAM Card.
- 1.21 Frequent system hang-up at idle time or screen saver.
- 1.30 (New) ThinkPad 755/360 families are supported.
- 1.30 Fuel-gauge program doesn't work correctly.
- 1.30 Duration of Remaining Power is not correct when the processor speed is changed.

DOS PCMCIA UTILITY

- 1.20 (New) EasyPlaying is supported.

WINDOWS UTILITY

- 1.20 (New) ThinkPad 750Cs and 750Ce are supported.
- 1.20 (New) A warning is displayed when IRQ15 is selected.
- 1.20 (New) A warning is displayed when IRQ11 is selected with the Port Replicator with PCMCIA.
- 1.20 The LCD still active when Display High Performance Mode is on.
- |1.21 The way to open the 'More' Window is changed.
- 1.30 (New) ThinkPad 755/360 families are supported.
- 1.30 (New) Three 'Incoming call' items in Resume options are integrated into one item.
- 1.30 It is slow to open the 'More' panel from the 'Power' menu
- 1.31 (New) Processor Upgrade Kit for 750Ce is supported.

WINDOWS FUEL-GAUGE PROGRAM

- 1.20 (New) ThinkPad 750Cs and 750Ce are supported.
- 1.21 Character lost during high speed communication.
- 1.30 (New) ThinkPad 755/360 families are supported.
- 1.30 (New) Check if 'MS-DOS with APM' was chose on Windows setup.
- 1.30 The screen position is not saved on exit.
- 1.30 Duration of Remaining Power is not correct when the processor speed is changed.

WINDOWS PCMCIA UTILITY PROGRAM

- 1.20 (New) EasyPlaying is supported.

OS/2 UTILITY

- 1.20 (New) ThinkPad 750Cs and 750Ce are supported.
- 1.20 (New) A warning is displayed when IRQ15 is selected.
- 1.20 (New) A warning is displayed when IRQ11 is selected with the Port Replicator with PCMCIA.
- 1.20 (New) Option "Enable/Disable the speaker indicator" added.
- 1.20 LCD is still active when Display High Performance Mode is on.

- 1.21 Character lost during high speed communication.
- 1.30 (New) ThinkPad 755/360 families are supported.
- 1.30 (New) Three 'Incoming call' items in Resume options are integrated into one item.
- 1.30 Slow to open the 'More' panel from the 'Power' menu.
- 1.30 The description about the Fuel-Gauge program in Help is incorrect.
- 1.31 (New) Processor Upgrade Kit for 750Ce is supported.
- 1.31 163/173 errors occur when the Speaker Indicator is enabled (the 755 & 360).

OS/2 FUEL-GAUGE PROGRAM

- 1.21 Character lost under the high speed communication.
- 1.30 (New) ThinkPad 755/360 families are supported.
- 1.30 The screen position is not saved on exit.
- 1.30 Duration of Remaining Power is not correct when the processor speed is changed.

OS/2 PCMCIA UTILITY PROGRAM-

- 1.20 (New) EasyPlaying is supported.

OTHER UTILITY FIXES

- 1.20 Bitmap data is added for the wallpaper.
- 1.30 (New) Windows Large Pointer Program is added.
- 1.30 (New) IBM ThinkPad Space Saver Keyboard for DOS is supported.
- 1.30 (New) IBM ThinkPad Space Saver Keyboard for OS/2 is supported.
- 1.30 Patch program for MOUSE.COM 9.01 to correct a hang after suspend/resume operation.
- 1.30 Patch program for MOUSE.COM 8.20 or later to correct a keyboard/mouse hang if the Power on Password is installed.
- 1.31 Serial mouse doesn't work with the IBM ThinkPad Space Saver Keyboard.
- 1.31 QEXPUNIT.EXE returns incorrect return code on 755/360.

| VIDEO FEATURE DISKETTE

| The following list of problems is fixed by the IBM ThinkPad
| Video Feature Diskette.

Released Version

```
-----
1.00   7/12/93   Initial Release ThinkPad 750/750C/750P
1.12  11/29/93   2nd Release ThinkPad 750/750C/750P/750Cs/750Ce
1.30  02/23/94   3rd Release ThinkPad 750/755/360
1.31  04/28/94   4th Release ThinkPad 750/755/360
1.32  06/23/94   5th Release ThinkPad 750/755/360
```

Changed/Fixed Item

VESA

- 1.10 System hangs in INT 10h handling.
- 1.10 Characters do not display in OS/2 DOS session.
- 1.10 (Enh) STN-C panel support.
- 1.11 Black screen appears with 1-2-3(J) in OS/2(J) DOS box.
- 1.12 (New) ThinkPad 750Cs and 750Ce are supported.
- 1.30 (New) ThinkPad 755/360 families are supported.

WINDOWS DISPLAY DRIVER

- 1.10 (Enh) Pen Windows (inking function) support.
- 1.10 Garbage screen appears in 'file open' with PowerPoint 3.0.
- 1.10 GP fault occurs in printing with 5587 printer(Japan).
- 1.10 Garbage screen appears after WIN-OS/2 Startup failure.
- 1.11 (Enh) H/W line drawing support.
- 1.12 (New) ThinkPad 750Cs and 750Ce are supported.
- 1.30 (New) ThinkPad 755/360 families are supported.
- 1.30 (Enh) Large cursor/cursor color function support.
- 1.30 Garbage screen appears with CINEMANIA'92 with STN-C.
- 1.30 Ink becomes faded with NoteTaker (pen application).
- 1.30 Clock hands remains with CLOCK.EXE.
- 1.30 (Enh) Mouse trail support.
- 1.31 (Enh) Mouse trail performance up.
- 1.31 Clipboard colors turn black capturing Paintbrush window.
- 1.31 Video mode set fails with STN panel.
- 1.32 System hangs up with ThinkPad 755C 1024x768 60Hz.

1.32 GP fault occurs in opening/closing huge bitmap.

OS/2 DISPLAY DRIVER

1.10 Garbage screen appears after WIN-OS/2 Startup failure.
 1.10 Installation does not complete with READ ONLY files.
 1.12 (New) ThinkPad 750Cs and 750Ce are supported.
 1.12 Garbage screen appears with SETCRT in LCD(STN-C) only.
 1.30 (New) ThinkPad 755/360 families are supported.
 1.30 (Enh) Installation support for 'OS/2 for Windows'
 1.30 Garbage appears with FILEMAN etc. in DOS window session.
 1.30 Installation into OS/2 pre-load does not complete.
 1.31 Installation into OS/2 pre-load does not complete 2nd time
 1.31 Installation into OS/2 2.11 does not complete.
 1.31 Black screen appears starting icons at the same time.
 1.32 Transparent bitmap is displayed abnormally.
 1.32 Monochrome bitmap conversion table has problem.
 1.32 (Enh) README file is changed for OS/2 CSD installation.
 1.32 LCD & CRT screen may flicker on (755/360).

AUDIO FEATURE DISKETTE

The following is a list of problems fixed by the IBM ThinkPad
 Audio Feature Diskette.

Released Version

 1.00 07/07/93 Initial Release for ThinkPad 750/750C/750P
 1.10 12/01/93 2nd Release for ThinkPad 750/750C/750P
 1.30 02/18/94 3rd Release for ThinkPad 750/755/360
 1.31 06/24/94 4th Release for ThinkPad 750/755/360

Changed/Fixed Item

 1.10 (New) MIDI function is supported.
 1.10 (New) OS/2 2.1 is supported.
 1.30 (New) ThinkPad 750Cs, 750Ce, 755 family and 360 family are
 supported.
 1.30 The system hangs on exiting Windows.
 1.31 MIDI hangs under OS/2 2.11.
 1.31 DOS audio driver can't be loaded in the system with 36MB
 memory installed.

SAS KEYWORDS:

PSY2	PSY2MCD	PSY2ERR	PSY2DIAG
PSY2DISP	PSY2DOC	PSY2OPER	D/T2620
PSY2MEM			

1.4.183 750CE & 755 CDPD POWER UP DURATION.

Record number: H016164

Device: D/T9545
Model: M
Tip key: 023
Date created: 094/07/14
Date last altered: A94/09/23

The following is normal operation. DO NOT replace FRUs for these symptoms.

The 750CE and 755 systems will take longer to cold boot with a CDPD (Cellular Digital Packet Data subscriber unit) than with other 750 and 360 models. This is because the 750CE and 755 Thinkpad powers off the CDPD when they are powered off, and the 750 and 360 models do not.

Although the 750CE and 755 system take longer to boot the advantage of powering off the CDPD is longer battery charge life.

SAS KEYWORDS:

PSY2

PSY2ADPT

PSY2MISC

D/T2620

1.4.184 755, 760, 560, & 365X XD 2.1GB UNDETECTED DATA MODIFICATION.

Record number: H136020

Device: D/T9546
 Model: M
 Tip key: 013
 Date created: 097/01/09
 Date last altered: A97/02/11

DATA INTEGRITY NOTICE The following IBM ThinkPad systems containing fixed disks, with a total number of cylinders that = $1024 * 2$ to any power, can experience data loss. The area of possible data loss is limited to the first 8 Kilo bytes of data in the last cylinder. The data loss can only occur during the start of hibernation when the hibernation data over writes this area of the drive. A BIOS update has been released to correct this.

Normally the drive must be full to have data in this area of the fixed disk, but if the disk's data is fragmented (Many blank areas between data) a drive that appears to have space could have data in the last cylinder. The empty space, in this case, is located throughout the disk and not at the end.

Although the ThinkPad 2.1GB drive, FRU P/N82H8489, is the only IBM drive that can be affected today, the BIOS update should be applied to all systems.

CHART INFORMATION

CHART 1 contains drive geometries (# of cylinders) affected.
 CHART 2 contains ThinkPad Device types and Models that require the fix.

To determine if another equipment manufacturer's drive could be affected use the formula as these examples and CHART 1 shows.

Example $1024 * 2$ to 0 power = 1024
 $1024 * 2$ to the 1st power = 2048

CHART 1

Power	0	1	2	3	4	
Drives containing these numbers of cylinders are affected.	1024	2048	4096	8192	16384	etc.

CHART 2

DEVICE TYPE	MODELS REQUIRING THE FIX					
9545	755CD	755CE	755CSE	755CV	755CDV	755CX
9546	760C	760CD	760E	760ED		
9547	760L	760LD	760EL	760ELD		
2640	ALL MODELS					
2625	365X	365XD				

Do not use the Hibernation function until the BIOS fix is active on the above systems in CHART 2. To prevent the hibernation function from activating before the BIOS fix is loaded, disable hibernation as follows:
 356X & XD INSTRUCTIONS: Select ThinkPad FEATURES, click on the BATTERY Icon. At the next prompt click on the SUSPEND/HIBERNATION/RESUME OPTION Icon then click on the ENABLE HIBERNATION Button. The button will then be labeled DISABLE HIBERNATION. Select OK at the next screen. When the BIOS fix is loaded reactivate HIBERNATION by following the same above steps.

560 INSTRUCTIONS: Select ThinkPad FEATURES, click on the BATTERY Icon. At the next prompt click on the SUSPEND/HIBERNATION/RESUME OPTION Icon then click on the ENABLE HIBERNATION Button. The button will then be labeled DISABLE HIBERNATION. Select OK at the next screen. When the BIOS fix is loaded reactivate HIBERNATION by following the same above steps.

755 INSTRUCTIONS: Select the ThinkPad FEATURES, at the POWER setting (next prompt) select MORE and then select DISABLE HIBERNATION and save the new settings. The system will not be able to HIBERNATE. When the BIOS fix is loaded follow the same above steps to reactivate the Hibernation function. Click "Enable" then click on "OK". At the next screen click on "OK" again.

760 instructions: Select the ThinkPad FEATURES, click the Battery Icon, then click the Fixed Disk Icon and click on "OK". The system will not be able to HIBERNATE. When the BIOS fix is loaded follow the same above steps to reactivate the Hibernation function. Click "Enable" then click on "OK". At the next screen click on "OK" again.

NOTE: The system's SUSPEND works correctly and will not cause this condition.

The following BIOS updates correct this condition. They are located on the IBM PCCO BBS and can be downloaded via modem using the telephone numbers or Internet URL listed under heading labeled "IMPORTANT" at the end of this tip.

FILE NAMES ON THE BBS:

SYTPE144

IBM ThinkPad 755CD/755CE/755CSE/755CV/755CDV/755CX
System Program Service Diskette Version 1.44 (BIOS 11/07/96)
or later.

SYTPG105

IBM ThinkPad 760E/760ED/760EL/760ELD with SVGA LCD. 800 x 600
System Program Service Diskette Version 1.05 (BIOS 12/11/96) or
later.

SYTPF124

IBM ThinkPad 760C/760CD/760L/760LD
System Program Service Diskette Version 1.24 (BIOS 11/08/96) or
later.

SYTPH101

IBM ThinkPad 760E/760ED with XGA LCD. 1024 x 768
System Program Service Diskette Version 1.01 (BIOS 12/11/96) or
later.

SYTPK104

IBM ThinkPad 560 model systems.
System Program Service Diskette Version 1.04 (BIOS 02/05/97) or
later.

SY36X105

IBM ThinkPad 365X and 365XD model systems
System Program Service Diskette Version 1.05 (BIOS 01/30/97) or
later.

There are both DOC and EXE files with the above names. Check the model of the system requiring the BIOS update to determine which file to download. Download both the DOC and EXE file. Read the DOC file using an editor program. It contains detailed information about the fixes on the BIOS diskette, information pertaining to the ThinkPads operating system, and installation instructions.

----- IMPORTANT -----

Diskette fixes are customer installable. Customers should be advised to contact the IBM PC Company HelpCenter at 800-772 - 2227 if assistance is required in getting or installing this information.

Files are located on the PC company's Bulletin Board Service (BBS). The direct line for modem connection to The PC Company BBS is 1-919-517-0001 or tieline 255-0001.

Customers in Canada should call IBM's HelpPC at 800-565-3344 for Assistance or down load information. The Canadian BBS phone numbers are:

Montreal-514-938-3022, Toronto-905-316-4255,
Winnipeg-204-934-2735, Vancouver-604-664-6464.

The data may also be downloaded via the Internet from the IBM Personal Computer File Library by searching the following Internet URL: <http://www.pc.ibm.com/files.html>

PSY2 RETAIN TIPS

755, 760, 560, 365X XD 2.1GB UNDETECTED DATA MODIFICATION.

SAS KEYWORDS:

D/T9547
UNCLASSIFIED

THINKPAD
PSY2MCD

PSY2
D/T2640

PSY2PROG
D/T2625

755CX 1" BLACK BORDER IN VGA MODE IS NORMAL ON MOD HBD HBE

1.4.185 755CX 1" BLACK BORDER IN VGA MODE IS NORMAL ON MOD HBD & HBE

Record number: H002371

Device: D/T9545
Model: M
Tip key: 041
Date created: 095/07/17
Date last altered: A95/07/17

The 755CX has 2 models for VGA and 2 models for SVGA. A one inch border is displayed on the SVGA version if it is operated in VGA mode. This is because the VGA screen size is smaller when displayed on the SVGA LCD. The EASY SETUP screen will show the one inch black border on all sides. This is normal operation. NO FRU PARTS SHOULD BE REPLACED.

ThinkPad 755CX VGA models listed below should be used in situations where VGA is needed and the black one inch border on SVGA systems are unacceptable.

755CX SVGA MODELS	755CX VGA MODELS
9545 - HBD 9545-HBE	9545-SBJ 9545-SBK

SAS KEYWORDS:
PSY2 THINKPAD PSY2DISP

PSY2 RETAIN TIPS
8MB ECC SIMM MAY NOT FIT ALL SYSTEMS

1.4.186 8MB ECC SIMM MAY NOT FIT ALL SYSTEMS

Record number: H127320

Device: D/T8595
Model: M
Tip key: 018
Date created: 095/04/27
Date last altered: A95/04/27

8MB ECC SIMMS from IBM (Option P/N 92G7208, FRU P/N92F0098)
may not fit properly in the SIMM connectors of some systems.

The following system types and models are potentially affected.

8595 - All models
9595 - model 0LF (See note below)

Details:

Early production 8595 system boards were manufactured with gray plastic memory SIMM connectors which physically interfere with the installation of the referenced 8MB ECC SIMM.

In later production a green SIMM connector was used, which is compatible with the larger SIMMs. Many earlier systems, which have received service actions in the past 18 months, could have the later production system board (green SIMM connectors) already installed.

If this problem is encountered, please call 1-800-426-7299 (Options by IBM) to obtain replacement SIMMs which do not exhibit the physical interference problem. The customer may use the same packaging to ship original simm(s) back to IBM.

All system boards with green memory simm connectors, regardless of model number or processor upgrade are not affected.

Note: 9595 model 0LF is the only model of 9595 to use the 8595 system board, FRU P/N92F0270, (identified by a single serial and a single parallel port).

SAS KEYWORDS:

PSY2	PSY2MEM	D/T9595	D/T8595
9595	8595	PSY2BRD	

1.4.187 80387 MATH COPROCESSOR

Record number: H022822

Device: D/T8580
Model: M
Tip key: 002
Date created: 087/08/19
Date last altered: A94/03/14

THE 80387 COPROCESSOR CAN CAUSE AN UNDETECTABLE DATA CALCULATION UNDER VERY UNIQUE AND UNCOMMON SET OF CIRCUMSTANCES.

THE ERROR OCCURS WHEN A SOFTWARE PROGRAM USES A SPECIFIC INSTRUCTION CODED INTO THE 80387 TO CONVERT (ROUND) A FLOATING POINT VALUE TO AN INTERGER (WHOLE NUMBER), IT ROUNDS INCORRECTLY. THIS ONLY OCCURS WHEN THE FLOATING POINT NUMBER BEING CONVERTED IS IN THE RANGE BETWEEN 2 TO THE (-63) AND 2 TO THE (-65) OR ABOUT .00000000000000000001.

BUSINESS APPLICATIONS ARE NOT LIKELY TO USE NUMBERS THIS SMALL OR THE CONVERT-TO-INTERGER INSTRUCTION. THE CONDITION CAN OCCUR WITH THE MORE COMPLEX SCIENTIFIC AND ENGINEERING APPLICATIONS. HOWEVER, MOST WILL NOT BE AFFECTED BECAUSE NUMBERS THIS SMALL ARE NOT COMMONLY ROUNDED. CONSULT THE MARKETING SYSTEM "HONE/EQUAL QUESTION NUMBER 868MN" FOR THE Q'S AND A'S ON THE 80387 MATH COPROCESSOR.

SAS KEYWORDS:

PSY2 PSY2MISC PSY2PROG MATH
COPRO

1.4.188 8513 PLASTIC CARD TRAYS MAY LIMIT REPAIR

Record number: H122

Device: D/T8513
Model: M
Tip key: 006
Date created: 093/05/11
Date last altered: A94/05/02

DIFFERENT LEVELS OF CARD TRAY ASSEMBLIES WERE USED ON 8513 MONITORS. A SMALL NUMBER OF EARLY-LEVEL PLASTIC CARD TRAY ASSEMBLIES UTILIZE DIFFERENT WIRE CONNECTION POINTS THAN THE CURRENT METAL CARD TRAY FRU.

The "repairable" card tray assembly will have metal sides to the tray. The non-repairable on will have plastic sides. Both types of card trays have metal bottoms..

THE MONITOR SERVICE DOCUMENTATION SHOULD BE USED TO ASSIST WITH REPAIR.

IF THE SERVICER IS UNABLE TO IDENTIFY THE CORRECT LOCATIONS FOR VARIOUS WIRES*, OR CANNOT FACILITATE A COMPLETE REPAIR, DUE TO THE DIFFERENCES BETWEEN THE METAL AND PLASTIC CARD TRAYS, THE 8513 SHOULD BE ELEMENT EXCHANGED.

*Note: if there is a P10-1 and a P10-2 connector on the card tray assembly, that display is NOT for a repairable display (next to the CRT socket).

THE FRU NUMBER FOR THE 8513 MONITOR element IS P/N68X3088.

SAS KEYWORDS:

PSY2	PSY2DISP	DISPLAY	GROUND
75X8924	P/N79X8924	REPLACE	REPLACED
REPAIRED			

1.4.189 8513-001 DISPLAY MAY HAVE INCORRECT MODEL NUMBER

Record number: H034771

Device: D/T8513
Model: M
Tip key: 004
Date created: 091/03/13
Date last altered: A91/03/14

APPROXIMATELY 2200 8513-001 DISPLAY FRU'S WERE INCORRECTLY
LABELED DURING REPAIR WITH AN INCORRECT TYPE/MODEL OF 8513-003.
THE CORRECT TYPE/MODEL CAN BE FOUND ON THE PRODUCT INFORMATION
LABEL ON THE REAR COVER. THE TYPE/MODEL LISTED ON THE REAR LABEL
SHOULD BE CONSIDERED CORRECT ON ALL 8513 DISPLAYS. AN 8513 MODEL
003 (8513 - 003) IS A 200-240VAC WORLD TRADE DISPLAY MADE FOR USE
IN THE SOUTHERN HEMISPHERE AND NOT FOR USE IN THE UNITED STATES.

SAS KEYWORDS:

PSY2DISP

8513DISP

PSY2

PSY2MISC

1.4.190 8514-8514/A ADAPTER INSTALLATION & TROUBLESHOOTING TIPS

Record number: H026675

Device: D/T8514
 Model: M
 Tip key: 002
 Date created: 088/04/07
 Date last altered: A91/09/09

THE 8514/A ADAPTER CARD IS SLOT SENSITIVE; IT MUST BE PLUGGED INTO THE SLOT WHICH HAS EXTENDED VIDEO CAPABILITIES. (SLOT 3 ON THE 8550; SLOT 6 ON THE 8560,8565 & 8580; SLOT 1 ON THE 8555 AND 8570). 8590 AND 8595 DO NOT SUPPORT THE 8514/A ADAPTER.

A JUMPER ON THE MEMORY EXPANSION CARD MUST BE PROPERLY SET TO INDICATE THE AMOUNT OF INSTALLED DISPLAY ADAPTER MEMORY. THE JUMPER SETTING MAY BE FOUND IN THE INSTALLATION INSTRUCTIONS OR DIAGNOSTIC MAPS (7400).

A POST ERROR CODE OF 74XX WOULD INDICATE A 8514/A DISPLAY ADAPTER ERROR. DIAGNOSTIC MAPS SHOULD BE FOLLOWED FOR RESOLUTION.

SAS KEYWORDS:

PSY2	PSY2ADAPT	PSY2DISP	8514DISP
PSY2ERR	PSY2DIAG	8550SYSERR	8560SYSERR
8580SYSERR	8550SYSADPT	8560SYSADPT	8580SYSADPT
8550SYSDIAG	8560SYSDIAG	8580SYSDIAG	8555SYSERR
8555SYSDIAG	8565SYSERR	8565SYSDIAG	8555SYSADPT
8565SYSADPT	D/T8555	D/T8560	D/T8565
D/T8550	D/T8570	D/T8580	D/T8590
D/T8595			

1.4.191 8514/A ADAPTER CAUSES CONFIG ERROR ON PS/2

Record number: H106694

Device: D/T8550
 Model: M
 Tip key: 148
 Date created: 093/01/13
 Date last altered: A94/03/21

SOME PS/2 HARDWARE CONFIGURATIONS WHICH INCLUDE AN EARLY LEVEL 8514/A CARD, COMBINED WITH SOFTWARE THAT OPERATES IN EXPANDED MEMORY, MAY CREATE AN ADDRESS CONFLICT IN SYSTEM MEMORY THAT PREVENTS SUCCESSFUL CONFIGURATION OR OPERATION. EARLY LEVEL CARDS CAN BE IDENTIFIED BY 75X9013 OR 75X9014 PRINTED ON THE CARD IN WHITE INK. THIS PROBLEM WILL BE EXPERIENCED ONLY AT INITIAL INSTALLATION, OR AFTER A HARDWARE OR SOFTWARE CONFIGURATION CHANGE.

ENGINEERING ENHANCEMENTS MADE TO THE CURRENT LEVEL 8514/A ADAPTER REDUCE THE AMOUNT OF ROM ADDRESS SPACE REQUIRED FOR ITS CONFIGURATION. THIS MAY ELIMINATE SOME MEMORY ADDRESS CONFLICTS.

THE NEW CARD REQUIRES VERSION 1.01 OF THE 8514/A OPTION DISKETTE (PUB # G68X2366). OPTION DISKETTE VERSION 1.01 CAN BE USED WITH EARLY LEVEL AND NEW LEVEL 8514/A CARDS. IF THE NEW LEVEL 8514/A IS CONFIGURED WITH OPTION DISKETTE VERSION 1.00, THE SYSTEM WILL NOT RECOGNIZE CHANGES ON THE NEW 8514/A CARD.

SAS KEYWORDS:

PSY2	PSY2ADPT	PS2	PSY2ERR
D/T8514	D/T8555	D/T8556	D/T8557
D/T8560	D/T8565	D/T8570	D/T8573
D/T8580	DRIVER		

1.4.192 8514/A MEMORY EXPANSION UNUSABLE

Record number: H005840

Device: D/T8514
Model: M
Tip key: 001
Date created: 087/09/02
Date last altered: A94/03/14

IF A CUSTOMER HAS RUN THEIR 8514/A ADAPTER BEFORE ADDING THE MEMORY EXPANSION OPTION THEY WILL HAVE TO RUN THE ADAPTER INTERFACE INSTALLATION PROGRAM AGAIN IN ORDER TO USE THE ADDITIONAL MEMORY.

SAS KEYWORDS:

PSY2 8514ADPT PSY2ADPT PSY2MEM

1.4.193 8515/8516 INTERMITTENTLY POWERING OFF

Record number: H102248

Device: D/T8516
Model: M
Tip key: 004
Date created: 092/06/17
Date last altered: A95/03/09

THE PS/2 8515 AND 8516 TOUCH SCREEN COLOR DISPLAYS MAY INTERMITTENTLY EXHIBIT A BLANK SCREEN WITH THE POWER-ON LED OFF. THIS SYMPTOM MAY BE CAUSED BY THE INPUT AC POWER DROPPING BELOW 50 VAC FOR 0.5 SECOND OR LESS.

THE SYSTEM UNIT MAY CONTINUE TO OPERATE WITHOUT ANY INDICATION OF A POWER PROBLEM.

TO RECOVER FROM THIS SITUATION, POWER OFF THE DISPLAY FOR AT LEAST ONE SECOND, THEN POWER ON.

THIS SITUATION IS DUE TO THE POWER PROTECT CIRCUITRY DESIGNED INTO THE 8515 AND 8516 AND IS NOT A FAILURE OF THE DISPLAY UNIT. AC VOLTAGE DROPS FOR A PERIOD OF TIME GREATER THAN .5 SECOND WILL ALLOW THE DISPLAY TO SELF-RECOVER AND CONTINUE TO OPERATE NORMALLY.

IF THE CUSTOMER IS EXPERIENCING THIS SITUATION, INPUT POWER PROBLEM DETERMINATION PROCEDURES USING A POWER LINE MONITOR (DRANITZ METER) SHOULD BE PERFORMED.

SAS KEYWORDS:

PSY2	D/T8515	PSY2DISP	PSY2PWR
TOUCH	8515DISP	8516DISP	PSY2DISP
GREEN			

1.4.194 8517 / 9517 BLANK SCREENS / ANALOG CARD WIRING

Record number: H104368

Device: D/T8517
 Model: M
 Tip key: 002
 Date created: 092/12/21
 Date last altered: A95/05/10

REPLACEMENT OF THE VIDEO CARD ASSEMBLY IN THE PS/2 8517 AND 9517 REQUIRE THAT FOUR LEADS BE DISCONNECTED FROM THE ANALOG CARD AND THE HSTAT/FOCUS POTENTIOMETER ASSEMBLY. THESE LEADS ARE NOT MARKED OR COLOR CODED AND REPLACING THEM IN THEIR PROPER POSITION MAY BE DIFFICULT IF THEY ARE NOT MARKED BY THE SERVICER PRIOR TO THEIR REMOVAL.

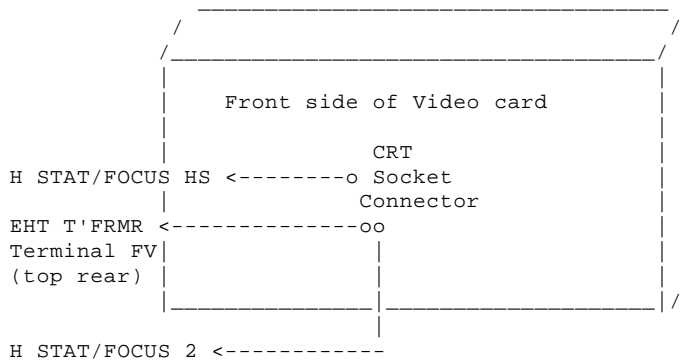
NOT CONNECTING THE WIRES CORRECTLY WILL CAUSE SOME, OR ALL OF THE FOLLOWING SYMPTOMS AND MAY CAUSE THE SERVICER TO BELIEVE HE HAS INSTALLED A "NEW DEFECTIVE" ANALOG CARD FRU:

- A. THE MONITOR HAS A HALF LIT POWER-ON LED, BRIEFLY, THEN THE LED GOES OUT.
- B. A FAINT HIGH PITCHED NOISE MAY BE HEARD.
- C. THE SCREEN WILL BE BLANK (BLACK, NO RASTER).

FOLLOWING IS A DESCRIPTION OF WHERE TO ATTACH THE VIDEO CARD LEADS. WORKING FROM THE FRONT OF THE DISPLAY UNIT, VIEW THE VIDEO CARD FROM THE INTEGRATED TUBE COMPONENT (ITC) CONNECTOR SIDE. REFER TO THE DIAGRAM BELOW:

1. A PAIR OF BLACK WIRES CAN BE SEEN BELOW THE ITC CONNECTION ON THE VIDEO CARD.
 - A) FROM THAT PAIR, THE LEFT LEAD SHOULD BE CONNECTED TO THE "FV" CONNECTOR ON THE EXTRA HIGH TENSION (EHT) TRANSFORMER.
 - B) THE RIGHT LEAD SHOULD BE CONNECTED TO POSITION NUMBER "2" ON THE HSTAT/FOCUS ASSEMBLY.
2. THE BLACK WIRE DIRECTLY ABOVE THE PAIR OF WIRES MENTIONED IN STEP 1, SHOULD BE CONNECTED TO THE "HS" CONNECTOR ON THE HSTAT/FOCUS ASSEMBLY.
3. THE ONLY RED LEAD INVOLVED SHOULD BE CONNECTED BETWEEN POSITION "1" ON THE HSTAT/FOCUS ASSEMBLY AND THE "MV" POSITION ON THE EHT TRANSFORMER.

Note: The numbers referred to above are imprinted on top of the 4 corners of the H-STAT/FOCUS pot assembly, but are small and difficult to see.



IT IS NECESSARY TO PERFORM ALL ADJUSTMENTS DETAILED IN THE 8517 9517 COLOR DISPLAY HMS AFTER REPLACEMENT OF THE ANALOG CARD OR VIDEO CARD ASSEMBLY. REFER TO 9517 MONITOR ALIGNMENT SERVICE AID, RETAIN RECORD # H124719, WHICH SUPPLEMENTS THE ALIGNMENT PROCEDURE IN THE DISPLAY HARDWARE MAINTENANCE MANUAL (HMM), VOL. 1, SECTION 8, FORM NUMBER SA38-0053-00. THE SERVICE AID PROVIDES ADDITIONAL DETAILED ALIGNMENT INFORMATION NOT FOUND IN THE HMM. RETAIN RECORD # H12816 PROVIDES ESSENTIAL BACKGROUND INFORMATION ON MONITOR OPERATIONAL THEORY..

 WARNING: REMOVING NEW ANALOG CARD ASSEMBLY FRU'S FROM THE BOX BY GRASPING THE EHT TRANSFORMER MAY CAUSE THE CARD TO FLEX AND BREAK PRINTED CIRCUIT PATTERNS!

SAS KEYWORDS:

PSY2 PSY2DISP D/T9517 DISPALY
 MONITOR 9517 CABLE DIM

PSY2 RETAIN TIPS

8517 / 9517 BLANK SCREENS / ANALOG CARD WIRING

DIMMER
GREEN
POWER-OFF

CONNECTIONS
LIGHT
POWER-ON

HOOK-UP
POWER ON
BLANK

WIRING
POWER OFF

PSY2 RETAIN TIPS
8525 FIXED DISK INFORMATION

1.4.195 8525 FIXED DISK INFORMATION

Record number: H036041

Device: D/T8525
Model: M
Tip key: 008
Date created: 089/07/24
Date last altered: A95/07/21

THERE ARE TWO DIFFERENT HARDFILES FOR USE IN THE 8525. BOTH ARE 3.5" 20MB DRIVES; HOWEVER, THERE ARE DIFFERENCES BETWEEN THE TWO DRIVES, AND HOW THEY ARE INSTALLED.

FRU P/N61X8929 IS MANUFACTURED BY IBM JAPAN AND IS USED IN BOTH THE 8525 AND 8530, THIS FIXED DISK IS BUILT WITH AN INTEGRATED DISK CONTROLLER CARD AND CONNECTS DIRECTLY TO THE 8525 SYSTEM BOARD WITH ONE CABLE. THIS CABLE SERVES ALL DATA, SIGNAL, AND POWER REQUIREMENTS OF THE DRIVE. FRU P/N61X8929 IS SHIPPED WITH SLIDE MOUNT RAILS ATTACHED TO THE BOTTOM SIDE OF THE DRIVE BY 4 SCREWS. THESE RAILS ARE FOR USE IN THE 8530 ONLY, AND MUST BE REMOVED BEFORE THE DRIVE CAN BE INSTALLED IN AN 8525. WHENEVER POSSIBLE, THE RAILS SHOULD BE RETURNED WITH THE REPLACED DRIVE.

FRU P/N27F4130 IS MANUFACTURED BY SEAGATE. IT IS USED ONLY IN THE 8525 AND IS NOT SHIPPED WITH SLIDE MOUNT RAILS. THIS DRIVE REQUIRES A SEPARATE, CABLE ATTACHED, CONTROLLER CARD THAT IS INSTALLED IN ONE OF THE 8525 BUS ADAPTER SLOTS. THERE ARE THREE CABLES (DATA, SIGNAL, AND POWER) CONNECTING THE DRIVE TO THE CONTROLLER CARD. THE CONTROLLER CARD HAS 4 PINS, LOCATED NEAR THE CENTER OF THE CARD, WHICH MAY HAVE UP TO TWO JUMPERS ON THEM. SET THE JUMPERS ON THE NEW CARD EXACTLY AS THEY WERE ON THE REPLACED CARD. FRU P/N27F4130 CONSISTS OF A SEAGATE 20MB DRIVE AND A CONTROLLER CARD. THE DRIVE AND CONTROLLER CARD ARE A MATCHED SET, AND SHOULD ALWAYS BE REPLACED TOGETHER WHEN THIS FRU IS EXCHANGED. THE DATA, SIGNAL, AND POWER CABLES FOR THIS DRIVE ARE SHIPPED TOGETHER AS ONE PART (FRU P/N33F8471).

P/N61X8929...20MB FIXED DISK W/INTEGRATED CONTROLLER
P/N78X9089...FIXED DISK CABLE (FOR USE WITH P/N61X8929 ONLY)
P/N27F4130...20MB FIXED DISK AND CONTROLLER CARD
P/N33F8471...FIXED DISK CABLES (FOR DRIVES WITH CONNECTORS FOR
3 CABLES)
P/N78X9088...FIXED DISK BEZEL W/KEYLOCK (FITS BOTH DRIVES)

SAS KEYWORDS:

PSY2 8525SYSFDSK 8525SYSPART PSY2FDSK
PSY2PART

1.4.196 8525 FRONT BEZEL SERIAL NUMBER LABEL

Record number: H025635

Device: D/T8525
Model: M
Tip key: 004
Date created: 088/02/02
Date last altered: A95/07/14

THE REPLACEMENT FRONT BEZEL, P/N00F2111, IS NOT SHIPPED WITH A SERIAL NUMBER LABEL. THE BEZEL ON A MANUFACTURED MACHINE CONTAINS A SERIAL NUMBER LABEL FOR THE USER'S CONVENIENCE. INSTRUCT THE MACHINE OWNER TO USE THE SERIAL NUMBER LOCATED ON THE REAR OF THE MACHINE.

SAS KEYWORDS:

8525SYS

8525DSKT

00F2111

PSY2

1.4.197 8525 SHIPPED WITH METAL SHIELD OVER DISKETTE DRIVE a

Record number: H034988

Device: D/T8525
Model: M
Tip key: 007
Date created: 089/05/10
Date last altered: A89/05/15

A LIMITED NUMBER OF 8525 SYSTEM UNITS WILL BE MANUFACTURED WITH A METAL SHIELD ATTACHED TO DISKETTE DRIVE "A". THE SHIELD COVERS THE TOP AND TWO SIDES OF THE 720KB HALF-HEIGHT DRIVE.

WHEN REPLACING DRIVE "A" IN AN 8525, THE SHIELD SHOULD BE REMOVED FROM THE DEFECTIVE DRIVE AND ATTACHED TO THE REPLACEMENT DRIVE. THE METAL SHIELD IS INSTALLED TO PROTECT THE DRIVE FROM MAGNETIC INTERFERENCE THAT MAY CAUSE READ ERRORS. DRIVE "B", IF INSTALLED, DOES NOT REQUIRE THE METAL SHIELD.

SAS KEYWORDS:

PSY2 8525DSKT 8525SYSDSKT PSY2DSKT

1.4.198 8525-286 HARDFILE INSTALLATION/REPLACEMENT

Record number: H096475

Device: D/T8525
Model: M
Tip key: 012
Date created: 092/04/01
Date last altered: A92/04/01

PS/2 8525 - 286 MODELS ARE SHIPPED WITH A HARDFILE SUPPORT TRAY INSTALLED IN ALL MODELS. THIS SUPPORT TRAY IS REQUIRED TO SUPPORT INSTALLATION OF A 1/3 HIGH HARD FILE OPTION OR FRU.

IF THIS TRAY HAS BEEN REMOVED TO INSTALL A 1/2 HIGH OPTION, THEN A 1/3 HIGH DRIVE IS SUBSEQUENTLY REQUIRED, THE TRAY MUST BE REINSTALLED. A NEW TRAY MAY BE OBTAINED BY ORDERING FRU P/N 64F4101, "TRAY, FIXED DISK SUPPORT", LISTED IN THE HMS.

SAS KEYWORDS:

PSY2	PSY2FDSK	PSY2PART	8525SYSFDSK
8525SYSPART	64F4101	FRAME	20MB
30MB	P/N61X8929	P/N6128279	PS2
PS/2			

1.4.199 8525/8530 720KB DISKETTE DRIVE FRU

Record number: H124324

Device: D/T8525
 Model: M
 Tip key: 017
 Date created: 094/06/16
 Date last altered: A94/06/16

PS/2 8525 - 001 AND 8530-0XX MODELS WERE MANUFACTURED WITH A 1/2 HEIGHT 720KB DISKETTE DRIVE. TO UTILIZE NEWER DISKETTE DRIVE TECHNOLOGY, AND TO MAINTAIN FRU AVAILABILITY, THE 720KB DISKETTE DRIVE FRU PART NUMBER HAS BEEN CHANGED TO A 1/3 HEIGHT DISKETTE DRIVE, FRU P/N96F7678.

FRU P/N96F7678 INCLUDES ADDITIONAL HARDWARE INTENDED FOR USE WHEN REPLACING THE ORIGINAL 1/2 HEIGHT DISKETTE DRIVE. THE PARTS INCLUDED WITH P/N96F7678 ARE:

QTY	DESCRIPTION
1	CABLE ADAPTER (40 PIN PADDLE TO 34 PIN BERG CONNECTOR)
2	1/3 HIGH BEZEL (1 BEZEL FOR 8525, 1 BEZEL FOR 8530)
1	MODEL 8525 MOUNTING BRACKET
4	SCREWS
1	INSTRUCTIONS

SAS KEYWORDS:

PSY2	PSY2DSKT	PSY2PART	D/T8530
720 KB	THIRD HIGH	HALF HEIGHT	

1.4.200 8525, EXHIBITS PROBLEMS AFTER REPLACING DISPLAY

Record number: H106222

Device: D/T8525
Model: M
Tip key: 013
Date created: 092/07/15
Date last altered: A92/08/05

INTERMITTENT PROBLEMS HAVE BEEN REPORTED ON 8525-286 SYSTEMS AFTER THE DISPLAY WAS INADVERTENTLY REPLACED WITH A STANDARD 8525 DISPLAY.

IF UNUSUAL OR INTERMITTENT PROBLEMS ARE OBSERVED ON A 8525-286 SYSTEM, VERIFY THAT THE CORRECT DISPLAY IS INSTALLED. REFER TO 8525 - 286 HMS FOR THE CORRECT FRU PART NUMBER.

NOTE:

RETAIN TIP NUMBER H031961 CONTAINS 8525 AND 8525-286 MODEL TYPE, DISPLAY TYPE, AND DISPLAY FRU NUMBER CROSS REFERENCE INFORMATION. IT ALSO CONTAINS SYSTEM SERIAL NUMBER TO DISPLAY FRU PART NUMBER INFORMATION.

SAS KEYWORDS:

PSY2	PSY2DISP	8525DISP	8525SYSDISP
PSY2ERR	8525SYSERR		

Record number: H101039

Device: D/T8535
 Model: M
 Tip key: 006
 Date created: 092/03/19
 Date last altered: A92/03/25

1. DIAGNOSTIC DISKETTES:

A NEW CONSOLIDATED DIAGNOSTIC DISKETTE (VERSION 1.20) IS NOW AVAILABLE FOR PS/2 MODELS 8525SX, 8535SX, 8540SX, 8535SLC, AND 8540SLC. THIS DISKETTE IS AVAILABLE BY ORDERING FORM NUMBER S91F8644.

THE NEW DISKETTE (VERSION 1.20) IS DOWNWARD COMPATIBLE WITH CURRENT 8535/40 AND 8525SX MODELS AND MAY BE USED IN PLACE OF 8525SX/8535/8540 DIAGNOSTIC DISKETTE VERSION 1.10 AND 8535/40 DIAGNOSTIC DISKETTE VERSION 1.04 OR EARLIER.

PS/2 MODELS 8535SLC AND 8540SLC REQUIRE DIAGNOSTIC DISKETTE VERSION 1.20 OR HIGHER. THE CORRECT LEVEL DISKETTE IS INCLUDED IN THE HML FOR THESE NEW MODELS.

***** IMPORTANT INFORMATION *****
 8535/40 DIAGNOSTIC DISKETTES (VERSION 1.04 OR EARLIER) AND 8525SX/8535/8540 DIAGNOSTIC DISKETTES VERSION 1.10 ARE NOT UPWARD COMPATIBLE AND WILL FAIL TO FUNCTION CORRECTLY WHEN USED ON 8525SX, 8535SLC, AND 8540SLC MODELS.

2. STARTER DISKETTES:

NEW STARTER DISKETTES (VERSION 1.21) WILL BECOME AVAILABLE AS CURRENT QUANTITIES OF VERSION 1.20 ARE DEPLETED. THESE DISKETTES ARE DOWNWARD COMPATIBLE WITH ALL PS/2 8525SX, 8535SX, 8540SX, 8535SLC AND 8540SLC MODELS.

PS/2 MODELS 8535SLC AND 8540SLC REQUIRE STARTER DISKETTE VERSION 1.20 OR HIGHER. THE CORRECT LEVEL STARTER DISKETTE IS INCLUDED IN THE GTO FOR THESE NEW MODELS.

***** IMPORTANT INFORMATION *****
 STARTER DISKETTE VERSION 1.10 AND EARLIER IS NOT UPWARD COMPATIBLE AND WILL FAIL TO FUNCTION CORRECTLY WHEN USED ON 8525SX, 8535SLC AND 8540SLC MODELS.

SAS KEYWORDS:

PSY2	D/T8540	D/T8525	PSY2DIAG
PSY2ERR	8525SYSERR	8535SYSERR	8540SYSERR

1.4.202 8530 BUS ADAPTER BATTERY VOLTAGE

Record number: H067282

Device: D/T8530
Model: M
Tip key: 041
Date created: 091/02/01
Date last altered: A92/03/06

EARLY RELEASES OF THE 8530 HMS (3-RING BINDER) MAPS, SYSTEM BOARD, PAGE 0100-4, SHOW INCORRECT PINS FOR CHECKING VOLTAGE ON THE BUS ADAPTER CARD.

IN FIGURE ONE, THE PINS LABELED "0" AND "39" SHOULD ACTUALLY BE LABELED PINS "1" AND "40". CORRECTLY MEASURING THE VOLTAGE IS THEN DONE AT PINS 38 AND 39 (THE SECOND AND THIRD PINS FROM THE RIGHT EDGE)

REPLACE THE BUS ADAPTER CARD IF VOLTAGE IS LESS THAN 2.5 VOLTS BETWEEN THE CORRECT PINS.

SAS KEYWORDS:

PSY2 PSY2DOC PSY2ADPT 8530SYSADPT
8530SYSDOC

1.4.203 8530 E01 AND E21 HARDFILE FORMATTING PROBLEM

Record number: H031569

Device: D/T8530
Model: M
Tip key: 029
Date created: 089/07/26
Date last altered: A92/08/06

IT HAS BEEN DISCOVERED DURING ROUTINE TESTING THAT THE ADVANCED DIAGNOSTICS VERSION 1.00 FOR THE 8530 MODEL 286 WILL NOT FLAG ALL MEDIA DEFECTS DURING A LOW LEVEL FORMAT.

IN THE INTERIM, LOW LEVEL FORMAT, USING ADVANCED DIAGNOSTICS VERSION 1.00, SHOULD NOT BE ATTEMPTED ON HARDFILES FOR ANY REASON.

VERSION 1.03 OF ADVANCED DIAGNOSTICS IS AVAILABLE AND IF REQUIRED SHOULD BE USED FOR FORMATTING. REMEMBER, ALL NEW HARDFILES AND HARDFILE FRUS HAVE BEEN LOW LEVEL FORMATTED AT THE FACTORY BEFORE BEING USED FOR FRU STOCK. NO FURTHER DIAGNOSTIC FORMATTING IS REQUIRED PRIOR TO USE.

SAS KEYWORDS:

PSY2 PSY2DIAG 8530SYSDIAG 8530SYSFDSK
PSY2FDSK

1.4.204 8530 FIXED DISK, SYSTEM BRD, ADV DIAGS

Record number: H007157

Device: D/T8530
 Model: M
 Tip key: 027
 Date created: 089/06/09
 Date last altered: A90/07/12

SUCCESSFUL FIXED DISK OPERATION ON THE 8530 MODEL 001 AND 021 SYSTEMS IS DEPENDENT UPON USING THE CORRECT COMBINATION OF SYSTEM BOARD, HARDFILE, AND ADVANCED DIAGNOSTICS. MISMATCH OF THE REQUIRED FRU'S OR FORMATTING THE FIXED DISK WITH THE INCORRECT LEVEL OF ADVANCED DIAGNOSTICS WILL CAUSE FIXED DISK ERRORS.

REQUIRED FRU P/N AND ADVANCED DIAGNOSTICS

MACHINE TYPE	SYSTEM BRD	FIXED DISK	DIAGS VER.
8530-021 BELOW SERIAL #2500000	P/N61X8907	P/N61X8929	8530 ADV. DIAGS ANY VERSION
8530-021 ABOVE SERIAL #2500000	P/N33F8474	P/N6128285	8530 ADV. DIAGS VER. 1.05
8530-001 ALL	P/N33F8474	P/N6128285 P/N6128279	8530 ADV. DIAGS VER. 1.05
8530-E21 (ONLY)	P/N27F4069	P/N6128285	8530-286 ADV.DGS VER 1.02
8530-E31 & E01	P/N34F0046	P/N6128285 P/N6128279	8530-286 ADV.DGS VER 1.02

* FIXED DISK P/N6128285 AND P/N6128279 MUST NOT BE INSTALLED IN ANY 8530 MODEL 021 BELOW SERIAL NUMBER 2500000.

* 8530 MODEL 021'S ABOVE SERIAL NUMBER 2500000 AND ALL 8530 MODEL 001'S MUST BE FORMATTED ONLY WITH 8530 ADVANCED DIAGNOSTICS VERSION 1.05.

8530 ADVANCED DIAGNOSTICS VERSION 1.05 IS AVAILABLE BY ORDERING PUBLICATION NUMBER S15F-2153.

SAS KEYWORDS:

PSY2 PSY2DIAG 8530SYSDIAG PSY2FDSK
 8530SYSFDSK 8530SYSBRD PSY2BRD

1.4.205 8530 286 ADVANCE DIAG TESTING FAILS ON SERIAL PARALLEL CARDS

Record number: H002607

Device: D/T8530
Model: M
Tip key: 028
Date created: 089/06/29
Date last altered: A92/02/27

DUE TO HARDWARE LIMITATIONS OF THE 8530 286 AND ADVANCED
DIAGNOSTICS FOR THE SERIAL/PARALLEL ADAPTER CARD, FRU
P/N8286147, ONLY "ONE" ADAPTER CAN BE TESTED AT A TIME.

IF AN 8530 286 HAS TWO SERIAL/PARALLEL CARDS, REMOVE ONE OF THE
CARDS AND TEST THE SYSTEM. REPEAT FOR THE SECOND CARD.

FOR TESTING ONLY, THE ADAPTER MUST BE JUMPERED AS FOLLOWS:
1. J1 (SERIAL)-THE TOP TERMINALS MUST BE JUMPERED (ALTERNATE).
2. J2 (PARALLEL)-THE BOTTOM TERMINALS MUST BE JUMPERED(PRIMARY).
RESET JUMPERS TO ORIGINAL POSITIONS WHEN TESTING IS COMPLETE.

SAS KEYWORDS:

PSY2	PSY2DIAG	PSY2ADPT	8530SYSDIAG
8530SYSADPT	PSY2COMM	8530SYSCOMM	D/T8530

1.4.206 8530 286 SYSTEMS MODELS U21, U31, T31, LA0

Record number: H063481

Device: D/T8530
 Model: M
 Tip key: 039
 Date created: 090/10/30
 Date last altered: A91/09/24

UNIQUE MODEL DESIGNATORS HAVE BEEN USED IN IDENTIFICATION OF
 8530 286 SYSTEMS. THE MODEL DESIGNATOR DEFINES WHERE THE UNIT
 WAS MANUFACTURED, HARDFILE SIZE OR IF IT CONTAINS SOFTWARE.

8530 E01, E21, E31, E41 - USA PRODUCTION

8530 LA0 - USA PRODUCTION, DASDLESS

8530 FXX, GXX, HXX - NON-USA PRODUCTION (XX IS THE HF SIZE)

8530 UXX, TXX - ACADEMIC INFORMATION SYSTEMS, (ACIS)
 PRODUCTION. HARDFILES ARE PRE-LOADED
 WITH SOFTWARE.

>>>> ALL MODELS USE STANDARD 8530 286 FRUS <<<<

SAS KEYWORDS:

PSY2	8530SYSMISC	8530SYSFDSK	PSY2FDSK
PSY2PART	8530SYSPART	PSY2MISC	

Record number: H037616

Device: D/T8530
Model: M
Tip key: 033
Date created: 090/04/11
Date last altered: A90/04/18

SOME NON-IBM SOFTWARE OPERATING SYSTEMS MAY FAIL AFTER REPLACING THE SYSTEM BOARD. IF YOUR 286 SYSTEM UNIT WORKED WITH FRU P/N27F4069, AND NOW FAILS WITH FRU P/N34F0046, YOU MAY SUSPECT THE NON-IBM OPERATING SYSTEM OR SOFTWARE PACKAGE.

SOME NON-IBM SOFTWARE PACKAGES THAT WRITE AROUND BIOS TO ENHANCE SYSTEM PERFORMANCE, MAY FAIL TO OPERATE PROPERLY WHEN NEWER LEVEL HARDWARE IS INSTALLED. THIS IS NOT CONSIDERED A HARDWARE DEFECT. IF DIAGNOSTICS RUN WITHOUT ERROR, THE CUSTOMER SHOULD BE REFERRED TO THEIR APPROPRIATE SOFTWARE POINT OF SALE FOR ASSISTANCE.

SAS KEYWORDS:

PSY2	8530SYSBRD	PSY2BRD	PSY2PROG
8530SYSPROG	POEM		

1.4.208 8535 AND 8540 HMS DOES NOT REF. THE SYSTEM BOARD JUMPER J10

Record number: H09387

Device: D/T8540
Model: M
Tip key: 001
Date created: 091/08/28
Date last altered: A91/10/24

THE SYSTEM BOARD J10 CONNECTOR IS NOT REFERENCED IN THE 8535 OR 8540 HMR. J10 HAS 2 JUMPER POSITIONS, IRQ5 AND IRQ7. FOR PROPER OPERATION THE JUMPER SHOULD BE IN THE IRQ7 POSITION.

BOTH HMR'S WILL BE UPDATED AT NEXT PUBLICATION.

SAS KEYWORDS:

PSY2

D/T8535

PSY2BRD

PSY2DOC

1.4.209 8535 AND 8540 REQUIRE 5250 DIAG VERSION 1.03

Record number: H092808

Device: D/T8540
 Model: M
 Tip key: 004
 Date created: 091/10/01
 Date last altered: A91/12/19

WHEN RUNNING 5250 EMULATION DIAGNOSTICS ON PS/2 8535 OR 8540, YOU MUST HAVE 5250 DIAG VERSION 1.03 OR HIGHER. OLDER VERSION DIAGNOSTICS WILL YIELD INVALID ERROR CODES. VERSION 1.03 IS ALSO REQUIRED TO RUN 5250 DIAGNOSTICS ON 5250 ADAPTERS WITH P/N88F0148 OR P/N92F3190. YOU CAN DETERMINE THE P/N OF THE ADAPTER BY LOOKING AT THE TOP LEFT CORNER OF THE CARD. VERSION 1.03 OF 5250 EMULATION DIAGNOSTICS IS COMPATIBLE WITH ALL PREVIOUS VERSIONS OF THE EMULATION ADAPTER. TO OBTAIN VERSION

TO OBTAIN VERSION 1.03 OF THE 5250 DIAGS, TYPE THE FOLLOWING ON YOUR VM COMMAND LINE:
 ====> TOOLS SENDTO KGNVMZ CSDPROD DOSCSD GET D5250 PACKAGE

INSTRUCTIONS ON UNPACKING AND INSTALLING VER 1.03 ARE INCLUDED IN THE PACKAGE OF FILES THAT WILL BE SENT AFTER EXECUTING THE ABOVE COMMAND. IF YOU HAVE DIFFICULTY ACCESSING THE DOSCSD DISK, OR DOWNLOADING THE PACKAGE, CONTACT YOUR VM HELP DESK FOR ASSISTANCE.
 IF VM ACCESS IS UNAVAILABLE, ORDER IBM PUBLICATION NUMBER G571 - 0147 FROM MECHANICSBURG.

SAS KEYWORDS:

D/T8535	PSY2	PSY2COMM	8535SYSCOMM
8540SYSCOMM	PSY2DIAG	8535SYSDIAG	8540SYSDIAG
PSY2ADPT	8535SYSADPT	8540SYSADPT	PSY2ERR
PSY2SYSERR			

1.4.210 8535 AND 8540 REQUIRE 5250 DIAG VERSION 1.03

Record number: H12181

Device: D/T8530
 Model: MCP1
 Tip key: 048
 Date created: 093/05/25
 Date last altered: A93/05/25

WHEN RUNNING 5250 EMULATION DIAGNOSTICS ON PS/2 8535 OR 8540, YOU MUST HAVE 5250 DIAG VERSION 1.03 OR HIGHER. OLDER VERSION DIAGNOSTICS WILL YIELD INVALID ERROR CODES. VERSION 1.03 IS ALSO REQUIRED TO RUN 5250 DIAGNOSTICS ON 5250 ADAPTERS WITH P/N88F0148 OR P/N92F3190. YOU CAN DETERMINE THE P/N OF THE ADAPTER BY LOOKING AT THE TOP LEFT CORNER OF THE CARD. VERSION 1.03 OF 5250 EMULATION DIAGNOSTICS IS COMPATIBLE WITH ALL PREVIOUS VERSIONS OF THE EMULATION ADAPTER. TO OBTAIN VERSION

TO OBTAIN VERSION 1.03 OF THE 5250 DIAGS, TYPE THE FOLLOWING ON YOUR VM COMMAND LINE:
 =====> TOOLS SENDTO KGNVMZ CSDPROD DOSCSD GET D5250 PACKAGE

INSTRUCTIONS ON UNPACKING AND INSTALLING VER 1.03 ARE INCLUDED IN THE PACKAGE OF FILES THAT WILL BE SENT AFTER EXECUTING THE ABOVE COMMAND. IF YOU HAVE DIFFICULTY ACCESSING THE DOSCSD DISK, OR DOWNLOADING THE PACKAGE, CONTACT YOUR VM HELP DESK FOR ASSISTANCE.

IF VM ACCESS IS UNAVAILABLE, ORDER IBM PUBLICATION NUMBER G571 - 0147 FROM MECHANICSBURG.

SAS KEYWORDS:

D/T8535	PSY2	PSY2COMM	8535SYSCOMM
8540SYSCOMM	PSY2DIAG	8535SYSDIAG	8540SYSDIAG
PSY2ADPT	8535SYSADPT	8540SYSADPT	PSY2ERR
PSY2SYSERR			

1.4.211 8535/40 FORMATS 1.2MB 5.25" DISKETTE TO 720KB

Record number: H083177

Device: D/T8540
Model: M
Tip key: 007
Date created: 092/08/26
Date last altered: A93/12/02

PS/2 8540 AND 8535 SYSTEMS WITH AN INTERNAL 1.2MB 5 1/4 INCH DISKETTE DRIVE USING OS/2, 2.0 MAY EXPERIENCE A FORMATTING PROBLEM. AFTER OS/2 IS LOADED THE 1.2MB DISKETTE DRIVE MAY ONLY FORMAT TO 720KB. THIS IS AN OS/2 MEDIA SENSE PROBLEM.

CUSTOMER'S EXPERIENCING THIS PROBLEM WITH AN INTERNAL 5 1/4" 1.2MB DISKETTE DRIVE (EXTERNAL DRIVES ARE NOT AFFECTED) SHOULD CALL OS/2 CUSTOMER SUPPORT AT 1-800-992-4777 FOR THE FIX. WHEN CALLING PLEASE REFERENCE APAR# PJ04071 AND FILE "IBM1FLPY.ADD".

THE CURRENT LEVEL OF OS/2 2.0 HAS BEEN UPDATED TO CORRECT THIS PROBLEM. OTHER VERSIONS OF OS/2 ARE NOT AFFECTED.

SAS KEYWORDS:

PSY2	D/T8535	PSY2DSKT	8535SYSDSKT
8540SYSDSKT	DSKT	FDD	FLOPPY

PSY2 RETAIN TIPS

8535/40 WITH IBM INTERNAL TAPE DRIVE CAN NOT RESTORE DATA

1.4.212 8535/40 WITH IBM INTERNAL TAPE DRIVE CAN NOT RESTORE DATA

Record number: H091496

Device: D/T8540
Model: M
Tip key: 005
Date created: 091/11/01
Date last altered: A91/11/01

A PROBLEM HAS BEEN DISCOVERED WHEN USING THE IBM PS/2 INTERNAL TAPE BACKUP PROGRAM VERSION 2.0 (DOS COMPATIBLE) WITH THE 8535/40 (NO OTHER MACHINE TYPES ARE AFFECTED). DATA RESTORED TO THE HARD DRIVE FROM THE MINI CARTRIDGE WILL BE INCOMPLETE. NO ERROR MESSAGES WILL APPEAR. CUSTOMERS SHOULD AVOID TRYING TO RESTORE DATA FROM A MINI CARTRIDGE TO THE HARD DRIVE OF AN 8535/40 UNTIL ECA 087 FOR DEVICE TYPES 8535 AND 8540 HAS BEEN INSTALLED ON THEIR SYSTEM UNIT. BACK UP FROM THE HARD DISK TO THE MINI CARTRIDGE MAY BE CONTINUED. SEE TDR H094429 FOR FURTHER DETAILS.

SAS KEYWORDS:

8540SYSTAPE	8540SYSERR	8540SYSMISC	D/T8540
PSY2TAPE	PSY2	D/T8535	

PSY2 RETAIN TIPS

8535/40 WITH IBM INTERNAL TAPE DRIVE CAN NOT RESTORE DATA

1.4.213 8535/40 WITH IBM INTERNAL TAPE DRIVE CAN NOT RESTORE DATA

Record number: H12180

Device: D/T8530
Model: MCP1
Tip key: 047
Date created: 093/05/25
Date last altered: A93/05/25

A PROBLEM HAS BEEN DISCOVERED WHEN USING THE IBM PS/2 INTERNAL TAPE BACKUP PROGRAM VERSION 2.0 (DOS COMPATIBLE) WITH THE 8535/40 (NO OTHER MACHINE TYPES ARE AFFECTED). DATA RESTORED TO THE HARD DRIVE FROM THE MINI CARTRIDGE WILL BE INCOMPLETE. NO ERROR MESSAGES WILL APPEAR. CUSTOMERS SHOULD AVOID TRYING TO RESTORE DATA FROM A MINI CARTRIDGE TO THE HARD DRIVE OF AN 8535/40 UNTIL ECA 087 FOR DEVICE TYPES 8535 AND 8540 HAS BEEN INSTALLED ON THEIR SYSTEM UNIT. BACK UP FROM THE HARD DISK TO THE MINI CARTRIDGE MAY BE CONTINUED. SEE TDR H094429 FOR FURTHER DETAILS.

SAS KEYWORDS:

8540SYSTAPE	8540SYSERR	8540SYSMISC	D/T8540
PSY2TAPE	PSY2	D/T8535	

1.4.214 8535/8556 3.5 INCH DISKETTE DRIVE TRAY BINDING

Record number: H101761

Device: D/T8535
Model: M
Tip key: 005
Date created: 092/09/10
Date last altered: A92/09/11

THE 3.5 INCH DISKETTE DRIVE TRAY FRU P/N85F0097 MAY BIND ON INSTALLATION IN A PS/2 8535 OR 8556 SYSTEM. THIS TRAY IS ALSO ATTACHED TO THE 1.44MB 3.5 INCH DISKETTE DRIVE FRU P/N85F0050 AND THE 2.88MB 3.5 INCH DISKETTE DRIVE FRU P/N64F4148. THE BINDING IS CAUSED BY CONTACT BETWEEN THE DRIVE MOUNTING TRAY AND THE SLIDE RECEIVERS ON THE BOTTOM OF THE SYSTEM BASE FRAME ASSEMBLY.

THE CONTACT CAN BE AVOIDED BY PLACING SLIGHT DOWNWARD PRESSURE ON THE FRONT EDGE OF THE DRIVE TRAY WHILE SLIDING IT INTO THE LOWER DRIVE BAY. THIS LIFTS THE REAR OF THE TRAY ENOUGH TO ALLOW THE TRAY TO SLIDE IN WITHOUT CONTACTING THE SLIDE RECEIVERS.

THE BASE FRAME ASSEMBLY FOR THE 8535 AND 8556 WILL BE MODIFIED TO PREVENT THE INTERFERENCE.

SAS KEYWORDS:

PSY2	D/T8556	8535SYDSKT	8556SYDSKT
PSY2DSKT	RAIL	RAILS	SLIDE

1.4.215 8543 FIXED DISK AND DISKETTE FRAMES

Record number: H095894

Device: D/T8543
Model: M
Tip key: 007
Date created: 092/01/17
Date last altered: A92/08/05

The frame for the FIXED DISK and DISKETTE DRIVE is an integral part of each of these FRUs. Because the frame is NOT a separate FRU itself, it is important to include it when returning a new fixed disk or diskette drive to stock.

SAS KEYWORDS:

PSY2	PSY2PART	PSY2DSKT	PSY2FDSK
8543SYSPART	8543SYSDSKT	8543SYSFDSK	P/N79F1009
P/N79F0983	D/T8543		

1.4.217 8543 LCD INFORMATION

Record number: H037735

Device: D/T8543
Model: M
Tip key: 003
Date created: 091/06/04
Date last altered: A94/07/26

THIS TIP INFORMS THE SERVICER OF VARIOUS OPERATIONAL AND DESIGN QUESTIONS THAT CUSTOMERS MAY HAVE ABOUT THE 8543 LCD ADVANCED TECHNOLOGY STN (SUPER TWISTED NEMATIC) DISPLAY.

LCD AND CRT DISPLAYS HAVE DIFFERENT VIEWING CHARACTERISTICS. THE VIEWING ANGLE OF THE LCD DISPLAY IS VERY DIRECTIONAL IN COMPARISON TO THE CRT DISPLAY. AS THE USER MOVES FROM THE CENTER OF THE DISPLAY TO EITHER SIDE, THE DISPLAY WILL APPEAR TO FADE AND CHANGE COLOR. THIS IS A NORMAL CONDITION. THE LCD IS DESIGNED FOR A GREATER VERTICAL RANGE OF ORIENTATION RATHER THAN HORIZONTAL. THIS PROVIDES A MEASURE OF VIEWING PRIVACY.

SOME "SHADOWING" (OR BLEEDING) IS NORMAL ON ALL LCD DISPLAYS. THESE CHARACTERISTICS APPEAR AS VERTICAL OR HORIZONTAL LINES OR BARS EXTENDING FROM THE ITEM DEPICTED ON THE LCD TO THE EDGES OF LCD SCREEN. IN MOST CASES THIS CAN BE ELIMINATED WITH THE FOLLOWING ADJUSTMENTS:

1. ADJUST THE BRIGHTNESS AND CONTRAST SLIDES.
2. CHANGE THE SCREEN MODE USING THE REFERENCE DISKETTE OR BY USING OPERATING SYSTEM COMMANDS. THE REFERENCE DISKETTE WILL ALLOW FOUR DIFFERENT MODES, MONO, MONO REVERSED, COLOR, AND COLOR REVERSED.

SOME PROGRAMS ALLOW THE USER THE OPTION TO CUSTOMIZE SCREEN COLORS. THESE OPTIONS SHOULD BE USED TO CHANGE THE SCREEN IMAGE TO THE USER'S PREFERENCE.

SAS KEYWORDS:

D/T8543 PSY2 PSY2DISP 8543SYSDISP

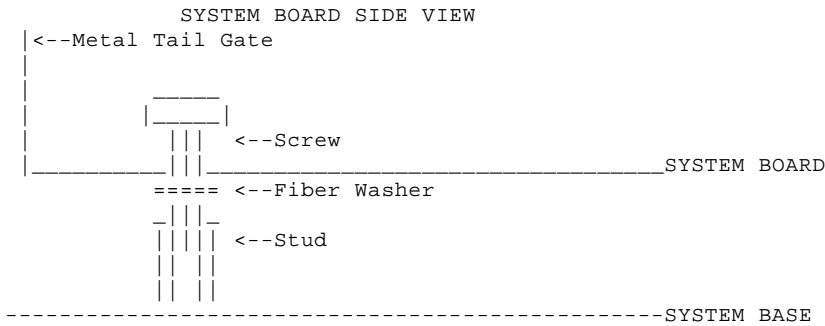
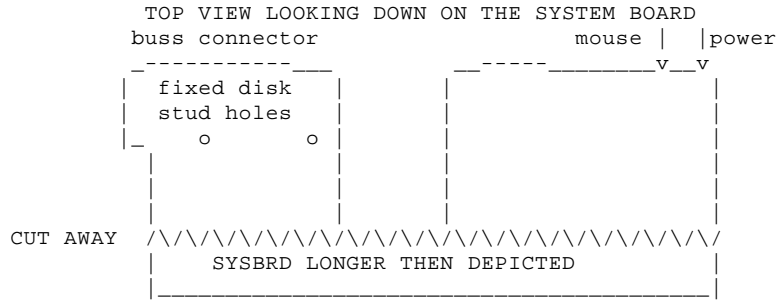
1.4.218 8543 SYSTEM BOARD INSULATING WASHER

Record number: H102328

Device: D/T8543
Model: M
Tip key: 009
Date created: 092/05/29
Date last altered: A92/10/15

Errors can occur if a system board land pattern contacts the conductive system base. This can happen on early level system boards where two of the land patterns run near system board holes used by the fixed disk drive mounting studs. An error would occur because of current leakage to ground if the land touches the base and makes electrical contact. Although system boards are coated, the coating is not meant to be an electrical insulator. Because of this, system boards of this vintage must use the insulated washers that are located between the stud shoulder and the system board.

THE WASHERS ARE NOT NEEDED WHEN USING NEW FRU STOCK THAT HAVE THE LAND PATTERNS MOVED AWAY FROM THE EDGE OF THE STUD HOLE.



SAS KEYWORDS:

PSY2 PSY2PART PSY2BRD PSY2MISC
PSY2ERR

1.4.219 VALUEPOINT / SCO UNIX COMPATIBILITY

Record number: H121691

Device: D/T6384
 Model: M
 Tip key: 040
 Date created: 093/10/27
 Date last altered: A93/12/03

VALUEPOINT 6382/S, 6384/D AND 6384/T SYSTEMS HAVE BEEN CERTIFIED BY SCO* FOR UNIX* PROVIDED THE FOLLOWING CONDITIONS ARE MET:

- 1 - IF THE SYSTEM CONTAINS AN EXTERNAL (LEVEL 2) CACHE, THIS CACHE MUST BE REMOVED TO PERFORM THE INSTALLATION. ONCE UNIX IS INSTALLED THE CACHE MAY BE RE-INSTALLED.
- 2 - A SPECIAL BOOT DISKETTE FROM SCO* IS REQUIRED FOR INSTALLATION. THE DISKETTE IS TITLED "IBM COMPATIBILITY EFS FOR SCO UNIX* AND SCO OPEN DESKTOP" RELEASE 1.0.0C. (OR HIGHER). THE DISKETTE INCLUDES DIRECTIONS TO INSTALL SCO UNIX AND SCO OPEN DESKTOP USING THE DISKETTE. THIS DISKETTE IS AVAILABLE FROM AUTHORIZED SCO UNIX RETAILERS AND FROM SCO TECHNICAL SUPPORT.
- 3 - THE VALUEPOINT FLASH EEPROM REVISION LEVEL MUST BE L6ET51AUS (51A) OR HIGHER.

WHEN THE ABOVE CONDITIONS ARE MET AND THE CUSTOMER CONTINUES TO HAVE PROBLEMS INSTALLING SCO UNIX OR SCO OPEN DESKTOP, THE CUSTOMER SHOULD BE REFERRED TO THE DEALER WHERE THE SOFTWARE WAS PURCHASED AND SCO TECHNICAL SUPPORT.

- * SCO IS A TRADEMARK OF THE SANTA CRUZ OPERATION, INC.
- * UNIX IS A REGISTERED TRADEMARK OF UNIX SYSTEM LABORATORIES.

SAS KEYWORDS:

PSVP	PSY2PROG	6384	6382
PSY2	PSVPPROG	D/T6387	D/T6382
PS/VP	6387	VALUE POINT	PSY2OPER
PSVPOPER	XENIX	PSVPMCD	PSY2MCD

1.4.220 8554 TFT LCD PROTECTIVE SHEET REMOVE

Record number: H105434

Device: D/T8554
Model: M
Tip key: 002
Date created: 092/12/02
Date last altered: A93/01/04

Some LCD FRUs may have a protective plastic sheet installed on them when shipped. Remove the coating by slowly pulling the sheet from one corner; this should take about 10 seconds.

SAS KEYWORDS:

PSY2

PSY2PART

1.4.221 8555 DIAG HANG W/ ARTIC X.25 OR MULTIPORT/2

Record number: H036256

Device:	D/T8555	Date created:	089/10/17
Model:	M	Date last altered:	A90/07/18
Diagnostic ID:	DIAGHANG	Owning B.U.:	USA
Tip key:	012		

Additional diagnostic IDs and online tests:

WHEN THE IBM X.25 INTERFACE CO-PROCESSOR/2 OR THE ARTIC MULTIPORT/2 IS INSTALLED IN THE 8555, AN UNRECOVERABLE MACHINE HANG CAN OCCUR WHEN RUNNING DIAGNOSTICS IF THE ARTIC OPTION DISKETTE IS VERSION 1.1 OR LOWER. THE SYSTEM WILL CONFIGURE PROPERLY AND ALLOW THE ADAPTER TO INSTALL, HOWEVER, DIAGNOSTICS WILL FAIL. THE PROBLEM IS CORRECTED IN THE ARTIC OPTION DISKETTE VERSION 1.2 OR HIGHER WHICH IS CURRENTLY BEING SHIPPED WITH THE PRODUCT.

SAS KEYWORDS:

PSY2	PSY2COMM	PSY2ERR	PSY2ADPT
8555SYSCOMM	8555SYSERR	8555SYSADPT	

1.4.222 8555 HANGS OR RE-BOOTS WITH AOX ADAPTER

Record number: H024102

Device: D/T8555
 Model: M
 Tip key: 024
 Date created: 092/05/06
 Date last altered: A92/05/12

AN 8555 SYSTEM WITH AN Aox MicroMASTER* 386 OR 486 ADAPTER
 INSTALLED MAY EXPERIENCE THE FOLLOWING ERROR INDICATIONS:

- A) INTERMITTENT SYSTEM HANG CONDITIONS
- B) THE SYSTEM WILL INTERMITTENTLY RE-BOOT

THE POTENTIAL FAILURE IS A RESULT OF THE Aox MicroMASTER
 ADAPTER AND THE 8555 SYSTEM BOARD COMPONENT TOLERANCES.
 THE FAILURE WILL ONLY OCCUR IN SYSTEMS THAT DO NOT CONTAIN
 A 2MB SIMM (FRU P/N92F0104) ON THE SYSTEM BOARD IN EITHER
 OF THE TWO SIMM POSITIONS.

THE 8555 CAN SUPPORT A 1MB, 2MB OR 4MB SIMM IN EITHER
 POSITION ON THE SYSTEM BOARD AS LONG AS SLOT 1 IS OCCUPIED.
 THE PRESENCE OF A 2MB SIMM IN EITHER POSITION ON THE
 SYSTEM BOARD WILL PREVENT THE ERROR FROM OCCURRING.
 THIS PROBLEM IS ONLY AFFECTED BY SYSTEM BOARD MEMORY.

PROBLEM ISOLATION:

1. THE FOLLOWING PS/2 8555 SYSTEMS MAY BE AFFECTED BY THE
 PROBLEM:

PS/2 8555SX MODELS 031, 041, 061, 081, U31, T61, AND W61
 PS/2 8555LS MODELS LE0 AND LT0
 PS/2 8555 MEDIALESS MODELS B00, C00, AND P00

2. IDENTIFY THE REVISION LEVEL OF THE ADAPTER. THE ADAPTER
 SHOULD HAVE A WHITE LABEL ATTACHED ON THE FRONT OF THE
 ADAPTER WITH THE REVISION NUMBER ON IT.
 - Aox MicroMASTER 386 (20MHZ, 25MHZ 33MHZ)
 NEW REVISION # = (REV. 4.3 OR GREATER)

ANY REVISION LEVEL PREVIOUS TO THE NEW REVISION LEVEL "4.3"
 CAN EXHIBIT THE PROBLEM

- Aox MicroMASTER 486 (25MHZ, 33MHZ)
 NEW REVISION # = (REV. 4.4 OR GREATER)

ANY REVISION LEVEL PREVIOUS TO THE NEW REVISION LEVEL "4.4"
 CAN EXHIBIT THE PROBLEM

3. IF THE REVISION LEVEL IS LOWER THAN THE LEVELS LISTED ABOVE,
 THE CUSTOMER SHOULD BE ADVISED TO CONTACT Aox INC. AT
 (617) 890-4402 AND REQUEST CUSTOMER SUPPORT. Aox WILL
 PROVIDE AN ENGINEERING CHANGE FOR THE ADAPTER TO RESOLVE
 THE PROBLEM.

- * - MicroMASTER 386 AND MicroMASTER 486 ARE REGISTERED
 TRADEMARKS OF Aox INCORPORATED.

SAS KEYWORDS:

PSY2	PSY2ADPT	PSY2OEM	PSY2ERR
8555SYSADPT	8555SYSOEM	8555SYSERR	AOX
MICROMASTER			

1.4.223 8555 REAR COVER BINDS W/ ARTIC MULTIPORT/2 CABLE

Record number: H027189

Device: D/T8555
Model: M
Tip key: 013
Date created: 090/09/19
Date last altered: A90/09/19

THE 8555 REAR COVER FRU P/N27F4670 HAS BEEN REDESIGNED TO ALLOW AN ARTIC MULTIPORT/2 ADAPTER TO BE INSTALLED IN ANY SLOT. WITH PREVIOUSLY RELEASED REAR COVERS, THE MULTIPORT/2 CABLE CONNECTOR WOULD BIND AGAINST THE REAR COVER, ALLOWING INSTALLATION ONLY IN SLOT NUMBER 2. THE NEW REAR COVER IS BEING SHIPPED ON ALL NEW 55SX SYSTEMS, AND IS AVAILABLE IN MECHANICSBURG FRU STOCK.

THE NEW COVER CAN BE IDENTIFIED BY "EC C31816" PRINTED ON THE INSIDE SURFACE OF THE REAR COVER.

SAS KEYWORDS:

PSY2COMM	PSY2MISC	8555SYSCOMM	8555SYSMISC
PSY2	8555SYSADPT	PSY2ADPT	

1.4.224 8555 SYSTEM BOARD DAMAGE AND RELATED HANDLING

Record number: H021594

Device: D/T8555
Model: M
Tip key: 019
Date created: 090/11/06
Date last altered: A90/11/06

FAILURE ANALYSIS OF RETURNED PS/2 8555 SYSTEM BOARDS HAS REVEALED THAT SOME BOARDS HAVE PHYSICAL DAMAGE TO THE PHASE LOCK LOOP (PLL) SIP COMPONENT. THE PLL SIP IS A SMALL CERAMIC CIRCUIT BOARD, MOUNTED VERTICALLY ON THE SYSTEM BOARD. IT IS APPROXIMATELY ONE INCH WIDE AND 3/4 INCH TALL, AND IS SOLDERED TO THE SYSTEM BOARD VERY CLOSE TO THE POWER SUPPLY CABLE CONNECTORS.

THE REPORTED DAMAGE IS A RESULT OF THE PLL SIP BEING BENT AT ITS SYSTEM BOARD CONNECTORS. THE PLL SIP IS SUPPOSED TO BE MOUNTED AT A 90 DEGREE ANGLE TO THE SYSTEM BOARD. ITS DESIGN WILL PERMIT SOME CONNECTOR BENDING (UP TO A 20 DEGREE ANGLE FROM ITS INTENDED PERPENDICULAR MOUNT). ONCE BENT, HOWEVER, THE PLL SIP MUST NOT BE STRAIGHTENED.

*** IMPORTANT ***

- ON THE REPLACEMENT SYSTEM BOARD FRU, IF THE PLL SIP IS BENT TOWARD THE POWER SUPPLY CONNECTOR, AND INTERFERES WITH PLUGGING IN THE POWER SUPPLY CABLES, DO NOT STRAIGHTEN THE PLL SIP. RETURN THE SYSTEM BOARD AS NEW DEFECTIVE.
- IF BENT AWAY FROM THE POWER SUPPLY CONNECTOR, AND IF THE SYSTEM BOARD OPERATES, THE SYSTEM BOARD SHOULD BE CONSIDERED GOOD. DO NOT STRAIGHTEN THE PLL SIP.

SAS KEYWORDS:

PSY2	PSY2PART	PSY2BRD	PSY2MISC
8555SYSPART	8555SYSBRD	8555SYSMISC	

1.4.225 8555 SYSTEM BOARD IDENTIFICATION / FRU #'S

Record number: H08860

```
Device:           D/T8555
Model:            M
Tip key:          021
Date created:     091/03/19
Date last altered: A92/05/01
```

THE FOLLOWING INFORMATION IS PROVIDED AS AN AID IN 8555 SYSTEM BOARD IDENTIFICATION BY MODEL. THERE ARE THREE DIFFERENT SYSTEM BOARD FRU'S, EACH HAVING UNIQUE BIOS CHARACTERISTICS.

SOME SYSTEM BOARD FRU'S MAY APPEAR PHYSICALLY DIFFERENT THAN THE ORIGINAL INSTALLED SYSTEM BOARD, BUT REMAIN FUNCTIONALLY EQUIVALENT. SELECTION OF AN 8555 SYSTEM BOARD FRU NUMBER SHOULD BE BASED ON MODEL NUMBER ONLY.

"55SX" MODELS 031, 061, U31, T61, W61, 041, 081..FRU P/N27F4667
(MOD U31, T61, AND W61 ARE ACADEMIC SYSTEMS PRE-LOADED WITH SOFTWARE.)

"55LS" MODELS LT0, LE0FRU P/N57F3003
(REQUIRES UNIQUE BUS CARD, FRU P/N64F3732)

"55SX MEDIALESS SPECIAL BID"
MODELS B00, C00, P00FRU P/N33F8159

STANDARD CONFIGURATION OF EACH 8555 MODEL:

8555 MOD	031	061	LT0	LE0	B00	C00	P00	041	081
	U31	T61 W61							
MEM	2MB	2MB	2MB	2MB	1MB	2MB	2MB	4MB	4MB
DSKT DRV.	1.44	1.44	OPT	OPT	OPT*	OPT*	OPT*	1.44	1.44
FIXED DSK.	30MB	60MB	OPT	OPT	N/A	N/A	N/A	40MB	80MB
ETHERNET	OPT	OPT	N/A	STD	N/A	N/A	N/A	OPT	OPT
TOKEN RING SPEED	OPT	OPT	4/16	N/A	4	4	16	OPT	OPT

* MODELS B00, C00, AND P00 CANNOT BOOT FROM AN OPTIONAL DISKETTE DRIVE.

SAS KEYWORDS:

```
PSY2                PSY2BRD                PSY2PART                8555SYSBRD
8555SYSPART
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1.4.226 8555/6157 STREAMING TAPE ADAPTER DIAGNOSTIC PROBLEM

Record number: H023476

Device: D/T8555
Model: M
Tip key: 005
Date created: 089/05/15
Date last altered: A92/08/19

THE 6157 STREAMING TAPE ADAPTER MAY FAIL TO SHOW UP AS AN INSTALLED DEVICE WHEN RUNNING ADVANCED DIAGNOSTICS ON A PERSONAL SYSTEM/2 MODEL 55 (8555). ALTHOUGH THIS ADAPTER CAN BE ADDED TO THE INSTALLED DEVICES LIST, DIAGNOSTICS WILL NOT RUN PROPERLY. THIS DIAGNOSTIC PROBLEM IS CORRECTED IN THE 6157 STREAMING TAPE ADAPTER OPTION DISKETTE VERSION 1.03 OR LATER.

SAS KEYWORDS:

PSY2 PSY2DIAG PSY2ADPT 8555SYSDIAG
8555SYSADPT

1.4.227 8556 LS FAILS TO RIPL, 1999 AFTER SYSBRD REPLACEMENT

Record number: H087166

Device: D/T8556
Model: M
Tip key: 001
Date created: 092/07/16
Date last altered: A93/11/16

A small number of system board FRUs P/N84F7994 have been shipped with a down level EPROM part number 92F1600 located in position U55. This module does not support media-less 8556 model 14X or 24X systems; although, it does work in systems with media that have IML information on a fixed disk. If a down level system board is installed in a media-less system the system will not Remote Initial Program Load (RIPL) and will issue an error code of I9990303 or I9990022.

All Mechanicsburg fru stock has been updated with a new module that will support both media and media-less systems as originally designed; the fru number has not been changed.

SAS KEYWORDS:

PSY2	PSY2BRD	PSY2PART	8556SYSBRD
8556SYSPART	161	163	3702
LAN			

1.4.228 8556 PRINT OPERATION FAILS W/ BAYTECH PRINT MASTER SWITCHER

Record number: H10509

Device: D/T8556
Model: M
Tip key: 002
Date created: 092/07/21
Date last altered: A92/07/29

A solid or intermittently failing print operation may occur when using any *BayTech print switcher with parallel ports, such as BayTech's: 700 or 800 Series, LaserShare, and their mod 24 Data Exchange System. A symptom could be printer out of paper or no printer communication. If this occurs, remove the BayTech device from the circuit by cabling the printer directly to the system unit and retry the operation. If the printer now prints have the customer call BayTech at 1 - 800-523 - 2702. An update is available for the BayTech system. If the problem is still present after the BayTech device is removed from the system follow normal diagnostic procedures to determine the failing component.

*"BayTech" is a registered trademark of the BayTech Corporation.

SAS KEYWORDS:

PSY2	PSY2OEM	PSY2PRT	8556SYSBRD
PSY2BRD	8556SYSPRT	8556SYSOEM	OEM

1.4.229 8556-24X WITH INCORRECT MODEL NUMBER (LTO)

Record number: H20535

Device: D/T8556
 Model: M
 Tip key: 004
 Date created: 093/02/14
 Date last altered: A93/02/23

A small number of 8556 MOD 24X LAN stations have been shipped with a model number of LTO rather than 24X. This error is only on the system unit's ID label found on the right front panel below the power switch. All other associated system documentation is correct. (ex. shipping carton, bill of laden, packing list, ship group manuals and documentation)

The following is a list of those machines that were mislabeled.

***** Mislabeled 8556-24Xs. Labeled as LTO.*****

(all serial numbers prefix = 55)

ARWZD ARWZH ARWZK ARWZM ARWZP ARWZT ARWZV ARWZW ARWZX
 ARWZY ARWZZ ARXAA ARXAC ARXAD ARXAV ARXAW ARXBA ARXBB
 ARXBC ARXBV ARXCP ARXCY ARXCZ ARXDM ARXDP ARXDR ARXDT
 ARXDV ARXDW ARDX ARXDY ARXDZ ARXFK ATDBA ATDBB ATDBC
 ATDBF ATDBG ATDBH ATDBK ATDCA ATDCB ATDCC ATDCD ATDCF
 ATDCG ATDCH ATDCK ATDCL ATDCM ATDDC ATDDD ATDDK ATDDP
 ATDDP ATDDR ATDFH ATDFL ATDFW ATDFX ATDFY ATDFZ ATDGC
 ATDGL ATDGV ATDGW ATDGX ATDGY ATDHA ATDHT ATDKL ATDKM
 ATDKN ATDKP ATDKR ATDKV ATDKW ATDKX ATDLA ATDLC ATDLD
 ATDNC ATDND ATDNF ATDNG ATDNH ATDNK ATDNR ATDNT ATDNV
 ATDNW ATDNX ATDNY ATDNZ ATDPA ATDPB ATDPC ATDPD ATDPF
 ATDPG ATDPN ATDPT ATDPZ ATDRH ATDRK ATDRL ATDSY ATDTC

SAS KEYWORDS:

PSY2 PSY2SYS 8556SYS D/T8556
 LTO

1.4.230 8556/57

Record number: H12654

Device:	D/T8557
Model:	M
Tip key:	010
Date created:	O93/04/30
Date last altered:	A94/02/22

Inlaid information, erasing Tip

SAS KEYWORDS:
PSY2OEM

1.4.231 8557 / 9557 / 7546 BUS ADAPTER IDENTIFICATION

Record number: H025752

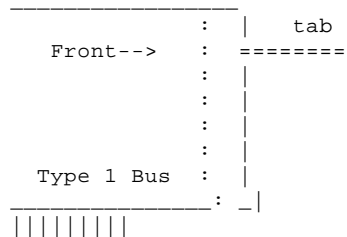
Device: D/T8557
 Model: M
 Tip key: 011
 Date created: 093/08/16
 Date last altered: A93/10/02

This tip is to aid in the identification of the 8557/9557 bus adapter.

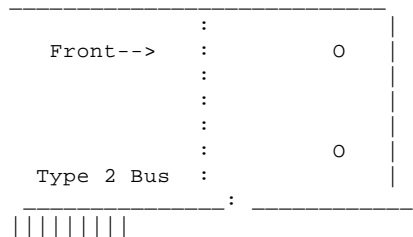
There are two bus adapters available for 8557/9557 systems:

- Type 1, FRU p/n85F0056 for early 8557 only.
- Type 2, FRU p/n41G3877 for later 8557, all M57 & all 9557s.

Type 1 is shorter, has
 has a mounting tab, and
 fits only in system
 frame fru p/n10G3965.



Type 2 is longer, has two
 mounting holes instead of a
 tab, and fits only in system
 frame p/n92F0040.



Due to differences in the system frames, bus adapter FRU's should be used only as a "like for like" replacement.

The FRU description in the HMM will be improved in the next release.

SAS KEYWORDS:

PSY2PART	D/T9557	41G3877	PSY2
85F0056	92F0114	RISER	BUSS
CARD	7546	7546A11	

1.4.232 8557 FRONT BEZEL PART NUMBERS / HMS CORRECTIONS

Record number: H091071

Device: D/T8557
 Model: M
 Tip key: 002
 Date created: 091/08/20
 Date last altered: A91/08/20

THE FOLLOWING LIST CONTAINS THE CORRECT FRU PART NUMBERS
 FOR THE 8557 FRONT BEZELS. THE 57SX HMS (JUNE 1, 1991) WILL
 BE CORRECTED IN THE NEXT RELEASE.

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INDEX SYSTEM UNIT

13	R/W CD BEZEL(BAY 4)	85F0073
13	3.5 - INCH DISKETTE DRIVE BEZEL(BAY 4)	85F0069
13	TAPE BACKUP (BAY 4)	85F0070
15	CD-ROM BEZEL(BAY 2,3)	85F0008
15	R/W CD BEZEL(BAY 2,3)	85F0020
15	3.5 - INCH DISKETTE DRIVE BEZEL(BAY 2,3)	85F0003
15	5.25 - INCH DISKETTE DRIVE BEZEL(BAY 2,3)	64F4125
16	3.5 - INCH DISKETTE DRIVE TRAY(BAY 1,2,3)	85F0097
16	3.5 - INCH DISKETTE DRIVE BEZEL(BAY 1)	85F0093
16	5.25 - INCH DISKETTE DRIVE BEZEL(BAY 1)	85F0068

SAS KEYWORDS:

PSY2 PSY2PART PSY2MISC 8557SYSPART
 8557SYSMISC

1.4.233 8557 PRINT OPERATION FAILS W/ BAYTECH PRINT MASTER SWITCHER

Record number: H102266

Device: D/T8557
Model: M
Tip key: 004
Date created: 092/07/21
Date last altered: A92/07/29

A solid or intermittently failing print operation may occur when using any *BayTech print switcher with parallel ports, such as BayTech's: 700 or 800 Series, LaserShare, and their mod 24 Data Exchange System. A symptom could be printer out of paper or no printer communication. If this occurs, remove the BayTech device from the circuit by cabling the printer directly to the system unit and retry the operation. If the printer now prints have the customer call BayTech at 1 - 800-523 - 2702. An update is available for the BayTech system. If the problem is still present after the BayTech device is removed from the system follow normal diagnostic procedures to determine the failing component.

*"BayTech" is a registered trademark of the BayTech Corporation.

SAS KEYWORDS:

PSY2	PSY2OEM	PSY2PRT	8557SYSBRD
PSY2BRD	8557SYSPRT	8557SYSOEM	OEM

1.4.234 8557, SYSTEM BOARD SCSI TERMINATOR

Record number: H091282

Device: D/T8557
Model: M
Tip key: 003
Date created: 091/10/24
Date last altered: A91/10/24

THE 8557 SYSTEM BOARD SCSI TERMINATOR CAN BE ORDERED AS FRU
P/N57F2870. THIS PART NUMBER WILL BE INCLUDED IN THE NEXT
RELEASE OF THE 8557 HMS.

SAS KEYWORDS:

PSY2 PSY2PART 8557SYSPART PSY2MISC
8557SYSMISC

1.4.235 8560 SYSTEM BOARD REPLACEMENT

Record number: H024555

Device: D/T8560
Model: M
Tip key: 002
Date created: 087/10/26
Date last altered: A87/11/04

SOME 8560 SYSTEM UNITS WERE ASSEMBLED WITH SYSTEM BOARDS
REQUIRING A PLASTIC WASHER UNDER THE MOUNTING SCREW LOCATED
APPROXIMATELY IN THE CENTER OF THE BOARD. REPLACEMENT SYSTEM
BOARDS FROM FIELD STOCK DO NOT REQUIRE THE INSTALLATION OF THIS
WASHER.

SAS KEYWORDS:

PSY2

PSY2SYSBRD

8560SYSBRD

1.4.236 8560/8580 SYS BOARD CONNECTIVITY PROBLEM

Record number: H12394

Device: D/T8560
 Model: M
 Tip key: 006
 Date created: 093/06/17
 Date last altered: A93/06/17

A REPLACEMENT SYSTEM BOARD, SPEAKER/BATTERY ASSEMBLY AND SPEAKER/BATTERY CABLE MAY BE REQUIRED TO MAINTAIN CONNECTIVITY.

A CONNECTOR CHANGE WAS MADE BY MANUFACTURING WHICH MAY PRODUCE A CONNECTIVITY PROBLEM IF THE SYSTEM BOARD, SPEAKER/BATTERY ASSEMBLY, OR SPEAKER/BATTERY ASSEMBLY CABLE ARE REPLACED. THE ORIGINAL CONNECTORS WERE USED IN:

- 8560 SERIAL NUMBERS RANGING FROM 8000500 THROUGH 8009000
- 8580 SERIAL NUMBERS RANGING FROM 8000001 THROUGH 8000200

ALL FRUS ARE STOCKED AT THE CURRENT LEVEL.

THE FOLLOWING CHART DESCRIBES THE DIFFERENCES IN CONNECTOR TYPES

	SYSTEM	MODEL	ORIGINAL	CURRENT
	-----	-----	-----	-----
SYSTEM BOARD (P/N72X8538)	8560	- 041,071	FEMALE	MALE
SYSTEM BOARD (P/N72X6668)	8580	- 041,071	FEMALE	MALE

THE FOLLOWING PARTS HAVE THE SAME P/N FOR BOTH 8560 AND 8580:

SPEAKER/BATTERY ASSEMBLY (P/N72X8511)	FEMALE	MALE
SPEAKER/BATTERY ASSEMBLY CABLE (P/N72X8558)	MALE	FEMALE

IF ANY OF THE THREE FRUS LISTED ABOVE ARE REPLACED, THEN THE OTHER TWO CORRESPONDING FRUS MUST ALSO BE REPLACED. THIS WILL MAINTAIN CONNECTIVITY BETWEEN THE CONNECTOR TYPES (MALE VS. FEMALE)

SAS KEYWORDS:

D/T8580 PSY2 PSY2MISC PSY2BRD

1.4.237 8570 SYSTEM BOARD DAMAGE AND RELATED HANDLING

Record number: H021449

Device: D/T8570
 Model: M
 Tip key: 014
 Date created: 090/11/15
 Date last altered: A90/11/16

FAILURE ANALYSIS OF RETURNED PS/2 8570 SYSTEM BOARDS HAS REVEALED THAT SOME BOARDS HAVE PHYSICAL DAMAGE TO THE PHASE LOCK LOOP (PLL) SIP COMPONENT. THE PLL SIP IS A SMALL CERAMIC CIRCUIT BOARD, MOUNTED VERTICALLY ON THE SYSTEM BOARD. IT IS APPROXIMATELY ONE INCH WIDE AND 3/4 INCH TALL, AND IS SOLDERED TO THE SYSTEM BOARD VERY CLOSE TO THE FIXED DISK AND DISKETTE BUSS ADAPTER.

THE REPORTED DAMAGE IS A RESULT OF THE PLL SIP BEING BENT AT ITS SYSTEM BOARD CONNECTORS. THE PLL SIP IS SUPPOSED TO BE MOUNTED AT A 90 DEGREE ANGLE TO THE SYSTEM BOARD. ITS DESIGN WILL PERMIT SOME CONNECTOR BENDING (UP TO A 20 DEGREE ANGLE FROM ITS INTENDED PERPENDICULAR MOUNT). ONCE BENT, HOWEVER, THE PLL SIP MUST NOT BE STRAIGHTENED.

*** IMPORTANT ***

- ON THE REPLACEMENT SYSTEM BOARD FRU, P/N33F5834 OR P/N33F5835 THE PLL SIP MAY BE BENT TOWARD THE BUSS ADAPTER CONNECTOR, AND INTERFERE WITH THE INSTALLATION OF THE BUSS ADAPTER FOR THE FIXED DISK AND DISKETTE. DO NOT STRAIGHTEN THE PLL SIP ON THE NEW FRU; RETURN THE SYSTEM BOARD AS NEW DEFECTIVE.
- IF THE PLL SIP IS BENT AWAY FROM THE FIXED DISK AND DISKETTE BUS ADAPTER AND OPERATES PROPERLY THE SYSTEM BOARD SHOULD BE CONSIDERED GOOD. REMEMBER, DON'T STRAIGHTEN THE PLL SIP.

SAS KEYWORDS:

PSY2	PSY2PART	PSY2BRD	PSY2MISC
8570SYSPART	8570SYSBRD	8570SYSMISC	

8570 SYSTEM BOARD FRU PARTS BY MOD SERIAL NUMBER

1.4.238 8570 SYSTEM BOARD FRU PARTS BY MOD & SERIAL NUMBER

Record number: H036039

Device: D/T8570
 Model: M
 Tip key: 013
 Date created: 090/10/16
 Date last altered: A93/09/21

THE 8570 SYSTEM IS MADE UP OF SEVERAL MODELS. THE FOLLOWING INFORMATION CONTAINS SYSTEM SERIAL NUMBER TO SYSTEM BOARD FRU PART NUMBER IDENTIFICATION BY MODEL.

NOTE: 8570 MODELS E61, 061, AND 121 WITHIN THE FOLLOWING THREE SERIAL NUMBER RANGES HAVE NO SERIAL NUMBER TO SYSTEM BOARD FRU IDENTIFICATION. THE SYSTEM COVER WILL HAVE TO BE REMOVED TO DETERMINE IF THE FULL SIZED SYSTEM BOARDS P/N90F730* OR THE DOWN SIZED 16MHZ SYSTEM BOARDS P/N41G3984 OR 20MHZ P/N41G3985 SHOULD BE USED.

ALL 16 AND 20 MHZ 8570 SYSTEMS WITH XXALPHA SERIAL NUMBERS USE DOWN SIZED SYSTEM BOARDS.

MODEL	SYSTEM BOARD SERIAL		FIXED DISK		
	NUMBER	DESCRIPTION	SPEED	SIZE	FRU P/N
E61	4000000 TO 4499999		16MHZ	60MB	
061	3000000 TO 3249999		20MHZ	60MB	
121	3500000 TO 3749999		20MHZ	120MB	

THE FOLLOWING SERIAL NUMBERS RANGES ARE BROKEN OUT BY SYSTEM BOARD FRU PART NUMBER, FIXED DISK SIZE, AND SYSTEM BOARD SPEED.

L=LONG SYSTEM BOARD
 S=DOWN SIZED (SHORT) SYSTEM BOARD

MODEL	SYSTEM BOARD SERIAL		FIXED DISK			
	NUMBER	DESCRIPTION	SPEED	SIZE	FRU P/N	
E61	1500000 TO 1999999	L	16MHZ	60MB	P/N96F7309	SYSBRD
	2500000 TO 2515999					
	7000000 TO 7163999					
	F000000 TO F000999					
E61	2516000 TO 2650000	S	16MHZ		P/N41G3984	SYSBRD
	7164000 TO 7999999					
	F001000 TO F249999					
	DT5500A0001 TO DT5500Z9999					
	ALPHA SERIAL NUMBERS			60MB	P/N6128294	FDISK
U61	U000001 TO U001476	L	16MHZ		P/N96F7309	SYSBRD
				60MB	P/N6128294	FDISK
U61	U001477 TO U999999	S	16MHZ		P/N41G3984	SYSBRD
	ALPHA SERIAL NUMBERS			60MB	P/N6128294	FDISK
061	5000000 TO 5001499	L	20MHZ		P/N96F7308	SYSBRD
				60MB	P/N6128294	FDISK
061	5001500 TO 5549999	S	20MHZ		P/N41G3985	SYSBRD
	8007000 TO 8999999					
	ALPHA SERIAL NUMBERS			60MB	P/N6128294	FDISK
081	ALPHA SERIAL NUMBERS	S	20MHZ		P/N41G3985	SYSBRD
				80MB	P/N56F8894	FDISK
121	5000000 TO 9999999	L	20MHZ		P/N96F7308	SYSBRD
	3500000 TO 3999999					
	5500000 TO 5505499					
	8000000 TO 8006999					
	9000000 TO 9075499			120MB	P/N6128291	FDISK
121	5505500 TO 5605500	S	20MHZ		P/N41G3985	SYSBRD
	9075500 TO 9999999					
	ALPHA SERIAL NUMBERS					

PSY2 RETAIN TIPS

8570 SYSTEM BOARD FRU PARTS BY MOD SERIAL NUMBER

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120MB P/N6128291 FDISK
161 ALPHA SERIAL NUMBERS S 20MHZ P/N41G3985 SYSBRD
160MB P/N56F8895 FDISK

ALTHOUGH THE FOLLOWING SYSTEM BOARDS ARE NOT SERIAL NUMBER
SENSITIVE IN REGARD TO THE FRU P/N THEY ARE LISTED HERE BY
THE SYSTEM BOARD PART NUMBER, PROCESSOR BOARD PART NUMBER, FIXED
DISK SIZE, AND SYSTEM BOARD SPEED HAVE BEEN IDENTIFIED FOR YOUR
CONVENIENCE.

A61 386 L 25MHZ P/N92F0580 SYSBRD
A61 386 25MHZ P/N15F7659 PROCBRD
60MB P/N6128294 FDISK
-----
A81 386 L 25MHZ P/N10G4009 SYSBRD
A81 386 25MHZ P/N15F7659 PROCBRD
80MB P/N56F8894 FDISK
-----
A21 386 L 25MHZ P/N92F0580 SYSBRD
A21 386 P/N15F7659 PROCBRD
120MB P/N6128291 FDISK
-----
A16 386 L 25MHZ P/N10G4009 SYSBRD
A16 386 L 25MHZ P/N15F7659 PROCBRD
160MB P/N56F8895 FDISK
-----
B61 486 L 25MHZ P/N41G3979 SYSBRD
B61 486 25MHZ P/N64F0123 PROCBRD
60MB P/N6128294 FDISK
-----
B81 AND B16 ARE SYSTEMS ARE ONLY AVAILABLE TO CUSTOMERS AS
AN MES UPGRADE FROM A81 AND A16 SYSTEMS.
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B81 486 25MHZ P/N41G3979 SYSBRD
B61 486 25MHZ P/N64F0123 PROCBRD
80MB P/N56F8894 FDISK
-----
B21 486 L 25MHZ P/N41G3979 SYSBRD
B21 486 P/N64F0123 PROCBRD
120MB P/N6128291 FDISK
-----
B16 486 25MHZ P/N41G3979 SYSBRD
B16 486 25MHZ P/N64F0123 PROCBRD
160MB P/N56F8895 FDISK

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SAS KEYWORDS:

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PSY2 PSY2PART 8570SYSPART 8570SYSPROC
PSY2PROC 8570SYSBRD PSY2BRD D/T8570

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PSY2 RETAIN TIPS

8570 WITH 'SHORT' PLANAR BOARDS REQUIRE LEVEL 1.06 DIAG.

1.4.239 8570 WITH 'SHORT' PLANAR BOARDS REQUIRE LEVEL 1.06 DIAG.

Record number: H083262

Device:	D/T8570	Date created:	089/12/15
Model:	M	Date last altered:	A91/03/06
Diagnostic ID:	DIAGDIAGNOSTIC	Owning B.U.:	USA
Tip key:	019		

Additional diagnostic IDs and online tests:

THE NEW LEVEL OF THE 8570 16 AND 20 MHZ. MODELS WITH THE SMALL PLANAR BOARDS MUST BE CONFIGURED USING DIAGNOSTIC LEVEL 1.06 OR HIGHER. IF A LOWER LEVEL OF DIAGNOSTIC IS USED, CONFIGURATION AND FUNCTIONAL PROBLEMS MAY OCCUR.

SAS KEYWORDS:

PSY2

8570SYSBRD

PSY2MISC

PSY2BRD

8570SYSDIAG

PSY2DIAG

1.4.240 8570 25MHZ SYSBRD / PROCBRD REMOVE/REPLACE INFO

Record number: H007917

Device: D/T8570
 Model: M
 Tip key: 011
 Date created: 090/03/28
 Date last altered: A93/07/23

IBM FRU P/N33F9955, A COMBINATION SYSTEM BOARD AND PROCESSOR BOARD FOR THE 8570 25MHZ 386 SYSTEMS MOD A61 AND A21, HAS BEEN REPLACED WITH A SYSTEM BOARD FRU P/N92F0580 AND A PROCESSOR BOARD FRU P/N15F7659. THE COMBINATION PART WILL SELECTIVELY SUB WHEN ORDERED, GIVING THE SERVICER THE OPPORTUNITY TO ORDER ONE OF THE TWO COMPONENT PARTS.

THE FOLLOWING SPECIAL PROCEDURES IN THIS TIP ARE NEEDED FOR REMOVAL AND REPLACEMENT OF SYSTEM BOARDS AND PROCESSOR CARDS IN 8570 SYSTEMS MODEL A61, A21, B61, AND B21.

8570 386 & 486 PROCESSOR BOARD REMOVAL
 AND REPLACEMENT INSTRUCTIONS

FOLLOW THE HMR INSTRUCTIONS FOR REMOVING: COVERS, ADAPTERS, DISKETTE DRIVES, FIXED DISK, BUS ADAPTER, SUPPORT STRUCTURE, AND THE POWER SUPPLY.

386 PROCESSOR BOARD AND 486 POWER PLATFORM REMOVAL:

1. TAKE P/N57F2859, THE SNAP/PROCESSOR BOARD REMOVAL TOOL, THAT COMES WITH THE NEW REPLACEMENT 386 FRUS. (THE 486 SYSTEMS HAVE THE TOOL STORED IN THE FRAME.)

NOTE: IF YOUR NEW FRU OR SYSTEM DOES NOT HAVE THE SNAP/PROCESSOR BOARD REMOVAL TOOL P/N57F2859 OBTAIN ONE BEFORE REMOVING THE PROCESSOR BOARD. DO NOT USE THE SNAP TOOL P/N72X8547. IT IS DESIGNED TO UNSNAP THE SUPPORT STRUCTURE, NOT TO SEPARATE THE PROCESSOR BOARD FROM THE SYSTEM BOARD.

2. HOLD THE TOOL SO THAT THE SECURING TAB IS FACING DOWN. PLACE THE WIDE END OF THE TOOL BETWEEN THE PLATFORM BOARD AND THE SYSTEM BOARD AT THE POWER SUPPLY SIDE OF THE J15 SYSTEM BOARD CONNECTOR.

3. GENTLY PRY FIRST AT THE CENTER OF THE SYSTEM BOARD CONNECTOR, THEN NEAR ONE END AND NEAR THE OTHER END. (TAKE CARE NOT TO PRY ON BOARD COMPONENTS.) REPEAT THIS PROCESS IF THE 386 OR 486 PROCESSOR BOARD DOES NOT COME LOOSE FROM THE CONNECTOR.

4. NEXT RELEASE THE FOUR LATCHES THAT HOLD DOWN THE PROCESSOR BOARD.

5. IF YOU ARE REPLACING A 386 PROCESSOR BOARD, P/N15F7659, THAT HAS A MATH CO-PROCESSOR ON IT (POSITION U13) REMOVE THE MATH CO-PROCESSOR, AND INSTALL IT ON THE NEW PROCESSOR BOARD.

NOTE: EVERY 486 POWER PLATFORM PROCESSOR BOARD HAS A BUILT IN MATH CO-PROCESSOR, SO A MATH CO-PROCESSOR IS NOT TRANSFERRED FROM THE OLD FRU TO THE NEW FRU.

386 PROCESSOR BOARD AND 486 POWER PLATFORM REPLACEMENT:

1. TO INSTALL A NEW PROCESSOR BOARD ON A SYSTEM BOARD, TURN THE SNAP/PROCESSOR BOARD REMOVAL TOOL ON ITS SIDE AND PLACE IT ON THE TABLE OR WORK SURFACE. POSITION THE TOOL BETWEEN THE WORK SURFACE AND THE SYSTEM BASE, DIRECTLY BELOW THE CONNECTOR WHERE THE PROCESSOR BOARD CONNECTS TO THE SYSTEM BOARD. (THIS PREVENTS EXCESSIVE FLEXING OF THE SYSTEM BOARD.)

2. NOW PRESS THE PROCESSOR BOARD INTO THE FOUR LATCHES.

3. VERIFY THAT THE CONNECTOR ON THE NEW PROCESSOR BOARD IS ALIGNED WITH THE SOCKET ON THE SYSTEM BOARD, AND PRESS DOWN FIRMLY ON THE CONNECTOR TO SEAT IT IN THE SOCKET.

4. IF THE SYSTEM YOU ARE WORKING ON HAS THE OLD SNAP REMOVAL TOOL REPLACE IT WITH THE NEW SNAP/PROCESSOR BOARD REMOVAL TOOL THAT CAME WITH THE FRU.

5. FOLLOW THE HMR TO REPLACE THE OTHER REMOVED PARTS OF THE SYSTEM.

6. RUN THE RESTORE CONFIGURATION PROGRAM ON THE USER'S REFERENCE DISKETTE TO RESTORE THE TIME/DATE INFORMATION.

7. RUN ADVANCED DIAGNOSTICS BEFORE RETURNING THE SYSTEM TO THE CUSTOMER.

SAS KEYWORDS:

PSY2

8570SYSBRD

PSY2PART

8570ECA

PSY2SYSBRD

8570SYSPART

1.4.241 8573 WITH EXTERNAL 8513 ATTACHED

Record number: H04472

Device: D/T8550
Model: M
Tip key: 015
Date created: 089/05/09
Date last altered: A89/05/10

WHEN AN 8513 IS ATTACHED EXTERNALLY TO THE PS-2 MODEL P70 386 (8573 MOD 061 AND 121) AND THE 8513 IS POWERED OFF DURING OPERATION A LOSS OF DISPLAY ON THE PLASMA DISPLAY CAN OCCUR. THE DIAGNOSTICS FOR THE PLASMA DISPLAY CALL OUT THAT THE 8513 IS POWERED OFF. THIS INSTRUCTION SHOULD BE IGNORED AND THE 8513 POWER LEFT ON WHILE RUNNING THE DIAGNOSTICS.

THE 8513 SHOULD BE CONNECTED TO THE 8573 AND POWERED UP PRIOR TO POWERING ON THE 8573 TO AVOID ANY LOSS OF PLASMA DISPLAY. THE 8513 SHOULD NOT BE TURNED OFF DURING NORMAL OPERATION ALSO TO AVOID THE LOSS OF PLASMA DISPLAY.

NOTE: 8573 MOD 061 IS ALSO KNOWN AS MOD K61 IN EUROPE
8573 MOD 121 IS ALSO KNOWN AS MOD K21 IN EUROPE

SAS KEYWORDS:

D/T8573	D/T8513	8573SYSDIAG	PSY2DISP
PSY2	PSY2DIAG		

1.4.242 8580 20MHZ, POTENTIAL MODIFIED/LOST DATA

Record number: H12388

Device: D/T8580
 Model: M
 Tip key: 023
 Date created: 093/06/08
 Date last altered: A93/07/27

8580 SYSTEMS IN THE FOLLOWING SERIAL NUMBER RANGE WITH FRU P/N33F8415, P/N90X7390 OR ONE THAT IS NOT VISIBLE MAY BE SUBJECT TO A POTENTIAL MODIFIED/LOST DATA PROBLEM WHEN ONE OF THE LISTED BUSMASTER * ADAPTERS ARE INSTALLED.

SYSTEMS WITH THE AFFECTED SYSTEM BOARDS MAY EXHIBIT VARIOUS SYMPTOMS, OR NO SYMPTOMS AT ALL, DEPENDENT ON THE ACTUAL BUSMASTER ADAPTER INSTALLED.

AFFECTED SERIAL NUMBER RANGES:

MOD 111 S/N 6000000 THRU 6101499
 MOD 121 S/N 4500000 THRU 4999999 & 9000000 THRU 9014999
 MOD 311 S/N 6500000 THRU 6553499
 MOD 321 S/N 6000000 THRU 6499999 & 9200000 THRU 9215499
 * BUSMASTER ADAPTERS USUALLY CONTAIN A MICROPROCESSOR AND HAVE THE CAPABILITY OF CONTROLLING DATA TRANSFER ON THE MICRO CHANNEL BUS, INDEPENDENTLY OF THE SYSTEM MICROPROCESSOR. DUE TO VARIATIONS IN DESIGN, VISUAL IDENTIFICATION OF A BUSMASTER MAY BE DIFFICULT, THEREFORE THE DOCUMENTATION ACCOMPANYING THE ADAPTER IN QUESTION SHOULD BE REFERENCED.

MANUFACTURER	BUSMASTER NAME
Aox INCORPORATED	MicroMASTER 386
Aox INCORPORATED	MicroMASTER 486
BICC DATA NETWORKS	ISOLAN 4110-3 CONTROLLER
BUSTEK CORPORATION	SCSI HOST ADAPTER BT640A
COMTECH INTERNATIONAL	CHANNEL/2
COMTECH INTERNATIONAL	CHANNEL/2 PLUS
IBM CORP. WIZARD COPROCESSOR (34F3032)(FC3462)	
IBM CORP. PORTMASTER ADAPTER/A, 512KB (PN53F2601)(FC6360)	
IBM CORP. PORTMASTER ADAPTER/A, 1MB (PN53F2604)(FC6364)	
IBM CORP. PORTMASTER ADAPTER/A, 2MB (PN53F2607)(FC6368)	
IBM CORP. EXTENDED GRAPHICS ARRAY (XGA)(75X5887)(FC5887)	
IBM CORP. EXTENDED GRAPHICS ARRAY (XGA-2)(87F4773)(FC2561)	
IBM CORP. TOKEN-RING NETWORK 16/4 ADPT/A (PN74F4140)(FC4041)	
MADGE NETWORKS INC.	STRAIGHT BLUE 16/4 MC32 TOKEN RING
METACOMP	PSCONNECT
NORTHERN TELECOM	LANSTAR/MC(PCLINK/MC)
PROTEON	P1840 PRONET-4 BUSMASTER
RACORE COMPUTER PRODUCTS	RACORE 4X16MBPS 802.5
STORAGE DIMENSIONS	SDC-3211B
YARC SYSTEMS	MICRO785+

SYSTEMS IN THE AFFECTED SERIAL NUMBER RANGE WITH A LISTED BUSMASTER INSTALLED AND A SYSTEM BOARD WITH A FRU PART NUMBER AS LISTED SHOULD HAVE THE SYSTEM BOARD REPLACED.

REPLACEMENT SYSTEM BOARD FRU P/N92F0756 SHOULD BE ORDERED USING NORMAL FRU PARTS ORDERING PROCEDURES. ALL ORDERS FOR FRU P/N33F8415 AND FRU P/N90X7390 WILL BE AUTOMATICALLY SUBSTITUTED TO THE CURRENT FRU PART NUMBER.

SAS KEYWORDS:

PSY2 PSY2ADPT PS/2 PS2
 BUSSMASTER ECA048

1.4.243 8580 25MHZ, INTERMITTENT OS/2 TRAP ERRORS

Record number: H12390

Device: D/T8580
 Model: M
 Tip key: 025
 Date created: 093/06/15
 Date last altered: A94/06/07

INTERMITTENT TRAP 0002 ERRORS MAY BE EXPERIENCED ON 25 MHZ 8580 SYSTEMS RUNNING OS/2 DUE TO A TIMING CONDITION ON THE SYSTEM PLANAR. OTHER COMPLEX OPERATING SYSTEMS MAY EXPERIENCE NMI OR OTHER ERRORS DEPENDING UPON THE CHARACTERISTICS OF THE OPERATING SYSTEM.

8580 25 MHZ SYSTEMS MAY REQUIRE A REPLACEMENT SYSTEM BOARD WHEN "8 MEGABYTES" OF SYSTEM BOARD MEMORY IS INSTALLED AND ERRORS, AS DESCRIBED, ABOVE ARE OCCURING.

THE FOLLOWING INFORMATION WILL HELP DETERMINE IF YOUR SYSTEM IS AFFECTED:

EXAMINE THE "MODULES" IN POSTION "U24" AND "U34" LOCATED NEAR J8 AND J9, THE SYSTEM BOARD MEMORY SOCKETS. IF THE PART NUMBER *ON THE MODULE* IS "FCT841" THE SYSTEM BOARD SHOULD BE REPLACED.

***** IMPORTANT NOTICE *****
 INFORMATION PRINTED ON THE SYSTEM BOARD NEAR THE MODULE SHOULD BE IGNORED. ONLY INFORMATION PRINTED ON THE MODULE SHOULD BE USED WHEN MAKING THIS PHYSICAL CHECK.

MODULES WITH ANY IDENTIFICATION OTHER THAN "FCT841" (SUCH AS F841, 841D, 72F841, 72F841D, ETC.) ARE GOOD AND THE SYSTEM BOARD DOES NOT NEED TO BE REPLACED.

ORDER THE CURRENT LEVEL SYSTEM BOARD FRU P/N85F0046, USING NORMAL PARTS ORDERING PROCEDURES.

SAS KEYWORDS:

PSY2	A16	A21	A31
PSY2ERR	PSY2BRD	8580SYSBRD	PSY2MEM
8580SYSTEMEM	PSY2	ECA051	

1.4.244 8590 MEMORY PARITY ERRORS / CONFIGURATION

Record number: H095511

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Device:           D/T8590
Model:           M
Tip key:         007
Date created:    091/08/20
Date last altered: A93/05/20
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UNBALANCED LOADING OF MEMORY SIMM'S MAY CAUSE PARITY ERRORS IN 8590'S WHEN USING FOUR OR MORE MEMORY SIMMS.

MEMORY SIMM CONFIGURATION PROCEDURE:

NOTE: FOR THIS PROCEDURE, MEMORY WILL ALWAYS BE INSTALLED IN MATCHED PAIRS STARTING WITH J1 & J3 THEN J2 & J4 ON MEMORY RISER CARDS. RISER CARD IN CONNECTOR J11 WILL ALWAYS BE FULLY POPULATED FIRST.

CLASSIFY EACH SIMM AS HIGH OR LOW LOAD BASED ON THE FOLLOWING GUIDELINE:

- A. COUNT THE TOTAL MODULES (CHIPS) ON BOTH SIDES OF THE SIMM.
- B. IF 12 OR LESS, THE SIMM IS LOW LOAD.
- C. IF GREATER THAN 12, THE SIMM IS HIGH LOAD.

THE CHART BELOW SHOWS THE NUMBER OF MODULES (CHIPS) THAT CAN BE FOUND ON EACH TYPE OF SIMM AND ITS LOAD:

SIZE	# OF MODULES	LOAD
2 MEG	10	LOW
4 MEG	9-12	LOW
2 MEG	18-24	HIGH
8 MEG	18-24	HIGH

IF THE SIMMS ARE EITHER ALL HIGH LOAD, OR ALL LOW LOAD, THEN INSTALL IN BOTH MEMORY RISER CARDS AND EXIT THIS PROCEDURE.

1. INSTALL A LOW LOAD MATCHED PAIR IN J2 AND J4 OF MEMORY RISER CONNECTOR IN J11.
2. IF THE TOTAL NUMBER OF SIMMS TO BE INSTALLED IS 4 GO TO STEP 3, IF NOT, PROCEED WITH STEP 4.
3. INSTALL TWO REMAINING MATCHED SIMMS IN J1 & J3 OF MEMORY RISER CARD IN CONNECTOR J11 AND EXIT THIS PROCEDURE.
4. IF YOU HAVE SIX SIMMS CONTINUE TO STEP 5 (REFER TO EXAMPLE 1) IF YOU HAVE EIGHT SIMMS GO TO STEP 7 (REFER TO EXAMPLE 2)
5. IF YOU HAVE ANOTHER LOW LOAD MATCHED PAIR, INSTALL IT IN J1 & J3 OF THE MEMORY RISER IN CONNECTOR J11 AND GO TO STEP 6. IF YOUR REMAINING MEMORY IS HIGH LOAD THEN INSTALL A HIGH LOAD MATCHED PAIR J1 & J3 OF MEMORY RISER IN J11.
6. INSTALL THE REMAINING HIGH LOAD MATCHED PAIR IN J1 & J3 OF MEMORY RISER IN CONNECTOR J14; EXIT PROCEDURE.
7. INSTALL A HIGH LOAD MATCHED PAIR IN J1 & J3 OF MEMORY RISER IN CONNECTOR J11.
8. IF REMAINING MEMORY IS ALL HIGH OR ALL LOW, INSTALL ON MEMORY RISER IN CONNECTOR J14: EXIT PROCEDURE.
9. INSTALL REMAINING LOW LOAD MATCHED MEMORY IN J2 & J4 AND HIGH LOAD MATCHED MEMORY IN J1 & J3 OF THE MEMORY RISER IN CONNECTOR J14: EXIT PROCEDURE.

THE FOLLOWING ARE EXAMPLES OF HOW TO IMPLEMENT THIS PROCEDURE:

EXAMPLE 1:

J4 2MB LOW	J4
J3 2MB LOW	J3 8MB HIGH
J2 2MB LOW	J2
J1 2MB LOW	J1 8MB HIGH
J11	J14
RISER CONNECTOR	RISER CONNECTOR

THIS SYSTEM HAS SIX SIMMS AND IT HAS BEEN DETERMINED THAT THE FOUR 2MB SIMMS ARE LOW LOAD AND THE TWO 8MB SIMMS ARE HIGH LOAD. ACCORDING TO THIS PROCEDURE, NO CHANGE IS REQUIRED.

EXAMPLE 2:

J4 2MB LOW	J4 8MB HIGH
J3 2MB LOW	J3 8MB HIGH
J2 2MB LOW	J2 8MB HIGH
J1 2MB LOW	J1 8MB HIGH
J11	J14
RISER CONNECTOR	RISER CONNECTOR

THE SYSTEM ABOVE, HAS EIGHT SIMMS OF WHICH FOUR ARE HIGH LOAD

8590 MEMORY PARITY ERRORS / CONFIGURATION

AND FOUR ARE LOW LOAD. ACCORDING TO THIS PROCEDURE, THE SYSTEM SHOULD BE RECONFIGURED AS SHOWN BELOW IN EXAMPLE 3:

EXAMPLE 3:

J4 | 2MB LOW
J3 | 8MB HIGH
J2 | 2MB LOW
J1 | 8MB HIGH
J11
RISER CONNECTOR

J4 | 2MB LOW
J3 | 8MB HIGH
J2 | 2MB LOW
J1 | 8MB HIGH
J14
RISER CONNECTOR

SAS KEYWORDS:

PSY2 PSY2MEM PSY2CNFG 8590SYSTEMEM
8590SYSCNFG

1.4.245 8590 PRINT OPERATION FAILS W/ BAYTECH PRINT MASTER SWITCHER

Record number: H101429

Device: D/T8590
Model: M
Tip key: 017
Date created: 092/07/21
Date last altered: A92/07/29

A solid or intermittently failing print operation may occur when using any *BayTech print switcher with parallel ports, such as BayTech's: 700 or 800 Series, LaserShare, and their mod 24 Data Exchange System. A symptom could be printer out of paper or no printer communication. If this occurs, remove the BayTech device from the circuit by cabling the printer directly to the system unit and retry the operation. If the printer now prints have the customer call BayTech at 1 - 800-523 - 2702. An update is available for the BayTech system. If the problem is still present after the BayTech device is removed from the system follow normal diagnostic procedures to determine the failing component.

*"BayTech" is a registered trademark of the BayTech Corporation.

SAS KEYWORDS:

PSY2	PSY2OEM	PSY2PRT	8590SYSBRD
PSY2BRD	8590SYSPRT	8590SYSOEM	OEM

1.4.246 8590/8595 PROCESSOR MODULE UPGRADE - EXPIRES MAY 1, 1996

Record number: H20859

Device: D/T8590
 Model: M
 Tip key: 023
 Date created: 092/07/16
 Date last altered: A96/02/09

>>> Note: THIS UPGRADE NOT AVAILABLE AFTER MAY 1, 1996 <<<<

A NEW VERSION OF THE SYSTEM PROCESSOR BOARD (STAGE 1) POST/BIOS CODE IS NOW AVAILABLE FOR CERTAIN MODELS OF THE 8590/95 AT NO COST TO CUSTOMERS REQUESTING THE UPGRADE. THE UPGRADE IS IMPLEMENTED BY CHANGING A MODULE ON THE PROCESSOR BOARD (NOT THE SYSTEM BOARD).

THE MODULE IS AVAILABLE FOR SOME TYPE 1 AND TYPE 2 PROCESSOR BOARDS ONLY. THE TYPE 3 PROCESSOR BOARD HAS PREVIOUSLY IMPLEMENTED THESE CAPABILITIES.

THE UPGRADE PROVIDES THE FOLLOWING ADDITIONAL CAPABILITIES.

1. ADAPTER ROM MEMORY WILL BE MORE EFFICIENTLY UTILIZED TO MINIMIZE ADAPTER CONFIGURATION CONFLICTS.
2. BIOS SUPPORT FOR FIXED DISKS UP TO 3.94 GIGABYTES PER DEVICE
3. SUPPORTS SEARCH IML FROM ANY PUN (PHYSICAL UNIT NUMBER) OR SCSI ID. THE SYSTEM PARTITION IS NO LONGER RESTRICTED TO ONLY SCSI ID=6. EACH FIXED DISK ID WILL BE SEARCHED FOR A VALID SYSTEM PARTITION.
4. ALLOWS REDUNDANT SYSTEM PARTITIONS (IML).
5. SHARING OF SCSI DEVICES. AN EXTERNAL SCSI DEVICE, SUCH AS THE 3511, MAY BE SHARED BETWEEN TWO SYSTEM UNITS.
6. PROVIDES THE ADDITIONAL SUPPORT FOR THE SCSI-2 FAST/WIDE ADAPTER/A, FRU P/N92F0160, OPTION 6451280.

THE FOLLOWING MODELS ARE AFFECTED:

1. TYPE 1 PROCESSOR SYSTEMS, MODELS 0GX, 0JX or 0KX AND SYSTEMS THAT HAVE BEEN UPGRADED BY A SALES FEATURE TO 'P3'. (THE "X" IN THE MODEL NUMBER MAY BE ANY CHARACTER.)
2. TYPE 2 PROCESSOR SYSTEMS, MODEL 0HX. (THE "X" IN THE MODEL NUMBER MAY BE ANY CHARACTER.)

ONLY THE FOLLOWING TYPE 1 PROCESSOR BOARDS WITH AN EPROM MODULE LABEL HAVING THE FOLLOWING PART NUMBERS MAY BE UPGRADED:

PROCESSOR	FRU P/N	MODEL	EPROM P/N	LOC.
20MHZ SX	92F0049	0GX	91F9812	U36
25MHZ DX	64F0201	0JX	84F9154 OR 91F9812	U36
33MHZ DX	64F0198	0KX	84F9154 OR 91F9812	U36
50MHZ DX	92F0048	P3 (UPGRADE)	91F9812	U44

ONLY THE MODEL 0HX TYPE 2 PROCESSOR BOARDS MAY BE UPGRADED.

PROCESSOR	FRU P/N	MODEL	EPROM P/N	LOC.
25MHZ SX	92F0079	0HX	N/A	U16

CUSTOMERS DESIRING THIS UPGRADE MAY CALL TOLL FREE, 1-800-426 - 7282 FOLLOWED BY A 1, OR REQUEST THE OPERATOR AND ASK FOR THE APPROPRIATE EPROM FOR THE PROCESSOR TYPE AS FOLLOWS:

(TYPE 1, PART NUMBER 52G9509 ON THE MODULE LABEL), OR
 (TYPE 2, PART NUMBER 41G9361 ON THE MODULE LABEL)

THE PACKAGE CONTAINS:

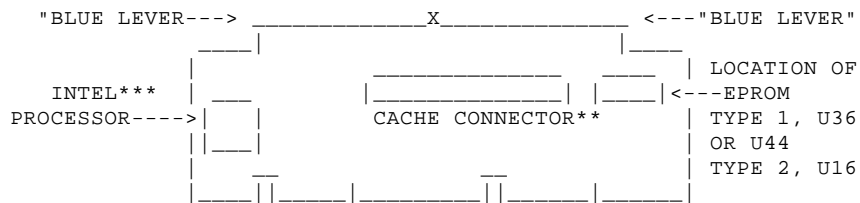
A. THE NEW MODULE
 (TYPE 1, PART NUMBER 52G9509 ON THE MODULE LABEL), OR
 (TYPE 2, PART NUMBER 41G9361 ON THE MODULE LABEL)

B. DETAILED INSTALLATION INSTRUCTIONS.

TYPE 1 AND 2 PROCESSOR BOARD, COMPONENT SIDE

PUSH HERE TO RESEAT THE BOARD.*

|



* THE 20 & 25 MHZ SX PROCESSOR BOARDS HAVE NO CACHE CONNECTOR.

NOTES:

***** IMPORTANT *****
 * RESULTS OF PREVIOUS PROBLEM DETERMINATION HAVE SHOWN THAT THE PROCESSOR BOARD IS OFTEN NOT FULLY SEATED AFTER BEING REMOVED AND REINSERTED. THIS MAY CAUSE INTERMITTENT AND DIFFICULT TO DIAGNOSE SYSTEM FAILURES.

THE "BLUE LEVERS" LOCATED ON THE TOP CORNERS OF THE PROCESSOR BOARD ARE FOR REMOVAL OF THE BOARD ONLY! DO NOT ATTEMPT TO REINSTALL THE PROCESSOR BY USING THE LEVERS. THE CORRECT METHOD IS AS FOLLOWS:

CENTER THE BOARD INTO THE SLOT CAREFULLY ALIGNING THE LEVERS WITH THE SIDE RAILS. PLACE THE HEEL OF THE HAND IN THE CENTER OF THE CARD EDGE AND "FIRMLY" FORCE THE BOARD ALL OF THE WAY INTO THE CONNECTOR SLOT. (APPROXIMATELY 17-22LBS OF FORCE IS REQUIRED TO FULLY SEAT THE BOARD.)

THIS IS A FUNCTIONAL ENHANCEMENT AND IS CUSTOMER INSTALLABLE. THERE WILL BE NO FIELD PLAN (ECA).

THIS IS NOT A MAINTENANCE PART, THEREFORE NO FRU PART HAS BEEN RELEASED IN THE PARTS DISTRIBUTION SYSTEM.

EARLIER VERSIONS OF THE REFERENCE DISKETTE ARE COMPATIBLE WITH THIS EPROM MODULE, HOWEVER THE SYSTEM PARTITION (REFERENCE DISKETTE) MUST BE UPGRADED TO VERSION 1.3X OR LATER (TYPE 1) OR VERSION 1.2X (TYPE 2) TO SUPPORT THESE ENHANCEMENTS.

ALL AFFECTED PROCESSOR BOARD FRU'S HAVE BEEN UPGRADED TO THE CURRENT LEVEL POST/BIOS CODE VERSION.

NOTICE: THIS FREE UPGRADE WILL NO LONGER BE AVAILABLE AFTER MAY 1, 1996.

*** TRADEMARK OF INTEL INC.

SAS KEYWORDS:

PSY2	PSY2FDSK	PSY2PROG	D/T8590
PS2	PS/2	SCSI	BIOS
IML	MICRO	CODE	D/T8595
2GB	8595	SCSI2	FAST
WIDE			

1.4.247 8590/8595 PROCESSOR MODULE UPGRADE - EXPIRES MAY 1, 1996

Record number: H20859

Device: D/T8590
 Model: M
 Tip key: 023
 Date created: 092/07/16
 Date last altered: A96/02/09

>>> Note: THIS UPGRADE NOT AVAILABLE AFTER MAY 1, 1996 <<<<

A NEW VERSION OF THE SYSTEM PROCESSOR BOARD (STAGE 1) POST/BIOS CODE IS NOW AVAILABLE FOR CERTAIN MODELS OF THE 8590/95 AT NO COST TO CUSTOMERS REQUESTING THE UPGRADE. THE UPGRADE IS IMPLEMENTED BY CHANGING A MODULE ON THE PROCESSOR BOARD (NOT THE SYSTEM BOARD).

THE MODULE IS AVAILABLE FOR SOME TYPE 1 AND TYPE 2 PROCESSOR BOARDS ONLY. THE TYPE 3 PROCESSOR BOARD HAS PREVIOUSLY IMPLEMENTED THESE CAPABILITIES.

THE UPGRADE PROVIDES THE FOLLOWING ADDITIONAL CAPABILITIES.

1. ADAPTER ROM MEMORY WILL BE MORE EFFICIENTLY UTILIZED TO MINIMIZE ADAPTER CONFIGURATION CONFLICTS.
2. BIOS SUPPORT FOR FIXED DISKS UP TO 3.94 GIGABYTES PER DEVICE
3. SUPPORTS SEARCH IML FROM ANY PUN (PHYSICAL UNIT NUMBER) OR SCSI ID. THE SYSTEM PARTITION IS NO LONGER RESTRICTED TO ONLY SCSI ID=6. EACH FIXED DISK ID WILL BE SEARCHED FOR A VALID SYSTEM PARTITION.
4. ALLOWS REDUNDANT SYSTEM PARTITIONS (IML).
5. SHARING OF SCSI DEVICES. AN EXTERNAL SCSI DEVICE, SUCH AS THE 3511, MAY BE SHARED BETWEEN TWO SYSTEM UNITS.
6. PROVIDES THE ADDITIONAL SUPPORT FOR THE SCSI-2 FAST/WIDE ADAPTER/A, FRU P/N92F0160, OPTION 6451280.

THE FOLLOWING MODELS ARE AFFECTED:

1. TYPE 1 PROCESSOR SYSTEMS, MODELS 0GX, 0JX or 0KX AND SYSTEMS THAT HAVE BEEN UPGRADED BY A SALES FEATURE TO 'P3'. (THE "X" IN THE MODEL NUMBER MAY BE ANY CHARACTER.)
2. TYPE 2 PROCESSOR SYSTEMS, MODEL 0HX. (THE "X" IN THE MODEL NUMBER MAY BE ANY CHARACTER.)

ONLY THE FOLLOWING TYPE 1 PROCESSOR BOARDS WITH AN EPROM MODULE LABEL HAVING THE FOLLOWING PART NUMBERS MAY BE UPGRADED:

PROCESSOR	FRU P/N	MODEL	EPROM P/N	LOC.
20MHZ SX	92F0049	0GX	91F9812	U36
25MHZ DX	64F0201	0JX	84F9154 OR 91F9812	U36
33MHZ DX	64F0198	0KX	84F9154 OR 91F9812	U36
50MHZ DX	92F0048	P3 (UPGRADE)	91F9812	U44

ONLY THE MODEL 0HX TYPE 2 PROCESSOR BOARDS MAY BE UPGRADED.

PROCESSOR	FRU P/N	MODEL	EPROM P/N	LOC.
25MHZ SX	92F0079	0HX	N/A	U16

CUSTOMERS DESIRING THIS UPGRADE MAY CALL TOLL FREE, 1-800-426 - 7282 FOLLOWED BY A 1, OR REQUEST THE OPERATOR AND ASK FOR THE APPROPRIATE EPROM FOR THE PROCESSOR TYPE AS FOLLOWS:

(TYPE 1, PART NUMBER 52G9509 ON THE MODULE LABEL), OR
 (TYPE 2, PART NUMBER 41G9361 ON THE MODULE LABEL)

THE PACKAGE CONTAINS:

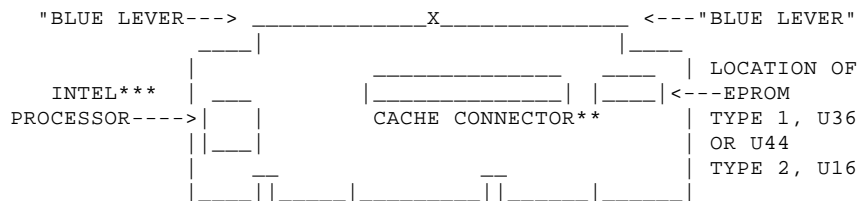
- A. THE NEW MODULE
 (TYPE 1, PART NUMBER 52G9509 ON THE MODULE LABEL), OR
 (TYPE 2, PART NUMBER 41G9361 ON THE MODULE LABEL)

- B. DETAILED INSTALLATION INSTRUCTIONS.

TYPE 1 AND 2 PROCESSOR BOARD, COMPONENT SIDE

PUSH HERE TO RESEAT THE BOARD.*





* THE 20 & 25 MHZ SX PROCESSOR BOARDS HAVE NO CACHE CONNECTOR.

NOTES:

***** IMPORTANT *****
 * RESULTS OF PREVIOUS PROBLEM DETERMINATION HAVE SHOWN THAT THE PROCESSOR BOARD IS OFTEN NOT FULLY SEATED AFTER BEING REMOVED AND REINSERTED. THIS MAY CAUSE INTERMITTENT AND DIFFICULT TO DIAGNOSE SYSTEM FAILURES.

THE "BLUE LEVERS" LOCATED ON THE TOP CORNERS OF THE PROCESSOR BOARD ARE FOR REMOVAL OF THE BOARD ONLY! DO NOT ATTEMPT TO REINSTALL THE PROCESSOR BY USING THE LEVERS. THE CORRECT METHOD IS AS FOLLOWS:

CENTER THE BOARD INTO THE SLOT CAREFULLY ALIGNING THE LEVERS WITH THE SIDE RAILS. PLACE THE HEEL OF THE HAND IN THE CENTER OF THE CARD EDGE AND "FIRMLY" FORCE THE BOARD ALL OF THE WAY INTO THE CONNECTOR SLOT. (APPROXIMATELY 17-22LBS OF FORCE IS REQUIRED TO FULLY SEAT THE BOARD.)

THIS IS A FUNCTIONAL ENHANCEMENT AND IS CUSTOMER INSTALLABLE. THERE WILL BE NO FIELD PLAN (ECA).

THIS IS NOT A MAINTENANCE PART, THEREFORE NO FRU PART HAS BEEN RELEASED IN THE PARTS DISTRIBUTION SYSTEM.

EARLIER VERSIONS OF THE REFERENCE DISKETTE ARE COMPATIBLE WITH THIS EPROM MODULE, HOWEVER THE SYSTEM PARTITION (REFERENCE DISKETTE) MUST BE UPGRADED TO VERSION 1.3X OR LATER (TYPE 1) OR VERSION 1.2X (TYPE 2) TO SUPPORT THESE ENHANCEMENTS.

ALL AFFECTED PROCESSOR BOARD FRU'S HAVE BEEN UPGRADED TO THE CURRENT LEVEL POST/BIOS CODE VERSION.

NOTICE: THIS FREE UPGRADE WILL NO LONGER BE AVAILABLE AFTER MAY 1, 1996.

*** TRADEMARK OF INTEL INC.

SAS KEYWORDS:

PSY2	PSY2FDSK	PSY2PROG	D/T8590
PS2	PS/2	SCSI	BIOS
IML	MICRO	CODE	D/T8595
2GB	8595	SCSI2	FAST
WIDE			

1.4.248 8590/95 PROCESSOR BOARD INSTALLATION

Record number: H105822

Device: D/T8590
Model: M
Tip key: 018
Date created: 092/08/14
Date last altered: A92/09/04

8590 AND 8595 SYSTEMS MAY EXPERIENCE HIGHLY INTERMITTENT AND DIFFICULT TO DIAGNOSE SYSTEM PROBLEMS DUE TO PROCESSOR BOARDS WHICH HAVE NOT BEEN FULLY SEATED INTO THE SYSTEM BOARD SOCKET.

THESE PROCESSOR BOARDS HAVE "LEVERS" ON THE CORNERS OF THE BOARD. THE PURPOSE OF THE LEVERS IS TO REMOVE (UNSEAT) THE BOARD FROM THE PLANAR. THE LEVERS SHOULD NEVER BE USED TO INSTALL OR RE-INSTALL THE BOARD.

17 TO 22 POUNDS OF FORCE ARE REQUIRED TO FULLY SEAT THE PROCESSOR BOARD INTO THE SYSTEM PLANAR. ATTEMPTING TO INSTALL THE BOARD USING THE LEVERS MAY PRODUCE A "SNAP" OR "POP" WHICH IS ASSUMED TO BE THE SOUND OF THE BOARD SEATING. THIS IS OFTEN MISLEADING.

THE CORRECT TECHNIQUE IS AS FOLLOWS:

FIRST, LINE UP THE BOARD OVER THE CORRECT SLOT WHILE LINING UP THE LEVERS TO "ENGAGE" THEIR CONTACT POINTS. THEN, PLACE THE HEEL OF THE HAND IN THE CENTER OF THE BOARD AND PRESS FIRMLY. (THE FLOOR STANDING DESIGN OF THE 8595 WILL PROBABLY REQUIRE SUPPORTING THE SYSTEM UNIT WITH THE OTHER HAND WHILE APPLYING THE INSERTION PRESSURE.)

SAS KEYWORDS:

PSY2	PS2	PS/2	D/T8590
D/T8595	PSY2ERR	8590SYSERR	8595SYSERR

1.4.249 8590/95 SYSTEM HANG WITH IMAGE ADAPTER INSTALLED

Record number: H101665

Device: D/T8550
 Model: M
 Tip key: 130
 Date created: 092/08/10
 Date last altered: A92/08/11

A CP 40 (STAGE 1 VIDEO TEST) POST HANG CONDITION WILL BE EXPERIENCED ON 8590 AND 8595 MODELS OMF AND OMT (50MHZ PROCESSOR BOARD) IF AN EARLY VERSION IMAGE ADAPTER IS INSTALLED.

THESE MODELS MUST HAVE IMAGE ADAPTER/A FRU P/N06G8224 (MARKETING OPTION P/N'S 35G4712, 35G4713, OR 35G4714). THIS FRU PART NUMBER IS NOT LISTED IN THE 8590/95 HMS MANUAL DATED JULY 1992.

FRU	DESCRIPTION	COMMENTS
P/N06G8224	IMAGE ADAPTER/A	USE ON 8590/95 MODELS OMF AND OMT (50 MHZ, P9)
THE FOLLOWING IMAGE ADAPTERS WILL NOT FUNCTION IN THE 50 MHZ MODELS OF THE 8590 AND 8595:		

FRU P/N06G8223	FRU P/N07F2481
FRU P/N06G8221	FRU P/N07F2508

* THE 8590/95 HMS WILL BE UPDATED AT ITS NEXT RELEASE.

8590 AND 8595 SYSTEMS WHICH ARE BEING UPGRADED TO 50MHZ BY A SALES FEATURE (P9 UPGRADE LABEL) AND WERE PREVIOUSLY RUNNING WITH AN EARLY VERSION OF IMAGE ADAPTER/A, WILL REQUIRE THE CURRENT VERSION.

SAS KEYWORDS:

CP40	PSY2	PS2	PS/2
D/T8590	D/T8595	PSY2DISP	PSY2ADPT
8590SYSADPT	8595SYSADPT	8590SYSDISP	8595SYSDISP
8595SYSERR	CP-40	PSY2ERR	8590SYSERR

1.4.250 8590/95, 486SX-25MHZ DISKETTE DATA LOSS

Record number: H025397

Device: D/T8595
 Model: M
 Tip key: 012
 Date created: 093/04/02
 Date last altered: A93/04/05

THE FOLLOWING INFORMATION WILL AID IN THE PREVENTION OF FAILURES WHILE USING THE VERIFY FUNCTION DURING "DISKETTE LIKE OPERATIONS" THIS PROBLEM MAY ALLOW BAD DATA TO BE READ FROM OR WRITTEN TO A DEVICE WITHOUT ANY ERROR INDICATION OR OTHER EVIDENCE OF SYSTEM FAILURE.

* "DISKETTE-LIKE OPERATIONS" ARE DEFINED AS OPERATIONS ON ANY DEVICE ATTACHED TO THE DISKETTE DRIVE CONTROLLER AND ARE "SEEN" BY THE SYSTEM AS A DISKETTE DRIVE, SUCH AS SOME TAPE BACKUP DEVICES.

THE AFFECTED SYSTEMS ARE:

MODELS	SERIAL NUMBER RANGE
8590-0H5	23-XPW00 THROUGH 23-XVH33
8590-0H9	23-YAT00 THROUGH 23-YKM99
8595-0H9	23-KL700 THROUGH 23-KW431
8595-0HF	23-KZ700 THROUGH 23-LF657

SYSTEMS WHICH HAVE BEEN UPGRADED TO THE 486SX/25MHZ PROCESSOR COMPLEX THROUGH INSTALLATION OF AN IBM PROCESSOR UPGRADE OPTION CAN BE IDENTIFIED BY A SYSTEM LABEL DESIGNATION OF P5 or P6. THE SYSTEM LABEL IS FOUND TO THE RIGHT OF THE EXISTING SERIAL NUMBER.

ONLY SYSTEMS WHICH HAVE THE 486SX/25MHZ PROCESSOR BOARD INSTALLED AND HAVE VERSION 1.00 OR 1.01 SYSTEM PARTITION ARE SUBJECT TO THIS PROBLEM.

THE PROCESSOR BOARD MAY BE IDENTIFIED BY:

- FRU P/N92F0079 ON THE BOARD
- SUB-MODEL BYTE CODE 58, WHICH APPEARS ON THE SYSTEM PARTITION "DISPLAY REVISION LEVELS" SCREEN.

THE SYSTEM PARTITION SHOULD BE "RESTORED" WITH A CURRENT LEVEL REFERENCE DISKETTE.

AS A RESULT OF THIS PROBLEM, IBM HAS WITHDRAWN SUPPORT FOR THE FOLLOWING OPTIONS IN THE 8590 AND 8595 486/25MHZ MODELS:

IBM PS/2 5.25 inch Diskette Adapter/A (#1007) (6451007)
 IBM PS/2 4869-001 360KB External Diskette Drive
 IBM PS/2 4869-002 1.2MB External Diskette Drive

THESE OPTIONS USE A SEPARATE DEVICE DRIVER (NOT BIOS), AND DMA VERIFY. AS A RESULT, THEY ARE EXPOSED TO THE PROBLEM EVEN AFTER THE SYSTEM PARTITION IS UPDATED. CUSTOMERS WITH THIS CONFIGURATION SHOULD BE DIRECTED TO THEIR POINT OF SALE FOR ASSISTANCE. APPROPRIATE MARKETING INFORMATION HAS BEEN UPDATED.

THIS TIP REPLACES EXPIRED ECA100

SAS KEYWORDS:

PSY2	PS2	D/T8590	D/T8595
PSY2DSKT	8590SYSDSKT	8595SYSDSKT	DIAGNOSTICS
REFERENCE	ECA 100		

1.4.251 8590/95, 9590/95 8641 REFERENCE DISKETTE ID MATRIX

Record number: H095936

Device: D/T8590
 Model: M
 Tip key: 010
 Date created: 092/01/21
 Date last altered: A96/04/03

THERE ARE FOUR TYPES OF 859X/959X REFERENCE DISKETTES (LABELED 1, 2, 3 OR 4). THE PROCESSOR BOARD INSTALLED IN THE SYSTEM DETERMINES WHICH TYPE REFERENCE DISKETTE (SET) TO USE. A REFERENCE DISKETTE SET CONSISTS OF AN IML DISKETTE OF THE APPROPRIATE TYPE AND THE COMMON DIAGNOSTIC DISKETTE (see note below).

THE FOLLOWING METHODS MAY BE USED TO IDENTIFY THE TYPE OF PROCESSOR BOARD INSTALLED AND THE REFERENCE DISKETTE REQUIRED:

A. DISPLAY REVISION LEVELS

GO TO THE SYSTEM PARTITION MAIN MENU AND SELECT "DISPLAY REVISION LEVELS" ("MORE UTILITIES" ON LATER VERSIONS). NOTE THE SUBMODEL CODE DISPLAYED ON THE SCREEN AND REFER TO THE CHART BELOW.

B. FRU PART NUMBER.

READ THE FRU PART NUMBER ON THE PROCESSOR BOARD AND REFER TO THE CHART BELOW.

C. UPGRADE LABEL.

CHECK THE SYSTEM FOR AN ADDITIONAL LABEL NEXT TO THE FRONT SERIAL NUMBER. IF THE SYSTEM IS UPGRADED WITH A DIFFERENT PROCESSOR BOARD, AN UPGRADE LABEL (MARKED P1-PE) IS ADDED.

USE THE FOLLOWING MATRIX TO IDENTIFY WHICH PROCESSOR BOARD IS INSTALLED AND WHICH REFERENCE DISKETTE IS REQUIRED:

MODEL	90 SUB MODEL CODE	95 SUB MODEL CODE	OTHER MODEL CODE	PROCESSOR BOARD FRU NUMBER & DESCRIPTION	UPGRADE LABEL NUMBER	REF. DSKT TYPE
0GX	2F	2E		P/N92F0049 486/20MHZ		1
0JX	11	14		P/N64F0201 486/25MHZ	P1	1
0KX	13	16		P/N64F0198 486/33MHZ	P2	1
-	2B	2A		P/N92F0048 486/50MHZ	P3	1
0GX	2D	2C		P/N92F0065 486SX/20MHZ	P4	1
0HX	57	58		P/N92F0079 486SX/25MHZ	P5	2
0HX	59<	5A<		P/N92F0079 486SX/25MHZ	P6	2
0LX	3F	40		P/N92F0161 486DX 25/50	P7	2
0HX	5B	5C		P/N92F0079 486 25/50	P8	2
-	37	36		P/N92F0145 486DX 33/66	P9	1
0MX	29	28		P/N57F1597 486 50	PA	3
XNX	43	42	44	P/N61G2343 486DX2 (HF)	PB	4
XPX	45	46	47	P/N52G9362 586 60 (GS)	PC	4
XQX	45	46	47	P/N92F0120 586 66 (GS)	PE	4
YYX			47	P/N06H3739 586 90	(8641)	4

< ALSO REQUIRES 487SX COPROCESSOR (FRU P/N92F0100)

NOTE: SOME TYPE 1 REFERENCE DISKETTES WERE PRODUCED WITH A SMALL "1" IN THE UPPER RIGHT CORNER OF THE LABEL. THESE DISKETTES ARE IDENTICAL TO THE DISKETTES WITH A LARGE "1." EARLY TYPE "1" DISKETTES DID NOT HAVE A NUMBER PRINTED ON THE LABEL (VERSIONS (1.01, 1.02 & 1.03)).

Note: COMMON DIAGNOSTIC DISKETTE

AS OF 10/01/95, THE COMMON DIAGNOSTIC DISKETTE VERSION 2.33 IS THE CURRENT VERSION. EARLIER VERSIONS HAVE KNOWN "BUGS". SUCH AS 174 ERRORS.

THE 8641 SERVER 500 USES THE SAME SYSTEM BOARD AS THE 9595 AND THE 9595A (FRU P/N92F2623). HOWEVER THE CABINET IS SIMILAR IN EXTERNAL APPEARANCE (ONLY) TO THE 8640 PCSERVER.

FLASH BIOS:

TYPE 4 PROCESSOR BOARDS USE FLASH BIOS. BIOS LEVEL 08 IS THE MOST CURRENT VERSION. FLASH BIOS VERSIONS 02 AND 03 ARE AVAILABLE FROM THE NATIONAL SUPPORT CENTER BBS. CUSTOMERS MAY CONTACT THE IBM PC COMPANY BULLETIN BOARD SYSTEM AT: 1 - 919 - 517 - 0001 TO OBTAIN THE FILES. RETAIN RECORD # H126229 SHOULD BE REVIEWED FOR SPECIFIC DETAILS ON FLASH BIOS VERSIONS.

THE FLASH UPDATE IS CUSTOMER INSTALLABLE. CUSTOMERS SHOULD BE ADVISED TO CONTACT THE PC COMPANY HELPCENTER AT 800-772 - 2227 IF ASSISTANCE IS REQUIRED IN GETTING OR INSTALLING THE APPROPRIATE UPDATE.

SAS KEYWORDS:

PSY2	PSY2DIAG	D/T8595	8590SYSDIAG
8595SYSDIAG	D/T8590	D/T9590	D/T9595
D/T9595A	PENTIUM	D/T8641	500
000174	000174000	D/T8640	300
SERVER	320		

1.4.252 8590, 8595 POST MEMORY ERRORS&COLON. ADDITIONAL INFORMATION

Record number: H097077

Device: D/T8590
 Model: M
 Tip key: 013
 Date created: 092/04/15
 Date last altered: A92/04/15

POST (POWER-ON SELF TEST) ERROR CODES 000110XX AND 0002XXXX INDICATE PROBABLE MEMORY FAILURES. ADDITIONAL INFORMATION CAN BE DETERMINED FROM THE 7TH AND 8TH CHARACTER OF THE POST ERROR CODE. FOR EXAMPLE:

ERROR CODE: 000110XX
 CHARACTER POSITION: 12345678

THE 7TH CHARACTER OF THE ERROR CODE INDICATES THE LOCATION OF THE FAILING MEMORY AS SHOWN BELOW:

8590 SYSTEMS	8595 SYSTEMS
0-UNDETERMINED	0-UNDETERMINED
1 - RISER CARD J11, SIMM SOCKET J1	1-PLANAR SIMM SOCKET A1
2 - RISER CARD J11, SIMM SOCKET J3	2-PLANAR SIMM SOCKET B1
3 - RISER CARD J11, SIMM SOCKET J2	3-PLANAR SIMM SOCKET A2
4 - RISER CARD J11, SIMM SOCKET J4	4-PLANAR SIMM SOCKET B2
5 - RISER CARD J14, SIMM SOCKET J1	5-PLANAR SIMM SOCKET A3
6 - RISER CARD J14, SIMM SOCKET J3	6-PLANAR SIMM SOCKET B3
7 - RISER CARD J14, SIMM SOCKET J2	7-PLANAR SIMM SOCKET A4
8 - RISER CARD J14, SIMM SOCKET J4	8-PLANAR SIMM SOCKET B4
C-MICRO CHANNEL ERROR (MEMORY EXP)*	SAME AS 8590
U-UNDETERMINED ORIGIN	SAME AS 8590

FOR 0,C AND U CODES, THE MAINTENANCE PACKAGE SHOULD BE USED TO DETERMINE CAUSE.

* NOTE: MEMORY EXPANSION ADAPTERS ARE ONLY SUPPORTED ON 8590 SPECIAL BID SYSTEMS WITH 386 PROCESSOR BOARDS (FRU P/N33F8454).

THE 8TH CHARACTER POSITION IS AN IDENTIFIER FOR PLANAR MEMORY. THIS WILL REFLECT TYPE, SIZE AND SPEED OF SIMMS, WHEN IDENTIFIABLE.

0-UNDETERMINED TYPE IF 7TH CHARACTER IS "0"
 0-PARITY TYPE SIMM, 4MB, 80NS, IF 7TH CHARACTER IS "1-8"
 1 - N/A
 2 - N/A
 4 - PARITY TYPE SIMM, 4MB, 70NS
 5 - PARITY TYPE SIMM, 2MB, 85NS
 6 - PARITY TYPE SIMM, 1MB, 85NS
 8 - PARITY TYPE SIMM, 8MB, 85NS
 9 - PARITY TYPE SIMM, 2MB, 80NS
 B-PARITY TYPE SIMM, 8MB, 70NS
 C-PARITY TYPE SIMM, 2MB, 70NS
 D-N/A
 E-N/A

NOTE: ALL OTHER CHARACTERS IN THIS POSITION ARE RESERVED.
 NOTE: 8590 AND 8595 SYSTEMS DO NOT SUPPORT MEMORY SLOWER THAN 85 NANoseconds.

USING THE INFORMATION PROVIDED, REPLACE THE APPROPRIATE MEMORY SIMM. CONFIRM CORRECT OPERATION BY RUNNING THE MEMORY DIAGNOSTICS.

SAS KEYWORDS:

PSY2	PSY2MEM	PS2	PSY2ERR
D/T8590	8590SYSTEMEM	8595SYSTEMEM	PSY2DIAG
8590SYSERR	8590SYSDIAG	8595SYSERR	8595SYSDIAG
PS/2	110	211	111
201	210	215	216
225	226	240	255
20X	295	252	296
298	D/T8595		

1.4.253 8595 PRINT OPERATION FAILS W/ BAYTECH PRINT MASTER SWITCHER

Record number: H101985

Device: D/T8595
Model: M
Tip key: 009
Date created: 092/07/21
Date last altered: A92/07/29

A solid or intermittently failing print operation may occur when using any *BayTech print switcher with parallel ports, such as BayTech's: 700 or 800 Series, LaserShare, and their mod 24 Data Exchange System. A symptom could be printer out of paper or no printer communication. If this occurs, remove the BayTech device from the circuit by cabling the printer directly to the system unit and retry the operation. If the printer now prints have the customer call BayTech at 1 - 800-523 - 2702. An update is available for the BayTech system. If the problem is still present after the BayTech device is removed from the system follow normal diagnostic procedures to determine the failing component.

*"BayTech" is a registered trademark of the BayTech Corporation.

SAS KEYWORDS:

PSY2	PSY2OEM	PSY2PRT	8595SYSBRD
PSY2BRD	8595SYSPRT	8595SYSOEM	OEM

1.4.254 8595/9595 SYSTEM BOARD PART NUMBER

Record number: H125677

Device: D/T8595
Model: M
Tip key: 017
Date created: 094/11/29
Date last altered: A94/11/29

There has been some confusion in the HMM, S52G-9971-02, with system boards on pages 273 and 278.

The 8595 and 9595 XP 486 system has only one serial and one parallel port on the system board. It is FRU P/N33F5717.

The 9595 (non-XP 486) and Server 95 systems (9595A) have two serial and two parallel ports on the system board. It is FRU P/N92F2623.

The referenced documentation will be modified during the next revision.

SAS KEYWORDS:

PSY2SYSDOC	PSY2PARTS	D/T9595	PSY2
PSY2PART	PLANAR	95A	D/T9595A
9595A	PSY2BRD		

PSY2 RETAIN TIPS

8602 POST ERROR ON AN 8530 286 WITH a 4717 OR 4718 ATTACHED

1.4.255 8602 POST ERROR ON AN 8530 286 WITH a 4717 OR 4718 ATTACHED

Record number: H031192

Device: D/T8530
Model: M
Tip key: 032
Date created: 089/09/11
Date last altered: A89/11/15

AN 8602 POST ERROR CAN OCCUR WHEN AN IBM 4717 MAGNETIC STRIPE READER OR AN IBM 4718 PIN KEYPAD IS ATTACHED TO AN 8530 286 MOUSE PORT. THIS ERROR MAY BE CIRCUMVENTED BY USING THE "Y" CABLE WHICH IS USED TO ATTACH BOTH A 4717 AND A 4718 TO THE SAME PORT. CONTACT THE ACCOUNT MARKETING REPRESENTATIVE AND HAVE THEM ORDER THE "Y" CABLE, FEATURE NUMBER 8634.

THE CURRENT PLAN IS TO MAKE A CABLE THAT WILL CORRECT THIS PROBLEM AVAILABLE FOR FRU STOCK. THIS TIP WILL BE UPDATED WITH THE FRU PART NUMBER AT THAT TIME.

CONTACT BLAIR FOSTER IN CHARLOTTE FOR FURTHER DIRECTION
TIE LINE 794 - 8532

SAS KEYWORDS:

PSY2 PSY2MISC PSY2ERR 8530SYSERR
8530SYSMISC

8602 POST ERROR ON AN 8530 286 WITH a 4717 OR 4718 ATTACHED

1.4.256 8602 POST ERROR ON AN 8530 286 WITH a 4717 OR 4718 ATTACHED

Record number: H094229

Device: D/T8530
Model: M
Tip key: 042
Date created: 091/08/06
Date last altered: A92/09/04

AN 8602 POST ERROR CAN OCCUR WHEN AN IBM 4717 MAGNETIC STRIPE READER OR AN IBM 4718 PIN KEYPAD IS ATTACHED TO AN 8530 286 MOUSE PORT. THIS ERROR MAY BE CIRCUMVENTED BY USING THE "Y" CABLE WHICH IS USED TO ATTACH BOTH A 4717 AND A 4718 TO THE SAME PORT. CONTACT THE ACCOUNT MARKETING REPRESENTATIVE AND HAVE THEM ORDER THE "Y" CABLE, FEATURE NUMBER 8634.

PLEASE REFER TO TIP 002 FOR DEVICE TYPE 4718 OR SEARCH ON "R H034710".

SAS KEYWORDS:

PSY2 PSY2MISC PSY2ERR 8530SYSERR
8530SYSMISC

PSY2 RETAIN TIPS

8602 POST ERROR ON AN 8530 286 WITH a 4717 OR 4718 ATTACHED

1.4.257 8602 POST ERROR ON AN 8530 286 WITH a 4717 OR 4718 ATTACHED

Record number: H103962

Device: D/T8530
Model: M
Tip key: 045
Date created: 092/08/13
Date last altered: A92/08/13

AN 8602 POST ERROR CAN OCCUR WHEN AN IBM 4717 MAGNETIC STRIPE READER OR AN IBM 4718 PIN KEYPAD IS ATTACHED TO AN 8530 286 MOUSE PORT. THIS ERROR MAY BE CIRCUMVENTED BY USING THE "Y" CABLE WHICH IS USED TO ATTACH BOTH A 4717 AND A 4718 TO THE SAME PORT. CONTACT THE ACCOUNT MARKETING REPRESENTATIVE AND HAVE THEM ORDER THE "Y" CABLE, FEATURE NUMBER 8634.

THE CURRENT PLAN IS TO MAKE A CABLE THAT WILL CORRECT THIS PROBLEM AVAILABLE FOR FRU STOCK. THIS TIP WILL BE UPDATED WITH THE FRU PART NUMBER AT THAT TIME.

Note: this situation may apply to other system units such as 8557.

SAS KEYWORDS:

PSY2 PSY2MISC PSY2ERR 8530SYSERR
8530SYSMISC

1.4.258 8604 MONOCHROME MONITOR

Record number: H013208

Device: D/T8604
Model: M
Tip key: 001
Date created: 089/03/21
Date last altered: A89/03/21

THE 8604 MONOCHROME DISPLAY (FRU P/N6398267) PARTS INFORMATION CAN BE FOUND IN THE HARDWARE MAINTENANCE SERVICE MANUAL FOR THE ACADEMIC SYSTEM 6152 (FORM NUMBER S68X2327).

SAS KEYWORDS:

PSY2DISP 8604DISP PSY2

1.4.259 8640 BIOS REVISIONS (PC SERVER 300)

Record number: H127771

Device: D/T8640
 Model: M
 Tip key: 007
 Date created: 095/05/25
 Date last altered: A96/05/31

Note: This tip does not apply to Server 320 Models
 which have Dual Pentium processor sockets.

Server 300 (8640) systems are manufactured in two basic models:

Models xNx have the 486-DX2 33/66 system board, FRU P/N71G0033.
 Models xPx have the 60 MHZ Pentium system board, FRU P/N71G0747

Both types of system board FRU's are supplied WITHOUT the
 processor chip, which is a separate FRU part number.

Note: Use care when changing the Flash/BIOS version of the
 Server 300. It is possible to install the 486 system
 board BIOS on the Pentium system board, and Vice-versa.
 If this happens the system board will hang immediately
 and the diskette drive will be inoperable, preventing
 the installation of the correct BIOS.. Replacement of
 the system board or BIOS module will be required to fix
 the system.

BIOS REVISIONS FOR THE 486DX2-33/66 MHZ SYSTEM BOARD:

M4PE_T40 - General Announcement Version.

 M4PE-T48 - Provided the following upgrades and fixes:

1. Enable SETUP with new Benchmarq chip.
2. Two PCI adapter VGA support.
3. Flush keyboard buffer prior to password request.
4. Monochrome cards now supported.
5. Fix EISA CMOS error (Can't clear EISA CMOS with some SRAM
brand installed).
6. Implemented Memory gap option for Banyan's ICA adapter.
7. Added support for 3 PCI busmasters instead of 2.
8. The SETUP MENU was changed from 3 screens to 2.

 M4PE_T55 - Current Version (BBS file name 300BIOSN.DSK)

1. Support for OEM PCI RAID with PCI Ethernet card installed.
2. Corrects various networking problems (hangs).
3. Support for Xerox ACP adapter and Cornerstone DualPage
120i and 150i multi-function display adapters.
4. Correct password message.
5. Support for IBM SCSI-2 F/W PCI-Bus RAID Adapter option.
6. Support for the IBM Token Ring PCI Adapter (FRU P/N04H8098,
Option 04H8098, Feature # 4182 - and -
The IBM 32 - bit Ethernet EISA adapter, FRU P/N04H6540, Option
P/N 04H6490, feature # 6490.

BIOS REVISIONS FOR THE 60 MHZ PENTIUM SYSTEM BOARD:

M5PE_T38 - General Announcement Version.

 M5PE_T44 - implemented the following changes:

1. 2 PCI Video Cards are now supported in the system.
2. Modified operation of PCI BUS.
3. Clear Key Board buffer before the password is asked for.
4. Enable SETUP with new RTC chip.
5. Monochrome cards now supported.
6. Implemented Memory gap option for Banyan's ICA adapter.
7. Added support for 3 PCI busmasters instead of 2.
8. Changed SETUP menu from 3 screens to 2.
9. Corrected EISA CMOS clearing problem.

 M5PE_T53 - Current BIOS version (BBS file name 300BIOSP.DSK)

1. Change PCI IRQ default from NONE to IRQ 15.
2. Includes fixes for some known networking problems, including
hangs during file transfers.
3. Support for OEM PCI RAID with PCI Ethernet card installed.
4. Corrected the Xerox ACP card problem with the memory gap
feature.

1.4.260 8640 BIOS REVISIONS (PC SERVER 320)

Record number: H06176

Device: D/T8640
 Model: M
 Tip key: 009
 Date created: 095/07/25
 Date last altered: A96/12/20

Note: This tip only applies to the PC Server 320, which has Dual Pentium processor sockets. Do not confuse the PC SERVER 300 with the PC SERVER 320 (both of which are machine type 8640). BIOS revision information for the PC Server 300 may be found in RETAIN Record # H127771.

Server 320 (8640) systems are manufactured in two basic models:

1. PCI/EISA.
2. PCI/MicroChannel.

Models 0xx and 1xx are Dual Pentium PCI/EISA systems.
 Models Mxx are Dual Pentium PCI/MicroChannel systems.

PCI/EISA models use system board FRU P/N06H2173.
 PCI/MicroChannel models use system board FRU P/N96G1340.
 All system board FRU's are without the processor chip and heat sink, which are separate FRU P/N's.

BIOS REVISIONS FOR THE PC SERVER 320 PCI/EISA MODELS

The filename is 76H4891.EXE ON THE IBM PC Co. BBS
 NOTE: requires EISACFG.EXE V4.02 also on the BBS

M54Pe_05 - General Announcement Version. (Non-RAID Array models)

M54Pe_07 - Initial Ship level for RAID Array models.
 Support for IBM SCSI-2 F/W PCI RAID Adapter added.

M54Pe_09J - Includes the following changes:

1. Corrects an installation problem encountered during the installation of Windows NT Version 3.51 on the PC SERVER 320 in uni-processor mode,
2. Supports the enabling of memory gap in setup.
3. Supports the century rollover for the system clock.
4. PCI SCSI ROM scan is now in order of F, E, D. The slot closest to the power supply first and the shared slot last.

M54Pe_09N

Includes the following changes:

1. Changed the message "Previous boot incomplete ..." to, "Previous Boot Incomplete. BIOS defaults used (cache disabled). Reboot to restore prior configuration."
2. Fixed Numlock problem PTR 37294
3. Fixed serial ports problem PTR 37188
4. Fixed swapped floppy problem PTR 37294
5. Moved MP table to accomodate PTR 35953
6. Support for 133 MHz processors

M54Pe_15T3B

NOTE: requires EISACFG.EXE V4.02 also on the BBS

M54Pe_16T3B - CURRENT VERSION (PCI/EISA) 76H4891.EXE

NOTE: requires EISACFG.EXE V4.02 also on the BBS

1. Corrects PCI bridge error with triple LanStreamer adapter.

BIOS REVISIONS FOR THE PC SERVER 320 PCI/MICRO-CHANNEL MODELS

The filename is 320BIOSM.EXE ON THE IBM PC Co. BBS

VERSION 1.03 09A - Was the initial version.

VERSION 1.03 11A - Supported monochrome monitors.

VERSION 1.20 17A

Contains enhancements and/or fixes in the following areas:

- PCI adapter support (memory enable bit correction)
- Century byte problem with Windows NT
- PCI reset on warm boot
- support for 166 & 200MHz processors

VERSION 1.20 19A

- required if using Mainframe-MicroChannel adapter

 VERSION 2.11.01 20A

- fix for intermittent cold boot hangs
 - flash progress indication during flash update

 VERSION 2.11.01 22A -

- support for MicroChannel ISDN adapter

 VERSION 2.11.01 23A - CURRENT VERSION (PCI/MCA) 320BIOSM.EXE

- fix for system hangs on "Remove DOS" in Netware 4.1
 - added Setup feature to allow system to be biased to Micro-
 Channel (MCA) bus if MCA streaming adapters are installed.
 - added SCSI POST support for SCSI-2 F/W adapter (FRU 92F0160)

-----IMPORTANT-----

| Diskette images are customer installable. Customers should |
 | review any "README" files located on the diskette for |
 | installation information. Contact the IBM PC HelpCenter at |
 | 800-772 - 2227 if download/installation assistance is needed. |

| IBM PC Server files are located in Directory 22 on the PC |
 | Company Bulletin Board Service (BBS) at 1-919-517-0001 or |
 | tieline 255-0001. |

| The files may also be downloaded via the Internet from the |
 | IBM PC File Library by searching the following Internet URL: |
 | http: //www.pc.ibm.com/files.html |

SAS KEYWORDS:

PSY2	SERVER	8640	PCSERVER
300	PC	PSY2ADPT	PSY2COMM
TR	T/R	RAID	RTC
INTERRUPT	NOT	FOUND	MC
OXX	FLASH		

1.4.261 8640 MOUSE DIAGNOSTICS

Record number: H126414

Device: D/T8640
Model: M
Tip key: 006
Date created: 095/02/14
Date last altered: A95/02/15

QAPlus/Pro diagnostics shipped with the 8640 does not include a diagnostic test for a mouse.

No mouse test is included due to the large variety of "mice" available in the marketplace, all of which come with their own exercisers/diagnostics. No mouse was shipped with the 8640 ship group.

Although there is no actual mouse test, when a mouse driver is loaded QA Plus/PRO will function with it, in effect providing a test.

SAS KEYWORDS:

PSY2	PCSERVER	PC	SERVER
300	PSY2DIAG	POINTING	DEVICE

1.4.262 8640 PCSERVER SETUP UTILITY-DOCUMENTATION OMISSION

Record number: H124642

Device: D/T8640
 Model: M
 Tip key: 002
 Date created: 094/06/28
 Date last altered: A95/07/07

To use the SETUP utility:

On early versions of BIOS:

1. Turn on the Server
2. During the POST memory test, press and then release the SPACE bar; then press and release the CTRL, ALT, and S keys Simultaneously.

--or--

In any DOS full screen, press then release the CTRL, ALT, and S keys simultaneously. (CTRL, ALT, S will not work in an OS/2 DOS box.)

3. The "Standard System Parameters" screen will appear.
4. Follow the instructions on the screen to view or change the configuration.
5. Press ESC from any screen in the setup utility. The "Exiting Setup" pop-up screen will appear.
6. Press F4 to save the configuration information and restart the server.

On later versions of BIOS:

Press CTRL/ALT/S immediately after the BEEP at the end of POST to access the Setup Utility.

When configuring an 8640 PCSERVER, you must correctly exit the SETUP utility in order to save the configuration information.

NOTES:

- A. If a configuration error occurs during POST, a configuration error message appears before the operating system loads. (Press F1 to bypass the error.)
- b. DO NOT start the Setup Utility while using the EISA Configuration program (diskette).

This information was not included in the 8640 HMM (Hardware Maintenance Manual). It will be included in future revisions. This information may be found in the 8640 User's Handbook, (83G8040) pages 94 through 100.

SAS KEYWORDS:

PSY2	PCSERVER	PC	SERVER
8640	CONFIGURATION	PSY2OPER	PSY2DOC
CONFIG	OS2	300	

1.4.263 8640/8641 MCA PROCESSOR PLANAR JUMPER SETTINGS

Record number: H135712

Device: D/T8640
 Model: M
 Tip key: 014
 Date created: 096/12/10
 Date last altered: A96/12/13

For the PC Server 320 MicroChannel (MCA) Systems, there are two System board FRUs:

FRU p/n96G1340 supports 75MHz and 90MHz only.
 FRU p/n96G3694 supports 75MHz, 90MHz, 100MHz, and 133MHz.

For the PC Server 520 MicroChannel (MCA) Systems, there is one System board FRU:

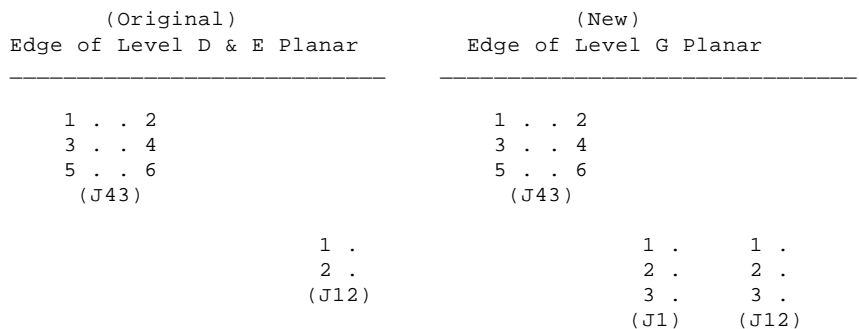
FRU p/n96G2648 supports 75MHz, 90MHz, 100MHz, and 133MHz.

In addition there are two versions of 96G3694 and 96G2648:
 Original planar (Level D & E): No J1, J12 (2-pin), J43 (6-pin).
 New planar (Level G): J1 (3-pin), J12 (3-pin), J43 (6-pin).

On the new planar (Level G), a new jumper J1 (3-pin) was added AND J12 was changed from a 2-pin to a 3-pin jumper.
 Jumpers J1, J12 and J43 control the processor speed.

J1 (new planar) is located to the left of the processor and J12. J12 is located to the left of the processor.
 J43 is located a little less than halfway down the system board beneath the processors. It has three double jumpers (6-pins) corresponding to each oscillator located right beneath the processors. The three oscillators from left to right are 50, 60, and 66 MHz. When you jumper the pins, you are grounding its corresponding oscillator thus disabling it.

Below are diagrams indicating the pin orientation and numbering scheme with respect to the edge of the planar. Refer to the diagram on the system frame or door for additional information.



	(Original) Level D	(Original) Level E	(New) Level G
FRU	96G1340 (320) N/A 96G2648 (520)	N/A 96G3694 (320) 96G2648 (520)	N/A 96G3694 (320) 96G2648 (520)
Jumper	J12 J43 2 - pin 6-pin	J12 J43 2-pin 6-pin	J1 J12 J43 3-pin 3-pin 6-pin
Processor			
50/75MHz	open 3-4,5-6	open 3-4,5-6	1-2 1-2 3-4,5-6
60/90MHz	open 1-2,5-6 (320 only)	open 1-2,5-6	1-2 1-2 1-2,5-6
66/100MHz	open 1-2,3-4 (520 only)	open 1-2,3-4	1-2 1-2 1-2,3-4
66/133MHz	NOT Supported	1-2 1-2,3-4	1-2 2-3 1-2,3-4

SAS KEYWORDS:

PSY2	PSY2BRD	PSY2DOC	PSY2PART
UNCLASSIFIED	96G1340	96G3694	96G2648
MULTIPLIER			

1.4.264 8641/8642 RAID CONTROLLER TO BACKPLANE CABLE

Record number: H137448

Device: D/T8641
Model: M
Tip key: 017
Date created: 097/04/17
Date last altered: A97/04/18

When troubleshooting RAID subsystem errors, including tape, hard drive, and CD-ROM errors on PC Server 500 (8641) and PC Server 720 (8642) RAID systems, do the following:

Inspect the four digit date code (ww/yy or wyyy) on the RAID controller to Backplane cable FRU p/n82G3613. If the date code is earlier than (13/95 or 1395), replace the cable with FRU p/n82g3613.

Although the FRU number has not changed, the affected cables have been cleared from stock.

The first two numbers (ww) are the week and the second two numbers (yy) are the year of manufacture.

Cables manufactured before (13/95 or 1395) have end caps which may not be securely latched.

All current inventory should be dated (13/95 or 1395) and later.

SAS KEYWORDS:

PSY2	PSY2PART	PSY2ERR	UNCLASSIFIED
DDD	DEFUNCT	D/T8642	ERROR

1.4.265 8644 HARDFILE INSTALLATION

Record number: H163426

Device: D/T8644
Model: M
Tip key: 004
Date created: 098/04/15
Date last altered: A98/04/20

Machines Affected: 8644 -All models

The Netfinity 3500 User Guide publication indicates two different methods for installing an optional hardfile to the 8644 system. One method utilizes the small blue colored rubber grommets which are already attached to the DASD bays. The other method does not.

It is recommended that the rubber grommets should be used for all optional hardfile installations into the 8644. Use of these grommets will reduce the amount of acoustic noise from the hardfile.

Furthermore the grommets will require a slightly longer screw to install the hardfile.

A spare supply of the screws are installed in every 8644 system in a spare DASD tray which is attached to one of the top DASD bays.

SAS KEYWORDS:

FTSGNK	D/T8644	HARD FILE	DASD
NETFINITY	SERVICER ONLY	PSY2	PSY2HARDWARE
GROMMETS			

1.4.266 95XX BATTERY LIFE EXPECTANCY, VOLTAGE

Record number: H103746

Device: D/T95XX
 Model: M
 Tip key: 004
 Date created: 093/01/21
 Date last altered: A93/02/10

The battery used on the 95XX products has a normal life expectancy of five to seven years. The life of the battery is directly related to how the machine is used. Battery voltage is consumed only when the system is powered off. Since the battery is a lithium battery, it has a very long shelf life.

For correct machine operation the battery voltage should be between 2.5 volts and 3.7 volts.

To check the battery voltage:

- TURN OFF THE SYSTEM UNIT POWER
- REMOVE THE BATTERY FROM THE BATTERY HOLDER.
- CHECK THE BATTERY FOR A VOLTAGE OF 2.5V - 3.7V DC.

If the battery voltage drops below 2.5 volts, it should be replaced with FRU P/N33F8354.

After replacing the battery, the system unit should be powered on and checked for proper operation.

SAS KEYWORDS:

PSY2	D/T9556	D/T9557	D/T9576
D/T9577	D/T8590	D/T8595	D/T9585
D/T9595	D/T8556	D/T8557	161
ERROR	CONFIGURATION	PSY2ERR	

1.4.267 95XX MODEL MAY CONTAIN 212MB, 245MB OR 270MB HF

Record number: H123109

Device: D/T95XX
 Model: M
 Tip key: 018
 Date created: 094/03/09
 Date last altered: A94/04/14

Due to unforeseen supply constraints IBM is utilizing larger capacity hard drives on some of the current PS/2 desktop systems.

A notice has been inserted in each shipping carton stating that the system was built with a larger hard drive in order to meet marketing demand for this model.

Customers, who transfer existing images to new systems during installation and set up, may experience problems because of the new drives. Depending on the application being used, formatting the new drives to the former size may eliminate the problem. In other cases a second "image" may have to be created and used when installing systems with larger files.

The strategy is as follows:

System	File Transition	Approx. Mfg. Target Date
-----	-----	-----
9576/77	208MB to 245MB 245MB to 270MB	2/11 3/15
9557/9577	540MB to faster 540MB	3/15
9556/9557	104MB to 170MB	3/15
SLC2	208MB to 270MB	3/15
9556/9557	245MB to 270MB	3/31
SLC3		

Servicers should be aware that when contacting a customer or support to pre-determine what size hardfile to bring along, more information than just the model number is needed to make a correct decision. Utilizing the model number only, may not correctly identify the capacity of the hardfile.

Servicers should always order the same size file that is installed in the PS/2. If that size file is not available it will be automatically subbed to the next available size. Hardfiles should be replaced for appropriate error conditions only. They should not be replaced to upgrade size.

The FRU part numbers for the files are as follows:

104MB - P/N95F4748	170MB - P/N71G6550
212MB - P/N95F4749	245MB - P/N71G4875
270MB - P/N82G5930	540MB - P/N61G3788

SAS KEYWORDS:

PSY2	9576	9577	9556
9557	D/T9576	D/T9577	D/T9556
D/T9557	SCSI	MAY	CONTAIN

1.4.268 951X MISSING OR DISTORTED VIDEO

Record number: H10589

Device: D/T9515
 Model: M
 Tip key: 001
 Date created: 092/11/11
 Date last altered: A93/09/22

THE 951X MONITOR DOES NOT ATTACH DIRECTLY TO IBM 85nn PS/2 SYSTEM UNITS. THESE MONITORS MUST BE CONNECTED TO AN XGA-2 DISPLAY ADAPTER/A OR A XGA-2 SUBSYSTEM CHIP SET ON THE SYSTEM BOARD OF THE IBM 95nn SYSTEMS. FURTHER INFORMATION IS CONTAINED IN HONE FOR SUPPORT OF ISO MONITORS.

THE PS/2 9515, 9517 AND 9518 MAY EXHIBIT THE FOLLOWING SYMPTOMS IF NOT CONNECTED TO A PS/2 95XX SYSTEM UNIT OR A PS/2 85XX SYSTEM UNIT VIA THE XGA-2 DISPLAY ADAPTER/A CARD, FRU P/N87F4774:

- POWER LED ON, NO VISIBLE IMAGE DISPLAYED
- DISTORTED VIDEO IMAGES AND/OR COLOR IMPURITY

PS/2 951X DISPLAYS MAY ALSO EXHIBIT THE ABOVE SYMPTOMS IF THE DEVICE DRIVERS REQUIRED BY THE OPERATING SYSTEM ARE NOT INSTALLED. DEVICE DRIVER DISKETTES ARE SHIPPED WITH THE 95XX SYSTEMS AND XGA-2 DISPLAY ADAPTER/A OPTION.

ALL MODELS OF THE PS/2 9515, 9517, AND 9518 REQUIRE THE USE OF THE XGA-2 ADAPTER/A CARD OR THE VIDEO OUTPUT PROVIDED BY THE 95XX SYSTEM UNITS. THE PS/2 951X DISPLAYS ARE ISO (INTERNATIONAL STANDARDS ORGANIZATION) COMPLIANT. ISO DESIGNED DISPLAYS WILL ONLY FUNCTION PROPERLY WHEN ATTACHED TO A SYSTEM UNIT WITH VIDEO OUTPUT SUPPORTING THE ISO VIDEO REFRESH RATES FOR FLICKER FREE PERFORMANCE, SUCH AS THE XGA-2 ADAPTER/A. THIS REQUIREMENT IS EXPLAINED IN THE 951X MARKETING DOCUMENTATION.

THE IMAGE ADAPTER/A, PS/2 DISPLAY ADAPTER, 8514/A ADAPTER, XGA ADAPTER/A OR SYSTEM BOARD MCGA OR VGA PORTS DO NOT PROVIDE THE NECESSARY VIDEO REFRESH RATES TO ALLOW THE 951X DISPLAYS TO FUNCTION AS DESIGNED AT THIS TIME.

IF THE PS/2 951X DISPLAY IS CONNECTED TO THE APPROPRIATE VIDEO ADAPTER INTERFACE AS DESCRIBED ABOVE, AND THE SYMPTOMS MENTIONED IN THIS TIP PERSISTS, UTILIZE NORMAL PROBLEM DETERMINATION PROCEDURES TO ISOLATE THE FAILING FRU.

SAS KEYWORDS:

PSY2 PSY2DISP PSY2ADPT D/T9517
 D/T9518 D/T9515

1.4.269 9515 SERIAL NUMBERS

Record number: H1277

Device: D/T9515
Model: M
Tip key: 003
Date created: 093/05/18
Date last altered: A93/05/18

A LIMITED NUMBER OF 9515 MONITORS WITH A PREFIX OF 55
MAY HAVE A SIX DIGIT SERIAL NUMBER IN PLACE OF A NORMAL
FIVE DIGIT SERIAL NUMBER. TO CORRECTLY REPORT REPAIR
ACTIONS ON THE MONITORS WITH A SIX DIGIT SERIAL NUMBER
THE FIRST "5" FROM THE PREFIX SHOULD BE OMITTED AND
THE NEXT 7 DIGITS RECORDED AS THE SERIAL NUMBER.

EXAMPLE:

55 - 123456 WILL BE REPORTED AS 5123456

SAS KEYWORDS:

PSY2 PSY2DISP PSY2MISC DISPLAY

1.4.270 9517 / 8517 MONITOR ALIGNMENT SERVICE AID

Record number: H124719

Device: D/T9517
 Model: M
 Tip key: 005
 Date created: 094/07/20
 Date last altered: A95/03/06

9517 MONITOR GEOMETRY ADJUSTMENTS:

PREFACE:

*****READ THE FOLLOWING COMMENTS CAREFULLY*****
 Prior to using this procedure, it is STRONGLY recommended that the servicer review RETAIN tip H12816 which is a Service Aid for PS/2 and ValuePoint CRT monitors. The information in the referenced Service Aid will contribute to the understanding of the following alignment procedure. Retain tip H122146 concerned with Monitor "image tilt" is also very informative.

It is MANDATORY that the servicer be familiar with the safety procedures required for servicing CRT monitors.

There are 23 separate adjustments to align geometry on the 9517 monitor. Some of the adjustments must be made in each separate mode. Example; Vertical Size for modes 1, 2, 3, 4, & 5. The servicer must use care be certain that the correct potentiometer (pot) is being adjusted, because the adjustments are sequence sensitive and interactive. While 23 adjustments initially sounds very challenging, following this process will reduce it to a few easily understood procedures. The goal of this Service Aid is to implement a procedure that will allow all servicers to align the 9517 with a customer acceptable result.

The Test Pattern Diskette provides menus for selecting the required test patterns. The programs on the diskette will automatically present all available modes (resolutions) which the monitor and attached video adapter are capable of providing. For example, a 9517 with an XGA-2 Adapter/A, will provide 4 modes with resolutions up to 1024 X 768 pixels interlaced or non-interlaced. (This diskette will not provide all available modes on Valuepoint systems.)

ALL ADJUSTMENTS MUST BE MADE with the MONITOR BRIGHTNESS CONTROL set at the center detent and the CONTRAST CONTROL must be set at MAXIMUM.*

* The brightness control detent is "soft" and may not be easily felt on some monitors. Carefully feel for it in the center of the control (The control on the left is Brightness, the one next to the power switch is Contrast.).

Note: Provide at least 12 inches clearance from other monitors, florescent desk lamps, appliances or other electromagnetic devices, to minimize the influence of unwanted magnetic fields, which could make these adjustments difficult or impossible.

Use only the plastic end of the adjustment tool FRU P/N6247769 for the geometry and focus adjustment procedures. The metal tipped end is used only for adjusting the video card. Adjustments for unsupported modes are not required. However, if the monitor is later attached to an adapter which provides additional modes, further adjustments may be required. For instance, if the monitor is aligned while attached to an XGA-2 adapter (4 modes) and is later attached to an Image Adapter/A (5 modes).

Boot the PS/2 Color Displays Test-Pattern Diskette (part 41G8502 form # S41G-3317).

 NOTE: No other "test pattern diskette" or customer software is supported for use in alignment of monitors. Customer operating systems, software applications and windowing programs are also NOT VALID to make monitor quality evaluations.

Helpful hints:

1. For convenience, copy and enlarge the diagrams in section 8 of the Monitor HMM, which show components and locations.
2. It is presumed that monitor Self Test functions correctly. A great deal can be learned about the current alignment condition of a monitor by simply observing Self Test.
3. Don't spend too much time trying to "force" one adjustment to

be correct or perfect. Move on to the other adjustments and come back to it. Remember; the adjustments are interactive!

START HERE:

Mode 4 Alignment Procedure:

1. Select mode 4 (or mode 3 if mode 4 is not available), then ENTER. The Setup Patterns window will open.
2. Select option 3, pattern C - Full Screen Raster, then press ENTER. A full screen green raster will appear. Now press the space bar 4 times to get a black screen (a blue, red, white, then black full screen raster will appear).
3. Adjust RV508 (G2) until the background raster is barely visible. (The edges of raster can just be seen in dim room lighting. This adjustment will be "refined" later.) (Refer to HMM page 8-14. G2 is located on the analog card just below the video card. (G2 is the primary video brightness. The front panel brightness control is the fine adjustment for it.)

 Note: On new analog card FRU's, G2 is turned all the way down at the factory. This often results in no visible image (or raster) and is often perceived to be a new defective analog card FRU. Turning up G2 slightly should result in a visible raster.

4. Adjust RV506 (H.CENT) until the background raster is centered within the bezel.
5. Now adjust RV508 (G2) again, until the background raster just disappears.
6. Press F3 to return to the Setup Patterns screen.
7. Select option 1, pattern A - Crosshatch. Press ENTER. A green crosshatch appears. (If it is not "true green," don't be concerned. This will be corrected later in the Color Point adjustment procedure.)
8. Adjust the following controls to center the pattern horizontally within the bezel.

Display	Mode 4	Mode 3
8517	RV405 or RV404	RV403
9517	RV404	RV403

9. Adjust RV204 (Vertical Centering) until the pattern is centered vertically within the bezel. (Use a plastic ruler to determine the exact center of the bezel).
10. Adjust the following width control (Horizontal size) until the distance between each vertical edge of the pattern and the bezel is:

5/16" (7.5 mm 0.5 mm) in mode 4, or 1/2" (11 mm +/- 0.5 mm) in mode 3.

Display	Mode 4	Mode 3
8517	RV356 or RV355	RV354
9517	RV356	RV354

11. Adjust the following height controls until the distance between each horizontal edge of the pattern and the bezel is: 5/16" (7.5 mm 0.5 mm) in mode 4, or 1/2" (11 mm +/- 0.5 mm) in mode 3.

Display	Mode 4	Mode 3
8517	RV215 or RV214	RV213
9517	RV215	RV213

Notes: Use care and make sure you are adjusting the correct pot in the next few steps. Refer to figure 8-12 on page 8 - 19 of the Monitor HMM for illustrations of the basic monitor geometry controls and resulting effects.

If one or more of the following adjustments doesn't seem to have enough control, move on to the the others and come

back to it later. Remember, these adjustments are interactive (they affect each other) and one or two of them may be "out" far enough to make others seem "ineffective."

12. Adjust RV202 V.LIN (Vertical Linearity) until the distance between the top and center lines of the crosshatch pattern is the same as the distance between the bottom and center lines of the crosshatch pattern.
13. Adjust RV307 PIN.BAL (Pincushion Balance) until the center vertical line of the crosshatch pattern is straight.
14. Adjust RV305 (S-CORE) until the vertical (left and right) edges of the pattern are straight.
15. Adjust the following pincushion controls until the vertical edges of the pattern are straight.

Display	Mode 4	Mode 3
8517	RV352 or RV351	RV350
9517	RV352	RV350

16. Adjust the following trapezoid controls until the edges of the pattern are parallel.

Display	Mode 4	Mode 3
8517	RV358	RV358
9517	RV359	RV358

17. Adjust RV203 V. ANGLE (Vertical Angle) until the edges of the pattern are vertical.
18. It may be necessary to repeat steps 13 - 17, for RV307, RV305, RV352, RV359 and RV203. Because these adjustments interact with each other, adjust them for the best immediate result, then repeat them until the best overall geometry is achieved.

Mode 4 alignment is now complete. Continue the alignment for Mode 5 if available, or skip to mode 3 and continue.

Mode 5 Alignment Procedure: (Image Adapter/A or equivalent is required)

19. Press F3 to return to the selection menu. Select Mode 5 and press ENTER.
20. Select 1. Pattern A - Crosshatch. Press ENTER; a green crosshatch pattern is visible. Press the space bar 3 times for a white crosshatch pattern.
21. a. Adjust RV353 until the vertical edges of the pattern are straight.
 - B. Set width (RV357) until the distance between each vertical edge of the pattern and the bezel is 5/16" (7.5 mm .0.5 mm.)
 - C. Set height (RV216) until the distance between each horizontal edge of the pattern and the bezel is 5/16" (7.5 mm .0.5 mm).

This completes Mode 5 Alignment.

Mode 3 Alignment Procedure:

22. Press F3 to return to the selection menu. Select Mode 3 and press ENTER.
23. Select 1. Pattern A - Crosshatch. Press ENTER; a green crosshatch pattern is visible. Press the space bar 3 times for a white crosshatch pattern.
24. a. Adjust RV350 (VGA Pincushion Correction) until the vertical edges of the pattern are straight.
 - B. Adjust RV354 (VGA Horizontal Size) until the distance between each vertical edge (side) of the pattern and the bezel is 1/2" (11 mm +/- 0.5mm).
 - C. Adjust RV213 (Vertical Size, Mode 3) until the distance between each horizontal edge (top) of the pattern and the bezel is 1/2" (11 mm +/- 0.5mm).

This completes the Mode 3 Alignment.

Mode 2 Alignment

25. Press F3 to return to the Setup Patterns.
26. Press ESC to return to the selection menu.
27. Select mode 2 and press ENTER. Select option 1, pattern A-Crosshatch. Press Enter, Then Press the space bar 3 times for a white crosshatch pattern.
28. Adjust RV212 (Mode 2 Vertical Size) until the distance between the top edge of the bezel and the crosshatch pattern is 1/2" (11 mm +/- 0.5 mm).

This completes the Mode 2 Alignment.

Mode 1 Alignment

29. Press F3 to return to the Setup Patterns.
30. Press ESC to return to the Selection Menu.
31. Select mode 1. Press ENTER. Select option 1, pattern A-Crosshatch. Press ENTER. Press space bar 3 times for a white crosshatch pattern.
32. Adjust RV211 (Mode 1 Vertical Size) until the distance between the outer edge of the pattern and the bezel is 1/2" (11 mm +/- 0.5 mm).

Note:

If vertical height problems are still encountered, the following vertical adjustments should be repeated with a cross hatch pattern in the mode given.

- RV215 - V. Size Mode 4
- RV202 - V. Linearity Mode 4
- RV204 - V. Centering Mode 4
- RV216 - V. Size Mode 5
- RV211 - V. Size Mode 1
- RV212 - V. Size Mode 2
- RV213 - V. Size Mode 3

33. The Geometry Alignment is now complete, continue with the focus and convergence adjustments as follows:

FOCUS and CONVERGENCE

34. Press F3 to return to the Setup Patterns. Select the highest resolution mode available (mode 5 with Image Adapter/a, mode 4 with XGA-2, etc.)
35. Select Pattern A - Crosshatch and press ENTER. Press the space bar 3 times for a white crosshatch.
36. Adjust the focus control mounted on the bracket on the video card for the best focus of the VERTICAL lines. (The control closest to the neck of the CRT.)
37. Adjust the focus control ON THE SIDE of the EHT transformer to focus the HORIZONTAL lines (figure 8-9, page 8-14 of HMM)
38. Press F3 to return to the Set Up Patterns. Select option 5, Pattern E - Focus Pattern and press Enter. Use this pattern and optimize the adjustments in steps 36 and 37, for the best overall focus settings.
39. Press F3 to return to the Setup Patterns. Select option 1, Pattern A - Crosshatch and press ENTER. Press the spacebar 3 times for a white crosshatch pattern.
40. Adjust the H.STAT control on the bracket on the video card (furthestmost away from the CRT neck) for the best overall convergence. (Red Green and Blue all come together to form white lines.)

This completes the Geometry and Focus Alignment. Continue with the Colorpoint adjustments as follows:

COLORPOINT ALIGNMENT PROCEDURE:

Also referred to as, Video Levels and Cutoff Voltages:

ALL ADJUSTMENTS MUST BE MADE with the Brightness Control set

at center detent and the Contrast Control set at MAXIMUM.

1. Select mode 4 (or mode 3 if mode 4 is not available), then press the Enter key. The Setup Patterns window will open.

Select 3. Pattern C- Full Screen Raster, then press Enter. A full screen green raster will appear. Now press the space bar 4 times to get a black screen (A blue, red, white, then black full screen raster will appear in sequence).

A. Using the metal tipped end of the adjustment tool*, Turn RV014, R.BKG (Red Background) and RV034, B.BKG (Blue Background), located on the back of the video card, fully clockwise.

B. Adjust RV508 (G2) until a background raster is visible, but not real bright, use dim room lighting if possible. (Note: The G2 adjustment controls the screen background brightness. The raster you see should be green, because of adjustments in the prior step.)

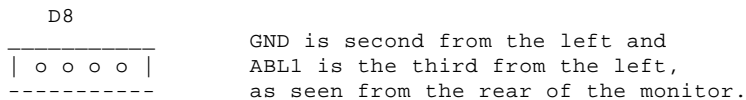
Note: dimming the room lights may be helpful to determine when the background raster disappears

C. Adjust RV014 R.BKG (Red Background) until the raster has a red tinge, then readjust until the red tinge just disappears. (The raster now appears lighter; less green.)

D. Adjust RV034 (B.BKG) until raster has a blue tinge, then readjust until the blue tinge just disappears. (The raster now appears more white; dim white.)

E. Adjust RV508 (G2 Control) until the background raster just disappears. When the background color point is set correctly, the raster is white or gray until it disappears. If it is not, repeat this step.

2. Connect a voltmeter black (common) lead to ground (GND) and the red (positive) lead to ABL1 on connector D8. (D8 is on the analog card, just below the corner of the video card. There is no cable attached. Page 8-21, figure 8-13 in the Display HMM shows this location.)



3. Press the space bar two times to get a full blue screen.
4. Adjust RV031 B.DRIVE (Blue Drive) to give:

(8517) -1.38 V dc.	(All of the voltages in these
(9517) -1.60 V dc.	steps are +/- .03 Volt.)
5. Press the space bar until you get a full green screen.
6. Adjust RV021 (G.DRIVE) to give:

(8517) -2.30 V dc.
(9517) -2.15 V dc.
7. Press the space bar until you get a full red screen.
8. Adjust RV011 (R.DRIVE) to give:

(8517) -2.50 V dc.
(9517) -2.60 V dc.
9. Press PF3 to return to the setup patterns. Select 2. Pattern B - 50 mm square block. Press the Enter key.
10. Press the space bar until you get a white block.
11. Measuring at D8, between GND and ABL1 (same as above), adjust RV102 SUB.CONT (Sub Contrast) to the highest voltage possible within the following range:

(8517) -0.45 V dc to -0.50 V dc.
(9517) -0.50 V dc to -0.55 V dc.

12. If the voltage is not within this range, repeat steps 1 through 11 of this procedure.

13. Press PF3 to return to the setup patterns. Select 4, Pattern D - Gray Scale. Press the ENTER key.

14. While viewing the gray scale pattern, turn the front panel Contrast Control (beside the power switch), from maximum all the way down through the minimum contrast settings. The gray scale blocks should have an even gradient from black in the upper left corner, through to bright white in the center block, with no color tinges. The black block should be exactly the same shade as the black background.. No lines should be visible separating the black block from the background (this is proof that G2 is set correctly). If the check does not pass, repeat the colorpoint adjustment procedure.
15. Repeat the focus and convergence adjustments after this procedure.

Notes: *

The metal tipped end of the tool should be CAREFULLY inserted into the access holes of the video card. The tip must go through another hole on circuit card, because the adjustment potentiometers (pots) are mounted on the backside of the circuit board. Remove the cover from the rear of the video card and examine how this is done.

A white crosshatch pattern is used during the geometry and focus adjustments to provide a more intense electron beam to maximize the interaction of the beam magnetic field with the magnetic field of the deflection and focus coils (deflection yoke).

For the best possible resolution, repeat all the steps in this procedure, due to the interactive nature of the adjustments. Up to three complete passes through these adjustments may be required to satisfy critical graphics customer needs.

SAS KEYWORDS:

PSY2	PSY2DISP	DISPLAY	9517
8517	D/T8517	SERVICE	AID
DJAM			

1.4.271 9517 CARD TRAY HANDLING DAMAGE

Record number: H126400

Device: D/T9517
Model: M
Tip key: 006
Date created: 095/02/08
Date last altered: A95/02/14

Failure Analysis of returned 9517 analog card trays, FRU P/N39G2096, has revealed extensive damage due to improper packaging and handling.

The following information is important to know when handling 9517 analog card trays:

- The card tray is very fragile. It must NOT be removed from the FRU container by grasping the Extra High Tension (EHT) Transformer (Flyback Transformer) or heatsinks. The correct way to remove the card tray FRU from the packaging is to carefully grasp the card tray circuit board and remove it from the foam cushion or package. Be careful not to flex the circuit card. This may break the printed circuit patterns.
- When installing the defective or removed card tray in the FRU container, it is important to package the card exactly as the new card was prior to removal.
- The top foam inserts must be re-installed in the correct position.

IBM is aware of the difficulties in the handling of this part and is currently in the process of providing the part in a protective metal card tray. Until then, exceptional care should be used to handle the card tray FRU.

SAS KEYWORDS:

PSY2	PSY2DISP	9517	BROKEN
BUSTED	CRACKED	DAMAGED	NEW

1.4.272 9518 MODEL 005 RPQ DISPLAY UNIQUE COVER P/N

Record number: H121183

Device: D/T9518
 Model: M
 Tip key: 002
 Date created: 093/07/28
 Date last altered: A93/09/14

The 9518 model 005 has unique front and rear cover part numbers.
 The unique numbers are due to the color difference used on
 the model 005 displays.

All internal FRUs, maintain the same part numbers as the
 9518 - 004.

If the front or rear covers are required for the 9518-005, the
 following numbers should be used:

FRU P/N73G2002 - front cover
 FRU P/N73G2003 - rear cover

SAS KEYWORDS:

9518	DISPLAY	PS2	INDUSTRIAL
7546	7568	7537	PSY2
PSY2DISP	D/T7537	D/T7568	D/T7564
MONITOR			

1.4.273 9521 ANALOG CARD TRAY FRU REPLACEMENT

Record number: H126940

Device: D/T9521
Model: M
Tip key: 004
Date created: 095/03/27
Date last altered: A95/06/28

If an Analog Card Tray Assembly, FRU P/N68G2651 or P/N72G9125, is identified as defective through normal problem determination and is being replaced, ALL individual parts, cards & assemblies included with the Card Tray Assembly FRU must be changed at the same time. The parts are furnished as a tested unit. Mixing pieces of the new FRU assembly with previously installed parts may result in unpredictable performance.

Note: The transistors are mounted with a heatsink compound or thermal grease. The grease or compound may be removed from the defective components and reused or new thermal grease or compound applied. In either event the grease or compound must be used. Pre-mature failure will occur if the components are dry mounted.

SAS KEYWORDS:

PSY2	PSY2DISP	PSY2PART	9521
HEAT	SINK	MONITOR	REPAIR

1.4.274 9521 MONITOR MODEL 002, 21X

Record number: H125825

Device: D/T9521
Model: M
Tip key: 003
Date created: 094/12/16
Date last altered: A94/12/20

A limited number of 9521 Model 002 (9521002) monitors have been distributed in the USA. These monitors are identical to the 9521 Model 001 monitors except model number is 002 and the keypad door cover may be labeled with "21X" (instead of 21P).

SAS KEYWORDS:

PSY2 PSY2DISP 9521 21X
21P

1.4.275 9527 CARD TRAY POWER CABLE REMOVAL

Record number: H123145

Device: D/T9527
Model: M
Tip key: 002
Date created: 094/03/16
Date last altered: A94/09/21

During the removal of the 9527 card tray assembly, FRU P/N68G2540, care should be exercised while removing the power connector cables from the card tray assembly.

The power connector cables have latches that must be un-latched prior to the cable being removed. If the latches are not released, and the cables are pulled, the pins could be pulled out of the circuit card. If this occurs, replacement of the card tray is required.

One power connector is located on the deflection card as illustrated in the HMM V2, (S71G-4197-02), page 4-31. A second power connector, not identified in the HMM, is on a smaller card located under the deflection card.

The HMM will be modified to identify the second power connector cable. A note will be added to the HMM identifying the correct method of removing these cables.

SAS KEYWORDS:

PSY2

PSY2DISP

9527

SOLDER

1.4.276 9527 GEOMETRY SETTINGS / ADJUSTMENTS

Record number: H127517

Device: D/T9527
Model: M
Tip key: 008
Date created: 095/04/28
Date last altered: A95/05/18

9527 geometry settings require that servicers follow ALL of the adjustment steps explicitly. Failure to follow these steps completely and in exact order will cause servicing difficulty.

- The 9527 service procedure disables write protection of the micro controller memory by use of a jumper from Write Enable Pin 1 to ground. Insure that this connection is made and correct before proceeding. Reference 9527 HMM page 4-21.
- While in each of the service modes, Buttons 1 and 27 (Reference H124106) have different meanings. Pressing them at the wrong time may invoke "Exit Service Mode." Therefore, when in a service mode, do not attempt to perform a factory reset by pressing these buttons! An unintentional exit may result in unacceptable screen settings with no apparent cause.
- The Color Test Pattern Diskette (P/N41G8502) displays only four modes in lower refresh rates. It may not be suitable for setting the geometry for all 9527 capable modes, especially at the higher refresh rates. Therefore, it is recommended that any final screen setup adjustments may be made using the system's video diagnostics for other modes.
- Unacceptable screen geometry results may be observed when exiting a service mode (pressing buttons 1 or 27). Screen settings (new factory values) made while in the service mode are ONLY recovered by depressing and holding button 1 for 5 seconds ONLY after exiting the service mode.

If unacceptable screen geometry results are observed, the service mode should be re-entered and the factory values re-adjusted, then properly exited once again.

SAS KEYWORDS:

PSY2

PSY2DISP

9527

PSVP

1.4.277 9545 AND 2620 FLASH BIOS FIXES.

Record number: H124580

Device: D/T9545
Model: M
Tip key: 020
Date created: 094/07/08
Date last altered: A95/10/12

IBM ThinkPad System Program Service Diskette Ver 1.41. Current BIOS releases contain previous BIOS release updates.

----- IMPORTANT -----

Diskette fixes are customer installable. Customers should be advised to contact the IBM PC Company HelpCenter at 800-772 - 2227 if assistance is required in getting or installing this information. Files are located on the PC company's Bulletin Board Service (BBS). The direct line for modem connection to The PC Company BBS is 1-919-517-0001 or tieline 255-0001.

Customers in Canada should call IBM's HelpPC at 800-565-3344 for Assistance or down load information. The Canadian BBS phone numbers are:
Montreal-514-938-3022, Toronto-905-316-4255,
Winnipeg-204-934-2735, Vancouver-604-664-6464.

The data may also be downloaded via the Internet from the IBM Personal Computer File Library by searching the following Internet URL: <http://www.pc.ibm.com/files.html>

The System Program Service diskette installs BIOS updates in the ROM area of the following ThinkPad models.

- ThinkPad 355, 355C and 355Cs
- ThinkPad 360, 360C, 360Cs, 360CE, 360CSE, 360P and 360PE
- ThinkPad 750, 750C, 750Cs, 750Ce and 750P
- ThinkPad 755C and 755Cs.

If your customer is experiencing one of the problems listed in the "Summary of Problem Fixes" section, please have them follow the instructions given in the "Updating System Programs" section below when updating their system BIOS.

Contents Page.

Section 1: RELEASED BIOS VERSIONS MAJOR FIX.

Section 2: VERSION / BIOS P/N / DATE CORRELATION

Section 3: SUMMARY OF PROBLEM FIXES. FIX DETAIL BY VERSION BY MODEL.

Section 4: BIOS UPDATE INSTRUCTIONS

SECTION 1: Release Version

Version 1.00	Supports 750Cs
Version 1.01	Supports A/D Video Converter
Version 1.02	Corrective service
Version 1.03	Supports 750Ce
Version 1.04	Supports TV Tuner
Version 1.04a	Corrective service
Version 1.05	Supports hard disk drive more than 512MB and CDPD
Version 1.06	Supports 755 and 355/360 families
Version 1.07	Corrective service
Version 1.07a	Corrective service
Version 1.12	Supports Docking Station II
Version 1.13	Corrective service
Version 1.15	Supports 360CE and 360CSE
Version 1.16	Adds a PATCH diskette for Madge TRN ISA card
Version 1.20	Supports Windows* 95 (beta) plug and play function
Version 1.40	Supports Windows* 95

Note:

- The 750 family supports APM BIOS 1.0 with Windows* 95.
- No PnP (Plug and Play) support is available on the 750 family (The 750 family supports PnP BIOS 1.0, not 1.0a).

SECTION 2: VERSION / BIOS P/N / DATE CORRELATION

SYSTEM PROGRAM

750/750C/750Cs						
750P			750Ce		755C/755Cs	
Disk Ver	P/N	Date	P/N	Date	P/N	Date
1.00	59G3849	10-14-93	N/A	N/A	N/A	N/A
1.01	59G3966	11-19-93	N/A	N/A	N/A	N/A
1.02	59G3968	11-25-93	N/A	N/A	N/A	N/A
1.03	59G3970	12-20-93	89G4293	11-22-93	N/A	N/A
1.04	59G3980	02-28-94	89G4576	02-15-94	N/A	N/A
1.04a	59G3985	03-01-94	"	"	N/A	N/A
1.05	59G3983	04-04-94	59G4063	03-18-94	N/A	N/A
1.06	59G3987	05-25-94	40G3482	04-27-94	40G3483	04-27-94
1.07	"	"	"	"	89G5118	06-03-94
1.07a	"	"	"	"	"	"
1.12	89G5075	07-07-94	89G5076	07-07-94	89G5078	07-20-94
1.13	"	"	"	"	"	"
1.15	91G0362	10-12-94	91G0363	10-14-94	91G0365	10-14-94
1.16	"	"	"	"	"	"
1.20	91G0716	03-31-95	91G0720	04-26-95	91G0724	06-30-95
1.40	"	"	"	"	91G1218	09-13-95
1.41	"	"	"	"	"	"

355/355C/355Cs
360/360C/360Cs
360CE/360CSE
360P/360PE

Disk Ver	P/N	Date
1.00	N/A	N/A
1.01	N/A	N/A
1.02	N/A	N/A
1.03	N/A	N/A
1.04	N/A	N/A
1.04a	N/A	N/A
1.05	N/A	N/A
1.06	89G5074	05-23-94
1.07	89G5119	06-03-94
1.07a	89G5213	06-14-94
1.12	89G5077	07-20-94
1.13	89G5704	09-02-94
1.15	91G0375	10-14-94
1.16	"	"
1.20	91G0723	06-30-95
1.40	91G1217	09-13-95
1.41	"	"

Section 3: FIX DETAIL BY VERSION BY MODEL

Summary of changed/ fixed items

NOTE: n.nn Diskette Version (e.g. 1.15 Version 1.15)

NOTE: 1.41 all model fix:

Corrects a BIOS hang while loading that occurs in BIOS 1.40 on all 750 models except the 750Ce.

The hang condition occurs when the message:

"Reading the System Program File.
Please Stand By"

The BIOS P/N and the date can be viewed by invoking Easy-Setup and selecting Config followed by System Board.

Customers experiencing problems listed in the "Summary of Problem Fixes" section should update their flash BIOS using the "Updating System Programs" instructions.

ThinkPad 355, 355C, 355Cs, 360, 360C, 360Cs, 360CE,

360CSE, 360P and 360

1.06

- During block transfer of Video, some dots are missed.

1.07

- Remote IPL from new IBM Token Ring PCMCIA Card doesn't work.

1.07a

- Erroneously mute status of audio feature after booting when Dock I is attached.

- No CD Audio from a Dock I with internal SCSI CD ROM.

- Audio Card is re-enabled upon reboot, when the user has selected to Disable Audio in PS2 or ThinkPad Features.

1.12

- Add support for Dock 2.

- COM port disappears after accessed by some applications.
- 1.13
 - False intermittent 8611 and 8613 error code displayed at power on.
- 1.15
 - New model support, 360CE and 360CSE.
 - ThinkPad Space Saver Keyboard(black) support without Device Driver.
 - Reset is not performed after warm docking to ThinkPad Dock II Expansion Unit.
 - Erroneous audio muting after undocking a ThinkPad Dock II Expansion Unit.
 - DOS stand alone dump support for the PC3270 Workstation Program doesn't work with ThinkPad Dock II Expansion Unit.
 - Printer does not work after suspend/resume.
- 1.20
 - Add plug and play function for Windows* 95 (beta).
 - IBM Auto-ISA Token Ring card does not work.
 - Missing diagnostic test of the 2nd DIMM module.
 - Mouse cursor hangs after resume.
- 1.40
 - Windows* 95 support
 - RPL can't be done under the following condition.
 - The PCMCIA slot(s) in ThinkPad: PCMCIA ATA
 - The PCMCIA slot(s) in Dock-II : PCMCIA RPL (Token Ring or Ethernet)
 - Dock-II SCSI Select utility hangs.

ThinkPad 750, 750C, 750Cs and 750P

-
- 1.00
 - Add support for 750Cs.
 - Intermittent OS/2 hang at the first FDD access following wake-up from hibernation.
 - Intermittent 199FE error upon wake-up from hibernation.
 - 1.01
 - Suspend mode entered sooner than the specified System Off Timer value.
 - Supports Analog to Digital Video Converter option for Dock I.
 - Excessive screen flicker after resume (750Cs and 750P only).
 - 1.02
 - Video problems on externally attached ISO monitor (750Cs only).
 - Diagnostics erroneously reports a 5016 error (750Cs only).
 - 1.03
 - Intermittent 19929 POST error upon resume.
 - 1.04
 - Add support for TV Tuner.
 - The external CRT attached to the Dock I goes blank after the operating system is booted or resumed when the 750's lid is closed.
 - System hangs using the ROM free Area E000-E6FF.
 - Correct range (E000-E5FF in this version) is indicated in the ROM area.
 - 1.04a
 - Some of the 16MB memory cards can not be used.
 - 1.05
 - Add support for internal 512MB IDE HDD.
 - Add support for CDPD Mobile Communications module option.
 - Unable to suspend after removing AC adapter.
 - Some video adapters installed in the Dock-I fail with an 103 POST error.
 - System can't enter suspend mode again if the AC adapter is disconnected or connected during suspend.
 - 1.06
 - The Screen Off Timer becomes inactive if any key other than "Fn is depressed to restore the screen.
 - Systems with some PCMCIA modem cards may malfunction during a suspend operation.
 - After a suspend command the system beeps and will not suspend for about 30 seconds. (This is normal if the CDPD Mobile Communications Module is installed.)
 - 1.12
 - Add support for Dock 2.
 - DOS stand alone dump support for PC3270 Workstation Program.
 - 1.20
 - Fixed suspend/resume problem with Windows* 95 beta.
 - 1.40 None
 - 1.41
 - The system hangs while reading the System Program Service diskette.

ThinkPad 750Ce

1.03 Add TP750Ce support.
1.04
-Add support for TV Tuner.
-Add support for CDPD Mobile Communications Module option.
1.05
-Add support for internal IDE HDD with capacity > 512 MB.
-The external mouse hangs intermittently after Suspend/Resume under the DOSSHELL.
-195 error occurs after hibernation with ATA PCMCIA card in the Port Replicator with PCMCIA.
-Audio stops after Standby.
1.06
-The CPU information is wrong in the EasySetup.
-A 118 error occurs.
-Some video adapters installed in the Dock-I fail with 103 error
1.12
-Add support for Dock 2.
-COM port disappears after accessed by some applications.
1.15
-DOS stand alone dump support for PC3270 Workstation Program with ThinkPad Dock II Expansion Unit.
1.20
-Added some of APM function for Windows* 95 (beta).
1.40
NONE

ThinkPad 755C and 755Cs

1.06
-Some video adapters installed in the Dock-I fail with 103 error
-RPL from PCMCIA Ethernet card does not work.
-System hangs when hibernating under the following conditions.
- One of the primary partitions is HPFS, and
- The hibernation file is in an extended partition.
1.07
-Remote IPL from new IBM Token Ring PCMCIA Card doesn't work.
1.12
-Add support for Dock 2.
-COM port disappears after access by some applications.
-ThinkPad Space Saver Keyboard(black) support without device driver.
1.15
-Reset is not performed after warm docking to ThinkPad Dock II Expansion Unit.
-Erroneous audio muting after undocking ThinkPad Dock II Expansion Unit.
-DOS stand alone dump support with ThinkPad Dock II Expansion Unit attached.
-Printer does not work after suspend/resume.
1.20
-Add plug and play function for Windows* 95 (beta).
-IBM Auto-ISA Token Ring card does not work.
-Missing diagnostic test of the 2nd DIMM module.
-Mouse cursor hangs after resume.
1.40
-Windows* 95 support
-RPL can't be done under the following condition.
- The PCMCIA slot(s) in ThinkPad: PCMCIA ATA
- The PCMCIA slot(s) in Dock-II : PCMCIA RPL (Token Ring or Ethernet).
-Dock-II SCSI Select utility hangs.

Section 4: BIOS UPDATE INSTRUCTIONS

Updating System Programs

NOTES:

- You need an AC adapter and a charged battery pack to update the system program.
 - If your computer is attached to a ThinkPad Dock I, Dock II or a port replicator, turn off the computer and detach it before proceeding.
1. Print these instructions or display on another computer.
 2. Firmly connect the AC adapter to the computer.
 3. Insert the System Program Service Diskette into the diskette drive and turn on the computer.
 4. Select "Read this first..." from the menu and carefully read the information that appears.
 5. Press the Esc key to return to the menu.
 6. Select "Update system program" and follow the instruction on the screen.

WARNING

=====

THE SYSTEM BOARD WILL HAVE TO BE REPLACED IF THE COMPUTER IS
TURNED OFF OR SUSPENDED DURING THE BIOS UPDATE PROCESS.

After the update has been completed, do the following to make
the changes effective.

7. Make sure the System Program Service Diskette is removed from
the diskette drive, then turn off the computer.
8. Press and hold the F1 key, then turn on the computer. Hold
the F1 key until the Easy-Setup menu appears.
9. If a password prompt appears, type the correct password.
- 10 Select Config, then select Initialize.
- 11 Select OK to initialize the system.

Run the diagnostics to make sure that the computer runs with
no errors:

- 12 Turn off the computer, press and hold the F1 key, then turn
on the computer. Hold the F1 key until the Easy-Setup menu
appears.
- 13 Select Test, then select Start to run all the basic tests.
Various test patterns will appear on the screen.
An OK will appear for each device that passes the test.
- 14 Verify that OK appears for all of the devices tested.
- 15 Press the Esc key to exit Test and turn off the computer.

Service Information

The System Program Service diskette installs System Program
as follows.

ThinkPad model	BIOS P/N	Date	Unused Reserved BIOS Area*
355, 355C, 355Cs, 360, 360C, 360Cs, 360CSE, 360P 360CE, and 360PE	91G1217	09/13/95	E000-E5FF (24KB)
750, 750C, 750Cs and 750(91G0716	03/31/95	E000-E5FF (24KB)
750Ce	91G0720	04/26/95	E000-E6FF (28KB)
755C and 755Cs	91G1218	09/13/95	E000-E5FF (24KB)

* Trademark of Microsoft Corporation.

SAS KEYWORDS:

PSY2	PSY2MCD	PSY2ERR	PSY2DIAG
PSY2DISP	PSY2DOC	PSY2OPER	D/T2620
PSY2MEM			

1.4.278 9545 BATTERY CONDITIONING INFORMATION

Record number: H122521

Device: D/T9545
Model: M
Tip key: 009
Date created: 094/05/06
Date last altered: A94/05/06

A ThinkPad 750 series battery pack can obtain a "memory". This is a term that relates to a diminished charge capacity of the battery pack. It can occur if the battery is not fully discharged prior to beginning a charge cycle. A full discharge occurs when the system enters suspend mode because of a low battery charge.

The Fuel-Gauge program monitors the extent of the battery memory. After the battery has gone through 60 or more partial discharges a battery discharge prompt message will be displayed by the DOS, Windows, and OS/2 Fuel-Gauge Programs. The prompt can also be invoked manually by pressing the Fn and F2 function keys. Another way of accomplishing the discharge is to use the system until it goes into suspend mode.

Note: The following procedures may have to be done more than once to bring the battery back to its full potential.

Fuel-Gauge Program for DOS:

Pressing the Fn+F2 key combination allows the fuel-gauge display to appear at the top-right corner of the screen. When the AC adapter is used, the system prompts you to discharge the battery pack with an asterisk (*) next to the fuel-gauge message.

```
-----+  
AC Charge * |  
            |
```

Fuel-Gauge Program for Windows and OS/2:

Pressing the Fn+F2 key combination allows the fuel-gauge display to appear. When the AC adapter is used the system prompts you with the following message: "The battery pack requires discharging. To restore the battery to the best condition, press the discharging button."

SAS KEYWORDS:

PSY2 PSY2POWER

1.4.279 9545 BIOS FIXES 755CE/CSE/CD/CX/CV/CDV

Record number: H131175

Device: D/T9545
 Model: M
 Tip key: 048
 Date created: 095/09/28
 Date last altered: A95/10/12

IBM ThinkPad System Program Service Diskette Ver 1.30. Current BIOS releases contain previous BIOS release updates.

----- IMPORTANT -----

Diskette fixes are customer installable. Customers should be advised to contact the IBM PC Company HelpCenter at 800-772 - 2227 if assistance is required in getting or installing this information. Files are located on the PC company's Bulletin Board Service (BBS). The direct line for modem connection to The PC Company BBS is 1-919-517-0001 or tieline 255-0001.

Customers in Canada should call IBM's HelpPC at 800-565-3344 for Assistance or down load information. The Canadian BBS phone numbers are:
 Montreal-514-938-3022, Toronto-905-316-4255,
 Winnipeg-204-934-2735, Vancouver-604-664-6464.

The data may also be downloaded via the Internet from the IBM Personal Computer File Library by searching the following Internet URL: <http://www.pc.ibm.com/files.html>

IBM ThinkPad 755CE/CSE/CD/CX/CV/CDV
 System Program Service Diskette Ver 1.30
 What This Diskette Does

 The System Program Service diskette installs BIOS updates in the ROM area of the following ThinkPad models.
 - ThinkPad 755CE, 755CSE, 755CD, 755CX, 755CV and 755CDV

If your customer is experiencing one of the problems listed in the following "SUMMARY OF PROBLEM FIXES" section, please have them follow the instructions in the "BIOS UPDATE INSTRUCTIONS" section when updating the system BIOS.

Contents Page.

Section 1: RELEASED BIOS VERSIONS MAJOR FIX.

Section 2: VERSION / BIOS P/N / DATE CORRELATION

Section 3: SUMMARY OF PROBLEM FIXES. FIX DETAIL BY
 VERSION BY MODEL.

Section 4 BIOS UPDATE INSTRUCTIONS

 SECTION 1: Release Version

Version 1.00 Corrective service
 Version 1.01 Supports Pentium Processor upgrade
 Version 1.20 Corrective service and new models support
 Limited distribution
 Version 1.30 Updates for Windows* 95 and corrective service

SECTION 2: VERSION / BIOS P/N / DATE CORRELATION
 755CE/CSE/CD/CX/CV/CDV

SYSTEM PROGRAM		
Diskette	-----	
Version	P/N	Date

1.00	91G0439	02-13-95
1.01	91G0713	03-17-95
1.20	91G0722	04-25-95
1.30	91G0730	06-30-95

SECTION 3: SUMMARY OF PROBLEM FIXES.
 FIX DETAIL BY VERSION BY MODEL

 Note: n.nn Diskette Version (e.g. 1.15 Version 1.15)

ThinkPad 750CE/CSE/CD

1.00 BIOS revision: 00

Power management version: 1.24
Setup version: 1.14

1.01 BIOS revision: 00
Power management version: 1.27
Setup version: 1.17

ThinkPad 750CE/CSE/CD/CX/CV/CDV

1.20 BIOS revision: 00
Power management version: 1.31
Setup version: 1.18

1.30 BIOS revision: 00
Power management version: 1.32
Setup version: 1.20

<POST/BIOS > fixes.

1.00

- The LCD TFT panel may have intermittent noise (sparkle) when operating at temperatures near its lower range.
- The keyboard hangs at Hard Disk Password prompt.
- The system hangs when DOS 6.3/V (Japan) installer formats the hard disk.
- A vertical bar appears on the left side of screen when:
 - an ISO CR monitor is attached
 - simultaneous display mode is selected (STN color panel only).
- The screen may be corrupted on resume operation.
- 1.2MB format diskette in the external FDD can't be read.
- Some printers may not work.
- Ethernet remote IPL can't be done.
- PCMCIA hard disk can't be booted up when more than three IDE/SCSI hard disk drives are attached to the system.
- CD-ROM data in the internal CD-ROM drive may be corrupted when CD-ROM reading or CD-ROM to hard disk copying (750CD only).

1.01

- New) Supports pentium processor upgrade kit

1.20

- IBM Auto-ISA Token Ring card does not work
- If hibernation file size is invalid, error message is not shown.
- Garbage on personalization screen

1.30

- Supports Plug and play for Windows* 95
- Fixed problem on "year 2000"
- Fixed problem of no CD-ROM drive after dual-boot to DOS

<Power Management> fixes:

1.00

- Add support for PC3270-J.
- Power-on or resume operation can be done even if the keyboard is raised.
- Resume operation can't be completed when any keys are depressed during the resume.
- The TrackPoint hangs when the Power-on Password is set.
- The serial or parallel data transfer fails when the SMI (system Management Interrupt) is generated.
- The percentage of remaining power of Fuel-Gauge program may be over 100 % at the full charge.
- The screen may intermittently have some noises at the low temperature (TFT color panel only).
- The power source (AC Adapter or Battery) indicator of Fuel-Gauge program is not changed when the AC Adapter is attached.
- The pop-up low battery warning message by ThinkPad feature doesn't appear when the remaining battery power becomes low.
- Battery discharge information becomes invalid when the keyboard raised to go into the partial suspend.
- The "Resume on timer" is not performed when "Resume on incoming" is disabled in the ThinkPad feature.
- The TrackPoint may hang on resume.
- The screen may become blank when the system resumes normal operation from hibernation mode (STN color panel only).
- A graphical hibernation message is not displayed when a specific PS/Value Point CRT monitor is attached and the system goes into hibernation mode (STN color panel only).
- The mouse (TrackPoint) hangs at suspend/resume operation when unattended resume is performed.
- The screen may intermittently blank when the system resumes normal operation from suspend mode at the low

- temperature (STN color panel only).
- The screen becomes blank when the LCD/external display switching (Fn+F7 key) is repeatedly pressed.
- The hard disk data may be corrupted when docked with the Dock-I with some video adapter cards installed.
- The system may resume normal operation immediately when it goes into suspend mode (755CD only).
- Suspend timer, Stand-by timer and Hibernation timer activate later than their setup values (the timers are delayed).
- Resume operation can't be done when both an AC adapter and an external keyboard are attached.
- The spindle motor of PCMCIA hard disk drive doesn't stop when the system goes into suspend mode.
- The system hangs coming out of a hibernation that was created when a power down occurred during a safe suspend.
- The password prompt appears twice when the system resumes normal operation by "Resume on incoming call" or "Resume on timer."
- 1.20 level Power Management fixes:
 - Video corruption on Windows DOS session after resume
 - COM3/COM4 with FIFO does not work after resume

<EASY-SETUP> fixes:

- 1.00
 - Add warning beep(s) at the password entry panel if a password longer than 8 digits is entered.
 - The default Year set of Date/Time panel is changed from 1994 to 1995.
 - A small bug in the Year set Date/Time panel.

<DIAG> fixes:

- 1.00
 - The Display Diag has the wrong message of 80x25x16 at the 9x16 pattern.
 - Error log isn't printed out during the DSP Diag (Advanced Diag Mode.)
 - The arrow keys don't work correctly on the Diag panel.
 - The screen becomes blue in the Display Diag.
- 1.20
 - Support 755CX/CV/CDV
- 1.30
 - Hangs when CTRL+K is pressed while cursor is moving.

SECTION 4: BIOS UPDATE INSTRUCTIONS

Updating System Programs

NOTES:

- You need an AC adapter and a charged battery pack to update the system program.
 - If your computer is attached to a ThinkPad Dock I, Dock II or a port replicator, turn off the computer and detach it before proceeding.
1. Print these instructions or display on another computer.
 2. Firmly connect the AC adapter to the computer.
 3. Insert the System Program Service Diskette into the diskette drive and turn on the computer.
 4. Select "Read this first..." from the menu and carefully read the information that appears.
 5. Press the Esc key to return to the menu.
 6. Select "Update system program" and follow the instruction on the screen.

WARNING

=====

THE SYSTEM BOARD WILL HAVE TO BE REPLACED IF THE COMPUTER IS TURNED OFF OR SUSPENDED DURING THE BIOS UPDATE PROCESS.

After the update has been completed, do the following to make the changes effective.

7. Make sure the System Program Service Diskette is removed from the diskette drive, then turn off the computer.
8. Press and hold the F1 key, then turn on the computer. Hold the F1 key until the Easy-Setup menu appears.
9. If a password prompt appears, type the correct password.
10. Select Config, then select Initialize.
11. Select OK to initialize the system.

Run the diagnostics to make sure that the computer runs with no errors.

12. Turn off the computer, press and hold the F1 key, then turn on the computer. Hold the F1 key until the Easy-Setup menu appears.
13. Select Test, then select Start to run all the basic tests. Various test patterns will appear on the screen. An OK will appear for each device that passes the test.
14. Verify that OK appears for all of the devices tested.
15. Press the Esc key to exit Test and turn off the computer.

Service information

The System Program Service diskette installs System Program as follows:

ThinkPad model	BIOS P/N	Date	Reserved BIOS Area*	Usable ROM BIOS Area
755CE/CSE/CD/CX/ CV/CDV	91G0730	06/30/95	C000-C7FF	E000-EFFF

The BIOS P/N and the date can be viewed by invoking Easy-Setup and selecting Config followed by System Board.

NOTE:

- Memory Range C000-C7FF is reserved for Video BIOS.
- Memory Range E000-EFFF can be used as UMB (Upper Memory Block) by a memory manager such as EMM386.

The areas listed above are valid for the corresponding BIOS P/N's, and are subject to change in future updates of BIOS.

* Trademark of Microsoft Corporation.

SAS KEYWORDS:

PSY2	THINKPAD	PSY2BRD	PSY2DISP
PSY2PROG	PSY2MCD	PSY2DIAG	

1.4.280 9545 CDPD FRU PART NUMBERS.

Record number: H124022

Device: D/T9545
Model: M
Tip key: 011
Date created: 094/05/19
Date last altered: A94/10/26

The following FRUs are available to support the CDPD option.

Communications Module	P/N61G3045
Antenna Cover	P/N61G3046
Connector Assembly	P/N61G3047
U.S. DAA Assembly	P/N43G3392
Telephone Cable	P/N43G3398
DAA Interface Cable	P/N42G2741
Handset	P/N71G2579

A blank bezel and plastic tool FRU kit will be released shortly. Please contact level 2 support through your support structure if either of these parts are required before the FRU release.

Advanced CDPD diagnostics reside on the Easy-Setup screen. Press and hold the F1 key while cold booting the system to access this function.

This information will be included in the next update of the HMM.

SAS KEYWORDS:

PSY2

PSY2CDPD

PSY2COMM

1.4.281 9545 CONNECTION PROBLEMS WITH PORT REPLICATORS.

Record number: H13987

Device: D/T9545
Model: M
Tip key: 047
Date created: 095/09/19
Date last altered: A95/09/22

A small number of 755CE, CSE, CD or CDV systems may contain system expansion pin locator nuts with incorrectly sized holes.

This condition will interfere with Port Replicator installation by preventing the 240 pin D shell connector on the Port Replicator 1 and 2 from fully mating with the 240 pin expansion bus connector on the affected ThinkPads.

Order the miscellaneous screw kit P/N85G1935 or P/N84G6560 to obtain replacement pin locator nuts.

NOTE:

The Dock I (3545) and Dock II (3546) will connect correctly to systems containing the undersized pin alignment holes.

SAS KEYWORDS:

PSY2

PSY2BD

THINKPAD

PSY2PART

1.4.282 9545 PCMCIA BEZEL

Record number: H122772

Device: D/T9545
Model: M
Tip key: 003
Date created: 094/01/25
Date last altered: A94/02/17

FRU P/N66G5053 MAY HAVE A MISSING BEZEL. THIS FRU SHOULD CONTAIN 2 BEZELS AND A SECURITY PLATE. ONE BEZEL HAS A HOLE FOR A PCMCIA EXTERNAL PLUG; THE OTHER BEZEL IS A BLANK PLATE. THE PROBLEM HAS BEEN CORRECTED AND NEW FRU STOCK IN MECHANICSBURG SHOULD CONTAIN ALL 3 PARTS. IF ALL THREE PARTS ARE NOT INCLUDED CONTACT L2 SUPPORT.

SAS KEYWORDS:

PSY2	9545	THINKPAD	750
PSY2PART	750C	750CS	750CE

1.4.284 9545 750, 750P, 750C, 750CS, & 750CE FRU P/NS

Record number: H022933

Device: D/T9545
 Model: M
 Tip key: 002
 Date created: 094/01/11
 Date last altered: A94/03/21

THE FOLLOWING MATRIX IDENTIFIES 9545 FRU PARTS BY MODEL.

Marketing Name	Type	Mod	Processor	Mem	Hardfile	size
Thinkpad 750	9545	-006	486SL-33	4/20	170Mb	
"	750	008	"	"	340Mb	
"	750C	306	"	"	170Mb	
"	750C	308	"	"	340Mb	
"	750Cs	206	"	"	170Mb	
"	750Cs	208	"	"	340Mb	
"	750CE	908	486SL-50	"	340Mb	
"	750P	40C	486SL-33	"	170Mb	
"	750P	40E	"	"	340Mb	

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7 7 7 7 7 7 7 7 7
 5 5 5 5 5 5 5 5 5
 0 0 0 0 0 0 0 0 0
 C C C C C P P
 s s E

0 0 3 3 2 2 9 4 4
 0 0 0 0 0 0 0 0 0

FRU DESCRIPTION FRU P/N 6 8 6 8 6 8 8 C E
 CARD: AUDIO P/N66G5037 X X X X X X X X X X

CARD: DCDC P/N66G5038 X X X X X X X X X X

CARD: DCDC P/N66G9226 X

0 0 3 3 2 2 9 4 4
 0 0 0 0 0 0 0 0 0

FRU DESCRIPTION FRU P/N 6 8 6 8 6 8 8 C E
 CARD: INDICATOR ASM P/N66G5034 X X

CARD: INDICATOR ASM P/N66G5033 X X

CARD: INDICATOR ASM P/N66G6321 X X

CARD: INDICATOR ASM P/N66G9222 X

CARD: INDICATOR ASM P/N66G5035 X X

CARD: INTERPOSER P/N66G5044 X X X X X X X X X X

0 0 3 3 2 2 9 4 4
 0 0 0 0 0 0 0 0 0

FRU DESCRIPTION FRU P/N 6 8 6 8 6 8 8 C E
 CARD: INTERPOSER P/N66G9242 X

CARD: SYSTEM BOARD P/N66G5036 X X X X X X X X X X

CARD: SYSTEM BOARD P/N66G6209 X X

CARD: SYSTEM BOARD P/N66G9224 X

CARD: PCMCIA BOARD P/N66G5121 X

CARD: CPU P/N66G9225 X

0 0 3 3 2 2 9 4 4
 0 0 0 0 0 0 0 0 0

FRU DESCRIPTION FRU P/N 6 8 6 8 6 8 8 C E
 DRIVES: FDD P/N66G5060 X X X X X X X X X X

DRIVES: FDD STRAP P/N66G5123 X X X X X X X X X X

DRIVES: FDD BEZEL P/N66G5051 X X X X X X X X X X

DRIVES: HDD 170MB P/N66G5066 X X X X

DRIVES: HDD 340MB P/N66G5068 X X X X

DRIVES: HDD STRAP P/N66G5122 X X X X X X X X X X

FRU DESCRIPTION		0	0	3	3	2	2	9	4	4
		0	0	0	0	0	0	0	0	0
	FRU P/N	6	8	6	8	6	8	8	C	E
KYBD: US KEYBOARD	P/N66G0150	X	X	X	X	X	X	X	X	X
LCD: COLOR TFT	P/N66G5058			X	X				X	
LCD: COLOR STN	P/N66G6210					X	X			
LCD: MONO	P/N66G3710	X	X							
LCD: MONO PEN	P/N66G5059								X	X
CABLES: AUDIO	P/N66G5180	X	X	X	X	X	X	X	X	X
FRU DESCRIPTION		0	0	3	3	2	2	9	4	4
		0	0	0	0	0	0	0	0	0
	FRU P/N	6	8	6	8	6	8	8	C	E
MISC: SHIELD, LOWER	P/N66G9227								X	
MISC: SHIELD, UPPER	P/N66G9262								X	
MISC: SPEAKER	P/N66G3754	X	X	X	X	X	X	X	X	X
MISC: KYBD LOCK TAB	P/N66G0031	X	X	X	X	X	X	X	X	X
MISC: SPRING PLATE	P/N66G0041	X	X	X	X	X	X	X	X	X
PLASTIC: BASE COVER	P/N66G5125	X	X							
FRU DESCRIPTION		0	0	3	3	2	2	9	4	4
		0	0	0	0	0	0	0	0	0
	FRU P/N	6	8	6	8	6	8	8	C	E
PLASTIC: BASE COVER	P/N66G5126			X	X					
PLASTIC: BASE COVER	P/N66G4591					X	X			
PLASTIC: BASE COVER	P/N66G9217								X	
PLASTIC: BASE COVER	P/N66G5127								X	X
PLASTIC: HINGE CVR	P/N66G5048	X	X							
PLASTIC: HINGE CVR	P/N66G5047			X	X	X	X	X		
FRU DESCRIPTION		0	0	3	3	2	2	9	4	4
		0	0	0	0	0	0	0	0	0
	FRU P/N	6	8	6	8	6	8	8	C	E
PLASTIC: HINGE CVR	P/N66G5049								X	X
PLASTIC: HINGE R/L	P/N66G5057	X	X	X	X	X	X	X	X	X
PLASTIC: LOWER SHLD	P/N66G5043	X	X	X	X	X	X	X	X	X
PLASTIC: MISC PARTS	P/N66G5039	X	X	X	X	X	X	X	X	X
PLASTIC: PCMCIA CVR	P/N66G5053	X	X	X	X	X	X	X	X	X
PLASTIC: PCMCIA SLT	P/N66G5121	X	X	X	X	X	X	X	X	X
FRU DESCRIPTION		0	0	3	3	2	2	9	4	4
		0	0	0	0	0	0	0	0	0
	FRU P/N	6	8	6	8	6	8	8	C	E
PLASTIC: SCREW CVR	P/N66G5046	X	X	X	X	X	X	X	X	X
PLASTIC: SCREW KIT	P/N66G5124	X	X	X	X	X	X	X	X	X
PLASTIC: SPKR SHLD	P/N66G5041	X	X	X	X	X	X	X	X	X
PLASTIC: I/O DOOR	P/N66G5050	X	X	X	X	X	X	X	X	X
PLASTIC: TPII CAP	P/N66G6444	X	X	X	X	X	X	X	X	X
PLASTIC: UPPER CVR	P/N66G5045	X	X							
FRU DESCRIPTION		0	0	3	3	2	2	9	4	4
		0	0	0	0	0	0	0	0	0
	FRU P/N	6	8	6	8	6	8	8	C	E
PLASTIC: UPPER CVR	P/N66G5094			X	X	X	X	X		
PLASTIC: UPPER CVR	P/N66G6771								X	X
BATTERY PACK	P/N66G2820	X	X	X	X	X	X	X	X	X

BATTERY STDBY	P/N66G3755	X	X	X	X	X	X	X	X	X	X
BATTERY BCKUP	P/N66G3764	X	X	X	X	X	X	X	X	X	X
AC 40W	P/N49G2196	X	X	X	X	X	X	X	X	X	X
		0	0	3	3	2	2	9	4	4	
FRU DESCRIPTION		0	0	0	0	0	0	0	0	0	0
	FRU P/N	6	8	6	8	6	8	8	C	E	
AC 50W	P/N48G8942	X	X	X	X	X	X	X	X	X	X
POWER CORD	P/N13F9959	X	X	X	X	X	X	X	X	X	X
ICDRAM 2M	P/N07G1414	X	X	X	X	X	X	X	X	X	X
ICDRAM 4M	P/N07G1415	X	X	X	X	X	X	X	X	X	X
ICDRAM 8M	P/N07G1416	X	X	X	X	X	X	X	X	X	X
ICDRAM 16M	P/N66G0094	X	X	X	X	X	X	X	X	X	X
		0	0	3	3	2	2	9	4	4	
FRU DESCRIPTION		0	0	0	0	0	0	0	0	0	0
	FRU P/N	6	8	6	8	6	8	8	C	E	
CAR BATTERY POWER	P/N49G1148	X	X	X	X	X	X	X	X	X	X
ICDRAM EJECT TP	P/N53G9318	X	X	X	X	X	X	X	X	X	X
KYBD/MOUSE CBL	P/N54G0444	X	X	X	X	X	X	X	X	X	X
QUICK CHARGER	P/N66G2815	X	X	X	X	X	X	X	X	X	X
PORT REP W/PCMCIA	P/N66G3574	X	X	X	X	X	X	X	X	X	X
PORT REPLICATOR	P/N66G3575	X	X	X	X	X	X	X	X	X	X
		0	0	3	3	2	2	9	4	4	
FRU DESCRIPTION		0	0	0	0	0	0	0	0	0	0
	FRU P/N	6	8	6	8	6	8	8	C	E	
OPTION BAY COVER	P/N66G5052	X	X	X	X	X	X	X	X	X	X
FDD EXTERNAL KIT	P/N66G5069	X	X	X	X	X	X	X	X	X	X
MINIATURE MOUSE	P/N95F5723	X	X	X	X	X	X	X	X	X	X
NUMERIC KEYPAD	P/N95F5741	X	X	X	X	X	X	X	X	X	X

SAS KEYWORDS:

PSY2

PSY2PWR

PSY2PART

PLANAR

PSY2BRD

PLANAR BOARD

PSY2ADPT

1.4.285 9545 755C BATTERY NOT CHARGING ON AC.

Record number: H135471

Device: D/T9545
Model: M
Tip key: 059
Date created: 097/01/23
Date last altered: A97/02/28

A small number of 755C and 755CS systems may not charge the main battery during AC operation when using the following 35 Watt AC Adapters:

35 WATT ADAPTER FRU
P/N85G4951
P/N85G6693
P/N85G6691

On affected 9545 755C 755CS systems, the charging circuit could interpret signal strength from a 35 watt AC Adapter as though it was a Car-Battery Adapter. This would only allow main battery charging while the system was off.

To determine if this is occurring shut the system off and unplug and plug the 4 pin power connector at the back of the system - then turn the system on and check for charging. Do this multiple times. This action resets the charging circuitry allowing the system to intermittently recognize the power supply as a 35 Watt Adapter and allow charging during operation.

If the system charges the battery during the test a 40 Watt 4 pin AC Adapter should be used on the system.

If the system does not charge the battery during the test follow normal problem determination to determine the cause of the failure.

SAS KEYWORDS:

PSY2 THINKPAD UNCLASSIFIED PSY2PWR
PSY2ADPT

1.4.286 9545 755CX VGA NEW FRU PART NUMBERS.

Record number: H133691

Device: D/T9545
Model: M
Tip key: 058
Date created: 096/08/20
Date last altered: A96/11/04

The 755CX VGA version has four unique FRU part numbers that are not listed in the April 1995 HMM (S82G-1502-03). They are:

Index

09	Shield Case Upper	P/N85G1353
26	AV Door	P/N85G1330
32	AV Panel Cover	P/N85G1337
36a	Beep Card	P/N85G1338

Insert the FRUs in the manual. The next revision will contain these part numbers.

SAS KEYWORDS:

PSY2	PSY2PART	PSY2ADPT	THINKPAD
85G1338	85G1353	85G1337	85G1330

1.4.287 9545/2620 IMPORTANT DSKT DRIVE REMOVAL INFORMATION.

Record number: H124276

Device: D/T9545
Model: M
Tip key: 014
Date created: 094/06/10
Date last altered: A94/06/10

IMPORTANT

Ensure the diskette drive is empty before removing the drive from the system. Leaving the diskette in while removing the drive will damage the diskette drive.

SAS KEYWORDS:

PSY2	PSY2DSKT	THINKPAD	D/T2620
755	750	360	

9546 9547 HMM CORRECTION. DEVICE TYPE MOD NUMBER INCORRECT

1.4.288 9546 & 9547 HMM CORRECTION. DEVICE TYPE MOD NUMBER INCORRECT

Record number: H137447

Device: D/T9547
Model: M
Tip key: 008
Date created: 097/04/17
Date last altered: A97/04/21

IBM MOBILE SYSTEM HMM S82G-1503-04 CORRECTION On page 370 and page 373 of the 9/96 HMM the 760L and 760LD are referred to as a 9546 machine type. This is incorrect, they should listed as 9547.

SAS KEYWORDS:

PSY2

PSY2DOC

THINKPAD

UNCLASSIFIED

MODEL

1.4.290 9546 / 9547 FRU PARTS

Record number: H065937

Device: D/T9547
Model: M
Tip key: 001
Date created: 096/04/08
Date last altered: A96/08/06

A new release of the 9456 and 9547 HMM is being produced. This FRU list should be used until the new manual is available.

760 FRUs

Parts Listing

Model 760C+-----+

Index System Unit (760C)

- | | | |
|-----|------------------------------------------------------------------------|------------|
| 1 | LCD Assembly (12.1 TFT) | P/N29H9226 |
| | Note: | |
| | In U.S., this LCD is for 9546-U21, 9546-U27, 9546 - U2A, and 9546 U2H. | |
| | LCD Assembly (10.4 TFT) | P/N29H9227 |
| | Note: | |
| | In U.S., this LCD is for 9546-U22 and 9546-U2B, | |
| 2 | Standby Battery | P/N29H9497 |
| 3 | LCD Indicator Assembly Cover | P/N39H7036 |
| 4a | LCD Indicator Assembly | P/N29H9220 |
| 4b | Volume Knob | P/N39H7037 |
| 5a | See Keyboard Misc. parts | |
| 5b | Keyboard Foot | P/N39H7038 |
| 5c | Keyboard FPC Bracket | P/N39H7035 |
| 5d | See Keyboard Misc. parts | |
| 6 | TrackPoint III Cap | P/N84G6536 |
| 7 | Keyboard (See Keyboard Section) | |
| 8 | Upper Shield Case | P/N29H9212 |
| 9 | Video Card | P/N29H9207 |
| 10a | Volume Connection Cable | P/N29H9211 |
| 10b | Mic Connection Cable | P/N29H9210 |
| 11 | DSP Card | P/N29H9205 |
| 12 | Rear Shield Case | P/N29H9200 |
| 13 | System Board | P/N29H9199 |
| 14a | PC Card Slot | P/N39H7019 |
| 14b | Eject Button | P/N39H7018 |
| 15 | Battery Pack (Li-ion) | P/N29H9232 |
| 16a | HDD Removable Strap | P/N29H9236 |
| 16b | Hard Disk Drive (720 MB, 12.7 mm) | P/N29H9229 |
| 16c | EMI Sheet | P/N39H7031 |
| 17 | Rear Connector Door | P/N29H9185 |
| 18a | Base Cover | P/N29H9181 |
| 18b | PC Card Door | P/N29H9238 |
| 18c | Name Label | P/N66G9228 |
| 19a | DIMM Cover | P/N29H9195 |
| 19b | DIMM Adapter Card | P/N29H9296 |
| 20 | Lower Spacer | P/N29H9194 |
| 21a | FDD Blank Bezel | P/N29H9239 |
| | FDD Bezel | P/N29H9196 |
| 21b | Option Cover | P/N29H9193 |
| 22 | AV Cover | P/N29H9189 |
| 23 | Modem Cover Lock | P/N39H7028 |
| 24 | Modem Cover | P/N39H7030 |
| | Blank Cover for EMEA | P/N29H9187 |
| 25 | Front IR Assembly | P/N29H9215 |
| 26a | Diskette Drive (3-mode) | P/N29H9230 |
| 26b | Diskette Drive Removable Strap | P/N29H9237 |
| 27 | Lower Shield | P/N29H9202 |
| 28 | CPU Card (90 MHz, Pentium) | P/N29H9198 |
| | CPU Card (120 MHz, Pentium) | P/N29H9297 |
| | Note: | |
| | In U.S., this FRU is for 9546-U27 and 9546-U2H. | |
| 29 | Heat Sink (Pentium 90MHz) | P/N39H7005 |
| | Heat Sink (Pentium 120MHz) | P/N39H7006 |
| 30 | See Misc. Parts | |
| 31 | Internal DAA Assembly | P/N29H9216 |
| 32 | DC/DC Card | P/N29H9204 |
| 33 | See Misc. Parts | |
| 34 | Power Switch Actuator | P/N29H9209 |
| 35 | Power Switch Button | P/N29H9191 |
| 36 | Rear IR Assembly | P/N29H9214 |
| 37 | Keyboard Base | P/N29H9218 |
| 38 | Keyboard Cable | P/N29H9222 |
| 39a | Speaker (right) | P/N29H9225 |
| 39b | Speaker (left) | P/N39H6983 |
| 39c | Speaker Holder (right) | P/N39H7033 |

PSY2 RETAIN TIPS
9546 / 9547 FRU PARTS

39d	Speaker Holder (left)	P/N39H7034
40	Keyboard Card	P/N29H9221
41	Backup Battery	P/N29H9506
42	Palm Rest	P/N29H9219
43	Keyboard Unit (See Keyboard Unit Section)	
44	Top Cover	P/N29H9183
	AC Adapter (35W)	P/N85G6701
	For Japan	P/N85G6699
	Keyboard Misc. Parts	P/N39H7039
	Misc. Parts	P/N29H9234
	(Includes the following:)	
	Modem Holder	
	Modem Lever	
	DSP Holder	
	Rear IR Lens	

Model 760CD+-----+

ThinkPad 760X 85

Index System Unit (760CD)		
1	LCD Assembly (12.1 TFT)	P/N29H9226
	Note:	
	In U.S., this LCD is for 9546-U21, 9546-U27,	
	9546 - U2A, and 9546-U2H.	
2	Standby Battery	P/N29H9497
3	LCD Indicator Assembly Cover	P/N39H7036
4a	LCD Indicator Assembly	P/N29H9220
4b	Volume Knob	P/N39H7037
5a	See Keyboard Misc. Parts	
5b	Keyboard Foot	P/N39H7038
5c	Keyboard FPC Bracket	P/N39H7035
5d	See Keyboard Misc. Parts	
6	TrackPoint III Cap	P/N84G6536
7	Keyboard (See Keyboard Section)	
8	Upper Shield Case	P/N29H9213
9	Video Card	P/N29H9208
10a	Volume Connection Cable	P/N29H9211
10b	Mic Connection Cable	P/N29H9210
11	DSP Card	P/N29H9205
12a	External Diskette Drive Connector	P/N29H9203
12b	Rear Shield Case	P/N29H9201
13	System Board	P/N29H9199
14a	PC Card Slot	P/N84G1303
14b	Eject Button	P/N39H7018
15	Battery Pack (Li-ion)	P/N29H9232
16a	HDD Removable Strap	P/N29H9236
16b	Hard Disk Drive (1.2 GB, 17 mm)	P/N29H9228
	Hard Disk Drive (12.7 mm) 720Mb	P/N29H9229
16c	EMI Sheet	P/N39H7031
17	Rear Connector Door	P/N29H9186
18a	Base Cover	P/N29H9182
18b	PC Card Door	P/N29H9238
18c	Name Label	P/N66G9228
19a	DIMM Cover	P/N29H9195
19b	DIMM Adapter Card	P/N29H9296
20	Lower Spacer	P/N29H9194
21a	CD-ROM Blank Bezel	P/N29H9289
	Diskette Drive Bezel	P/N29H9197
21b	Option Cover	P/N29H9193
22	AV Cover	P/N29H9190
23	Modem Cover Lock	P/N39H7027
24	Modem Cover	P/N39H7029
	Blank Cover for EMEA	P/N29H9188
25	Front IR Assembly	P/N29H9215
26	CD-ROM Drive	P/N29H9231
27	Lower Shield	P/N29H9202
28	CPU Card (90 MHz, Pentium)	P/N29H9198
	CPU Card (120 MHz, Pentium)	P/N29H9297
29	Heat Sink (Pentium 90MHz)	P/N39H7005
	Heat Sink (Pentium 120MHz)	P/N39H7006
30	See Misc. Parts	
31	Internal DAA Assembly	P/N29H9216
32	DC/DC Card	P/N29H9204
33	See Misc. Parts	
34	Power Switch Actuator	P/N29H9209
35	Power Switch Button	P/N29H9192
36	Rear IR Assembly	P/N29H9214
37	Keyboard Base	P/N29H9218
38	Keyboard Cable	P/N29H9222
39a	Speaker (right)	P/N29H9225
39b	Speaker (left)	P/N39H6983
39c	Speaker Holder (right)	P/N39H7033
39d	Speaker Holder (left)	P/N39H7034

PSY2 RETAIN TIPS
9546 / 9547 FRU PARTS

40	Keyboard Card	P/N29H9221
41	Backup Battery	P/N29H9506
42	Palm Rest	P/N29H9219
	For Japan	P/N29H7032
43	Keyboard Unit (See Keyboard Unit Section)	
44	Top Cover	P/N29H9184
	Conversion Cable, Game Port	P/N39H7004
	Conversion Cable, Game Video	P/N85G1897
	Wall Plug	P/N85G2367
	Microphone	P/N66G7871
	AC Adapter (35W)	P/N85G6701
	For Japan	P/N85G6699
	Keyboard Misc. Parts	P/N39H7039
	Misc. Parts	P/N46H5367
	(Includes the following:)	
	Modem Holder	
	Modem Lever	
	DSP Holder	
	Rear IR Lens	

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Keyboard listed at the end of the tip

Model 760L+-----+

1	LCD Assembly (10.4 TFT)	P/N46H5355
2	Standby Battery	P/N29H9497
3	LCD Indicator Assembly Cover	P/N39H7036
4a	LCD Indicator Assembly	P/N29H9220
4b	Volume Knob	P/N39H7037
5a	See Keyboard Misc. parts	
5b	Keyboard Foot	P/N39H7038
5c	Keyboard FPC Bracket	P/N39H7035
5d	See Keyboard Misc. parts	
6	TrackPoint III Cap	P/N84G6536
7	Keyboard (See Keyboard Section)	
8	Upper Shield Case	P/N29H9212
9	Video Card	P/N29H9207
10a	Volume Connection Cable	P/N29H9211
10b	Mic Connection Cable	P/N29H9210
11	ESS Card	P/N46H5353
12	Rear Shield Case	P/N29H9200
13	System Board	P/N29H9199
14a	PC Card Slot	P/N39H7019
14b	Eject Button	P/N39H7018
15	Battery Pack (Ni-MH)	P/N29H9233
16a	HDD Removable Strap	P/N29H9236
16b	Hard Disk Drive (810 MB, 12.7 mm)	P/N29H9366
16c	EMI Sheet	P/N39H7031
17	Rear Connector Door	P/N29H9185
18a	Base Cover	P/N46H5358
18b	PC Card Door	P/N29H9238
18c	Name Label	P/N66G9228
19a	DIMM Cover	P/N29H9195
19b	DIMM Adapter Card	P/N29H9296
20	Lower Spacer	P/N29H9194
21a	FDD Blank Bezel	P/N29H9239
	FDD Bezel	P/N29H9196
21b	Option Cover	P/N29H9193
22	AV Cover	P/N29H9189
23	Modem Cover Lock	P/N39H7028
24	Modem Cover	P/N39H7030
	Blank Cover for EMEA	P/N29H9187
25	Front IR Assembly	P/N29H9215
26a	Diskette Drive (3-mode)	P/N29H9230
26b	Diskette Drive Removable Strap	P/N29H9237
27	Lower Shield	P/N29H9202
28	CPU Card (90 MHz, Pentium)	P/N29H9198
	CPU Card (120 MHz, Pentium)	P/N29H9297
	Note:	
	In U.S., this FRU is for 9546-U27 and 9546-U2H.	
29	Heat Sink (Pentium 90MHz)	P/N39H7005
	Heat Sink (Pentium 120MHz)	P/N39H7006
30	See Misc. Parts	
31	Modem Bracket Assembly	P/N46H5360
32	DC/DC Card	P/N29H9204
33	See Misc. Parts	
34	Power Switch Actuator	P/N29H9209
35	Power Switch Button	P/N29H9191
36	Rear IR Assembly	P/N29H9214
37	Keyboard Base	P/N29H9218
38	Keyboard Cable	P/N29H9222
39a	Speaker (right)	P/N29H9225
39b	Speaker (left)	P/N39H6983

PSY2 RETAIN TIPS
9546 / 9547 FRU PARTS

39c	Speaker Holder (right)	P/N39H7033
39d	Speaker Holder (left)	P/N39H7034
40	Keyboard Card	P/N29H9221
41	Backup Battery	P/N29H9506
42	Palm Rest	P/N29H9219
43	Keyboard Unit (See Keyboard Unit Section)	
44	Top Cover	P/N29H9183
	AC Adapter (35W)	P/N85G6701
	For Japan	P/N85G6699
	Keyboard Misc. Parts	P/N39H7039
	Misc. Parts	P/N46H5366
	(Includes the following:)	
	Modem Holder	
	Modem Lever	
	Rear IR Lens	

Model 760LD+-----+

1	LCD Assembly (10.4 TFT)	P/N46H5355
2	Standby Battery	P/N29H9497
3	LCD Indicator Assembly Cover	P/N39H7036
4a	LCD Indicator Assembly	P/N29H9220
4b	Volume Knob	P/N39H7037
5a	See Keyboard Misc. Parts	
5b	Keyboard Foot	P/N39H7038
5c	Keyboard FPC Bracket	P/N39H7035
5d	See Keyboard Misc. Parts	
6	TrackPoint III Cap	P/N84G6536
7	KeyboardSee Keyboard Section)	
8	Upper Shield Case	P/N29H9213
9	Video Card	P/N46H5318
10a	Volume Connection Cable	P/N29H9211
10b	Mic Connection Cable	P/N29H9210
11	ESS Card	P/N46H5353
12a	External Diskette Drive Connector	P/N29H9203
12b	Rear Shield Case	P/N29H9201
13	System Board	P/N29H9199
14a	PC Card Slot	P/N84G1303
14b	Eject Button	P/N39H7018
15	Battery Pack (Ni-MH)	P/N29H9233
16a	HDD Removable Strap	P/N29H9236
16b	Hard Disk Drive (810 MB, 12.7 mm)	P/N29H9366
16c	EMI Sheet	P/N39H7031
17	Rear Connector Door	P/N29H9186
18a	Base Cover	P/N46H5359
18b	PC Card Door	P/N29H9238
18c	Name Label	P/N66G9228
19a	DIMM Cover	P/N29H9195
19b	DIMM Adapter Card	P/N29H9296
20	Lower Spacer	P/N29H9194
21a	CD-ROM Blank Bezel	P/N29H9289
	Diskette Drive Bezel	P/N29H9197
21b	Option Cover	P/N29H9193
22	AV Cover	P/N29H9190
23	Modem Cover Lock	P/N39H7027
24	Modem Cover	P/N39H7029
	Blank Cover for EMEA	P/N29H9188
25	Front IR Assembly	P/N29H9215
26	CD-ROM Drive	P/N39H7424
27	Lower Shield	P/N29H9202
28	CPU Card (90 MHz, Pentium)	P/N29H9198
	CPU Card (120 MHz, Pentium)	P/N29H9297
29	Heat Sink (Pentium 90MHz)	P/N39H7005
	Heat Sink (Pentium 120MHz)	P/N39H7006
30	See Misc. Parts	
31	Modem Bracket Assembly	P/N46H5360
32	DC/DC Card	P/N29H9204
33	See Misc. Parts	
34	Power Switch Actuator	P/N29H9209
35	Power Switch Button	P/N29H9192
36	Rear IR Assembly	P/N29H9214
37	Keyboard Base	P/N29H9218
38	Keyboard Cable	P/N29H9222
39a	Speaker (right)	P/N29H9225
39b	Speaker (left)	P/N39H6983
39c	Speaker Holder (right)	P/N39H7033
39d	Speaker Holder (left)	P/N39H7034
40	Keyboard Card	P/N29H9221
41	Backup Battery	P/N29H9506
42	Palm Rest	P/N29H9219
	For Japan	P/N29H7032
43	Keyboard Unit (See Keyboard Unit Section)	
44	Top Cover	P/N29H9184
	Wall Plug	P/N85G2367

PSY2 RETAIN TIPS
9546 / 9547 FRU PARTS

Microphone	P/N66G7871
AC Adapter (35W)	P/N85G6701
For Japan	P/N85G6699
Keyboard Misc. Parts	P/N39H7039
Misc. Parts	P/N46H5367
(Includes the following:)	
Modem Holder	
Modem Lever	
Rear IR Lens	

Keyboard

Arabic	P/N29H9076
Belgian	P/N29H9074
Canadian French	P/N29H9082
Czech	P/N29H9292
Danish	P/N29H9073
Dutch	P/N29H9071
French	P/N29H9067
German	P/N29H9065
Greek	P/N29H9080
Hebrew	P/N29H9077
Hungary	P/N29H9291
Italian	P/N29H9069
Japanese	P/N29H9083
Latin Spanish	P/N29H9081
Norwegian	P/N29H9075
Portuguese	P/N29H9078
Polish	P/N29H9290
Russian	P/N29H9084
Slovak	P/N29H9293
Spanish	P/N29H9072
Swedish / Finnish	P/N29H9070
Swiss / French	P/N29H9068
Swiss / German	P/N29H9066
Turkish	P/N29H9079
U.K. English	P/N29H9064
U.S. English	P/N29H9063

Keyboard Unit

Arabic	P/N29H9408
Belgian	P/N29H9406
Canadian French	P/N29H9414
Czech	P/N39H6978
Danish	P/N29H9405
Dutch	P/N29H9403
French	P/N29H9399
German (Black)	P/N29H9397
Greek	P/N29H9412
Hebrew	P/N29H9409
Hungary	P/N39H6977
Italian	P/N29H9401
Japanese	P/N29H9415
Latin Spanish	P/N29H9413
Norwegian	P/N29H9407
Portuguese	P/N29H9410
Polish	P/N39H6976
Russian	P/N29H9416
Slovak	P/N39H6979
Spanish	P/N29H9404
Swedish / Finnish	P/N29H9402
Swiss / French	P/N29H9400
Swiss / German	P/N29H9398
Turkish	P/N29H9411
U.K. English	P/N29H9396
U.S. English	P/N29H9395

SAS KEYWORDS:

PSY2	PSY2PART	PSY2BRD	PSY2ADPT
THINKPAD	PSY2DOC		

1.4.291 9546 / 9547 765D & HMM CORRECTIONS AND ADDITIONS.

Record number: H163218

Device: D/T9546
Model: M
Tip key: 020
Date created: 098/03/31
Date last altered: A98/03/31

A corrections are needed to the Volume 4 ThinkPad Computers HMM manual S05L-1270.

1. The 9546 765D and 9547 765L parts page requires an addition of an AIR DUCT FRU P/N46H5763. This should be added to the list as index 57.
2. The Fan Silencer listed next to index 5 is not in a kit. It is a separate FRU P/N46H5495.
3. Change the index 5 System Board FRU part number. Current number p/n11j8118 subs to FRU P/N05K3178.
4. Change Misc. Parts FRU part number. Delete current listing and add FRU P/N29H9235 for the 765D and FRU P/N46H5367 for the 765L.
5. Add Inverter Card FRU P/N05K3100 under the current Inverter Card FRU P/N11J8120. Inverter card P/N05K3100 is for the NEC developed panel.
6. Index 52 Power Switch Button listed as P/N29H9191 should be changed to FRU P/N29H9192.s

These changes will be listed in the on-line internet HMM manual and will be placed in the next addition of the hard copy manual.

SAS KEYWORDS:

PSY2	THINKPAD	UNCLASSIFIED	PSY2PART
PSY2DOC	PSY2BRD	D/T9547	

1.4.292 9546 COMBINED SYSBRD & CPU FRU REPLACEMENT INFO.

Record number: H136617

Device: D/T9546
 Model: M
 Tip key: 014
 Date created: 097/01/14
 Date last altered: A97/02/18

There are two levels of system board and CPU that could be installed in the following 9546 or 9547 model 760 systems. The new level CPU operates correctly with either level system board, but the early level CPU will only operate correctly with the early level system board.

SYMPTOM:

If the early level CPU is installed in a newer level system board the system will not power-on the first time the power switch is pushed. At the second power-on the system will power-on correctly and operate without error. If the system is shut down, but still at normal operating temperature, it will power-on during the first try.

FIX:

When replacing a system board FRU, identified by the bar code in FIG 1 or by the level of module in Fig 2 and 3, a new CPU should be ordered. This is because the early level system board will most likely have an early CPU that will not match the newer level system board from FRU stock.

NOTE: The CPU level can not be determined until it is removed from the system.

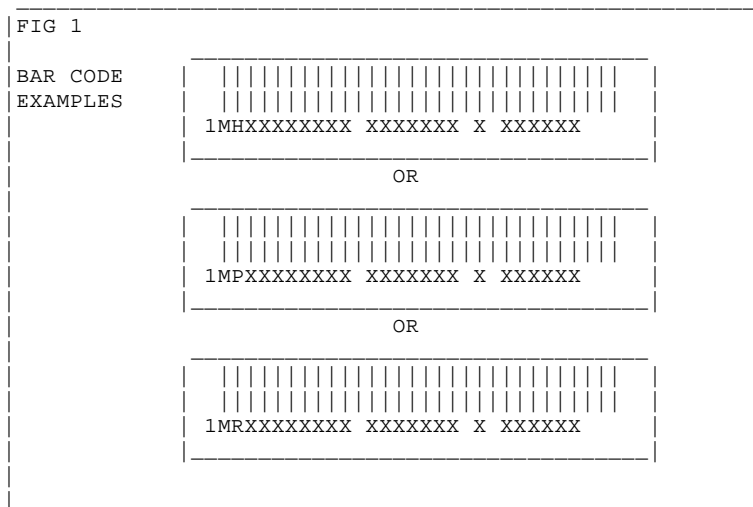
DETAIL:

ThinkPad 760 Systems affected:
 Model EL/ELD U4H,U4F,U6F,U6G,U3F,U4R,U4S,U6R
 Model E/ED U3A,U3B,U4A,U4B,U3L

SYSTEM BOARD IDENTIFICATION METHOD 1. (FIG 1)

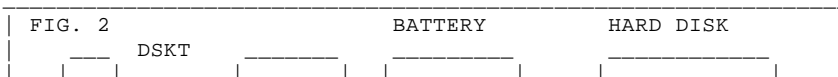
When ordering a replacement system board for one of the above 760 models check the bar code of the failing board. If the bar code contains 1MH, 1MP or 1MR, the system board is at the early level and the CPU level should be checked before it is swapped from the old system board to the new level system board. If the CPU that was ordered is not used return it. (Check FIG 4 for CPU FRU numbers.)

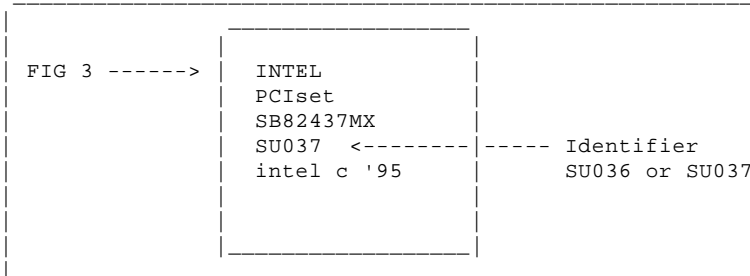
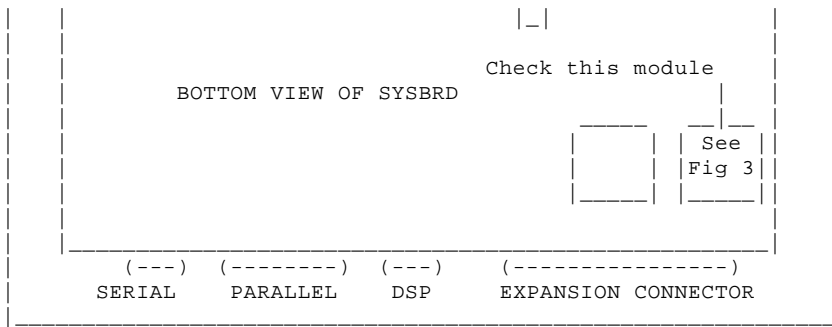
The bar code is located below the option in the ULTRA BAY. Lift the keyboard and remove the option to see the Bar code. The X in the figure represents any letter or number and is not relevant.



SYSTEM BOARD IDENTIFICATION METHOD 2. (FIG 2)

Alternative method to identify older level system boards if the bar code is damaged: This can only be done after the system board is removed from the computer.





NOTE:

If the sysbrd module identified in Fig 2 and 3 has SU036 or SU037 on it the system board is at the older level.
 If the CPU that was ordered is not used return it.

(Check FIG 4 for CPU numbers.)

FIG 4.

	OLD	NEW
100 MHz CPU FRU	P/N46H5598	P/N11J9673
120 MHz CPU FRU	P/N39H6230	P/N11J9672
120 MHz CPU FRU	P/N46H5597	P/N82H8927
133 MHz CPU FRU	P/N39H6231	P/N82H8897
133 MHz CPU FRU	P/N46H5596	P/N11J9674

SAS KEYWORDS:

PSY2 THINKPAD UNCLASSIFIED PSY2BRD
 PSY2CPU

PSY2 RETAIN TIPS
9546 HMM FRU CORRECTIONS.

1.4.293 9546 HMM FRU CORRECTIONS.

Record number: H132401

Device: D/T9546
Model: M
Tip key: 001
Date created: 096/01/23
Date last altered: A96/05/17

The following corrections should be made to your HMM Mobile manual S82G-1503-01, dated October 1995.

Page 154 List 18a Base Cover From P/N39H7054
to P/N29H9181.

Page 154 List 23 Modem Cover Lock P/N39H7028 Correct.
Part being released.

Page 154 List 24 Modem Cover P/N39H7030 Correct.
Part being released.

Page 154 List 24 Blank cover for EMEA P/N29H9187 Correct.
Part being released.

Page 157 List 18a Base Cover From P/N39H7057
to P/N29H9182.

NOTE: THE ABOVE CHANGES BRACKETED WITH EQUAL SIGNS WERE NOT
PLACED INTO HMM FORM NUMBER S82G-1503-03.

SAS KEYWORDS:

PSY2

PSY2PART

PSY2DOC

THINKPAD

1.4.294 9546 SCREW COVER MANUFACTURING CHANGE.

Record number: H133083

Device: D/T9546
Model: M
Tip key: 002
Date created: 096/03/15
Date last altered: A96/03/18

New 760C, CD, L and LD model systems are being manufactured with out screw covers in the I/O area of the system. This matches the I/O area's over all design. It is an intentional change - FRU replacement or hole covers are not required.

All cover FRUs that have fastener holes will still ship with hole covers. The extra hole covers in the base FRU may be used in other areas of the system.

SAS KEYWORDS:

PSY2

PSY2PART

THINKPAD

D/T9547

1.4.295 9546/9547 KINGSTON MEMORY SAFETY CHECK.

Record number: H003182

Device: D/T9546
 Model: M
 Tip key: 006
 Date created: 096/05/09
 Date last altered: A96/05/15

Kingston Technology Corporation has recalled its 16MB DIMM memory, Kingston part number KTM-TP760/16, which is sold by Kingston for use in IBM ThinkPad 760 C, CD, L & LD models. The Kingston DIMM referenced has a potential safety problem, that may result in an electrical short, overheating, smoke and possibly fire.

The following is a partial quote from Kingston's Press Release.

Kingston Institutes a Voluntary Precautionary Total Recall, Stops Production of KTM-TP760/16 Memory Module to Maintain Customer Safety

Fountain Valley, CA -- (May 10, 1996), Kingston Technology Corporation, today announced that it has discovered a potential problem with its KTM-TP760/16 memory module for IBM ThinkPad 760L, 760LD, 760C, 760CD notebook computers. Under specific conditions, an electrical short circuit could develop creating the potential for overheating, smoke and possibly fire. Of the more than 27,000 KTM-TP760/16 Kingston memory modules which have shipped since its introduction in November of 1995 only one instance of the short circuit has been reported. However, to eliminate the possibility of risk to its customers, Kingston has instituted a voluntary and precautionary recall of all its KTM-TP760/16 memory modules. No other Kingston products are affected.

Customers should call Kingston's toll-free number (1 - 888 - 435 - 4937) for more information about affected memory products and the company's product recall program. Kingston customers outside of the United States and Canada should contact their Kingston Technology memory DIMM point of sale for further information.

IBM product questions can be directed to IBM's customer PC Help Center (1 - 800-772-2227). Customers with IBM product questions in Canada should call the Canadian Help Center at 1 - 800-565 - 3344. Customers in other areas should contact their system's point of sale.

IBM and TSS servicers should do the following:

Customers' ThinkPad 760 C, CD, L or LD models, containing 24MB or more memory, should be checked for this DIMM during any service action. All Kingston KTM-TP760/16 DIMMS must be removed from the system, and returned to the customer. Customers must be advised to not reinstall this DIMM and to contact Kingston Technology Corporation at 1-888-435-4937 for information on DIMM replacement.

To accomplish both of these actions do the following: Place the Kingston KTM-TP760/16 memory in an anti-static bag. The bag and the RETAIN tip, or the portion of the tip bordered by equal signs (==), should then be placed in the shipping carton sling. Place the system unit in the sling over the memory and announcement.

IBM does not have any IBM FRU stock of this DIMM.

SAS KEYWORDS:

PSY2	PSY2MEM	THINKPAD	D/T9547
760C	760CD	760L	760LD

1.4.296 9547 760EL & 760ELD HMM CORRECTION TO S82G-1503-04.

Record number: H135061 Number of altered copies: 1

Device: D/T9547
Model: M
Tip key: 004
Date created: 096/11/12
Date last altered: A96/11/12

The HMM Volume 3 for ThinkPad Computers (S82G-1503-04) requires a change to page 378. Index 12a and 12b descriptions should be swapped and the FDD Connector Cable P/N29H9003 should be changed to the following:

Index 12a should read:

12a FDD Connector Cable FRU P/N29H9203

And index 12b should read:

12b Rear Shield Case FRU P/N29H9201

SAS KEYWORDS:

PSY2 PSY2PART PSY2DOC THINKPAD
UNCLASSIFIED

1.4.297 9548 & 9549 CPU REMOVAL AND INSTALLATION INFORMATION.

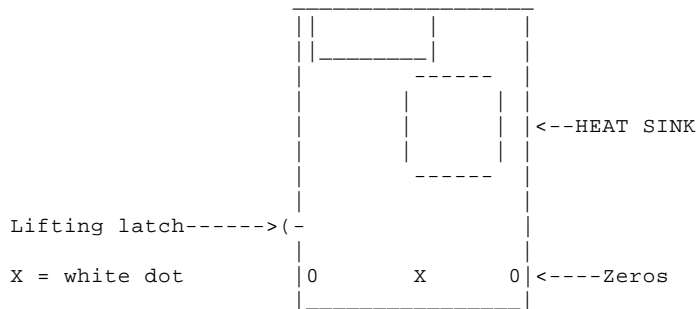
Record number: H163627

Device: D/T9548
 Model: M
 Tip key: 001
 Date created: 098/05/08
 Date last altered: A98/05/08

Follow the HMM CPU removal information. Use a small flat blade screw driver in the designated slot to loosen the CPU card. Do NOT pull the CPU card from its socket before loosening it.

The CPU card pins must all seat simultaneously during installation. To do this place the card over the socket. Then position your fingers at the two corners and on the white silk screened spot at the center of card over the connector. Press down with even pressure until the connector clicks into the socket.

Figure 1.
 The Zeros and the white silk screened dot indicate where to press during installation.



NOTE: The on-line Internet HMM CPU removal and replacement area will be updated with this information. Hardcopy versions will be updated during the next release.
 IBM Mobile Systems Hardware Maintenance Manual Volume 4 form number S05L-1270.

IBM HMM Internet Url:
<http://www.pc.ibm.com/us/cdt/hmm.html>

SAS KEYWORDS:
 PSY2 THINKPAD PSY2DOC PSY2PART
 PSY2BRD UNCLASSIFIED D/T9549

1.4.298 9548 & 9549 FDD HOT SWAP INFORMATION.

Record number: H163620

Device: D/T9549
Model: M
Tip key: 003
Date created: 098/05/08
Date last altered: A98/05/08

The 770 ThinkPad supports hot swapping of all options within the Ultra Bay. Options that plug into external ports such as the external FDD are not hot swappable. Do not plug or unplug non-Ultra Bay items while the system is powered on. Doing this could cause hardware or operational failures.

SAS KEYWORDS:

PSY2 PSY2PART PSY2DIAG THINKPAD
UNCLASSIFIED D/T9548

1.4.299 9548 & 9549 HMM PART NUMBER CORRECTIONS.

Record number: H162466

Device: D/T9549
Model: M
Tip key: 001
Date created: 098/01/13
Date last altered: A98/01/13

The following corrections should be placed in current Hardcopy
Volume 4 ThinkPad (form number S05L-1270-01) HMM manuals.

FRU P/N	CURRENT	CHANGE
HMM cover	ThinkPad 770 (9547)	(9548 - 9549)
P/N05K4478 Screw Kit	lists 6-4mm screws	6-6mm screws
P/N12J0410 Video Card		

SAS KEYWORDS:
PSY2

1.4.300 9552 / 9545 PCMCIA INDICATOR DESIGN

Record number: H085136

Device: D/T9552
Model: M
Tip key: 024
Date created: 093/12/07
Date last altered: A94/02/23

This tip explains the operation of the 9552 720 and the 9545 750 PC card in-use LEDs, the reason for the differences in the duration of LED ON time between these two devices and information on hot plugging the PCMCIA cards.

Some PCMCIA cards can not be hot-plugged when they are performing certain activities. Memory updates to a PCMCIA memory card is an example.

The 720 PC card in-use LED "ON" means the PCMCIA card must stay in the system while the indicator is lit. If it is removed software operation or data problems can occur. When the LED is off the PCMCIA card may be removed even if the card is active.

The 750 PC card in-use LED "ON" means the card is powered on. Its design is NOT meant to indicate card operation that precludes PCMCIA card removal. Because there is no distinction the PCMCIA card must stay in the system when the PC card in-use LED is on.

Customer information about the PCMCIA icon LED is located in the customer's Quick Reference hand book.

SAS KEYWORDS:

PSY2

PSY2ADPT

D/T9545

1.4.301 9552 MODEM AND CABLE PART NUMBERS

Record number: H10146

Device: D/T9552
Model: M
Tip key: 003
Date created: 092/11/03
Date last altered: A92/11/04

THE 9552 THINKPAD 700 & 700C HARDWARE MAINTENANCE SERVICE
NUMBER S42G-2022 (PART NUMBER 42G2022) WILL CONTAIN THE
FOLLOWING MODEM AND CABLE PART NUMBERS IN ITS NEXT RELEASE:

NAME	FRU P/N
SERIAL ADAPTER	FRU P/N79F6840
DATA/FAX ADAPTER	FRU P/N94X2554 (U.S. AND CANADA)
DATA/FAX ADAPTER	FRU P/N94X2506 (JAPAN)
TELEPHONE CABLE	FRU P/N94X1540

THESE FRUS ARE USED ON THE 9552, 8554 AND 8551 SYSTEMS.

SAS KEYWORDS:

PSY2	D/T8554	D/T8551	PSY2ADPT
PSY2DOC	PSY2PART	PSY2COMM	

1.4.302 9552 POST ERROR CODE 01290200 RECOVERY

Record number: H125791

Device: D/T9552
Model: M
Tip key: 034
Date created: 094/12/16
Date last altered: A97/12/05

Post error code 01290200 is recorded on the system board's NVRAM (Non Volatile Random Access Memory.) It will continue to display at post after the cause of the error is corrected unless it is cleared from NVRAM storage.

The error can be caused by software such as an extended memory manager, or by a processor card or system board failure.

No hardware replacements (FRU replacements) should be done before the error log is erased. To erase the error log start the system board advanced diagnostics. Answer NO to the question DO YOU WISH TO DISABLE CASHE? This will erase the code in storage. If the problem continues replace the above FRUs separately.

SAS KEYWORDS:

PSY2	PSY2ERR	PSY2OEM	PSY2PART
PSY2COMM	THINKPAD	UNCLASSIFIED	

1.4.303 9552 PROCESSOR SPEED INFORMATION

Record number: H035423

Device: D/T9552
Model: M
Tip key: 019
Date created: 093/07/01
Date last altered: A93/09/27

The 720C/720 and 50MHz 700C/700 can run at 50MHz in both AC and battery mode. The system can be set to 50MHz, 25Mhz or auto. In Automatic mode (Battery saver) the processor speed will range from 0 to 25MHz as required by system use, but it will not operate at 50MHz. This information is documented in the 9552 User's Guide.

SAS KEYWORDS:

PSY2 PSY2MISC DOUBLE CLOCK PSY2BRD

PSY2 RETAIN TIPS
9552 TEMPERATURES RANGES.

1.4.304 9552 TEMPERATURES RANGES.

Record number: H123872

Device: D/T9552
Model: M
Tip key: 029
Date created: 094/04/27
Date last altered: A94/04/27

This tip defines the operational and storage temperature ranges of 9552.

The system can be operated when:

The temperatures are 10 to 35 C (41 to 95 F).

The off condition temperature rating assumes that a battery or AC is connected to the system.

The temperatures are 5 to 43 C (41 to 110 F).

The Storage/Shippment temperature rating is defined as a packaged system without a battery or AC power attached.

The temperatures are -20 to 60 C (-4 to 140 F).

Warning: Temperatures below -20 C (-4 F) may permanently damage the LCD display.

SAS KEYWORDS:

PSY2

PSY2PW

PSY2DISP

ENVIRONMENT

1.4.306 9552 700C LCD DIMS WHEN SWITCHED TO DC (NORMAL)

Record number: H053411

Device: D/T9552
Model: M
Tip key: 003
Date created: 093/02/22
Date last altered: A93/05/21

DO NOT REPLACE PARTS IF YOUR CUSTOMER INDICATES THE BRIGHTNESS DIMS WHEN SWITCHING FROM A.C. POWER TO INTERNAL D.C. POWER. THIS IS A NORMAL FUNCTION OF THE SYSTEM. IN THE CUSTOMER'S THINKPAD 700C PS/2 "BATTERY OPERATION GUIDE" BOOKLET IT STATES ON PAGE 6, BELOW STEP 2 (BRIGHTNESS), "NOTE WHEN YOU DISCONNECT THE AC ADAPTER FROM THE COMPUTER, THE LCD BECOMES SLIGHTLY DIMMER TO CONSERVE BATTERY POWER."

The Booklet is located in the system's publication ship group. form number S42G-2012 (Dealer # P/N42G2012) for the 700 and S42G-2019 (Dealer # P/N42G2019) for the 700C.

SAS KEYWORDS:

PSY2 PSY2DISP DISPLAY INTENSITY

1.4.307 9552 8554 & 8551 HIGH SPEED DATA/FAX MODEM P/N.

Record number: H007594

Device: D/T9552
 Model: M
 Tip key: 013
 Date created: 093/04/01
 Date last altered: A97/12/05

THE INTERNAL MODEM (MODEL FC3632) WAS CHANGED FROM P/N42G2592 TO P/N92F0288.

THE LOW SPEED MODEM (PCMCIA MODEL FC3634) WAS CHANGED FROM P/N42G2593 TO P/N92F0289 TO P/N13H5297. ***

THE HIGH SPEED MODEM (PCMCIA MODEL FC3635) WAS CHANGED FROM P/N42G2594 TO P/N92F0290 TO P/N13H5298.***

THE PCMCIA-TO-MINIDIN CABLE IS P/N92F0287.

The PSTN cable
FRU for U.S./Canada/Latin America (except Chile)is P/N94X1540.

This information will be in the next HMS releases.

SAS KEYWORDS:

PSY2	D/T8554	D/T8551	PSY2PART
PSY2ADPT	PSY2DOC	CABLE	THINKPAD
UNCLASSIFIED			

1.4.308 9552. LOW SPEED PCMCIA OS/2 MODEM DRIVER.

Record number: H122863

Device: D/T9552
Model: M
Tip key: 025
Date created: 093/07/22
Date last altered: A94/02/23

The IBM PCMCIA Data/Fax Modem Model FC3634 (FRU P/N42G2593) will not operate with OS/2 2.1 unless the driver diskette for the PCMCIA adapter is 1.20 or higher. Customers or servicers can download this diskette from the NSC BBS via modem by calling 5 - 6600 or by ordering it from the IBM Help Center at 1 - 800-PS2 - 2227.

SAS KEYWORDS:

PSY2 PSY2PROG PSY2ADPT

1.4.309 9552&COLON. MOUSE OR RESUME HANGS USING WINDOWS

Record number: H20458

Device: D/T9552
 Model: M
 Tip key: 007
 Date created: 093/01/27
 Date last altered: A94/01/20

The 9552 requires that the DOS operating system be at or above version 5.02 and that Windows be at or above version 3.1 for correct operation. If the program levels are correct the WINDOWS SETUP program should be examined and changed if necessary before any frus are replaced for suspend / resume problems or if mouse control is lost after reentering WINDOWS.

Symptoms of an improper WINDOWS setup are not being able to RESUME after a SUSPEND operation, no mouse control after returning to WINDOWS and other errorless system hang conditions. Your customer should do the following ato correct these conditions:

1. At a C: prompt do a change directory to the WINDOWS directory.
2. Key "SETUP"
3. Under "System Information" the customer must change the options for Computer and Display.
4. To do this press the arrow key to bring the highlight area next to the word Computer. Press enter.
5. Use the arrow key to move the highlighted area to "MS-DOS System with APM". Press enter.
6. Next ensure the selection adjacent Display is VGA (Version 3). To do this the press the arrow key to bring the highlight area next to the word Display. Press enter.
7. Use the arrow key to move the highlighted area to "VGA (Version 3)". Press enter.
8. Press enter and follow the steps on the screen to complete the changes.

SAS KEYWORDS:

PSY2	PSY2PROG	HANG	LOCKED
HUNG	D/T2618	D/T2615	D/T3550
D/T8543	D/T8551	D/T2614	D/T9545
D/T8554	D/T2603	2618	2615
2614	2603		

1.4.310 9553 POWER SUPPLY WIRE INFORMATION ERROR

Record number: H017488

Device: D/T9553
Model: M
Tip key: 003
Date created: 094/03/17
Date last altered: A94/05/13

Page 4 of the December 1993 supplement (S82G-3782-00) to the PS/2 HMS (S52G-9971-00), shows a wire connected to position #5 of the power supply connector J12 (+5 Sense). This is an error, as no wire is present in this position.

This wire was used in some prior PS/2 products. Later power supply design changes eliminated this wire.

The correct FRU part number for the 9553 Power Supply is P/N27F4166. An incorrect FRU, P/N92F0266, is printed on the label on the top of the power supply.

This information will be corrected in the next HMS revision.

SAS KEYWORDS:

PSY2 PSY2DOC PSY2POWR 27F4166
92F0266

1.4.311 9553 VERTICAL MOUNTING

Record number: H0162

Device: D/T9553
Model: M
Tip key:
Date created: 094/03/21
Date last altered: A94/08/15

The IBM 9553 (PS/2 53 and 53LS 486SLC2) is designed for use in a horizontal position and has been approved by the Underwriters Laboratory and the Canadian Standards Association for use in a horizontal position only.

IBM supports vertical mounting of the 9553 when installed in an appropriate fixture approved for such use by the Underwriters Laboratory and the Canadian Standards Association. Any 9553 installed vertically must conform with the following stipulations.

- * The system unit must have the left side (side with louvers) as viewed from the front, facing down for proper cooling.
- * The louvers must not be blocked as to afford continuous air flow into the unit. There must be a clearance of at least 3 inches above the floor or solid surface.
- * Care must be taken to prevent the system unit from tipping over because of the narrow profile design. The unit must be secured in some manner to prevent tipping but at the same time allow for easy accessibility for service.

If these stipulations are not followed it may void the product warranty.

SAS KEYWORDS:

PSY2 9553 PSY2MISC MOUNT

1.4.312 9576/77 S&I MODELS FLASH EEPROM CODE UPDATES

Record number: H127524

Device: D/T9577
 Model: M
 Tip key: 005
 Date created: 095/05/12
 Date last altered: A95/05/12

The purpose of this tip is to list the BIOS updates for the 9576 and 9577 systems and provide a method of obtaining the latest level flash update diskette. A detailed list of the contents of the BIOS updates is also contained in this in this tip. The flash updates for the 9576i, 9577i, 9576s and 9577s are:

Flash Revision 03 was the original release

Flash Revision 04 contains the following enhancements:

- 1) Third Party Video Adapter enhancements

Flash Revision 05 (current) contains the following enhancements:

- 1) Electronic eject floppy diskette drive compatibility
- 2) Image/I Adapter/A compatibility
- 3) Melco 1.44 floppy diskette drive compatibility

The current Flash 05 update, may be downloaded from the IBM PC Company Bulletin Board System at 919-517-0001.

The Image to search for is 7677FLSH.DSK

```

=
= THESE FLASH UPDATES ARE CUSTOMER INSTALLABLE. CUSTOMERS
= SHOULD BE ADVISED TO CONTACT THE PC COMPANY HELPCENTER AT
= 800-772 - 2227 IF ASSISTANCE IS REQUIRED IN GETTING THE
= APPROPRIATE UPDATE.
=
=

```

SAS KEYWORDS:

PSY2	D/T9577I	D/T9577S	D/T9576I
D/T9577S	PSY2MCD	PSY2ADPT	PSY2DSKT

1.4.313 9595 PROCESSOR BOARD PART NUMBER INCORRECT

Record number: H123141

Device: D/T9595
 Model: M
 Tip key: 007
 Date created: 094/03/16
 Date last altered: A94/03/16

The parts list for 9595A in the Hardware Maintenance Manual S52G-9971 - 01, dated Sept. 1993, is incorrect. The correct 80486DX2 - 33/66 Processor for the Server 95 and 9595A is FRU P/N61G2343 (refer to page 187, index 25, and page 190, index 26). Page 183, index 24, is correct for the 8595.

FRU P/N92F0145 is the 486DX2-33/66 MHZ type 1 processor card.
 FRU P/N61G2343 is the 486DX2-33/66 Mhz type 4 processor card.

These processor cards are not interchangeable. Each requires a different Reference Diskette (System partition, etc.).

Note: While the type 4 processor board will work in the 8595 XP-486* and the Server 95 systems, the type 1 processor board will not work in the Server 95 system.

* Note- System differences:

8595 XP 486 system has only one serial and one parallel port on the system board (FRU P/N33F5717).

The Server 95 systems have two serial and two parallel ports on the system board (FRU P/N92F2623).

The referenced documentation error will be corrected during the next revision.

SAS KEYWORDS:

PSY2SYSDOC	PSY2PARTS	D/T8595	PSY2
PSY2PART	92F0145	PLANAR	61G2343

1.4.314 9595 PROCESSOR BOARD SPEED

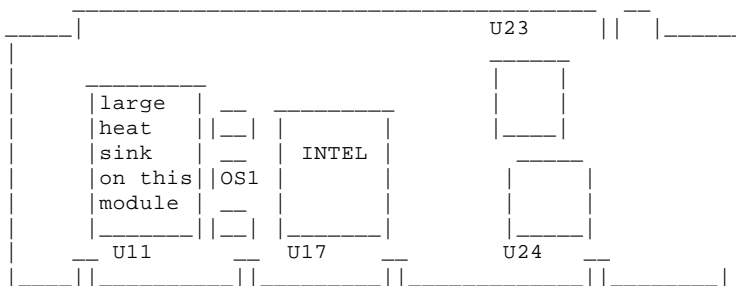
Record number: H123651

Device: D/T9595
 Model: M
 Tip key: 013
 Date created: 094/02/23
 Date last altered: A94/04/20

A limited number of 8595/9595 systems with 66 MHZ Pentium* processor boards (Type 4) may erroneously display the processor speed as 60 MHZ. This may be seen at the diagnostic "devices installed" menu, which is seen immediately after selecting the diagnostic mode, or on the "View Configuration" screen of the system partition.

This is not a functional error and does not affect the true processing speed of the system or the functional accuracy of the diagnostic. Only the speed information shown on the diagnostic menu is affected. The actual speed of the processor is determined by precision clocking circuits which are not associated with this diagnostic menu.

Physical confirmation of the Pentium processor board speed may be done by inspecting the small module (oscillator chip) at location OS1. OS1 is the center module between U11 and U17. A 66MHZ processor will have "66.0000 MHZ" printed on top of the module. Refer to the diagram below:



The FRU part number of the 66 MHZ Pentium Processor board is: P/N92F0120.

* Registered Trademark of Intel Inc.

SAS KEYWORDS:

PSY2

PSY2ADPT

PSY2MISC

D/T9595A

attached to the RAID controller.

- C. Fixes problems encountered while running SCSI fixed disk diagnostics with the "read verify" option selected.
- 7.00 Dated 11/28/95. Superseded by ver. 8.00, dated Jan.1996.

Support was added for the following enhancement:

- A. BIOS code was added to support switching a single keyboard and monitor between multiple systems.
- 8.00 Dated January, 1996, is the current version.
The file name on the BBS is BIOS08.DSK.
- A. Corrects Date and Time not set problem that only occurs when running OS/2.

Device Drivers and recent BIOS versions referenced in this tip may be downloaded from the IBM PC Company Bulletin Board System (BBS), Section 22, by calling 919-517-0001. The current Type 4 Ref. Disk. V1.34 filename is: RF90954A.DSK. The current Common Diag. Disk. V2.33 filename is: RD9095A.DSK. The BIOS version 8.00 Update Diskette filename is: BIOS08.DSK.

UPGRADING THE POST/BIOS

The Level of POST/BIOS is indicated on the IBM logo screen of the system.

Type 4 Reference Diskette versions below 1.31 will be disabled from running on a system with a BIOS version 3.00 or higher to prevent configuration errors and startup sequence errors. If the system is "flashed" DOWN below BIOS version 3.00 AN OLDER REFERENCE DISKETTE WILL BE REQUIRED to configure the system.

Back up the system partition before updating the system and SAVE the diskettes. This set of back-up diskettes will be compatible with BIOS level 1, 2, or 3.

Also verify configuration information and startup sequence before updating the system. A configuration error and startup sequence error will occur after the update. The new Reference diskette will be required to correct the configuration error.

BIOS level 3 and higher:

Note:

SCO Unix and Banyan Vines will not be able to recognize devices configured on the SCSI-2 F/W Adapter, when the adapter has been configured on a system with level 3 BIOS or higher. This is due to the fact that the internal and external ports are separated. A special version of the SCSI-2 F/W Adapter's ADF (@8EFC.ADF) file is available to allow the busses to be set to a COMBINED state, which overcomes this problem.

The ADF file is available by contacting the HelpCenter and is on the PCC BBS in directory 22. It is also available from level 2 support and BBS in other geographies.

Bootable CD ROM's are supported.

Bootable read write optical devices are supported if the drive is jumpered to enable its configuration as a removable hard disk. The media created (formatted and written) by this bootable optical device cannot be read by another optical drive that is not jumpered to be bootable and vice-versa. Refer to the user's documentation for the specific devices for additional information.

FAST POST, set from the configuration menu or from the Logo screen at boot, does not check for the presence of newly added SCSI devices unless F1 is also pressed at the Logo, to invoke the system partition. Newly added SCSI devices may not be configured, nor will an error occur, if fast post is chosen as the default. Enter the System Partition by pressing F1 at the logo to configure the new device initially. The "Change Configuration" menu and the "Set and View SCSI Device" menu allow multiple methods of bypassing POST error messages under various conditions if the user so desires.

A configuration error will occur if the system is being updated to BIOS level 3, or higher, from a previous level.

The configuration program will attempt to keep a configuration saved from "change configuration" menu when new adapters are added. After flashing with the POST/BIOS diskette and "Updating System Programs" from the Reference Diskette, go to the system partition and select "Change Configuration," and verify the configuration is correct, and "Save."

Verify the Selectable Boot Sequence is correct after confirming the configuration.

SAS KEYWORDS:

PSY2	PSY2PROG	SERVER	D/T9595A
SERVER95	95	OS2	SCO
BANYAN	VINES	UNIX	D/T8641
FIRMWARE	NETWARE	NOVELL	SERVER
500	8641	32MB	0002251R
000225XX	PSY2ERR	ERROR	D/T8590
D/T8595			

1.4.316 9595A/8641 RAID ARRAY SYSTEMS WITH SCSI TAPE OR CD-ROMS

Record number: H091381

Device: D/T9595
 Model: M
 Tip key: 012
 Date created: 094/03/14
 Date last altered: A97/03/21

RAID Array systems, which have an optional CD-ROM or tape drive connected to the RAID controller adapter, may experience difficult to diagnose configuration problems if the device address is not set correctly, terminators are installed, or if other option jumpers are set incorrectly (9595A & 8641 systems).

The supported optional tape drive is shipped preset as SCSI address 5. On the Server 95 (9595A), the optional CD-ROM is usually set to address 6. Use the preset address, or 4 thru 6, to avoid conflicts with addresses 0 through 3, which are reserved by the adapter firmware (RAID Controller Diskette) for fixed disks in the RAID array.

If this tape drive is being installed in a system other than a 9595A, the SCSI ID should be set to an address that is not currently in use by any other SCSI device. Refer to the system documentation provided with the Server to determine the correct SCSI ID to assign to the tape drive.

DO NOT install the tape drive on any system without first checking that the SCSI ID and termination is set properly. Failure to follow these instructions could cause difficult to diagnose system failures and excess downtime, particularly on systems with RAID adapters.

There should be NO TERMINATORS on these devices when installed in these systems. Termination is preset by the DASD fixed disk support structure.

Note:

This restriction does not apply to devices attached to any other optional SCSI adapter, which may be installed in the system.

The only tape option supported on the RAID array controller used in the 9595A is:

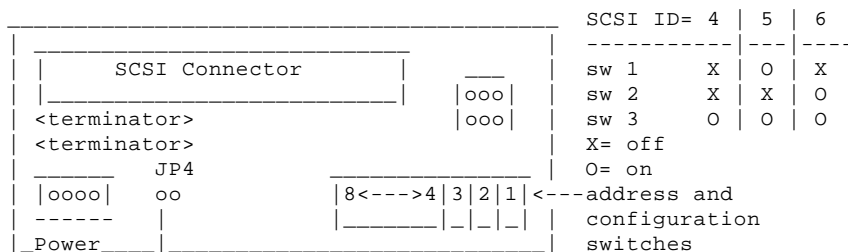
IBM 4/10GB 4MM DAT TAPE DRIVE OPTION kit, Feature code 7499, option number 74G8632. (Note: the option number was originally 8191339 and was recently changed to 74G8632.)

The FRU is P/N16G8456, which supplies only the tape drive.

Note:

There are currently two different tape drives which may be disbursed under FRU P/N16G8456. They are interchangeable, but have different addressing methods, as follows:

Rear View of 4MM SCSI Tape Drive
 (Addressed by switches on the drive)



No jumpers should be installed on JP4. Switches 4 thru 8 Must be off.

JP4 is the jumper for TERM POWER. Since most SCSI and RAID adapters already provide TERM POWER, there is no need for this jumper to be installed.

* Note: 01291500 errors may be caused when a jumper is installed on JP4 on 9595A RAID ARRAY systems.

*****IMPORTANT NOTE*****
 Note: SCSI Bus Adapter FRU P/N92F0324.

A SCSI bus adapter is required between the WIDE SCSI cable and NARROW SCSI devices, such as the CD-ROM or the 4mm optional

tape drive. CARE MUST BE EXERCISED WHEN THIS ADAPTER IS INSERTED INTO THE REAR OF THE TAPE UNIT TO PREVENT MIS-PLUGGING. The adapter is keyed, however some tape drives have connectors that do not have the corresponding keyway. This allows the adapter to be mis-plugged one pin position, either direction.

Mis-plugging one direction has been known to cause the systems to shut down (power supply self-protect). When this condition is corrected the system power supply will operate normally. (Power supply self-protect is explained on page 290 of the PS/2 Hardware Maintenance Manual S52G-9971-01, dated Sept, 1993.)

Mis-plugging in the other direction has been know to cause the device to be unrecognized (configuration failures).

Rear View of Later version of 4MM SCSI DAT Tape Drive
(Addressed by jumpers on the drive)

	SCSI ID	Pins jump'd
ID and Option jumpers	4	5&6
15 1	5	5&6 1&2
16 2	6	5&6 3&4
SCSI Signal Cable Connector oooo <--Power		

Feature	Pins jumpered
Terminator power on	15 & 16
N/A	13 & 14
Active terminator enabled	11 & 12
Data Compression enabled	9 & 10 (Off, unless clearly required)

A feature jumpering information label is on the on the unit.

SAS KEYWORDS:

PSY2	PSY2ADPT	D/T9595A	16G8456
16G8456	PSY2FDSK	MAGNETIC	SERVER
95	POST	ERROR	D/T8641
0206	8641	CD	ROM
GUIDE	02067043	180A	CDROM
CD-ROM	BOOT	PSY2CDROM	SERVER
95	500	4/10	

AUDIO CABLE FRU FROM CDROM TO J2 ON ACPA/A ADAPTER

1.4.317 AUDIO CABLE FRU FROM CDROM TO J2 ON ACPA/A ADAPTER

Record number: H023172

Device: D/T8557
Model: M
Part number: P/N92F0112
Tip key: 006
Date created: 092/10/19
Date last altered: A93/06/02

The FRU part number of the CDROM II audio cable that attaches to the J2 connector on the ACPA/A adapter is P/N92F0112. This will be included in the next release of the HMS manual.

SAS KEYWORDS:

PSY2	PSY2PUB	PSY2DOC	D/T9557
DOCUMENTATION	PUBLICATION	MULTIMEDIA	P/N92F2168
CAPTURE	PLAYBACK	CD	CD-ROM
CD ROM			

1.4.318 BACK-UP BATTERY HOLDER CLARIFICATION

Record number: H131214

Device: D/T9545
Model: M
Part number: P/N84G6558
Tip key: 050
Date created: 095/10/12
Date last altered: A95/10/12

The IBM Mobile Systems HMM S82G-1502-03 Volume 2 dated April 1995, page 459, index number 8, for FRU P/N85G1501, does not include the back-up battery holder as the drawing indicates. The back-up battery holder is included in the miscellaneous parts kit FRU P/N84G6558 listed on page 463. This will be corrected in the next update to the HMM.

SAS KEYWORDS:

PSY2	THINKPAD	85G1501	85G6558
DOC	PSY2DOC	PSY2PART	

BASE FRAME FRONT SHIELD HAS BEEN REDESIGNED

1.4.319 BASE FRAME FRONT SHIELD HAS BEEN REDESIGNED

Record number: H123550

Device: D/T9556
 Model: M
 Part number: P/N73G6061
 Tip key: 002
 Date created: 094/04/12
 Date last altered: A94/11/01

Changes have been made to the front shield (stamped sheet metal RF shield) for the 9556 and 9576.

These changes were made to reduce physical interference which hampered cover removal. This interference often resulted in the shield being bent.

The changes included adjusting the radius of the corners and enlarging certain openings, which improve the overall physical handling qualities.

The FRU part number (P/N73G6061) remains unchanged.

SAS KEYWORDS:

PSY2	PSY2PART	PSY2MISC	D/T9557
D/T9577	EMC	METAL	FINGER
SPRING	STEEL	73G6061	

BOX AND CABLE FOR THE PCMCIA PERSONAL DICTATION ADAPTER

1.4.320 BOX AND CABLE FOR THE PCMCIA PERSONAL DICTATION ADAPTER

Record number: H13762

Device: D/T9545
Model: M
Part number: P/N89G2848
Tip key: 045
Date created: 095/09/07
Date last altered: A95/09/07

To obtain the cable for the IBM PCMCIA Personal Dictation Adapter FRU P/N89G2846 order FRU P/N89G2848. This FRU contains the cable and external JACK box.

SAS KEYWORDS:

PSY2

PSY2PART

PSY2ADPT

THINKPAD

1.4.321 CABLE DESCRIPTION

Record number: H126254

Device: D/T9545
Model: M
Part number: P/N84G3629
Tip key: 031
Date created: 095/02/01
Date last altered: A95/02/01

Page 642 of the Oct 94 HMM under index 14 lists the cables in Cable Group P/N84G3629. Connection Cable 1 is incorrectly listed twice. There is only 1 connection one cable. This is a Y cable that goes from one connector on one end to two connectors on the other.

SAS KEYWORDS:

PSY2 PSY2PART PSY2DOC PSY2PUB
84G3629

1.4.322 CD-ROM POWER EXTENSION CABLE AVAILABLE

Record number: H132491

Device: D/T9595
 Model: M
 Part number: P/N06H6317
 Tip key: 028
 Date created: 096/02/02
 Date last altered: A96/02/02

The following FRU part number is available to servicers, but is not listed in the HMM (Hardware Maintenance Manual) S52G-9971-02 dated October, 1994:

CD-ROM power cable extension FRU P/N06H6317

Servicers should add this new part number to page 283 of their HMM.

This cable is compatible with CD-ROM drive FRU P/N88G4898, which automatically substitutes to FRU P/N88G4921. These CD-ROMs were standard equipment in the 9595A RAID array servers when Serverguide was introduced. The extension was required because the new CD-ROM was further away from the power connector on the 9595 power supply. This power cable has the standard four wire connector.

The part number will be added to the HMM at the next update.

SAS KEYWORDS:

PSY2	PSY2PART	06H6317	CD
ROM	D/T9595	D/T9595A	PSY2DOC
SERVER	95		

1.4.323 CDROM I SCSI ID JUMPERS AVAILABLE

Record number: H095825

Device: D/T8550
 Model: M
 Part number: P/N92F0082
 Tip key: 115
 Date created: 092/04/01
 Date last altered: A95/08/11

SCSI ID JUMPERS FOR CDROM I ARE AVAILABLE BY ORDERING
 FRU P/N92F0082. REFER TO THE HARDWARE MAINTENANCE DOCUMENTATION
 FOR THE CORRECT INSTALLATION OF THESE JUMPERS.

SAS KEYWORDS:

PSY2	PSY2MISC	D/T8550	D/T8555
D/T8556	D/T8557	D/T8560	D/T8565
D/T8570	D/T8573	D/T8580	D/T8590
D/T8595	JUMPER	HARDFILE	TAPE
CDROM	FIXED DISK	8550SYSPART	8555SYSPART
8556SYSPART	8557SYSPART	8560SYSPART	8565SYSPART
8570SYSPART	8573SYSPART	8580SYSPART	8590SYSPART
8595SYSPART	8595SYSMISC	8550SYSMISC	8555SYSMISC
8556SYSMISC	8557SYSMISC	8560SYSMISC	8565SYSMISC
8570SYSMISC	8573SYSMISC	8580SYSMISC	8590SYSMISC
JUMPER			

CONTROL PANEL BEZEL HAS BEEN REDESIGNED

1.4.324 CONTROL PANEL BEZEL HAS BEEN REDESIGNED

Record number: H13118

Device: D/T8641
Model: M
Part number: P/N06H3595
Tip key: 004
Date created: 095/06/12
Date last altered: A95/06/15

FRU P/N06H3595, referenced on page 270, index 27, of the HMM (Hardware Maintenance Manual), dated October, 1994, has been redesigned. This is the power On-Off switch bezel (cover) and the new design is to minimize accidental power-off.

The FRU part number has not changed.

SAS KEYWORDS:

PSY2	PSY2PART	8641	SERVER
500	RAID	CONTROL	PANEL

1.4.325 D/T2640 HMM SYSTEM BOARD FRU CORRECTION.

Record number: H134097

Device: D/T2640
 Model: M
 Part number: P/N46H4146
 Tip key: 002
 Date created: 096/09/20
 Date last altered: A97/12/05

The Mobile Systems Hardware Maintenance Manual Volume 3 S82G-1503 - 03 and 04 dated May 1996 / September 1996 require the following corrections to the ThinkPad 560 parts listings.

Page 227, ThinkPad 560 (2640)

Index	Current version	Correction
7	SystemBoard (100MHz) 46H4147	==> 46H4146
	SystemBoard (120MHz) 46H4146	==> 46H4147

The Japanese version of the Mobile Systems Hardware Maintenance Manual for the ThinkPad 560 (2640) Sa88-5763-00 requires the following corrections:

Page 59, ThinkPad 560 (2640)

Index	Current version	Correction
7	SystemBoard (100MHz) 46H4147	==> 46H4146
	SystemBoard (120MHz) 46H4146	==> 46H4147

SAS KEYWORDS:

PSY2 PSY2BRD PSY2DOC THINKPAD
 UNCLASSIFIED

1.4.326 DATA FAX MODEM INSTALLATION & REPLACEMENT

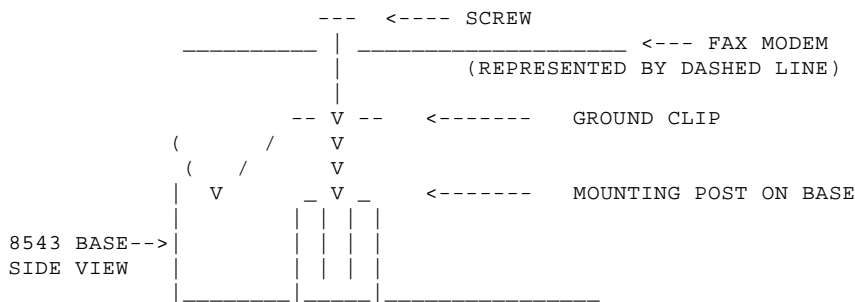
Record number: H081567

Device: D/T8543
 Model: M
 Part number: P/N79F0996
 Tip key: 002
 Date created: 091/04/30
 Date last altered: A97/02/28

WHEN INSTALLING OR REPLACING THE EARLY LEVEL DATA FAX MODEM OPTION ENSURE THE METAL GROUNDING CLIP IS PROPERLY WEDGED BETWEEN THE SIDE OF THE SYSTEM BASE AND THE FAX MODEM BASE SUPPORT. THE FASTENING SCREW PASSES THROUGH THE FAX MODEM, THE HOLE IN THE GROUND CLIP, AND THEN INTO THE MOUNTING POST ON THE SYSTEM BASE.

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DIAGRAM ON NEXT PAGE



THIS CLIP IS CONDUCTIVE AND IF IT IS NOT FASTENED PROPERLY IT COULD CAUSE A SHORT BETWEEN THE BASE AND COMPONENTS ON THE SYSTEM, RESULTING IN PERMANENT DAMAGE TO THE SYSTEM UNIT AND/OR THE DATA/FAX MODEM CARD.

SAS KEYWORDS:

PSY2	PSY2ADPT	8543SYSADPT	D/T8543
PSY2MISC	8543SYSMISC	UNCLASSIFIED	

1.4.327 DATA FAX MODEM SECURING SCREW

Record number: H123878

Device: D/T9552
Model: M
Part number: P/N53G7847
Tip key: 030
Date created: 094/05/09
Date last altered: A94/05/09

The data fax modem knurled attachment screw has been released as a FRU. The new FRU part number is P/N53G7847.

The HMM will be updated on its next release.

SAS KEYWORDS:

PSY2	PSY2PART	PSY2COMM	P/N92F0288
92F0288	53G7847		

1.4.328 DIALOGIC VOICE COMMUNICATION KIT FRU AND PUB LIST FOR 8580

Record number: H123476

Device: D/T8550
 Model: MCP1
 Part number: P/N95F1228
 Tip key: 199
 Date created: 094/03/21
 Date last altered: A94/03/21

IBM IS CURRENTLY MARKETING DIALOGIC VOICE COMMUNICATION ADAPTER TO BE USED IN THE 8557 MOD 045 AND 049, 8580 MOD A16 AND A31, ALL MODELS OF 8595 AND 9585 MOD 0X6, 0XA AND 0XF. ALL LEVELS OF SUPPORT ARE PROVIDED BY IBM.

LEVEL I & II - ATLANTA ISSC 1-800-426-2472
 LEVEL III - COMPLEMENTARY PRODUCTS ENGINEERING

DESCRIPTION	IBM PART NUMBER
- D/41 MC ADAPTER 2 - DROP PCM EXPANSION BUS (PEB) CABLE	P/N95F1228
- LOOP START INTERFACE (LSI)/40-MC ADAPTER SA/120 (TELEPHONE INTERFACE) 2 - DROP PEB CABLE	P/N95F1248
- D/81 - MC ADAPTER 2 - DROP PEB CABLE	P/N95F1235
- LSI/80-MC ADAPTER SA/120 2 - DROP PEB CABLE	P/N95F1229
- VR/41 - MC ADAPTER 3 - DROP PEB CABLE 5 - DROP PEB CABLE	P/N95F1239
- VR/81 - MC ADAPTER 3 - DROP PEB CABLE 5 - DROP PEB CABLE	P/N95F1245
- TTS/40-MC ADAPTER 3 - DROP PEB CABLE 5 - DROP PEB CABLE	P/N92F4116
- TTS/80-MC ADAPTER 3 - DROP PEB CABLE 5 - DROP PEB CABLE	P/N92F4117
- PEB CABLE KIT (INCLUDES ONE EACH OF 2 - , 3 - , 4 - , 5-, AND 6-DROP CABLES)	P/N92F4124
- 7 - DROP PEB CABLE	P/N92F4122
* DIALOGIC HARDWARE MAINTENANCE GUIDE (INCLUDES DIAG DISKETTE) AND INSTALL AND TEST INSTRUCTIONS - FORM NUMBER G571-0249	

SAS KEYWORDS:

POEM	OEM CARDS	OEMCARDS	CARDS
OEMFEATURES	PSY2	D/T8580	DIAL
LOGIC	VOICE	DIALOGIC	RECOGNITION

1.4.329 DISK DRIVE MOUNTING TRAY FRU P/N INCORRECT

Record number: H123865

Device: D/T9585
 Model: M
 Part number: P/N85F0013
 Tip key: 006
 Date created: 094/05/06
 Date last altered: A95/06/07

The FRU part number for the Hard Disk Drive Mounting Tray index 6, page 184, of the PS2 Hardware Maintenance Manual, S52G-9971 - 01, dated Sept. 1993, is incorrect.

The affected machine is the PS/2 9585 (Server 85).

The correct part number is FRU P/N64F0141. The tray is also used in the 8595 and 3511.

This error will be corrected in the next update of the Hardware Maintenance Manual.

SAS KEYWORDS:

PSY2	PSY2FDSK	PSY2PART	D/T9585
64F0141	85F0013	P/N85F0013	P/N64F0141
PSY2DOC	FILE	FIXED	D/T8595
D/T3511			

DISKETTE DRIVE P/N64F0207 WITHOUT BEZEL INCLUDED

1.4.330 DISKETTE DRIVE P/N64F0207 WITHOUT BEZEL INCLUDED

Record number: H121660

Device: D/T8550
Model: M
Part number: P/N64F0207
Tip key: 192
Date created: 093/10/29
Date last altered: A93/10/29

SOME 8550 AND 8570 DISKETTE DRIVES, FRU P/N64F0207, WILL NOT CONTAIN A FRONT BEZEL. USE THE EXISTING BEZEL ON THE FAILING DISKETTE DRIVE. IF REPLACING A HALF HIGH (2" HIGH) DISKETTE DRIVE, ORDER BEZEL FRU P/N15F7571. THE HALF HIGH DISKETTE DRIVES CAN BE IDENTIFIED BY AN LED LOCATED ABOVE THE DISKETTE DRIVE SLOT.

SAS KEYWORDS:

PSY2 PSY2PART PSY2DSKT 64F0207
15F7571

1.4.331 DISKETTE EJECT PROBLEMS ON 8555 8565 8580 1/3 HIGH DRIVES

Record number: H063341

Device: D/T8550
 Model: M
 Part number: P/N33F8211
 Tip key: 060
 Date created: 090/08/16
 Date last altered: A91/09/03

A LIMITED NUMBER OF 1/3 HIGH DISKETTE DRIVES, FRU P/N33F8211, CONTAIN A DRIVE SLIDE ASSEMBLY THAT MAY CAUSE A PROBLEM WITH DISKETTE EJECTION.

IF AFTER REPLACING FRU P/N33F8211 YOU EXPERIENCE THIS PROBLEM, YOU MAY REPLACE THE PLASTIC SLIDE ASSEMBLY WITH A NEW DISKETTE 1/3 HIGH DRIVE SLIDE ASSEMBLY, FRU P/N64F0156. THE NEW SLIDE REQUIRES LONGER MOUNTING SCREWS, (QTY=4), FRU P/N1621023.

--- OR ---

THE DRIVE SLIDE ASSEMBLY MAY BE REMOVED FROM THE DEFECTIVE DRIVE AND REINSTALLED IN PLACE OF THE SLIDE ON THE NEW FRU.

ALL FRUS IN MECHANICSBURG HAVE THE CORRECT DRIVE SLIDE ASSEMBLY INSTALLED.

SAS KEYWORDS:

8580SYSDSKT	PSY2	PSY2DSKT	PSY2PART
8580SYSPART	8565SYSDSKT	8565SYSPART	8555SYSDSKT
8555SYSPART	D/T8580	D/T8565	D/T8555

1.4.332 DISKETTE OR DISK HANGS LOADING OR READING DATA / PROGRAMS

Record number: H20533

Device: D/T8573
 Model: M
 Part number: P/N38F4734
 Tip key: 006
 Date created: 092/03/13
 Date last altered: A92/03/25

Some 8573 power supplies may transmit Radio Frequency Interference (RFI) that interferes with diskette and fixed disk operation. This RFI signal could affect any 8573 system.

The power supply RFI could cause problems when transferring data to or from the diskette or fixed disk drive. This includes, but is not limited to the following:

1. Installing programs or transferring data to the fixed disk drive from any source (E.G. internal or external diskette drive, tape drive etc,.)
2. Backing up data from the disk to diskette or any other media.
3. Loading programs or data from diskette or fixed disk to the system.
4. Saving information from the system to diskette or the fixed disk.

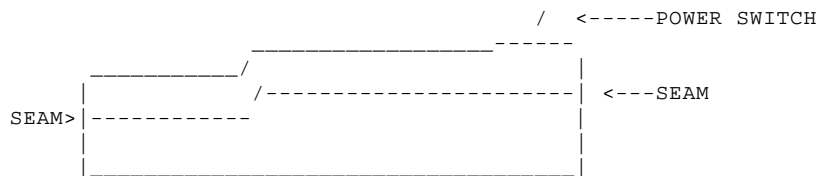
NOTE:

* IF THE RFI LEVEL IS HIGH ENOUGH TO CAUSE A PROBLEM WHEN *
 * TRANSFERRING DATA AN ERROR WILL OCCUR. *

To determine if the power supply is effected load the advanced diagnostics from the reference diskette and run the fixed disk tests. If one of the following errors occur, remove the power supply, remove any black plastic tape located along the seam between the front and top of the supply, and install copper tape.

To install the copper tape lift the clear plastic shield covering the side and top of the supply, install the 1 inch wide copper tape across the length of the top and side of the supply so it covers all seam openings between the top and sides of the front of the supply.

This prevents the escape of stray RFI from the power supply. RFI transmissions can travel between two peaces of metal that are not electrically connected. By the way the vent holes at the end of the supply are electrically connected so RFI can not transmit through them.



ERRORS:

The

SAS KEYWORDS:

PSY2	PSY2ERR	PSY2	D/T8573
8573SYSERR	OS/2	OS2	2.0

DOCK II ADAPTER CARD COVER AVAILABILITY

1.4.333 DOCK II ADAPTER CARD COVER AVAILABILITY

Record number: H127923

Device: D/T3546
Model: M
Part number: P/N84G3625
Tip key: 003
Date created: 095/06/02
Date last altered: A96/11/12

The Adapter Card Cover is in the process of being placed in the Mechanicsburg parts system. Until it is available contact Level 2 support in Raleigh through your normal support structure.

SAS KEYWORDS:

PSY2 DOCK II BLANK PSY2PART
UNCLASSIFIED THINKPAD

EXPANSION CONNECTOR SCREWS COME WITH CONNECTOR BRACKET

1.4.334 EXPANSION CONNECTOR SCREWS COME WITH CONNECTOR BRACKET

Record number: H122234

Device: D/T8554
Model: M
Part number: P/N07G1402
Tip key: 006
Date created: 094/01/05
Date last altered: A97/12/05

The expansion connector screws shown in the HMM volume 1, page 128, next to view 43, come with the connector bracket. This bracket is listed as FRU P/N07G1402 in the parts section of the manual.

SAS KEYWORDS:

PSY2

PSY2PART

UNCLASSIFIED

THINKPAD

1.4.335 FIXED DISK ADAPTER (ST506) IS FRU P/N72X8540

Record number: H20139

Device: D/T8580
Model: M
Part number: P/N72X8540
Tip key: 021
Date created: 093/01/27
Date last altered: A93/01/27

THE IBM PERSONAL SYSTEM/2 HARDWARE MAINTENANCE MANUAL (HMM)
FORM # S52G-9971-00, CONTAINS AN INCORRECT FRU PART NUMBER
ON PAGE 218, P/N90X8540. THE CORRECT FRU PART NUMBER FOR THE
FIXED DISK ADAPTER IS P/N72X8540.

THE HMM ALSO INDICATES THAT THIS ADAPTER IS SUPPORTED IN THE
8565; THIS IS NOT CORRECT. FRU P/N72X8540 IS ONLY SUPPORTED
IN THE 8560 AND 8580.

A CORRECTION WILL BE MADE IN THE NEXT RELEASE OF THIS DOCUMENT.

SAS KEYWORDS:

PSY2	D/T8565	PART	PSY2PART
72X8540	D/T8560	PSY2ADPT	PSY2FDSK

1.4.336 FOCUS POT MISSING FROM 8517/9517 VIDEO CARDS

Record number: H097104

Device: D/T9517
Model: M
Part number: P/N39G2100
Tip key: 002
Date created: 093/03/09
Date last altered: A94/12/02

SOME VIDEO CARDS, FOR THE 9517 AND 8517 MAY BE MISSING THE FOCUS AND H.STAT POT BRACKET ASSEMBLY. THE POT ASSEMBLY MAY BE REMOVED FROM THE OLD VIDEO CARD AND REINSTALLED ON THE NEW VIDEO CARD.

IF A NEW POT ASSEMBLY IS REQUIRED, LEVEL 2 HARDWARE SUPPORT SHOULD BE CONTACTED VIA THE ESTABLISHED SUPPORT STRUCTURE. THE SERVICERS NAME, ADDRESS AND PHONE NUMBER SHOULD BE INCLUDED IN THE PMR.

MANUFACTURING IS AWARE OF THIS PROBLEM, AND IS TAKING CORRECTIVE ACTION.

8517 VIDEO CARD FRU PART NUMBER P/N69F9778
9517 VIDEO CARD FRU PART NUMBER P/N39G2100
THE D/T8517 MAY BE MISSING THE FOCUS AND H.STAT POTENTIOMETER BRACKET ASSEMBLY. THE POTENTIOMETER ASSEMBLY SHOULD BE REMOVED FROM THE OLD VIDEO CARD AND REINSTALLED ON THE NEW CARD.

THE POTENTIOMETER BRACKET ASSEMBLY IS BEING ADDED TO NEW FRUS.

SAS KEYWORDS:

PSY2 PSY2DISP PSY2PART D/T8517
8517

1.4.337 FRU NUMBER FOR 6314-011 MONITORS

Record number: H121700

Device: D/T6314
 Model: M
 Part number: P/N39G3328
 Tip key: 002
 Date created: 093/11/01
 Date last altered: A93/12/13

THE 6314 MONITOR IS AVAILABLE IN TWO MODELS FOR US/CANADA;
BOTH ARE ELEMENT EXCHANGE DEVICES.

6314 MODEL 001.....FRU P/N39G3352
 6314 MODEL 011.....FRU P/N39G3328
 6314 SIGNAL CABLE.....FRU P/N39G3331

THE 6314 MODEL 011 WAS SPECIALLY MANUFACTURED FOR EDUQUEST
BY IBM. THE MODEL 011 MEETS MPR II REQUIREMENTS. FURTHER
INFORMATION IS CONTAINED IN HONE.

SAS KEYWORDS:

PSY2	PSVP	DISPLAY	6314011
PSY2PART	39G3328	39G3352	6314001

1.4.338 FRU P/N CORRECTIONS / OMISSIONS IN HMM (8641 & 3516)

Record number: H127807

Device: D/T8641
 Model: M
 Part number: P/N06H3060
 Tip key: 003
 Date created: 095/05/26
 Date last altered: A96/04/09

The following information was not included in the PS/2
 Hardware Maintenance Manual, S52G-9971-02, dated October 1994:

Page 271, SCSI RAID Hard Disk Drive Adapter FRU P/N06H3059

The above P/N is correct, however
 there is an additional Signal Pass-
 through card (daughter card) and a
 cross-over cable which attaches it
 to the the RAID controller.

RAID Pass Through Card & Cable FRU P/N06H3060

Page 271 32MB ECC Memory SIMM FRU P/N73G3136

& 281, (Omitted from the HMM)

Page 271, Processor Card Support (typo error) FRU P/N82G3959

-should be-

Processor Card Support FRU P/N06H3959

Page 271, Keylock (with keys), FRU P/N82G3606

This FRU does not include the lock
 Pawl. The Pawl is available in the:

Miscellaneous Parts Kit FRU P/N82G3611

Page 272, Hot Swap Flex Sig. Cable(wide) FRU P/N06H6145

(About 2 in. long. Part of hot swap
 tray assm. omitted from the HMM)

68 Pin RAID (SCSI) Signal Cable FRU P/N06H6661

68 Pin NON-RAID SCSI Signal Cable FRU P/N06H6675

Page 293, The external 16 bit F/W cable FRU P/N52G9501

required to connect the 3516 to the
 SCSI RAID Adapter in the host system
 (Omitted from the HMM)

Notes:

Page 293 does not refer to the OBI DASD enclosure as machine
 type 3516. Servicers should write Machine Type 3516 at the
 top of the page.

This information will be included in the next update of the
 HMM.

SAS KEYWORDS:

PSY2	PSY2DOC	RAID	SCSI-2
D/T3516	8641	PSY2PART	500
SERVER	D/T9595	9595	

FRU PART NUMBERS FOR IBM PS/2 PLANAR UPGRADES

1.4.339 FRU PART NUMBERS FOR IBM PS/2 PLANAR UPGRADES

Record number: H121853

Device: D/T8580
 Model: M
 Part number: P/N71G2606
 Tip key: 029
 Date created: 093/11/30
 Date last altered: A94/09/12

The following is a list of FRU part numbers for the recently announced PS/2 planar upgrades which are supported on the PS/2 8550, 8555, 8560, 8565, 8570 and 8580 systems:

System Boards:

Model 70 486 BL2-66 FRU = P/N71G2606
 Model 70 486 DX33 FRU = P/N71G2641
 Model 60/65/80 486DX2-66 FRU = P/N71G2643
 Model 60/65/80 486 BL2-66 FRU = P/N71G2610
 Model 50/50Z FRU = P/N61G3502
 Model 55SX FRU = P/N71G2602

Installation Kits:

Model 60/65/80 Fixed Disk Drive Kit FRU = P/N32G3335
 Model 70 Fixed Disk Drive Kit FRU = P/N32G3331
 Model 55 Fixed Disk Drive Kit FRU = P/N32G3327
 Model 50 Fixed Disk Drive Kit FRU = P/N32G3323

The above kits are required for the installation of supported IDE hardfiles. The kits include an IDE cable, slides, brackets and screws.

SAS KEYWORDS:

PSY2	PSY2PART	D/T8560	D/T8565
D/T8570	D/T8580	PLANAR	REPLY
D/T8550	D/T8555	BLUE	LIGHTNING
UPGRADE	HARDFILE	KIT	

1.4.340 64XX HANGS AFTER INSTALLING PCI ADAPTER

Record number: H126986

Device: D/T6484
 Model: M
 Tip key:
 Date created: 095/05/08
 Date last altered: A95/05/08

SYMPTOM:

The PS/ValuePoint 6484 or 6494 system hangs after installing a PCI adapter.

PROBLEM ISOLATION AIDS:

- This tip applies to 486DX2-33/66 MHZ PCI models:
 6484 - L4F, and L4G
 6494 - L5F,

And

6482 and 6492 486DX2-33/66 MHZ models with the PCI riser card option installed.

- This tip does NOT apply to VESA/ISA system or system running at micro-processor speeds other than 33/66mhz.
- Move the system board micro-processor speed jumpers (J17 and J18) from 33mhz to 25mhz; if the error can be reproduced at 25mhz, this tip does NOT apply, continue with normal problem determination.

FIX:

- If the system is a DX/2 33/66mhz PCI model and the failure can be eliminated by moving the processor speed jumpers from 33mhz to 25mhz, replace the riser card using FRU p/n82G3555 for 648x and FRU p/n82g3563 for 649x.

SAS KEYWORDS:

PSY2	PSVP	64XX	D/T6492
VALUEPOINT	PSY2ADPT	D/T6484	D/T6494
PSVPADPT	PSY2MISC	PSVPMISC	PS/VALUEPOINT
82G3555	82G3563	LOCK	

FUTURE DOMAIN TMC850-IBM SCSI ADAPTER FRUS AND PUBS

1.4.341 FUTURE DOMAIN TMC850-IBM SCSI ADAPTER FRUS AND PUBS

Record number: H20589

Device: D/T8550
 Model: MCP1
 Part number: P/N37G0083
 Tip key: 160
 Date created: 093/03/02
 Date last altered: A93/03/02

THE FUTURE DOMAIN TMC-850-IBM SCSI ADAPTER, AND ASSOCIATED HARDWARE, FEATURE CODES 3780, 3781 AND 3782 ARE AVAILABLE AS FRUs. THIS SCSI ADAPTER IS MANUFACTURED EXCLUSIVELY FOR IBM BY FUTURE DOMAIN AND IS USED IN NON-MICRO CHANNEL PS/2s.

DESCRIPTION	FRU P/N
SCSI ADAPTER	04G6131
CABLE & TERMINATOR	04G6130
INTERNAL CABLE	37G0084
DISKETTE & PUBS	04G6132

LEVEL 1 & 2 SUPPORT IS PROVIDED BY ATLANTA ISSC 800-426-2472
 LEVEL 3 SUPPORT IS PROVIDED BY FUTURE DOMAIN AT 714-253-0400

SAS KEYWORDS:
 PSY2SYSMISC SCSI POEM FUTURE DOMAIN
 TMC850-IBM

1.4.342 HMM CORRECTION FOR CD-ROM DRIVES

Record number: H036294

Device: D/T8550
 Model: M
 Part number: P/N81F7930
 Tip key: 147
 Date created: 093/01/11
 Date last altered: A95/11/16

An incorrect description for the CD-ROM type 1 and type 2 drives is found on page 186, of the PS/2 Hardware Maintenance Manual, form # S52G-9971-00.

The correct information is as follows:

Internal CD-ROM I Drive, FRU P/N81F7930, is identified by the eject button being ABOVE the slot.

Internal CD-ROM II Drive FRU P/N92F0084, is identified by the eject button being BELOW the slot.

The descriptions for the eject button locations are reversed in the HMM. This will be corrected on the next update.

SAS KEYWORDS:

PSY2	PS2	PS/2	PERSYS
PSY2PART	PSY2DOC	CDROM	CD ROM
D/T3510	D/T3511	D/T8550	D/T8555
D/T8557	D/T8560	D/T8565	D/T8570
D/T8573	D/T8580	D/T8590	D/T8595
D/T8577	D/T8576	D/T9595	D/T8556
PSY2CDROM			

HMM CORRECTION ON MODEM DOORS.

1.4.343 HMM CORRECTION ON MODEM DOORS.

Record number: H12511

Device: D/T9552
Model: M
Part number: P/N53G7817
Tip key: 017
Date created: 093/06/28
Date last altered: A95/05/25

HMM form number S82G-1502-03 for ThinkPad Computers requires a correction on page 115 index 13. The correct part number for the 700 Mono modem door is P/N53G7815. The 700C modem door is P/N53G7817. This will be corrected in the next supplement.

SAS KEYWORDS:

PSY2 PSY2PART MODEL 300 301
30B PSY2PUB

1.4.344 HMM CORRECTION REAL TIME CLOCK MODULE

Record number: H123809

Device: D/T9553
Model: M
Part number: P/N06H3013
Tip key: 004
Date created: 094/05/02
Date last altered: A94/06/03

The HMM Supplement, part number S82G-3782, page 19, incorrectly identifies the FRU part number for the Real Time Clock Module used on the 9553 system.

The correct FRU part number for the 9553 system is FRU P/N06H3013.

This information will be corrected in the next release of the HMM.

SAS KEYWORDS:

PSY2	PSY2PART	06H3013	9553
P/N8509237	8509237	PART	

1.4.345 HMM CORRECTION 9521 SIGNAL CABLE

Record number: H013821

Device: D/T9521
Model: M
Part number: P/N68G2652
Tip key: 002
Date created: 094/03/21
Date last altered: A95/05/18

The 9521 Specific Repair Update Supplement, S82G-3773, for the Monitor Maintenance Manual Volume 2, S71G-4197-02 contains an incorrect FRU Part Number on page 9-36, P/N39G2652. The correct FRU Part Number, for the 9521 Signal cable, is P/N68G2652.

A correction will be made in the next release of this document.

SAS KEYWORDS:

PSY2	68G2652	39G2652	PSY2PART
HMS	HMM	PSY2DISP	

1.4.346 HMM CORRECTION 9524 FRONT COVER

Record number: H124382

Device: D/T9524
Model: M
Part number: P/N39G6262
Tip key: 003
Date created: 094/06/21
Date last altered: A95/05/10

The Monitor Maintenance Manual Volume 2, S71G-4197-02, contains an incorrect FRU Part Number on page 3-25, P/N69G6262. The correct FRU Part Number, for the 9524 Touch Front Cover / bezel is P/N39G6262.

A correction will be made in the next release of this document.

SAS KEYWORDS:

PSY2	69G6262	39G6262	PSY2PART
HMS	HMM	PSY2DISP	

1.4.347 HMM CORRECTION. 6381 POWER SUPPLY P/N

Record number: H123827

Device: D/T6384
 Model: M
 Part number: P/N92F0411
 Tip key: 059
 Date created: 094/05/04
 Date last altered: A95/05/18

The part number listed in the PS/ValuePoint HMM for the 6381 Power Supply is incorrect. The part number should be P/N 92F0415. This number is on the FRU part.

ValuePoint Power Supply FRU numbers for the following machines types:

6381	100W Power Supply	FRU P/N92F0415
6382/Si	100W Power Supply	FRU P/N92F0415
6384	145W Power Supply	FRU P/N52G8741
6384/D	200W Power Supply	FRU P/N92F0411
6387/T	200W Power Supply	FRU P/N92F0411

This will be corrected in the next release of the HMM.

SAS KEYWORDS:

PSVP	PSVPPART	PSVDOC	PSVPPUB
PSY2	PSY2PART	PSY2DOC	PSY2PUB
PSVPPWR	92F0415	52G8741	92F0411
PSY2PWR			

1.4.348 HMM CORRECTION. 9545 30W AC ADAPTER

Record number: H126040

Device: D/T9545
Model: M
Part number: P/N84G2277
Tip key: 028
Date created: 095/01/16
Date last altered: A95/01/18

The part number listed in the ThinkPad Computers HMM for the 9545 AC Adapter (100 - 240 V ac, 30W) Models 355x and 360x is incorrect. The part number should be FRU P/N84G2277 .

This will be corrected in the next release of the Mobile HMM.

SAS KEYWORDS:

PSY2	PSY2PART	PSY2DOC	PSY2PUB
P/N49G2277	PSY2PWR	49G2277	

1.4.349 HMM CORRECTION, FLEX SIGNAL CABLE FRU FOR PC SERVER

Record number: H126790

Device: D/T8641
Model: M
Part number: P/N06H6145
Tip key: 001
Date created: 095/03/16
Date last altered: A95/08/17

The Hardware Maintenance Manual publication part number S52G-9971-02, dated October 1994 is missing the FRU part number for Flex Signal Cable.

The cable connects the DASD hot swap tray to the SCSI Hard Disk Drive on the 8641.

The FRU part number for the Flex Signal Cable is P/N06H6145.

Other part numbers used with the DASD Hot Swap Tray are:

P/N06H5059 Cam and spring assembly
P/N06H3957 POS ID Cable fast/wide
P/N06H3592 POS ID Cable narrow
P/N06H6145 Flex Cable

SAS KEYWORDS:

PSY2	PSY2PART	PSY2DOC	TRAY
ID	P/N06H3956	P/N06H3957	SCSI

HMM CORRECTION, INVALID SYSTEM BOARD PART NUMBER

1.4.350 HMM CORRECTION, INVALID SYSTEM BOARD PART NUMBER

Record number: H126142

Device: D/T9556
Model: M
Part number: P/N81G1658
Tip key: 003
Date created: 095/01/25
Date last altered: A95/01/25

The IBM Personal System/2 HMM, publication part number S52G-9971 - 02, dated October 1994 contains two invalid part numbers on page 258. They are identified as 486SLC3 - 33/66 MHz systemboards, FRU P/N81G1658 and P/N81G1660.

The numbers should be deleted from the HMM to prevent confusion since they are not valid. There are no 486SLC3-33/66 MHz systemboards for the 9556 or 9576.

SAS KEYWORDS:

PSY2	PSY2PART	PSY2DOC	P/N81G1658
P/N81G1660	WRONG	D/T9576	D/T9577

1.4.351 HMM CORRECTION, L2 CACHE FRU NUMBERS FOR PC SERVERS

Record number: H017955

Device: D/T8640
 Model: M
 Part number: P/N06H8510
 Tip key: 004
 Date created: 094/09/20
 Date last altered: A95/06/08

The PC Server Hardware Maintenance Manual Supplement, publication part number S83G-8084-00, dated May 1994 and the PC Server 320 (Type 8640), Hardware Maintenance Manual Supplement, publication part number S30H-1660 are both missing the FRU part numbers for L2 Cache.

The L2 Cache FRU part number for the 8640 Models ON0, ONJ, (486 DX2 - 66) OP0, OPT (60 Mhz Pentium) is FRU P/N92G7431. There are 10 Modules provided but only 8 of them are used for the Server 300. The other 2 modules are control modules for use on other IBM products.

| The L2 Cache FRU part number for the 8640 Models xYx, |(90 Mhz Pentium) is FRU P/N06H8510 and is only used on |the Server 320. This FRU contains 1 module. The servicer |should rotate this module through the 8 positions to |identify the failing module, however certain situations |may require that the servicer replace all 8 modules at the |same time,

The HMM S52G-9971-02, page 268, ONLY identifies L2 Cache FRU P/N92G7431.

SAS KEYWORDS:

PSY2	PSY2PART	PSY2DOC	MEMORY
SIMM	92G7431	06H8510	94G3141
24H3969			

1.4.352 HMM CORRECTION, SHADOW BOX FRU NUMBER FOR 9595A

Record number: H125305

Device: D/T9595
Model: M
Part number: P/N71G0210
Tip key: 018
Date created: 094/10/18
Date last altered: A94/10/19

The IBM Personal System/2 HMM, publication part number S52G-9971 - 02, dated October 1994 is missing the FRU part number for the Shadow Box.

The FRU part number for the Shadow Box is P/N71G0210.

SAS KEYWORDS:

PSY2	PSY2PART	PSY2DOC	ADAPTER
GUIDE	BRACKET	I/O	42G0009
P/N42G0009			

HMM CORRECTION, 1MB VIDEO RAM UPGRADE MODULE

1.4.353 HMM CORRECTION, 1MB VIDEO RAM UPGRADE MODULE

Record number: H126402

Device: D/T9577
Model: M
Part number: P/N82G1794
Tip key: 004
Date created: 095/02/14
Date last altered: A95/03/15

The Personal System/2 Hardware Maintenance Manual Supplement, publication part number S83G7912-00, dated May 1994 is missing the FRU part number for the 1MB Video Ram Upgrade.

The FRU part number for the Video Ram is P/N82G1794.

SAS KEYWORDS:

PSY2	PSY2PART	PSY2DOC	MEMORY
D/T9577I	D/T9577S	D/T9576I	D/T9577S

1.4.354 HMM CORRECTION, 2GB SCSI DRIVE FRU PART NUMBER

Record number: H125764

Device: D/T8640
Model: M
Part number: P/N92F0407
Tip key: 005
Date created: 094/12/12
Date last altered: A94/12/14

Page 269, index 18, of the 8640 PCSERVER parts catalog in the Hardware Maintenance Manual, S52G-9971-02, dated Oct. 1994 shows FRU P/N92F0407. This is a SCSI-2 Fast/Wide drive requiring a 68 pin SCSI cable.

For an 8640 with the PCI SCSI-2 Fast Adapter, FRU P/N53G0382, the correct 2GB SCSI-2 FAST drive is FRU P/N92F0440.

Servicers should correct their manuals with this information.

This will be corrected on the next update of the HMM.

SAS KEYWORDS:

PSY2	PSY2DOC	PSY2FDSK	PSY2PART
92F0407	92F0440		

1.4.355 HMM CORRECTION, 256MB DIMM FRU FOR PC SERVER 325/330

Record number: H1668

Device: D/T8640
Model: M
Part number: P/N12J4123
Tip key: 016
Date created: 097/06/12
Date last altered: A97/06/12

The Hardware Maintenance Manual publications
S84H-3049 - 00 (PC Server 325) and S84H-3050-00 (PC Server 330)
are missing the FRU part number for the 256MB DIMM.

The FRU part number is 12J4123 (Option p/n94G7079).

SAS KEYWORDS:

PSY2	PSY2PART	PSY2DOC	UNCLASSIFIED
ID	P/N12J4123	MEMORY	D/T8639

1.4.356 HMM CORRECTION, 32MB & 64MB DIMM FRUS FOR PC SERVER 325/330

Record number: H16462

Device: D/T8640
Model: M
Part number: P/N12J4121
Tip key: 017
Date created: 097/07/17
Date last altered: A97/07/17

The Hardware Maintenance Manual publications dated November 1996 S84H-3049 - 00 (PC Server 325) and S84H-3050-00 (PC Server 330) contain the wrong FRU part numbers for the 32MB and 64MB DIMMs.

The correct FRU part numbers are as follows:

32MB DIMM FRU is 12J4121.

64MB DIMM FRU is 12J4122.

SAS KEYWORDS:

PSY2	PSY2PART	PSY2DOC	UNCLASSIFIED
ID	MEMORY	D/T8639	P/N12J4121
P/N12J4122			

1.4.357 HMM CORRECTION, 33 MHZ PROCESSOR FRU FOR 9577

Record number: H104538

Device: D/T9577
Model: M
Part number: P/N71G0791
Tip key: 002
Date created: 094/10/10
Date last altered: A94/10/11

The 9576i, 9577i, 9576s, and 9577s Hardware Maintenance Manual Supplement, publication number S83G-7912-00, dated May 1994 is missing the FRU part number for the 33 Mhz processor used on the 9576 and 9577 system.

The FRU part number for the processor is P/N71G0791.

The HMM will be updated to reflect this change.

SAS KEYWORDS:

PSY2	PSY2PART	PSY2DOC	MEMORY
SIMM	D/T9576	D/T9577I	D/T9577S
D/T9576I	D/T9577I		

1.4.358 HMM CORRECTION, 9525 ITC SHIELD

Record number: H097329

Device: D/T9525
Model: M
Part number: P/N68G1374
Tip key: 006
Date created: 095/03/30
Date last altered: A95/04/04

The 6324/6325, 9524/9525 Monitor Maintenance Manual UPDATE to Volume 2, S71G-4197-02, identifies a Metal ITC Shield, on page 2 - 34, as P/N68G1328. This part is valid only for 9525 - 005 monitors. The 9525-005 monitor is released for use in Europe only.

Monitors in the USA do not use P/N68G1328.

The correct FRU Part Number for a Metal ITC Shield, for USA monitors, is P/N68G1374. It is listed in the HMM as an Electromagnetic Interference Shield.

A correction will be made in the next release of this document.

SAS KEYWORDS:

PSY2	68G1374	68G1328	PSY2PART
HMS	HMM	PSY2DISP	FULL
JACKET	9525		

1.4.359 HMM CORRECTIONS&COLON. PC SERVER 330 (8640)

Record number: H16498

Device: D/T8640
 Model: M
 Part number: P/N06H3398
 Tip key: 018
 Date created: 097/07/22
 Date last altered: A97/07/22

The PC Server 330 - Type 8640 Hardware Maintenance Manual Supplement, publication part number S84H-3050-00, dated November 1996, contains incorrect FRU part numbers for the following two parts:

1. P6 66/200 MHz Processor Chip w/ 512K Internal Cache, Heat Sink, and grease (Model EM2) on pages 174 and 175:

Incorrect	Correct
-----	-----
76H4889	12J3501

The incorrect FRU part number is located in both the part listings on page 174 and in the 2nd note box on page 175.

2. Real Time Clock with Battery on page 174:

Incorrect	Correct
-----	-----
06H3398	82G3620

The next release of the HMM will contain these corrections.

SAS KEYWORDS:

PSY2	PSY2PRT	PSY2DOC	SERVICER ONLY
P/N76H4889	P/N12J3501	P/N06H3398	P/N82G3620

1.4.360 HYPERTEC SEE SIGMA DATA

Record number: H12881

Device: D/TOEMF
Model: MEAT
Part number: P/N9999999
Tip key: 031
Date created: 093/08/16
Date last altered: A94/01/12

HYPERTEC IS THE MANUFACTURER, SIGMA DATA IS U.S. DISTRIBUTER.
USE SIGMA DATA AS SEARCH WORD FOR PART NUMBER INFORMATION ON
SIGMA DATA PROCESSOR UPGRADES.

SAS KEYWORDS:

SIGMADATA	SIGMA DATA	SIGMA	HYPERTEC
HYPERTEC	HY200	HY201	HY-200
HY-201	HY205	HYPERTEC	POEM
PSY2	PSVP		

IBM DUALSTOR 250 INTERNAL TAPE BACKUP UNIT

1.4.361 IBM DUALSTOR 250 INTERNAL TAPE BACKUP UNIT

Record number: H123475

Device: D/T6384
 Model: MCP1
 Part number: P/N82G7106
 Tip key: 054
 Date created: 094/04/07
 Date last altered: A94/04/07

THE IBM DUALSTOR INTERNAL TAPE DRIVE (FEATURE CODE 7094) WAS ANNOUNCED 4/94. FOLLOWING IS A LIST OF FRUs AND PUBs:

DESCRIPTION	PART NUMBER
TAPE DRIVE FRU	82G7106
BEZEL FRU	82G7107
EDGE ADAPTER FRU	82G7108
BRACKET FRU	92G5039

DESCRIPTION	PUB NUMBER
INSTALLATION INSTRUCTIONS	G571-0300-00
USER'S GUIDE	G571-0291-00
HML SUPPLEMENT	G571-0292-00 (SEE NOTE)

NOTE: THE HML SUPPLEMENT IS CONTAINED ON DISKETTE.
 THE DISKETTE IS SHIPPED WITH THE FEATURE AND
 ALSO AVAILABLE ON THE STATES TOOLS DISK.

AS WITH THE IBM PS/2 INTERNAL TAPE BACKUP UNIT, A BLANK
 FORMATTED TAPE IS NECESSARY TO RUN DIAGNOSTICS. FRU PART
 NUMBER OF THAT TAPE IS 30F5277.

SAS KEYWORDS:

PSY2	PSY2TAPE	ITBU	PSY2MISC
PSY2ERR	TAPE	BACKUP	INTERNAL
D/T8557	D/T8556	D/T9595	D/T9585
DUALSTOR	PSVPTAPE	PSVPMISC	

1.4.362 IMAGE-I ADAPTER IS FRU P/N49G2716

Record number: H101243

Device: D/T95XX
 Model: M
 Part number: P/N49G2716
 Tip key: 012
 Date created: 093/10/04
 Date last altered: A94/09/08

THE IBM PERSONAL SYSTEM/2 IMAGE ADAPTER/A AND IMAGE-I ADAPTER/A SUPPLEMENT, FORM # S71G-2238-00, CONTAINS AN INCORRECT FRU PART NUMBER ON PAGE 17, P/N49G2720. THE CORRECT FRU PART NUMBER FOR THE IMAGE-I ADAPTER/A IS P/N49G2716.

A CORRECTION WILL BE MADE IN THE NEXT RELEASE OF THIS DOCUMENT.

THE FOLLOWING FRU P/N CORRECTIONS SHOULD ALSO BE NOTED FOR THE IMAGE-I ADAPTER/A:

6091 - 019 VIDEO Cable	FRU P/N49G2717
9517 Monitor Cable	FRU P/N49G2718

SAS KEYWORDS:

PSY2	49G2716	PART	PSY2PART
49G2720	IMAGE-1	D/T9504	D/T9517
D/T7546	D/T1091	D/T6091	D/T8555
D/T8556	D/T8557	D/T8573	D/T8560
D/T8565	D/T8570	D/T9576	D/T8580
D/T8590	D/T8595	D/T9585	D/T9577
D/T9556	D/T9557	D/T9595	HMM
D/T9517	D/T6091		

INCORRECT SYSTEM BOARD PART NUMBERS

1.4.363 INCORRECT SYSTEM BOARD PART NUMBERS

Record number: H1252

Device: D/T6384
 Model: M
 Part number: P/N92F0388
 Tip key: 026
 Date created: 093/05/11
 Date last altered: A94/03/17

FRU P/N92F0388 IS ERRONEOUSLY PRINTED ON SOME 425SX, 433DX, AND 433DX2 SYSTEM BOARDS FOR 6382/S, 6384/D, AND 6387/T SYSTEMS. P/N92F0388 IS THE CORRECT FRU P/N FOR 433SX LEVEL 1 SYSTEM BOARD (MEMORY SIMM SOCKETS PARALLEL TO THE FRONT EDGE OF THE SYSTEM BOARD).

FRU P/N61G3223, P/N71G3154, OR P/N82G1865 IS ERRONEOUSLY PRINTED ON SOME LEVEL 2 486DX2 33/66MHZ SYSTEM BOARDS.

FRU P/N52G7022 IS ERRONEOUSLY PRINTED ON SOME 425SX SYSTEM BOARDS FOR THE 6381-Fxx.

THE PS/VALUEPOINT HARDWARE MAINTENANCE MANUAL (S61G1423) SHOULD BE USED FOR PART NUMBER INFORMATION.

THIS PROBLEM HAS BEEN CORRECTED BY MANUFACTURING.

SAS KEYWORDS:

PSY2	VALUE POINT	PSY2PART	PS/VP
PSVPPART	PSVPBRD	D/T6382	PSVP
SPY2PART	PSY2BRD	6382	6384
D/T6382	6387	61G3223	71G3154
82G1865	92F0388	6381	52G7022
P/N52G7023	D/T6381	52G7023	

INCORRECT 120MB FIXED DISK FRU NUMBER

1.4.364 INCORRECT 120MB FIXED DISK FRU NUMBER

Record number: H027039

Device: D/T2620
Model: M
Part number: P/N66G2271
Tip key: 002
Date created: 094/12/06
Date last altered: A97/02/28

The correct number for the 120Mb fixed disk is FRU P/N84G2271.
The HMM will be corrected in the next release.

SAS KEYWORDS:

PSY2	PSY2PART	PSY2FDSK	HARDFILE
HARD FILE	DISK DRIVE	UNCLASSIFIED	

1.4.365 INTERNAL TAPE BACK-UP STOP CLIP 8557,9556/57,9576/77

Record number: H103631

Device: D/T8557
Model: M
Part number: P/N92F3762
Tip key: 005
Date created: 092/08/10
Date last altered: A93/10/04

The February 25, 1992 8557 HMS manual form number S92F-1678 - 01 does not list the FRU part number for the Internal Tape Back-up Stop Clip. This clip is used with the 5279 Internal Tape installed in bay 3 of the 8557, 9557, 9577 and in bay 2 of 9556 and 9576. The replacement Stop Clip FRU number is P/N92F3762.

SAS KEYWORDS:

PSY2	PSY2PART	8557SYSPART	D/T8557
D/T5279	D/T9557	D/T9577	D/T9556
D/T9576			

KEYPAD MISSING FROM POWER SWITCH FRU

1.4.366 KEYPAD MISSING FROM POWER SWITCH FRU

Record number: H122678

Device: D/T9527
Model: M
Part number: P/N68G2541
Tip key: 004
Date created: 094/09/08
Date last altered: A94/09/08

A limited number of Power Switch/Keypad Control Panel FRUs, FRU P/N68G2541, may be missing the Keypad assembly.

If a Keypad assembly is required, servicers should order a replacement Power Switch/Keypad Control Panel FRU through Mechanicsburg. Their inventory has been corrected.

SAS KEYWORDS:

PSY2

PSY2PART

PSY2DISP

9527

1.4.367 KINGSTON TECHNOLOGY (TSA-2), TECHNICAL SUPPORT AGREEMENT

Record number: H122136

Device: D/TOEMF
 Model: MEAT
 Part number: P/N9999999
 Tip key: 043
 Date created: 093/12/21
 Date last altered: A95/11/16

IBM and Kingston Technology* signed a Technical support Agreement effective November 11, 1993 to provide service for Kingston Technology memory products.

 IF THE (KINGSTON) PRODUCT IS NOT LISTED BELOW CALL THE ATLANTA SUPPORT CENTER FOR ASSISTANCE IN ORDERING THE PART DIRECT FROM KINGSTON. THE PART IS TO BE RETURNED TO KINGSTON VIA THE ENCLOSED PREPAID MAILER IN THE ORIGINAL CARTON.

PRODUCT DESCRIPTION	KINGSTON P/N	IBM P/N
2MB MODULE NOTE BOOK	KTM-N45/2	p/n93F8333
2MB MODULE NOTE BOOK	KTM-N51/2	p/n93F8276
2MB MODULE NOTE BOOK	KTM-L40SX/2	p/n93F8267
4MB MODULE NOTE BOOK	KTM-N51/4	p/n93F8284
4MB MODULE NOTE BOOK	KTM-L40SX/4	p/n93F8282
8MB MODULE NOTE BOOK	KTM-N51/8	p/n93F8277
8MB MODULE NOTE BOOK	KTM-L40SX/8	p/n93F8281
2MB MODULE THINKPAD 300	KTM-TP300/2	p/n93F8280
8MB MODULE THINKPAD 300	KTM-TP300/8	p/n93F8279
2MB MODULE CL/57SX	KTM-CLSX/2	p/n93F8290
4MB MODULE CL/57SX	KTM-CLSX/4	p/n93F8283
8MB MODULE CL/57SX	KTM-CLSX/8	p/n93F8266
2MB KIT PS/2 30,50,60	KTM2000/M30	p/n93F8288
8MB MODULE PS/2 80NS	KTM0129	p/n93F8269
2MB BOARD	KTM2000/372	p/n93F8334
1MB MODULE PS/2 70,80	KTM1000/M70	p/n93F8271
2MB MODULE PS/2 70-E61 & 121, 80	KTM2000/M70N	p/n93F5670
2MB MODULE PS/2 70-A21	KTM2001/M70	p/n93F5669
4MB MODULE	KTM4000/M70	p/n93F5794
1MB MODULE PS/2 80	KTM1000/M80	p/n93F8292
2MB MODULE PS/2 80	KTM2000/M80	p/n93F5804
4MB MODULE PS/2 80-A21 & A31	KTM4000/M80	p/n93F8270
4MB ECC MODULE PS/2 95-OMF & OMT	KTM1158	p/n93F8274
8MB ECC MODULE PS/2 95-OMF & OMT	KTM1159	p/n93F8275
2MB MODULE PS/2 70ns	KTM0902	p/n93F8265
4MB MODULE PS/2 70ns	KTM0128	p/n93F7029
8MB MODULE PS/2 70ns	KTM0130	p/n93F8268
16MB MODULE PS/2 70ns	KTM0160	p/n93F8264
8MB MODULE 6571 (Non-Parity)	KTMAPT/8	p/n22H4155
1 - 13MB EXP. BRD W/1MB PS/2	KTM609/16-1	p/n93F8289
2 - 14MB EXP. BRD PS/2 50,55SX,60	KTM609/16-2	p/n93F6121
4 - 16MB EXP. BRD PS/2 50,55SX,60	KTM609/16-4	p/n93F8263
2 - 8MB EXP. BRD PS/2 70, 80	KTM8000/386-2	p/n93F5667
2 - 16MB EXP. BRD PS/2 70, 80	KTM3077-2	p/n93F5668
4 - 16MB EXP. BRD PS/2 70,80	KTM3011-4	p/n93F6578
4 - 64MB EXP. BRD 32 BIT	KTM-MC64/4	p/n93F8272
8 - 64MB EXP. BRD 32 BIT	kTM/MC64/8	p/n93F8273
4MB KIT VALUEPOINT	KTM9290/4	p/n93F8285
16MB KIT VALUEPOINT	KTM9290/16	p/n93F8286
DATAMASTER INT.85MB AT/IDE CARD	DM085-50Z	p/n93F8336
DATAMASTER INT.127MB AT/IDE CARD	DM127-50Z	p/n93F8337
DATAMASTER INT.170MB AT/IDE CARD	DM170-50Z	p/n93F8327
DATAMASTER INT.240MB AT/IDE CARD	DM240-50Z	p/n93F8326
340MB INT. FIXED SCSI HARD DRIVE	DM340	p/n93F8315
426MB INT. FIXED SCSI HARD DRIVE	DM426	p/n93F8316
25MHz 486SX/NOW! (PGA)	486/25PS3	p/n93F8320
33MHz 386SX/NOW! (PLCC)	SX-33L/CM	p/n93F8330
33MHz 386SX/NOW! (PLCC)	SX-33L/EM	p/n93F8325
MICROMASTER 486DX 33MHz, 0MB	MM33PD/0	p/n93F8304
MICROMASTER 486DX 33MHz, 2MB	MM33PD/2	p/n93F8305
MICROMASTER 486DX 33MHz, 4MB	MM33PD/4	p/n93F8306
MICROMASTER 486DX 33MHz, 8MB	MM33PD/8	p/n93F8307
MICROMASTER 486DX 33MHz, 16MB	MM33PD/16	p/n93F8308
MICROMASTER 486SX 25MHz, 0MB	MM25PS/0	p/n93F8314
MICROMASTER 486SX 25MHz, 2MB	MM25PS/2	p/n93F8312
MICROMASTER 486SX 25MHz, 4MB	MM25PS/4	p/n93F8311
MICROMASTER 486SX 25MHz, 8MB	MM25PS/8	p/n93F8310
MICROMASTER 486SX 25MHz, 16MB	MM25PS/16	p/n93F8309
486DX 33MHz PS/2 P70	486/33PD3-P70	p/n93F8318
486SX 33MHz PS/2 P70	486/33PS3-P70	p/n93F8317

KINGSTON TECHNOLOGY (TSA-2), TECHNICAL SUPPORT AGREEMENT

128KB UPGRADE KIT PS/2 25	KTM-128/M25	p/n93F8332
512KB UPGRADE KIT PS/2 30,50,60	KTM-512/M30	p/n93F8291
486DX 33MHz UPGRADE PS/2 70 & 80	486/33PD3	p/n93F8339
SX/NOW 25MHz PS/2 50 & 60	SX/25GAM	p/n93F8331
25MHz UPGRADE XT/286 & AT	SX/25GDM	p/n93F8322
SX/NOW 25MHz UPGRADE PS/2 50Z	SX/25LCM	p/n93F6115
SX/NOW 25MHz PS/2 25/286, 30/286	SX/25LEM	p/n93F8329
SLC/NOW 25MHz UPGRADE PS/2 50&60	SLC/50GAM	p/n90G7228
16 MB ECC MEMORY MODULE PS/2 9595	KTM3720	p/n90g8000
4 MB MEMORY MODULE 6381, 6384	KTM3131	p/n90g8140
KTR-ISA16/4 TOKEN RING ADAPTER	KTR-ISA16/4	p/n20h5968
32 MB CREDIT CARD (PCMCIA)	KTM-TP750/32	p/n20h6193
14.4 PCMCIA TYPE II FAX/MODEM	KFM-PC144	p/n20h6217

TERMS AND CONDITIONS

According to the terms of this agreement, IBM will provide on-site service for Kingston products installed in or attached to IBM systems covered by IBM on-site warranty. The IBM systems include: IBM PC; IBM PS/2; RISC System/6000 (workstations only); IBM or Lexmark printer; and IBM ThinkPad covered by EasyServ or on-site service. IBM will also provide twelve months of on-site service for Kingston products installed in or attached to comparable IBM products covered by an IBM on-site maintenance agreement. After the twelve months, IBM will offer maintenance services for the Kingston products.

Customers requesting service on Kingston products not covered under this agreement should be directed to Kingston or their point of purchase for support.

This agreement supports IBM's expanded Multivendor Availability Services strategy to satisfy customer's requirements for support of products critical to their operation.

This listing will be updated as new products are added / deleted additional information regarding this announcement, contact Lee Keen T/L 443-8752 .

*TRADEMARK OR REGISTERED TRADEMARK OF KINGSTON TECHNOLOGY

SAS KEYWORDS:

POEM	KINGSTON	MEMORY	PROCESSOR
KTM	OEM VENDOR	OEM	PSY2
PSY2PART	PSVP	PSVPPART	P/N REFERENCE
P/N	TOKEN RING	ISA	CREDIT CARD
PCMCIA	MODEM	FAX/MODEM	DATAREX

KINGSTON TECHNOLOGY HARD DRIVE P/N'S

1.4.368 KINGSTON TECHNOLOGY HARD DRIVE P/N'S

Record number: H062465

Device: D/TOEMF
 Model: MEAT
 Part number: P/N9999999
 Tip key: 035
 Date created: 093/09/28
 Date last altered: A93/12/23

KINGSTON TECHNOLOGY HARD DRIVE PN'S

KINGSTON P/N	DESCRIPTION	IBM P/N	FC
DM085 - 50Z	DATAMASTER 85MB AT/IDE HD	93F8336	8316
DM127 - 50Z	DATAMASTER 127MB AT/IDE HD	93F8337	8315
DM170-50Z	DATAMASTER 170MB AT/IDE HD	93F8327	8314
DM240-50Z	DATAMASTER 240MB AT/IDE HD	93F8326	8313
DM340-DE/T	DATAMASTER 340MB SCSI HD	93F8315	8311
DM426 - DE/T	DATAMASTER 426MB SCSI HD	93F8316	8312

SAS KEYWORDS:

POEM KINGSTON HARD DRIVE DATAMASTER
 HARD DRIVE P/N PSY2 PSVP PSY2FDSK
 PSVPFDSK

PSY2 RETAIN TIPS

LOOSE VIDEO CARD HEAT SINKS ON 9552 700C SYSTEMS.

1.4.369 LOOSE VIDEO CARD HEAT SINKS ON 9552 700C SYSTEMS.

Record number: H122962

Device: D/T9552
Model: M
Part number: P/N35G4823
Tip key: 027
Date created: 094/03/02
Date last altered: A94/03/02

This applies to P/N35G4823 only. No other video card is involved. A small number of 700C video cards may be affected by a heat sink adhesion problem. A loose heat sink bar will be contained in the area of the video card and will not create a safety problem, but could damage system board components.

Remove the defective video card and the loose heat sink. Replace the video card and run all system diagnostics to ensure the system board is operating correctly before returning the system to the customer.

All current FRU stock contains video cards with the correct adhesive.

SAS KEYWORDS:

PSY2

PSY2PART

PSY2ADPT

PSY2DISP

L2 CACHE FRU MAY CONTAIN UNAPPROVED MODULES

1.4.370 L2 CACHE FRU MAY CONTAIN UNAPPROVED MODULES

Record number: H13166

Device: D/T68XX
 Model: M
 Part number: P/N06H6052
 Tip key: 008
 Date created: 095/06/16
 Date last altered: A95/06/19

A number of 128kb L2 Cache FRUs p/n06H6052 contain all IDT cache modules. Excluding the 1 tag ram module, the maximum number of IDT modules that should be installed is 5. IDT cache must not be installed in locations U31, U32, and U34. Until this problem is resolved, order FRU p/n06h8004. This FRU contains 3 non IDT modules.

For problems associated with using IDT modules in u31, u32, and u34, refer to tip H127080 (6875 ECA002).

SAS KEYWORDS:

PSY2	PC700	D/T6876	D/T6886
D/T6875	D/T6885	PSY2PART	PSVPPART
PSVPBRD	PSYPBRD	PSVPTBD	PSY2TBD

1.4.372 MEMORY FAILURE AFTER OPTION OR FRU INSTALLATION / RELOCATION

Record number: H084097

Device: D/T8573
 Model: M
 Part number: P/N64F3605
 Tip key: 002
 Date created: 091/03/21
 Date last altered: A92/10/26

THE "MANUFACTURED BY IBM" 4MB 70 NS MEMORY, FRU P/N64F3605 OR P/N92F0105 AND 2MB 70NS MEMORY FRU P/N64F3604, OR P/N92F0102 WILL OPERATE IN THE ODD MEMORY SOCKETS ON THE 8573 P75 486 SYSTEM. THIS IS BECAUSE OF A TIMING LINE INCOMPATIBILITY PROBLEM BETWEEN THE SYSTEM BOARD AND "MANUFACTURED BY IBM" MEMORY. IF THIS MEMORY IS INSTALLED IN THE EVEN NUMBERED MEMORY SOCKETS, POST ERROR CODES OR ADVANCED DIAGNOSTIC ERRORS SUCH AS 107, 110 WITH FIVE QUESTION MARKS, 215, 216, OR 221 CAN OCCUR.

THE "MANUFACTURED BY IBM" 4MB 70 NS MEMORY SIMMS HAVE NINE (9) MEMORY MODULES PLACED VERTICALLY ON ONE SIDE OF THE SIMM. THE MEMORY "MANUFACTURED FOR IBM" HAS THE SAME FRU NUMBER BUT, DOES NOT HAVE A SOCKET RESTRICTION AND CAN BE INSTALLED IN ODD OR EVEN SYSTEM BOARD MEMORY SOCKETS. THIS TYPE OF MEMORY CAN HAVE EIGHT (8) VERTICAL MODULES AND FOUR (4) HORIZONTAL MODULES ON ONE SIDE OF THE SIMM OR MODULES ON BOTH SIDES OF THE SIMM. THE ODD AND EVEN SYSTEM BOARD MEMORY SOCKETS ARE REFERRED TO AS 1,2,3, AND 4 IN THE HARDWARE MAINTENANCE REFERENCE MANUAL ON PAGE 39. THE ODD SOCKETS ARE IN SYSTEM BOARD LOCATIONS J9 AND J11.

*****UPDATE UPDATE UPDATE UPDATE*****
 A new 4Mb simm Fru P/N79F3234 is now available for use on the 8573 P75 systems. This simm operates in all system board memory locations.

THE "MANUFACTURED BY IBM" MEMORY IS NOW USED IN FRU STOCK FOR THE 8590, AND 8595. IT IS USED IN OPTION STOCK ON THE 8573 P75, 8590 AND 8595. THIS PROBLEM ONLY EFFECTS THE 8573 P75 SYSTEM, SO OPTION STOCK MUST BE INSTALLED IN THE ODD MEMORY SOCKETS. THE 8590 AND 8595 WILL OPERATE ERROR FREE ON EITHER THE "MANUFACTURED BY IBM" OR THE "MANUFACTURED FOR IBM" MEMORY.

SAS KEYWORDS:

PSY2MEM	PSY2BRD	8573SYSBRD	8573SYSTEM
PSY2PART	8573SYSPART	PSY2ERR	8573SYSERR
PSY2			

MICROCHANNEL TO MAINFRAME CONNECTION (MMC) FRUS AND PUBS

1.4.373 MICROCHANNEL TO MAINFRAME CONNECTION (MMC) FRUS AND PUBS

Record number: H20587

Device: D/T8550
 Model: MCP1
 Part number: P/N12G8067
 Tip key: 158
 Date created: 093/03/02
 Date last altered: A93/03/02

FOLLOWING IS A LIST OF FRUS AND PUBS FOR THE MICROCHANNEL TO MAINFRAME CONNECTION ADAPTER (MMC) FEATURE CODE 1436. THIS PRODUCT WAS PREVIOUSLY AVAILABLE AS AN RPQ AND WAS CALLED THE S/370 CHANNEL ADAPTER (PCA). FOR ADDITIONAL INFORMATION ON THE FUNCTION AND USE OF THIS ADAPTER, SEE TIP NUMBER H097313.

PUBLICATIONS:

INSTALLATION AND TEST INSTRUCTIONS, FORM NUMBER G571-0244
 SUPPLEMENT TO THE HML, FORM NUMBER G571-0239
 TECHNICAL REFERENCE MANUAL, FORM NUMBER G571-0245 (AVAILABLE 4Q92)

FRUS:

MMC ADAPTER CARD	12G8067
MMC V CABLE	89F8391
10' EXTENSION CABLE	12G7989
25' EXTENSION CABLE	12G7990
40' EXTENSION CABLE	12G7991
100' EXTENSION CABLE	12G7992
UPSTREAM BUS/TAG CABLE	12G7988
DOWNSTREAM BUS/TAG CABLE	12G7993
TERMINATION BLOCK	6473048
WRAP PLUG	71F1184

SAS KEYWORDS:

PSY2	D/T8570	D/T8580	D/T8590
PSY2ADAPT	8570SYSADPT	8580SYSADAPT	8590SYSADAPT
D/T8595	8595SYSADAPT	PCA	MMC
S370			

MOBILE HMM CORRECTION ON 755CD TOP COVER.

1.4.374 MOBILE HMM CORRECTION ON 755CD TOP COVER.

Record number: H126039

Device: D/T9545
Model: M
Part number: P/N85G1491
Tip key: 027
Date created: 095/01/18
Date last altered: A95/01/18

The Mobile HMM dated October 1994 incorrectly lists the "Top Cover" as P/N84G1491 on page 512 index 5. The correct part number is FRU P/N85G1491. This change will be included in the next printing of the manual.

SAS KEYWORDS:

PSY2	PSY2PART	85G1491	84G1491
PSY2DOC	PSY2PUB		

MONITOR MISCELLANEOUS PARTS KIT CONTENTS

1.4.375 MONITOR MISCELLANEOUS PARTS KIT CONTENTS

Record number: H122992

Device: D/T95XX
 Model: M
 Part number: P/N39G6281
 Tip key: 017
 Date created: 094/03/02
 Date last altered: A94/10/03

The Display Hardware Maintenance Manual Volume 1, SA38-0053, and the Monitor Hardware Maintenance Manual Volume 2, S71G-4197, contain the following miscellaneous or small parts kits. The contents of each kit are noted below.

FRU P/N39G6281

QTY	NAME
1	On/Off Push Rod (Slider)
1	On/Off Button
1	Spring Loaded (Door) Catch

FRU P/N45F1545 (Used with 8518 Monitor)

QTY	NAME
4	Nut
2	Screw 4.2
4	Screw M4
2	Foot
1	Knob Control Wheel
1	Thumb Screw Knob
2	CRT Assembly Screws

The following FRU P/N's are reference numbers only. They are in the Manual, but are not valid FRU #s for servicing monitors:

P/N72G8492, P/N69F9781, P/N39G2101, P/N72G8492, P/N72G9116, P/N68G2664, P/N68G2655, P/N07G9838, P/N69F9777.

The Monitor HMM, S71G-4197, will be updated to identify the contents of these small parts kits. Corrections will also be made to eliminate the erroneous numbers.

SAS KEYWORDS:

PSY2	PSY2MISC	PSY2PART	PSY2DISP
D/T8503	D/T8504	D/T8506	D/T8507
D/T8508	D/T8511	D/T8513	D/T8515
D/T8516	D/T8517	D/T8518	D/T9515
D/T9517	D/T9518	D/T9524	D/T9525
D/T9507	D/T9521	D/T9527	D/T6312
D/T6314	D/T6317	D/T6319	D/T6324
D/T6325	D/T6327		

MONITOR REAR COVER DELATCHING TOOLS

1.4.376 MONITOR REAR COVER DELATCHING TOOLS

Record number: H065813

Device: D/T95XX
 Model: M
 Part number: P/N68G1457
 Tip key: 014
 Date created: 093/12/13
 Date last altered: A93/12/14

A new rear cover delatching tool, FRU P/N68G1457 has been made available for Type 1* monitors such as the 6324, 6325, 9524 and the 9525. The new tool works on all Type 1 monitors.

The original tool, FRU P/N59X6319 is still available and may be ordered if required, however it only works on early model Type 1 covers. The new tool was identified to the field in HMM V2 S71G-4197-02.

* Type 1 covers use a delatching tool.
 Type 2 covers use a screw to secure the cover.

SAS KEYWORDS:

PSY2	D/T8503	D/T8504	D/T8506
D/T8507	D/T8508	D/T8511	D/T8513
D/T8515	D/T8516	D/T8517	D/T8518
D/T9515	D/T9517	D/T9518	D/T9524
D/T9525	D/T9521	D/T9527	D/T6312
D/T6314	D/T6317	D/T6319	D/T6324
D/T6325	D/T6327		

PSY2 RETAIN TIPS
MOUSE FRU PARTS CORRECTION

1.4.377 MOUSE FRU PARTS CORRECTION

Record number: H124023

Device: D/T8550
Model: M
Part number: P/N33G5417
Tip key: 201
Date created: 094/05/20
Date last altered: A94/05/20

The published FRU part number on page 203 of the PS/2 Hardware Maintenance Manual, Form # S52G-9971-01, dated September, 1993, for "Mouse Retainer Ring," FRU P/N33F5417 is correct, however, this part number will also provide the "mouse ball" and the ball retainer for the "New Style" mouse.

This will be included in the next update of the HMS manual.

SAS KEYWORDS:

PSY2	PSY2PART	BALL	PSY2MISC
P/N33G5417	P/N33G5420	NEW	STYLE

1.4.378 NEW BASE FOOT FRU FOR THE 9545, 95XX

Record number: H104092

Device: D/T9545
Model: M
Part number: P/N84G4326
Tip key: 008
Date created: 094/04/14
Date last altered: A94/04/29

A base foot, FRU P/N84G4326, is now available for 9545 system units. Please order this part instead of the system base when a foot is needed.

SAS KEYWORDS:

PSY2 PSY2PART PSY2MISC

PSY2 RETAIN TIPS
NEW CONTROL PANEL ASSEMBLY

1.4.379 NEW CONTROL PANEL ASSEMBLY

Record number: H103633

Device: D/T8557
Model: M
Part number: P/N92F0002
Tip key: 008
Date created: 093/03/31
Date last altered: A93/04/14

Control Panel Assembly FRU#92F0002 has been replaced by the following new FRU numbers:

D/T	Old FRU#	New FRU#
8540	92F0002	61G2288
8557	92F0002	52G7711
9557	92F0002	52G7711
9577	92F0002	61G2288

These new FRU numbers will be reflected in the next release of the PS/2 HMM.

SAS KEYWORDS:

PSY2PART	D/T8540	D/T8557	D/T9557
D/T9577	P/N61G2288	P/N52G7711	

NEW SCREWS IN FRU MAY INTERFERE WITH DC/DC CARD**1.4.380 NEW SCREWS IN FRU MAY INTERFERE WITH DC/DC CARD**

Record number: H125840

Device: D/T9552
Model: M
Part number: P/N66G1609
Tip key: 035
Date created: 094/10/31
Date last altered: A97/12/05

The new keyboard base cover (MONO FRU P/N66G1607 & COLOR FRU P/N66G1609) contains a set of black or brass replacement screws. The brass screws are 5mm long and may touch the voltage regulator card which is behind one of the keyboard screw holes. The pressure from the longer screw can cause connection problems. This has been corrected by using 4mm black screws that are now supplied with each base cover FRU. The brass screw can be used in this area if 1mm is trimmed from its length using a screw cutter.

SAS KEYWORDS:

PSY2

PSY2PART

PSY2PWS

THINKPAD

UNCLASSIFIED

1.4.381 NEW 2630 701 BASE 25/75 SYSTEM BOARD FRU

Record number: H127412

Device: D/T2630
Model: M
Part number: P/N25H4883
Tip key: 001
Date created: 095/05/05
Date last altered: A97/01/29

FRU P/N25H4860 in the HMM is incorrect. The correct FRU number for the 25/75MHz bottom system board is P/N041H7180 This correction will be in the next HMM release.

SAS KEYWORDS:

PSY2	PSY2PART	PSY2BRD	THINKPAD
PSY2DOC	UNCLASSIFIED		

1.4.382 NEW 5.25" DISKETTE DRIVE FOR VALUEPOINT

Record number: H122111

Device: D/T6384
Model: M
Part number: P/N82G1824
Tip key: 044
Date created: 093/12/20
Date last altered: A93/12/20

THE PS/VALUEPOINT 5.25 INCH DISKETTE DRIVE FRU PART NUMBER
HAS BEEN CHANGED TO P/N82G1824.

THE NEW DRIVE IS A REPLACEMENT DRIVE FOR THE EXISTING
5.25 DISKETTE DRIVE FRU P/N93F2362. P/N82G1824 IS
FUNCTIONALLY COMPATIBLE WITH P/N93F2362.

THIS CHANGE AFFECTS ALL PS/VALUEPOINT SYSTEMS AND MODELS.
THE NEXT REVISION OF THE PS/VALUEPOINT HMS/R WILL INCLUDE
THIS PART NUMBER CHANGE.

SAS KEYWORDS:

PSVP	PSY2	PSVPDSKT	PSY2DSKT
PSVPPART	PSY2PART	D/T6381	D/T6382
D/T6387	6381	6382	6384
6387	VALUE POINT	PS VP	1.2MB

1.4.383 NEW 9545/2620 PC CARD LOCKING BAR.

Record number: H126576

Device: D/T9545
Model: M
Part number: P/N85G8625
Tip key: 035
Date created: 095/03/01
Date last altered: A95/03/02

A new locking bar FRU P/N85G8625 has been released. This bar is redesigned to allow token ring PC card cable connector clearance.

SAS KEYWORDS:

PSY2	PSY2ADAPT	PSY2PART	PSY2DOC
PCMCIA	LOCK	HOLDER	85G8625
PSY2PUB			

NUMERIC KEYPAD CABLE FRU PART NUMBER

1.4.384 NUMERIC KEYPAD CABLE FRU PART NUMBER

Record number: H086878

Device: D/T8543
Model: M
Part number: P/N1396183
Tip key: 001
Date created: 091/04/12
Date last altered: A95/09/08

THE PART NUMBER FOR THE NUMERIC KEYPAD CABLE IS MISSING FROM
THE HMS MANUAL. IT WILL BE INCLUDED IN THE NEXT RELEASE.
THE NUMBER IS P/N95F4779 .

SAS KEYWORDS:

PSY2	PSY2PART	8543SYSPART	8543SYSKBD
PSY2KBD	PAY2PUB		

1.4.385 OBI 28.8 PC CARD DATA/FAXMODEM FAILURES.

Record number: H165

Device: D/T9546
 Model: M
 Part number: P/N42H4326
 Tip key: 016
 Date created: 097/06/06
 Date last altered: A97/06/09

The 28.6 Options by IBM PC card modem, option P/N 42H4319, must have USA in the country code section of its setup, or the modem could give an error "no dial out".

NOTE: Ensure USA is in the country code area of setup before any FRUs are replaced.

This condition can occur with any ThinkPad system using this PC card.

SAS KEYWORDS:

PSY2	PSY2ADPT	PSY2PART	PCMCIA
THINKPAD	UNCLASSIFIED	D/T2603	D/T2604
D/T2610	D/T2618	D/T2619	D/T2620
D/T2625	D/62630	D/T2635	D/T2640
D/T9545	D/T9547	D/T9552	D/T3546
D/T3547			

OPERATOR PANEL CABLE FRU P/N92F0239 INCORRECT

1.4.386 OPERATOR PANEL CABLE FRU P/N92F0239 INCORRECT

Record number: H122483

Device: D/T9595
Model: M
Part number: P/N92F0329
Tip key: 004
Date created: 094/01/27
Date last altered: A94/11/09

The information on page 283 of the PS2 Hardware Maintenance Manual, S52G-9971-02, dated Oct. 1994, is in error. The following correction will be included in the next update of the HMS.

Index 4, The Operator Panel to System board cable (wide cable) should be P/N92F0329.

SAS KEYWORDS:

PSY2	PSY2PART	D/T8595	D/T9595A
PSY2DOC	92F0329	61G3817	33F8429
61G3824	92F0335	P/N92F0239	

OPTION CARD GROUNDING/RETAINING SCREWS

1.4.387 OPTION CARD GROUNDING/RETAINING SCREWS

Record number: H121835

Device: D/T8557
Model: M
Part number: P/N71G5704
Tip key: 012
Date created: 093/11/19
Date last altered: A95/05/08

Adapter grounding / retaining screws are available.

lea. FRU# P/N71G5704 for models 8557, 9557, 9577

lea. FRU# P/N71G5705 for models 8556, 9556, 9576

SAS KEYWORDS:

PSY2	D/T8530	D/T8555	D/T8556
D/T8557	D/T8590	D/T9556	D/T9557
D/T9576	D/T9577	SCREW	JACK
NUT	THUMB		

1.4.388 P/N REFERENCE LIST- PCMCIA

Record number: H123791

Device: D/TOEMF
Model: MEAT
Part number: P/N9999999
Tip key: 049
Date created: 094/05/02
Date last altered: A96/07/01

LISTING OF PCMCIA PRODUCT P/N'S

MFG	MODEL	DESCRIPTION	FC	PART #
KINGSTON	KTC-ELITE/4	4MB MEMORY	0000	P/N62H0492
KINGSTON	KTC-ELITE/8	8MB MEMORY	0047	P/N62H0493
KINGSTON	KTC-ELITE/16	16MB MEMORY	0048	P/N62H0494
KINGSTON	KTC2337/4	4MB MEMORY	0000	P/N62H0502
KINGSTON	KTC2337/16	16MB MEMORY	0052	P/N62H0503
KINGSTON	KTC9769/4	4MB MEMORY	0000	P/N62H0510
KINGSTON	KTC9769/8	8MB MEMORY	0055	P/N62H0511
KINGSTON	KTM-TP750/4	4MB MEMORY	0000	P/N62H0522
KINGSTON	KTT2000SXE/4	4MB MEMORY	0000	P/N62H0523
KINGSTON	KTT2000SXE/8	8MB MEMORY	0057	P/N62H0524
KINGSTON	KTT4400SX/8	8MB MEMORY	0058	P/N62H0525
KINGSTON	KTT4500/4	4MB MEMORY	0000	P/N62H0526
KINGSTON	KTT4500/8	8MB MEMORY	0059	P/N62H0527
KINGSTON	KTT4600/16	16MB MEMORY	0060	P/N62H0528
MADGE	SMART 16/4	16/4 RINGNODE		P/N20H6416
MEGAHERTZ	XJ1144	DATA/FAX MODEM	8074	P/N90G7520
MEGAHERTZ	XJ2144	DATA/FAX MODEM	8608	P/N20H7395

SAS KEYWORDS:

POEM	PCMCIA	CREDIT CARD	MODEM
FAX	PSY2	9545	THINKPAD
LAPTOP	KINGSTON	MEGAHERTZ	

1.4.389 PC SERVER 330&COLON. MISLABELED 3-DROP SCSI CABLE

Record number: H16625

Device: D/T8640
Model: M
Part number: P/N76H3455
Tip key: 019
Date created: 097/08/04
Date last altered: A97/08/04

The 3 - drop SCSI cable in PC Server 330 Hot-Swap models 8640-EM2, ES2, and ESS may be incorrectly labeled as FRU p/n06H6440.

The correct FRU number label should read FRU p/n76H3455.

The HMM documentation is correct.

Field and manufacturing stock are being re-labeled.

SAS KEYWORDS:

PSY2 PSY2PART UNCLASSIFIED 76H3455
06H6440

1.4.390 PC-SERVER 520, SCSI CABLE P/N CORRECTION

Record number: H132775

Device: D/T8641
 Model: M
 Part number: P/N06H6661
 Tip key: 014
 Date created: 096/02/26
 Date last altered: A96/02/26

The Server 520 (8641) Hardware Maintenance Manual Supplement S30H-2501 - 00 dated October 1995, page 193, index 3 and 5, incorrectly lists FRU part numbers 06H6675 and 06H6661 for the SCSI FAST/WIDE Cables (3x).

Do not order 06H6675 or 06H6661 for the Server 520.

The correct DASD cables the Server 520 (RAID or NON-ARRAY systems) are as follows:

- SCSI Controller to Backplane Cable.... FRU P/N 06H6876
- Backplane to CD ROM w/termination..... FRU P/N 06H3751

The illustration on page 293 does not correctly identify either of these cables

This will be corrected in future updates of the manual.

SAS KEYWORDS:

PSY2	PSY2PART	HARDFILE	FIXED
DISK	PSY2DOC	PUB	PUBS
HMM	P/N06H6661	P/N06H6876	P/N06H3751
P/N06H6675	PSY2FDSK		

1.4.391 PCMCIA MODEM WITH INTERNAL DAA MAKES NOISE

Record number: H127929

Device: D/T9545
Model: M
Part number: P/N73G9343
Tip key: 039
Date created: 095/06/02
Date last altered: A95/06/02

PROBLEM: Speaker noise occurring while the PCMCIA modem is plugged in its socket.

If replacing the following PCMCIA modem for noise does not fix the problem please contact Level 2 Raleigh support through your normal support structure.

Engineering is in the process of determining the root cause and solution to this issue.

Description	FRU P/N
PCMCIA 14/4 modem	P/N73G9343

SAS KEYWORDS:

PSY2 PSY2PART PSY2ADAPT

1.4.392 PS/2 8535 COVER LOCK AND PAWL

Record number: H094996

Device: D/T8535
Model: M
Part number: P/N92F0003
Tip key: 001
Date created: 091/09/04
Date last altered: A91/09/04

THE 8535 COVER LOCK ASSEMBLY FRU P/N92F0003 LISTED IN THE HMS IS ALSO USED IN OTHER MACHINE TYPES. IT IS SHIPPED WITH A BLACK PLASTIC PAWL THAT WILL NOT FIT PROPERLY IN THE 8535. (THE PAWL IS THE SMALL PLASTIC EXTENSION ON THE LOCK ASSEMBLY THAT ENGAGES WITH THE SYSTEM FRAME.)

WHEN REPLACING THE LOCK ASSEMBLY IN AN 8535, USE THE WHITE PLASTIC PAWL FROM THE ORIGINAL LOCK, OR ORDER A NEW PAWL AS FRU P/N79F3459. THE PART NUMBERS ARE LISTED IN THE HMS.

SAS KEYWORDS:

PSY2

PSY2MISC

8535SYSMISC

1.4.393 PS/2 8550 MEMORY MODULE PART NUMBER DELETION

Record number: H016959

Device: D/TPCPS
Model: MPUB
Part number: P/N15F7586
Tip key: 002
Date created: 089/03/14
Date last altered: A89/03/14

P/N15F7586 (PS/2 8550 MODEL 021, 1MB MEMORY MODULE PACKAGE, TYPE 2 ONLY) IS A NONEXISTENT NUMBER. IN YOUR PS/2 HARDWARE MAINTENANCE SERVICE MANUAL (FORM NUMBER S68X2222), CORRECT PAGE 7 OF THE 8550 PARTS CATALOG (THE PAGE IS DATED APRIL 13, 1988). ALSO CORRECT THE PARTS SECTION OF YOUR 8550 SERVICE SUMMARY CARD (DATED APRIL 13, 1988).

SAS KEYWORDS:

PSY2 8550SYSDOC PSY2DOC

1.4.394 PS/2 8573 HMS UPDATE ON PAGE 9 REGARDING ECA014

Record number: H031207

Device: D/TPCPS
Model: MPUB
Part number: P/N38F4737
Tip key: 003
Date created: O89/05/16
Date last altered: A89/05/16

ON PAGE 9 OF THE HMS INSERT FOR THE 8573 DATED FEBRUARY 6,
1989, ORDER FORM NUMBER S68X-2381 OR P/N68X2381, THE FOLLOWING
INFORMATION SHOULD BE ADDED AFTER "FOR ADDITIONAL INFORMATION
REFER TO IBM SERVICE BULLETIN." THE SENTENCE SHOULD READ
"FOR INFORMATION ON NON-FAILING PARTS REIMBURSEMENT REFER TO
IBM SERVICE BULLETIN ECA014."

SAS KEYWORDS:

PSY2	PSY2DOC	8573SYSDOC	8573SYSPART
PSY2PART	PSY2ECBM	8573ECA	8573SYSECBM
8573SYSPWR	PSY2PWR		

1.4.395 RED WIRE FOR 9517, EHT TO HSTAT FOCUS ASSEMBLY

Record number: H13137

Device: D/T9517
Model: M
Part number: P/N39G2096
Tip key: 007
Date created: 095/07/26
Date last altered: A96/04/09

Analog Card Trays, FRU P/N39G2096, are manufactured with a red wire connecting the EHT on the Analog Card Tray to the HSTAT focus pot assembly.

If the replacement Analog Card Tray does not contain a new red wire, the wire should be carefully unplugged from the defective card tray and used on the replacement.

The card tray should not be considered defective if the red wire is missing.

In the unlikely event a red wire is required, it is now contained in the Small Cables Kit, FRU P/N69F9782

SAS KEYWORDS:

PSY2 PSY2DISP 9517 PSY2PART
PSY2PART

1.4.396 RELABELED FRU STOCK CONTAINS ARTIC EIB P/N09F1889

Record number: H097687

Device: D/T8550
Model: M
Part number: P/N91F7974
Tip key: 119
Date created: 092/05/05
Date last altered: A93/11/02

SOME FRU STOCK HAS BEEN RELABELED SUBSTITUTING FRU P/N09F1889
FOR P/N91F7974. THESE PARTS ARE FUNCTIONALLY EQUIVALENT.

SAS KEYWORDS:

PSY2ADPT	8550SYSADPT	8560SYSADPT	8570SYSADPT
8590SYSADPT	8595SYSADPT	PSY2COMM	8580SYSADPT
D/T8560	D/T8570	D/T8580	D/T8590
D/T8595			

RELABELED FRU STOCK CONTAINS ARTIC EIB FRU P/N09F1890

1.4.397 RELABELED FRU STOCK CONTAINS ARTIC EIB FRU P/N09F1890

Record number: H097699

Device: D/T8550
Model: M
Part number: P/N91F7966
Tip key: 120
Date created: 092/05/07
Date last altered: A93/11/02

SOME FRU STOCK HAS BEEN RELABELED SUBSTITUTING FRU P/N09F1890
FOR P/N91F7966. THESE PARTS ARE FUNCTIONALLY EQUIVALENT.

SAS KEYWORDS:

PSY2ADPT	8550SYSADPT	8560SYSADPT	8570SYSADPT
8580SYSADPT	8590SYSADPT	8595SYSADPT	PSY2COMM
D/T8580	D/T8590	D/T8595	D/T8570

REMOVE INCORRECT DSKT DRIVE CABLE FROM 8551 FRU.

1.4.398 REMOVE INCORRECT DSKT DRIVE CABLE FROM 8551 FRU.

Record number: H121702

Device: D/T8551
Model: M
Part number: P/N06G9865
Tip key: 009
Date created: 093/10/04
Date last altered: A93/11/05

A diskette drive cable, FRU P/N79F0978, belonging to an 8543 was included with a small number of 8551 diskette drives, FRU P/N06G9865. This cable will not operate on an 8551 and should be removed before the diskette drive is installed. The cable is not returnable-it can be saved for use on 8543 systems.

SAS KEYWORDS:

PSY2	PSY2PART	PSY2DSKT	P/N07G1228
N51SX	L40 L40SX	N51SLC	

REPLACEMENT THUMBSCREW P/N85F0256 AVAILABLE FOR ARTIC CABLES

1.4.399 REPLACEMENT THUMBSCREW P/N85F0256 AVAILABLE FOR ARTIC CABLES

Record number: H002113

Device: D/T7538
 Model: M
 Part number: P/N85F0256
 Tip key: 013
 Date created: 091/06/05
 Date last altered: A91/06/05

FRU P/N85F0256 IS AVAILABLE AS A REPLACEMENT THUMBSCREW FOR THE FOLLOWING ARTIC CABLES:

P/N09F1801 - 8 PORT, MULTIPORT AND MULTIPORT/2
 P/N15F8868 - 6 PORT, MULTIPORT/2
 P/N53F2621 - 8 PORT, PORTMASTER AND MULTIPORT MODEL 2
 P/N53F2624 - SELECTABLE, "
 P/N53F2651 - SELECTABLE X.21, "
 P/N53F2752 - SELECTABLE V.35, "

THE THUMBSCREWS CAN BE REMOVED BY GRASPING THE HEAD AND PULLING THEM OUT OF THE MOLDING. NEW SCREWS CAN BE INSERTED BY PUSHING THEM INTO THE MOLDING.

SAS KEYWORDS:

PSY2	PSY2COMM	PSY2ADPT	8550SYSCOMM
8550SYSADPT	8555SYSADPT	8555SYSCOMM	8560SYSADPT
8570SYSCOMM	8570SYSADPT	8580SYSADPT	8580SYSCOMM
PCOMM	5150SYSADPT	5160SYSADPT	5170SYSADPT
5150SYSCOMM	5160SYSCOMM	5170SYSCOMM	ARTIC
RTIC	RIC		

SCSI ADAPTER W/O CACHE MAY HAVE WRONG FRU P/N ON THE BOARD

1.4.400 SCSI ADAPTER W/O CACHE MAY HAVE WRONG FRU P/N ON THE BOARD

Record number: H085260

Device: D/T8550
 Model: M
 Part number: P/N85F0002
 Tip key: 082
 Date created: 091/07/02
 Date last altered: A95/06/06

THE SCSI ADAPTER WITHOUT CACHE, FRU P/N85F0002, MAY HAVE THE INCORRECT (OLD) FRU PART NUMBER PRINTED ON THE CARD ASSEMBLY.

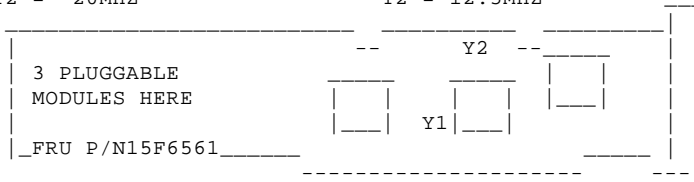
ALL INVENTORIES OF THIS FRU AND MARKETING OPTIONS HAVE BEEN REWORKED TO THE CURRENT VERSION (FRU P/N85F0002).

SERVICERS MAY RECEIVE ADAPTERS WHICH HAVE THE CURRENT FRU PART NUMBER PRINTED ON THE OUTSIDE OF THE BOX, BUT THE OLD FRU PART NUMBER IS STILL VISIBLE ON THE ADAPTER ITSELF.

THE FOLLOWING INFORMATION WILL ENABLE POSITIVE IDENTIFICATION OF THE CURRENT LEVEL OF THE SCSI ADAPTER WITHOUT CACHE.

THE CRYSTALS (SMALL SILVER CANS) AT LOCATION Y1 AND Y2 WERE CHANGED AS FOLLOWS:

OLD VERSION (FRU P/N15F6561)	CURRENT VERSION (FRU P/N85F0002)
Y1 = 25MHZ	Y1 = 20MHZ
Y2 = 20MHZ	Y2 = 12.5MHZ



NOTES:

ON THE CURRENT VERSION OF THE ADAPTER, A PAIR OF YELLOW WIRES MAY, OR MAY NOT, BE VISIBLE APPROXIMATELY BETWEEN Y1 AND Y2. BOTH VERSIONS ARE CURRENT, AS THE WIRES WERE "IMBEDDED" IN LATER PRODUCTION.

THE FRU PART NUMBER ETCHED INTO THE CARD SHOULD BE IGNORED IF THE MARKINGS ON THE CRYSTALS CORRESPOND WITH THE ABOVE LIST.

SAS KEYWORDS:

PSY2	PSY2ADPT	PSY2FDSK	D/T8550
D/T8560	D/T8565	D/T8570	D/T8580
D/T8590	D/T8595	D/T8557	ADPT
ADPT/A	HARDFILE	ADAPTER	CD
WRONG	INCORRECT	ECA032	ECA027

SCSI DEVICE TERMINATORS AVAILABLE (R-PAKS)

1.4.401 SCSI DEVICE TERMINATORS AVAILABLE (R-PAKS)

Record number: H105711

Device: D/T8550
Model: M
Part number: P/N92F0143
Tip key: 146
Date created: 093/01/06
Date last altered: A93/04/27

FRU p/n92F0143 SCSI Terminator kit contains three (3) modules. These are used as SCSI terminators on the IBM 3.5" R/W optical file and the IBM 40,60,80,120 and 160 MB 3.5" SCSI fixed disks.

The PS/2 HMM, page 191, will be corrected in the next release.

SAS KEYWORDS:

PSY2	PS/2	PS2	PERSYS
D/T8550	D/T8555	D/T8557	D/T8556
D/T8560	D/T8565	D/T8570	D/T8580
D/T8590	D/T8595	D/T9577	D/T9576
D/T9595	PSY2FDSK		

PSY2 RETAIN TIPS
SECURITY KEY LOCK AND KEYS

1.4.402 SECURITY KEY LOCK AND KEYS

Record number: H096102

Device: D/T8573
Model: M
Part number: P/N64F9991
Tip key: 004
Date created: 092/01/30
Date last altered: A92/01/31

FRU P/N64F9991 is listed in the P75 Hardware Maintenance Service Manual form number S84F-7593, dated October 31, 1990, as a "Security Key." In fact this is a Security Keylock and key assembly. This will be corrected in future releases of this manual.

SAS KEYWORDS:

PYS2 PYS2PART 8573SYSPART 8573SYSDOC
PSY2DOC

PSY2 RETAIN TIPS
SENSOR CABLE NOT AVAILABLE

1.4.403 SENSOR CABLE NOT AVAILABLE

Record number: H122711

Device: D/T9524
Model: M
Part number: P/N68G1326
Tip key: 002
Date created: 094/02/14
Date last altered: A95/11/13

The 9524/9525 sensor cable, FRU P/N68G1326, cannot be ordered. This FRU part number was published erroneously and will be deleted from any future versions of the Monitor Hardware Maintenance Manual, Volume 2, Form # S71G-4197-02, dated Sept. 1993.

It is recommended that servicers delete this FRU part number from pages 2-32 and 2-33 of their manual.

SAS KEYWORDS:

PSY2	PSY2DISP	PSY2PART	D/T9524
D/T9525	68G1326		

SERVER 310 HMM FRU PART NUMBER CORRECTIONS

1.4.404 SERVER 310 HMM FRU PART NUMBER CORRECTIONS

Record number: H132290

Device: D/T8639
 Model: M
 Part number: P/N4867170
 Tip key: 001
 Date created: 096/01/19
 Date last altered: A96/01/19

The following are corrections to the Server 310 (8639) HMM
 (Hardware Maintenance Manual) Supplement, S30H-2501-00, dated
 October 1995:

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Ethernet Card Assy (ISA) FRU P/N4867170, should be P/N48G7170.
 Ethernet Card Assy (MC) FRU P/N4867172, should be P/N48G7172.

SAS KEYWORDS:

PSY2	SERVER	310	PSY2ADPT
PSY2COMM	PSY2DOC	4867172	4867170
48G7170	48G7172	PSY2PART	

1.4.405 SERVER 320 RAID STATUS CABLE FRU P/N MISSING

Record number: H131210

Device: D/T8640
 Model: M
 Part number: P/N0000000
 Tip key: 010
 Date created: 095/10/11
 Date last altered: A95/10/12

The PC Server 320 Hardware Maintenance Manuals, Form #'s:

S30H-2452 - 00 for models xYx, dated June 1995, pages 10-12,
 S30H-2440-00 for models xMx, dated July 1995, pages 10-13,

Have omitted the the following cable:

RAID Status Cable P/N06H7766

This cable connects the RAID Controller Adapter to the DASD Hot Swap Backplane, page 11, index 2.

This will be corrected on future updates of the HMM.

SAS KEYWORDS:

PSY2	SERVER	320	RAID
BACK	PLANE	PSY2DOC	PSY2FDSK
HMM	06H7766		

PSY2 RETAIN TIPS
SHORT DISCHARGE CYCLE

1.4.406 SHORT DISCHARGE CYCLE

Record number: H125843

Device: D/T9545
Model: M
Part number: P/N66G2846
Tip key: 025
Date created: 094/12/13
Date last altered: A94/12/21

Short discharge times may occur after charging battery FRU P/N66G2846 or P/N49G2166 with a quick charger, if the battery voltage is below 8 volts. The Quick Charger's charging cycle time is designed for a battery discharged to at or above 8 volts. A deeper discharge that results in battery voltage below 8 volts will require multiple charge cycles to completely charge the battery. Do NOT discharge between the Quick Charger cycles.

To prevent discharging the battery below the 8 volt range do the

1. Charge the battery shortly after it has gone into a discharged suspend mode.
AND
2. Do NOT attempt more than one resume operation after the discharge has occurred.

Follow normal problem determination if the battery discharge time is still short.

SAS KEYWORDS:

PSY2	PSY2PWR	QUICK CHARGE	DRAIN
LIFE	POWER		

1.4.407 SIGMA DATA / HYPERTEC PROCESSOR UPGRADE P/N

Record number: H121593

Device: D/TOEMF
 Model: MEAT
 Part number: P/N9999999
 Tip key: 038
 Date created: 093/10/25
 Date last altered: A94/08/19

SIGMA DATA / HYPERTEC PROCESSOR UPGRADE P/N

MODEL	DESCRIPTION	IBM P/N
HY200	HYPERACE 486, PROCESSOR UPGRADE BOARD FOR THE 8570. HAS AN EIGHT SWITCH BLOCK ON ONE CORNER AND HYPERACE 486 WRITTEN ON THE BOARD. BOARD IS VERSION 2.00, COMES WITH COPROCESSOR PLUG AND ADAPTER FOR PROCESSOR SOCKET. OEM P/N= SDH011D433	93F8762
HY201	HYPERACE 486, PROCESSOR UPGRADE MODULE FOR THE 8580. PLUGS INTO THE PROCESSOR SOCKET ON THE SYSTEM BOARD. VERSION 2.00 COMES WITH A COPROCESSOR AND AN ADAPTER SOCKET FOR THE UPGRADE OEM P/N= SDH017S425	93F8761
HY205	HYPERACE 486, PROCESSOR UPGRADE MODULE FOR THE 8573 (P70). PLUGS INTO THE PROCESSOR SOCKET ON THE SYSTEM BOARD. OEM P/N= SDH026D433	90G6356
QEP/486 - D301	486 PROCESSOR UPGRADE FOR IBM PS/2 MODEL 70 AND 80, UTILIZING BLUE LIGHTNING PROCESSOR WITH 16KB OF INTERNAL CACHE AND TRIPLE CLOCK SPEED. ***** *** NOT TO BE USED AT TRIPLE SPEED *** *** IN A 25Mhz MACHINE. ONLY *** *** CONFIGURE FOR DOUBLE SPEED IN *** *** A 25MHZ MACHINE. *** *****	90G8724
QEP/486 - 302	486 PROCESSOR UPGRADE FOR IBM PS/2 MODEL 70 AND 80, UTILIZING BLUE LIGHTNING PROCESSOR WITH 16KB OF INTERNAL CACHE AND TRIPLE CLOCK SPEED.	90G8725

SAS KEYWORDS:

POEM	SIGMA	SIGMA DATA	HY201
HY200	HY205	SIGMADATA	HYPERTEC
HYPER TEC	PROCESSOR	UPGRADE	PSY2
PSY2OEM	D/T8580	D/T8570	D/T8573
HYPERTECH			

1.4.408 SYSBRD VIDEO CABLES LACK THREADED NUTS

Record number: H036252

Device: D/T8530
Model: M
Part number: P/N27F4163
Tip key: 034
Date created: 090/05/01
Date last altered: A92/08/18

THE SYSTEM BOARD VIDEO CABLE, FRU P/N27F4163 HAS BEEN IMPROVED TO INCLUDE THREADED NUTS. THIS CHANGE WAS MADE FOR EASE OF ASSEMBLY DURING THE MANUFACTURING PROCESS AND FRU REPLACEMENT.

IF THE VIDEO CABLE YOU RECEIVE DOES NOT HAVE THE NUTS ATTACHED, IT IS NOT CONSIDERED DEFECTIVE. THE CABLE CAN BE USED WITH THE 4 - 40 NUT FROM THE 8530 286 MISCELLANEOUS PARTS KIT, FRU P/N27F4171. THE 4-40 NUT CAN BE ORDERED SEPARATELY AS FRU P/N37913.

THE DISPOSITION OF THE CABLE WITH OUT THE NUTS IS, "USE AS IS UNTIL DEPLETED". THIS MEANS THAT EARLY LEVEL CABLES WILL BE USED ALONG WITH THE NEW ONES UNTIL THEY ARE ALL DISBURSED.

SAS KEYWORDS:

PSY2	8530SYSBRD	8530SYSPART	8530SYSMISC
PSY2BRD	PSY2PART	PSY2MISC	JACK
NUT	CABLE	SCREWS	NUTS

SYSTEM BOARDS WITH SOLDERED MEMORY

1.4.409 SYSTEM BOARDS WITH SOLDERED MEMORY

Record number: H022551

Device: D/T8525
Model: M
Part number: P/N00F2100
Tip key: 001
Date created: 087/08/05
Date last altered: A94/01/11

SOME 8525 MACHINES WERE MANUFACTURED WITH SYSTEM BOARDS THAT HAVE SOLDERED 512KB MEMORY. WHEN THESE SYSTEM BOARDS FAIL FOR ANY REASON, A NEW SYSTEM BOARD P/N96F7390 AND TWO 256KB MEMORY MODULE PACKAGES P/N61X8906 MUST BE ORDERED.

SAS KEYWORDS:

8525SYSPART
PSY2PART

8525SYSBRD
PSY2BRD

8525SYSMISC
PSY2

PSY2MISC

1.4.410 TECMAR AVC -AUDIO/VIDEO- FRUS AND PUBLICATIONS

Record number: H1269

Device: D/T8550
 Model: MCP1
 Part number: P/N34F2793
 Tip key: 171
 Date created: 093/04/01
 Date last altered: A93/04/01

THE AUDIO CAPTURE & PLAYBACK ADAPTER, AUDIO CAPTURE & PLAYBACK ADAPTER/A AND THE VIDEO ADAPTER/A PROVIDE THE CAPABILITY TO CAPTURE, DIGITIZE AND PLAYBACK HIGH QUALITY AUDIO AND IMAGES ON STANDARD PS/2 HARDWARE.

THESE HARDWARE PRODUCTS ARE MANUFACTURED BY TECMAR, INC., FOR EXCLUSIVE RESALE AND SERVICE BY IBM. THEY MAY BE USED WITH THE IBM AUDIO VISUAL CONNECTION PROGRAM PRODUCT OR ALTERNATE SOFTWARE PRODUCTS.

FOLLOWING IS A LIST OF FRUS AND PUBLICATIONS. PLEASE NOTE THAT THE CUSTOMER RECEIVES ALL NECESSARY PARTS, CABLES AND PUBLICATIONS WITH THE ADAPTER(S) AT THE TIME OF PURCHASE.

AUDIO CAPTURE & PLAYBACK ADAPTER (NON-MICROCHANNEL)	P/N34F2786
AUDIO CAPTURE & PLAYBACK ADAPTER/A (MICROCHANNEL)	P/N34F2787
AUDIO V-CABLE	P/N87F9912
AUDIO DIAGNOSTIC DISKETTE	P/N87F9910
VIDEO CAPTURE ADAPTER/A (MICROCHANNEL)	P/N34F2788
VIDEO INPUT/OUTPUT CABLE	P/N34F2789
VIDEO Y/C CABLE (S-CONNECTOR)	P/N34F2790
VIDEO WRAP CABLE	P/N34F2791
VIDEO TERMINATORS (THREE 75 OHM PLUGS)	P/N34F2792
VIDEO DIAGNOSTIC DISKETTE	P/N34F2794
AUDIO INSTALLATION MANUAL AND TECH REF G571-0181	P/N34F2795
VIDEO INSTALLATION MANUAL AND TECH REF G571-0180	P/N34F2796

AUDIO VISUAL CONNECTION SOFTWARE AND AVC HARDWARE SUPPORT IS THROUGH THE IBM MULTIMEDIA SYSTEMS SUPPORT CENTER IN BOCA RATON AT 1 - 800-241-1620.

SAS KEYWORDS:

PSY2DOC	PSY2	8525SYSDOC	8530SYSDOC
8550SYSDOC	8555SYSDOC	8560SYSDOC	8570SYSDOC
8580SYSDOC	8590SYSDOC	8595SYSDOC	8525SYSADPT
8530SYSADPT	8550SYSADPT	8555SYSADPT	8560SYSADPT
8570SYSADPT	8580SYSADPT	8590SYSADPT	8595SYSADPT

POEM

PSY2 RETAIN TIPS
TECMAR M-MOTION VIDEO ADAPTERS

1.4.411 TECMAR M-MOTION VIDEO ADAPTERS

Record number: H1272

Device: D/T8550
Model: MCP1
Part number: P/N34F3091
Tip key: 172
Date created: 093/04/01
Date last altered: A93/04/01

THE M-MOTION VIDEO ADAPTER/A AND THE ENHANCED M-MOTION VIDEO ADAPTER/A ALLOW THE MICROCHANNEL PS/2S TO DISPLAY FULL MOTION, INTERACTIVE COLOR VIDEO ON STANDARD PS/2 VGA DISPLAYS. THIS ADAPTER ALSO PROVIDES FULL LINE AUDIO AND DIGITAL VIDEO AUDIO CAPABILITIES.

THIS HARDWARE PRODUCT IS MANUFACTURED BY TECMAR, INC. FOR EXCLUSIVE RESALE AND SERVICE BY IBM.

FOLLOWING IS A LIST OF FRUS AND PUBLICATIONS. PLEASE NOTE THAT THE CUSTOMER RECEIVES ALL OF THE FOLLOWING COMPONENTS WITH EACH ADAPTER AT THE TIME OF PURCHASE.

M-MOTION VIDEO ADAPTER	P/N34F3091
VGA TERMINATOR	P/N34F3088
VIDEO I/O CABLE	P/N34F3089
DIAGNOSTIC DISKETTE	P/N34F3093
USER'S GUIDE (INCLUDES SERVICE INFORMATION)	P/N34F3090

-OR-

ENHANCED M-MOTION VIDEO ADAPTER	P/N95F1094
VGA TERMINATOR	P/N34F3088
VIDEO I/O CABLE	P/N95F1095
DIAGNOSTIC DISKETTE	P/N34F3092
USER'S GUIDE (INCLUDES SERVICE INFORMATION)	P/N95F1093

HARDWARE SUPPORT FOR THE M-MOTION VIDEO ADAPTERS IS THROUGH THE IBM INDUSTRY SYSTEMS SUPPORT CENTER IN ATLANTA AT 1 - 800-241 - 1620.

SAS KEYWORDS:

POEM	PSY2	8550SYSDOC	8560SYSDOC
PSY2DOC	8580SYSDOC	8550SYSADPT	8560SYSADPT
8570SYSDOC	8580SYSADPT	PSY2MISC	8570SYSADPT

1.4.412 TECMAR Q-60-H OBSOLETE

Record number: H097603

Device: D/T1560
Model: MA01
Part number: P/N55X3342
Tip key: 004
Date created: 094/01/31
Date last altered: A94/01/31

TECMAR Q-60-H TAPE DRIVE P/N 55X3342 FOR 1560 MODEL A01 IS NO
MANUFACTURED BY TECMAR. IBM HAS DONE AN END OF SERVICE TO THIS
PRODUCT SINCE WE CAN NOT GET REPLACEMENT UNITS OR PARTS FOR
REPAIR.

SAS KEYWORDS:

POEM	1560	TECMAR	Q-60-H
TAPE	PSY2	PSVP	

1.4.413 THE 9545 THINKPAD 750CS (206 & 208) UNIQUE FRUS.

Record number: H121887

Device: D/T9545
Model: M
Part number: P/N66G6210
Tip key: 001
Date created: 093/11/24
Date last altered: A93/12/14

The 750Cs, model 206 & 208, have two FRU numbers unique to these models. The system board is FRU P/N66G6209 and the STN LCD is P/N66G6210. The German STN LCD FRU is P/N66G6211.

These numbers will be published in the next release of the HMM. of the HMM.

SAS KEYWORDS:

PSY2

PSY2PART

TFT

PSY2 RETAIN TIPS
THINKPAD 300 KEYBOARD CABLE

1.4.414 THINKPAD 300 KEYBOARD CABLE

Record number: H122441

Device: D/T2615
Model: M
Part number: P/N92F8833
Tip key: 004
Date created: 094/01/26
Date last altered: A96/11/11

THE MOUSE/EXTERNAL KEYBOARD CABLE PART NUMBER IS FRU P/N54G0444.

SAS KEYWORDS:

PSY2	PSY2PART	PART	2615
THINKPAD 300	D/T2615	UNCLASSIFIED	

1.4.415 THINKPAD 32MB ICDRAM OPTION FRU P/N92G7282

Record number: H131670

Device: D/T9545
Model: M
Part number: P/N92G7282
Tip key: 052
Date created: 095/11/10
Date last altered: A95/11/10

A new 32MB DRAM has been released by OPTIONS BY IBM. This is a 70ns, 5 volt, low power, parity memory. The option number is 92G7235 and FRU number is 92G7282. This is not a replacement for any other FRU number and should be replace like for like. This information will be made available in the next update of the HMM manual for mobile PCs.

SAS KEYWORDS:

DRAM	32MB	MEMORY	PSY2
PSY2MEM	PSY2ADPT	THINKPAD	P/N92G7235

1.4.416 TRACK POINT KEYBOARD CABLE FRU P/N61G2913

Record number: H122871

Device: D/T95XX
 Model: M
 Part number: P/N61G2913
 Tip key: 016
 Date created: 094/02/23
 Date last altered: A95/03/29

The HMM, part number S52G-9971-01, omits the FRU part number for the Keyboard Cable FRU used with the TrackPoint II Keyboard.

The correct FRU part number for the Keyboard Cable FRU is P/N61G2913.

This does not apply to internal keyboards in ThinkPad systems.

This information will be added to the next release of the HMM.

SAS KEYWORDS:

PSY2	PSY2PART	TRACK	POINT
2	P/N61G2901	61G2901	61G2913
D/T8525	D/T8530	D/T8535	D/T8540
D/T8543	D/T8551	D/T8554	D/T8550
D/T8555	D/T8556	D/T8557	D/T8573
D/T8560	D/T8565	D/T8570	D/T9576
D/T8580	D/T8590	D/T8595	D/T9585
D/T9577	D/T9556	D/T9557	D/T9595
D/T9533	D/T6384	D/T6381	D/T6382
D/T6387	D/T2603	D/T2614	D/T2615
D/T2618	D/T9552	D/T9545	D/T2521

PSY2 RETAIN TIPS
UNIVERSAL TRACKPOINT CAP FRU

1.4.417 UNIVERSAL TRACKPOINT CAP FRU

Record number: H002586

Device: D/T9545
Model: M
Part number: P/N84G6536
Tip key: 057
Date created: 096/05/13
Date last altered: A96/05/13

The TrackPoint cap kit FRU, part number 84G6536, fits all ThinkPad keyboards. It should be ordered for any TrackPoint cap replacement. The TrackPoint cap kit will be included in all future HMM updates.

SAS KEYWORDS:

PSY2	PSY2PART	PSY2KBD	D/T9546
D/T9547	D/T2630	D/T2625	D/T2603
D/T2604	D/T2610	D/T2619	D/T2620
D/T2618	D/T9552	THINKPAD	

1.4.418 VALUE POINT DISPLAY POWER CORD P/N38F3908

Record number: H093698

Device: D/T6384
Model: M
Part number: P/N38F3908
Tip key: 016
Date created: 093/02/26
Date last altered: A93/02/26

THE PART NUMBER FOR THE VALUE POINT DISPLAY POWER CORD IS NOT IN THE "PS/VALUEPOINT HARDWARE MAINTENANCE SERVICE AND REFERENCE" MANUAL, FORM P/N 52G9982 (SEPT.92)

THE POWER CORD FOR 6312, 6314 AND 6319 DISPLAYS IS P/N38F3908.

THIS INFORMATION WILL BE IN THE NEXT RELEASE OF THE HMSR.

SAS KEYWORDS:

VALUE POINT	VALUEPOINT	D/T6384	PSY2
PSY2DISP	PSY2DOC	PSY2PART	PSVP
D/T6312	D/T6314	D/T6319	PSVPPART
VP			

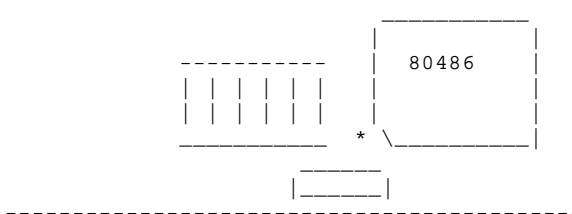
1.4.419 VALUEPOINT & PC 300 486DX4 PROCESSOR & REGULATOR

Record number: H124033

Device: D/T6484
 Model: M
 Part number: P/N71G0733
 Tip key: 001
 Date created: 094/05/20
 Date last altered: A96/09/19

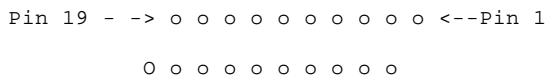
IBM PC 300 Series & PS/ValuePoint 486DX4 100Mhz models include the processor and voltage regulator. The voltage regulator is available separately under FRU P/N71G0733.

Install all 486DX4 processors with the bevelled corner located at the front-left corner of the processor socket.



***** Warning *****
 * If the 486DX4 is installed without the voltage regulator *
 * and the system board DX4 voltage regulator connector is*
 * jumpered for 5 volts, as the system board FRU is normally *
 * jumpered, the 486DX4 will be destroyed when the system *
 * is powered on! *
 * *
 * If the processor is not positioned correctly, the system *
 * board or the processor may be damaged *

Diagnosing a defective voltage regulator can be done by measuring for 3.5VDC between pin 1 and pin 19 on the regulator board.



If the voltage is incorrect, replace the voltage regulator.

Additional information on servicing systems utilizing this device is available on page 2 of the ValuePoint Hardware Maintenance Supplement (form number S83G-7790).

SAS KEYWORDS:

PSY2	PSVP	PS/VALUEPOINT	PS/VP
6484	6492	6494	71G0796
D/T6494	D/T6492	71G0733	P/N71G0733
PSVPPART	PSY2PART	D/T6482	6482
D/T6571	D/T6573	D/T6581	D/T6583
PC 330	PC 350	PC300	IBMPC

VALUEPOINT DASD TRAY PART NUMBERS

1.4.420 VALUEPOINT DASD TRAY PART NUMBERS

Record number: H007476

Device: D/T6384
 Model: M
 Part number: P/N71G6113
 Tip key: 036
 Date created: 093/08/11
 Date last altered: A93/08/12

THE PS/VALUEPOINT HARDWARE MAINTENANCE SERVICE AND REFERENCE MANUAL, PUBLICATION NUMBER S61G-1302-00, DATED MARCH 1993, HAS INCORRECT FRU PART NUMBERS FOR THE 3.5" DASD TRAY AND RISER CARD SUPPORTS AND 5.25" DASD TRAYS.

THE FOLLOWING FRU PART NUMBERS SHOULD BE USED:

6382/S

3.5" DASD TRAY AND RISER
 CARD SUPPORT P/N61G2175
 5.25" DASD TRAY P/N71G6111

6384, 6384/D

3.5" DASD TRAY AND RISER
 CARD SUPPORT P/N71G6112
 5.25" DASD TRAY P/N71G6113

IF ANY OF THE ABOVE PART NUMBERS ARE NOT RECOGNIZED BY MECHANICSBURG, PLACE THE ORDER CODE "A."

THESE PART NUMBERS WILL BE INCLUDED IN THE NEXT RELEASE OF THE HMS&R.

SAS KEYWORDS:

PSY2	PSVPDOC	PSVPPART	D/T6382
6382	6384	93F2387	61F2176
P/N93F2387	P/N61F2176	61G2175	71G1111
71G1112	71G1113	PSVP	VALUE POINT
PS/VP			

1.4.421 VALUEPOINT MISCELLANEOUS PARTS KIT

Record number: H014464

Device: D/T6482
 Model: M
 Part number: P/N53G0387
 Tip key: 003
 Date created: 094/11/15
 Date last altered: A94/11/16

The ValuePoint Miscellaneous Parts Kit, FRU P/N53G0387, contains the following items:

Qty	Name
4	Hard Disk Drive Mounting Screws
4	Power Supply Mounting Screw
4	Diskette Drive Mounting Screws
2	Tower Cover Screws
2	System Board Standoffs
4	Nylon Screws
4	Flat Adhesive Washers
6	System Board and DASD Tray Screws

This information will be included in the next release of the Hardware Maintenance Manual.

SAS KEYWORDS:

PSY2	PSY2PART	PSVP	PSVPPART
53G0387	PS/VALUEPOINT	VALUE POINT	6482
D/T6381	6381	D/T6382	6382
D/T6387	6387	D/T6472	6472
D/T6484	6484	D/T6492	6492
D/T6494	6494	PSVPMISC	PSY2MISC
D/T6384	6384		

1.4.422 VALUEPOINT 5.25" TO 3.5" DASD TRAY KIT

Record number: H122543

Device: D/T6384
 Model: M
 Part number: P/N70G8165
 Tip key: 048
 Date created: 094/01/21
 Date last altered: A94/01/24

P/N70G8165 IS A MOUNTING KIT TO INSTALL A 3.5" FIXED DISK OR
 DISKETTE DRIVE IN A VALUEPOINT 5.25" BAY. INDIVIDUAL PARTS ARE
 NOT AVAILABLE. THE FRU AND THE OPTION HAVE THE SAME PART NUMBER.

THE KIT CONTAINS THE FOLLOWING ITEMS:

INSTALLATION INSTRUCTIONS
 MANUAL
 3.5" TO 5.25" CONVERSION BRACKET
 3.5" TO 5.25" CONVERSION DISKETTE BEZEL
 34 PIN BERG TO PADDLE CARD CONVERTER
 4 PIN LARGE TO 4 PIN SMALL POWER CABLE
 SCREW KIT

SAS KEYWORDS:

PSY2	PSVP	PS/VP	VALUEPOINT
6381	6282	6387	D/T6381
D/T6387	6384	PSVPDSKT	PSY2DSKT
D/T6382	PSY2PART	PSVPPART	PSY2FDSK
PSVPFDSK	70G8165	HARD	

PSY2 RETAIN TIPS
VALUEPOINT 64XX L2 CACHE FRUS

1.4.423 VALUEPOINT 64XX L2 CACHE FRUS

Record number: H124602

Device: D/T6484
Model: M
Part number: P/N92G7430
Tip key: 005
Date created: 094/06/21
Date last altered: A94/07/12

The ValuePoint Performance Series system board has 4 (for 128Kb) or 8 (for 256Kb) 28-pin cache memory sockets. There is also one 22 - pin Tag RAM socket and one 28-pin Tag RAM socket. The Cache FRUs contain the following components:

P/n92G7430 128kb L2 Cache
5 Cache Memory Modules
1 Cache Tag Ram Module

P/n92G7431 256kb L2 Cache
9 Cache Memory Modules
1 Cache Tag Ram Module

Install one of the cache memory modules in the 28-pin Tag RAM socket, and the 22-pin Tag RAM module in the 22-pin Tag socket.

SAS KEYWORDS:

PSY2	PS/VP	VALUE POINT	PS/VALUEPOINT
PSVP	D/T6472	6472	D/T6482
6482	6484	D/T6492	6492
D/T6494	6494	92G7430	92G7431
PSY2PART	PSVPPART		

VOLTAGE SETTING OF POWER SUPPLY FRU FOR 5170

1.4.424 VOLTAGE SETTING OF POWER SUPPLY FRU FOR 5170

Record number: H056296

Device: D/T5170
Model: M
Part number: P/N8286122
Tip key: 020
Date created: 092/09/03
Date last altered: A92/09/03

THE POWER SUPPLY SWITCH SETTING OF THIS POWER SUPPLY MUST
BE CHECKED PRIOR TO INSTALLING A NEW FRU P/N8286122.
THE PROBLEM HAS ARISEN BECAUSE THIS POWER SUPPLY IS A VENDOR
SUPPLIED PART AND THIS VENDOR IS THE SAME FOR USA AND EUROPE.
IN THE USA THE NORMAL SETTING IS FOR LOW VOLTAGE.
ENSURE THE SWITCH IS CORRECTLY SET FOR THE SUPPLY VOLTAGE TO
WHICH THE SYSTEM IS TO BE CONNECTED.
THE SWITCH IS ON THE BACK OF THE UNIT.

SAS KEYWORDS:

PSY2	D/T5170	D/T5273	D/T5373
D/T7531	D/T7532	P/S	

14.4 IBM PCMCIA MODEM WILL NOT COMMUNICATE.

1.4.425 14.4 IBM PCMCIA MODEM WILL NOT COMMUNICATE.

Record number: H13611

Device: D/T9545
Model: M
Part number: P/N73G9343
Tip key: 042
Date created: 095/08/02
Date last altered: A95/09/08

PCMCIA modems, FRU P/N73G9343, using down level PCMCIA socket services or card services could experience communication failures. To correct this ensure the latest card and socket services from the IBM PC Company are being used.

----- IMPORTANT -----

Diskette fixes are customer installable. Customers should be advised to contact the IBM PC Company HelpCenter at 800-772 - 2227 if assistance is required in getting or installing this information.

Files are located on the PC company's Bulletin Board Service (BBS). The direct line for modem connection to The PC Company BBS is 1-919-517-0001 or tieline 255-0001.

Customers in Canada should call IBM's HelpPC at 800-565-3344 for Assistance or down load information. The Canadian BBS phone numbers are:
Montreal-514-938-3022, Toronto-905-316-4255,
Winnipeg-204-934-2735, Vancouver-604-664-6464.

The data may also be downloaded via the Internet from the IBM Personal Computer File Library by searching the following Internet URL: <http://www.pc.ibm.com/files.html>

SAS KEYWORDS:

PSY2

PSY2COMM

THINKPAD

14.4 PC CARD MODEM WITH INTERNAL DAA.

1.4.426 14.4 PC CARD MODEM WITH INTERNAL DAA.

Record number: H124505

Device: D/T9545
 Model: M
 Part number: P/N73G9343
 Tip key: 017
 Date created: 094/06/30
 Date last altered: A95/01/27

The following FRU has been released to support the PC card 14/4 Data Fax Modem with Integrated DAA.

Option P/N	Description	FRU P/N
73G7097	14/4 modem	P/N73G9343
	Cable	P/N73G9327

This modem can be used in any system containing a PCMCIA slot.

SAS KEYWORDS:

PSY2	PSY2ADPT	PSY2PART	PSY2OPT
D/T9552	D/T2618	D/T2610	D/T2620
THINKPAD	360	510	720
750	350	500	D/T2603
PSY2DOC	INTEGRATED		

14.4 PCMCIA MODEM AND CABLE FRU PART NUMBERS.

1.4.427 14.4 PCMCIA MODEM AND CABLE FRU PART NUMBERS.

Record number: H064199

Device: D/T9545
Model: M
Part number: P/N10H9350
Tip key: 026
Date created: 095/01/05
Date last altered: A95/01/05

A 14.4 PCMCIA Modem with internal DAA has been released. The modem FRU is P/N10H9350 and its cable is FRU P/N10H9248. This modem has Made In Canada written on the back of it and the option number is 73G7097.

This FRU information will be included in future releases of the ThinkPad HMM.

SAS KEYWORDS:

PSY2

PSY2PART

PSY2COM

1.4.428 2 DRIVE DSKT CABLES P/N27F4176 P/N27F4914 INVALID

Record number: H027113

Device: D/T8530
Model: M
Part number: P/N27F4176
Tip key: 020
Date created: 088/11/23
Date last altered: A88/11/28

THE 2 DRIVE DISKETTE CABLES FOR THE 8530 286, P/N27F4176 AND P/N27F4914 , AS SPECIFIED IN THE SUPPLEMENT TO THE HARDWARE MAINTENANCE SERVICE MANUAL PARTS CATALOG DATED JUNE 6TH, 1988, FORM NUMBER S01F0235 WERE PUBLISHED IN ERROR.

THESE CABLES ARE NOT AVAILABLE FOR THE 8530 286 AND SHOULD NOT BE ORDERED.

SAS KEYWORDS:

PSY2	8530SYSPART	PSY2PART	PSY2DOC
8530SYSDOC	8530SYSDSKT	PSY2DSKT	

1.4.429 2400/9600 PC CARD MODEM WITH INTERNAL DAA.

Record number: H124506

Device: D/T9545
 Model: M
 Part number: P/N73G9321
 Tip key: 018
 Date created: 094/06/30
 Date last altered: A94/09/20

The following FRU been released to support the PC card 2400/9600 Data Fax Modem with Integrated DAA.

Option P/N	Description	FRU P/N
73G9398	2400/9600 modem	P/N73G9321
	Cable	P/N73G9327

This modem can be used in any system containing a PCMCIA slot.

SAS KEYWORDS:

PSY2	PSY2ADPT	PSY2PART	PSY2OPT
D/T9552	D/T2618	D/T2610	D/T2620
THINKPAD	360	510	720
750	350	500	D/T2603
PSY2DOC			

1.4.430 2524 NEW PEN DOOR RELEASED AS SEPARATE FRU.

Record number: H132971

Device: D/T2524
Model: M
Part number: P/N39H6021
Tip key: 001
Date created: 096/03/06
Date last altered: A97/11/07

A re-designed Pen door, FRU P/N39H6021, has been released. If your customer's 730T or 730TE Tablet requires a new pen door the IBM PC Company Help Center will ship them the new CRU (Customer Installable Unit.) The Help Center phone number in the U.S. is 1 - 800-772-2227 and in Canada it is 1-800-565-3344.

The HMM manuals will be updated to show that the old cover kit, FRU P/N84G0507, no longer contains the Pen door and that a new Pen door FRU is now available.

SAS KEYWORDS:

PSY2	PSY2PART	THINKPAD	39H6021
84G0507	PSY2DOC	UNCLASSIFIED	

1.4.431 2600 HMM CORRECTION 05J9338 SUBS TO 05K9338.

Record number: H163593

Device: D/T2600
Model: M
Part number: P/N05K9338
Tip key: 001
Date created: 098/05/05
Date last altered: A98/05/05

IBM Mobile Systems ThinkPad 310 (D/E/ED) HMM Document Number
: S05L-1935-00 requires a FRU part number change in the parts
section 1.24 index number 2 for the 12.1" TFT LCD FRU
P/N05J9338. The correct FRU number is P/N05K9338. This has
been corrected in the on-line HMM.

SAS KEYWORDS:

THINKPAD	UNCLASSIFIED	PSY2	PSY2DSP
PSY2DOC	PSY2PART		

1.4.432 2610 340 HMM AC ADAPTER PART NUMBER CORRECTION

Record number: H136399

Device: D/T2610
Model: M
Part number: P/N39H2425
Tip key: 004
Date created: 097/01/29
Date last altered: A97/01/29

Page 64.6 in the HMM volume 2 S82G-1502-03 requires a part number change. Change the AC Adapter P/N84G6679 to P/N39H2425. This change will be in the next release of the HMM. The old part will sub to the new number when it is ordered.

SAS KEYWORDS:

PSY2	PSY2PART	PSY2DOC	THINKPAD
UNCLASSIFIED	PSY2PWR		

1.4.433 2610, 2625, 2630, 9545 & 9552 AC ADAPTER FRU NOTICE.

Record number: H132536

Device: D/T2610
 Model: M
 Part number: P/N85G6698
 Tip key: 003
 Date created: 096/01/30
 Date last altered: A97/11/07

The AC Adapter, FRU P/N85G6689, that contained a 2 pin barrel connector and a 4 pin rectangular connector is being discontinued. A new AC Adapter, FRU P/N85G6701, with a more robust molded 4 pin connector will be shipped in place of P/N85G6689.

The 2610 mod 340 and 345, the 2625, and the World Trade 2630 systems, require an AC Adapter that uses a barrel connector.

The World Trade 2630 AC Adapter requires a separate AC cord. These systems will now use a new AC Adapter, FRU P/N85G6698, that has a more robust molded barrel connector. See the following NOTE on the US and Word Trade 2630 for details.

NOTES:

- o AC Adapter FRU P/N85G6689 was shipped with all 2610 340 and 345 models, with some 2625 and with all 2630 World Trade systems.
- o The mobile HMM S82G-1502-03 dated April 1995 lists the correct part number 85G6698 for the 2610.
- o The mobile HMM S82G-1503-01, for the 2625, dated October 1995 will be updated with AC Adapter P/N85G6698 during the next release.
- o The 2630 US systems will still use FRU P/N04H6903. It has a built-in two prong AC plug.
- o Most World Trade 2630 systems were shipped with P/N85G6689. This Adapter has a removable 2 pin or 4 pin connector. It is no longer being manufactured. Use P/N85G6698 as a replacement for P/N85G6689.

The part number listed in the HMM for the 2630 world trade AC Adapter is FRU P/N04H6904. Fru P/N85G6698 should be ordered in place of P/N04H6904, but because the AC cord connections at the adapters are different the appropriate countries' AC Cord must also be ordered for AC Adapter P/N85G6698.

Use the following chart to order the correct AC Adapter replacement for the combination connector AC Adapter FRU P/N85G6689.

DEVICE	MODEL	AC ADAPTER RECTANGLE	AC ADAPTER BARREL
		4 PIN MOLDED	2 PIN MOLDED
2610	340 345		P/N85G6698
2625	ALL		P/N85G6698
2630	World Trade		P/N85G6698 SEE 2630 NOTE ABOVE
2630	Americas & Japan		P/N04H6903
9552	ALL	P/N85G6701	
9545	ALL	P/N85G6701	
9546	ALL	P/N85G6701	

SAS KEYWORDS:

PSY2	PSY2PART	THINKPAD	D/T9545
D/T9546	D/T9552	85G6689	D/T2625
D/T2630	85G6698	85G6701	PSY2DOC
PSY2PWR	UNCLASSIFIED		

2614 (N45) CABINET PARTS PACK INFORMATION

1.4.434 2614 (N45) CABINET PARTS PACK INFORMATION

Record number: H022307

Device: D/T2614
Model: M
Part number: P/N92F8825
Tip key: 001
Date created: 092/10/14
Date last altered: A96/11/11

The 2614 Cabinet parts pack, FRU P/N92F8825, listed in HMS
S42G-0486 - 0 contains the following parts:

- o Cover for LCD hinges (1 right, 1 left)
- o Memory expansion cover (with insulator)
- o Black plastic knob for the lid switch
- o Small square plug for modem cover
- o Memory Cover
- o Modem Door
- o Coprocessor door
- o I/O cover on back of machine

SAS KEYWORDS:

PSY2

PSY2PART

PSY2MISC

PSY2DOC

UNCLASSIFIED

1.4.435 2614 (N45) SCREW PACK INFORMATION

Record number: H103028

Device: D/T2614
Model: M
Part number: P/N92F8824
Tip key: 002
Date created: 092/10/14
Date last altered: A96/11/11

The 2614 Screw parts pack, FRU P/N92F8824, listed in HMS S42G-0486 - 0 contains the following parts:

3 Screw 2.5x4
3 Screw 2.5x12
2 Screw 2.6x6 (tap)
3 Screw 2.6x6
5 Screw 2x6 (tap)
3 Screw 2.5x4
11 Screw 2.5x6
Insulator sheet (between DC/DC and Main board)

SAS KEYWORDS:

PSY2 PSY2PART PSY2MISC PSY2DOC
UNCLASSIFIED

1.4.436 2619 MOD 355 CONTAINS ONE PCMCIA SOCKET

Record number: H131669

Device: D/T2619
Model: M
Part number: P/N84G2273
Tip key: 001
Date created: 095/11/10
Date last altered: A97/11/07

The 2619 355 model systems are manufactured with one PCMCIA socket that can accommodate a type I, II, or III PC card. The PCMCIA opening on the outside of the system is the same size that a double socket opening is. This is so the opening can accommodate the type III PC card.

Due to manufacturing parts constraints some systems were built with a two socket PCMCIA connector instead of the normal single socket connector. Even though this now looks like a dual socket the top socket is not functional. THIS IS NORMAL. DO NOT REPLACE PARTS FOR THIS SITUATION.

If the lower functional PCMCIA socket is failing replace the double socket with "PCMCIA Slot Assembly (1-slots, 355x) P/N84G2273" which is listed in the April 95 edition of the ThinkPad HMM # S82G-1502-03.

SAS KEYWORDS:

PSY2

PSY2BRD

THINKPAD

UNCLASSIFIED

1.4.437 2620 HMM CORRECTION. CORRECT NMHI BATTERY P/N84G2144

Record number: H132973

Device: D/T2620
 Model: M
 Part number: P/N84G2146
 Tip key: 005
 Date created: 096/02/29
 Date last altered: A97/11/07

The Mobile HMM, form number S82G-1502-03, requires a correction on page 299. Index 26 Battery Pack (Nickel Metal Hydride) should read P/N84G2144 instead of the current incorrect number P/N84G2146.

Please make a note of this. The change will be in the next HMM mobile release.

SAS KEYWORDS:

PSY2	PSY2PWR	PSY2PART	84G2144
84G2146	PSY2DOC	THINKPAD	UNCLASSIFIED

2625 AC ADAPTER HMM FRU PART NUMBER CORRECTION

1.4.438 2625 AC ADAPTER HMM FRU PART NUMBER CORRECTION

Record number: H132488

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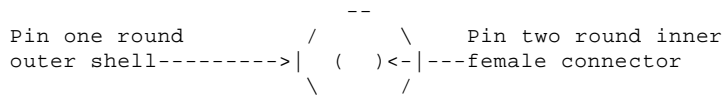
Device:          D/T2625
Model:           M
Part number:     P/N85G6698
Tip key:         001
Date created:    096/02/01
Date last altered: A97/02/28

```

The Mobile HMM volume 3 dated October 1995 (S82G-1503-01) incorrectly lists the AC Adapter on page 80 as P/N85G6701. This AC adapter has a 4 pin connector. It is used on the 9546.



The AC Adapter, FRU P/N85G6698, used on the 2625 has a 2 pin barrel connector.



The correction will be in the next release of the HMM.

SAS KEYWORDS:

PSY2	PSY2PART	PSY2PWR	THINKPAD
PSY2DOC	85G6698	85G6701	UNCLASSIFIED

1.4.439 2625 HINGES FOR 365C, CD, CS, CSD, X, XD, E, AND ED.

Record number: H133689

Device: D/T2625
Model: M
Part number: P/N74H0619
Tip key: 007
Date created: 096/08/16
Date last altered: A97/12/05

The right and left LCD hinges are contained in the miscellaneous parts kit FRU P/N74H0619. This is listed on page 165 and 167 of the Mobile HMM Volume 3, S82G-1503-03 under model 365 X and XD. This part number should also be listed on page 86 and 89 for the other 365 models.

SAS KEYWORDS:

PSY2	PSY2PART	PSY2MISC	PSY2DOC
THINKPAD	UNCLASSIFIED		

1.4.440 2625 HMM SOUND CARD CORRECTION.

Record number: H132716

Device: D/T2625
Model: M
Part number: P/N41H7437
Tip key: 002
Date created: 096/02/20
Date last altered: A97/11/07

The ThinkPad HMM volume 3 dated October 1995 requires a wording change on page 80, index 15.

ORIGINAL

"Sound Card w/o Sound Function (365CS Only) 41H7437"

Should be changed to read:

NEW

"Sound Card w/o Sound Function (365C & 365CS Only) 41H7437"

Note: The speaker does not come with the Sound Card. It is included with Base Lower Asm. FRU P/N41H7432

SAS KEYWORDS:

PSY2	PSY2DOC	PSY2ADPT	THINKPAD
P/N41H7437	UNCLASSIFIED		

PSY2 RETAIN TIPS
2625 MISCELLANEOUS LCD KIT.

1.4.441 2625 MISCELLANEOUS LCD KIT.

Record number: H135022

Device: D/T2625
Model: M
Part number: P/N74H0619
Tip key: 009
Date created: 096/11/08
Date last altered: A96/11/08

The 2625 LCD kit, FRU P/N74H0619, contains the following parts:

COVER TOP CVR SCREW
KNOB SLIDE BRIGHT
HINGE HINGE RIGHT
HINGE HINGE LEFT
RUBBER RUBBER LID
LABEL LOGO PLATE LRG
LABEL LOGO PLATE SML
CLAMP CLAMP LCD
GASKET LCD TFT BACK
GASKET LCD TFT TOP
TAPE LCD TFT TOP
TAPE ADHESIVE TAPE
TAPE CU TAPE

NOTE: The September 1996 HMM Volume 3 (S82G-1503-04) incorrectly lists the LCD hinges on page 86 and 89 as a component of the Miscellaneous Parts/Screw Kit FRU P/N41H7456.

SAS KEYWORDS:

PSY2	PSY2PART	PSY2DOC	PSY2MISC
THINKPAD	365E 365C	365ED 365CD	365CS 365CSD
UNCLASSIFIED			

1.4.442 2625 365 + E & ED MODEL LOWER COVER ASSEMBLY FRU #

Record number: H136387 Number of altered copies: 1

Device: D/T2625
Model: M
Part number: P/N75H7577
Tip key: 011
Date created: 097/01/29
Date last altered: A97/03/20

The Lower Cover Assembly P/N75H7577 (Base) is being changed. The old cover was a bare plastic base. It did not contain any of the attached parts, such as the keyboard latches, labels, etc.

There are now two different Lower Cover Assemblies, one for the 365C, CD, CS & CSD, FRU P/N76H3079, and the other for the 365E & ED, FRU P/N76H3123. The HMM Volume 3 (S82G-1503-04) will be updated to reflect this change in the next revision.

The 365 E and ED can also use the tilt foot listed for the 365 X and XD. There are 2 feet in FRU P/N74H0571.

SAS KEYWORDS:

PSY2

PSY2PART

THINKPAD

UNCLASSIFIED

1.4.443 2625 365C, CD, CS, CSD, E, ED 8MB MEMORY HMM CORRECTION.

Record number: H003163

Device: D/T2625
 Model: M
 Part number: P/N88G1262
 Tip key: 012
 Date created: 097/12/09
 Date last altered: A97/12/09

The Volume 3 Hardware Maintenance Manual for ThinkPad systems, form number S82G-1503-05, requires a change in the 2625 Parts Listing for the 365C, CD, CS, CSD and 365E and ED - location 2.11 and 2.12.

The Manual lists an "8MB RAM Card (SO-DIMM) 88G1262". This is incorrect. This system does not have an 8MB memory card. The FRU P/N88G1262 is an 8MB Memory Board that accepts SO-DIMM memory. It is listed correctly in the HMM. Erase the 8MB RAM card entry in your hardcopy HMM. This will be corrected in the on line internet HMM and in the next revision of the hardcopy manual.

4	8MB Memory Board	88G1262	
	Memory Board Insulated Bracket (10)	75H7624	
4a	4MB RAM Card (SO-DIMM)	92G7290	
4a	8MB RAM Card (SO-DIMM)	88G1262	ERASE
4a	16MB RAM Card (SO-DIMM)	92G7296	

The Internet URL is: <http://www.pc.ibm.com/us/cdt/hmm.html>

SAS KEYWORDS:

PSY2	PSY2DOC	PSY2PART	PSY2MEM
THINKPAD	UNCLASSIFIED		

1.4.444 2630 DSKT CABLE AND PARALLEL CABLE KIT.

Record number: H133078

Device: D/T2630
Model: M
Part number: P/N10H4070
Tip key: 008
Date created: 096/03/15
Date last altered: A97/12/05

FRU P/N10H4070, a cable kit, contains the diskette drive and parallel port cable for the 2630 model 701 mobile system. This information will be in the next release of the Mobile Hardware Maintenance Manual (HMM).

SAS KEYWORDS:

PSY2	PSY2PART	PSY2DOC	THINKPAD
10H4070	FLOPPY	PRINTER	PSY2PRT
PSY2DSKT	UNCLASSIFIED		

1.4.445 2630 MOD 701 CABLE FOR EXTERNAL FDD TO 3546

Record number: H131949

Device: D/T2630
Model: M
Part number: P/N25H4879
Tip key: 005
Date created: 095/12/11
Date last altered: A97/02/28

The external diskette drive cable that goes from the 701 external diskette drive to the 3546 Dock II is FRU P/N25H4879. This part number will be in the next HMM update.

SAS KEYWORDS:

PSY2

PSY2PART

THINKPAD

UNCLASSIFIED

1.4.446 2630 MOD 701 KEYBOARD CAM / HMM CORRECTION.

Record number: H13889

Device: D/T2630
Model: M
Part number: P/N42H1505
Tip key: 007
Date created: 096/01/31
Date last altered: A97/02/28

There are 2 index 7 references in the April 1995 mobile HMM on page 190. The keyboard hinge, index 7, (located to the left and above index 30) is listed as FRU P/N04H8389 on page 191. The keyboard cam, index 7, (located to the right of index 8) on page 190 does not have a FRU part number listed. The new keyboard cam is FRU P/N42H1505. Please make a note of this. The HMM will be updated at the next release.

SAS KEYWORDS:

PSY2

PSY2PART

THINKPAD

PSY2DOC

UNCLASSIFIED

1.4.448 2630 MOD 701 720MB HARD DISK HMM CORRECTION.

Record number: H132165

Device: D/T2630
Model: M
Part number: P/N25H4873
Tip key: 006
Date created: 096/01/11
Date last altered: A97/02/28

The April 1995 Mobile HMM (S82G-1502-03) incorrectly lists the 720Mb hard drive as FRU P/N10H4046. The 720Mb hard drive should be listed as FRU P/N25H4873. This will be corrected in the next release of the manual.

SAS KEYWORDS:

PSY2 PSY2PART PSY2FDSK FIXED DISK
UNCLASSIFIED

1.4.449 2635 FAN INSTALLATION CAUTION

Record number: H16398

Device: D/T2635
Model: M
Part number: P/N83H6526
Tip key: 008
Date created: 097/07/09
Date last altered: A97/07/10

The rotor bearing and fan blades are susceptible to damage from finger pressure or sudden physical shock. When inserting and removing the fan, hold it gently by the corners and do not drop it.

Follow the Hardware Maintenance Manual instruction notes when removing and replacing the fan assembly.

The HMM states:

1. Be careful not to touch the rotor and blade of the fan when assembling or disassembling.
2. When replacing the fan attach the fan cable to the air duct using the cable holder (tape).

SAS KEYWORDS:

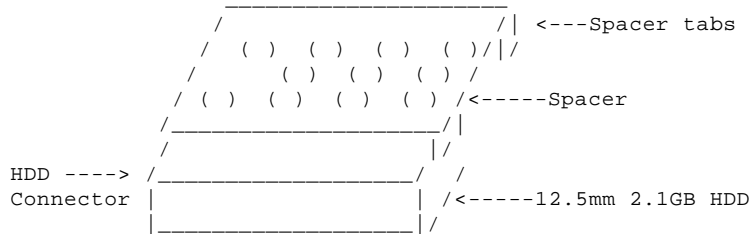
PSY2	PSY2PART	BLOWER	COOLING
THINKPAD	UNCLASSIFIED	PSY2DOC	

1.4.450 2635 HDD SPACER RELEASED FOR USE WITH 12.5MM HDDS

Record number: H16253

Device: D/T2635
 Model: M
 Part number: P/N73H9936
 Tip key: 005
 Date created: 097/06/30
 Date last altered: A97/07/01

The Hard Disk Drive Bracket FRU P/N73H9936 can accommodate an HD of 17mm and 12.5mm. A spacer must be used with the 12.5mm high HDD. The Spacer and spacer installation instructions are include with the HDD bracket FRU. This FRU must be ordered if a 2.1GB 12.5mm HDD is received as a replacement FRU for a 2.1GB 17mm HDD.



1. Place the HDD spacer on the HDD (Note: the spacer tabs should be on the side opposite the HDD connector.)
2. Install the HDD and spacer assembly into the bracket.
3. Attach the HDD and spacer assembly to the bracket using screws removed from the old HDD.
4. Install the complete HDD bracket assembly into the ThinkPad making sure the connector is fully seated.

This information will be included in the on-line Hardware Maintenance Manual (HMM) and in the next revision of the hardcopy HMM.

SAS KEYWORDS:

PSY2 PSY2PART PSY2FDISK UNCLASSIFIED
 THINKPAD

PSY2 RETAIN TIPS
2640 WITH STICKING KEYS.

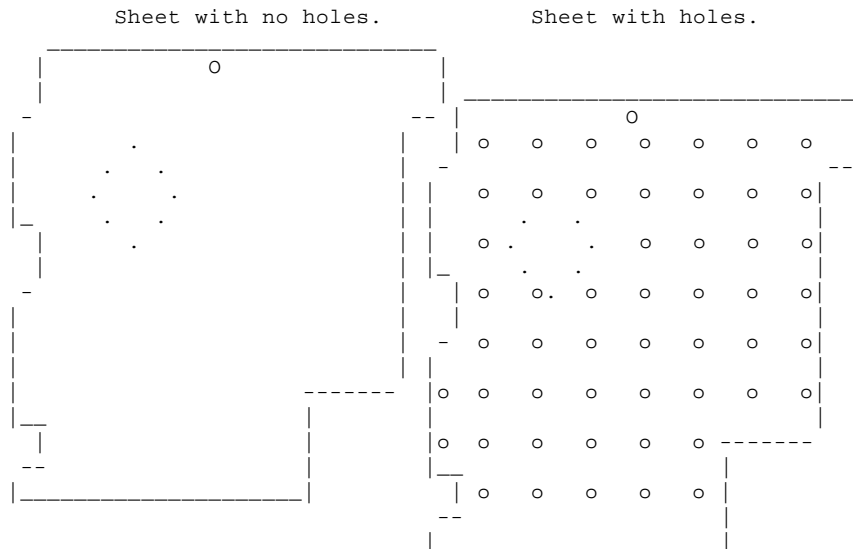
1.4.451 2640 WITH STICKING KEYS.

Record number: H133518

Device: D/T2640
Model: M
Part number: P/N46H4150
Tip key: 001
Date created: 096/08/02
Date last altered: A97/12/05

When servicing a 2640 system replace the existing rubber sheet located beneath the keyboard, if it does not have rows of holes.

The following diagrams show an example of a sheet with no holes on the left and a sheet with holes on the right.



The part is referred to as a "KEYBOARD SHEET" FRU P/N46H4150 in the Mobile HMM volume 3 (MAY) manual on page 227, index 20. The holes stop the keys from sticking after being depressed by preventing a vacuum from forming between the bottom of the key and the rubber sheet.

SAS KEYWORDS:

PSY2

PSY2PART

PSY2KBD

THINKPAD

UNCLASSIFIED

2645 THINKPAD 600 DIMM MEMORY FRU PART NUMBERS.

1.4.452 2645 THINKPAD 600 DIMM MEMORY FRU PART NUMBERS.

Record number: H163711

Device: D/T2645
 Model: M
 Part number: P/N42H2818
 Tip key: 001
 Date created: 098/05/15
 Date last altered: A98/05/18

The ThinkPad 600 HMM, form number S10L-9619-00 does not list the DIMM FRU part numbers. This will be corrected on the WEB and in the next hard copy release of the 600 HMM. The FRU part numbers are:

DIMM Size	FRU Part Number	Option Part Number
16Mb	P/N42H2818	76H0293
32Mb	P/N42H2819	76H0294
64Mb	P/N42H2820	76H0295

SAS KEYWORDS:

PSY2 PSY2MEM THINKPAD PSY2DOC
 PSY2PART UNCLASSIFIED

1.4.453 3COM (TSA), TECHNICAL SUPPORT AGREEMENT

Record number: H12896

Device: D/TOEMF
 Model: MEAT
 Part number: P/N9999999
 Tip key: 032
 Date created: 093/08/20
 Date last altered: A95/10/05

IBM AND 3COM CORPORATION, INC.* SIGNED A TECHNICAL SUPPORT AGREEMENT EFFECTIVE OCTOBER 01, 1995 TO PROVIDE "LABOR ONLY" MAINTENANCE SERVICE FOR 3COM PRODUCTS.

TERMS & CONDITIONS

CONTRACT-----
IBM is subcontracted to 3COM for "labor only" maintenance.

SERVICE DELIVERY

Customer places a call to the 3COM help desk. 3COM performs problem determination. If hardware service is necessary, 3COM will arrange for delivery of parts from their vendor and then call IBM dispatch to coordinate delivery of the part with the IBM CE going on-site. Service provided will be IOE or IOR depending upon the product type. Standard IBM call response criteria (call customer within 1 hour, 2 or 4 hour on-site for repair).

PARTS STRATEGY/SUPPORT

Not applicable as 3COM provides and manages their own parts.

TRAINING

Documents are provided to the IBM CE by 3COM with removal and replacement procedures.

TECHNICAL SUPPORT

3COM provides technical support to the IBM service force on a 6am to 12am, 7 days a week basis. 3COM and IBM are negotiating a migration of technical support to 7 days a week/24 hours a day coverage.

RALEIGH CONTACTS

Development SPR: Ed Rector (8-352-1639) (RECTOR/RALVM29)
Support Rep: Bill Griffin (8-352-1478) (WGRIFFIN/RALVM29)

* TRADEMARK OR REGISTERED TRADEMARK OF 3COM CORPORATION, INC.

SAS KEYWORDS:

3COM	3COM CORP	POEM	PSY2
PSY2PART	D/T8550	D/T8550Z	D/T8560
D/T8570	D/T8580	D/T9545	D/T2620
THINKPAD			

PSY2 RETAIN TIPS

33F8435 FRU PARTS KIT MUST BE ORDERED WITH KEYLOCK

1.4.454 33F8435 FRU PARTS KIT MUST BE ORDERED WITH KEYLOCK

Record number: H046036

Device: D/T8595
Model: M
Part number: P/N33F8433
Tip key: 002
Date created: 091/02/04
Date last altered: A91/02/04

If a replacement keylock is required for 8595.FRU kit 33f8435 must also be ordered.This kit contains a breakaway washer required to fit the replacement keylock to the bezel.

SAS KEYWORDS:
8595SYSPART PSY2PART D/T8595

1.4.455 3545 HMM VOLUME 1 VIDEO CABLE FRU NUMBER CORRECTION.

Record number: H00315

Device: D/T3545
Model: M
Part number: P/N66G3583
Tip key: 004
Date created: 096/05/03
Date last altered: A96/05/03

The Hardware Maintenance Manual Volume 1 form # S82G-1501-01
requires a FRU part number correction to the Dock I on page 387.

Please change the existing P/N66F3583 to P/N66G3583. This will
be corrected in the next release of the manual.

SAS KEYWORDS:

PSY2

PSY2PART

PSY2DOC

THINKPAD

1.4.456 3545 SYSTEM BOARD SWITCH INFORMATION

Record number: H124942

Device: D/T3545
Model: M
Part number: P/N66G3557
Tip key: 002
Date created: 094/08/19
Date last altered: A96/11/11

The position of switch 1 or 4 in the memory address block, or any of the 4 or 8 position DIP block switches, does not affect system operation.

Information about other system board switches are published in the customer's DOCK I User's Guide.

SAS KEYWORDS:

PSY2 PSY2BRD PSY2PART THINKPAD
UNCLASSIFIED

1.4.457 3546 FULL SIZE IDE INTERFACE CABLE.

Record number: H131966

Device: D/T3546
Model: M
Part number: P/N84G5253
Tip key: 006
Date created: 095/12/13
Date last altered: A97/02/28

There are two types of IDE drive cables for the Dock II. The IDE interface cable for the full size drive (not the ThinkPad 2.5" IDE drive) is located in the SCSI cable kit FRU P/N84G5253. The ThinkPad 2.5" IDE fixed disk drive cable is FRU P/N66G3576 and is listed in the Volume 1 Mobile HMM as "IDE Device Cable."

This information will be included in the next HMM update.

SAS KEYWORDS:

PSY2 PSY2PART PSY2FDSK THINKPAD
UNCLASSIFIED

1.4.458 3546 IDE CABLE FRU

Record number: H126578

Device: D/T3546
Model: M
Part number: P/N66G3576
Tip key: 001
Date created: 095/03/02
Date last altered: A96/11/11

The IDE cable included with the 3546 Dock II can be replaced by ordering the IDE Cable FRU P/N66G3576. This information will be included with the next release of the HMM manual.

SAS KEYWORDS:

PSY2	PSY2PART	66G3576	PSY2MISC
PSY2PUB	PSY2DOC	UNCLASSIFIED	

PSY2 RETAIN TIPS
3550 MISCELLANEOUS KIT CONTENTS.

1.4.459 3550 MISCELLANEOUS KIT CONTENTS.

Record number: H003694

Device: D/T3550
Model: M
Part number: P/N49G2665
Tip key: 007
Date created: 094/03/03
Date last altered: A97/12/05

The Miscellaneous parts kit P/N49G2665 includes the following parts:

Screws			
Discription	Size in millimeters	Length in millimeters	Quantity
Flanged screw	3mm	6mm	5
Machine screw	4mm	6mm	5
Machine screw	2mm	6mm	5
Machine screw & washer	3.5mm	6mm	5
Machine screw	3.5mm	4mm	5
Machine nut	3.5mmmm		5
Machine selftap screw	3mm		5
Thumb screw			2

SAS KEYWORDS:
PSY2 PSY2PART THINKPAD UNCLASSIFIED

1.4.460 4869 EXTERNAL & INTERNAL DRIVE & ADPT PART NUMBERS

Record number: H036217

Device: D/T4869
 Model: M
 Part number: P/N72X6759
 Tip key: 002
 Date created: 089/09/26
 Date last altered: A95/06/06

IF YOU ENCOUNTER DIFFICULTY WITH A 5.25 INCH INTERNAL OR EXTERNAL DRIVE ON ANY OF THE FOLLOWING PS/2 SYSTEMS YOU MIGHT SUSPECT A MISMATCH OF THE DISKETTE DRIVE ADAPTER CARD OR ADAPTER/A CARD AND/OR THE DRIVE. THE FOLLOWING INFORMATION MAY AID IN PROBLEM DETERMINATION.

4869 EXTERNAL & INTERNAL	8	8	8	8	8	8	8	8	8	8
5.25 " DISKETTE DRIVE	5 A	5 A	5 5	5 5	5 5	5 5	5 5	5 5	5 A21	5 A21
COMPATIBILITY AND	2 L	3 L	5 7	5 7	7 6	8 6	6 8	6 8	8 A31	8 A31
PART NUMBERS	5 L	0 L	0 0	0 0	3 0	0 0	5 0	5 0	0 0	0 0
360 KB DRIVE P/N	1	1	1	1	1	1	1	1	1	1
EXTERNAL	-----									
4869 - 001 ADPT CD P/N	2	2	3/4	4	*	3/4	4	4	4	4
1.2 MEG DRIVE P/N	N/A	N/A	5	5	5	5	5	5	5	5
EXTERNAL	-----									
4869 - 002 ADPT CD P/N	N/A	N/A	4	4	4	4	4	4	4	4
1.2 MEG DRIVE P/N	N/A	N/A	N/A	N/A	N/A	6	6	6	6	6
INTERNAL	-----									
ADPT CD P/N	N/A	N/A	N/A	N/A	N/A	4	4	4	4	4

PART NUMBERS FOR CHART ABOVE

- 1 - > 72X6759 (360KB DRIVE) 4-> 15F7996 (ADAPTER/A CARD)
- 2 - > 72X6757 (ADAPTER) 5-> 15F7993 (1.2MB EXT DRIVE)
- 3 - > 72X6758** ("B" BOX KIT) 6-> 15F6912 (1.2MB INT DRIVE)

* THE 8573 DOESN'T REQUIRE AN ADAPTER TO ATTACH TO THE 4869-001. THE 8573 REQUIRES AN EXTERNAL STORAGE DEVICE CABLE P/N23F3230.

** P/N72X6758 INCLUDES AN ADAPTER, CABLE AND A DRIVE CONNECTOR ASSEMBLY (PLASTIC "B" BOX).

ADDITIONAL HELPFUL INFORMATION ON THE ABOVE FRUS.....

ADAPTER P/N72X6758 (ATTACHMENT GROUP)

- THIS ADAPTER USES AN INTERNAL CABLE. THE CABLE ATTACHES THE ADAPTER TO THE DRIVE CONNECTOR ASSEMBLY IN THE "B" BAY.
- THIS ADAPTER SUPPORTS THE 360KB 5.25 EXTERNAL DISKETTE DRIVE.
- THIS ADAPTER IS NOT SUPPORTED IN THE 8555, 8580 A21 AND A31, AND 8565 IT IS NOT REQUIRED FOR THE 8573.
- AN OPTION DISKETTE IS NOT REQUIRED FOR THIS ADAPTER, AND A SOFTWARE DEVICE DRIVER IS NOT REQUIRED.
- CONFIGURATION WILL SHOW THE 5.25 EXTERNAL DRIVE AS DRIVE "B".
- THE ADAPTER WILL NOT BE ILLUSTRATED AS TAKING UP A SLOT.
- THE EXTERNAL DRIVE ATTACHED WILL BE LOGICALLY INTERNAL. THEREFORE, DOS WILL ADDRESS THIS DRIVE AS DRIVE "B".

5.25 INCH ADAPTER/A P/N15F7996

- THIS ADAPTER USES CABLES ONLY WHEN THE 5.25" INTERNAL DRIVE IS ATTACHED. THE CURRENT VERSION OF THE CARD HAS ALOT OF CHIPS (MORE THAN 50).
- THIS ADAPTER SUPPORTS BOTH THE 4869-001 (360KB 5.25 DRIVE) AND THE 4869-002 (1.2MB 5.25 DRIVE).
- THIS CARD IS SUPPORTED IN ALL MICRO CHANNEL SYSTEM UNITS.
- AN OPTION DISKETTE IS REQUIRED TO DO CONFIGURATION AND DIAGNOSTICS. CONFIGURATION WILL SHOW THIS ADAPTER AS INSTALLED IN A SLOT.
- A SOFTWARE DEVICE DRIVER AND INSTALLATION PROGRAM ARE NEEDED TO INSTALL THIS OPTION. THESE PROGRAMS ARE SHIPPED WITH THE OPTION ON THE OPTION/DEVICE DRIVER DISKETTE. THIS DISKETTE SHOULD NOT BE CONFUSED WITH THE OPTION DISKETTE THAT COMES WITH THE HMS UPDATE.

- WHEN THIS ADAPTER IS USED THE DRIVE ATTACHED WILL BE VIEWED BY THE SYSTEM AS LOGICALLY EXTERNAL. THIS ALSO APPLIES TO THE INTERNAL DRIVE. YOUR OPERATING SYSTEM WILL ASSIGN THIS DRIVE THE NEXT AVAILABLE DRIVE DESIGNATION. FOR EXAMPLE: IF A 115MB HARDFILE IS INSTALLED ON A MODEL 8580-111 AND THE CUSTOMER HAS IT PARTITIONED AS C, D, E, F, THE NEXT AVAILABLE DRIVE DESIGNATION IS "G". YOUR EXTERNAL DRIVE WILL BE BOOTED AS "G" DURING POST WHEN THE DEVICE DRIVER IS BEING LOADED.
- MARKETING INFORMATION SHOULD ALSO BE REVIEWED TO DETERMINE IF THE 4869 DRIVE IS SUPPORTED ON CURRENT PRODUCTS IF PROBLEMS ARE EXPERIENCED.

DEVICE DRIVERS

THE SERVICER WILL BE ASSURED THAT THE DEVICE DRIVER IS BEING LOADED BY OBSERVING THE DISPLAY DURING POST. THE DRIVE DESIGNATION ASSIGNED WILL BE DISPLAYED.

TO VERIFY PROPER INSTALLATION OF THE DEVICE DRIVER REFER TO THE SECTION IN THE PS/2 SIM THAT DISCUSSES THE "DASDDRVR" PATCH INSTALLATION/VERIFICATION. REPLACE THE FILENAME OF "DASDDRVR" WITH "\$FDD5.SYS" AND FOLLOW THE INSTRUCTIONS.

SAS KEYWORDS:

PSY2	PSY2ADPT	PSY2DSKT	4869DSKT
D/T8555	D/T8560	D/T8530	D/T8580
D/T8550	D/T8565	D/T8525	D/T8573
D/T8570	D/T9576	D/T9577	

1.4.461 51SLC HMS LISTING FOR DIAG DSKT AND MANUAL

Record number: H104048

Device: D/T8551
Model: M
Part number: P/N94X2517
Tip key: 002
Date created: 092/08/19
Date last altered: A93/04/28

THE 8551 HMS MANUAL DATED APRIL 18,1992 FORM NUMBER SQ4G-5112-01
LISTS P/N94X2517 AS A DIAGNOSTIC/UTILITY DISKETTE (WITH MANUAL).
THIS IS NOT A FRU. THE CORRECT WAY TO ORDER THIS IS BY FORM
NUMBER. FORM NUMBER S04G-5108-01 WILL SUPPLY HMS/HMR INFORMATION
AND A DIAGNOSTIC DISKETTE. PLEASE DELETE THE FRU NUMBER FROM
THE MANUAL. THIS WILL BE CORRECTED IN THE NEXT UPDATE OF THE
MANUAL.

SAS KEYWORDS:

PSY2

PSY2PART

PSY2DOC

D/T8551

51SLC INCORRECT HMS LISTING FOR THE KEYBOARD CARD

1.4.462 51SLC INCORRECT HMS LISTING FOR THE KEYBOARD CARD

Record number: H104431

Device: D/T8551
Model: M
Part number: P/N35G3239
Tip key: 003
Date created: 092/08/19
Date last altered: A92/09/29

THE 8551 HMS MANUAL DATED APRIL 18,1992 FORM NUMBER SQ4G-5112-01
LISTS KEYBOARD CONTROL CARD ON PAGE 36 AS P/N35G3323. IT SHOULD
READ P/N35G3239. THIS WILL BE CORRECTED IN THE NEXT HMS UPDATE.

SAS KEYWORDS:

PSY2 PSY2PART PSY2DOC D/T8551

60MB HARDFILES ARE LABELED INCORRECTLY

1.4.463 60MB HARDFILES ARE LABELED INCORRECTLY

Record number: H027465

Device: D/T8550
Model: M
Part number: P/N90X9287
Tip key: 026
Date created: 088/06/17
Date last altered: A88/06/22

THE 60MB HARDFILE FOR THE 8550 IS LABELED INCORRECTLY. THE LABEL REFLECTS "IBM FRU P/N90X9287" WHEN IT SHOULD READ "IBM FRU P/N90X8627". THE HMS IS CORRECT AND SHOULD BE USED WHEN ORDERING THIS FRU. UPDATE THE SERVICE SUMMARY CARD TO REFLECT 60MB FIXED DISK = P/N90X8627.

THE INCORRECT FRU NUMBER ON THE HARDFILE LABEL IS A VALID NUMBER AND IF ORDERED WILL YIELD THE "FIXED DISK AND DISKETTE BUS ADAPTER FOR THE 8570.

SAS KEYWORDS:

PSY2 PSY2PARTS PSY2FDSK 8550SYSFDSK
8550SYSPARTS

PSY2 RETAIN TIPS

60MB HARDFILES ARE LABELED INCORRECTLY WITH FRU P/N90X9287

1.4.464 60MB HARDFILES ARE LABELED INCORRECTLY WITH FRU P/N90X9287

Record number: H027466

Device: D/T8570
Model: M
Part number: P/N90X8627
Tip key: 003
Date created: 088/06/17
Date last altered: A88/06/22

THE 60MB HARDFILE FOR THE 8570 IS LABELED INCORRECTLY. THE LABEL REFLECTS "IBM FRU P/N90X9287" WHEN IT SHOULD READ "IBM FRU P/N90X8627". THE HMS AND SERVICE SUMMARY CARD ARE CORRECT AND SHOULD BE USED WHEN ORDERING THIS FRU. THE INCORRECT FRU P/N90X9287, IS A VALID NUMBER, AND IF ORDERED WILL YIELD THE "FIXED DISK AND DISKETTE DRIVE BUS ADAPTER".

SAS KEYWORDS:

PSY2 PSY2PARTS PSY2FDSK 8570SYSFDSK
8570SYSPART

1.4.465 6319-011 FRU PART NUMBER IS P/N39G3329

Record number: H067162

Device: D/T6319
Model: M
Part number: P/N39G3329
Tip key: 001
Date created: 094/09/26
Date last altered: A94/09/26

The 6319 - 011 replacement FRU monitor was not published in the HMM, S71G-4197-02. The FRU P/N is P/N39G3329.

The FRU number will be added to the next release of the HMM.

SAS KEYWORDS:

PSY2PART	PSY2DOC	PSY2PUB	PSY2
6319	DISPLAY	PSY2DISP	

1.4.466 6321 MONITOR FRU PARTS CLARIFICATION

Record number: H122792

Device: D/T6321
Model: M
Part number: P/N72G8763
Tip key: 001
Date created: 094/02/17
Date last altered: A94/02/18

The 6321 monitor parts list on page 7-25 of the 6321 monitor supplement in the Monitor Hardware Maintenance Manual-Vol.2, S71G-4197 - 02, dated Sept. 1993, the following corrections should be noted:

"Card Assembly for 6321001 72G8783"
should be corrected to read as follows:

Card Tray Assembly 6321001 72G8783

"Card Tray 68G3011"
should be corrected to read as follows:

Card Tray (only a plastic tray) 68G3011

There are no electronic components on this part.
These corrections will then correspond with the illustration on page 7 - 24.

SAS KEYWORDS:

PSY2	PSY2DISP	6321	DISPLAY
PSY2PART	PSY2DOC	ANALOG	

1.4.467 6325 MODEL 0X1 FRU P/N IS INVALID

Record number: H13986

Device: D/T6325
Model: M
Part number: P/N96G1432
Tip key: 002
Date created: 095/09/20
Date last altered: A95/09/22

The HMM (Hardware Maintenance Manual) Supplement, form number S19H-1238 - 00, for the 6324/25, 9524/25 monitors, page 2-31 contains erroneous part numbers for the 6325-01X monitors. IBM never manufactured or released a 6325-0X1 monitor. Therefore, FRU P/N96G1432 is erroneous and should not be ordered.

Action is being taken to update future service manuals to delete references to this specific model and to remove the FRU part number from Mechanicsburg records.

The supported service procedure for all models of the 6324/25 and 9524/25 monitor is on-site repair. No element exchange monitor FRU's are available in the USA.

SAS KEYWORDS:

PSY2	PSY2DISP	PSY2PART	96G1432
D/T6324	D/T6325	D/T9524	D/T9525
6324	6325	9524	9525
VDT			

PSY2 RETAIN TIPS
64XX DX/4-50/100MHZ SYSTEM BOARD FRU

1.4.468 64XX DX/4-50/100MHZ SYSTEM BOARD FRU

Record number: H06579

Device: D/T6482
Model: M
Part number: P/N06H6355
Tip key: 005
Date created: 095/01/04
Date last altered: A95/01/11

The system board FRU for ValuePoint Performance Series 6482, 6484, 6492, and 6494 DX/4-50/100 models is now p/n06H6355. SX, DX, and DX-2 models will continue to use FRU p/n82G2397.

When installing p/n06H6355 in DX/4 models, insure jumper J36 is installed on pins 2 and 3 (front two pins). This jumper is located in front of the hard disk drive cable connectors. Refer to the old system board and the ValuePoint Hardware Maintenance Manual for other jumper settings.

The above information will be included in the next release of ValuePoint HMM (S61G-1423).

SAS KEYWORDS:

PSY2	PSY2BRD	PSVP	PSVPBRD
82G2397	06H6355	6H6355	P/N6H6355
PSY2PART	PSVPPART	PS/VALUEPOINT	VALUE POINT

1.4.469 64XX 8MB SIMMS

Record number: H124074

Device: D/T6482
Model: M
Part number: P/N92G7521
Tip key: 004
Date created: 094/12/08
Date last altered: A95/12/12

ValuePoint Performance Series Systems have been assembled with 8mb SIMM FRU p/n73G3234 or FRU p/n92G7521. These SIMMs are functionally equivalent when installed in the Performance Series System (64XX).

The next release of the PS/ValuePoint Hardware Maintenance Manual will list 92G7521 as the 8mb memory module for 64XX systems.

SAS KEYWORDS:

PSY2	PSY2PART	PSVP	PSVPPART
92G7521	73G3234	D/T6472	D/T6484
D/T6492	D/T6494	6472	6482
6484	6492	6494	PSY2MEM
PSVPMEM	VALUE POINT	PS/VP	P/N92G7520
92G7520	OBI		

1.4.470 6494 PCI RISER CARD MIS-LABELED AS FRU 82G3555

Record number: H081208

Device: D/T6494
Model: M
Part number: P/N82G3563
Tip key: 001
Date created: 094/09/29
Date last altered: A94/10/03

SOME ValuePoint Performance Series 6492 and 6494 PCI riser cards P/N82G3563 have FRU P/N82G3555 printed on the card.

82G3555 is the PCI riser card for 6482 and 6484.

The FRU P/N on the card will be corrected in the manufacturing process. The 64XX HMS parts listing contains the correct part number.

SAS KEYWORDS:

PSY2	PSVP	VALUE POINT	PS/VALUEPOINT
PSY2PART	PSVPPART	D/T6492	

1.4.471 755CD REAR FASCIA HMM FRU NUMBER CORRECTION

Record number: H126253

Device: D/T9545
Model: M
Part number: P/N85G1919
Tip key: 030
Date created: 095/02/01
Date last altered: A96/05/10

The Oct 94 HMM incorrectly lists the Rear FASCIA Panel on page 437 as P/N85G1918. The correct FRU number is P/N85G1919. This has been corrected in the April 95 release of the HMM.

The Rear FASICA Panel is the black strip of plastic directly below the rear of the Top Cover, index 5 P/N85G1884 or P/N85G7476.

SAS KEYWORDS:

PSY2	PSY2PUB	PSY2DOC	85G1918
85G1919	COVER	BAR	DISPLAY
LCD	LED		

8525 FIXED DISK BEZEL, KEYLOCK, AND SWITCH ASSEMBLY

1.4.472 8525 FIXED DISK BEZEL, KEYLOCK, AND SWITCH ASSEMBLY

Record number: H125113

Device: D/T8525
Model: M
Part number: P/N78X9088
Tip key: 018
Date created: 094/09/02
Date last altered: A94/09/02

FRU P/N78X9088 for the 8525 fixed disk bezel, keylock, and switch assembly was not included in the PS/2 Hardware Maintenance Manual (September 1993).

It will be included in the next release of the Maintenance Manual.

SAS KEYWORDS:

PSY2PART	8525	78X9088	PSY2FDSK
PSY2MISC			

1.4.473 8530 286 CLOCK MODULE IS PART OF SYS BRD FRU

Record number: H02521

Device: D/T8530
Model: M
Part number: P/N8509237
Tip key: 022
Date created: 089/01/03
Date last altered: A92/01/08

WHEN REPLACING THE SYSTEM BOARD, P/N27F4069 OR P/N34F0046
DO NOT REMOVE THE CLOCK MODULE, P/N8509237 FROM THE SYSTEM
BOARD . A NEW CLOCK MODULE IS INCLUDED AS PART OF THE SYSTEM
BOARD FRU.

IF THE CLOCK MODULE IS BELIEVED TO BE DEFECTIVE IT CAN BE
REPLACED. IT CONTAINS THE BATTERY, CMOS AND CONFIGURATION.

THE CLOCK MODULE SHOULD BE REPLACED BEFORE REPLACING
THE SYSTEM BOARD ON TIME / DATE, AND CONFIGURATION
RELATED PROBLEMS.

SAS KEYWORDS:

8530SYSPART	8530SYSADPT	PSY2	PSY2ADPT
PSY2PART	D/T8530		

1.4.474 8543 FUSE CARD

Record number: H123930

Device: D/T8543
Model: M
Part number: P/N95F6731
Tip key: 013
Date created: 094/05/13
Date last altered: A94/05/13

FRU P/N95F6731 is the fuse card used in ECA072 to fuse the 8543 system board lands. Replace the fuse card FRU if it is blown and remove all connected devices. Boot the system after a device is added. If the card blows again replace the card and the last device installed.

SAS KEYWORDS:

PSY2 PSY2PART PSY2PW

8543 SYSBRD. REMOVE PLASTIC SHIPPING RIVETS

1.4.475 8543 SYSBRD. REMOVE PLASTIC SHIPPING RIVETS

Record number: H001557

Device: D/T8543
Model: M
Part number: P/N95F4879
Tip key: 008
Date created: 092/06/03
Date last altered: A97/02/28

The 8543 system board fru is manufactured with two black plastic rivets inserted through the rear panel and system board. They are used for support during shipping. Remove the rivets before installing the system board fru. The system board base screws will now take the place of the rivets.

SAS KEYWORDS:

PSY2

PSY2PART

PSY2SYSBRD

UNCLASSIFIED

1.4.476 8551 BATTERY PRESENT SWITCH

Record number: H121290

Device: D/T8551
Model: M
Part number: P/N07G1223
Tip key: 008
Date created: 093/09/27
Date last altered: A93/09/27

THE BATTERY PRESENT SWITCH CANNOT BE ORDERED AS A SEPARATE FRU. IT IS PART OF THE BATTERY TERMINAL ASSEMBLY FRU P/N07G1223.

NOTE: THE BATTERY PRESENT SWITCH TRANSFERS WHEN A NICKEL HY-DRIDE BATTERY IS INSERTED INTO THE 8551. THIS MODIFIES THE CHARGING CIRCUIT, WHICH CONTROLS THE RATE OF CHARGE. THE BATTERY PRESENT SWITCH DOES NOT OPERATE WHEN A NICKEL CADMIUM BATTERY IS USED. HOWEVER, BOTH BATTERIES FUNCTION IN THE SYSTEM.

SAS KEYWORDS:

PSY2

PSY2PART

BATTERY

1.4.477 8551 FRONT RUBBER FOOT KIT

Record number: H12774

Device: D/T8551
Model: M
Part number: P/N35G3332
Tip key: 007
Date created: 093/07/29
Date last altered: A93/07/29

The 8551 front rubber kit contains the following parts:

Qty

1 RUBBER FOOT (RIGHT)
1 RUBBER FOOT (LEFT)

This information will be in the next release of the HMS.

SAS KEYWORDS:

PSY2 PSY2PART LEG FEET

PSY2 RETAIN TIPS
8551 LCD COVER KIT

1.4.478 8551 LCD COVER KIT

Record number: H12505

Device: D/T8551
Model: M
Part number: P/N35G3335
Tip key: 005
Date created: 093/06/09
Date last altered: A97/12/05

FRU P/N35G3335 contains the following LCD cover components: Qty 1 Left Latch cover release 1 Right Latch cover release 2 Latch Springs

SAS KEYWORDS:

PSY2 PSY2PART PSY2DISP SWITCH
UNCLASSIFIED

1.4.479 8551 LEG KIT FRU P/N35G3333 NOTE&COLON. ORDER P/N07G1209

Record number: H12773

Device: D/T8551
Model: M
Part number: P/N35G3333
Tip key: 006
Date created: 093/07/29
Date last altered: A97/12/05

The leg kit for the 8551 contains the following parts:

Qty

- 1 LEG (RIGHT)
- 1 LEG (LEFT)
- 1 SPRING (RIGHT)
- 1 SPRING (LEFT)

NOTE: THIS FRU IS NOT AVAILABLE AT THIS TIME. PLEASE ORDER FRU P/N07G1209 IF THE ABOVE COMPONENTS ARE NEEDED.

SAS KEYWORDS:

PSY2 PSY2PART FOOT UNCLASSIFIED

1.4.480 8551 LITHIUM CMOS BATTERY W/ INCORRECT CONNECTOR

Record number: H123549

Device: D/T8551
Model: M
Part number: P/N07G1225
Tip key: 010
Date created: 094/04/04
Date last altered: A94/04/12

Some Lithium Backup Battery FRUs were manufactured with a connector 3mm in width. The correct width of the connector is 4.5 millimeters. Batteries with the 3mm connector have a date code of 26 printed on the edge of the battery.

Manufacturing has corrected this and Mechanicsburg FRU stock of P/N07G1225 has been sorted. Field stock is now being checked for the 3mm connector. If this level battery is found in a FRU order it should be disposed of as required by local ordinances or sent back as new defective.

SAS KEYWORDS:
PSY2 PSY2PART

PSY2 RETAIN TIPS
8551 SCREW KIT CONTENTS

1.4.481 8551 SCREW KIT CONTENTS

Record number: H12504

Device: D/T8551
Model: M
Part number: P/N07G1835
Tip key: 004
Date created: 093/05/07
Date last altered: A97/12/05

The screw kit listed in the 8551 HMS manual has the following parts in it. These can also be used in most other IBM laptop and notebook systems that use 2.5 mm screws.

Description	Quantity
Machine thread 1.6mm X 4	10
" 2 mm X 5	10
" 2.5mm X 3 BLACK	10
" 2.5mm X 4 BLACK	10
" 2.5mm X 8 BLACK	10
" 2.5mm X 5	100
" 2.5mm X4 & star washer/ Flat-WSR	10
" 2.5mm X6 & star washer	10
" 2.5mm X12 & star washer	10
" 3 mm X 4	10
Self Tapping 2 X 4	10
Machine thread 4-40 X 5 STUD	20
" 4-40 X 4.8 STUD	10

SAS KEYWORDS:

PSY2

D/T9552

D/T8554

PSY2PART

UNCLASSIFIED

1.4.482 8554: DEW SENSOR PART NUMBER RELEASE

Record number: H20720

Device: D/T8554
Model: M
Part number: P/N35G2319
Tip key: 003
Date created: 093/03/17
Date last altered: A97/12/05

A FRU PART NUMBER HAS BEEN RELEASED FOR THE SYSTEM BOARD DEW
SENSOR. THE NEW FRU IS P/N35G2319.

THIS INFORMATION WILL BE RELEASED IN THE NEXT HMS UPDATE.

SAS KEYWORDS:

PSY2

PSY2PART

PSY2DOC

PUBLICATION

UNCLASSIFIED

1.4.483 8554 EXTERNAL BATTERY PACK FRU P/N34G9869

Record number: H12739

Device: D/T8554
Model: M
Part number: P/N34G9869
Tip key: 004
Date created: 093/07/27
Date last altered: A93/07/27

The FRU part number for the external battery pack is P/N34G9869.
The adapter cable is FRU P/N34G9870.

The part numbers will be included in the next release of the
HMS.

SAS KEYWORDS:

PSY2 PSY2PART 34G9851 P/N34G9851

1.4.484 8554 PASSWORD JUMPER & VOLTAGE CONNECTOR CHANGES

Record number: H101969

Device: D/T8554
 Model: M
 Part number: P/N07G1371
 Tip key: 001
 Date created: 092/09/30
 Date last altered: A97/12/05

ENGINEERING CHANGES HAVE BEEN MADE TO THE 8554 SYSTEM BOARD THAT REMOVED THE J2 AND J12 PINS. THE HMR MANUAL NUMBER S10G-4419 REFERS TO THESE PIN LOCATIONS ON PAGE 45. THE J2 CONNECTOR IS IDENTIFIED AS ITEM 15, A VOLTAGE CONVERTER CONNECTOR; AND J12 IS IDENTIFIED AS ITEM 6, A PASSWORD OVERRIDE JUMPER. AN INSTRUCTION SHEET IS ALSO INCLUDED WITH THE NEW LEVEL SYSTEM BOARD THAT EXPLAINS THESE CHANGES.

NOTE: EARLY LEVEL SYSTEM BOARDS ARE NOT USED AS FRU STOCK SO THE FRU PART NUMBER (P/N07G1371) HAS NOT CHANGED.

J2 PIN INFORMATION:

THE J2 VOLTAGE CONVERTER CONNECTOR CABLE USED ON EARLIER SYSTEM BOARDS IS NOT NEEDED ON THE CURRENT LEVEL SYSTEM BOARD FRU. THE CABLE SHOULD BE DISCARDED WHEN INSTALLING THE NEWER LEVEL FRU.

J12 PIN INFORMATION:

TO REMOVE THE PASSWORD FROM EITHER THE EARLY LEVEL SYSTEM BOARD WITH J12 PINS OR THE NEWER LEVEL SYSTEM BOARD WITHOUT J12 PINS, ALL SYSTEM POWER MUST FIRST BE REMOVED. THIS INCLUDES A.C. POWER, AND BOTH THE MAIN BATTERY AND THE SYSTEM BACKUP BATTERY AT J13.

EARLY LEVEL SYSTEM BOARD.

ON THE EARLY LEVEL SYSTEM BOARD WITH J12 PINS, SHORTING THE J13 PINS WILL ELIMINATE THE PASSWORD.

NEWER LEVEL SYSTEM BOARD.

ON THE LATER LEVEL SYSTEM BOARD THAT DOES NOT HAVE J12 PINS, SHORTING THE J13 PINS WILL ELIMINATE THE PASSWORD AND THE SYSTEM CONFIGURATION. IN THIS CASE AN AUTO CONFIGURATION MUST BE DONE TO RECREATE THE CONFIGURATION IN CMOS. THE DIAGNOSTIC ON THE FIXED DISK SHOULD BE USED TO DO THE AUTO CONFIGURATION.

SAS KEYWORDS:

PSY2	PSY2DOC	PSY2PART	D/T8554
PSY2PWR	PSY2BRD	UNCLASSIFIED	

1.4.485 8554 REAR POWER SWITCH PLASTIC SLIDE

Record number: H12899

Device: D/T8554
Model: M
Part number: P/N07G1402
Tip key: 005
Date created: 093/08/18
Date last altered: A93/08/20

The plastic slide that connects to the "Communications Cartridge Switch" P/N07G1385 is part of the "Bracket, Connector" P/N07G1402. This switch is a power switch that is in series with the power switch in front of the system. If it is off the system can not be turned on with the front switch. The switch is put in the off position when the system is plugged into a communications cartridge or docking station. The comm cartridge or docking station will then supply power to the 8554.

SAS KEYWORDS:

PSY2

PSY2PART

1.4.486 8554 TRACKBALL CABLE

Record number: H017446

Device: D/T8554
Model: M
Part number: P/N07G1381
Tip key: 007
Date created: 094/03/22
Date last altered: A97/12/05

The 8554 track ball cable is listed as "Cable, Keyboard" in the HMM Volume One on page 133. A more correct description of this cable would be Trackball Cable. The cable runs from the Trackball to the keyboard control card and system board.

New releases of the manual will have this correction.

SAS KEYWORDS:

PSY2 PSY2PART PSY2DOC DOCUMENTATION
UNCLASSIFIED

1.4.487 8556/57 9533 9556/57 MATH CO-PROCESSOR SOCKET FRU.

Record number: H12347

Device: D/T8557
Model: M
Part number: P/N10G3975
Tip key: 009
Date created: 093/06/14
Date last altered: A93/10/04

A math co-processor socket FRU has been released. When replacing the system board the socket should be transferred from the old system board to the new system board. If it is broken or missing, the socket can now be ordered as FRU p/n10G3975. Please make a note of this in the current HMS. The manual will be updated on its next release.

SAS KEYWORDS:

PSY2	PSY2PART	COPROCESSOR	D/T8556
D/T8557	D/T9557	D/T9556	D/T9533

1.4.488 8556/8557-SX SYSTEM BOARD FRU P/N84F7994

Record number: H05753

Device: D/T8556
 Model: M
 Part number: P/N84F7994
 Tip key: 005
 Date created: 092/06/30
 Date last altered: A92/06/30

Currently, the Medialess Models (14X and 24X) of the Machine Type 8556 have a unique FRU for the System Board - P/N79F7211. This is being changed to incorporate the Support of these Models into the standard 8556/'57 System Board FRU P/N84F7994; as common practice on other Medialess versions of the PS/2 Family.

As there has been no change of FRU P/N to allow Field Stock to be easily moved to a common "higher" FRU, the existing stock of FRU P/N84F7994 having to be re-levelled. This may take some time to complete, so the following information can be used as a guide in understanding what can be used in which machines:

FRU P/N79F7211 - Can be used ONLY in the Medialess System, those with Remote IPL T/R or E'Net cards and no DASD.

FRU P/N84F7994 - Will ALWAYS be able to support the standard Models (those with DASD) of the 8556 and 8557 386SX Processors.
 As from WK25/92, Greenock have been shipping this FRU at a level which will support the Medialess Models also. This level of FRU can be recognised by having either Card Assy part no. 92F2515 or 92F2498 (rework level equivalent) within it. Numerically higher P/N's which may replace them, will also continue support.

Use should be made of FRU P/N79F7211 until stock is exhausted, before ensuring the content of FRU P/N84F7994 has been upgraded so it can be used. In the event of Supply difficulties, an order should be placed directly on Greenock Plant for P/N92F2515 (this P/N will be unknown to Country Stockrooms).

SAS KEYWORDS:

PSY2 8556SYSBRD 8557SYSBRD PSY2BRD

8557 2MB MEMORY MODULE PART NUMBER CORRECTION

1.4.489 8557 2MB MEMORY MODULE PART NUMBER CORRECTION

Record number: H095100

Device: D/T8557
Model: M
Part number: P/N90X8625
Tip key: 001
Date created: 091/09/04
Date last altered: A91/09/06

THE 8557 (57SX) JUNE 1991 HMS PAMPHLET INCORRECTLY LISTS THE 2MB
70NS MEMORY MODULE AS FRU P/N90X8625. P/N90X8625 IS ACTUALLY
A 2MB 85NS MEMORY MODULE, AND WILL NOT WORK IN THE 8557.

THE CORRECT FRU NUMBER FOR THE 8557 2MB MEMORY MODULE IS
P/N92F0102. THE HMS WILL BE CORRECTED IN ITS NEXT RELEASE.

SAS KEYWORDS:

PSY2 PSY2PART PSY2MEM 8557SYSPART
8557SYSTEMEM

1.4.490 8570 MODEL B61 & B21 BEZEL / LOGO PART NUMBER

Record number: H006503

Device: D/T8570
Model: M
Part number: P/N64F0133
Tip key: 010
Date created: 090/03/15
Date last altered: A90/03/15

THE BEZEL / LOGO FRU IS P/N64F0133. THIS FRU NUMBER WILL BE IN
FUTURE RELEASES OF THE HMS MANUAL.

SAS KEYWORDS:

8570SYSPART PSY2PART

8570 SYSTEM BOARD IDENTIFICATION

1.4.491 8570 SYSTEM BOARD IDENTIFICATION

Record number: H017048

Device: D/T8570
Model: M
Part number: P/N90X9355
Tip key: 005
Date created: 088/08/04
Date last altered: A88/09/09

THE 8570 SYSTEM BOARDS CAN NORMALLY BE IDENTIFIED BY THE WORDS "IBM FRU P/NXXXXXXX" WRITTEN ON THE COMPONENT SIDE OF THE SYSTEM BOARD. THERE HAVE BEEN SOME REPORTS OF SYSTEM BOARDS PRODUCED WITHOUT FRU NUMBERS WRITTEN ON THEM. THESE SYSTEM BOARDS CAN BE IDENTIFIED BY AN OSCILLATOR THAT RUNS AT TWICE THE SPEED OF THE BOARD. THE OSCILLATOR HAS THE NUMBER 40,000 KHZ OR 32,000 KHZ WRITTEN ON IT. IT IS POSITIONED IN THE FRONT LEFT HAND CORNER OF THE SYSTEM BOARD IN THE U159 POSITION BELOW THE SPEAKER ASSEMBLY. THE SPEAKER ASSEMBLY AND THE SUPPORT STRUCTURE MIGHT HAVE TO BE REMOVED IN ORDER TO READ THE OSCILLATOR. AN EXAMPLE OF WHAT WILL BE SEEN IS THE 16 MHZ SYSTEM BOARD P/N90X9355 USED FOR THE MODEL E61 AND AND F61 WILL HAVE 32.000 KHZ WRITTEN ON THE OSCILLATOR AND THE 20 MHZ SYSTEM BOARD P/N90X8623 USED FOR MODEL 121 WILL HAVE 40,000 KHZ WRITTEN ON THE OSCILLATOR.

SAS KEYWORDS:

PSY2 8570SYSPART 8570SYSBRD PSY2BRD
PSY2PART

1.4.492 8573 HMM PART NUMBER CORRECTION ON PLASMA ADAPTER.

Record number: H016817

Device: D/T8573
Model: M
Part number: P/N56F9083
Tip key: 008
Date created: 094/02/23
Date last altered: A94/04/28

A part number correction to the HMM Volume 1: Laptop, notebook, Portable Computers should be corrected on page 162.

The plazma display adapter which is item 3 show as fru P/N59F9083 should be changed to P/N38F4686. Please make this change in HMMs with form number S82G-1501-00. Also, the plazma display is not shown under the "P70, Serial Number xxxx50001 or later", heading. It should be item 13, Fru P/N38f4737, and should be listed in both serial number ranges.

Future Releases will have these corrections.

SAS KEYWORDS:

PSY2

PSY2PART

1.4.493 8573 HMS ADDITION / DOOR FOR CONNECTORS AND ADAPTER I/OS

Record number: H095924

Device: D/T8573
Model: M
Part number: P/N65X1583
Tip key: 003
Date created: 092/01/20
Date last altered: A92/06/01

The 3/21/90 HMS manual (3.5" x 8.5"), form number S15F-2198 / P/N15F2198, does not list the FRU part number for the rear door. This door covers the I/O connectors for the system board and adapters. The door is attached to the right side of the rear cover fru. The door FRU is P/N65X1583; it is used with all 8573 P70 systems. This part number will be included in any new releases of this manual.

SAS KEYWORDS:

PSY2

PSY2PART

8573SYSPART

D/T8573

1.4.494 8573 HMS CORRECTION FOR BUS INTERFACE P/N56F9101

Record number: H105678

Device: D/T8573
Model: M
Part number: P/N56F9101
Tip key: 005
Date created: 092/05/13
Date last altered: A92/10/08

THE P70 HMS MANUAL FORM NUMBER S15F-2198-00 DATED MARCH 21, 1990
REQUIRES A CORRECTION ON PAGE 18. THE STATEMENT:

Bus Interface Assembly 56F9101
Serial number xxxx49999 or earlier

SHOULD READ

Bus Interface Assembly 56F9101
Serial number xxxx49999 or later

SAS KEYWORDS:

D/T8573 PSY2PART PSY2PUB

1.4.496 8573 P75 HMM BUS INTERFACE CABLE

Record number: H122390

Device: D/T8573
Model: M
Part number: P/N78F9893
Tip key: 007
Date created: 094/01/20
Date last altered: A94/01/20

The HMM S82G-1501 on Portable Computers or the 8573 P75 HMS does not list the Bus Interface Cable that goes between the Bus Interface 4 - slot P/N64F9977 and the system board. The part number of the cable is P/N78F9893. This will be included in the next release of the HMM.

SAS KEYWORDS:

PSY2

PSY2PART

PSY2CABLE

PSY2 RETAIN TIPS
8580 BASE FRAME INFORMATION

1.4.497 8580 BASE FRAME INFORMATION

Record number: H021673

Device: D/T8580
Model: M
Part number: P/N64F0157
Tip key: 018
Date created: 092/07/21
Date last altered: A94/05/06

THERE ARE TWO BASE FRAME ASSEMBLIES USED FOR THE 8580 SYSTEM UNIT.

FRU P/N64F0157 IS USED FOR MODELS 8580-041, 8580-071, 8580-081, 8580-111, 8580-121, 8580-161, 8580-311, 8580-321.

The above base assembly contains a metal back plane required for EMC purposes and should not be removed.
+*****+

FRU P/N64F0158 IS USED FOR MODELS 8580-A16, 8580-A21, 8580-A31.

This Base assembly DOES NOT contain a back plane assembly because there are components on the back of the system board.

THE TWO BASES ARE NOT INTERCHANGEABLE AND ARE AVAILABLE ON A EXCHANGE BASIS ONLY.

THIS INFORMATION WILL BE INCLUDED IN THE NEXT RELEASE OF THE HMS.

THE BASE FRAME ASSEMBLIES CONTAIN THE THUMB SCREWS TO ATTACH ADAPTER CARDS. THE THUMB SCREW IS NOT AVAILABLE AS A FRU.

SAS KEYWORDS:
PSY2 FRAME 8580SYSPART COVER
COVERS PSY2PART PLATE SHORT

1.4.498 8590 AND 9590 USE THE SAME SYSTEM BOARD

Record number: H12563

Device: D/T9590
 Model: M
 Part number: P/N64F3287
 Tip key: 001
 Date created: 093/12/08
 Date last altered: A94/12/02

This tip is to clarify the confusion concerning the correct FRU part number for the system board in the PS/2 9590.

The PS/2 Hardware Maintenance and Service Manual, Form # S52G-9971 - 01, dated September 1993, correctly lists FRU P/N64F3287 as being used on the 8590 and 9590 (page 179).

This system board contains an integrated XGA video adapter. This adapter does not meet ISO video standards.

The 9590 is an ISO compliant system because it was shipped with an XGA-2 (ISO compliant) video adapter in a micro channel slot as a standard feature.

SAS KEYWORDS:

PSY2	D/T8590	D/T9590	PSY2ADPT
2401	PSY2PART	PSY2BRD	SYSBRD
FRU	HMM	INCORRECT	

1.4.499 8590 LOGO IS NOT AVAILABLE AS a FRU

Record number: H122424

Device: D/T8590
Model: M
Part number: P/N33F8367
Tip key: 025
Date created: 094/01/25
Date last altered: A94/01/25

Page 179, of the PS2 Hardware Maintenance Manual, S52G-9971-01, dated September 1993, shows FRU P/N33F8367 as a logo (index #1 in the list).

This is a typographical error. This part number is for a power supply label, which is what will be received if this number is ordered.

There is no FRU for the 8590 logo and there are no plans to make it available as a service part. The logo may be removed from a damaged top cover assembly and "snapped" into place on the replacement part.

SAS KEYWORDS:

PSY2

PSY2MISC

PSY2PART

33F8367

1.4.500 8590 MISCELLANEOUS PARTS KIT CONTENTS

Record number: H104530

Device: D/T8590
 Model: M
 Part number: P/N33F8370
 Tip key: 020
 Date created: 092/09/10
 Date last altered: A92/09/17

THE 8590 MISCELLANEOUS PARTS KIT, FRU P/N33F8370, CONTAINS
 THE FOLLOWING ITEMS:

QTY	NAME
-----	-----
4	Rubber Feet
4	Screws 8mm x 14.7mm Captive
4	Screws 3.5mm x 7mm Hex Head
4	Screws 3mm x 6mm Plastite (Chassis)

THE HARDWARE MAINTENANCE DOCUMENTATION WILL BE UPDATED TO
 REFLECT THESE ITEMS.

SAS KEYWORDS:

PSY2	PSY2PART	8590SYSPART	PSY2MISC
8590SYSMISC	SCREW		

1.4.501 8590 POWER SUPPLY CABLE PROBLEMS

Record number: H012364

Device: D/T8590
Model: M
Part number: P/N33F8431
Tip key: 015
Date created: 092/07/23
Date last altered: A92/09/25

A SMALL NUMBER OF 8590 POWER SUPPLY FRUS WERE SHIPPED WITH SHORT POWER CABLES. THE SHORT CABLES MAY NOT REACH ALL INSTALLED DEVICES.

FIX:

A FIXED DISK POWER CABLE SHOULD BE USED TO EXTEND THE SHORT CABLE TO AN ACCEPTABLE LENGTH.

ORDER THE CABLE, FRU P/N33F8431, THROUGH NORMAL CHANNELS.

THIS FRU PART NUMBER IS PUBLISHED IN THE 8590/8595 HMS.

IF YOU ARE REPLACING A POWER SUPPLY THAT HAS SHORT CABLES WITH THE NEW POWER SUPPLY WITH LONGER CABLES, THE CABLE USED TO EXTEND THE SHORT POWER CABLE TO THE SCSI DEVICE SHOULD BE REMOVED. THIS NEEDS TO BE REMOVED BECAUSE THE POWER SUPPLY WITH THE LONGER CABLES AND THE EXTENSION CABLE BOTH HAVE FEMALE ENDS AND WILL NOT CONNECT.

SAS KEYWORDS:

PSY2	PSY2PART	8590SYSPART	PSY2PWR
8590SYSPWR	P/N33F5662	P/N64F4114	P/N92F0088

1.4.502 8595 AND 9595 POWER SUPPLY IS NOT INTERCHANGABLE

Record number: H067021

Device: D/T8595
 Model: M
 Part number: P/N92F0051
 Tip key: 014
 Date created: 093/08/03
 Date last altered: A93/12/06

While very similar in physical appearance and dimensions, The 400 watt 9595 power supply used in current manufacturing IS NOT INTERCHANGEABLE with the 335 Watt power supply used in the following systems:

- A. All models of the 8595.
- b. 9595 models OMF, and OMT.
- c. Early models of the 3511 SCSI expansion unit.

The 400 watt power supply was phased into manufacturing with new models of the 9595 which also incorporated a redesigned system board (identified by dual serial and dual parallel ports).

The 400 watt power supply is currently used in the following systems:

- A. 9595 all models, except those noted above.
- b. 3511 model 0V0.

Installing a 400 watt P.S. into a system designed for the 335 Watt power supply may result in system damage, as these systems were not designed to handle the current capacity of the larger rated power supply.

The capacity of the power supply (watts output) is printed on the label on the side of the unit, along with the FRU part number. Use only the correct replacement FRU for the system being serviced.

The 335 watt power supply is FRU P/N92F0051.
 The 400 watt power supply is FRU P/N92F0267.

SAS KEYWORDS:

PSY2	PS2	D/T3511	PSY2POWR
AMPS	D/T8595	D/T9595	TOWER
SCSI			

1.4.503 8595 KEYLOCK ASSEMBLY MISSING PAWL

Record number: H121163

Device: D/T8595
Model: M
Part number: P/N33F8433
Tip key: 013
Date created: 093/09/08
Date last altered: A93/11/16

FRU P/N33F8433, Keylock assembly for the 8595, is missing the correct pawl. The pawl from the original lock may be transferred and used on the new keylock assembly. If this pawl is either missing or broken it may be obtained by ordering the miscellaneous parts kit FRU P/N33F8435, which includes the correct pawl and break-away washer for the keylock assembly.

Note: The 8595 parts section (Page 177) of the PS/2 Hardware Maintenance Manual, form # S52G-9971-00, refers to a "bracket pawl" as part of the misc. parts kit, FRU P/N33F8435. This is actually the keylock pawl.

SAS KEYWORDS:

PSY2	PSY2PART	D/T9595	LOCK
PSY2DOC	D/T9590	9590	KEY

1.4.504 8595 MISCELLANEOUS PARTS KIT CONTENTS

Record number: H103495

Device: D/T8595
 Model: M
 Part number: P/N33F8435
 Tip key: 010
 Date created: 092/09/10
 Date last altered: A93/09/09

THE 8595 MISCELLANEOUS PARTS KIT, FRU P/N33F8435, CONTAINS
 THE FOLLOWING ITEMS:

QTY	NAME
-----	-----
2	Screws 6/19 x .31
1	Cable clamp
2	Screws 4mm x 9.5mm Screws
1	Washer breakway
1	Keylock pawl
1	Cable clamp
1	Ground base spring
1	MCA I/O bracket
1	PC board standoff
1	Wing nut
1	Ground spring

THE HARDWARE MAINTENANCE DOCUMENTATION WILL BE UPDATED TO
 REFLECT THESE ITEMS.

SAS KEYWORDS:

PSY2	8595SYSPART	8595SYSMISC	PSY2MISC
PSY2PART	SCREW		

1.4.505 8640 PCI SCSI-2 FAST ADAPTER FRU P/N CORRECTION

Record number: H124756

Device: D/T8640
Model: M
Part number: P/N52G0382
Tip key: 003
Date created: 094/07/27
Date last altered: A94/07/28

The FRU P/N label on the SCSI-2 Fast PCI-Bus Adapter, used in the PCSERVER (8640), has a typographical error. The label shows FRU P/N52G0382. The correct FRU P/N is: 53G0382.

The HMS Supplement, S83G-8084-00, and the label affixed to the interior of the system unit show a correct FRU part number.

Parts orders for the incorrect FRU part number will be automatically substituted to the correct FRU number.

SAS KEYWORDS:

PSY2	PSY2ADPT	PC	SERVER
8640	PSY2PART	53G0382	52G0382

1.4.506 9527 CONTROL PANEL / KEYPAD

Record number: H123108

Device: D/T9527
Model: M
Part number: P/N68G2541
Tip key: 001
Date created: 094/03/10
Date last altered: A95/03/15

Unlike some IBM monitor front covers that contain a Key Pad assembly, the 9527 Power/Control Switch assembly (commonly known as the Key Pad Assembly) is not part of the front cover.

The 9527 Power/Control Switch Assembly should be ordered when problem determination indicates that the Key Pad should be replaced.

The 9527 Power/Control Switch Assembly FRU number, P/N68G2541, is located in the HMM Volume 2, S71G-4197, page 4-29.

Also note that an incorrect "Symptom Action" is provided on page 4 - 19 of the same document. The correct action should say, "Replace Power/Control Switch" not "Replace front cover". The HMM will be updated to reflect this information during the next release.

SAS KEYWORDS:

PSY2

PSY2PART

9527

PSY2DISP

1.4.507 9545 HMM CORRECTION CONCERNING DSTN LCD.

Record number: H123906

Device: D/T9545
 Model: M
 Part number: P/N84G4317
 Tip key: 055
 Date created: 096/01/04
 Date last altered: A96/01/10

The April 1995 mobile HMM manual page 309 requires a part number placement correction. Change the following.

Current text:

Index

1	LCD Assembly (755C)	66G5058
	For Japan	84G4316
	LCD Assembly (755C)	84G4337
	(This LCD does not have a contrast control.)	84G4317
	LCD Assembly (755Cs)	

The following areas indicated by a bar (|) contain new information.

Index

1	LCD Assembly (755C)	TFT	66G5058
	For Japan	TFT	84G4316 subs to 84G4337
	LCD Assembly (755C)	TFT	84G4337
	(This LCD does not have a contrast control.)		
	LCD Assembly (755Cs)	DSTN	84G4317

SAS KEYWORDS:

PSY2	PSY2PART	PSY2DISP	THINKPAD
PSY2DOC			

1.4.508 9545 PEN UPPER COVER PART NUMBER UPDATE TO P/N66G5045.

Record number: H132042

Device: D/T9545
Model: M
Part number: P/N66G6771
Tip key: 054
Date created: 095/12/18
Date last altered: A95/12/18

The 750P "Upper Cover" Index 31, listed in the April 95 Mobile HMM, is incorrectly listed as P/N66G6771. The correct part number is the same as the 750 mono - it is P/N66G5045.

This will be corrected in the next update of this manual.

SAS KEYWORDS:

PSY2 PSY2PART PSY2BD PEN
THINKPAD

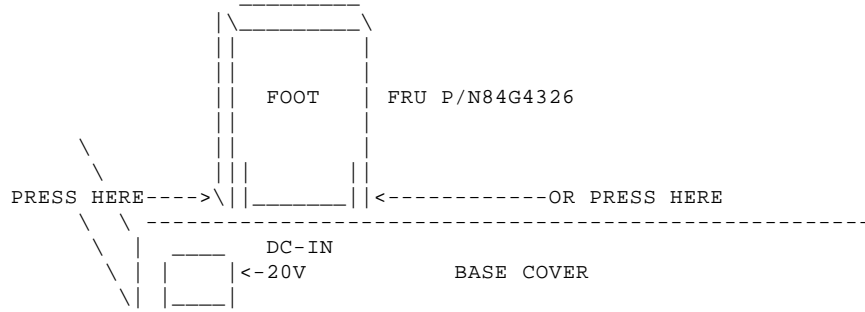
1.4.509 9545 REAR FOOT (LEG) LEFT OR RIGHT.

Record number: H123647

Device: D/T9545
 Model: M
 Part number: P/N84G4326
 Tip key: 007
 Date created: 094/04/19
 Date last altered: A94/04/20

A FRU part number has been released for the rear feet located on the system base. Prior to this release the complete base had to be ordered for a replacement foot.

To replace the foot extend it to its open position and using your thumb press in at the base of its side.



SAS KEYWORDS:

PSY2

PSY2PART

LEG

1.4.510 9545 750 P/N66G5036 SUBS TO P/N66G6209.

Record number: H131213

Device: D/T9545
 Model: M
 Part number: P/N66G5036
 Tip key: 049
 Date created: 095/10/12
 Date last altered: A95/11/16

System board FRU P/N66G5036, for the 750, 750P, and 750C subs directly to FRU P/N66G6209 which is the FRU for the 750CS. This substitution will work correctly, but the 750CS will not work with system board and P/N66G5036.

750CS System Board Compatibility Chart

	750CS	750 / 750C / 750P
System board	P/N66G6209	P/N66G6209 or P/N66G5036

Based on the above information do NOT relabel FRU P/N66G5036 with FRU P/N66G6209.

SAS KEYWORDS: PSY2 THINKPAD PSY2PART PSY2BD

1.4.511 9545 755 BASE MEMORY REPLACEMENT INFORMATION.

Record number: H13761

Device: D/T9545
Model: M
Part number: P/N85G8548
Tip key: 044
Date created: 095/09/07
Date last altered: A95/09/07

The 9545 755CX system board FRU P/N85G8548 no longer contains the base 8Mb memory card. This card is now available as FRU P/N85G8565. The HMM does identify this as a replaceable part. NOTE: Remember to remove the memory before returning the system board.

The 9545 755CE, 755CSE, and 755CV system board FRU P/N85G1141 still contains the base 8mb memory card. This tip will be updated if this system board's base memory card is made available. The memory card listed as P/N84G6561 on page 460 of the HMM (S82G-1502-03, APRIL 1995) is not a valid FRU.

SAS KEYWORDS:

PSY2 THINKPAD PSY2BRD PSY2MEM
PSY2PART

1.4.512 9545 755CD / DISKETTE DRIVE BLANK PLATE.

Record number: H127086

Device: D/T9545
Model: M
Part number: P/N85G1891
Tip key: 037
Date created: 095/04/11
Date last altered: A95/04/11

The blank plate that fits in place of the CD or diskette drive is FRU P/N85G1891. This will be in the next release of the HMM.

SAS KEYWORDS:

PSY2

PSY2PART

PSY2DSKT

THINKPAD

1.4.513 9545 755CD AND 755CE SYSTEM BOARD CHANGE.

Record number: H106637

Device: D/T9545
Model: M
Part number: P/N85G1141
Tip key: 032
Date created: 095/02/03
Date last altered: A95/02/03

The 755CD/CE system board, FRU P/N85G1493, listed in the Oct. 94 HMM has been replaced with FRU P/N85G1141. As of 2/3/95 the automatic sub has not been completed. The old part number order will cancel. Please order the new system board FRU P/N85G1141. The part substitution is being corrected and the number will be included in the next release of the HMM.

SAS KEYWORDS:

PSY2 PSY2SYSBRD PSY2PART PSY2DOC
PDY2PUB

9545 755CD MICROPHONE CONNECTION AND SPEAKER CABLE.

1.4.514 9545 755CD MICROPHONE CONNECTION AND SPEAKER CABLE.

Record number: H126563

Device: D/T9545
Model: M
Part number: P/N85G8495
Tip key: 034
Date created: 095/02/24
Date last altered: A96/11/21

The FRU part number for the microphone connection cable is P/N85G8495. The internal speaker cable is also packed in the Microphone FRU kit. The Microphone kit is listed in the HMM, but it is not illustrated there. The Removal and Replacement step number 2145 "VIDEO CARD OR REAR IR" shows the placement of both the speaker and the microphone cables. The Speaker cable is on the left and the microphone cable is on the right in the picture. Both cables run from the video card to the system board.

SAS KEYWORDS:

PSY2	PSY2PART	PSY2DOC	PSY2PUB
AUDIO	PSY2ADPT	VIDEO CARD	THINKPAD
84G6559	PSY2BD		

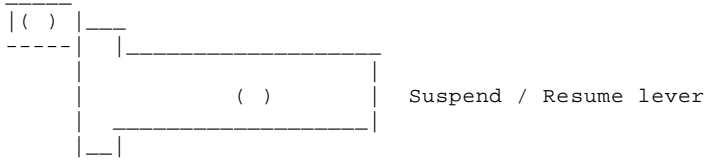
1.4.515 9545 755CD SPRING KIT.

Record number: H131889

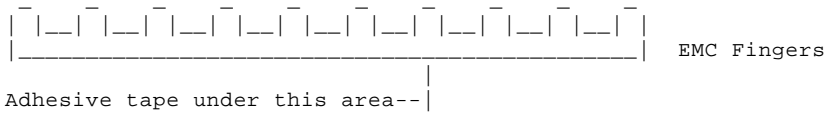
Device: D/T9545
Model: M
Part number: P/N85G8496
Tip key: 053
Date created: 095/12/04
Date last altered: A95/12/07

The Spring Kit is made up of the following:

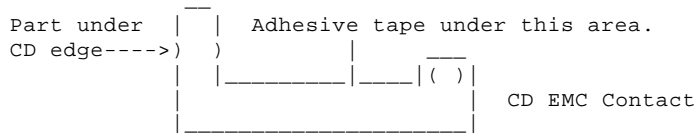
1. Metal suspend resume switch lever. (mounts to speaker screw)



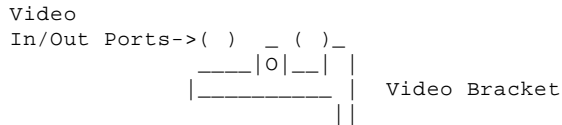
2. Rear EMC fingers. (Mounts by sticking to the top of the I/O area.)



3. CD EMC contact. (Mounts by sticking to the area below the rear right hand side of the CD.)



4. Video Bracket EMC contact. (Mounts just below Video In/Out Ports.)



SAS KEYWORDS:

PSY2 THINKPAD PSY2PART P/N85G1885
VIDEO CARD 85G1885 PSY2MISC

PSY2 RETAIN TIPS
9545 755CD 2.5 X 14MM SCREW.

1.4.516 9545 755CD 2.5 X 14MM SCREW.

Record number: H131391

Device: D/T9545
Model: M
Part number: P/N84G6560
Tip key: 051
Date created: 095/10/20
Date last altered: A95/10/26

The 755 CD screw kit does not contain 2.5 x 14mm screws. If this size screw is needed please order screw kit P/N84G6560. This kit is released under the 755CE system. It contains 10 2.5 x 14mm screws. The complete contents of this kit are listed in the ThinkPad Computers volume 2 HMM dated April 1995.

SAS KEYWORDS:

PSY2

PSY2PART

THINKPAD

1.4.518 9545 755CE, MISCELLANEOUS PARTS KIT CONTENTS

Record number: H126440

Device: D/T9545
Model: M
Part number: P/N84G6558
Tip key: 033
Date created: 095/02/17
Date last altered: A95/03/02

The following parts are included in the miscellaneous parts kit:

QTY

1 Modem Guide
1 DC-In Holder
1 Backup Battery Holder
1 Memory Spacer
1 Modem Lever
1 Suspend Switch Holder
1 Mini Jack Holder

This information will be included in the next release of the HMM manual.

SAS KEYWORDS:

PSY2 PSY2PART PSY2DOC PSY2PUB
THINKPAD

1.4.519 9545 810 MB. FIXED DISK FRU

Record number: H124114

Device: D/T9545
Model: M
Part number: P/N85G0961
Tip key: 013
Date created: 094/05/18
Date last altered: A94/05/31

The FRU part number of the 810 Mb fixed disk is P/N85G0961.
The 810Mb fixed disk OPTION is required to initially upgrade the
system unit. If this unit fails please use the above FRU as a
replacement.

This number is not in the service documentation, but it will be
included in the next release of the HMM.

SAS KEYWORDS:

PSY2

PSY2PART

PSY2FDSK

PSY2TBD

1.4.520 9546 & 9547 DSKT DRIVE FRU UPDATE FOR HMM.

Record number: H00157

Device: D/T9546
Model: M
Part number: P/N29H9230
Tip key: 005
Date created: 096/05/02
Date last altered: A96/05/03

The Hardware Maintenance Manual S82G-1503 Volume 3 requires the following addition to the 760CD and 760LD parts listings.

Diskette Drive 29H9230

Diskette Drive Fru P/N29H9230 should be ordered when replacing the drive that is part of the ship group.

SAS KEYWORDS:

PSY2 PSY2DSKT PSY2PART PSY2DOC
THINKPAD

1.4.521 9546 & 9547 FAN INSTALLATION CAUTION

Record number: H16397

Device: D/T9546
Model: M
Part number: P/N46H5762
Tip key: 017
Date created: 097/07/10
Date last altered: A97/07/10

The rotor bearing and fan blades are susceptible to damage from finger pressure or sudden physical shock. When inserting and removing the fan, hold it gently by the corners and do not drop it.

Follow the Hardware Maintenance Manual instruction notes when removing and replacing the fan assembly.

The HMM states:

1. Be careful not to touch the rotor and blade of the fan when assembling or disassembling.

SAS KEYWORDS:

PSY2	PSY2PART	BLOWER	COOLING
THINKPAD	UNCLASSIFIED	PSY2DOC	D/T9547

1.4.522 9546 & 9547 HMM. 1.2GB HD IS FRU P/N29H9228 ETC.

Record number: H135021

Device: D/T9546
 Model: M
 Part number: P/N29H9288
 Tip key: 010
 Date created: 096/11/08
 Date last altered: A97/11/10

1. The September Volume 3 ThinkPad HMM (S82G-1503-04) page 358, page 366, and page 379 require a change to index 16b, hard disk drive (1.2 GB, 17mm). The current number listed as, P/N29H9288, must be changed to FRU P/N29H9228.

2. Also note that index 26a on pages 367 and 379 requires the following changes:

26a FDD Drive (3 mode) remove--> "760E thick type)"
 for Japan (4 mode) remove--> "760E thick type)"
 CD-ROM Drive add--> "4X"
 CD-ROM Drive add--> "4X" change-> "46H5500" to
 "46H8136".

NOTE: P/N46H5500 automatically subs to P/N46H8136.

3. Index 19a DIMM Door on page 367. Change--> "29H9138" to "69H8422". All other DIMM Door references of index 19a should be changed from FRU P/N29H9195 to FRU P/N69H8422.

SAS KEYWORDS:

PSY2	PSY2PART	PSY2DOC	PSY2FDSK
THINKPAD	UNCLASSIFIED	D/T9547	P/N29H9138

1.4.523 9546 / 9547 DIMM DOOR HMM CORRECTION.

Record number: H134521

Device: D/T9546
 Model: M
 Part number: P/N69H8422
 Tip key: 009
 Date created: 096/10/16
 Date last altered: A96/11/13

The Mobile Hardware Maintenance Manual (HMM) S82G-1503-04 dated September 1996 requires a part number change to the DIMM door FRU on the following pages:

PAGE	MODEL	INDEX	OLD PART	NEW PART
355	9546 760C	19a	P/N29H9195 TO	P/N69H8422
358	9546 760CD	19a	P/N29H9195 TO	P/N69H8422
363	9546 760E	19a	P/N29H9195 TO	P/N69H8422
367	UPGRADABLE CD 760E /760ED	19A	P/N29H9138 TO	P/N69H8422
371	9546 760L	19a	P/N29H9195 TO	P/N69H8422
374	9546 760LD	19a	P/N29H9195 TO	P/N69H8422
379	9547 760EL 760ELD	19a	P/N29H9195 TO	P/N69H8422

The FRU P/N29H9195 will be substituted to P/N69H8422 in the near future. The FRU part number listed on page 367 (P/N29H9138) will not be substituted, because it is a miss-print and not an actual part number.

SAS KEYWORDS:

PSY2	PSY2PART	PSY2DOC	PSY2MISC
PLASTIC	COVER	THINKPAD	69H8422

1.4.524 9546 760C AND E HMM CORRECTION.

Record number: H031747

Device: D/T9546
Model: M
Part number: P/N80G4584
Tip key: 011
Date created: 096/12/11
Date last altered: A96/12/16

The Hardware Maintenance Manual (HMM) Volume 3, September 1996 issue requires a correction on page 396. The New Zealand DAA Assembly is listed as P/N80H3465. This is correct for the 755 systems, but the 760 systems should use FRU P/N80G4584. This will be corrected in the next release of the manual.

SAS KEYWORDS:

PSY2 PSY2PART THINKPAD UNCLASSIFIED
D/T9545

PSY2 RETAIN TIPS

9546 765D 9547 765L REQUIRE a NEW PC CARD SECURITY PLATE.

1.4.525 9546 765D & 9547 765L REQUIRE a NEW PC CARD SECURITY PLATE.

Record number: H162100

Device: D/T9546
Model: M
Part number: P/N05K4732
Tip key: 019
Date created: 097/12/04
Date last altered: A97/12/05

The 9546 765D and 9547 765L require a unique PC Card Security Plate, FRU P/N05K4732. The PC Card Security Plate in the Security Parts Kit FRU P/N29H9294 will not allow the 765D and 765L keyboards to close, if it is installed.

The new part number will be placed in the INTERNET on-line HMM and in the next hardcopy release of the HMM.

The Internet URAL is: <http://www.pc.ibm.com/us/cdt/hmm.html>

SAS KEYWORDS:

PSY2	PSY2PART	THINKPAD	UNCLASSIFIED
PCMCIA	LOCK	D/T9547	29H9294

1.4.526 9546-THE PCMCIA SLOT FRU SHOULD BE P/N39H7019.

Record number: H133587

Device: D/T9546
Model: M
Part number: P/N84G1330
Tip key: 008
Date created: 096/08/09
Date last altered: A96/08/09

The Mobile HMM Volume 3 (S82G-1503-03) incorrectly lists the PCMCIA Card Slot as P/N84G1303 on page 316 (760CD) and page 330 (760LD). The correct part number under index 14a should be FRU P/N39H7019. This will be corrected in the next release of the HMM.

SAS KEYWORDS:

PSY2 PSY2PART PSY2ADPT THINKPAD
PSY2DOC

1.4.527 9546/9547 HMM VOL 5 DATED MARCH 1997 - REQUIRED CHANGE

Record number: H161773

Device: D/T9546
Model: M
Part number: P/N85G8549
Tip key: 018
Date created: 097/11/10
Date last altered: A97/12/05

The Mobile HMM Vol3, dated 9/11/97 with form number S82G-1503-05 requires a change on page 497 index 16b. The current FRU P/N29H9325 listed there is an Option number. The correct FRU part number is P/N85G8549. This change will also be made on the on line HMM at <http://www.pc.ibm.com/us/cdt/hmm.html>.

SAS KEYWORDS:

PSY2 PSY2PART PSY2DOC THINKPAD
UNCLASSIFIED

1.4.528 9547 AND 9546 3GB HDD HMM FRU CORRECTION TO P/N45H8791.

Record number: H162146

Device: D/T9547
 Model: M
 Part number: P/N45H8790
 Tip key: 013
 Date created: 097/12/11
 Date last altered: A97/12/11

The following correction should be made to the Hardware maintenance Manual volume 4, form number S05L1270-01 dated September 1997.

1. The 3GB disk drive on page 503 index number 19 should be changed from P/N45H8790 to FRU P/N45H8791.
2. The 3GB disk drive on page 512 under options should be changed from P/N45H8789 to FRU P/N45H8791.

These changes will be made on the internet HMM and in the next hardcopy release.

The internet URL is: <http://www.pc.ibm.com/us/cdt/hmm.html>

SAS KEYWORDS:

PSY2	PSY2PART	PSY2HDD	THINKPAD
UNCLASSIFIED	PSY2DOC	45H8789	45H8790
45H8791	HARD DRIVE	FIXED DISK	D/T9546

1.4.529 9547 MOD L & LD NI-MH BATTERY FRU CORRECTION.

Record number: H10741

Device: D/T9547
Model: M
Part number: P/N46H5365
Tip key: 002
Date created: 096/07/23
Date last altered: A96/07/23

The Ni-MH battery FRU P/N46H5365 listed in the May 1996 volume 3 Mobile HMM form number S82G-1503-03 is incorrect. The correct Ni-MH battery FRU is P/N29H9233. Please make this change on page 327 index 15 and page 330 index 15.

SAS KEYWORDS:

PSY2	PSY2PART	PSY2PRW	THINKPAD
PSY2DOC	PUBLICATION		

1.4.530 9547 1.4GB HARD DISK DRIVE FRU.

Record number: H134386

Device: D/T9547
Model: M
Part number: P/N82H8884
Tip key: 003
Date created: 096/10/10
Date last altered: A96/11/01

The 760EL and 760ELD and the upgradable 760E and 760ED support the following Hard Disk Drives:

810MB FRU P/N29H9366
1.08GB FRU P/N29H9367
1.2GB FRU P/N29H9228
1.4GB FRU P/N82H8884
2.1GB FRU P/N82H8489

This information is located in the new Mobile Systems Hardware Maintenance Manual (HMM) Volume 3 (S82G-1503-04).

SAS KEYWORDS:

PSY2 PSY2FDSK PSY2DOC D/T9547
FIXED DISK THINKPAD

1.4.531 9548 & 9549 HMM CORRECTION FOR THE USB TOOL.

Record number: H163626

Device: D/T9549
Model: M
Part number: P/N05K2586
Tip key: 004
Date created: 098/05/08
Date last altered: A98/05/08

The 770 USB Parallel connector tool is listed incorrectly as P/N05K2586 on page 613 of the HMM volume 4 S05L-1270-01. The correct part number for the USB Parallel connector is FRU P/N05K2580.

This information will be listed in the on-line HMM at URL <http://www.pc.ibm.com/us/cdt/hmm.html> and will be placed in the next hardcopy release of this manual.

SAS KEYWORDS:

PSY2	PSY2PART	PSY2TOOL	THINKPAD
PSY2DOC	UNCLASSIFIED	D/T9548	

1.4.532 9552 COLOR LCD SPACERS

Record number: H093168

Device: D/T9552
Model: M
Part number: P/N48G9908
Tip key: 023
Date created: 093/12/23
Date last altered: A94/06/13

The spacers located below the TFT LCD hinge area for the 700C and 720C are located in the following kits:

700C MODEL UNIQUE COVER KIT P/N48G8714
700C MODEL UNIQUE COVER KIT P/N48G9906 German (gray)
720C MODEL UNIQUE COVER KIT P/N53G9184
720C MODEL UNIQUE COVER KIT P/N53G9186 German (gray)

SAS KEYWORDS:

PSY2 D/T9552 PSY2PART THINKPAD
SPACER

1.4.533 9552 MONO PANEL COVER GROUP KITS FOR 700/720

Record number: H12510

Device: D/T9552
 Model: M
 Part number: P/N53G9213
 Tip key: 016
 Date created: 093/06/09
 Date last altered: A95/05/25

700 Mono Panel Cover Kit is FRU P/N44G3789.

720 Mono Panel Cover Kit is FRU P/N53G9213.

The Mono panel cover group kits contains the following:

Qty	Description
1	LED black plastic cover with clear insert
1	One left black plastic hinge cover end cap.
1	One right black plastic hinge cover end cap.
1	Hinge bracket support right (connects hinge to system unit)
1	Hinge bracket support left (connects hinge to system unit)
2	LCD screw covers.

Note: When replacing the Mono LCD, only send back the main FRU.
 Remove the right and left hinge bracket supports and
 install them on the replacement Mono LCD FRU.
 The color LCD hinges are part of the FRU and are sent back
 with it.

SAS KEYWORDS:

PSY2	PSY2PART	PSY2LCD	PSY2DISP
REMOVE REPLACE	MOD 307	MOD 308	P/N44G3789

1.4.534 9552 NEW FRU PARTS&COLON. LCD BEZEL & MONO HINGE KIT

Record number: H16865

Device: D/T9552
Model: M
Part number: P/N46H8010
Tip key: 039
Date created: 097/08/22
Date last altered: A97/08/22

A 700C and 720C front LCD bezel and Mono LCD hinge kit has been released. The LCD TFT bezel is FRU P/N46H8010 and the Mono Hinge Kit is FRU P/N73H9994.

SAS KEYWORDS:

PSY2PART PSY2 PSY2DISP THINKPAD
UNCLASSIFIED

1.4.535 9552 NEW MONO LCD SLIDE FRU. ORDER DETAIL IN TIP.

Record number: H20461

Device: D/T9552
Model: M
Part number: P/N53G7803
Tip key: 008
Date created: 093/02/18
Date last altered: A93/06/17

A CONTRAST & BRIGHTNESS SLIDE FRU P/N53G7803 HAS BEEN DEVELOPED.
THIS FRU WILL BE USED TO REPLACE BROKEN OR MISSING SLIDES. THE
FRU CAN BE ORDERED THROUGH THE NORMAL PARTS SYSTEM.

TO INSTALL THE NEW SLIDE MOVE THE CONTRAST OR BRIGHTNESS CONTROL
PIN TO ITS LOWEST SETTING, PLACE THE NEW SLIDE OVER THE PIN,
AND PRESS IN PLACE.

SAS KEYWORDS:

PSY2 PSY2PART LCD 700

1.4.536 9552 POINTING STICK CAP SET FRU P/N54G0439

Record number: H12740

Device: D/T9552
Model: M
Part number: P/N54G0439
Tip key: 018
Date created: 093/07/27
Date last altered: A95/05/25

POINTING STICK CAP FRU P/N54G0439 A pointing stick cap set is available. It contains three spare caps. To remove the old cap pull up on it with your finger tips. To install the new cap line up the square opening in the bottom of the new cap with the square tip of the pointing stick and slide the new cap down on the stick.

This part number is in HMM for ThinkPad computers S82G-1502-03.

SAS KEYWORDS:

PSY2	PSY2PART	TIP	RED
TRACKPOINT II	2		

1.4.537 9552 2, 4, & 8MB IC DRAM PART NUMBERS

Record number: H104969

Device: D/T9552
Model: M
Part number: P/N07G1414
Tip key: 004
Date created: 092/12/29
Date last altered: A92/12/31

The 9552 system uses 8554 IC Dram memory cards. Insert the following FRU numbers in the 700 and 700C HMS manuals:

2Mb P/N07G1414
4Mb P/N07G1415
8Mb P/N07G1416

This information will be included in the next HMS release.

SAS KEYWORDS:

PSY2	D/T8554	PSY2MEM	PSY2PART
PSY2DOC	PUBS	PUBLICATION	

1.4.538 9552 700 (MONO) MISC. PARTS PACKAGE CONTENTS

Record number: H083760

Device: D/T9552
 Model: M
 Part number: P/N44G3790
 Tip key: 009
 Date created: 093/02/09
 Date last altered: A93/03/01

The following parts are contained in the 700 thinkpad (mono) miscellaneous parts package.

FRU P/N44G3790 (Mono)	QTY
---	---
KBD Support bracket	1
Modem Insulator	1
Heatsink Asm	1
Battery Terminal Clip	1
Holder DC-In	1
Ground Finger	1
2.6x4 Screw	2
Mouse Bracket Shield	1

THIS INFORMATION WILL BE INCLUDED IN THE NEXT HMS RELEASE.

SAS KEYWORDS:

PSY2

PSY2DOC

PSY2PUB

PSY2PART

1.4.539 9552 700 & 720 MONO HINGE KIT FRU.

Record number: H004178

Device: D/T9552
 Model: M
 Part number: P/N73H9994
 Tip key: 038
 Date created: 096/11/14
 Date last altered: A97/03/06

A Hinge Kit FRU P/N73H9994 has been released for the 9552 mono 700 and 720 systems. This will allow separate hinge replacement on these systems.

The Kit contains the following components:

Quantity	Name	Description
2	SCREW	
2	SCREW	2.5 x 8mm
1	HINGE	Right
1	HINGE	Left
2	RUBBER	Screw hole Plug (Lower)
2	RUBBER	Screw hole Cover (Upper)
4	SCREW	T6 Torx (5mm)
1	PLATE	Lexan Z shaped shield
4	GASKET	shield

SAS KEYWORDS:

PSY2

PSY2PART

PSY2DOC

THINKPAD

UNCLASSIFIED

1.4.540 9552 700 AND 700C DRAMS MOUNTS ON BASE MEMORY CARD.

Record number: H124509

Device: D/T9552
Model: M
Part number: P/N44G3785
Tip key: 032
Date created: 094/06/29
Date last altered: A94/06/30

The DRAM memory FRU P/N07G1414 (2Mb), P/N07G1415 (4Mb), and P/N07G1416 (8Mb) mounts on the base memory card. The base memory holds 2 DRAMs and it attaches to the system board through a flat ribbon cable.

The next HMM release will be changed to clearly show the above associations.

SAS KEYWORDS:

PSY2	PSY2PART	PSY2MEM	PSY2ADPT
THINKPAD	700	PSY2DOC	PSY2PUB

1.4.541 9552 700C (COLOR) MISC. PARTS PACKAGE CONTENTS

Record number: H20145

Device: D/T9552
Model: M
Part number: P/N48G8944
Tip key: 010
Date created: 093/02/09
Date last altered: A93/03/01

The following parts are contained in the 700C thinkpad (color) miscellaneous parts package.

FRU P/N48G8944 (Color)	Qty
KBD Support Bracket	1
Modem Insulator	1
Heatsink Asm	1
Battery Terminal Clip	1
Holder DC-In	1
Ground Finger	1
2.6x4 Screw	2
Mouse Bracket Shield	1

THIS INFORMATION WILL BE INCLUDED IN THE NEXT HMS RELEASE.

SAS KEYWORDS:

PSY2

PSY2DOC

PSY2PUB

PSY2PART

PSY2 RETAIN TIPS

9552 700C AND 720C HINGE REPLACEMENT KIT.

1.4.542 9552 700C AND 720C HINGE REPLACEMENT KIT.

Record number: H124034

Device: D/T9552
Model: M
Part number: P/N85G8199
Tip key: 037
Date created: 095/08/18
Date last altered: A95/08/18

Stiff (creaking or binding) LCD hinges should be replaced using the hinge kit P/N85G8199. This kit contains 2 hinges and installation instructions.

SAS KEYWORDS:

PSY2 CASE BASE PSY2PART
THINKPAD

1.4.543 9552 700C SYSTEM BOARD/LED CABLE INFORMATION.

Record number: H105449

Device: D/T9552
Model: M
Part number: P/N49G2142
Tip key: 005
Date created: 092/12/03
Date last altered: A95/05/25

The short cable extension from connector J1 to the LED connector is a separate FRU P/N49G2142. It is listed in the HMS as an "LED Junction FPC." The FPC acronym stands for Flexible Plastic Cable. This is listed in the HMM ThinkPad manual S82G-1502-03.

This cable might have been glued to the metal frame of the system board during manufacturing. If the cable is damaged while it is being removed from a failed system board, order the separate cable, FRU P/N49G2142.

SAS KEYWORDS:

PSY2

PSY2DOC

PSY2PART

PSY2BRD

1.4.544 9576 9577 SYSTEM BOARD FRU'S

Record number: H12683

Device: D/T9577
Model: M
Part number: P/N39G2668
Tip key: 001
Date created: 093/07/20
Date last altered: A93/08/23

To enhance the availability of system boards for FRU stock, two types of FRU system boards are available for each Processor speed (33Mhz & 33/66Mhz).

33Mhz System Board:

FRU P/N39G2668 for 33Mhz 9576/77 EXCLUDING M77 Ultimedia.
FRU P/N39G5698 for 33Mhz 9577 M77 Ultimedia systems. This FRU may also be used in 9576/77 if p/n39G2668 is out of stock.

33/66Mhz System Board:

FRU P/N39G2669 for 33/66Mhz 9576/77 EXCLUDING M77 Ultimedia.
FRU P/N39G6086 for 33/66Mhz 9577 M77 Ultimedia systems. This FRU may also be used in 9576/77 if p/n39G2669 is out of stock.

The current HMM update (March 93) reflects this information.

*NOTE: IF FRU P/N87F4839 IS FOUND, INSTALLED IN A SYSTEM, DO NOT ORDER THIS PART NUMBER. THIS IS AN OBSOLETE 25MHZ PLANAR BOARD. ORDER THE APPROPRIATE 33MHZ OR 33/66MHZ PLANAR BOARD AS INDICATED ABOVE.

SAS KEYWORDS:

PSY2	D/T9576	D/T9577	MULTIMEDIA
PSY2PART	PSY2BRD		

1.4.545 9600 BAUD DATA/FAX MODEM

Record number: H122007

Device: D/T2618
Model: M
Part number: P/N60G1811
Tip key: 006
Date created: 093/12/08
Date last altered: A97/11/07

THE IBM INTERNAL 9600 BAUD HIGH SPEED DATA/FAX MODEM
(NON PCMCIA) FRU PART NUMBER IS P/N60G1811. THE OPTION NUMBER
IS 60G0375 (no longer sold.)

SAS KEYWORDS:

PSY2	PSY2PART	D/T9552	D/T9545
D/T2603	D/T9533	PORT REPLICATOR	MODEM
THINKPAD	UNCLASSIFIED		

1.4.546 9600 V.32 MODEM/A PS/2 UNDERCOVER

Record number: H097262

Device: D/T4683
Model: MP11
Part number: P/N93F1574
Tip key: 113
Date created: 092/05/27
Date last altered: A92/05/27

New announced undercover 9600 modem for Asynchronous or SDLC operation in a 4684 or 85xx microchannel card. It performs similar to a IBM 7855 modem.

This is a feature card for a 4684 and should be an MES order of 93F1573.

Fru card is P/N93F1574, Wrap plug is P/N74F4508 (leased)
Option Diskette (diagnostic) order form SX273915
Install and PDG and Op. guide form # SA27-3955 should be used to service this feature.

SAS KEYWORDS:

468401.

4684SYS

4684SYSCOMM

PSY2PART

1.4.547 (IML) SYSTEM PARTITION CAN'T BE ACCESSED

Record number: H124303

Device: D/T8590
 Model: M
 Tip key:
 Date created: O94/06/01
 Date last altered: A94/08/15

SYMPTOM:

The cursor fails to move to the upper right corner of the monitor during an attempt to boot the System Partition of an IML machine on either a cold-boot or a warm-boot.

Note: On some IML systems, it is normal for both stage 1 and stage 2 POST to complete without the cursor moving to the upper right corner of the monitor, when cold-booted. (This is model and Reference Diskette version dependent.) The system will "beep" one time and the operating system will begin execution. After the "beep", a warm-boot should be done (CTL-ALT-DEL). The cursor will then move to the upper right corner. Depress the keyboard CTL-ALT-INS keys to boot the System Partition.

PROBLEM ISOLATION AIDS:

1. Diagnostics (from Reference Diskette) run error-free.
2. Restoring the System Partition from a known good Reference Diskette does not fix the problem.
3. Removing additional features and attachments does not change the failure symptoms.

If the above description fits the problem, it is possible the system has been contaminated by a computer virus.

FIX:

Certain versions of computer viruses have been known to cause IML failures of the System Partition on PS/2 products. There are two methods of identifying and correcting this problem:

1. Current virus scan programs should be run. A virus could still be present, even if none is detected, as it may be a new or unknown virus.
2. Back-up the customer data and software, or confirm with the customer that he has valid back-up software. Original software source diskettes (physically write protected) are the best. Next, run the low-level format program on the fixed disk using the Advanced Diagnostics. This will completely erase anything on the fixed disk, including the System Partition and any hidden virus software. Then using a "known good" Reference Diskette set, the system partition should be re-created.

When complete, if the system boots to the newly created System Partition, no hardware failure has occurred. If the problem recurs after the customer's software is reloaded, then it can be safely assumed the customer software is contaminated or corrupting the System Partition.

Note: Due to the exposure to Servicer's Reference Diskettes being contaminated by a computer virus, it is strongly recommended that they be kept mechanically write protected and virus scan software run on them frequently.

NOTE: Only the utility provided on the Reference Diskette should be used to reproduce additional "back-up" copies of the Reference Diskette Set. Reproducing Reference Diskettes by ANY OTHER METHOD exposes the servicer to the following situations:

- A. Hidden files not being copied.
- b. Contamination of the Reference Diskette with viruses.
- c. Unwanted and/or unsupported files.

SAS KEYWORDS:

PSY2	PS/2	PS2	PSY2PROG
D/T9556	D/T9595	D/T8595	D/T8577
D/T8556	D/T8557	D/T8580	D/T8565
D/T8560	D/T8590	D/T9577	D/T9576
D/T9590	D/T9557		

1.4.548 "ADAPTER NOT FOUND" ERROR W/IBM ETHERNET ADAPTER

Record number: H132153

Device: D/T6571
 Model: M
 Tip key:
 Date created: 096/01/04
 Date last altered: A96/01/04

SYMPTOM:

Any brand of system using an IBM Ethernet adapter, FRU P/N60G0605, may experience "adapter not found" errors following a cold boot operation and loading the NE2000.COM device driver.

PROBLEM ISOLATION AIDS:

The NE2000.COM device driver may post an "adapter not found" error after a cold boot, but initialize the adapter properly with a subsequent warm boot operation (CTRL+ALT+DEL).

The NE2000.COM device driver is version 1.54.

FIX:

Install the IBM device driver IBMENIO.COM that ships with the adapter or version 2.05 or higher NE2000.COM device driver.

The NE2000.COM device driver may be obtained from the Novell Netwire Technical Support Services via the Internet. The URL is "<http://netwire.novell.com/index.htm>." From the Novell Netwire Home Page, access the Netwire Technical Support area and then the File Update section. Search on "NE2000" and select "Automated PNW DOS" update for the updated driver.

Netwire is a trademark of the Novell Corporation.

SAS KEYWORDS:

PSY2	PSVP	IBMPC	PC330
PC350	PC 330	PC 350	PSVPADPT
PSY2ADPT	D/T65XX	D/T68XX	PSVPOEM
PSY2OEM	PSVPPART	PSY2PART	D/T6381
D/T6382	D/T6384	D/T6387	D/T6482
D/T6484	PSY2ERR	PSVPERR	D/T6472
D/T6492	D/T6494	D/T6573	D/T6581
D/T6583	D/T6575	D/T6585	D/T6576
D/T6586	D/T6875	D/T6885	D/T6876
D/T6886			

1.4.549 "CREATE SYSTEM DISKS" FAILS ON DISK #2 WITH FIXPACK 1

Record number: H161772

Device: D/T6282
Model: M
Tip key:
Date created: 097/11/10
Date last altered: A97/11/10

SYMPTOM:

The Windows95 "Create System Disks" utility fails when trying to create diskette #2 after Windows95 Service Pack 1 has been applied to the system.

PROBLEM ISOLATION AIDS:

This tip applies to those systems preloaded with Windows95 OSR1, and updated with the Windows95 Service Pack 1 before the "Create System Disks" utility has been run.

FIX:

Modify the DMFWRITE.PIF file via the following steps:

1. Double click the "My Computer" icon, then "C-Drive" icon.
2. Double click the "Windows" folder, then "Options" folder.
3. Right click on the DMFWRITE.PIF file icon.
4. Click on "Properties" from the drop-down list.
5. Uncheck the Read Only box and click on the "Memory" tab.
6. Change Conventional Memory from Auto to 1024.
7. Change Expanded Memory, if available, from Auto to 1024.
8. Change Extended Memory from Auto to 1024.
9. Click on the "General" tab and check the "Read Only" box.
10. Click on Apply, then Close. Restart Windows95 for changes to take affect.

Windows and Windows95 are trademarks of Microsoft Corporation.

SAS KEYWORDS:

PSY2	PSY2ERR	PSY2OPER	PSVP
PSVPERR	PSVPOPER	D/T6272	D/T6282
PC300GL	6272	6282	OSR1
UNCLASSIFIED			

"DOS OPTIONS" RETURNS ERROR IN QAPLUS/PRO FOR WINDOWS

1.4.550 "DOS OPTIONS" RETURNS ERROR IN QAPLUS/PRO FOR WINDOWS

Record number: H121567

Device: D/T6562
 Model: M
 Tip key:
 Date created: 097/09/29
 Date last altered: A97/10/02

SYMPTOM:

After selecting "Interrupts" from the "DOS Options" menu in QAPLUS/PRO for Windows, the following error is displayed:

"An Error Has Occurred In Your Program QAPLUSVP. Ignore or Close?"

PROBLEM ISOLATION AIDS:

If the user is running QAPLUS/PRO Diagnostics for Windows version 1.15, preloaded with Windows95 on the IBM PC PC300PL, machine type 6562, this tip applies.

FIX:

Download and run PC Doctor diagnostic software, file name T3GT03A.EXE, to test the system.

The IBM PC 300/700 Enhanced Diagnostic Diskette may be downloaded via the Internet from the IBM Personal Computer File Library by searching the following Internet URL:

Http: //www.us.pc.ibm.com/files.html

The IBM PC 300/700 Enhanced Diagnostic diskette may also be obtained from the IBM PC Company BBS system by calling 1 - 919 - 517 - 0001. Locate the "IBM PC 300/700 Files" (section #21) for the file titled:

T3GT03A.EXE - IBM PC 300/700 Enhanced Diag. Dskt. v1.8.312
 T3GT03A.TXT - Text file describing the new diagnostic package.

Windows is a trademark of Microsoft Corporation.
 QAPLUS/PRO is a trademark of DiagSoft, Inc.
 PC Doctor is a trademark of Watergate Software, Inc.

SAS KEYWORDS:

PSY2ERR	PSY2DIAG	PSY2OPER	PSY2OEM
PSY2	PSVP	PSVPERR	PSVPDIAG
PSVPOPER	PSVPOEM	D/T6562	6562
68828	UNCLASSIFIED		

1.4.551 "HARDWARE FAILURE SYMPTOMS" CAUSED BY OS/2 VERSION 2.1

Record number: H123587

Device: D/T8550
 Model: M
 Tip key:
 Date created: 094/04/14
 Date last altered: A94/08/26

SYMPTOM:

One or more of the following symptoms may be associated with this problem. However, other symptoms unknown at the time of this writing, may also be experienced:

- A. OS/2 SYS0049 error messages *
- b OS/2 SYS0551 error messages
- c. System "hangs"
- d. I9990303 error during POST (Power On System Test)
- e. 01290053 error (May be intermittent and occurs randomly.)
- f. Corrupted system data files. (Possible customer data loss)

The following are conditions known to be associated with this problem:

- 1. The operating system in use is OS/2 version 2.1
- 2. The diagnostics run error free.
- 3. Normal hardware troubleshooting/replacement is ineffective.
- 4. Minor changes in the hardware configuration often "seems" to resolve the problem.
- 5. HPFS seems to be affected to a much higher degree than does FAT file system. Reinstalling OS/2 using FAT file, rather than HPFS, often allows successful operation, giving the "appearance" of an HPFS problem.

This problem can affect any hardware system, including non-IBM products. As additional failure symptoms are identified this tip will be updated.

PROBLEM ISOLATION AIDS:

At the OS/2 prompt, type in the following OS/2 command:

```
SYSLEVEL
```

This command will display the current levels of software for the various OS/2 components. Make note of the IBM OS/2 BASE OPERATING SYSTEM, versions and levels.

Version 2.1 and CSD levels below XR06200 are affected.
 Version 2.11 and CSD levels XR06200 incorporate the fixes.

FIX:

The following APAR's are known to resolve the symptoms listed above:

```
PJ11015      PJ13228
PJ11722      PJ09189
```

These referenced software fixes are incorporated into the SERVICE PAK which will bring OS/2 2.1 up to the current 2.11 level. This update is available through the software support structure.

*** Note:**

In the case of SYS0049 errors, installing the APAR's alone will NOT resolve the problem. The hardfile(s) will need to be re-formatted before the software is reloaded, or the SYS0049 errors will persist.

SAS KEYWORDS:

PSY2	PSY2PROG	PSY2FDSK	PSY2ADPT
D/T9595	D/T9590	D/T9585	D/T9577
D/T8570	D/T8565	D/T8580	D/T8590
D/T8595	D/T8555	HANG	VALUEPOINT
D/T8590	D/T8565	D/T8555	D/T8573
D/T9577S	D/T8530	D/T8557	D/T8556
D/T8540	PSVP	D/T6384	OEM
PSY2OEM	APAR	OS2	SYS
TRAP	CP42	CP	42
CP: 42	D/T9556	D/T9557	D/T9576S

1.4.552 "INACCESSIBLE BOOT DEVICE" WITH WINDOWSNT

Record number: H017881

Device: D/T6577
 Model: M
 Tip key:
 Date created: 096/06/19
 Date last altered: A96/06/19

SYMPTOM:

IBM PC 300 Series 6577 or 6587 systems may exhibit an "Inaccessible Boot Device" error after installing WindowsNT Version 3.51 via CDROM. The error occurs after removing the CDROM drive then rebooting the system to the WindowsNT environment.

PROBLEM ISOLATION AIDS:

None

FIX:

Perform the following steps to eliminate the error condition:

1. Reinstall the CDROM drive.
2. IPL WindowsNT.
3. Select the "Main" group from the Program Manager.
4. Select "Control Panel."
5. Select "Devices."
6. Highlight "ATAPI.SYS." Change ATAPI.SYS from "boot" status to "disable."
7. Highlight "ATDISK.SYS." Change ATDISK.SYS from "disabled" to "boot."
8. Shutdown the system.
9. Power off and disconnect the CDROM drive.

Microsoft has implemented a permanent fix for this problem in Windows NT version 4.0.

WindowsNT is a trademark of the Microsoft Corporation.

SAS KEYWORDS:

PSY2	D/T65XX	6577	6587
IBMPC	PSVP	PSVPERR	PSY2ERR
D/T6587	PC 350	PC350	PC300
PC 330	PC330	40216	PSVPCDROM
PSY2CDROM	PSVPPROG	PSY2PROG	

1.4.553 "INSUFFICIENT MEMORY" MESSAGE LOADING DIAGNOSTICS

Record number: H126953

Device: D/T9595
 Model: M
 Tip key:
 Date created: O95/03/27
 Date last altered: A95/03/29

SYMPTOM:

While loading the Advanced Diagnostics on a PS/2 system, the following message is displayed:

"Insufficient memory"

The list of options to be tested may be incomplete.

Affected systems: All PS/2 systems running IBM diagnostics.

PROBLEM ISOLATION AIDS:

1. The memory diagnostics run without error.
2. Removal of one or more adapter, may correct the problem.

FIX:**Background:**

The diagnostic control program (DCP), resident on the Advanced Diagnostics Diskette (also pre-loaded into the system partition non-array systems), uses DOS to provide the the operating environment. Therefore, it has the 640KB memory limitation imposed by DOS.

When the DCP begins testing, it loads all of the .DGS files that are available from either the Diagnostics Diskette or from the system partition. In certain hardware configurations, the total memory required by the diagnostics exceeds the 640KB DOS limitation. In this case, an "Insufficient Memory" error message is displayed. Execution will continue, but for those options/devices where the diagnostics did not get loaded, they will be missing from the list displayed by the DCP and are not testable.

This situation is more likely to occur on larger systems with more Micro Channel slots due to their greater expansion capability.

Temporary fix:

Using the BACKUP copy of the system partition diskettes for the non-RAID array system, or the BACKUP copy of the reference and diagnostic diskettes for the RAID array system perform the following:

1. Rename the KYBD.DGS and KEYBOARD.DGS files to KYBD.TMP and KEYBOARD.TMP, respectively.
2. Then, for the non-array system, use the "Restore System Programs" option from the Main Menu to copy these updated diskettes into the system partition.

For the array system, simply use the MODIFIED BACKUP copies of the reference and diagnostic diskettes.

With the files renamed, the DCP will not load the keyboard diagnostics files. Since keyboard problems tend to be obvious. With the files renamed, the DCP will not load the keyboard diagnostics files. This should free up enough memory to load the remaining diagnostics. Since keyboard problems tend to be obvious This should not be a concern. Should it become necessary or desirable to execute the keyboard diagnostics, the original reference and diagnostics diskettes (RAID array or non-RAID array system) can be used.

Permanent fix:

A new version of the DCP will be released in the future that will overcome this limitation for future systems, both array and non-array, beginning with the PC Server 720 (est. avail. 6/30/95); however this new DCP will not solve the problem for prior array systems (e.g., 9595 and 8641), or for systems prior to the PC Server 720 using non-IBM SCSI adapters (e.g., Adaptec).

SAS KEYWORDS:

PSY2	PSY2DIAG	PSY2PROG	PSY2ERR
D/T8595	D/T9585	D/T8580	D/T8590
D/T9595	D/T8641	D/T8570	D/T8560
D/T8550	D/T8565	9595A	9595

PSY2 RETAIN TIPS

"INSUFFICIENT MEMORY" MESSAGE LOADING DIAGNOSTICS

8595	8590	9590	8580
8570	8560	8550	8565
D/T8565			

1.4.554 "IRQ 00 NOT BEING SERVICED" ERRORS IN ERROR LOG

Record number: H083867

Device: D/T9577
Model: M
Tip key:
Date created: 096/07/10
Date last altered: A96/07/10

SYMPTOM:

IBM PS/2 9576i, 9576s, 9577i and 9577s systems may log "IRQ 00 Not Being Serviced" errors in the system error log while copying files from the hardfile to the floppy drive.

PROBLEM ISOLATION AIDS:

None

FIX:

Install Flash BIOS update 7677FLSH.EXE (Rev. 8 G7GT60A).

Obtain the latest PS/2 9576/9577 Flash BIOS updates from the IBM PC Company BBS system by calling 1-919-517-0001. Locate the "Reference and Adapter Diskettes" section (section #27) for the file titled:

7677FLSH.EXE - Rev. 8 G7GT60A 9576/77 Flash Update
Flash BIOS updates may also be downloaded via the Internet from the IBM Personal Computer File Library by searching the following Internet URL:

<http://www.pc.ibm.com/files.html>

If the failure persists after installing the Flash BIOS update, replace the system board.

SAS KEYWORDS:

PSY2	IBMPC	PSY2ERR	PSY2FDSK
D/T9577	9576	9577	PSY2DSKT

"M" KEY NOT ACCEPTED FOR PASSWORD ON AZERTY KEYBOARD

1.4.555 "M" KEY NOT ACCEPTED FOR PASSWORD ON AZERTY KEYBOARD

Record number: H135895

Device: D/T6877
Model: M
Tip key:
Date created: 096/12/30
Date last altered: A96/12/30

SYMPTOM:

IBM PC 700 Series 6877 and 6887 systems may not accept the "M" key as a valid Power-on-Password or Administrator Password character from an AZERTY keyboard (AZERTY is the standard European keyboard key layout).

PROBLEM ISOLATION AIDS:

When attempting to set a Power-on-Password or an Administrator Password using the systems Setup Utility, the "M" character is not accepted.

The Flash BIOS level is LQJT36A or lower.

FIX:

Obtain and install Flash BIOS level LQJT39A or higher. The current Flash BIOS level is LQJT40A. Flash BIOS updates may be obtained from the IBM PC Company BBS system by calling 1-919-517-0001. View the "IBM PC 300/700 Files" section (section #21) for the file titled:

LQJT39A.EXE - Flash BIOS updt diskette 6877/6887 v39
- OR -
LQJT40A.EXE - Flash BIOS updt diskette 6877/6887 v40

The Flash BIOS update may also be downloaded via the Internet from the IBM Personal Computer File Library by searching the following Internet URL:

<http://www.pc.ibm.com/files.html>

SAS KEYWORDS:

PSVP	PSY2	IBMPC	PSY2MCD
PSVPMCD	PC 700	PC730	D/T6887
UNCLASSIFIED			

"NO BOOTABLE MEDIA" ERROR WITH 4.2GB IDE HARDFILES

1.4.556 "NO BOOTABLE MEDIA" ERROR WITH 4.2GB IDE HARDFILES

Record number: H162342

Device: D/T6588
 Model: M
 Tip key:
 Date created: 098/01/08
 Date last altered: A98/01/08

SYMPTOM:

After installing an IBM 4.2GB IDE hardfile that has been preloaded or previously installed in another system, the following, or similar POST error message is displayed:

"162 Configuration Change
 No Bootable Media"

PROBLEM ISOLATION AIDS:

This tip applies to the IBM PC300XL Machine Type 6588, and IBM IntelliStation M-Pro Machine Type 6888 installed with the IBM Model DCAA-34330, 4.2GB IDE hardfile with 8192 cylinders.

The hardfile will have been formatted and preloaded in another system prior to being installed into the above mentioned models.

FIX:

The IBM Model DCAA-34330 IDE hardfile with 8192 cylinders must be repartitioned and reformatted in the IntelliStation M-Pro or PC300XL system it is intended to be used in prior to being installed with an operating system.

SAS KEYWORDS:

PSY2	PSY2FDSK	PSVP	PSVPFDSK
DCAA34330	HLPCTR_5643	D/T6588	D/T6888
6588	6888	UNCLASSIFIED	

1.4.557 "NO ROOM PC ADDRESS" MSG W/5250 & PS/VALUEPOINT

Record number: H124661

Device: D/T6384
 Model: M
 Tip key:
 Date created: 094/07/18
 Date last altered: A94/07/18

SYMPTOM:

PS/VALUEPOINT SYSTEMS (ALL MACHINE TYPE AND MODELS) MAY DISPLAY A MESSAGE STATING "NO ROOM PC ADDRESS SPACE FOR 5250 RAM" WHEN THE ENHANCED 5250 EMULATION PROGRAM IS STARTED.

PROBLEM ISOLATION AIDS:

THE ENHANCED 5250 EMULATION ADAPTER REQUIRES 8KB OF ROM THAT MUST BE MAPPED TO THE UPPER MEMORY REGION OF THE SYSTEM.

FIX:

IF THE CUSTOMER IS USING A MEMORY MANAGER SUCH AS EMM386 OR QEMM, ENSURE THAT AN "EXCLUDE" PARAMETER IS USED TO KEEP THE NECESSARY ROM SPACE AVAILABLE FOR THE 5250 ADAPTER.

BELOW IS AN EXAMPLE OF THE EMM386 STATEMENT USED IN THE CONFIG.SYS FILE AND A LIST OF OTHER MEMORY ADDRESSES. THE STATEMENT SHOULD FOLLOW THE "HIMEM.SYS" AND "DOS=HIGH,UMB" STATEMENTS IN THE CONFIG.SYS.

EXAMPLE: DEVICE=C: \DOS\EMM386.EXE X=DC00-DDFF

```

                AC00-ADFF
                BC00-BDFF
                CC00-CDFF
    THE DEFAULT SETTING ==> DC00-DDFF
    FOR THE 5250 ADAPTER   EC00-EDFF
                        FC00-FDFF
    
```

THIS ERROR MESSAGE MAY ALSO OCCUR IF THE "HISCAN" PARAMETER IS USED WITH EMM386.EXE. REMOVE THIS STATEMENT AND RE-TEST. THE USER SHOULD REFER TO THE 5250 DOCUMENTATION FOR ADDITIONAL INFORMATION.

SAS KEYWORDS:

PSVP	PSY2	PSVPADPT	PSY2ADPT
PSVPCOMM	PSY2COMM	D/T6381	D/T6382
D/T6387	6381	6382	6384
6387	D/T6472	PS VP	D/T6482
D/T6484	D/T6492	D/T6494	PSVPERR
PSY2ERR	PSVPPROG	PSY2PROG	

1.4.558 "OS2KRNL IS NOT ACCEPTABLE" MESSAGE

Record number: H124639

Device: D/T8640
 Model: M
 Tip key:
 Date created: 094/07/13
 Date last altered: A94/08/15

SYMPTOM:

During initial installation of the PCSERVER (8640) the following OS/2 error message is observed.

"The file OS2KRNL is not acceptable.
 Insert a system diskette and restart the system."

The system then halts (hangs).

PROBLEM ISOLATION AIDS: None

- a. No POST error is observed. The memory count is correct.
- b. Diagnostics run without error.
- c. DOS may be booted from the diskette drive and a directory listing of the fixed disk C: shows OS/2 files installed.

FIX:

This is not a hardware failure. No hardware problem isolation is required.

OS/2 is not normally pre-loaded on this system, however a small number of 8640 PCSERVER systems were inadvertently shipped with some OS/2 manufacturing exerciser software still installed.

A low level format of the fixed disk (drive C:) will clear the files on the primary drive.

Refer to page 142 of the "PC SERVER User's Handbook," which is shipped with each system, for instructions on how to use the low level format program on the diagnostic diskette. There is nothing on the fixed disk that requires a back-up under these circumstances, therefore the directions to save data may be ignored to save time.

After the low-level format, the customer can continue normal operating system and software installation.

This problem has been eliminated on current production systems.

SAS KEYWORDS:

PSY2	PSY2PROG	PSY2ERR	8640
PC	SERVER	HANG	HALT
INSTALL	EISA	ISA	PCI
OS2			

1.4.559 "PARAMETER OUT OF RANGE" ERROR W/QAPLUS/PRO

Record number: H134952

Device: D/T6260
Model: M
Tip key:
Date created: 096/11/05
Date last altered: A96/11/05

SYMPTOM:

IBM PC 100 Series 6260 systems preloaded with Windows 3.11 may exhibit a "parameter out of range" error in QAPlus/Pro (IBM PC 300/700 Diagnostic Diskette) when the Quick Check option is selected from the Diagnostics menu.

PROBLEM ISOLATION AIDS:

To recreate the failure, perform the following steps:

- 1) Create the QAPlus/Pro diskette using the Diskette Factory.
- 2) Boot the system using the QAPlus/Pro diskette.
- 3) At the Main Menu, select Diagnostics, then select Quick Check.

An error message is displayed stating that the "parameter is out of range." The system reboots when the ENTER key is pressed.

FIX:

Obtain QAPlus/Pro version 5.43 or higher. The current version of QAPlus/Pro is level 5.45 and is available from the IBM PC Company BBS system by calling 1-919-517-0001. Search the "IBM PC 300/700 Files" section (section #21) for the file titled:

LKGT28A.EXE - QAPLUS/PRO BOOTABLE V5.45 (6560/6260)

The update may also be downloaded via the Internet from the IBM Personal Computer File Library located at the following Internet URL:

<http://www.pc.ibm.com/files.html>

The search facility may be used to locate the file using the filename stated above.

QAPlus/Pro is a trademark of Diagsoft, Inc.

Windows is a trademark of the Microsoft Corporation.

SAS KEYWORDS:

PSVP	PSY2	IBMPC	PSVPDIAG
PSY2DIAG	PSVPERR	PC100	47454
PSY2ERR			

1.4.560 "PATH NOT FOUND" ERROR RUNNING IBMSETUP ON PC 700

Record number: H132814

Device: D/T6877
 Model: M
 Tip key:
 Date created: 096/02/28
 Date last altered: A96/02/28

SYMPTOM:

IBM PC 700 Series 6877 and 6887 systems preloaded with DOS and Windows 3.11 may exhibit a "Path not found" error when performing "IBMSETUP."

PROBLEM ISOLATION AIDS:

When using the RTC (Ready to Configure) CDROM to create LAN Image diskettes, all files are not copied to the diskette. The system returns to the main menu with no error message posted. This ONLY affects the LAN Image diskette creation process.

When IBMSETUP is run from the LAN Image diskette created in the step above, a "Path not found" message will be displayed.

The IBMRTC directory on the diskette contains only 8 files, but should have a total of 16 files.

FIX:

To eliminate this problem, perform the following steps in the sequence given:

- 1) Create CDROM drivers from the Diskette Factory of RTC.
- 2) Remove the CDROM drivers from the CONFIG.SYS and AUTOEXEC.BAT files from the system hard file.
- 3) Reboot the system. The CDROM drivers should NOT load.
- 4) Install the CDROM drivers using the diskette created in step #1 using the "A: CDSETUP" command.
- 5) The following lines should appear in the CONFIG.SYS and AUTOEXEC.BAT files:
 AUTOEXEC.BAT- "LH C: \DOS\MSCDEX /D: IBMCD001 /M: 10"
 CONFIG.SYS - "DEVICEHIGH=C: \CDROM\IBMIDECD.SYS /D: IBMCD001"
- 6) Reboot the system.
- 7) The LAN Image diskettes may be re-created from the RTC CD.

SAS KEYWORDS:

PSY2	D/T68XX	6887	6877
IBMPC	PSVP	PSVPDSKT	PSY2DSKT
D/T6887	PSY2PROG	PSVPPROG	PSVPERR
PSY2ERR	PC750	PC700	PC 730
PC 750	PC730	PSVPCDROM	PSY2CDROM
40622			

"RPL HALTED" ERROR W/IBM LAN ADAPTER FOR ETHERNET

1.4.561 "RPL HALTED" ERROR W/IBM LAN ADAPTER FOR ETHERNET

Record number: H01737 Number of altered copies: 1

Device: D/T6577
 Model: M
 Tip key:
 Date created: 096/06/19
 Date last altered: A97/01/23

SYMPTOM:

IBM PC 300/700 Series 6577, 6587, 6877 and 6887 may exhibit an "RPL Halted" error message at the beginning of the RIPL operation, immediately following the POST test beep when using the IBM LAN Adapter for Ethernet.

PROBLEM ISOLATION AIDS:

Configure the adapter to perform the RIPL function, then configure the System Setup Startup Options to start the system from the network instead of the floppy drive or hardfile. When the system is restarted, the "RPL Halted" message appears after POST.

FIX:

Do not replace hardware. Verify that the network, system, and adapter configurations are correct.

An updated EPROM has been developed and made available to eliminate this failure. This is a customer-installable replacement which is ordered directly from the IBM Support Center for the IBM LAN Adapter for Ethernet.

THE EPROM UPDATE IS PROVIDED TO ELIMINATE THE SYMPTOM DESCRIBED ABOVE. OTHER LAN RELATED PROBLEMS SHOULD BE ISOLATED USING NORMAL PROBLEM DETERMINATION PROCEDURES OR DIRECTED TO THE IBM SUPPORT STRUCTURE FOR ASSISTANCE.

Contact IBM Support at 1-800-237-5511 and request the level 2.3 EPROM update for the IBM LAN Adapter for Ethernet. Reference the failure symptom and this tip number.

SAS KEYWORDS:

PSY2	D/T65XX	6577	6587
IBMPC	PSVP	PSVPADPT	PSY2ADPT
D/T6587	PC 350	PC350	PC300
PC 330	PC330	43790	PSVPCOMM
PSY2COMM	D/T6877	D/T6887	6877
6887	PC 700	PC 730	PC 750

"SENSE KEY" ERRORS W/FUTURE DOMAIN DIAGNOSTICS

1.4.562 "SENSE KEY" ERRORS W/FUTURE DOMAIN DIAGNOSTICS

Record number: H082244

Device: D/T6384
 Model: M
 Tip key:
 Date created: 094/10/05
 Date last altered: A95/10/30

SYMPTOM:

"Sense Key 05" and "Sense Key 24" errors may be displayed while using Future Domain diagnostics version 4.0 in a PS/ValuePoint 6382/S, 6384/D or 6387/T system.

PROBLEM ISOLATION AIDS:

The adapter and attached SCSI devices may function properly under user applications.

False sense key errors may result when using the OEM Future Domain Diagnostic diskette version 4.0 to diagnose IBM SCSI devices, rather than the "made for IBM" version of the IBM 16 Bit AT Fast SCSI Diagnostics, version 1.2 or higher. The OEM Future Domain diagnostics do not support all IBM SCSI Devices.

NOTE: The IBM 16 Bit AT Fast SCSI Adapter is made for IBM by Future Domain. Future Domain markets a similar adapter under the Future Domain logo.

FIX:

To properly diagnose potential IBM 16 Bit AT Fast SCSI adapter or device problems in a PS/ValuePoint system, utilize the diagnostic diskette that accompanies the option, version 1.2 or higher.

The diagnostics are available from Future Domain by calling (407) 998 - 1900 or (714) 253-0440 and requesting the Future Domain SCSI diagnostics for IBM, version 1.2 or higher.

Future Domain is a trademark of the Future Domain Corporation.

SAS KEYWORDS:

VALUE POINT	PS/VP	PSVP	6384
6382	6387	D/T6382	D/T6387
PSY2	PSVPDIAG	PSY2DIAG	PSVPADPT
PSY2ADPT			

1.4.563 "SERIOUS DISK ERROR" W/BANYAN VINES & WINDOWS 3.1

Record number: H123394

Device: D/T6885
 Model: M
 Tip key:
 Date created: 096/11/18
 Date last altered: A96/11/18

SYMPTOM:

IBM PC 700 Series 6875, 6885, 6876 or 6886 systems may display a "Serious disk error writing to drive C: " message in Windows 3.1 while connected to a server running Banyan Vines 5.53(0) and attempting to save a file to the local hardfile.

PROBLEM ISOLATION AIDS:

Systems running DOS 5.02, and Microsoft Windows 3.1 on a client system using a SCSI hardfile and connected to a server running Banyan Vines 5.53(0) are affected.

The failure occurs when accessing Microsoft Windows applications through the network and saving the modified files to the local hardfile.

FIX:

To eliminate this failure, perform the following steps:

- 1) Edit the CONFIG.SYS and AUTOEXEC.BAT files to remove or "REM" SMARTDRV.EXE from each file if present.
- 2) Start Windows at the client end and access the Control Panel in the Main group.
- 3) Click on the "386 Enhanced" icon.
- 4) Click on "Virtual Memory."
- 5) Click on "Change", then check the box labeled "32 Bit Disk Access."
- 6) Exit and reboot the system.

If the failures persist, continue normal problem determination to isolate the failing application or FRU.

Windows is a trademark of the Microsoft Corporation.
 Banyan Vines is a trademark of Banyan Systems Incorporated.

SAS KEYWORDS:

PSVP	PSY2	IBMPC	PSY2ERR
PSVPERR	PSY2COMM	PSVPCOMM	PSY2PROG
PSVPPROG	UNCLASSIFIED	52441	D/T6886
D/T6876	D/T6875	PC750	PC730
PC 750	PC 750		

1.4.564 "SETUP NOT COMPLETED SUCCESSFULLY" MESSAGE ON 6577/87

Record number: H133949

Device: D/T6577
 Model: M
 Tip key:
 Date created: 096/09/12
 Date last altered: A96/10/08

SYMPTOM:

IBM PC 300 & 365 Series 6577, 6587 and 6589 systems preloaded with Microsoft WindowsNT 3.51 may display a "Setup Not Completed Successfully" message on the initial startup of the system (out-of-box failure).

PROBLEM ISOLATION AIDS:

If the "Setup Not Completed Successfully" message is displayed, there is no option to bypass the error and continue to perform the WindowsNT setup routine.

FIX:

The cause of the failure is the system was powered-on at some point after manufacture and allowed to IPL. The initial IPL of a system with a WindowsNT preload performs a setup routine which MUST be completed once started. Systems exhibiting this failure were not allowed to complete the setup routine.

A bootable recovery diskette is available from the IBM PC Company BBS at 919-517-0001 to resolve this failure. The diskette allows the system to continue the WindowsNT Setup routine. The file is titled NTRECOV.EXE. There is a README file on the diskette with additional instructions.

WindowsNT is a trademark of the Microsoft Corporation.

SAS KEYWORDS:

PSVP	PSY2	PSVPERR	PSY2ERR
PSVPPROG	PSY2PROG	PC 330	IBMPC
PC 330	PC 350	D/T6587	52791
D/T6589	PC365		

1.4.565 "SINGF30" GENERAL PROTECTION FAULT IN NETFINITY

Record number: H133206

Device: D/T6877
 Model: M
 Tip key:
 Date created: 096/03/25
 Date last altered: A96/03/25

SYMPTOM:

IBM PC 700 Series 6877 and 6887 may display a General Protection Fault (GPF) in Netfinity while running in a Microsoft Windows 3.1 environment.

PROBLEM ISOLATION AIDS:

The GPF may be displayed while accessing the Adapter Information under Netfinity. The sequence required to display the error is as follows:

- Click on the Netfinity Icon.
- Click on Service Manager.
- Click on System Info.
- Click on Adapter Info.

A GPF is displayed with the following common information:
 "SINGF30"; Module MGAX64.drv; 002b: 2037"

FIX:

Do not replace any hardware. The adapter information that Netfinity is attempting to retrieve from the Matrox Millennium Graphics adapter is not accessible.

The on-board S3 Video controller in the 6877 & 6887 may be interrogated by Netfinity without errors.

Windows is a trademark of the Microsoft Corporation.

SAS KEYWORDS:

PSY2	D/T68XX	6887	6877
IBMPC	PSVP	PSVPDISP	PSY2DISP
D/T6887	PSVPPROG	PSY2PROG	PSVPERR
PC 750	PC750	PC700	PC 730
PSY2ERR	PC730	41499	PSY2ADPT
PSVPADPT			

1.4.566 "SYS1728" DISKCACHE MSG W/2GB SCSI FIXED DISK

Record number: H12664

Device: D/T8550
 Model: M
 Tip key:
 Date created: 093/07/21
 Date last altered: A94/08/15

SYMPTOM:

The following operating system error message is displayed by OS/2 1.3:

SYS1728: The value specified for the DISKCACHE statement in the CONFIG.SYS file is too small.

This error message may be seen when a 2GB or larger SCSI fixed disk has just been installed in an existing system, or the entire system has just been installed.

PROBLEM ISOLATION AIDS: None**FIX:**

The DISKCACHE value is too small for the amount of total DASD (fixed disk size) in the system.

The default size of the cache is 64K bytes with OS/2 1.3.

The disk cache size should be at least 512k bytes with the IBM 2GB SCSI fixed disk installed.

Edit the CONFIG.SYS file and increase the value for the DISKCACHE command; then restart the system.

The OS/2 Command Reference should be consulted for additional information about DISKCACHE.

SAS KEYWORDS:

PSY2	PSY2PROG	PSY2ERR	PSY2FDSK
D/T8550	D/T8560	D/T8565	D/T8570
D/T8580	D/T8590	D/T8595	D/T9595
D/T9590	D/T9577	D/T9576	D/T8556
D/T8557	D/T9585	OS2	PS2
SYS1728			

1.4.567 "TOKEN-NW-206&COLON." ERROR IN NETWARE SERVER

Record number: H132007

Device: D/T8640
 Model: M
 Tip key:
 Date created: O95/12/14
 Date last altered: A95/12/15

SYMPTOM:

When user attempted to load the device driver TOKEN.LAN under Netware 3.12, the following error message is displayed:

"Token-nw-206: An interrupt failed to occur during initialization. Module initialization failed."

PROBLEM ISOLATION AIDS:

The affected system may be either a Server 320 (8640) or a SERVER 520 (8641) with an EISA/PCI system board.

A 3COM 3C679 Token ring adapter is installed.
 The operating system is Novell Netware.

FIX:

The 3COM 3C679 will not function with the TOKEN.LAN driver if the 3COM 3C679 is configured at any address other than D8000 (hexidecimal address).

Note:

This problem may appear to be a lost hardware interrupt, but it is not. No hardware should be replaced.

Netware is a trademark of Novell Inc.
 3COM is a trademark of 3COM Corporation.

SAS KEYWORDS:

PSY2	SERVER	320	520
PSY2ADPT	PSY2PROG	PSY2COMM	D/T8641
8640	8641	PCI	EISA
PCI/EISA	PSY2OEM		

1.4.568 "UNRECOGNIZED BAY" ERROR DURING POST

Record number: H123143

Device: D/T9595
 Model: M
 Tip key:
 Date created: 094/03/16
 Date last altered: A94/08/15

SYMPTOM:

"Unrecognized Bay 1" errors may be encountered on a limited number of 9595 models 3NG, 3PG, 3QT, 3NT, AND 3PT.

PROBLEM ISOLATION AIDS:

If this symptom is experienced, inspect the single drive fixed disk mounting tray, FRU P/N61G3527 located in the upper 5 1/4" Bay, for a mounting screw and bracket making contact with (shorting against) a printed circuit pattern on the connector attachment card mounted on the rear of the tray.

This problem was identified in early production systems and action was taken to eliminate the problem. However, a small number of systems may have been shipped prior to this problem being identified.

All systems on hand were corrected by the addition of nylon insulating washers and a longer mounting screw to attach the connector attachment card to the DASD tray assembly.

FIX:

If the attachment card is shorted to the bracket, replace the old tray assembly with a new (modified) DASD tray assembly by ordering FRU P/N61G3527 using normal parts ordering procedures.

Current FRU parts have been modified to provide proper clearance between the tray and the circuit card.

There are two ways to identify current or reworked tray assemblies:

1. A yellow dot on the frame of new production trays.
2. "TS" written in marker on the reworked trays.

SAS KEYWORDS:

PSY2	PSY2ERROR	PSY2FDSK	D/T9595A
ARRAY	RAID	PSY2PART	SERVER
95			

1.4.569 "161 163" ERRORS

Record number: H02692

Device: D/T8550
Model: M
Tip key:
Date created: 087/04/02
Date last altered: A93/08/04

SYMPTOM: "161 163" ERROR

PROBLEM ISOLATION AIDS: NONE

FIX: CONFIGURE THE SYSTEM

A 161 163 ERROR MAY OCCUR WHEN INSTALLING A SYSTEM FOR THE FIRST TIME AFTER REPLACING THE SYSTEM BOARD OR REPLACING THE BATTERY. CMOS IS BATTERY POWERED STORAGE WHICH CONTAINS THE SYSTEM CONFIGURE INFORMATION. CMOS DATA MAY BE LOST ON THE SYSTEM BOARD IF THE BATTERY POWER IS REMOVED WHEN THE SYSTEM IS POWERED OFF. RUN AUTO CONFIG AND SET UP TO RESTORE CONFIGURATION, TIME DATE, KEYBOARD SPEED AND POWER ON PASSWORD.

SAS KEYWORDS:

8560SYSERR	8580SYSERR	8550SYSERR	PSY2ERR
PSY2	8555SYSERR	8565SYSERR	8573SYSERR
8570SYSERR	D/T8560	D/T8580	D/T8550
D/T8573	D/T8555	D/T8570	D/T8565

1.4.570 A POST 225 ERROR CODE INDICATES a MEMORY SPEED PROBLEM

Record number: H08910

Device: D/T8570
 Model: M
 Tip key:
 Date created: 091/01/17
 Date last altered: A92/03/05

SYMPTOM:

THE SYSTEM DISPLAYS POST 225 ERRORS AFTER THE INSTALLATION OF A MEMORY SIM (OPTION OR FRU).

PROBLEM ISOLATION AIDS:

DETERMINE THE SPEED OF THE NEWLY INSTALLED MEMORY. THIS ERROR IS AN INDICATION OF A MEMORY SIM SPEED PROBLEM.

FIX:

REPLACE THE NEWLY INSTALLED MEMORY WITH MEMORY OF THE CORRECT SPEED. THE HARDWARE MAINTENANCE SERVICE MANUAL (HMS) WILL CORRELATE THE CORRECT MEMORY PART NUMBER TO SYSTEM BOARD PART NUMBER.

SAS KEYWORDS:

PSY2	PSY2MEM	PSY2ERR	8570SYSTEMEM
8570SYSERR	8573SYSTEMEM	8573SYSERR	8580SYSTEMEM
8580SYSERR	8590SYSTEMEM	8590SYSERR	8595SYSTEMEM
8595SYSERR	D/T8560	D/T8565	D/T8573
D/T8580	D/T8590	D/T8595	

1.4.571 A.S.M.A. DIAL-OUT FUNCTION MAY NOT COMMUNICATE ALERT

Record number: H163746

Device: D/T8650
 Model: M
 Tip key:
 Date created: 098/05/19
 Date last altered: A98/05/20

SYMPTOM:

The Automatic Dialout function of the ASMA (Advanced Systems Management Adapter) dials out, but the receiving numeric or alphanumeric pager does not receive the alert.

PROBLEM ISOLATION AIDS:

All of the following must be true for this TIP to apply:

- The System is any IBM PC Server or Netfinity server that supports and is properly configured with a ASMA (Advanced Systems Management Adapter) Option p/n94G7578 (FRU p/n12J4743) or Option p/n94G5570 (FRU p/n76H3240).
- The Server is properly configured with a supported modem that the ASMA is properly configured to operate.

FIX:

Add one or more commas " , " at the end of the telephone number configured for the "Alert Dialout" function in the "Service Processor Manager". Each comma will cause a 2 second delay* from the time that the ASMA completes dialing to the time that the numeric or alphanumeric alert is transmitted.

See the "Service Processor Manager for Netfinity User's Guide" p/n05L1468 for setting dialout functions for the ASMA.

The "Service Processor Manager for Netfinity User's Guide" is available in pdf format on the IBM Website at the following URL:

<http://www.pc.ibm.com/files>

Search on "Service Processor Manager"

*The delay time is dependent on the Paging Service receiving the dialout.

SAS KEYWORDS:

PSY2	D/T8640	D/T8641	D/T8650
D/T8651	D/T8644	ASMA	DIALOUT
ALERT	P/N94G7578	P/N12J4743	P/N94G5570
P/N76H3240	D/T8639	UNCLASSIFIED	

1.4.572 ACCESS VIOLATION RUNNING VIEWPERF 5.0 ON 6899

Record number: H136890

Device: D/T6899
Model: M
Tip key:
Date created: 097/03/18
Date last altered: A97/03/18

SYMPTOM:

IBM IntelliStation Z Pro 6899 systems running Microsoft WindowsNT v4.0 may exhibit an "Access Violation" in a kernel call to the GLZIC while executing the DRV viewset test of ViewPerf version 5.

PROBLEM ISOLATION AIDS:

This failure has only occurred on IBM IntelliStation Z Pro 6899 systems with a dual processor configuration and an Intergraph video adapter installed.

ViewPerf is a portable OpenGL performance benchmark program developed by IBM.

FIX:

Contact Intergraph for a ViewPerf executable that functions on a dual processor system. Intergraph can be reached at 1 - 800-633 - 7248 or at the following Internet URL:
<http://www.intergraph.com/ics/support/support.htm>

Intergraph is a trademark of Intergraph Computer Systems.

SAS KEYWORDS:

PSVP	PSY2	PSVPADPT	PSY2ADPT
PSY2OEM	PWS	PSY2DISP	IBMPC
UNCLASSIFIED	61139	PSVPDISP	PSVPOEM
PSVPERR	PSY2ERR		

ADAPTEC 1640 SCSI ADAPTER FAILS IN PS/2 SYSTEMS

1.4.573 ADAPTEC 1640 SCSI ADAPTER FAILS IN PS/2 SYSTEMS

Record number: H132520

Device: D/T9576
 Model: M
 Tip key:
 Date created: 096/02/06
 Date last altered: A96/02/06

SYMPTOM:

The Adaptec 1640 Micro Channel SCSI Adapter may fail to recognize attached SCSI devices such as the JetStore 2000 Tape Backup Unit or fail to boot from a hardfile that has DOS as the primary operating system.

PROBLEM ISOLATION AIDS:

PS/2 8556, 8557, 9556, 9557, 9576, 9577 and Server 500 systems may all be affected.

Reported failures regarding the Adaptec 1640 Micro Channel SCSI adapter include the following:

- 1) PS/2 9577 running OS/2 2.11 with the Adaptec 1640 adapter and a JetStore 2000 Tape Backup Unit installed. The "AHA1640.ADD" device driver would fail to load thus preventing the SCSI adapter from functioning properly.
- 2) Any PS/2 model mentioned above with a hardfile connected to the Adaptec 1640 adapter AND loaded with either PC DOS or MS DOS would fail to boot. The drive could be formatted with DOS, but a hang condition occurs when the system is rebooted.

System and adapter diagnostics run without failures.

FIX:

The Adaptec 1640 Micro Channel SCSI Adapter was not tested by IBM for use in PS/2 systems. There is a BIOS incompatibility between the adapter and the PS/2 systems mentioned above.

Customers that have purchased the Adaptec 1640 Micro Channel adapter for use in the PS/2 systems should be directed back to their point of purchase or to Adaptec Technical Support at 1 - 800-959 - 7274.

SAS KEYWORDS:

PSY2	IBMPC	PSY2ADPT	PSY2OEM
PSY2PART	D/T8556	D/T8557	D/T9556
D/T9557	D/T9576	D/T9577	D/T8641
PSY2FDSK			

1.4.574 ADAPTER RESOURCE CONFLICT IN PC 700 MICRO CHANNEL

Record number: H133293

Device: D/T6876
 Model: M
 Tip key:
 Date created: 096/04/19
 Date last altered: A96/04/19

SYMPTOM:

IBM PC 700 Series 6876 and 6886 Micro Channel systems and PS/2 9576/9577 models ANG and BNG may exhibit resource conflicts when attempting to use two or more adapters in OS/2.

An incorrect ABIOS.SYS file installed during the installation of OS/2, is not allowing interrupt sharing to occur.

PROBLEM ISOLATION AIDS:

When installing OS/2 on a 6876/6886 or 9576/9577 system that does not contain a system partition, and the system posts a message stating "Cannot find ABIOS.SYS" after the first IPL, then this tip applies.

This failure occurs because the correct ABIOS.SYS, and SF83900.BIO (6886/6876), or SF8B000.BIO (9576/9577) files are not presented when OS/2 is installed. Each of these Micro Channel systems requires a system specific ABIOS file to function properly, which includes shared interrupt capability.

The result of this failure will be seen in the following example: If the user installs an IBM Multiprotocol adapter and also wishes to use an on-board serial port for an SDLC connection, OS/2 WARP may report that "the COMM port is being used by another resource."

FIX:

To install OS/2 2.1, or OS/2 WARP in a Micro Channel system that does not contain a system partition, the Installation Diskette must be modified in the following manner:

1. Make a copy of the OS/2 Installation Diskette. The Installation Diskette is different depending on what type of install process is chosen (i.e, CID INSTALL, WARP CONNECT, or CDROM).

Type DISKCOPY A: A: and press ENTER.
 Remove and insert diskettes when prompted to do so.

2. Delete the SF83900.BIO or SF8B000.BIO and ABIOS.SYS files from the copy of the Installation Diskette.
 (SF83900.BIO for 6886/6876 and SF8B000.BIO for 9576/77)
3. Copy the SF83900.BIO or SF8B000.BIO and ABIOS.SYS files from the Reference Diskette to the copy of the Installation Diskette.

Note: This Installation Diskette copy is now system-specific.
 A modified Installation Diskette will need to be created for each type of system OS/2 will be installed.

4. Use this copy of the diskette during the installation process.
5. Begin the installation of the system by inserting the copy of the Installation Diskette and reboot the system.

SAS KEYWORDS:

PSVP	PSY2	PSVPPROG	PSY2PROG
PSVPERR	PSY2ERR	IBMPC	D/T6886
D/T9576	D/T9577		

1.4.575 ADAPTER RESOURCE CONFLICT ON FIRST WINDOWS95 IPL

Record number: H133509

Device: D/T6560
 Model: M
 Tip key:
 Date created: 096/08/02
 Date last altered: A96/08/02

SYMPTOM:

IBM PC 340 Series 6560 systems preloaded with Microsoft Windows95 may exhibit an adapter installation failure during the initial power on of the system with a LAN Adapter installed.

The Windows95 Control Panel will indicate that the LAN adapter is either not present, not working, or not properly installed by displaying a yellow exclamation mark or a red X next to the LAN adapter entry in the Control Panel Device Manager.

PROBLEM ISOLATION AIDS:

This failure ONLY affects 6560 systems on the very FIRST power-on cycle with the LAN adapter ALREADY installed.

Systems that have been previously powered on to IPL Windows95 and powered off will not exhibit this failure when the LAN adapter is installed. The failure ONLY occurs when the LAN adapter is present during the first IPL of Windows95 while the operating system is performing the initial check of the system configuration.

FIX:

The cause of the failure is that Windows95 sees the single LAN adapter as 2 separate adapters and configures both the actual and the "phantom" adapter with the same system resources. This results in the Control Panel Device Manager marking the "phantom" LAN adapter card icon with either a yellow exclamation mark or a red X.

To resolve this failure, perform the following steps:

- 1) Access the Control Panel Device Manager.
- 2) Select the "phantom" LAN adapter card.
- 3) Click on the REMOVE button.
- 4) Confirm the activity and allow Windows95 to reboot.

When the system reboots, the Control Panel Device Manager will correctly indicate that only one LAN adapter card is installed.

Windows95 is a trademark of the Microsoft Corporation.

SAS KEYWORDS:

PSVP	PSY2	PSVPPROG	PSY2PROG
PSVPCOMM	PSY2COMM	PSVPADPT	PSY2ADPT
44824	PSVPERR	PSVPERR	PC 300
IBMPC			

1.4.576 ADAPTERS CARDS NOT RECOGNIZED IN 6387/T

Record number: H121539

Device: D/T6387
 Model: M
 Tip key:
 Date created: 093/10/20
 Date last altered: A94/01/06

SYMPTOM:

PS/VALUEPOINT 6387/T MAY FAIL TO RECOGNIZE AN INSTALLED ADAPTER. ADAPTERS INSTALLED MAY FAIL DIAGNOSTIC APPLICATIONS AND FAIL TO LOAD APPLICATION SOFTWARE WITH ERRORS RANGING FROM "ADAPTER NOT FOUND" TO "ADAPTER INITIALIZE FAILURE."

PROBLEM ISOLATION AIDS:

PS/VALUEPOINT ADVANCED DIAGNOSTICS PERFORMED ON THE SYSTEM UNIT RUN WITHOUT FAILURES. PS/VALUEPOINT ADVANCED DIAGNOSTICS CANNOT BE USED TO TEST FOR THE PRESENCE OR FUNCTIONALITY OF ADAPTER CARDS.

CHECK THE RISER CARD FOR FRU P/N92F0393 AND "B121K" OR "B11UE" PRINTED ON THE BAR CODE LABEL.

NOTE - PS/VALUEPOINT SYSTEMS DO NOT DISPLAY INSTALLED ADAPTERS IN THE "CONFIGURATION UTILITY." DO NOT CHECK FOR THE PRESENCE OF AN ADAPTER USING THIS FEATURE. DIAGNOSTIC APPLICATIONS, CUSTOM SOFTWARE OR DRIVERS WRITTEN FOR THE ADAPTER CARD ARE USED TO DETERMINE IF THE CARD IS INITIALIZED AND FUNCTIONAL.

IDENTIFY THE SYSTEM SERIAL NUMBER AND THE BAR CODE LABEL AFFIXED TO THE RISER CARD. AFFECTED RISER CARDS WERE SHIPPED IN RANGE OF SYSTEMS LISTED BELOW. NOT ALL SERIAL NUMBERS IN THE LIST BELOW WILL HAVE THE AFFECTED RISER CARDS. THE BAR CODE LABEL MUST HAVE "B121K" OR "B11UE" AS THE FIRST 5 CHARACTERS.

M/T	MODEL	SERIAL NUMBER
6387	- M00	23A0311 - 23A0660
6387	- M70	23AA451 - 23AB533
6387	- M71	NOT AFFECTED
6387	- W00	23N0218 - 23N1362
6387	- W90	23FF258 - 23FK584
6387	- W91	23V0042 - 23V2681

FIX:

REPLACE THE RISER CARD IF IT MEETS THE CRITERIA ABOVE WITH FRU P/N92F0393. FRU STOCK IS NOT AFFECTED, AND WILL HAVE A DIFFERENT BAR CODE HEADER.

IF PROBLEMS PERSISTS AFTER REPLACING THE RISER CARD, UTILIZE NORMAL PROBLEM DETERMINATION TO ISOLATE THE FAILING FRU.

SAS KEYWORDS:

PSVP	PSY2	PSVPADPT	PSY2ADPT
PSVPPART	PSY2PART	PSVPERR	PSY2ERR
PSY2COMM	D/T6387	D/T6382	

1.4.577 ADOBE ATM ICON REMAINS ON OS/2 DESKTOP

Record number: H105360

Device: D/T6576
 Model: M
 Tip key:
 Date created: 096/10/04
 Date last altered: A96/10/04

SYMPTOM:

IBM PC 300 Series 6576, 6586, 6577, 6587 and 6589 systems may display the Adobe ATM icon on the OS/2 Desktop after starting a seamless WIN-OS/2 session.

PROBLEM ISOLATION AIDS:

A seamless WIN-OS/2 session (WIN-OS/2 session displayed in a window on the OS/2 Desktop as opposed to a WIN-OS/2 Full Screen session) started with the Adobe Type Manager enabled displays the ATM icon on the OS/2 Desktop until the Desktop is refreshed manually.

The S3 Trio64/64v+ video driver is 2.80.18 or lower.

FIX:

Install S3 Trio64/64v+ video driver level 2.81.05 or higher. The current level S3 Trio64/64v+ video device driver for OS/2 is level 2.85.02

The latest S3 device driver may be obtained from the IBM PC Company BBS system by calling 1-919-517-0001. View the "IBM PC 300/700 Files" section (section #21) for the file titled:

Z01T17A.EXE - V2.81.05 S3 Trio 64/64v+ Driver for OS/2

Z01T32A.EXE - V2.85.02 S3 Trio 64/64v+ Driver for OS/2

The updated device drivers may also be downloaded via the Internet from the IBM Personal Computer File Library by searching the following Internet URL:
<http://www.pc.ibm.com/files.html>

The update is located in the IBM PC 300 & 700 Series Files Section or by using the search facility to locate the file by the names listed above.

Trio64 & Trio64+ are trademarks of S3, Inc.

SAS KEYWORDS:

PSY2	PSVP	PSY2DISP	PSVPDISP
PSVPPROG	PSY2PROG	D/T6586	D/T6577
D/T6587	D/T6589	PC 340	PC 365
PC 350	PC330		

1.4.578 ADVANCED DIAGNOSTICS HANG

Record number: H124054

Device: D/T9595
Model: M
Tip key:
Date created: 094/05/25
Date last altered: A94/08/15

SYMPTOM:

The system hangs while loading diagnostics after the "Control-A" command at the Main Menu, followed by the "System Checkout" selection. All models of the 8595 and 9595 are affected.

PROBLEM ISOLATION AIDS:

If the parallel port is set to "Disabled" and the model 90/95 Diagnostic Diskette version is below version 2.20, hangs may occur.

1. To determine if the parallel port is disabled:

Enter the System Partition, then from the Main Menu, choose "Set configuration." Next, select "View configuration" to determine the setting of the "System board parallel port B" for 9595 systems (which has two parallel ports), or the "System board parallel port" for 8595 systems. Make a note of the customer's parallel port configuration.

2. To determine the Diagnostic Diskette version being used.

Return to the system partition "Main Menu" and select "Display Revision Levels" to determine the Diagnostic diskette version. (This screen may be found under "Other Utilities" at the Main Menu on some systems.)

The following screen will be seen:

Revision level	X.
Reference Diskette version	X.XX
Diagnostic Diskette version	?..? (Below 2.20 affected)
Diagnostic Version	X.XX
Config. util. version	X.XX

(The information shown as "X" does not matter.)

FIX:

This condition will be corrected in the next IML (Reference and Diagnostic Diskette) update.

Workaround:

Before using the following procedure, save the customer's configuration settings with "Save Configuration". This will allow restoring the original configuration by use of the "Restore Configuration" option.

Before running the Advanced Diagnostics, change the configuration of parallel port B to the default settings (use auto-config.). When testing is completed, reconfigure to the customers original settings by setting it manually or using "Restore Configuration."

SAS KEYWORDS:

PSY2	PSY2DIAG	PSY2ERR	D/T9595A
D/T8595	RAID	PSY2TBD	

ANTIVIRUS ICON REMAINS ON DESKTOP AFTER INSTALLATION

1.4.579 ANTIVIRUS ICON REMAINS ON DESKTOP AFTER INSTALLATION

Record number: H123334

Device: D/T6272
Model: M
Tip key:
Date created: 097/04/15
Date last altered: A97/04/15

SYMPTOM:

The "Complete Your Installation" folder for the IBM Antivirus program may remain on the desktop following installation on IBM PC 300GL Series 6272 & 6282 systems preloaded with WindowsNT v4.0.

PROBLEM ISOLATION AIDS:

Following the installation of all IBM Antivirus components on systems preloaded with WindowsNT v4.0, the "Complete Your Installation" folder should automatically be removed from the desktop. The IBM Antivirus components consist of IBM Antivirus, Configsafe, and IBM DMIBIOS.

FIX:

Highlight the "Complete Your Installation" folder by clicking on the icon once with the left mouse button. When highlighted, click once with the right mouse button to activate the pull-down menu. Choose DELETE to remove the icon from the desktop.

WindowsNT is a trademark of the Microsoft Corporation.

SAS KEYWORDS:

PSVP	PSY2	PSVPPROG	PSY2PROG
IBMPC	61536	PC300GL	UNCLASSIFIED
PC 330	PC 340		

1.4.580 APM FAILS ON IBM PC300-GL WITH WINDOWS 95

Record number: H16124

Device: D/T6282
Model: M
Tip key:
Date created: 097/06/11
Date last altered: A97/08/25

SYMPTOM:

IBM PC300-GL systems running Windows95 fail to go into Advanced Power Management (APM) when this feature is enabled.

PROBLEM ISOLATION AIDS:

This tip applies to systems that have a CDROM drive installed.

FIX:

The CDROM Auto Insert Notification function must be disabled in Windows95 to allow the APM function to work.

To disable Auto Insert Notification in Windows95:

1. Right click on "My Computer" icon.
2. Click on "Properties."
3. Click on "Device Manager" tab.
4. Double click on CDROM.
5. Double click on the installed CDROM drive.
6. Click on "Settings" tab.
7. Click on the "Auto Insert Notification" box to un-check it.
8. Click "OK."

Windows95 is a trademark of Microsoft Corporation.

SAS KEYWORDS:

PSY2	PSY2MISC	PSY2OPER	PSVPMISC
PSVPOPER	D/T6272	APM	CDROM
WINDOWS95	6272	6282	UNCLASSIFIED
67102	67102F_1		

1.4.581 ARABIC WIN95 TOUR DOES NOT WORK ON STARTUP

Record number: H161962

Device: D/T6562
Model: M
Tip key:
Date created: 097/11/24
Date last altered: A97/11/24

SYMPTOM:

After the "Welcome Center" is started under preloaded Arabic Windows95, clicking on the Tour button returns the error message "Cannot Find CD-ROM."

PROBLEM ISOLATION AIDS:

None

FIX:

The Windows95 Tour must be installed via the following steps:

1. Click Start, Settings, then Control Panel.
2. Double click Add/Remove Programs.
3. Click the Windows Setup tab.
4. Double click the Accessories line.
5. Click the check box beside Windows 95 Tour.
6. Click OK, OK, and restart Windows95 for the change to take effect.

Windows and Windows95 are trademarks of Microsoft Corporation.

SAS KEYWORDS:

PSY2	PSY2ERR	PSY2DOC	PSY2MISC
PSVP	PSVPERR	PSVPDOC	PSVPMISC
D/T6562	D/T6592	6562	6592
78668	UNCLASSIFIED		

1.4.582 ARTIC ADAPTER ERROR AFTER AUTO-CONFIG

Record number: H106187

Device: D/T8550
 Model: M
 Tip key:
 Date created: 092/09/18
 Date last altered: A92/11/20

SYMPTOM:

After an Automatic Configuration, the DOS ARTIC Device driver indicates "THE ARTIC ADAPTER CANNOT BE FOUND" or "THE ARTIC ADAPTER IS ASSIGNED AN INVALID INTERRUPT LEVEL."

This affects the following ARTIC adapters

- IBM Realtime Interface Co-Processor Multiport/2
- IBM Portmaster Adapter/A
- IBM X.25 Interface Co-Processor/2
- IBM High Speed Communication Co-Processor

CAUSE:

The current automatic configuration algorithm will always select the adapter configuration address option that occupies the smallest amount of space in the "adapter ROM area." Depending on the software set-up options and application, this may not be adequate. These address options are the same choices displayed during the manual "Change Configuration" function.

This will cause an ARTIC adapter to move its RAM buffer to above 1 mb (megabyte).

PROBLEM ISOLATION AIDS: NONE

FIX:

Using the Reference Diskette (System Partition) "View Configuration, Change Configuration" option, manually configure the ARTIC adapter RAM location to below 1 mb.

Note:

After any subsequent auto-configurations, it will be necessary to manually reconfigure the ARTIC adapters to their original locations below 1 mb.

SAS KEYWORDS:

PSY2	PS2	PS/2	D/T8595
D/T8590	D/T8580	D/T8570	D/T8565
D/T8560	D/T8555	PSY2ADPT	PSY2ERR
D/T8556	D/T8557	D/T9556	D/T9557
D/T9576	D/T9577	PSY2COMM	AUTO CONFIG
D/T9585			

ARTIC AND MOUSE CONFLICT ON INTERRUPT LEVEL 12

1.4.583 ARTIC AND MOUSE CONFLICT ON INTERRUPT LEVEL 12

Record number: H097130

Device: D/T5170
Model: M
Tip key:
Date created: 092/04/06
Date last altered: A93/01/11

SYMPTOM:

WHEN THE ARTIC ADAPTER IS SET TO INTERRUPT LEVEL 12 IN A SYSTEM THAT HAS MOUSE SUPPORT BUILT INTO THE PLANAR, THE ARTIC LOADER WILL POST AN ERROR INDICATING "NO DEVICE RESPONSE" AND THE CARD WILL NOT FUNCTIN. THE DUAL PORT AND MULTIPORT CARDS WILL RETURN AN 84 ERROR ON DIAGNOSTICS, THE MULTIPORT MODEL 2 WILL RETURN AN E0E2 ERROR ON DIAGNOSTICS.

PROBLEM ISOLATION AIDS:

CHECK THE SETTING IF THE INTERRUPT LEVEL ON THE CARD BY RUNNING ARTIC DIAGNOSTICS AND OBSERVING THE CONFIGURATION SCREEN OR BY PHYSICALLY CHECKING THE SETTING ON THE CARD ACCORDING TO THE MAINTENANCE DOCUMENTATION.

FIX:

SET THE ARTIC CARD INTERRUPT LEVEL FOR OTHER THAN 12 ON SYSTEMS THAT HAVE MOUSE SUPPORT ON THE PLANAR.

SAS KEYWORDS:

D/T8525	D/T8530	D/T8535	D/T8540
ARTIC	PCOM	PSY2	

1.4.584 ARTIC 960 DIAGNOSTIC INCOMPATIBLE W/SERVER 720

Record number: H131100

Device: D/T8642
Model: M
Tip key:
Date created: 095/10/02
Date last altered: A95/10/03

SYMPTOM:

Diagnostics for the Artic960 Adapter/A can not be run.

After updating the Reference and Diagnostic diskettes by using the "Copy an Option" function, the Artic960 adapter diagnostic does not appear in the "List of installed devices" when the diagnostics are invoked.

PROBLEM ISOLATION AIDS:

Only the IBM Server 720 with the IBM Artic960 micro channel adapter/A, Option part numbers 61G2925 and 61G2922, with Startup/Option diskettes 61G2424 and 39H807E8 (version 1.04 and lower) are affected.

This is a diagnostic failure only. The Artic960 adapter is otherwise functional with the Server 720. A firmware incompatibility exists between the IBM PC Server 720 and the IBM Artic960 Micro channel Adapter Startup/Option Diskette. This incompatibility prevents the Artic960 adapter from appearing in the diagnostic "List of installed devices," when running the Server 720 diagnostics.

FIX:

Version 1.05 of the ARTIC960 Adapter/A Startup/Option Diskette corrects this problem. It may be down-loaded from the PC Company Bulletin Board System by calling 919-517-0001. The file name is: 9600PT.DSK, dated 09/27/95. It is located in Section 27, on Reference and Adapter Diskettes.

SAS KEYWORDS:

PSY2	SERVER	720	8642
PSY2ADPT	PSY2COMM	PSY2DIAG	ARTIC

1.4.585 AT&T PC/PBX PLATFORM 8556/57 9556/57 HANGS

Record number: H10720

Device: D/T8557
Model: M
Tip key:
Date created: 092/12/01
Date last altered: A95/12/12

SYMPTOM:

AT&T PC/PBX Micro Channel Platform 8556/57 SX, SLC, 486SLC
and 9556/57SLC

- System hangs with or without error code 00021014.
- Problems running the PC/PBX application program.
- PC/PBX hardware diagnostics (DCPDIAG.EXE) fail with the following message:
" Device Driver Installed test? FAILED!
Wrong Device Driver Installed. "
" DCPI Board DMA Test? FAILED! Conflicting Board
DMA Channel 1 or defective PC/PBX Board! "

PROBLEM ISOLATION AIDS:

The PS/2 passes POST and Advanced Diagnostics on the
IBM Hardware.

FIX:

Have customer contact AT&T at the toll free number provided in
the Trouble Shooting section of the AT&T "PC/PBX Platform
Installation and Reference" manual (35-016-101)

SAS KEYWORDS:

D/T8556 D/T8557 D/T9556 D/T9557
PSY2ERR PSY2PROG

1.4.586 ATI GRAPHICS PRO TURBO ADAPTER FAILS IN PC 700

Record number: H132343

Device: D/T6876
 Model: M
 Tip key:
 Date created: 096/01/25
 Date last altered: A96/01/25

SYMPTOM:

The ATI GRAPHICS PRO TURBO PCI video adapter installed in a PC 700 Series Micro Channel 6876 or 6886 system will cause corrupted video during POST or hang the system with a "Starting ATI BIOS" message.

PROBLEM ISOLATION AIDS:

This failure ONLY affects the PCI version of the ATI GRAPHICS PRO TURBO adapter installed in a PC 700 system with a Micro Channel riser card. This includes all 6876 and 6886 systems, and 6875 and 6885 systems that have the Select-A-Bus option installed. The Select-A-Bus option converts an ISA/PCI system to Micro Channel/PCI.

FIX:

The ATI GRAPHICS PRO TURBO PCI video adapter is incompatible with the I/O address mapping scheme in PC 700 Series Micro Channel systems.

Customers that have purchased the ATI GRAPHICS PRO TURBO PCI video adapter for a PC 700 Micro Channel system should be directed back to their point of purchase.

GRAPHICS PRO TURBO is a trademark of ATI Technologies Inc.

SAS KEYWORDS:

PSY2	D/T68XX	68XX	PSVP
IBMPC	PSVPOEM	PSY2OEM	PSY2DISP
PSVPDISP	D/T6886	HUNG	PSY2ADPT
PC 750	PC730	PC700	PC 730
PC750	PSY2ERR	PSVPERR	PSVPADPT

1.4.587 ATI PRO TURBO 1600 NOT SEEN IN WINDOWS 95

Record number: H161649

Device: D/T6898
Model: M
Tip key:
Date created: 097/10/31
Date last altered: A97/10/31

SYMPTOM:

After installing an ATI Graphics Pro Turbo 1600 video adapter, the screen blanks immediately after the SCSI BIOS loads.

PROBLEM ISOLATION AIDS:

This tip applies to the IBM IntelliStation M-Pro, M/T6898.

FIX:

PCI Parity generation must be disabled under PCI Control via the following steps:

1. Press <F1> during post to run the setup utility.
 2. Highlight "Advanced Setup" and press <Enter>.
 3. Highlight "PCI Control" and press <Enter>.
 4. Highlight "PCI Parity" and change to Disabled.
 5. Save the change and reboot the system.
- When "Starting Windows 95.." is displayed on the monitor, press <F8> to display the Windows95 startup menu. Highlight "Safe Mode" and press <Enter>.

Follow the vendor supplied instructions to install the ATI video drivers.

Windows and Windows95 are trademarks of Microsoft Corporation.

SAS KEYWORDS:

PSY2	PSY2ADPT	PSY2OEM	PSY2OPER
PSVP	PSVPADPT	PSVPOEM	PSVPOPER
75877	75877F_1	75877F_2	D/T6898
6898	UNCLASSIFIED		

1.4.588 ATI VIDEO DRIVER INSTALLATION FAILS IN OS/2 WARP

Record number: H133588

Device: D/T6576
 Model: M
 Tip key:
 Date created: 096/08/09
 Date last altered: A96/08/09

SYMPTOM:

The video device driver for the ATI MACH32 ISA Video Adapter may fail to load in OS/2 WARP on a PC 300 or 700 Series system.

PROBLEM ISOLATION AIDS:

The ATI MACH32 ISA Video adapter is configured to use I/O address 2E8 which conflicts with the I/O address for COM4.

FIX:

Modify the OS/2 WARP CONFIG.SYS file as indicated below:

```
Change "DEVICE=C: \OS2\BOOT\COM.SYS"
      to
      "DEVICE=C: \OS2\BOOT\COM.SYS (1,3F8,4) (2,2F8,3)"
```

REM out "DEVICE=C: \OS2\MDOS\VCOM.SYS"

If the error persists, continue normal problem determination procedures.

ATI MACH32 is a trademark of ATI Technologies Inc.

SAS KEYWORDS:

PSVP	PSY2	PSVPOEM	PSY2OEM
PSVPADPT	PSY2ADPT	PC 330	IBMPC
PC 730	PC 750	D/T6586	PC 330
PC 350	D/T6571	D/T6573	D/T6581
D/T6583	D/T6575	D/T6585	D/T6586
D/T6577	D/T6587	D/T6598	D/T6560
D/T6877	D/T6887	PC 340	PC 360
45075			

PSY2 RETAIN TIPS
AUDIOVATION ADAPTER/A AUDIO BREAKUP

1.4.589 AUDIOVATION ADAPTER/A AUDIO BREAKUP

Record number: H124485

Device: D/T95XX
Model: M
Tip key:
Date created: 094/06/27
Date last altered: A94/10/27

SYMPTOM:

Audio breakup experienced when running certain Windows multimedia applications in Windows or WIN-OS2 using the Audiovation Adapter.

PROBLEM ISOLATION AIDS:

- 95XX multimedia models which have the Audiovation Adapter/A installed.
- OS/2 2.11 with Audiovation 2.0 drivers are being used.
- Windows 3.11 with Audiovation 2.0 drivers are being used.

FIX:

Change the Audio Mode from Normal (default) to Audio/Image Sync in the Mwave Audio Options section of the Mwave Audio Control program (see the Audio Control chapter in the Audiovation Adapter/A Users' Guide).

If further assistance is required, the customer should be advised to contact the IBM Personal Systems Help Center at 1 - 800-772 - 2227 and select multimedia.

Windows is a trademark of Microsoft Corporation

SAS KEYWORDS:

PSY2	PSY2ADPT	AUDIO	VATION
OS2	D/T9576	D/T8590	D/T8595
D/T9585	D/T9577	D/T9556	D/T9557
D/T9595	D/T9590	D/T9595A	P/N65G3826
MWAVE	M-WAVE		

1.4.590 AUTO CONFIG CONFLICTS W/ 5.25 DSKT DRIVE ADAPTER

Record number: H066796

Device: D/T8550
Model: M
Tip key:
Date created: 090/09/24
Date last altered: A93/09/01

SYMPTOM:

WHEN AUTO-CONFIGURING A PS/2 WHICH CONTAINS AN ETHERNET ADAPTER AND AN EXTERNAL 5.25" DISKETTE DRIVE ADAPTER, ADDRESS CONFLICTS MAY BE EXPERIENCED.

THE IBM EXTERNAL 5.25" DISKETTE DRIVE ADAPTER HAS A FIXED I/O ADDRESS, WHICH IS NOT RELOCATABLE. ALTHOUGH THE ETHERNET ADAPTER ADDRESS CAN BE RELOCATED, ITS DEFAULT ADDRESS CAN CONFLICT WITH THE EXTERNAL DISKETTE ADAPTER. MOVING THE EXTERNAL DISKETTE DRIVE ADAPTER TO A LOWER NUMBER SLOT THAN THE ETHERNET ADAPTER WILL AVOID ADDRESS CONFLICTS BUT MOVING THE ETHERNET ADAPTER TO A DIFFERENT SLOT MAY CAUSE PROBLEMS WITH THE CUSTOMERS CUSTOMIZED SOFTWARE.

PROBLEM ISOLATION AIDS:**FIX:**

IF "VIEW CONFIGURATION" SHOWS AN ADDRESS CONFLICT WITH THE EXTERNAL 5.25" DRIVE ADAPTER, USE "CHANGE CONFIGURATION" TO SELECT A NON-CONFLICTING ADDRESS FOR THE ETHERNET ADAPTER.

SAS KEYWORDS:

PSY2	PSY2COMM	PSY2ADPT	PSY2DSKT
D/T8555	D/T8560	D/T8565	D/T8570
D/T8580	D/T8590	D/T8595	D/T9585
D/T9577	D/T9556	D/T9557	D/T9595
D/T9533			

1.4.591 AUTO 16/4 TOKEN RING ADAPTER FAILS AFTER FLASH UPDATE

Record number: H131259

Device: D/T6576
 Model: M
 Tip key:
 Date created: 096/07/30
 Date last altered: A96/07/30

SYMPTOM:

IBM PC 300 Series 6576 and 6586 systems with an IBM Auto 16/4 ISA Token Ring Adapter installed may fail to connect to the LAN after updating the Flash BIOS level from LPJT56A to LPJT59A.

PROBLEM ISOLATION AIDS:

None

FIX:

When installing Flash BIOS level LPJT59A, REMOVE the Auto 16/4 ISA Token Ring Adapter from the system.

The Flash update process is reordering the IRQ choices for the adapter. The original IRQ setting for the Token Ring adapter is no longer valid.

If the system has been updated WITH the Auto 16/4 Token Ring adapter installed, and exhibiting the failing symptom, perform the following steps in sequence to correct the failure.

- 1) Access the systems Setup Utility by pressing F1 during the memory count.
- 2) Select the option to "Load Default Settings."
- 3) Disable Serial Port B (COM 2).
- 4) Disable ROM Shadowing at C8000h-CFFFFh in the Advanced Setup menu.
- 5) If there are any other adapters in the system, ensure that the IRQ's for those adapters are set as NOT AVAILABLE in the ISA Legacy Resources menu.
- 6) Reboot the system with the LANAID diskette inserted in Drive A: . Press F5 to bypass the CONFIG.SYS and AUTOEXEC.BAT files.
- 7) Type LANAIDC /PNP=Y and press ENTER. This will set the adapter for Plug n Play mode.
- 8) Remove the LANAID diskette and reboot the system.
- 9) Access the Setup Utility by pressing F1 during the memory count.
- 10) Reenable Serial Port B (COM 2) and the C8000h-CFFFFh range in the ROM Shadowing menu. Reset any IRQ's that were set for NOT AVAILABLE in step #5 to AVAILABLE.

The Auto 16/4 Token Ring adapter should function normally. If the adapter continues to fail, verify that the steps above were followed correctly and continue normal problem determination to isolate the failing FRU.

NOTE - The steps above may need to be modified depending on the adapters co-existing with the IBM Auto 16/4 Token Ring adapter. Memory address ranges and IRQ's for other adapters may need to remain NOT AVAILABLE or DISABLED to allow proper operation. Consult the Users Guide for the adapter for additional information.

SAS KEYWORDS:

PSY2	PSVP	IBMPC	D/T65XX
D/T6586	6576	6586	PSY2ADPT
PSVPADPT	PSVPCOMM	PSY2COMM	PC 330
PC 350			

1.4.592 AUTO-CONFIG PROB W/ ACTIONMEDIA/2 OR IMAGE ADPT.

Record number: H102950

Device: D/T8550
 Model: M
 Tip key:
 Date created: 092/09/18
 Date last altered: A92/09/23

SYMPTOM:

After an Automatic Configuration, the adapter support drivers for ActionMedia/2 or Image Adapter/A will indicate the adapter is not present, or is not functional (No video).

DETAILS:

The current automatic configuration algorithm will always select the adapter configuration address option that occupies the smallest amount of space in the "adapter ROM area." Depending on the software set-up options and application, this may not be adequate. These address options are the same choices displayed during the manual "Change Configuration" function.

This will select "NO SPACE USED (DISABLED)" for the ActionMedia/2 or Image Adapter/A ROM space.

PROBLEM ISOLATION AIDS: NONE**FIX:**

Use the Reference Diskette (System Partition) "View Configuration, Change Configuration" function, to manually configure the ActionMedia/2 or Image Adapter/ROM address to a selection other than 'DISABLED'.

SAS KEYWORDS:

PSY2	PS2	PS/2	D/T8595
D/T8590	D/T8580	D/T8570	D/T8565
D/T8560	D/T8555	PSY2ADPT	PSY2DISP
D/T8556	D/T8557	D/T8576	D/T8575
D/T8596	D/T8597	D/T9554	D/T9557
D/T9576	D/T9577	D/T9585	D/T9595
D/T95XX			

BACKING UP REFERENCE DISKETTE CAUSES INVALID TRACK 0 ERROR

1.4.593 BACKING UP REFERENCE DISKETTE CAUSES INVALID TRACK 0 ERROR

Record number: H01948

Device: D/T8580
Model: M
Tip key:
Date created: 090/03/07
Date last altered: A90/12/12

SYMPTOM:

WHEN AN ATTEMPT TO BACKUP A REFERENCE DISKETTE IS MADE TWO TIMES IN A ROW, THE OPERATOR RECEIVES AN ERROR MESSAGE FROM THE COMPUTER INDICATING TRACK 0 IS BAD.

PROBLEM ISOLATION AIDS:

ON THE 8580-A21 AND 8580-A31, THE CACHE MEMORY DOES NOT GET RESET DURING CONSECUTIVE DISKETTE FORMATS WHILE BACKING UP THE REFERENCE DISKETTE FOR A SECOND TIME.

FIX:

IF THE OPERATOR RECEIVES THE "TRACK 0 BAD" ERROR, A SOFT BOOT (CONTROL-ALT-DEL) SHOULD BE PERFORMED, THEN THE BACK-UP OF THE REFERENCE DISKETTE, FOR THE SECOND TIME, SHOULD BE DONE.

SAS KEYWORDS:

PSY2	8580DSKT	8580SYSERR	8580DIAG
PSY2ERR	PSY2DIAG	8580SYSDIAG	

1.4.594 BIOS INFO / UPGRADE&COLON. EX. 2640 HANGS WITH EDO SO DIMM.

Record number: H123636

Device: D/T2640
 Model: M
 Tip key:
 Date created: 097/04/14
 Date last altered: A97/05/06

SYMPTOM:

When operating with a 16, 32, or 64 Mb EDO SO DIMM installed, the system may hang and stop processing. It will be necessary to shut down and reboot the system to clear the hang and continue operation. The condition can occur using any operating system.

In Windows the hang is a General Protection Fault (GPF), in OS/2 it is a TRAP error.

PROBLEM ISOLATION AIDS:

BIOS update 1.05 is NOT installed.

FIX:

IBM PCCP BBS file name "sytpk105.exe"

Install BIOS upgrade (System Program) version 1.05 to allow correct 16, 32, and 64 Mb EDO SO DIMM usage.

NOTE, A NEW FEATURE HAS ALSO BEEN RELEASED UNDER BIOS 1.05:

This BIOS version also adds a Hard Disk password function to the 2640 system. If this is set and the HDD password is forgotten the HDD can NOT be used. The password can NOT be removed unless the existing password is known. To recover from a forgotten password the HDD must be replaced. This is NOT covered by warranty.

 IMPORTANT

Diskette based fixes are customer installable. Customers should be advised to contact the IBM PC Company HelpCenter at 800-772 - 2227 if assistance is required in getting or installing this information.

Files are located on the PC company's Bulletin Board Service (BBS). The direct line for modem connection to The PC Company BBS is 1-919-517-0001 or tieline 255-0001.

Customers in Canada should call IBM's HelpPC at 800-565-3344 for Assistance or down load information. The Canadian BBS phone numbers are:
 Montreal-514-938-3022, Toronto-905-316-4255,
 Winnipeg-204-934-2735, Vancouver-604-664-6464.

The data may also be downloaded via the Internet from the IBM Personal Computer File Library by searching the following Internet URL: <http://www.pc.ibm.com/files.html>

SAS KEYWORDS:

PSY2 PSY2PROG PSY2MCCD THINKPAD
 UNCLASSIFIED LOCK UP FEATURE

1.4.595 BLACK SCREEN WITH 6542 G40 DISPLAY AND WINDOWS 95

Record number: H131419

Device: D/T6282
 Model: M
 Tip key:
 Date created: 097/10/14
 Date last altered: A97/10/15

SYMPTOM:

After attaching an IBM Model 6542-103 G40 display and choosing the Cirrus 5446 video driver install icon, allowing the video driver to automatically set the refresh rate results in a black screen when Windows95 is restarted.

PROBLEM ISOLATION AIDS:

This tip applies to IBM PC Model PC300GL, machine types 6272 and 6282, running Windows95 and using Cirrus Logic 5446 video driver version 1.13s or earlier.

FIX:

Download and install Cirrus Logic 5446 Windows95 video driver version 1.13W, file name ZV3T10A.EXE.

In order to recover from the black screen condition, Windows95 may need to be restarted in Safe Mode to reset the video to VGA. The updated driver can then be installed in Windows95.

ZV3T10A.EXE may be downloaded via the Internet from the IBM Personal Computer File Library by searching the following Internet URL: www.us.pc.ibm.com/files.html

ZV3T10A.EXE may also be obtained from the IBM PC Company BBS system by calling 919-517-0001.

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SAS KEYWORDS:

PSY2DISP	PSY2OPER	PSY2	PSVP
PSVPDISP	PSVPOPER	D/T6272	D/T6282
6272	6282	76194	76195
HLPCT_3751	UNCLASSIFIED		

1.4.596 BLANK SCREEN AFTER LOADING OS/2 SVGA VIDEO DRIVER

Record number: H162468

Device: D/T8644
 Model: M
 Tip key:
 Date created: 098/01/08
 Date last altered: A98/01/16

SYMPTOM:

After the install of the OS/2 "Super VGA (SVGA)" video driver, shutdown, and subsequent restart, a blank screen is observed as the OS/2 desktop begins to appear.

All SCSI activity stops and the keyboard appears to be locked (Num-Lock and Caps-Lock keys will not toggle the corresponding keyboard LEDs).

PROBLEM ISOLATION AIDS:

- The system is a Netfinity 3500 (8644) with 256MB or more of memory.
- The "Super VGA (SVGA)" video driver has just been installed.

FIX:

Use ServerGuide (V4.0.1 or later) to install Network Operating Systems so that the current device drivers and service packs are installed automatically. ServerGuide installs the Number 9 video driver.

New device drivers are always being developed to ensure high-quality performance of the server. These device drivers are available on the IBM BBS at 919-517-0001 or via the internet at <http://www.pc.ibm.com/us/files.html>

-or-

Use the following procedure enable the SVGA driver:

1. Reboot the server.
2. When "OS/2" text appears at the top left corner of monitor, press <Alt> <F1> to bring up the "RECOVERY CHOICES" menu.
3. Select "C" to go to a command line.
4. Use TEDIT to edit the two files listed below:
 - A. In the `ibm386fs\hpfs386.ini` file, verify that the following statement appears: `CACHESIZE=4096`
 - B. In the `CONFIG.SYS`, change the following statement:


```
From:  THREADS=1024
To:    THREADS=256
```
5. Type "Exit" to reboot the server

These modifications are necessary in systems with 256MB or more of memory because HPFS386 allocates an increasingly greater amount of memory depending on the amount of physical memory installed.

Number Nine is a trademark of Number Nine Computer Corporation.

SAS KEYWORDS:

PSY2 PSY2DISP UNCLASSIFIED 79678

1.4.597 BLANK SCREEN ON REBOOT W/CIRRUS OS/2 DRIVER V1.13B1

Record number: H037505

Device: D/T6272
Model: M
Tip key:
Date created: 097/04/15
Date last altered: A97/04/15

SYMPTOM:

IBM PC 300GL Series 6272 and 6282 systems running OS/2 2.11 may exhibit a blank screen on reboot following the installation of the OS/2 Cirrus video device driver v1.13b1.

PROBLEM ISOLATION AIDS:

When the installation of the OS/2 Cirrus video device driver is complete, the system prompts the user to perform a Shutdown and reboot the system. A blank image results from the reboot.

FIX:

Use the native OS/2 VGA drivers in place of the Cirrus video drivers.

An updated version of the Cirrus video device driver is being developed to eliminate the problem. The updated driver will be available during April 1997 from the IBM PC Company BBS at 919 - 517-0001 and from the IBM PC Company File Library via the Internet at the following URL:

<http://www.pc.ibm.com/files.html>

SAS KEYWORDS:

PSVP	PSY2	PSVPDISP	PSY2DISP
IBMPC	61037	PSVPPROG	PSY2PROG
UNCLASSIFIED	PC 330	PC 340	PC300GL

BLURRED VIDEO WHEN MOVING SLIDE USING HARVARD GRAPHICS

1.4.598 BLURRED VIDEO WHEN MOVING SLIDE USING HARVARD GRAPHICS

Record number: H13411

Device: D/T9545
Model: M
Tip key:
Date created: O95/07/11
Date last altered: A95/08/22

SYMPTOM:

Video is blurred and distorted when a slide using a full screen bit map is panned across the screen. The video is clear when panning has stopped.

PROBLEM ISOLATION AIDS:

The condition occurred while running a slide presentation in Harvard Graphics for Windows version 2.0. on a 9545-7BE using DOS 6.3 with Windows 3.11.

FIX:

Change the color driver to 64k or 256k by using Windows Setup to select the WD90C24 256 color driver. It cannot be done with a "system utility disk".

Windows is a trademark of the Microsoft Corp.
Harvard Graphics is a trademark of the Software Publishing Corp.

SAS KEYWORDS:

PSY2 PSY2DISP PSY2PROG THINKPAD

BRIDGE CARD EMC SHIELD CAUSES SYSTEM FAILURE

1.4.599 BRIDGE CARD EMC SHIELD CAUSES SYSTEM FAILURE

Record number: H136268

Device: D/T8642
Model: M
Tip key:
Date created: 097/01/21
Date last altered: A97/01/22

SYMPTOM:

The PC Server 720 (8642) hangs or fails to boot.

PROBLEM ISOLATION AIDS: NONE

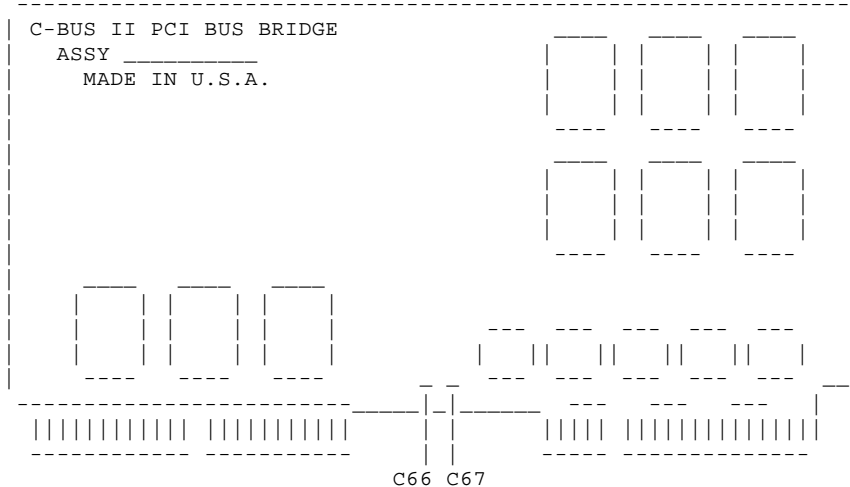
FIX:

Inspect the EMC shield on the bridge card. Locate the metal clip (one of four) on the component side near capacitor C66. If the clip appears too close to capacitor C66, remove the EMC shield, and cut out the corner of the metal clip to increase the clearance from the capacitor (Recommended).

-OR-

Remove the EMC shield, and insulate the edge of the metal clip with electrical tape, and re-install the shield (Alternative).

Refer to the diagram below:



Some bridge cards were undercut at the EMC shield attach point which could cause a short to the C66 capacitor.

SAS KEYWORDS:

PSY2 UNCLASSIFIED PSY2PART PSY2ADPT
71G0694 P/N71G0694 76H7134 P/N76H7134

1.4.600 BRIDGE CARD LED REMAINS OFF WITH BIOS 09

Record number: H134499

Device: D/T8642
 Model: M
 Tip key:
 Date created: 096/10/07
 Date last altered: A98/01/20

SYMPTOM:

The bridge card LED remains OFF during and after initialization with BIOS Level 09.

PROBLEM ISOLATION AIDS:

The system is a PC Server 720 (8642) with BIOS level 09.

FIX:

Upgrade the BIOS to level 10 or higher. BIOS 10 is available in the file 720UPD.EXE on the IBM PC Company BBS.

With BIOS level 09, the bridge card LED is OFF at all times; do not replace the card unless the diagnostics fail.

For BIOS level 09 only, disregard the bridge card LED information on pages 348-349 of the March 1996 PC Server HMM publication number S30H-2501-01.

Refer to RETAIN Record H131754 for additional information on BIOS levels for the PC Server 720.

-----IMPORTANT-----

Diskette images are customer installable. Customers should review any "README" files located on the diskette for installation information. Contact the IBM PC HelpCenter at 800-772 - 2227 if download/installation assistance is needed.

IBM PC Server files are located in Directory 22 on the PC Company Bulletin Board Service (BBS) at 1-919-517-0001 or tieline 255-0001.

The files may also be downloaded via the Internet from the IBM PC File Library by searching the following Internet URL: <http://www.pc.ibm.com/files.html>

SAS KEYWORDS:

PSY2	PSY2ADPT	FLASH	PSY2ADPT
SERVER	8642	PCSERVER	720
PC	FIRMWARE	PSY2DOC	HEALTH

1.4.601 BUSLOGIC 542B SCSI ADAPTER NOT SUPPORTED IN 6899

Record number: H136888

Device: D/T6899
 Model: M
 Tip key:
 Date created: 097/03/18
 Date last altered: A97/03/18

SYMPTOM:

IBM IntelliStation Z Pro 6899 systems running Microsoft WindowsNT v4.0 may not boot with a BusLogic 542B ISA SCSI adapter installed.

PROBLEM ISOLATION AIDS:

The system hangs consistently at each attempt to boot WindowsNT v4.0 regardless of the resource configuration of the BusLogic 542B ISA SCSI adapter.

Similar malfunctions may be observed while running operating systems other than WindowsNT v4.0 in an IBM IntelliStation Z Pro 6899 system configured with a BusLogic 542B ISA SCSI adapter.

FIX:

The BusLogic 542B ISA SCSI adapter has been tested and is not supported in the IBM IntelliStation Z Pro 6899 system.

Customers requiring the use of this adapter should contact the point of purchase for the adapter or BusLogic for additional information.

BusLogic is a trademark of BusLogic Inc.

SAS KEYWORDS:

PSVP	PSY2	PSVPADPT	PSY2ADPT
PSY2OEM	PWS	PSY2FDSK	IBMPC
UNCLASSIFIED	60669	PSVPFDSK	PSVPOEM
HANG	HUNG	LOCKUP	

CANCELLING PROSET100 ETHERNET DIAGS HANGS SYSTEM

1.4.602 CANCELLING PROSET100 ETHERNET DIAGS HANGS SYSTEM

Record number: H16917

Device: D/T6562
Model: M
Tip key:
Date created: 097/08/15
Date last altered: A97/08/26

SYMPTOM:

After starting the INTEL Proset100 diagnostics to test the onboard ethernet adapter, canceling the operation on the last panel causes the system to hang.

PROBLEM ISOLATION AIDS:

None

FIX:

After starting the Proset100 ethernet diagnostics, allow the tests to complete normally. Do not select cancel.

Proset100 is a trademark of INTEL Corporation.

SAS KEYWORDS:

PSY2	PSY2DIAG	PSY2OPER	PSVP
PSVPDIAG	PSVPOPER	PROSET	D/T6562
D/T6592	6562	6592	69271
UNCLASSIFIED			

1.4.603 CANNOT SET 1600 X 1200 RESOLUTION IN WINDOWS95

Record number: H132879

Device: D/T6887
 Model: M
 Tip key:
 Date created: 096/03/04
 Date last altered: A96/03/04

SYMPTOM:

IBM PC 700 Series 6877 and 6887 systems preloaded with the Windows95 operating system may not allow a setting of 1600 X 1200 video resolution with an IBM P70 Color Display.

PROBLEM ISOLATION AIDS:

The PC 700 6877 or 6887 contains a Matrox Millennium Graphics adapter and an IBM P70 DDC Color Display.

The Display Settings dialog box in Windows95 does not allow the 1600 X 1200 resolution to be selected.

FIX:

To enable 1600 X 1200 resolution for the IBM P70 Color Display, perform the following steps:

- Start Windows95
- Click the right mouse button on a clear area of the Desktop.
- Click on "Properties."
- Click on the "Settings" folder.
- Click on "Change Display Type."
- Click on "Change" for Monitor type.
- Click on "Show All Devices."
- Scroll to "IBM PC Company" under Manufacturers.
- Scroll to "IBM 9521" under Models.
- Click on "OK."
- Click on "Close."
- Click on "Yes."
- Click on "OK."
- Perform a shutdown, then restart the system.
- Click the right mouse button on a clear area of the Desktop.
- Click on "Properties."
- Click on the "Settings" folder.
- Move the scroll bar to 1600 x 1200 pixels.
- Click on "Apply."
- Click on "OK."
- The resolution change is complete.

Windows95 is a trademark of the Microsoft Corporation.

SAS KEYWORDS:

PSY2	D/T68XX	D/T6877	6887
6877	PC 750	PC700	PC750
68XX	IBMPC	PSVP	PC730
PC 730	PSVPDISP	PSY2DISP	PSY2ADPT
PSVPADPT	PSVPPROG	PSY2PROG	

1.4.604 CANNOT SETUP GREATER THAN 16 COLORS IN WINDOWS 3.11

Record number: H133804

Device: D/T6260
 Model: M
 Tip key:
 Date created: 096/08/30
 Date last altered: A96/08/30

SYMPTOM:

IBM PC 100 Series 6260 systems preloaded with Microsoft Windows 3.11 may display a "driver not found" error when using the Windows Setup icon to "Change System Settings" to a video resolution containing greater than 16 colors.

A message appears informing the user that the driver is not on the hardfile and prompts the user to insert a diskette in drive A: . When the device driver diskette is inserted, resolutions above 16 colors still fail to load.

PROBLEM ISOLATION AIDS:

The driver installed on the system and the device driver diskette is Cirrus CL5436 video driver level V1.11.

This failure also occurs when the user tries to change the system settings using the SETUP command from the DOS prompt in the WINDOWS directory.

FIX:

Install Cirrus CL5436 Windows 3.11 video driver version 1.12F or higher. The current version of the driver is titled:

LZ2T07A.EXE - Cirrus Logic Win 3.11 Drv. V1.12F (6560/6260)

The update may be obtained from the IBM PC Company BBS system by calling 1 - 919-517-0001. Locate the "IBM PC 300/700 Files" section (section #21) for the driver.

The driver may also be downloaded via the Internet from the IBM Personal Computer File Library located at the following Internet URL:

<http://www.pc.ibm.com/files.html>

The search facility may be used to locate the file using the filename stated above.

Windows is a trademark of the Microsoft Corporation.
 Cirrus CL5436 is a trademark of Cirrus Logic, Inc.

SAS KEYWORDS:

PSVP	6260	PSVPERR	PSVPDISP
IBMPC	PC 100	PC100	49879
PSY2	D/T6560	6560	

1.4.605 CAPACITORS MAY OBSTRUCT SIMM PLACEMENT ON ADAPTER

Record number: H035585

Device: D/T8570
Model: M
Tip key:
Date created: 089/07/28
Date last altered: A89/07/28

SYMPTOM: A LIMITED NUMBER OF ENHANCED 80386 MEMORY OPTION ADAPTERS ARE SUSPECTED OF HAVING CAPACITOR POSITION OBSTRUCTING SIMM PLACEMENT. SIMMS WHICH ARE NOT FULLY SEATED HAVE THE POTENTIAL TO CREATE INTERMITTENT MEMORY FAILURES.

PROBLEM ISOLATION AIDS: NONE

FIX: IF CAPACITOR IS INHIBITING PROPER SIMM PLACEMENT IN CONNECTORS J2, J3 OR J4, PERFORM THE FOLLOWING:

J2: GENTLY BEND THE C3 CAP TO A 45 DEGREE ANGLE TO THE RIGHT OF THE J2 CONNECTOR
J3: GENTLY BEND THE C4 CAP TO A 45 DEGREE ANGLE TO THE RIGHT OF THE J3 CONNECTOR
J4: GENTLY BEND THE C5 CAP TO A 45 DEGREE ANGLE AWAY FROM THE J4 CONNECTOR

SAS KEYWORDS:

PSY2	PSY2MEM	8570SYSTEM	8580SYSTEM
8570SYSADPT	8580SYSADPT	PSY2ADPT	

1.4.606 CAPACITORS MAY OBSTRUCT SIMM PLACEMENT ON ADAPTER

Record number: H12178

Device: D/T8570
Model: MCP1
Tip key:
Date created: 093/05/21
Date last altered: A93/05/21

SYMPTOM: A LIMITED NUMBER OF ENHANCED 80386 MEMORY OPTION ADAPTERS ARE SUSPECTED OF HAVING CAPACITOR POSITION OBSTRUCTING SIMM PLACEMENT. SIMMS WHICH ARE NOT FULLY SEATED HAVE THE POTENTIAL TO CREATE INTERMITTENT MEMORY FAILURES.

PROBLEM ISOLATION AIDS: NONE

FIX: IF CAPACITOR IS INHIBITING PROPER SIMM PLACEMENT IN CONNECTORS J2, J3 OR J4, PERFORM THE FOLLOWING:

J2: GENTLY BEND THE C3 CAP TO A 45 DEGREE ANGLE TO THE RIGHT OF THE J2 CONNECTOR
J3: GENTLY BEND THE C4 CAP TO A 45 DEGREE ANGLE TO THE RIGHT OF THE J3 CONNECTOR
J4: GENTLY BEND THE C5 CAP TO A 45 DEGREE ANGLE AWAY FROM THE J4 CONNECTOR

SAS KEYWORDS:

PSY2	PSY2MEM	8570SYSTEM	8580SYSTEM
8570SYSADPT	8580SYSADPT	PSY2ADPT	

Record number: H132808

Device: D/T6877
 Model: M
 Tip key:
 Date created: 096/02/27
 Date last altered: A96/04/01

SYMPTOM:

IBM PC 700 Series 6877 and 6887 may display a 0014 error while running the CD Audio test and/or show the incorrect IRQ assigned to the parallel port (LPT: 1) using QAPLUS/2 for OS/2.

PROBLEM ISOLATION AIDS:

The 0014 error displayed during the testing of the CDROM audio function should be considered a false indication of a hardware problem. Verify that ALL applications that utilize the audio capability of the CDROM are failing before pursuing parts replacement. An audio failure may also be caused by improperly configured system resources.

The parallel port test under QAPLUS/2 will pass, however when the "Information" icon is accessed, the IRQ assigned to the parallel port shows IRQ 5 instead of IRQ 7. Check the Configuration/Setup Utility for the actual IRQ assigned to the parallel port.

FIX:

Prior to any hardware replacements as a result of running QAPLUS/2, QAPLUS/Pro should be performed. QAPLUS/Pro operates as a more in-depth standalone diagnostic routine without the resource limitations of running under Windows or OS/2 operating systems.

This problem will be resolved in the next update of QAPLUS/2 and will be available from the IBM PC Company Bulletin Board Service.

QAPLUS/2 is a trademark of DiagSoft, Inc.

SAS KEYWORDS:

PSY2	D/T68XX	6887	6877
IBMPC	PSVP	PSVPDIAG	PSY2DIAG
D/T6887	QA PLUS	QAPLUS2	QA+
LOCKUP	PC750	HUNG	QAPLUS 2
PC 750	PC730	PC700	PC 730
40643	39947		

CD ROM DISC FALLS OUT OF DRIVE DURING INSERTION

1.4.608 CD ROM DISC FALLS OUT OF DRIVE DURING INSERTION

Record number: H132224

Device: D/T8642
 Model: M
 Tip key:
 Date created: 096/01/17
 Date last altered: A96/04/01

SYMPTOM:

The customer complains that during insertion of the CD-ROM disc into the CD drive, the disc falls out. They may have even resorted to laying the system on its side in order to load the software disc into the CD ROM player.

PROBLEM ISOLATION AIDS:

Servers have shipped with 2 different types of CD-ROMs.

The 2X CD-ROM is 1" wide and uses spring loaded ball bearings on the spindle to retain the disc.

The 4X CD-ROM is 1 5/8" wide and uses four plastic clips (one in each corner to retain the disc.

Servers 310, 500, 720 and 520 are affected.

FIX:

On systems with vertically mounted 2X CD-ROMs, which have ballbearings in the spindle, press the disc over the spring loaded balls and it will be retained for vertical operation.

The 4X CD-ROMs have no ballbearings in the spindle, but do have 4 clips that retain the disk during vertical operation.

The documentation for most servers describes the correct operation of the CD-ROM. However, a limited number of systems may have been shipped to the field with documentation which does not refer to the 4X CD-ROM and the 4 tabs that must be moved into position to prevent the disc from falling out.

An errata sheet will be added to the affected system ship group explaining this operation. The errata sheets will be shipped until the system documentation can be updated with the required information.

SAS KEYWORDS:

PSY2	SERVER	CD	ROM
CDROM	CD-ROM	720	500
520	D/T8641	D/T8642	8641
8642	DISK	SCSI	PSY2ADPT
PSY2DOC	310	8639	

CD ROM DISC FALLS OUT OF DRIVE DURING INSERTION IN HMC

1.4.609 CD ROM DISC FALLS OUT OF DRIVE DURING INSERTION IN HMC

Record number: H081607

Device: D/T967X
 Model: M
 Tip key:
 Date created: 096/11/02
 Date last altered: A96/11/04

SYMPTOM:

The customer complains that during insertion of the CD-ROM disc into the CD drive, the disc falls out. They may have even resorted to laying the system on its side in order to load the software disc into the CD ROM player.

PROBLEM ISOLATION AIDS:

The 4X CD-ROM is 1 5/8" wide and uses four plastic clips (one in each corner to retain the disc.

FIX:

On systems with vertically mounted 2X CD-ROMs, which have ballbearings in the spindle, press the disc over the spring loaded balls and it will be retained for vertical operation.

The 4X CD-ROMs have no ballbearings in the spindle, but do have 4 clips that retain the disk during vertical operation. Place the CDROM in the player and then move the 4 tabs into position to prevent the disc from falling out.

SAS KEYWORDS:

PSY2	967XHMC	CD	ROM
967XCDROM	CD-ROM	9672	DISK
SCSI	9672HMC	9672CDROM	

1.4.610 CD-ROM DEVICE DRIVER ERROR MESSAGE, "INCORRECT DOS VERSION"

Record number: H083356

Device: D/T8550
 Model: M
 Tip key:
 Date created: 091/06/11
 Date last altered: A95/11/16

SYMPTOM:

THE CD-ROM DEVICE DRIVER WILL NOT INSTALL.
 THE FOLLOWING ERROR MESSAGE IS DISPLAYED:

"INCORRECT DOS VERSION"

CONFIGURATION:

IBM CD-ROM DRIVE
 IBM DOS DEVICE DRIVER VERSION 1.00 OR 1.01
 (OPTION DISKETTE, 1.00 OR 1.01)
 MSCDEX.EXE VERSION 2.2
 MICROSOFT OR IBM DOS VERSION 5.0.

THE IBM CD-ROM DOS FILE SYSTEM TRANSLATOR, MSCDEX, PERFORMS A DOS "VERSION CHECK" OF ITS OPERATING SYSTEM. THE IBM DOS OR MS-DOS VERSION 5.0 IS NOT LISTED IN THIS TRANSLATOR (MSCDEX.EXE), THEREFORE AN ERROR IS DISPLAYED DURING BOOTUP.

THE "VERSION CHECK" CAN BE CORRECTED BY THE PROCEDURE OUTLINED UNDER "FIX."

APPLICATION			MSCDEX.EXE &	SCSI ADAPT.		CD-
SOFTWARE	<->	DOS	<->	DEVICE DRVR	<->	ROM

MSCDEX.EXE TRANSLATES DOS FIXED DISK PARAMETERS TO CD-ROM COMPATIBLE FILES AND VICE-VERSA, AS ILLUSTRATED ABOVE.

CD-ROM OPTION DISKETTE VERSIONS 1.00 OR 1.01 WILL WORK WITH SYSTEMS RUNNING DOS. DISKETTE VERSION 1.01 IS REQUIRED FOR SYSTEMS RUNNING OS/2.

PROBLEM ISOLATION AIDS: NONE**FIX:**

AT THE COMMAND LINE, TYPE IN THE FOLLOWING:

SETVER <DRIVE> MSCDEX.EXE 4.00

NOTE: <DRIVE> = DRIVE AND DIRECTORY WHERE DOS 5.0 IS LOCATED.

THE SETVER COMMAND WILL INSTRUCT DOS 5.0 TO RESPOND TO THE MSCDEX.EXE VERSION CHECK WITH DOS 4.00. ALL OTHER COMMAND AND VERSION CHECKS WILL REMAIN THE SAME.

NOTE:

MS-DOS IS A REGISTERED TRADEMARK OF MICROSOFT INC.

SAS KEYWORDS:

PSY2	PSY2PROG	D/T3510	PSY2ERR
8550SYSPROG	8555SYSPROG	8560SYSPROG	8565SYSPROG
8570SYSPROG	8580SYSPROG	8590SYSPROG	8595SYSPROG
8550SYSERR	8555SYSERR	8560SYSERR	8565SYSERR
8570SYSERR	8580SYSERR	8590SYSERR	8595SYSERR
D/T8550	D/T8555	D/T8560	D/T8565
D/T8570	D/T8580	D/T8590	D/T8595
CDROM	D/T9595	D/T9590	D/T9585
D/T9577	D/T9576	D/T8556	D/T8557
D/T9557	PSY2CDROM		

1.4.611 CD-ROM DRIVES WILL NOT CONFIGURE

Record number: H124277

Device: D/T95XX
Model: M
Tip key:
Date created: 094/06/06
Date last altered: A94/08/15

SYMPTOM:

After upgrading a system with several CD-ROM drives, certain CD-ROM drives are not configured.

PROBLEM ISOLATION AIDS:

Multiple CD-ROM drives are physically installed.
Several of the CD-ROM drives installed are OEM drives.

FIX:

Installation of an IBM CD-ROM I drive FRU P/N81F7930 or an OEM CD-ROM drive (NEC, Sony, Hitachi, etc.), along with a CD-ROM II drive FRU P/N92F0084 or an Enhanced CD-ROM II drive FRU P/N61G1901, may cause the IBM CD-ROM I drive and/or the OEM drive not to operate properly.

The Enhanced CD-ROM II Dos/Windows device drivers are designed to work with only the IBM CD-ROM II & Enhanced CD-ROM II drives. These device drivers will not operate properly with non-IBM CD-ROM drives or the original IBM CD-ROM I drive.

As a workaround either of the following changes may be utilized:

WORKAROUND 1

- Change the default entry in CONFIG.SYS from:

```
DEVICE=C: \IBMCDROM.SYS /D: IBMCD001
```

To

```
DEVICE=C: \IBMCDROM.SYS /D: IBMCD001 /I
```

This change will tell the device driver to control all CD-ROM drives on the SCSI adapter, not just the IBM CD-ROM II and/or the IBM Enhanced CD-ROM II drive.

A limitation exists with the above workaround. The limitation will only allow Mode 1* data, as normally used on the CD-ROM 1 drive, to pass through the Enhanced CD-ROM II device driver. Audio playback will not operate properly.

* Mode 1 data is considered normal computer data.
Other types of data are music or video data.

WORKAROUND 2

The above limitation may be corrected by using two CD-ROM device drivers installed in parallel and may be accomplished in the following method:

Save the original OEM device drivers for CD-ROM drives in a uniquely identified subdirectory.

Change and add the following lines in the CONFIG.SYS:

```
DEVICE=C: \IBMCDROM.SYS /D: IBMCD001  
DEVICE=C: \CDROM\IBMCDROM.SYS /D: IBMCD002
```

Note: Automatic installation utilities cannot be used for making these changes, they must be made manually.

The DOS AUTOEXEC.BAT entry for MSCDEX must also be changed to force the recognition of the second device driver:

From:

```
C: \MSCDEX /D: IBMCD001 /M: 10
```

To:

```
C: \MSCDEX /D: IBMCD001 /D: IBMCD002 /M: 10
```

These changes will allow an IBM CD-ROM I and a IBM CD-ROM II to operate in parallel. The audio on both drives will function properly.

PSY2 RETAIN TIPS
CD-ROM DRIVES WILL NOT CONFIGURE

SAS KEYWORDS:
PSY2
92F1426

PSY2OEM
61G1896

CDROM

31F4332

1.4.612 CDROM BACKGROUND MISSING IN SELECTIVE INSTALL

Record number: H132826

Device: D/T6877
 Model: M
 Tip key:
 Date created: 096/02/28
 Date last altered: A96/02/28

SYMPTOM:

IBM PC 700 Series 6877 and 6887 may exhibit a missing background image for the CDROM entry in the OS/2 WARP Connect Selective Install application.

PROBLEM ISOLATION AIDS:

With the Matrox Millennium OS/2 video drivers loaded in the 640 X 480 X 256 colors resolution, the OS/2 WARP Selective Install screen will contain a missing image for the CDROM entry.

Perform the following steps to determine if this tip applies:

- Select OS/2 system
- Select Selective install
- The background for CDROM is missing.

FIX:

Change the video resolution to a setting higher than 640 X 480.

This is a ONLY cosmetic problem and does not indicate that a hardware problem exists. There is no update planned to eliminate the missing background at this time.

This problem does not affect the S3 video on the system board.

SAS KEYWORDS:

PSY2	D/T68XX	6887	6877
IBMPC	PSVP	PSVPDISP	PSY2DISP
D/T6887	PSY2PROG	PSVPPROG	PSVPERR
PSY2ERR	PC750	PC700	PC 730
PC 750	PC730	40214	

1.4.613 CDROM INSTALLATION ERROR WITH PRELOADED WINDOWS NT 4.0

Record number: H161281

Device: D/T6562
 Model: M
 Tip key:
 Date created: 097/10/01
 Date last altered: A97/10/01

SYMPTOM:

After installing an IDE CDROM and booting the system, the CDROM drive is inaccessible.

PROBLEM ISOLATION AIDS:

The error may be seen in IBM PC models preloaded with WindowsNT 4.0 and NOT preinstalled with an IDE CDROM drive. The error is only seen when the CDROM is installed AFTER the first boot of the operating system.

The following, or similar error message is displayed after clicking on the CDROM icon:

"Drive D: \ is inaccessible. The parameter is incorrect."

The error does not occur with shrinkwrap WindowsNT 4.0, or, if the first boot process is completed WITH the IDE CDROM attached.

FIX:

The customer can correct the condition by either re-installing the operating system with the IDE CDROM drive installed, or, by editing the WindowsNT Registry via the following steps:

WARNING: Editing the WindowsNT registry directly may result in unpredictable errors or system failure. Backup the system registry before making any changes.

- Login to the system as a user with "Administrator" rights.
- Click the "Start" button.
- Click "Run".
- Type "REGEDT32" (Ignore quotes) and press OK.
- Maximize HKEY_LOCAL_MACHINE on Local Machine
 - Double click "SYSTEM"
 - Double click "CurrentControlSet"
 - Double click "Enum"
 - Double click "Root"
 - Double click "LEGACY_CDFS"
 - Double click "0000"
- You should see trees expanded with "LEGACY_CDFS", "0000", and "Control."
- Single click "Control" to highlight it
- In the "Security" menu, click "Permissions".
- With "Everyone" highlighted, click the down arrow on "Type of Access."
- Click on "Full Control"
- Click "OK"
- With the key still highlighted, press the "Delete" key on the keyboard.
- Click "Yes" to "Do you want to continue the operation"
- Perform the same "Security" steps for "0000" and "LEGACY_CDFS."
- The above steps should remove keys "LEGACY_CDFS", "0000", and "Control."
- Shut down and "Restart the computer"
- The system should come up with the CD working correctly.

WindowsNT is a trademark of Microsoft Corporation.

SAS KEYWORDS:

PSY2	PSY2ERR	PSY2OPER	PSY2OEM
PSY2CDRM	PSVP	PSVPERR	PSVPOPER
PSVPOEM	PSVPCDRM	D/T6562	6562
CD-ROM	75453	D/T6592	6592
D/T6588	6588	D/T6888	6888
UNCLASSIFIED			

1.4.614 CDROM SEEN AS 3.5" DISKETTE IN 6588/6888 SETUP

Record number: H137868

Device: D/T6588
 Model: M
 Tip key:
 Date created: 097/05/23
 Date last altered: A97/05/28

SYMPTOM:

IBM PC 300 Series 6588 and Intellistation M Pro 6888 systems may show a 3.5 inch diskette drive instead of a CDROM drive as the third IDE device in the systems Setup Utility. This problem occurs if the CDROM is installed as the MASTER drive on the SECONDARY IDE port.

PROBLEM ISOLATION AIDS:

Access the Setup Utility by pressing F1 during the memory count. Select "Devices", "IDE", and view the Third Device. The image on the display gives the appearance that the third device is a diskette drive.

The displayed image in the Devices, IDE area of the Setup Utility does not affect the function of the CDROM drive.

The CDROM drive is displayed correctly when viewed in the System Summary section of the Setup Utility.

FIX:

This problem will be resolved in future releases of the 6588 and 6888 Flash BIOS levels. Flash BIOS levels above NEKT04A (BIOS Level 4) will contain the correction.

The updated Flash BIOS may be obtained from the PC Company BBS at 919 - 517-0001 or from the PC Company File Library via the Internet at the following URL:

"<http://www.us.pc.ibm.com/files.html>"

SAS KEYWORDS:

PSY2	PSVP	IBMPC	PSVPDOC
PSY2DOC	62206F_1	PSY2MCD	PSVPMCD
PC 330	PC 350	D/T6888	UNCLASSIFIED

1.4.615 CHARACTER "SHADOWS" ON 6384 MXX VIDEO IMAGE

Record number: H001465

Device: D/T6384
 Model: M
 Tip key:
 Date created: 093/04/01
 Date last altered: A93/04/01

SYMPTOM:

A LIMITED NUMBER OF PS/VALUEPOINT 433DX SYSTEMS WILL DISPLAY DISTORTED IMAGES WHILE VIEWING ANY APPLICATION THAT USES A LIGHT COLORED BACKGROUND WITH CONTRASTING TEXT. APPLICATIONS SUCH AS OS/2, MICROSOFT WINDOWS OR THE DOS SHELL WILL DISPLAY THREE TO FOUR VERTICAL BARS ALONG THE LEFT SIDE OF THE DISPLAY, AND "SHADOWS" OF THE TEXT CHARACTERS THROUGHOUT THE DISPLAY.

THIS SYMPTOM CAN APPEAR ON IBM AND OEM VGA OR SVGA DISPLAYS.

PROBLEM ISOLATION AIDS:

BELOW ARE THE SERIAL NUMBERS OF THE MXX MODELS THAT MAY EXHIBIT THE FAILURE:

MODEL	BEGINNING	ENDING
M40	23 - MAD33	23-MAN28
M43	23 - LHBXF	23-LHFPTD
M50	23 - PPD74	23-PRR82
M53	23 - LYGGD	23-LYMLR

***** AND *****
 BAR CODE HEADER ON THE SYSTEM BOARD HAS THE FOLLOWING HEADER NUMBER'S: B11DD OR B11DB

EXAMPLE BAR CODE LABEL: B11DD000000 52G0000 000
 BAR CODE LABEL IS LOCATED NEXT TO THE RISER CARD SOCKET.

THE CONFIGURATION UTILITY SCREEN, WHICH IS ACCESSED BY PRESSING THE F1 KEY DURING POST MAY BE USED TO TEST FOR THE PRESENCE OF THE FAILING SYMPTOM. OBSERVE THE DISPLAYED IMAGE FOR THE VERTICAL BARS AND SHADOWS ON THE TEXT.

THIS PROBLEM IS NOT CAUSED BY A DETERIORATING CONDITION OF THE SYSTEM OR DISPLAY. IF THE SYMPTOM IS NOT PRESENT AT INSTALLATION, THIS TIP DOES NOT APPLY.

FIX:

IF THE SYSTEM MEETS THE ALL OF THE ABOVE CRITERIA, AND EXHIBITS THE FAILURE SYMPTOM, REPLACE THE SYSTEM BOARD. FRU STOCK OF P/N52G8780 IS NOT AFFECTED BY THIS PROBLEM.

IF THE PROBLEM PERSISTS AFTER REPLACING THE SYSTEM BOARD, FOLLOW NORMAL PROBLEM DETERMINATION PROCEDURES TO ISOLATE THE FAILING FRU.

NOTE:

IF THE SYSTEM IS DISPLAYING THE FAILURE, BUT THE SERIAL NUMBER DOES NOT MATCH THOSE LISTED ABOVE, UTILIZE NORMAL PROBLEM DETERMINATION PROCEDURES TO ISOLATE THE FAILING FRU.

SAS KEYWORDS:

PSVP	PSVPBRD	PSVPDISP	PSVPPART
PSY2	PSY2BRD	PSY2DISP	PSY2PART
GHOSTING	6312	6314	MONITOR
6319	BLEEDING		

CLIENTCARE DOES NOT INSTALL THE DMI BROWSER FROM RTC

1.4.616 CLIENTCARE DOES NOT INSTALL THE DMI BROWSER FROM RTC

Record number: H161505

Device: D/T6898
Model: M
Tip key:
Date created: 097/10/21
Date last altered: A97/10/21

SYMPTOM:

During the installation of LANdesk and ClientCare from the Ready-To-Configure (RTC) CDROM, the option to install "Service Provider" from ClientCare is not checked.

PROBLEM ISOLATION AIDS:

When installing these applications from the RTC CDROM, the user accepts the default values for the order of installation. ClientCare is installed before LANdesk.

FIX:

Install LANdesk manually by itself from the RTC CDROM before installing the ClientCare applications.

SAS KEYWORDS:

PSY2	PSY2OPER	PSY2MISC	PSVP
PSVPOPER	PSVPMISC	D/T6898	6898
80338	UNCLASSIFIED		

1.4.617 CLIENTCARE HELP FILES MISSING IN NON-ENGLISH PRELOADS

Record number: H162702

Device: D/T6561
 Model: M
 Tip key:
 Date created: O98/02/11
 Date last altered: A98/02/11

SYMPTOM:

After starting the ClientCare/DMI browser and selecting "Help," the system displays error message "Aide de Windows" and indicates that file "fraLDXX.hlp" is missing.

PROBLEM ISOLATION AIDS:

This tip applies to IBM PC300GL systems, machine types 6561/6591, preloaded with French, German, and Italian versions of Windows95.

FIX:

Translated versions of the help text are not available for this product. As a workaround, the user can elect to search for help files and select "enuLDXX.hlp" to display the English version of the help text.

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SAS KEYWORDS:

PSY2	PSY2ERR	PSY2MISC	PSVP
PSVPERR	PSVPMISC	D/T6561	D/T6591
6561	6591	83763	83763F_1
83763F_2	UNCLASSIFIED		

1.4.618 CLIENTS REPORT INVALID INFO TO "CAPACITY MANAGEMENT" QUERIES

Record number: H163222

Device: D/T8639
 Model: M
 Tip key:
 Date created: 098/03/26
 Date last altered: A98/03/31

SYMPTOM:

-Clients are not correctly creating Capacity Management monitor files(.SLT files) on the Server. A maximum of 1000 invalid monitor files are being produced (one file*/minute). The indication is that no valid Capacity Management report information is available from the affected client.

* trend.001 up to trend.999(invalid) instead of the valid trend.slt, realtime.001 up to realtime.999(invalid) instead of the valid trend.slt

PROBLEM ISOLATION AIDS:

The following environments must hold true for this TIP to apply:

- The Server is any IBM PC Server / Netfinity server running OS/2 Warp with Netfinity version 5.1 Services or Manager, Capacity Management for Netfinity 5.1, and Workspace On Demand.
- The failing Clients(respective to the Symptom above) are running OS/2 Warp with Netfinity version 5.1 Services or Manager, Capacity Management for Netfinity 5.1, and Workspace On Demand.
- The Failure of the Clients (with respect to the Symptoms above) can only be seen from a NT Client* running Netfinity version 1.5 Manager, Capacity Management for Netfinity 5.1.

* Capacity Management offers no OS/2 GUI.

FIX:

- 1 - Edit all of the Client xxx.FIT files located on the Server at \IBMLAN\RPL\FITS\xxx.FIT to add the following at the bottom of each file:

```

\\Serverx\workfiles\pltxxx\netfin\cmbase.*
\\Serverx\workfiles\pltxxx\netfin\sltfiles\realtime
\\Serverx\workfiles\pltxxx\netfin\sltfiles\trend
\\Serverx\workfiles\pltxxx\netfin\sf.tmp
\\Serverx\workfiles\pltxxx\netfin\sltfiles
  
```

Where Serverx is the RIPL Server's name.
 Where pltxxx is the Workstation/Clients name.

- 2 - Restart Client normally.

DETAIL:

If Capacity Management is running in conjunction with Workspace On Demand, redirection files must be added in the Client's xxx.FIT configuration file located in Workstation On Demand so that Clients can correctly write the Capacity Management monitor files to the Server.

SAS KEYWORDS:

PSY2	PSY2LAN	PSY2TRAFFIC	D/T8638
D/T8639	D/T8640	D/T8641	D/T8642
D/T8650	D/T8651	D/T8644	WORKPLACE
ON DEMAND	NETFINITY	CAPACITY	MANAGEMENT
UNCLASSIFIED			

1.4.619 COLD BOOT/TRAP 0003/DUAL IDE ON 8570 SYSBRD UPGRADE

Record number: H124031

Device: D/T8570
 Model: M
 Tip key:
 Date created: 094/05/17
 Date last altered: A94/08/15

SYMPTOM:

8570 systems that have a 486 DX33 or 486 BL2-66 Upgrade System Board installed may encounter hangs during a cold boot (POST), or exhibit Trap 0003 errors during operation.

Systems with dual IDE hard files may fail to complete POST and may not boot to the "A" drive.

PROBLEM ISOLATION AIDS:

The System Upgrade Board was just installed.

Locate the manufacturing part number on the system board. If it is 71G2605 or 71G2642 this tip applies.

Removing one of the hardfiles allows the system to complete POST and boot to the "A" drive.

FIX:

A replacement system board FRU has been made available to fix these problems.

FRU P/N71G2641 for the 486DX 33 Upgrade
 (Manufacturing part number 71G0712)

FRU P/N71G2606 for the 486 BL2-66 Upgrade
 (Manufacturing part number 71G0713)

All replacement FRUs will have a Flash BIOS level of 1.18.02. The above system board FRUs should not be flashed with any Bios level below 1.18.02.

Replacement FRUs may be ordered through the Normal FRU ordering process.

SAS KEYWORDS:

PSY2	8570	REPLY	71G2641
71G2606	P/N71G2641	P/N71G2606	PSY2BRD
PSY2ERR	BOOT	TRAP	DUAL
0003			

1.4.620 COLOR CHANGE/DISTORTED VIDEO IN WIN-OS/2

Record number: H125387

Device: D/T6384
 Model: M
 Tip key:
 Date created: 094/10/24
 Date last altered: A95/10/30

SYMPTOM:

PS/ValuePoint 6382/S, 6384/D and 6387/T systems may exhibit color changes and/or distorted video in WIN-OS/2 using the OS/2 S3 video device drivers.

The failure is most noticeable in the 640 X 480 X 64K color mode.

PROBLEM ISOLATION AIDS:

Inspect the video chip located at the right rear of the system board next to the video feature connector, in position U45 (Type 1 board) or in position U15 (Type 2 board).

This tip applies only if "BT" or "Brook Tree" is printed on the component. Components with other brand names are not affected.

FIX:

Install the OS/2 S3 video device driver package S3-16M.DSK with a file date of 10/19/94 or later. This update may be downloaded from the IBM PC Company Bulletin Board service at 919 - 517 - 0001.

----- IMPORTANT -----

```

| THE S3 - 16M.DSK DRIVER IS CUSTOMER INSTALLABLE. CUSTOMERS |
| SHOULD BE ADVISED TO CONTACT THE PC COMPANY HELPCENTER AT |
| 800-772 - 2227 IF ASSISTANCE IS REQUIRED IN GETTING THE |
| APPROPRIATE UPDATE. |

```

If the failure symptom described above continues after the installation of the update S3 device drivers, utilize normal problem determination to isolate the failing application or FRU.

SAS KEYWORDS:

VALUE POINT	PS/VP	PSVP	6384
6382	6387	D/T6382	D/T6387
PSY2	PSVPDISP	PSY2DISP	OS2

1.4.621 COLOR PROBLEMS WITH REELMAGIC LITE ADAPTER

Record number: H012538

Device: D/T68XX
 Model: M
 Tip key:
 Date created: 095/07/20
 Date last altered: A95/07/20

SYMPTOM:

PC300, PC700, and 64XX Commercial Desktop Systems display incorrect colors or other video problems after a ReelMagic Lite adapter is installed.

PROBLEM ISOLATION AIDS:

Video problems will occur in video modes higher than VGA (640x480) or number of colors greater than 256.

Video diagnostics will complete without error when the ReelMagic adapter is removed and the monitor is connected to the system board video connector.

FIX:

Configure the video resolution for 640x480 256 colors. This is the only video resolution supported when the ReelMagic Lite adapter is installed.

ReelMagic does offer the Rave adapter which does support Super VGA and additional colors.

Contact ReelMagic for any additional support required.

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SAS KEYWORDS:

PSY2	IBMPC	D/T6875	D/T6876
D/T6885	D/T6886	PC700	PC730
PC750	PSY2DISP	PSVPDISP	PSVPADPT
PSY2ADPT	D/T6472	D/T6482	D/T6484
D/T6484	D/T6492	D/T6494	D/T6571
D/T6581	D/T6573	D/T6573	D/T6586
D/T6576			

1.4.622 COLORS WILL NOT CONVERGE, FOCUS PROBLEM

Record number: H082249

Device: D/T9527
 Model: M
 Tip key:
 Date created: 094/09/28
 Date last altered: A95/02/27

SYMPTOM:

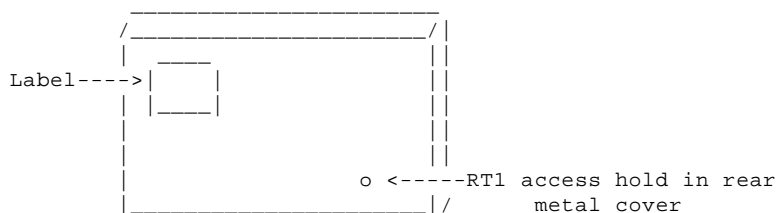
This situation may appear as a customer complaint related to color convergence (may be perceived as a "focus" problem by some users) or it may be found during monitor alignment.

While performing the color convergence adjustments, RT1, the servicer may find there is insufficient range on the front panel horizontal convergence control.

PROBLEM ISOLATION AIDS:

There is a coarse horizontal convergence control (RT1) on the rear of the monitor, which is not referenced in the service documentation. Refer to the diagram below for the location:

View from the rear of the 9527 Monitor video card (attached to the neck of the ITC and part of the Card Tray Assembly).



There are two versions of the RT1 potentiometer in the field. They are identified by the color of the plastic part where the adjustment tool is inserted (the "wiper") in the potentiometer. Note of the color of this part. Note: The color of the other parts of the control does not matter and should be ignored. Removal of the video the sheet metal RFI shield on the back of the video board may be required to examine the RT1 control.

Note:

Adjustment of RT1 is required, for convergence, after replacing a card tray on a 9527 model 001 or 011.

FIX:

If the wiper of RT1 is made of black plastic, the Card Tray Assembly should be replaced, even if it appears to adjust correctly. Over a long period of time, this component may not maintain adjustment. There is no acceptable method of fixing or "cleaning" the potentiometer which will correct this problem.

If the wiper is made of white plastic, a very slight adjustment of this control should correct the convergence limitation of the front panel control. The problem referenced above does not affect this potentiometer.

It is recommended that the front panel control be set midway between its limits prior to adjusting RT1. The front panel control should now have sufficient bandwidth to enable correct convergence.

Card Tray Assembly	FRU P/N
Models 001, 002, 004 & 005	68G2540
Models T01, T02 T04, T21, T22 & T24	72G9094
Models 011, 012, 014 & 015	95G8971

Note:

All new monitors are manufactured with a white wiper.

SAS KEYWORDS:

PSY2	PSY2DISP	DISPLAY	9527
MONITOR	PSVP	001	011
POT			

1.4.623 COM 2 MISSING FROM TRANXIT CONFIGURATION MENU

Record number: H132792

Device: D/T6877
 Model: M
 Tip key:
 Date created: 096/02/27
 Date last altered: A96/02/27

SYMPTOM:

When loading the TranXit software for Windows95 that provides infrared support, COM 2 is not present on the Configuration Menu.

PROBLEM ISOLATION AIDS:

This problem only affects IBM PC 700 Series 6877 or 6887 systems with Windows95 and an Infrared Transceiver (Dongle) option installed. This option allows communications between two systems via infrared transceiver. The PC 700 6877 and 6887 contain an infrared adapter port on the system board, accessed from the rear of the system.

FIX:

Before installing the TranXit software package, ensure that the latest Infrared Data Association (IrDA) device drivers for Windows95 are installed.

Driver updates may be obtained from the Microsoft Windows95 Service Pak Web site at:

<http://www.microsoft.com/windows/servpak1.sphome.htm>

Choose the "Information System Professionals" section.

After installing the latest level driver, perform the following steps:

- Boot Windows95 and click on "START."
- Click on "SETTINGS."
- Click on "CONTROL PANEL."
- Double click on the Infrared Icon.
- Click on "Options."
- Remove the checkmark on "Enable Infrared Communication."
- Click on "Apply" and "OK" to close the window.

The TranXit software may be installed

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 TranXit is a trademark of PUMA, Inc.

SAS KEYWORDS:

PSY2	D/T68XX	6887	6877
IBMPC	PSVP	PSVPCOMM	PSY2COMM
D/T6887	PSY2ADPT	PSVPADPT	PSVPBRD
PSY2BRD	PC750	PSY2ERR	PSVPERR
PC 750	PC730	PC700	PC 730
41380			

1.4.624 COMMUNICATION ADAPTER FAILURES IN 6381/SI

Record number: H026127

Device: D/T6381
 Model: M
 Tip key:
 Date created: 094/05/05
 Date last altered: A94/05/17

SYMPTOM:

PS/VALUEPOINT 6381/Si 425SX & 433SX (F3X & K3X) MODELS
 MAY EXPERIENCE SYSTEM HANGS AND/OR COMMUNICATION FAILURES
 WITH A 120MB QUANTUM DRIVE INSTALLED. NOT ALL COMMUNICATION
 ADAPTERS ARE AFFECTED IN THIS CONFIGURATION.

PROBLEM ISOLATION AIDS:

IF SYSTEM HANGS AND/OR COMMUNICATION FAILURES ARE OCCURRING IN
 THIS CONFIGURATION, PROCEED WITH THE FOLLOWING ISOLATION AIDS:

1. VERIFY THE FRU PART NUMBER OF THE SYSTEM BOARD. IF THE
 SYSTEM BOARD IS FRU P/N52G7023 OR FRU P/N52G7022, THIS TIP
 APPLIES. PROCEED TO THE NEXT STEP.
2. VERIFY THAT THE LATEST LEVEL OF THE COMMUNICATION APPLICATION
 IS BEING USED AND PROPERLY SETUP ACCORDING TO THE INSTALLATION
 INSTRUCTIONS PROVIDED WITH THE APPLICATION.
3. VERIFY THAT THE FLASH BIOS LEVEL IS AT THE CURRENT LEVEL.
4. SET THE INTERRUPT LEVEL (IRQ) OF THE COMMUNICATION ADAPTER
 TO IRQ2, IRQ9, IRQ10 OR IRQ11. THESE ARE RECOMMENDED
 INTERRUPT SETTINGS FOR COMMUNICATION ADAPTERS IN THE 6381/Si.
 IF THE ADAPTER HAS A CONFIGURATION SETTING FOR "EDGE
 TRIGGERED" INTERRUPTS, SELECT IT AND RE-TEST THE ADAPTER.
5. PERFORM ALL PS/VALUEPOINT ADVANCED DIAGNOSTICS. VERIFY PROPER
 EXECUTION OF THESE DIAGNOSTICS AND RESOLVE ANY FAILURES BEFORE
 PROCEEDING TO THE NEXT STEP.
6. PERFORM ALL ADAPTER DIAGNOSTICS. RESOLVE ANY FAILURES
 OBSERVED WHEN PERFORMING DIAGNOSTICS ON THE FAILING
 COMMUNICATION ADAPTER(S).
7. REMOVE ANY ADAPTERS THAT ARE NOT NECESSARY TO RECREATE
 THE FAILURE.
8. CREATE A SELF BOOTING DISKETTE THAT WILL ALLOW THE OPERATING
 SYSTEM AND THE COMMUNICATION APPLICATION TO LOAD SUCCESSFULLY.
 PERFORM THE FOLLOWING STEPS IN SEQUENCE:
 - A) REMOVE THE HARDFILE CABLE FROM THE SYSTEM BOARD. A POST
 ERROR WILL BE REPORTED AS A RESULT OF REMOVING THE CABLE.
 ENTER THE CONFIGURATION UTILITY, VERIFY THAT THE DRIVE
 IS MISSING FROM THE CONFIGURATION AND THEN SAVE THE
 CHANGES.
 - B) BOOT THE SYSTEM WITH THE SELF BOOTING DISKETTE.
 - C) ATTEMPT TO RECREATE THE FAILURE.
 - D) IF THE FAILURE OCCURS WITH THE HARDFILE CABLE
 DISCONNECTED, THIS TIP DOES NOT APPLY.
 - E) IF THE FAILURE DOES NOT OCCUR AND COMMUNICATION
 WITH THE HOST ESTABLISHES WITHOUT ERRORS, THIS TIP
 DOES APPLY.

FIX:

IF ALL OF THE ABOVE STEPS WERE FOLLOWED PRECISELY AND NO FAILURE
 OCCURS IN STEP "E" AFTER REMOVING THE HARDFILE SIGNAL CABLE
 FROM THE SYSTEM BOARD, AN INCOMPATIBILITY MAY EXIST BETWEEN THE
 COMMUNICATION ADAPTER AND THE 6381/Si.

IN MOST CASES THIS INCOMPATIBILITY CAN BE RESOLVED BY REPLACEMENT
 OF THE SYSTEM BOARD WITH FRU P/N88G4127 (425SX MODEL) OR
 FRU P/N88G4126 (433SX MODEL).

IF FAILURES CONTINUE AFTER THE SYSTEM BOARD HAS BEEN REPLACED,
 UTILIZE NORMAL PROBLEM DETERMINATION PROCEDURES TO ISOLATE THE
 FAILURE.

SAS KEYWORDS:

PSVP	PSY2	PS/VP	6381
PSVPDIAG	PSY2DIAG	PSVPERR	PSY2ERR
PSVPBRD	PSY2BRD	VALUEPOINT	PSY2COMM
PSVPCOMM	PSVPPART	PSY2PART	IOR
I/O READ			

1.4.625 COMMUNICATION ADAPTERS FAIL ON 6384

Record number: H101998

Device: D/T6384
Model: M
Tip key:
Date created: 092/11/19
Date last altered: A93/03/04

SYMPTOM:

AN IBM OR OEM TOKEN RING, 3270, 5250 OR ETHERNET ADAPTER MAY FAIL TO INITIALIZE AND CONNECT WITH THE HOST ON A 6384 PS/VALUEPOINT SYSTEM. THIS FAILURE IS CAUSED BY A CONFLICT BETWEEN THE COMMUNICATIONS ADAPTER AND THE VIDEO INTERRUPT SIGNAL.

SYMPTOMS MAY INCLUDE:

- COMMUNICATIONS ADAPTER FAILS TO INITIALIZE AND CONNECT TO THE HOST
- SYSTEM WILL PASS POST AND HALT WITH CURSOR BLINKING IN THE UPPER LEFT CORNER OF THE DISPLAY.

PROBLEM ISOLATION AIDS:

DIAGNOSTICS FOR THE COMMUNICATION ADAPTER WITHOUT ERRORS. SYSTEM DIAGNOSTICS MAY PASS WITHOUT ERROR.

FIX:

ON 6384 MODEL 325T (C0X, C2X OR C4X), LOCATE JUMPER POSITION *J16, IF PRESENT. MOVE THE J16 JUMPER FROM PINS 1-2 TO 2-3.

*J16 IS LOCATED DIRECTLY TO THE REAR OF THE PARALLEL PORT J5. IF THE J16 JUMPER POSITION IS NOT PRESENT, THE BOARD IS AT AN EC LEVEL THAT IS NOT AFFECTED BY THE "SYMPTOM" INFORMATION CONTAINED IN THIS TIP. UTILIZE NORMAL PROBLEM DETERMINATION PROCEDURES TO ISOLATE THE FAILING FRU.

ON 6384 MODEL 425SX (F0X, F2X OR F4X), LOCATE JUMPER POSITION **JP17. REMOVE THE JP17 JUMPER FROM ONE OF THE TWO PINS.

** JP17 IS LOCATED ON THE LEFT SIDE OF THE RISER CONNECTOR, AND TO THE LEFT OF THE SECOND PLUGGABLE MODULE. THE MODULES AND RISER CONNECTOR ARE PICTURED IN THE "SYSTEM BOARD LAYOUTS" SECTION OF THE 6384 HMS/R.

ON 6384 MODEL 433DX (M0X, M4X OR M5X) AND 466DX2 (W52 AND W53), LOCATE JUMPER POSITION ***JP305. REMOVE THE JP305 JUMPER FROM ONE OF THE TWO PINS.

***THE LOCATION OF JP305 CAN BE FOUND IN THE "SYSTEM BOARD LAYOUTS" SECTION OF THE 6384 HMS/R.

IF THE ABOVE PROCEDURES DO NOT RESOLVE THE FAILING CONDITION, UTILIZE NORMAL PROBLEM DETERMINATION PROCEDURES TO ISOLATE THE FAILING FRU.

SAS KEYWORDS:

PSVP	PSY2	PSY2BRD	PSY2ADPT
PSY2COMM	VALUE POINT	VALUEPOINT	PSVPADPT
PSVPBRD	PSVPCOMM		

1.4.626 COMMUNICATION ADAPTERS FAIL IN 6381/SI

Record number: H121937

Device: D/T6381
 Model: M
 Tip key:
 Date created: 093/12/02
 Date last altered: A94/07/20

SYMPTOM:

PS/VALUEPOINT 6381/SI 433DX AND 466DX2 MODELS WITH COMMUNICATION ADAPTERS INSTALLED USING INTERRUPT 2 OR 9 MAY FAIL TO FUNCTION.

THE ADAPTERS MAY CAUSE A SYSTEM HANG OR FAIL WITH ERROR MESSAGES INDICATING THAT THE ADAPTER COULD NOT INITIALIZE.

PROBLEM ISOLATION AIDS:

COMMUNICATION ADAPTERS SUCH AS THE 3270 ADAPTER, TOKEN RING ADAPTERS AND ETHERNET ADAPTERS SET TO INTERRUPT 2 OR 9 MAY FAIL DIAGNOSTIC ROUTINES AND FAIL TO LOAD COMMUNICATION APPLICATIONS DUE TO AN INTERRUPT CONFLICT.

A LIMITED NUMBER OF SYSTEM BOARDS WERE SHIPPED WITH INCORRECT SILKSCREEN LABELING ON THE SYSTEM BOARD IN POSITION J14. JUMPER POSITION J14 MAY SHOW POSITION "1" TO THE REAR OF THE 3 PIN JUMPER LOCATION, TOWARD THE SYSTEM BOARD I/O CONNECTORS. THIS IS INCORRECT. THE REAR JUMPER PIN SHOULD BE MARKED AS "3".

THE WIRING OF THE SYSTEM BOARD IS CORRECT. ONLY THE SILKSCREEN MARKING ON THE BOARD IS INCORRECT.

FIX:

LOCATE JUMPER POSITION J14. POSITION THE JUMPER IN THE "DEFAULT" LOCATION AS PICTURED IN THE HMS/R AND ON THE LABEL ATTACHED TO THE INSIDE OF THE SYSTEM UNIT TOP COVER ASSEMBLY. THE DEFAULT POSITION HAS THE JUMPER INSTALLED ON THE REAR TWO PINS.

IF THE COMMUNICATION ADAPTER(S) CONTINUES TO EXHIBIT THE SYMPTOMS STATED ABOVE, UTILIZE NORMAL PROBLEM DETERMINATION PROCEDURES TO ISOLATE THE FAILING SOFTWARE APPLICATION OR THE FAILING FRU.

NOTE: VERIFY THAT THE APPLICATIONS BEING USED ARE AT THE LATEST LEVEL AND THAT ALL APPLICABLE CSD'S AND PTF'S ARE APPLIED.

SAS KEYWORDS:

PSVP	PSY2	PSVPERR	PSY2ERR
PSVPBRD	PSY2BRD	PSVPCOMM	PSY2COMM
PSVPPART	PSY2PART	PSVPDIAG	PSY2DIAG
PSVPADPT	PSY2ADPT	6381	52G7017
52G7016			

1.4.627 CONFIG ERRORS/MUTE BUTTON FAILURE W/BUSINESS AUDIO

Record number: H131804

Device: D/T6886
 Model: M
 Tip key:
 Date created: O95/11/28
 Date last altered: A95/11/28

SYMPTOM:

IBM PC 700 Series Microchannel or ISA/PCI systems may display the following error symptoms under OS/2 WARP or DOS/Windows 3.1 using the Crystal Business Audio device drivers.

- A) CONFIG.SYS errors while loading OS/2 WARP after installing an updated version of the Crystal Drivers.
- B) The Mute light activates automatically when exiting Windows to a DOS prompt and cannot be deactivated manually.

PROBLEM ISOLATION AIDS:

The errors ONLY affect systems that are preloaded by IBM with the Select-A-System feature that allows a user to select either a DOS/Windows or OS/2 WARP operating system.

FIX:

Install the following Crystal Device Driver updates depending on the operating system being used:

OS/2 WARP: 700AUD.EXE
 DOS/Windows: CRYSTAL1.EXE
 CRYSTAL2.EXE

The updates may be obtained from the IBM PC Company BBS system by calling 1 - 919-517-0001. Locate the "IBM PC 300/700 Files" section (section #21) for the updates.

The updates may also be downloaded via the Internet from the IBM Personal Computer File Library by searching the following Internet URL:

[Http: //www.pc.ibm.com/files.html](http://www.pc.ibm.com/files.html)

The updates are located in the IBM PC 300 & 700 Series Files section or by using the search facility to locate the files by the names listed above.

If the failure persists continue normal problem determination procedures to isolate the failing application or FRU.

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SAS KEYWORDS:

PSVP	PSY2	D/T68XX	IBMPC
PSY2ERR	PSVPERR	PSY2PROG	PSVPPROG
D/T6876	D/T6875	D/T6885	6886
6875	6876	6885	WAVE
PC750	PC730	PSY2AUDIO	PSVPAUDIO

1.4.628 CONFIGURATION PROBLEMS WITH 5 OR MORE ADAPTERS & SCSI

Record number: H012523

Device: D/T8550
 Model: M
 Tip key:
 Date created: 090/03/05
 Date last altered: A92/11/18

SYMPTOM:

1. CONFIGURATION ERRORS AFTER CONFIGURATION IS SETUP.
2. SYSTEM REQUIRES EXCESSIVE TIME TO CONFIGURE OR SYSTEM HANGS DURING CONFIGURATION SETUP.

ONE OR MORE OF THE FOLLOWING ADAPTERS MAY BE INVOLVED:

TOKEN RING
 8514/A
 3270
 SCSI ADAPTER WITH CACHE (1 OR MORE)
 SCSI ADAPTER WITHOUT CACHE (1 OR MORE)
 S/370 CHANNEL EMULATION ADAPTER/A

PROBLEM ISOLATION AIDS:

CERTAIN ADAPTERS REQUIRE SPECIFIC (UNIQUE) ADDRESSES IN ROM (READ ONLY MEMORY). IF CONFIGURATION DIFFICULTIES ARE EXPERIENCED, THE FOLLOWING STEPS SHOULD BE TAKEN:

- A. REMOVE ENOUGH ADAPTERS SO THAT A MAXIMUM OF 4 ARE LEFT IN THE SYSTEM (THERE IS NO SPECIFIC INSTALLATION ORDER). RUN SETUP. POWER-OFF THE SYSTEM.
- B. ADD ANOTHER ADAPTER AND RUN SETUP. THIS STEP SHOULD BE REPEATED AS MANY TIMES AS NECESSARY TO COMPLETE THIS SYSTEM'S UNIQUE CONFIGURATION.
- C. IF AFTER ADDING ALL ADAPTERS, ONE AT A TIME, SETUP HAS SUCCESSFULLY RESOLVED ALL CONFLICTS, THE USER IS DONE. IF CONFLICTS REMAIN EVEN AFTER STEPS A & B, THEN PROCEED TO TO STEP D. AND CONSULT "ADDITIONAL INFORMATION" WHICH FOLLOWS BELOW.
- D. REMOVE ENOUGH ADAPTERS SO THAT A MAXIMUM OF 4 AGAIN REMAIN. REARRANGE THESE 4 ADAPTERS INTO DIFFERENT SLOTS. RUN SETUP. PROCEED TO STEP B.

ADDITIONAL INFORMATION:

1. ANY REMAINING CONFIGURATION CONFLICTS CAN USUALLY BE CLEARED BY MAKING MANUAL CHANGES. THIS CAN BE DONE BY SELECTING "SET CONFIGURATION" FROM THE MAIN MENU, FOLLOWED BY SELECTING "CHANGE CONFIGURATION." AT THIS POINT YOU WILL SEE AN ASTERISK (*) NEXT TO THE ADAPTER RESOURCE THAT IS IN CONFLICT. YOU MAY ALTER THE SETUP SELECTIONS MANUALLY ON SOME ADAPTERS UNTIL ALL CONFLICTS ARE RESOLVED. (THIS IS DONE USING THE PF5 AND PF6 KEYS, TO STEP THRU THE ALLOWABLE CONFIGURATION SELECTIONS FOR A GIVEN ADAPTER LINE ITEM). AFTER ALL CONFLICTS ARE RESOLVED USING THIS METHOD, PF10 SHOULD BE PRESSED TO SAVE THE CONFIGURATION. CONFLICT RESOLUTION WILL BE APPARENT BECAUSE THE ASTERISK (*) SHOULD NOT BE PRESENT ON ANY ADAPTER LINE ITEM.
2. TOKEN RING AND BROADBAND/BASEBAND ADAPTERS CAN CO-EXIST. IF THE SYSTEM HAS ONE OF EACH KIND, THEY MAY BOTH BE CONFIGURED TO "PRIMARY" BY THE SETUP PROGRAM.

TWO TOKEN RING ADAPTERS CAN CO-EXIST. ONE WILL BE CONFIGURED AS "PRIMARY;" THE OTHER AS "ALTERNATE" BY THE SETUP PROGRAM.

TWO BROADBAND/BASEBAND ADAPTERS CAN CO-EXIST. SETUP WILL CONFIGURE ONE AS "PRIMARY;" THE OTHER AS "ALTERNATE."

ALTERING OR ASSIGNING A "PRIMARY" ADAPTER TO "ALTERNATE" MAY ALLOW CERTAIN CONFIGURATIONS TO COMPLETE SUCCESSFULLY, BUT THE "ALTERNATE" SELECTION FOR A BROADBAND/BASEBAND ADAPTER SHOULD BE SELECTED ONLY IF A "PRIMARY" BROADBAND/BASEBAND ADAPTER HAS ALREADY BEEN CONFIGURED.

NOTE: SPECIAL APPLICATION SOFTWARE CONSIDERATIONS MAY APPLY TO THE "SETTING-UP" OF THE ADAPTERS. THE USER SHOULD CONSULT ANY LITERATURE THAT ACCOMPANIED THE APPLICATION SOFTWARE TO CONFIRM THESE CONSIDERATIONS.

FIX:

NONE

SAS KEYWORDS:

PSY2	8550SYSADPT	8560SYSADPT	8570SYSADPT
8580SYSADPT	PSY2ADPT	PSY2ERR	8550SYSERR
8560SYSERR	8565SYSERR	8570SYSERR	8580SYSERR
8565SYSADPT	8555SYSADPT	PSY2DIAG	8550SYSDIAG
8555SYSDIAG	8560SYSDIAG	8565SYSDIAG	8570SYSDIAG
8580SYSDIAG	8555SYSERR	D/T8550	D/T8555
D/T8556	D/T8557	D/T8560	D/T8565
D/T8570	D/T8573	D/T8580	D/T9585

1.4.629 CONMAN WILL NOT LOGON & HELP FUNCTION FAILS

Record number: H013982

Device: D/T6877
 Model: M
 Tip key:
 Date created: 096/04/01
 Date last altered: A96/04/01

SYMPTOM:

The CONMAN (Connection Manager) application included in the OS/2 WARP Connect preload on IBM PC 700 Series 6877 and 6887 systems may fail with the following symptoms:

1. CONMAN "Logon" menu item does not logon to a network.
2. CONMAN Help functions do not work.

PROBLEM ISOLATION AIDS:

NONE

FIX:

- Problem 1. - The CONMAN menu has a "Logon" item. This item cannot actually logon to a network. CONMAN can logoff of a network. This is a mis-write in the CONMAN menu.
- Problem 2. - To enable the Help function, open the icon Settings. Change the Working Directory to "C: \IBMLAN\NETPROG"

SAS KEYWORDS:

PSY2	D/T68XX	6887	6877
IBMPC	PSVP	PSVPCOMM	PSY2COMM
D/T6887	PSVPPROG	PSY2PROG	PSVPADPT
PC 750	PC750	PC700	PC 730
40723	PC730	40724	

CONTROLS DO NOT OPERATE AFTER ANALOG CD REPLACEMENT

1.4.630 CONTROLS DO NOT OPERATE AFTER ANALOG CD REPLACEMENT

Record number: H086423

Device: D/T9527
 Model: M
 Tip key:
 Date created: 094/10/06
 Date last altered: A95/01/27

SYMPTOM:

The front panel user controls do not operate correctly.

PROBLEM ISOLATION AIDS:

The Analog Card Tray was just replaced.

FIX:

Ensure that the correct Analog Card Tray FRU was used as the replacement for the model being serviced.

|FRU part numbers are now being added to the card trays

The FRU part numbers for the parts are as follows:
 9527 - 001 Analog Card Tray FRU P/N68G2540.

|The 9527 - 001 card tray when viewed from the rear will be
 |identified on the left side with a silk screen marking
 |of "SMB053".

9527 - 011 Analog Card Tray FRU P/N95G8971.

|The 9527 - 001 card tray when viewed from the rear will be
 |identified on the left side with a silk screen marking
 |of "SMB054".

The Analog Card Tray FRUs are NOT interchangeable between the model 9527-001 and the model 9527-011.

Note: the 9527-011 has a front panel "tilt rotation" control. the 9527 - 001 does not have this feature.

SAS KEYWORDS:

PSY2	PSY2DISP	TILT	967X
HMC	D/T967X	D/T9672	D/T9674
D/T9676	9672	9674	9676

1.4.631 CORNERSTONE IMAGEACCEL2 FAILS IN PC 365 6589

Record number: H134038

Device: D/T6589
Model: M
Tip key:
Date created: 096/09/18
Date last altered: A96/09/18

SYMPTOM:

A Cornerstone ImageAccel2 PCI video adapter may fail to function or may take up to 40 seconds after power-on to display video when installed in an IBM PC 365 Series 6589.

PROBLEM ISOLATION AIDS:

The failure occurs in either Primary or Secondary PCI slots on the riser card.

FIX:

The Cornerstone ImageAccel2 PCI video adapter is not compatible with the IBM PC 365 Series 6589 system. Customers experiencing failures with the adapter installed in a 6589 system should be directed back to their point of purchase.

ImageAccel2 is a trademark of Cornerstone Imaging, Inc.

SAS KEYWORDS:

PSY2	PSVP	IBMPC	PSVPOEM
PSY2OEM	PSVPADPT	PSY2ADPT	PSY2DISP
PSVPDISP	51299	PC365	

1.4.632 CORRUPT CMOS,PASSWORD NOT VALID ERRORS ON PC 300/700

Record number: H023394

Device: D/T6571
 Model: M
 Tip key:
 Date created: 096/04/04
 Date last altered: A96/04/04

SYMPTOM:

IBM PC 300 and 700 Series systems may display a "CMOS Corrupted-Password Not Valid" error after the system has completed POST and the Power-on Password is entered.

The failure occurs as a result of installing an ISA Legacy adapter (not Plug 'n Play) that uses I/O address "XX70" or "XX71" (where XX is equal to or greater than 04).

PROBLEM ISOLATION AIDS:

Affected machine types are: 6571 6576 6877
 6573 6586 6887
 6581 6598
 6583

FIX:

Configure the ISA adapter to use an I/O address other than "XX70" or "XX71."

SAS KEYWORDS:

PSY2	D/T65XX	65XX	6585
IBMPC	PSVP	PSVPERR	PSY2ERR
PSY2ADPT	PSVPADPT	D/T6573	D/T6581
D/T6583	D/T6576	D/T6586	D/T6598
D/T6877	D/T6887	NATIONAL 306	PC 730
PC 750	PC 330	PC 350	

1.4.633 CORRUPTED DATA & ERRORS ON REBOOT W/486SLC2 UPGRADE

Record number: H133774

Device: D/T8555
Model: M
Tip key:
Date created: 096/08/28
Date last altered: A96/08/28

SYMPTOM:

IBM PS/2 8555SX systems with a Reply 486SLC2 25/50 upgrade board installed may exhibit the following error indications after rebooting the system:

- 1) "Error when reading 1, press Enter" message is displayed.
- 2) Corrupted FAT table on reboot after the system has been powered off/on following a perceived system hang. The hardfile must be formatted and reloaded.

PROBLEM ISOLATION AIDS:

The upgrade board was installed from an incomplete upgrade package. The complete package contains a special hardfile cable that prevents data held in cache during a power off/on cycle or a soft reset from being lost.

FIX:

Install hardfile cable FRU P/N71G2662 or cut pin 1 of the existing hardfile cable. Pin 1 is the red wire on the IDE hardfile cable.

If the failures persists, continue normal problem determination to isolate the failing FRU or application.

SAS KEYWORDS:

PSY2	PSY2FDSK	8555	PSY2BRD
PSY2PART	PSY2ERR	PSY2OPER	486 SLC
44791	486 SLC2		

1.4.634 CORRUPTED VIDEO WITH MATROX MILLENIUM IN IBM PC365

Record number: H16270

Device: D/T6589
Model: M
Tip key:
Date created: 097/07/02
Date last altered: A97/07/02

SYMPTOM:

When running Windows95 on an IBM PC365 system using a Matrox Millenium video adapter, certain programs will not run properly if Device Bitmap Caching is enabled.

PROBLEM ISOLATION AIDS:

The following programs may not run properly, and may display corrupted video:

- Remote control programs such as CoSession.
- Programs offering multiple monitor/multiple adapter support.
- Microsoft NetMeeting.
- Accessibility applications such as screen magnifiers and screen readers.

FIX:

To correct the condition, make the following changes in Windows95:

1. Right click on the Windows95 desktop background.
2. Left click on "Properties."
3. Left click on the "Settings" tab.
4. Left click on the "PowerDesk" button.
5. Make sure the "Use Device Bitmaps Caching" is NOT checked.
6. Left click on "Apply."
7. Left click on "Close."
8. Left click on "Restart."

Windows95 & NetMeeting are trademarks of Microsoft Corporation.
Matrox Millenium is a trademark of Matrox Corporation.
CoSession is a trademark of Artisoft, Inc.

SAS KEYWORDS:

PSY2	PSY2DISP	PSY2PROG	PSY2OPER
PSVP	PSVPDISP	PSVPPROG	PSVPOPER
D/T6589	6589	UNCLASSIFIED	

1.4.635 CORRUPTED/DISTORTED VIDEO ON PC 300/700 WITH OS/2

Record number: H132521

Device: D/T6885
 Model: M
 Tip key:
 Date created: 096/02/06
 Date last altered: A96/04/19

SYMPTOM:

IBM PC 300/700 Series 6575,6585,6875,6885,6876 and 6886 systems with S3 Vision864 integrated video chipsets may experience video corruption while running applications in OS/2 seamless mode (in a window as opposed to full screen mode). This symptom has been experienced with applications such as Lotus 1 - 2 - 3 for Windows or Lotus: CCMail.

PROBLEM ISOLATION AIDS:

Applications running in a seamless mode on the OS/2 Desktop may intermittently begin to lose video synchronization which may cause the video image to fade out, begin to roll, or become too distorted to read. The power-on LED on IBM and other brands of multi-sync monitors will begin to blink when video sync is lost.

The 300/700 Series systems are built with either an S3 Vision864 or S3 Vision868 video chipset. The following system board FRU part numbers with the S3 Vision868 chipset are NOT affected:

FRU P/N12H1947 ISA 100Mhz & below Models
 FRU P/N12H1954 Micro Channel 100Mhz & below Models
 FRU P/N40H4759 Micro Channel 100Mhz+ Models
 FRU P/N40H4760 ISA 100Mhz+ Models

Only system boards with the S3 Vision864 chipset AND an S3 Video DAC in location U3, next to the battery, are affected.

FIX:

Not all systems will exhibit the failure even while running seamless applications. The following system board FRU part numbers should be replaced if normal problem determination efforts conclude that the failure is consistent with this tip:
 FRU P/N88G4282 60Mhz Pentium ISA/PCI (6575/6585)

FRU P/N88G4270 / Asm P/N40H4811 (75/90Mhz ISA Bus Models)

FRU P/N11H5545 / Asm P/N40H4795 (75/90Mhz Micro Channel Models)

Windows is a trademark of the Microsoft Corporation.

SAS KEYWORDS:

PSVP	PSY2	PSVPDISP	PSY2DISP
IBMPC	PSY2BRD	PSVPBRD	OS2
D/T68XX	D/T6875	D/T6885	D/T6876
D/T6886	DISPLAY	88G4270	11H5545
12H1947	12H1954	40H4759	40H4760
D/T6585	D/T6575		

COSESSION DISCONNECTS AFTER RUNNING COM2 TESTS

1.4.636 COSESSION DISCONNECTS AFTER RUNNING COM2 TESTS

Record number: H01556

Device: D/T6577
 Model: M
 Tip key:
 Date created: 096/06/19
 Date last altered: A96/06/19

SYMPTOM:

IBM PC 300 Series 6577 and 6587 systems running CoSession for Windows may disconnect from the CoSession Viewer when the two COM2 external loopback tests in QAPLUS/WIN-WIN are selected.

PROBLEM ISOLATION AIDS:

The failure occurs when the system is running CoSession for Windows with an asynchronous connection via COM1 and all of the COM2 tests or just the two external loopback tests in QAPLUS/WIN-WIN are performed.

COM2 is the built-in Infrared port on the PC 300 6577 and 6587. This port performs much like a serial port, however, the D-shell connector is female as opposed to a standard male D-shell. The external tests typically performed using a wrap connector will not work on COM2. When the tests are selected and started, the CoSession Viewer will be disconnected.

FIX:

Do not replace hardware. Run only the internal loopback test selections in QAPLUS/WIN-WIN to test COM2.

All 4 loopback test in QAPLUS/WIN-WIN can be performed on COM1.

SAS KEYWORDS:

PSY2	D/T65XX	6577	6587
IBMPC	PSVP	PSVPADPT	PSY2ADPT
D/T6587	PC 350	PC350	PC300
PC 330	PC330	43820	PSVPCOMM
PSY2COMM			

1.4.637 COSESSION DISCONNECTS WHILE RUNNING QAPLUS MEM TEST

Record number: H133501

Device: D/T6560
Model: M
Tip key:
Date created: 096/08/02
Date last altered: A96/08/02

SYMPTOM:

IBM PC 340 Series 6560 systems preloaded with Microsoft Windows 3.11 or Windows95 and CoSession 7.0 may intermittently disconnect CoSession when QAPlus/WIN-WIN 1.14 Memory test is executed.

PROBLEM ISOLATION AIDS:

When the CoSession Host and Viewer connect and QAPlus/WIN-WIN Memory test is selected and started on the Host, CoSession may disconnect.

FIX:

To resolve this failure, perform the following steps to disable the "Keep Alive Timer" at the CoSession Viewer end:

- 1) Open CoSession Viewer and click on Setup.
- 2) Click on Viewer Setup.
- 3) Click on "Keep Alive Timer" to remove the blue check.
- 4) The "Keep Alive Timer" is disabled.
- 5) After running the QAPlus/WIN-WIN Memory test, the "Keep Alive Timer" may be reenabled.

SAS KEYWORDS:

PSVP	PSY2	PSVPPROG	PSY2PROG
PSVPERR	PSY2ERR	47808	PC 300
IBMPC			

1.4.638 COSESSION FOR OS/2 FAILS W/NETWARE

Record number: H01544

Device: D/T6577
Model: M
Tip key:
Date created: 096/06/19
Date last altered: A96/06/19

SYMPTOM:

IBM PC 300 Series 6577 or 6587 systems preloaded with OS/2 and Microsoft Windows may fail to connect a CoSession for OS/2 Host to a CoSession for Windows Viewer if the system is running Novell Netware.

PROBLEM ISOLATION AIDS:

The failure does not occur if CoSession for Windows Host is used instead of CoSession for OS/2 Host. Both are available on systems with the Select-a-System preloaded software.

FIX:

An updated version of CoSession for OS/2 Host will be available from the IBM PC Company BBS to resolve this failure. The new version should be posted on the BBS by 6/1/1996.

Customers experiencing this failure should download and install the updated version or use CoSession for Windows Host.

Windows is a trademark of the Microsoft Corporation.
Netware is a trademark of Novell, Inc.

SAS KEYWORDS:

PSY2	D/T65XX	6577	6587
IBMPC	PSVP	PSVPPROG	PSY2PROG
D/T6587	PC 350	PC350	PC300
PC 330	PC330	45361	

1.4.639 COSESSION HOST INSTALLATION FAILS WITH SHRINKWRAP WIN95

Record number: H16420

Device: D/T6588
Model: M
Tip key:
Date created: 097/07/11
Date last altered: A97/07/14

SYMPTOM:

When restarting Windows95 after installing CoSession Host, the system shuts down completely. Normally, the system should restart automatically.

PROBLEM ISOLATION AIDS:

This problem occurs if the customer has installed a shrinkwrap version of Windows95. The shrinkwrap version of Windows95 does not contain the correct video device driver.

FIX:

If the customer has already installed CoSession and is experiencing this problem, restart Windows95 in Safe Mode and install the appropriate Windows95 video driver from the Ready To Configure (RTC) CD. Otherwise, install the appropriate Windows95 video driver from the RTC/CD before installing CoSession Host.

-CoSession is a trademark of Artisoft Corporation.
-Windows95 is a trademark of Microsoft Corporation.

SAS KEYWORDS:

PSY2	PSY2OPER	PSVP	PSVPOPER
D/T6588	D/T6888	6588	6888
64250F_1	PSY2PROG	PSVPPROG	

1.4.640 COSESSION UNINSTALL FAILS ON PC 340 6560

Record number: H133504

Device: D/T6560
Model: M
Tip key:
Date created: 096/08/02
Date last altered: A96/08/02

SYMPTOM:

IBM PC 340 Series 6560 systems preloaded with Microsoft Windows95 and CoSession may display a "copy error" message when the CoSession Uninstall program is executed.

PROBLEM ISOLATION AIDS:

When the CoSession Uninstall program is started, the system displays a "copy error" message and states that CoSession will not uninstall.

FIX:

To resolve this failure, perform the following modification to the UNINSTAL.DAT file located in the C: \CSW directory:

- 1) Use an editor to open the UNINSTAL.DAT file.
- 2) Locate the APPLICATION section within that file.
- 3) Change "DefPMGroup=COSW.GRP, IBM Online Housecall"
to
"DefPMGroup=CSW.GRP, CoSession"

The CoSession Uninstall program should now work properly.

SAS KEYWORDS:

PSVP	PSY2	PSVPPROG	PSY2PROG
PSVPERR	PSY2ERR	49583	PC 300
IBMPC			

1.4.641 CPU THERMAL MONITOR FAILS TO INSTALL ON 6899

Record number: H137032

Device: D/T6899
Model: M
Tip key:
Date created: 097/03/24
Date last altered: A97/03/24

SYMPTOM:

IBM IntelliStation Z Pro 6899 systems running Microsoft WindowsNT v3.51 or v4.0 may exhibit an error indication on reboot following the installation of the CPU Thermal Monitor Application from the RTC CD.

The system may display a "driver or service failed to load" error after rebooting the system following the "Install All" option on the RTC CD. The "Install All" option installs various applications, including the CPU Thermal Monitor.

PROBLEM ISOLATION AIDS:

To recreate the failure, perform the following steps:

- 1) Select START, PROGRAMS, ADMINISTRATIVE TOOLS and EVENT VIEWER from the WindowsNT desktop.
- 2) The EVENT VIEWER will display the message that the CPU Monitor Application failed to load.

FIX:

The "DMI for NT" application must be installed and running BEFORE the installation of the CPU Monitor Application.

After installing "DMI for NT" from the RTC CD, the system must be rebooted for the installation to complete successfully. CPU Thermal Monitor will install and function properly following the reboot.

WindowsNT is a trademark of the Microsoft Corporation.

SAS KEYWORDS:

PSVP	PSY2	PSVPPROG	PSY2PROG
PWS	IBMPC	UNCLASSIFIED	62203

1.4.642 CPU UTILIZATION IS INCORRECT W/NETFINITY

Record number: H132827

Device: D/T6877
Model: M
Tip key:
Date created: 096/02/28
Date last altered: A96/02/28

SYMPTOM:

IBM PC 700 Series 6877 and 6887 may show CPU utilization to be at 100% if viewed with the NetFinity for Windows CPU Utilization feature.

PROBLEM ISOLATION AIDS:

CPU utilization show 100% when viewed while the Advanced Power Management (APM) feature of the PC 700 is enabled.

FIX:

This problem is caused by the APM feature taking control of the Windows CPU Utilization program interface.

Disable APM to allow the NetFinity for Windows CPU Utilization program to take an accurate reading of the system resources.

Windows is a trademark of the Microsoft Corporation.

SAS KEYWORDS:

PSY2	D/T68XX	6887	6877
IBMPC	PSVP	PSVPPROG	PSY2PROG
D/T6887	PC730	PC700	PC 730
PC 750	PC750	40180	

1.4.643 CREATIVE LABS CDROM DOES NOT WORK IN IBM PC340

Record number: H16267

Device: D/T6560
 Model: M
 Tip key:
 Date created: 097/06/30
 Date last altered: A97/07/02

SYMPTOM:

The customer may experience either of the following errors:

1. The system will hang with the CDROM installed as a master device on the secondary IDE controller.
2. The CDROM is no longer recognized after a warm boot when installed as a slave device on the primary IDE controller.

PROBLEM ISOLATION AIDS:

There are two problems. One or both may apply.

1. The IDE cable supplied with the Creative Labs CDROM is 24 inches long. EIDE specifications state that the cable length cannot exceed 18 inches.
2. The system is at flash BIOS level 21 or earlier. A timing delay difference between a warm boot and a cold boot has been identified in BIOS levels 21 and earlier. Cold booting the system will cause the CDROM to be re-recognized.

FIX:

1. Obtain an IDE cable 18 inches or less. Contact your vendor or Creative Labs.
2. Update the flash BIOS to the current level.

The current flash BIOS may be obtained from the PC Company BBS at 919 - 517 - 0001 or from the PC Company file library via the internet at "<http://www.us.pc.ibm.com/searchfiles.html>." Search on "LXJT" to obtain the most current level for the IBM PC340.

SAS KEYWORDS:

PSY2	PSY2MCD	PSY2OPER	PSY2ADPT
PSVP	PSVPMCD	PSVOPER	PSVPADPT
D/T6560	6560	HLPCT_3419	UNCLASSIFIED

1.4.644 CRYSTALWARE MPU-401 DEVICE MANAGER CONFLICT IN WINDOWS 95

Record number: H163740

Device: D/T6561
 Model: M
 Tip key:
 Date created: 098/05/20
 Date last altered: A98/05/21

SYMPTOM:

Device manager displays a yellow exclamation mark beside the native Windows95 Crystal MPU-401 device and indicates the device is not working properly.

The CrystalWare MPU-401 device is also installed and working properly.

PROBLEM ISOLATION AIDS:

This tip applies to the following systems preloaded with Windows95.

IBM PC300GL Series 6561/6591 systems
 IBM PC300PL Series 6862/6892 systems

FIX:

1. In device manager, highlight the Generic MPU-401 device indicated as a conflict and select Remove.
2. Shut down and restart Windows95. The CrystalWare MPU-401 device should be listed without conflicts and working properly.

Windows and Windows95 are trademarks of Microsoft Corporaiton.

SAS KEYWORDS:

PSY2	CDTERR	CDTOPER	D/T6561
D/T6591	6561	6591	UNCLASSIFIED
MPU401	CRYSTAL	90538	D/T6862
D/T6892	6862	6892	

1.4.645 D/T 9576/77 ERROR CODE 01290XXX

Record number: H12411

Device: D/T95XX
Model: M
Tip key:
Date created: 093/06/18
Date last altered: A94/03/17

SYMPTOM:

ERROR CODE 01290XXX CAN BE SOLID OR INTERMITTENT. THE ERROR INDICATION USUALLY OCCURS AFTER A PROCESSOR UPGRADE. MAPS CALL OUT SYSTEM BOARD OR PROCESSOR BOARD.

PROBLEM ISOLATION AIDS: NONE**FIX:**

RESEAT THE PROCESSOR CHIP. IN SOME CASES THE PROCESSOR WAS NOT FULLY SEATED IN MANUFACTURING OR DURING A PROCESSOR UPGRADE.

THE FOLLOWING PROCEDURE SHOULD BE USED:

REMOVE THE PLANAR BOARD FROM THE SYSTEM AND PLACE IT ON A SMOOTH, FLAT AREA. THE PLANAR BOARD SHOULD BE SUPPORTED UNDER THE SOCKET AREA. PUSH THE PROCESSOR DOWN ON THE SYSTEM BOARD UNTIL FULLY SEATED. THE HEEL OF YOUR HAND MAY BE USED TO ACCOMPLISH THIS.

WHEN THE PROCESSOR IS FULLY SEATED, THE PINS ARE BARELY VISIBLE, WHEN VIEWED FROM THE SIDE.

SAS KEYWORDS:

PSY2	PS2	PS/2	ERR
012901XX	012902XX	012903XX	PSY2ERR
01290200	D/T9576	D/T9577	PSY2BRD
9577	9576		

1.4.647 DAG / DEGAUSS & GROUND CABLES APPEAR TOO SHORT

Record number: H034453

Device: D/T6325
Model: M
Tip key:
Date created: 094/06/15
Date last altered: A94/09/20

SYMPTOM:

The DAG/Degauss & ground cables on the 6325 ITC, FRU P/N39G6292, or on the 9524 ITC, FRU P/N39G6260, appear too short and can not be attached to the card tray.

PROBLEM ISOLATION AIDS: NONE

- The ITC was just replaced.
- The cables on the new ITC appear shorter than the ones on the older ITC being removed.

FIX:

- The DAG/Degauss & ground cables may be installed incorrectly.
- Remove the DAG/Degauss & ground cables from the new ITC.
- Take note of the installation of the cables on the old ITC.
- Install the removed cables on the new ITC in a similar manner.

Manufacturing has been made aware of this problem and has taken corrective action on the newly assembled ITC FRUs.

SAS KEYWORDS:

PSY2	PSY2DISP	DEGAUSS	DEGAUSE
WIRE	DEGUASS	DEGAUS	GROUND
STRAP			

1.4.648 DATA CAN BE WRITTEN TO THE DISK, BUT NOT READ BACK

Record number: H084267

Device: D/T8640
 Model: M
 Tip key:
 Date created: 095/12/13
 Date last altered: A95/12/18

SYMPTOM:

When running under DOS, files on SCSI-2 fixed disks larger than 3.88 GB appear to be corrupted. Data has been written to the fixed disk, but it cannot be read back.

Note:

When running DOS FDISK on fixed disks greater than 7.8GB, FDISK will display an incorrect disk capacity.

PROBLEM ISOLATION AIDS:

1. An IBM SCSI-2 FAST PCI Adapter, Option P/N 32G3100, FRU P/N53G0382, is installed.
2. Diagnostics on the adapter and the fixed disk run error free
3. The operating system is DOS.
4. FDISK "appears" to run normally during operating system installation on fixed disks between 3.88 and 7.8 GB.

FIX:

Although FDISK may have appeared to run correctly, DOS is unable to perform a correct FDISK on a SCSI-2 fixed disk 3.88 GB or larger.

There is a code limitation in the BIOS originally installed on the IBM SCSI-2 FAST PCI Adapter which limits the usable size of the fixed disk to 3.88 GB (Gigabytes).

This is not a defect in the adapter or the BIOS code. It is a result of rapidly progressing personal computer technology. When this adapter was marketed, there were no SCSI-2 fixed disks larger than 3.88 GB available on the market, so there was no requirement to support the large capacity fixed disks currently available.

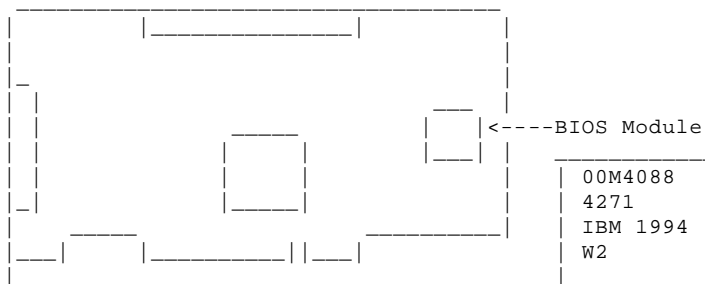
This limitation affects operation under DOS (Disk Operating System) and may affect booting of other operating systems using fixed disks larger than 3.88GB. Complex operating systems such as OS/2, Netware and others, use device drivers which bypass this BIOS code and are therefore unaffected.

A newer level of BIOS is being implemented on FRU P/N53G0382. The newer level of BIOS is fully compatible with systems which were previously running the earlier version.

For those customers who have the affected SCSI-2 adapter and wish to use it running under DOS with a fixed disk larger than 3.88GB, they may request the later level BIOS which does not have the 3.88 GB limitation.

The BIOS module is located on the Adapter, as referenced below, in a socket and may be easily changed by the customer.

The earlier level of BIOS module may be identified by the markings on top of the module, also noted below.



IBM SCSI-2 FAST PCI ADAPTER FRU P/N 53G0382

Requests for this free BIOS upgrade should be escalated to Engineering through the Hardware Service Support Structure With the customer's name, required quantity and shipping address. Engineering will ship the newer modules direct to the customer at no charge.

This upgrade is being provided free to customers upon request.

PSY2 RETAIN TIPS

DATA CAN BE WRITTEN TO THE DISK, BUT NOT READ BACK

As this is not a defect in the adapter and the demand for the newer BIOS is expected to be minimal, there will be no field plan or ECA.

SAS KEYWORDS:

PSY2	SCSI	PSY2FDSK	PSY2PROG
D/T8640	D/T8641	D/T8639	PCI
SERVER	READ	ERROR	

1.4.649 DATA LOSS ON IDE HDD, MICROCODE UPDATE

Record number: H02964

Device: D/T6482
 Model: M
 Tip key:
 Date created: 094/06/28
 Date last altered: A96/04/01

SYMPTOM:

A small number of IDE Hardfile Options, listed below, may experience lost data.

PS/2 systems with an IBM 486 system board upgrade may display a "NO IDE DRIVE PRESENT" error message.

The likelihood of this occurring is highly dependent on the interaction of the system timings, hardfile timings, and operating system. The probability of meeting all the conditions and dependencies required for the failure to occur is extremely low. At this time there have been no field reported failures.

PROBLEM ISOLATION AIDS:

The affected drives will be labeled "IBM DSAA" and "MLC level D43406." Only a limited number of the following drives were loaded with this code. Current drives no longer use this level of code.

Drive Size	FRU Number	Mkt Option Number	Part Number
270Mb	82G5926	70G8487	84G3474 or 66G9681
360Mb	82G5927	70G8488	84G3475 or 66G9682
527Mb	84G6108	70G8486	84G3476
540Mb	82G5928	N/A	66G9683
720Mb	82G5929	70G8511	84G3477 or 66G9684

The following manufactured systems may have the affected drive installed.

Model	S/N#	From	To	Model	S/N#	From	To
6472	- C3B	23CVR55	- 23CWM38	6482-H3B	23GWWG6	- 23GXND8	
	H4F	23CYKR2	- 23CYTG4	H4F	23NDYH9	- 23NFLL7	
	L4F	23AVPAG	- 23AVTKW	L4F	23HCRBK	- 23HCZRA	
6492	- H3F	23CYKT2	- 23CYPK8	L4G	23HYFBN	- 23HYFYM	
	L4F	23CGVAR	- 23CVGYT	X4F	23RGGCP	- 23RGGMV	
	X4F	23LLKHG	- 23LLLVB				

Systems containing the drive as an installed option may also be affected.

FIX:

Do NOT replace any hardware in an attempt to fix the above problem.

A self-loading hardfile microcode update diskette is available. It should be run immediately on any potentially affected systems. The file is titled: DSAAFIX.DSK
 Only drives labeled with MLC level D43406 need to have the microcode updated. The Microcode Update Diskette is a self booting diskette that will interrogate the hard drive (up to four in each system) and install the new code only if required.

The diskette may be downloaded from the IBM PC Company Bulletin Board System by calling 919-517-0001. If the customer cannot receive the update by modem, the HelpCenter will send the customer a copy on diskette. Customers and dealers in Canada may down-load the code from their respective IBM regional bulletin board service.

= This hardfile update diskette is customer installable. =
 = Customers should be advised to contact the PC Company =
 = HelpCenter at 800-772-2227 if assistance is required =
 = in getting the update. =

PS/2 8550 8555 8570 & 8580 systems with an IBM 486 system board upgrade installed may experience "NO IDE DRIVE PRESENT" error messages, when attempting to load the microcode update. To prevent this error, the Flash BIOS on these upgraded systems must be at the following level or higher:

Mod 50/50Z/55 version 1.35
 Mod 70 version 1.18.02
 Mod 80 version 1.31

PSY2 RETAIN TIPS**DATA LOSS ON IDE HDD, MICROCODE UPDATE**

Refer to Retain record H121912 for instructions on obtaining the BIOS updates.

SAS KEYWORDS:

VALUE POINT	PS/VP	PSVP	D/T6472
D/T6482	D/T6492	D/T6494	6484
6482	6492	PSY2FDISK	PSVPFDISK
D/T8570	6494	6472	D/T8555
D/T8550	D/T6384	D/T6387	D/T6381
FDISKOPTION	PSY2FDSK	PSVPFDSK	DSAA
SATSUMA	D/T6382	D/T6384	D/T6387
6382	6384	6387	PSY2
D/T8555	D/T8550	50Z	D/T8560
D/T8580	D/T8565	D/T8570	REPLY
71G2606	71G2641	71G2643	71G2610
61G3502	71G2602		

1.4.650 DATA MODIFICATION WHEN USING LAN STREAMER ADAPTERS

Record number: H122376

Device: D/T8550
 Model: MLAN
 Tip key:
 Date created: 093/10/20
 Date last altered: A94/01/19

SYMPTOM:

This tip provides new information concerning a potential data integrity problem originally reported on the PS/2 Server 85 when using IBM LANStreamer (TM) MC adapters. Additional testing has revealed all PS/2 micro channel systems configured with the adapters listed below, are susceptible to data corruption when used in environments characterized by intense busmaster use.

The following micro channel adapters are affected:

EMEA PARTNUMBERS

ADAPTER	FRU P/N	FEATURE	OPTION#
IBM LANStreamer MC 32	P/N59G9047	3093	33G9030
IBM LANStreamer MC 16	P/N60G0655	5545	60G0511
IBM EtherStreamer MC 32	P/N59G9081	8544	60G1573

USA P/Ns FOR INFORMATION ONLY

ADAPTER	FRU P/N		OPTION
IBM LANStreamer MC 32	P/N92F8941	8942 1100	92F8942
IBM LANStreamer MC 16	P/N59G8999	8998 1515	59G8998
IBM ETHERstreamer MC 32	P/N59G9081	9066 3310	59G9066

In normal circumstances, the chances of experiencing data corruption are extremely small. However, the risk of data modification or loss can be eliminated in the noted hardware configurations by making the following changes:

- A. Increase arbitration priority
(a lower arbitration number corresponds to a higher priority)
- b. Disable fairness
- c. Disable loop-back
- d. For 16 - bit microchannel environments, set the receive buffer size equal to the maximum frame size.

Items A and B are changed using "Change Configuration" (from the "Set and View Configuration" menu) on the System Partition. Items C and D are changed by editing the PROTOCOL.INI file. (these are only required for NDIS)

Temporary work-around:

When the above configuration changes are made, the following PS/2 system/model configurations are NOT exposed to data modification:

- All PS/2 systems, including the 8600 models 195/295*, with only 1 of the referenced EtherStreamer or LANStreamer adapters installed.
- 8595 - OMX (50MHZ 486DX) (note 1) \
- 9585 - all models (note 1) - up to 3 EtherStreamer
- 9595 - all models (note 1) / or LANStreamer adapters installed.

IBM expects to have a permanent solution no later than Januray 1994 and will replace all affected adapters at no additional charge. This solution will encompass the previously announced model 85 data streaming problem (RETAIN TIP H12989).

The FRU part numbers of the referenced LANSTREAMING adapters will be changed to reflect the hardware fix and this RETAIN tip will be updated with the appropriate information as it is made available.

Notes:

1. Prior instructions to turn off data streaming on the 9585 (RETAIN TIP H12989) should be continued until the permanent fix is implemented in the LANstreaming adapters. PS/2 models 8595-OMx or 9595-OMx or any PS/2 upgraded with the Enhanced 486/50MHz Processor Upgrade option must have ECA001 installed on the PC.

PROBLEM ISOLATION AIDS:

US and Canadian customers can call 800-426-2269 to register for replacement adapters and receive additional information via FAX. US and Canadian customers requiring assistance implementing these changes, or with questions about system configurations not listed above, may call 1 - 800-426-2269 9: 00 AM to 6: 00 PM Monday to Friday EST. This telephone number will remain active through first quarter of 1994.

FIX:

SAS KEYWORDS:

PSY2	PSY2ADPT	PSY2COMM	D/T8550
D/T8557	D/T8573	D/T9525	DISPLAY
D/T8560	D/T8565	D/T8570	D/T9576
D/T8580	D/T8590	D/T8595	D/T9585
D/T9577	D/T9556	D/T9557	D/T9595
D/T8600	195	295	PSY2ERR
LANSTREAMER	LAN	TOKENRING	ETHERSTREAMER
LANADAPTER			

PSY2 RETAIN TIPS
DATA TRANSMIT ERRORS ON 9553

1.4.651 DATA TRANSMIT ERRORS ON 9553

Record number: H122063

Device: D/T9553
Model: M
Tip key:
Date created: 093/12/09
Date last altered: A94/08/15

SYMPTOM:

Data errors may occur at BAUD rates above 57600 on a Model 9553.

The maximum BAUD rate supported on the 9553 is 57600.

PROBLEM ISOLATION AIDS: NONE

FIX:

The BAUD rate should be reduced to 57600 or lower.

SAS KEYWORDS:

PSY2	9553	ASYNC	COMMUNICATION
X-MIT	MODEM	PSY2COMM	SERIAL
TP			

1.4.652 DDD DRIVES MAY NOT REBUILD AUTOMATICALLY TO HSP

Record number: H161857

Device: D/T8640
 Model: M
 Tip key:
 Date created: 098/03/05
 Date last altered: A98/03/09

SYMPTOM:

Viewing the RAID ARRAY from any RAID Administrator Utility indicates a hard drive is DDD (defunct) and another drive is HSP (Hot Spare). The HSP drive is not automatically rebuilding.

PROBLEM ISOLATION AIDS:

- The System is any PC Server / Nefinity server that supports and is properly configured with a ServeRAID Adapter FRU p/n06H9334 / 06H76H6875, ServeRAID II Adapter FRU p/n76H3587, or ServeRAID II Onboard Controller.
- Any Supported Operating System RAID Administration Utility, Netfinity RAID Administration Utility or Boot Diskette RAID Utility is used to view the Array.
- The HSP drive is not automatically rebuilt, but CAN be rebuilt by manual selection.

FIX:

Update the ServRAID / ServeRAID II Adapter / Controller to the following Firmware and BIOS Levels (or higher):

ServeRAID Adapter FRU p/n06H9334 (Opt. p/n70G8489)	2.23s.6*	2.40.06*
ServeRAID Adapter FRU p/n76H6875 (Opt. p/n70G8489)	2.23s.6*	2.40.06*
ServeRAID II Adapter FRU p/n76H3587 (Opt. p/n76H3584)	2.40.21*	2.40.06*
ServeRAID Onboard Controller	2.40.14*	2.40.06*

* The Firmware/BIOS diskette 2.41 contains the BIOS flash 2.40.06 as well as the Firmware flashes.

NOTE: These Firmware and BIOS versions are to date at the time this document was released. Firmware and BIOS levels are subject to change over time. Always check for the latest BIOS and Firmware utility on the IBM Website URL:

[Http: //www.pc.ibm.com//us/files.html](http://www.pc.ibm.com//us/files.html)

NOTE: Be sure that the latest version of the corresponding RAID utility diskette is used to ensure compatibility with the latest Firmware and BIOS on the corresponding Adapter/ Controller.

SAS KEYWORDS:

PSY2	PSY2ADPT	D/T8640	D/T8642
320	06H9334	76H6875	76H3587
DDD	HSP	DEFUNCT	520
720	SERVER	500	HOT SPARE
RAID	320	D/T8639	D/T8650
325	330	704	REBUILD FAILS
HARDFILE	RAID BIOS	RAID FIRMWARE	UNCLASSIFIED
HEALTH	D/T8651		

1.4.653 DECREASED NETWORK PERFORMANCE USING 100MBS ETHERNET

Record number: H162450

Device: D/T6588
 Model: M
 Tip key:
 Date created: 098/02/26
 Date last altered: A98/03/02

SYMPTOM:

When using the integrated 10/100 Ethernet adapter at a rate of 100mbs, the system may return various networking error messages, or exhibit increased packet loss during transfers.

PROBLEM ISOLATION AIDS:

This tip applies to the IBM PC300XL Series 6588 systems, and the IBM IntelliStation M-Pro Series 6888 systems equipped with an integrated Intel 10/100 PCI Wake-On-Lan Ethernet adapter.

The error, or performance condition is only seen when using the integrated Ethernet adapter. OEM ISA/PCI Ethernet network adapters are not affected.

The error, or performance condition may be exhibited under various operating systems, and may be limited to networking cable lengths equal to, or exceeding 50 meters (150 feet).

FIX:

Before replacing hardware, proceed with normal problem determination to eliminate possible software configuration, network cabling, or network equipment errors.

If error messages, or network performance conditions persist (i.e. increased packet loss during transfers), Servicicers should contact the IBM HelpCenter via 1 - 800-IBM-PROD for further assistance.

SAS KEYWORDS:

PSY2	PSY2COMM	PSY2ADPT	PSY2ERR
PSVP	PSVPCOMM	PSVPADPT	PSVPERR
D/T6588	D/T688	6588	6888
SERVICER ONLY			

1.4.655 DEVICES IN CONFIGURATION SEEN ONLY AFTER COLD BOOT

Record number: H132358

Device: D/T8640
Model: M
Tip key:
Date created: 096/01/25
Date last altered: A96/01/25

SYMPTOM:

The SCSI fixed disk drives attached to a BusLogic EISA BF-757 SCSI Adapter are only seen in configuration by the system after a cold boot.

PROBLEM ISOLATION AIDS:

The adapter is installed in an IBM Server 320 (8640) or 520 (8641) and is configured as a secondary adapter.

FIX:

In the EISA Configuration Utility, set the BusLogic adapter configuration for "Adapter Initiate Synchronous Negotiation" to ENABLED.

NOTE: When the BusLogic adapter is configured as the primary adapter, no problems are encountered.
Buslogic is a trademark of Buslogic Inc.

SAS KEYWORDS:

PSY2	SERVER	320	520
8640	8641	D/T8641	PSY2OEM
OEM	PSY2ADPT		

1.4.656 DIAG ERROR 00019201, SUSPEND RESUME PROBLEMS

Record number: H125842

Device: D/T9552
 Model: M
 Tip key:
 Date created: 094/12/21
 Date last altered: A97/12/05

SYMPTOM:

1. Closing the LCD cover will not initiate a suspend function and opening the LCD will not initiate a resume function.
2. Diagnostics will issue a 00019201 error.

PROBLEM ISOLATION AIDS:

1. Check for the physical presence of the suspend / resume pin above the Esc key in the blank area between the keyboard and the LCD.
2. Run advanced diagnostics to check for the error code.

FIX:

If either or both of the above symptoms occur replace the Voltage Converter FRU listed below by model.

Model	Type	FRU part number
700	9552-300 or 301	P/N44G3784
700C	9552-30B only	P/N48G8712
720 & 720C	9552 All 720 versions	P/N53G8114

This information will be added to the next scheduled HMM update.

SAS KEYWORDS:

PSY2	PSY2ERR	PSY2PWR	PSY2PART
THINKPAD	UNCLASSIFIED		

DIAGNOSTICS HANG IN LOOP MODE WITH TOKEN RING INSTALLED

1.4.657 DIAGNOSTICS HANG IN LOOP MODE WITH TOKEN RING INSTALLED

Record number: H027273

Device: D/T8570
 Model: M
 Tip key:
 Date created: 088/06/02
 Date last altered: A88/10/31

SYMPTOM: PS/2 DIAGNOSTICS COULD HANG IF RUN IN LOOP MODE
 WHEN TOKEN RING CARD IS INSTALLED. THIS IS A RESULT OF SOME
 DEVICES NOT SUPPORTING INTERRUPT SHARING.

PROBLEM ISOLATION AIDS: NONE

FIX: IF THE TOKEN RING CARD IS SET TO INTERRUPT LEVEL 3, ADVANCED
 DIAGNOSTICS WILL HANG WHEN RUN IN LOOP MODE. THIS PROBLEM CAN
 CAN BE ELIMINATED BY NOT LOOPING DIAGNOSTICS WITH THE TOKEN RING
 CARD INSTALLED OR BY PUTTING THE TOKEN RING ADAPTER ON AN UNUSED
 INTERRUPT LEVEL OF 2, 3, 10 OR 11. TO CHANGE THE INTERRUPT LEVEL
 FOLLOW THESE INSTRUCTIONS; BOOT THE SYSTEM WITH THE REFERENCE
 DISKETTE, CHOOSE THE "SET CONFIGURATION" ROUTINE, AT THE NEXT
 SCREEN CHOOSE "CHANGE CONFIGURATION" AND CURSER DOWN TO THE
 "RESOURCES USED" AREA NEXT TO THE SLOT WITH THE TOKEN RING CARD.
 USE THE PF5 OR PF6 KEY TO SELECT A DIFFERENT INTERRUPT LEVEL.

SAS KEYWORDS:

PSY2	PSY2ADPT	PSY2DIAG	8570SYSDIAG
PSY2SYSADPT	8550SYSDIAG	8560SYSDIAG	8580SYSDIAG
8550SYSADPT	8560SYSADPT	8580SYSADPT	8570SYSADPT

1.4.658 DIAGNOSTICS MAY HANG WHEN 3270 CONNECTION CARD IS INSTALLED

Record number: H014136

Device: D/T8550
Model: M
Tip key:
Date created: 088/08/31
Date last altered: A93/09/01

SYMPTOM:

WHEN RUNNING ADVANCED DIAGNOSTICS ON A PERSONAL SYSTEM/2 MODEL 50, 60, 70, OR 80, DIAGNOSTICS MAY HANG IF A 3270 CONNECTION CARD/A IS INSTALLED AND THE 3270 CONNECTION CARD DIAGNOSTICS VERSION 1.0 IS LOADED ON THE REFERENCE DISKETTE. THE SYMPTOM WILL BE A BLANK SCREEN AND THE DISKETTE DRIVE A: LED LIGHT STAYS ON.

THIS SYMPTOM CAN OCCUR IF THE FOLLOWING STEPS ARE TAKEN:

RUNNING "SYSTEM CHECKOUT" FROM THE "ADVANCED DIAGNOSTIC MENU" EITHER IN LOOP MODE OR ONE TIME ONLY FOR ANY GIVEN OPTION, AND THEN BACKING OUT TO THE "ADVANCED DIAGNOSTIC MENU AND RUNNING "SYSTEM CHECKOUT" AGAIN.

AT THIS POINT YOU WILL SEE THE MESSAGE "THE TESTS ARE BEING LOADED INTO MEMORY. PLEASE STAND BY...". AFTER THE TESTS ARE LOADED THE SCREEN WILL FLASH TO A BLANK SCREEN AND THE DISKETTE DRIVE A: LED LIGHT WILL STAY ON SOLID. A COLD BOOT WILL BE REQUIRED TO CORRECT THE SYSTEM HANG CONDITION.

PROBLEM ISOLATION AIDS: NONE

FIX: THIS PROBLEM IS CORRECTED WITH 3270 CONNECTION DIAGNOSTICS VERSION 1.1, FORM NUMBER G1260190.

SAS KEYWORDS:

PSY2	PSY2DIAG	PSY2COMM	PSY2DOC
D/T8550	D/T8560	D/T8570	D/T8580

1.4.659 DIFFERENCE OR INCREASE IN TAPE BACKUP TIME

Record number: H124885

Device: D/T8580
Model: M
Tip key:
Date created: 092/11/18
Date last altered: A94/08/15

SYMPTOM: Users may notice a significant difference in tape backup time between apparently similar systems for the same amount of data. Or, a significant increase in tape backup time if a system board is replaced.

PROBLEM ISOLATION AIDS: NONE

FIX: Add the parameter IROPT=I to the device driver statement in CONFIG.SYS.

FIX(1) For PMTAPE
DEVICE=C: \PMTAPE\IP2IDRV.SYS IROPT=I

FIX(2) For OS2TAPE
Same as above, but system must have latest version of OS/2TAPE (currently 1.01). The driver to modify is ITI.SYS

****NOTE**** The parameter must be upper case I

Adding the above option in the device driver forces the device driver to a very high priority when it is expecting an index pulse. The device polls a status bit instead of waiting for an interrupt to occur, hence saving the interrupt latency which can be long. This allows the phase lock loop to sync. more quickly which helps a sensitivity problem that some model 80's may have.

SAS KEYWORDS:

PSY2	D/T8580	8580DSKT	8580SYSTAPE
PSY2TAPE	PSY2MISC	8580SYSMISC	

DIRECTDRAW APPS DO NOT RUN WITH INTERGRAPH ADAPTER

1.4.660 DIRECTDRAW APPS DO NOT RUN WITH INTERGRAPH ADAPTER

Record number: H161507

Device: D/T6898
 Model: M
 Tip key:
 Date created: 097/10/22
 Date last altered: A97/10/22

SYMPTOM:

Applications utilizing DirectDraw shut down after being started.

PROBLEM ISOLATION AIDS:

This tip applies to the IBM IntelliStation M-Pro, M/T 6898, equipped with the Intergraph Intense 3D Pro2200/4T video adapter.

The condition may also be seen on other IBM Commercial Desktop systems equipped with an Intergraph Intense 3D video adapter.

FIX:

None for DirectDraw applications that only assume an 8-bit color depth.

The Intergraph Intense 3D Pro2200/4T video adapter supports a 32 - bit color depth. DirectDraw applications written to query the selected color depth should run without errors.

Applications that default to an 8-bit color depth must have a command line, or some other option, enabling them to be set to a 32 - bit color depth in order to run with the Intergraph Intense 3D Pro2200/4T video adapter.

DirectDraw is a trademark of Microsoft Corporation.
 Intense 3D is a trademark of Intergraph Computer Systems.

SAS KEYWORDS:

PSY2	PSY2ERR	PSY2OPER	PSY2ADPT
PSVP	PSVPERR	PSVOPER	PSVPADPT
D/T6898	6898	DDRAW	78864
UNCLASSIFIED			

1.4.661 DISKETTE CREATE FAILS IN OS/2 WARP REMOTE INSTALL

Record number: H132824

Device: D/T6877
 Model: M
 Tip key:
 Date created: 096/02/28
 Date last altered: A96/02/28

SYMPTOM:

The diskette create function under the OS/2 WARP Connect "Remote Install" folder fails.

PROBLEM ISOLATION AIDS:

When attempting to create a diskette using the following steps on a PC 700 Series 6877 or 6887 system preloaded with OS/2 WARP Connect, the following error is received:

- A) From the OS/2 Desktop, select the OS/2 WARP Connect "Install/Remove" folder.
- B) Select WARP Connect Remote Install.
- C) Select "Yes" to create new diskettes.
- D) Select "OK" twice.
- E) Insert diskette in appropriate diskette drive.
- F) Select "OK."
- G) This error appears: "Diskette creation failed. Ensure a diskette is in the diskette drive. Select OK to retry."

FIX:

Remove the OS/2 WARP Connect Remote Install Icon from the Desktop. This feature was not intended to be a part of early versions of the OS/2 WARP Connect Preload. The current level OS/2 WARP Connect preload for the PC 700 6877/6887 does not contain this feature.

SAS KEYWORDS:

PSY2	D/T68XX	6887	6877
IBMPC	PSVP	PSVPDSKT	PSY2DSKT
D/T6887	PSY2PROG	PSVPPROG	PSVPERR
PSY2ERR	PC750	PC700	PC 730
PC 750	PC730	42458	

DISKETTE DRIVE "A" ACCESS PROBLEM W/ AIX OPERATING SYSTEM

1.4.662 DISKETTE DRIVE "A" ACCESS PROBLEM W/ AIX OPERATING SYSTEM

Record number: H031150

Device: D/T8550
 Model: M
 Tip key:
 Date created: 091/06/11
 Date last altered: A93/12/03

SYMPTOM:

PS/2 16 OR 20 MHZ SYSTEMS MAY EXPERIENCE PROBLEMS
 ACCESSING DISKETTE DRIVE "A" WHEN USING AIX 1.1.

8570 AND 8580 ARE PRIMARILY AFFECTED, HOWEVER, OTHER
 MODELS MAY ALSO BE AFFECTED.

PROBLEM ISOLATION AIDS:

DISKETTE DIAGNOSTICS RUN ERROR-FREE.

SELF BOOTING DISKETTES READ CORRECTLY, AND A DOS
 SYSTEM DISKETTE WILL READ AND LOAD CORRECTLY.

THE PROBLEM MANIFESTS ITSELF ONLY DURING AIX DISKETTE
 READ OPERATIONS.

FIX:

THIS IS NOT A HARDWARE FAILURE. IT IS CAUSED BY A SOFTWARE
 ERROR IN THE AIX DISKETTE DIRECT DRIVER SOFTWARE (AIX DOES
 NOT USE THE BIOS ROUTINES FOR DISKETTE OPERATIONS).
 THE ERROR IS TIMING RELATED, AND IS EXPERIENCED ON MOST DISKETTE
 DRIVES. REPLACEMENT OF THE DISKETTE DRIVE WILL PROBABLY NOT
 RESOLVE THE PROBLEM.

THE SYSTEM REQUIRES CSD (CORRECTIVE SERVICES DISKETTE) 1040 FOR
 AIX 1.1. THIS CSD CORRECTS THE "TIMING" PROBLEM AND IS
 BY CONTACTING AIX SOFTWARE SUPPORT AT THE FOLLOWING NUMBER:

1 - 800-992 - 4777

LATER VERSIONS OF AIX INCORPORATE THIS FIX.

SAS KEYWORDS:

PSY2	PSY2PROG	PSY2DSKT	8570SYSPROG
8570SYSDSKT	D/T8570	D/T8580	D/T8565
8580SYSDSKT	8580SYSPROG		

DISKETTE DRIVE FAILURE, DISKETTE CHANGE NOT RECOGNIZED

1.4.663 DISKETTE DRIVE FAILURE, DISKETTE CHANGE NOT RECOGNIZED

Record number: H037584

Device: D/T8550
Model: M
Tip key:
Date created: 091/04/12
Date last altered: A94/08/15

SYMPTOM:

THE PS/2 FAILS TO RECOGNIZE THAT A DIFFERENT DISKETTE HAS BEEN INSERTED IN THE DRIVE. THIS MAY BE APPARENT WHEN COPYING AN OPTION DISKETTE TO THE REFERENCE DISKETTE, OR WHEN DISKETTE CHANGES ARE REQUIRED WHILE LOADING OR RUNNING APPLICATIONS.

PROBLEM ISOLATION AIDS:

DISPLAY THE DIRECTORY OF A DISKETTE. NEXT, INSERT A DISKETTE CONTAINING DIFFERENT FILES AND DISPLAY ITS DIRECTORY. IF THE SECOND DISKETTE SHOWS THE SAME DIRECTORY AS THE FIRST DISKETTE, THE SYSTEM FAILED TO RECOGNIZE A DISKETTE CHANGE.

FIX:

IF AFTER REPLACING THE DISKETTE DRIVE, THE MACHINE STILL DOES NOT RECOGNIZE A DISKETTE CHANGE, REPLACE THE DISKETTE DRIVE CABLE. IN MODELS WITHOUT A DISKETTE DRIVE CABLE, SUCH AS THE 8550 OR 8570, REPLACE THE DISKETTE DRIVE BUS ADAPTER.

SAS KEYWORDS:

PSY2	PSY2DSKT	D/T8555	D/T8560
D/T8565	D/T8570	D/T8573	D/T8580
D/T8590	D/T8595	DIR	

DISKETTE DRIVE FAILURE, DISKETTE CHANGE NOT RECOGNIZED

1.4.664 DISKETTE DRIVE FAILURE, DISKETTE CHANGE NOT RECOGNIZED

Record number: H08260

Device: D/T8580
Model: M
Tip key:
Date created: 091/03/13
Date last altered: A94/04/25

SYMPTOM:

THE PS/2 FAILS TO RECOGNIZE THAT A DIFFERENT DISKETTE HAS BEEN INSERTED IN THE DRIVE. THIS MAY BE APPARENT WHEN COPYING AN OPTION DISKETTE TO THE REFERENCE DISKETTE, OR WHEN DISKETTE CHANGES ARE REQUIRED WHILE LOADING OR RUNNING APPLICATIONS.

PROBLEM ISOLATION AIDS:

DISPLAY THE DIRECTORY OF A DISKETTE. NEXT, INSERT A DISKETTE CONTAINING DIFFERENT FILES AND DISPLAY ITS DIRECTORY. IF THE SECOND DISKETTE SHOWS THE SAME DIRECTORY AS THE FIRST DISKETTE, THE SYSTEM FAILED TO RECOGNIZE A DISKETTE CHANGE.

FIX:

IF AFTER REPLACING THE DISKETTE DRIVE, THE MACHINE STILL DOES NOT RECOGNIZE A DISKETTE CHANGE, REPLACE THE DISKETTE DRIVE CABLE. IN MODELS WITHOUT A DISKETTE DRIVE CABLE, SUCH AS THE 8550 OR 8570, REPLACE THE DISKETTE DRIVE BUS ADAPTER.

SAS KEYWORDS:

PSY2	PSY2DSKT	8570SYSDSKT	D/T8555
D/T8560	D/T8525	D/T8530	D/T8590
D/T8595	D/T8565	D/T8570	D/T8573
D/T8550			

1.4.665 DISKETTE DRIVE FAILURES W/DCA IRMA CARD INSTALLED

Record number: H101757

Device: D/T6384
 Model: M
 Tip key:
 Date created: 093/06/16
 Date last altered: A93/09/02

SYMPTOM:

PS/VALUEPOINT SYSTEMS (386 OR 486 MODELS) MAY EXPERIENCE A DISKETTE DRIVE FAILURE WHEN ACCESSING THE "A" DRIVE WITH A DCA IRMAtrac TOKEN RING ADAPTER/CONVERTIBLE CARD WITH 4/16 FIBER RIM (RING INTERFACE MODULE) INSTALLED.

PROBLEM ISOLATION AIDS:

PS/VALUEPOINT DIAGNOSTICS RUN WITHOUT ERRORS.

FIX:

THE DCA TOKEN RING ADAPTER IS USUALLY CONFIGURED USING INTERRUPT LEVEL 10. SETTING THE DCA ADAPTER TO INTERRUPT LEVEL 7 WILL ELIMINATE THIS FAILURE. VERIFY THERE ARE NO CONFLICTS WITH OTHER ADAPTERS OR BASE SYSTEM HARDWARE AFTER SETTING THE DCA ADAPTER TO INTERRUPT LEVEL 7 BY:

- A) POWERING OFF/ON THE SYSTEM CHECKING FOR POST ERRORS
- B) PERFORM ALL SYSTEM DIAGNOSTICS
- C) HAVE CUSTOMER LOAD & RUN THEIR APPLICATIONS

DCA TECHNICAL SUPPORT MAY BE CONTACTED AT 404-442-4000 FOR ADDITIONAL INFORMATION REGARDING THE INTERRUPT SETTINGS AND DEVICE DRIVERS AVAILABLE FOR THIS PROBLEM.

THIS FAILURE MAY ALSO EFFECT THE PS/2 8535 SX AND PS/2 8540 SX SYSTEMS. FOLLOW THE ABOVE FIX PROCEDURE FOR THOSE SYSTEMS.

IF THE SYMPTOM PERSISTS, UTILIZE NORMAL PROBLEM DETERMINATION PROCEDURES TO ISOLATE THE FAILING FRU.

SAS KEYWORDS:

PSVP	VALUE POINT	PSVPCOMM	PSVPERR
PSY2	PSY2COMM	PSY2ERR	PSY2OEM
PSVPOEM	PSVPADPT	PSY2ADPT	PSVPDSKT
PSY2DSKT	D/T8535	D/T8540	D/T8550

1.4.666 DISKETTE DRIVE MISALIGNED IN PC 350 & 750

Record number: H13625

Device: D/T6885
 Model: M
 Tip key:
 Date created: 095/08/28
 Date last altered: A95/08/28

SYMPTOM:

The 3.5 inch diskette drive shipped in IBM PC 350 and 750 Series systems, 6581, 6583, 6585, 6586, 6885 and 6886 may be misaligned in the bezel opening.

PROBLEM ISOLATION AIDS:

Remove the top cover assembly from the PC 350 or 750 system and locate the 3.5 inch DASD tray/riser support bracket and the 5.25 inch drive tray.

If the (located approximately 3 inches from the front bezel) tab on the 5.25 tray is not inserted into the slot on the DASD tray/riser support bracket, the diskette drive will not fit squarely into the opening of the front bezel, giving the diskette drive a misaligned appearance.

FIX:

Reinsert the tab on the 5.25 inch drive tray into the opening on the 3.5 inch DASD tray/riser support bracket.

If the problem reoccurs due to excessive shipping and handling of the system unit, contact the IBM PC Company HelpCenter at 1 - 800-772 - 2227 to request a special shipping bracket for the diskette drive. This is not a problem for stationary systems.

SAS KEYWORDS:

PSVP	PSY2	PSVPPART	IBMPC
PSY2PART	PSVPDSKT	PSY2DSKT	PSVPFDSK
PSVPFDSK	D/T6886	D/T6586	D/T6585
D/T6581	D/T6583	PC300	PC 300
PC350	6581	6583	6585
6586	6885	6886	

DISKETTE FACTORY FAILS TO BUILD OS/2 WARP DISKETTES

1.4.667 DISKETTE FACTORY FAILS TO BUILD OS/2 WARP DISKETTES

Record number: H087806

Device: D/T6877
Model: M
Tip key:
Date created: 096/07/09
Date last altered: A96/07/09

SYMPTOM:

IBM PC 700 Series 6877 and 6887 systems preloaded with the Select-A-System preload may fail to create the OS/2 WARP installation diskettes using the Diskette Factory application.

PROBLEM ISOLATION AIDS:

During the creation of the WARP installation diskettes, the Diskette Factory stops the process after completing diskette #6.

This failure only affects 6877 and 6887 systems with an Italian language Select-A-System preload.

FIX:

Using an editor, edit the "OS2_30.CTL" file as follows:

- 1) Change to the C: \OS2\INSTALL\PRELOAD directory.
- 2) Edit the OS2_30.CTL file.
- 3) Locate "Disk=7" section in the OS2_30.CTL file.
- 4) Change the "DISKPATH=DISK_6" to "DISKPATH=DISK_6DF".
- 5) Save and exit.

The Diskette Factory should now complete the creation of the OS/2 WARP installation diskettes.

SAS KEYWORDS:

PSVP	PSY2	PSVPPROG	PSY2PROG
6877	PC 700	PC730	PSVPERR
PSY2ERR	51318		

1.4.668 DISKETTE READ / WRITE ERRORS W/ CRT ATTACHED

Record number: H01303

Device: D/T8573
Model: M
Tip key:
Date created: 091/08/05
Date last altered: A91/08/05

SYMPTOM:

DISKETTE DRIVE ERRORS 653 OR 654 OCCURRING DURING DIAGNOSTICS
AND/OR OTHER READ / WRITE ERRORS OCCURRING DURING CUSTOMER
OPERATION.

PROBLEM ISOLATION AIDS: THE SYSTEM HAD A CRT ATTACHED WHILE
A READ OR WRITE OPERATION OCCURRED TO THE DISKETTE DRIVE.

FIX:

A CRT LOCATED NEAR THE DISKETTE DRIVE MAY CAUSE ERRORS WHEN
A DISKETTE IS BEING WRITTEN TO. THIS IS CAUSED BY NORMAL CRT
ACTIVITY. MOVE THE CRT TO THE LEFT HAND SIDE OF THE SYSTEM
OR THE SAME EQUIVALENT DISTANCE AWAY FROM THE DISKETTE DRIVE IN
ANOTHER DIRECTION.

SAS KEYWORDS:

PSY2 PSY2DSKT PSY2DISP 8573SYSDSKT
D/T8573

1.4.669 DISKETTE READ ERROR DURING FILE TRANSFER ON PC 300

Record number: H136521

Device: D/T6577
Model: M
Tip key:
Date created: 097/02/07
Date last altered: A97/02/07

SYMPTOM:

IBM PC 300 Series 6577 and 6587 systems may exhibit diskette read errors during file transfer operations from diskette to the Host via an IBM Auto 16/4 Token Ring adapter and the IBM LAN Support Program.

PROBLEM ISOLATION AIDS:

File transfer operations from the local hardfile to the Host function normally.

Advanced Diagnostics run without errors.

FIX:

Obtain and install SETUPPCI.COM from the IBM PC Company BBS system by calling 1-919-517-0001. View the "IBM PC 300/700 Files" section (section #21) for the file titled:
SETUPPCI.COM - 65x7 fixes Auto T/R Card and LAN Support

This file may be downloaded via the Internet from the IBM Personal Computer File Library by searching the following Internet URL:
<http://www.pc.ibm.com/files.html>

SAS KEYWORDS:

PSY2	PSVP	IBMPC	PSVPDSKT
PSY2DSKT	PSVPERR	PSY2ERR	54520
PC 330	PC 350	UNCLASSIFIED	

1.4.670 DISKETTE READ ERRORS WHILE INSTALLING WINDOWS-NT

Record number: H034679

Device: D/T6384
 Model: M
 Tip key:
 Date created: 094/02/18
 Date last altered: A94/06/06

SYMPTOM:

PS/ValuePoint 6384 P60/D (All Models) and the PC Server 8640 (all models) may experience diskette read errors while installing Microsoft WindowsNT 3.1 from diskette. Errors occur after rebooting the system during the installation process.

PROBLEM ISOLATION AIDS:

- Diskette read errors occur after the system has been rebooted (after diskette #9). These errors may be bypassed by removing the diskette when the error occurs, then immediately re-inserting the same diskette.
- Microsoft WindowsNT may be installed from CD-ROM without errors
- PS/ValuePoint Advanced Diagnostics run without errors.

FIX:

An updated version of the "FLOPPY.SYS" driver is available to resolve this failure. The driver is available (by modem) from the Microsoft Bulletin Board at (206) 936-6735 or from the SMC Bulletin Board at (516) 273-4936. It is also available on diskette from SMC at (800) 443-7364.

The driver should be loaded onto a diskette and installed on the WindowsNT boot drive in the following manner:

1. Follow the install procedure until diskette #9 installation is complete.
2. When instructed to reboot the system, insert a bootable DOS diskette. After the system has booted, remove the DOS diskette and place the diskette with the updated FLOPPY.SYS driver in drive A: .
3. Rename the existing FLOPPY.SYS driver, located on the hardfile in the \WINNT\SYSTEM32\DRIVERS directory, to FLOPPY.OLD.
4. Copy the updated FLOPPY.SYS from drive A: to the \WINNT\SYSTEM32\DRIVERS directory.
5. Remove the diskette from the A: drive and reboot the system. Complete the WindowsNT installation by following the on-screen instructions.

Revisions of Windows NT dated after February 1994 contain the updated FLOPPY.SYS driver.

SAS KEYWORDS:

PSVP	PSY2	PSVPPROG	PSY2PROG
PSVPFDSK	PSY2FDSK	PENTIUM	P60
189	199	PS VP	6384
VALUE POINT	N/T	D/T8640	8640

1.4.671 DISKETTES FROM DISKETTE FACTORY UNUSABLE

Record number: H133211

Device: D/T6877
 Model: M
 Tip key:
 Date created: 096/03/25
 Date last altered: A96/04/01

SYMPTOM:

The OS/2 OR DOS/Windows 3.11 Diskette Factory preloaded on IBM PC 700 Series 6877 or 6887 systems may produce diskettes that are not useable. The diskettes produced may not have all of the necessary files to function.

PROBLEM ISOLATION AIDS:

While making diskettes using the OS/2 Diskette Factory, the horizontal progress bar may move very quickly or instantly across the screen providing a false indication of successful completion.

During the creation process using the Diskette Factory in the DOS/Windows environment, if the application does not prompt the user to label the diskette, but immediately requests another diskette, the creation process is not functioning properly. When the next diskette is inserted, the Diskette Factory will actually create the previous again.

FIX:

When diskettes are not created properly, exit out of the Diskette Factory application and reboot the system.

Ensure that all diskettes are formatted using the "FORMAT A: " command, not the "FORMAT A: /Q" command, before attempting to create diskettes. Verify that the formatted capacity of the diskette meets the requirements for the diskette being created.

SAS KEYWORDS:

PSY2	D/T68XX	6887	6877
IBMPC	PSVP	PSVPDSKT	PSY2DSKT
D/T6887	PSVPPROG	PSY2PROG	PSVPERR
PC 750	PC750	PC700	PC 730
PSY2ERR	PC730	42939	40322

1.4.672 DISPLAY APPLLET WINDOW TOO LARGE FOR SCREEN

Record number: H137864

Device: D/T6588
 Model: M
 Tip key:
 Date created: 097/05/23
 Date last altered: A97/06/25

SYMPTOM:

The Intergraph Display Applet window may appear too large for the screen, preventing access to the control buttons, after installing the adapter device drivers for WindowsNT v4.0 on an IBM PC 300 Series 6588 and IntelliStation M Pro 6888 systems.

PROBLEM ISOLATION AIDS:

The Intergraph 3D video device driver level is 4.01

This problem occurs only if the resolution is set for 640x480.

FIX:

Use the title bar to move the Intergraph Display Applet window up to a point where the control buttons at the bottom are accessible.

Setting the resolution higher than 640x480, such as 1024x768, will allow the window to fit the screen.

The device drivers for the Intergraph adapter are being updated to eliminate this problem.

Intergraph 3D is a trademark of the Intergraph Corporation.
 WindowsNT is a trademark of the Microsoft Corporation.

SAS KEYWORDS:

PSY2	PSVP	IBMPC	PSVPADPT
PSY2ADPT	PSVPOEM	PSY2OEM	PSVPDISP
PSY2DISP	63767	PC 330	PC 350
UNCLASSIFIED	PSVPPROG	PSY2PROG	

1.4.673 DISPLAY FOCUS, COLOR PURITY, AND BLOTCHING

Record number: H002095

Device: D/T8513
 Model: M
 Tip key: 003
 Date created: 089/05/15
 Date last altered: A94/09/01

SYMPTOM:

SOME PS/2 DISPLAYS MAY EXHIBIT "OUT OF FOCUS", "COLOR FADING", AND/OR "BLOTCHING" SYMPTOMS, IF THE BRIGHTNESS AND CONTRAST CONTROLS ARE MALADJUSTED. (THIS INCLUDES 8503, 8504, 8512, 8513, 8514, 8515 AND 8516 DISPLAYS)

ALL DISPLAYS ARE MANUFACTURED TO MEET A PARTICULAR MINIMUM BRIGHTNESS SPECIFICATION. BECAUSE SOME DISPLAYS ARE CAPABLE OF EXCEEDING THIS SPECIFICATION MORE SO THAN OTHERS, IT IS POSSIBLE TO SET THE BRIGHTNESS AND CONTRAST CONTROLS AT A POSITION THAT EXCEED THE DISPLAY'S NORMAL OPERATING CAPACITIES. THIS OVERDRIVING CONDITION IS TYPICALLY REPORTED AS "OUT OF FOCUS" (BLURRY CHARACTERS), "COLOR FADING"(COLOR PURITY),OR "BLOTCHES".

"OUT OF FOCUS" AND "COLOR FADING" ARE SELF EXPLANATORY. HOWEVER, "BLOTCHES" USUALLY EFFECT BRIGHT AREAS, SOLID WHITE, OR LIGHT COLORS ON THE SCREEN, AND MAY TAKE UP TO 3 MINUTES TO APPEAR.

FIX:

VERIFY THAT THE DISPLAY HAS BEEN ALLOWED TO WARM-UP (POWER-ON) FOR AT LEAST 20 MINUTES, THEN ADJUST THE OPERATOR BRIGHTNESS AND CONTRAST CONTROLS IN THE FOLLOWING MANNER.

1. TURN THE BRIGHTNESS TO MAXIMUM AND CONTRAST TO MINIMUM POSITION. DISPLAYED DATA SHOULD STILL BE VISIBLE, IF NOT INCREASE THE CONTRAST CONTROL UNTIL THE DATA IS JUST VISABLE.
2. DECREASE THE BRIGHTNESS UNTIL THE RIGHT AND LEFT BORDERS ARE NOT VISIBLE AGAINST A BLACK BACKGROUND. IF A APPLICATION WITH A BLACK BACKGROUND IS NOT AVAILABLE, MAKE THIS ADJUSTMENT WITH THE SYSTEM UNIT POWERED OFF.
3. LEAVE THE BRIGHTNESS CONTROL AS SET IN STEP 2 AND ADJUST THE CONTRAST CONTROL FOR A COMFORTABLE LEVEL CONSISTENT WITH CLARITY, COLOR PURITY AND WITHOUT BLOTCHING.

NOTE: THE OPTIMUM SETTING OF CONTRAST MAY VARY, DEPENDING ON THE APPLICATION BEING RUN, AS SOFTWARE PACKAGES DRIVE THE MONITOR TO DIFFERENT EXTENTS. MANY PACKAGES, ESPECIALLY "WINDOWS" BASED, ARE BEST RUN AT A REDUCED BRIGHTNESS (CONTRAST) AS TO AVOID ANY OF THE ABOVE SYMPTOMS. TEXT BASED PACKAGES MAY NEED THE CONTROL SET MORE TOWARD MAXIMUM.

IF THE DISPLAY CONTINUES TO EXHIBIT ANY OF THE SYMPTOMS LISTED ABOVE, ADVANCED DIAGNOSTICS VIDEO TESTS SHOULD BE RUN TO TO DETERMINE IF THE DISPLAY IS DEFECTIVE.

USER APPLICATION SOFTWARE SHOULD NOT BE USED TO EVALUATE DISPLAY PERFORMANCE. ONLY IBM ADVANCED DIAGNOSTIC VIDEO TESTS ARE VALID TO EVALUATE THE QUALITY AND/OR PERFORMANCE OF IBM DISPLAYS. THE DISPLAY MUST FAIL A SPECIFIC ADVANCED DIAGNOSTIC VIDEO TEST(S) AND/OR OTHER PORTIONS OF THE ADVANCED DIAGNOSTIC TESTS TO BE CONSIDERED DEFECTIVE.

NOTES:

1. DEGAUSSING OF A DISPLAY IS ACTIVATED UPON POWER ON (COLD). IF A DISPLAY HAS BEEN MOVED, IT SHOULD BE POWERED OFF FOR A MINIMUM OF 30 MINUTES TO ALLOW THE DEGAUSSING CIRCUIT TO RESET. MULTIPLE DEGAUSSING CYCLES MAY BE REQUIRED IN CASES OF EXTREME EXPOSURE TO HIGH MAGNETIC FIELDS. MANUAL DEGAUSSING MAY ALSO BE PERFORMED.
1. DISPLAYS SHOULD BE WARMED-UP FOR AT LEAST 20 MINUTES PRIOR TO MAKING A DISPLAY IMAGE QUALITY ASSESSMENT.
2. ADVANCED DIAGNOSTICS ARE THE ONLY SERVICE TOOL THAT CAN BE USED TO MAKE A DISPLAY IMAGE QUALITY DECISION.
3. IF THE DISPLAY ORIGINALLY EXHIBITED "BLOTCHES", THE DISPLAY

PSY2 RETAIN TIPS

DISPLAY FOCUS, COLOR PURITY, AND BLOTCHING

MUST BE POWERED OFF (MINIMUM 15 MINUTES) TO ALLOW ANY
INTERNAL COMPONENTS TO COOL SO TAHT THE EFFECT OF THE
ADJUSTMENTS CAN BE SEEN.

SAS KEYWORDS:

PSY2	PSY2DISP	D/T8503	D/T8512
D/T8513	D/T8514	D/T8515	D/T8516
DOMING	D/T8517	D/T9517	

1.4.674 DISPLAY JITTER/FLICKER WITH WINDOWS95

Record number: H134031

Device: D/T6589
Model: M
Tip key:
Date created: 096/09/18
Date last altered: A96/09/18

SYMPTOM:

IBM PC 365 Series 6589 systems with a DDC (Display Data Channel) capable monitor attached may exhibit jitter and flicker after selecting a video resolution in Windows95 that should provide virtually flicker free performance.

PROBLEM ISOLATION AIDS:

This failure occurs in PC 365 model 1XX and 2XX systems configured with an S3 Trio64V+ PCI video adapter.

S3 device driver versions 2.10.01 and 2.10.02 are affected.

When selecting video resolutions in Windows95 such as 1024 x 768 x 16, the driver does not properly program the S3 adapter to function at the optimal refresh rate required to achieve virtually flicker free performance. The driver may set the resolution and refresh rate to 1024 x 768 x 16 at 60Hz which is not flicker free.

FIX:

Use the S3 Refresh tab to select the appropriate refresh rates for the monitor installed. Access the S3 Refresh tab by clicking the right mouse button on the Desktop and selecting Properties, then select Display Properties. This process allows for the manual setting of resolutions and refresh rates.

NOTE: Setting a refresh rate that the monitor is not capable of may cause permanent damage to the monitor.

Refer to the monitors user documentation for information regarding supported resolutions and refresh rates. If this information is not available, contact the manufacturer or the point of purchase for the specifications of the monitor installed.

Windows95 is a trademark of the Microsoft Corporation.

SAS KEYWORDS:

PSY2	PSVP	IBMPC	PSVPDISP
PSY2DISP	PSVPADPT	PSY2ADPT	PSY2OEM
52246	PC365	PSVPOEM	CORRUPTION
DISTORTION	WAVY	JITTERY	

1.4.675 DISPLAY PROPERTIES WINDOW TOO LARGE IN THAI WINDOWS NT4.0

Record number: H161854

Device: D/T6898
Model: M
Tip key:
Date created: 097/11/14
Date last altered: A97/11/14

SYMPTOM:

The Display Properties window in the preloaded Thai language version of WindowsNT 4.0 is too large when displayed at 640x480 resolution. The OK, Cancel, and Apply buttons display off the bottom edge of the screen.

PROBLEM ISOLATION AIDS:

The condition is limited to the preloaded Thai language version of WindowsNT 4.0 when used with the STB Glyder MAX-2 video adapter.

Customers may find that additional applications, information, and settings windows display off the edges of their screens.

FIX:

The default resolution must be set higher than 640x480. For those users who's default resolution is set to 640x480 and cannot see the OK, Cancel, and Apply buttons under Display Properties, the default resolution can still be set higher via the following steps:

1. Right click on the WindowsNT Desktop, then click on "Properties" to bring up the Display Properties window.
2. Click on the Settings tab, and using the "slider" under the Desktop Area window, increase the screen resolution.
3. Press the "A" key to apply the new setting. When WindowsNT asks if you want to keep the new setting, click on Yes.

Windows and WindowsNT are trademarks of Microsoft Corporation.

SAS KEYWORDS:

PSY2	PSY2OPER	PSY2DISP	PSVP
PSVPOPER	PSVPDISP	83182	UNCLASSIFIED

1.4.676 DISTORTED IMAGE W/VIDEO ADAPTER IN a IBM PC 700

Record number: H126163

Device: D/T68XX
 Model: M
 Tip key:
 Date created: 095/01/27
 Date last altered: A95/10/02

SYMPTOM:

IBM PC 700 Series systems may experience distorted video images when an ISA video adapter is installed.

PROBLEM ISOLATION AIDS:

Using the Setup Utility, check that the Parallel Port Mode is set for ECP (Extended Capabilities Port) mode OR the Parallel Port address is set to "3BC." These settings may be viewed in the Setup Utility by pressing F1 during the memory count.

System diagnostics run without errors when the ISA video adapter is removed from the system.

FIX:

Change the Parallel Port Mode to "PC/AT Compatible" or set the Parallel Port base address to an address other than "3BC." If the symptom remains, utilize normal problem determination procedures to isolate the failing FRU or application.

SAS KEYWORDS:

PSY2	6875	D/T6875	D/T6885
D/T6876	D/T6886	6885	6876
6886	PSY2ADPT	PSY2OEM	PSY2DISP
IBMPC	PSY2ERR	PC 750	PC 730
PSVP	D/T68XX		

1.4.677 DISTORTED LINES APPEAR W/AUTOCAD AND WINDOWS

Record number: H124917

Device: D/T9577
 Model: M
 Tip key:
 Date created: 094/08/10
 Date last altered: A94/08/19

SYMPTOM:

Under Microsoft Windows, version 3.1, an image is cut from AutoCAD ("Copy Vectors") and pasted to the Microsoft Windows Clipboard.

The pasted image contains distorted shapes, jagged lines, etc.

PROBLEM ISOLATION AIDS:

- The 9576 or 9577 is running "AutoCAD Release 12 For Microsoft Windows."

- The following display driver is being used:

"Microsoft Windows Driver - by AutoDesk"

FIX:

This problem was found to be caused by using an incorrect display driver. The correct device driver is identified as:

"Windows Accelerated Display Driver ADI 4.2 - by AutoDesk"

The user should follow the installation instructions that are included with the drivers and the application.

If using the correct driver, identified above, does not correct the problem, the servicer should use normal problem determination procedures to isolate the defect.

Additional Information:

During the investigation of this problem, the following items were worth noting:

- To utilize the above driver correctly, the DEVICE statement in CONFIG.SYS (where QEMM/HIMEM/EMM386 is loaded) excluded the XGA-2 memory range as follows:

```
DEVICE=C: \EMM386.EXE NOEMS X=C0000-C08000
```

- To have AutoCAD Release 12 For Microsoft Windows 3.1 work with XGA-2, IBM XGA 2.11 Device Driver for Windows was loaded.

- While loading the "Windows Accelerated Display Driver ADI 4.2 - by AutoDesk", the "DISPLAY LIST" and "GDI-BYPASS" defaults were de-selected.

Windows is a trademark of Microsoft Corp.

ADI is a trademark of AutoDesk, Inc.

AutoCAD is a trademark of AutoDesk, Inc.

SAS KEYWORDS:

PSY2 PSY2MEM D/T9576 PSY2ERR
 JITTER VIDEO

1.4.678 DIVIDE BY ZERO ERROR OPENING MICROSOFT WORD FILE

Record number: H00894

Device: D/T6576
Model: M
Tip key:
Date created: 096/05/06
Date last altered: A97/04/18

SYMPTOM:

IBM PC 300 Series 6576 or 6586 may exhibit a Divide By 0 error when opening a Microsoft Word V6.0 file.

PROBLEM ISOLATION AIDS:

The problem reported to IBM involved opening a file titled RACV.BMP in Microsoft Word v6.0. The Divide By 0 error was displayed while the file was attempting to open.

FIX:

Install the current level of S3 Trio64 video device drivers for Windows. The current level driver is titled ZK2T00A.EXE and may be downloaded from the IBM PC Company BBS by calling 919 - 517 - 0001. The file is located in the IBM PC 300/700 Files section #21.

Device driver updates may also be downloaded via the Internet from the IBM Personal Computer File Library by searching the following Internet URL:

<http://www.us.pc.ibm.com/files.html>

The updates are located in the IBM PC 300 & 700 Series Files section or by using the search facility to locate the files by the name listed above.

Microsoft Word is a trademark of the Microsoft Corporation.

SAS KEYWORDS:

PSY2	D/T65XX	65XX	6586
IBMPC	PSVP	PSVPERR	PSY2ERR
PSY2DISP	PSVPDISP	D/T6586	6576
PC 330	PC 350		

1.4.679 DMA ARBITRATION ERROR 113 WITH ADVANCED DIAGNOSTICS LVL 1.03

Record number: H027272

Device: D/T8570
Model: M
Tip key:
Date created: O88/06/02
Date last altered: A88/06/03

SYMPTOM: IF THE ESDI HARDFILE ARBITRATION LEVEL IS SET TO 4 THROUGH THE CONFIGURATION MENU, A 113 ERROR WILL BE POSTED. THE ERROR WILL APPEAR DURING BOTH THE CUSTOMER AND ADVANCED DIAGNOSTIC HARDFILE TEST.

PROBLEM ISOLATION AIDS: NONE

FIX: THIS PROBLEM IS FIXED IN THE MODEL 70/80 REFERENCE DISKETTE LEVEL 1.04 AND HIGHER.

SAS KEYWORDS:

PSY2 PSY2ERR PSY2DIAG 8570SYSDIAG
8570SYSERR

1.4.680 DMA TIMEOUT ERROR (TRAP0002) ON PS/2

Record number: H121109

Device: D/T9585
 Model: M
 Tip key:
 Date created: 093/08/30
 Date last altered: A94/08/15

SYMPTOM:

OS/2 TRAP 0002 (DMA TIMEOUT) ERROR OCCURS ON A PS/2 SYSTEM DURING OPERATION. OTHER OPERATING SYSTEMS WILL PRODUCE DIFFERENT DMA TIMEOUT FAILURE SYMPTOMS, SUCH AS "PANIC" HANGS, NMI ERRORS, ETC.

PROBLEM ISOLATION AIDS:

THE SYSTEM HARDWARE DIAGNOSTICS COMPLETE WITHOUT ERROR.

THE PS/2 HAS A DMA CONTROLLED ARBITRABLE PARALLEL PORT. (ALL IML SYSTEMS HAVE ARBITRABLE SERIAL AND PARALLEL PORTS.)

THE PARALLEL PORT DMA ARBITRATION LEVEL IS AT A SETTING OTHER THAN "DISABLE".

THE PS/2 MAY HAVE ANY OPERATING SYSTEM OR APPLICATION INSTALLED.

FIX:

IF THE FAILURE OCCURS ONLY WHEN A CERTAIN ADAPTER IS BEING UTILIZED, THE PROBLEM MAY BE CIRCUMVENTED BY CHANGING THE ADAPTER ARBITRATION LEVEL TO A SETTING OTHER THAN "0".

IF PROBLEMS ARE STILL ENCOUNTERED, THE PARALLEL PORT DMA ARBITRATION LEVEL, SHOULD BE SET TO "DISABLED." THESE CHANGES ARE ACCOMPLISHED BY USING THE "CHANGE CONFIGURATION" OPTION ON THE SYSTEM PARTITION OR REFERENCE DISKETTE.

THIS PROBLEM IS CURRENTLY UNDER INVESTIGATION BY ENGINEERING. ADDITIONAL INFORMATION WILL BE COMMUNICATED VIA THIS RETAIN TIP WHEN AVAILABLE.

IF PROBLEMS ARE STILL ENCOUNTERED AFTER DISABLING THE PARALLEL PORT DMA ARBITRATION LEVEL, NORMAL PROBLEM DETERMINATION SHOULD BE PERFORMED.

SAS KEYWORDS:

PSY2	PSY2ERR	OS2	TRAP0002
D/T8570	D/T9576	OS/2	TIMEOUT
D/T8580	D/T8590	D/T8595	D/T9585
D/T9577	D/T9556	D/T9557	D/T9595
PSY2COMM	PRINTER	MODEM	D/T9590
PSY2PRT	TAPE	113	

DMI BROWSER CONTROL PANEL TEXT TURNS UPSIDE DOWN

1.4.681 DMI BROWSER CONTROL PANEL TEXT TURNS UPSIDE DOWN

Record number: H133511

Device: D/T6560
Model: M
Tip key:
Date created: 096/08/02
Date last altered: A96/08/02

SYMPTOM:

IBM PC 340 Series 6560 systems preloaded with DOS/Windows 3.11 and running the DMI Browser, may display the text on the folders in the DMI Control Panel upside down when the user clicks on the uppermost arrow in the left margin.

PROBLEM ISOLATION AIDS:

This problem occurs if the video resolution is set for 800 x 600 (small fonts) or 1024 x 768 (large fonts).

When this problem occurs, the user must restart DMI so that the folder text is upright. The problem will reoccur if the user clicks on the arrow in the upper left margin.

FIX:

This problem is being resolved in future releases of the DOS/Windows 3.11 preloaded software. Users requiring this function may contact the IBM PC Company HelpCenter at 1 - 800-772 - 2227 for information on upgrading the preloaded DMI Browser application.

Windows is a trademark of the Microsoft Corporation.

SAS KEYWORDS:

PSVP	PSY2	PSVPPROG	PSY2PROG
IBMPC	PC 300	50457	

DMI INSTALL README TEXT NOT VISIBLE ON DESKTOP

1.4.682 DMI INSTALL README TEXT NOT VISIBLE ON DESKTOP

Record number: H136886

Device: D/T6899
 Model: M
 Tip key:
 Date created: 097/03/18
 Date last altered: A97/03/18

SYMPTOM:

IBM IntelliStation Z Pro 6899 systems preloaded with Microsoft WindowsNT v4.0 may fail to display the README text box while performing the DMI BIOS automated install from the RTC CD that ships with the system.

PROBLEM ISOLATION AIDS:

During DMI BIOS automated installation step of the "Install All" option on the RTC CD, a view README question is displayed. If the user selects YES to view the README text, the text will appear for approximately 2 seconds then disappear to the background. The README text box will reappear after completing the installation.

This problem occurs on all WindowsNT v4.0 preloaded systems regardless of language.

FIX:

To view the README text during the DMI BIOS automated installation, use the Task Bar to bring the README back to the foreground.

This problem will be resolved in future releases of the SystemView Agent program product.

WindowsNT is a trademark of the Microsoft Corporation.

SAS KEYWORDS:

PSVP	PSY2	PSVPPROG	PSY2PROG
PSY2ERR	PWS	PSVPERR	IBMPC
UNCLASSIFIED	61531		

1.4.683 DOS SUPPORT FOR CD-ROM WILL NOT INSTALL WITH OS/2 DUAL BOOT

Record number: H016639

Device: D/T8550
 Model: M
 Tip key: 050
 Date created: 090/03/09
 Date last altered: A95/11/16

SYMPTOM:

CD-ROM DRIVE DOS SUPPORT WILL NOT INSTALL ON AN OS/2 V1.2 DUAL-BOOT SYSTEM, WHEN DOS BOOT IS SELECTED.

THE PROBLEMS MAY BE SEEN ON ANY PS/2 MICROCHANNEL MACHINE WITH AN IBM CD-ROM DRIVE AND USING THE OS/2 V1.2 DUAL BOOT FEATURE.

ADDITIONAL INFORMATION:

THIS IS DUE TO THE FACT THAT THE DOS INSTALL UTILITY TESTS FOR THE EXISTANCE OF OS/2 SYSTEM FILES ON THE FIXED DISK TO DETERMINE IF THE SYSTEM IS RUNNING OS/2. THIS TEST IS NOT VALID FOR AN OS/2 V1.2 DUAL BOOT SYSTEM RUNNING IN DOS BOOT MODE, SINCE THE OS/2 SYSTEM FILES WILL BE PRESENT ON THE FIXED DISK EVEN THOUGH THE MACHINE IS RUNNING TOTALLY UNDER THE DOS OPERATING SYSTEM.

FIX:

NOTE: THE FOLLOWING PROCEDURE SHOULD BE PERFORMED BY THE CUSTOMER OR THEIR RESPONSIBLE SOFTWARE SUPPORT PERSONNEL.

TO INSTALL THE CD-ROM DRIVE UNDER DOS FOR AN OS/2 V1.2 DUAL BOOT SYSTEM, THE INSTALLATION MUST BE DONE MANUALLY.

THIS IS THE PROCEDURE FOR INSTALLING DOS SUPPORT:

1. COPY THE FOLLOWING FILES FROM THE CD-ROM OPTION/DEVICE DRIVER DISKETTE TO THE C: DRIVE.

A. IBMCDROM.SYS
 B. MSCDEX.EXE
 C. IBMCDPLY.EXE

2. INSERT THE FOLLOWING STATEMENT IN THE CONFIG.SYS FILE.

DEVICE=\IBMCDROM.SYS /D: IBMCD001

3. INSERT THE FOLLOWING STATEMENT IN THE AUTOEXEC.BAT FILE.

MSCDEX /D: IBMCD001

4. REBOOT THE SYSTEM TO ACTIVATE THE SOFTWARE.

THIS PROBLEM WILL BE FIXED ON THE CDROM OPTION/DEVICE DRIVER DISKETTE WHICH CONTAINS OS/2 SUPPORT. THE CUSTOMER MAY OBTAIN IT BY SENDING IN THE MAILER, PROVIDED WITH HIS CD-ROM OPTION, TO IBM. THE CUSTOMER WILL BE SENT THE COMBINED DISKETTE AT NO ADDITIONAL COST.

SAS KEYWORDS:

PSY2	PSY2ADPT	PSY2ERR	CDROM
D/T8580	D/T8550	D/T8560	D/T8570
D/T8555	D/T8565	PSY2CDROM	

1.4.684 DOS 3270 APPLICATION FAILS TO CONNECT UNDER OS/2

Record number: H134614 Number of altered copies: 1

Device: D/T9552
 Model: M
 Tip key:
 Date created: 096/10/16
 Date last altered: A96/11/14

SYMPTOM:

Any IBM PC 300/700 Series, PS/2, PS/ValuePoint or ThinkPad system may fail to connect to the network while running a (DOS 3270 Application) in an OS/2 environment.

PROBLEM ISOLATION AIDS:

The DOS based 3270 application may exhibit either of the following symptoms while attempting to connect to the network:

- A) The DOS based 3270 application never connects to the network and posts various configuration errors during the attempt.
- b) To gain access to the network, the DOS based 3270 application must be started, closed, and restarted to connect.
- c) A DOS Full Screen session must be opened and closed while the 3270 application starting.

FIX: THIS IS A PERMANENT RESTRICTION

DOS based 3270 applications are NOT supported in an OS/2 environment due to the direct hardware access requirements.

Customers experiencing failures with this configuration should either use the Dual Boot feature of OS/2 to run the application in a DOS environment or choose a 3270 application that is compatible with OS/2.

SAS KEYWORDS:

PSY2	IBMPC	D/T8573	D/T2610
D/T2615	D/T2618	D/T2619	D/T2620
D/T2630	D/T2523	D/T2603	D/T2604
D/T2625	D/T2640	D/T9545	D/T9546
D/T9547	D/T9552	THINKPAD	UNCASSIFIED

1.4.685 DOS 3270 APPLICATION FAILS TO CONNECT UNDER OS/2

Record number: H134488

Device: D/T6576
 Model: M
 Tip key:
 Date created: O96/10/15
 Date last altered: A96/11/18

SYMPTOM:

Any IBM PC 300/700 Series, IBM PS/2, or PS/ValuePoint system may fail to connect a DOS 3270 application to the network while running in an OS/2 environment.

PROBLEM ISOLATION AIDS:

The DOS based 3270 application may exhibit either of the following symptoms while attempting to connect to the network:

- A) The DOS based 3270 application never connects to the network and posts various configuration errors during the attempt.
- b) To gain access to the network, the DOS based 3270 application must be started, closed, and restarted to connect.
- c) A DOS Full Screen session must be opened and closed while the 3270 application starting.

FIX:

An updated version of the S3 Trio 64/64v+ video device driver for OS/2 has been released to resolve this failure with commonly used DOS 3270 applications.

The updated S3 device driver may be obtained from the IBM PC Company BBS system by calling 1-919-517-0001. View the "IBM PC 300/700 Files" section (section #21) for the file titled:

Z01T33A.EXE - V2.85.07 S3 Trio 64/64v+ Driver for OS/2

The updated device driver may also be downloaded via the Internet from the IBM Personal Computer File Library by searching the following Internet URL:
<http://www.pc.ibm.com/files.html>

Customers that continue to experience failures with this configuration should either use the Dual Boot feature of OS/2 to run the application in a DOS environment or choose an application that is compatible with OS/2.

DOS based 3270 applications are not supported in an OS/2 environment due to the direct hardware access requirements.

S3 Trio64 & Trio64v+ are trademarks of S3 Incorporated.

SAS KEYWORDS:

PSVP	PSY2	PSVPCOMM	PSY2COMM
PSVPERR	PSY2ERR	PSVPPROG	IBMPC
PSY2PROG	PC 350	D/T6587	D/T6589
D/T6260	D/T6571	D/T6573	D/T6581
D/T6583	D/T6575	D/T6585	D/T6576
D/T6586	D/T6875	D/T6885	D/T6876
D/T6886	D/T6577	D/T6587	D/T6598
D/T6877	D/T6887	D/T6381	D/T6382
D/T6384	D/T6387	D/T6472	D/T6482
D/T6484	D/T6492	D/T6494	D/T8550
D/T9576	D/T9577	D/T8640	D/T8641
D/T9595	D/T9590	D/T8590	D/T8595
D/T9556	D/T9557	D/T8556	D/T8557
UNCLASSIFIED			

1.4.686 DOSCALL\$ TRAP ERROR WITH MWAVE AND TCPIP INSTALLED

Record number: H133217

Device: D/T6877
 Model: M
 Tip key:
 Date created: 096/03/25
 Date last altered: A96/03/25

SYMPTOM:

IBM PC 700 Series 6877 and 6887 systems with OS/2 WARP installed (not preloaded) may exhibit a DOSCALL\$ Trap error during boot after installing TCP/IP and Mwave device drivers.

PROBLEM ISOLATION AIDS:

The installation of the Mwave device drivers and TCP/IP MPTS (Multi-Protocol Transport Support) may create DOSCALL\$ Trap errors if certain statements in the CONFIG.SYS file are not in a particular order.

The DOSCALL\$ Trap errors occur if the following MPTS and Mwave statements are in the order shown:

```
RUN=C: \CDT\MWOS2\BIN\MWSTART.EXE
CALL=C: \OS2\CMD.EXE /Q /C C: \MPTN\BIN\MPTSTART.CMD
```

FIX:

Edit the CONFIG.SYS file and relocate the Mwave MWSTART.EXE statement so that it FOLLOWS the MPTSTART.CMD statement.

SAS KEYWORDS:

PSY2	D/T68XX	6887	6877
IBMPC	PSVP	PSY2PROG	PSVPPROG
D/T6887	PC750	PC700	PC 730
PC 750	PC730	PSY2ERR	PSVPERR
41524			

1.4.687 DOTS AND DASHES REMAIN ON 8555 SYSTEM MONITOR

Record number: H12224

Device: D/T8555
 Model: M
 Tip key:
 Date created: 093/05/25
 Date last altered: A94/08/18

SYMPTOM:

A small number of pixels remain lit on the monitor forming dots or dashes.
 Refreshing screen does not remove lit pixels but re-booting system will remove lit pixels for a short time.

PROBLEM ISOLATION AIDS:

To determine if the system is running OS/2 2.0 with service Pak 1, perform the following:
 At an OS/2 C: > prompt type: SYSLEVEL
 The system will respond with multiple lines of information. Locate the "IBM OS/2 Base Operating System" information as shown below.

```
IBM OS/2 Base Operating System
Version 2.00.1      Component ID xxxxxxxxxx
Type 0
Current CSD level: XR06055
Prior   CSD level: XR02000
```

FIX:

If the "Current CSD Level" is XR06055 then a fix is available from OS/2 Support.

The Customer should contact OS/2 Support and request the fix for APAR PJ06599. If the reported CSD level is not XR06055, continue with normal problem determination procedures.

SAS KEYWORDS:

PSY2	DISPLAY	D/T8555	SPOTS
VIDEO	PSY2DISP	8503	8504
8511	8512	8513	8514
8515	8516	8517	8518
6312	6314	6317	6318
6319			

1.4.688 DOUBLE KEY KEY STROKES W/ CARBON COPY & PC ANYWHERE

Record number: H123850

Device: D/T6384
 Model: M
 Tip key:
 Date created: 094/04/18
 Date last altered: A94/05/06

SYMPTOM:

ValuePoint 6382/S, 6387/T and 6384/D (except P60/D) may experience key button inputs repeating unexpectedly when running CARBON COPY or PC ANYWHERE.

PROBLEM ISOLATION AIDS:

Run keyboard diagnostics.

If diagnostics fail, follow the instructions provided by the diagnostics.

If diagnostics do NOT fail, proceed to fix.

FIX:

If diagnostics do not fail and other applications do not experience keyboard problems, replace the system board.

SAS KEYWORDS:

PSY2	PSVP	PS/VP	VALUE POINT
6384	6382	6387	D/T6382
D/T6387	PSY2BRD	PSVPBRD	PSY2KBD
PSVPKBD	REPEAT	PS/VALUEPOINT	PCANYWHERE

EICON ADAPTER FAILS TO CONFIGURE IN PC700

1.4.689 EICON ADAPTER FAILS TO CONFIGURE IN PC700

Record number: H095769

Device: D/T6885
 Model: M
 Tip key:
 Date created: 095/11/15
 Date last altered: A95/11/15

SYMPTOM:

An EICON HSI/MC Communication adapter installed in an IBM PC 700 Microchannel Series system causes the system to request a diskette in drive A: on each reboot.

PROBLEM ISOLATION AIDS:

After configuring the EICON HSI/MC Communication adapter using the Option Diskette shipped with the card, the system recognizes the adapter, however, when the system is rebooted, the Insert Diskette Icon appears on the screen. The only diskette that the system will accept at this point is the IBM PC 700 Reference Diskette. Each reboot requires the Reference Diskette to be inserted unless the EICON adapter is removed.

FIX:

The "NumByte" parameter in the @6E6E.ADF and @6F6E.ADF files on the EICON Option Diskette should be set for 4 instead of 3. This can be done by using an editor to change the values.

EICON is a trademark of EICON Technologies.

SAS KEYWORDS:

PSVP	PSY2	PSVPADPT	IBMPC
PSY2ADPT	PSVPCOMM	PSY2COMM	PSVPOEM
PSY2OEM	D/T6886	6886	D/T6885
D/T6875	6876	6885	6875
PC750	PC730	D/T68XX	PSY2DSKT
PSVPDSKT	D/T8639	SERVER 310	

1.4.690 EICON ADAPTER FAILS TO CONFIGURE IN SERVER 310, 320 & 520

Record number: H131719

Device: D/T8639
 Model: M
 Tip key:
 Date created: 095/11/16
 Date last altered: A96/02/06

SYMPTOM:

An EICON HSI/MC Communication adapter installed in an IBM SERVER Micro channel system causes a request for a diskette in drive A: on each reboot.

PROBLEM ISOLATION AIDS:

After configuring the EICON HSI/MC Communication adapter using the Option Diskette shipped with the card, the system recognizes the adapter, however, when the system is rebooted, the Insert Diskette Icon appears on the screen. The only diskette that the system will accept at this point is the IBM Server Reference Diskette. Each reboot requires the Reference Diskette to be inserted unless the EICON adapter is removed.

FIX:

The "NumByte" parameter in the @6E6E.ADF and @6F6E.ADF files on the EICON Option Diskette should be set for 4 instead of 3. This can be done by using an editor to change the values.

EICON is a trademark of EICON Technologies.

SAS KEYWORDS:

PSVP	PSY2	PSVPADPT	IBMPC
PSY2ADPT	PSVPCOMM	PSY2COMM	PSVPOEM
PSY2OEM	D/T6886	68XX	D/T68XX
PSY2DSKT	PSVPDSKT	SERVER	310
D/T8639	SERVER310	8639	MICROCHANNEL
D/T8641	8641	320	520
MICRO	CHANNEL	8640	D/T8640

1.4.691 EISA SLOT 6 CONFIGURATION PROBLEM

Record number: H127122

Device: D/T8640
 Model: M
 Tip key:
 Date created: 095/04/10
 Date last altered: A95/04/14

SYMPTOM:

EISA slot 6 can not be configured. When the configuration is viewed, it is seen as "OTHER". The other adapter slots are correctly shown as EISA slots.

PROBLEM ISOLATION AIDS:

- a. The EISA Configuration diskette is version 1.00.
- b. The system has a Pentium processor board installed.

FIX:

The following procedure will correct this problem:

1. Insert the EISA CONFIGURATION DISKETTE in the diskette drive
2. Type a DIR command (directory listing).
3. Look for a file named, "!MIC0005.CFG 7444 3-25-94 3: 15PM".
 (This is the Pentium system board configuration file.)
4. Then, print out the file or use the "TYPE" comand:
 TYPE !MIC0005.CFG | MORE (for OS/2),
 -or-
 TYPE !MIC0005.CFG /P (for DOS).

This will allow you to view the text in the file. On the 1st page there is a list of the EISA slots, continued on page 2. If EISA slot 6 appears as follows:

```
SLOT(6) = OTHER(6)
LENGTH = 341
BUSMASTER = YES
```

It is incorrect.

5. Use an editor to correct the typographical error so slot 6 appears the same as the other EISA slots, as follows:

```
SLOT(6) = EISA(6)
LENGTH = 341
BUSMASTER = YES
```

The 486DX/2 system board uses the following file:
 "!MIC0004.CFG 5628 3-25-94 3: 15PM". It is correct and may be used for a comparison.

Pentium is a registered trademark of Intel Inc.

SAS KEYWORDS:

PSY2	PSY2PROG	CONFIG	8640
SERVER	300	PCSERVER	PC

1.4.692 EMM386 EXCEPTION 06 OR REBOOT AFTER TRACK POINT OPERATION

Record number: H124941

Device: D/T9545
Model: M
Tip key:
Date created: 094/08/16
Date last altered: A95/02/14

SYMPTOM: After Windows is closed the system receives an EMM 386 exception 06 error or reboots when the trackpoint is touched.

PROBLEM ISOLATION AIDS:

The Windows Audio Drivers are loaded and the control sound panel is set to no sound on start or exit.

FIX:

WORK AROUND:

1. Enable the start or exit sound.
OR
2. Remove the Audio Driver from SYSTEM.INI file.
 - A. Edit WINDOWS/SYSTEM.INI by placing an ; in front of the following statements to remark them out of the file.

```
|-----|
| In the 386 ENHANCED section: |
| ;DEVICE=TPAUDVXD.386       |
|                             |
| In the DRIVER section:    |
| ;WAVE=IBMMME.DRV         |
| ;MIDI=IBMMME.DRV        |
| ;AUX=IBMMME.DRV         |
|-----|
```

A Microsoft driver is needed to fix this problem. Our work around can be used if this is not available.

Windows is a trademark of the Microsoft Corporation.

SAS KEYWORDS:

PSY2
MOUSEPSY2ERR
PSY2TBO

PSY2MCD

PSY2PROG

1.4.693 ENHANCED 80386 MEMORY ADAPTER W/SYSTEM DETECTED MEMORY ERROR

Record number: H037481

Device: D/T8580
 Model: M
 Tip key:
 Date created: 090/04/04
 Date last altered: A91/06/03

SYMPTOM: AN OPERATING SYSTEM DETECTED MEMORY ERROR, SUCH AS TRAP
 0002 AND/OR 000C, MAY OCCUR IN THE FOLLOWING CONFIGURATION:

8580 MODEL 111 OR 311 RUNNING OS/2 SE OR EE,
 AND AN ENHANCED 80386 MEMORY EXPANSION ADAPTER
 LOCATED IN MICROCHANNEL SLOT #1.

THE ENHANCED 80386 MEMORY EXPANSION ADAPTER CAN BE IDENTIFIED BY
 HAVING 3 SIMM CONNECTORS ON THE LEFT HALF OF THE ADAPTER AND ONE
 SIMM CONNECTOR ON THE TOP RIGHT HALF OF THE ADAPTER.

PROBLEM ISOLATION AIDS:

ALL SYSTEM AND MEMORY DIAGNOSTICS AND THE ENHANCED
 80386 MEMORY EXPANSION OPTION (OPTION # 33F3077,
 FRU P/N34F2825) DIAGNOSTICS RUN ERROR-FREE.

MOVE THE 80386 ENHANCED MEMORY ADAPTER TO MICROCHANNEL I/O
 SLOT #4.

FIX:

IF MOVING THE ENHANCED MEMORY ADAPTER TO SLOT 4 OF THE SYSTEM
 BOARD DOES NOT CORRECT THE PROBLEM, VERIFY THAT THE
 ENHANCED 80386 MEMORY EXPANSION ADAPTER HAS RESISTORS POSITIONED
 DIAGONALLY ACROSS MODULES U21, U22, U23 AND U24. IF THESE
 RESISTORS ARE NOT PRESENT, REPLACE THE ADAPTER (FRU P/N34F2825).

REFER TO TDR #H037846 UNDER D/T8580 FOR ADDITIONAL INFORMATION
 IF REQUIRED.

THE NEW FRU PART NUMBER FOR THIS ADAPTER CARD IS: FRU P/N87F9916

SAS KEYWORDS:

PSY2	PSY2ERR	8580SYSERR	8580SYSTEM
8580SYSADPT	PSY2MEM	8570SYSERR	8570SYSTEM
8570SYSERR	8573SYSERR	8573SYSTEM	8573SYSADPT
8570SYSADPT	D/T8570	D/T8573	D/T8580

1.4.694 ENHANCED 80386 MEMORY ADAPTER W/SYSTEM DETECTED MEMORY ERROR

Record number: H12179

Device: D/T8580
 Model: MCP1
 Tip key:
 Date created: 093/05/18
 Date last altered: A93/05/18

SYMPTOM: AN OPERATING SYSTEM DETECTED MEMORY ERROR, SUCH AS TRAP 0002 AND/OR 000C, MAY OCCUR IN THE FOLLOWING CONFIGURATION:

8580 MODEL 111 OR 311 RUNNING OS/2 SE OR EE,
 AND AN ENHANCED 80386 MEMORY EXPANSION ADAPTER
 LOCATED IN MICROCHANNEL SLOT #1.

THE ENHANCED 80386 MEMORY EXPANSION ADAPTER CAN BE IDENTIFIED BY HAVING 3 SIMM CONNECTORS ON THE LEFT HALF OF THE ADAPTER AND ONE SIMM CONNECTOR ON THE TOP RIGHT HALF OF THE ADAPTER.

PROBLEM ISOLATION AIDS:

ALL SYSTEM AND MEMORY DIAGNOSTICS AND THE ENHANCED 80386 MEMORY EXPANSION OPTION (OPTION # 33F3077, FRU P/N34F2825) DIAGNOSTICS RUN ERROR-FREE.

MOVE THE 80386 ENHANCED MEMORY ADAPTER TO MICROCHANNEL I/O SLOT #4.

FIX:

IF MOVING THE ENHANCED MEMORY ADAPTER TO SLOT 4 OF THE SYSTEM BOARD DOES NOT CORRECT THE PROBLEM, VERIFY THAT THE ENHANCED 80386 MEMORY EXPANSION ADAPTER HAS RESISTORS POSITIONED DIAGONALLY ACROSS MODULES U21, U22, U23 AND U24. IF THESE RESISTORS ARE NOT PRESENT, REPLACE THE ADAPTER (FRU P/N34F2825).

REFER TO TDR #H037846 UNDER D/T8580 FOR ADDITIONAL INFORMATION IF REQUIRED.

THE NEW FRU PART NUMBER FOR THIS ADAPTER CARD IS: FRU P/N87F9916

SAS KEYWORDS:

PSY2	PSY2ERR	8580SYSERR	8580SYSTEM
8580SYSADPT	PSY2MEM	8570SYSERR	8570SYSTEM
8570SYSERR	8573SYSERR	8573SYSTEM	8573SYSADPT
8570SYSADPT	D/T8570	D/T8573	D/T8580

1.4.695 ENHANCED 80386 MEMORY NOT RECOGNIZED BY THE SYSTEM

Record number: H035588

Device: D/T8570
 Model: M
 Tip key:
 Date created: 089/07/28
 Date last altered: A90/04/03

SYMPTOM: EXTENDED MEMORY ON THE ENHANCED 80386 MEMORY OPTION ADAPTER (OPTION # 33F3077, OR FRU P/N34F2825) IS NOT RECOGNIZED DURING POST OR ADVANCED DIAGNOSTIC TESTING FOLLOWING A FIXED DISK REPLACEMENT OR FORMAT.

THE REFERENCE DISKETTE VIEW CONFIGURATION SCREEN "TOTAL SYSTEM MEMORY," LINE FAILS TO DISPLAY ENHANCED 80386 MEMORY.

PROBLEM ISOLATION AIDS: NONE

FIX: THE ENHANCED 80386 MEMORY OPTION CREATES A HIDDEN RECORD ON THE FIXED DISK DURING CONFIGURATION.

A FORMAT OR REPLACEMENT OF THE FIXED DISK WILL CAUSE LOSS OF THE RECORD AND RESULT IN CONFIGURATION ERRORS. AFTER FORMAT OR REPLACEMENT OF THE FIXED DISK, THE SYSTEM MUST BE RECONFIGURED USING THE CUSTOMER'S REFERENCE DISKETTE IN ORDER TO REWRITE THIS HIDDEN CONFIGURATION DATA RECORD.

THE INSTALLATION INSTRUCTIONS FOR THIS ADAPTER MUST BE FOLLOWED EXACTLY, STEP-BY-STEP, IN ORDER TO WRITE THE HIDDEN RECORD ON THE FIXED DISK. THIS RECORD IS WRITTEN DURING STEP 18, ON PAGE 1-4 OF THE ADAPTER INSTALLATION INSTRUCTIONS. FAILURE TO FOLLOW THE INSTRUCTIONS EXACTLY WILL RESULT IN CONFIGURATION ERRORS.

A SEPARATE DIAGNOSTIC IS USED FOR TESTING ENHANCED 80386 MEMORY AND IS PROVIDED ON THE OPTION DISKETTE INCLUDED IN THE MARKETING OPTION PACKAGE ALONG WITH INSTALLATION INSTRUCTIONS. THIS ADDITIONAL TEST IS TRANSFERRED TO THE CUSTOMER'S BACKUP REFERENCE DISKETTE DURING CONFIGURATION. IT MUST BE RUN AS A SEPARATE OPERATION.

NOTE: IT IS NORMAL OPERATION FOR THE ENHANCED 80386 MEMORY TO NOT BE INCLUDED IN "TOTAL SYSTEM MEMORY" WHEN USING THE "VIEW CONFIGURATION" FUNCTION OF THE REFERENCE DISKETTE. THE ADAPTER ITSELF WILL BE RECOGNIZED, BUT THE MEMORY INSTALLED ON IT WILL NOT BE LISTED.

TOTAL SYSTEM MEMORY, INCLUDING THE ENHANCED 80386 MEMORY EXPANSION, WILL BE COUNTED DURING POST AFTER A BRIEF HESITATION IN WHICH THE HIDDEN RECORD ON THE FIXED DISK IS ACCESSED.

WHEN RUNNING ADVANCED DIAGNOSTICS, THE TOTAL SYSTEM MEMORY DISPLAYED WILL BE MINUS THE MEMORY INSTALLED ON THE ENHANCED 80386 MEMORY EXPANSION ADAPTER.

THE OPTION DISKETTE AND INSTALLATION INSTRUCTIONS ARE NOT INCLUDED WITH THE FRU PACKAGE (FRU P/N34F2825).

SAS KEYWORDS:

PSY2	PSY2MEM	PSY2ADPT	PSY2FDSK
8570SYSTEMEM	8570SYSFDSK	8570SYSADPT	8580SYSTEMEM
8580SYSFDSK	8580SYSADPT		

1.4.696 ENHANCED 80386 MEMORY NOT RECOGNIZED BY THE SYSTEM

Record number: H1270

Device: D/T8550
 Model: MCP1
 Tip key:
 Date created: 093/04/01
 Date last altered: A93/04/01

SYMPTOM: EXTENDED MEMORY ON THE ENHANCED 80386 MEMORY OPTION ADAPTER (OPTION # 33F3077, OR FRU P/N34F2825) IS NOT RECOGNIZED DURING POST OR ADVANCED DIAGNOSTIC TESTING FOLLOWING A FIXED DISK REPLACEMENT OR FORMAT.

THE REFERENCE DISKETTE VIEW CONFIGURATION SCREEN "TOTAL SYSTEM MEMORY," LINE FAILS TO DISPLAY ENHANCED 80386 MEMORY.

PROBLEM ISOLATION AIDS: NONE

FIX: THE ENHANCED 80386 MEMORY OPTION CREATES A HIDDEN RECORD ON THE FIXED DISK DURING CONFIGURATION.

A FORMAT OR REPLACEMENT OF THE FIXED DISK WILL CAUSE LOSS OF THE RECORD AND RESULT IN CONFIGURATION ERRORS. AFTER FORMAT OR REPLACEMENT OF THE FIXED DISK, THE SYSTEM MUST BE RECONFIGURED USING THE CUSTOMER'S REFERENCE DISKETTE IN ORDER TO REWRITE THIS HIDDEN CONFIGURATION DATA RECORD.

THE INSTALLATION INSTRUCTIONS FOR THIS ADAPTER MUST BE FOLLOWED EXACTLY, STEP-BY-STEP, IN ORDER TO WRITE THE HIDDEN RECORD ON THE FIXED DISK. THIS RECORD IS WRITTEN DURING STEP 18, ON PAGE 1-4 OF THE ADAPTER INSTALLATION INSTRUCTIONS. FAILURE TO FOLLOW THE INSTRUCTIONS EXACTLY WILL RESULT IN CONFIGURATION ERRORS.

A SEPARATE DIAGNOSTIC IS USED FOR TESTING ENHANCED 80386 MEMORY AND IS PROVIDED ON THE OPTION DISKETTE INCLUDED IN THE MARKETING OPTION PACKAGE ALONG WITH INSTALLATION INSTRUCTIONS. THIS ADDITIONAL TEST IS TRANSFERRED TO THE CUSTOMER'S BACKUP REFERENCE DISKETTE DURING CONFIGURATION. IT MUST BE RUN AS A SEPARATE OPERATION.

NOTE: IT IS NORMAL OPERATION FOR THE ENHANCED 80386 MEMORY TO NOT BE INCLUDED IN "TOTAL SYSTEM MEMORY" WHEN USING THE "VIEW CONFIGURATION" FUNCTION OF THE REFERENCE DISKETTE. THE ADAPTER ITSELF WILL BE RECOGNIZED, BUT THE MEMORY INSTALLED ON IT WILL NOT BE LISTED.

TOTAL SYSTEM MEMORY, INCLUDING THE ENHANCED 80386 MEMORY EXPANSION, WILL BE COUNTED DURING POST AFTER A BRIEF HESITATION IN WHICH THE HIDDEN RECORD ON THE FIXED DISK IS ACCESSED.

WHEN RUNNING ADVANCED DIAGNOSTICS, THE TOTAL SYSTEM MEMORY DISPLAYED WILL BE MINUS THE MEMORY INSTALLED ON THE ENHANCED 80386 MEMORY EXPANSION ADAPTER.

THE OPTION DISKETTE AND INSTALLATION INSTRUCTIONS ARE NOT INCLUDED WITH THE FRU PACKAGE (FRU P/N34F2825).

SAS KEYWORDS:

PSY2	PSY2MEM	PSY2ADPT	PSY2FDSK
8570SYSTEMEM	8570SYSFDSK	8570SYSADPT	8580SYSTEMEM
8580SYSFDSK	8580SYSADPT		

ENTER KEY DOES NOT WORK ON IBM REGISTRATION WINDOW BUTTONS

1.4.697 ENTER KEY DOES NOT WORK ON IBM REGISTRATION WINDOW BUTTONS

Record number: H16422

Device: D/T6588
Model: M
Tip key:
Date created: 097/07/11
Date last altered: A97/07/11

SYMPTOM:

In the IBM Registration application, pressing the enter key does not activate the outlined (highlighted) buttons along the bottom of the IBM Registration window.

PROBLEM ISOLATION AIDS:

None

FIX:

The space bar can be used to activate the outlined (highlighted) buttons along the bottom of the IBM Registration window instead of pressing the enter key, or pointing and clicking with the mouse.

SAS KEYWORDS:

PSY2	PSY2KBD	PSY2OPER	PSVP
PSVPKBD	PSVPOPER	65430	UNCLASSIFIED
D/T6588	D/T6888	6588	6888

PSY2 RETAIN TIPS
EPROM CHANGE FOR TOKEN RING ADAPTER

1.4.698 EPROM CHANGE FOR TOKEN RING ADAPTER

Record number: H12391

Device: D/T8550
Model: M
Tip key:
Date created: 093/06/16
Date last altered: A94/08/15

SYMPTOM:

DOWN LEVEL 16/4 TOKEN RING CARDS MAY EXHIBIT THE FOLLOWING SYMPTOMS:

- LOSS OF COMMUNICATION BETWEEN THE SERVER AND CLIENT
- LOST SESSIONS
- SERVER HANG OR LOCK-UP

THESE SYMPTOMS MAY BE INTERMITTENT.

PROBLEM ISOLATION AIDS: NONE

FIX:

AFFECTED 16/4 TOKEN RING ADAPTERS CAN BE IDENTIFIED BY THE PART NUMBERS OF THE TWO EPROM MODULES ON THE CARD. IF EPROM PART NUMBERS "74F9325 AND 74F9326" or "25F9523 AND 25F9524" ARE PRESENT, THE EPROM SHOULD BE REPLACED.

THE MICROCODE LEVEL MAY ALSO BE CHECKED BY RUNNING THE TOKEN RING DIAGNOSTICS FROM THE REFERENCE DISKETTE. IF LEVEL C24550 OR A78064 IS PRESENT, THE AFFECTED EPROMS ARE ON THE ADAPTER.

ONLY PS/2'S USED AS SERVERS OPERATING WITH NON-IBM NETWORK SOFTWARE ARE AFFECTED. WORKSTATIONS WHICH ARE NOT USED AS SERVERS DO NOT REQUIRE A NEW EPROM. REPLACEMENT EPROMS ARE SHIPPED WITH INSTALLATION INSTRUCTIONS, AND ARE AVAILABLE BY ORDERING FRU P/N92F9122.

ORDER P/N92F9122 THROUGH NORMAL DISTRIBUTION.

SCRAP THE REMOVED EPROMS LOCALLY.

SAS KEYWORDS:

PSY2	PSY2COMM	PSY2ADPT	D/T8525
D/T8530	D/T8535	D/T8540	D/T8550
D/T8555	D/T8556	D/T8557	D/T8573
D/T8560	D/T8565	D/T8570	D/T9576
D/T8580	D/T8590	D/T8595	D/T9585
D/T9577	D/T9556	D/T9557	D/T9595

ERRATIC MICROSOFT MOUSE MOVEMENT ON DOCKED THINKPAD.

1.4.699 ERRATIC MICROSOFT MOUSE MOVEMENT ON DOCKED THINKPAD.

Record number: H135662

Device: D/T3546
Model: M
Tip key:
Date created: 097/02/27
Date last altered: A97/02/27

SYMPTOM:

Erratic movement or drift of the arrow when using a Microsoft mouse of +5 volts with a 3546 Dock II and Thinkpad.

PROBLEM ISOLATION AIDS:

To determine if the Microsoft mouse is +5 Volts check the voltage specifications on the bottom of the mouse.

Note: A Microsoft mouse with a 12 volt requirement will work correctly. It does not have the erratic movement or drift symptom.

FIX:

If the Microsoft mouse does require +5 volts, the method to prevent erratic movement or drift is to disable the internal trackpoint on the ThinkPad using ThinkPad Features. Select the keyboard option and select the disable trackpoint option.

Note: The trackpoint must be enabled again if arrow movement is required when the ThinkPad is off the Dock II and an external mouse is not being used.

* Microsoft is a registered trademark of the Microsoft Corporation.

SAS KEYWORDS:

PSY2	PSY2MISC	OEM	THINKPAD
UNCLASSIFIED	D/T9545	D/T9546	

1.4.700 ERROR CODE 00024700 INCORRECT IN THE HMM

Record number: H063637

Device: D/T8641
 Model: M
 Tip key:
 Date created: 095/07/20
 Date last altered: A95/07/25

SYMPTOM:

The following error code is received while running diagnostics on the 8641:

00024700

The HMM (Hardware Maintenance Manual) S52G-9971-02, dated October 1994, page 39, indicates the processor board is failing. Replacement of the processor board does not correct the problem.

PROBLEM ISOLATION AIDS: None**FIX:**

This is not a hardware failure.

A 00024700 error means the L1/L2 processor cache was disabled. Replacing processor card will not clear it, because the information is stored in NVRAM on the planar board.

The following procedure will re-enable the cache:

1. Boot the system diagnostics.
2. Run the processor tests.
3. When asked if you want to turn on the processor cache, reply "yes" and the error will be cleared.

This information will be corrected in future releases of the HMM.

SAS KEYWORDS:

PSY2	D/T9595	8641	9595
8595	D/T8595	SERVER	500
95	PSY2ERR	PSY2DOC	0247
24700	247		

1.4.701 ERROR INSTALLING IBM UTILITIES IN RETAIL WINDOWS NT 4.0

Record number: H162995

Device: D/T6898
Model: M
Tip key:
Date created: 098/03/12
Date last altered: A98/03/12

SYMPTOM:

After selecting to install "IBM Utilities" from the Ready-To-Configure (RTC) CD-ROM, the installation program returns the following, or similar error message:

"Installation is incomplete. Upgrade or install Microsoft Internet Explorer before installing IBM Utilities."

PROBLEM ISOLATION AIDS:

This tip applies to the IBM IntelliStation M-Pro Series 6898 systems installed with a retail version of Microsoft WindowsNT 4.0.

FIX:

The system must be installed with Microsoft Internet Explorer version 3.02 or later before installing IBM Utilities from the RTC.

1. Update, or install Internet Explorer 3.02 or later.
2. Reinstall IBM Utilities from the RTC.

Windows and WindowsNT are trademarks of Microsoft Corporation.

SAS KEYWORDS:

PSY2	PSY2MISC	PSY2OPER	PSVP
PSVPMISC	PSVPOPER	MSIE	87961
D/T6898	6898	UNCLASSIFIED	

1.4.702 ERROR LOADING PCI TOKEN RING DRIVER IN WINDOWS NT 4.0

Record number: H123403

Device: D/T6898
 Model: M
 Tip key:
 Date created: 097/11/05
 Date last altered: A97/11/05

SYMPTOM:

When performing a new installation of WindowsNT with the IBM PCI Token Ring adapter, choosing "Select From List," then "Have Disk" causes the PCI Token Ring driver to load incorrectly. The Token Ring driver then cannot be removed from WindowsNT.

PROBLEM ISOLATION AIDS:

The condition is seen with the following PCI Token Ring adapters:

IBM PCI 16/4 Token Ring Adapter P/N41H8900
 IBM PCI 16/4 WOL Token Ring Adapter P/N86H1880

FIX:

Download and install the modified OEMSETUP.INF file from the Internet or IBM BBS, file name OEMSETUP.EXE.
 After creating the diskette, replace the OEMSETUP.INF file in the A: \NT subdirectory on diskette #2 supplied with the Token Ring adapter with the new OEMSETUP.INF. Use this modified diskette when re-installing WindowsNT to install the drivers for the PCI Token Ring adapter.

See the README.TXT file on the downloaded diskette for further information.

OEMSETUP.EXE may be downloaded via the Internet from the IBM Personal Computer File Library by searching the following Internet URL: www.us.pc.ibm.com/files.html

OEMSETUP.EXE may also be obtained from the IBM PC Company BBS system by calling 919-517-0001.

Windows and WindowsNT are trademarks of Microsoft Corporation.

SAS KEYWORDS:

PSY2	PSY2ERR	PSY2ADPT	PSY2COMM
PSVP	PSVPERR	PSVPADPT	PSVPCOMM
D/T6562	D/T6592	D/T6898	6562
6592	6898	79585	UNCLASSIFIED

1.4.703 ERROR MESSAGE VIEWING PROSET ETHERNET HELP FILE

Record number: H062390

Device: D/T6562
 Model: M
 Tip key:
 Date created: 097/09/29
 Date last altered: A97/10/01

SYMPTOM:

Clicking on the Help button within Intel PRO Set after selecting "Test" and running diagnostics, returns the message:

"The Topic Does Not Exist. Contact Your Application Vendor For An Update. (129)."

PROBLEM ISOLATION AIDS:

The error is only seen in the IBM PC PC300PL, machine type 6562, preloaded with Windows95.

FIX:

Click on the "Help" button before running the diagnostics, or, download and install the updated Intel Ethernet driver Q37T07A.EXE.

Q37T07A.EXE may be downloaded via the Internet from the IBM IBM Personal Computer File Library by searching the following Internet URL: www.us.pc.ibm.com/files.html

Q37T07A.EXE may also be obtained from the IBM PC Company BBS system by calling 919-517-0001.

Windows95 is a trademark of Microsoft Corporation.
 Intel PRO Set is a trademark of Intel Corporation.

SAS KEYWORDS:

PSY2	PSY2ERR	PSY2OPER	PSY2COMM
PSVP	PSVPERR	PSVOPER	PSVPCOMM
D/T6562	6562	69270F_1	UNCLASSIFIED
69270	69270F_2		

ERROR MSGCOLON. "INVALID MEDIA TYPE" ON LAN WORKSTATION

1.4.704 ERROR MSG&COLON. "INVALID MEDIA TYPE" ON LAN WORKSTATION

Record number: H033695

Device: D/T8550
Model: M
Tip key:
Date created: 091/04/08
Date last altered: A91/06/17

SYMPTOM:

WHEN A PS/2 LAN WORKSTATION THAT DOES NOT CONTAIN A DISKETTE DRIVE IS UPGRADED WITH A FIXED DISK OPTION, THE FIXED DISK MUST BE PARTITIONED AND FORMATTED USING THE NETWORK.

IF THE IPL OPERATING SYSTEM IS MODIFIED BY ADDING THE DOS FILES "FDISK" AND "FORMAT" TO THE IMAGE DEFINITION FILE, AND THIS MODIFIED OPERATING SYSTEM IMAGE IS USED TO PARTITION THE HARDFILE, THE FOLLOWING ERROR MAY APPEAR WHEN THE WORKSTATION RESTARTS:

INVALID MEDIA TYPE READING DRIVE C.
ABORT, RETRY, FAIL ?

PROBLEM ISOLATION AIDS:**FIX:**

IF THIS ERROR MESSAGE APPEARS:

1. REPLY "F" TO ALLOW THE SYSTEM TO DISPLAY THE OPERATING SYSTEM PROMPT.
2. WHEN THE OPERATING SYSTEM PROMPT APPEARS, TYPE "FORMAT C: "
3. PRESS ENTER.
4. RESTART THE WORKSTATION AFTER THE FORMAT IS COMPLETE.

SAS KEYWORDS:

PSY2 8550SYSFDSK 8550SYSERR 8555SYSERR
8555SYSFDSK D/T8555

1.4.705 ERRORS INITIALIZING KODAK SCANNERS

Record number: H131162

Device: D/T9595
 Model: M
 Tip key:
 Date created: O95/10/04
 Date last altered: A95/10/09

SYMPTOM:

A Kodak Scanner, attached to an IBM SCSI-2 Fast Wide Adapter/A, fails to initialize when running imaging applications under OS/2 versions 2.X and 3.X.

POST (Power-on System Test) and diagnostics complete without error.

PROBLEM ISOLATION AIDS:

Affected Hardware Configuration:

Server 95 (9595), Models xNx, xPx, and xQx, or any 8590/95 9590/95 system upgraded with a Type 4 processor card, at BIOS revision level (flash) 03 or higher.

IBM PS/2 SCSI-2 F/W Adapter/A, FRU P/N92F0160, Marketing Option P/N's, 70G8498 and 6451280 (old), at a firmware (microcode) revision level below 71.

(The adapter's Revision level can be determined by running Advanced Diagnostics on the adapter. During the diagnostics, one of the screens will display the revision level.)

Kodak SCSI Scanner Models: 500, 900, 923 and 990 series.

Note:

See RETAIN record # H095936 for additional detail related to identifying Type 4 processor systems.

Affected Software:

OS/2 version 2.x or later with SCSI device drivers IBM2SCSI.ADD and DELIVERY.SYS dated 9/94 or later.

FIX:

Reflash the SCSI-2 Fast/Wide Adapter/A to firmware (microcode) revision level 71.

This diskette loaddisk image file (REV71UPD.DSK), located in Directory 22 - IBM PC Server Files, may be down-loaded from the PC Company Bulletin Board System (BBS) by calling: 1-919-517-0001 in the USA.

In addition, customers and dealers in Canada may download the file(s) from any of the following regional IBM Canada Bulletin Board numbers:

Vancouver (604) 664-6464
 Montreal (514) 938-3822
 Markham (905) 316-4255

----- IMPORTANT -----

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| THE UPDATES ARE CUSTOMER INSTALLABLE. CUSTOMERS SHOULD |
| BE ADVISED TO CONTACT THE PC COMPANY HELPCENTER AT      |
| 800-772 - 2227 IF ASSISTANCE IS REQUIRED IN GETTING OR    |
| INSTALLING THE APPROPRIATE UPDATE. IN CANADA THE        |
| HELPPC NUMBER IS 1-800-565-3344.                        |

```

SAS KEYWORDS:

PSY2	D/T9595	D/T9590	D/T8595
9595	8595	SCSI2	PSY2PROG
SERVER	95	D/T8590	9595A
PSY2ADPT	OEM	8590	9590

1.4.706 ERRORS INSTALLING OS/2 FROM CD-ROM ON a 9553

Record number: H122179

Device: D/T9553
 Model: M
 Tip key:
 Date created: 093/12/27
 Date last altered: A94/08/15

SYMPTOM:

During the installation of OS/2 2.1 from a CD-ROM the following errors may occur:

- Internal Processing Error
- System Hang
- TRAP 0008 or TRAP 000E

PROBLEM ISOLATION AIDS:

These errors may be generated if the IBM Model 9553 OS/2 2.1 CD-ROM installation procedures are not followed.

FIX:

Complete the following steps to correctly install OS/2 2.1 from a CD-ROM to a 9553:

1. Make a complete backup copy of the OS/2 2.1 Installation Diskette. Label the newly created diskette "New OS/2 2.1 Installation Diskette - PS/2 9553 486SLC2 Only."
2. Copy the ABIOS.SYS file and all files with a *.BIO extension from the PS/2 9553 486SLC2 Reference Diskette to the diskette labeled "New OS/2 2.1 Installation Diskette - PS/2 9553 486SLC2 Only." Verify that the files were copied to the new diskette.

Note: If insufficient room exists on the backup copy of the Installation Diskette for the new *.BIO files you may delete the existing (old) *.BIO files and the ABIOS.SYS file from the backup Installation Diskette.

3. Begin the installation of OS/2 using the CD-ROM. The installation diskette labeled "New OS/2 2.1 Installation Diskette - PS/2 9553 486SLC2 Only." should be used.
4. Continue the OS/2 2.1 installation from the CD-ROM until a message appears instructing you to remove the diskette and press "Enter" to continue the installation from the hard disk. After this completes, power off the system, insert the diskette labeled "New OS/2 2.1 Installation Diskette - PS/2 9553 486SLC2 Only" and power the system on.
5. Follow the instructions until the message screen titled "Welcome to OS/2" appears.
6. Press the "Esc" key. You will be at an OS/2 Command Prompt.
7. Copy the ABIOS.SYS file and all files with a *.BIO extension from the diskette labeled "New OS/2 2.1 Installation Diskette - PS/2 9553 486SLC2 Only" to the OS/2 sub-directory of the hardfile where OS/2 is being installed.
8. Re-start the system from the hard disk and complete the OS/2 installation from the CD-ROM.

SAS KEYWORDS:

PSY2	CDROM	COMPACT	DISK
CD	PSY2PROG	HANGS	PS/2

1.4.707 ERRORS INSTALLING OS/2 ON a 9553

Record number: H122181

Device: D/T9553
Model: M
Tip key:
Date created: 093/12/20
Date last altered: A94/08/15

SYMPTOM:

During the installation of OS/2 the following errors may occur:

- Internal Processing Error
- System Hang
- TRAP 0008 or TRAP 000E

PROBLEM ISOLATION AIDS:

These errors may be generated if the proper IBM Model 9553 OS/2 installation procedures are not followed.

If installing OS/2 1.3 verify correct installation by looking for the following three files in the root directory.

If they are not present, installation was not completed correctly.

- ABIOS.SYS
- SF8B9XX.BIO
- 0000000.BIO

The OS/2 sub-directory should be viewed for the same files if you are installing OS/2 2.0 or 2.1.

FIX:

The process of installing RAM loadable ABIOS is dependant on the version of OS/2 being used, and the presence of a SCSI device.

- OS/2 2.1 (NO SCSI device) - Insert the Model 53 Reference Diskette when prompted during the installation of OS/2 2.1. The files SF8B9XX.BIO, 000000.BIO, and ABIOS.SYS will be copied to C: \OS2 during the installation process.
- OS/2 2.1 (WITH SCSI device) - Copy the ABIOS.SYS and *.BIO files from the Model 53 Reference Diskette to a backup copy of the OS/2 2.1 Installation Diskette. Install OS/2 using the newly created Installation diskette. Insert the Model 53 Reference Diskette when prompted during the installation of OS/2 2.1. The files SF8B9XX.BIO, 000000.BIO, and ABIOS.SYS will be copied to C: \OS2 during the installation process.
- OS/2 2.0 - Copy the ABIOS.SYS and *.BIO files from the Model 53 Reference Diskette to a backup copy of both the OS/2 2.0 Installation Diskette and OS/2 2.0 Diskette 1. Install OS/2 using the newly created diskettes. The files SF8B9XX.BIO, 000000.BIO, and ABIOS.SYS will be copied to C: \OS2 during the installation process.
- OS/2 1.3 - Copy the ABIOS.SYS and *.BIO files from the Model 53 Reference Diskette to a backup copy of the OS/2 1.3 Installation Diskette. Install OS/2 using the newly created diskette. The files SF8B9XX.BIO, 000000.BIO, and ABIOS.SYS will be copied to the root directory (i.e., C: \) during the installation process.

Note: If insufficient room exists on the backup copy of the Installation Diskette for the new *.BIO files you may delete the existing (old) *.BIO files and the ABIOS.SYS file from the backup Installation Diskette.

SAS KEYWORDS:

PSY2 PSY2ERR DEAD HANGS
PS/2 PSY2PROG

1.4.708 ESDI FIXED DISKS WILL NOT CONFIGURE OR COME READY

Record number: H087199

Device: D/T8550
 Model: M
 Tip key: 083
 Date created: 091/07/19
 Date last altered: A93/04/19

SYMPTOM: ONE OR MORE ESDI FIXED DISK IS NOT RECOGNIZED BY THE SYSTEM (0 FIXED DISKS INSTALLED).

PROBLEM ISOLATION AIDS:

TO BE RECOGNIZED AND COME "READY," THE FOLLOWING OPERATIONS MUST OCCUR IN THE ESDI FIXED DISK SUBSYSTEM:

- A. DURING POST (POWER-ON SELF TEST), THE BIOS (BASIC INPUT/OUTPUT SYSTEM) ROUTINES ON THE ESDI ADAPTER ISSUE A "READ ID" COMMAND TO FIXED DISK DRIVE "C. THIS CAUSES THE FIXED DISK IDENTIFICATION RECORD, WHICH IS WRITTEN ON THE DRIVE, TO BE READ AND TRANSFERRED TO THE ADAPTER. BY SUCCESSFULLY READING THIS RECORD, THE ESDI ADAPTER RECOGNIZES THE SIZE OF THE FIXED DISK ATTACHED (70MB, 115MB, OR 314MB) AND "READY" IS ESTABLISHED.
- B. THE SAME PROCESS THEN OCCURS FOR THE "D" DRIVE.

IF THE SYSTEM CANNOT RECOGNIZE EITHER FIXED DISK, THE CONFIGURATION WILL SHOW "0 FIXED DISKS INSTALLED," BUT A 165 CONFIGURATION ERROR WILL NOT OCCUR BECAUSE THE ESDI ADAPTER WAS IDENTIFIED DURING POST. A 10480 OR 10490 ERROR WILL OCCUR, INDICATING NO FIXED DISK CAME "READY."

FOR DIAGNOSTICS TO RUN, CERTAIN CONDITIONS MUST BE MET:

- 1. POWER MUST BE GOOD.
 - A. IS THE GREEN "POWER GOOD" LIGHT ON?
 - B. THE POWER CABLE ON THE FIXED DISK CONNECTED (NOT INVERTED)
 - C. CAN THE FIXED DISK BE HEARD "SPINNING UP?" (IF THE DRIVE CAN NOT BE HEARD, CHECK VOLTAGES AT THE POWER CABLE FROM THE POWER SUPPLY AND AT THE POWER SUPPLY, PUSHED PINS MAY PREVENT THE FILE FROM SPINNING UP.)
- 2. ALL CONNECTIONS AND CABLING MUST BE INTACT. ALL DIAGNOSTICS ARE WRITTEN WITH THIS ASSUMPTION.
 - A. IS THE ESDI ADAPTER IN THE CORRECT SLOT AND SEATED FULLY?
 - B. ARE THE CABLES IN THE CORRECT POSITIONS? SEE BELOW.
 - C. IS ONLY DRIVE "C" CORRECTLY TERMINATED? SEE NOTE BELOW.
- 3. ALL FUNCTIONAL UNITS MUST BE GOOD.
 - A. MULTIPLE FAILURES COMPOUND THE PROBLEM AND CAN BE VERY FRUSTRATING. "DRIVE READY" FAILURES MAY BE CAUSED BY ANY COMPONENT FRU IN THE FIXED DISK SUBSYSTEM.
- 4. THE ID RECORD ON TRACK 0 OF THE FIXED DISK MUST BE READABLE.
 - A. IF THIS RECORD IS OVERWRITTEN BY SOFTWARE, THE FAILURE WILL "APPEAR" TO BE HARDWARE. AN ADVANCED DIAGNOSTIC FORMAT WILL RE-CREATE IT, AS IT REFORMATS THE ENTIRE DISK.

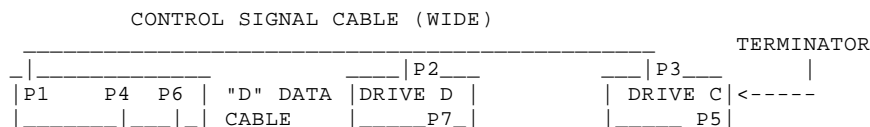
THE MOST COMMON CAUSES FOR A ESDI HARDFILE "FAILURE TO COME READY," IN THE ORDER OF PROBABILITY, ARE AS FOLLOWS:

- 1. THE CABLING BEING CONNECTED IMPROPERLY. THE CABLING MUST BE CONNECTED EXACTLY AS FOLLOWS:

CONTROL SIGNAL CABLE (WIDE CABLE): P1 ATTACHES TO THE ADAPTER. P2 ATTACHES TO THE "D" DISK (LOCATED IN THE FRONT OF THE MACHINE), AND P3 ATTACHES TO THE "C" DISK (REAR OF THE MACHINE). IT SHOULD BE NOTED THAT P3 IS THE CONNECTOR ON THE END OF THE CABLE. (THE TERMINATOR CHIP GOES ON THIS DRIVE.) (THE CABLE LAYOUT SHOULD BE OBSERVED CAREFULLY, AS THIS IS FREQUENTLY CONFUSING.)

DATA CABLE FOR C-DRIVE (NARROW CABLE): P4 TO ADAPTER; P5 TO DISK DRIVE "C."

DATA CABLE FOR D-DRIVE (NARROW CABLE): P6 TO ADAPTER; P7 TO DISK DRIVE "D."



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ESDI | | _____ | "C" DATA CABLE |
ADAPTER | _____ |

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2. MULTIPLE DEFECTIVE FUNCTIONAL UNITS. FOR INSTANCE, THE ORIGINAL FAILING COMPONENT AND AN ADDITIONAL FAILING COMPONENT (EITHER THE ADAPTER, DISK OR CABLE).
3. THE CORRECT TYPE OF FIXED DISK ADAPTER MUST BE INSTALLED.

A FIXED DISK ADAPTER (ST-506) WILL ONLY SUPPORT THE 44MB (ST-506) FIXED DISK. THE ESDI ADAPTER WILL ONLY WORK WITH ESDI FIXED DISKS (70MB, 115MB OR 314MB). MIXING 44MB (ST-506) AND ESDI FIXED DISKS ON EITHER ADAPTER CANNOT BE DONE BECAUSE THE TWO TYPES OF INTERFACE ARE INCOMPATIBLE.

4. THE DISK IDENTIFICATION RECORD IS MISSING (OVERWRITTEN BY SOFTWARE) OR UNREADABLE, PREVENTING "READY" FROM BEING ESTABLISHED. THIS MAY HAPPEN TO EITHER, OR BOTH FIXED DISKS.

NOTE: DIRECT DRIVER SOFTWARE, WHICH BYPASSES BIOS, MAY INADVERTENTLY OVER-WRITE OR CORRUPT THE FIXED DISK ID RECORD, AND/OR OTHER CRITICAL AREAS OF THE FIXED DISK, CAUSING ERRORS WHICH APPEAR TO BE HARDWARE FAILURES, INCLUDING FAILURE TO COME READY (CONFIGURATION SHOWS "0 FIXED DISKS INSTALLED"). 10480, 10481, 10482, 10483, 10490, 10491 AND POSSIBLY OTHER ERRORS MAY BE CAUSED BY THIS SITUATION. IF THESE ERRORS ARE EXPERIENCED, AN ADVANCED DIAGNOSTIC FORMAT SHOULD BE RUN PRIOR TO REPLACEMENT OF THE FIXED DISK, IF POSSIBLE.

THE ADVANCED DIAGNOSTIC FORMAT WILL RESTORE THE DISK ID RECORD. WHEN THE FORMAT COMPLETES, THE DIAGNOSTICS SHOULD BE RUN.

IF THE DIAGNOSTICS THEN RUN ERROR-FREE, NO HARDWARE FAILURE HAS OCCURRED AND NO HARDWARE SHOULD BE REPLACED.

IF SOFTWARE IS CORRUPTING THE FIXED DISK, ASSISTANCE SHOULD BE SOUGHT FROM THE APPROPRIATE SOFTWARE SOURCE.

ADDITIONAL NOTES:

TERMINATORS:

DRIVE "C" MUST BE TERMINATED. IF A TERMINATOR IS INSTALLED ON BOTH THE "C" AND "D" DRIVES, DIFFICULT TO DIAGNOSE FAILURES MAY OCCUR DURING SYSTEM OPERATION, YET DIAGNOSTICS MAY RUN ERROR-FREE. THE TERMINATOR IS CONSIDERED PART OF THE "CABLING BEING INTACT" ASSUMPTIONS, AS NOTED ABOVE.

SWITCHES ON THE FIXED DISK DRIVES:

THE SWITCHES ON THE FIXED DISK DRIVES MUST NOT BE CHANGED FROM THE FACTORY SETTINGS. OPERATIONAL PROBLEMS COULD RESULT.

ADDITIONAL INFORMATION MAY BE OBTAINED BY REVIEWING RETAIN RECORD H006140

SAS KEYWORDS:

PSY2	PSY2ADPT	PSY2FDSK	PSY2ERR
8560SYSADPT	8580SYSADPT	8560SYSFDSK	8580FDSK
8560SYSERR	8580SYSERR	D/T8560	D/T8580
8580	STORE	SYSTEM	SYSTEMS
D/T4680	4680	D/T4680	SPIN
UP	SPINUP		

1.4.709 ESS 1868 AUDIO ADAPTER HANGS SYSTEM IF NOT INSTALLED

Record number: H161957

Device: D/T6562
Model: M
Tip key:
Date created: 097/11/24
Date last altered: A97/11/24

SYMPTOM:

Under WindowsNT 4.0, removing an ESS 1868 audio adapter from the system before uninstalling the audio device driver causes the system to hang at the blue WindowsNT startup screen.

PROBLEM ISOLATION AIDS:

None

FIX:

Following the instructions in the user's guide included with the adapter, uninstall the ESS audio device driver, followed by a normal shutdown of WindowsNT before removing the adapter from the system.

Windows and WindowsNT are trademarks of Microsoft Corporation.

SAS KEYWORDS:

PSY2	PSY2ERR	PSY2ADPT	PSVP
PSVPERR	PSVPADPT	D/T6562	D/T6592
6562	6592	66027	66027F_1
UNCLASSIFIED			

1.4.710 ETHERNET CONFIGURATION CORRUPTED ON PC 300/700

Record number: H127441

Device: D/T6575
 Model: M
 Tip key:
 Date created: 095/05/08
 Date last altered: A96/01/23

SYMPTOM:

IBM PC 300 and 700 series systems, 6571, 6573, 6581, 6583, 6575, 6585, 6875 and 6885 may display a message during IPL indicating that the configuration of the IBM LAN Adapter for Ethernet has been corrupted. The failure is indicated by a message stating that "the configuration has been corrupted, reset to 300/X."

This corruption will cause the adapter not to function with communication applications.

PROBLEM ISOLATION AIDS:

The following adapters may be affected:

IBM LAN Adapter for Ethernet
 three media (10Base-T (UTP), 10Base2 (coax), AUI)
 P/N48G7169, FRU P/N48G7170

IBM LAN Adapter for Ethernet TP
 single media (10Base-T (UTP))
 P/N60G0605, FRU P/N60G0611 & FRU P/N92F0386

IBM LAN Adapter for Ethernet CX
 single media (10Base2 (coaxial))
 P/N60G0615, FRU P/N60G0621

The error message is only displayed after a cold boot operation (power off/on).

The configuration of the adapter will appear as follows in the CONFIG program from the Option diskette provided with the Ethernet adapter:

I/O Base Address = 300
 IRQ = X, where X represents the fact that the interrupt is disabled and the adapter will not operate.
 Physical Media = TPI (10BaseT)
 Adapter Architecture = I/O Port
 Boot Prom = No Boot Prom

Users that are attempting to use the Remote Program Load (RPL) feature of the adapter will not be able to complete the RPL. Two error messages are displayed by the Power On Self Test (POST). These messages are as follows:

PR005 EEPROM integrity error
 OR
 PR003 IRQ Setup error

FIX:

Do not replace hardware.

The corrupted configuration can be reset using the CONFIG application provided on the Option diskette.

There is a software patch that prevents this failure from occurring. The patch is available from the IBM Internal disk LANPROD by entering the following command at the PROFS/OFFICEVISION command line:

REQUEST ENETPTCH PACKAGE FROM IBMLAN AT RALVM17

The patch may also be requested from the IBM PC Company Bulletin Board service at 919-517-0001. The name of the file on the bulletin board is "ENETPTCH.ZIP" 05-15-95 . The patch cannot be used on systems using the RPL feature.

The failure has been resolved in new levels of the adapter card which carry the same FRU numbers. Mechanicsburg inventory of the affected adapters has been refreshed.

SAS KEYWORDS:

PSY2	D/T68XX	D/T6885	6875
6885	PC 750	PC 730	PC750
68XX	IBMPC	PSVP	PSVPADPT
PSY2ADPT	PSVPERR	PSY2ERR	PSY2COMM

PSY2 RETAIN TIPS

ETHERNET CONFIGURATION CORRUPTED ON PC 300/700

PSVPCOMM
PC300
D/T6575
NE2000

PSVPPROG
PC 330
6575
ENETPTCH

PSY2PROG
PC 350
6585

PC730
D/T6585
D/T65XX

EXCEPTION 6 ERRORS ON PCSERVER 320 EISA CONFIGURATION

1.4.711 EXCEPTION 6 ERRORS ON PCSERVER 320 EISA CONFIGURATION

Record number: H127680

Device: D/T8640
Model: M
Tip key:
Date created: 095/05/22
Date last altered: A95/05/22

SYMPTOM:

Upon loading the EISA configuration program, the system stops with an "Exception 6" error. An example of the error follows:

EXCEPTION 6

AX= 02E2 BX= 61D0 CX= 0060 DX= 0000 SP= 1200 SI= 000D DI= 12E0
DS= 0010 ES= 0068 SS= 0008 CS= 0100 JP= 067E FLAGS = 3046

(The register information may or may not be the same as above.)

PROBLEM ISOLATION AIDS:

All models of the Server 320 are affected.

FIX:

This condition may be corrected by modifying the CONFIG.SYS file on the EISA Configuration Diskette to include the following statement: DEVICE = HIMEM.SYS
Reboot the system and the problem should not recur.

SAS KEYWORDS:

PSY2	SERVER	320	PCSERVER
PC	8640	PSY2ERR	

1.4.712 EXCESSIVE LOST ALLOCATION UNITS W/340MB DRIVE

Record number: H121147

Device: D/T6384
 Model: M
 Tip key:
 Date created: 093/09/09
 Date last altered: A95/10/30

SYMPTOM:

PS/VALUEPOINT SYSTEMS WITH 340MB DISK DRIVES MAY EXPERIENCE A HIGH RATE OF FIXED DISK LOST ALLOCATION UNITS. THIS WILL APPEAR TO THE USER AS REOCCURRING "XX LOST ALLOCATION UNITS FOUND IN X CHAINS" UPON EXECUTING THE "CHKDSK /F" COMMAND. THIS PROBLEM MAY ALSO APPEAR AS MISSING FILES OR DATA.

PROBLEM ISOLATION AIDS:

NOT ALL 340MB DRIVES ARE AFFECTED. ONLY 340MB DRIVES MEETING ALL OF THE FOLLOWING CRITERIA MAY EXHIBIT THE PROBLEM:

- MADE FOR IBM BY WESTERN DIGITAL
- FRU P/N92F0404
- BAR CODE LABEL BEGINNING WITH "L15P0...."
IF ANY OF THE FIRST 5 CHARACTERS ARE DIFFERENT, THE DRIVE IS NOT AFFECTED.
- DIAGNOSTICS DO NOT FAIL.

FIX:

DO NOT REPLACE THE 340MB HARDFILE TO RESOLVE THIS PROBLEM.

A SELF-LOADING 340 MB HARD FILE UPGRADE DISKETTE, REQUIRING JUST ONE-TIME USE, IS AVAILABLE TO ELIMINATE THE OCCURRENCE OF THIS ERROR. IT SHOULD BE RUN IMMEDIATELY ON ALL AFFECTED SYSTEMS.

THE UPDATE IS CUSTOMER INSTALLABLE AND CAN BE OBTAINED ON DISKETTE BY CALLING THE IBM PC CO. HELPCENTER AT 800-772 - 2227 OR BY CALLING THE IBM PC CO. BULLETIN BOARD AT (919) 517 - 0001 AND REQUESTING THE "340UPDT.DSK" FILE.

SAS KEYWORDS:

PSY2	PSVP	VALUE POINT	6382
6384	D/T6382	PSVPFDSK	6387
PSY2FDSK	PSVPERR	D/T6387	PS/VP
PSY2ERR			

1.4.713 EXTERNAL CABLE / TERMINATOR MAY NOT FIT

Record number: H017664

Device: D/T3510
Model: M
Tip key:
Date created: 091/05/30
Date last altered: A91/05/30

SYMPTOM:

DIFFICULTY MAY BE EXPERIENCED CONNECTING AN EXTERNAL CABLE OR A TERMINATOR TO THE CONNNECTOR ON THE REAR OF THE 3510. THE TERMINATOR MAY NOT SEAT PROPERLY, MAY "POP OUT," OR MAY BE VERY DIFFICULT TO LATCH.

PROBLEM ISOLATION AIDS: NONE**FIX:**

REPLACE THE DATA CABLE ASSEMBLY, P/N64F5815, LOCATED INSIDE THE UNIT, WITH FRU P/N92F0009.

SAS KEYWORDS:

PSY2 D/T3510 SCSI

1.4.714 EXTERNAL CACHE FAILURE USING QAPLUS/PRO

Record number: H126939

Device: D/T6875
 Model: M
 Tip key:
 Date created: 095/03/29
 Date last altered: A95/03/29

SYMPTOM:

The IBM PC 700 Series systems may exhibit an external cache diagnostic failure when running memory diagnostics using QAPLUS/PRO version 5.22 and 5.28.

PROBLEM ISOLATION AIDS:

The IBM PC 700 is capable of memory interleaving for improved system performance. To enable memory interleaving, there must be four "like" simms installed. For example memory interleaving will function with four 8Mb simms, but not with two 8mb and two 4Mb simms installed.

QAPLUS/PRO versions 5.22 and 5.28 do not have the capability to diagnose systems using memory interleaving. The result is a false diagnostic error indicating that the external cache has failed.

QAPLUS/WIN is not affected. QAPLUS/WIN, which is preloaded on models with DOS and Windows 3.X does not perform the same test that QAPLUS/PRO is performing when the false error occurs.

QAPLUS/FE may indicate the same false diagnostic failure as as QAPLUS/PRO. QAPLUS/FE is not recommended for use on IBM PC 300 or 700 systems. Other false diagnostic errors may occur using this version of QAPLUS. Refer to RETAIN record H126531 for further information on using QAPLUS/FE on IBM PC 300/700 systems.

FIX:

Do not replace hardware.

A new version of QAPLUS/PRO is being developed that will allow testing of a system with interleaved memory. This tip will be updated with information regarding the new version of QAPLUS/PRO and ordering information.

QAPLUS is a trademark of DiagSoft, Inc.

SAS KEYWORDS:

PSY2	D/T68XX	D/T6573	D/T6583
D/T6571	D/T6581	D/T6575	D/T6585
D/T6876	D/T6886	D/T6875	D/T6885
68XX	6573	6583	6571
6581	6575	6585	6876
6886	6875	6885	PSY2PROG
PSY2ERR	PSY2DIAG	IBMPC	PSVP
QAPLUS			

EXTERNAL DISPLAY PROBLEM WHEN ATTACHED TO THE 750 MONO.

1.4.715 EXTERNAL DISPLAY PROBLEM WHEN ATTACHED TO THE 750 MONO.

Record number: H016836

Device: D/T9545
Model: M
Tip key:
Date created: 094/03/14
Date last altered: A94/03/23

SYMPTOM:

A line of data or a portion of a line of data will vibrate or waver. The condition may jump from one area of the screen to another.

PROBLEM ISOLATION AIDS:

This only occurs on the external CRT. The mono LCD works correctly and does not exhibit the symptom.

The symptom has only been seen using OEM DRAM memory.

FIX:

Remove the OEM DRAM and reboot. If the CRT does not waver install an IBM DRAM of like size for DIAGNOSTIC PURPOSES ONLY.

If this fixes the problem, remove the IBM memory, and refer the customer to their point of sale for OEM DRAM card resolution. If the problem remains follow normal problem determination procedures.

SAS KEYWORDS:

PSY2	PS2PART	PSY2MEM	OEMMEM
PSY2DISP	PSY2OEM		

EXTERNAL DRIVE MOTOR SPINS WHEN ACCESSING THE INTERNAL DRIVE

1.4.716 EXTERNAL DRIVE MOTOR SPINS WHEN ACCESSING THE INTERNAL DRIVE

Record number: H025731

Device: D/T8580
Model: M
Tip key:
Date created: 088/02/10
Date last altered: A88/02/17

SYMPTOM:

WHEN THE D/T4869 (5.25 EXTERNAL DISKETTE DRIVE) IS ATTACHED TO AN 8580, THE SPINDLE MOTOR WILL SPIN WHEN THE INTERNAL 3.5" DISKETTE DRIVE IS ACCESSED.

PROBLEM ISOLATION AIDS: NONE**FIX:**

IT IS NORMAL FOR THE 4869 EXTERNAL 5.25" DISKETTE DRIVE SPINDLE MOTOR TO SPIN WHEN THE INTERNAL DISKETTE DRIVE IS ACCESSED ON 8580 PRODUCTS. IN FACT, BOTH SPINDLE MOTORS WILL SPIN WHEN EITHER DRIVE IS ACCESSED. THIS ALSO HOLDS TRUE IF BOTH DRIVES ARE INTERNAL 3.5" DISKETTE DRIVES (THREE DISKETTE DRIVES ARE NOT SUPPORTED ON THE SYSTEM). ACTIVATING BOTH SPINDLE MOTORS PROVIDES INCREASED PERFORMANCE ON MULTIPLE DRIVE OPERATIONS SUCH AS "DOS DISKCOPY", SINCE MOTOR START DELAYS ARE ELIMINATED WHEN SWITCHING BETWEEN DRIVES. OPERATING BOTH MOTORS SIMULTANEOUSLY WILL NOT AFFECT DEVICE RELIABILITY.

SAS KEYWORDS:

PSY2

PSY2DSKT

8580SYSDSKT

4869DSKT

1.4.717 EXTERNAL 5.25" 360KB DISKETTE DRIVE CONFIGURATION PROBLEM

Record number: H037745

Device: D/T4869
 Model: M
 Tip key:
 Date created: 090/05/01
 Date last altered: A95/06/06

SYMPTOM:

THE 360KB 5.25" EXTERNAL DISKETTE DRIVE (4869) FAILS TO CONFIGURE AND/OR THE DRIVE ACCESS LIGHT IS ALWAYS ON.

PROBLEM ISOLATION AIDS:

THIS SYMPTOM MAY BE CAUSED BY ONE OF THE FOLLOWING CONDITIONS:

- A) THE RIBBON CABLE FROM THE EXTERNAL DRIVE ADAPTER CARD, WHICH CONNECTS TO THE B: DRIVE MODULE INSERT, COULD BE MISCABLED (THE RIBBON CABLE BEING OFFSET TO THE LEFT OR RIGHT ON THE INSERT CONNECTOR).
- B) THE B: DRIVE MODULE INSERT IS NOT FULLY/CORRECTLY SEATED INTO THE CONNECTOR AT THE REAR OF THE 3.5: DISKETTE DRIVE BAY.

FIX:

- A) MAKE CERTAIN THAT THE EXTERNAL DRIVE ADAPTER RIBBON CABLE IS CENTERED PROPERLY ON THE B: DRIVE MODULE INSERT.
- B) ON 8560'S AND 8580'S, ENSURE THAT THE B: DRIVE MODULE INSERT IS FULLY SEATED INTO THE 3.5" DISKETTE DRIVE BAY CONNECTOR. LISTENING FOR THE "SNAP" AS THE DRIVE MODULE IS INSTALLED.

INSERTED, DOES NOT INDICATE THE CABLE CONNECTOR HAS ALLIGNED AND SEATED PROPERLY.

IN ADDITION, CHECK THAT THE DISKETTE DRIVE BAY CONNECTOR HAS NOT DISENGAGED FROM IT'S BRACKET (THIS WOULD PREVENT PROPER SEATING OF THE B: DRIVE MODULE INSERT).

NOTE: THIS TIP IS NOT APPLICABLE TO THE 1.2 MB EXTERNAL DISKETTE DRIVE (4869-002 & 4869-502) WHICH DOES NOT USE THE DRIVE MODULE INSERT AND RIBBON CABLE. THE DRIVE MODULE INSERT IS REFERED TO A "DRIVE CONNECTOR ASSEMBLY" IN THE PARTS CATALOG.

SAS KEYWORDS:

PSY2 PSY2DSKT 4869DSKT D/T8550
 D/T8560 D/T8570 D/T8580

1.4.718 FAILURE ACCESSING 60 OR 120 MEGABYTE DRIVE ON 8550Z OR 8570

Record number: H014202

Device: D/T8550
 Model: M
 Tip key:
 Date created: 088/09/06
 Date last altered: A88/09/06

SYMPTOM:

8550Z (MODEL 061) AND 8570 (MODEL E61, 121, OR A21) MAY BE UNABLE TO ACCESS THE 60 MEGABYTE OR 120 MEGABYTE HARDFILE USING NOVELL NETWARE SOFTWARE. IF THIS HAPPENS THE NOVELL NETWARE SOFTWARE WILL DISPLAY THE FOLLOWING MESSAGE.

```
*****
*                               *
*           ERROR REPORT       *
*                               *
* DESCRIPTION                   *
*   THERE WERE NO DRIVES LOCATED. THIS COULD BE *
*   BECAUSE ... THE WRONG DISK DRIVE WAS SELECTED *
*   PLEASE VERIFY YOUR CONFIGURATION.           *
*                               *
* SEVERITY                       *
*   FURTHER PROGRAM EXECUTION IS NOT POSSIBLE. *
*                               *
*****
```

THIS FAILURE MESSAGE IS RECEIVED NO MATTER WHAT DISK CONTROLLER IS SELECTED IN THE "SET CONFIGURATION" PROCEDURE.

PROBLEM ISOLATION AIDS:

THE ABOVE MESSAGE GENERATED BY THE NOVELL NETWARE PACKAGE APPEARS DURING INSTALLATION AND THE CUSTOMER DIAGNOSTICS OR ADVANCED DIAGNOSTICS RUN TO COMPLETION WITHOUT ERROR.

FIX:

THE CUSTOMER MAY REQUIRE ADDITIONAL DRIVERS OR TECHNICAL SUPPORT FROM NOVELL. DIRECT THEM TO THEIR POINT OF SALE OR THE NOVELL TECHNICAL SUPPORT CENTER (1-800-526-7937) FOR ASSISTANCE.

SAS KEYWORDS:

PSY2	PSY2PROG	8550SYSPROG	8570SYSPROG
PSY2FDSK	8550SYSFDSK	8570SYSFDSK	

1.4.719 FAILURES WITH HYUNDAI 4MB MEMORY SIMMS

Record number: H126730

Device: D/T6875
 Model: M
 Tip key:
 Date created: O95/03/14
 Date last altered: A95/03/17

SYMPTOM:

IBM PC 700 series systems 6875 and 6885, may exhibit one or more of the following symptoms:

- Intermittent system hangs
- 110 Parity errors in DOS
- Error message indicating "Unreliable XMS memory at location XXXXXXX" with DOS 6.X.
- TRAP 0002 error with OS/2 2.X and WARP

PROBLEM ISOLATION AIDS:

Check the system for the following memory SIMMs, manufactured by Hyundai for IBM:

- 4Mb memory, P/N74G1187
- 8Mb memory, P/N05H0910

The above SIMMs are affected only if they contain modules indentified as 14400A J-70, with a date code prior to 9441 and contain a "B" suffix. For example a date code of 9371B would be a suspect part, however, 9371A would not be affected.

Advanced diagnostics run without errors.

FIX:

Replace affected SIMMs with FRU P/N73G3233 (4Mb) or P/N92G7521 (8Mb). FRU stock will not contain the affected Hyundai SIMMs.

If the affected Hyundai SIMMs are not installed, continue normal problem determination to isolate the failing application or FRU.

SAS KEYWORDS:

PSY2	D/T68XX	D/T6885	6875
6885	PC 750	PC 730	PC750
68XX	IBMPC	PSVP	PSVPMEM
PSY2MEM	PSVPERR	PSY2ERR	PC730

1.4.720 FALSE / ERRONEOUS ERROR CODES ON 8590 AND 8595

Record number: H096046

Device: D/T8590
 Model: M
 Tip key:
 Date created: 091/12/06
 Date last altered: A92/01/28

SYMPTOM:

FALSE ERROR CODES MAY OCCUR ON 8590 AND 8595 SYSTEMS.
 VERY FEW INCIDENTS HAVE BEEN REPORTED, HOWEVER THESE
 ERRORS MAY CAUSE EXCESSIVE SYSTEM DOWN TIME AND INCORRECT
 TROUBLESHOOTING DUE TO THE MISLEADING NATURE OF THE FAILURE.

THE ERRORS MAY APPEAR AS THE FOLLOWING SCSI ERROR CODES:

01127010 188H
 0096701U 188H
 00967013

IF NORMAL PROBLEM DETERMINATION PROCEDURES FAIL TO ISOLATE
 THE FAILING FRU, REPLACE THE PROCESSOR BOARD.
 THESE FAILURES USUALLY MANIFEST THEMSELVES DURING POST (POWER
 -ON SYSTEM TEST).

ERROR CODE 01291300 MAY ALSO OCCUR.

THIS CODE IS LISTED AS A "CACHE ERROR" IN THE HMS (HARDWARE
 MAINTENANCE AND SERVICE MANUALS). THE ERROR IS ACTUALLY
 A "BUS MASTER ARBITRATION ERROR" AND MAY BE CAUSED BY
 A DEFECTIVE BUSMASTER ADAPTER. TO ISOLATE THE PROBLEM,
 REMOVE THE BUSMASTER ADAPTERS (PROBLEM SHOULD GO AWAY),
 THEN REINSTALL THE ADAPTERS ONE AT A TIME UNTIL THE
 FAILURE SYMPTOM REAPPEARS.

PROBLEM ISOLATION AIDS: NONE

FIX:

REPLACE THE FAILING FRU'S USING NORMAL SERVICE PROCEDURES.

SAS KEYWORDS:

PSY2	PSY2ERR	D/T8590	D/T8595
8590SYSERR	8595SYSERR	1127010	96701U
967013	12913	1291300	

1.4.721 FALSE "DISK CHANGE" TEST FAILURE IN QAPLUS/WIN-WIN

Record number: H01754

Device: D/T6577
 Model: M
 Tip key:
 Date created: 096/06/19
 Date last altered: A96/06/19

SYMPTOM:

IBM PC 300 Series 6577 and 6587 preloaded with Windows95 may exhibit a false "Disk Change" test failure when testing the diskette drive subsystem with QAPLUS/WIN-WIN.

PROBLEM ISOLATION AIDS:

Start QAPLUS/WIN-WIN in Windows95 and select the floppy subsystem test routine. Disable all other tests except the "Disk Change." Perform the test to recreate the failure.

The failure will also occur if the other tests are allowed to execute along with the "Disk Change" test.

This failure only affects QAPLUS/WIN-WIN in the Windows95 environment. Windows 3.11 does not exhibit the failure.

FIX:

Do not replace hardware. This is a false error condition.

QAPLUS/PRO (IBM PC 300/700 Diagnostic diskette) should be used to verify proper operation of the diskette drive subsystem.

QAPLUS/WIN-WIN, included in the systems preloaded software, is being updated to eliminate this failure. An updated version of the application should be available from the IBM PC Company BBS on 6/1/96 in the PC 300/700 Files section (#21).

QAPLUS/WIN-WIN is a trademark of Diagsoft, Inc.
 Windows & Windows95 are trademarks of the Microsoft Corporation.

SAS KEYWORDS:

PSY2	D/T65XX	6577	6587
IBMPC	PSVP	PSVPDSKT	PSY2DSKT
D/T6587	PC 350	PC350	PC300
PC 330	PC330	43294	PSVPDIAG
PSY2DIAG	PSVPPROG	PSY2PROG	

1.4.722 FALSE ASYNC OR MPCA DIAGNOSTIC ERRORS

Record number: H124053

Device: D/T9595
 Model: M
 Tip key:
 Date created: 094/05/24
 Date last altered: A94/08/15

SYMPTOM:

False diagnostic errors may be experienced when running the Advanced Diagnostics on 9595 Pentium* processor models if the diagnostic wrap plug is installed. This occurs on either the serial (async) port or the MPCA (Multiprotocol Adapter/A). The same error may occur on 8590 or 8595 systems which have Pentium processor upgrades installed.

Async port error codes are: 0011XXXX XXXX may be any code
 MPCA error codes are: 0100XXXX XXXX may be any code

PROBLEM ISOLATION AIDS:

Run the async port and MPCA diagnostics without the wrap plug installed. If no failures occur, there is only a small chance of a hardware failure. (The diagnostic testing is the same with or without the wrap plug, except the actual I/O connector is not tested without the wrap plug.)

Check the level and version of the diagnostics using the "Display Revision Levels" selection under "More Utilities" in the System Partition. The following information will be seen:

BIOS part number XXXXXXXXX
 Date XX/XX/XX

Model F8
 Submodel 45, 46 or 47
 Revision level X
 Reference Diskette version X.XX
 Diagnostic Diskette version X.XX (Any version below 2.20)
 Diagnostic version X.XX
 Config. util. version X.XX

IML image name

Note: Use the F1 "Help" key for definitions of the above.
 The "X" information may be anything.

If the "Diagnostic Diskette Version" is lower than 2.20, the error is caused by processor speed dependent code in the diagnostics.

FIX:

If the customer is not experiencing problems with either the ASYNC port or MPCA adapter, and the diagnostics run without error with the wrap plug removed, no defect should be suspected. The diagnostics will be corrected on the Common Diagnostic Disk version 2.20 update and will be seen as "DIAG Version 2.20" when displaying the revision levels on the system partition.

This tip will be updated when the Common Diagnostic Diskette Version 2.20 is available.

* Pentium is a registered trade mark of INTEL Inc.

SAS KEYWORDS:

PSY2	PSY2DIAG	PSY2ERR	D/T9595A
SERIAL	TEST	RAID	SERVER
95	PSY2TBD		

1.4.723 FALSE CPU ERROR CODE MBD061 WITH QAPLUS/2

Record number: H01647

Device: D/T6577
 Model: M
 Tip key:
 Date created: 096/06/19
 Date last altered: A96/06/19

SYMPTOM:

IBM PC 300 Series 6577 and 6587 may intermittently exhibit a false CPU diagnostic error code when the System Board test is performed using QAPLUS/2. The error code displayed is "MBD061."

PROBLEM ISOLATION AIDS:

The false error code is displayed when all of the System Board tests are selected in QAPLUS/2. The error will occur when the CPU is tested.

FIX:

If the user suspects a system board problem exists, the IBM Personal Computer Diagnostic diskette (QAPLUS/PRO) should be used to diagnose the failure.

The IBM PC 300/700 Diagnostic diskette (QAPLUS/PRO) is created by using the Diskette Factory included in the systems preloaded software.

Perform the System Board diagnostic routines using QAPLUS/PRO. If all of the system board tests pass, assume that the "MBD061" error indication under QAPLUS/2 is false. If the test does fail in QAPLUS/PRO, continue normal problem determination procedures.

QAPLUS/2 & QAPLUS/PRO are trademarks of Diagsoft, Inc.

SAS KEYWORDS:

PSY2	D/T65XX	6577	6587
IBMPC	PSVP	PSVPBRD	PSY2BRD
D/T6587	PC 350	PC350	PC300
PC 330	PC330	42844	PSVPDIAG
PSY2DIAG			

1.4.724 FALSE DDD ERRORS WHILE RUNNING TME 10 NETFINITY

Record number: H091380

Device: D/T8641
 Model: M
 Tip key:
 Date created: 096/09/30
 Date last altered: A96/09/30

SYMPTOM:

A hard drive becomes defunct (DDD). The RAIDADM utility Drive Information/Drive Error count shows 48 errors or the TME 10 Netfinity RAID Manager Timeout Error count shows 48 errors.

PROBLEM ISOLATION AIDS:

All of the following must be true for this tip to apply:

- TME 10 Netfinity 4.0 or earlier is running on the Server.
- The Server has an IBM PCI Fast/Wide Streaming RAID adapter (FRU p/n06H5078) or an IBM MicroChannel Fast/Wide Streaming adapter (FRU p/n92F0335 or FRU p/n06H3059).
- The following hard drives are attached to the RAID adapter:
 1GB FRU p/n06H8560 (Option p/n94G2649)
 2GB FRU p/n06H8561 (Option p/n94G2650)
 4GB FRU p/n06H8562 (Option p/n94G2651)

FIX:

Important:

This fix is only for Servers with TME 10 Netfinity V4.0. If the Server does not have TME 10 Netfinity V4.0, then it must first be upgraded to V4.0. Then the fix can be applied.

With a ServerGuide or a PC Server proof-of-purchase, customers can obtain TME 10 Netfinity v4.0 by ordering ServerGuide version 2.51 from 1 - 800-426-7282. There is no charge if proof-of-purchase is provided.

Follow this procedure:

1. Download TMEDDD.EXE from the IBM PC Company BBS and expand the image onto a blank diskette using the command: TMEDDD A:
2. Upgrade to TME 10 Netfinity V4.0 if necessary.
3. Shutdown TME 10 Netfinity 4.0:
 - a. For OS/2: At a command line type: NETFBASE SHUTDOWN
 - b. For Windows NT: At the Windows Control Panel, select Services, then select TME 10 Netfinity Support Program and select STOP.
 - c. For NetWare: At the console type: unload NETFBASE.NLM
4. Copy the appropriate Operating System specific files from the TMEDDD.EXE diskette to the system's \Netfin subdirectory.
5. Restart TME 10 Netfinity 4.0:
 - a. For OS/2: At a command line type: NETFBASE START
 - b. For Windows NT: At the Windows Control Panel, select Services, then select TME 10 Netfinity Support Program and select START.
 - c. For NetWare: At the console type: load NETFBASE.NLM

-----IMPORTANT-----

Diskette images are customer installable. Customers should review any "README" files located on the diskette for installation information. Contact the IBM PC HelpCenter at 800-772 - 2227 if download/installation assistance is needed.

IBM TME 10 Netfinity files are located in Directory 40 on the IBM PC Company Bulletin Board Service (BBS) at:
 1 - 919 - 517-0001 or tieline 255-0001.
 The files may also be downloaded via the Internet from the IBM PC File Library by searching the following Internet URL:
<http://www.pc.ibm.com/files.html>

NetWare is a trademark of Novell, Inc.
 Windows NT is a trademark of Microsoft Corp.

SAS KEYWORDS:

PSY2	PSY2FDISK	SCSI	SCSI-2
ARRAY	D/T9595	D/T9595A	D/T8640
D/T8642	D/T3516	9595A	D/T3517
D/T3518	06H8560	06H8561	06H8562
94G2649	94G2650	94G2651	06H5078
92F0335	06H3059		

1.4.725 FALSE DIAG ERROR CODE WITH XGA AND 2 MPCA CARDS INSTALLED

Record number: H086006

Device: D/T8595
 Model: M
 Tip key:
 Date created: 091/06/21
 Date last altered: A92/07/27

SYMPTOM:

MULTI PROTOCOL COMMUNICATIONS ADAPTER (MPCA) DIAGNOSTICS MAY REPORT A FALSE ERROR CODE WHEN TESTED WITH ANOTHER MPCA CARD AND AN EXTENDED GRAPHICS ADAPTER (XGA) CARD. THE FALSE ERROR CODE IS 010002X0, WHERE X REPRESENTS THE SLOT NUMBER. THIS PROBLEM MAY OCCUR IN ANY PS/2 SYSTEM WHICH SUPPORTS THE XGA AND THE MPCA ADAPTERS. THE CONFIGURATION MUST INCLUDE TWO MPCA CARDS AND AN XGA CARD.

PROBLEM ISOLATION AIDS:

THE FALSE ERROR WILL ONLY OCCUR DURING ADVANCED DIAGNOSTIC TESTING, AND ONLY IF THE MPCA DIAGNOSTICS ARE RUN AFTER XGA DIAGNOSTICS.

FURTHER, DURING ADVANCED DIAGNOSTIC TESTING, IF THE "RUN TEST CONTINUOUSLY" AND THEN "ALL DEVICES" MODES ARE SELECTED, THE MPCA DIAGNOSTICS WILL RUN BEFORE THE XGA DIAGNOSTICS AND NO ERROR CODE WILL BE REPORTED ON THE FIRST PASS. HOWEVER, ON THE SECOND PASS, THE MPCA DIAGNOSTICS WILL REPORT THE FALSE ERROR CODE (010002X0).

FIX: (ANY OF THE FOLLOWING WILL ELIMINATE THE FALSE ERROR)

1. DO NOT RUN ADVANCED DIAGNOSTICS WITH MULTIPLE MPCA CARDS INSTALLED, THE FALSE ERROR WILL NOT BE OBSERVED IF ONLY ONE MPCA CARD IS INSTALLED.
2. WHEN RUNNING ADVANCED DIAGNOSTICS, DO NOT RUN MPCA DIAGNOSTICS AFTER XGA DIAGNOSTICS. RUN MPCA DIAGNOSTICS THEN XGA DIAGNOSTICS AND DO NOT RERUN MPCA DIAGNOSTICS.
3. RUN MPCA DIAGNOSTICS IN CONTINUOUS MODE ALONE.
4. ELIMINATE AN MPCA ADAPTER OR AN XGA ADAPTER FROM THE INSTALLED DEVICES LIST.

NOTE: THE REPORTING OF THE FALSE ERROR HAS BEEN FIXED ON THE NEW ADAPTER DEFINITION DISKETTE (.ADD). THE NEW XGA DIAGNOSTICS DISKETTE ALSO CONTAINS THE NEW .DGS FILE. THE FILE CAN BE IDENTIFIED AS HAVING A DATE OF 7/21/92 AND A BYTE SIZE OF 36777. THE NEW DISKETTE DOES NOT POST INVALID OR FALSE ERRORS.

SAS KEYWORDS:

PSY2ADAPT	PSY2	PSY2DIAG	D/T8557
D/T8555	PSY2ERR	D/T8565	D/T8570
D/T8580	D/T8590	D/T8595	8555SYSADPT
8555SYSDIAG	8555SYSERR	8557SYSADPT	8557SYSDIAG
8557SYSERR	8565SYSADPT	8565SYSDIAG	8565SYSERR
8570SYSADPT	8570SYSDIAG	8570SYSERR	8580SYSADPT
8580SYSDIAG	8580SYSERR	8590SYSADPT	8590SYSDIAG
8590SYSERR	8595SYSADPT	8595SYSDIAG	8595SYSERR

1.4.726 FALSE DIAGNOSTIC ERROR ON RAID SCSI DEVICE

Record number: H132357

Device: D/T8640
 Model: M
 Tip key:
 Date created: 096/01/25
 Date last altered: A96/01/25

SYMPTOM:

The diagnostics report a failing CD-ROM or other device while running system diagnostics.

PROBLEM ISOLATION AIDS:

All of the following must apply:
 The system is an IBM Server 320, or 520 with a RAID option (possibly installed by the user).
 FRU P/N06H5078 is the IBM RAID adapter installed.
 The Diagnostics are V 5.32.
 The "failing device" is attached to the RAID SCSI bus but is not configured.

FIX:

This is an erroneous error and no hardware should be replaced.

The fix is to configure all devices in the RAID subsystem prior to running diagnostics, or to not select the SCSI subsystem test for the diagnostic run.

SAS KEYWORDS:

PSY2	SERVER	320	520
RAID	PSY2DIAG	PSY2ERR	8640
8641	D/T8641	PSY2FDSK	CD
ROM			

FALSE DIAGNOSTIC ERROR WITH FIXED DISK CONTROLLER TEST

1.4.727 FALSE DIAGNOSTIC ERROR WITH FIXED DISK CONTROLLER TEST

Record number: H162810

Device: D/T8644
 Model: M
 Tip key:
 Date created: 098/02/13
 Date last altered: A98/02/20

SYMPTOM:

The following FALSE error message may appear when running the "IBM Enhanced Diagnostics" (PC-Doctor) Fixed Disk Controller Test:

"Disk 0 Controller
 Controller data loopback failed, Wrote FFFFH, Read 00H."

PROBLEM ISOLATION AIDS:

- The system is a Netfinity 3500 (8644) or Intellistation (6898)
 - The hard disk drive does not contain any data (ie. it is a new "blank" drive, it was just replaced, or it was just formatted)
 - The diagnostic version is 1.8.335 or below
- Note: The diagnostic version can be viewed by pressing <F10> on the main menu screen of the "IBM Diagnostics".

FIX:

Do not replace any hardware as this is a false error message.

The false error message appears if the hard drive being tested does not contain any data or was just formatted.

The PC-Doctor HD Controller test reads the first sector on the drive (boot sector) and analyzes its contents to make sure that there are no stuck-high or stuck-low data lines.

If the hard drive has been partitioned, the first sector will contain boot and partition table data which can be read and allow the data lines to be tested.

The false error occurs on "blank" drives because the data appears to be set to all "zeros" and the loopback test fails.

An engineering investigation is currently in progress. This RETAIN tip will be updated when additional information is available.

PC-Doctor is a trademark of Watergate Software.

SAS KEYWORDS:

PSY2	PSY2DIAG	PSY2ADPT	UNCLASSIFIED
D/T6898	SCSI	IDE	

1.4.728 FALSE DIAGNOSTIC ERRORS REPORTED BY QAPLUS/WIN-WIN

Record number: H132809

Device: D/T6877
 Model: M
 Tip key:
 Date created: 096/02/27
 Date last altered: A96/02/27

SYMPTOM:

IBM PC 700 Series 6877 and 6887 may display false error indications while running QAPlus/WIN-WIN.

PROBLEM ISOLATION AIDS:

While performing QAPlus/WIN-WIN diagnostic routines, the following error indications may be received:

CDROM - Random cylindrical access failed.
 Hard File - Disk Access Failed.
 Diskette Drive - Write protect test failed.
 Com Port - Could not select any of the options
 Printer - The test fails to print to an IBM Proprinter II.

The errors above are a result of an incompatibility between the QAPlus/WIN-WIN diagnostic routines interfacing with the PC 700 hardware.

Prior to any hardware replacements as a result of running QAPlus/WIN-WIN, IBM Advanced Diagnostics should be performed (QAPlus/Pro).

FIX:

Use the IBM PC 300/700 Advanced Diagnostic diskette (QAPlus/Pro) to diagnose any suspected hardware failures.

This problem will be resolved in the next update of QAPlus/WIN-WIN which will be available from the IBM PC Company Bulletin Board Service at 1-919-517-0001.

QAPlus/WIN-WIN is a trademark of DiagSoft, Inc.

SAS KEYWORDS:

PSY2	D/T68XX	6887	6877
IBMPC	PSVP	PSVPDIAG	PSY2DIAG
D/T6887	QA PLUS	QAPLUS	QA+
LOCKUP	PC750	HUNG	QAPLUSWIN
PC 750	PC730	PC700	PC 730
40176			

FALSE DIAGNOSTIC FAILURES WITH QAPLUS/WIN

1.4.729 FALSE DIAGNOSTIC FAILURES WITH QAPLUS/WIN

Record number: H094228

Device: D/T65XX
 Model: M
 Tip key:
 Date created: 094/12/06
 Date last altered: A95/10/30

SYMPTOM:

IBM PC 300 and 700 Series systems with a DOS/Windows preload may exhibit a symptom of exiting from QAPlus/WIN diagnostics to a DOS prompt (C: \) when the Loop mode is used or display false memory errors during testing.

PROBLEM ISOLATION AIDS:

When running QAPlus/WIN Version 1.02 in loop mode, the application may unexpectedly exit to the DOS prompt within a few minutes. When running QAPlus/WIN Version 1.03 this failure may occur after an hour or more when running in loop mode..

QAPlus/WIN version 1.02 and version 1.03 may exhibit false memory errors when using the memory test routines.

QAPlus/PRO does not exhibit these failures. QAPlus/PRO is the diagnostic preloaded on the system, in the "Diskette Factory" utility.

FIX:

QAPlus/PRO should ALWAYS be used prior to any parts replacements. Verify proper operation of the system unit.

QAPlus/WIN version 1.05 may be requested from the IBM PC Company bulletin board system by calling 919-517-0001. The file name is QAPLUSW.DSK.

SAS KEYWORDS:

PSY2	D/T68XX	D/T6573	D/T6583
D/T6571	D/T6581	D/T6575	D/T6585
D/T6876	D/T6886	D/T6875	D/T6885
68XX	6573	6583	6571
6581	6575	6585	6876
6886	6875	6885	PSY2PROG
PSY2ERR	PSY2DIAG	IBMPC	PSVP
QAPLUS			

1.4.730 FALSE DISKETTE ERROR CODE 667

Record number: H037714

Device: D/T9557
Model: M
Tip key:
Date created: 093/04/06
Date last altered: A94/05/09

SYMPTOM:

The diskette diagnostics report a 00066700 error only with a 5.25 diskette drive installed. POST completes without error, and advanced diagnostics fail only with a 00066700 error. The system does not fail during normal use.

PROBLEM ISOLATION AIDS:

Check the date of the diskette diagnostic file (DISKETTE.DGS). The file dated 08/11/92 can generate a false 00066700 error when a 5.25 diskette drive is installed.

To view files on the system partition:

Backup the system partition using the Backup/Restore System Programs option on the main menu. The diskette diagnostic file date can then be viewed on the backup diskette directory.

Failing file: DISKETTE.DGS 22520 08/11/92

FIX: The system partition may be updated to the latest level, refer to Retain Tip H02451 for details on levels and how to obtain code.

SAS KEYWORDS:

PSY2	PSY2DIAG	PSY2ERR	667
D/T9556	D/T9557	66700	PSY2DSKT
9556	9557		

FALSE DRIVER CONFLICT MESSAGE IN EVENT VIEWER

1.4.731 FALSE DRIVER CONFLICT MESSAGE IN EVENT VIEWER

Record number: H136901

Device: D/T6899
 Model: M
 Tip key:
 Date created: 097/03/18
 Date last altered: A97/03/18

SYMPTOM:

IBM IntelliStation Z Pro 6899 systems preloaded with WindowsNT 3.51 or v4.0 may display a false device driver conflict message in the WindowsNT Event Viewer.

The message states "A conflict has been detected between two drivers which derived two overlapping memory regions. Driver G1ZMPEL, with device </device\video 0. Translated >, claimed a memory range with starting address in the data address 0x28 & 0x2C and length in data address 0x30."

PROBLEM ISOLATION AIDS:

The system contains an Adaptec 2940uw SCSI adapter and an Intergraph Intense 3D video adapter.

FIX:

Do not replace parts. This is a false error indication posted to the Event Viewer. There is no functional failure.

An updated version of the Intergraph video device driver is being developed to eliminate the message. The updated driver will be available during April 1997 from the IBM PC Company BBS at 919 - 517-0001 and from the IBM PC Company File Library via the Internet at the following URL:

<http://www.pc.ibm.com/files.html>

Adaptec 2940uw is a trademark of Adaptec, Inc.
 Intergraph is a trademark of the Intergraph Corporation.

SAS KEYWORDS:

PSVP	PSY2	IBMPC	PSY2ERR
PSVPERR	PWS	PSVPADPT	PSY2ADPT
UNCLASSIFIED	PSVPOEM	PSY2OEM	57272

1.4.732 FALSE ERRORS FROM PS/2 WITH AOX CARD INSTALLED

Record number: H096294

Device: D/T8550
 Model: M
 Tip key:
 Date created: 092/02/13
 Date last altered: A92/02/13

SYMPTOM:

THE AOX MICROMASTER 386 20MHZ PROCESSOR CARD, RELEASED FOR USE IN IBM INTERNAL 8550 AND 8560 SYSTEMS, WILL DISPLAY FALSE ERRORS WHEN TESTING THE ADAPTER MEMORY. IN ADDITION, FALSE 103, 109, OR 162 SYSTEM ERRORS MAY BE DISPLAYED IF THE PS/2 IS CONFIGURED OR TESTED WHILE OPERATING WITH THE AOX MICROMASTER SELECTED AS THE CONTROLLING PROCESSOR.

THE FOLLOWING FALSE ERRORS WILL BE DISPLAYED WHEN USING THE MICROMASTER DIAGNOSTICS ON THE AOX OPTION DISKETTE VERSION 1.12:

- SELECTION M. (MEMORY TEST):
 WHILE RUNNING THE TEST, A ROW OF MIXED ASCI CHARACTERS WILL APPEAR IN THE TEST RESULT AREA. IGNOR THIS SYMPTOM AND LET THE TEST COMPLETE (APPROX. 60 SEC). THE REAL TEST RESULTS WILL BE DISPLAYED. WHERE?
- SECTION S. (SRAM TESTS):
 THE SRAM TEST FAILS WITH THE FOLLOWING MESSAGE: SRAM FAILURE AT D000: 4000 EXPECTED=0000 FOUND=FFFF. THIS IS A FALSE ERROR AND SHOULD BE DISREGARDED.

PROBLEM ISOLATION AIDS:

THE FALSE ERRORS WILL BE SEEN ON AOX MICROMASTER 386 DIAGNOSTICS VERSION 0.26. THE 0.26 DIAGNOSTICS VERSION IS SHIPPED ON THE AOX MICROMASTER 386 OPTION DISKETTE VERSION 1.12.

FIX:

WHEN TESTING THE AOX MICROMASTER CARD WITH THE OPTION DISKETTE, DO NOT RUN SELECTION "S" (SRAM TESTS).

SELECTION "M" (MEMORY TEST) TESTS ALL OF THE MEMORY INSTALLED ON THE ADAPTER. WHEN RUNNING THIS MEMORY TEST, DISREGARD THE LINE OF ASCI CHARACTERS, AND WAIT FOR THE REAL TEST RESULTS. THESE PROBLEMS HAVE BEEN CORRECTED ON LATER VERSIONS OF THE AOX DIAGNOSTICS.

SAS KEYWORDS:

PSY2	PSY2ADPT	PSY2MEM	PSY2ERR
PSY2DIAG	8550SYSADPT	8550SYSTEM	8550SYSERR
8550SYSDIAG	8560SYSADPT	8560SYSTEM	8560SYSERR
8560SYSDIAG	POEM	PSY2OEM	8560SYSOEM
8550SYSOEM	D/T8560	OEM	

1.4.733 FALSE MEMORY ERROR WITH QAPLUS/WIN-WIN ON PC 340

Record number: H133505

Device: D/T6560
 Model: M
 Tip key:
 Date created: 096/08/02
 Date last altered: A96/08/02

SYMPTOM:

IBM PC 340 Series 6560 systems preloaded with Microsoft Windows95 may exhibit a false error when QAPLUS/WIN-WIN Memory test is started in a system containing 32Mb or 64Mb of memory.

QAPLUS/WIN-WIN V1.14 displays the following error message when the Memory test is started from the IBM Easy Tools group in Windows95:

"Qaplusvp - an error occurred in your program. To keep working anyway click ignore and save your work in a new file. To quit this program click close. You will lose information you entered since your last save."

PROBLEM ISOLATION AIDS:

This failure may occur if the system contains four 8Mb memory SIMMs (32Mb) or two 32Mb SIMMs (64Mb).

This failure does not occur using QAPLUS/Pro.

FIX:

Do not replace hardware. This is a false error indication.

Use QAPLUS/Pro standalone diagnostics to diagnose a suspected memory failure. The QAPLUS/Pro (IBM Advanced Diagnostics) diskette can be created using the preloaded Diskette Factory.

Performing tests with QAPLUS/Pro is recommended prior to any parts replacement in any PC 300 or 700 product.

Windows95 is a trademark of the Microsoft Corporation.

SAS KEYWORDS:

PSVP	PSY2	PSVPERR	PSY2ERR
PSVPDIAG	PSY2DIAG	48515	PSVPMEM
PSY2MEM	IBMPC		

1.4.734 FALSE VIDEO DIAGNOSTIC ERROR MESSAGE

Record number: H131011

Device: D/T8641
 Model: M
 Tip key:
 Date created: 095/09/22
 Date last altered: A95/10/02

SYMPTOM:

While running Advanced Diagnostics on the Server 500 (8641) SVGA (video) Adapter/A, the following intermittent error message is seen:

Error Code = 02610450
 Error in the display.
 1. Replace the display.
 2. Rerun the video Diagnostic tests.

PROBLEM ISOLATION AIDS:

The video subsystem consists of the SVGA Adapter, FRU P/N71G0650, and any of the following displays: 851X, 632X or 952X.

The Advanced Diagnostics is version 2.32.
 Replacement of the monitor or the video adapter does not correct the problem.

FIX:

This is a diagnostic software error. No parts should be replaced. The problem has been corrected in Advanced Diagnostics version 2.33, or later.

Advanced Diagnostics Diskette version 2.33 should be available on the PC Company Bulletin Board System in October, 1995.

The current Reference and Diagnostic Diskette versions (two diskette set) may be downloaded from the IBM PC Company Bulletin Board System by calling 919-517-0001. The file may be found in section 22 on SERVERS.

SAS KEYWORDS:

PSY2	SERVER	500	PSY2DISP
PSY2ERR	PSY2DIAG	RAID	02610950

1.4.735 FALSE 11XX ERROR WHILE TESTING PS/2 SYSTEMS

Record number: H093522

Device: D/T8550
Model: M
Tip key:
Date created: 091/12/30
Date last altered: A94/03/21

SYMPTOM:

The PS/2 displays an 11XX error (XX can be any number) when testing the system board serial port with customer or advanced level diagnostics. The user has not experienced any async communication problems.

PROBLEM ISOLATION AIDS:

Check to see if the PS/2 has an OEM internal modem or OEM serial port adapter installed. If it does, remove it and run diagnostics.

FIX:

If the 11XX error remains, it should be treated as valid and normal problem determination must be performed. If the 11XX error is eliminated, it should be considered a false error.

The OEM option should be tested with its own diagnostics to determine proper operation.

SAS KEYWORDS:

PSY2	PSY2ADPT	PSY2DIAG	PSY2ERR
D/T8550	D/T8555	D/T8556	D/T8557
D/T8573	D/T8560	D/T8565	D/T8570
D/T9576	D/T8580	D/T8590	D/T8595
D/T9585	D/T9577	D/T9556	D/T9557
D/T9595	D/T9590	D/T9595A	D/T9533

1.4.736 FALSE 1280 DIAGNOSTIC ERROR ON THINKPAD 350

Record number: H123501

Device: D/T2618
Model: M
Tip key:
Date created: 094/04/06
Date last altered: A97/11/07

SYMPTOM:

IF AN IBM INTERNAL DATA/FAX MODEM IS INSTALLED, AND RELEASE 1.0 OR 1.01 DIAGNOSTICS ARE USED, FALSE 1280 ERRORS MAY OCCUR.

PROBLEM ISOLATION AIDS:

IF NO MODEM ERRORS ARE EXPERIENCED DURING NORMAL OPERATION, THE 1280 DIAGNOSTIC ERROR SHOULD BE CONSIDERED FALSE.

FIX:

THIS PROBLEM IS FIXED IN RELEASE 1.02 OF THE 2618 ADVANCED DIAGNOSTIC DISKETTE. THIS DIAGNOSTIC DISKETTE IS AVAILABLE FROM IBM PC COMPANY BULLETIN BOARD SYSTEM.

----- IMPORTANT -----

Diskette fixes are customer installable. Customers should be advised to contact the IBM PC Company HelpCenter at 800-772 - 2227 if assistance is required in getting or installing this information.

Files are located on the PC company's Bulletin Board Service (BBS). The direct line for modem connection to The PC Company BBS is 1-919-517-0001 or tieline 255-0001.

Customers in Canada should call IBM's HelpPC at 800-565-3344 for Assistance or down load information. The Canadian BBS phone numbers are:
Montreal-514-938-3022, Toronto-905-316-4255,
Winnipeg-204-934-2735, Vancouver-604-664-6464.

The data may also be downloaded via the Internet from the IBM Personal Computer File Library by searching the following Internet URL: <http://www.pc.ibm.com/files.html>

SAS KEYWORDS:

PSY2	PSY2ERR	PSY2COMM	2618
DIAG	DIAGS	THINKPAD	UNCLASSIFIED

1.4.737 FALSE 162 POST ERRORS ON PC 700

Record number: H13395

Device: D/T6885
Model: M
Tip key:
Date created: O95/07/10
Date last altered: A95/07/10

SYMPTOM:

IBM PC 700 series systems, 6885 and 6886 which utilize the 210 watt power supply, FRU P/N06H2968, may display a false 162 POST error after AC power is applied to the system, then removed and reapplied (Power on, power off, pull AC line cord, reattach AC line cord - power on).

PROBLEM ISOLATION AIDS:

This tip applies to 6885 and 6886 ISA and Microchannel systems that display 162 POST errors after the system unit has been powered on, powered off and the AC line cord is unplugged. When the AC line cord is reattached, and the system is powered on, a 162 POST error is displayed. The same symptom may be observed if the system is connected to a power strip.

When the ENTER key is pressed to access the Setup Utility after receiving the 162 error, there are NO changes highlighted or arrows next to any of the menu items on the initial Setup Utility screen. This indicates that there were no configuration changes made and the 162 error is false.

FIX:

Replace the power supply.

If failures persist after replacing the power supply, continue normal problem determination procedures.

SAS KEYWORDS:

PSY2	D/T68XX	D/T6886	6885
6886	PC 750	PC700	PC750
68XX	IBMPC	PSVP	PSVPPART
PSY2PART	PSVPPWR	PSY2PWR	PSY2ERR
PSVPERR	06H2966	06H2968	

1.4.738 FALSE 1702 1713 ERRORS ON PS/2 "E"

Record number: H12767

Device: D/T9533
Model: M
Tip key:
Date created: 093/07/30
Date last altered: A93/09/20

SYMPTOM:

WHEN RUNNING HARDFILE DIAGNOSTICS ON THE 9533 SYSTEM, 1702 OR 1713 MAY OCCUR. IF NO OTHER SYMPTOMS ARE EXPERIENCED AND APPLICATIONS ARE RUNNING NORMAL, THESE ERRORS ARE FALSE AND SHOULD BE IGNORED.

PROBLEM ISOLATION AIDS:

NONE

FIX:

ENGINEERING IS WORKING ON A FIX FOR THE DIAGNOSTICS. THIS TIP WILL BE UPDATED WHEN THE FIX IS AVAILABLE.

SAS KEYWORDS:

PSY2	D/T9533	PSY2SYS	PSY2FDSK
PSY2ERR	PSY2DIAG	PS/2	PS2
EW	ERR		

1.4.739 FALSE 198 ERRORS WHEN RUNNING DIAGNOSTICS

Record number: H123737

Device: D/T6381
Model: M
Tip key:
Date created: 094/04/28
Date last altered: A94/12/20

SYMPTOM:

PS/VALUEPOINT 6381/Si 433DX & 466DX2 MODELS MAY EXPERIENCE FALSE 198 ERRORS WHEN RUNNING ADVANCED DIAGNOSTICS.

PROBLEM ISOLATION AIDS:

198 ERRORS MAY BE SEEN WHEN RUNNING THE ADVANCED DIAGNOSTIC ROUTINE ON THE "SYSTEM UNIT."

THE TYPE 3 ADVANCED DIAGNOSTIC V1.00 AND 1.01 DISKETTES, WHICH ARE CREATED USING THE "DISKETTE FACTORY" THAT IS PRELOADED ON 6381/Si SYSTEMS IS THE ONLY VERSION AFFECTED. NOT ALL SYSTEMS USING THIS VERSION DISKETTE WILL DISPLAY THE FALSE 198 ERROR.

THERE IS NO EFFECT ON CUSTOMER APPLICATIONS OR SYSTEM PERFORMANCE AS A RESULT OF THE 198 ERRORS. IF THE SYSTEM EXHIBITS NO OTHER OPERATIONAL PROBLEMS, THE ERROR SHOULD BE CONSIDERED FALSE, AND NO PARTS SHOULD BE REPLACED.

FIX:

AN UPDATED VERSION OF THE 6381/SI ADVANCED DIAGNOSTIC HAS BEEN RELEASED THAT DOES NOT EXHIBIT THIS FAILURE. THE VERSION IS 1.02.

SAS KEYWORDS:

PSVP	PSY2	PS/VP	6381
PSVPDIAG	PSY2DIAG	PSVPERR	PSY2ERR
PSVPBRD	PSY2BRD	VALUEPOINT	POST

1.4.740 FALSE 301 OR 301/8602 POST ERROR

Record number: H022119

Device: D/T8550
 Model: M
 Tip key:
 Date created: 087/06/29
 Date last altered: A93/12/22

SYMPTOM: FALSE 301/8602 ERROR POSTED AFTER POWER ON.

PROBLEM ISOLATION AIDS: THE 8550, 8560, AND 8570 SYSTEMS MAY DISPLAY 301 AND 8602 POST ERRORS IF THE MACHINE IS POWERED OFF AND BACK ON TOO QUICKLY. THESE SYSTEMS REQUIRE A MINIMUM OF 10 SECONDS AFTER POWERING OFF TO RESET ALL INTERNAL CIRCUITS. IF THE SYSTEM UNIT IS RE-POWERED TOO QUICKLY, OR IF THE SYSTEM UNIT IS SUBJECT TO A VERY BRIEF POWER FAILURE, SUCH AS SWITCHING FROM PRIMARY POWER INPUT TO A UPS SYSTEM, A FALSE 301 OR 301/8602 ERROR MAY BE DISPLAYED.

FIX:

THE 301 AND 301/8602 FALSE ERROR CANNOT BE BYPASSED WITH THE F1 KEY. THE SYSTEM MUST BE POWERED OFF FOR MORE THAN 10 SECONDS, AND THEN RESTARTED. IF THE CORRECT POWER-OFF PROCEDURE FAILS TO RESET CONDITIONS CAUSING THE 301/8602 ERRORS, THE SYSTEM BOARD MAY BE DEFECTIVE.

*** IT IS IMPORTANT TO NOTE THAT PARTS REPLACEMENT, INCLUDING THE SYSTEM BOARD, WILL NOT PREVENT FALSE 301/8602 ERRORS FROM REOCCURRING. ***

SYSTEMS RUNNING DOS CAN USE THE DASDDRVR.SYS MODULE TO PREVENT THE FALSE ERRORS. SYSTEMS USING NON-DOS OPERATING SYSTEMS, INCLUDING THE IBM STORE CONTROLLER OPERATING SYSTEM, CAN NOT USE THE DASDDRVR.SYS MODULE. THOSE SYSTEMS SHOULD BE POWERED OFF FOR AT LEAST 10 SECONDS, THEN RESTARTED.

NOTE: THE SYSTEM UPDATE DISKETTE CONTAINS DASDDRVR.SYS, AND CAN BE OBTAINED BY FOLLOWING INSTRUCTIONS PROVIDED IN HSF RECORD NUMBER H037906. THE CUSTOMER SHOULD INSTALL THE DASDDRVR.SYS MODULE. THIS MODULE IS ALSO AVAILABLE ON THE MODEL 50/60 REFERENCE DISKETTE, VERSION 1.02 AND HIGHER.

CUSTOMER ENGINEERS SHOULD ORDER FORM NUMBER S64F-5107 FROM MECHANICSBURG TO OBTAIN VERSION 1.06 OF THE MODEL 50/60 REFERENCE DISKETTE. THIS DISKETTE CONTAINS SEVERAL FIXES TO ADVANCED DIAGNOSTICS.

*****NOTE: THE 8570 HAS THESE PATCHES HARD WIRED ON THE SYSTEM BOARD. THE PATCH WILL FIX SYSTEMS THAT RECEIVE ERRORS AFTER BEING POWERED OFF FOR MORE THEN THE 10 SECOND MINIMAL TIME THAT IS STATED IN THE HMR MANUAL.

SAS KEYWORDS:

PSY2	PSY2ERR	PSY2MISC	PSY2OPER
8550SYSERR	8550SYSMISC	8550SYSOPER	8560SYSERR
8560SYSMISC	8560SYSOPER	8570SYSOPER	8570SYSMISC
8570SYSERR	D/T8550	D/T8560	D/T8570
D/T8580	PSY2POWR		

1.4.741 FALSE 401 PARALLEL PORT ERRORS WITH DIAGNOSTIC LEVEL 1.03

Record number: H021959

Device: D/T8570
Model: M
Tip key:
Date created: 088/06/02
Date last altered: A92/07/30

SYMPTOM: WHEN USING THE 8570 REFERENCE DISKETTE LEVEL 1.03, A FALSE ERROR CONDITION WILL BE DISPLAYED WHEN THE PARALLEL PORT DIAGNOSTICS IS RUN WITH THE WRAP CONNECTOR ATTACHED. THE PLANAR BOARD WILL BE CALLED OUT AS A FAILING FRU.

PROBLEM ISOLATION AIDS: NONE

FIX: THIS FAILURE IS UNIQUE TO ADVANCED DIAGNOSTICS AND IS CORRECTED ON THE MODEL 70/80 REFERENCE DISKETTE LEVEL 1.04 OR LATER WHICH IS SHIPPED WITH EVERY 8570 HMS.

SAS KEYWORDS:

PSY2	PSY2ERR	8570SYSDIAG	PSY2DIAG
8570SYSERR	D/T8580		

1.4.742 FALSE 701 MATH COPROCESSOR DIAGNOSTICS ERRORS

Record number: H106902

Device: D/T8550
 Model: M
 Tip key:
 Date created: 093/01/14
 Date last altered: A94/08/15

SYMPTOM:

A "701" (00070100) error is displayed when coprocessor diagnostics are run on 8590/8595 and other systems with 80486 base processors.

Other than the exceptions noted below, coprocessor diagnostics are NOT VALID and are NOT supported on PS/2 80486 (i486) based systems. The "coprocessor function" is integrated into the 80486DX module and is tested with the "System Unit" diagnostic, therefore there is no separate coprocessor diagnostic for any 80486 system, including the "SX" models.

Note: There is a separate coprocessor diagnostic test for the 8570-486 system.

DETAILS:

On PS/2 Systems, diagnostics are run under control of the DCP (Diagnostic Control Program), which is common for all PS/2 systems. Therefore, a coprocessor diagnostic intended for a system with an 80386 processor (such as the 8580) may be erroneously added to the Reference (Diagnostic) Diskette for an 80486 processor system (such as the 8595).

If erroneously added to a reference diskette, The coprocessor diagnostic will be recognized as valid by the DCP. If selected during diagnostic testing, the DCP will attempt to execute it. As this test is written for the 80387 coprocessor module only, it will fail and display the "701 error" when run on "80486 based" systems.

Note: Using the "Copy an Option" utility and copying the options from a Reference Diskette (ie., 8580 Ref. diskette) will copy any option .ADF files and .DGS files. This is how the COPROC.DGS file may be erroneously transferred to a Reference diskette or System partition for an IML machine, such as the 8595.

PROBLEM ISOLATION AIDS: None**FIX:**

If this situation is encountered, the coprocessor diagnostic file (COPROC.DGS) should be removed from systems with 80486 processors (except for the 8570-486).

A directory listing of the reference or diagnostic diskette will reveal the presence of the COPROC.DGS file.

The presence of a COPROC.DGS file on a system partition will be indicated by displaying the diagnostic devices under test in the Advanced Diagnostics (Control/A, at the main menu). If the coprocessor is listed as an installed device, the COPROC.DGS file is erroneously installed. It can only be removed by deleting the COPROC.DGS file from the back-up Reference Diskette (DOS delete function) and then restoring the system partition from the corrected Backup Reference Diskette.

Note: When displaying the "View Configuration" screen, the coprocessor will be listed as "installed." This does not mean a separate coprocessor is physically installed, but that it is an integral function of the 80486 processor itself.

Future releases of Reference/Diagnostics diskettes will include a "Dummy" COPROC.DGS file (approximately 4 bytes long) which will prevent unintentional copying of non-supported "COPROC.DGS" files.

SAS KEYWORDS:

PSY2	PSY2ERR	PS2	PS/2
D/T8590	D/T8595	D/T9595	D/T9576
D/T9577	D/T8556	D/T8557	PSY2DIAG
PSVP	VALUEPOINT	D/T9585	8590
9577	9576	9585	9595
8595	D/T9590	9590	

FDISK SHOWS DRIVES IN WRONG ORDER

1.4.743 FDISK SHOWS DRIVES IN WRONG ORDER

Record number: H132272

```

Device:           D/T8641
Model:           M
Tip key:
Date created:    096/01/19
Date last altered:  A96/01/22

```

SYMPTOM:

When running FDISK under OS/2 versions 2.11 or 3.0 (WARP), the fixed disk drives are shown in the wrong order.

PROBLEM ISOLATION AIDS:

The system is an IBM PC Server 520 (8641-models EZ0 and EZV).

Multiple PCI Fast/Wide SCSI (Adaptec AHA-2940W) Adapters (FRU P/N 06H8574) are installed.

FIX:

Multiple PCI F/W SCSI Adapters (Adaptec AHA-2940W) require multiple basedev statements in the CONFIG.SYS file. The order of the basedev statements affects the order the drives appear in FDISK.

The multiple statements should be listed in the following order: PCI slot 1, then 2, then 3.

(PCI slot 1 is the shared PCI/EISA slot, slot 2 is the middle PCI slot, and slot 3 is the slot nearest the memory sockets).

```

For adapter in slot #   basedev statement
-----
1                       basedev=aic7870.add /a: 1 /i /a: 0 /i
2                       basedev=aic7870.add /a: 2 /i /a: 0 /i
3                       basedev=aic7870.add /a: 2 /i /a: 1 /i

```

SAS KEYWORDS:

```

PSY2           SERVER           520           8641
SCSI           PSY2FDSK

```

1.4.744 FIXED DISK ERRORS OR 1714 DIAGS ERROR ON 6484/6494

Record number: H105203

Device: D/T6484
 Model: M
 Tip key:
 Date created: 094/10/21
 Date last altered: A95/01/09

SYMPTOM:

The PS/ValuePoint 6484 or 6494 system fails with any of the following symptoms:

- 1 - Advanced Diagnostics returns a 1714 data miscompare error.
- 2 - The operating system reports errors reading or writing to an IDE hard disk drive.
- 3 - The system hangs while attempting to install an operating system.

PROBLEM ISOLATION AIDS:

- This tip applies to the following PCI models:
 6484 - X46, X5F, and X5G
 6494 - X5F, and X5G
- And
- 6482 and 6492 models with the PCI riser option installed.
- This tip does NOT apply to VESA/ISA system or system running at micro-processor speeds slower than 50/100mhz.
- Move the system board micro-processor speed jumpers (J17 and J18) from 50mhz to 33mhz; if the error can be reproduced at 33mhz, this tip does NOT apply, continue with normal problem determination.

FIX:

- If the system is a DX/4 50/100mhz PCI model and the failure can be eliminated by moving the processor speed jumpers from 50mhz to 33mhz, replace the system board using FRU p/n06H6355.
- When installing p/n06H6355 in DX/4 models, insure jumper J36 is installed on pins 2 and 3 (front 2 pins). This jumper is located in front of the hard disk drive cable connectors.

SAS KEYWORDS:

PSY2	PSVP	64XX	D/T6492
VALUEPOINT	PSY2FDSK	D/T6484	D/T6494
PSVPFDSK	PSY2BRD	PSVPBRD	PS/VALUEPOINT
P/N82G2397	82G2397	06H6355	6H6355
HANG	LOCK		

1.4.745 FIXED DISK PROBLEMS AFTER MAKING PHYSICAL CHANGES.

Record number: H124992

Device: D/T8550
 Model: M
 Tip key:
 Date created: 094/08/01
 Date last altered: A94/08/26

SYMPTOM:

Customers using OS/2 Version 2.XX may be unable to access a fixed disk drive and/ or experience data loss after the following changes to a system:

- A. An update to the Reference Diskette on non-IML systems.
- b. An Update to the System Partition on IML machines.
- c. A physical change to the fixed disk hardware configuration, such as moving the drive to a different adapter or machine.

The following additional OS/2 error symptoms may also be observed with HPFS file systems:

SYS551 or SYS552

Other symptoms unknown at the time of this writing may also be experienced.

This problem can affect any hardware system, including non-IBM products.

PROBLEM ISOLATION AIDS:

1. OS/2 Version 2.00 and higher, with CSD levels through XR06300 affected.

To determine the software level and version:
 At the OS/2 prompt, type in the following OS/2 command:

SYSLEVEL

This command will display the current levels of software for the various OS/2 components. Make note of the IBM OS/2 BASE OPERATING SYSTEM, versions and levels.

2. The diagnostics run error free.
3. Replacement of the fixed disk may appear to correct the problem at first, but the problem recurs.

FIX:

OS/2 APAR PJ14806 dated 94/08/01 has been written to correct this problem. The customer should contact OS/2 Support to obtain the fix.

Notes:

This fix is preventative and will not correct the problem on a failing system. A complete re-install of the operating system, after a low-level format, is required to correct a pre-existing condition.

Swapping of fixed disks between different machine types is not supported. Machine specific operating system information is stored on the fixed disk.

SAS KEYWORDS:

PSY2	PSY2PROG	PSY2FDSK	PSY2ADPT
D/T9595	D/T9590	D/T9585	D/T9577
D/T8570	D/T8565	D/T8580	D/T8590
D/T8595	D/T8555	HANG	VALUEPOINT
D/T8590	D/T8565	D/T8555	D/T8573
D/T8525	D/T8530	D/T8557	D/T8556
D/T8540	PSVP	D/T6384	OEM
PSY2OEM	APAR	OS2	SYS
TRAP	D/T6381	D/T6382	D/T6384
D/T6387	VP	HANGS	D/T6472
D/T6482	D/T6484	D/T6492	D/T6494
CP42	CP: 42	CP	42

FORMAT FAILURE ON DOS 3.3 WITH CERTAIN PS/2 MODELS

1.4.746 *FORMAT FAILURE ON DOS 3.3 WITH CERTAIN PS/2 MODELS*

Record number: H011341

Device: D/T8550
Model: M
Tip key:
Date created: 090/03/07
Date last altered: A92/12/01

SYMPTOM:

FORMAT FAILS USING DOS VERSION 3.3 ON THE FOLLOWING
PERSONAL SYSTEMS:

8570-A21
8580-121
8580-131
8580-A21
8580-A31

MULTIPLE FORMAT FAILURES ON 3.5 INCH DISKETTE DRIVES WITH
THE ERROR MESSAGE "INVALID PARAMETER," WHEN THE OPERATOR
REPLIES "Y" TO THE PROMPT, "FORMAT ANOTHER (Y/N)?" AFTER
THE FIRST FORMAT IS COMPLETE. THE MESSAGE APPEARS WHEN
ATTEMPTING TO FORMAT THE SECOND DISKETTE.

PROBLEM ISOLATION AIDS: NONE

FIX: DASDDRVR.SYS VERSION 1.56 SHOULD BE LOADED ON
THE FIXED DISK, WITH THE POINTER STATEMENT IN THE
CONFIG.SYS FILE.

SAS KEYWORDS:

PSY2	PSY2ADPT	PSY2ERR	8570SYSADPT
8570SYSERR	8580SYSADPT	8580SYSERR	D/T8560
D/T8580	D/T8570		

1.4.747 FRONT PANEL LED'S ARE INACCURATE

Record number: H121412

Device: D/T8600
Model: M
Tip key:
Date created: 093/09/30
Date last altered: A94/08/15

SYMPTOM:

Front panel LED's (Light Emitting Diodes) do not reflect the machine status correctly. The typical symptom is that the green LED is off when it should be on. The yellow LED can also indicate an inaccurate status.

When this condition occurs there are no adverse effects on the system, except the true system status is not reflected.

PROBLEM ISOLATION AIDS:

Verify the LED's are functional.

(both LED's should light up when the system is initially powered on)

Verify the LED's are not indicating a "real" error.

(Check the RMP LOG.)

The system functions normally in all other respects.

If the above are true, replace the IPB (InterProcessor Bus) backplane. If not, follow normal diagnostic procedures.

FIX:

FRU P/N92F0172 will provide the current IP backplane.

SAS KEYWORDS:

PSY2	295	PARALLAN	195
PSY2PWR	SERVER	PSY2ERR	

1.4.748 FULL LENGTH ADAPTER CARDS DON'T FIT SLOT

Record number: H131524

Device: D/T8640
Model: M
Tip key:
Date created: O95/10/31
Date last altered: A95/10/31

SYMPTOM:

On a limited number of Server 300 and 320 (8640) systems, difficulty or physical interference may be encountered while installing full length adapter cards into slots 1 and 2.

PROBLEM ISOLATION AIDS: None**FIX:**

This situation can be corrected by loosening the system board mounting screws and "rotating" the system board slightly to provide the alignment necessary for full length adapters to fit correctly in the lower slots. Slots 1 and 2 are affected the most. The higher numbered slots are affected the least.

SAS KEYWORDS:

PSY2	SERVER	320	PSY2ADPT
EISA	CARD	300	PSY2BRD

1.4.749 GENERAL PROTECTION FAULTS W/INTEL ETHEREXPRESS PRO/10

Record number: H132259

Device: D/T6484
 Model: M
 Tip key:
 Date created: O96/01/18
 Date last altered: A96/01/18

SYMPTOM:

Intermittent General Protection Faults may be reported by Microsoft Windows 3.x running with an Intel EtherExpress Pro/10 adapter on a Banyan Vines client with FoxPro software.

PROBLEM ISOLATION AIDS:

The intermittent General Protection Faults only occur with the Intel EtherExpress Pro/10 adapter installed.

Any ISA Bus system may exhibit the failure.

FIX:

Install the latest NDIS driver for Banyan Vines released by Intel for the Intel EtherExpress Pro/10 adapter.

The driver may be obtained from the Intel BBS at (503) 264-7999 or via the Internet through the Intel Home Page at:
[http: //www.intel.com](http://www.intel.com)

Use the search facility to locate "NDIS Drivers."

If the error persists, continue normal problem determination procedures.

Windows is a trademark of the Microsoft Corporation.
 EtherExpress Pro/10 is a trademark of the Intel Corporation.
 Banyan Vines is a trademark of Banyan Systems Incorporated.
 FoxPro is a trademark of Fox Software, Inc.

SAS KEYWORDS:

PSY2	PSVP	PSY2COMM	PSVPCOMM
PSY2ADPT	PSVPADPT	PSVPOEM	PSY2OEM
D/T6571	D/T6573	D/T6581	D/T6583
D/T6575	D/T6585	D/T6576	D/T6586
D/T6875	D/T6885	D/T6876	D/T6886
D/T68XX	D/T65XX	IBMPC	PC330
PC350	PC730	PC750	D/T6472
D/T6482	D/T6484	D/T6492	D/T6494
IBMPC			

1.4.750 GPF INSTALLING DOS LAN REQUESTER ON 6899 OR 6589

Record number: H136898

Device: D/T6899
 Model: M
 Tip key:
 Date created: 097/03/18
 Date last altered: A97/03/18

SYMPTOM:

IBM IntelliStation Z Pro 6899 and PC 365 Series 6589 systems may exhibit a General Protection Fault (GPF) during the installation of DOS LAN Requester v5.0. Following is the GPF error message:

```
Error 35: General Protection Fault in A: \Install6.exe at
0160: 4D46
code 9F80 ss=0180 DS=0180 ES=0180 load base=0100
AX=0605 BX=0015 CX=0000 DX=9F80 SP=E75E BP=E7CC SI=2AC6 DI=E938
```

PROBLEM ISOLATION AIDS:

The failure occurs after the files from LAN Requester diskette #1 are copied to the hardfile. A message stating "Please wait - Install is examining your system files. Examination may take a few minutes" precedes the GPF.

FIX:

Prior to installing DOS LAN Requester v5.0, read the README file on the installation diskette. This file provides information on different options to use in addition to the INSTALL command.

To allow the installation of DOS LAN Requester v5.0, use the following install command: INSTALL /I

If the failure persists, continue normal problem determination procedures.

SAS KEYWORDS:

PSVP	PSY2	IBMPC	PSY2ERR
PSVPERR	PWS	PSVPCOMM	PSY2COMM
UNCLASSIFIED	PSVPPROG	PSY2PROG	56950

1.4.751 GPIB ADAPTER FAILS DIAGNOSTICS IN PC 300

Record number: H132254

Device: D/T6571
 Model: M
 Tip key:
 Date created: 096/01/18
 Date last altered: A96/01/18

SYMPTOM:

The IBM General Purpose Interface Bus adapter (GPIB) fails diagnostics in the PC 300 6571, 6573, 6581 and 6583 Intel 486 based systems.

PROBLEM ISOLATION AIDS:

The following error message is received when the diagnostic program for the GPIB adapter is attempted:

"Cannot interrupt on ADSC. Spurious interrupt or expected interrupt not received. Interrupt error on IRQ."

FIX:

The IBM GPIB adapter, IBM FRU P/N6181770, Manufacturing P/N73F4136, P/N96G4924 and P/N12G7662 were not tested and are not supported in the PC 300 Series systems.

Customers that have purchased the GPIB adapter for use in the PC 300 i486 based systems should be directed back to the point of purchase.

SAS KEYWORDS:

PSY2	D/T65XX	65XX	PSVP
IBMPC	PSVPADPT	PSY2ADPT	PSY2PART
PSVPPART	D/T6573	D/T6581	D/T6583
PC 350	PC330	PC300	PC 330
PC350	PSY2ERR	PSVPERR	

1.4.752 GPPE, PAGE FAULT ABEND RUNNING NETWARE 3X/4X (SPXS PATCH)

Record number: H163301

Device: D/T8640
 Model: M
 Tip key:
 Date created: 098/04/08
 Date last altered: A98/04/08

SYMPTOM:

- NetWare SMP 4x requires 3 to 5 minutes to return from calling TLI Function t_sndrel or t_revel
- The System ABENDS running NetWare 3x / 4x. Some typical ABEND messages include (but not limited to) the following:

"Abend: General Protection Processor Exception (Error code 00000000) OS version: Novell NetWare 4.10 November 8, 1994 Running Process: Interrupt service routine (nested count 2)"

"Abend: General Protection Processor Exception (Error code 00000000) OS version: Novell NetWare 4.10 November 8, 1994 Running Process: Server 10 Process"

"Abend: General Protection Processor Exception (Error code 00000000) OS version: Novell NetWare 4.10 November 8, 1994 Running Process: nsrd 3 Process" These were running Legato Network backup software.

"Abend: Page Fault Processor Exception (Error code 00000000) Running Process: TO Server #00001 Process"

PROBLEM ISOLATION AIDS:

- The System is any PC Server / Netfinity server running Novell NetWare 3x / 4x , or 4x SMP.
- The System passes Diagnostics

FIX:

- 1 - Contact Novell Technical Support (800-858-4000) and ask for FSPXS08A.EXE (it is a self-extracting executable file that creates a diskette). This Novell Field Patch contains SPXS.NLM version T which is required if the System ABENDS.
- 2 - Follow the instructions listed in the FSPXS08A.TXT file to apply this New Novell SPXS FIELD PATCH.

Note: At the time this document was published, the FIELD PATCH FSPXS08A.EXE was not available in the PUBLIC area of the Novell Website. Check the Website for availability of this file prior calling Novell.

SAS KEYWORDS:

PSY2	PSY2CODE	UNCLASSIFIED	NOVELL
NETWARE	3X	4X	D/T8638
D/T8639	D/T8640	D/T8641	D/T8642
D/T8650	D/T8651	D/T8644	ABEND
GPPE	SPXS	FSPXS08A.EXE	

G42 MONITOR DOES NOT DISPLAY 1152 X 864 RESOLUTION IN NT

1.4.753 G42 MONITOR DOES NOT DISPLAY 1152 X 864 RESOLUTION IN NT

Record number: H162359

Device: D/T8644
Model: M
Tip key:
Date created: 098/01/07
Date last altered: A98/01/09

SYMPTOM:

When "Monitor Mode" (resolution) 1152 X 864 is selected from the "Resolution Exchange" Tab in Windows NT Server 4.0, the screen becomes blank for 15 seconds and then returns back to the previously selected monitor mode.

PROBLEM ISOLATION AIDS:

- The system is a Netfinity 3500 (8644-1xx/2xx/3xx)
- A G42L or G42P monitor is attached to the video port
- The video driver from the Number Nine Virge GX2 NT 4.0 device driver diskette has been installed

FIX:

Do not replace any hardware. The maximum resolution of a G42L or G42P monitor is 1024 X 768.

Windows NT is a trademark of Microsoft Corporation.

SAS KEYWORDS:

PSY2 PSY2DISP UNCLASSIFIED 83245

1.4.754 G50 AND G41 MONITORS INTERMITTENTLY BLINK

Record number: H132637

Device: D/T6542
 Model: M
 Tip key:
 Date created: 096/02/13
 Date last altered: A96/02/20

SYMPTOM:

G41 and G50 monitors intermittently blank for .5 to 1 second.

PROBLEM ISOLATION AIDS:

This tip is only applicable to 6542-30x and 6543-10x monitors, when attached to PS/2, ValuePoint and PC system units.

Note:

This tip DOES NOT APPLY when these monitors are attached to 3483/3488/3489 Display system units (MFI pancakes that allow the monitor to act as a host attached terminal). See additional note below.

FIX:**Problem background:**

In order to Sync (synchronize), the monitor counts Vertical Sync pulses generated by the video controller in the system unit as it searches for a mode it recognizes. When it recognizes a mode, the monitor assumes the image geometry (height, width, etc.) programmed for that mode.

Testing has revealed the mode counter becoming corrupted if a clock pulse leading edge coincides with a Vertical Sync pulse leading edge. When this happens, the monitor erroneously reacts as if it has detected a mode change and blanks the display until it re-syncs.

The modes that are most effected are:

640 by 480 at 85 Hz and
 800 by 600 at 85 Hz.

However, as each video chipset produces slightly different timings, these modes may not be affected, but other modes may.

Note:

During mode changing, it is normal for the monitor to blink.

FIELD FIX:

Changing the resolution or refresh rate will change the count and prevent the problem from occurring in that mode. Refer to the documentation shipped with the monitor for the available modes.

Permanent fix:

A new microprocessor is being produced which corrects this problem. This microprocessor cannot be installed in the field. This fix should be implemented on new production in 2nd quarter, 1996.

Additional note:

The G41/G50 monitors are not supported for applications with 3483/3488/3489 Display system units at this time. When the G41/G50 microprocessor is changed, then the G41/G50 monitor will be supported for 3483/3488/3489 Display system applications.

SAS KEYWORDS:

PSY2 PSY2DISP BLANK D/T6542
 D/T6543 PSY2TBD

1.4.755 G70 MONITOR SCREEN BLANKS INTERMITTENTLY

Record number: H132548

Device: D/T6544
 Model: M
 Tip key:
 Date created: 096/02/07
 Date last altered: A96/05/22

SYMPTOM:

Intermittently, the G70 Monitor screen may blank for about half a second, then return to normal operation while running at 1024x768 with a 75 Hz refresh rate.

PROBLEM ISOLATION AIDS:

The monitor is a G70 running in 1024x768 @ 75Hz refresh mode. Serial numbers prior to 23-28000 are affected. Only the G70 monitor is affected.
 The monitor may be attached to any MCI/PCI architecture system which complies with VESA 75 Hz timings specification.

FIX:**PROBLEM BACKGROUND:**

The blanking is the result of a Mode Blank signal from the monitor's internal processor. The blank screen occurs when the monitor's count of sync pulses changes, and the monitor erroneously assumes a mode change has occurred.

Eleven predefined user modes are pre-programmed into the monitor along with several factory presets. The Factory presets are VESA specified. One of the user defined modes is XGA (1024x768)

The monitor counts sync pulses searching for a mode it recognizes, first from the user defined modes, then from the factory presets. When it recognizes a mode, the monitor assumes the image geometry (height, width, etc.) programmed for that mode.

Because the difference between XGA mode and VESA 75Hz mode is very slight, the monitor sees the initial mode and compares it to the user defined modes, and may select the XGA mode without checking the factory presets. Once this occurs, the monitor locks into that mode. Since this mode is not an exact fit (and sync sampling continues), the count will occasionally be sampled differently. The monitor then blanks the screen and selects a new mode. It samples the timings again and matches them to the XGA user defined mode, starting the whole process over again.

Preventative Actions:

XGA timings have been removed from current manufacturing to eliminate the problem. Engineering will continue to examine modes selected for the user defined space to ensure they are not close enough to the factory presets to cause confusion.

Permanent Fix:

A permanent fix is available from the PC Company Bulletin Board System by calling 919-517-0001, and downloading the following file to reprogram the user defined modes of the G70 monitor:

File Name - G70FIX2.EXE (disk image)
 File Size - 131,553 bytes
 File Date - 02/16/96
 Directory - IBM PC 300/700 Files

The instructions that are given at the start of the program MUST BE FOLLOWED EXACTLY. The geometry must be changed for each screen and then wait for more than 5 seconds before going to the next screen.

As an interim solution, you can change the refresh rate in the BIOS setup to 72Hz for 1024 by 768 resolution. To do this, any DDC capability of the system will have to be disabled. This may result in a slight increase in flicker, which is why the fix on the BBS is recommended.

SAS KEYWORDS:

PSY2	PSY2DISP	6544	BLINKING
BLINK	PSVP	VALUE	POINT
VALUEPOINT	DISPLAY	PSVP	PSVPDISP
PSVPPROG	PSY2PROG	IBMPC	D/T6571
D/T6573	D/T6581	D/T6583	D/T6575
D/T6585	D/T6576	D/T6586	D/T6875

PSY2 RETAIN TIPS

G70 MONITOR SCREEN BLANKS INTERMITTENTLY

D/T6885
D/T6482

D/T6876
D/T6484

D/T6886
D/T6492

D/T6472
D/T6494

1.4.756 HANG/FORMAT FAILURE INSTALLING OS/2 ON 2GB DRIVE

Record number: H134030

Device: D/T6589
 Model: M
 Tip key:
 Date created: 096/09/18
 Date last altered: A96/09/18

SYMPTOM:

Installing OS/2 2.11 or OS/2 WARP 3.0 on a 2Gb or larger hardfile may cause the system to hang or display a red screen error message indicating that the format has failed.

PROBLEM ISOLATION AIDS:

If the 2Gb drive is partitioned to use 100% of the drive or a partition size greater than 2047Mb, OS/2 will fail to install. Drives that are formatted HPFS may exhibit a system hang during the format procedure. Drives formatting FAT may display a red screen error message indicating that formatting has failed.

This failure can occur on any brand of system during the installation of OS/2 on an IDE or SCSI hardfile with a partition size greater than 2047Mb.

FIX:

Accept the option to format the partition (FDISK) during the installation of OS/2. Ensure that the partition size selected is less than 2047Mb. The DOS FDISK command may also be used to format the partition to less than 2047Mb prior to the installation of OS/2.

SAS KEYWORDS:

PSY2	PSVP	IBMPC	PSVPPROG
PSY2PROG	PSVPERR	PSY2ERR	LOCKUP
52155	PC365	HUNG	PC 300
PC 330	PC 350	PC 700	PC 730
PC 750	D/T6571	D/T6573	D/T6581
D/T6583	D/T6575	D/T6585	D/T6576
D/T6586	D/T6598	D/T6577	D/T6587
D/T6560	D/T6260	D/T6875	D/T6876
D/T6877	D/T6885	D/T6886	D/T6887

1.4.757 HANGS & TRAP 000E ERRORS WITH 256KB WRITE-THRU CACHE

Record number: H123086

Device: D/T6384
 Model: M
 Tip key:
 Date created: 094/03/11
 Date last altered: A94/05/18

SYMPTOM:

PS/VALUEPOINT 6384/D, 6382/S AND 6387/T 433DX (486 33MHZ) SYSTEMS MAY EXPERIENCE SYSTEM HANG CONDITIONS OR TRAP 000E ERRORS WITH A 256KB WRITE-THRU CACHE OPTION INSTALLED (F/C 5296, OPTION P/N92G7218, FRU P/N92F0398).

PROBLEM ISOLATION AIDS:

SYSTEMS WITH THE 256KB WRITE-THRU CACHE OPTION INSTALLED MAY HANG USING ANY OPERATING SYSTEM. TRAP 000E ERRORS MAY BE EXPERIENCED IN SYSTEMS USING OS/2 2.X.

PS/VALUEPOINT ADVANCED DIAGNOSTICS RUN WITHOUT ERRORS.

REMOVE THE 256KB WRITE-THRU CACHE OPTION FROM THE SYSTEM AND ATTEMPT TO RECREATE THE FAILURE. IF THE ERROR CAN BE RECREATED WITH THE CACHE MODULE REMOVED, THIS TIP DOES NOT APPLY. UTILIZE NORMAL PROBLEM DETERMINATION PROCEDURES TO ISOLATE THE FAILING FRU.

IF THE FAILURE CANNOT BE RECREATED WITH THE 256KB WRITE-THRU CACHE OPTION REMOVED, THIS TIP DOES APPLY. PROCEED TO THE "FIX" SECTION OF THIS TIP.

SYSTEMS WITH THE 128KB WRITE-THRU CACHE OPTION ARE NOT AFFECTED. SYSTEMS WITH EITHER A 128KB OR 256KB WRITE-BACK CACHE OPTION ARE ALSO NOT AFFECTED.

REPLACEMENT OF EITHER THE SYSTEM BOARD AND/OR THE 256KB WRITE-THRU CACHE MODULE WILL NOT RESOLVE THIS FAILURE.

FIX:

IF THE FAILURE CANNOT BE RECREATED WITH THE 256KB CACHE MODULE REMOVED, REPLACE THE 256KB WRITE-THRU CACHE MODULE WITH THE 256KB WRITE-BACK CACHE, FRU P/N92F0400. THE 256KB WRITE-THRU CACHE MODULE FRU NUMBER (P/N92F0398) IS BEING SUBSTITUTED TO THE 256KB WRITE-BACK CACHE FRU NUMBER (P/N92F0400) IN THE MECHANICSBURG PARTS SYSTEM. THERE IS NO PERFORMANCE DEGRADATION AS A RESULT OF THIS CHANGE.

NOTE - 433DX SYSTEMS WITH TYPE 1 SYSTEM BOARDS MUST HAVE FLASH BIOS LEVEL 54A OR HIGHER INSTALLED BEFORE ADDING THE 256KB WRITE-BACK CACHE MODULE.

SAS KEYWORDS:

PSVP	PSY2	PSVPBRD	PSY2BRD
PSVPPART	PSY2PART	TRAP E	LOCKUP
D/T6382	D/T6387	6384	6382
6387			

1.4.758 HANGS & TRAP 000E ERRORS WITH 256KB L2 CACHE

Record number: H136817

Device: D/T6577
 Model: M
 Tip key:
 Date created: 097/02/28
 Date last altered: A97/03/05

SYMPTOM:

IBM PC 300 Series 6577 and 6587 systems may exhibit intermittent system hangs, Trap 000E errors in OS/2 WARP, and other memory related errors posted by various operating system platforms on systems containing a Level 2 cache module made by UMC for IBM.

PROBLEM ISOLATION AIDS:

UMC cache modules can be identified by the UMC brand logo printed on the modules chips. The barcode label attached to the affected cache modules contains a header code of J1111, J11RS or J11W3.

The FRU part number is P/N07H1150. No other brand of level 2 cache stocked under FRU P/N07H1150 is affected.

Advanced Diagnostics run without errors.
 Remove the 256Kb L2 cache module from the system and attempt to recreate the failure. If the error can be recreated with the cache module removed, this tip does not apply. Utilize normal problem determination procedures to isolate the failing FRU or application.

If the failure cannot be recreated with the 256Kb cache module removed, this tip does apply. Proceed to the "FIX" section of this tip.

FIX:

The cause of the failure is a buildup of contaminants between the cache module tabs and the contacts on the system board cache socket.

Remove the cache from the socket and reseal the module several times to remove the contaminants and provide a solid connection between the tabs and the contacts. Retest the system.

If the system continues to exhibit the failure after reseating the cache module, replace the cache module FRU P/N07H1150.

All affected UMC brand cache modules stocked under FRU P/N07H1150 have been purged from FRU inventory, reworked and restocked with a new barcode number. The FRU part number was not changed.

UMC is a trademark of United Microelectronics Corp.

SAS KEYWORDS:

PSVP	PSY2	PSVPBRD	PSY2BRD
PSVPPART	PSY2PART	TRAP E	LOCKUP
D/T6587	6577	6587	PSVPMEM
PSY2MEM	SERVICER ONLY	PSY2ERR	PSVPERR
PSVPADPT	PSY2ADPT		

PSY2 RETAIN TIPS
HANGS ON SOFT IPL

1.4.759 HANGS ON SOFT IPL

Record number: H031203

Device: D/T8570
Model: M
Tip key:
Date created: 089/10/23
Date last altered: A91/03/06

SYMPTOM:

8570 MODEL 121 HANGS DURING A SOFT BOOT WHEN USING THE CONTROL,
ALT, AND DELETE KEYS.

PROBLEM ISOLATION AIDS: CHECK TO SEE IF YOUR STORE SYSTEM
CONTROLLER IS CONNECTED TO A 8570 MODEL 121 THAT CONTAINS
SYSTEM BOARD P/N33F5835.

FIX: HAVE YOUR CUSTOMER ORDER APAR IR86844 FROM THEIR POINT OF
SALE. YOUR CUSTOMER WILL INSTALL THIS PATCH.

SAS KEYWORDS:

PSY2 PSY2PROG 8570SYSPROG

HARDFILE AND DISKETTE DRIVE RELATED ERRORS

1.4.760 HARDFILE AND DISKETTE DRIVE RELATED ERRORS

Record number: H021963

Device: D/T8550
Model: M
Tip key:
Date created: 087/06/22
Date last altered: A94/08/09

SYMPTOM:

HARDFILE AND DISKETTE DRIVE RELATED ERRORS; ERROR CODES 6XX, AND 17XX, MAY BE CAUSED BY LOOSE SIGNAL AND DATA CABLES. MACHINE TYPES AFFECTED ARE 8530, 8550, 8560 AND 8580

PROBLEM ISOLATION AIDS:

NONE

FIX:

RESEAT SIGNAL AND DATA CABLES.

SAS KEYWORDS:

PSY2	PSY2MISC	PSY2FDSK	PSY2ERR
PSY2MISC	D/T8580	D/T8570	D/T8560
D/T8530	D/T8525	D/T8573	D/T8555
D/T8565			

1.4.761 HARDFILE ERROR CODE "10463" ON a MODEL 111 (115MB HARDFILE)

Record number: H017810

Device: D/T8580
Model: M
Tip key:
Date created: 087/12/17
Date last altered: A94/03/14

SYMPTOM:

A FALSE ERROR CODE "10463" (READ/WRITE SECTOR ERROR) MAY OCCUR WHILE RUNNING HARDFILE DIAGNOSTICS ON A 115MB DRIVE. THIS TELLS THE USER TO "REPLACE FIXED DISK C."
IF A "10463" (READ/WRITE SECTOR ERROR) ONLY OCCURS DURING THE ESDI READ WRITE TEST PORTION OF THE DIAGNOSTICS AND THE CUSTOMER IS NOT EXPERIENCING HARDFILE RELATED PROBLEMS, THEN THIS ERROR SHOULD BE IGNORED AND THE FIXED DISK NOT REPLACED. THIS INFORMATION ONLY PERTAINS TO THE 115MB FIXED DISK.

PROBLEM ISOLATION AIDS: NONE**FIX:**

THE MICROCODE ON THE 115 MB HARDFILE WAS CORRECTED TO PREVENT FALSE "10463" ERRORS. DRIVES WITH A DATE CODE OF 12/21/87 OR LATER WILL HAVE THE CORRECTED LEVEL OF MICROCODE.

SAS KEYWORDS:

PSY2 PSY2ERR PSY2DIAG PSY2FDSK

HARDFILE LED REMAINS ON AFTER PERFORMING SHUTDOWN

1.4.762 HARDFILE LED REMAINS ON AFTER PERFORMING SHUTDOWN

Record number: H134034

Device: D/T6589
 Model: M
 Tip key:
 Date created: 096/09/18
 Date last altered: A96/09/18

SYMPTOM:

The hardfile LED may remain on for up to 30 seconds after performing an operating system Shutdown command on IBM PC 365 Series 6589 systems. The hardfile LED may remain on after the operating system has indicated that the system may be rebooted or powered-off.

PROBLEM ISOLATION AIDS:

This symptom was reported using the Windows95 operating system, while performing an orderly Shutdown. This symptom may occur with other operating systems.

The hardfile activity LED remains lit due to a hardfile reset command being sent to the hardfile by the systems BIOS routines. The hardfile light will remain on for approximately 30 seconds.

This failure only occurs if the system has Power Management features disabled in the Setup Utility and contain an IDE CDROM drive connected to the Primary EIDE port on the system board and configured as SLAVE.

The hardfile light does NOT remain on if the CDROM drive is connected to the Secondary EIDE port as MASTER. All PC 365 systems are manufactured using this configuration.

FIX:

Do not replace hardware. The hardfile is inactive during this 30 second delay. This is a design characteristic, not a functional failure.

The user may power down or reboot the system as directed by the operating system without corrupting data or damaging the hardfile.

Windows95 is a trademark of the Microsoft Corporation.

SAS KEYWORDS:

PSY2	PSVP	IBMPC	PSVPFDSK
PSY2FDSK	PSVPCDROM	PSY2CDROM	CD ROM
51408	PC365		

PSY2 RETAIN TIPS
HARDFILE NOISE OR VIBRATION IN PC 360

1.4.763 *HARDFILE NOISE OR VIBRATION IN PC 360*

Record number: H012493

Device: D/T6598
Model: M
Tip key:
Date created: 096/04/02
Date last altered: A96/04/02

SYMPTOM:

The IBM PC 360-S200 6598 systems may exhibit hardfile noise or cover vibration in excess of prior IBM PC Products.

PROBLEM ISOLATION AIDS:

None

FIX:

Do not replace parts. This is not a hardware problem.

The PC 360 6598 systems use a more advanced high performance SCSI hard drive which spins at speeds in excess of 7200 RPM depending on the drive model. This increase in drive RPM may lead the user to conclude that there is a problem due to the increased noise or vibration when compared to other types of PC products. This is a design characteristic of the PC 360 which has met industry specifications for vibration and noise.

Repositioning the system has proven to lessen or eliminate what the customer may perceive as excessive noise or vibration.

SAS KEYWORDS:

IBMPC	PSVP	PSY2	D/T65XX
6598	PC360	PENTIUMPRO	PSVPFDSK
PSY2FDSK			

1.4.764 HAYES SMARTMODEM 2400 WON'T CONFIGURE IN 6876/6886

Record number: H131157

Device: D/T6886
 Model: M
 Tip key:
 Date created: 096/07/30
 Date last altered: A96/07/30

SYMPTOM:

Hayes Smartmodem 2400 Internal Micro Channel modems may fail to configure in a PC 700 Series 6876 or 6886 Micro Channel system.

PROBLEM ISOLATION AIDS:

The Hayes Smartmodem 2400 is recognized in the Setup Utility, but cannot be setup in the System Configuration using the Reference Diskette and the Option Diskette that ships with the modem.

FIX:

The "NumByte" parameter in the ".ADF" (Adapter Description File) file on the Hayes Smartmodem Option Diskette needs to be changed. Edit the ADF file and set the "NumBytes = 1" parameter to "NumBytes = 2." The modem should now be configurable with the Hayes Smartmodem 2400 Option Diskette and the PC 700 Series Reference Diskette.

Hayes Smartmodem 2400 is a trademark of Hayes Microcomputer Products, Inc.

SAS KEYWORDS:

PSVP	PSY2	PSVPADPT	IBMPC
PSY2ADPT	PSVPCOMM	PSY2COMM	PSVPOEM
PSY2OEM	D/T6886	6886	D/T6885
D/T6875	6876	6885	6875
PC750	PC730	D/T68XX	

PSY2 RETAIN TIPS
HIGH SPEED PARALLEL PORT PROBLEMS

1.4.765 HIGH SPEED PARALLEL PORT PROBLEMS

Record number: H027141

Device: D/T9595
Model: M
Tip key:
Date created: 093/10/04
Date last altered: A94/08/15

SYMPTOM:

There are multiple symptoms that may be experienced with this situation. The following are three known symptoms:

1. System hangs during High Speed Parallel Port* operations while multi-tasking or while busy with display screen updates.
2. DMA arbitration time-outs (error code 01291300).
3. Internal Processing Error at location ##0160: FFF6015C - 000D: A15C 60002, 9084, (when running OS/2).

The affected systems are:

Server 95/95A Models, 0PT, 0NT, 0NG, 3NG, 3PT, 3NT

* This system board also has a standard parallel port.

PROBLEM ISOLATION AIDS:

Use the "view configuration" function of the system main menu to note the DMA arbitration level of the high speed parallel port.

FIX:

If you are experiencing any of the above problems, the following changes are recommended:

Assign the arbitration level for the High Speed Parallel Port to "Shared Level 7" (default setting).

If "Shared Level 6" has to be used for the High Speed Parallel Port, then the other Bus Masters' DMA Arbitration Levels should be assigned to either 8, A, C or E.

SAS KEYWORDS:

PSY2	PSY2ERR	D/T9595	PENTIUM
D/T9595A	9595	9595A	

1.4.766 HORIZONTAL LINES APPEAR ON RIGHT SIDE OF MONITOR

Record number: H124090

Device: D/T967X
 Model: M
 Tip key:
 Date created: O95/01/17
 Date last altered: A95/01/17

SYMPTOM:

While viewing any monitor connected to a PS/2 9576 or 9577, horizontal lines may be observed on the right side of the screen. This may be observed in varying degrees depending on the display mode and software being used, such as on the OS/2 Desktop. A Gray pannel work best for showing the problem.

PROBLEM ISOLATION AIDS:

This tip applies only if the 9576 or 9577 is a Model xUx, xNx, or xTx.

This tip applies only if the unit is a 9576i, 9576s, 9577i or 9577s.

Video diagnostics will not detect this problem. The problem can only be visually observed during normal operation.

The following are various display resolutions and the corresponding resultant symptom:

640 x 480 x 256	No Failure
800 x 600 x 256	Horizontal lines 1 pixel in height on the right-most 1/8th inch of the screen
1024 x 768 x 256	Horizontal lines 1 pixel in height on the right-most 20% of the screen
1280 x 1024 x 256	Horizontal lines 1 pixel in height on the right-most 80% of the screen
640 x 480 x 64K	Horizontal lines 1 pixel in height on the right-most 80% of the screen (more subtle color delta)
800 x 600 x 64K	Same as 640 x 480 x 64K
1024 x 768 x 64K	No failure
640 x 480 x 16M	Horizontal lines 1 pixel in height on the right-most 1" of the screen.

FIX:

The system board, FRU P/N95G9692, should be replaced.

The problem has been fixed on replacement system boards.

Only a small number of systems will exhibit this problem. If the symptom is not displayed, the system board is not affected, and no parts should be replaced.

If replacing the system board as identified above does not correct the problem, the servicer should use normal problem determination procedures.

SAS KEYWORDS:

PSY2	D/T9576	9576I	9576S
9577I	9577S	D/T9577I	D/T9577S
D/T9576I	D/T9577I	D/T8511	D/T8513
D/T8515	D/T8516	D/T8517	D/T8518
D/T9515	D/T9517	D/T9518	D/T9524
D/T9525	D/T9507	D/T9521	D/T9527
D/T6312	D/T6314	D/T6317	D/T6319
D/T6324	D/T6325	D/T6327	PSY2DISP
D/T9527	HMC	D/T9673	D/T9674
D/T9672			

1.4.767 HORIZONTAL LINES APPEAR ON RIGHT SIDE OF MONITOR

Record number: H125310

Device: D/T9577
 Model: M
 Tip key:
 Date created: 094/09/23
 Date last altered: A94/12/09

SYMPTOM:

While viewing any monitor connected to a PS/2 9576 or 9577, horizontal lines may be observed on the right side of the screen. This may be observed in varying degrees depending on the display mode and software being used, such as on the OS/2 Desktop.

PROBLEM ISOLATION AIDS:

This tip applies only if the 9576 or 9577 is a Model xUx, xNx, or xTx.

This tip applies only if the unit is a 9576i, 9576s, 9577i or 9577s.

Video diagnostics will not detect this problem. The problem can only be visually observed during normal operation.

The following are various display resolutions and the corresponding resultant symptom:

640 x 480 x 256	No Failure
800 x 600 x 256	Horizontal lines 1 pixel in height on the right-most 1/8th inch of the screen
1024 x 768 x 256	Horizontal lines 1 pixel in height on the right-most 20% of the screen
1280 x 1024 x 256	Horizontal lines 1 pixel in height on the right-most 80% of the screen
640 x 480 x 64K	Horizontal lines 1 pixel in height on the right-most 80% of the screen (more subtle color delta)
800 x 600 x 64K	Same as 640 x 480 x 64K
1024 x 768 x 64K	No failure
640 x 480 x 16M	Horizontal lines 1 pixel in height on the right-most 1" of the screen.

FIX:

The system board, FRU P/N95G9692, should be replaced.

The problem has been fixed on replacement system boards.

Only a small number of systems will exhibit this problem. If the symptom is not displayed, the system board is not affected, and no parts should be replaced.

If replacing the system board as identified above does not correct the problem, the servicer should use normal problem determination procedures.

SAS KEYWORDS:

PSY2	D/T9576	9576I	9576S
9577I	9577S	D/T9577I	D/T9577S
D/T9576I	D/T9577I	D/T8511	D/T8513
D/T8515	D/T8516	D/T8517	D/T8518
D/T9515	D/T9517	D/T9518	D/T9524
D/T9525	D/T9507	D/T9521	D/T9527
D/T6312	D/T6314	D/T6317	D/T6319
D/T6324	D/T6325	D/T6327	PSY2DISP

1.4.768 HOT SWAP FIXED DISKS FAIL TO POWER UP

Record number: H13644

Device: D/T8641
 Model: M
 Tip key:
 Date created: 095/08/23
 Date last altered: A95/11/10

SYMPTOM:

During system POST (Power-On System Test), one or more fixed disk drives do not power up. The green LED's on the drive trays (locking handle) are NOT On. This problem may be intermittent. Powering off, then back on, usually brings all the fixed disks back online. Once all drives are ready, system operation is normal.

PROBLEM ISOLATION AIDS: None**FIX:**

The fixed-disk drive backplane has a micro processor which controls the power-on functions of the hot swap fixed disks. This micro processor controls power to all of the drives, therefore, a solid or intermittent failure in the backplane can result in removal of power from all drives in that bay, forcing them offline.

If these symptoms are being experienced, the backplane should be considered suspect.

The Server 500 and 520 (8641, all models), Server 320 RAID Array systems and Server 720 systems use similar, but not identical backplanes.

Server 320 (8640 MXO, MXT, MYO, MYT & MYR),	FRU P/N06H7669
Server 500 (8641 OYV, OYS)	FRU P/N71G6291
Server 520 (all models)	FRU P/N06H8388
Server 720 (8642)	FRU P/N06H8388

SAS KEYWORDS:

PSY2	RAID	SERVER	320
500	D/T8640	8641	PSY2FDSK
DASD	8640	71G6291	720
D/T8642	06H8388	71G8388	P/N71G8388
520	D/T8641		

1.4.769 HP EXPLORER S/W FAILS TO RECOGNIZE HP LASERJET 4

Record number: H124915

Device: D/T6384
 Model: M
 Tip key:
 Date created: 094/08/17
 Date last altered: A94/08/23

SYMPTOM:

"HP Explorer" remote printer setup software fails to recognize Hewlett Packard LaserJet 4 printer when attached to a 6381/Si.

PROBLEM ISOLATION AIDS:

Printer will work correctly when instructions are entered directly from the printer control panel.

All ValuePoint and printer diagnostics run without errors.

Only the following HP models of the LaserJet are affected.

LaserJet 4	LaserJet 4MP
LaserJet 4P	LaserJet 4M Plus
LaserJet 4 Plus	LaserJet 4ML

FIX:

DO NOT replace any ValuePoint hardware. This Printer/Software configuration is not supported on the 6381/Si ValuePoint.

This problem has been corrected in Subsequent HP LaserJet models (eg. LaserJet 4L, LaserJet 4Si).

LaserJet is a trademark of the Hewlett-Packard Company

SAS KEYWORDS:

PS/VP	PSVP	PSY2	6381
D/T6381	VALUE POINT	PSY2PRT	PSVPPRT
PSVPMCD	PSY2MCD		

HP 10/100VG ETHERNET ADAPTER DOES NOT FUNCTION UNDER WARP 4

1.4.770 HP 10/100VG ETHERNET ADAPTER DOES NOT FUNCTION UNDER WARP 4

Record number: H16913

Device: D/T6562
Model: M
Tip key:
Date created: 097/08/13
Date last altered: A97/08/26

SYMPTOM:

After installing device drivers for the Hewlett Packard 10/100VG Ethernet adapter under OS/2 Warp 4.0, the system returns the following, or similar errors:

"LAN Software Error"
"Check Cable Connection"
"Exception in Device Drivers" trap D errors
Requestor code fails to start

PROBLEM ISOLATION AIDS:

If the Hewlett Packard Ethernet 10/100VG is installed in either the IBM PC6562 or IBM PC6592, and running under OS/2 Warp 4.0, this tip applies.

FIX:

None. The Hewlett Packard 10/100VG Ethernet adapter is not supported under OS/2 Warp 4.0 in the above systems.

SAS KEYWORDS:

PSY2	PSY2ERR	PSY2ADPT	PSY2OEM
PSVP	PSVPERR	PSY2ADPT	PSY2OEM
D/T6562	D/T6592	69042F_1	UNCLASSIFIED

1.4.771 HP 100MBIT ETHERNET ADAPTER FAILS IN 6381/SI

Record number: H061445

Device: D/T6381
 Model: M
 Tip key:
 Date created: 095/11/03
 Date last altered: A95/11/16

SYMPTOM:

The Hewlett-Packard HP 100mbit Ethernet adapter card may fail to be recognized by the adapter's setup utility software when installed in any model of the IBM PS/ValuePoint 6381/Si system.

PROBLEM ISOLATION AIDS:

CAUTION: If the setup utility for the HP 100mbit adapter does not allow the selection of an IRQ or fails the Card Test, DO NOT save the configuration due to the potential of permanently damaging the adapter.

The HP 100mbit Ethernet adapter setup software allows the user to set the configuration parameters and save them. When the software interrogates the card to verify the setup, the application returns an error indicating that the adapter is not present.

FIX:

The adapter may be slot sensitive. Move the HP 100mbit Ethernet adapter to each slot on the riser card. Retest using the adapters setup utility. If the problem occurs in each slot, replace the riser card with FRU P/N88G4178.

If the failure persists, continue with normal problem determination.

HP is a trademark of the Hewlett-Packard Company

SAS KEYWORDS:

PSY2	PSVP	PS/VALUEPOINT	VALUE POINT
6381	PSVPCOMM	PSY2COMM	PSVPADPT
PSY2ADPT	PSY2NLGO	PSVPNLGO	88G4178
52G7065	PSVPPART	PSY2PART	

1.4.772 IBM ANTIVIRUS 2.5 ERRORS AFTER INSTALLATION ON PC 365

Record number: H096517

Device: D/T6589
 Model: M
 Tip key:
 Date created: 096/09/18
 Date last altered: A97/04/18

SYMPTOM:

The following failures may be exhibited by the IBM Antivirus v2.5 application following the installation of the application from the RTC CD that ships with the PC 365 Series 6589 systems:

- 1) The progress indicator moves to 25% complete and stops until the completion of the virus scan. The virus scan continues without the progress indicator.
- 2) "Drive not ready..." message is displayed in WindowsNT following the installation of IBM Antivirus on PC 365 systems containing a PD/CD ROM drive. The PD media cartridge is not inserted in the drive.

If the user chooses to abort the application, WindowsNT will shut down IBM Antivirus with an Exception Error.

PROBLEM ISOLATION AIDS:

Failure 1: This failure occurs when IBM Antivirus attempts to scan the CD installed in the CDRom drive for viruses.

While the progress indicator remains at 25% complete, the virus scan is performing normally.

Failure 2: The following error message is displayed when this problem occurs:

"The drive is not ready for use; its door may be open. Please check drive\Device\Harddisk0\Partition0 and make sure that a disk is inserted."

The IBM Antivirus application erroneously detects the PD/CD ROM drive as a hardfile. Without the PD media cartridge inserted, the failure occurs.

FIX:

IBM Antivirus v2.5 is being updated to eliminate these failures.

Since the virus check is completed in Failure #1, no redistribution of the application is planned.

The error message displayed due to the PD/CD ROM drive may be avoided by placing the PD media cartridge in the PD/CD drive. If the PD media is not available, run the IBMAVSN.EXE from the command prompt. This will cause the application to display a "drive not ready" message and give the user the option to continue the scan of other drives.

NOTE: In IBM AntiVirus 2.5.1 and 2.5.2, the "drive not ready" message comes up. Clicking IGNORE once or twice will allow scanning to continue.

WindowsNT is a trademark of the Microsoft Corporation.

SAS KEYWORDS:

PSY2	PSVP	IBMPC	PSVPPROG
PSY2PROG	PSVPERR	PSY2ERR	LOCKUP
54797	PC365	HUNG	54794

1.4.773 IBM AUTO LANSTREAMER PCI ADAPTER DIAGNOSTIC HANG

Record number: H131752

Device: D/T8640
 Model: M
 Tip key:
 Date created: O95/11/14
 Date last altered: A95/11/21

SYMPTOM:

When running diagnostics for either the PCI Auto LANStreamer PCI or Triple Auto LANStreamer PCI Adapter, the system could hang.

PROBLEM ISOLATION AIDS:

No problems are encountered running applications.

A mix of PCI LANStreamer and either MCA LANStreamer or ETHERStreamer adapters are installed.

The affected systems are:

All PCI/Micro Channel model systems, such as the Server 310, 320, 520 and 720,

FIX:

Before running the diagnostics for the PCI Autolanstreamer Adapter FRU P/N04H8098 or Triple Auto LANStreamer PCI adapter (FRU P/N25H6305), on the affected PCI/Micro Channel systems, remove ANY Micro Channel based LANStreamer or ETHERStreamer adapters that are installed:

Adapters	FRU Part Numbers		
LANStreamer MC32	74G0122	74G0098	92F8941
LANStreamer MC16	74G0800	58G8999	
ETHERStreamer MC32	74G0865	59G9081	
Auto LANStreamer MC32	60G1593	60G1595	
Dual LANStreamer MC32	73G7140		
Dual ETHERStreamer MC32	73G7141		

The affected Diagnostic diskettes are:

IBM Auto LANStreamer PCI diagnostic diskette V1.0 p/n 04H8107
 IBM Auto LANStreamer PCI diagnostic diskette V1.1 p/n 42H0661
 IBM Triple Auto LANStreamer PCI diag. disk. V1.0 p/n 25H6333

Engineering investigation has determined a modification of the LANStreamer PCI adapter diagnostics is required. This tip will be updated with the appropriate information when a diagnostic diskette image becomes available.

SAS KEYWORDS:

PSY2	SERVER	310	320
720	PSY2COMM	PSY2DIAG	HANGS
HUNG	520	8640	8639
8641	D/T8641	D/T8640	D/T8639
PSY2TBD	PS2VP	D/T68XX	PSY2ADPT
PSVPADPT	AUTO	LANSTREAMER	WILDWOOD
WILD	WOOD	P/N73G7140	PSY2COMM
PSVPCOMM	P/N74G0098	P/N73G7141	P/N92F8941
P/N74G0122	P/N58G8999	P/N74G0865	P/N60G1595
P/N74G0800	P/N59G9081	P/N60G1593	P/N60G1595

1.4.774 IBM AUTO 16/4 TOKEN RING FAILS IN PC300

Record number: H13301

Device: D/T65XX
 Model: M
 Tip key:
 Date created: 095/03/24
 Date last altered: A96/10/08

SYMPTOM:

IBM Auto 16/4 Token Ring ISA adapter (FRU p/n92G7638) and other adapters may fail when installed in a PC300-486 with any of the following symptoms.

- 1 - Software fails to recognize the card is installed.
- 2 - The system fails to connect to the network.
- 3 - The system fails to maintain connection to the network.

PROBLEM ISOLATION AIDS:

Adapter diagnostics may, or may not, detect an error. This is dependent on individual adapter and system characteristics and how long the diagnostics are run.

FIX:

Set the interrupt level of the adapter to IRQ2, IRQ9 or IRQ10. If the problem persists, continue with normal problem determination.

SAS KEYWORDS:

PSY2	PSVP	D/T6571	D/T6573
D/T6581	D/T6583	TOKENRING	PC 300
PC 330	PC 350	PSY2ADPT	PSVPADPT
92G7638	P/N92G7638	PSY2NLGO	PSVPNLGO
PSY2COMM	PSVPCOMM	IBMPC	

IBM ENHANCED MOUSE FAILURES ON THINKPADS

1.4.775 IBM ENHANCED MOUSE FAILURES ON THINKPADS

Record number: H124988

Device: D/T9552
 Model: M
 Tip key:
 Date created: 094/08/23
 Date last altered: A94/08/24

SYMPTOM:

THE ENHANCED MOUSE WILL NOT WORK CORRECTLY ON SOME IBM THINKPADS. PRESSING THE MOUSE BUTTON CAN CAUSE ERRATIC OPERATIONS. FOR EXAMPLE, THE SYSTEM WILL REACT TO A SINGLE CLICK AS IF WERE A DOUBLE CLICK OR NO CLICK AT ALL.

PROBLEM ISOLATION AIDS:

THIS TIP DOES NOT APPLY TO THE THINKPAD 360 OR 755. AFFECTED IBM MICE CAN BE IDENTIFIED BY MANUFACTURING P/N92G7457 OR P/N96F9274 ON THE BOTTOM OF THE MOUSE. THE FRU PART NUMBERS ARE THE SAME AS THE MANUFACTURING PART NUMBERS. SOME OEM MICE MAY ALSO EXHIBIT THIS SYMPTOM.

FIX:

TRACKPOINT MUST BE DISABLED FOR THE ABOVE MICE TO WORK PROPERLY. TRACKPOINT MAY BE DISABLED BY USING EASY-SETUP OR CHANGING CONFIGURATION, DEPENDING ON WHICH MODEL THINKPAD YOU HAVE. REFER TO THE PROPER USER DOCUMENTATION FOR YOUR THINKPAD (USER'S GUIDE OR QUICK REFERENCE MANUAL) FOR MORE INFORMATION ON HOW TO DISABLE TRACKPOINT.

SAS KEYWORDS:

PSY2	PSY/2	PSY2PART	MOUSE
92G7457	96F9274	2604	2619
2620	9545	2618	2610
D/T2604	D/T2610	D/T2618	D/T2619
D/T2620	D/T9545	9552	

Record number: H124544

Device: D/T8550
 Model: MLAN
 Tip key:
 Date created: 094/11/03
 Date last altered: A94/11/03

SYMPTOM: This tip provides information concerning customers when the IBM EtherStreamer MC 32 Adapter (FRU 74G0865, P/N 74G0851) configured in a half duplex, UTP environment may be expericing Low Throughput.

PROBLEM ISOLATION AIDS: Condition requires Adapter replacement. In order to apply for a replacement adapter, the customer should call the 1 - 800-IBM-SERV number for IBM Service, and after proper account valadation, should ask the Level-1 service to send the problem to the Networking Environment Support Team (Level-2) Que in Resaerch Triangle Park, NC.

Level-1 must be certain to include the customer's direct dial telephone number in the Retain problem record. Level-2 will then contact the customer directly, and arrange to ship prepaid, a replacement EtherStreamer MC 32 Adapter to the customer, with instructions on how to return the defective adapter to IBM.

FIX: The solution for this situation requires replacing the ES MC 32 Adapter.

SAS KEYWORDS:

ETHERSRSTREAMER	ETHER	LANSTREAMER	LAN
LANADAPTER	TOKENRING	PSY2	PSY2ADPT
D/T8550	D/T8557	D/T8573	D/T9525
D/T8560	D/T8565	D/T8570	D/T9576
D/T8580	D/T8590	D/T8595	D/T9585
D/T9577	D/T9556	D/T9557	D/T9595

1.4.777 IBM ETHERNET ADAPTER FAILS IN PS/VALUEPOINT

Record number: H121246

Device: D/T6384
 Model: M
 Tip key:
 Date created: 093/09/17
 Date last altered: A94/03/14

SYMPTOM:

THE IBM LAN ADAPTER FOR ETHERNET NETWORKS, FOR INDUSTRY STANDARD ARCHITECTURE (ISA) SYSTEMS, MAY FAIL TO OPERATE IN THE "I/O" MODE WHEN INSTALLED IN A PS/VALUEPOINT 6387/T, 6384/D OR 6382/S 433DX AND 466DX2 SYSTEMS.

PROBLEM ISOLATION AIDS:

THE AFFECTED ADAPTERS ARE:

IBM LAN ADAPTER FOR ETHERNET - OPTION P/N48G7169
 FRU P/N48G7170

IBM LAN ADAPTER FOR ETHERNET CX - OPTION P/N60G0615
 FRU P/N60G0621

IBM LAN ADAPTER FOR ETHERNET TP - OPTION P/N60G0605
 FRU P/N60G0611

THE ADAPTER FUNCTIONS PROPERLY WHEN SET TO OPERATE IN THE "SHARED MEMORY" MODE.

DIAGNOSTICS FOR THE ETHERNET ADAPTER MAY DISPLAY A "BUFFER MEMORY CHECK" FAILURE. THIS FAILURE MAY ALSO BE DISPLAYED WHEN THE COMMUNICATION APPLICATION IS LOADING.

DIAGNOSTICS FOR THE PS/VALUEPOINT SYSTEM DO NOT FAIL.

FIX:

THE ETHERNET ADAPTER CAN BE SET TO OPERATE IN THE "SHARED MEMORY" MODE USING THE OPTION DISKETTE AS A TEMPORARY SOLUTION.

IF THE FAILING SYSTEM MATCHES THE SYMPTOM AND PROBLEM ISOLATION AIDS ABOVE, REPLACE THE RISER CARD. THE RISER CARD FRU NUMBERS ARE:

6382/S - P/N82G3507
 6384/D - P/N82G3509
 6387/T - P/N82G3511

SAS KEYWORDS:

PSVP	VALUE POINT	PSVPADPT	PSVPERR
PSY2	PSY2ADPT	PSY2ERR	PSVPCOMM
PSY2COMM	D/T6387	D/T6382	

1.4.778 IBM G40 DISPLAY NOT SEEN AS DDC1 ON PC 340 6560

Record number: H133500

Device: D/T6560
 Model: M
 Tip key:
 Date created: 096/08/02
 Date last altered: A96/08/06

SYMPTOM:

IBM PC 340 Series 6560 systems may fail to recognize the IBM G40 Color Display as a DDC1 compliant monitor in the Setup Utility and may cause display failures during operation.

PROBLEM ISOLATION AIDS:

During the setup of the IBM G40 display in the 6560 system Setup Utility, the option for DDC1 capability may not be shown as an available setting. This setting is only available if the system detects that the monitor attached is DDC1 or DDC2B compliant. The IBM G40 display is DDC1 compliant.

This problem may also produce a failure of not displaying the IBM logo and POST test during startup. The operating system startup will be the first images displayed.

No other IBM or OEM DDC1/DDC2B compliant display has exhibited this problem.

FIX:

Use either of the following procedures to setup the IBM G40 display on a PC 340 6560 system:

Systems using DOS/Windows 3.11 or OS/2 WARP

- 1 - Press F1 during POST to access the Setup Utility.
- 2 - Select Devices and I/O ports.
- 3 - Select Video
- 4 - Disable DDC
- 5 - Select Custom Monitor type
- 6 - Fill in the refresh rates for the IBM G40 display.
 - 640x480 - 75 hz
 - 800x600 - 60 hz
 - 1024x768 - 43 interlaced
- 7 - Press ESC twice.
- 8 - Select Save and Exit

Systems using Windows95

- 1 - Boot to the Windows95 Desktop.
- 2 - Click right mouse button on the Desktop.
- 3 - Select Properties.
- 4 - Select Refresh Rates.
- 5 - Fill in the refresh rates for the IBM G40 display.
 - 640x480 - 75 hz
 - 800x600 - 60 hz
 - 1024x768 - 43 interlaced
- 6 - Click OK.

Engineering is currently investigating the cause of the PC 340 6560 system not recognizing the IBM G40 display as DDC1 compliant. This tip will be updated with additional information as it becomes available.

Users with multiples of the SAME machine type may use the CONFIG.ZIP file available from the IBM PC Company BBS to copy a systems CMOS configuration to another system. This eliminates the need to manually configure each system using the Setup Utility.

The file may be obtained from the PC Company BBS at 919-517-0001 or from the PC Company File Library via the Internet at the following URL: "<http://www.pc.ibm.com/files.html>"

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SAS KEYWORDS:

PSVP	PSY2	PSVPDISP	PSY2DISP
PSVPERR	PSY2ERR	50131	IBMPC
D/T6542	PC 300		

1.4.779 IBM G40 MONITOR IN MONO MODE WHEN SYSTEM BOOTS

Record number: H134197

Device: D/T6542
Model: M
Tip key:
Date created: 096/09/27
Date last altered: A96/10/02

SYMPTOM:

When an IBM 6542-103 (G40) monitor is connected to a PS/2 system via 8514/a, XGA, XGA-2, or Image Adapter/A video controller, the system may intermittently boot in Monochrome video, without access to higher resolutions.

PROBLEM ISOLATION AIDS: NONE**FIX:**

Install a signal cable connector (dongle) FRU p/n96g2693 on the monitor signal cable.

Customers experiencing this problem may contact the IBM PC Company HelpCenter at 1-800-772-2227 to receive a dongle at no charge.

Additional information:

Some adapters, such as those referenced above, may disable sync during POST, which causes the G40 monitor to enter Power Management. This enables DDC even if it has been disabled from the front panel controls. Having DDC enabled causes video adapters that look for ID bit information to be confused about the monitor type attached, leading to the symptom above. Installing the dongle will eliminate this conflict.

Engineering is evaluating a change in the monitor's microcode, which will prevent the G40 from entering DDC1 mode when coming out of power management.

SAS KEYWORDS:

PSY2

PSY2DISP

PSY2ADPT

1.4.780 IBM G70 DISPLAY NOT SEEN AS DDC1 ON 6576/6586

Record number: H131541

Device: D/T6576
 Model: M
 Tip key:
 Date created: 096/07/30
 Date last altered: A96/07/30

SYMPTOM:

IBM PC 300 Series 6576 & 6586 systems may fail to recognize the IBM G70 Color Display as a DDC1 or DDC2B compliant monitor in the Setup Utility.

PROBLEM ISOLATION AIDS:

During the setup of the IBM G70 display in the 6576/6586 system Setup Utility, the option for DDC1 capability may not be shown as an available setting. This setting is only available if the system detects that the monitor attached is DDC1 or DDC2B compliant. The IBM G70 display is DDC1 and DDC2B compliant.

FIX:

Use either of the following procedures to setup the IBM G70 display on a PC 300 6576/6586 system:

Systems using DOS/Windows 3.11 or OS/2 WARP

- 1 - Press F1 during POST to access the Setup Utility.
- 2 - Select Devices and I/O ports.
- 3 - Select Video
- 4 - Disable DDC
- 5 - Select Custom Monitor type
- 6 - Fill in the refresh rates for the IBM G70 display.
 - 640x480 - 85hz
 - 800x600 - 85hz
 - 1024x768 - 75hz non-interlaced
 - 1280x1024 - 60hz non-interlaced
- 7 - Press ESC twice.
- 8 - Select Save and Exit

Systems using Windows95

- 1 - Boot to the Windows95 Desktop.
- 2 - Click right mouse button on the Desktop.
- 3 - Select Properties.
- 4 - Select Refresh Rates.
- 5 - Fill in the refresh rates for the IBM G70 display.
 - 640x480 - 85hz
 - 800x600 - 85hz
 - 1024x768 - 75hz non-interlaced
 - 1280x1024 - 60hz non-interlaced
- 6 - Click OK.

Engineering is currently investigating the cause of the 6576/6586 systems not recognizing the IBM G70 display as DDC1 and DDC2B compliant. This tip will be updated with additional information as it becomes available.

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SAS KEYWORDS:

PSVP	PSY2	PSVPDISP	PSY2DISP
PSVPERR	PSY2ERR	PC 330	IBMPC
D/T6544	PC 300	PC 350	

1.4.781 IBM MPEG INTERACTIVE VIDEO PLAYER SEQUENCE ERRORS

Record number: H162741

Device: D/T6282
 Model: M
 Tip key:
 Date created: 098/02/12
 Date last altered: A98/02/12

SYMPTOM:

When playing some multimedia MPEG applications, the video sequence may not advance correctly, may loop back to the start of a video sequence, or may randomly black out the screen.

PROBLEM ISOLATION AIDS:

This tip applies, but is not limited to, the IBM PC300GL Machine Type 6282. The error condition may also be seen in other IBM Desktop systems supporting the IBM MPEG Interactive Video Player, P/N55H8615.

FIX:

Download and install the updated 16-bit Sigma Design Windows95/Windows 3.1x REALMagic device driver, version 2.34, file name PRO_234M.EXE.
 PRO_234M.EXE may be downloaded via the Internet from the IBM Personal Systems Group file library by searching the following Internet URL: www.us.pc.ibm.com/files.html

The REALmagic Maxima Pro, Release 2.34 driver may also be downloaded via the Internet from the Sigma Designs file library by searching the following Internet URL:

Www.sigmadesigns.com/download.html

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 REALmagic is a trademark of Sigma Designs, Incorporated.

SAS KEYWORDS:

PSY2	PSY2DISP	PSY2ERR	PSY2ADPT
PSVP	PSVPDISP	PSVPERR	PSVPADPT
D/T6272	D/T6282	6272	6282
55H8615	HLPCT_6271	HLPCT_5398	UNCLASSIFIED

1.4.782 IBM PCI TOKEN RING ADAPTER HANGS IN PC700

Record number: H131150

Device: D/T6885
 Model: M
 Tip key:
 Date created: 095/10/09
 Date last altered: A95/10/30

SYMPTOM:

IBM PC 700 Series systems 6875, 6885, 6876, and 6886 may exhibit an intermittent system hang condition after a warm boot with an IBM PCI Token Ring adapter installed (Skyline Adapter).

PROBLEM ISOLATION AIDS:

A PC 700 system connected to a server via the IBM PCI Token Ring adapter does not exhibit an intermittent hang if the system is powered off/on as required instead of a warm boot sequence.

System and adapter diagnostics run without failures.

FIX:

The system hang conditions occurs at a warm boot due to the adapter continuing to load data into memory while the system is loading its BIOS into memory.

Install the latest BIOS update for the PC 700 system AND the "BUSMASTR.EXE" file which enables or disables PCI Busmastering for specific PCI slots installed in the system.

Obtain the latest PC 700 Series Flash BIOS updates from the IBM PC Company BBS system by calling 1-919-517-0001. Locate the "IBM PC 300/700 Files" section (section #21) for the files titled:

N2JT38A.DSK - MCA/PCI FLASH UPDATE LEVEL 38A
 N1JT76A.EXE - ISA/PCI FLASH UPDATE LEVEL 76A
 BUSMASTR.EXE - FIX FOR PCI SKYLINE TOKEN RING ADAPTER

The Flash BIOS updates may also be downloaded via the Internet from the IBM Personal Computer File Library by searching the following Internet URL:

<http://www.pc.ibm.com/files.html>

The updates are located in the IBM PC 300 & 700 Series Files section or by using the search facility to locate the files by the names listed above.

If the failure persists continue normal problem determination procedures to isolate the failing application or FRU.

SAS KEYWORDS:

PSVP	PSY2	PSVPCOMM	PSY2COMM
PSVPADPT	PSY2ADPT	PSVPMCD	PSY2MCD
IBMPC	D/T68XX	68XX	D/T6875
6875	D/T6876	6876	D/T6886
6886	HUNG	PC 730	LOCKUP
PC750	PC 750	PC730	

1.4.783 IBM PC300-GL FAILS TO ENTER APM MODE WITH NT 4.0

Record number: H16126

Device: D/T6282
 Model: M
 Tip key:
 Date created: 097/06/16
 Date last altered: A97/06/17

SYMPTOM:

IBM PC300-GL 6272/6282 systems running WindowsNT 4.0 with Advanced Power Management (APM) enabled may fail to enter APM mode, or may take longer to enter APM mode than what is specified in APM setup.

PROBLEM ISOLATION AIDS:

This tip applies if the user has enabled APM mode via the setup utility. The system will not enter an APM state, or will take longer than the user specified times to enter the APM state.

FIX:

All hardware interrupt monitoring must be disabled in BIOS except for the keyboard and mouse.

To disable hardware interrupt monitoring:

1. Press F1 during post to enter setup.
2. Highlight Advanced Power Management and press enter.
3. Highlight Activity Monitor and press enter.
4. Change each IRQ to 'disabled' except 1 and 12.
5. Save changes and exit.

WindowsNT is a trademark of Microsoft Corporation.

SAS KEYWORDS:

PSY2	PSY2OPER	PSVP	PSVPOPER
PSY2MCD	PSVPMCD	D/T6272	D/T6282
6272	6282	WINDOWSNT	APM
PC300-GL	UNCLASSIFIED	67667F_1	

1.4.784 IBM PC6562/6592 HANGS AT WINDOWS 3.11 LOGO SCREEN

Record number: H16925

Device: D/T6562
Model: M
Tip key:
Date created: 097/08/20
Date last altered: A97/08/26

SYMPTOM:

IBM PC6562/6592 systems running Windows3.11 hang at the Windows logo screen after completing post.

PROBLEM ISOLATION AIDS:

This tip applies if the following conditions are met:

1. The system is running DOS and Windows3.11.
2. The Universal Serial Bus (USB) has been disabled via the F1 System Setup utility.
3. The system has a SCSI hardfile, an Adaptec SCSI adapter, and no IDE hardfiles.

FIX:

Add the statement "VirtualHDIRQ=false" to the 386enh section of the System.ini file as follows:

1. Reboot the system. When "Starting PC DOS" is displayed, press the F5 key to clean boot the system.
2. Type "E C: \WINDOWS\SYSTEM.INI" to open the file.
3. Scroll down to the 386enh section and add the line "VirtualHDIRQ=false" without quotation marks.
4. Save the changes and restart Windows.

Windows3.11 is a trademark of Microsoft Corporation

SAS KEYWORDS:

PSY2	PSY2OPER	PSY2PROG	PSVP
PSVPOPER	PSVPPROG	D/T6562	D/T6592
68847	UNCLASSIFIED		

1.4.785 IBM PC700 FAILS WHEN LOADING AUDIO DRIVERS

Record number: H126800

Device: D/T6875
 Model: M
 Tip key:
 Date created: O95/03/21
 Date last altered: A95/07/21

SYMPTOM:

IBM PC 700 series systems 6875 and 6885 may fail to load audio device drivers or exhibit a system hang condition while loading the audio device drivers

PROBLEM ISOLATION AIDS:

Perform the following steps in sequence to determine if this tip applies:

- 1)Following the failure, power the system unit off.
- 2)Power on the system unit and allow POST to complete.
- 3)If the audio drivers loaded successfully, this tip applies. Proceed to the "FIX" section.

If the drivers did not load successfully, this tip does not apply. Continue problem determination to isolate the driver failure.

Advanced diagnostics run without errors.

FIX:

Do not replace hardware. This is not a functional failure.

If the POST memory test is interrupted by power off on two consecutive POST cycles, the next power-on will load the default audio settings (Audio Disable). This is indicated by a "0" being displayed in the upper left corner of the display during POST.

Subsequent power on cycles will load the CMOS values which will enable Business Audio and allow audio drivers to load.

SAS KEYWORDS:

PSY2	D/T68XX	D/T6885	6875
6885	PC 750	PC 730	PC750
68XX	IBMPC	PSVP	PSVPFDSK
PSY2OPER	PSVOPER	PC730	PSVPMCD
PSY2MCD	PSVPPROG	PSY2PROG	

1.4.786 IBM PC700 TRAP 0002 ERRORS WARM BOOTING OS/2

Record number: H126728

Device: D/T6875
 Model: M
 Tip key:
 Date created: 095/03/14
 Date last altered: A97/07/13

SYMPTOM:

IBM PC 700 series systems, 6875 & 6885, may exhibit trap 0002 errors or system hang while loading OS/2 2.X or WARP from a CID (LAN installation) install or while running OS/2 2.x or WARP after a warm boot (CTRL-ALT-DEL).

PROBLEM ISOLATION AIDS:

View the Flash EEPROM Revision Level in the Setup Utility by pressing F1 during the memory count. Select "Product Data" from the Main Menu.

If the Flash EEPROM Revision Level is 62A or higher, this tip does not apply.

If the Flash EEPROM Revision Level is 61A or below, this tip does apply.

Advanced diagnostics run without errors.

FIX:

Install Flash BIOS update 62A or higher.

----- IMPORTANT -----

```

| THESE FLASH UPDATES ARE CUSTOMER INSTALLABLE. CUSTOMERS |
| SHOULD BE ADVISED TO CONTACT THE PC COMPANY HELPCENTER AT |
| 800-772 - 2227 IF ASSISTANCE IS REQUIRED IN GETTING THE |
| APPROPRIATE UPDATE. |

```

The current update is titled "N1JT62A.DSK", and may be downloaded from the IBM PC Company HelpCenter bulletin board service by calling 919-517-0001.

If trap 0002 errors persists, verify that Alliance or Micron cache chips are installed in positions U31, U32 and U34 and seated properly (see tip H126344). If the cache is the correct type and installed properly, continue normal problem determination to isolate the failing application or FRU.

SAS KEYWORDS:

PSY2	D/T68XX	D/T6885	6875
6885	PC 750	PC 730	PC750
68XX	IBMPC	PSVP	PSVPMEM
PSY2MEM	PSVPERR	PSY2ERR	PSVPMCD
PSY2MCD	PSVPPROG	PSY2PROG	PC730

1.4.787 IBM PC700 1762/162 POST ERRORS

Record number: H126731

Device: D/T6875
Model: M
Tip key:
Date created: 095/03/14
Date last altered: A97/07/13

SYMPTOM:

IBM PC 700 series systems 6875 and 6885 may exhibit intermittent 1762 and 162 POST errors with a Western Digital WD2540 540Mb hardfile installed.

PROBLEM ISOLATION AIDS:

Following the 1762/162 POST errors, the Setup Utility will show the hardfile as "not installed." Rebooting the system (ctrl-alt-del) usually allows the drive to be recognized and will then show "installed." The drive will then function properly.

There is no data loss or corruption as a result of this symptom.

Advanced diagnostics run without errors.

FIX:

Do not replace hardware. Install Flash BIOS update 62A or higher.

----- IMPORTANT -----
| THESE FLASH UPDATES ARE CUSTOMER INSTALLABLE. CUSTOMERS |
| SHOULD BE ADVISED TO CONTACT THE PC COMPANY HELPCENTER AT |
| 800-772 - 2227 IF ASSISTANCE IS REQUIRED IN GETTING THE |
APPROPRIATE UPDATE.

The current update is titled "N1JT62A.DSK", and may be downloaded from the IBM PC Company HelpCenter bulletin board service by calling 919-517-0001.

If the errors persists after installing the flash update, continue normal problem determination to isolate the failing FRU.

SAS KEYWORDS:

PSY2	D/T68XX	D/T6885	6875
6885	PC 750	PC 730	PC750
68XX	IBMPC	PSVP	PSVPFDSK
PSY2FDSK	PSVPERR	PSY2ERR	PSVPMCD
PSY2MCD	PSVPPROG	PSY2PROG	PC730

1.4.788 IBM PS/2 9576/77 HANGS W/NCI X-OVER ADAPTER

Record number: H131296

Device: D/T9576
 Model: M
 Tip key:
 Date created: O95/10/16
 Date last altered: A95/10/16

SYMPTOM:

IBM PS/2 9576/77 Microchannel systems, models DUA, DU6, DNA, DNG and DUG may intermittently hang with an NCI X-Over Banking adapter installed.

PROBLEM ISOLATION AIDS:

Inspect the PAL module in socket position U14 on the NCI X-Over adapter. This tip DOES NOT apply if the label on top of the PAL module reads "BU-14D."

An adapter with any other markings or no markings on the PAL in position U14 may be affected.

IBM PS/2 9576/77 "i" or "s" systems are not affected regardless of the markings on the PAL module in location U14 of the NCI X-Over Banking adapter.
 System and adapter diagnostics run without failures.

FIX:

Contact NCI (Network Controls International) for a PAL module update for the NCI X-Over Banking adapter. Reference the symptom in this RETAIN tip.

NCI may be contacted at (704) 527-4357 or at address:

Network Controls International
 9 Woodlawn Green
 Charlotte, N.C. 28217
 Attn: Ed Propst or John Collins

If the failure persists continue normal problem determination procedures.

SAS KEYWORDS:

PSY2	IBMPC	PSY2COMM	PSY2OEM
PSY2ADPT	PSY2PART	D/T9577	9576
9577			

1.4.789 IBM P200/P201 DISPLAYS NOT SEEN AS DDC COMPLIANT

Record number: H137866

Device: D/T6588
Model: M
Tip key:
Date created: 097/05/23
Date last altered: A97/05/28

SYMPTOM:

IBM PC 300 Series 6588 and Intellistation M Pro 6888 systems running WindowsNT v4.0 may not see the IBM P200/P201 6555 Color Displays as DDC compliant when attached to an Intergraph 3D adapter.

PROBLEM ISOLATION AIDS:

The Intergraph 3D adapter video device driver is at level 4.01.

To verify how the display is recognized by WindowsNT v4.0, perform the following steps:

1. Install the Intergraph 3D video device driver according to the instructions in the README file.
2. Boot WindowsNT and open the Display window in the Control Panel.
3. Click on the DDC Information Tab and note that it states that the monitor is not capable of DDC operation. No information is filled out in any of the fields.

FIX:

Consult the User's Guide for the IBM P200 or P201 6555 Color Display for the supported video resolutions. View the README file contained on the Intergraph device driver diskette to determine the resolutions supported by the adapter.

Configure the display type and resolution in the WindowsNT "Display" window in the Control Panel to match the capabilities of the display and Intergraph adapter.

An updated video device driver for the Intergraph 3D adapter is being developed to allow DDC support for the IBM P200/P201 6555 Color Displays. The updated drivers may be obtained from the PC Company BBS at 919-517-0001 or from the PC Company File Library via the Internet at the following URL:
"http: //www.us.pc.ibm.com/files.html"

WindowsNT is a trademark of the Microsoft Corporation.
Intergraph 3D is a trademark of the Intergraph Corporation

SAS KEYWORDS:

PSVP	PSY2	PSVPDISP	PSY2DISP
PSVPERR	PSYWERR	63682	IBMPC
D/T6888	PC 300		

IBM T/R BRIDGE SOFTWARE FAILS IN PC 700 MICROCHANNEL

1.4.790 IBM T/R BRIDGE SOFTWARE FAILS IN PC 700 MICROCHANNEL

Record number: H065939

Device: D/T6876
 Model: M
 Tip key:
 Date created: 096/04/10
 Date last altered: A96/04/10

SYMPTOM:

IBM PC 700 Series 6876 and 6886 MicroChannel systems running IBM Token Ring Bridge software may stop sending data across the network if one or more of the Token Ring adapters is set for Streaming.

PROBLEM ISOLATION AIDS:

None

FIX:

IBM Token Ring Bridge Software does not support Streaming. Since the software cannot handle the high bandwidths that arise when Token Ring adapters use Streaming, a condition occurs where one of the adapter cards is in a starvation mode because the IBM Bridge software cannot process the data packets fast enough.
 Disable the Streaming option on all token ring cards that are installed in systems running the IBM Token Ring Bridge software.

If the failure persists continue normal problem determination procedures to isolate the failing application or FRU.

SAS KEYWORDS:

PSVP	PSY2	PSVPCOMM	PSY2COMM
PSVPADPT	PSY2ADPT	IBMPC	PSY2PROG
PSVPPROG	D/T68XX	68XX	D/T6886
PC 730	PC750	PC 750	PC730

1.4.791 IBM TMC-850 SCSI CARD BY FUTURE DOMAIN FAILS IN 300/700

Record number: H133569

Device: D/T6576
 Model: M
 Tip key:
 Date created: 096/08/06
 Date last altered: A96/08/06

SYMPTOM:

SCSI devices attached to an IBM TMC-850 ISA SCSI adapter, made for IBM by Future Domain, may fail to function properly or fail to be detected by the adapter when installed in an IBM PC 300 or 700 Series system.

PROBLEM ISOLATION AIDS:

This tip is specifically referring to the 8 bit version of the IBM ISA SCSI adapter made for IBM by Future Domain. The IBM Fast SCSI adapters made for IBM by Future Domain, which are 16 bit adapters, are not affected.

Some SCSI devices may function normally with this adapter when installed in an IBM PC 300 or 700. Other SCSI devices and/or SCSI device drivers may fail to load properly with this adapter.

FIX:

The IBM TMC-850 8 bit ISA SCSI adapter was not tested and is not supported in the PC 300 or 700 Series products.

SAS KEYWORDS:

PSVP	PSY2	PSVPOEM	PSY2OEM
PSVPERR	PSY2ERR	PC 330	IBMPC
PSVPADPT	PSY2ADPT	PSVPFDSK	PSY2FDSK
PSVPCDROM	PSY2CDROM	CDROM	SCANNER
TAPE DRIVE	HARDFILE	D/T6586	PC 330
PC 350	D/T6571	D/T6573	D/T6581
D/T6583	D/T6575	D/T6585	D/T6586
D/T6577	D/T6587	D/T6598	D/T6560
D/T6877	D/T6887		

IBM TOKEN RING ADAPTER FAILS WINDOWS NT RPL

1.4.792 IBM TOKEN RING ADAPTER FAILS WINDOWS NT RPL

Record number: H161695

Device: D/T6898
 Model: M
 Tip key:
 Date created: 097/11/04
 Date last altered: A98/02/05

SYMPTOM:

After defining "Network" as the first startup device in BIOS, the system fails to connect (RPL) to the WindowsNT server.

PROBLEM ISOLATION AIDS:

This tip applies to the IBM IntelliStation M-Pro, M/T6898, and the IBM Netfinity 3500, M/T8644 using any of the following IBM Token Ring adapters:

Auto 16/4 Token Ring Adapters
 Auto Wake Token Ring Adapters
 Turbo 16/4 Token Ring Adapters

FIX:

Download and install the Token Ring flash BIOS update, file name ZJJT01A.EXE.
 To install, cold boot the system from the diskette created from the file ZJJT01A.EXE and follow the on-screen instructions.

ZJJT01A.EXE may be downloaded via the Internet from the IBM Personal Computer File Library by searching the following Internet URL: www.us.pc.ibm.com/files.html

ZJJT01A.EXE may also be obtained from the IBM PC Company BBS system by calling 919-517-0001.

Windows and WindowsNT are trademarks of Microsoft Corporation.

SAS KEYWORDS:

PSY2	PSY2ERR	PSY2ADPT	PSY2MICR
PSVP	PSVPERR	PSVPADPT	PSVPMICR
D/T6898	M/T6898	6898	79376
UNCLASSIFIED	D/T8644	NETFINITY 3500	8644

1.4.793 IBM TOKEN RING DRIVER INSTALL FAILS IN WINDOWSNT 4.0

Record number: H136892

Device: D/T6899
 Model: M
 Tip key:
 Date created: 097/03/18
 Date last altered: A97/03/25

SYMPTOM:

IBM IntelliStation Z Pro 6899 systems may exhibit one or more of the following error messages when installing the IBM PCI Token Ring device drivers via the Network Configuration phase of WindowsNT v4.0 installation:

- "Unexpected error has occurred..."
- "Unable to open the file: D: \i386\OEM_FILE_NAME"
- "Unable to open the file: \$win_nt\$. ls\i386\OEM_FILE_NAME"

The affect of either of these errors will cause the network installation to fail, and may possibly require a complete reinstallation of WindowsNT v4.0 to remove the driver that caused the error and enable networking capability.

PROBLEM ISOLATION AIDS:

WindowsNT will not allow the removal of the network adapter device drivers after the error messages have been displayed and bypassed.

This error was reported during the installation of an IBM PCI Token Ring adapter. The error may occur during the installation of other brands of communication adapters.

This error message may be displayed during the network adapter installation/configuration phase of either WindowsNT Server v4.0 or WindowsNT Workstation v4.0.

FIX:

To install the IBM PCI Token Ring adapter, obtain and install the updated device drivers from the following IBM Internet Web Site URL:

<http://www.networking.ibm.com/nes/nestoken.htm>

Diskette #2 (NDIS driver diskette) contains an updated OEMSETUP.INF file which will resolve the error indications during the network adapter configuration phase of the WindowsNT v4.0 installation.

It is advisable to download the complete 5 disk set of drivers to update the package that ships with the Token Ring adapter.

Since this is a problem within WindowsNT v4.0, view Microsoft WindowsNT Document # Q156606 via the Microsoft WindowsNT support web site at the following URL:

<http://www.microsoft.com>

Use the Support Search facility with the keywords: kbsetup
 kb3rdparty
 kbbub4.00

WindowsNT is a trademark of the Microsoft Corporation.

SAS KEYWORDS:

PSVP	PSY2	PSVPCOMM	PSY2COMM
PSVPERR	PSY2ERR	PWS	IBMPC
UNCLASSIFIED	59964	PSVPADPT	PSY2ADPT
PSVPOEM	PSY2OEM		

1.4.794 IDE HARDFILE FAILS WITH PLANAR UPGRADE

Record number: H124590

Device: D/T8550
 Model: M
 Tip key:
 Date created: O94/07/11
 Date last altered: A94/07/11

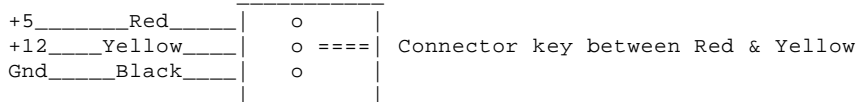
SYMPTOM:

The IDE drive fails to spin up when the system is powered on.

PROBLEM ISOLATION AIDS:

This problem is limited to 8550, 8555 and 8570 with planar upgrade and an IDE Fixed Disk installed. The failure will be observed immediately after installing the upgrade option. Hard File Power cable (FRU#71G2684) shipped with 8550, 8555 and 8570 Planar/Hardfile Upgrade Kits, maybe miswired at the system board end of the cable.

The connector should be wired as shown.



FIX:

If the Red and Yellow wires are reversed, the connector pins may be corrected by releasing the pins from the connector body and reinserting in the correct order. The connector pin may be released by depressing the barb latch on each pin.

SAS KEYWORDS:

D/T8550 D/T8555 D/T8570 PSY2FDSK
 PSY2PWR

ILLEGAL OPERATION ERROR IN QAPLUS/WIN-WIN

1.4.795 ILLEGAL OPERATION ERROR IN QAPLUS/WIN-WIN

Record number: H136884

Device: D/T6899
Model: M
Tip key:
Date created: 097/03/18
Date last altered: A97/03/18

SYMPTOM:

IBM IntelliStation Z Pro 6899 systems preloaded with Microsoft Windows95 may exhibit an "Illegal Operation" when closing the QAPlus/WIN-WIN application after using the Interrupt Vector Table function.

PROBLEM ISOLATION AIDS:

None

FIX:

The QAPlus/PRO (Advanced Diagnostic Diskette) should be used to validate hardware interrupts.

QAPlus/WIN-WIN, included in the systems preloaded software, is being updated to eliminate this failure.

QAPLUS/WIN-WIN & QAPlus/PRO are trademarks of Diagsoft, Inc. Windows95 is a trademark of the Microsoft Corporation.

SAS KEYWORDS:

PSVP	PSY2	IBMPC	PSY2DIAG
PSVPDIAG	PWS	PSVPERR	PSY2ERR
UNCLASSIFIED	61547		

IMAGE ADAPTER/A MAY CAUSE SYSTEM HANG CONDITION

1.4.796 IMAGE ADAPTER/A MAY CAUSE SYSTEM HANG CONDITION

Record number: H037907

Device: D/T8550
Model: M
Tip key:
Date created: 090/05/03
Date last altered: A94/08/09

SYMPTOM:

THE SYSTEM HANGS, WITH AN UNCHANGING SCREEN ON THE ATTACHED DISPLAY.

THIS SYMPTOM MAY OCCUR WHEN A PS/2 IMAGE ADAPTER/A ADAPTER CARD (OPTION P/N07F4400, FRU P/N07F4401) IS INSTALLED WITH ANY OTHER BUS MASTER ADAPTER, AND/OR THE SYSTEM UNIT ITSELF ACTING AS A BUS MASTER.

THIS SYSTEM HANG CONDITION IS CAUSED BY A CONFLICT AT THE ARBITRATION LEVEL 5 SET BY THE EARLY LEVEL OPTION DISKETTE. THE NEW LEVEL OPTION DISKETTE (1.02) ELIMINATES THIS PROBLEM BY SETTING THE IMAGE ADAPTER/A TO ARBITRATION LEVEL 14.

PROBLEM ISOLATION AIDS: NONE**FIX:**

- POWER THE COMPLETE WORKSTATION OFF.
- INSERT THE SYSTEM REFERENCE DISKETTE, POWER ON, AND GO THROUGH "SET CONFIGURATION" TO ACCESS THE "CHANGE CONFIGURATION" SCREEN.
- SET THE ARBITRATION LEVEL OF THE IMAGE ADAPTER/A TO LEVEL 14 TO AVOID CONFLICT WITH OTHER BUS MASTERS.

NOTE:

- CURRENTLY AVAILABLE IMAGE ADAPTER/A OPTIONS CONTAIN AN UP-LEVEL DISKETTE WHICH AUTOMATICALLY SETS THE ARBITRATION LEVEL TO 14 DURING INSTALLATION.

SAS KEYWORDS:

PSY2	PSY2ERR	PSY2ADPT	D/T8503
D/T8514	D/T8565	D/T8515	D/T8570ERR
D/T8580	PSY2DISP		

1.4.797 INCONSISTENT IMAGE INTENSITY, STREAKS ON LEFT

Record number: H123991

Device: D/T9527
 Model: M
 Tip key:
 Date created: 094/05/16
 Date last altered: A94/08/15

SYMPTOM:

The customer reports the monitor intensity is inconsistent (lighter at the top, darker at the bottom) and the image is streaking along the left edge of the 9527 (17P) monitor. The resolution in use is 1280 x 1024 x 256 colors, with the latest OS/2 display drivers.

The problem is not limited to this resolution. It also exists at the 1024 x 768 mode, although it is less evident. The problem may also occur in Windows at the same resolution.

PROBLEM ISOLATION AIDS:

Change the resolution to 1280 x 1024 x 256 colors. If the symptoms above are seen, then follow the directions below to resolve the problem.

FIX:

Note: the following procedure is documented in the customer's "User's Manual" on page 32, in the chapter on "Troubleshooting." Refer to "Step 3: Troubleshooting a discolored image."*

Operate the system in the failing resolution (1280 x 1024 x 256 colors) and bring up the failure on the screen, then:

- A. Open up the front controls compartment of the display unit.
- B. Locate the TWO RIGHT MOST geometry controls on this panel.

Each of these controls has two keys - one along the top row, and the other along the bottom row. The left set of buttons control the bowing of the screen image along the edges. These are "PinCushion keys". The right most set of buttons control the slanting of the screen image along the edges of the screen. These are the "Trapezoid keys".

- C. Simultaneously press the PinCushion key on the top row and the Trapezoid key on the bottom row. Once this is done, do not touch any other key for 5 seconds. This will store the setting in memory.

This will resolve the problem.

- * The following is the text from "Step 3: Troubleshooting a discolored image," in the User's Manual for the 9527:

"Computer monitors are affected by magnetic fields. If the monitor is installed next to equipment that produces large magnetic fields discoloration of the screen may occur. This problem can also be caused by swivelling the monitor excessively. To correct the problem press the degauss button on the control panel.

Some video adapter cards can display an image which is colored gray instead of the expected white. This is usually due to the video signal timings not being sufficient for the sophisticated circuitry of the monitor. The monitor can compensate for this effect if the button above the pincushion symbol and button below the trapezoid symbol are pressed simultaneously."

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SAS KEYWORDS:

PSY2	PSY2DISP	PSVP	VALUEPOINT
DISPLAY	17P	LINES	SMEAR
SMEARS			

INCORRECT COLOR IN QAPLUS GRID TEST W/COSESSION VIEWER

1.4.798 INCORRECT COLOR IN QAPLUS GRID TEST W/COSESSION VIEWER

Record number: H01778

Device: D/T6577
 Model: M
 Tip key:
 Date created: 096/06/19
 Date last altered: A96/06/19

SYMPTOM:

IBM PC 300 Series 6577 and 6587 running QAPLUS/WIN-WIN via CoSession may display an incorrect color during the Grid Lines test at the CoSession for Windows V7.0 Viewer end (Helpdesk). The CoSession for Windows Host end (customer) is running in a Windows 3.1 environment.

PROBLEM ISOLATION AIDS:

The Grid Lines test in QAPLUS/WIN-WIN will display red lines instead of black on the Viewer end. The Host end (customer) will correctly display black lines.

The system does not exhibit this failure if the Host operating system is Windows95.

FIX:

Do not replace hardware. There is no video hardware failure. Use QAPLUS/PRO to diagnose a suspected video hardware problem.

QAPLUS/WIN-WIN, included in the systems preloaded software, is being updated to eliminate this failure. An updated version of the application is being made available from the IBM PC Company BBS at 919-517-0001 or via the Internet at the following URL:

<http://www.pc.ibm.com/files.html>

QAPLUS/WIN-WIN & QAPLUS/PRO are trademarks of Diagsoft, Inc. Windows & Windows95 are trademarks of the Microsoft Corporation.

SAS KEYWORDS:

PSY2	D/T65XX	6577	6587
IBMPC	PSVP	PSVPDISP	PSY2DISP
D/T6587	PC 350	PC350	PC300
PC 330	PC330	44674	PSVPDIAG
PSY2DIAG	PSVPPROG	PSY2PROG	

1.4.799 INCORRECT COLORS IN ADOBE PHOTOSHOP 4.0/4.1

Record number: H162997

Device: D/T6898
 Model: M
 Tip key:
 Date created: 098/03/12
 Date last altered: A98/03/12

SYMPTOM:

After starting Adobe PhotoShop and selecting "File", "New," the canvas opens with a yellow background instead of the normal white background.

PROBLEM ISOLATION AIDS:

This tip applies to IBM IntelliStation M-Pro Series 6898 systems preloaded with WindowsNT 4.0, and configured with the STB Glyder MAX-2 video adapter.

The incorrect color condition will be seen when operating at "True Color" or 24 bit color depth.

FIX:

Using the Notepad application (NOTEPAD.EXE), edit Photos40.ini via the following steps:

1. Close the Adobe PhotoShop application.
2. Open Photos40.ini from the \Adobe\Photoshop\Prefs folder.
3. Edit, or add if not found, the following line:
 InvertDIB=0 (with no spaces)
4. Restart Adobe PhotoShop.

Windows and WindowsNT are trademarks of Microsoft Corporation. PhotoShop is a trademark of Adobe Systems Incorporated. Glyder MAX-2 is a trademark of STB Systems Incorporated.

SAS KEYWORDS:

PSY2	PSY2DISP	PSY2ADPT	PSY2OEM
PSVP	PSVPDISP	PSVPADPT	PSVPOEM
89747	D/T6898	6898	UNCLASSIFIED

INCORRECT INFORMATION DISPLAYED BY IBM DMI BROWSER

1.4.800 INCORRECT INFORMATION DISPLAYED BY IBM DMI BROWSER

Record number: H132817

Device: D/T6877
 Model: M
 Tip key:
 Date created: 096/02/28
 Date last altered: A96/07/24

SYMPTOM:

IBM PC 700 Series 6877 & 6887 and PC 340 Series 6560 systems may display incorrect information when using the IBM DMI (Desktop Management Interface) Browser.

PROBLEM ISOLATION AIDS:

The IBM DMI Browser is used to interrogate the system for specific hardware and microcode level information.

Use the following procedure to determine if the level of IBM DMI browser installed is affected:

- A) From the Desktop select "IBM DMI."
- B) Select the "DMI MIF Browser."
- C) Click on the "+" sign next to "PC System MIF."
- D) Double click on the Component ID - the incorrect serial number will be displayed.
- E) Double click on System BIOS - the incorrect level is shown.

Incorrect information may also be received from the following categories:

Physical Memory	System Enclosure	Logical Drive
System Cache	System Slots	Mouse
Parallel Port	Video	Keyboard
Serial Port	Disk	
IRQ 15	Partition	

FIX:

To verify system information, press F1 during the memory count to access the Configuration/Setup Utility. IBM Advanced Diagnostics (QAPlus/Pro) and the System Information Tool located on the Desktop may also be used to view and verify system information.

The next release of the IBM DMI Browser will be updated to eliminate this problem. Contact the IBM PC Company Helpcenter for information regarding updates to preloaded software.

QAPlus/Pro is a trademark of DiagSoft, Inc.

SAS KEYWORDS:

PSY2	D/T68XX	6887	6877
IBMPC	PSVP	PSVPDIAG	PSY2DIAG
D/T6887	PSY2PROG	PSVPPROG	PC750
PSY2ERR	PSVPERR	PC 750	PC730
PC700	PC 730	40733	PC 340
PC 300	D/T6560	50697	

1.4.801 INSTALL & UNINSTALL OF IBM PRODUCT REGISTRATION FAILS

Record number: H016967

Device: D/T6877
 Model: M
 Tip key:
 Date created: 096/04/02
 Date last altered: A96/04/02

SYMPTOM:

The IBM Product Registration application may exhibit either of the following symptoms on an IBM PC 700 Series 6877 or 6887, depending on the operating system being used:

- 1) The IBM Product Registration may fail to uninstall in Windows95.
- 2) The IBM Product Registration may fail to install from the Ready To Configure (RTC) CD for Windows in a WIN-OS/2 environment.

PROBLEM ISOLATION AIDS:

None

FIX:

Problem 1:

The Uninstall function for the IBM Product Registration may leave active files on the hardfile and an icon on the Windows95 desktop. To remove the IBM Product Registration, remove the product icon from the "Start" bar manually.

Problem 2:

If IBM Product Registration fails to install from the RTC CD for Windows in a WIN-OS/2 environment, perform the following steps:

- Start a WIN-OS/2 window for full-screen session.
- Start the File Manager application.
- Choose the drive letter for the CDROM drive. Ensure that the RTC CD for Windows is installed in the CDROM drive.
- Change to the subdirectory \WIN31\REGISTER
- Double click on SETUP.EXE

This operation will correctly install the IBM Product Registration from the RTC CD.

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SAS KEYWORDS:

PSY2	D/T68XX	6887	6877
IBMPC	PSVP	PSVPPROG	PSY2PROG
D/T6887	PC 750	PC750	PC700
PC 730	PC730	42242	

INSTALL PROBLEM WITH WINDOWS NT SERVER 3.51.

1.4.802 INSTALL PROBLEM WITH WINDOWS NT SERVER 3.51.

Record number: H132261

Device: D/T8641
Model: M
Tip key:
Date created: 096/01/18
Date last altered: A96/01/18

SYMPTOM:

During the initial installation of Windows NT Server, V 3.51 on the IBM Server 520 (8641), the system hangs after the initial loading of files.

PROBLEM ISOLATION AIDS:

Affected systems:
Server 520 (8641-EZ1, MZL, XZS, and XZE)
Server 320 (8640-1YX, and MYR)

An IBM PCI RAID Adapter FRU P/N 06H5078 is installed and configured as RAID-5.

FIX:

Create a DOS partition on the logical drive. Format the partition using DOS FORMAT with the /S parameter, then install Windows NT 3.51 Server on the DOS partition.

Windows NT is a trademark of Microsoft Inc.

SAS KEYWORDS:

PSY2	SERVER	520	320
8641	8640	D/T8640	PSY2PROG

1.4.803 INSUFFICIENT MEMORY ERROR WITH CHKDSK

Record number: H135923

Device: D/T8641
 Model: M
 Tip key:
 Date created: 097/01/03
 Date last altered: A97/01/03

SYMPTOM:

PC Servers with a disk partition of 17GB or larger may receive an insufficient memory error while running CHKDSK.

-OR-

CHKDSK may fail to complete (hang) when run on a large disk partition. The system may hang with only a partial error message displayed on the monitor. For example, the error message "HFS #####" may be displayed as "H" due to the hang.

PROBLEM ISOLATION AIDS:

- The system is a PC Server with an IBM RAID adapter.
- The Operating System is OS/2 2.11, 2.11 SMP, 3.0, 4.0 or Warp Server.
- CHKDSK is run on a disk partition of 17GB or larger.

FIX:

Do not replace any hardware; this is a software error.

NOTE: CHKDSK runs for a long time on large partitions; it is NOT unusual for CHKDSK to run for 90 minutes or longer on a 17GB partition. CHKDSK may still be running even though it appears to be hung, so allow enough time for it to complete.

Follow this procedure as a work-around:

1. Make a backup of the CONFIG.SYS file.
2. Edit the CONFIG.SYS file and remove the drive letter causing the error/hang from the AUTOCHECK parameter in the IFS (Install File System) statement.
 IFS=C: \OS2\HPFS.IFS /CACHE: 1024 /CRECL: 64 /AUTOCHECK: CD <--drive letter
3. Restore data from a current backup.

For additional information refer to OS/2 defect 155730 and/or APAR PJ18004.

SAS KEYWORDS:

PSY2	PSY2PROG	PSY2OPER	UNCLASSIFIED
D/T8642	D/T8650	300	310
320	325	330	500
520	704	720	H
HFS	06H3059	92F0335	06H5078
76H6875	32H3811	D/T8640	D/T9595
9595	8640	8641	8642
8650	SERVER		

1.4.804 INSUFFICIENT SPACE CREATING WINDOWS 3.11 BACKUP

Record number: H136252

Device: D/T6577
Model: M
Tip key:
Date created: 097/01/21
Date last altered: A97/01/21

SYMPTOM:

IBM PC 300 Series 6577 or 6587 systems preloaded with DOS and Windows 3.11 may exhibit an "Insufficient Disk Space" error while creating the Windows 3.11 backup via the Diskette Factory.

PROBLEM ISOLATION AIDS:

The "insufficient disk space" error may occur during the creation of Diskette #2 as the system is copying XGA.DL_ from the hardfile to the diskette.

FIX:

If the error occurs, exit the Diskette Factory and perform the following steps:

- 1) Open a DOS session and ENTER the following commands:
CD\DISKETTS\WIN311\DISK_W2
DELETE NW40.HL_
- 2) Exit the DOS session, restart the Diskette Factory and create the Windows 3.11 backup diskettes.

Windows is a trademark of the Microsoft Corporation.

SAS KEYWORDS:

PSVP	PSY2	IBMPC	PSY2ERR
PSVPERR	PSY2DSKT	PSVPDSKT	D/T6587
PC 330	PC 350	UNCLASSIFIED	51899

1.4.805 INTEL NDIS OID QUERY PROTOCOL ERRORS

Record number: H162595

Device: D/T6561
 Model: M
 Tip key:
 Date created: 097/12/19
 Date last altered: A98/02/11

SYMPTOM:

After installing LANDesk and restarting Windows95, the following, or similar errors occur:

Fatal Exception Error 0E - VXD NDIS (04)
 Error Message "C: \DMILoop"
 LANDesk Uninstall utility hangs the system.

PROBLEM ISOLATION AIDS:

This tip applies to IBM PC300GL systems, machine types 6561/6591, installed with an IBM or Intel 10/100 Ethernet adapter.

The INTEL NDIS OID Query protocol is installed during the installation of LANDesk.

FIX:

Unbind the Intel NDIS OID Query protocol from any installed adapters other than the IBM or Intel 10/100 Ethernet adapters.

1. In Control Panel, double click the Network icon.
2. Double click the appropriate network adapter to open its Properties window.
3. Under Bindings, uncheck the Query Protocol box.
4. Click OK to save changes and restart Windows95.

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SAS KEYWORDS:

PSY2	PSY2ERR	PSY2COMM	PSY2ADPT
PSVP	PSVPERR	PSVPCOMM	PSVPADPT
D/T6561	D/T6591	6561	6591
80786F_1	80786F_2	80786	UNCLASSIFIED

INTERMITTENT "NOT READY" OR "GENERAL FAILURE" MESSAGES

1.4.806 INTERMITTENT "NOT READY" OR "GENERAL FAILURE" MESSAGES

Record number: H024147

Device: D/T8550
Model: M
Tip key:
Date created: 087/09/28
Date last altered: A93/09/01

SYMPTOM:

HIGHLY INTERMITTENT PROBLEM WITH EITHER A DISKETTE DRIVE
"NOT READY" OR A FIXED DISK "GENERAL FAILURE" ERROR MESSAGE.
THIS PROBLEM MAY BE AGGRAVATED BY CERTAIN PROGRAMMING
PRACTICES THAT MASK OFF INTERRUPTS FOR LONG PERIODS OF TIME.
MACHINES AFFECTED: 8550, 8560 AND 8580 USING PC/DOS 3.3

PROBLEM ISOLATION AIDS: NONE**FIX:**

CONTACT THE ACCOUNT WORKSTATION SYSTEM ENGINEER TO INSTALL THE
DASDDRVR.SYS MODULE UPDATE. INFORMATION ABOUT DASDDRVR.SYS IS
AVAILABLE ON HONE/EQUAL, ITEM #913MN.

NOTE: DASDDRVR IS ALSO AVAILABLE ON THE SYSTEM UPDATE DISKETTE
THE DISKETTE CAN BE OBTAINED BY FOLLOWING INSTRUCTIONS IN HSF
RECORD NUMBER H037906.

SAS KEYWORDS:

PSY2	PSY2PROG	PSY2MISC	D/T8560
D/T8580	1.02	SYSTEM	UPDATE

INTERMITTENT DISKETTE FAILURES ON PS/VALUEPOINT

1.4.807 INTERMITTENT DISKETTE FAILURES ON PS/VALUEPOINT

Record number: H007620

Device: D/T6384
 Model: M
 Tip key:
 Date created: 094/11/09
 Date last altered: A94/11/09

SYMPTOM:

PS/VALUEPOINT SYSTEMS (ALL MACHINE TYPES AND MODELS) MAY FAIL WITH THE FOLLOWING 3.5 INCH DISKETTE DRIVE "A" SYMPTOMS:

- 1) THE 3.5 INCH DISKETTE DRIVE IS NOT RECOGNIZED IN THE CONFIGURATION UTILITY (162/601 POST ERRORS).
- 2) INTERMITTENT DISKETTE READ AND/OR WRITE ERRORS
- 3) GENERAL FAILURE READING DRIVE A

PROBLEM ISOLATION AIDS:

VIEW THE LABEL ATTACHED TO TOP OF THE DISKETTE DRIVE, JUST ABOVE THE SIGNAL CABLE CONNECTOR. IF THE LABEL STATES THAT THE DRIVE WAS "MADE IN MALAYSIA," THIS TIP APPLIES.

PS/VALUEPOINT ADVANCED DIAGNOSTICS MAY FAIL WITH VARIOUS DISKETTE DRIVE OPERATIONAL OR MEDIA TYPE FAILURES.

FIX:

IF THE LABEL INDICATES THAT THE DRIVE WAS "MADE IN MALAYSIA," RESEAT THE DISKETTE DRIVE CABLE INTO THE DISKETTE DRIVE SEVERAL TIMES (5 TO 7). THIS IS DONE TO REMOVE AN EXCESS OF SOLDER FLUX ON THE DISKETTE DRIVE PINS.

IF THE DRIVE CONTINUES TO FAIL AFTER RESEATING THE CABLE SEVERAL TIMES, UTILIZE NORMAL PROBLEM DETERMINATION PROCEDURES TO ISOLATE THE FAILING FRU.

SAS KEYWORDS:

PSVP	PSY2	PSVPDSKT	PSY2DSKT
PSVPERR	PSY2ERR	PSVPDIAG	PSY2DIAG
PSVPPART	PSY2PART	D/T6381	D/T6382
D/T6387	6381	6382	6384
6387	VALUE POINT	6381/SI	6382/S
6384/D	6387/T	VALUEPOINT	

INTERMITTENT DISKETTE FAILURES ON PS/VALUEPOINT

1.4.808 INTERMITTENT DISKETTE FAILURES ON PS/VALUEPOINT

Record number: H121729

Device: D/T6384
 Model: M
 Tip key:
 Date created: 093/11/09
 Date last altered: A93/11/09

SYMPTOM:

PS/VALUEPOINT SYSTEMS (ALL MACHINE TYPES AND MODELS) MAY FAIL WITH THE FOLLOWING 3.5 INCH DISKETTE DRIVE "A" SYMPTOMS:

- 1) THE 3.5 INCH DISKETTE DRIVE IS NOT RECOGNIZED IN THE CONFIGURATION UTILITY (162/601 POST ERRORS).
- 2) INTERMITTENT DISKETTE READ AND/OR WRITE ERRORS
- 3) GENERAL FAILURE READING DRIVE A

PROBLEM ISOLATION AIDS:

VIEW THE LABEL ATTACHED TO TOP OF THE DISKETTE DRIVE, JUST ABOVE THE SIGNAL CABLE CONNECTOR. IF THE LABEL STATES THAT THE DRIVE WAS "MADE IN MALAYSIA," THIS TIP APPLIES.

PS/VALUEPOINT ADVANCED DIAGNOSTICS MAY FAIL WITH VARIOUS DISKETTE DRIVE OPERATIONAL OR MEDIA TYPE FAILURES.

FIX:

IF THE LABEL INDICATES THAT THE DRIVE WAS "MADE IN MALAYSIA," RESEAT THE DISKETTE DRIVE CABLE INTO THE DISKETTE DRIVE SEVERAL TIMES (5 TO 7). THIS IS DONE TO REMOVE AN EXCESS OF SOLDER FLUX ON THE DISKETTE DRIVE PINS.

IF THE DRIVE CONTINUES TO FAIL AFTER RESEATING THE CABLE SEVERAL TIMES, UTILIZE NORMAL PROBLEM DETERMINATION PROCEDURES TO ISOLATE THE FAILING FRU.

SAS KEYWORDS:

PSVP	PSY2	PSVPDSKT	PSY2DSKT
PSVPERR	PSY2ERR	PSVPDIAG	PSY2DIAG
PSVPPART	PSY2PART	D/T6381	D/T6382
D/T6387	6381	6382	6384
6387	VALUE POINT	6381/SI	6382/S
6384/D	6387/T	VALUEPOINT	

INTERMITTENT FAILURES USING KEYBOARD PASSWORD FUNCTION

1.4.809 INTERMITTENT FAILURES USING KEYBOARD PASSWORD FUNCTION

Record number: H03956

Device: D/T8570
Model: M
Tip key:
Date created: 089/12/28
Date last altered: A90/03/26

SYMPTOM: THE KP.COM PASSWORD SECURITY PROGRAM, CONTAINED ON THE IBM 70/80 REFERENCE DISKETTE BELOW VERSION 1.10, MAY CAUSE INTERMITTENT SYSTEM FAILURES WHEN USED ON THE 8570.

1. THE SYSTEM CAN HANG WHEN:
 - A. INVOKING KP.COM.
 - B. USING MORE THAN THREE PASSWORD CHARACTERS.
2. AN INSTALLED MOUSE OPTION MAY HANG AFTER USING KP.COM.
3. THE SYSTEM MAY PERFORM A SELF-INITIATED IPL WHEN KP.COM IS INVOKED.

PROBLEM ISOLATION AIDS: NONE

FIX:

AN UPDATED VERSION OF KP.COM HAS BEEN DEVELOPED, AND IS AVAILABLE ON VERSION 1.10 OF THE 70/80 REFERENCE DISKETTE. THIS DISKETTE IS INCLUDED IN THE MODEL 80 HMS SUPPLEMENT, FORM NUMBER S15F-2185.

SAS KEYWORDS:

PSY2	8570SYSMISC	PSY2MISC	PSY2PROG
8570SYSPROG	8570SYSKBD	PSY2KBD	

1.4.810 INTERMITTENT FALSE C-2 SECURITY ERROR MESSAGES

Record number: H161336

Device: D/T6562
Model: M
Tip key:
Date created: 097/10/08
Date last altered: A97/10/08

SYMPTOM:

After enabling the enhanced security feature and setting an Administrator password, the following, or similar C-2 security message is intermittently displayed at POST:

176 The system has been tampered with.
System-security-Administrator password required.
Type your password, then press Enter.

PROBLEM ISOLATION AIDS:

This tip applies to IBM PC model PC300PL, machine type 6562, models only.

FIX:

If the symptom persists after confirming that the top cover is fully seated, replace the Fan/Speaker/Power Switch assembly FRU P/N76H7332.

SAS KEYWORDS:

PSY2	PSY2ERR	PSY2PART	PSVP
PSVPERR	PSVPPART	D/T6562	6562
76H7332	UNCLASSIFIED		

INTERMITTENT MEDIA ERRORS ON R/W OPTICAL DRIVES

1.4.811 INTERMITTENT MEDIA ERRORS ON R/W OPTICAL DRIVES

Record number: H003383

Device: D/T9595
 Model: M
 Tip key:
 Date created: 096/05/16
 Date last altered: A96/07/16

SYMPTOM:

Intermittent media errors on R/W optical drives.
 Advanced diagnostics generate error 0217xxxx.

PROBLEM ISOLATION AIDS: None

FIX:

1. Clean the optics. Refer to record H127072.
2. Verify that the media cartridge capacity matches drive capacity:

FRU Number	Option Number(s)	Description
92F0167	6450162,6451295,6451062	127MB R/W Optical Drive
66G7510	62G0489,62G2908,3432705 62G2911	127MB R/W Optical Drive
05H3449*	05H2784,05H2794,3432715	230MB R/W Optical Drive

* Note: FRU P/N05H3449 does not appear anywhere on the drive.
 The manufacturing P/N05H2005 is visible on this drive.

If a 230MB cartridge is used in a 127MB drive, intermittent errors will occur.
 When replacing a failing R/W Optical Drive, be sure to order the correct size drive as the drives are similar in appearance.

For jumper/switch settings, refer to record H093531.

SAS KEYWORDS:

PSY2	9595POS	9595OPTIC	D/T8595
8595	D/T9585	9585	D/T8639
8639	D/T8640	8640	D/T8641
8641	D/T8642	8642	D/T8650
8650	D/T9595	9595	300
310	320	500	520
720	704	05H2005	

1.4.812 INTERMITTENT OR SOLID 24XX ERRORS ON 6384

Record number: H106057

Device: D/T6384
 Model: M
 Tip key:
 Date created: 093/01/06
 Date last altered: A93/01/08

SYMPTOM:

A SMALL NUMBER OF PS/VALUEPOINT 6384 MODEL C00, C20 OR C40 MAY EXHIBIT INTERMITTENT OR SOLID 24XX VIDEO POST ERRORS. THIS ERROR MAY OCCUR ON SYSTEMS WITH ONLY ONE HARD DRIVE INSTALLED. SYSTEMS WITH TWO HARD FILES INSTALLED ARE NOT AFFECTED.

PROBLEM ISOLATION AIDS:

THE 24XX POST ERROR MAY BE BYPASSED BY PRESSING THE "ESC" KEY AT THE POST ERROR DEFINITION SCREEN AND THE SYSTEM MAY FUNCTION PROPERLY. ADVANCED DIAGNOSTICS MAY FAIL WITH A 24XX ERROR.

FIX:

THE HARDFILE CABLE ASSEMBLY HAS TWO CONNECTORS FOR THE "C" AND "D" DRIVES. THE CABLE FOR THE "D" DRIVE IS LONGER THAN THE "C" DRIVE CABLE. REMOVE THE "C" DRIVE CABLE FROM THE HARDFILE AND INSTALL THE LONGER "D" DRIVE CABLE.

IF THE CUSTOMER ADDS A SECOND DRIVE TO THE SYSTEM, THE "C" AND "D" DRIVE CABLES SHOULD BE RELOCATED TO THEIR APPROPRIATE DRIVE.

NEW PRODUCTION SYSTEMS ARE NOT EXPOSED TO THIS POTENTIAL PROBLEM.

IF THE ABOVE PROCEDURE DOES NOT RESOLVE THE PROBLEM, UTILIZE NORMAL PROBLEM DETERMINATION PROCEDURES TO ISOLATE THE FAILING FRU.

SAS KEYWORDS:

PSY2	PSVP	PSY2ERR	PSY2DISP
PSVPERR	PSVPDISP	VALUE POINT	VALUEPOINT
2400	2401	2402	2408
2409	2410		

INTERMITTENT POWER-ON FAILURE ON IBM PC300-GL

1.4.813 INTERMITTENT POWER-ON FAILURE ON IBM PC300-GL

Record number: H16198

Device: D/T6282
 Model: M
 Tip key:
 Date created: 097/06/24
 Date last altered: A97/06/24

SYMPTOM:

IBM PC300-GL 6272/6282 systems intermittently fail to power on.

PROBLEM ISOLATION AIDS:

In some systems the HD drive and power LED cables may be secured too tightly with the LED wire tie wraps. This can cause the insulation on the LED wires to become damaged resulting in an intermittent short.

If the system exhibits the symptom described above, examine the LED cables for damage that may expose the inner wire resulting in a possible short.

FIX:

If the insulation on one or both of the LED wires is damaged, replace them with the following FRU numbers:

HDD LED and Cable FRU 93F2388

Power LED and Cable FRU 93F2389

SAS KEYWORDS:

PSY2	PSY2MISC	PSY2PART	PSVP
PSVPMISC	PSVPMISC	D/T6272	D/T6282
D/T6560	6272	6282	6560
UNCLASSIFIED			

1.4.814 INTERMITTENT TAPE ERRORS WITH 4/10GB TAPE DRIVE

Record number: H013309

Device: D/T8641
 Model: M
 Tip key:
 Date created: 097/03/07
 Date last altered: A97/03/21

SYMPTOM:

- Excessive cleaning indications (Amber LED on solid)
- Tape drive not recognized on Channel 2 on the PCI RAID Adapter (FRU p/n06h5078 or 06H3059)
- Tape drive backup/restore fails (Amber LED flashes), but is successful after the power is cycled
- Other unexplained intermittent tape backup failures

PROBLEM ISOLATION AIDS:

- The 4mm DAT tape drive is FRU p/n16G8454 or FRU p/n16G8456.
- The tape drive may have jumpers or dip switches.
- The tape drive may be 3.5" or 5.25" form factor.

FIX:

Read and understand this entire tip before attempting to perform the actions below.

Note: For systems with an AT Fast SCSI adapter FRU p/n82G4879 or FRU p/n92F0330 refer to RETAIN tip H015029.

For tape cleaning procedures, refer to RETAIN tip H133024.

Update the tape drive with the latest microcode (UCODE). The following two methods are available:

1. Microcode update utility diskette.
 - a. Download 4MMDAT4.EXE for tape drives with switches.
 - b. Download 4MMDAT5.EXE for tape drives with jumpers.

-OR-

2. Microcode update tape cartridge. Use this method for updating tape drives connected to RAID adapters.

Note: For RAID systems, it is still necessary to download the appropriate diskette so the current UCODE can be determined using the /D option explained later.

In addition the file 4MMREAD.TXT can be viewed on-line with a WEB browser and the file README.TXT, which is on both utility diskettes, should be printed for detailed instructions.

PROCEDURE TO DETERMINE THE CURRENT TAPE DRIVE UCODE LEVEL:

1. Boot the diskette made from the 4MMDAT?.EXE

Note: Error messages and beeps will be generated as many ASPI device drivers attempt to load; these errors are normal and should be ignored as the correct driver will load.

2. Type the following at the A: \> prompt:

```
MU_TAPE4 /D <Enter> -OR-
MU_TAPE5 /D <Enter>.
```

Note: Either diskette will work with the display (/D) option.

The program will return the adapter information and pause for the operator. The next screen will contain the drive identification.

The information returned by the /D option will always indicate an ARCHIVE drive in the Vendor Identification field. This is normal. Refer to the Product Revision Level field, which will return the current UCODE level (starting with 4 for drives with switches and 5 for drives with jumpers).

The UCODE levels from older to newer are as follows:

```
ARCHIVE (with switches): 4.75, 4.AC, 4.AP, 4.BK, 4BKA, 4BKC
CONNOR and SEAGATE (with jumpers): 5.50, 5.77, 5AJ
```

If the UCODE level is BELOW the level listed in the chart below, update the tape drive microcode using the diskette procedure below.

-OR-

If the tape drive is attached to a RAID adapter AND the UCODE level is BELOW the level listed in the chart below, call the IBM

INTERMITTENT TAPE ERRORS WITH 4/10GB TAPE DRIVE

PC HelpCenter at 1-800-772-2227 for a microcode update tape. Please include the physical size of the tape drive (3.5" or 5.25") to insure that the proper tape is sent.

In addition, perform all of the following:

1. Tape drive stand-alone diagnostics. Use the diagnostic tape cartridge.
2. Verify proper SCSI termination and cable connections
3. Verify tape media quality (IBM or Sony are recommended).
4. Clean tape drive (IBM cartridge is recommended).
5. Verify that all the software device drivers are installed and that all the drivers are current.

FRU	Vendor	Form Factor	SCSI ID Configuration	Latest UCODE
16G8454	Archive	5.25"	switches	4BKC
16G8456	Archive	3.5"	switches	4BKC
16G8454	Conner	5.25"	jumpers	5AJ
16G8456	Conner	3.5"	jumpers	5AJ

Use one of the following procedures to update the microcode on the 4/10GB tape drives. The update takes approximately one to three minutes.

PROCEDURE TO UPDATE THE UCODE WITH THE UPDATE UTILITY DISKETTE:

1. If a tape is already present in the tape drive, eject the tape prior to running the utility diskette.
2. Perform a shutdown of the operating system and power off the system and insert the Utility Diskette.
3. If the tape drive is external, power it on first.
4. Power on the system which will boot the Utility Diskette.
5. Verify that the tape drive is functional by testing it with the diagnostic tape cartridge. The tape will eject when the diagnostic is complete.
6. Verify that the Utility Diskette is compatible with the model tape drive you are upgrading. See the chart above.
7. Follow the instructions in the README.TXT to ensure that the correct device drivers are loaded.
8. Type MU_TAPE4 or MU_TAPE5 <Enter> and follow the on-screen instructions. The microcode update takes approximately one to three minutes.
9. When the update is complete, and all the lights on the tape drive have been continuously off for 30 seconds, remove the Utility Diskette and reboot the system.

PROCEDURE TO UPDATE THE UCODE WITH THE UPDATE TAPE CARTRIDGE:

Note: A microcode tape is unique and can only be used for a microcode update. This tape cannot be duplicated locally to another tape drive, copied to a system fixed disk, or used as a backup or data tape because the tape header has special code which executes immediately when the tape is inserted into the tape drive. The tape cannot respond to normal tape operations and is therefore not usable for any other purpose.

Caution: Do not power down the tape drive during the three minute microcode update process. This will cause damage to the tape drive.

1. Perform a shutdown of the operating system and power off the system.
2. If the tape drive is external, power it on first.
3. Power on the system. Note: It is not necessary for the tape drive to be connected to the SCSI bus for this update process. If the unit is connected to the SCSI bus, there should be no data activity on the bus (The operating system should not be running), because bus activity will interfere with the microcode update process.

4. Wait for the tape drive Power-On Self Test to complete. This takes approximately ten(10) seconds. Three(3) LEDs flash briefly, then the left LED blinks for 10 seconds.
5. If a tape is already present in the tape drive, wait for the drive to complete the self test, then manually eject the tape by pressing the eject button.
6. Verify that the tape drive is functional by testing it with the diagnostic tape cartridge. The tape will eject when the diagnostic is complete.
7. Clean the tape drive with the tape cleaning cartridge. The tape will eject when the cleaning is complete.
8. There are two fully compatible, but slightly different versions of the tape drive, therefore you may have received two different types of tape cartridges. Only one is compatible with your tape drive. If you insert the incorrect tape no damage or harm will result. An incompatible tape cartridge will be rejected by the tape drive and the tape will be quickly ejected. If this happens, just remove it and insert the other cartridge which should be compatible.
 - A. The microcode update tape is unique and cannot be copied locally on any tape drive or system, due to special code written on the header of the tape.
 - B. The microcode tape may only be used 50 times. Prior to the update, an update counter record is read and if the number of operations exceeds fifty (50), the update will abort. This minimizes the chance of a worn tape causing a failure during the update process, and rendering the tape drive unusable. The tape can not be used for any other purpose, so should then be discarded.
9. Insert the microcode update tape. The update process will start automatically and take up to three(3) minutes to complete. During the update, the tape drive LEDs will flash and the cartridge will then be ejected and the LEDs will continue to flash for approximately 30 seconds.

Caution: The update is not complete until thirty (30) seconds after the tape has been ejected AND the LEDs have stopped flashing.

Customers are responsible for cleaning the tape drive with a cleaning cartridge. Customers may order this cartridge as FRU p/n21F8763.

```

-----IMPORTANT-----
|
| Diskette images are customer installable. Customers should
| review any "README" files located on the diskette for
| installation information. Contact the IBM PC HelpCenter at
| 800-772 - 2227 if download/installation assistance is needed.
|
| IBM PC Server files are located in Directory 22 on the PC
| Company Bulletin Board Service (BBS) at 1-919-517-0001 or
| tieline 255-0001.
| The files may also be downloaded via the Internet from the
| IBM PC File Library by searching the following Internet URL:
| http: //www.pc.ibm.com/files.html
|
-----
    
```

Sony is a trademark of Sony Corporation.

SAS KEYWORDS:

PSY2	PSY2TAPE	720	300
MAGNETIC	D/T9595	520	9595A
8641	SCSI	PSY2ERR	320
SERVER	95	500	310
D/T8640	D/T8642	D/T9595	LED
PSVP	21F8763	PC 300	PC 700
PC300	PC700	325	330
704	D/T8650	D/T8639	8639
82G4879	92F0330	D/T6885	6885
4/10			

1.4.815 INTERMITTENT TRAP 000E OR GPF'S IN 6576 AND 6586

Record number: H13733

Device: D/T6586
 Model: M
 Tip key:
 Date created: 095/09/06
 Date last altered: A96/05/08

SYMPTOM:

IBM PC 330 and 350 75/90Mhz Pentium based systems (6576 and 6586) may exhibit intermittent trap 000E errors or intermittent General Protection Faults (GPF) in Windows.

PROBLEM ISOLATION AIDS:

Trap 000E errors may be displayed intermittently during the initial system startup that boots to the "Welcome" screen on the "Select-a-Bus" preloaded systems or at some other point during or after IPL.

This failure only affects systems with one or more 8Mb IBM Tin-Lead memory SIMMs, FRU P/N92G7245.

Customers using a DOS operating system may experience "UNRELIABLE XMS MEMORY" errors.
 Advanced Diagnostics run without errors.

FIX:

Replace 8Mb SIMM FRU P/N92G7245. If the failure persists, continue normal problem determination procedures to isolate the failure application or FRU.

SAS KEYWORDS:

PSY2	D/T65XX	65XX	6576
IBMPC	PSVP	PSVPMEM	PSY2MEM
D/T6576	TRAP 00E	TRAP00E	PSVPPART
PSY2PART	PSVPERR	PSY2ERR	SHRINK2

1.4.816 INTERMITTENT VIDEO CORRUPTION RUNNING WINSTONE 96

Record number: H132815

Device: D/T6877
Model: M
Tip key:
Date created: 096/02/28
Date last altered: A96/02/28

SYMPTOM:

IBM PC 700 Series 6877 and 6887 may intermittently exhibit a narrow multicolored horizontal line across the display after exiting from the Winstone 96 Benchmark application. The line is approximately 1cm from the top edge of the screen.

PROBLEM ISOLATION AIDS:

IBM PC 700 6877 or 6887 with S3 Windows95 video drivers loaded.

FIX:

Maximize the DOS window then restore the window to it's normal size.

Winstone 96 is a trademark of the Microsoft Corporation.

SAS KEYWORDS:

PSY2	D/T68XX	6887	6877
IBMPC	PSVP	PSVPDISP	PSY2DISP
D/T6887	PC730	PC700	PC 730
PC 750	PC750	40409	

1.4.817 INTERMITTENT 161 POST ERRORS ON PC 700 6877/6887

Record number: H136064

Device: D/T6877
 Model: M
 Tip key:
 Date created: 097/01/13
 Date last altered: A97/01/13

SYMPTOM:

IBM PC 700 Series 6877 & 6887 systems may exhibit a 161 POST error during installation or if the system has been removed from an AC power source for at least 90 days. A 161 POST error indicates a defective CMOS battery or a Date/Time error has occurred.

A 184 POST error indicating to the user to enter a new power-on password may also occur along with the 161 POST error.

PROBLEM ISOLATION AIDS:

Affected systems will exhibit 161 or 161/184 POST errors under the following conditions:

- 1) During the installation process at the initial power-on only. Subsequent power-on cycles DO NOT POST a 161 error after setting the Date/Time entries in the Setup Utility.
- 2) Systems that are placed in storage for periods exceeding 90 days (3 months) and exhibit a 161 POST error at installation.
- 3) Systems that are disconnected from the AC power source periodically, either via a circuit breaker or power strip and exhibit intermittent 161 POST errors.

FIX:

Perform the following step to eliminate this problem:

- 1) Remove the AC line cord from the wall outlet or power strip. Measure the battery voltage using a voltmeter, from the top of the battery located on the right side, center of the system board, to the chassis (ground). Pin 1 of the J15 CMOS/Password Clear jumper location, may also be used for a Ground probe point. DO NOT remove the battery from the system board to measure the battery capacity.

A good battery will measure in the range of 2.3 to 3.0 vdc.

- A) If the battery voltage is higher than 2.3 vdc, it is unlikely the battery has caused the 161 or 184 POST errors. Continue with normal problem determination.
- B) If the battery voltage is 2.3vdc or lower, replace the battery, FRU P/N33F8354.

SAS KEYWORDS:

PSY2	68XX	D/T68XX	D/T6887
PSVP	IBMPC	PSVPBRD	PSY2BRD
PSVPERR	PSY2ERR	PSVPPART	PSY2PART
PC-700	PC700	PC 730	

1.4.818 INTERMITTENT 162 POST ERRORS W/MITSUMI IDE CDROM

Record number: H131802

Device: D/T6576
 Model: M
 Tip key:
 Date created: 095/11/28
 Date last altered: A95/11/28

SYMPTOM:

IBM PC 300 Series 6576 and 6586 systems may display intermittent 162 POST errors with a Mitsumi 4X IDE CDROM drive installed. The Setup Utility will show that the CDROM drive is not installed.

PROBLEM ISOLATION AIDS:

The 162 POST error occurs after a warm boot operation. The error can be reset by either another warm boot operation (Ctrl-Alt-Del) or by powering off/on the system. Another 162 POST error will occur indicating that the CDROM drive is present. The system should boot with no POST errors after saving the configuration settings.

FIX:

Engineering is currently investigating the cause of this failure. This tip will be updated with information regarding the fix as soon as it is available.

SAS KEYWORDS:

PSY2	PSVP	IBMPC	PC330
PC350	PC 330	PC 350	PSVPADPT
PSY2ADPT	PSY2CDROM	PSVPCDROM	PSVPOEM
PSY2OEM	PSVPPART	PSY2PART	CD ROM
D/T6586	6576	6586	PSVPCDROM
PSY2CDROM	PSY2ERR	PSVPERR	

1.4.819 INTERMITTENT 162 POST ERRORS ON 6381/SI

Record number: H123953

Device: D/T6381
Model: M
Tip key:
Date created: 094/05/16
Date last altered: A97/07/13

SYMPTOM:

INTERMITTENT 162 POST ERRORS MAY BE OBSERVED ON 6381/SI 466DX2 SYSTEMS (WXX MODELS) WITH A 212MB OR LARGER WESTERN DIGITAL HARDFILE INSTALLED (ONLY WESTERN DIGITAL DRIVES MADE FOR IBM ARE AFFECTED).

PROBLEM ISOLATION AIDS:

THE CONFIGURATION UTILITY DISPLAYS A 0MB DRIVE SIZE FOR THE WESTERN DIGITAL DRIVE INSTALLED. POWERING THE SYSTEM OFF/ON USUALLY RESETS THE DRIVE SIZE AND ALLOWS THE SYSTEM TO FUNCTION NORMALLY.

FIX:

INSTALL 6381/SI FLASH BIOS UPGRADE 40A OR HIGHER.

VIEW THE FLASH EEPROM LEVEL BY ACCESSING THE CONFIGURATION UTILITY PROGRAM. THE FIFTH, SIXTH AND SEVENTH POSITIONS OF THE EEPROM LEVEL REPRESENT THE CODE LEVEL; FOR EXAMPLE: L8ET27AUS IS CODE LEVEL 27A.

THE FLASH UPDATE 40A MAY BE DOWNLOADED FROM THE TECHNICAL SUPPORT BULLETIN BOARD BY CALLING 919 517-0001.

***** IMPORTANT *****
*
* THESE FLASH UPDATES ARE CUSTOMER INSTALLABLE. CUSTOMERS *
* SHOULD BE ADVISED TO CONTACT THE PC COMPANY HELPCENTER AT *
* 800-772 - 2227 IF ASSISTANCE IS REQUIRED IN GETTING THE *
* APPROPRIATE UPDATE. *

SAS KEYWORDS:

PSVP PSY2 PS/VP 6381
PSVPDIAG PSY2DIAG PSVPERR PSY2ERR
PSVPMCD PSY2MCD VALUEPOINT PSY2FDSK
PSVPFDSK PSVPPART PSY2PART

1.4.820 INTERNAL PROCESSING ERROR AT LOCATION XXXX&COLON. XXXX

Record number: H20560

Device: D/T8550
 Model: M
 Tip key:
 Date created: 093/02/22
 Date last altered: A95/06/30

SYMPTOM:

Running in the OS/2 environment, the following software error message is displayed (without any associated TRAP information):

"Internal Processing Error at Loc. 0218: 4EDB"

Note: the "location" noted in this error message may be any hexadecimal memory address. Typically, it will be the same address each time a reproducible failure occurs.

The system halts and a Cold Boot (power off-on) is required to restart the system.

POST (Power On System Test)* and hardware diagnostics complete without error and the operating system boots. The system runs for awhile, but fails eventually with the same (or very similar) error message.

PROBLEM ISOLATION AIDS:

All information displayed on the screen should be copied and made available for problem analysis.

FIX:

The "Internal Processing Error.." message is software generated and indicates a problem was detected by software during the operation of the application software or operating system.

Since there is no indication of a hardware failure (POST and the diagnostics complete without error), the most effective approach to resolving this problem is to seek assistance from the OS/2 software support center.

NOTES:

* POST is a comprehensive diagnostic and is a valuable indication to the customer/servicer that the basic hardware system is functioning correctly.

For example, the 8590/8595 POST executes approximately 15-20 thousand lines of code to test the function of the processor/memory complex and virtually all additional features and options installed in the system. Each micro channel adapter installed adds to the total run time of POST because the POST process includes executing the Self Test code imbedded in the optional adapters.

Completion of POST without an error is an indication the basic hardware is functional and should instill a high degree of confidence in the system. If POST and the Advanced Diagnostics run error-free, yet problems are being experienced while running applications, the software installation or configuration should be first suspect.

SAS KEYWORDS:

PSY2	D/T8595	D/T8590	D/T9595
D/T9552	PSY2ERR	D/T8580	D/T8565
D/T8570	D/T8560	D/T8550	D/T8577
D/T8556	D/T9585	PSY2PROG	OS/2
DOS	OS2	PS2	PS/2
8600	295	195	PARALAN
PARALLAN	9595A	D/T9595A	D?T8565
PSVP	VP	VALUEPOINT	D/T6381
D/T6382	D/T6384	D/T6387	OS2
OS/2			

1.4.821 INTERNAL PROCESSING ERROR DURING INSTALL OF OS/2

Record number: H20850

Device: D/T95XX
 Model: M
 Tip key:
 Date created: 093/03/30
 Date last altered: A94/08/15

SYMPTOM:

DURING THE INSTALLATION OF OS/2 2.00 OR 1.3 ON A 95XX, THE FOLLOWING ERROR IS DISPLAYED:

"THE SYSTEM DETECTED AN INTERNAL PROCESSING ERROR AT

60000, 6000

THE SYSTEM IS STOPPED. RECORD THE LOCATION NUMBER OF THE ERROR AND CONTACT YOUR SERVICE REPRESENTATIVE."

PROBLEM ISOLATION AIDS: NONE**FIX:**

FOR OS/2 VERSION 2.00:

1. USING ANOTHER MACHINE, CREATE A BACKUP COPY OF THE OS/2 INSTALLATION DISKETTE AND DISKETTE 1.
2. USING THE REFERENCE DISKETTE, FROM THE SYSTEM YOU ARE GOING TO INSTALL OS/2 2.00 ON:
 - A) COPY THE ABIOS.SYS FILE FROM THE REFERENCE DISKETTE TO BOTH THE INSTALLATION DISKETTE AND DISKETTE 1.
 - B) COPY THE *.BIO FILE FROM THE REFERENCE DISKETTE TO BOTH THE INSTALLATION DISKETTE AND DISKETTE 1.

Note: If insufficient room exists on the backup copy of the Installation Diskette for the new *.BIO files you may delete the existing (old) *.BIO files from the backup Installation Diskette.

3. INSTALL OS/2 2.00 USING THE NEWLY CREATED OS/2 INSTALLATION DISKETTE AND DISKETTE 1.

NOTE: THE NEW COPIES OF THE INSTALLATION DISKETTE AND DISKETTE 1 ARE UNIQUE TO THE SYSTEM TYPE IT WAS USED ON.

FOR OS/2 VERSION 1.3:

1. USING ANOTHER MACHINE, CREATE A BACKUP COPY OF THE OS/2 INSTALLATION DISKETTE.
2. USING THE REFERENCE DISKETTE, FROM THE SYSTEM YOU ARE GOING TO INSTALL OS/2 1.3 ON:
 - A) COPY THE ABIOS.SYS FILE FROM THE REFERENCE DISKETTE TO THE INSTALLATION DISKETTE.
 - B) COPY THE *.BIO FILE FROM THE REFERENCE DISKETTE TO THE INSTALLATION DISKETTE.
3. INSTALL OS/2 1.3 USING THE NEWLY CREATED INSTALLATION DISKETTE.

NOTE: THE NEW COPY OF THE INSTALLATION DISKETTE IS UNIQUE TO THE SYSTEM TYPE IT WAS USED ON.

OS/2 VERSION 1.3 IS NOT SUPPORTED ON THE 9552 700 OR 720 THINKPAD MOBILE SYSTEMS.

| Note:

| When encountering an Internal Processing Error on a Server 85
 | and copying the ABIOS.SYS and *.BIO files as identified above,
 | be aware that there are two versions of the 9585. Each version
 | uses a unique reference diskette as identified below. Failure
 | to use the correct diskette may result in TRAP 0002 or time
 | out errors during the subsequent installation of OS/2.

| - If you are installing OS/2 on a 9585-0Xx, use the ABIOS.SYS
 | and the *.BIO from the 1.11 reference diskette.

| - If you are installing OS/2 on a 9585-0Kx or 9585-0Nx, use
 | the ABIOS.SYS and the *.BIO from the 1.32 reference
 | diskette.

SAS KEYWORDS:

PSY2

PSY2ERR

9585SYSERR

SOFTWARE

PSY2 RETAIN TIPS

INTERNAL PROCESSING ERROR DURING INSTALL OF OS/2

DEAD	ERRORS	HANGS	PROCESSING
SERVER 85	PS/2	PSY2PROG	POST
FAILURE	FAILS	HANG	INSERT
D/T9585	D/T9595	D/T9556	D/T9557
D/T9576	D/T9577	D/T9552	

1.4.822 INTERNAL PROCESSING ERROR & SYSTEM HALTS ON PC 300/700

Record number: H00993

Device: D/T6576
 Model: M
 Tip key:
 Date created: 096/03/29
 Date last altered: A97/04/18

SYMPTOM:

IBM PC 300 and 700 Series 6576, 6586, 6877 and 6887 systems may display an Internal Processing Error during IPL of OS/2. The Internal Processing Error will halt system operation after 5 seconds and require a power off/on cycle to clear the error.

When the system is powered-on and the IPL process begins, the Internal Processing Error will display again. The system is not functional at this point.

Following is the error message that is displayed at the time of failure:

```
"The system detected an Internal      (X = alpha numeric data
Processing error at location          which will vary by machine)
# XXXXXXXXXXXXXXX - XXXX: XXXXXXXX
Internal Revision X.XXX, YY/MM/DD
The system is stopped. Record all
of the above information and contact
your service representative."
```

PROBLEM ISOLATION AIDS:

Affected 6576, 6586, 6877 and 6887 systems contain the S3 Trio 64 & 64+ video chipset, AND the following software and firmware:

- OS/2 version 2.11, WARP 3.0 or WARP Connect
- IBM AntiVirus for OS/2 V2.3 or higher.
- Version 2.80.16 or 2.80.18 S3 Trio 64/64+ Device Drivers for OS/2 or any video device driver that was written using the OS/2 DDK 3 (Device Driver Kit 3 - developers kit). Contact the manufacturer of the device driver to determine if OS/2 DDK 3 was used.

The error occurs as a result of the OS/2 operating system running a portion of the DOS AUTOEXEC.BAT file during IPL. The AUTOEXEC.BAT file contains a command that starts the IBM AntiVirus program. The IBM AntiVirus program contains code that activates on a predetermined date to prompt the user to update the AntiVirus application. This code is activated when the AntiVirus program is 7 months or older.

When the actual date reaches the predetermined date in the AntiVirus application, IBM AntiVirus attempts to display a warning message during IPL of OS/2. This process violates the system integrity and produces an Internal Processing Error.

FIX:

Do not replace hardware. This is not a hardware problem.

NOTE: OS/2 and IBM AntiVirus programs used separately or together will NOT cause this error to occur. ONLY the combination of OS/2, IBM AntiVirus and S3 device drivers 2.80.16 or 2.80.18 will cause this failure.

To recover from this failure, the user must utilize either of the following steps:

Option 1: (Temporary Workaround)

Power the system off/on. During the memory count press F1 to access the Setup Utility. Set the system date back 1 month. Save and exit the Setup Utility.

By setting the date back 1 month, the IBM AntiVirus program will not attempt to display the update warning message.

Option 2: (Permanent Fix)

Perform Option #1. Re-IPL OS/2 and use the steps below to obtain S3 device driver V2.81.05 from the IBM BBS.

The latest S3 device driver may be obtained from the IBM PC Company BBS system by calling 1-919-517-0001. View the "IBM PC 300/700 Files" section (section #21) for the file titled:

Z01T17A.DSK - V2.81.05 S3 Trio 64/64v+ Driver for OS/2

PSY2 RETAIN TIPS

INTERNAL PROCESSING ERROR SYSTEM HALTS ON PC 300/700

The updated device drivers may also be downloaded via the Internet from the IBM Personal Computer File Library by searching the following Internet URL:
<http://www.us.pc.ibm.com/files.html>

The update is located in the IBM PC 300 & 700 Series Files Section or by using the search facility to locate the file by the names listed above.

After the installation of the S3 V2.81.05 device driver, the system date can be reset to reflect the actual date.

Trio64 & Trio64+ are trademarks of S3, Inc.

SAS KEYWORDS:

PSY2	D/T65XX	65XX	6585
IBMPC	PSVP	PSVPERR	PSY2ERR
PSY2PROG	PSVPPROG	PSY2DISP	PSVPDISP
D/T6576	D/T6586	D/T6877	D/T6887
HANG	HUNG	LOCKED	PC 350
PC 730	PC 750	PC 330	6576
6586	6877	6887	

1.4.823 INTERNAL 245MB/270MB SCSI DRIVE NOT RECOGNIZED

Record number: H124112

Device: D/T9557
 Model: M
 Tip key:
 Date created: 094/05/27
 Date last altered: A95/03/27

SYMPTOM:

9556/57 9576s/77s Systems will not recognize the internal 245Mb or 270Mb disk after an external SCSI device is connected to the external SCSI connector (J6).

PROBLEM ISOLATION AIDS:

After removing the 50 pin terminator from the external SCSI device, the system recognizes the internal 245Mb / 270Mb SCSI drive.

FIX:

Replace the 50 pin external terminator with the new 50 pin active terminator. Mechanicsburg has inventory of the new active terminator. It can be identified by the word ACTIVE printed on the terminator, following the FRU number (FRU#92F0057A-Active) Some external devices that use this terminator are the 3509, 3510, 3532 expansion units, 2456 Scanners, etc.

SAS KEYWORDS:

PSY2	D/T9556	D/T2456	D/T3509
D/T3510	D/T3532	9556	9557
D/T9576	D/T9577	D/T9576S	D/T9577S
9576	9577	245	270

1.4.824 INTERNET EXPLORER HANGS IN IBM WELCOME CENTER

Record number: H162998

Device: D/T6898
 Model: M
 Tip key:
 Date created: 098/03/12
 Date last altered: A98/04/09

SYMPTOM:

When clicking on the links in the left hand frame of IBM Welcome Center, Internet Explorer intermittently goes into a hang condition.

PROBLEM ISOLATION AIDS:

This tip applies to IBM IntelliStation M-Pro Series 6898 and 6889 systems preloaded with WindowsNT 4.0 and Internet Explorer 3.xx.

FIX:

Using the "IE 4 Setup" icon provided on the WindowsNT desktop, upgrade Internet Explorer 3.x to version 4.0.

If Internet Explorer 3.x is presently in a hang condition, close the application via the following steps:

1. Pres ALT+CLT+DEL to display Tasklist Manger.
2. Select tab "Applications."
3. Select Internet Explorer with Status "Not Responding."
4. Click End Task.
5. Close Task Manager.

To upgrade Internet Explorer to version 4.0, double click on the "IE 4 Setup" icon and follow the displayed instructions.

Windows and WindowsNT are trademarks of Microsoft Corporation.

SAS KEYWORDS:

PSY2	PSY2MISC	PSY2OPER	PSVP
PSVPMISC	PSVPOPER	87902	87902F_1
D/T6898	6898	IE40	UNCLASSIFIED
D/T6889	6889	91048	

1.4.825 INTRANETWARE FAILS INSTALL W/ 7870 DRIVER ON 7895 CONTROLLER

Record number: H163507

Device: D/T8644
 Model: M
 Tip key:
 Date created: 098/02/20
 Date last altered: A98/04/29

SYMPTOM:

After selecting the AIC7870.dsk driver during a Netware 4.11 installation, the following screen prompts for a slot # parameter for the AIC7870.dsk driver and will not allow the install to be continued unless a slot# parameter is inputted. The resulting attempt to load the AIC7870.dsk driver using ANY Slot# parameter results in a failure of the driver to load.

PROBLEM ISOLATION AIDS:

- The System is any model IBM Netfinity server 3500 type 8644 properly configured with the primary hard drive supported by the on-board 7895 SCSI Controller.
- Novell IntraNetWare 4.11 is being installed.

Note:

The AIC7870.dsk driver version is not relevant to the issue.

FIX:

- 1 - When prompted for the Slot# parameter for the AIC7870.dsk driver during the Netware 4.11 installation, press the CTRL-ESC Keys, and select the "System Console" screen.
- 2 - Type the following at the server prompt IF installing without ServerGuide 4.0.1 or greater:

```
LOAD C: \NWSERVER\AIC7870.DSK
```

Then press <enter>.

----- OR -----

Type the following at the server prompt IF installing with ServerGuide 4.0.1 or greater:

```
LOAD C: \AIC7870.DSK
```

Then press <enter>.

NOTE: In either case, there will NOT be a slot # displayed when the driver loads.

- 3 - Press the CTRL-ESC keys, select the "Install" Screen.
- 4 - Select "Continue Installation"

DETAIL:

The AIC7870 Driver will not load and does not require a SLOT # when used with the 7895 SCSI Controller. Novell IntraNetWare will normally identify a slot # and not prompt for it when the driver is used with the 7870 or 7880 controller/adaptor. By default, NetWare will not allow the installation to be continued due to missing a slot value that it was unable to detect for the 7895 controller, thus the prompt. Due to this and the fact that the driver will only load without a slot # when applied to the 7895 controller, the solution is to leave the installation, load the driver manually w/o a slot #, then return to the installation. With the driver already loaded, the installation program no longer prompts for a slot# and may be continued. NetWare and IntraNetWare are trademarks of Novell Inc.

SAS KEYWORDS:

PSY2	D/T8644	UNCLASSIFIED	NOVELL
PSY2INSTALL	DRIVER	AIC7870	7870
7895	3500	INTRANETWARE	

1.4.826 IOS ERROR DURING INITIAL BOOT ON IBM PC6588-12U

Record number: H16447

Device: D/T6588
 Model: M
 Tip key:
 Date created: 097/07/15
 Date last altered: A97/07/18

SYMPTOM:

During the initial boot-up on IBM PC6588-12U systems preloaded with Windows95, the user may see an error message or hang condition similar to the following examples:

A "Cannot write to registry file, disk full" error message
 An IOS Error: "Error: An I/O subsystem driver failed to load"
 A hang condition at the "Setting Up Hardware" window
 A hang condition at the main Windows95 logo screen
 A Windows Protection Error message

PROBLEM ISOLATION AIDS:

NOTE: If the system HAS NOT been powered on for the first time, perform Steps 2-7 in STEP 1 below to prevent these errors from occurring.

A limited number of 6588-12U systems will experience problems upon the initial boot of the Windows95 preload. Those systems that manifest problems can be recovered by following the fix procedures below.

FIX:

STEP 1:

1. Power off the system.
2. Remove any installed adapter cards.
3. Power the system back on and press F1 for the Setup Utility.
4. Highlight "Start Options" and press <Enter>.
5. Highlight "Configuration Mode" then use the arrow keys to select "Use BIOS Setup" and press <Enter>.
6. Highlight "Exit Setup" and press <Enter>.
7. Highlight "Yes, save and exit the Setup Utility" and press <Enter>.
8. Optional: If the Microsoft Windows95 Startup Menu Option is displayed when rebooting after following this procedure, select option "#1. Normal."

Some 6588 - 12U systems that experienced problems on the initial boot of Windows95 have Device Manager conflicts. Yellow caution indicators will appear underneath the "Sound, Video, and Game Controllers" section beside the "Creative Labs Sound Blaster Pro" and the "Crystal PnP Audio System CODEC" devices. Those systems can be correctly configured by following the procedure below.

STEP 2:

1. From the Windows95 desktop, right click the "My Computer" icon and select "Properties."
2. From the System Properties Menu, select the "Device Manager" tab.
3. Highlight the "Creative Labs Sound Blaster Pro" device underneath the "Sound, video, and game controllers section and select Remove.
4. Select Close from the System Properties Window.
5. From the Taskbar select Start, then select Shutdown, then select "Restart the Computer?" and choose Yes.
6. As the system is rebooting, press F1 for the Setup Utility.
7. Highlight "Start Options" and press <Enter>.
8. Highlight "Configuration Mode" then use the arrow keys to select "Use PNP OS" and press <Enter>.
9. Press <Esc>, then highlight "Exit Setup" and press <Enter>.
10. Highlight "Yes, save and exit the Setup Utility" and press <Enter>.
11. After the Windows95 desktop is displayed, select Start, then select Shutdown, then select "Restart the Computer?" and choose Yes.
12. As the system is rebooting, press F1 for the Setup Utility.
13. Highlight "Start Options" and press <Enter>.
14. *Highlight "Configuration Mode" then use the arrow keys to select "Use BIOS Setup" and press <Enter>.
15. Press <Esc>, then highlight "Exit Setup" and press <Enter>.
16. Highlight "Yes, save and exit the Setup Utility" and press <Enter>.

PSY2 RETAIN TIPS

IOS ERROR DURING INITIAL BOOT ON IBM PC6588-12U

*Configuration Mode is set back to "Use BIOS Setup" in order to maintain compatability with system management software.

If at anytime during this procedure Windows95 will not allow the steps to be followed because of hang conditions or other error messages, contact the IBM PC HelpCenter at 1 - 800-772 - 2227.

-Windows and Windows95 are trademarks of Microsoft Corporation

SAS KEYWORDS:

PSY2	PSY2OPER	PSY2PROG	PSY2ERR
PSVP	PSVPOPER	PSVPPROG	PSVPERR
D/T6588	6588	UNCLASSIFIED	PC300-XL
PC300XL			

1.4.827 IPX/SPX ERROR USING WORKGROUPS FOR WINDOWS

Record number: H131112

Device: D/T6885
 Model: M
 Tip key:
 Date created: O95/10/03
 Date last altered: A95/10/03

SYMPTOM:

IBM PS/ValuePoint, ValuePoint Performance Series, and PC 300 and 700 Series systems may display an "IPX/SPX Connection Error" and a system hang condition while running Workgroups for Windows 3.11 in a Novell Netware environment.

PROBLEM ISOLATION AIDS:

During the installation of Workgroups for Windows, the protocol "IPX/SPX Compatible Transport with NetBIOS" is selected. As a part of the installation process, NWLINK.386 which is a new 32 bit IPX/SPX Transport Protocol driver shipped with Workgroups for Windows, is included in the Windows SYSTEM.INI file.

NWLINK.386 does not provide full IPX/SPX API compatibility for SPX based applications. This problem is documented by Novell in documentation ID TID021979.

SPX-Sequenced Packet Exchange
 IPX-Internet Packet Exchange

FIX:

Install VIPX.386, which is also a virtual IPX/SPX driver shipped with Workgroups for Windows, in place of NWLINK.386 in the SYSTEM.INI file located in the WINDOWS directory.

Microsoft is currently investigating the problem with NWLINK.386 and may be contacted if further assistance is required. The Microsoft service reference number for this problem is SRG950810955755.

Windows and Workroups for Windows are a trademarks of the Microsoft Corporation.

SAS KEYWORDS:

PSVP	PSY2	PSVPPROG	PSY2PROG
PSVPERR	PSY2ERR	PSVPCOMM	PSY2COMM
IBMPC	D/T68XX	68XX	D/T65XX
65XX	D/T6381	D/T6382	D/T6384
D/T6387	D/T6472	D/T6482	D/T6484
D/T6492	D/T6494	D/T6571	D/T6573
D/T6581	D/T6583	D/T6575	D/T6585
D/T6576	D/T6586	D/T6875	D/T6885
D/T6876	D/T6886	VALUE POINT	HUNG
LOCKUP	PC750	PC 750	PC730
PC 730	PC330	PC 330	PC350
PC 350			

IRWIN TAPE DRIVES-READ/WRITE ERRORS, FORMAT FAILURES

1.4.828 IRWIN TAPE DRIVES-READ/WRITE ERRORS, FORMAT FAILURES

Record number: H00736

Device: D/T1546
 Model: M
 Tip key:
 Date created: 091/04/09
 Date last altered: A91/04/09

SYMPTOM: READ OR WRITE ERRORS, FORMAT FAILURES, OR LARGE NUMBERS OF BAD BLOCKS.

PROBLEM ISOLATION AIDS: IF EXPERIENCING READ OR WRITE ERRORS, FORMAT FAILURES, OR LARGE NUMBERS OF BAD BLOCKS, THE HEAD AND CAPSTAN MAY REQUIRE CLEANING. THIS SHOULD BE DONE BEFORE REPLACING THE TAPE DRIVE.

FIX: USE IBM SOLVENT PN#2200200 AND COTTON SWAB PN#69X7671 TO CLEAN THE READ/WRITE HEAD AND CAPSTAN. IN CLEANING THE READ/WRITE HEAD, GENTLY RUB THE ALCHOL-DAMPENED SWAB AGAINST THE HEAD. IF NECESSARY, USE A SECOND SWAB UNTIL FURTHER RUBBING DOES NOT DISCOLOR THE SWAB. WHEN CLEANING THE CAPSTAN, RUB THE ALCOHOL-DAMPENED SWAB AGAINST THE SURFACE OF THE CAPSTAN USING AN UP-AND-DOWN MOTION. GENTLY PUSH THE EDGE OF THE CAPSTAN WITH THE TIP OF THE SWAB TO ROTATE ADDITIONAL UNCLEANNED SURFACE INTO VIEW. ALLOW ONE MINUTE FOR RESIDUAL ALCOHOL TO EVAPORATE BEFORE USING THE DRIVE.

BOTH THE HEAD AND CAPSTAN ARE ACCESSIBLE THROUGH THE FLIP-UP DRIVE DOOR. THE CAPSTAN IS THE HORIZONTAL RUBBER WHEEL IN THE CENTER OF, AND 1 3/4 INCHES INSIDE, THE OPENING; THE HEAD IS THE LARGE METAL PART BESIDE AND TO THE RIGHT OF THE CAPSTAN.

NOTES: DO NOT USE COSMETIC SWABS AND DO NOT CLEAN THE READ/WRITE HEAD WITH A SWAB USED TO CLEAN THE CAPSTAN. NEVER APPLY A LUBRICANT TO THE DRIVE.

SAS KEYWORDS:

5150SYSNLGO	5155SYSNLGO	5160SYSNLGO	5170SYSNLGO
8530SYSNLGO	8550SYSNLGO	8560SYSNLGO	8570SYSNLGO
8580SYSNLGO	PSY2PART	POEM	OEMPART
SYS2OEM	OEMTAPE	PCOMOEM	POEMTAPE
IRWIN			

1.4.829 PC SERVER 330&COLON. BOOT ERROR AFTER ADDING SERVERAID II_ADAPTER

Record number: H162191

Device: D/T8640
Model: M
Tip key:
Date created: 097/12/11
Date last altered: A97/12/11

SYMPTOM:

"Non system disk" or "No Boot Device found" errors reported after installing a ServeRAID II adapter in any of the Primary PCI slots.

-- OR --

The system boots to a bootable device attached to the ServeRAID II adapter instead of booting to a bootable device attached to the integrated ServeRAID controller.

PROBLEM ISOLATION AIDS:

The system is a PC Server 330 type 8640 model PT0/PB0/PM0 that is configured to boot to a device attached to the integrated ServerRAID controller.

A ServeRAID II adapter is located in a Primary PCI slot (PCI slots 1,2, and 3 are Primary PCI slots). This adapter may or may not have a bootable device attached to it.

FIX:

Move the ServeRAID II adapter to the Secondary PCI slots so the System will boot to the integrated ServeRAID controller.

NOTE: PCI slots 4,5, and 6 are Secondary PCI slots.

SAS KEYWORDS:

PSY2	PSY2BOOT	UNCLASSIFIED	D/T8640
PT0	PB0	PM0	SERVERAID II

Record number: H161014

Device: D/T6562
 Model: M
 Tip key:
 Date created: 097/09/09
 Date last altered: A98/02/05

SYMPTOM:

When adding a network adapter via "Network" in Control Panel or during a new installation of WindowsNT, the network adapter is not shown. After choosing "Select From List," then "Have Disk," the following or similar error occurs when trying to copy files from the driver diskette:

An error has occurred:
 Unable to open the file x: \i386\OEM_FILE_NAME

PROBLEM ISOLATION AIDS:

The error may occur under both WindowsNT Workstation version 4.0 and WindowsNT Server version 4.0.

The error may be seen on any network adapter that requires a "Have Disk" function on installation including, but not limited to, the following network adapters:

IBM Turbo 16/4 ISA adapter	Option P/N72H3482
IBM PCI 16/4 Wake on LAN adapter	Option P/N86H1880
IBM PCI 16/4 adapter	Option P/N41H8900

FIX:

1. IBM Turbo 16/4 ISA adapter only:

Download and extract OEMSETNT.EXE from the IBM BBS or IBM BBS web site. Backup the OEMSETUP.INF file in the \NT subdirectory on the drivers disk, copy the new OEMSETUP.INF file from the downloaded disk to the same directory, and reinstall the adapter as usual.

2. IBM 16/4 ISA and IBM PCI 16/4 Wake on LAN adapters only:

Backup the OEMSETUP.INF file found in the \NT subdirectory on the drivers disk, rename the OEMSETUP.NT4 file in the same directory to OEMSETUP.INF, and reinstall the adapter as usual.

3. Any other network adapter that exhibits the symptom:

Contact the manufacturer for an updated OEMSETUP file per Microsoft Knowledge Base article Q156606. For IBM network adapters contact Network Hardware support at 1-800-772-2227.

OEMSETNT.EXE can be downloaded from the IBM BBS at 919-517-0001 or from the IBM web site: www.us.pc.ibm.com/searchfiles.html

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SAS KEYWORDS:

PSY2	PSY2ERR	PSY2OPER	PSY2ADPT
PSY2OEM	PSVP	PSVPERR	PSVPOPER
PSVPADPT	PSVPOEM	D/T6282	D/T6560
D/T6562	D/T6577	D/T6587	D/T6588
D/T6589	D/T6592	D/T6877	D/T6887
D/T6888	D/T6898	D/T6899	UNCLASSIFIED
PSY2COMM	PSVPCOMM	D/T8644	NETFINITY 3500
8644			

1.4.831 I999XXXX ERRORS ON PS/2 SYSTEMS

Record number: H097022

Device: D/T8557
Model: M
Tip key:
Date created: 091/08/27
Date last altered: A93/12/17

SYMPTOM:

PS/2 SYSTEM DISPLAYS AN I999XXXX POST ERROR CODE (XXXX CAN BE ANY NUMBER).

PROBLEM ISOLATION AIDS:

THE PS/2 MAINTAINS IML MICROCODE ON THE DEFAULT FIXED DISK. IF THIS INFORMATION IS MISSING OR INACCESSIBLE, THE RESULT WILL USUALLY BE AN I999XXXX ERROR. THIS ERROR WILL ALSO BE DISPLAYED IF THE OPERATING SYSTEM SOFTWARE CANNOT BE FOUND.

NOTE: THE DEFAULT FIXED DISK IS THE DRIVE CONFIGURED AS SCSI DEVICE ID=6, DETERMINED BY THE DRIVE SWITCHES OR JUMPERS. USE "SET CONFIGURATION" TO VERIFY THE DEFAULT DRIVE SCSI ID.

FIX:

THE FOLLOWING STEPS WILL ELIMINATE MOST I999XXXX ERRORS:

1. INSURE THAT THE SELECTABLE BOOT SEQUENCE IS VALID:
 - BOOT THE REFERENCE DISKETTE.
 - SELECT "SET FEATURES" FROM THE MAIN MENU.
 - SELECT "SET STARTUP SEQUENCE."
 - CHECK THE LIST OF DEVICES IN THE "SET STARTUP SEQUENCE." IS THE DEFAULT FIXED DISK IN THE STARTUP SEQUENCE?
 - YES: RETURN TO THE MAIN MENU. CONTINUE WITH STEPS 2 & 3.
 - NO: CHANGE AND SAVE THE STARTUP SEQUENCE TO INCLUDE THE DEFAULT FIXED DISK (6,0), THEN TURN OFF THE COMPUTER. IF AN I999XXXX ERROR OCCURS AT POWER-ON, CONTINUE WITH STEPS 2 & 3.
2. RESTORE THE SYSTEM PARTITION.
 - BOOT THE CUSTOMER'S REFERENCE DISKETTE.
 - SELECT "BACKUP/RESTORE SYSTEM PROGRAMS."
 - SELECT "RESTORE THE SYSTEM PARTITION."
 - FOLLOW INSTRUCTIONS ON THE SCREEN.
3. VERIFY THAT THE CUSTOMER HAS AN OPERATING SYSTEM INSTALLED.
 - THE OPERATING SYSTEM SOFTWARE MUST BE PROPERLY INSTALLED ON ONE OF THE DEVICES IN THE STARTUP SEQUENCE.

IF THESE STEPS DO NOT ELIMINATE THE I999XXXX ERROR, REFER TO THE HMS FOR FRU ISOLATION.

THE FOLLOWING IS FOR SEARCH ASSISTANCE ONLY:

I9990011 I9990012 I9990013 I9990014 I9990015 I9990016 I9990017
I9990019 I9990021 I9990022 I9990023 I9990024 I9990025 I9990026
I9990027 I9990029 I9990031 I9990032 I9990033 I9990034 I9990035
I9990036 I9990037 I9990039
I9990041 I9990042 I9990043 I9990044 I9990045 I9990046 I9990047
I9990049 I9990051 I9990052 I9990053 I9990054 I9990055 I9990056
I9990057 I9990059 I9990061 I9990062 I9990063 I9990064 I9990065
I9990066 I9990067 I9990069
I9990071 I9990072 I9990073 I9990074 I9990075 I9990076 I9990077
I9990079 I9990091 I9990093 I9990094 I9990095 I9990096
I9990097 I9990099 I9990301 I9990302 I9990303 I9990305 I9990306
I9990401 I9990402 I9990403
I9990081 I9990082 I9990083 I9990084 I9990085 I9990086 I9990087
I9990089

SAS KEYWORDS:

PSY2 PSY2FDSK PSY2ERR I999

1.4.832 I999XXXX ERRORS ON PS/2 SYSTEMS WITH IML

Record number: H122028

Device: D/T95XX
 Model: M
 Tip key:
 Date created: 093/12/10
 Date last altered: A93/12/10

SYMPTOM:

PS/2 SYSTEM DISPLAYS AN I999XXXX POST ERROR CODE (XXXX CAN BE ANY NUMBER).

PROBLEM ISOLATION AIDS:

THE PS/2 MAINTAINS IML MICROCODE ON THE DEFAULT FIXED DISK. IF THIS INFORMATION IS MISSING OR INACCESSIBLE, THE RESULT WILL USUALLY BE AN I999XXXX ERROR. THIS ERROR WILL ALSO BE DISPLAYED IF THE OPERATING SYSTEM SOFTWARE CANNOT BE FOUND.

NOTE: THE DEFAULT FIXED DISK IS THE DRIVE CONFIGURED AS SCSI DEVICE ID=6, DETERMINED BY THE DRIVE SWITCHES OR JUMPERS. USE "SET CONFIGURATION" TO VERIFY THE DEFAULT DRIVE SCSI ID.

FIX:

THE FOLLOWING STEPS WILL ELIMINATE MOST I999XXXX ERRORS:

1. INSURE THAT THE SELECTABLE BOOT SEQUENCE IS VALID:
 - BOOT THE REFERENCE DISKETTE.
 - SELECT "SET FEATURES" FROM THE MAIN MENU.
 - SELECT "SET STARTUP SEQUENCE."
 - CHECK THE LIST OF DEVICES IN THE "SET STARTUP SEQUENCE." IS THE DEFAULT FIXED DISK IN THE STARTUP SEQUENCE?
 - YES: RETURN TO THE MAIN MENU. CONTINUE WITH STEPS 2 & 3.
 - NO: CHANGE AND SAVE THE STARTUP SEQUENCE TO INCLUDE THE DEFAULT FIXED DISK (6,0), THEN TURN OFF THE COMPUTER. IF AN I999XXXX ERROR OCCURS AT POWER-ON, CONTINUE WITH STEPS 2 & 3.
2. RESTORE THE SYSTEM PARTITION.
 - BOOT THE CUSTOMER'S REFERENCE DISKETTE.
 - SELECT "BACKUP/RESTORE SYSTEM PROGRAMS."
 - SELECT "RESTORE THE SYSTEM PARTITION."
 - FOLLOW INSTRUCTIONS ON THE SCREEN.
3. VERIFY THAT THE CUSTOMER HAS AN OPERATING SYSTEM INSTALLED.
 - THE OPERATING SYSTEM SOFTWARE MUST BE PROPERLY INSTALLED ON ONE OF THE DEVICES IN THE STARTUP SEQUENCE.

IF THESE STEPS DO NOT ELIMINATE THE I999XXXX ERROR, REFER TO THE HMS FOR FRU ISOLATION.

THE FOLLOWING IS FOR SEARCH ASSISTANCE ONLY:

I9990011 I9990012 I9990013 I9990014 I9990015 I9990016 I9990017
 I9990019 I9990021 I9990022 I9990023 I9990024 I9990025 I9990026
 I9990027 I9990029 I9990031 I9990032 I9990033 I9990034 I9990035
 I9990036 I9990037 I9990039
 I9990041 I9990042 I9990043 I9990044 I9990045 I9990046 I9990047
 I9990049 I9990051 I9990052 I9990053 I9990054 I9990055 I9990056
 I9990057 I9990059 I9990061 I9990062 I9990063 I9990064 I9990065
 I9990066 I9990067 I9990069
 I9990071 I9990072 I9990073 I9990074 I9990075 I9990076 I9990077
 I9990079 I9990091 I9990093 I9990094 I9990095 I9990096
 I9990097 I9990099 I9990301 I9990302 I9990303 I9990305 I9990306
 I9990401 I9990402 I9990403
 I9990081 I9990082 I9990083 I9990084 I9990085 I9990086 I9990087
 I9990089

SAS KEYWORDS:

PSY2	PSY2FDSK	PSY2ERR	I999
D/T9556	D/T9557	D/T9576	D/T9577
D/T9585	D/T9590	D/T9595	D/T9553
9556	9557	9576	9577
9585	9590	9595	9553

1.4.833 I999XXXX ERRORS ON PS/2 SYSTEMS WITH IML

Record number: H162231

Device: D/T9032
 Model: M
 Tip key:
 Date created: 097/12/17
 Date last altered: A97/12/17

SYMPTOM:

PS/2 SYSTEM DISPLAYS AN I999XXXX POST ERROR CODE (XXXX CAN BE ANY NUMBER).

PROBLEM ISOLATION AIDS:

THE PS/2 MAINTAINS IML MICROCODE ON THE DEFAULT FIXED DISK. IF THIS INFORMATION IS MISSING OR INACCESSIBLE, THE RESULT WILL USUALLY BE AN I999XXXX ERROR. THIS ERROR WILL ALSO BE DISPLAYED IF THE OPERATING SYSTEM SOFTWARE CANNOT BE FOUND.

NOTE: THE DEFAULT FIXED DISK IS THE DRIVE CONFIGURED AS SCSI DEVICE ID=6, DETERMINED BY THE DRIVE SWITCHES OR JUMPERS. USE "SET CONFIGURATION" TO VERIFY THE DEFAULT DRIVE SCSI ID.

FIX:

THE FOLLOWING STEPS WILL ELIMINATE MOST I999XXXX ERRORS:

1. INSURE THAT THE SELECTABLE BOOT SEQUENCE IS VALID:
 - BOOT THE REFERENCE DISKETTE.
 - SELECT "SET FEATURES" FROM THE MAIN MENU.
 - SELECT "SET STARTUP SEQUENCE."
 - CHECK THE LIST OF DEVICES IN THE "SET STARTUP SEQUENCE." IS THE DEFAULT FIXED DISK IN THE STARTUP SEQUENCE?
 - YES: RETURN TO THE MAIN MENU. CONTINUE WITH STEPS 2 & 3.
 - NO: CHANGE AND SAVE THE STARTUP SEQUENCE TO INCLUDE THE DEFAULT FIXED DISK (6,0), THEN TURN OFF THE COMPUTER. IF AN I999XXXX ERROR OCCURS AT POWER-ON, CONTINUE WITH STEPS 2 & 3.
2. RESTORE THE SYSTEM PARTITION.
 - BOOT THE CUSTOMER'S REFERENCE DISKETTE.
 - SELECT "BACKUP/RESTORE SYSTEM PROGRAMS."
 - SELECT "RESTORE THE SYSTEM PARTITION."
 - FOLLOW INSTRUCTIONS ON THE SCREEN.
3. VERIFY THAT THE CUSTOMER HAS AN OPERATING SYSTEM INSTALLED.
 - THE OPERATING SYSTEM SOFTWARE MUST BE PROPERLY INSTALLED ON ONE OF THE DEVICES IN THE STARTUP SEQUENCE.

IF THESE STEPS DO NOT ELIMINATE THE I999XXXX ERROR, REFER TO THE PS/2 HARDWARE MAINTENANCE MANUAL FOR FRU ISOLATION.

THE FOLLOWING IS FOR SEARCH ASSISTANCE ONLY:

I9990011 I9990012 I9990013 I9990014 I9990015 I9990016 I9990017
 I9990019 I9990021 I9990022 I9990023 I9990024 I9990025 I9990026
 I9990027 I9990029 I9990031 I9990032 I9990033 I9990034 I9990035
 I9990036 I9990037 I9990039
 I9990041 I9990042 I9990043 I9990044 I9990045 I9990046 I9990047
 I9990049 I9990051 I9990052 I9990053 I9990054 I9990055 I9990056
 I9990057 I9990059 I9990061 I9990062 I9990063 I9990064 I9990065
 I9990066 I9990067 I9990069
 I9990071 I9990072 I9990073 I9990074 I9990075 I9990076 I9990077
 I9990079 I9990091 I9990093 I9990094 I9990095 I9990096
 I9990097 I9990099 I9990301 I9990302 I9990303 I9990305 I9990306
 I9990401 I9990402 I9990403
 I9990081 I9990082 I9990083 I9990084 I9990085 I9990086 I9990087
 I9990089

SAS KEYWORDS:

PSY2	PSY2FDSK	PSY2ERR	I999
D/T9556	D/T9557	D/T9576	D/T9577
D/T9585	D/T9590	D/T9595	D/T9553
9556	9557	9576	9577
9585	9590	9595	9553
9032	9033	D/T9033	

1.4.834 I999XXXX ERRORS ON PS/2 8590, 8595, 9590 AND 9595

Record number: H094855

Device: D/T8590
 Model: M
 Tip key:
 Date created: 091/09/06
 Date last altered: A94/06/13

SYMPTOM:

THE INFORMATION PANEL DISPLAYS AN I999XXXX ERROR CODE DURING POST (POWER-ON SYSTEM TEST). (XXXX CAN BE ANY NUMBER)

PROBLEM ISOLATION AIDS:

THE 8590/95 SYSTEMS MAINTAIN MICROCODE ON THE DEFAULT FIXED DISK. IF THIS INFORMATION IS MISSING OR INACCESSIBLE DURING THE IML (INITIAL MICROCODE LOAD) OF THE FIXED DISK, THE RESULT WILL BE AN I999XXXX ERROR DISPLAYED ON THE INFORMATION PANEL AND/OR DISPLAY. THE SYSTEM WILL BE INOPERATIVE UNTIL THE ERROR CONDITION IS CORRECTED.

NOTE: THE DEFAULT FIXED DISK IS THE DRIVE CONFIGURED AS SCSI DEVICE ID=6, DETERMINED BY THE DRIVE ADDRESS SWITCHES OR JUMPERS. USE "SET CONFIGURATION/VIEW CONFIGURATION" TO VERIFY THE DEFAULT DRIVE SCSI ID.

FIX:

MOST I999XXXX ERRORS CAN BE CORRECTED WITHOUT HARDWARE REPLACEMENT. THE FOLLOWING STEPS WILL CORRECT MOST I999XXXX ERRORS:

1. INSURE THAT THE SELECTABLE BOOT SEQUENCE IS VALID.
 - POWER-ON PASSWORD JUMPER MOVED? * SEE NOTE
 - BOOT THE BACKUP REFERENCE DISKETTE.
 - SELECT "SET FEATURES" FROM THE MAIN MENU.
 - SELECT "SET STARTUP SEQUENCE."
 - CHECK THE LIST OF DEVICES IN THE "SET STARTUP SEQUENCE." IS THE DEFAULT FIXED DISK LISTED IN THE STARTUP SEQUENCE?
 - YES: RETURN TO THE MAIN MENU AND CONTINUE WITH STEPS 2 & 3.
 - NO: "CHANGE" AND "SAVE" THE STARTUP SEQUENCE TO INCLUDE THE DEFAULT FIXED DISK (6,0), THEN TURN OFF THE COMPUTER. (THE CHANGES ARE EFFECTIVE AT THE NEXT POWER-ON.)
 - IF AN I99900XX ERROR OCCURS AGAIN AT POWER-ON, CONTINUE WITH STEPS 2 & 3.
2. RUN DIAGNOSTICS FROM THE REFERENCE DISKETTE.
 - TEST THE DEFAULT FIXED DISK AND SCSI ADAPTER.
 - ERROR CODE? IF YES, REPLACE THE FAILING FRU.
 - OK? PROCEED WITH STEP 3.
3. RESTORE THE SYSTEM PARTITION.
 - PASSWORD JUMPER? * SEE NOTE
 - BOOT THE CUSTOMERS REFERENCE DISKETTE.
 - SELECT "BACKUP/RESTORE SYSTEM PROGRAMS."
 - SELECT "RESTORE THE SYSTEM PARTITION."
 - FOLLOW INSTRUCTIONS ON THE SCREEN.
4. IML TO FIXED DISK SUCCESSFUL? HARDWARE IS NOW FUNCTIONAL AND CUSTOMER SOFTWARE SHOULD SUCCESSFULLY LOAD.
5. VERIFY THAT OPERATING SYSTEM SOFTWARE IS INSTALLED (DOS, OS/2, ETC.)
 - THE OPERATING SYSTEM MUST BE INSTALLED ON ONE OF THE DEVICES IN THE STARTUP SEQUENCE (NORMALLY FIXED DISK DRIVE "C" WHICH IS SCSI ID=6).

*** NOTE-PASSWORD JUMPER:**

IT MAY BE NECESSARY TO MOVE THE POWER-ON PASSWORD JUMPER (J16 - 8595, OR J10-8590) TO ENABLE AN IML TO THE REFERENCE DISKETTE IN DRIVE A. MOVING THIS JUMPER FORCES THE STAGE 1 POST ROUTINE TO BRANCH TO THE DISKETTE, RATHER THAN ATTEMPT TO LOAD STAGE 2 POST FROM THE FIXED DISK SYSTEM PARTITION. (A REFERENCE DISKETTE MUST BE PRESENT IN THE A: DRIVE.) THE STAGE 2 POST CODE ON THE REFERENCE DISKETTE IS IDENTICAL TO THE CODE LOADED ONTO THE SYSTEM PARTITION. MOVING THIS JUMPER SETS ALL DEFAULT VALUES, EXCEPT ASCII TERMINAL MODE. IT SHOULD BE FURTHER NOTED, THAT MOVING THE POWER-ON PASSWORD JUMPER IS EFFECTIVE FOR ONLY 1 POWER-ON CYCLE BECAUSE STAGE 1 POST TRACKS (RECORDS) THE POSITION OF THE JUMPER EACH TIME IT IS RUN.

*** NOTE-ASCII TERMINAL MODE:**

IF ASCII TERMINAL MODE IS SET (96-8N1, VISIBLE IN INFORMATION PANEL), THE BATTERY VOLTAGE MUST BE REMOVED FROM THE PLANAR TO RESET IT. (SLIDE STIFF PAPER UNDER BATTERY CLIP FOR APPROX. 10 TO 15 MINUTES.)

*****IMPORTANT NOTE*****

ASCII TERMINAL MODE WILL BE AUTOMATICALLY SET BY STAGE 1 POST
IF THERE IS NO PRIMARY VIDEO ADAPTER DETECTED (XGA ADAPTER IS
MISSING FROM THE SYSTEM).

THE FOLLOWING ERROR CODES AND CORRESPONDING RECOMMENDED ACTIONS,
MAY BE ENCOUNTERED BY CUSTOMERS AND/OR SERVICERS:

THE ERRORS LISTED BELOW MAY BE CORRECTED BY RESTORING THE
SYSTEM PARTITION: REFER TO STEP 3 ABOVE.

I999001X NO VALID DISK IML RECORD WAS FOUND ON THE FIXED DISK.
I999002X DISK IML RECORD LOAD (READ) ERROR.
I999003X DISK IML RECORD INCOMPATIBLE WITH PLANAR.
I999004X DISK IML RECORD INCOMPATIBLE WITH PROCESSOR CARD.
I999005X DISK IML NOT ATTEMPTED.
I999006X DISK STAGE II IMAGE LOAD (READ) ERROR.
I999007X DISK STAGE II CHECKSUM (READ) ERROR.

THE ERRORS LISTED BELOW CAN BE CORRECTED BY RESTARTING
THE SYSTEM USING A GOOD SYSTEM REFERENCE DISKETTE:

I99900X1 INVALID DISKETTE IML RECORD
I99900X2 DISKETTE IML RECORD LOAD (READ) ERROR
I99900X3 DISKETTE IML RECORD INCOMPATIBLE WITH PLANAR.
I99900X4 DISKETTE IML RECORD INCOMPATIBLE WITH PROCESSOR CARD.
I99900X6 DISKETTE STAGE II IMAGE LOAD (READ) ERROR.
I99900X7 DISKETTE STAGE II IMAGE CHECKSUM ERROR.

I99900X5 DISKETTE IML RECOVERY PREVENTED (VALID PASSWORD AND
CE OVERRIDE JUMPER NOT SET). ACTION: POWER-DOWN,
TOGGLE CE OVERRIDE ON SYSTEM PLANAR (J10 ON THE 8590),
(J16 ON THE 8595), POWER-UP.

I9990301 NO BOOTABLE DEVICE. ACTION: RESTART USING A GOOD
BOOTABLE OPERATING SYSTEM DISKETTE.

I9990302 INVALID DISK BOOT RECORD. ACTION: RESTART USING A
GOOD BOOTABLE OPERATING SYSTEM DISKETTE (I.E., DOS);
INSTALL OPERATING SYSTEM ON FIXED DISK.

I9990303 SYSTEM PARTITION BOOT FAILURE. ACTION: USING SYSTEM
BACKUP REFERENCE DISKETTE, RESTORE SYSTEM PARTITION.

I9990304 NO BOOTABLE DEVICE WITH ASCII CONSOLE. ACTION:
RESTART THE SYSTEM USING BOOTABLE OPERATING SYSTEM
DISKETTE.

I9990305 NO BOOTABLE DEVICE ERROR. RESTART SYSTEM W/DISKETTE
CHECK SELECTABLE BOOT SEQUENCE ON SYSTEM PARTITION.

THE FOLLOWING ERRORS NORMALLY REQUIRE PROCESSOR FRU
REPLACEMENT: .

I9990401 UNAUTHORIZED ACCESS.
I9990402 MISSING ROM IBM COPYRIGHT NOTICE
I9990403 NON-IBM IML ROUTINE
I9990600 IML OVERLAY LOGISTICS ERROR
I9990607 IML OVERLAY CHECKSUM ERROR
I9990609 IML OVERLAY ID ERROR

The following information is including only to assist in
"searching" for this RETAIN tip:

I9990010 I9990012 I9990013 I9990017 I9990019 I9990020 I9990022
I9990027 I9990029 I9990030 I9990032 I9990037 I9990039 I9990040
I9990042 I9990043 I9990047 I9990049 I9990053 I9990054 I9990056
I9990057 I9990059 I9990060 I9990062 I9990063 I9990067 I9990069
I9990070 I9990073 I9990075 I9990077 I9990079

SAS KEYWORDS:

PSY2	PSY2ERR	D/T8595	PSY2DIAG
PSY2FDSK	8590SYSFDSK	8595SYSFDSK	8590SYSERR
8595SYSERR	8590SYSDIAG	8595SYSDIAG	PS2
PS/2	IML	96 8N1	96
8NI	968N1	968NI	N1
NI	8	D/T9595	

1.4.835 I999009X ERRORS ON PS/2 8556 OR 8557

Record number: H103634

Device: D/T8557
 Model: M
 Tip key:
 Date created: 092/09/21
 Date last altered: A92/09/30

SYMPTOM: After replacing 8556 or 8557 system board, an I999009X POST error code (X can be any number) is displayed. This is a warning message stating that the ROM date on the system board is at a later level than the IML code loaded on the fixed disk, and that the IML code on the fixed disk should be updated.

PROBLEM ISOLATION AIDS:

This symptom can be reproduced as follows:

- o Power on the System without a diskette in drive A:
 - An I9990092 Error appears.
 - Memory counts
 - IBM Logo screen appears
 - The following warning message appears:
 - IML Error - 99992
 - Reference Diskette needs to be replaced with a later version.

FIX:

To eliminate the I999009X Error, restore the system partition using the latest Reference Diskette (V1.24 or higher).

- Boot the reference diskette in drive A:
- Select "Backup/Restore system programs."
- Select "Restore the system partition."
- Follow instructions on the screen.

Workaround:

If a Reference diskette is unavailable:

- Start the system without a diskette in drive A:
- When the Main menu appears select #1 "Start Operating System." This will allow system operation until the Restore option can be performed with a current level Reference Diskette.

SAS KEYWORDS:

PSY2	PSY2FDSK	PSY2ERR	I999
D/T8556	57SX	8557SX	8557SLC
57SLC	8556SX	56SX	56SLC
8556SLC	8556LS	56LS	D/T8557
IML	I9990091	I9990093	I9990094
I9990095	I9990096	I9990097	I9990099

1.4.836 I9990303 ERROR (SYSTEM PARTITION BOOT FAILURE)

Record number: H121779

Device: D/T9585
 Model: M
 Tip key:
 Date created: 093/11/12
 Date last altered: A95/03/15

SYMPTOM:

The 9585 system displays a I9990303 System Partition Boot Failure error message with OS/2 2.1 installed.

PROBLEM ISOLATION AIDS:

OS/2 2.1 was installed without using the Model 9585 setup utility to copy the ABIOS files onto a newly created Model 9585 OS/2 2 install diskette.

A System Partition Boot Failure error (I9990303) occurs the first time the System Partition is accessed.

Some time may have lapsed between the installation of OS/2 2.1 and the actual need to utilize the System Partition.

FIX:

1. BACKUP THE SYSTEMS HARDFILE (ALL DATA)
2. CREATE A MODEL 85 OS/2 2.1 INSTALLATION DISKETTE BY:
 - A. USING ANOTHER MACHINE, CREATE A BACKUP COPY OF THE OS/2 2.1 INSTALLATION DISKETTE. LABEL THIS DISKETTE AS THE MODEL 9585 OS/2 2.1 INSTALLATION DISKETTE.
 - B. USING THE MODEL 9585 REFERENCE DISKETTE
 - 1) COPY THE ABIOS.SYS FILE FROM THE REFERENCE DISKETTE TO THE INSTALLATION DISKETTE (CREATED IN STEP 2-A.)
 - 2) COPY ALL *.BIO FILES FROM THE REFERENCE DISKETTE TO THE INSTALLATION DISKETTE (CREATED IN STEP 2-A.)

Note:

When encountering an I9990303 error on a Server 85 and copying the ABIOS.SYS and *.BIO files as identified above, be aware that there are two models of the 9585. Each model uses a unique reference diskette as identified below. Failure to use the correct diskette may result in TRAP 0002 or time out errors during the subsequent installation of OS/2.

- If you are installing OS/2 on a 9585-0Xx, use the ABIOS.SYS and the *.BIO from the 1.11 reference diskette.

- If you are installing OS/2 on a 9585-0Kx or 9585-0Nx, use the ABIOS.SYS and the *.BIO from the 1.32 reference diskette.

Note: If insufficient room exists on the backup copy of the Installation Diskette for the new *.BIO files you may delete the existing (old) *.BIO files from the backup Installation Diskette.

- C. INSTALL OS/2 2.1 USING THE NEWLY CREATED INSTALLATION DISKETTE. (THIS DISKETTE SHOULD ONLY BE USED ON THIS SYSTEM SINCE SOME OF THE ABIOS FILES ARE SYSTEM UNIQUE.

 WARNING: MAKE SURE THAT ALL DATA FILES HAVE BEEN BACKED UP BEFORE PERFORMING A LOW LEVEL FORMAT. ALL DATA ON THE HARD FILE WILL BE LOST.

3. PERFORM A LOW LEVEL FORMAT.
4. INSTALL A SYSTEM PARTITION USING "RESTORE SYSTEM PARTITION" FROM THE REFERENCE DISKETTE.
5. INSTALL OS/2 2.1 USING THE UNIQUE INSTALLATION DISKETTE CREATED IN STEP 2 ABOVE.
6. RESTORE THE BACKED UP DATA FILES.

TECHNICAL EXPLANATION OF PROBLEM:

The OS/2 2.1 installation procedure invokes a sequence of code paths that will calculate the hardfile space available to the user for partition(s); C drive, or C and D drives, etc. The BIOS files are used if available. Otherwise, the OS/2 FDISK code invokes a device driver that miscalculates the hardfile space by one cylinder larger than it really is.

The 9585 system has a RAM loaded BIOS architecture (FLASH) so the files are not available during the initial installation of OS/2 and the FDISK drive code path is invoked. This causes OS/2 to create a user partition (eg. C drive) which overlaps the part of the hardfile containing the System Partition. When the user attempts to access the System Partition the POST code does not know if the System Partition is valid since OS/2 is claiming this space. The System Partition is then marked invalid and the I9990303 error is generated.

SAS KEYWORDS:

PSY2	PSY2ERR	9585SYSERR	SOFTWARE
DEAD	ERRORS	HANGS	PROCESSING
SERVER 85	PS/2	PSY2PROG	POST
FAILURE	FAILS	HANG	INSERT
D/T9585	D/T9595	D/T9556	D/T9557
D/T9576	D/T9577	303	OS2

1.4.837 JITTER IN 800 X 600 MODE ON G41 & G50

Record number: H107355

Device: D/T6542
Model: M
Tip key:
Date created: 096/08/12
Date last altered: A96/08/19

SYMPTOM:

6542 - lxx and 6543-lxx monitors may experience screen jitter when operating in 800x600 mode at 85Hz.

This has also been described as characters and vertical lines that "dance" or appear "torn."

PROBLEM ISOLATION AIDS:

Isolate the symptom by operating the monitor in a different mode or refresh rate. This symptom should only be seen at 800x600, 85Hz.

FIX:

The symptom is dependent upon screen loading and on outlet supply voltage; therefore, many users may never see this problem. If the symptom is noticed, the solution is to change the refresh rate for that resolution. A refresh rate of 75 Hz is suggested to maintain flicker free operation. This should have no significant impact on the use of the monitor.

The user should change the 800x600 refresh rate to 75Hz using the system's Configuration Set-Up utility. On IBM systems capable of custom video configuration (including ValuePoint Performance Series 64xx, PC300 65xx, and PC700 68xx, and later systems) enter the configuration set-up utility and select "Custom" as the video display type, then select 75Hz as the refresh rate for the 800x600 resolution.

SAS KEYWORDS:

D/T6543

PSY2

PSY2DISP

1.4.838 JITTER ON MONITOR ATTACHED TO IBM PC300PL

Record number: H162743

Device: D/T6562
 Model: M
 Tip key:
 Date created: 098/02/13
 Date last altered: A98/04/01

SYMPTOM:

After connecting a monitor to an IBM PC300PL system, machine types 6562/6592, users may detect image jitter on the display. The jitter will appear to be a small wave scrolling vertically down the screen. It may also be more evident on the left hand side of the screen, with certain backgrounds or along the sides of open windows.

PROBLEM ISOLATION AIDS:**FIX:**

The jitter condition may be corrected by creating a custom display profile via the following steps:

1. Right click on the Windows Desktop.
2. Select Properties, Monitor Tab, then MGA Monitor.
3. Expand the Manufacturer view and highlight the specific monitor being used.
4. Select Properties, then the resolution in which jitter is seen.
5. Select Test, then OK when the caution window appears.
6. Select Yes on Monitor Settings, then OK when the caution window displays. Expand the Details view.
7. Under Horizontal, place a Check in the Negative Sync Polarity Box.
8. Select Apply, then "Continue Testing" on the Monitor settings window.
9. Select OK, then Save.
10. Type in a desired Monitor Name and select Save.
11. Select Apply, then OK on the Monitor Selection window.
12. Select Yes on Monitor Settings dialog box, then OK on Display Properties.

After completing the above steps, use the custom display profile as the MGA monitor to eliminate the jitter condition.

SAS KEYWORDS:

PSY2	PSY2DISP	PSY2OEM	PSVP
PSVPDISP	PSVPOEM	D/T6562	D/T6592
6562	6592	UNCLASSIFIED	COMPAQ
V70	P92	P202	TAXAN
NEC			

1.4.839 KEYBOARD ERRORS IN WINDOWS95 NOTEPAD

Record number: H16266

Device: D/T6560
 Model: M
 Tip key:
 Date created: 097/06/30
 Date last altered: A97/07/02

SYMPTOM:

When using Notepad in Windows95, the following five characters do not appear the first time their respective key is pressed:

Tilde, Apostrophe, Quotation, Grav Accent, and Caret

If the key is pressed a second time, a double entry of the character will appear on the display.

PROBLEM ISOLATION AIDS:

None

FIX:

This is not a defect. The IBM PC340 Windows95 preload uses the "English (US) International" keyboard language by default. Change the keyboard language to "United States" to correct this condition.

1. In Windows95, open the Control Panel.
2. Double-click the "Keyboard" icon.
3. Click on the "Language" tab.
4. Click on the "Properties" button.
5. Select "United States" from the list of keyboard languages.
6. Click OK.

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SAS KEYWORDS:

PSY2	PSY2MISC	PSY2OPER	PSVP
PSVPMISC	PSVPOPER	D/T6560	6560
HLPCT_3087	PSY2KYBD	PSVPKYBD	UNCLASSIFIED

1.4.840 KEYBOARD LOCK-UP WITH BIOS 42A ON PC SERVER 325/330

Record number: H162710

Device: D/T8640
 Model: M
 Tip key:
 Date created: 098/02/11
 Date last altered: A98/03/25

SYMPTOM:

No keyboard response after rebooting any PC Server 325/330 upon flashing to BIOS 42A and disabling "Virtual Wire I/O APIC mode" in CMOS.

PROBLEM ISOLATION AIDS:

All the following must be true for this TIP to Apply:

- The System is a PC Server 325 Type 8639 model EJ0,ES0,ESV,RS0,EM0 or PC Server 330 Type 8640 model ES0,ES2,ESS,EM2,EMR that has been flashed to BIOS 42A.
- The System is configured with one processor.
- The "Virtual Wire I/O APIC mode" setting in CMOS has been set to "disabled" (as required for NetWare and specific in the readme file on the BIOS 42A Flash diskette).
- The keyboard is locked as identified in the "Symptoms" section above.

FIX:

- 1 - Download the Following diskette images (as required) from the IBM Website:

"PC Server 325 (8639-EJ0, ES0, ESV, RS0, EM0) and
 IBM PC Server 330(8640-ES0, ES2, ESS, EM2, EMR)
 BIOS flash update diskette version 45A"

"PC Server 325 (8639-EJ0, ES0, ESV, RS0, EM0) and
 PC Server 330(8640-ES0, ES2, ESS, EM2, EMR) EISA configurati
 diskette version 6.10."

These images are available at the IBM Website at URL:

Http: //www.pc.ibm.com/files.html

- Select SEARCH
- Type a search word in the Keywords box, Examples:
 "BIOS 45A"
 "EISA 6.1"
- Select the Image (listed above) to download

Note: select the corresponding Readme files listed with a code image to view, print, or download for application details specific to the image.

The diskette images are self-extracting executable files that prompt for a blank diskette.

- 2 - Depress and hold down both Mouse buttons while powering up the system. Do not release the Mouse buttons until System POST completes. This will reset the CMOS settings to the default values allowing the keyboard to operate normally. When Post completes, the System will beep once and reboot. Upon completion of boot, power down the system.
- 3 - Insert the System BIOS flash ver 45A or higher, power up the System and follow the on-screen prompts to Flash the System BIOS to the latest level.
- 4 - Configure the System via CMOS as required.
- 5 - Reboot the System using the EISA Configuration Diskette ver. 6.1 (or Higher), adjust the total System memory setting with respect to the actual total memory in the System. This will ensure that NetWare can use all the installed Memory in the System. Configure any EISA / ISA adapters in the System.

WORKAROUND:

- 1 - Download the Following diskette images (as required) from the IBM Website:

"PC Server 325(8639-EJ0,ES0,ESV,RS0) Recovery Diskette for BIOS

V42A"

"PC Server 330(8640-ES0,ES2,ESS,EM2) Recovery Diskette for BIOS V42A"

"PC Server 325 (8639-EJ0, ES0, ESV, RS0, EM0) and IBM PC Server 330(8640-ES0, ES2, ESS, EM2, EMR) BIOS flash update diskette version 45A"

"PC Server 325 (8639-EJ0, ES0, ESV, RS0, EM0) and PC Server 330(8640-ES0, ES2, ESS, EM2, EMR) EISA configuration diskette version 6.10."

These images are available at the IBM Website at URL:

Http: //www.pc.ibm.com/files.html

- Select SEARCH
- Type a search word in the Keywords box, Examples:
 - "Recovery BIOS V42A"
 - "BIOS 45A"
 - "EISA 6.1"
- Select the Image (listed above) to download

Note: select the corresponding Readme files listed with each code image to view, print, or download for application details specific to each image.

The diskette images are self-extracting executable files that prompt for a blank diskette.

- 2 - Insert the CORRECT Recovery diskette into the System Floppy drive, then power on the System. The recovery program will reset the CMOS settings to default including the "Virtual I/O APIC mode" settings. Upon completion, power down the System and remove the Recovery Diskette (the Keyboard will now function the next time the System is powered up).
 - 3 - Insert the System BIOS flash ver 45A or higher, power up the System and follow the on-screen prompts to Flash the System BIOS to the latest level.
 - 4 - Configure the System via CMOS as required.
 - 5 - Reboot the System using the EISA Configuration Diskette ver. 6.1 (or Higher), adjust the total System memory setting with respect to the actual total memory in the System. This will ensure that NetWare can use all the installed Memory in the System. Configure any EISA / ISA adapters in the System
- OR -----
- 1 - Power off the system and disconnect the power cable.
 - 2 - Move the Processor and the VRM (Voltage Regulator Module) to their second sockets respectively.
 - 3 - Connect the power cable, insert the ver. 45A BIOS Flash diskette (or higher) into the Floppy Drive, power up the System, the keyboard will now function. Follow the on-screen prompts to Flash the BIOS.
 - 4 - Power down the Server after the System reboots upon completion of the BIOS Flash.
 - 5 - Remove the Power Cord, then move the processor and VRM to their original sockets respectively, then reinstall the Power Cord.
 - 6 - Configure the System via CMOS as required.
 - 7 - Reboot the System using the EISA Configuration Diskette ver. 6.1 (or Higher), adjust the total System memory setting with respect to the actual total memory in the System. This will ensure that NetWare can use all the installed Memory in the System. Configure any EISA / ISA adapters in the System.

Detail:

This problem is specific to single processor configurations when after applying BIOS Version 42A, the keyboard will lock-up during the next system boot IF the "Virtual Wire Mode" is disabled in the CMOS. Disabling the "Virtual Wire Mode" is required IF the system will be running NetWare. BIOS 42A has been removed from the IBM BBS and Website, BIOS Versions 41A

PSY2 RETAIN TIPS

KEYBOARD LOCK-UP WITH BIOS 42A ON PC SERVER 325/330

and 34A (34A specific for use with NetWare) have been posted back on the IBM BBS and Website until Ver. 45A BIOS is fully tested and available. This problem does not exist if running Dual Processors.

NetWare is a trademark of Novell Inc.

SAS KEYWORDS:

PSY2	D/T8640	D/T8639	UNCLASSIFIED
PSY2BIOS	BIOS 42A	KEYBOARD	HANG
LOCK	BIOS 45A	EISA 6.1	MEMORY
NETWARE	VIRTUAL	WIRE	MODE

1.4.841 KEYBOARD LOCK-UP/SYSTEM HANG IN WORDPERFECT 6.1

Record number: H133675

Device: D/T6576
 Model: M
 Tip key:
 Date created: 096/08/19
 Date last altered: A96/08/19

SYMPTOM:

A keyboard lock-up, which may be reported as a system hang condition, may occur when WordPerfect 6.1 is executed from a Windows 3.1 environment.

PROBLEM ISOLATION AIDS:

Any brand of personal computer running Windows 3.1 and WordPerfect 6.1 may exhibit this problem.

FIX:

Any brand of personal computer running Windows 3.1 and WordPerfect 6.1 may exhibit this problem.

FIX:

Modify the SYSTEM.INI file located in the /WINDOWS directory. The statement below is located in the keyboard section of the SYSTEM.INI file.

```
Change "keyboard.dll=kbdus.dll"
      to
      "keyboard.dll="
```

Contact Corel WordPerfect Customer Service at 800-772-6735 for additional information.

WordPerfect is a trademark of Corel Corporation.
 Windows is a trademark of the Microsoft Corporation.

SAS KEYWORDS:

PSVP	PSY2	PSVPPROG	PSY2PROG
PSVPKYBD	PSY2KYBD	PC 330	IBMPC
PC 730	PC 750	D/T6586	PC 330
PC 350	D/T6571	D/T6573	D/T6581
D/T6583	D/T6575	D/T6585	D/T6586
D/T6577	D/T6587	D/T6598	D/T6560
D/T6877	D/T6887	PC 340	PC 360
46087	D/T6381	D/T6382	D/T6384
D/T6387	D/T6472	D/T6482	D/T6484
D/T6492	D/T6494	D/T6875	D/T6885
D/T6876	D/T6886		

1.4.842 KEYBOARD LOCKS USING WINDOWS OR WINDOWS FOR WORKGROUPS

Record number: H12986

Device: D/T6384
 Model: M
 Tip key:
 Date created: 093/08/26
 Date last altered: A95/10/30

SYMPTOM:

A PS/VALUEPOINT 6384/D, 6382/S AND 6387/T MAY EXPERIENCE A KEYBOARD LOCKUP WHEN MICROSOFT WINDOWS 3.1 OR WINDOWS FOR WORKGROUPS 3.11 IS INSTALLED.

PROBLEM ISOLATION AIDS:

- 1) THE KEYBOARD LOCKUP OCCURS ONLY IN WINDOWS OR WINDOWS FOR WORKGROUPS 3.11.
- 2) THERE IS NOT AN IBM MOUSE OR SIMILAR "PS/2 STYLE" MOUSE, ATTACHED TO THE MOUSEPORT WHEN THE ERROR OCCURS UNDER WINDOWS 3.1. THE FAILURE UNDER WINDOWS FOR WORKGROUPS 3.11 CAN OCCUR WITH OR WITHOUT A MOUSE INSTALLED.
- 3) VALUEPOINT DIAGNOSTICS PASS WITHOUT ERROR.

FIX:

HARDWARE REPLACEMENT OF ANY VALUEPOINT PART WILL NOT RESOLVE THE PROBLEM.

THERE ARE 3 WORKAROUNDS AVAILABLE TO THE CUSTOMER FOR THE FAILURE UNDER WINDOWS 3.1. THE ONLY FIX FOR WINDOWS FOR WORKGROUPS 3.11 IS OPTION #3 BELOW.

1. LOAD WINDOWS IN STANDARD MODE BY ENTERING "WIN /s", RATHER THAN "WIN /3" OR "WIN" THAT LOADS WINDOWS IN THE 386 ENHANCED MODE. THIS IS THE LEAST DESIRABLE WORKAROUND, AS IT MAY AFFECT PERFORMANCE.

** OR **

2. INSTALL THE IBM MOUSE* THAT SHIPPED WITH THE PS/VALUEPOINT SYSTEM. A SERIAL PORT MOUSE WILL SHOW THE SAME FAILURE SYMPTOM AS NO MOUSE ATTACHED. IT IS POSSIBLE FOR A NON-IBM "PS/2 STYLE" MOUSE TO WORK IN PLACE OF AN IBM MOUSE.

** OR **

3. INSTALL THE "IBMKBFIX.386" PATCH. THIS FILE CAN BE DOWNLOADED FROM THE IBM PC COMPANY BULLETIN BOARD AT 919 - 517 - 0001. THE FILENAME IS "IBMKBFIX.EXE."

INSTRUCTIONS FOR INSTALLING THE PATCH ARE ON THE DISKETTE IN THE "READ.ME" FILE.

IF THE SYMPTOM REMAINS WHILE UTILIZING THE PREVIOUS STEPS, CONTINUE NORMAL PROBLEM DETERMINATION.

SAS KEYWORDS:

PSVP	VALUE POINT	PSVPMISC	6384
PSY2	PSY2MISC	HANG	LOCK-UP
LOCKUP	PSVPKBD	PSY2KBD	6382
D/T6382	D/T6387	6387	WINDOW

1.4.843 KODAK IMAGELINK 990D SCANNER FAILS ON PC 300 OR 700

Record number: H124716

Device: D/T6576
 Model: M
 Tip key:
 Date created: 096/08/07
 Date last altered: A96/08/13

SYMPTOM:

When attempting to use the Kodak ImageLink FilmOnly or KODAKTST Utility programs on a Kodak ImageLink 990D Scanner connected via SCSI adapter to a PC 300 or 700 Series system, the following error message may be displayed:

"The scanner device driver could not be opened; ScanOpen returned 0x6102 (RC_SCAN_DEVICE_ERROR)."

An "EVNA388D" error message may appear indicating that the scanner is unavailable when attempting to use the ImagePlus Workstation Program/2 (IWPM/2).

PROBLEM ISOLATION AIDS:

None

FIX:

Install the latest level Kodak ImageLink 990D Scanner device driver. The current level driver is titled "OS2V131.EXE" and may be downloaded from the Kodak BBS at 716-726-0898.

Ensure that the SCSI adapter has "reset" disabled to prevent resetting the scanner during IPL.

Kodak ImageLink 990D is a trademark of the Eastman Kodak Co.

SAS KEYWORDS:

PSVP	PSY2	PSVPOEM	PSY2OEM
PSVPERR	PSY2ERR	PC 330	IBMPC
PC 730	PC 750	D/T6586	PC 330
PC 350	D/T6571	D/T6573	D/T6581
D/T6583	D/T6575	D/T6585	D/T6586
D/T6577	D/T6587	D/T6598	D/T6560
D/T6877	D/T6887	PC 340	PC 360

1.4.844 KODAK SCANNER IS NOT "SEEN" BY SERVER 300, 320 & 520

Record number: H132528

Device: D/T8640
 Model: M
 Tip key:
 Date created: 096/02/05
 Date last altered: A96/02/06

SYMPTOM:

During installation of a Kodak 923D Scanner, the system does not configure (recognize) the scanner in the SCSI installed devices list.

PROBLEM ISOLATION AIDS:

The system is a Server 300, 320, or 520.
 The system diagnostics don't fail.
 QA plus can see the device, OS/2 and POST do not recognize it.
 The device is attached to a PCI SCSI-2 Adapter.
 The device may be fully functional if attached to a non-PCI SCSI adapter, such as the micro channel adapter in the 9595.

FIX:

No IBM FRUs should be replaced. This appears to be a device driver compatibility issue. This scanner may not be supported on a PCI SCSI bus by the device vendor.

Customers who have this scanner attached to a PCI SCSI adapter and are having compatibility problems should refer the problem to their point of sale of the Kodak scanner or to Kodak technical support for further assistance and to inquire about the availability of fixes.

SAS KEYWORDS:

PSY2	SCSI	PSY2OEM	D/T8640
8640	PCI	SERVER	300
320	PSY2TBD	520	8641
D/T8641	OEM	SCSI-2	

1.4.845 KOFAX IMAGE ADAPTER NOT RECOGNIZED BY NETFINITY

Record number: H097211

Device: D/T6886
 Model: M
 Tip key:
 Date created: 095/11/15
 Date last altered: A95/11/15

SYMPTOM:

IBM PC 700 Series Microchannel systems with a Kofax 9250 Image Microchannel Adapter will not properly recognize the I/O address settings with the IBM NetFinity application.

PROBLEM ISOLATION AIDS:

I/O address changes to the Kofax Image adapter cannot be detected by Netfinity. Other applications that interrogate the adapter for specific setup information may also fail to return correct I/O address information.

The I/O address for the Kofax Image adapter will display as "1000" under Netfinity regardless of the actual setting.

FIX:

The "NumByte" parameter in the @7055.ADF file located on the Kofax 9250 Image Adapter Option Diskette should be set for 3 instead of 2. This can be done by using an editor to change the values.

Kofax 9250 Image Adapter(MCA) is a product of Kofax Image Products. Phone: (714) 727-1733

SAS KEYWORDS:

PSVP	PSY2	PSVPADPT	IBMPC
PSY2ADPT	PSVPCOMM	PSY2COMM	PSVPOEM
PSVPOEM	D/T6886	6886	D/T6885
D/T6875	6876	6885	6875
PC750	PC730	D/T68XX	D/T8639
SERVER 310			

1.4.846 KOFAX IMAGE ADAPTER NOT RECOGNIZED BY NETFINITY

Record number: H131723

Device: D/T8639
 Model: M
 Tip key:
 Date created: 095/11/17
 Date last altered: A95/11/17

SYMPTOM:

IBM Server 310 systems with a Kofax 9250 Image Microchannel Adapter installed will not properly recognize the I/O address settings with the IBM NetFinity application.

PROBLEM ISOLATION AIDS:

I/O address changes to the Kofax Image adapter cannot be detected by Netfinity. Other applications that interrogate the adapter for specific setup information may also fail to return correct I/O address information.

The I/O address for the Kofax Image adapter will display as "1000" under Netfinity regardless of the actual setting.

FIX:

The "NumByte" parameter in the @7055.ADF file located on the Kofax 9250 Image Adapter Option Diskette should be set for 3 instead of 2. This can be done by using an editor to change the values.

Kofax 9250 Image Adapter(MCA) is a product of Kofax Image Products. Phone: (714) 727-1733

SAS KEYWORDS:

PSVP	PSY2	PSVPADPT	IBMPC
PSY2ADPT	PSVPCOMM	PSY2COMM	PSVPOEM
PSY2OEM	D/T68XX	8639	D/T8639
SERVER	310	OEM	

1.4.847 LANDESK HELP NOT AVAILABLE IN WINDOWS NT V4.0

Record number: H136889

Device: D/T6899
 Model: M
 Tip key:
 Date created: 097/03/18
 Date last altered: A97/07/09

SYMPTOM:

IBM IntelliStation Z Pro 6899 and PC Server systems running Microsoft Windows NT v4.0 and LANdesk may exhibit a "This file is not a Windows HELP file" message when accessing the LANdesk Help functions.

PROBLEM ISOLATION AIDS:

This failure does not occur with Windows NT v3.51.

To recreate this failure, perform the following steps:

- 1) Go to LANdesk Manager and click on Tools and pull down the DMI Control Panel.
- 2) Click on LDCM File and OS Instrumentation.
- 3) Click on Help and pull down "How to use Help."
- 4) Click on "Get Help."
- 5) Application, Dialog, and Command boxes are underlined. Clicking on either of these boxes causes the "This is not a Windows Help File" message to be displayed.

Other Help functions in Windows NT v4.0 may also exhibit similar messages.

FIX:

Do not replace hardware. This is a Windows NT v4.0 software problem.

Contact Microsoft Windows NT Technical Support or view the Microsoft Internet site at the following URL for additional information regarding Windows NT v4.0 Help updates:
<http://www.microsoft.com/>

Windows NT is a trademark of the Microsoft Corporation.

SAS KEYWORDS:

PSVP	PSY2	PSVPPROG	PSY2PROG
IBMPC	PWS	PSY2ERR	PSVPERR
UNCLASSIFIED	61505	D/T8638	PC SERVER 315

1.4.848 LANDESK 3.0 REPORTS LOW VIRTUAL MEMORY

Record number: H161960

Device: D/T6562
Model: M
Tip key:
Date created: 097/11/24
Date last altered: A97/11/24

SYMPTOM:

LANdesk Client Manager 3.0 (LDCM) reports low virtual memory when run with multiple applications. Intermittent system hangs may occur.

PROBLEM ISOLATION AIDS:

This tip applies to LANdesk Client Manager version 3.0 running under WindowsNT 4.0 in conjunction with multiple applications.

FIX:

Increase the default size of the WindowsNT virtual memory (swap file) to its maximum size via the "System Properties" Performance tab.

Windows and WindowsNT are trademarks of Microsoft Corporation.

SAS KEYWORDS:

PSY2	PSY2ERR	PSY2MEM	PSY2OPER
PSVP	PSVPERR	PSVPMEM	PSY2OPER
D/T6562	D/T6592	6562	6592
68818	68818F_1	UNCLASSIFIED	

1.4.849 LARGE FONT ERROR SWITCHING TO 640X480 RESOLUTION

Record number: H162868

Device: D/T6588
 Model: M
 Tip key:
 Date created: 098/02/26
 Date last altered: A98/04/21

SYMPTOM:

When the Task Bar is used to switch to 640x480 resolution from a higher resolution with large fonts (i.e. 800x600 or 1024x768), the large font is not changed to the default setting of Small Fonts for 640x480 resolution.

If the Display Properties window is opened to change screen resolutions, the buttons used to change the settings are displayed off the screen at 640x480 resolution.

PROBLEM ISOLATION AIDS:

This tip applies, but is not limited to, IBM PC300XL Series 6588 systems preloaded with Windows95.

The condition has also been displayed in IBM PC300PL Series 6862/6892 systems preloaded with Windows95.

FIX:

To reset the 640x480 resolution to the default setting with small fonts, use the Task Bar to switch to a higher resolution followed with the Display Properties window to switch back to 640x480 resolution. The system will then automatically switch to small fonts in 640x480 resolution when the system is re-started.

Windows and Windows95 are trademarks of Microsoft Corporation.

SAS KEYWORDS:

PSY2	PSY2DISP	PSVP	PSVPDISP
D/T6588	6588	UNCLASSIFIED	65434
CDT	CDTDISP	D/T6862	D/T6892
6862	6892	84150	84150F_1
84150F_2			

1.4.850 LCCM FAILS TO IDENTIFY ONBOARD ETHERNET IN PC6588/6888

Record number: H16955

Device: D/T6588
 Model: M
 Tip key:
 Date created: 097/09/02
 Date last altered: A97/09/03

SYMPTOM:

When starting Lan Client Control Manager (LCCM) in the IBM PC6588 or PC6888, LCCM may fail to identify the onboard ethernet adapter or report the adapter is from an unidentified vendor.

PROBLEM ISOLATION AIDS:

Affected systems can be identified by viewing the onboard ethernet adapter's MAC address in the F1 Setup utility. To view the MAC address, use the following steps:

1. During POST press the F1 key to run Setup.
2. Highlight "Devices and I/O Ports" and press <Enter>.
3. Highlight "Ethernet Setup" and press <Enter>.
4. Observe the line titled "MAC Address." If the MAC address begins with "60" this tip applies.

FIX:

Download and run the utility MACSWAP.EXE.

Running MACSWAP.EXE will create a bootable diskette. Cold boot the affected system from this diskette and note the on-screen message. The utility will notify the user that the MAC address has successfully been updated. The user will also be notified if the MAC address is valid and no updates were made. After the utility has run, remove the diskette and reboot the system.

Applying the MACSWAP.EXE utility to an unaffected system will not harm or alter the system.

MACSWAP.EXE can be downloaded from the following IBM web page or downloaded from the IBM BBS at 919-517-0001.

Http: //www.us.pc.ibm.com/searchfiles.html

SAS KEYWORDS:

PSY2	PSY2OPER	PSY2ADPT	PSY2PROG
PSVP	PSVPOPER	PSVPADPT	PSVPPROG
D/T6588	D/T6888	6588	6888
75909	UNCLASSIFIED		

1.4.851 LCCM LAN CONTROL MANAGER UNABLE TO CONNECT WITH CLIENT

Record number: H161556

Device: D/T6282
 Model: M
 Tip key:
 Date created: 097/10/24
 Date last altered: A97/10/24

SYMPTOM:

The LCCM LAN communication control manager is unable to connect with the client using the RPL protocol. Remote boot fails.

PROBLEM ISOLATION AIDS:

This tip applies to IBM PC Model PC300GL, M/T6272 and M/T6282, with integrated 10BaseT Ethernet support.

Affected systems can be identified by viewing the onboard ethernet adapter's MAC address in the F1 Setup utility. To view the MAC address, use the following steps:

1. During POST press the F1 key to run Setup.
2. Highlight "Devices and I/O Ports" and press <Enter>.
3. Highlight "Ethernet Setup" and press <Enter>.
4. Observe the line titled "MAC Address." If the MAC address begins with "00 06 29" this tip applies.

FIX:

Download and run the utility MACUPDAT.EXE.

Running MACUPDAT.EXE will create a bootable diskette. Cold boot the affected system from this diskette and note the on-screen message. The utility will notify the user that the MAC address has successfully been updated. The user will also be notified if the MAC address is valid and no updates were made. After the utility has run, remove the diskette and reboot the system.

Applying the MACUPDAT.EXE utility to an unaffected system will not harm or alter the system. Applying the utility to an incorrect, or unaffected system will produce the following, or similar message:

```

This machine MAC address:  FFFFFFFF
NO UPDATE NEEDED !

```

MACUPDAT.EXE may be downloaded via the Internet from the IBM Personal Computer File Library by searching the following Internet URL: www.us.pc.ibm.com/files.html

MACUPDAT.EXE may also be obtained from the IBM PC Company BBS by calling 919-517-0001.

SAS KEYWORDS:

PSY2	PSY2ERR	PSY2COMM	PSY2MCD
PSY2ADPT	PSVP	PSVPERR	PSVPCOMM
PSVPMCD	PSVPADPT	D/T6282	D/T6272
6282	6272	UNCLASSIFIED	

PSY2 RETAIN TIPS
LCD BLANK AFTER MEMORY COUNT

1.4.852 LCD BLANK AFTER MEMORY COUNT

Record number: H127709

Device: D/T2618
Model: M
Tip key:
Date created: 095/05/23
Date last altered: A95/05/23

SYMPTOM:

IBM 2618 Models 350 and 425, the LCD goes blank after the memory count completes during power up.

PROBLEM ISOLATION AIDS:

Depressing the Fn F1 keys will bring the LCD back on with the configuration utility displayed. After configuration is completed the LCD goes blank again. An external CRT attached to the system will not exhibit any failure symptoms. This problem may occur after replacing the lid switch, FRU P/N60G0358.

FIX:

If the system has the above symptoms, replace the lid switch, FRU P/N60G0358. Field FRU stock may contain improperly wired switches; if you have the failing symptom after you have replaced a lid switch, you may be able to correct the problem by switching the two red wires on the connector end of the FRU. Mechanicsburg has been checked and should not have any improperly wired switches in stock.

SAS KEYWORDS:

PSY2	HANG	HUNG	THINKPAD
SUSPEND	60G0358	RESUME	

LOCKUP AFTER SUSPEND RESUME OF a SOUNDBLASTER GAME

1.4.853 LOCKUP AFTER SUSPEND RESUME OF a SOUNDBLASTER GAME

Record number: H034629

Device: D/T9545
Model: M
Tip key:
Date created: 094/12/14
Date last altered: A94/12/16

SYMPTOM: The system locks up or has no sound after a suspend / resume operation is done during the playing of a game that uses soundblaster.

PROBLEM ISOLATION AIDS:

For problem determination do the following:

1. Make a boot diskette using the MAKEBOOT command.
2. Boot up machine with this diskette.
3. Play the failing game.
4. Suspend and resume.

If the system locks or the sound is not present follow the steps in the fix.

FIX: Copy POWER.EXE from the DOS dir to the diskette, and add "DEVICE=C: \POWER.EXE" to the CONFIG.SYS statement. This operation will disable the suspend resume operation during operation of this type of game.

SAS KEYWORDS:

PSY2 PSY2PROG HANG

1.4.854 LOW MEMORY RESOURCE ERROR RUNNING WINDOWS 3.1

Record number: H132168

Device: D/T6571
 Model: M
 Tip key:
 Date created: 096/01/11
 Date last altered: A96/01/11

SYMPTOM:

IBM PC 300 Series 6571, 6573, 6581, and 6583 (Intel 486 Models) running Windows 3.1 and applications such as Microsoft Word, Microsoft PowerPoint, Microsoft Excel or other graphics intensive applications, may exhibit a low or out of memory error.

PROBLEM ISOLATION AIDS:

The amount of available system resources can be determined by accessing "Help" from the Program Manager action bar, followed by "About Program Manager."

Advanced diagnostics run without errors.

FIX:

Out of memory or low resource messages may result from a number hardware or software causes. One possible cause may be downlevel video device drivers.

Install the latest Cirrus video device drivers.

Obtain the current Cirrus video device drivers from the IBM PC Company BBS system by calling 1-919-517-0001. Locate the "ValuePoint Vendor Files" section (section #39). At this time, the current files are:

K543X2E.ZIP - Cirrus 5430 Drivers 1.24 for Windows 1 of 2
 K543X2E2.ZIP- Cirrus 5430 Drivers 1.24 for Windows 2 of 2

The new drivers may also be downloaded via the Internet from the IBM Personal Computer File Library by searching the following Internet URL:

<http://www.pc.ibm.com/files.html>

The drivers are located in the "ValuePoint Vendor Files" section or by using the search facility to locate the files by the names listed above.

If the error persists, continue normal problem determination procedures outlined by the operating system User's Guide.

Windows, Microsoft Word, Microsoft Excel, and Microsoft PowerPoint are trademarks of the Microsoft Corporation.

SAS KEYWORDS:

PSY2	D/T65XX	65XX	6571
IBMPC	PSVP	PSVPDISP	PSY2DISP
D/T6573	6573	PSY2PROG	PSVPPROG
D/T6581	6581	D/T6583	6583
PC 350	PC330	PC300	PC 330
PC350	PSY2ERR	PSVPERR	

1.4.855 MATROX DEVICE DRIVER INSTALLATION FAILS ON PC 700

Record number: H132835

Device: D/T6877
 Model: M
 Tip key:
 Date created: 096/02/28
 Date last altered: A96/02/28

SYMPTOM:

Installation of the Matrox Millennium video device drivers may fail when installing the drivers on a PC 700 6877 or 6887 with WindowsNT Preload.

PROBLEM ISOLATION AIDS:

When installing the Matrox Millennium device drivers from the Control Panel using the CD that contains the PC 700 device drivers, the system continues to prompt for the Matrox MGA Millennium Installation Disk in drive D: .
 Drive D: is the CDROM drive.

OR

When installing the Matrox Millennium device drivers using the diskette created from the Diskette Factory, the installation functions normally. However, the README.NT on the diskette is not correct. Step #5 of the installation instructions shows the location of the Matrox MGA Millennium drivers to be in the A: \WINNT directory. The drivers are actually located in the A: \ (root) directory.

FIX:

Use the Matrox Millennium MGA driver diskette created from the RTC (Ready To Configure) CD that ships with the system.

The diskette created using the Diskette Factory may also be used to install the drivers. Simply be aware of the directory where the drivers are actually located (A: \).

WindowsNT is a trademark of the Microsoft Corporation.

SAS KEYWORDS:

PSY2	D/T68XX	6887	6877
IBMPC	PSVP	PSVPDISP	PSY2DISP
D/T6887	PSY2PROG	PSVPPROG	40870
PC750	PC700	PC 730	PC 750
PC730			

1.4.856 MATROX DRIVER INSTALLATION REQUESTS WRONG DISK

Record number: H132788

Device: D/T6877
 Model: M
 Tip key:
 Date created: 096/02/27
 Date last altered: A96/02/28

SYMPTOM:

During the installation of the Matrox Millennium video device drivers for OS/2 WARP Connect, the installation program may request a diskette with a volume label of "MGA OS/2 Driver Diskette" to be placed in drive A: .

The Matrox Millennium device drivers for OS/2 diskette volume label does not match the diskette being requested. The installation process must be aborted.

PROBLEM ISOLATION AIDS:

The volume label being requested during the installation process is actually the diskette label name that should be applied to the diskette with a label for external identification.

The Matrox device driver diskette may not contain a volume label at all after creating the diskette with the Diskette Factory. Check the diskette label using the VOL A: command. The correct volume name for the Matrox driver diskette should be "OS2."

FIX:

After creating the Matrox Millennium video device diskette from the Diskette Factory, use the LABEL command at an OS/2 prompt to assign a volume name of "OS2" to the diskette.

SAS KEYWORDS:

PSY2	D/T68XX	6887	6877
IBMPC	PSVP	PSVPDISP	PSY2DISP
D/T6887	PSY2PROG	PSVPPROG	PSVPERR
PSY2ERR	PC750	PC700	PC 730
PC 750	PC730	40344	

1.4.857 MAXIMUM OF 8MB OF USABLE SYSTEM MEMORY

Record number: H01326

Device: D/T8590
 Model: M
 Tip key:
 Date created: 090/11/28
 Date last altered: A90/11/28

SYMPTOM:

THE FOLLOWING PROBLEM MAY BE EXPERIENCED WHEN REFERENCE DISKETTE VERSION 1.01 IS USED ON THE PS/2 8590.

A MAXIMUM OF 8 MB OF SYSTEM MEMORY IS USABLE, EVEN IF A GREATER AMOUNT OF SYSTEM MEMORY IS INSTALLED, DUE TO A SOFTWARE PROBLEM ON THE REFERENCE DISKETTE.

DETAIL:

A SMALL NUMBER OF PS/2 8590 SYSTEMS WERE SHIPPED WITH REFERENCE DISKETTE VERSION 1.01 PACKED WITH THE SYSTEM AND PRE-CONFIGURED ON THE FIXED DISK SYSTEM PARTITION.

OTHER SYSTEMS WERE SHIPPED WITH THE VERSION 1.01 REFERENCE DISKETTE PACKED WITH THE SYSTEM, HOWEVER, VERSION 1.02 REFERENCE DISKETTE HAS BEEN PRE-CONFIGURED ON THE SYSTEM PARTITION. A CURRENT BACK-UP SYSTEM REFERENCE DISKETTE SHOULD BE CREATED FROM THE SYSTEM PARTITION ON THOSE SYSTEMS SHIPPED WITH VERSION 1.02 PRE-CONFIGURED. THE QUICK REFERENCE MANUAL SHOULD BE CONSULTED FOR THE PROPER PROCEDURES.

CUSTOMERS RECEIVING THE VERSION 1.01 SOFTWARE, INSTALLED ON THE FIXED DISK SYSTEM PARTITION PRIOR TO SHIPPING, MAY OBTAIN THE CURRENT VERSION REFERENCE DISKETTE AT NO COST BY CALLING ONE OF THE FOLLOWING TELEPHONE NUMBERS:

PROBLEM ISOLATION AIDS: NONE

FIX:

OBTAIN A COPY OF REFERENCE DISKETTE VERSION 1.02 AND INSTALL IT ON THE SYSTEM PARTITION OF THE FIXED DISK AT THE EARLIEST OPPORTUNITY. A VERSION 1.02 BACK-UP DISKETTE SHOULD BE CREATED FROM THE SYSTEM PARTITION AND KEPT IN A SECURE, ACCESSIBLE LOCATION.

IT IS RECOMMENDED THAT COPIES OF VERSION 1.01 BE RENDERED UNUSEABLE.

REFERENCE DISKETTE VERSION 1.02 IS AVAILABLE BY CALLING THE FOLLOWING NUMBERS MONDAY THROUGH FRIDAY:

CUSTOMERS IN USA...1-800-426-7282, 8: 00AM UNTIL 8: 00PM, EST
 CUSTOMERS IN CANADA...1-800-465-1234, 8: 00AM UNTIL 4: 30PM, EST
 CUSTOMERS IN ALASKA...1-414-633-8108, 8: 00AM UNTIL 5: 00PM, LOCAL

CUSTOMERS WITH 8590 SYSTEMS SHOULD SPECIFY SYSTEM REFERENCE DISKETTE PART NUMBER 57F1952.

IBM WORLD TRADE CUSTOMERS SHOULD FOLLOW LOCAL PROCEDURES TO OBTAIN THE CURRENT REFERENCE DISKETTE.

SAS KEYWORDS:

PSY2	PSY2DIAG	PSY2PROG	PRY2ERR
8590DIAG	8590SYSPROG	8590SYSERR	

1.4.858 MAXIMUM OF 8MB OF USABLE SYSTEM MEMORY

Record number: H01604

Device: D/T8595
 Model: M
 Tip key:
 Date created: 090/11/28
 Date last altered: A90/11/28

SYMPTOM:

THE FOLLOWING PROBLEM MAY BE EXPERIENCED WHEN REFERENCE DISKETTE VERSION 1.01 IS USED ON THE PS/2 8595.

A MAXIMUM OF 8 MB OF SYSTEM MEMORY IS USABLE, EVEN IF A GREATER AMOUNT OF SYSTEM MEMORY IS INSTALLED, DUE TO A SOFTWARE PROBLEM ON THE REFERENCE DISKETTE.

DETAIL:

A SMALL NUMBER OF PS/2 8595 SYSTEMS WERE SHIPPED WITH REFERENCE DISKETTE VERSION 1.01 PACKED WITH THE SYSTEM AND PRE-CONFIGURED ON THE FIXED DISK SYSTEM PARTITION.

OTHER SYSTEMS WERE SHIPPED WITH THE VERSION 1.01 REFERENCE DISKETTE PACKED WITH THE SYSTEM, HOWEVER, VERSION 1.02 REFERENCE DISKETTE HAS BEEN PRE-CONFIGURED ON THE SYSTEM PARTITION. A CURRENT BACK-UP SYSTEM REFERENCE DISKETTE SHOULD BE CREATED FROM THE SYSTEM PARTITION ON THOSE SYSTEMS SHIPPED WITH VERSION 1.02 PRE-CONFIGURED. THE QUICK REFERENCE MANUAL SHOULD BE CONSULTED FOR THE PROPER PROCEDURES.

CUSTOMERS RECEIVING THE VERSION 1.01 SOFTWARE, INSTALLED ON THE FIXED DISK SYSTEM PARTITION PRIOR TO SHIPPING, MAY OBTAIN THE CURRENT VERSION REFERENCE DISKETTE AT NO COST BY CALLING ONE OF THE FOLLOWING TELEPHONE NUMBERS:

PROBLEM ISOLATION AIDS: NONE

FIX:

OBTAIN A COPY OF REFERENCE DISKETTE VERSION 1.02 AND INSTALL IT ON THE SYSTEM PARTITION OF THE FIXED DISK AT THE EARLIEST OPPORTUNITY. A VERSION 1.02 BACK-UP DISKETTE SHOULD BE CREATED FROM THE SYSTEM PARTITION AND KEPT IN A SECURE, ACCESSIBLE LOCATION.

IT IS RECOMMENDED THAT COPIES OF VERSION 1.01 BE RENDERED UNUSEABLE.

REFERENCE DISKETTE VERSION 1.02 IS AVAILABLE BY CALLING THE FOLLOWING NUMBERS MONDAY THROUGH FRIDAY:

CUSTOMERS IN USA...1-800-426-7282, 8: 00AM UNTIL 8: 00PM, EST
 CUSTOMERS IN CANADA...1-800-465-1234, 8: 00AM UNTIL 4: 30PM, EST
 CUSTOMERS IN ALASKA...1-414-633-8108, 8: 00AM UNTIL 5: 00PM, LOCAL

CUSTOMERS WITH 8595 SYSTEMS SHOULD SPECIFY SYSTEM REFERENCE DISKETTE PART NUMBER 57F1959.

IBM WORLD TRADE CUSTOMERS SHOULD FOLLOW LOCAL PROCEDURES TO OBTAIN THE CURRENT REFERENCE DISKETTE.

SAS KEYWORDS:

PSY2	PSY2DIAG	PSY2PROG	PRY2ERR
8595DIAG	8595SYSPROG	8595SYSERR	

1.4.859 MAXTOR HDD TEST FAILS UNDER QAPLUS DIAGNOSTICS

Record number: H161323

Device: D/T6282
 Model: M
 Tip key:
 Date created: 097/10/07
 Date last altered: A97/10/07

SYMPTOM:

After booting QAPLUS/PRO DOS diagnostics and selecting Module Test, System Board, and System Controller, the following, or similar error message is displayed:

"PCI IDE Transfer Failed Error Code 0004h"
 "PCI IDE Component Failed: FAILED"

PROBLEM ISOLATION AIDS:

The error is seen on, but not limited to, Maxtor fixed disk drive models 84200A8 and 82559A4 installed in the IBM PC300GL machine types 6272 and 6282.

FIX:

Download and run PC Doctor diagnostic software, file name T3GT03A.EXE, to test the system.
 The IBM PC 300/700 Enhanced Diagnostic Diskette may be downloaded via the Internet from the IBM Personal Computer File Library by searching the following Internet URL:

Http: //www.us.pc.ibm.com/files.html

The IBM PC 300/700 Enhanced Diagnostic diskette may also be obtained from the IBM PC Company BBS system by calling 1 - 919 - 517 - 0001. Locate the "IBM PC 300/700 Files" (section #21) for the file titled:

T3GT03A.EXE - IBM PC 300/700 Enhanced Diag. Dskt. v1.8.312
 T3GT03A.TXT - Text file describing the new diagnostic package.

QAPLUS/PRO is a trademark of DiagSoft, Inc.

PC Doctor is a trademark of Watergate Software, Inc.

SAS KEYWORDS:

PSY2	PSY2ERR	PSY2OPER	PSY2DIAG
PSVP	PSVPERR	PSVOPER	PSVPDIAG
D/T6272	D/T6282	6272	6282
75314	UNCLASSIFIED		

1.4.860 MEDIALESS 8556 9556 RUN SLOW AFTER 486SLC2 UPGRADE

Record number: H094431

Device: D/T8556
 Model: M
 Tip key:
 Date created: 093/10/01
 Date last altered: A94/10/05

SYMPTOM:

AFTER UPGRADING AN 8556 MEDIALESS SYSTEM WITH THE 486SLC2 PROCESSOR UPGRADE, PERFORMANCE DEGRADES OR OTHER ABNORMAL SYMPTOMS MAY OCCUR.

PROBLEM ISOLATION AIDS:**FIX:**

ENSURE THE WORKSTATION IML IMAGE IS UPDATED, USING THE REFERENCE DISKETTE AT VERSION 2.01 OR HIGHER.
 FOR MEDIALESS SYSTEMS THE IML IMAGE IS LOCATED ON THE SERVER.

FOR INSTRUCTIONS ON UPDATING AN OS/2 LAN IML IMAGE, REFER TO THE "LAN REFERENCE FOR MICRO CHANNEL WORKSTATIONS" MANUAL, INCLUDED IN THE SYSTEM LIBRARY LAN REFERENCE DOCUMENTATION (S42G-0357). INFORMATION CAN BE FOUND UNDER THE HEADING "INSTALLING THE IML UPDATE FUNCTION."

FOR INFORMATION ON UPGRADING IML IMAGES UNDER OTHER NETWORK OPERATING SYSTEMS, CUSTOMERS SHOULD REFER TO THE DOCUMENTATION INCLUDED WITH THE SPECIFIC NETWORK PRODUCT OR CONTACT THE APPROPRIATE SOFTWARE SUPPORT.

SAS KEYWORDS:

PSY2	DRIVER	NETWORK	SERVER
SLOW	PSY2COMM	PSY2OPER	486SLC2
MEDIALESS	D/T9556	8556	9556

1.4.861 MEMORY LEAKS/HANG W/ NETFINITY SERVICES AND ASMA W/ NETWARE

Record number: H162688

Device: D/T8640
 Model: M
 Tip key:
 Date created: 098/02/09
 Date last altered: A98/02/12

SYMPTOM:

NetWare reports memory errors, modules fail to load,
 %free memory decreases, and/or the System may reboot or Hang.

PROBLEM ISOLATION AIDS:

All of the Following must be true for this TIP to apply:

- The System is any PC Server/Netfinity server that supports and is configured with a IBM Advanced Systems Management Adapter (Option p/n94G5570/FRU p/n76H3240 OR Option p/n94G7578 /FRU p/n12J4743.
- The System is running Novell NetWare 3x or 4x, and Netfinity Client Services for NetWare.
- The Advanced Systems Management Adapter Driver for NetWare is IBMSPN.NLM from the " Advanced Systems Management Adapter Configuration update utility and device driver diskette" ver 2.1 or lower.
- The Advanced System Management Adapter is properly configured for use with the server.
- The System and Network Operating System are configured correctly with supported memory.
- System Diagnostics pass.

FIX:

- 1 - Before going onsite, Download the "Advanced Systems Management Adapter Configuration update utility and device driver diskette ver 2.20" or later. It is located at the following IBM Website URL:

Http: //www.pc.ibm.com/us/files.html

- Select "Search"
- Type "Management Adapter Configuration" in the Keywords box, then select "Search"
- Select "Advanced System Management Adapter Configuration update utility and device driver diskette version 2.20" to download. This is a self-extracting executable file that will prompt for a blank diskette.

Note: Read the READ.ME file located in the root directory of the new diskette for software/BIOS updates that may need to be installed to fully utilize the functionality of this software update.

Note: The following is contained in the NETWARE Directory on the new diskette:

```

.           <DIR>      12-04-97  11: 18a
..          <DIR>      12-04-97  11: 18a
IBMSPN  NLM    55720  12-04-97  11: 10a
SETUP   NLM    55620  12-04-97  11: 10a
INSTAL4 NLM    55500  12-04-97  11: 11a
5 file(s)

```

- 2 - Copy the SM.INI from the "Advanced System Manager Configuration update and device driver diskette" that was last used to configure the adapter to the new diskette. If the SM.INI is not available, then create a new one as follows:

- With the new diskette in the Server, type the following at the NetWare Console prompt:

```
LOAD A: \NETWARE\SETUP.NLM      <enter>
```

- Configure the Advanced System Management Adapter resources (refer to the "Basic Adapter Configuration" section in the "Advanced System Management Adapter Users Guide" for instructions configuring the Adapter.

- 3 - Insert the diskette into the Server, and type the following

MEMORY LEAKS/HANG W/ NETFINITY SERVICES AND ASMA W/ NETWARE

at the NetWare Console Prompt:

LOAD A: \NETWARE\INSTAL4 <enter>

The New driver IBMASPN.NLM will be copied to the Server,
Loaded in NetWare, and the Autoexec.ncf file will be modified
to Load the driver whenever NetWare is started.

Detail:

Netfinity will leak small amounts of memory each time it sends
a command to the Advanced Systems Management Adapter. Eventually
the Server runs out of memory and hangs.
The New IBMASPN.NLM fixes this problem.

SAS KEYWORDS:

PSY2	UNCLASSIFIED	D/T8638	D/T8639
D/T8640	D/T8641	D/T8650	D/T9651
D/T8644	ASMA	PSY2ADAPTER	PSY2HANG
HEALTH	UNCLASSIFIED		

1.4.862 MEMORY PARITY ERRORS USING DOS/WINDOWS

Record number: H12476

Device: D/T6384
 Model: M
 Tip key:
 Date created: 093/06/25
 Date last altered: A94/08/17

SYMPTOM:

PS/VALUEPOINT 6384/D 466DX2 SYSTEMS MAY EXHIBIT MEMORY PARITY ERRORS, SYSTEM HANGS OR SEGMENT LOAD FAILURES WHILE OPERATING IN A DOS/WINDOWS 3.1 OR WIN/OS2 ENVIRONMENT WITH AN L2 128KB OR 256KB "WRITE THRU" CACHE OPTION INSTALLED. THIS FAILURE MAY OCCUR ON EITHER "PRELOADED" OR CUSTOMER SOFTWARE INSTALLED SYSTEMS.

THE 6382/S AND 6387/T SYSTEMS MAY ALSO FAIL IF THE 128K CACHE OPTION (P/N60G1624) OR THE 256K OPTION (P/N60G1625) IS INSTALLED.

PROBLEM ISOLATION AIDS:

PS/VALUEPOINT ADVANCED DIAGNOSTICS WILL NOT FAIL DURING TESTING OF MEMORY, SYSTEM BOARD OR ANY OTHER BASE SYSTEM COMPONENTS.

FIX:

THE 128KB L2 CACHE CARD LOCATED IN POSITION U13 ON THE SYSTEM BOARD SHOULD BE REPLACED. REPLACEMENT PARTS SHOULD BE ORDERED USING NORMAL DISTRIBUTION PROCESSES.

IF THE SYSTEM IS EXPERIENCING PARITY ERRORS AND DOES NOT MATCH THE CRITERIA GIVEN IN THIS TIP, FOLLOW NORMAL PROBLEM DETERMINATION PROCEDURES TO ISOLATE THE FAILING FRU.

SAS KEYWORDS:

PSVP	VALUE POINT	PSVPERR	PSVPMEM
PSY2	PSY2ERR	PSY2MEM	PSVPBRD
PSY2BRD	LOCKUP	110	92F0397

1.4.863 MEMORY RANGE CONFLICT IN WINDOWS 95

Record number: H163290

Device: D/T6561
 Model: M
 Tip key:
 Date created: 098/04/07
 Date last altered: A98/05/14

SYMPTOM:

In Device Manager, Windows95 reports a conflicting memory range under the "Intel 82443LX Pentium II Processor to AGP Controller" resource tab.

Memory Range F5FF0000-F7FFFFFF used by:
 Cirrus Logic 546X AGP
 Memory Range F5FF0000-F7FFFFFF used by:
 Cirrus Logic 546X AGP

And under the "Cirrus Logic 546X AGP" Resource tab as:

Memory Range F6000000-F7FFFFFF used by:
 Intel 82443LX Pentium II Processor to AGP Controller
 Memory Range F5FF0000-F5FFFFFF used by:
 Intel 82443LX Pentium II Processor to AGP Controller

PROBLEM ISOLATION AIDS:

This tip applies, but is not limited to, IBM PC300GL Series 6561/6591 systems installed with Window95 and equipped with an integrated AGP video adapter.

The memory conflict condition may also be seen in IBM PC300PL Series 6862/6892 systems, and additional systems configured with AGP video devices.

FIX:

No corrective action is needed.

This memory conflict message is caused by the limitation of Windows95 to accurately report AGP resources in use across PCI-to-PCI chipsets.

This limitation may be corrected in future updates of the operating system.

Windows and Windows95 are trademarks of Microsoft Corporation.

SAS KEYWORDS:

PSY2	PSY2ERR	PSVP	PSVPERR
D/T6561	D/T6591	6561	6591
AGP	WIN95	UNCLASSIFIED	D/T6862
D/T6892	6862	6892	PCI

1.4.864 MGA MONITOR TAB INFORMATION IS NOT UPDATED

Record number: H161959

Device: D/T6562
Model: M
Tip key:
Date created: 097/11/24
Date last altered: A97/11/24

SYMPTOM:

When attempting to make a refresh rate change and then canceling the operation at the prompt "Your Monitor Selection Has Changed. Do You Want To Keep This Setting?", the information on the MGA Monitor tab continues to display the new refresh rate.

PROBLEM ISOLATION AIDS:

None

FIX:

Download and install the current Matrox Graphics for WindowsNT 4.0 video driver for the IBM PC300PL, Machine Type 6562/6592.

The current Matrox WindowsNT 4.0 video drivers may be downloaded via the Internet from the IBM Personal Computer File Library by searching the following Internet URL:
www.us.pc.ibm.com/files.html

The drivers may also be obtained from the IBM Personal Systems Group BBS by calling 919-517-0001.

Windows and WindowsNT are trademarks of Microsoft Corporation.

SAS KEYWORDS:

PSY2	PSY2MISC	PSY2OPER	PSVP
PSVPMISC	PSVPOPER	D/T6562	D/T6592
6562	6592	67951	UNCLASSIFIED

1.4.865 MGA POWER DESK MENU OPTION REMAINS IN TASK BAR

Record number: H161955

Device: D/T6562
Model: M
Tip key:
Date created: 097/11/24
Date last altered: A97/11/24

SYMPTOM:

After running the Matrox Power Desk uninstall application, the Power Desk menu option remains on the Task Bar.

PROBLEM ISOLATION AIDS:

This tip applies to the IBM PC300PL, Machine Types 6562/6592, preloaded with WindowsNT 4.0.

FIX:

The Power Desk menu option can be removed via the following steps:

1. Right click on My Computer icon.
2. Click on Explore.
3. Click on IBM_Preload, then Winnt40.
4. Click on Profiles, All Users, Start Menu, then Programs.
5. Expand Programs and delete the MGA NT Power Desk option.

Windows and WindowsNT are trademarks of Microsoft Corporation.
MGA Power Desk is a trademark of Matrox Corporation.

SAS KEYWORDS:

PSY2	PSY2MISC	PSY2OPER	PSVP
PSVPMISC	PSVPOPER	D/T6562	D/T6592
6562	6592	71131	71132
UNCLASSIFIED			

1.4.866 MGA POWERDESK ICON REMAINS AFTER UNINSTALL ROUTINE

Record number: H161801

Device: D/T6592
Model: M
Tip key:
Date created: 097/11/12
Date last altered: A97/11/12

SYMPTOM:

After running the MGA PowerDesk Uninstall utility, the MGA PowerDesk entry is not removed from the Start menu.

PROBLEM ISOLATION AIDS:

This tip applies to the IBM PC300PL, Machine Types 6562 and 6592, preloaded with WindowsNT 4.0.

FIX:

The MGA PowerDesk icon can be removed via the following steps:

1. Double click the My Computer icon, then double click the (C:) Drive icon.
2. Double click the following folders: Winnt40, Profiles, Administrator, Start Menu, then Programs.
3. Click once on the MGA PowerDesk folder to highlight it.
4. Press <Delete> and answer Yes to move the MGA PowerDesk icon to the Recycle Bin.

Windows and WindowsNT are trademarks of Microsoft Corporation.

SAS KEYWORDS:

PSY2	PSY2OPER	PSVP	PSVPOPER
D/T6562	D/T6592	6562	6592
MATROX	75667	75668	75669
UNCLASSIFIED			

1.4.867 MICROSOFT DESKTOP MANAGEMENT CONFLICTS WITH LANDESK

Record number: H162996

Device: D/T6898
 Model: M
 Tip key:
 Date created: 098/03/12
 Date last altered: A98/03/12

SYMPTOM:

After uninstalling Microsoft Desktop Management via the Install/Uninstall tab in "Add/Remove Programs," attempting to install LANdesk Client Manager returns an error message stating that Microsoft Desktop Management is still installed.

PROBLEM ISOLATION AIDS:

This tip applies to IBM IntelliStation M-Pro Series 6898 systems preloaded with Windows95 OSR 2.x.

FIX:

LANdesk Client Manager is incompatible with Microsoft Desktop Management.

Microsoft Desktop Management must be uninstalled via the following steps:

1. Reboot the system and press <F5> to start Windows in Safe Mode.
2. Click the Start button, then go to Settings, Control Panel.
3. Double click "Add/Remove Programs" icon.
4. Click the Windows Setup tab.
5. Double click "Accessories."
6. Uncheck the Desktop Management box and click OK.
7. Restart Windows95.

Windows and Windows95 are trademarks of Microsoft Corporation.

SAS KEYWORDS:

PSY2	PSY2ERR	PSY2MISC	PSVP
PSVPERR	PSVPMISC	LDCM	MDM
87992	87992F_1	D/T6898	6898
UNCLASSIFIED			

1.4.868 MICROSOFT FRAMEMAKER FAILS ON PS/2 9576/9577

Record number: H102486

Device: D/T9576
Model: M
Tip key:
Date created: 096/04/22
Date last altered: A96/04/22

SYMPTOM:

IBM PS/2 9576i, 9576s, 9577i and 9577s systems may exhibit intermittent video corruption or system hangs when running Microsoft Framemaker software in a WIN-OS/2 session or in a DOS/Windows environment.

PROBLEM ISOLATION AIDS:

Video corruption or system hangs occur while moving dialog boxes partially off the screen and back on repeatedly. The corruption may be displayed as multicolored bars running from the upper right corner of the display down to the lower left corner. The color of the bars will match closely to the colors that were displayed before the corruption occurred.

FIX:

Do not replace hardware.

The Microsoft Framemaker application is incompatible with the S3 - 928 video chipset integrated in the 9576 and 9577 i & s model systems.

Customers using this application and experiencing the symptoms above should be directed back to their point of purchase.

Microsoft Framemaker is a trademark of the Microsoft Corporation.

SAS KEYWORDS:

PSY2	IBMPC	PSY2PROG	PSY2OEM
D/T9577	9576	9577	PSY2DISP

1.4.869 MICROSOFT SYSTEM CERTIFICATION TESTS HANG SYSTEM

Record number: H161610

Device: D/T6898
Model: M
Tip key:
Date created: 097/10/30
Date last altered: A97/10/30

SYMPTOM:

The system hangs during the following Microsoft System Certification tests:

Port Class Dynamic Configuration
Media Class Dynamic Configuration
Net Class Dynamic Configuration
Other Classes Dynamic Configuration

PROBLEM ISOLATION AIDS:

The mouse and keyboard may also not respond. The system must be powered off and restarted to recover.

No report logs are created.

FIX:

Before running the tests, SCSI channel B must be disabled in the Windows95 Device Manager.

To re-enable SCSI channel B after completing the tests, SCSI channel B must be removed, and then redetected in the Windows95 Device Manager.

Windows and Windows95 are trademarks of Microsoft Corporation.

SAS KEYWORDS:

PSY2	PSY2ERR	PSY2OPER	PSVP
PSVPERR	PSVPOPER	D/T6898	M/T6898
6898	78334	78334F_1	UNCLASSIFIED

1.4.870 MODEM FAILS ON COM 4 W/WINDOWS 95 & PC 700

Record number: H131587

Device: D/T6885
 Model: M
 Tip key:
 Date created: 095/11/06
 Date last altered: A95/11/06

SYMPTOM:

IBM PC 700 Series 6875, 6885, 6876, and 6886 may exhibit data transmission failures or Mouse failures using Microsoft's Windows 95 Terminal program with either of the following configurations:

- A) Modem configured for COM 4 and running a video mode of 1280 x 1024 x 256 colors = Data Transmission Failure
- B) Modem configured for COM 4 and running a video mode of 640 x 480 (VGA) = Mouse Pointer does not move

PROBLEM ISOLATION AIDS:

Configure Windows 95 Terminal to use COM 1, COM 2, or COM 3 and retest for the failure. If the failure does not reoccur, this tip applies.
 Advanced diagnostics run without failures.

FIX:

An incompatibility exists between COM 4 under Windows 95 Terminal and the S3 864 video chipset used in the IBM PC 700 Series systems.

The incompatibility can be resolved by installing the latest level BIOS update and the 5WIN95 COM4 fix. Listed below are the filenames of the updates:

N1JT78A.EXE - Flash BIOS Update for 6875 & 6885 ISA/PCI
 N2JT38A.EXE - Flash BIOS Update for 6876 & 6886 Microchannel
 5WIN95.ZIP - Windows 95 COM4 Fix

The updates may be obtained from the IBM PC Company Bulletin Board system by calling 919-517-0001. The files are located in Section 21 titled "IBM PC 300/700 Files."

The files may also be downloaded via the Internet from the IBM Personal Computer File Library by searching the following Internet URL:

Http: //www.pc.ibm.com/files.html

If the failure persists, continue normal problem determination procedures to isolate the failing application or FRU.

Windows 95 is a trademark of the Microsoft Corporation.
 S3 864 is a trademark of S3 Incorporated.

SAS KEYWORDS:

PSVP	PSY2	PSVPPROG	PSY2PROG
IBMPC	PSY2COMM	PSVPCOMM	D/T68XX
PSVPADPT	PSY2ADPT	PSVPDISP	PSY2DISP
WINDOWS95	D/T6875	D/T6876	D/T6886

1.4.871 MONITOR APPEARS TO BOOT IN 40 COLUMN MODE

Record number: H121884

Device: D/T6324
 Model: M
 Tip key:
 Date created: 093/11/24
 Date last altered: A94/08/15

SYMPTOM:

The monitor may display characters in what appears to be 40 column mode.

The memory count may appear in the middle center of the screen and the image appears to shift to the middle center (Image Wrap)

If a warm boot is performed, (Ctl-Alt-Del), the above symptom may reoccur.

PROBLEM ISOLATION AIDS:

The monitor was powered on before the system unit and is a multiscanning or multifrequency monitor.

FIX:

Power the monitor off and back on after the system unit has completed POST.

Note: The monitor should be powered on approximately 10 seconds after the system unit. This will allow the system unit to complete POST.

This situation may occur with a limited number of early level multiscanning monitors (6324, 6325, 9524 and 9525) during POST.

When powered-on, the monitor starts its sweep initialization sequence and sweeps its frequency range (30KHz to 64KHz) attempting to lockon (or sync) to the incoming sync signal from the system unit. Due to timing considerations, between the system unit and the display, the display may lock onto twice the sync frequency of the signal coming from the system unit.

While this situation has been fixed in later level monitors, it is not considered a defect. No parts should be changed to troubleshoot this condition. As stated in the users manual shipped with the product, all multiscanning monitors should be powered on AFTER turning on the system unit.

SAS KEYWORDS:

PSY2	PSVP	VPDISP	PS2DISP
D/T9524	D/T9525	DISPLAY	D/T6325
OVERLAPPING	OVERLAP	WRAP	MULTISCAN
MULTISYNC			

MONITOR BLANK, NO GREEN LED, DOES NOT WAKE UP

1.4.872 MONITOR BLANK, NO GREEN LED, DOES NOT WAKE UP

Record number: H086601

Device: D/T6327
Model: M
Tip key:
Date created: 094/09/09
Date last altered: A95/02/27

SYMPTOM:

The 6327 or 9521 appears to fail and not come out of Power Saver Mode.

The monitor screen is blank and the green LED is off.

PROBLEM ISOLATION AIDS: None**FIX:**

This is not a defect. The 6327-001 and 9521-001 will enter a shutdown or sleep mode if not used over an extended period of time.

To recover from the shutdown or sleep modes the user must power the monitor off and back on.

The 6327 - 023 monitor will "wake up" with a keyboard or mouse action.

Details of these instructions are provided in the Customer's Users Manual.

SAS KEYWORDS:

PSY2	PSY2DISP	PSVP	D/T9521
9521	6327	D/T6327	

1.4.873 MONITOR BLANKS ON SERVER 295

Record number: H104471

Device: D/T8600
Model: M
Tip key:
Date created: 094/05/19
Date last altered: A94/08/15

SYMPTOM: Blank monitor when booted into DIAGMON
The system boots into DIAGMON (as indicated by the front panel LED's), but nothing is displayed on the VGA monitor. This occurs when the AP/FP switch is set to FP. The monitor is controlled by the AP processor when running DIAGMON.

PROBLEM ISOLATION AIDS: None

FIX: There is no permanent fix for this situation. The following procedure is a work-around.

DURING THIS PROCEDURE, DO NOT RE-CONFIGURE
THE SYSTEM WITH THE REFERENCE DISK!!

- A. Temporarily set the AP/FP switch to "AP."
- B. Enter DIAGMON (power on the server with the two black buttons on the LCD being depressed).
- C. Configure/Upgrade BIOS or RMP.
- D. Shutdown operating system, and turn machine off.
Ignore any POST errors if the RMP FLASH WRITE reboots the system.
- E. Return AP/FP switch to FP position & power on machine.

No further engineering action is planned.

SAS KEYWORDS:

PSY2

SERVER

295

SERVER295

MONITOR CARD TRAY SLIDER ON/OFF BUTTON

1.4.874 MONITOR CARD TRAY SLIDER & ON/OFF BUTTON

Record number: H122937

Device: D/T95XX
 Model: M
 Tip key:
 Date created: 094/02/15
 Date last altered: A95/06/28

SYMPTOM:

A limited number of 6324, 6325, 9524 and 9525 monitors may have a defective ON/OFF button and slider (the slider is a plastic push-rod, located between the on/off button and the power switch on the card tray). The button may jam, lock or flex when operated.

PROBLEM ISOLATION AIDS: NONE**FIX:**

A Small Parts Kit, FRU P/N39G6281, has been released to resolve these problems.

The Kit contains a redesigned ON/OFF button, an improved slider and a spring loaded catch that holds the front panel door. The kit should be ordered using normal parts ordering procedures.

The Monitor HMM, S71G-4197, will be updated to identify the contents of this small parts kit. Current production monitors are using the improved design.

SAS KEYWORDS:

D/T9524	D/T9525	D/T6324	PUSH ROD
D/T6325	BENDS	FLEXING	BENDING
PSY2	PSY2DISP	DOOR	LATCH
D/T9527	D/T9521	D/T6327	

MONITOR DISPLAYS a WHITE SCREEN DURING POST

1.4.875 MONITOR DISPLAYS a WHITE SCREEN DURING POST

Record number: H125308

Device: D/T9577
Model: M
Tip key:
Date created: 094/09/06
Date last altered: A95/03/16

SYMPTOM:

A monitor attached to a 9576 or 9577 with a Cornerstone ImageAccel Multi-function Display Controller Adapter displays a white screen during POST.

PROBLEM ISOLATION AIDS:

- This tip applies only if the 9576 or 9577 is a Model xUx, xNx, or xTx.
- This tip applies only if the unit is a 9576i, 9576s, 9577i or 9577s.
- The system contains a Cornerstone ImageAccel Multi-function Display Controller Adapter Card.
- The system unit does not have a Cornerstone terminator or second monitor attached to the system board video port.

FIX:

This problem has been fixed with 9576/77 Flash BIOS revision level 04 on, Version 3.03.

The Flash update, 7677FLSH.DSK may be downloaded from the IBM PC Company Bulletin Board System at 919-517-0001.

IMPORTANT
#
THESE FLASH UPDATES ARE CUSTOMER INSTALLABLE. CUSTOMERS
SHOULD BE ADVISED TO CONTACT THE PC COMPANY HELPCENTER AT
800-772 - 2227 IF ASSISTANCE IS REQUIRED IN GETTING THE
APPROPRIATE UPDATE.
#
#####

The terminator, shipped with the Cornerstone ImageAccel Multi-function Display Controller Adapter Card, must also be installed.

If installing the Flash update and the terminator identified above does not correct the problem, the servicer should use normal problem determination procedures.

ImageAccel Multifunction Display Controller is a trademark of Cornerstone Imaging, Inc.

SAS KEYWORDS:

PSY2 D/T9576 D/T9577I D/T9577S
D/T9576I D/T9577I BOOT PSY2DISP

MONITOR DISPLAYS CHANGING OR INCONSISTENT SCREEN COLORS

1.4.876 MONITOR DISPLAYS CHANGING OR INCONSISTENT SCREEN COLORS

Record number: H126928

Device: D/T95XX
 Model: M
 Tip key:
 Date created: 095/03/27
 Date last altered: A95/11/17

SYMPTOM:

6324, 6325, 6327, 9524, 9525 monitors may experience changing or inconsistent screen colors during operation.

PROBLEM ISOLATION AIDS:

The monitor is a 6324-001, 6325-001, 6327-023, 9524 - 001, or 9525-001

Inspect the exterior covering of the Signal Cable for a marking of "J1-HAW" identified in black ink, along with other lettering or wording.

AND/OR

Inspect the Strain Relief on the Signal Cable that connects the affected monitor to the system unit at the point it feeds through the Analog Card Tray for an identification mark of "ESM." It may be necessary to remove the cable from the Analog Card Tray Strain Relief slot to observe the "ESM" identification.

FIX:

If the exterior covering on the Signal Cable has a marking of "J1-HAW" identified in black ink, along with other lettering or wording or the Strain Relief on the Cable is identified with "ESM," and the above symptom is experienced, the cable should be replaced with a new FRU, P/N39G6264.

It is highly unlikely that this problem is caused by the Analog Card Tray, hence the card tray should not be replaced in an attempt to fix the defect.

If the symptom remains, utilize normal problem determination procedures to isolate the failing FRU or application.

| Note: The 6327-001 monitor uses signal cable FRU P/N71G8490. Signal cables installed on 6327-001 monitors are not affected.

SAS KEYWORDS:

PSY2	PSY2DISP	D/T6324	D/T6325
D/T9524	D/T9525	D/T6327	INTERFACE
6324 001	6325 001	6327 023	9524 001
9525 001	JI HAW	J1HAW	

1.4.877 MONITOR DOES NOT ADJUST SATISFACTORILY

Record number: H125768

Device: D/T9521
Model: M
Tip key:
Date created: 094/12/13
Date last altered: A95/03/27

SYMPTOM:

The servicer is unable to adjust geometry satisfactorily.
The upper corners exhibit excessive curvature.

PROBLEM ISOLATION AIDS:

Servicer is only using the service documentation.

FIX:

There is an additional adjustment mode which is only documented in the 9521 "User's Guide," which is shipped with each monitor. By performing the adjustments described under "Advanced Mode Function," additional control is gained over the geometry adjustments, such as Pincushion Balance, Trapezoid balance and Keystone (Horizontal skew).

Due to the interactive nature of the adjustments, all three will have to be adjusted for best overall geometry. Adjustments in the other modes should be rechecked for best results.

Note:

If after performing the above adjustments parts replacement is required, it should be noted that ALL parts shipped with the Analog Card tray FRU should be changed at the same time.

SAS KEYWORDS:

PSY2	PSY2DISP	9521	21P
21X	ALIGNMENT	CURVE	

1.4.878 MONITOR EXHIBITS BLINKING ON 9576 AND 9577

Record number: H124609

Device: D/T9576
 Model: M
 Tip key:
 Date created: 094/07/11
 Date last altered: A95/02/24

SYMPTOM:

6327 monitors connected to a 9576 or 9577 may exhibit a flashing, blanking or blinking screen. When this occurs, the screen "blanks out" very briefly, approximately once per second.

PROBLEM ISOLATION AIDS:

- This tip applies only if the 9576 or 9577 is a Model xUx, xNx, or xTx.
- This tip applies only if the unit is a 9576i, 9576s, 9577i or 9577s.
- The flash BIOS level is at version 3.01.

Note: A flash Bios level of 02 or 2 is the same as version 3.01 identified on the diskette.

FIX:

If the system is experiencing the above problem during power up or POST and the version of the BIOS level is 3.01, a new level BIOS should be obtained. (3.02)

Note: A flash BIOS level of 03 or 3 is the same as version 3.02 identified on the diskette.

If the system is experiencing the above problem after the system is up and running, a new XVAVES.A.COM file (SVGA TSR) should also be obtained.

Note:

The 640 x 480 x 256 color mode at 75 Hz is NOT supported on these systems.

The flash BIOS image and the XVAVES.A.COM file may be down loaded from the IBM PC Company Bulletin Board System by calling 919-517-0001.

```
***** IMPORTANT *****
*
* THESE UPDATES ARE CUSTOMER INSTALLABLE. CUSTOMERS
* SHOULD BE ADVISED TO CONTACT THE PC COMPANY HELPCENTER
* AT 800-772-2227 IF ASSISTANCE IS REQUIRED IN GETTING
* THE APPROPRIATE UPDATE.
*****
```

SAS KEYWORDS:

PSY2	D/T6327	PSY2DISP	76I
D/T9577	77I	76S	77S
D/T9577I	D/T9577S	D/T9576I	D/T9577I
JITTERING	BLANKING	BLINKS	

MONITOR FAILURE WHEN USING PS/VP WITH S3 VIDEO

1.4.879 MONITOR FAILURE WHEN USING PS/VP WITH S3 VIDEO

Record number: H123789

Device: D/T6384
 Model: M
 Tip key:
 Date created: 094/05/02
 Date last altered: A95/10/23

SYMPTOM:

Any multi-scanning monitor (Multi-Sync), which includes the PS/ValuePoint 6314, 6317, and 6319, may blank out when changing video modes. For example; when entering or exiting a text mode application, and switching to a high-resolution graphics application. When this "blanking" occurs, the user should power the monitor off/on to recover. In some cases the monitor may not recover.

PROBLEM ISOLATION AIDS:

If this symptom is experienced, verify the monitor is being driven by a PS/ValuePoint 6382/S, 6384/D, or 6387/T system that is using the S3 Video Drivers that accompanied the system. If so, this tip applies.

A problem has been identified whereby the above configuration may - during MODE switching - present Horizontal Synch signals from the system unit to the monitor that are out of normal frequency range/duration. Multi-sync monitors will attempt to lock onto this spurious frequency and potentially blank out. Mode switching occurs when running an application and the user changes from one task window to another, such as changing from the OS/2 desktop to a WIN-OS/2 session.

FIX:

Note: The failure modes for video and monitor devices can occur for reasons other than those described above. Utilize the following steps to eliminate the above failure symptom as a possible cause:

The complete fix is dependent upon which operating system is installed:

For DOS-based system operations, obtain and install the latest PS/ValuePoint Flash BIOS update. No additional changes or updates are required.

For OS/2 - based system operations, obtain and install the latest PS/ValuePoint Flash BIOS update. In addition to the Flash BIOS system update, you MUST obtain and install the OS/2 S3 Driver Update package "S3-16M.DSK."

The ValuePoint Flash BIOS update and the OS/2 S3 Device Driver Update Packages may be downloaded from the IBM PC Co. Bulletin Board System at 919-517-0001. The file names on the IBM PC Co. Bulletin Board are:

Flash Bios Update Level 68A - L6JT68A.EXE

OS/2 S3 Driver Update Package - S3-16M.DSK

These updates are customer installable and can also be obtained on diskette by calling the PC Co. HelpCenter at 800-772 - 2227.

SAS KEYWORDS:

PSY2	PSY2DISP	PSY2PROG	D/T6319
D/T9525	D/T9524	D/T6314	D/T6317
D/T6224	D/T6325	PSVP	PSVPPROG
PSVPDISP	PSVPPROG	PSVPMCD	PSY2MCD
PSVPOPER	PSY2OPER		

1.4.880 MONITOR JITTER WHEN ATTACHED TO 9576 OR 9577

Record number: H124517

Device: D/T9576
 Model: M
 Tip key:
 Date created: 094/06/15
 Date last altered: A94/12/09

SYMPTOM:

IBM and other monitors may exhibit jitter* when connected to a PS/2 9576 or 9577 system.

* Jitter is characterized by vertical lines periodically displaying small waves, instead of displaying a solid vertical line. This jitter is most apparent during hardfile and mouse activity.

PROBLEM ISOLATION AIDS:

- This tip applies only if the 9576 or 9577 is a Model xUx, xNx, xTx.
- This tip applies only if the unit is a 9576i, 9576s, 9577i or 9577s.
- Determine if a replacement system board is required by viewing the systems Vital Product Data (VPD) as indicated below.

FIX:

To determine if the jitter is caused by the system board, the user should boot the reference diskette or the reference partition from the hard file.

Once at the Main Menu, select:

8. More Utilities

From the next menu, select:

4. Set system identification

From the next menu, select:

2. View system identification

At this point, there will be a line labeled: "Unique part identifier" followed by an alphanumeric code, starting with "B1...", this is basically the planar serial number.

Cross-reference the system board part number and the alphanumeric Bar Code Header* to the table below. If a match is found, the system board is downlevel and should be replaced with FRU P/N95G9692.

* Note: The Bar Code Header is the first 5 characters of the "Unique part identifier".
 The following are the part numbers and the alphanumeric Bar Code Headers of the system boards that should be replaced:

System Board Part Number	--- Bar Code Headers ---		
72G9383	B13AD	B13AE	B13AF
72G9384	B13AG	B13AH	B13AJ
72G9385	B13AK	B13AL	B13AM
72G9386	B13AN	B13AP	B13AQ
72G9393	B13AR	B13AS	B13AT
95G9662	B13AU	B13AV	B13AW
95G9663	B13AX	B13AY	B13AZ
72G9389	B13B0	B13B1	B13B2
72G9390	B13B3	B13B4	B13B5
72G9391	B13B6	B13B7	B13B8
95G9667	B13B9	B13BA	B13BB
95G9646	B13BC	B13BD	B13BE
95G9678	B13BF	B13BG	B13BH
95G9679	B13BJ	B13BK	B13BL
95G9680	B13BM	B13BN	B13BP
95G9669	B13BQ	B13BR	B13BS
72G9399	B13BT	B13BU	B13BV
95G9685	B13BW	B13BX	B13BY
95G9686	B13BZ	B13C0	B13C1
95G9687	B13C2	B13C3	B13C4
95G9647	B13CH	B13CJ	B13CK
95G9690	B13CL	B13CM	B13CN

PSY2 RETAIN TIPS

MONITOR JITTER WHEN ATTACHED TO 9576 OR 9577

72G9400	B13C8	B13C9	B13CA
72G9401	B13CB	B13CC	B13CD
95G9670	B13CE	B13CF	B13CG
95G9700	B13NU	B13NV	B13NW
95G9701	B13NX	B13NY	B13NZ
95G9702	B13P0	B13P1	B13P2
95G9703	B13P3	B13P4	B13P5
95G9704	B13P6	B13P7	B13P8
95G9705	B13P9	B13PA	B13PB
95G9666	B13PC	B13PD	B13PE
95G9706	B13PF	B13PG	B13PH
95G9707	B13PK	B13PL	B13PM
95G9707	B13PJ	B13PK	B13PL
95G9708	B13PM	B13PN	B13PP
95G9709	B13PQ	B13PR	B13PS
95G9661	B13PT	B13PU	B13PV
95G9710	B13PW	B13PX	B13PY
95G9711	B13PZ	B13Q0	B13Q1
95G9712	B13Q2	B13Q3	B13Q4
95G9713	B13Q5	B13Q6	B13Q7
95G9714	B13Q8	B13Q9	B13QA
95G9715	B13QB	B13QC	B13QD
95G9716	B13QE	B13QF	B13QG
95G9717	B13QH	B13QJ	B13QK
95G9718	B13QL	B13QM	B13QN
95G9719	B13QP	B13QQ	B13QR
95G9720	B13QS	B13QT	B13QU
95G9721	B13QV	B13QW	B13QX
95G9722	B13QY	B13QZ	B13R0
95G9726	B13R1	B13R2	B13R3
95G9727	B13R4	B13R5	B13R6

Only systems with the above numbers are affected. Current manufacturing and FRU system boards will have different numbers and are not affected.

If jittering exists with the replacement system board, or if the system board did not have one of the above numbers, continue with normal problem determination.

SAS KEYWORDS:

D/T9577	D/T9521	D/T6327	D/T9527
PSY2DISP	JITTER	FLICKER	95G9692
JITTERS	76I	77I	76S
77I	JITTERING	D/T9577I	D/T9577S
D/T9576I	D/T9577I	9576I	9577I
PSY2DISP	PSY2	9576S	9577S

MONITOR KEYPAD DOES NOT OPERATE PROPERLY

1.4.881 MONITOR KEYPAD DOES NOT OPERATE PROPERLY

Record number: H017945

Device: D/T95XX
 Model: M
 Tip key:
 Date created: 094/03/22
 Date last altered: A95/08/08

SYMPTOM:

Keypad on the monitor does not operate properly.

PROBLEM ISOLATION AIDS:

The Monitor or Keypad may have just been installed, removed, and/or replaced.

FIX:

- Remove and reseal the flex cable that connects the Keypad and the analog card. The connector is a Zero-Insertion-Force (ZIF) connector. The flex cable may be removed by sliding the white plastic collar of the keypad cable connector towards the edge of the analog card. Instructions for removal are also on page 2 - 11 of the Monitor HMM, S71G4197-02.
- Replace the Keypad assembly if reseating does not fix the problem. (Keypad assembly is part of front cover.)
- Replace the analog card only if reseating and replacing the Keypad assembly does not fix the problem.
- The Problem Determination procedures identified above are also provided in the HMM on page 2-22.

SAS KEYWORDS:

PSY2	D/T9525	D/T9525	D/T6324
D/T6325	TOUCHPAD	TOUCH	PAD
PANEL	KEY	PSY2DISP	CONTROL

PSY2 RETAIN TIPS
MONITOR LOOSES TOUCH FUNCTION

1.4.882 MONITOR LOOSES TOUCH FUNCTION

Record number: H125826

Device: D/T9524
Model: M
Tip key:
Date created: 094/12/12
Date last altered: A95/01/05

SYMPTOM:

The touch monitor does not react to touch input.

PROBLEM ISOLATION AIDS:

- Diagnostics complete without error. (Touch function works)
- After turning the system unit off & on or using Ctl-Alt-Del, the unit works correctly.

FIX:

This is not a hardware defect and no parts should be replaced in an attempt to fix it.

This may occur if your monitor has been switched off but your computer unit has been left powered on.

When the monitor was turned off and back on, the information sent to it from the PS/2 during IML was lost, thus the touch function cannot operate. Only a reboot of the system will re-enable the touch function.

Care should also be taken when attaching any power saver devices to monitors with the touch option, as monitor power interruption may reset the touch controller card within the monitor.

Further information can also be obtained from the "Touch Option User Guide" shipped with the customers unit.

Note:

If a customer has a need to power off their monitor leaving their system unit on and the touch function does not work, a patch is available from Micro Touch. Micro Touch can be contacted at 508-659-9000. The patch file is identified as "MTCONFIG.EXE". The file can be downloaded from their BBS at 508 - 683 - 0358.

SAS KEYWORDS:

PSY2	PSY2DISP	T01	D/T9515
D/T9524	D/T9525	D/T9521	D/T9527
D/T6324	D/T6325	D/T6327	PIZZA

1.4.883 MONITOR MAY NOT DISPLAY HIGH RESOLUTION MODE

Record number: H12354

Device: D/T95XX
 Model: M
 Tip key:
 Date created: 093/06/25
 Date last altered: A94/08/15

SYMPTOM:

- A MONITOR CONNECTED TO AN XGA-2 ADAPTER MAY NOT DISPLAY HIGH RESOLUTION MODE WHEN USED WITH CADAM OR OTHER HIGH RESOLUTION TYPE APPLICATIONS RUNNING UNDER OS/2.

PROBLEM ISOLATION AIDS:

- DISPLAYED IMAGE APPEARS OUT OF SYNC.
- MONITOR DISPLAYS OPERATING SYSTEM AND DIAGNOSTIC SCREENS CORRECTLY.
- MONITOR AND SYSTEM DIAGNOSTICS RUN WITHOUT ERROR.

FIX:

THIS PROBLEM MAY BE CAUSED BY AN INCORRECT OR DOWN LEVEL DEVICE DRIVER THAT WAS PROVIDED WITH OS/2 2.00.1. OS/2 SOFTWARE SUPPORT HAS INDICATED THAT FILE "BVHXGA.DLL" MAY BE DOWN LEVEL AND MAY NEED TO BE UPDATED OR REPLACED. THE CURRENT UPDATED FILE HAS A BYTE COUNT OF 9520 BYTES. THE DATE ON THE FILE CHANGES DEPENDING ON WHEN IT WAS DOWN LOADED. THE CUSTOMER OR SERVICER SHOULD CONTACT OS/2 SOFTWARE SUPPORT AT 1-800-992-4777 AND REQUEST THE UPDATED FILE. THIS PROBLEM HAS BEEN FIXED IN OS/2 RELEASE 2.1.

IF DIAGNOSTICS AND OTHER APPLICATIONS RUN SUCCESSFULLY, IT IS VERY UNLIKELY THAT HARDWARE IS FAILING. SOFTWARE SUPPORT SHOULD BE UTILIZED BEFORE REPLACING ANY HARDWARE. RETAIN RECORD H20154 CONTAINS ADDITIONAL XGA DEVICE DRIVER INFORMATION FOR OS/2.

SAS KEYWORDS:

PSY2	XGA2	PSY2DISP	XGA
PSY2PROG	OS2	OS-2	D/T9515
D/T9517	D/T9518		

1.4.884 MONOCHROME MONITOR FAILS TO DISPLAY 16 GREY SHADES

Record number: H123257

Device: D/T6272
Model: M
Tip key:
Date created: 097/04/15
Date last altered: A97/04/15

SYMPTOM:

IBM PC 300GL Series 6272 and 6282 systems running OS/2 2.11, OS/2 WARP 3.x or 4.x may fail to display 16 shades of grey on a monochrome monitor with the Cirrus video device drivers installed.

PROBLEM ISOLATION AIDS:

In graphic applications running on a monochrome monitor, areas of the displayed image do not appear correctly or are visible at all.

FIX:

Use the native OS/2 VGA or SVGA drivers in place of the Cirrus video drivers.

An updated version of the Cirrus video device driver is being developed to eliminate the problem. The updated driver will be available from the IBM PC Company BBS at 919-517-0001 and from the IBM PC Company File Library via the Internet at the following URL:

<http://www.pc.ibm.com/files.html>

SAS KEYWORDS:

PSVP	PSY2	PSVPDISP	PSY2DISP
IBMPC	60349	PSVPPROG	PSY2PROG
UNCLASSIFIED	PC 330	PC 340	PC300GL

MOUSE CURSOR IS ERRATIC OR LOCKED AFTER APM WAKEUP

1.4.885 MOUSE CURSOR IS ERRATIC OR LOCKED AFTER APM WAKEUP

Record number: H161051

Device: D/T6588
Model: M
Tip key:
Date created: 097/09/16
Date last altered: A97/09/16

SYMPTOM:

After the system has entered Advanced Power Management (APM) mode and a key is pressed to wakeup the system, the mouse cursor becomes erratic or is locked up.

PROBLEM ISOLATION AIDS:

If the user is running DOS and Windows 3.x, or DOS and Windows for Workgroups in the IBM PC300XL or IntelliStation M-Pro (Machine types 6588 and 6888), this tip applies.

FIX:

Advanced Power Management (APM) mode must be disabled via the F1 Setup in the IBM PC300XL and IntelliStation M-Pro (Machine types 6588 and 6888) if either DOS and Windows 3.x, or DOS and Windows for Workgroups is used as the operating system.

DOS, Windows, and Windows for Workgroups are trademarks of Microsoft Corporation.

SAS KEYWORDS:

PSY2	PSY2OPER	PSY2MCD	PSVP
PSVPOPER	PSVPMCD	D/T6588	D/T6888
WINDOWS3.X	WFW	62363	PCDOS
UNCLASSIFIED			

1.4.886 MOUSE FAILS EXITING POWER MANAGEMENT IN WINDOWS 3.X

Record number: H134338

Device: D/T6576
 Model: M
 Tip key:
 Date created: 096/10/08
 Date last altered: A96/10/08

SYMPTOM:

IBM PC 300 Series 6576 and 6586 systems preloaded with DOS & Windows 3.x may exhibit a mouse lockup after recovering from APM (Advanced Power Management) mode if either of the following conditions are met:

- 1) The SYSTEM.INI file in the WINDOWS directory executes the following two mouse drivers that do not re-initialize the mouse after APM has been active for at least 20 minutes:

LVMD.386 size=9,688 bytes, date=12/31/93
 LMOUSE.DRV size=12,346 bytes, date=12/31/93

- 2) If Lotus SmartSuite is installed, the following statement may be deleted from the WIN.INI file:

"LOAD=C: \WINDOWS\NWAPM.EXE"

When the system tries to recover from Suspend mode, the mouse locks up because the APM driver was never loaded in the WIN.INI file.

PROBLEM ISOLATION AIDS:

This failure only affects the Windows 3.x environment.

When this failure occurs, the system continues to function without the mouse.

FIX:

Mouse Lockup caused by symptom #1:
 The mouse drivers listed above in the SYMPTOM section are inappropriate for use with the APM feature. The following two drivers will function normally after recovering from APM mode:

LVMD.386 size=10,238 bytes, date=7/8/93
 LMOUSE.DRV size=32,208 bytes, date=7/8/93

There are 2 sets of the drivers included with the preloaded software on the PC 300 6576/6586 system. They are located in different directories and can be identified by the file size and date.

Edit the SYSTEM.INI file and verify that the following two entries are pointing to the directory that contain the appropriate mouse drivers listed above:

SYSTEM.INI entries - MOUSE=C: \Mouse Directory\LVMD.386
 MOUSE.DRV=C: \Mouse Directory\LMOUSE.DRV

Mouse Lockup caused by symptom #2:
 Edit the WIN.INI file and add the following statement after the "SPOOLER=YES" statement:

LOAD=C: \WINDOWS\NWAPM.EXE

If mouse lockups persist, continue normal problem determination to isolate the failing application or FRU.

Windows is a trademark of the Microsoft Corporation.

SAS KEYWORDS:

PSVP	PSY2	PSVPPROG	PSY2PROG
PSVPERR	PSY2ERR	PC 330	IBMPC
PC 330	PC 350	D/T6586	

PSY2 RETAIN TIPS
MOUSE FAILS ON VALUEPOINT

1.4.887 MOUSE FAILS ON VALUEPOINT

Record number: H1289

Device: D/T6384
Model: M
Tip key:
Date created: 093/05/12
Date last altered: A93/08/06

SYMPTOM: THE MOUSE FAILS TO FUNCTION ON A VALUEPOINT SYSTEM AND THE CONFIGURATION UTILITY DOES NOT RECOGNIZE AN INSTALLED MOUSE.

PROBLEM ISOLATION AIDS: SOME REPORTED MOUSE FAILURES HAVE BEEN ATTRIBUTED TO THE USE OF KEYBOARD CABLES FROM OTHER TYPES OF EQUIPMENT. FAILING CABLES HAVE HAD 6 WIRES VISABLE THROUGH THE PLASTIC CONNECTOR. VALUEPOINT CABLES SHOULD HAVE 4 WIRES VISIBLE THROUGH THE PLASTIC CONNECTOR.

NOTE: THIS TIP ONLY APPLIES IF THE CABLE CAN BE UNPLUGGED FROM THE KEYBOARD ASSEMBLY. IF THE CABLE IS PERMANENTLY ATTACHED TO THE KEYBOARD, IT HAS FOUR WIRES.

FIX: IF THE KEYBOARD CABLE HAS SIX WIRES, REPLACE THE CABLE WITH FRU P/N61X8898.

SAS KEYWORDS:

PSY2	PSVP	VALUE POINT	PS/VP
PSVPKBD	PSVPMISC	D/T6382	6282
6284	6384		

MOUSE FAILS TO FUNCTION UNDER DOS MERGE W/AIX 1.1 OR 1.2

1.4.888 MOUSE FAILS TO FUNCTION UNDER DOS MERGE W/AIX 1.1 OR 1.2

Record number: H064928

Device: D/T8570
Model: M
Tip key:
Date created: 090/11/08
Date last altered: A93/12/06

SYMPTOM:

MOUSE FAILURE WHEN OPERATING UNDER DOS MERGE IN AIX LEVEL 1.1 OR OR 1.2. ON 8570 SYSTEMS WITH 16 OR 20 MHZ SYSTEM BOARDS FRU P/N33F5834 OR P/N33F5835.

PROBLEM ISOLATION AIDS:

DIAGNOSTICS DO NOT FAIL.

FIX:

SYSTEMS WITH AIX 1.1 NEED PTF# U401181 OR VOLUME ID MP11066.
SYSTEMS WITH AIX 1.2 NEED PTF# U401214 OR VOLUME ID 1007.
CUSTOMERS SHOULD OBTAIN THESE FIXES THROUGH AIX BY CALLING
1 - 800-992 - 4777.

SAS KEYWORDS:

PSY2 PSY2PROG 8570SYSPROG PSY2MISC
8570SYSMISC

PSY2 RETAIN TIPS
MOUSE IS NOT DETECTED DURING POST

1.4.889 MOUSE IS NOT DETECTED DURING POST

Record number: H123869

Device: D/T8516
Model: M
Tip key:
Date created: 094/04/28
Date last altered: A94/08/15

SYMPTOM:

During POST a message is generated that incorrectly indicates the mouse is not attached to the 8516 Touch monitor.

PROBLEM ISOLATION AIDS:

Mouse, FRU P/N96f9258, is attached to the 8516 Touch monitor.

FIX:

If the mouse (FRU P/N96F9258) cannot be detected during POST it should be replaced with an older style mouse FRU P/N61X8923 or P/N33G5420. Mouse FRU P/N96F9258 is not compatible with the 8516 Touch monitor.

Mouse FRU P/N96F9258 is not defective and may be used on other PS/2 systems.

SAS KEYWORDS:

PSY2	8516	PSY2MISC	MICE
44F9759	P/N44F9759	D/T8530	D/T8535
D/T8540	D/T8543	D/T8551	D/T8554
D/T8550	D/T8555	D/T8556	D/T8557
D/T8573	D/T8560	D/T8565	D/T8570
D/T9576	D/T8580	D/T8590	D/T8595
D/T9585	D/T9577	D/T9556	D/T9557
D/T9595	D/T9590	D/T9595A	D/T9533
D/T6384	D/T6381	D/T6382	D/T6387

1.4.890 MULTIMEDIA SYSTEM HANGS W/"TALK-TO PLUS"

Record number: H124488

Device: D/T95XX
 Model: M
 Tip key:
 Date created: 094/06/27
 Date last altered: A94/08/15

SYMPTOM:

95XX Multimedia models may hang when attempting to close WIN-OS2 with the Ultimedia Microphone and the Talk-To Plus application.

PROBLEM ISOLATION AIDS:

- 95XX multimedia models which have the Audiovation Adapter/A, FRU P/N52G6469 installed.
- Talk-To Plus version 1.3FG is installed.
- OS/2 2.11 along with Audiovation 2.0 drivers are being used.

FIX:

- The Talk-To Plus application must be closed prior to closing the WIN-OS2 session. If the hang situation has already been encountered, one of the following may be done to recover:
1. Reboot the system (ensure all hardfile activity has stopped prior to a reboot without a proper Shutdown.)
 2. Close the WIN-OS2 session by returning to the OS/2 Desktop (Alt-Esc), display the Window List (Ctrl-Esc), click the right mouse button on the WIN-OS2 session, and select Close. MWFLUSH should then be run to refresh Audiovation's DSP (see Problem Solving - Appendix D in the Audiovation Adapter/A User's Guide).

If further assistance is required, the customer should be advised to contact the IBM Personal Systems Help Center at 1 - 800-772 - 2227 and select multimedia.

SAS KEYWORDS:

PSY2	PSY2ADPT	OS2	AUDIO
VATION	TALK	2	P/N65G3826
WINDOWS	MULTI	MEDIA	

1.4.891 MULTIPLE DDD DRIVES ON PC-SERVER 320/500/520/720

Record number: H131887

Device: D/T8641
 Model: M
 Tip key:
 Date created: 095/12/06
 Date last altered: A96/03/05

SYMPTOM:

Server 320/500/520/720 RAID Array systems may be unable to start the fixed disk drives if multiple drives are DDD (defunct). The following error message will be reported after selecting the "Replace" option in the RAID Option Diskette:
 "ERROR IN STARTING DRIVE..."

PROBLEM ISOLATION AIDS:

If more than one drive appears defunct, all drives should not be defective; data may not be lost. It is possible for one failing drive to cause one or more OTHER drives on the same backplane to appear as DDD. This can occur when the user performs any operation that resets the SCSI bus after the original drive problem.

Engineering is investigating this situation; this tip will be updated as new information becomes available.

Also refer to Record H132397.

FIX:

POWER OFF the system and any external drive enclosures. Reboot the system to the Raid Option Diskette.

Using the procedure below, attempt to restart each drive with the "REPLACE" option on the RAID Option Diskette. The "REPLACE" option will bring every functional drive back to an ONL state except the last drive in each array, which must be rebuilt.

If any drive (other than the last one) fails to return to an ONL status, that drive may require replacement. Leave the failing drive out of the array, return the other functional drives to an ONL status, then install and rebuild the replacement drive.

- A. Physically disconnect ALL DEFUNCT DRIVES, except the one you are trying to start.
- B. With the one defunct drive installed, select the "REPLACE" option in the REPLACE/REBUILD menu to start the drive.
- C. Once started, you can insert the next defunct drive and start it. Use this procedure to isolate and replace a suspected failing drive.
- D. Continue until all (functional) defunct drives have been started. The last drive of each array will report an OFL status. To bring the drive back to an ONL state, rebuild the drive using the "REBUILD" option on the RAID utility diskette.

NOTE: DDD means defunct, not defective. A defunct drive will not respond to commands from the RAID controller. This could be caused by factors external to the fixed disk itself.

SAS KEYWORDS:

PSY2	PSY2FDSK	SERVER	520
RAID	8641	500	PSY2TBD
8640	D/T8640	8642	D/T8642
320	720	SCSI	SCSI-2

1.4.892 MULTIPLE PNP ADAPTERS NOT RECOGNIZED BY OS/2 WARP 4

Record number: H16268

Device: D/T6588
 Model: M
 Tip key:
 Date created: 097/06/30
 Date last altered: A97/07/01

SYMPTOM:

After installing Plug and Play (PnP) adapters in IBM PC 6588/6888 Series systems, one or more of the adapters may not be recognized or may report an adapter conflict.

PROBLEM ISOLATION AIDS:

This tip applies if the customer has installed OS/2 Warp 4.0 and more than one PnP adapter card. These can include networking multimedia, SCSI, video, or other types of PnP adapters.

FIX:

1. Turn off the system.
2. Remove the new adapter card(s) from the system.
3. Power on the system and press F1 to enter the Setup utility. Highlight "Start Options" and press enter. Highlight "Configuration Mode" and change the setting from "Use BIOS Setup" to "Use PNP OS." Save the change and exit the Setup utility.
4. Boot Warp 4.0 and install the device drivers for the new adapters.
5. Open the "System Setup" folder and click "Hardware Manager."
6. Click on "folder" and then "properties."
7. Under "Detection level", set for "Full hardware detection on next system restart."
8. Shut down and power off the system.
9. Reinstall the adapter cards.
10. Restart the system.

The operating system will now detect and configure all installed adapters.

SAS KEYWORDS:

PSY2	PSY2OPER	PSY2ADPT	PSVP
PSVPOPER	PSVPADPT	D/T6588	D/T6888
6588	6888	63646	61811F_1
66927	63613	UNCLASSIFIED	

1.4.893 MULTIPLE 8554 VOLTAGE CONVERTER FAILURES

Record number: H121269

Device: D/T8554
Model: M
Tip key:
Date created: 093/09/20
Date last altered: A93/09/20

SYMPTOM:

Multiple voltage converter failures after service work has been performed.

PROBLEM ISOLATION AIDS:**FIX:**

Examine the underside of the internal trackball for loose metal objects, such as screws. These objects can be attracted to magnetic surfaces on the trackball assembly and may short the trackball or adjacent components. The short can cause the soldered fuses on the voltage converter (FRU 07G1373) to blow.

SAS KEYWORDS:

PSY2 PSY2ERROR GROUND BLOWN

1.4.894 MWAVE MODEM NOT DETECTED BY CLOSEUP V6.0

Record number: H136388

Device: D/T6877
 Model: M
 Tip key:
 Date created: 097/01/29
 Date last altered: A97/01/29

SYMPTOM:

IBM PC 700 Series 6877 and 6887 systems running Closeup Remote V6.0 from Norton Lambert, Windows95, and an IBM MWAVE modem, may not detect the presence of the modem if it is configured for COM3.

PROBLEM ISOLATION AIDS:

With COM1 enabled and the MWAVE adapter using COM3, Closeup software reports a conflict between COM1 and COM3. Disabling COM1 prevents the Closeup software from detecting the MWAVE modem on COM3.

FIX:

1. Disable COM1 via the Setup Utility.
2. Open a DOS window in Windows95.
3. Change to the \CLOSEUP directory.
4. Enter this command: `cremote comtest=off com3`

This change should allow the Closeup software to recognize the MWAVE modem on COM3.

If failures persist, continue normal problem determination.

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SAS KEYWORDS:

PSVP	PSY2	IBMPC	PSY2PROG
PSVPPROG	PC 700	PC730	D/T6887
UNCLASSIFIED	PSVPADPT	PSY2ADPT	PSVPCOMM
PSY2COMM	PSVPOEM	PSY2OEM	51127

1.4.895 NEC CDR250 CDROM NOT RECOGNIZED IN PC 300

Record number: H131619

Device: D/T6576
 Model: M
 Tip key:
 Date created: 095/11/08
 Date last altered: A95/11/08

SYMPTOM:

IBM PC 300 Series 6576 and 6586 systems may fail to complete Power On Self Test (POST) with an NEC CDR250 IDE CDROM drive installed. If POST does complete, the system may not recognize the NEC CDROM drive.

PROBLEM ISOLATION AIDS:

NONE

FIX:

The NEC CDR250 IDE CDROM drive was not tested and is incompatible with the IBM PC 300 Series 6576 and 6586.

The NEC CDR260 and CDR273 are more current IDE CDROM offerings from NEC. The CDR260 was tested and does function in the PC 300 Series systems. Both of the current IDE CDROM drives eliminate the failure when installed in combination with the latest Flash BIOS update for the PC 300 Series 6576 and 6586.

SAS KEYWORDS:

PSY2	PSVP	IBMPC	PC330
PC350	PC 330	PC 350	PSVPADPT
PSY2ADPT	PSY2CDROM	PSVPCDROM	PSVPOEM
PSY2OEM	PSVPPART	PSY2PART	CD ROM
D/T6586	6576	6586	

1.4.896 NETFINITY ERROR&COLON. UNABLE TO COMMUNICATE W/BROWSER BASE

Record number: H161015

Device: D/T6588
 Model: M
 Tip key:
 Date created: 097/09/09
 Date last altered: A97/09/10

SYMPTOM:

Netfinity Desktop Management Interface (DMI) displays the the message "Unable to communicate with DMI Browser Base" after rebooting the system.

PROBLEM ISOLATION AIDS:

If the user is running TME 10 NetFinity version 4.00.5 and LANDesk version 3.0 for Windows95, this tip applies.

FIX:

Remove DMI from the Startup folder through the following steps:

1. Click on Start, Settings, then Taskbar.
2. Click on the "Start Menu Programs" tab.
3. Click on the "Remove" button.
4. Highlight DMI in the Startup folder and click on "Remove."
5. Shutdown and restart the system.

For DMI users, it is recommended that the DMI information be viewed via the LANDesk Client Manager instead of using NetFinity DMI.

SAS KEYWORDS:

PSY2	PSY2ERR	PSY2OPER	PSVP
PSVPERR	PSVOPER	D/T6588	D/T6888
6588	6888	INTELLISTATION	UNCLASSIFIED
64638	64638F_1		

1.4.897 NETFINITY FOR WINDOWS95 INSTALLATION FAILS FROM THE RTC

Record number: H161279

Device: D/T6562
 Model: M
 Tip key:
 Date created: 097/09/30
 Date last altered: A97/09/30

SYMPTOM:

When installing Netfinity for Windows95 from the RTC (Ready-To-Configure) CDROM, P/N84H8304, Netfinity does not install and appears to hang if any of the RTC language buttons are selected except for US English.

PROBLEM ISOLATION AIDS:

None

FIX:

The "IBMCDDROM" task must be ended and the installation restarted.

1. Press Control+Alt+Delete to bring up the Windows95 Close Program task window.
2. Select the "IBMCDDROM (Not Responding)" task and click on the "END Task" button.
3. Run the RTC program "IBMSETUP" from the RTC CDROM.
4. Select the "US English" button on the language selection screen.
5. Follow the RTC user instructions for installing Netfinity.

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SAS KEYWORDS:

PSY2	PSY2ERR	PSY2OPER	PSY2COMM
PSVP	PSVPERR	PSVPOPER	PSVPCOMM
D/T6562	D/T6592	6562	6592
TME	74276	UNCLASSIFIED	

1.4.898 NETFINITY RAID DRIVE INFORMATION IS DISPLAYED INCORRECTLY

Record number: H00196

Device: D/T8640
 Model: M
 Tip key:
 Date created: 096/05/02
 Date last altered: A96/05/03

SYMPTOM:

When using Netfinity RAID Manager to view the fixed disk configuration, internal drive information is displayed incorrectly, or external drive information is missing.

PROBLEM ISOLATION AIDS:

- The system has an IBM PCI Fast/Wide Streaming RAID adapter or an IBM MicroChannel Fast/Wide Streaming RAID adapter.
- Netfinity version 3.05 or earlier is installed.

FIX:

Netfinity version 3.06 or later is required if a RAID adapter is installed. One may upgrade to Netfinity v3.06 by either using ServerGuide v2.5 or by applying the following RAID patch files which can be downloaded from the IBM BBS (Directory 40):

OS2RAID.DSK and WINRAID.DSK

WINRAID.DSK is used for Windows and Netware systems. Refer to the README file on the diskette for instructions on applying the patch.

With a ServerGuide version 2.21 or 2.4, or a PC Server proof-of-purchase, one can obtain Netfinity v3.06 by ordering ServerGuide version 2.5 from 1-800-426-7282. There is no charge if proof-of-purchase is provided.

This upgrade is intended for systems with NetFinity v3.0 or v3.05 and will not upgrade any other versions properly. To have the new functions, one must install both the Manager and Services upgrade. Any mixture of v3.0 or v3.05 RAID Manager Services that have not been upgraded are NOT supported. The RAID channel configuration on the PCI RAID adapter is opposite than that of the MicroChannel RAID adapter. After Netfinity has been upgraded, follow this procedure:

Restart the Netfinity Service Manager, select RAID Manager, Options, Configure Enclosure, right mouse click on the picture of the enclosure, select Change Enclosure, choose the enclosure and change the RAID Adapter and Channel number if necessary.

SAS KEYWORDS:

PSY2	RAID	SERVER	PSY2FDSK
SCSI	SCSI-2	ARRAY	D/T9595
D/T9595A	D/T8641	D/T3516	320
D/T8640	8640	9595	9595A
8641	500	95	EXPANSION
ENCLOSURE	720	8642	D/T8642
520	D/T8642	IBMPC	PSY2PROG
D/T3517	D/T3518	3517	3518

1.4.899 NETFINITY V2.01 ERROR, "UNABLE TO CONNECT NETBASE.EXE"

Record number: H127844

Device: D/T8641
Model: M
Tip key:
Date created: 095/05/30
Date last altered: A95/05/30

SYMPTOM:

After installing NETFINITY 2.01 and the ServerGuard option, repeated attempts to invoke the Security Manager within Netfinity fail with the following error message:

PROBLEM ISOLATION AIDS:

The following are installed:

Netfinity V2.01
Netfinity Manager V2.01
The ServerGuard Adapter, FRU P/N61G3628
ServerGuard Code V1.1.

FIX:

During the ServerGuard installation under Netfinity when offered the 3 options (choices) for ServerGuard, choose either #2 OR #3, which uppacks WATADMN.EXE. Option #1 does not unpack it and causes the error.

SAS KEYWORDS:

PSY2	PSY2ADPT	PSY2PROG	PSY2ERR
D/T9595	8641	9595	PSY2COMM
SERVER	GUARD		

1.4.900 NETFINITY 3500&COLON. SCO OPENSERVR INSTALL REQUIRES BIOS FLASH

Record number: H163080

Device: D/T8644
 Model: M
 Tip key:
 Date created: 098/03/16
 Date last altered: A98/04/10

SYMPTOM:

The System hangs with the following displayed:

```
" F eiadinit
  NOTICE: k_trap - Unexpected NMI in system mode! "
```

This occurs during the installation of SCO OpenServer 5.04 at the "Hardware Configuration" screen immediately after the boot kernel has loaded into memory (ie: at the very beginning of the installation).

PROBLEM ISOLATION AIDS:

- The System is a Netfinity 3500 Type 8644 model 10U, 10X, 20U, 20X, 21U, 21X, 30U, 30X being configured with SCO Open Server 5.04
- The System is at BIOS level 25A
- The System hardware is properly configured.

FIX:

- 1 - Download the "Netfinity 3500 BIOS flash update diskette version 1.29 (revision 29) from the IBM Website at the following URL:

Http: //www.pc.ibm.com/us/files.html

- Select "Search"
- Type "3500 BIOS" in the keywords box
- Select "Search"
- Select "Netfinity 3500 BIOS flash update diskette version 1.29 (revision29)" to download.

The file is a self-extracting executable file that will create a diskette. Be sure to label the diskette and indicate BIOS level 29A.

- 2 - Place the BIOS flash update diskette in the diskette drive, then power up the System.
- 3 - Follow the on-screen instructions to perform the BIOS Flash.
--DO NOT INTERRUPT THE SYSTEM DURING THE FLASH PROCEDURE--
- 4 - After the BIOS flash update is complete, remove the diskette, and then press enter to reboot the System
- 5 - Install the SCO Open Server 5.04 Network Operating System.

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 OpenServer is a trademark of The Santa Cruz Operation, Inc.

SAS KEYWORDS:

PSY2	D/T8644	PSY2BIOS	BIOS 29A
SCO	PSY2HANG	HANG	TRAP
K_TRAP	UNCLASSIFIED	BIOS 25A	FLASH

1.4.901 NETFINITY 3500&COLON. SYSTEM HANGS WHEN BOOTING SERVERGUIDE CD#2

Record number: H162801

Device: D/T8644
Model: M
Tip key:
Date created: 098/02/19
Date last altered: A98/04/15

SYMPTOM:

-The System Hangs* with a incomplete boot when attempting to boot to the "Software Guide" CD (CD#2) contained in ServerGuide versions 4.0.1 and 4.0.2.

-The System may be restarted with <Ctrl-Alt-Del> or a System power-down / power-up cycle.

*The Hang results with the IBM logo screen displaying the words "Software Guide" (in yellow text) and "Operating System/2 version 3" will be displayed as the first line near the bottom of the screen.

PROBLEM ISOLATION AIDS:

All of the following must be true for this TIP to apply:

- The System is any model Netfinity server 3500 type 8644 that has been configured with the onboard Ethernet Controller set to "disabled" in the CMOS Setup Utility.

FIX:

A permanent fix to the issue will be included in the next release version of Serverguide.

WORKAROUND:

Set the on-board Ethernet Controller to "enabled" in the Systems CMOS Setup Utility, then boot to the Serverguide "Software Guide" CD. Later, if required, the Onboard Ethernet Controller may be disabled in the CMOS Setup Utility.

SAS KEYWORDS:

PSY2 D/T8644 PSY2HANG UNCLASSIFIED
SERVERGUIDE

Record number: H012700

Device: D/T8644
 Model: M
 Tip key:
 Date created: 098/04/29
 Date last altered: A98/05/08

SYMPTOM:

The System hangs with no video displayed after a warm or cold boot.

PROBLEM ISOLATION AIDS:

All of the following must be true for this TIP to apply:

- The System is a Netfinity 3500 Type 8644 model 10U, 20U, 21U, 29U, 10X, 20X, 21X, configured with a System Planar FRU p/n93H7269 (FRU p/n is located at the bottom right corner of the Planar).
- The System is configured with one or two 333MHz Processors.
- The above described Symptoms occurred after installing one or two 333MHz Processor Upgrade Option p/n01K8025.

Note: If the System is configured with one 333MHz Processor, the Processor Bus terminator card must be in the second Processor Slot. If the System is configured with two Processors, both Processors must be the same speed (MHz).

FIX:

Contact the IBM PSGHC (Personal Systems Group Help Center) at 1 - 800-772 - 2227 for assistance.

Workaround:

Re-install the 233MHz or 266MHz Processor(s) to recover System functions.

SAS KEYWORDS:

PSY2	333MHZ	333	MHZ
D/T8644	93H7269	SYSTEM	PLANAR
NETFINITY	3500	UNCLASSIFIED	019
ECA	VIDEO	HANG	HEALTH

1.4.903 NETFINITY 7000&COLON. COOLING FAILURE LIGHT BLINKS SLOWLY

Record number: H163045

Device: D/T8651
Model: M
Tip key:
Date created: 098/03/13
Date last altered: A98/03/17

SYMPTOM:

The System Cooling Failure Light (Amber Light located at the front Control Panel) blinks slowly.

PROBLEM ISOLATION AIDS:

All of the following must be true for this TIP to apply:

- The System is a IBM Netfinity 7000 type 8651 model RM0, TM0, RH0, TH0.
- All cooling fans are operate properly.
- All power supplies are operating properly.
- The Fan Jumpers (Fan3: J2J3, Fan4: J2J4 located near the left front edge of the Planar / Fan2: J5G2, Fan1: J5G1 located near right front edge of the Planar) are securely in place.
- All internal cables are secure.
- System Diagnostics Pass.

FIX:

Replace the Power Backplane Cover with FRU p/n12J3266 using normal warranty parts replacement procedures.

NOTE: Refer to the "Power Backplane Removal" section of the "Hardware Maintenance Manual Supplement" publication S06J-0791 - 00 p/n06J0791 for power backplane cover removal and installation instructions.

SAS KEYWORDS:

PSY2 D/T8651 UNCLASSIFIED COOLING FAILURE
PSY2PART P/N12J3266

1.4.904 NETFINITY 7000&COLON. FRONT PANEL DISPLAYS UNREADABLE CHARACTERS

Record number: H163143

Device: D/T8651
 Model: M
 Tip key:
 Date created: O98/03/13
 Date last altered: A98/03/23

SYMPTOM:

Incorrect or unreadable information is displayed on the Front Panel after replacing the System Planar Board.

PROBLEM ISOLATION AIDS:

All of the following must be true for this TIP to apply:

- The System is a Netfinity 7000 Type 8651 Model RM0, RH0, TH0, TH0.
- The Symptoms started to occur immediately AFTER replacing the System Planar board.
- Other than the Symptom described above, the System functions normally.

FIX:

Replace the Control Panel Card with FRU p/n93G6052 using the following procedure:

- 1 - Power down the Server, then remove the Power Cord.
- 2 - Loosen the two thumbscrews located at the back of the top cover.
- 3 - Remove the Top Cover by sliding the cover to the rear , then lift the front , then the rear.
- 4 - Disconnect the 20 conductor ribbon cable from J7 of the Control Panel Board.
- 5 - Remove the Two internal screws located at the top rear of the LED Card Bracket Assembly, then remove the LED Card Bracket Assembly (Refer to the IBM Netfinity Hardware Maintenance Manual Supplement p/n06J0791 page 102)
- 6 - Disconnect the following cables from the Control Panel Board: - 2 conductor from J5 (to cover switch) - 26 conductor ribbon from J2 (to Power Backplane) - 40 conductor ribbon cable from J1 (to Planer)
- 7 - Remove the 4 screws that secure the Control Panel Board to the chassis.
- 8 - Replace the Control Panel Board using normal parts replacement procedures.
- 9 - Reverse this procedure to complete the installation.

DETAIL:

The buffers used in the original Control Panel Card may cause the Front Panel to display unreadable / incorrect characters. This issue has no direct effect on the System's Server functions.

SAS KEYWORDS:

PSY2	D/T8651	SERVICER ONLY	CONTROL PANEL
UNREADABLE	DISPLAY	INCORRECT	

1.4.905 NETFINITY 7000&COLON. POWER FAIL LED BLINKS AFTER REPLACING P.S.

Record number: H162679

Device: D/T8651
Model: M
Tip key:
Date created: 098/01/15
Date last altered: A98/02/10

SYMPTOM:

The Power Fail LED at the front of the Server continues to blink after replacing one or more failed power supplies.

PROBLEM ISOLATION AIDS:

All of the following must be true for this Tip to apply:

- The System is a Netfinity 7000 type 8651 model RH0/RM0/TH0/TM0
- The System has a BIOS level of CZE10A or lower.
- One or more Power supplies have been replaced.
- The system has not been powered down during or after the replacement of the power supply(s).

FIX:

Take down the Server NOS, power-off then power-on the server.

DETAIL: The power-off/power-on cycling of the Server will reset the Power Fail LED controller.

NOTE: If the Power Fail LED continues to blink, continue normal problem determination.

Refer to Retain TIP Record # H161771 that covers "Power Supply Fault Isolation on Netfinity 7000"

SAS KEYWORDS:

D/T8651	PSY2	PSY2POWER	POWER SUPPLY
H161771	NETFINITY	7000	UNCLASSIFIED

Record number: H12977

Device: D/T8550
 Model: M
 Tip key:
 Date created: 093/08/26
 Date last altered: A94/08/15

SYMPTOM:

THE "IBM PERSONAL SYSTEM/2 ADAPTER/A FOR ETHERNET" ADAPTER CARD, WHEN USED IN A SYSTEM SET UP AS NETWARE 3.11 SERVER, DOES NOT COMMUNICATE ON THE LAN NETWORK. AFTER EXECUTING THE NOVELL COMMAND NETX OR BNETX AN ERROR MESSAGE "FILE SERVER COULD NOT BE FOUND" MAY OCCUR.

PROBLEM ISOLATION AIDS:

THIS PROBLEM OCCURS ON PS/2'S RUNNING NOVELL NETWARE VERSION 3.11 WITH AN ETHERNET ADAPTER INSTALLED, AND THE "ADAPTER BIOS-ROM/RAM LOCATION" PARAMETER SET TO "C4000 - C7FFF" OR "D4000 - D7FFF".
 THE ETHERNET ADAPTER AND SYSTEM UNIT PASS ALL DIAGNOSTICS. THE "IBM PERSONAL SYSTEM/2 ADAPTER/A FOR ETHERNET" ADAPTER CARD IS FRU P/N48G7172.

FIX:

USING THE CHANGE CONFIGURATION FUNCTION ON THE REFERENCE DISKETTE, CHANGE THE "ADAPTER BIOS-ROM / RAM LOCATION" PARAMETER TO AN ACCEPTIBLE ADDRESS RANGE LISTED BELOW. DO NOT USE ADDRESS RANGE "C4000-C7FFF" OR "D4000-D7FFF".
 THE ACCEPTIBLE ADDRESS RANGE SELECTIONS ARE:

"C8000 - CFFFF"
 "D0000 - D7FFF"
 "D8000 - DFFFF"
 "C8000 - CBFFF"
 "D0000 - D3FFF"
 "D8000 - DBFFF"

SELECTION WILL DEPEND UPON SYSTEM CONFIGURATION AND WHAT MEMORY SPACES HAVE ALREADY BEEN ALLOCATED. IF CHANGING THE ADAPTER'S CONFIGURATION DOES NOT RESOLVE THE FAILURE, UTILIZE NORMAL PROBLEM DETERMINATION PROCEDURES.

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SAS KEYWORDS:

PSY2	PS/2	NETWORK	NETWARE
NOVELLE	ERR	PS2	PSY/2
NOVELL	PSY2COMM	PSY2ERR	NOVEL
D/T8525	D/T8530	D/T8535	D/T8540
D/T8543	D/T8551	D/T8554	D/T8550
D/T8555	D/T8556	D/T8557	D/T8573
D/T8560	D/T8565	D/T8570	D/T9576
D/T8580	D/T8590	D/T8595	D/T9585
D/T9577	D/T9556	D/T9557	D/T9595

1.4.907 NETWARE 3.12&COLON. LOST HARDWARE INTERRUPT

Record number: H134622

Device: D/T8639
 Model: M
 Tip key:
 Date created: 096/10/10
 Date last altered: A96/10/22

SYMPTOM:

NetWare 3.12 issues lost hardware interrupt errors (on the server console) when logging onto the Server or performing any network activity.

PROBLEM ISOLATION AIDS:

The system is a PC Server 310 (8639), a PC 300 (65xx), or a PC 700 (68xx) with BOTH an IBM Auto ISA 16/4 Token Ring Adapter FRU p/n41H8452 (Option p/n92G7632) and an Adaptec AHA-2940 PCI SCSI Adapter FRU p/n06H5250 with BIOS 1.11, 1.16, or 1.19 installed.

FIX:

Ignore and disable the interrupt alerts by adding the following statement to the STARTUP.NCF file:

```
SET DISPLAY INTERRUPT ALERTS = OFF
```

-OR-

Install NetWare 4.x

-OR-

Install a PCI Token Ring Adapter.

This alert is actually a "spurious interrupt" warning message and does not cause any disruption in the network activity.

The alert is due to "extra level trigger to edge trigger conversion" pulse that the VLSI interrupt controller is generating. Normally, a PCI interrupt (two pulses internal to the VLSI Interrupt Controller Chip) is converted to an ISA interrupt. In this case, three(3) or more pulses are generated by the VLSI Controller after receiving an interrupt request from the Adaptec SCSI Adapter. This third pulse causes the "lost hardware interrupt " error message to appear.

Adaptec is a trademark of Adaptec, Inc.

NetWare is a trademark of Novell, Inc.

SAS KEYWORDS:

PSY2	PSY2ADPT	41H8452	92G7632
PSY2ERR	PC 750	PC750	750
310	PC350	PC300	PC 300
PC 350	D/T6587	D/T6589	D/T6571
D/T6573	D/T6581	D/T6583	D/T6575
D/T6585	D/T6576	D/T6586	D/T6875
D/T6885	D/T6876	D/T6886	D/T6577
D/T6587	D/T6598	D/T6877	D/T6887

- Restart the Server, at the console prompt: Type "Memory" to verify that NetWare reports all the installed Server memory

DETAIL:

ISA/PCI (310,315) Systems with more than 16MB of System memory, Novell NetWare 3.12 requires that Automatic Registration of memory is disabled, and all System memory manually registered. Novell has no patch / fixpack to date for ISA/PCI Systems running NetWare 3.12 to Auto-register beyond 16MB of System memory.

ISA/PCI (310,315) Systems with more than 16MB of System memory, Novell NetWare 4.10 requires the Novell Patch 410PT8.

ISA/PCI (310,315) Systems with more than 16MB of System memory, Novell NetWare 4.11 requires the Novell Service Pack 2 or higher.

EISA/PCI (320) Systems with more than 16MB of System memory, Novell NetWare 3.12 / 4.10 / 4.11 requires that the System's EISA Configuration Utility is set with the total System memory (an alternate method for 4.10 / 4.11 would be to apply the 410PT8A patch for 4.10 / the service pack 2 or higher for 4.11).

EISA/PCI (325/330) Systems with more than 16MB of System memory, Novell NetWare 3.12 requires that the System's EISA Configuration Utility is set with the total System Memory.

EISA/PCI (325/330) Systems with more than 64MB of System memory, Novell NetWare 4.10 / 4.11 requires that the System's Configuration Utility is set with the total System Memory (an alternate method for 4.10 / 4.11 would be to apply the 410PT8A patch for 4.10 / the service pack 2 or higher for 4.11).

NetWare is a trademark of Novell, Inc.

SAS KEYWORDS:

PSY2	PSY2MEM	PSY2DOC	UNCLASSIFIED
D/T8640	NETWARE	3.12	MEMORY
D/T8638	D/T8639	REGISTER	HEALTH
4.10	4.11	AUTO	310
315	330	320	410PT8A
SERVICE PACK 2	EISA CONFIG		

1.4.909 NETWARE 4.11 HANGS DURING INSTALL VIA SOME IDE CD-ROMS

Record number: H162376

Device: D/T8651
 Model: M
 Tip key:
 Date created: 098/01/08
 Date last altered: A98/01/12

SYMPTOM:

The server hangs during a NetWare 4.11 install when copying files from the CD-ROM to the Hard Drive(s).

PROBLEM ISOLATION AIDS:

- The system is a Netfinity server or PC Server 704 that has an IDE CD-ROM used to install NetWare 4.11
- The Native NetWare 4.11 files IDEATA.HAM, IDECD.CDM, and IDEHD.CDM files are used

FIX:

Use ServerGuide (V4.0.1 or later) to install Network Operating Systems so that the current device drivers and service packs are installed automatically.

-or-

- 1 - Replace the Native IDEATA.HAM, IDECD.CDM, and IDEHD.CDM files with the latest files that at the time of this publication, are only available by calling Novell and requesting these files by referencing Novell TID 2931918.
- 2 - If the SCSI Disk subsystem uses a IBM ServeRAID or ServeRAID II Adapter, the SCSI drivers must be version 2.30 or later. The current drivers may be downloaded from the IBM Website at URL:

Http: //www.pc.ibm.com/us/files.html

- Select "Search"
- Type "ServeRAID" in the keywords box
- Select and download the current ServeRAID device drivers: "IBM ServeRAID and IBM ServeRAID II device driver diskette" (Version 2.30 or later)

Detail:

Novell has updated the IDEATA.HAM, IDECD.CDM, and IDEHD.CDM files. These updated files are required to support the IDE CD-ROM that ships with some IBM Netfinity servers and the IBM PC Server 704.

NetWare is a trademark of Novell, inc.

SAS KEYWORDS:

PSY2	D/T9650	D/T8651	77524
NETWARE	NOVELL	HANG	UNCLASSIFIED
TID 2931918	D/T8644	NETFINITY 3500	

PSY2 RETAIN TIPS
NETWORK SERVER MODE LOST

1.4.910 NETWORK SERVER MODE LOST

Record number: H012697

Device: D/T8590
Model: M
Tip key:
Date created: 090/11/28
Date last altered: A90/11/28

SYMPTOM:

THE FOLLOWING PROBLEM MAY BE EXPERIENCED WHEN REFERENCE DISKETTE VERSION 1.01 IS USED ON THE PS/2 8590.

CUSTOMERS SETTING UP PS/2 8590 SYSTEMS AS NETWORK FILE SERVERS WITH VERSION 1.01 REFERENCE DISKETTE, MAY EXPERIENCE AN ERROR WITH THE FOLLOWING MESSAGE:

"YOU CANNOT SET NETWORK SERVER MODE UNTIL POWER-ON PASSWORD IS SET."

WHEN AN ATTEMPT IS MADE TO SET THE POWER-ON PASSWORD, A MESSAGE IS RECEIVED INDICATING THAT IT IS ALREADY SET.

DETAIL:

A SMALL NUMBER OF PS/2 8590 SYSTEMS WERE SHIPPED WITH REFERENCE DISKETTE VERSION 1.01 PACKED WITH THE SYSTEM AND PRE-CONFIGURED ON THE FIXED DISK SYSTEM PARTITION.

OTHER SYSTEMS WERE SHIPPED WITH THE VERSION 1.01 REFERENCE DISKETTE PACKED WITH THE SYSTEM, HOWEVER, VERSION 1.02 REFERENCE DISKETTE HAS BEEN PRE-CONFIGURED ON THE SYSTEM PARTITION.

A CURRENT BACK-UP SYSTEM REFERENCE DISKETTE SHOULD BE CREATED FROM THE SYSTEM PARTITION ON THOSE SYSTEMS SHIPPED WITH VERSION 1.02 PRE-CONFIGURED. THE QUICK REFERENCE MANUAL SHOULD BE CONSULTED FOR THE PROPER PROCEDURES.

CUSTOMERS RECEIVING THE VERSION 1.01 SOFTWARE, INSTALLED ON THE FIXED DISK SYSTEM PARTITION PRIOR TO SHIPPING, MAY OBTAIN THE CURRENT VERSION REFERENCE DISKETTE AT NO COST BY CALLING ONE OF THE FOLLOWING TELEPHONE NUMBERS:

PROBLEM ISOLATION AIDS: NONE

FIX:

OBTAIN A COPY OF REFERENCE DISKETTE VERSION 1.02 AND INSTALL IT ON THE SYSTEM PARTITION OF THE FIXED DISK AT THE EARLIEST OPPORTUNITY. A VERSION 1.02 BACK-UP DISKETTE SHOULD BE CREATED FROM THE SYSTEM PARTITION AND KEPT IN A SECURE, ACCESSIBLE LOCATION.

IT IS RECOMMENDED THAT COPIES OF VERSION 1.01 BE RENDERED UNUSEABLE.

REFERENCE DISKETTE VERSION 1.02 IS AVAILABLE BY CALLING THE FOLLOWING NUMBERS MONDAY THROUGH FRIDAY:

CUSTOMERS IN USA...1-800-426-7282, 8: 00AM UNTIL 8: 00PM, EST
CUSTOMERS IN CANADA...1-800-465-1234, 8: 00AM UNTIL 4: 30PM, EST
CUSTOMERS IN ALASKA...1-414-633-8108, 8: 00AM UNTIL 5: 00PM, LOCAL

CUSTOMERS WITH 8590 SYSTEMS SHOULD SPECIFY SYSTEM REFERENCE DISKETTE PART NUMBER 57F1952.

IBM WORLD TRADE CUSTOMERS SHOULD FOLLOW LOCAL PROCEDURES TO OBTAIN THE CURRENT REFERENCE DISKETTE.

SAS KEYWORDS:

PSY2	PSY2DIAG	PSY2PROG	PRY2ERR
8590DIAG	8590SYSPROG	8590SYSERR	

PSY2 RETAIN TIPS
NETWORK SERVER MODE LOST

1.4.911 NETWORK SERVER MODE LOST

Record number: H013467

Device: D/T8595
Model: M
Tip key:
Date created: 090/11/28
Date last altered: A90/11/28

SYMPTOM:

THE FOLLOWING PROBLEM MAY BE EXPERIENCED WHEN REFERENCE DISKETTE VERSION 1.01 IS USED ON THE PS/2 8595.

CUSTOMERS SETTING UP PS/2 8595 SYSTEMS AS NETWORK FILE SERVERS WITH VERSION 1.01 REFERENCE DISKETTE, MAY EXPERIENCE AN ERROR WITH THE FOLLOWING MESSAGE:

"YOU CANNOT SET NETWORK SERVER MODE UNTIL POWER-ON PASSWORD IS SET."

WHEN AN ATTEMPT IS MADE TO SET THE POWER-ON PASSWORD, A MESSAGE IS RECEIVED INDICATING THAT IT IS ALREADY SET.

DETAIL:

A SMALL NUMBER OF PS/2 8595 SYSTEMS WERE SHIPPED WITH REFERENCE DISKETTE VERSION 1.01 PACKED WITH THE SYSTEM AND PRE-CONFIGURED ON THE FIXED DISK SYSTEM PARTITION.

OTHER SYSTEMS WERE SHIPPED WITH THE VERSION 1.01 REFERENCE DISKETTE PACKED WITH THE SYSTEM, HOWEVER, VERSION 1.02 REFERENCE DISKETTE HAS BEEN PRE-CONFIGURED ON THE SYSTEM PARTITION.

A CURRENT BACK-UP SYSTEM REFERENCE DISKETTE SHOULD BE CREATED FROM THE SYSTEM PARTITION ON THOSE SYSTEMS SHIPPED WITH VERSION 1.02 PRE-CONFIGURED. THE QUICK REFERENCE MANUAL SHOULD BE CONSULTED FOR THE PROPER PROCEDURES.

CUSTOMERS RECEIVING THE VERSION 1.01 SOFTWARE, INSTALLED ON THE FIXED DISK SYSTEM PARTITION PRIOR TO SHIPPING, MAY OBTAIN THE CURRENT VERSION REFERENCE DISKETTE AT NO COST BY CALLING ONE OF THE FOLLOWING TELEPHONE NUMBERS:

PROBLEM ISOLATION AIDS: NONE

FIX:

OBTAIN A COPY OF REFERENCE DISKETTE VERSION 1.02 AND INSTALL IT ON THE SYSTEM PARTITION OF THE FIXED DISK AT THE EARLIEST OPPORTUNITY. A VERSION 1.02 BACK-UP DISKETTE SHOULD BE CREATED FROM THE SYSTEM PARTITION AND KEPT IN A SECURE, ACCESSIBLE LOCATION.

IT IS RECOMMENDED THAT COPIES OF VERSION 1.01 BE RENDERED UNUSEABLE.

REFERENCE DISKETTE VERSION 1.02 IS AVAILABLE BY CALLING THE FOLLOWING NUMBERS MONDAY THROUGH FRIDAY:

CUSTOMERS IN USA...1-800-426-7282, 8: 00AM UNTIL 8: 00PM, EST
CUSTOMERS IN CANADA...1-800-465-1234, 8: 00AM UNTIL 4: 30PM, EST
CUSTOMERS IN ALASKA...1-414-633-8108, 8: 00AM UNTIL 5: 00PM, LOCAL

CUSTOMERS WITH 8595 SYSTEMS SHOULD SPECIFY SYSTEM REFERENCE DISKETTE PART NUMBER 57F1959.

IBM WORLD TRADE CUSTOMERS SHOULD FOLLOW LOCAL PROCEDURES TO OBTAIN THE CURRENT REFERENCE DISKETTE.

SAS KEYWORDS:

PSY2	PSY2DIAG	PSY2PROG	PRY2ERR
8595DIAG	8595SYSPROG	8595SYSERR	

1.4.912 NETWORKING ERRORS W/HP J2585A PCI 10/100 ADAPTER

Record number: H132041

Device: D/T8640
 Model: M
 Tip key:
 Date created: 095/12/15
 Date last altered: A96/12/02

SYMPTOM:

Customers may experience a variety of problems including not being able to use the network adapter card at all, or experience other LAN SERVER networking errors.

PROBLEM ISOLATION AIDS:

Affected configurations:

1. The HP 2585A PCI 10/100 Ethernet Adapter is installed.
2. Any system capable of running multiple processors, such as Server 720, 520, and 320, running in Multi-processor mode.
3. The Operating system is OS/2 version 2.11 SMP (Symmetrical Multi-Processing) and LAN SERVER 4.0.

FIX:

At this time there is no known fix.

The current device driver HPFEND.OS2, dated 4/95 was tested and found unable to support multi-processor mode. Device drivers released later than this date, may include updates to support MP (multi-processing).

Customers who are running the configuration referenced above, in multiprocessor mode and experiencing problems, should contact HP (Hewlett-Packard) for additional information on later drivers.

Note: Refer to RETAIN records H134555 and H134937 for additional tips on the 10/100 or 100/10 Ethernet adapters.

This tip will be updated as additional information is made available.

HP is a trademark of Hewlett-Packard Inc.

SAS KEYWORDS:

PSY2	SERVER	320	520
720	PSY2OEM	PSY2ADPT	PSY2COMM
D/T8640	D/T8641	D/T8642	OS2
MULTIPROCESSING	PSY2TBD	100/10	

1.4.913 NEW STYLE MOUSE REQUIRES ADJUSTMENT OF I/O PANEL

Record number: H066440

Device: D/T8530
Model: M
Tip key:
Date created: 090/09/28
Date last altered: A90/10/17

SYMPTOM:

THE NEW STYLE MOUSE, FRU P/N61X8923, CAN NOT BE PROPERLY INSERTED THROUGH THE I/O PANEL ON THE MODEL 8530 286.

PROBLEM ISOLATION AIDS:

THE NEW MOUSE HAS A PLUG THAT HAS A LARGER DIAMETER THAN THE PREVIOUS ONE. BECAUSE OF INTERFERENCE WITH THE METAL I/O PANEL, P/N27F4229, THE MOUSE CANNOT BE INSERTED SUCCESSFULLY.

FIX:

1. REMOVE THE REAR GRAY PLASTIC BEZEL
2. LOOSEN THE FOUR SCREWS THAT HOLD THE I/O PANEL IN PLACE
3. ALIGN PANEL AND INSERT THE MOUSE INTO THE I/O PORT
4. TIGHTEN THE SCREWS
5. REMOVE THE MOUSE FROM THE I/O PORT
6. INSTALL THE REAR GRAY PLASTIC BEZEL
7. PROPER INSTALLATION OF THE MOUSE IS NOW POSSIBLE

SAS KEYWORDS:

PSY2 PSY2MISC 8530SYSMISC

1.4.914 NE2000 ADAPTER HANGS ON 2C_STRSC NDIS TEST SCRIPT

Record number: H161956

Device: D/T6562
Model: M
Tip key:
Date created: 097/11/24
Date last altered: A97/11/24

SYMPTOM:

The Microdyne/Eagle NE2000 ISA Ethernet adapter may fail the Microsoft NDIS test (Part of the Microsoft HCT) when tested in the IBM Model PC300PL, Machine Type 6562/6592.

PROBLEM ISOLATION AIDS:

Similar errors may be seen with this adapter in other IBM Commercial Desktop systems. The error has been diagnosed as a limitation of the NE2000 device driver.

FIX:

None for the 2C_STRSC NDIS test script.

No problems have been seen during normal operation of the NE2000 ISA Ethernet adapter.

SAS KEYWORDS:

PSY2	PSY2ERR	PSY2DIAG	PSY2ADPT
PSY2COMM	PSY2OEM	PSVP	PSVPERR
PSVPDIAG	PSVPADPT	PSVPCOMM	PSVPOEM
D/T6562	D/T6592	6562	6592
71594	UNCLASSIFIED		

1.4.915 NE2000 ETHERNET FAILS IN PC 300 6588/6888

Record number: H137865

Device: D/T6588
Model: M
Tip key:
Date created: 097/05/23
Date last altered: A97/05/28

SYMPTOM:

IBM PC 300 Series 6588 and Intellistation M Pro 6888 systems with an NE2000 Ethernet adapter may fail to communicate with the network regardless of the type or level of the application software.

PROBLEM ISOLATION AIDS:

None

FIX:

The Novell NE2000 Ethernet adapter was tested and is incompatible with the IBM PC 300 Series 6588 and Intellistation M Pro 6888 systems.

SAS KEYWORDS:

PSY2	PSVP	IBMPC	PSVPADPT
PSY2ADPT	PSVPOEM	PSY2OEM	PSVPCOMM
PSY2COMM	63712	PC 330	PC 350
UNCLASSIFIED	PSVPPART	PSY2PART	

PSY2 RETAIN TIPS
NO DISPLAY AND SOLID HDD LED.

1.4.916 NO DISPLAY AND SOLID HDD LED.

Record number: H131667

Device: D/T2630
Model: M
Tip key: 002
Date created: 095/11/10
Date last altered: A96/11/11

SYMPTOM: No display and a solid (on) hard drive LED indicates a drive up to speed error.

FRU/ACTION: Replace the Hard Drive

SAS KEYWORDS:

PSY2 PSY2FDSK PSY2ERR FIXED DISK
THINKPAD UNCLASSIFIED

1.4.917 NO DISPLAY,1-2-2 BEEP CODE AFTER REPLACING BOARD

Record number: H13964

Device: D/T6886
 Model: M
 Tip key:
 Date created: 095/09/20
 Date last altered: A95/09/27

SYMPTOM:

IBM PC 700 MicroChannel Series systems 6876 and 6886 may exhibit a 1 - 2 - 2 beep code (one long, 2 short, 2 short) or no display after replacing the system board.

PROBLEM ISOLATION AIDS:

Remove the riser card from the PC 700 system exhibiting the symptom of "no display". If the system still posts a 1-2-2 beep code, this tip may not apply.

IMPORTANT: Disable the administrator password if it is set.

Remove the riser card from the system and access the Setup Utility by pressing F1 during the memory count. View the System Information selection for the Flash BIOS level. This tip applies only if the Flash BIOS level entry begins with the characters "N1."

Verify that the riser card FRU part number is P/N06H4018 or P/N06H4023.

FIX:

The failure symptom is due to the incorrect Flash BIOS on the system board. FRU P/N11H5545 is the only system board that should be installed in the 6876/6886 system. This system will not function with Flash BIOS type "N1" and a MicroChannel riser card installed. The Flash BIOS level indicated in the Setup Utility should begin with the characters "N2."

If the system contains the incorrect Flash BIOS, perform the following steps using an ISA/PCI riser:

- 1) Exchange the MicroChannel riser for an ISA/PCI riser. This will allow the system to boot properly.
- 2) Locate the file "\$IMAGE.USF" on the Microchannel Flash diskette. Remove the read-only attribute from that file by entering: "attrib -r \$IMAGE.USF" at a DOS prompt. Make sure that the directory containing the ATTRIB command is in the current path.
- 3) Rename the "\$IMAGE.USF" file on the MicroChannel Flash diskette to "\$IMAGEV.USF."
- 4) Re-Flash the system with the latest level MicroChannel 700 Flash BIOS diskette and power off the machine when the update has completed. RE-INSTALL THE MICROCHANNEL RISER CARD.
- 5) Boot to the 700 MicroChannel Reference Diskette and go to the Startup Options section.
- 6) Select "diskette drive a: " as the first startup option and "hard disk 0" as the second startup option. Save the configuration and exit.
You must boot to the Reference Diskette immediately.

NOTE: The "N1" type Flash BIOS can be installed onto a 6876/86 MicroChannel system inadvertently and result in the symptoms stated above.

The "N2" Flash BIOS may also be installed onto a "N1" type ISA/PCI system 6875/6885 (system board FRU P/N88G4270) inadvertently and result in the identical failure symptoms.

In each case, replacement of the system board may be necessary if the appropriate riser for the Flash BIOS type is not available for temporary use.

SAS KEYWORDS:

PSVP	PSY2	D/T6876	IBMPC
6876	PSVPBRD	PSY2BRD	6886
PSVPMCD	PSY2MCD	D/T6885	D/T6875
PC750	PC730	PC 730	PC 750
6885	6875	PSY2DISP	PSVPDISP
ISA			

1.4.918 NO ERROR MESSAGE IF VIDEO TEST FAILS IN QAPLUS/2

Record number: H01595

Device: D/T6577
 Model: M
 Tip key:
 Date created: 096/06/19
 Date last altered: A96/06/19

SYMPTOM:

When running the Video Test in QAPLUS/2 on IBM PC 300 Series 6577 or 6587, the user will be prompted to validate whether the screens are displayed correctly. If the screens are not displayed correctly, the user is expected to enter a "NO" response. If the response is negative (NO), QAPLUS/2 does not acknowledge the diagnostic failure properly. The error pop-up window does not appear acknowledging the failure.

PROBLEM ISOLATION AIDS:

None

FIX:

If the user suspects a video hardware problem exists, the IBM Personal Computer Diagnostic diskette (QAPLUS/PRO) should be used to diagnose the failure. With QAPLUS/PRO, the user can select video tests and test all facets of the video hardware.

The IBM PC 300/700 Diagnostic diskette (QAPLUS/PRO) is created by using the Diskette Factory included in the systems preloaded software.

QAPLUS/2 & QAPLUS/PRO are trademarks of Diagsoft, Inc.

SAS KEYWORDS:

PSY2	D/T65XX	6577	6587
IBMPC	PSVP	PSVPDISP	PSY2DISP
D/T6587	PC 350	PC350	PC300
PC 330	PC330	42522	PSVPDIAG
PSY2DIAG			

1.4.919 NO HELP TEXT DURING ETHERNET DRIVER INSTALLATION

Record number: H136883

Device: D/T6899
 Model: M
 Tip key:
 Date created: 097/03/18
 Date last altered: A97/03/18

SYMPTOM:

IBM IntelliStation Z Pro 6899 systems preloaded with Microsoft WindowsNT v4.0 may exhibit a "PCI Configuration Error Detected" message during the installation of the Intel 82557-based 10/100 PCI Ethernet adapter.

If the HELP dialog box is clicked when this error occurs, the following message is displayed:

Can not find the Help File:
 "C: \WINNT40\SYSTEM32\E100SET.HLP"

PROBLEM ISOLATION AIDS:

"PCI Busmastering Network Adapters = DISABLED" in the systems Configuration/Setup Utility.

FIX:

When the error occurs, an option is displayed to BROWSE for a replacement HELP file. Choose the following path for an alternate HELP file:

C: \WINNT40\System32

WindowsNT is a trademark of the Microsoft Corporation.

SAS KEYWORDS:

PSVP	PSY2	IBMPC	PSY2PROG
PSVPPROG	PWS	PSVPERR	PSY2ERR
UNCLASSIFIED	61978	PSVPADPT	PSY2ADPT
PSVPOEM	PSY2OEM	PSVPCOMM	PSY2COMM

NO VIDEO ON PC 700 MICROCHANNEL W/MATROX VIDEO ADAPTER

1.4.920 NO VIDEO ON PC 700 MICROCHANNEL W/MATROX VIDEO ADAPTER

Record number: H135920

Device: D/T6886
 Model: M
 Tip key:
 Date created: 097/01/03
 Date last altered: A97/01/03

SYMPTOM:

IBM PC 700 Series 6876 or 6886 systems may exhibit no video at system startup or under application control when using a Matrox PG-1281/8 MicroChannel Graphics adapter card.

PROBLEM ISOLATION AIDS:

The PC 700 Series 6876/6886 MicroChannel systems disable the onboard video controller during POST when it detects the presence of a video adapter card. The Matrox PG-1281/8 MicroChannel Graphics adapter depends on the onboard VGA video to be active at system startup in order to supply high resolution modes. Since the onboard controller is disabled, the end result is no video.

FIX:

Obtain and install Flash BIOS level N2JT47A or higher. Flash BIOS updates may be obtained from the IBM PC Company BBS system by calling 1-919-517-0001. View the "IBM PC 300/700 Files" section (section #21) for the file titled:

N2JT47A.EXE - Flash BIOS updt diskette 6876/6886 v47

The Flash BIOS update may also be downloaded via the Internet from the IBM Personal Computer File Library by searching the following Internet URL:

<http://www.pc.ibm.com/files.html>

Matrox is a trademark of Matrox Electronic Systems, Ltd.

SAS KEYWORDS:

PSVP	PSY2	IBMPC	PSY2DISP
PSVPDISP	PSY2ADPT	PSVPADPT	6876
UNCLASSIFIED	PC 750	D/T6876	MICRO CHANNEL
PC750	PC730		

1.4.921 NO VIDEO ON PC 700 WITH XGA-2 ADAPTER INSTALLED

Record number: H132746

Device: D/T6886
 Model: M
 Tip key:
 Date created: 096/02/22
 Date last altered: A96/02/22

SYMPTOM:

IBM PC 700 Series 6876 and 6886 Micro Channel systems may exhibit no video during POST with an XGA-2 adapter installed.

PROBLEM ISOLATION AIDS:

This failure ONLY occurs on non-English language systems. U.S., U.K., and Canadian systems do not exhibit the failure.

FIX:

Install Flash BIOS update 43A or higher for the PC 700 Micro Channel systems. The current Flash BIOS level is 44A.

Obtain the latest PC 700 Series Flash BIOS update from the IBM PC Company BBS system by calling 1-919-517-0001. Locate the "IBM PC 300/700 Files" section (section #21) for the files titled:

N2JT44A.DSK - MCA/PCI FLASH UPDATE LEVEL 44A

Flash BIOS updates may also be downloaded via the Internet from the IBM Personal Computer File Library by searching the following Internet URL:

<http://www.pc.ibm.com/files.html>

The updates are located in the IBM PC 300 & 700 Series Files section or by using the search facility to locate the files by the names listed above.

SAS KEYWORDS:

PSVP	PSY2	PSVPDISP	PSY2DISP
PSVPADPT	PSY2ADPT	PSVPMCD	PSY2MCD
IBMPC	D/T68XX	68XX	6876
6886	D/T6886	PC 730	PC730
PC 750	PC750		

1.4.922 NO VIDEO OR VIDEO FADES ON PC SERVER 320/520

Record number: H061389

Device: D/T8640
 Model: M
 Tip key:
 Date created: 096/09/24
 Date last altered: A97/02/08

SYMPTOM:

IBM PC Server 320/520 (PCI/EISA) systems may fail at POST with no video or the video fades during normal operation.

PROBLEM ISOLATION AIDS:

All of the following must be true for this tip to apply:

- The system is a PC Server 320 or 520 (PCI/EISA) with an IBM G40 or a Philips 7BM749/00H monitor
- The SVGA adapter installed is FRU p/n06H9114 with a Cirrus Logic chip with the markings "CL-GD5429-86QC-B"

FIX:

Inspect the SVGA adapter FRU p/n06H9114. If the Cirrus Logic chip has the markings "CL-GD5429-86QC-B", replace this adapter with FRU p/n06H9114. Although the FRU number has not changed, the affected adapters have been cleared from stock.

SVGA adapters with other Cirrus Logic chips are NOT affected.

SVGA adapters with the Cirrus Logic chip "CL-GD5429-86QC-B" are overly sensitive to disturbances caused by the monitors above.

Cirrus Logic is a trademark of Cirrus Logic.

Philips is a trademark of Philips Electronics N.V.

SAS KEYWORDS:

PSY2	PSY2DISP	D/T8641	320
520	D/T6542	6542	06H9114
76H4799	P/N76H4799	UNCLASSIFIED	

1.4.923 NO VIDEO OR 210 POST ERROR IN PC 300 W/32MB

Record number: H136516

Device: D/T6577
 Model: M
 Tip key:
 Date created: 097/02/07
 Date last altered: A97/02/10

SYMPTOM:

IBM PC 300 Series 6577 and 6587 systems may exhibit either of the following symptoms on systems containing an IBM 16Mb DIMM and 2 IBM 8Mb Non-Parity EDO 60ns SIMMs:

- 1) 1 to 5 beeps during POST, no video and a system hang condition prior to loading the operating system.
- 2) The system displays POST and performs an incorrect memory count resulting in a 210 POST error code.

Both failure symptoms are solid and recurring. This is not an intermittent failure.

PROBLEM ISOLATION AIDS:

Affected systems contain a total of 32Mb in the following combination ONLY:

- One IBM 16Mb DIMM, FRU P/N42H2779 manufactured for IBM by Hyundai. Affected Hyundai 16Mb DIMMs contain the following bar code headers: J10CV or J11UW
- Two IBM 8Mb 60ns Non-Parity SIMMs, FRU P/N42H2794, manufactured for IBM by IMD. The bar code header for the affected IMD SIMMs is: J11XW

If the system contains only the Hyundai 16Mb DIMM, there is no failure. If the system contains a pair or more of the 8Mb IMD SIMMs with no DIMM installed, there is no failure.

No other combination of DIMMs or SIMMs regardless of size, parity or non parity exhibit this failure.

NOTE - SOME SYSTEMS MAY CONTAIN A COMBINATION OF ONE 16MB DIMM AND TWO 8MB SIMMS FROM MANUFACTURERS OTHER THAN HYUNDAI AND IMD. THOSE SYSTEMS WILL NOT EXHIBIT THIS FAILURE.

FIX:

If the system is exhibiting the failure symptom stated above AND contains a combination of a 16Mb DIMM manufactured for IBM by Hyundai and two 8Mb SIMMs manufactured for IBM by IMD, replace the 16Mb DIMM, FRU P/N42H2779.

If the failure persists, continue normal problem determination.

SAS KEYWORDS:

PSVP	PSY2	IBMPC	PSY2MEM
PSVPMEM	PSY2PART	PSVPPART	HUNG
PC 330	PC 350	SERVICER ONLY	D/T6587
LOCKUP			

1.4.924 NO VIDEO W/ MICRO CHANNEL VIDEO ADAPTER

Record number: H13491

Device: D/T6886
Model: M
Tip key:
Date created: 095/08/07
Date last altered: A95/08/15

SYMPTOM:

A Micro Channel video adapter fails to function when installed in a PC700 model 6876 or 6886.

PROBLEM ISOLATION AIDS:

System board video functions correctly.

FIX:

Some Micro Channel video adapters will not be enabled unless an auxiliary-video extension cable is installed. This cable is a 26 - pin ribbon cable and installs between the riser card auxiliary-video extension connector and the system board VESA Passthrough Connector (J25).

This cable is not included with the system. The customer should order Auxiliary Video Extension Cable option p/n06H6727. If the problem persists, continue with normal problem determination.

SAS KEYWORDS:

PSY2	IBMPC	D/T6876	PSY2DISP
PSY2BRD	PC730	PC750	BLANK
BLACK	CORNERSTONE	P/N06H6728	

1.4.925 NO VIDEO W/CORNERSTONE ACCEL/2 ADAPTER INSTALLED

Record number: H001444

Device: D/T6576
 Model: M
 Tip key:
 Date created: 096/05/08
 Date last altered: A96/05/08

SYMPTOM:

IBM PC 300 Series 6576 and 6586 systems may fail with no video displayed during POST or under operating system control with a Cornerstone Accel/2 PCI or ISA video adapter installed.

PROBLEM ISOLATION AIDS:

The BIOS level of the PC 300 6576 or 6586 is level LPJT52A or lower.

FIX:

Install Flash BIOS level LPJT56A or higher.

Obtain the latest PC 300/700 Series Flash BIOS updates from the IBM PC Company BBS system by calling 1-919-517-0001. Locate the "IBM PC 300/700 Files" section (section #21) for the Flash BIOS file:

LPJT56A.EXE - PC 300 6576/6586 FLASH UPDATE

Flash BIOS updates may also be downloaded via the Internet from the IBM Personal Computer File Library by searching the following Internet URL:

<http://www.pc.ibm.com/files.html>

The updates are located in the IBM PC 300 & 700 Series Files section or by using the search facility to locate the files by the name listed above.

Cornerstone Accel/2 is a trademark of Cornerstone Imaging, Inc.

SAS KEYWORDS:

PSY2	D/T65XX	65XX	IBMPC
PSVP	PSVPOEM	PSY2OEM	PSY2ADPT
PSVPADPT	6576	D/T6586	PSVPDISP
PSY2DISP	PC 330	PC 350	

PSY2 RETAIN TIPS
NO VIDEO W/DIAMOND VIPER VIDEO CARD

1.4.926 NO VIDEO W/DIAMOND VIPER VIDEO CARD

Record number: H13163

Device: D/T6482
Model: M
Tip key:
Date created: 095/06/19
Date last altered: A95/06/29

SYMPTOM:

No video (blank screen) after installing a Diamond Viper PCI video adapter in ValuePoint Performance Series (64xx) system

PROBLEM ISOLATION AIDS:

This tip applies to Diamond Viper PCI video adapters with BIOS code v3.13 or lower.

FIX:

Diamond has fixed this problem with BIOS level v3.14. For additional information or to get BIOS eprom v3.14, customers should contact Diamond Computer Systems technical support at 408 325 - 7100 and reference problem # 01-0427-DV5.

Diamond and Diamond Viper are trademarks of Diamond Computer Systems.

SAS KEYWORDS:

PSY2	IBMPC	D/T6472	D/T6482
D/T6484	D/T6492	D/T6494	PSY2NLGO
PSVPNLGO	OEM	PSY2DISP	PSVPDISP
BLANK	BLACK	PSY2ADPT	PSVPADPT
PSVP			

1.4.927 NO VIDEO W/MATROX VLB VIDEO ADAPTER IN PS/VALUEPOINT

Record number: H13763

Device: D/T6484
 Model: M
 Tip key:
 Date created: 095/09/08
 Date last altered: A95/09/08

SYMPTOM:

PS/ValuePoint Performance Series systems may exhibit a symptom of no video, parity errors or system halted errors with a Matrox VLB Video adapter installed.

PROBLEM ISOLATION AIDS:

PS/ValuePoint Performance Series systems using an OEM video adapter instead of the onboard S3 864 video chipset, should have the Enable/Disable jumper located on the left side of the board to the rear of the memory SIMM sockets, in the "Disable" position.

Move the Enable/Disable jumper to the "Enable" position and retest for video. If the system does display video, this tip applies.

FIX:

Relocate the video ROM address for the Matrox VLB card to the "AC00" memory region.

If the failure persists, contact the place of purchase for the Matrox VLB adapter.

SAS KEYWORDS:

VALUE POINT	PSY2	PSVP	6484
6482	D/T6482	6492	6494
D/T6492	D/T6494	PSVPBRD	PSY2BRD
PSVERR	PSY2ERR	PSY2PART	PSVPPART
DEAD	HANG	HUNG	

1.4.928 NO VIDEO/SYSTEM HANG WITH KURTA VIDEO ADAPTER

Record number: H132195

Device: D/T6571
 Model: M
 Tip key:
 Date created: 096/01/15
 Date last altered: A96/01/15

SYMPTOM:

No video during POST and a system hang condition may occur in an IBM PC 300 6576 or 6586 system that has a Kurta Video/Tablet Adapter installed.

PROBLEM ISOLATION AIDS:

With the display installed on the Kurta Adapter, there will be no visible memory count or IBM Logo. The system will hang almost immediately.

This failure only occurs in the IBM PC 300 6576 or 6586.

FIX:

The Kurta Video/Tablet Adapter is designed in a manner which conflicts with the IBM BIOS code during POST. This causes the Kurta card to respond to the system prematurely which corrupts the BIOS data resulting in a system hang.

Customers that have purchased the Kurta Video/Tablet Adapter for use in an IBM PC 300 6576 or 6586 should be directed back to their point of purchase or to Kurta at (602) 276-5533.

SAS KEYWORDS:

PSY2	D/T65XX	65XX	PSVP
IBMPC	PSVPOEM	PSY2OEM	PSY2DISP
PSVPDISP	D/T6586	HUNG	PC 350
PC330	PC300	PC 330	PC350
PSY2ERR	PSVPERR		

NOISE FROM THE 3545 WHEN a SYSTEM IS INSTALLED.

1.4.929 NOISE FROM THE 3545 WHEN a SYSTEM IS INSTALLED.

Record number: H124939

Device: D/T3545
Model: M
Tip key:
Date created: 094/08/19
Date last altered: A96/11/11

SYMPTOM:

A noise can be heard in the Dock I when a 9545 system is installed.

PROBLEM ISOLATION AIDS:

The noise continues when the Dock I speakers and buzzer are disconnected, but stops when the 9545 main battery is removed.

FIX:

Replace the 3545 power supply FRU P/N66G3559.

SAS KEYWORDS:

PSY2	PSY2PWR	SOUND	BUZZ
SPEAKER	THINKPAD	UNCLASSIFIED	

1.4.930 NON-FUNCTIONAL ICONS ON OS/2 LAUNCHPAD

Record number: H01772

Device: D/T6577
Model: M
Tip key:
Date created: 096/06/19
Date last altered: A96/06/19

SYMPTOM:

IBM PC 300 Series 6577 and 6587 systems preloaded with OS/2 WARP Connect may display corrupted and non-functional icons when the arrow over the OS/2 Window icon is clicked.

PROBLEM ISOLATION AIDS:

When the arrow over the OS/2 Window icon is clicked, a box opens with two buttons and no pictures. If either button is clicked nothing happens. There is no operational connection to the program any longer. The DOS Full Screen and DOS Windows icons should be present.

FIX:

Click the arrow above the OS/2 Window icon on the Launchpad. Drag the non-functional icons to the Shredder. Open the OS/2 System folder followed by the Command Prompts folder. Drag and drop the two DOS Window and Full Screen icons from the Command Prompts folder to the Launchpad to replace the non-functional icons.

SAS KEYWORDS:

PSY2	D/T65XX	6577	6587
IBMP	PSVP	PSVPPROG	PSY2PROG
D/T6587	PC 350	PC350	PC300
PC 330	PC330	45037	

1.4.931 NOVELL FAILS TO INSTALL ON 64XX W/540MB HARDFILE

Record number: H124815

Device: D/T6482
 Model: M
 Tip key:
 Date created: 094/08/09
 Date last altered: A97/07/13

SYMPTOM:

Some ValuePoint Performance Series systems have shipped with a 540mb IDE hard drive and may experience the following problems when installing Novell Netware:

- 1 - Unable to create the volume, or the process takes longer than expected.
- 2 - When attempting to mount the volume, the two FAT tables do not match.
- 3 - When attempting VREPAIR, excessive errors are received.

PROBLEM ISOLATION AIDS:

Some 64xx models are manufactured with 527mb or 540mb IDE hard disk drives; 527mb drives are NOT affected.

The system configuration utility can be used to determine the capacity of the hard disk drive.

FIX:

Do not replace any hardware in an attempt to fix this problem.

A self-loading fixed disk drive microcode update diskette titled "540to528" is available to permanently change the 540mb IBM, Quantum (made for IBM) and Western Digital (made for IBM) fixed disk drives to 528mbs. This is accomplished by changing the default number of cylinders from 1049 to 1024. This will allow fixed disk drive device drivers such as Novell Netware, Windows 32 - bit disk/file access, etc to load without error.

The diskette may be downloaded from the IBM PC Company Bulletin Board System by calling 919-517-0001. If the customer cannot receive the diskette by modem, the HelpCenter will send the customer a copy.

Customers and dealers in Canada may download the diskette from their respective IBM regional bulletin board service.

```
+----- IMPORTANT -----+
| Diskette fixes are customer installable. Customers should |
| be advised to contact the IBM PC Company HelpCenter at |
| 800 772 - 2227 if assistance is required in getting or |
| installing the appropriate fix. Customers in Canada |
| should call IBM's HelpPC at 800 565-3344. |
+-----+
```

SAS KEYWORDS:

PSVP	PSY2	PS/VALUEPOINT	VALUE POINT
PSVPFDSK	PSY2FDSK	D/T6482	D/T6472
D/T6492	D/T6494	6472	6484
6492	6494	82G5928	P/N82G5928
NOVEL			

1.4.932 NOVELL NETWARE - SLUGGISH PRINTER OUTPUT

Record number: H131211

Device: D/T8640
Model: M
Tip key:
Date created: O95/10/10
Date last altered: A95/10/12

SYMPTOM:

Printer output may be sluggish (slow) and "Lost Interrupt" messages may be seen.

PROBLEM ISOLATION AIDS:

The operating system is Novell Netware version 3.12.
Any printer may be affected.
Only the Server 320 (8640 models OYO, OYT, 1YO and 1YT)
are affected.

FIX:

Novell Netware should be setup to print without using interrupts and the following statement should be added to the STARTUP.NCF.

```
'set display lost interrupt alert=off'
```

SAS KEYWORDS:

PSY2	PSY2PROG	SERVER	320
8640	PSY2ERR	PSY2PRT	

1.4.933 NOVELL NETWARE FAILS ON MAXTOR 540MB SCSI DISKS

Record number: H124486

Device: D/T8550
 Model: M
 Tip key:
 Date created: 094/06/24
 Date last altered: A94/08/26

SYMPTOM:

When loading Novell Netware* on a Maxtor 540MB SCSI-2 fixed disk, the system reports the partition to be larger than the actual drive. Various errors may be reported and the problem may appear to be an incompatibility with the fixed disk.

PROBLEM ISOLATION AIDS:

1. This is an initial installation of Novell on this fixed disk. (Netware versions 3.11, 3.12 4.0 and 4.01 are affected.)
2. The diagnostics run error-free.
3. IBM DOS (Disk Operating System) will install and run.

FIX:

This is probably not a hardware failure and none should be replaced unless the following procedure fails to resolve it.

Detail:

A limited number of the 540MB fixed disks were delivered to IBM with residual test data written in certain areas of the disk. This residual data causes Novell Netware to react to the disk as if it were loaded with incompatible software. A low-level format using the advanced diagnostics will clear all data from all areas of the disk, resolving the software conflict.

- A. Load the Reference Diskette, then do a Control-A and load the Diagnostic Diskette.
- B. At the Main Menu you will have two choices, "Low Level" or "Run Diagnostic".
- C. Choose "Low Level" and follow the instructions (requires about 25 minutes).

Note: After a low-level format, IML systems will require the System partition to be recreated using the Reference diskette if the drive being low-level formatted was the primary drive (SCSI ID=6).

* Novell and Netware are registered trade marks of Novell Inc.

SAS KEYWORDS:

PSY2	PSY2ADPT	PSY2ERR	PSY2FDSK
D/T8590	D/T8595	D/T9590	D/T9595
D/T9585	D/T8580	D/T8570	D/T8557
D/T8556	D/T9556	D/T9557	PSY2PROG
8556	8557	8595	8590
9595	9585	8580	8570
9590	MAXSTORE	MAXSTOR	540
MB	OS/2		

1.4.934 NOVELL NETWARE FAILS ON PS/2 8535/8540 SYSTEMS

Record number: H095676

Device: D/T8540
 Model: M
 Tip key:
 Date created: 091/10/26
 Date last altered: A93/07/27

SYMPTOM:

NOVELL NETWARE OPERATING SYSTEM MAY FAIL IN PS/2 8535 AND 8540 SYSTEMS USED AS NON-DEDICATED SERVERS. MULTIPLE SYMPTOMS MAY OCCUR, THESE INCLUDE BUT ARE NOT LIMITED TO THE FOLLOWING:

1. DATA CORRUPTION MAY OCCUR DURING DATA TRANSFER FROM A DISKETTE DRIVE IF THE HARDFILE IS ACCESSED SIMULTANEOUSLY.
2. FAILURE OF SERVER SOFTWARE INITIALIZATION.
3. UNABLE TO ACCESS HARDFILE AFTER INITIAL SOFTWARE START-UP.

PROBLEM ISOLATION AIDS:

1. DOES NOT AFFECT SERVER SOFTWARE INSTALLATION.
2. STAND ALONE WORKSTATIONS ARE NOT AFFECTED.
3. DEDICATED SERVERS ARE NOT AFFECTED.
4. ONLY NON-DEDICATED SERVERS ARE AFFECTED.
5. NO POST OR DIAGNOSTIC ERRORS WILL BE OBSERVED.

NOTE:

THE DEDICATED OR NON-DEDICATED STATUS OF A SERVER CAN BE OBSERVED DURING SYSTEM BOOT-UP. THE STATEMENT, "NOVELL DEDICATED NETWARE" OR "NOVELL NON-DEDICATED NETWARE" VERSION X.XX WILL BE DISPLAYED DURING NOVELL INITIALIZATION (OR LOAD). THE WORD "DEDICATED" MAY BE ABBREVIATED TO "DED" WHEN SEEN IN THE STATEMENT DESCRIBED ABOVE.

FIX:

ONE OR BOTH OF THE FOLLOWING FIXES MAY BE REQUIRED DEPENDING ON THE CURRENT LEVEL OF HARDWARE AND SOFTWARE. IF ONLY ONE OF THE FOLLOWING FIXES ARE APPLIED TO SYSTEMS REQUIRING BOTH, THE DATA CORRUPTION PROBLEM MAY STILL OCCUR.

1. VERIFY ECA089 HAS BEEN APPLIED TO THE 8535 OR 8540 SYSTEM. THE FOLLOWING PROCEDURE MAY BE USED TO DETERMINE IF ECA089 (BIOS MODULES) IS REQUIRED.
 TO DETERMINE "BIOS" DATE:
 - AT THE C: > TYPE "BASIC" AND PRESS "ENTER".
 - AT THE "OK" TYPE THE FOLLOWING LINE EXACTLY AS SHOWN:
 DEF SEG=-1: FOR X=5 TO 12: PRINT CHR\$(PEEK(X));: NEXT
 - PRESS "ENTER".
 - THE SYSTEM WILL DISPLAY A DATE.
 - IF "SYNTAX ERROR" IS DISPLAYED INSTEAD OF A DATE, VERIFY THAT THE LINE WAS TYPED EXACTLY AS SHOWN.
 - IF THE DATE DISPLAYED IS 9/25/1991 OR LATER, THE SYSTEM DOES NOT REQUIRE REPLACEMENT BIOS MODULES.
 - IF THE DATE DISPLAYED IS 9/24/1991 OR EARLIER, THE SYSTEM BIOS KIT SHOULD BE INSTALLED.
 - TO RETURN TO THE C: >, TYPE "SYSTEM" AND PRESS "ENTER".
2. AFFECTED CUSTOMERS SHOULD BE ADVISED TO CONTACT THEIR NOVELL POINT OF SALE FOR ASSISTANCE IN OBTAINING THE REQUIRED PATCH FOR THIS PROBLEM OR REFER TO IDE286.ZIP ON NETWARE.

*REGISTERED TRADEMARK OF NOVELL, INC.

SAS KEYWORDS:

PSY2	PSY2PROG	D/T8535	PSY2BRD
8535SYSBRD	8535SYSPROG	8540SYSBRD	8540SYSBRD

NOVELL NETWARE LOST HARDWARE INTERRUPTS

1.4.935 NOVELL NETWARE LOST HARDWARE INTERRUPTS

Record number: H132489

Device: D/T8640
 Model: M
 Tip key:
 Date created: 096/02/01
 Date last altered: A97/05/20

SYMPTOM:

While running Novell Netware, false "Lost Hardware Interrupt" errors may be experienced.

PROBLEM ISOLATION AIDS: None**FIX:**

This has been known to be caused by a conflict between Netware and the APIC (Advanced Programmable Interrupt Controller) which is integrated into the Intel P54C Pentium Processor chip in the Server 320.

P54C.COM is a software patch which disables the APIC function of the Intel P54C Pentium processor. By disabling the APIC, the false error messages regarding lost hardware interrupts in Novell Netware can be eliminated. This Patch allows the use of the P54C chip without lost interrupt messages until it can be integrated into the BIOS of the machine.

*NOTE: P54C.COM WORKS ONLY IN SINGLE PROCESSOR MODE.

This fix may be down-loaded from the IBM PC Company Bulletin Board system by calling 919-517-0001. The file name is P54CFIX.EXE and is a "hidden file" to all users except for those who log on in the following way:

First Name: Server
 Last Name: Hidden
 Password: Server

This file will self explode to 2 files, P54C.COM and README.1ST. The readme explains the fix below.

Place P54C.COM in you Netware File Server's AUTOEXEC.BAT file so that it is executed EACH TIME the machine is booted. THIS IS NOT A ONE-TIME APPLICATION, IT MUST BE EXECUTED EVERY TIME BEFORE NETWARE IS STARTED.

DIRECTIONS

1. Copy the file P54C.COM into the root directory of the boot drive. (usually C:)
2. Edit the AUTOEXEC.BAT and add the following line:

P54C.COM

3. Save and Exit the AUTOEXEC.BAT
4. Reboot and start Netware as normal

Netware is a trademark of Novell Inc.

SAS KEYWORDS:

PSY2	PSY2PROG	PSY2ERR	D/T8642
D/T8641	8640	8641	8642
SERVER	320	300	520

1.4.936 NOVELL UNIXWARE 1.1 FAILS TO INSTALL FROM CDROM

Record number: H124690

Device: D/T6384
 Model: M
 Tip key:
 Date created: 094/07/21
 Date last altered: A94/07/21

SYMPTOM:

NOVELL UNIXWARE 1.1 MAY FAIL TO INSTALL FROM A SCSI CDROM DRIVE IN A PS/VALUEPOINT SYSTEM.

PROBLEM ISOLATION AIDS:

THE SCSI ADAPTER CARD IS SET TO AN INTERRUPT OTHER THAN IRQ11. THE INSTALL PROCESS CAUSES A SYSTEM HANG CONDITION AFTER REMOVING DISKETTE #3. THE WORD "WORKING" WILL CONTINUE TO FLASH ON THE DISPLAY.

FIX:

THE UNIXWARE SOFTWARE IS WRITTEN SO THAT IT ONLY RECOGNIZES THE SCSI ADAPTER IF IT IS SET TO IRQ11 DURING THE INSTALLATION PROCESS.

SET THE ADAPTER TO IRQ11 AND CONTINUE THE INSTALLATION. THE IRQ SETTING OF THE ADAPTER MAY BE CHANGED AFTER THE INSTALLATION PROCESS IS COMPLETE.

SAS KEYWORDS:

VALUE POINT	PS/VP	PSVP	6384
6382	6387	6381	6472
6482	6484	6492	6494
D/T6381	D/T6382	D/T6387	D/T6472
D/T6482	D/T6484	D/T6492	D/T6494
P60/D	P60D	VALUE POINT	PSY2
PSVPOEM	PSY2OEM	PSVPADPT	PSY2ADPT
PSVPPROG	PSY2PROG	PSVPOPER	PSY2OPER
CD-ROM	CD ROM		

1.4.937 NUMBER 9 VIDEO CONFIGURATION FOR OS/2 WARP SERVER V4 SMP

Record number: H162360

Device: D/T8644
Model: M
Tip key:
Date created: 098/01/09
Date last altered: A98/01/15

SYMPTOM:

1. OS/2 Desktop becomes unreadable with Warp Server V4 SMP.

After installing Warp Server V4 SMP and the Number 9 video driver, the OS/2 Desktop is unreadable after the system is shutdown and restarted. This applies to systems equipped with two Pentium II processors.

-or-

2. WIN-OS/2 session fails to open.

After changing the desktop resolution, a full-screen WIN-OS/2 session fails to open. This is an intermittent error. Subsequent closing and opening of full-screen WIN-OS/2 sessions occur normally.

PROBLEM ISOLATION AIDS:

- The system is an IBM Netfinity 3500 (8644-1xx/2xx/3xx)
- The Number 9 video driver is installed

FIX:

Use ServerGuide (V4.0.1 or later) to install Network Operating Systems so that the current device drivers and service packs are installed automatically.

-or-

Download and install the current OS/2 Warp Service Pack.

The current OS/2 Warp Service Pack may be obtained via the Internet from the OS/2 Warp Download Library at the following URL: www.software.ibm.com/os/warp/downloads
Pentium is a trademark of Intel Corporation.
Number Nine is a trademark of Number Nine Computer Corporation.

SAS KEYWORDS:

PSY2 PSY2DISP UNCLASSIFIED 77137
75322

1.4.938 N51 HANGS AFTER a SUSPEND / RESUME OPERATION.

Record number: H097236

Device: D/T8551
Model: M
Tip key:
Date created: 092/03/31
Date last altered: A92/04/14

SYMPTOM:

N51 systems using Microsoft* Windows 3.0 or later in the Windows enhanced mode may hang after a suspend / resume operation if they have had UINSTALL programs loaded from DEVICE DRIVER DISKETTE VERSION 1.00.

PROBLEM ISOLATION AIDS:

The problem will occur if the customer loads UINSTALL from DEVICE DRIVER DISKETTE version 1.00.

FIX:

Have the customer erase the DOS5FIX0.COM file from the fixed disk and also remove the line: INSTALL=C: \DOS5FIX0.COM from the CONFIG.SYS file. These files were loaded from the Device Driver diskette version 1.00 during UINSTALL when the "Install DOS 5.0 Problem Fix" Option was selected from the Installation Options Menu.

The correction will allow operation, but version 1.10 should be installed when it is available to the customer.

Device Driver Diskette version 1.10 does not include or need the DOS5FIX0.COM file. Device Driver Diskette 1.10 is being shipped to all customers that received level 1.00. If they do not have 1.10 though, you may give them a copy.

The Device Driver Diskette and Reference Diskette is available on VM through PCPROD as RFN51A.

*Microsoft is a registered trademark of the Microsoft Corporation.

SAS KEYWORDS:

PSY2	PSY2PROG	8551SYSPROG	LOCKUP
PSY2ERR	8551SYSERR		

OBI ISA 33.6 MODEM INTERFERES WITH ADJACENT ADAPTER

1.4.939 OBI ISA 33.6 MODEM INTERFERES WITH ADJACENT ADAPTER

Record number: H161124

Device: D/T6282
 Model: M
 Tip key:
 Date created: 097/09/19
 Date last altered: A97/09/19

SYMPTOM:

The OBI ISA 33.6 modem, part number P/N42H4322, when installed in slot 1, physically interferes with an adapter in slot 2 on the riser card.

PROBLEM ISOLATION AIDS:

Only those OBI ISA 33.6 internal modems manufactured with a gray plastic cover over the RJ-11 phone cable connections are affected. Models manufactured with a black plastic cover over the phone cable connections are not affected.

PCI adapters are not affected.

FIX:

Install the modem in the top ISA slot on the riser card.

This will eliminate physical interference of the gray plastic cover with adjacent ISA adapters in the system.

SAS KEYWORDS:

PSY2	PSY2ADPT	PSVP	PSVPADPT
D/T6272	D/T6282	D/T6560	D/T6562
D/T6571	D/T6573	D/T6575	D/T6576
D/T6577	D/T6581	D/T6583	D/T6585
D/T6586	D/T6587	D/T6588	D/T6592
D/T6598	D/T6875	D/T6876	D/T6885
D/T6877	D/T6887	D/T6888	D/T6899
UNCLASSIFIED	PSY2COMM	PSVPCOMM	

1.4.940 OEM MONITOR FAILS ON PC 300/700 SYSTEMS

Record number: H126898

Device: D/T6875
 Model: M
 Tip key:
 Date created: 095/03/24
 Date last altered: A96/03/21

SYMPTOM:

Systems utilizing an S3-Vision 864 chip set, such as IBM PC 300/700 systems, may experience unexpected Video configuration errors when an OEM monitor is connected to the system unit. This problem applies to OEM monitors that implement the VESA Display Data Channel (DDC) standard.

This problem has been seen on "NEC" XE15, XE17, XE21, XP15, XP17, and XP21 monitors. It may also occur on other vendor monitors when connected to an IBM system, or with IBM DDC Compliant monitors attached to other vendor's system units.

85xx and 95xx Micro Channel systems using XGA-1, XGA-2, Image Adapter/A or Image-I Adapter/A could also experience video problems with OEM DDC monitors.

PROBLEM ISOLATION AIDS:

- The system displays a 162 error at POST. The set-up utility indicates a change has occurred in the video selection.
- The power LED on the monitor flashes, indicating that the display has lost sync or entered the power saver mode.
- The failure does not occur if the system is powered on 10-15 seconds prior to the monitor.
- An IBM monitor with DDC does not exhibit the above symptoms, whether it is DDC enabled or not.
- The IBM PC 300/700 system is NOT at Flash BIOS Level 65A or higher

FIX:

This is an OEM monitor incompatibility. No system parts should be replaced in an attempt to fix this problem.

- PC 300/700 BIOS level 65A and higher corrects this problem.
- NOTE - BIOS level 65A or higher has the support for DDC1. To enable this support, access the Setup Utility and select the Devices and I/O, then Video Setup. Enable DDC1 Checking. Enabling DDC1 checking will cause a 20 second delay during POST to allow the system and monitor to synchronize.

Flash BIOS may be downloaded from the IBM PC CO. Bulletin Board service by calling 919 - 517 - 0001.

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=
= THE FLASH UPDATE IS CUSTOMER INSTALLABLE. CUSTOMERS =
= SHOULD BE ADVISED TO CONTACT THE PC COMPANY HELPCENTER AT =
= 800-772 - 2227 TO OBTAIN THE FILE AND REQUEST ASSISTANCE =
= WITH INSTALLATION IF REQUIRED. =

```

- As an immediate workaround the IBM PC 300/700 system should be powered on first, at least 10-15 seconds prior to turning on the monitor.

85xx and 95xx Micro Channel systems using XGA-1, XGA-2, Image Adapter/A or Image-I Adapter/A must be powered on 10-15 seconds prior to turning on the monitor.

Notes:

DDC (Display Data Channel) allows basic configuration information to be passed between the system unit and the monitor. This enables the system unit to automatically configure for optimum monitor performance. This capability is sometimes referred to as "Plug'n Play"

Windows is a trademark of Microsoft Corporation
 NEC is a trademark of NEC Corporation

SAS KEYWORDS:

PSY2 PSY2DISP SERVER 300 SERVER 700

PSY2 RETAIN TIPS**OEM MONITOR FAILS ON PC 300/700 SYSTEMS**

D/T6876	D/T6886	D/T6875	D/T6885
PSVP	SOFTWARE	POEM	D/T8555
D/T8556	D/T8557	D/T8573	D/T8560
D/T8565	D/T8570	D/T9576	D/T8580
D/T8590	D/T8595	D/T9585	D/T9577
D/T9556	D/T9557	D/T9595	D/T9577I
D/T9577S	D/T9576I	D/T9577S	D/T9590
D/T9595A	D/T8550	NEC	DDC1
D/T68XX	D/T65XX	COMPAQ	171FS
DONGLE	96G2693		

1.4.941 OEM, PACIFIC RIM SYSTEMS* EXT DSKT DRIVE FAILURES

Record number: H063499

Device: D/T8570
 Model: M
 Tip key:
 Date created: 090/05/09
 Date last altered: A92/12/03

SYMPTOM: 8570 MODELS E61, 061, 121, AND U61 USING THE PACIFIC RIM* SYSTEMS EXTERNAL DISKETTE DRIVE, MAY EXPERIENCE READ, WRITE, OR FORMAT PROBLEMS WITH THIS DISKETTE DRIVE.

PROBLEM ISOLATION AIDS:

THE PACIFIC RIM SYSTEMS* DISKETTE DRIVE MAY FAIL TO READ OR WRITE TO PREVIOUSLY FORMATTED LOW DENSITY DISKETTES (360KB) WHEN USED WITH 8570 SYSTEMS WITHIN THE FOLLOWING SERIAL NUMBER RANGES:

8570 MODEL E61 WITHIN SERIAL NUMBER RANGES:
 2516000 TO 2650000
 7164000 TO 7999999
 F001000 TO F249999
 DT5500A0001 TO DT5500Z9999

8570 MODEL U61 WITHIN SERIAL NUMBER RANGES:
 U001477 TO U9999999

8570 MODEL 061 WITHIN SERIAL NUMBER RANGES:
 5001500 TO 5549999
 8007000 TO 8999999

8570 MODEL 121 WITHIN SERIAL NUMBER RANGES:
 5505500 TO 5605500
 9075500 TO 9999999

FIX: *****DO NOT REPLACE 8570 SYSTEM PARTS*****

IF THE PACIFIC RIM SYSTEMS* DISKETTE DRIVE FAILS WHEN USED WITH AN 8570 WITHIN THE ABOVE SERIAL NUMBER RANGES, HAVE THE CUSTOMER CONTACT PACIFIC RIM SYSTEMS* AT 510-782-1013.

* " PACIFIC RIM SYSTEMS " IS A REGISTERED TRADEMARK OF THE PACIFIC RIM SYSTEMS CORPORATION.

SAS KEYWORDS:

PSY2 PSY2DSKT 8570SYSDSKT POEM
 PSY2NLGO 8570SYSNLGO

1.4.942 ON-BOARD DIAGNOSTICS FAILS CONTINUOUS LOOP TEST

Record number: H162800

Device: D/T8640
Model: M
Tip key:
Date created: 098/02/18
Date last altered: A98/02/18

SYMPTOM:

The on-board ROM Based Diagnostics reports a 2620 error (RAID Configuration error).

PROBLEM ISOLATION AIDS:

All of the following must be true for this TIP to apply:

- The System is a IBM PC Server 330 type 8640 model PT0/PB0/PM0.
- The on-board ROM based Diagnostics has been engaged in a continuous loop mode to test the Raid disk subsystem.
- There are devices connected/configured on the on-board ServeRAID II Controller.

FIX:

This problem will be fixed in a future Firmware Flash Update for the on-board ROM based Diagnostics. The Flash update is anticipated to be available by June, 1998.

WORKAROUND:

Use the on-board ROM based diagnostics for Problem determination as it applies to isolating components only. DO NOT use it as a run-in exerciser(continuous loop).

SAS KEYWORDS:

PSY2	D/T8640	UNCLASSIFIED	PSY2DIAGS
PSY2ERROR	2620		

ONBOARD ETHERNET CONTROLLER RIPL DOES NOT ABORT

1.4.943 ONBOARD ETHERNET CONTROLLER RIPL DOES NOT ABORT

Record number: H162378

Device: D/T8644
Model: M
Tip key:
Date created: 098/01/08
Date last altered: A98/01/12

SYMPTOM:

Pressing the <HOME> key to "Abort RIPL" (Remote Initial Program Load), does not abort the RIPL.

PROBLEM ISOLATION AIDS:

- The system is an IBM Netfinity 3500 (8644-1xx/2xx/3xx)
- The Onboard Ethernet Controller is NOT connected to the LAN, or the connection is faulty.

FIX:

Connect the Onboard Ethernet Controller Port to the LAN.

If a there is a good LAN connection, the "Abort RIPL" works and the next device in the Startup Sequence is tried.

But if the cable is disconnected or faulty, the system waits indefinitely until a valid LAN connection is detected before continuing to RIPL.

SAS KEYWORDS:

PSY2	D/T8644	D/T8644RPL	ETHERNET
D/T8644CONN	NETFINITY	3500	UNCLASSIFIED
RPL			

OPERATING SYSTEMS USING ABIOS FAIL TO ACCESS FIXED DISK

1.4.944 OPERATING SYSTEMS USING ABIOS FAIL TO ACCESS FIXED DISK

Record number: H024909

Device: D/T8570
Model: M
Tip key:
Date created: 090/04/18
Date last altered: A91/05/20

SYMPTOM: MULTITASKING OPERATING SYSTEMS SUCH AS OS/2 FAIL WITH VARIOUS SYMPTOMS WHEN ATTEMPTING TO ACCESS THE SYSTEM'S FIXED DISK.

PROBLEM ISOLATION AIDS:

THE CUSTOMER HAS ASSIGNED A DEFAULT ARBITRATION LEVEL OF 0 TO ANY DEVICE OTHER THAN THE ST506 FIXED DISK.

FIX:

IN THE DMA ABIOS CODE, DMA ARBITRATION LEVEL 0 IS RESERVED FOR ST506 FIXED DISKS. IF ANY OTHER DEVICE HAS BEEN GIVEN AN ARBITRATION LEVEL OF 0 IT WILL HAVE TO BE CHANGED.

SAS KEYWORDS:

PSY2	PSY2PROG	8570SYSPROG	PSY2FDSK
8570SYSFDSK	PSY2ADPT	8570SYSADPT	8580SYSPROG
8580SYSFDSK	8580SYSADPT	D/T8570	D/T8580

1.4.945 OPTICAL WRITABLE DVCE DRVR WILL NOT LOAD WITH IBM CD-ROM

Record number: H093673

Device: D/T8550
 Model: M
 Tip key:
 Date created: 091/04/29
 Date last altered: A93/09/01

SYMPTOM:

AFTER INSTALLING THE WRITABLE OPTICAL DRIVE (OPTION # 6450162) THE MESSAGE "DRIVER NOT LOADED" IS DISPLAYED WHEN BOOTING AND FAILS TO LOAD THE WRITABLE DRIVE DEVICE DRIVER. THE SYSTEM COMPLETES THE BOOT AND WILL WORK WITHOUT ERROR BUT THE WRITABLE OPTICAL DRIVE WILL NOT BE INSTALLED IN THE SYSTEM.

PROBLEM ISOLATION AIDS:

CHECK FOR THE FOLLOWING CONFIGURATION

1. PS/2 WITH IBM CD ROM DRIVE INSTALLED
2. PS/2 3.5 IN. REWRITABLE OPTICAL DRIVE (OPTION # 6450162)
3. DOS 4.0

IF THE ABOVE CONFIGURATION EXISTS, LOOK IN THE CONFIG.SYS FILE FOR A DEVICE DRIVER "GENS386.SYS". IF THIS DEVICE DRIVER IS PRESENT, THERE WILL BE A DATA CONFLICT WITH THE WRITABLE OPTICAL DRIVE AND THE IBM CD-ROM DRIVE WHICH WILL CAUSE THE WRITABLE DRIVER NOT TO LOAD.

FIX:

ONLY VERY OLD CD-ROM APPLICATIONS REQUIRE THE GENS386.SYS DRIVER TO BE INSTALLED. THIS DRIVER MUST BE REMOVED FROM CONFIG.SYS TO ALLOW THE OPTICAL DRIVE TO BE INSTALLED. ONCE THIS DRIVER IS REMOVED THE CUSTOMER MAY EXPERIENCE PROBLEMS WITH SOME CD ROM APPLICATIONS. IF THIS OCCURS THE CUSTOMER SHOULD OBTAIN THE LATEST VERSION OF THEIR CD ROM APPLICATION. THE LATEST VERSION OF THE ALL CD ROM APPLICATIONS DO NOT REQUIRE THE GENS386 DRIVER.

AS AN ALTERNATIVE, THE UPGRADING TO DOS 5.0 WILL SUPPLY DOS DMA SERVICES AND GENS386 WILL NO LONGER BE REQUIRED ON ANY APPLICATION.

SAS KEYWORDS:

PSY2	PSY2ADPT	D/T9576	D/T9556
D/T9557	D/T9577	D/T8550	D/T8555
D/T8560	D/T8565	D/T8570	D/T8580
D/T8590	D/T8595	PSY2CNFG	D/T9595

1.4.946 ORCHID CD-ROM FAILS IN 6381/SI

Record number: H037069

Device: D/T6381
Model: M
Tip key:
Date created: 094/07/28
Date last altered: A95/11/16

SYMPTOM:

The Orchid (made by Sony) CDS 3110 CD-ROM and adapter kit may fail when installed in a 6381/SI. Symptoms include:

- 1 - The system may fail to recognize the CD-ROM.
 - 2 - The "in use" light on the CD-ROM drive may flash during hard disk drive activity, moving the mouse, or using the keyboard.
- Sony is a trademark of Sony Corporation.

PROBLEM ISOLATION AIDS:

None.

FIX:

Replace the riser card using FRU p/n88G4178. If problems persist, continue with normal problem determination.

SAS KEYWORDS:

PSY2	PSVP	PS/VALUEPOINT	VALUE POINT
6381	CD ROM	SONY	PSVPADPT
PSY2ADPT	PSY2NLGO	PSVPNLGO	88G4178
52G7065	PSVPPART	PSY2PART	CDROM
PS2YCDROM	PSVPCDROM		

1.4.947 OS/2 DUMP FAILS WITH CP-6E IN THE INFORMATION PANEL

Record number: H127301

Device: D/T8595
Model: M
Tip key:
Date created: 095/04/27
Date last altered: A95/05/02

SYMPTOM:

OS/2 hangs with CP: 6E visible in the information Panel during an OS/2 software dump.

(Note: CP-6E is NOT an error code. DO NOT attempt to use it as a troubleshooting aid.)

PROBLEM ISOLATION AIDS:

The system is a 8595 model OMT (486DX-50MHZ)

FIX:

This is not a hardware error.

There is a file available from OS/2 software Support named OS/2 Newdump (OS2DUMP file). This new code corrects the CP: 6E hang problem on 50Mhz 8595 systems (models OMT).

SAS KEYWORDS:

PSY2	PSY2PROG	D/T9595	8595
9595	PSY2ERR	CP6E	CP
6E	OS2		

1.4.948 OS/2 FDISK ERRORS ON IDE DRIVES LARGER THAN 4.0GB

Record number: H16423

Device: D/T6588
 Model: M
 Tip key:
 Date created: 097/07/11
 Date last altered: A98/01/07

SYMPTOM:

During installation of OS/2 Warp versions 3.0 and 4.0 on IDE hardfiles larger than 4.0GB, FDISK misidentifies the capacity of the hardfile.

PROBLEM ISOLATION AIDS:

This symptom is limited to IDE hardfiles equal to, or greater than 4.0GB in capacity.

FIX:

Download and install file IDEDASD.EXE.

IDEDASD.EXE may be downloaded via the Internet from the following URL:

Http: //service.software.ibm.com/os2ddpak/html/index.htm
 IDEDASD.EXE will be located in the "OS/2 Component Updates", "Installation Diskette Updates", "Greater than 4.3G IDE Hardfile Support" section.

SAS KEYWORDS:

PSY2	PSY2OPER	PSY2PROG	PSVP
PSVPOPER	PSVPPROG	D/T6588	D/T6888
6588	6888	68237	63441
UNCLASSIFIED	80541		

1.4.949 OS/2 HANGS ON REBOOT AFTER RESOLUTION CHANGE

Record number: H132803

Device: D/T6877
 Model: M
 Tip key:
 Date created: 096/02/27
 Date last altered: A96/02/27

SYMPTOM:

IBM PC 700 Series 6877 and 6887 may exhibit an intermittent system hang condition after changing the video resolution on a system preloaded with OS/2 WARP Connect.

PROBLEM ISOLATION AIDS:

The system hang condition may occur after following the sequence of steps below:

- Select "OS/2 System."
- Select "System Setup."
- Select "System."
- Change to a different resolution.
- Close window and Select "Shutdown."
- Press Cntrl+Alt+Del

During IPL, after the initial colored background is displayed, the frame of a window will be displayed. The system may hang at this point.

FIX:

To clear the system hang condition, power the system off/on. The system should reboot using the resolution chosen.

This problem only affects preloaded systems. There are no plans to resolve this problem at this time.

SAS KEYWORDS:

PSY2	D/T68XX	6887	6877
IBMPC	PSVP	PSVPERR	PSY2ERR
D/T6887	PSVPPROG	PSY2PROG	PSVPADPT
PC 750	PC750	PC700	PC 730
HUNG	PC730	LOCKUP	40868

OS/2 SCREEN TOGGLES CAUSE VIDEO CORRUPTION

1.4.950 OS/2 SCREEN TOGGLES CAUSE VIDEO CORRUPTION

Record number: H16921

Device: D/T6562
Model: M
Tip key:
Date created: 097/08/18
Date last altered: A97/08/26

SYMPTOM:

When toggling between the OS/2 desktop, DOS full screen, and Windows (WinOS2) sessions, the "top" windows may become corrupted.

PROBLEM ISOLATION AIDS:

The error is only seen in systems running OS/2 and using the onboard Matrox video.

FIX:

The condition can be corrected by either of the following methods:

1. Use the WinOS2 icons to launch a WinOS2 session.
2. Change the VIDEO_SWITCH_NOTIFICATION value for the DOS Full Screen icon used to launch WinOS2:

- Right click on the icon used to launch the DOS session.
- Select Properties.
- Go to the Session tab.
- Click the DOS properties button.
- Scroll down the list and highlight the VIDEO_SWITCH_NOTIFICATION setting.
- Change the value to ON.

Windows is a trademark of Microsoft Corporation.

SAS KEYWORDS:

PSY2	PSY2ERR	PSY2OPER	PSVP
PSVPERR	PSVOPER	D/T6562	D/T6592
6562	6592	67504F_1	UNCLASSIFIED

1.4.951 OS/2 SYSTEM HANG W/TOKEN RING & MATROX MGA CARD

Record number: H135789

Device: D/T6576
 Model: M
 Tip key:
 Date created: 096/12/17
 Date last altered: A96/12/18

SYMPTOM:

IBM PC 300 Series 6576 & 6586 systems may exhibit a system hang condition while executing the STARTUP.CMD file in OS/2 WARP Connect with an IBM Auto 16/4 Token Ring and a Matrox MGA PCI video adapter installed.

PROBLEM ISOLATION AIDS:

The failure reported to IBM involved an IBM PC 300 6576/6586, running OS/2 WARP Connect, IBM LAN AID 1.4, Communications Manager 1.11, IBM Auto 16/4 Token Ring adapter, and a Matrox Millennium PCI Graphics adapter. The system intermittently hung when LAN Requester loaded the STARTUP.CMD file. The Workplace Shell window exhibited video distortion in the form of a 3 sided window, with the word "Untitled" displayed on the title bar.

FIX:

Perform the following steps to eliminate the failure:

- 1) Rename the STARTUP.CMD file that loads the network drivers during IPL to START.COMD.
- 2) Use the Template Folder to drag and drop the Program template to the Desktop.
- 3) Input the path and filename for "START.COMD" in the Program Settings window.
- 4) Move the new icon to the Startup Folder and reboot.

A permanent fix for this problem will be included in future releases of OS/2 Fix Paks. The current OS/2 Fix Pak may be downloaded via the Internet at the following URL:

<http://www.software.ibm.com/download/>

Matrox Millennium is a trademark of Matrox Electronic Systems, LTD.

SAS KEYWORDS:

PSVP	PSY2	IBMPC	PSY2PROG
PSVPPROG	PSY2COMM	PSVPCOMM	D/T6586
UNCLASSIFIED	PC 350	PC 330	50780

1.4.952 OS/2 TRAP 0002 ERRORS OCCUR DURING 6157 TAPE BACKUP

Record number: H096484

Device: D/T8550
Model: M
Tip key:
Date created: 092/02/24
Date last altered: A93/12/03

SYMPTOM:

During a 6157 tape backup, the PS/2 system hangs and fails with a Trap 0002 error.

PROBLEM ISOLATION AIDS:

If hardware diagnostics run error free, and all appropriate Retain Tips and ECAs are reviewed and applied, then uninstalled BIOS files should be considered as a potential source of the problem.

These files are loaded during the initial operating system installation and are system specific. If OS/2 was downloaded through a network or was restored from a backup of another unit, some system-specific BIOS files may not have been correctly loaded.

FIX:

The customer should be directed to contact the OS/2 software support group at 1-800-992-4777 for assistance in identifying these files. The required files are located on the original OS/2 "Installation Disks." OS/2 software support suggests that these diskettes be available when assistance is requested.

Also see RETAIN record # H121109.

SAS KEYWORDS:

PSY2	PSY2PROG	PSY2TAPE	8580SYSERR
8580SYSPROG	8580SYSTAPE	D/T6157	6157SYSPROG
6157SYSERR	6157SYSTAPE	D/T8550	D/T9585

1.4.953 OS/2 VIDEO ERROR MSG RUNNING LOTUS 123

Record number: H101540

Device: D/T8550
 Model: M
 Tip key:
 Date created: 092/09/18
 Date last altered: A92/09/23

SYMPTOM:

WHEN RUNNING LOTUS 123, THE PS/2 DISPLAYS AN OS/2 ERROR MESSAGE INDICATING THE VIDEO MODE IS NOT SUPPORTED. THIS LEAVES THE OS/2 DOS SESSION IN A HANG CONDITION. (YOU MUST CLOSE THE DOS SESSION TO CONTINUE)

DETAILS:

THIS HANG OCCURS BECAUSE OF A NON-CONFORMING CODE SEQUENCE IN THE DOS VERSION OF LOTUS 123. THE PROBLEM MANIFESTS ITSELF IF BOTH OF THE FOLLOWING CONDITIONS ARE MET:

- A. THE DOS VERSION OF LOTUS 123 IS STARTED IN AN OS/2 VERSION 2.X DOS WINDOW.
- B. AN XGA ADAPTER/A IS INSTALLED WITH A CONFIGURATION ROM ADDRESS SET TO "C0000H-C1FFFH".

PROBLEM ISOLATION AIDS: NONE**FIX:**

USE THE LOTUS 123 VERSION FOR OS/2, OR LOTUS 123/G.

WORKAROUND:

1. START LOTUS 123 FOR DOS, IN A DOS FULL-SCREEN SESSION.
2. USE THE REFERENCE DISKETTE (OR SYSTEM PARTITION) "VIEW CONFIGURATION, CHANGE CONFIGURATION" FUNCTION TO MANUALLY CHANGE THE XGA ADAPTER ROM ADDRESS TO OTHER THAN C0000H-C1FFFH.

SAS KEYWORDS:

PSY2	PS2	PS/2	D/T8595
D/T8590	D/T8580	D/T8570	D/T8565
D/T8560	D/T8555	PSY2ADPT	PSY2PROG
D/T8556	D/T8557	D/T8576	D/T8575
D/T8596	D/T8597	D/T9554	D/T9557
D/T9576	D/T9577	D/T9585	D/T9595
PSY2ERR	D/T95XX		

1.4.954 OS/2 WARP CONNECT DESKTOP & ICONS DISTORTED

Record number: H132804

Device: D/T6877
 Model: M
 Tip key:
 Date created: 096/02/27
 Date last altered: A96/02/27

SYMPTOM:

IBM PC 700 Series 6877 and 6887 may exhibit the following video distortion after installing OS/2 WARP Connect from CD:

- Desktop is cutoff on the left and right side.
- Button Icons overlap each other.

PROBLEM ISOLATION AIDS:

The Matrox Millennium video adapter is installed along with the Matrox Millennium OS/2 device drivers. The drivers are setup for a 640 X 480 resolution.

FIX:

Adjust the image using the geometry adjustment panel on the front of the display. If there is no adjustment panel or the adjustments cannot compensate for the distortion, increase the video resolution above 640 X 480.

SAS KEYWORDS:

PSY2	D/T68XX	6887	6877
IBMPC	PSVP	PSVPDISP	PSY2DISP
D/T6887	PSVPPROG	PSY2PROG	PSVPADPT
GUI	PC750	40645	PSY2ADPT
PC 750	PC730	PC700	PC 730

1.4.955 OS/2 WARP CONNECT HANGS AT BOOT ON IBM PC

Record number: H16160

Device: D/T6282
 Model: M
 Tip key:
 Date created: 097/06/23
 Date last altered: A97/09/12

SYMPTOM:

Customers running OS/2 Warp Connect experience intermittent hangs on boot with a blinking cursor in the upper left hand corner of the screen.

PROBLEM ISOLATION AIDS:

The customer is running OS/2 Warp Connect with fix pack 23 or less.

This condition has been observed on IBM Commercial Desktop and IBM Thinkpad systems with 166MHz MMX processors and 200MHz MMX processors.

FIX:

DO NOT REPLACE HARDWARE UNTIL THE CURRENT FIX PACK HAS BEEN INSTALLED.

Apply the current OS/2 Warp Connect fix pack.

At the time of this tip the current OS/2 Warp Connect fix pack is 26 (FP26).

To obtain fix pack 26, download all files beginning with XR_W026. Also download files WKICKR.ZIP and WKICKR.TXT.

Fix pack files can be downloaded from the IBM BBS at 919 - 517 - 0001 or from the IBM web site:

Http: //www.us.pc.ibm.com/files.html

NOTE: If the customer is installing OS/2 and experiences the hang condition, the files OS2LDR, OS2LDR.MSG, and OS2KRNL will need to be replaced with those in Fix Pack 26 in order to complete the installation.

This condition may be seen on additional 166MHz and faster Pentium processors.

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SAS KEYWORDS:

PSY2	PSY2OPER	PSVP	PSVPOPER
6272	6282	6560	6576
6577	6586	6587	6588
6877	6887	6888	6899
6589	6598	6899	2640
9546	9547	MMX	UNCLASSIFIED

1.4.956 OS/2 WARP SERVER V4 SMP DESKTOP&COLON. FAINT LINE REMAINS

Record number: H162361

Device: D/T8644
Model: M
Tip key:
Date created: 098/01/08
Date last altered: A98/02/12

SYMPTOM:

On the OS/2 desktop, a faint line remains around the ICON of the last Task closed.

PROBLEM ISOLATION AIDS:

- The system is an IBM Netfinity 3500 (8644-1xx/2xx/3xx)
- OS/2 Warp Server SMP V4 with fixpack 32 is installed

FIX:

Refresh the OS/2 Desktop with the following procedure:

1. In an open area on the OS/2 Desktop, right-click the mouse.
2. Left-click on "Select Refresh Now" on the pop-up.

A permanent fix will be made to the S3 video driver.

This tip will be updated when the updated driver is available.

S3 is a trademark of S3 Incorporated

SAS KEYWORDS:

PSY2 PSY2DISP UNCLASSIFIED 83558
D/T8644

1.4.957 OS/2 WON'T INSTALL ON 8580 W/486DX UPGRADE

Record number: H12499

Device: D/T8580
 Model: M
 Tip key:
 Date created: 093/06/30
 Date last altered: A94/08/24

SYMPTOM:

OS/2 2.1 may not install on an 8580 with the Hypertech 486/DX option installed. The problem only shows up when the 486DX upgrade card is running with cache turned on. If the on-board cache is turned off, OS/2 2.1 will load without any problems.

PROBLEM ISOLATION AIDS: NONE**FIX:**

The following information is being shipped with the upgrade as a flyer and is being published in RETAIN for the convenience of the servicer. The instructions should be used as required.

Installing OS/2 2.1 with the 486DX33 Processor Upgrade

If you are installing OS/2 2.1 and the 486DX33 Processor Upgrade at the same time, install the OS/2 operating system before you install the Processor Upgrade.

If you are installing OS/2 2.1 on a IBM Model 80 that has the 486DX33 Processor Upgrade already installed, you must turn off the Processor Upgrade cache before you install OS/2. If you do not turn off the cache, you could encounter installation problems.

To turn off the cache and install OS/2, use one of the following procedures:

- Disabling cache using DOS. Use this procedure if you have a DOS Version 3.3 (or later) diskette.
- Disabling cache not using DOS. Use this procedure only if you do not have a DOS Version 3.3 (or later) diskette.

Disabling Cache Using DOS (Version 3.3 or later)

1. Insert the DOS diskette in drive A and start the computer (if the computer is already running, you can restart it by pressing Ctrl+Alt+Del).

Note: You must use a DOS diskette to turn off the cache. If you run the following program from an OS/2 DOS session, the cache will not be turned off.

2. Remove the DOS diskette and insert the "IBM PS/2 486DX33 Processor Upgrade Option Diskette."
3. At the DOS A> prompt, type SLOW, then press Enter. The cache is now turned off.

Note: Do not turn off the computer until you have installed OS/2. Turning the computer off, then on, restarts the cache.

4. Insert the first OS/2 2.1 installation diskette and press Ctrl+Atl+Del.
5. Follow the OS/2 2.1 installation instructions and install the operating system.
6. After the installation is completed, turn the computer off, then on, to restart the cache.

Disabling Cache Not Using DOS

1. If the 486DX33 Processor Upgrade is already installed, refer to the 486DX33 Processor Upgrade Installation Instructions (page 15, Step 2 "Removing Adapters and the Drive-Support Structure') and follow the instructions to get access to the processor Upgrade switches.
2. Refer to the 486DX33 Installation Instructions (page 22, Step 7 "Checking the Switches') and set Switch 1 on the Processor Upgrade to OFF. (This turns the cache off.) Do not change any other switch settings.
3. Refer to the 486DX33 Installation Instructions (page 25,

Step 9 "Completing the Installation') and follow the instructions (substeps 1 through 7) to reassemble the computer.

4. After the computer is reassembled, ensure that it starts correctly.
5. Follow the OS/2 2.1 installation instructions and install the operating system. When the installation is completed, continue with the next step.
6. You now need to turn the cache back on; if you do not turn the cache back on, the performance of your computer will decrease. Turn off the computer and use the procedures described in step 1 above to get access to the Processor Upgrade switches.
7. Set Switch 1 on the Processor Upgrade to ON. (This turns the cache on.)
8. Use the procedures described in step 3 above to reassemble the computer.
9. After the computer is reassembled, ensure that it starts correctly.

Note:

- If OS/2 is being loaded on numerous 8580 systems with the Hypertech upgrade, contact Level 2 Hardware support in Boca Raton using the normal service support structure. A procedure is available that will provide instructions for the modification of the OS/2 installation diskettes. This procedure will eliminate the need to turn cache on and off for each unit.
- This problem will be fixed in a later release of OS/2. Customer documentation will be updated and the flyer will be removed from the option at this time.

SAS KEYWORDS:

PSY2

PSY2MISC

HYPER TECH

HYPERTEC

1.4.958 OS/2 2.1 INSTALL FAILS W/ISA CD-ROM DRIVE

Record number: H042110

Device: D/T6384
 Model: M
 Tip key:
 Date created: 094/06/15
 Date last altered: A94/06/15

SYMPTOM:

PS/VALUEPOINT SYSTEMS AND PS/2 8535, AND 8540 SYSTEMS
 MAY FAIL TO LOAD OS/2 2.1 FROM THE IBM ISA CD-ROM DRIVE.

PROBLEM ISOLATION AIDS:

1) OS/2 2.1 INSTALLATION PROGRAM PROMPTS "INSERT CD INTO
 CD-ROM AND PRESS ENTER." WHEN ENTER IS PRESSED, THE
 DRIVE LED DOES NOT TURN ON.

***** OR *****

2) AFTER OS/2 INSTALLS, THE OPERATING SYSTEM DOES NOT
 RECOGNIZE THE PRESENCE OF THE CD-ROM DRIVE.

WHEN USING THE "SELECTIVE INSTALL" FUNCTION TO ADD THE
 THE CD-ROM SUPPORT, OS/2 PROMPTS THE USER TO INSERT
 DISKETTE #12. DISKETTE #12 IS LOCATED ON THE OS/2 2.1 CD,
 HOWEVER, IT CANNOT BE LOADED BECAUSE OS/2 WILL NOT
 RECOGNIZE THE PRESENCE OF THE CD-ROM DRIVE.

FIX:

IPL THE SYSTEM WITH A BOOTABLE DOS DISKETTE THAT HAS "EDLIN"
 OR ANOTHER TYPE OF EDITOR APPLICATION. THE DOS DISKETTE
 MUST ALSO CONTAIN THE "COPY" COMMAND. USE THE FOLLOWING STEPS
 TO LOAD OS/2 2.1 AND CD-ROM SUPPORT.

1. COPY THE FILE "ISACDOS2.ADD" FROM THE ISA CD-ROM OPTION
 DISKETTE TO THE OS/2 INSTALLATION DISKETTE #1.
2. ADD THE FOLLOWING STATEMENT TO THE "CONFIG.SYS" ON THE OS/2
 INSTALLATION DISKETTE #1 USING A TEXT EDITOR:

```
BASEDEV=ISACDOS2.ADD /M: 300
```

THE /M: 300 PARAMETER INDICATES THE DEFAULT ADDRESS OF THE ISA
 CD-ROM ADAPTER (BOTH SWITCHES=ON). IF YOUR SWITCHES ARE SET
 DIFFERENTLY, SEE YOUR ISA CD-ROM INSTALLATION INSTRUCTIONS
 FOR THE CORRECT VALUE OF THE /M PARAMETER.

3. PERFORM THE INSTALLATION OF OS/2 2.1 ON THE SYSTEM USING
 THE OS/2 INSTALLATION INSTRUCTIONS. AFTER OS/2 HAS BEEN
 INSTALLED, USE THE FOLLOWING STEPS TO ADD THE CD-ROM SUPPORT
 PROGRAMS:
 - A) COPY THE "CDF5.IFS" AND "OS2CDROM.DMD" FILES FROM DISKETTE
 #1 TO THE ROOT DIRECTORY OF THE HARD FILE.
 - B) USING A TEXT EDITOR (SUCH AS THE E.EXE PROGRAM PROVIDED
 BY OS/2), ADD THE FOLLOWING STATEMENTS TO THE "CONFIG.SYS"
 FILE ON THE HARD FILE:


```
IFS=CDF5.IFS /Q
DEVICE=\OS2CDROM.DMD /Q
```
 - C) REBOOT THE SYSTEM.

CUSTOMERS REQUIRING ASSISTANCE WITH THE ABOVE PROCEDURE
 SHOULD CONTACT OS/2 SUPPORT AT 1-800-992-4777.

SAS KEYWORDS:

PSVP	VALUE POINT	PSVPPROG	PSVPOPER
PSY2	PSY2PROG	PSY2OPER	OS2
CDROM	D/T8535	D/T8540	COMPACT DISK
D/T6382	D/T6387	CD ROM	D/T6381
CD-ROM			

1.4.959 OS/2 2.1 INSTALL FAILS W/ISA CD-ROM DRIVE

Record number: H121075

Device: D/T6384
 Model: M
 Tip key:
 Date created: 093/09/01
 Date last altered: A94/01/05

SYMPTOM:

PS/VALUEPOINT SYSTEMS AND PS/2 8535, AND 8540 SYSTEMS
 MAY FAIL TO LOAD OS/2 2.1 FROM THE IBM ISA CD-ROM DRIVE.

PROBLEM ISOLATION AIDS:

- 1) OS/2 2.1 INSTALLATION PROGRAM PROMPTS "INSERT CD INTO CD-ROM AND PRESS ENTER." WHEN ENTER IS PRESSED, THE DRIVE LED DOES NOT TURN ON.

***** OR *****

- 2) AFTER OS/2 INSTALLS, THE OPERATING SYSTEM DOES NOT RECOGNIZE THE PRESENCE OF THE CD-ROM DRIVE.

WHEN USING THE "SELECTIVE INSTALL" FUNCTION TO ADD THE CD-ROM SUPPORT, OS/2 PROMPTS THE USER TO INSERT DISKETTE #12. DISKETTE #12 IS LOCATED ON THE OS/2 2.1 CD, HOWEVER, IT CANNOT BE LOADED BECAUSE OS/2 WILL NOT RECOGNIZE THE PRESENCE OF THE CD-ROM DRIVE.

FIX:

IPL THE SYSTEM WITH A BOOTABLE DOS DISKETTE THAT HAS "EDLIN" OR ANOTHER TYPE OF EDITOR APPLICATION. THE DOS DISKETTE MUST ALSO CONTAIN THE "COPY" COMMAND. USE THE FOLLOWING STEPS TO LOAD OS/2 2.1 AND CD-ROM SUPPORT.

1. COPY THE FILE "ISACDOS2.ADD" FROM THE ISA CD-ROM OPTION DISKETTE TO THE OS/2 INSTALLATION DISKETTE #1.
2. ADD THE FOLLOWING STATEMENT TO THE "CONFIG.SYS" ON THE OS/2 INSTALLATION DISKETTE #1 USING A TEXT EDITOR:

```
BASEDEV=ISACDOS2.ADD /M: 300
```

THE /M: 300 PARAMETER INDICATES THE DEFAULT ADDRESS OF THE ISA CD-ROM ADAPTER (BOTH SWITCHES=ON). IF YOUR SWITCHES ARE SET DIFFERENTLY, SEE YOUR ISA CD-ROM INSTALLATION INSTRUCTIONS FOR THE CORRECT VALUE OF THE /M PARAMETER.

3. PERFORM THE INSTALLATION OF OS/2 2.1 ON THE SYSTEM USING THE OS/2 INSTALLATION INSTRUCTIONS. AFTER OS/2 HAS BEEN INSTALLED, USE THE FOLLOWING STEPS TO ADD THE CD-ROM SUPPORT PROGRAMS:

A) COPY THE "CDF5.IFS" AND "OS2CDROM.DMD" FILES FROM DISKETTE #1 TO THE ROOT DIRECTORY OF THE HARD FILE.

B) USING A TEXT EDITOR (SUCH AS THE E.EXE PROGRAM PROVIDED BY OS/2), ADD THE FOLLOWING STATEMENTS TO THE "CONFIG.SYS" FILE ON THE HARD FILE:

```
IFS=CDF5.IFS /Q
DEVICE=\OS2CDROM.DMD /Q
```

C) REBOOT THE SYSTEM.

CUSTOMERS REQUIRING ASSISTANCE WITH THE ABOVE PROCEDURE SHOULD CONTACT OS/2 SUPPORT AT 1-800-992-4777.

SAS KEYWORDS:

PSVP	VALUE POINT	PSVPPROG	PSVPOPER
PSY2	PSY2PROG	PSY2OPER	OS2
CDROM	D/T8535	D/T8540	COMPACT DISK
D/T6382	D/T6387	CD ROM	D/T6381
CD-ROM			

1.4.960 OS/2 3.0 INSTALL IS SLOW, OR HANGS ON SCSI MODELS

Record number: H161502

Device: D/T6898
 Model: M
 Tip key:
 Date created: 097/10/20
 Date last altered: A97/11/07

SYMPTOM:

During the installation of OS/2 Warp 3.0 on the IBM IntelliStation M-Pro, machine type 6898, the install process stops or hangs on the second or third installation diskette.

PROBLEM ISOLATION AIDS:

This tip applies to IBM IntelliStation M-Pro systems equipped with SCSI hardfiles. The following error message may also be seen during the installation process:

"SYS0039: The C: Device Is Not Ready"

FIX:

The OS/2 boot diskettes must be modified via the following steps:

1. Type CDINST from the CDROM drive to create the boot diskettes.
2. Delete the following files from Disk 1:
 - aha152x.add
 - aha154x.add
 - aha164x.add
 - aha174x.add
 - aic7770.add
 - aic7870.add
3. The replacement Adaptec SCSI driver will be found on the Ready-To-Configure (RTC) CDROM included with the system. The required driver, Aic7870.add, can be obtained either by building the "Adaptec 7800 Family Manager Set" disk via the Diskette Factory utility on the RTC, or, by copying the driver directly from the RTC in directory \Adaptec\Os2\Aic7870.add. Copy this file to installation Disk 1 and rename it to AICNEW.ADD.
4. Edit CONFIG.SYS (on Disk 1) and remark out the BASEDEV statements for all of the above deleted drivers.
5. Add the new BASEDEV statement in CONFIG.SYS, BASEDEV=AICNEW.ADD
6. Move line BASEDEV=IBM1S506.ADD below the line that reads KEYS=ON.
7. In CONFIG.SYS, be sure the following statement is present:
SET SAVECONNECT=1.

*By default, this statement is inserted by CDINST.
8. At the end of installation, AICNEW.ADD will be copied to the root partition of the boot drive, and the CONFIG.SYS file will have a corresponding BASEDEV statement. You can then choose to copy this driver to the C: \OS2\BOOT directory. Do not rename this driver back to AIC7870.ADD.

SAS KEYWORDS:

PSY2	PSY2ERR	PSY2OPER	PSY2ADPT
PSVP	PSVPERR	PSVPOPER	PSVPADPT
D/T6898	6898	76708F_1	69815F_1
69928F_1	77048	ADAPTEC	AHA-7895
UNCLASSIFIED	69928	AIC7870.ADD	

1.4.961 PAGE FAULT ERRORS VIEWING THE COSESSION USER'S GUIDE

Record number: H16922

Device: D/T6562
Model: M
Tip key:
Date created: 097/08/19
Date last altered: A97/08/26

SYMPTOM:

Intermittent page fault errors occur when viewing the CoSession 8.0 user's guide under Windows95.

PROBLEM ISOLATION AIDS:

The errors occur when the User's Guide, created in Microsoft Word 7.0, is opened by Wordpad in Windows95.

FIX:

Temporary:

View the User's Guide with Word 7.0, or open, and then save the User's Guide in Microsoft Word 6.0 format.

Permanent:

Obtain the updated version of CoSession 8.0 from the Artisoft web site when it becomes available at www.artisoft.com. Windows95 and Word are trademarks of Microsoft Corporation. CoSession is a trademark of Artisoft Corporation

SAS KEYWORDS:

PSY2	PSY2ERR	PSY2OPER	PSVP
PSVPERR	PSVPOPER	D/T6562	D/T6592
6562	6592	68829	UNCLASSIFIED

1.4.962 PANASONIC CD-ROM FAILS IN PC300/700

Record number: H13360

Device: D/T68XX
 Model: M
 Tip key:
 Date created: 095/06/29
 Date last altered: A97/07/13

SYMPTOM:

PC300/700 systems fail to recognize Panasonic CD-ROM model LK-MC579BP.

PROBLEM ISOLATION AIDS: None.**FIX:**

Install flash BIOS code as follows:

PC300-486
 6571, 6573, 6581, 6583- Flash level LEJT55A or higher.

PC300-Pentium 60, PC700 ISA
 6575, 6585, 6875, 6885- Install Flash level N1JT65A or higher.

PC700 Micro Channel
 6876, 6886 - Fix not available - target - 7/95
 Current flash is N2JT25A; install flash higher than N2JT25A.

----- IMPORTANT -----

```
| The FLASH is customer installable. Customer's should |
| be advised to contact the IBM PC Company HelpCenter |
| at 800-772 - 2227 if assistance is required in getting |
| or installing the FLASH. Customers in Canada should |
| call IBM's HelpPC at 800-565-3344. |
|-----|
```

The FLASH code may be downloaded from the IBM PC Company Bulletin Board System by calling 919-517-0001. If the customer cannot receive the code by modem, the HelpCenter will send the customer a copy on diskette. Customers and dealers in Canada may download the code from their respective IBM regional bulletin board service.

If problems persist, continue with normal problem determination.

SAS KEYWORDS:

PSY2	IBMPC	D/T6571	D/T6573
D/T6581	D/T6583	D/T6875	D/T6885
D/T6876	D/T6886	CDROM	PC300
PC330	PC350	PC700	PC730
PC750	PSY2TBD	PS2OEM	PSVPOEM

1.4.963 PARALLEL PORT OPERATIONS ON IML SYSTEMS

Record number: H022722

Device: D/T8590
 Model: M
 Tip key:
 Date created: 091/09/04
 Date last altered: A93/09/07

SYMPTOM:

THE PARALLEL PORT MAY BE INOPERATIVE WHEN RUNNING OS/2, OR OTHER OPERATING SYSTEMS WHICH TAKE ADVANTAGE OF THE DMA (DIRECT MEMORY ACCESS) INTERRUPT CAPABILITY OF THE HARDWARE.

THIS MAY BE EXPERIENCED WITH CUSTOM DEVICES (IE. SECURITY DEVICE, VOLTAGE SENSING DEVICES) AND ON SOME PRINTER OPERATIONS.

DIAGNOSTICS AND OTHER PRINT OPERATIONS FUNCTION CORRECTLY (PRINT SCREEN, ETC.).

PROBLEM ISOLATION AIDS: NONE**FIX:**

THIS IS NOT A HARDWARE FAILURE. THE FOLLOWING PROCEDURE WILL CORRECT THE PROBLEM.

THE PARALLEL PORT ARBITRATION LEVEL MUST BE SET TO "DISABLED," BY USING THE FOLLOWING PROCEDURE:

- A. IML (INITIAL MICROCODE LOAD) THE SYSTEM PARTITION.
 - B. AT THE MAIN MENU, SELECT "SET CONFIGURATION."
 - C. AT THE "SET CONFIGURATION" MENU, SELECT "CHANGE CONFIG."
 - D. USING THE KEYBOARD ARROW KEY, MOVE THE SELECTOR BAR TO "PARALLEL PORT ARBITRATION LEVEL" (ARB LEVEL) UNDER THE "BUILT IN FEATURES" HEADING.
 - E. USING THE F6 KEY, TOGGLE THROUGH THE SELECTIONS UNTIL "DISABLED" IS VISIBLE.
 - F. SAVE THE CHANGES USING THE F10 KEY. PRESS "ENTER," THEN "EXIT," AND FOLLOW INSTRUCTIONS ON THE SCREEN.
- THE CONFIGURATION CHANGE WILL BECOME EFFECTIVE ON THE NEXT IML.

NOTE: THE CHANGE IN CONFIGURATION SHOULD ALSO BE SAVED ON THE CUSTOMER'S BACK-UP REFERENCE DISKETTE.

SAS KEYWORDS:

PSY2	PSY2ADPT	PSY2ERR	8590SYSERR
8595SYSERR	8590SYSADPT	8595SYSADPT	D/T8595
PSY2COMM	8590SYSCOMM	8595SYSCOMM	SCREEN
PRINT	OS/2	UPS	PS2
PS/2	PRINTER	D/T8556	D/T8557
D/T9595	D/T9577	D/T9576	POWER
D/T9590	D/T9595	D/T9585	D/T9556
D/T9557			

1.4.964 PARITY ERRORS WITH EYECOM SOFTWARE

Record number: H13366

Device: D/T6381
Model: M
Tip key:
Date created: 095/06/29
Date last altered: A95/06/30

SYMPTOM:

ValuePoint 6381 experiences parity errors after exiting Eyecom and attempting to run Windows.

PROBLEM ISOLATION AIDS:

The problem is in Eyecom's EYECOM2.EXE dated 1/4/93.

Diagnostics do not fail.

FIX:

The customer should contact their normal Eyecom support or Eyecom directly at 619-673-1700 and request EYECOM2.EXE dated 4/21/95 or later.

If problems persist, continue with normal problem determination.

SAS KEYWORDS:

PSY2	PSVALUEPOINT	PS/VP	PSVP
PSY2ERR	PSVPERR	VALUE POINT	MEMORY
PSY2PROG	PSVPPROG	PSY2MEM	PSVPMEM

1.4.965 PC DOCTOR DIAGNOSTICS SKIPS / HANGS TESTING WITH TAPE DRIVE

Record number: H163496

Device: D/T8639
 Model: M
 Tip key:
 Date created: 098/04/27
 Date last altered: A98/04/28

SYMPTOM:

Running PC Doctor Diagnostics on a Server configured with any supported tape drive results in either of the following:

- 1 - Without a tape cartridge in the tape drive, the diagnostics program does not test the device.
- 2 - With a tape cartridge in the tape drive, the diagnostics program responds with the following test failure, then the Utility hangs:

" IDx LUNy, DEVICE NOT TESTED, CODE 8000H"

(where x = the SCSI ID, and y = the Logical Unit Number of the tape drive).

PROBLEM ISOLATION AIDS:

- The System is any Netfinity server properly configured with any supported tape drive.
- PC Doctor version 1.9.387 or below is used.

FIX:

A diagnostics test module for tape drives will be provided in a future version release of PC Doctor.

WORKAROUND:

Remove the media cartridge from the tape drive prior to running the PC Doctor Diagnostics Utility to avoid a program hang.

DETAIL:

PC Doctor version 1.9.387 (or below) does not incorporate a test module for tape drives.

This TIP will be Updated when PC Doctor includes the test module for tape drives.

PC Doctor is a trademark of Watergate Software, Inc.

SAS KEYWORDS:

PSY2	PSY2DIAGS	DIAGS	PC DOCTOR
D/T8651	D/T8644	HANG	ERROR
UNCLASSIFIED			

1.4.966 PC DOCTOR DIAGNOSTICS SKIPS / HANGS TESTING WITH TAPE DRIVE

Record number: H163505

Device: D/T8644
 Model: M
 Tip key:
 Date created: 098/04/29
 Date last altered: A98/04/29

SYMPTOM:

Running PC Doctor Diagnostics on a Server configured with any supported tape drive results in either of the following:

- 1 - Without a tape cartridge in the tape drive, the diagnostics program does not test the device.
- 2 - With a tape cartridge in the tape drive, the diagnostics program responds with the following test failure, then the Utility hangs:

" IDx LUNy, DEVICE NOT TESTED, CODE 8000H"

(where x = the SCSI ID, and y = the Logical Unit Number of the tape drive).

PROBLEM ISOLATION AIDS:

- The System is any Netfinity server properly configured with any supported tape drive.
- PC Doctor version 1.9.387 or below is used.

FIX:

A diagnostics test module for tape drives will be provided in a future version release of PC Doctor.

WORKAROUND:

Remove the media cartridge from the tape drive prior to running the PC Doctor Diagnostics Utility to avoid a program hang.

DETAIL:

PC Doctor version 1.9.387 (or below) does not incorporate a test module for tape drives.

This TIP will be Updated when PC Doctor includes the test module for tape drives.

PC Doctor is a trademark of Watergate Software, Inc.

SAS KEYWORDS:

PSY2	PSY2DIAGS	DIAGS	PC DOCTOR
D/T8651	D/T8644	HANG	ERROR
UNCLASSIFIED			

1.4.967 PC DOCTOR MISIDENTIFIES PENTIUM II PROCESSORS

Record number: H162596

Device: D/T6561
Model: M
Tip key:
Date created: 098/01/08
Date last altered: A98/02/27

SYMPTOM:

When running PC Doctor for Windows95, selecting the Intel Pentium Information icon returns the following, or similar messages:

"This feature requires that your system has an Intel Pentium CPU"

"Your CPU is either not made by Intel or it doesn't support MSR registers.."

PROBLEM ISOLATION AIDS:

This tip applies to IBM Commercial Desktop and IntelliStation systems preloaded with Windows95, and supplied with PC Doctor for Windows95 version 2.0.123.

FIX:

If the user requires specific information on the Pentium type processor installed in the system, use PC Doctor for DOS.

This diskette can be created from the preloaded Diskette Factory, or from the Diskette Factory utility on the RTC CDROM included with the system.

Windows and Windows95 are trademarks of Microsoft Corporation. Pentium is a trademark of Intel Corporation.

SAS KEYWORDS:

PSY2	PSY2DIAG	PSVP	PSVPDIAG
D/T6561	D/T6591	D/T6898	D/T6588
D/T6888	PCDOCTOR	81153	87958
PENTIUM II	UNCLASSIFIED		

1.4.968 PC NETWORK ADAPTER ERROR AFTER AUTO-CONFIG

Record number: H106829

Device: D/T8550
 Model: M
 Tip key:
 Date created: 092/09/18
 Date last altered: A92/09/23

SYMPTOM:

After an Automatic Configuration, the PC Network Adapter device drivers indicate "The adapter could not be found" or "The adapter is defective."

Upon displaying the configuration with "View Configuration," the Network Adapter will be set to "ALTERNATE."

CAUSE:

The current automatic configuration algorithm will always select the adapter configuration address option that occupies the smallest amount of space in the "adapter ROM area." Depending on the software set-up options and application, this may not be adequate. These address options are the same choices displayed during the manual "Change Configuration" function.

This will cause a PC Network adapter (including Broadband and Baseband) to configure as an "ALTERNATE" adapter.

PROBLEM ISOLATION AIDS: NONE**FIX:**

1. Use the Reference Diskette (System Partition) "View Configuration, Change Configuration" function, to manually configure only 1 PC Network adapter to "PRIMARY."
- * User applications which will accept the Network adapter set as ALTERNATE will not experience this problem.

SAS KEYWORDS:

PSY2	PS2	PS/2	D/T8595
D/T8590	D/T8580	D/T8570	D/T8565
D/T8560	D/T8555	PSY2ADPT	PSY2COMM
D/T8556	D/T8557	D/T8576	D/T8575
D/T8596	D/T8597	D/T9554	D/T9557
D/T9576	D/T9577	D/T9585	D/T9595
PSY2ERR	D/T95XX	AUTO CONFIG	

PC SERVER RUNS SLOW WHILE MIRRORING WITH NETWORK

1.4.969 PC SERVER RUNS SLOW WHILE MIRRORING WITH NETWORK

Record number: H136094

Device: D/T8640
 Model: M
 Tip key:
 Date created: 097/01/14
 Date last altered: A98/01/20

SYMPTOM:

While Mirroring or Duplexing with NetWare, the Server runs slowly. Performance is degraded.

PROBLEM ISOLATION AIDS:

The system is a PC Server with one or more of the following Adaptec SCSI adapters installed:

- FRU p/n06H5250 or FRU p/n 06H9610 PCI Fast SCSI-2 adapter
- FRU p/n06H6431 or FRU p/n06H8574 (Option p/n94G3771 or p/n94G4673) PCI 2940W Wide adapter
- FRU p/n60H7823 (Option p/n76H5407) 2940UW Ultra-wide adapter

The Operating System is NetWare 3.1x or 4.1x with Mirroring OR Duplexing enabled.

FIX:

Edit the STARTUP.NCF so the loading of the Adaptec device drivers are as follows:

For Duplexing:

```
load aic7870.dsk slot=xx read_after_write=1      (primary drive)
load aic7870.dsk slot=xx read_after_write=0      (mirrored drive)
```

For Mirroring:

```
load aic7870.dsk slot=xx read_after_write=0
```

By default (no parameters), read after write verification is ENABLED for the aic7870.dsk device driver.

By using the "read_after_write=0" parameter, read after write verification is DISABLED and system performance is improved. Read after write verification will appear "DISABLED" for the mirrored drive on the NetWare Monitor (Disk Information) screen when "read_after_write=0" is used as the parameter.

Adaptec is a trademark of Adaptec, Inc.
 NetWare is a trademark of Novell, Inc.

SAS KEYWORDS:

PSY2	UNCLASSIFIED	PSY2COMM	PSY2OPER
PSY2PROG	PSY2ADAPT	D/T8639	D/T8641
D/T8642	D/T8650	8639	8640
8642	8650	300	310
320	325	330	500
520	720	704	76H5407
06H6431	06H8574	94G4673	DUPLEX
MIRROR	94G3771	06H5250	8641
06H9610	60H7823	HEALTH	

1.4.970 PC SERVER SERVERAID ADAPTER CONFIGURATION ERROR

Record number: H137616

Device: D/T8641
 Model: M
 Tip key:
 Date created: 097/04/29
 Date last altered: A97/05/01

SYMPTOM:

PC Server RAID systems display the following message:

"Recoverable configuration error - Start Configuration Program
 Installation stopped"

PROBLEM ISOLATION AIDS:

A ServeRAID adapter FRU p/n06H9334 (Option p/n70G8489) is installed.

FIX:**Permanent Fix:**

Install PC ServeRAID Adapter BIOS/Firmware V2.01 (Codeblk 97070) or later which is available on the IBM BBS/WEB.

Note:

The BIOS Version (ie. Ver: 2.0) of the ServeRAID Adapter is displayed, at startup, when the ServeRAID BIOS screen appears.

The Codeblk Revision (ie. Code BK: 97070) of the ServeRAID Adapter may be viewed, at startup, by accessing the Mini-configuration Utility: Press <Ctrl> I at the ServeRAID BIOS prompt and select View Adapter Status.

The Miniconfiguration Utility Version (ie. V2.00) which appears in the upper right-hand corner of the screen is simply the version of the Miniconfiguration Utility itself.

The Diskette Version on the diskette (ie. V2.01) is incremented whenever a change is made to the BIOS or Codeblk. Therefore, the Diskette Version may not always be the same as the BIOS version.

Work-around:

1. Reboot the Server.
2. At the BIOS Prompt press <CTRL> I.
3. Select "Advanced Functions" from the Menu.
4. Select "Initialize Configuration" from the Menu.
5. Press <Y> when prompted.
6. Reboot the system when prompted.

-----IMPORTANT-----

Diskette images are customer installable. Customers should review any "README" files located on the diskette for installation information. Contact the IBM PC HelpCenter at 800-772 - 2227 if download/installation assistance is needed.

IBM PC Server files are located in Directory 22 on the PC Company Bulletin Board Service (BBS) at 1-919-517-0001 or tieline 255-0001.

The files may also be downloaded via the Internet from the IBM PC File Library by searching the following Internet URL:
<http://www.us.pc.ibm.com/files.html>

SAS KEYWORDS:

PSY2	PSY2ERR	PSY2OPER	UNCLASSIFIED
PSY2ADPT	D/T8639	D/T8640	D/T8642
D/T8650	320	325	330
520	704	720	

1.4.971 PC SERVER 300&COLON. BIOS ERRORS WITH ADAPTEC 2940W AT BIOS 1.19S8

Record number: H163719

Device: D/T8640
 Model: M
 Tip key:
 Date created: 098/05/06
 Date last altered: A98/05/18

SYMPTOM:

-The Following errors are displayed in a red box when accessing the CMOS Setup Utility (pressing <CTRL-ALT-S>):

"Extended CMOS checksum was invalid"
 "Extended CMOS defaults are loaded"
 "Signature Byte was invalid"
 "Chip-set defaults were loaded"
 "Unable to initialize interface to NVRAM Manager" (this may be the cause of / lead to any other messages on the screen)

-The Time and Date fields cannot be changed in the CMOS Setup Utility.

-Any changes made in the CMOS Setup Utility are not saved as evident by restarting the System and accessing the CMOS Setup Utility.

NOTE: The System may prompt to enter the CMOS Setup Utility upon reboot after the above Symptoms occur.

PROBLEM ISOLATION AIDS:

All of the following must be true for this TIP to apply:

-The System is a PC Server 300 Type 8640 model ON0, ONJ configured with a System Board FRU p/n71G0033

-----OR-----

The System is a PC Server 300 Type 8640 model OP0, OPT configured with a System Board FRU p/n71g0747, 06H8756 or 28L0973.

-The System is properly configured with a Adaptec Controller model AHA-2940W that has a BIOS level 1.19s8.

FIX:

Contact the IBM PSGHC (Personal Systems Group Help Center) for assistance at 1-800-772-2227.

WORKAROUND:

(This only applies to the AHA-2940W with a BIOS level 1.19s8)
 Remove the AHA-2940W Adapter, change any settings as required in CMOS, save and exit the CMOS Utility (the system will now restart and the changes will be effective), shut down the System after a successful reboot, Install the AHA-2940W.

DETAIL:

It has been determined that if the System is configured with a AHA-2940W Adapter with a BIOS level of 1.19s8, the CMOS resets to default settings. Any subsequent attempts to change the CMOS settings will not be saved and usually results in other errors due to lack of configuration specific settings required in the System CMOS.

AHA-2940W Adapters with a BIOS lower than 1.19s8 do not exhibit this problem.

AHA and Adaptec are trademarks of Adaptec, Inc.

SAS KEYWORDS:

PSY2	D/T8640	2940W	UNCLASSIFIED
CMOS	BIOS	1.19S8	300
OPO	OPT	ONO	ONJ
71G0749	06H8756	28L0973	

1.4.972 PC SERVER 310 HANGS WHEN ACCESSING SCSSISELECT UTILITY

Record number: H16549

Device: D/T8639
 Model: M
 Tip key:
 Date created: 097/07/29
 Date last altered: A97/07/29

SYMPTOM:

After pressing <Ctrl> <A> to select the Adaptec SCSSISelect Utility, the Server hangs.

PROBLEM ISOLATION AIDS:

The system is an 8639-0Ex with the Adaptec Ultra Wide SCSI BIOS v1.23.

FIX:

Follow this procedure to re-flash the Adaptec SCSI BIOS.

Note: This BIOS diskette is only for use on PC Server 310 systems and should NOT be used on any other systems.

1. Download and expand 05L1435.EXE (PC Server 310 Ultra SCSI BIOS Utility Update Diskette v1.23) from the IBM PC Company BBS/WEB.
2. Boot the Ultra SCSI BIOS diskette.
3. Follow the on-screen instructions.
4. Remove the diskette and reboot the Server.

Some PC Server 310 systems received an incomplete SCSI BIOS flash causing the symptom above. By re-flashing the SCSI BIOS, the condition is corrected.

-----IMPORTANT-----

Diskette images are customer installable. Customers should review any "README" files located on the diskette for installation information. Contact the IBM PC HelpCenter at 800-772 - 2227 if download/installation assistance is needed.

IBM PC Server files are located in Directory 22 on the PC Company Bulletin Board Service (BBS) at 1-919-517-0001 or tieline 255-0001.
 The files may also be downloaded via the Internet from the IBM PC File Library by searching the following Internet URL:
<http://www.us.pc.ibm.com/files.html>

Adaptec and SCSSISelect are trademarks of Adaptec, Inc.

SAS KEYWORDS:

PSY2 PSY2ERR PSY2FDSK UNCLASSIFIED
 PSY2OPER PSY2ADPT

Record number: H137807

Device: D/T8639
 Model: M
 Tip key:
 Date created: 097/05/13
 Date last altered: A97/05/20

SYMPTOM:

The PC Server 310 traps, hangs, or abends when handling heavy network traffic.

PROBLEM ISOLATION AIDS:

- The system is a PC Server 310 (8639) with an IBM ISA EtherJet Adapter FRU p/n85H3367 (Option p/n04H6550).
- Heavy network traffic is on the LAN and/or multiple EtherJet adapters are installed.
- The EtherJet Adapter Device Driver Diskette version is V1.6

FIX:

Use the following procedure:

1. Download and expand the EtherJet ISA Adapter Device Driver Diskette V1.7 or later (ETIJ01.EXE) from the IBM PC Company BBS.
2. Follow the instructions contained in the README files.

The original ISA EtherJet device drivers did not support the 10Base2 function on some of the ISA EtherJet Adapters. The new device drivers support both the 10Base2 and 10BaseT functions.

-----IMPORTANT-----

Diskette images are customer installable. Customers should review any "README" files located on the diskette for installation information. Contact the IBM PC HelpCenter at 800-772 - 2227 if download/installation assistance is needed.

Network Support files are located in Directory 32 on the PC Company Bulletin Board Service (BBS) at 1-919-517-0001 or tieline 255-0001.

The files may also be downloaded via the Internet from the IBM PC File Library by searching the following Internet URL:
<http://www.us.pc.ibm.com/files.html>

SAS KEYWORDS:

PSY2	PSY2ERR	PSY2COMM	UNCLASSIFIED
PSY2PROG	PSY2ADPT	TRAP	HANG
ABEND			

1.4.974 PC SERVER 310&COLON. WINDOWS NT 4.0 INSTALLATION

Record number: H137536

Device: D/T8639
Model: M
Tip key:
Date created: 097/04/22
Date last altered: A97/04/22

SYMPTOM:

When booting a Windows NT 4.0 CD-ROM, one of the following messages may appear:

Error 1962

-or-

No SCSI Boot Device Found

PROBLEM ISOLATION AIDS: NONE**FIX:**

Boot the Windows NT Server 4.0 Setup Disk 1 and follow the on-screen instructions to install from the CD-ROM.

The PC Server 310 does not provide bootable CD-ROM support.

Windows NT is a trademark of Microsoft Corporation.

SAS KEYWORDS:

PSY2

PSY2ERR

PSY2OPER

UNCLASSIFIED

PSY2CDROM

PC SERVER 315 EXPERIENCING INTERMITTENT VIDEO FAILURES

1.4.975 PC SERVER 315 EXPERIENCING INTERMITTENT VIDEO FAILURES

Record number: H162142

Device: D/T8638
 Model: M
 Tip key:
 Date created: 097/10/03
 Date last altered: A97/12/10

SYMPTOM:

Intermittent video Failures.
 Failures may occur after power on/off cycle of Server.
 Failures may occur after adding/removing adapters from
 Riser Card or removing/installing Riser card.

PROBLEM ISOLATION AIDS:

- The system is a PC Server type 8638 model PJ0/PS0/PSV.
- The system is configured with either or both of the following:
 Riser Card FRU p/n61H0145 or FRU p/n60H9503
 Video adapter FRU p/n60H8386
- The system is running any supported NOS/OPSYS.

FIX:

- 1 - Power off system, reseal Riser card (including the three interconnecting paddle cards that interface the Riser card connector with the connector on the system board, reseal the Video adapter, power on the system.
- 2 - If step 1 does not correct problem, Replace the Riser card (includes replacement paddle cards) and Video adapter with the following FRU Part numbers:

Riser card (with paddle cards): FRU p/n61H0377
 Video adapter: 61H0081

Note: It is a requirement that BOTH parts are replaced for step 2 to be applied correctly.

SAS KEYWORDS:

PSY2	UNCLASSIFIED	D/T8638	8638-PJ0
8638 - PS0	8638-PSV	61H0145	60H9503
60H8386	61H0377	61H0081	315
VIDEO	RISER	INTERMITTENT	

1.4.976 PC SERVER 315 HANGS AT <CTRL-A> PROMPT DURING BOOT.

Record number: H162412

Device: D/T8638
 Model: M
 Tip key:
 Date created: 097/10/03
 Date last altered: A98/02/12

SYMPTOM:

The System hangs displaying a <Ctrl-A> prompt to select the SCSISelect Utility when the Systems attempts to access the Harddrive or Floppy drive during boot.

PROBLEM ISOLATION AIDS:

All of the following must be true for this TIP to apply:

- The system is a PC Server 315 type 8638 model PJ0/PS0/PSV, or a PC Server 310 type 8639 model 0E4/0E5.
- The system is configured with a Adaptec Ultra Wide SCSI adapter IBM Option p/n76H5407 FRU p/n76H5408/76H5394 or IBM Option p/n76H3579 FRU p/n12J3094. The Adapter is the Primary Boot Controller.
- The Ultra Wide SCSI Adapter's "Reset SCSI Bus IC Initialization" setting in the SCSISelect utility is disabled. (Follow steps 2 and 3 in the FIX section to view this setting)
- The ASPI8DOS.SYS ver. used is below ver. 1.26 (36,756 k), and is called from the CONFIG.SYS file using the following syntax:
 DEVICE=C: ASPI8DOS.SYS

Note: ASPI8DOS.SYS is typically located at the root of the C: drive.

----- OR -----

- The "Reset SCSI Bus IC Initialization" is DISABLED and the System is NOT calling a Downlevel ASPI8DOS.SYS.

FIX:

Note: Proceed with Step 1 thru 7 if the System was configured to call a downlevel ASPI8DOS.SYS.

Note: Proceed with Step 2 thru 7 if the System was not configured to call a downlevel ASPI8DOS.SYS.

- 1 - Replace the ASPI8DOS.SYS file located on drive C: with a ASPI8DOS.SYS ver 1.26 (or later) size 36,756 K, located on the Diagnostics diskette as well as on the EZ-SCSI diskettes that ship with the Server.
 Note: the File on the EZ-SCSI diskette is compressed and therefore requires use of the included EXPAND utility.
- 2 - Power on the system and press CTRL + A when prompted to start the SCSISelect utility, select "Configure Host Adapter Settings" then press <enter>.
- 3 - Select "Advanced Configuration Options", press <enter>.
- 4 - Highlight the setting to the right of the "Reset SCSI Bus IC Initialization", press <enter>, Select "Enabled", press <enter>.
- 5 - Press <Esc> two times.
- 6 - Select "Yes" to save changes when prompted, press <enter>.
- 7 - Press <Esc>, select "Yes" to exit the SCSISelect utility, press any key to restart system.

Detail:

If the "Reset SCSI Bus IC Initialization" is disabled, any subsequent cold boots will hang the system with the described Symptom.

The "Reset SCSI Bus IC Initialization" is disabled during boot if the backlevel ASPI8DOS.SYS is called from the CONFIG.SYS file.

Adaptec and SCSISelect are registered trademarks of Adaptec, Inc.

SAS KEYWORDS:

PSY2	UNCLASSIFIED	ADVANCED	SYSTEM
PERIPHERAL	INTERFACE	8638-PJ0	8638-PS0
8638 - PSV	D/T8638-PJ0	D/T8638-PS0	D/T8638-PSV
SCSISELECT	HANG	D/T8638	76H5407

PSY2 RETAIN TIPS

PC SERVER 315 HANGS AT <CTRL-A> PROMPT DURING BOOT.

76H5408

76H5394

76H3579

12J3094

1.4.977 PC SERVER 315&COLON. POWER-UP PROBLEM.

Record number: H162327

Device: D/T8638
Model: M
Tip key:
Date created: 097/12/11
Date last altered: A98/01/07

SYMPTOM:

The System fails to power-on initially - OR - fails to power-on after the first 5 to 7 power-on cycles.

PROBLEM ISOLATION AIDS:

All of the following must be true for this TIP to apply:

The System is a PC Server 315 type 8638 model KJ0/KS0/PJ0 PS0/PSV/PSW.

The Tantalum Capacitors at System Planer locations C17 and C535 are yellow and have the letter "A" located at the top of the capacitors.

The System failed to power-on initially, or after the first 5 to 7 power-on cycles.

The System will not power up.

The voltage selection switch at the back of the Power Supply is set correctly.

FIX:

- Replace the System Planar with FRU p/n93H4873.
- Refer to the PC Server 315 Hardware Maintenance Manual for assembly details.

Note:

- All FRU stock has been cleared of any affected System Planers World-Wide.
- See RETAIN TIP Record# H121366 for IBM statements relative to componant failures.

SAS KEYWORDS:

PSY2 PSY2PLANER UNCLASSIFIED D/T8638
POWER 93H4873

1.4.978 PC SERVER 320 PROCESSOR UPGRADE INSTALLATION ERROR

Record number: H131383

Device: D/T8640
 Model: M
 Tip key:
 Date created: O95/10/20
 Date last altered: A95/10/20

SYMPTOM:

After a processor upgrade, the Server 320 may experience:

- A. Slow system performance.
- b. Possible system failures
- c. POST reporting incorrect CPU speed.

PROBLEM ISOLATION AIDS:

The system has a PCI/EISA system board installed, FRU P/N06H2173.

FIX:

The installation procedure outlined in the IBM PC Server Processor Option Upgrade Installation Instructions, PN 30H2475, page 8, should be changed.

The correct CPU speed jumpers setting on the PC Server 320 EISA/PCI planar should be as follows:

Planar Jumpers	CPU Speed (Mhz)	
	75	90
W2	OFF	OFF
W6	2-3	1-2
W40	ON	OFF

ON = JUMPER INSTALLED
 OFF= NO JUMPER

Note: the W40 jumper is located above the Upgrade Processor, near W6. It is not shown in the HMM on pages 15 and 17.

These instructions apply to all PC Server 320 models (EISA and Micro Channel) and other server products which use the same system boards and BIOS.

The printing error has been corrected in the new publication released as PN 62H6914.

SAS KEYWORDS:

PSY2	PSY2DOC	SERVER	320
PSY2ERR	D/T8641	520	

1.4.979 PC SERVER 320/520&COLON. OS/2 MAY TRAP AFTER REPLACING VIDEO CARD

Record number: H132584

Device: D/T8640
 Model: M
 Tip key:
 Date created: 098/01/22
 Date last altered: A98/02/03

SYMPTOM:

A OS/2 TRAP 3 message and register dump occurs during Operating System Boot.

PROBLEM ISOLATION AIDS:

All of the following must be true for this TIP to apply:

- The System is a PC Server type 8640 model 0X0/0XT/0Y0 /0YT/1Y0/1YT/EE0/EEV/EE1/EES or PC Server type 8641 model WZ0/EZV/EZ1/EZS/EZE
- The Video Adapter FRU p/n71G0031 has been replaced with FRU p/n06H9114
- The System is running OS/2
- System Diagnostics pass.

FIX:

Download the EISA 320/520 Video Support Diskette (follow instructions in readme file to reset video to vga and then reinstall the svga driver). Details of these procedures are as follows:

- 1> Before going onsite, download the "EISA 320/520 Video Support Diskette v1.01" from the IBM Website at the following URL:

Http: //www.pc.ibm.com/files
 -Select "Search"
 -Type "EISA 320/520" in the Keywords box
 -Select the "EISA 320/520 Video Support Diskette v1.01" to download the diskette image.

The Diskette image is a self-extracting executable file that will prompt for a diskette.

Note: It is assumed that the Video adapter FRU p/n06H9114 is in the system at this time.

- 2> Set Operating System to VGA Mode:

OS/2 WARP/MERLIN:

- 1 - Turn on your computer. If your computer is already on, press Ctrl+Alt+Del to restart it.
- 2 - When a small white box appears in the upper-left corner of your screen, press Alt+F1.
- 3 - When the Recovery Choices screen appears, press V for Warp Version 3 or press F3 for Warp Version 4(Merlin).

Your video subsystem is now restored to work in VGA mode

OS/2 2.1, 2.11, OR OS/2 FOR WINDOWS:

If you installed OS/2 from diskettes, do the following:

- 1 - Start OS/2 using the OS/2 Installation Diskette.
- 2 - When you are prompted, insert Diskette 1 and press Enter
- 3 - Wait for the "Welcome to OS/2" message; then press Esc.
- 4 - Be sure RSPDSPI.EXE is in the \OS2\INSTALL directory. If it is, go to step 5. If it is not, insert Diskette 8 into drive A and unpack RSPDSPI.EXE with the following command:

```
C: \OS2\UNPACK A: \INSTAID C: /N: RSPDSPI.EXE
```

(where A: is the drive containing Diskette 8, and C: is the drive where OS/2 is installed.)

- 5 - Type C: and then press Enter.

6 - Type CD C: \OS2\INSTALL and then press Enter.

7 - Type the following:

```
RSPDSPI /PK: VGA /SK: NONE /S: A: \ /T: C:
```

(where A: is the diskette drive you used to install OS/2 and C: is the drive where OS/2 is installed.)

8 - Press Enter.

If you installed OS/2 from CD-ROM or a LAN, do the following:

1 - Start OS/2 using the OS/2 Installation Diskette.

2 - When you are prompted, insert Diskette 1 and press Enter.

3 - Wait for the "Welcome to OS/2" message; then press Esc.

4 - Be sure RSPDSPI.EXE is in the \OS2\INSTALL directory. If it is, go to step 5. If it is not, unpack RSPDSPI.EXE with the following command:

```
C: \OS2\UNPACK E: \DISK_8\INSTAID C: /N: RSPDSPI.EXE
```

(where C: is the drive where OS/2 is installed, and E: is the CD-ROM or LAN drive.)

5 - Type C: and then press Enter.

6 - Type CD C: \OS2\INSTALL and then press Enter.

7 - Type the following:

```
RSPDSPI /PK: VGA /SK: NONE /S: E: \OS2SE21\ /T: C:
```

(where E: is the CD-ROM or LAN drive and C: is the drive where OS/2 is installed.)

8 - Press Enter.

3> Re-install the Video Device Driver:

OS/2 VERSION 3.0 WARP:

1 - Open the System Setup folder.

2 - Open the Selective Install folder.

3 - At the System Configuration window, select Primary Display.

4 - At the Display Driver Install window, select Cirrus Logic 5426, 5428, 5430, 5434; then press Enter or select OK.

5 - At the System Configuration window, select OK.

6 - At the OS/2 Setup and Installation window, press Enter or select Install.

7 - Select the source drive and directory that contains the video drivers; select Install.

8 - At the Monitor Configuration/Selection Utility window, select Install Using Display Adapter Utility Program; then press Enter or select OK.

NOTE: If "Install Using Defaults for Monitor Type" is selected, the default refresh rates would be used; for example, 640 x 480 at 60 Hz and 1024 x 768 at 43.5 Hz, interlaced.

9 - Insert the IBM SVGA Support Diskette in drive A.

10 - At the Monitor Configuration/Selection Utility Location, type the following:

```
A: CLMODE.EXE
```

Then press Enter or select OK.

11 - The CLMODE utility will be invoked. Follow the instructions in the USING THE CLMODE UTILITY section. Once finished, exit the CLMODE utility, remove the SVGA Support Diskette from drive A. Keep this diskette with your other system

diskettes.

- 12 - After the completion of the driver installation, press Enter or select OK.
- 13 - Open the System Setup folder.
- 14 - Select the desired screen resolution.
- 15 - Close the System window and the System Setup window.
- 16 - Shut down and restart the system.

OS/2 2.11 AND 2.11 SMP

- 1 - Insert the IBM SVGA Support Diskette in drive A.
- 2 - Select the OS/2 System folder.
- 3 - Select the Command Prompts folder.
- 4 - Select the OS/2 Full Screen folder.
- 5 - At the OS/2 Full Screen command prompt, type DSPINSTL and press Enter.
- 6 - At the Display Driver Install window, select Primary Display; then press Enter or select OK.
- 7 - At the Primary Display Adapter Type window, select Cirrus Logic; then press Enter or select OK.
- 8 - At the Monitor Configuration/Selection Utility window, select Install Using Display Adapter Utility Program; then press Enter or select OK.
- 10 - The CLMODE utility will be invoked. Follow the instructions in the USING THE CLMODE UTILITY section. Once finished, and you exit the CLMODE utility, remove the IBM SVGA Support Diskette from drive A. Keep this diskette with your other system diskettes.
- 11 - At the Select Display Resolution window, choose the desired resolution by highlighting it; then press Enter or select OK.
- 12 - At the Source Directory window, specify the source directory containing the video drivers; then press Enter or select Install.
- 13 - After the completion of the driver installation, Shut down and restart the system.

Cirrus is a trademark of Cirrus Logic Inc.

SAS KEYWORDS:

PSY2	PSY2VIDEO	D/T8640	D/T8641
PSY2CODE	UNCLASSIFIED	71G0031	06H9114
OS/2	320	520	VIDEO
TRAP	REGISTER	DUMP	HEALTH

1.4.980 PC SERVER 325 / 330 SLOW SYSTEM BOOT UP TIME

Record number: H162983

Device: D/T8639
 Model: M
 Tip key:
 Date created: 097/09/22
 Date last altered: A98/03/10

SYMPTOM:

The system boots or operates extremely slowly.

PROBLEM ISOLATION AIDS:

All of the following must be true for this Tip to apply

System is PC Server type 8639 model PT0/PTW/PB0 or RB0
 System is PC Server type 8640 model PB0/PM0 or PT0
 Processor cache is disabled.

NOTE Processor cache may be manually enabled/disabled at system setup

Cache will be disabled automatically if configuration is invalid.

Cache will be disabled automatically if 3 consecutive system POST executions fail to complete.

FIX:

Ensure that processor cache is enabled if required.

SAS KEYWORDS:

PSY2	CACHE	BOOT	8639-PTW
8639 - PT0	8639-PD0	8639-RB0	8640-PB0
8640-PT0	8640-PM0	UNCLASSIFIED	

1.4.981 PC SERVER 325&COLON. A.S.M.A. LOGS / REPORTS FALSE FAN FAILURES

Record number: H163727

Device: D/T8639
 Model: M
 Tip key:
 Date created: O98/05/15
 Date last altered: A98/05/18

SYMPTOM:

- The ASMA (Advanced Systems Management Adapter) erroneously reports single fan failures.
- These false fan failures are written to the ASMA Event Log upon each instance.
- If the Automatic Dial-out Function of the ASMA is configured to dial-out to a pager or another Nefinity System in the event of a fan failure, the false fan failures will be interpreted as real fan failures resulting in the Dial-out function to be executed and send the alert.

PROBLEM ISOLATION AIDS:

All of the following must be true for this TIP to apply:

- The System is a PC Server 325 Type 8639 model PT0, PBW, PB0, RB0 that is properly configured with a ASMA (Advanced Systems Management Adapter) Option p/n94G7578 (FRU p/n12J4743) or Option p/n94G5570 (FRU p/n76H3234).
- The System is configured with any supported version of NT Server, OS/2, or NetWare.
- System Diagnostics pass.
- The System experiences the described Symptoms when all cooling fans are functioning.
- The Advanced Management Adapter is presently at a RAM microcode level* 12 or below.

* The RAM microcode level may be viewed from the "Configuration Information" section of the "Netfinity Service Processor" Utility located in Netfinity Manager (details may be found in step 4 under the FIX section of this document).

FIX:

- 1 - Prior to going onsite, download the "Advanced Systems Management Adapter Configuration Update Utility and Driver Diskette ver 2.3" or higher from the IBM Website at the following URL:

Http: //www.pc.ibm.com/us/files.html

- Select "Search"
- Type "Management Adapter 2.3" in the Keywords box
- Select the "Advanced Systems Management Adapter Configuration Update Utility and Driver Diskette ver 2.3" to download.

The file is a self-extracting executable file that creates a diskette.

- 2 - Update the ASMA RAM Microcode in one of the following ways:

Local Update(At the Server)*****

1. Boot to the Advanced Systems Management Adapter Configuration Update Utility and Driver Diskette ver 2.3 or higher.
2. Select the 3rd option "Update Service Processor" then press <enter>.
3. Follow instructions on the screen, when complete press <F3> to exit. Be sure to cycle power OFF, then ON after exiting to ensure changes will take effect.

Remote Update(Dialed-in to the ASMA from another computer)*****

Refer to page 38 of "Service Processor Manager for Netfinity User's Guide" to execute the following 4 steps.

1. On the machine that used to dial into the Server, copy the \$80C5102.BIN from the Advanced Systems Management

Adapter Configuration Update Utility and Driver Diskette ver 2.3 or higher to the NetWare directory.

2. Dial into the ASMA adapter and establish connection.
3. If the Server to be updated is up and running, access the "System Power Control" and select "Power off with O/S shutdown" (the system has to be OFF to apply the update).
4. Access "Configuration Information" and click on "Update Ram Microcode", follow the on-screen instructions.

Note: Completion of the Microcode Update will result in a disconnect of the remote connection to the Server requiring that a remote connection is re-established to remotely Power Up the Server.

DRIVER UPDATES:

It is recommended that the ASMA drivers are updated after upgrading the ASMA RAM Microcode (the ASMA Driver update may be done locally or remotely).

Local Update (at the Server):

For NT:

1. Open a MS-DOS Prompt.
2. Rename the existing driver and .DLL by typing the following:

```
rename c: \winnt\system32\ibmspw.dll ibmspw.aaa
rename c: \winnt\system32\drivers\ibmspw.sys ibmspw.bbb
```
3. Insert the "Advanced Systems Management Adapter Configuration Update Utility and Driver Diskette ver 2.3 or higher into the Floppy Drive (A drive).
4. Install the new drivers by typing the following:

```
copy a: \nt\ibmspw.dll c: \winnt\system32\
copy a: \nt\ibmspw.sys c: \winnt\system32\drivers\
```
5. Shutdown and Restart the System.
6. Cleanup by deleting the ibmspw.aaa and ibmspw.bbb that were created in step 2.

For OS/2:

1. Open an OS/2 Window.
2. Rename the existing driver and .dll by typing the following:

```
rename c: \os2\ibmspo.sys ibmspo.aaa
rename c: \os2\dll\ibmspo.dll ibmspo.bbb
```
3. Insert the Advanced Systems Management Adapter Configuration Update Utility and Driver Diskette ver 2.3 or higher into the Floppy Drive (A drive).
4. Install the new drivers by typing the following:

```
copy a: \os2\ibmspo.dll c: \os2\dll\
copy a: \os2\ibmspo.sys c: \os2\
```
5. Shutdown and Restart the System.
6. Cleanup by deleting the ibmspo.aaa and ibmspo.bbb (that were created in step 2.).

For NetWare (requires local and remote access):

1. Login to the NetWare server from a client as Administrator.
2. Map a unused drive to the sys: \system directory
3. Replace the IBMSPN.NLM on the sys: \system drive with the IBMSPN.NLM located on the Advanced Systems Management Adapter Configuration Update Utility and Driver Diskette Ver 2.3 or higher.
4. Logout of the Server.
5. At the NetWare Server, down, exit, and restart the server.

NOTE: To Update NT and OS/2 remotely , establish a Netfinity-to-Netfinity connection. Then establish a remote session and start with Step 2 in the above instructions for NT and OS/2.

NT is a trademark of Microsoft Corporation.

NetWare is a trademark of Novell, Inc.

SAS KEYWORDS:

PSY2	D/T8639	UNCLASSIFIED	ASMA
FALSE	FAN	FAILURE	ALERT
P/N94G7578	P/N12J4743	P/N94G5570	P/N76H43234
OS/2	NT	NETWARE	DIAL
OUT	DRIVERS		

1.4.982 PC SERVER 325/330 LOST HARDWARE INTERRUPT WITH NETWARE 3X/4X

Record number: H007138

Device: D/T8639
 Model: M
 Tip key:
 Date created: 098/03/24
 Date last altered: A98/03/25

SYMPTOM:

"Primary interrupt controller detected a lost hardware interrupt" is displayed at the NetWare Server console but the system continues to run without Abend or System Hang.

PROBLEM ISOLATION AIDS:

All of the following must be true for this TIP to apply:

- The System is a PC Server 325 Type 8639 model EJ0/ES0/ESV/RS0
 ----- OR -----
- The System is a PC Server 330 Type 8640 model ES0/ES2/ESS/EM2
- All System diagnostics Pass
- The System hardware is properly configured.
- The system is running Novell NetWare 3.12 / 4.10 / or 4.11

FIX:

- 1 - Download the "PC Server 325/330 BIOS 45A" or higher from the IBM Website at the following URL:

Http: //www.pc.ibm.com/us/files.html

-Select SEARCH

-Type "BIOS 45A" in the Keywords box

-Select SEARCH

-Select "PC Server 325/330 BIOS 45A" to download

The file is a self-extracting executable file that will prompt for a diskette.

- 2 - Cold Boot the Server with the BIOS 45A diskette, and follow the on-screen prompts to flash the System BIOS.
 NOTE: DO NOT interrupt the BIOS flash program.
- 3 - Reboot the Server with the flash diskette removed, and press <F1> for Setup/Configuration.
- 4 - Select "start options" from the Configuration Setup Utility Menu.
- 5 - Set the "virtual wire I/O APIC" to "Disable", then press <ESC> to exit this screen, save the settings and exit the Utility.

Note: IF the Symptoms persist, see RETAIN Record # H162440 for issues specific to NetWare and use of interrupt 15.

NetWare is a trademark of Novell Inc.

SAS KEYWORDS:

PSY2	UNCLASSIFIED	D/T8639	D/T8640
NETWARE	3X 4X	LOST	HARDWARE
INTERRUPTS	PRIMARY		

Record number: H161427

Device: D/T8639
 Model: M
 Tip key:
 Date created: 097/09/24
 Date last altered: A97/10/16

SYMPTOM:

During the installation of Windows NT 4.0, onboard Ethernet and / or SCSI controllers that were manually disabled with the Server <F1> Setup utility now appear enabled.

PROBLEM ISOLATION AIDS:

All of the following must true for this Tip to apply:

- The system is a PC Server type 8640 model PT0/PB0/PM0 or a PC Server type 8639 model PT0/PTW/PB0/RB0.
- Any of the onboard Ethernet or SCSI controllers have been disabled in the system setup utility prior to installing Windows NT.

FIX:

- 1 - In the system setup utility, enable the onboard controllers (default)
- 2 - Install Windows NT and drivers as prompted (or install without installing drivers).
- 3 - Un-install the device drivers in Windows NT for the onboard controllers that are not to be used (or ensure drivers are not installed).
- 4 - Disable the devices that are not to be used in the server's system setup utility.

Note: This applies to Windows NT the only NOS that enables the onboard controllers previously disabled in the system setup. Subsequently Windows NT detects these controllers.

Note: As a general rule of practice, the onboard Ethernet, and SCSI controllers are not required to be disabled if they are not to be used. The onboard Ethernet controller does not use adapter ROM space and the onboard RAID and Ultra Wide controllers do not use conventional adapter ROM space.

Windows NT is a trademark of Microsoft Corporation.

SAS KEYWORDS:

PSY2	OPSYS	UNCLASSIFIED	NIC
8640-PT0	8640-PB0	8640-PM0	8639-PT0
8639 - PTW	8639-PB0	8639-RB0	CMOS
WINDOWS	NT	ETHERNET	SCSI
ONBOARD	CONTROLLERS	DETECTED	

1.4.984 PC SERVER 325/330 ONBOARD ETHERNET CONTROLLER FAILS

Record number: H161425

Device: D/T8639
 Model: M
 Tip key:
 Date created: 097/09/19
 Date last altered: A97/10/16

SYMPTOM:

The Server cannot connect to the Network using the onboard Ethernet controller.

PROBLEM ISOLATION AIDS:

All of the Following must be true for this Tip to apply:

- The system is a PC Server type 8640 model PT0/PB0/PM0 or a PC Server type 8639 model PT0/PTW/PB0/RB0.
- The onboard Ethernet adapter is enabled for use with the Network Operating System.

FIX:

- 1 - Ensure that the adapter is configured for "Autosensing 10/100 port" (default parameters) in Windows NT by NOT selecting "TP" port.
 If the supported Network Operating System is not Windows NT, ensure that the adapter is configured using "default" settings in the Network Operating System.

Details:

The Ethernet controller has the RJ45 connection assigned to the logical Autosensing 10/100 port.
 If the TP (twisted pair) option is selected in the Ethernet controller configuration or in the NOS install, the controller will call for a TP port rather than the Autosensing 10/100 port.
 The Ethernet controller does not assign any physical ports to the TP port option.

Windows NT is a trademark of Microsoft Corporation.

SAS KEYWORDS:

PSY2	PSY2COMM	UNCLASSIFIED	NIC
8640-PT0	8640-PB0	8640-PM0	8639-PT0
8639 - PTW	8639-PB0	8639-RB0	WINNT
WINDOWS	NT	ONBOARD	ETHERNET
SCSI			

1.4.985 PC SERVER 325/330 ONBOARD ETHERNET FAILS W/ DRIVERS.

Record number: H161428

Device: D/T8639
 Model: M
 Tip key:
 Date created: 097/09/25
 Date last altered: A97/10/16

SYMPTOM:

- The LAN attached clients cannot see the server.
- Local client login results in screen lockup, subsequent LAN attached client login results in release of local screen.

PROBLEM ISOLATION AIDS:

All of the following must be true for this TIP to apply:

- The system is a PC Server type 8640 model PT0/PB0/PM0 or a PC Server type 8639 model PT0/PTW/PB0/RB0.
- The network operating installed is Windows NT ver. 4.0 or NetWare ver. 3.12/4.10/4.11
- The onboard Ethernet controller drivers used are ver. 3.2
- The onboard Ethernet controller is enabled.

FIX:

For NetWare(installed from shrinkwrap or ServerGuide 3.0 +):

- 1 - From the "Ethernet Support Diskette" ver 3.1.1 that shipped with the server, copy all the files from the A: \novell\server\3.1x or \4.10 or 4.11 (whichever applies) to the C: \nwserver directory (C: \server.312 directory for NetWare 3.12 only). This will ensure that the Ethernet version 3.1 LAN drivers are in place.

Note: the NetWare driver files per NetWare versions are:

NetWare 3.1x:

PCNTNW	LAN	21420	6-30-95	3: 00a
--------	-----	-------	---------	--------

NetWare 4.10:

PCNTNW	LAN	21420	6-30-95	3: 00a
PCNTNW	LDI	6193	6-30-95	3: 00a
OEMSETUP	INF	36814	8-11-96	8: 44p

NetWare 4.11:

OEMSETUP	INF	36814	6-30-95	3: 00a
PCNTNW	LAN	20958	6-27-96	3: 20p
PCNTNW	LDI	12236	10-09-96	5: 07p
PCNTNW	INF	12977	10-07-96	4: 47p

For Windows NT (installed from shrinkwrap or ServerGuide 3.0+):

- 1 - Insert the "Ethernet Support Diskette" disk 1 of 2 ver 3.1.1 that shipped with the server into the floppy drive.
- 2 - From the Control Panel in the Windows NT Main window, double click on the "Network" icon, single click on the "Adapters" tab.
- 3 - In the "Network Settings" dialog box, click on the "AMD PCnet adapter, then click "Remove".
- 4 - In the "Network Settings" dialog box, click "Add".
- 5 - In the "Select Network Adapters" dialog box click "Have Disk".
- 6 - In the Prompt box, enter: A: \WINNT
- 7 - Click the "AMD PCnet Family Ethernet Adapter" from the dialog box, then click "OK".
 Note: all of the new drivers associated files will be copied but the actual LAN driver itself will not.
- 8 - Go to a command prompt and copy the AMDPCN.SYS file from A: \WINNT to C: \WINNT\SYSTEM32\DRIVERS

Note: if the target path is different/unknown, then copy

From A: \WINNT to %SYSTEMROOT%\SYSTEM32\DRIVERS

- 10 - Shutdown and restart the server for the new driver to take effect.

Note: the LAN driver files for Windows NT ver 4.0 are:

PCNET	HLP	11365	3-28-95	1: 57p
AMDDL	DLL	5120	6-26-95	9: 37p
AMDPCN	SYS	31728	2-03-96	5: 28a
OEMSETUP	INF	40446	7-10-96	12: 58a
NDIS3X	TXT	3747	1-15-97	11: 55a

Windows NT is a trademark of Microsoft Corporation

NetWare is a trademark of Novell, Inc.

AMD is a trademark of Advanced Micro Devices, Inc.

SAS KEYWORDS:

PSY2	NOS	UNCLASSIFIED	CODE
8640-PT0	8640-PB0	8640-PM0	8639-PT0
8639 - PTW	8639-PB0	8639-RB0	WINDOWS
NT	AMD	NETWARE	PCNET

1.4.986 PC SERVER 325/330 OS/2 INSTALL HANGS AT CHECKPOINT 7F

Record number: H161429

Device: D/T8639
 Model: M
 Tip key:
 Date created: 097/09/25
 Date last altered: A97/10/16

SYMPTOM:

The system will intermittently hang at checkpoint 7F when installing OS/2.

PROBLEM ISOLATION AIDS:

All of the following must be true for this Tip to apply:

- The system is a PC Server type 8640 model PT0/PB0/PM0 or a PC Server type 8639 model PT0/PTW/PB0/RB0.
- The Network Operating System being installed is OS/2 Warp Server.

FIX:

- 1 - Restart the system (repeatedly if necessary).
- 2 - Continue to install / configure OS/2 (must be completed before next step).
- 3 - Install Fixpack 31 for os/2 Warp Server or later.

SAS KEYWORDS:

PSY2	NOS	UNCLASSIFIED	CODE
8640-PT0	8640-PB0	8640-PM0	8639-PT0
8639 - PTW	8639-PB0	8639-RB0	ERROR
BOOT	OS/2	WARP	FIXPACK 31
HANG	CHECKPOINT	7F	

1.4.987 PC SERVER 325/330 TRAP / HANG WITH 128MB DIMM

Record number: H161527

Device: D/T8639
 Model: M
 Tip key:
 Date created: O97/10/21
 Date last altered: A97/10/23

SYMPTOM:

PC Server 325/330 intermittent trap or hang. The failure may appear as:

- System hang
- Trap
- Blue screen
- Abend
- Memory error

PROBLEM ISOLATION AIDS:

- The system is a PC Server 325 type 8639 model EJ0/ES0/ESV/RS0/PT0/PTW/PB0/RB0 or PC Server 330 type 8640 model ES0/ES2/ESS/EM2/PT0/PB0/PM0
- The system has one or more 128MB DIMM FRU p/n76H0656, Option p/n94G6475, Assembly p/n63H0937.
 NOTE: The DIMM may or may not have a FRU# or Option# listed on the IBM sticker but will have the Assembly# listed directly below the bar code on the IBM sticker(see the IBM Label layout in diagram A)
- All memory in the system is IBM Qualified and Supported.

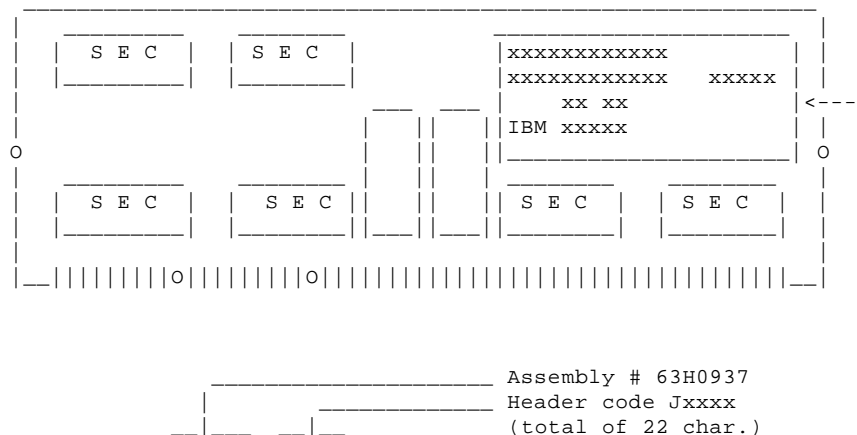
FIX:

- 1 - Eliminate the possibility of a DIMM placement problem by ensuring that the installed memory DIMMs in the system are located in order of capacity.
 Start with the greater capacity DIMM located in the connector marked J2 (closest to the outside edge of the processor board) and then continue with J3, J4, and J5 in order of decreasing DIMM capacities.
 Refer to the "User's Handbook" - Working with Memory-Module Kits for further details.
- 2 - Locate the Barcode on the IBM label attached to the 128mb DIMM.
- 3 - Examine the numbers listed below the Barcode to confirm the Assembly p/n63H0937 as well as the Header code located immediately to the right of the Assembly #.
- 4 - If the header code contains any of the following codes, the memory is suspected to be faulty:
 J12S3 J1369 J1414 J1415
- 5 - Replace suspected faulty 128MB DIMM(s) that have any of the Header codes listed above with a new DIMM, FRU p/n76H0656.

NOT all Systems with the 128MB DIMM(s) installed will experience failures; do NOT replace the 128MB DIMM(s) unless failures are observed.

NOTE: 128MB DIMM's with any other header codes are not suspect.

Diagram A: SAMPLE 128 MB MEMORY DIMM with IBM Label:



1.4.988 PC SERVER 325/330 8X CD-ROM WON'T EJECT

Record number: H137955

Device: D/T8639
Model: M
Tip key:
Date created: 097/06/04
Date last altered: A97/06/04

SYMPTOM:

8X SCSI CD-ROM tray will not eject electronically using the eject button or manually using an eject pin.

PROBLEM ISOLATION AIDS:

The Server has an 8X CD-ROM FRU p/n73H2601 (Option p/n73H2600).

-AND-

The customer has tried to manually eject the CD-ROM tray with the power on.

Note:

During normal operation, when power is present, do NOT manually eject a CD-ROM tray as damage may occur to the internal gears and cause the tray to stick.

FIX:

1. Power off the Server.
2. Manually eject the CD-ROM tray by pushing a narrow tool into the manual eject hole at the front of the drive. Considerable pressure may be required to release the stuck tray.
3. Power on the Server and use the electronic button and verify the open/close operation of the CD-ROM tray several times.

SAS KEYWORDS:

PSY2 PSY2CDROM PSY2PART UNCLASSIFIED
D/T8640

1.4.989 PC SERVER 325/330&COLON. SOME SERIAL PORT RESOURCE SETTINGS FAIL

Record number: H163238

Device: D/T8639
 Model: M
 Tip key:
 Date created: O98/03/11
 Date last altered: A98/04/03

SYMPTOM:

Failure of the System Board Serial Port(s) result in various errors from the Network Operating System and/or Application attempting to use the Port(s).

PROBLEM ISOLATION AIDS:

All of the following must be true for this TIP to apply:

- The System is a PC Server 325 Type 8639 model PT0, PTW, PB0, RB0, or PC Server 330 Type 8640 model PT0, PB0, PM0.
- The System is running any of the following Network Operating Systems:
 - o OS/2 Warp Server
 - o OS/2 Warp Server Advanced
 - o OS/2 Warp Server SMP
- The Network Operating System / Application is correctly configured to use the Serial Ports.
- The System is NOT configured with a Serial I/O Adapter Card
- System Diagnostics Passes when testing the the Serial Ports.
- The Serial Ports are configured to any of the following resource COMBINATIONS* in the CMOS Setup Utility:

Port A , Address: 2E8h, IRQ: 4
 Port B , Address: 3E8h, IRQ: 3
 Port A , Address: 2E8h, IRQ: 3
 Port B , Address: 3E8h, IRQ: 4

Port A , Address: 3E8h, IRQ: 4
 Port B , Address: 2E8h, IRQ: 3

Port A , Address: 3E8h, IRQ: 3
 Port B , Address: 2E8h, IRQ: 4

* 4 combinations listed.

FIX:

- 1 - Set the Resources of the onboard Serial ports to any of the following COMBINATIONS* in the CMOS Setup Utility:

Port A , Address: 3F8h, IRQ: 4
 Port B , Address: 2F8h, IRQ: 3

Port A , Address: 3F8h, IRQ: 3
 Port B , Address: 2F8h, IRQ: 4

Port A , Address: 2F8h, IRQ: 4
 Port B , Address: 3F8h, IRQ: 3

Port A , Address: 2F8h, IRQ: 3
 Port B , Address: 3F8h, IRQ: 4

- 2 - Configure the Serial Ports in the Network Operating System / Application for the new resources used.

* 4 combinations listed.

SAS KEYWORDS:

PSY2	UNCLASSIFIED	D/T8639	D/T8640
PSY2SERIAL	PSY2IO	WARP	PORTS

1.4.990 PC SERVER 325/330&COLON. NT INSTALL FAILS WITH SERVERAID II

Record number: H163422

Device: D/T8639
 Model: M
 Tip key:
 Date created: 097/09/25
 Date last altered: A98/04/20

SYMPTOM:

NT 4.0 installation fails resulting in a Blue Screen
 Trap message "INACCESSIBLE_BOOT_DEVICE" during the first phase
 of the installation (initial boot from CDROM)

PROBLEM ISOLATION AIDS:

All of the following must be true for this Tip to apply:

- The System is a PC Server 330 Type 8640 model PT0, PB0, PM0, 11Y, 21Y.
- The System is a PC Server 325 Type 8639 model PT0, PTW, PB0, RB0, 1RY, 2RY.
- The Network Operating System being installed in NT ver 4.0
- The System is configured to use the Onboard ServeRAID II Controller or a ServeRAID II Adapter as the primary disk subsystem.

FIX:

- 1 - Start the NT 4.0 installation either by booting to the NT CDROM or the Install diskettes.
- 2 - Press <F6> when the message " Setup is determining your computers hardware configuration" At this time Setup will not recognize the mass storage devices as that there is not a RAID option on the NT CDROM.
- 3 - Press <S> to skip mass storage device detection. Setup will now allow a manual selection of devices.
- 4 - Select "Other" and insert the RAID device driver diskette into drive A: when prompted. The driver selected should be the "IBM ServeRAID Adapter Device Driver". Be sure that the driver is ver. 2.23.16 of 7/23/97 (or later version/date)
- 5 - Continue installation as normal.

Note: Refer to Retain TIP H163372 in conjunction with this TIP for issues with multiple Onboard Adapters.

Note: Refer to Retain TIP Record H161427 in conjunction with this TIP for issues with NT auto-enabeling Onboard Devices.

NT is a trademark of Microsoft Corporation.

SAS KEYWORDS:

PSY2	NOS	UNCLASSIFIED	CODE
8640-PT0	8640-PB0	8640-PM0	8639-PT0
8639 - PTW	8639-PB0	8639-RB0	BLUE SCREEN
8640-11Y	8640-21Y	8639-1RY	8639-2RY
D/T8639	D/T8640	PSY2CODE	

Record number: H163424

Device: D/T8639
 Model: M
 Tip key:
 Date created: 098/04/09
 Date last altered: A98/04/20

SYMPTOM:

- The System displays the following errors after the IBM Logo is displayed during POST:
 - "112 I2C interface hardware error"
 - "173 Configuration change has occurred"
 - "188 System ID information destroyed - Bad VPD CRC#2"
- When POST completes, a blue screen appears prompting for continuation of System Setup.

PROBLEM ISOLATION AIDS:

- The System is a IBM PC Server 325 Type 8639 model EJ0, ES0, ESV, RS0, PT0, PTW, PB0, RB0.
 The System is a IBM PC Server 330 Type 8640 model ES0, ES2, ESS, EM2, PT0, PB0, PM0.
- The System is configured with a ASMA (Advanced Systems Management Adapter) card Option p/n94G5570 / FRU p/n76H3240 or Option p/n94G7578 / FRU p/n12J4743.
- The System is configured with one or more additional ISA or EISA Adapters.

FIX:

Configure the ASMA Adapter for I/O address range 300h-307h and IRQ 5. The following sections cover the I/O Address details. See RETAIN Record # H163307 (EMEA RETAIN Record# H054505) for IRQ details.

PCI/EISA and PCI/ISA Systems-----

- 1 - Power down the System, and disconnect the Power Cord from the Power Source.
- 2 - Remove the ASMA Adapter (note the slot #), and reconnect the Power Cord.
- 3 - If there are any ISA Adapters remaining in the System at this time, ensure that they are NOT set for duplicate resources or a I/O address range of 300h - 307h via the Adapter's Configuration diskette, Dip switches, or Jumpers (note the I/O address range set on each ISA Adapter).
- 4 - Power down the System, and disconnect the Power Cord from the power Source.
- 5 - Install the ASMA Adapter in the Slot it was removed from in Step 2, and reconnect the Power Cord. Insert the ASMA Configuration Utility and Device driver Diskette in the Diskette drive, then Power up the System. Once in the ASMA Utility, set the Adapter to use a I/O Address range of 300h-307h, and a IRQ of 5, exit the Utility, and power down the server.

PCI/ISA Systems-----

- 6 - Power up the System, then press <F1> when prompted to run the Configuration / Diagnostics Utility"
- 7 - Select "Plug and Play" and press <Enter>
- 8 - Select "I/O Port Resources" and press <Enter>
- 9 - Select and set the I/O address ranges that were noted in Step 3 and 5 to "Legacy Resources". This will ensure that the PCI Bus does not use them.
- 10 - Press <Esc> two times return to the main menu.
- 11 - Select "Save Settings" then press <Enter>. Press <Enter> again when asked if you wish to save the Settings.
- 12 - Select "Exit Setup" then press <Enter>.

13 - Press <Esc>, then Select "Yes, Exit the Setup Utility" then press <Enter>.

PCI/EISA Systems-----

6 - Place the EISA Configuration Utility Diskette in the Diskette drive, then power up the server. When prompted, press any key to continue. A blue screen will indicate that changes to the configuration have occurred. Press <Enter> as prompted to continue to the EISA Configuration Utility.

7 - When prompted, press <Y> to Configure System.

8 - Select Step 3 "View or Edit Details"

9 - Select the Slot Configured with a ISA Adapter, and select the "ISA I/O Port Resource Allocation" setting, then press <Enter>.

10 - Press <F6>, select the I/O Address range set on the Adapter specific to the Slot, press <F10>. Repeat this step for Each ISA Adapter configured in the System.

NOTE: If no ISA Adapters are listed, then press <F10> to return to the main menu, and select Step 1 for instructions to configure ISA Adapters in the EISA Configuration Utility.

NOTE: EISA Adapter configuration files do not offer a setting to change the I/O Address of the adapter, in which case the address is automatically set based on the resources available.

DETAIL:

The ASMA uses 300h - 307h temporarily during POST regardless of the I/O Range it has been set to use. Other Adapters set to use the 300h - 307h I/O address range will conflict with the ASMA During POST.

COMPANION:

Refer to US RETAIN Record# H163307 (EMEA Record# H054505) for Details on setting Interrupt assignments for the ASMA on the PC Server 325/330.

SAS KEYWORDS:

PSY2	PSY2ASMA	PSY2IO	UNCLASSIFIED
D/T8639	D/T8640	P/N94G5570	P/N76H3240
P/N94G7578	P/N12J4743	POST	ERRORS
112	I2C	173	188
BAD VPD			

1.4.992 PC SERVER 330 HANGS DURING NETWORK OPSYS INSTALLATION

Record number: H163372

Device: D/T8639
 Model: M
 Tip key:
 Date created: 097/09/19
 Date last altered: A98/04/20

SYMPTOM:

- NT Ver 4.0 Hangs at "Scan for Mass Storage Devices" during installation on drives attached to the onboard Ultra Wide SCSI Controller.
- Other Network Operating Systems installed from a bootable CD-ROM may experience hangs during install as well.

PROBLEM ISOLATION AIDS:

All of the following must be true for this Tip to apply:

- The System is a PC Server 330 Type 8640 model PT0, PB0, PM0, 11Y, 21Y.
- The onboard ServRAID II controller has any form of array(s) configured in NVRAM (there may or may not be any hard drives attached to the ServRAID II controller at the time).
- The CD-ROM as well as one or more hard drives are connected to to the onboard Ultra Wide SCSI controller.
- The onboard Ultra Wide SCSI controller has BIOS support for bootable CD-ROM enabled (default).

FIX:

Install by booting to the installation diskette(s) and insert the CD-ROM into the CD-ROM drive only when prompted to do so.

- OR-----
- 1 - Power on the server and press <F1> when prompted to start the "Configuration/Diagnostics" utility.
 - 2 - Select "Configuration / Setup Utility" and press <enter>.
 - 3 - Select "Start Options" and press <enter>.
 - 4 - Select "SCSI Subsystem Control Menu" and press <enter>.
 - 5 - Select "SCSI Subsystem Initialization Order" then press <enter>.
 - 6 - Use the left/right direction keys to select "System Adaptec, System RAID" then press <enter> (this will set first drive connected to the onboard Ultra Wide SCSI controller to 80h: the boot drive).
 - 7 - Press <Esc> two times to return to the main menu.
 - 8 - Select "Save Settings" then press <enter>
 - 9 - Press <Esc> two times, Select "Yes, exit the Setup Utility", then press <enter>, the system will now reboot.
 - 10 Upon reboot, press <Ctrl>+<A> when prompted to start the "SCSIselect Utility".
 - 11 - Select "Configure/View Host Adapter Settings", press <enter>.
 - 12 - Select "Advanced Configuration Options", press <enter>.
 - 13 - Change the state of the "BIOS Support for bootable CDROM" from "Enable" to "Disable"(select setting,press <enter>, select Disabled, press <enter>).
 - 14 - Press <Esc> two times.
 - 15 - Select "Yes" to save changes when prompted, press <enter>.
 - 16 - Press <Esc>, Select "Yes" to exit the SCSIselect Utility.
 - 17 - Insert the Network Operating System installation diskette into the floppy drive and the corresponding CD-ROM into the CD-ROM drive.
 - 18 - Press any key to reboot and start the Network Operating System installation.

Note: the above keystrokes were determined on a system BIOS

ver. 11A and a Adaptec controller BIOS ver. 1.26S1.

Adaptec and SCSIselect are registered trademarks of Adaptec, Inc.

NT is a trademark of Microsoft Corporation.

SAS KEYWORDS:

PSY2	DASD	UNCLASSIFIED	BLUE
ULTRASCSI	RAID	8640-PT0	8640-PB0
8640-PM0	ADAPTEC	NT	4.0

Record number: H162191

Device: D/T8640
Model: M
Tip key:
Date created: 097/12/11
Date last altered: A97/12/11

SYMPTOM:

"Non system disk" or "No Boot Device found" errors reported after installing a ServeRAID II adapter in any of the Primary PCI slots.

-- OR --

The system boots to a bootable device attached to the ServeRAID II adapter instead of booting to a bootable device attached to the integrated ServeRAID controller.

PROBLEM ISOLATION AIDS:

The system is a PC Server 330 type 8640 model PT0/PB0/PM0 that is configured to boot to a device attached to the integrated ServerRAID controller.

A ServeRAID II adapter is located in a Primary PCI slot (PCI slots 1,2, and 3 are Primary PCI slots). This adapter may or may not have a bootable device attached to it.

FIX:

Move the ServeRAID II adapter to the Secondary PCI slots so the System will boot to the integrated ServeRAID controller.

NOTE: PCI slots 4,5, and 6 are Secondary PCI slots.

SAS KEYWORDS:

PSY2	PSY2BOOT	UNCLASSIFIED	D/T8640
PT0	PB0	PM0	SERVERAID II

1.4.994 PC SERVER 330&COLON. INTERMITTENT RAID PROBLEMS

Record number: H163011

Device: D/T8640
 Model: M
 Tip key:
 Date created: 097/11/20
 Date last altered: A98/03/12

SYMPTOM:

The System is experiencing INTERMITTENT RAID problems.

PROBLEM ISOLATION AIDS:

All of the following must be true for this TIP to apply:

- The System is a PC SERVER 330 Type 8640 model PB0, PM0, PT0.
- The RAID problems are INTERMITTENT and may not be repeatable.

FIX:

1 - Check Planar card installed in the server (FRU p/n 60H8109):

- Locate the planar card serial number label (in the bottom left corner of the planar card.
- The serial number is in the following format:

X x x x x Y Y Y x x x

- IF characters YYY are any of the following combinations,

7AI,7AJ,7AK,7AL,7AM,7AN,7AO,7AP,7AQ,7AR,7AS,7AT,7AU or 7AV

THEN replace the planar with FRU p/n60H8109 using normal warranty parts replacement procedures.

Note: If replacing the planar does not resolve the problem, continue with normal problem determination procedures.

SAS KEYWORDS:

D/T8640	PB0	PM0	PT0
SERVER330	60H8109	RAID	INTERMITTENT
PSY2	HEALTH	SERVICER ONLY	

1.4.995 PC SERVER 520 RESPONDS SLOW, CLIENTS LOSE CONNECTION

Record number: H161136

Device: D/T8641
 Model: M
 Tip key:
 Date created: 097/09/04
 Date last altered: A97/09/24

SYMPTOM:

LAN attached clients may loose connection with the server or experience a slow server response time.

PROBLEM ISOLATION AIDS:

All of the following must be true for this Tip to apply:

- The PC Server is a 520 type: 8641-Mxx (Micro Channel).
- There are two (2) or more Micro Channel LAN adapters configured in the server.

FIX:

- 1 - Obtain the latest POST/BIOS diskette image file from the IBM BBS/WEB (download BIOSM.EXE this is Ver. 24A) as well as the matching Reference diskette image file (download RFPCIMCA.EXE this is Ver. 2.07). BIOS 24A or later may be used but must always be matched by the appropriate Reference diskette. Create one diskette from each of the image files located on the IBM BBS (919-517-0001) or the IBM WEB site (WWW.US.PC.IBM.COM). The files are self-extracting executable files.
- 2 - Apply and complete the POST/BIOS flash to the Server (boot to the POST/BIOS diskette Ver. 24A and follow the on screen prompts.
- 3 - Apply the new Reference diskette (boot to the Reference diskette Ver. 2.07 choose "set configuration" and follow the on screen prompts, save/exit).
- 4 - Cold boot the server and press <F1> when prompted for "configuration / Setup".
- 5 - Select "Advanced Setup".
- 6 - Select "System Resource Balance".
- 7 - Use the direction keys to toggle choice to "MCA biased" then press <ESC> key to exit.
- 8 - Press <ESC> key again to return to the main menu.
- 9 - Select "Save settings" then press the <ENTER> key.
- 10 - Select "Exit Setup" then press the <ENTER> key.
- 11 - Select "Yes Exit the Setup Utility" then press the <ENTER> key. The system will now reboot.

SAS KEYWORDS:

PSY2	PSY2COMM	UNCLASSIFIED	BIOS
24A	NIC	MZ0	MZV
MZS	MZE	MZL	MD2
MDG	MDO		

1.4.996 PC SERVER 704 ABEND&COLON. DIVIDE BY ZERO EXCEPTION

Record number: H137977

Device: D/T8650
Model: M
Tip key:
Date created: 097/06/05
Date last altered: A97/06/05

SYMPTOM:

The following message is displayed on the PC Server 704:
"ABEND: Divide by Zero exception"

PROBLEM ISOLATION AIDS:

- The Server has two(2) or more processors
- The Server is under heavy load running NetWare SMP 4.11

Note: This condition is aggravated while running Vinca StandBy Server.

FIX:

Use the following procedure:

1. Download, expand, and install the NetWare patches from the file IWSP2.EXE located on the following Novell WEB URL:
<http://support.novell.com/search/patlst.htm>
2. Change the following statement in the C: \NWSERVER\STARTUP.NCF

From: "LOAD MPS14"
to: "LOAD MPS14 -FB"

The -FB parameter changes the virtual wire mode.

Novell and NetWare are trademarks of Novell, Inc.
Vinca is a trademark of Vinca Corporation.

SAS KEYWORDS:

PSY2 PSY2ERR PSY2 UNCLASSIFIED
PSY2COMM

1.4.997 PC SERVER 704 HANGS WITH PCI BRIDGE TO BRIDGE ADAPTERS

Record number: H133573

Device: D/T8650
Model: M
Tip key:
Date created: 096/08/07
Date last altered: A98/01/20

SYMPTOM:

The PC Server 704 Models 8650-4BW, 7AX, and 4M0 trap or hang under heavy workload with PCI Bridge to Bridge Adapters installed.

PROBLEM ISOLATION AIDS:

The IBM Triple LanStreamer adapter (Option p/n25H6304, FRU p/n 25H6305) and the Adaptec 3940W and 3940UW are examples of PCI bridge to bridge adapters.
Diagnostics run without error.

FIX:

Remove any bridge adapters as they are NOT supported in the models 8650-4BW, 7AX, and 4M0.

Note: PCI bridge to bridge adapters are supported in models 8650-5M0 and 8650-6MM. Refer to the following PC Server Compatibility WEB page for compatibility information:
<http://www.us.pc.ibm.com/compat/>

Adaptec is a trademark of Adaptec, Inc.

SAS KEYWORDS:

PSY2	PSY2ADPT	25H6304	25H6305
BRIDGING	HEALTH		

1.4.998 PC SERVER 704 PARALLEL PORT NOT FUNCTIONING IN EPP/ECP MODE.

Record number: H16849

Device: D/T8650
 Model: M
 Tip key:
 Date created: 097/08/12
 Date last altered: A97/08/20

SYMPTOM:

Any device attached to the Parallel Port does not work.

PROBLEM ISOLATION AIDS:

All of the following must be true for this Tip to apply:

- The system is a PC Server 704 (8650)
- The Parallel Port is set to EPP (Extended Parallel Port) or ECP (Extended Capability Port).

FIX:

Use the following procedure:

1. Reboot Server, Press <F1> when prompted during POST.
2. Select "Advanced" from the Menu Bar.
3. Select "Peripheral Configuration"
4. Verify Selection of Parallel Port mode.
5. Select Parallel Port Address <enter>.
6. Choose the appropriate LPT Port/Address; use the chart below:

Mode	LPT Port / Address
EPP	LPT3 / 3BCh
EPC	LPT1 / 378h or LPT2 / 278h

Note: If the selections are grayed out, verify that the Configuration Mode at the top of the Menu is set to "Manual" and not "Auto."

7. Confirm LPT Port/Address choice by pressing <enter>.
8. Press <F10> to Save and Exit.
9. Press <Enter> to "Exit Saving Changes"

Note: The Default Parallel Port Mode setting = "ISA Compatible"
 The Default Parallel Port Address setting = "Disabled"

SAS KEYWORDS:

PSY2	PSY2PRT	PSY2COMM	UNCLASSIFIED
PSY2OPER	PRINTER	SCANNER	ZIP DRIVE
CDROM			

1.4.999 PC SERVER 704 POST ERROR 0303 (ECC SIMMS INCOMPATIBLE)

Record number: H02860

Device: D/T8650
 Model: M
 Tip key:
 Date created: 096/06/21
 Date last altered: A98/01/20

SYMPTOM:

A POST error 0303 (ECC SIMMs incompatible) is displayed on the monitor or on the LCD Information Panel.

PROBLEM ISOLATION AIDS: NONE

FIX:

POST error 0303 indicates an invalid memory configuration. Only the following memory configurations are supported:

BANK 1		BANK 2		Total
Size	Sockets	Size	Sockets	
16MB	J1 - J4	No memory installed		64MB
16MB	J1 - J8	No memory installed		128MB
16MB	J1 - J8	16MB	J9-J16	256MB
16MB	J1 - J8	32MB	J9-J16	384MB
32MB	J1 - J4	No memory installed		128MB
32MB	J1 - J8	No memory installed		256MB
32MB	J1 - J8	16MB	J9-J16	384MB
32MB	J1 - J8	32MB	J9-J16	512MB
64MB	J1 - J4	No memory installed		256MB
64MB	J1 - J8	No memory installed		512MB
64MB	J1 - J8	64MB	J9-J16	1024MB

These supported memory configurations are listed on page 98 of the PC Server 704 HMM Supplement, publication part number S78H-6414 - 00, dated May 1996.

Note: On page 98 of this PC Server 704 HMM Supplement, Bank 0 should be labeled Bank 1, and Bank 1 should be labeled Bank 2. This information will be corrected in future releases of the HMM.

SAS KEYWORDS:

PSY2 8650 ERR MEM
 PSY2DOC PUB PUBS HEALTH

1.4.1000 PC SERVER 704 RAID DRIVES FAIL TO FORMAT

Record number: H137931

Device: D/T8650
Model: M
Tip key:
Date created: 097/05/29
Date last altered: A97/05/30

SYMPTOM:

During a RAID Format using the RAID Configuration/Utility Diskette the following message appears:

"Format failed on device
Channel # x Target ID x"

PROBLEM ISOLATION AIDS:

Two or more hard drives are being formatted at the same time.

FIX:

Do not replace any hardware.
Format only one drive at time.

Note: On RAID systems, it is usually not necessary to format a hard drive unless it appears "UNF" (Unformatted) on the RAID Configuration Screen. However, it is necessary to Initialize and Synchronize RAID logical drives before installing software and data for the first time. Refer to RETAIN Record H134082.

An engineering investigation is currently in progress. This RETAIN tip will be updated when additional information is available.

SAS KEYWORDS:

PSY2 PSY2ERR PSY2FDSK UNCLASSIFIED
PSY2PROG

1.4.1001 PC SERVER 704 TRAPS, HANGS, OR REBOOTS

Record number: H13313

Device: D/T8650
 Model: M
 Tip key:
 Date created: 097/06/17
 Date last altered: A97/06/20

SYMPTOM:

The PC Server 704 intermittently traps, hangs, or reboots.

PROBLEM ISOLATION AIDS:

This failure has only been observed in a controlled lab environment under stress tests with elevated temperatures.

The following SIMMs are installed:

64MB SIMM FRU p/n75H9125 (Option p/n94G5879)
 -and/or-
 128MB SIMM FRU p/n76H4896 (Option p/n94G6682)

FIX:

Use the following procedure to identify suspect SIMMs:

1. Inspect the SIMMs for the presence of SEC DRAM modules:

-or-

SEC	KOREA		SEC	KOREA	
	###	<--date code		###Y	<--date code
KM44C16100AK-6			KM44C16100AK-6		

2. If any SEC DRAM module on the SIMM has KM44C16100AK-6 AND a date code (###) less than 710, replace the suspect SIMMs using the FRU part numbers from above.
3. If SEC DRAM modules on the SIMM have KM44C16100AK-6 and date codes (###) of 710 and greater, then no action is necessary.
4. Other SEC DRAM modules regardless of date code are not suspect.

It is highly unlikely that systems running in a normal operating environment would experience this memory symptom. This symptom has only been observed in a high temperature, stress-test environment.

If the Server is not experiencing these exact symptoms, then there is no reason to replace the SEC memory even if suspect DRAM modules are found. Continue normal problem determination procedures to isolate the failing application or FRU.

FRU and Option stock have been cleared.

SAS KEYWORDS:

PSY2	PSY2ERR	PSY2MEM	SERVICER ONLY
PSY2PART	TRAP	HANG	BLUE SCREEN
NMI	REBOOT		

1.4.1002 PC SERVER 704&COLON. FALSE CPU FAILURE AT POST

Record number: H134786

Device: D/T8650
 Model: M
 Tip key:
 Date created: 096/10/29
 Date last altered: A98/01/20

SYMPTOM:

The PC Server 704 displays any of the following POST messages:

0176 Previous CPU Failure - Slot 1, CPU #1
 0178 Previous CPU Failure - Slot 2, CPU #1
 0180 Attempting to boot with failed CPU

-OR- depending on the number of processors, the following POST messages (or something similar) may appear:

0177 Previous CPU Failure - Slot 1, CPU #2
 0179 Previous CPU Failure - Slot 2, CPU #2
 0181 BSP switched, system may be in uniprocessor mode

-OR-

0960 Watchdog Timeout has occurred

PROBLEM ISOLATION AIDS: NONE**FIX:**

 * It is a REQUIREMENT that ECA 013 is applied to the Server *
 * PRIOR to applying this TIP. *

Follow this procedure to put the processors back on-line:

1. Boot to the Setup utility by pressing <F1> during the memory count.
2. Load Setup Defaults by pressing <F5> <Enter>.
3. Save and Exit by pressing <F10> <Enter>.

-OR-

Reset NVRAM (CMOS) with switch S6A1-1. Refer to the procedure on pages 109-110 in the PC Server 704 HMM, publication number S78H-6414-00.

4. Power off the Server.
5. Disconnect the I2C cable FRU p/n75H9051 from connector J10 on the power distribution board.
6. Restart the Server.

This action resets system register settings to their default values and will allow the system to run normally.

If the errors continue after restoring the system defaults and after disconnecting the I2C cable, continue with normal problem determination procedures.

Note:

With the I2C cable disconnected, the System Drive-fault LED will be disabled, but the individual Hard Disk Fault LEDs will function normally.

SAS KEYWORDS:

PSY2	UNCLASSIFIED	PSY2ERR	PENTIUM
75H9005	P/N75H9005	8650	PROCESSOR
CLEAR	ERROR	ECA013	HEALTH

Record number: H16476

Device: D/T8650
Model: M
Tip key:
Date created: 097/07/15
Date last altered: A97/07/18

SYMPTOM:

The following errors may occur with OS/2 Warp Server SMP:

SYS0281: The extended attribute system file cannot be opened.

-OR-

A DOS session cannot be opened due to insufficient memory.

PROBLEM ISOLATION AIDS:

- The system is a PC Server 704 with OS/2 Warp SMP
- The HPFS386 file system is installed

This problem is more likely to occur on systems with more than 256MB of memory and/or on systems with multiple adapters.

FIX:

Use the following procedure:

1. Make a backup copy of the \IBM386FS\HPFS386.INI file
2. Add the following statement to the "filesys" section of the \IBM386FS\HPFS386.INI file:

MAXHEAP=2048

SAS KEYWORDS:

PSY2	PSY2ERR	PSY2MEM	UNCLASSIFIED
PSY2OPER	PSY2PROG		

1.4.1004 PC SERVER 704&COLON. 0176, 0177, 0178, 0179 POST ERRORS

Record number: H131758

Device: D/T8650
Model: M
Tip key:
Date created: 097/07/25
Date last altered: A97/07/28

SYMPTOM:

After installing a new processor, upgrading a processor, replacing an existing processor, or replacing a system board, any of the following POST errors are displayed:

0176
0177
0178
0179

PROBLEM ISOLATION AIDS:

Any of the following cards were added, or replaced:

- FRU p/n75H8018 or FRU p/n12J3338 System Board
- FRU p/n75H9109 (Option p/n94G5881) 166MHz Pentium Pro
- FRU p/n76H4889 (Option p/n94G6678) 200MHz Pentium Pro

FIX:**Permanent Fix:**

Install the plug-in module (PUTR) on the connector J8G1 on the system board. The PUTR and installation instructions ship with all FRU and Option processor cards and with all FRU system boards. The PUTR should always be installed when replacing the system board or processor card(s).

Work-around:

If for some reason the PUTR cannot be installed, power off the Server for a full 30 seconds and reboot. If the Server completes POST without errors and all processors are identified, the system will function normally.

In the unlikely event that a PUTR did not ship with the system board or the processor card, the PUTR can be ordered separately as FRU p/n12J4649.

Pentium is a trademark of Intel Corporation.

SAS KEYWORDS:

PSY2 PSY2ERR PSY2BRD UNCLASSIFIED
PSY2PART

PC SERVER 720 HANGS WITH PEERMASTER OR ARTIC ADAPTERS

1.4.1005 PC SERVER 720 HANGS WITH PEERMASTER OR ARTIC ADAPTERS

Record number: H137547

Device: D/T8642
Model: M
Tip key:
Date created: 097/04/21
Date last altered: A97/04/23

SYMPTOM:

The PC Server 720 (8642) traps or hangs.

PROBLEM ISOLATION AIDS:

Two(2) or more MicroChannel (MCA) Quad Peermaster adapters or two(2) or more MicroChannel (MCA) ARTIC adapters are installed.

FIX:

Replace the system board with FRU p/n06H1810.
Current system boards have an EC that enables Peer to Peer functionality between multiple MCA Quad Peermaster and ARTIC adapters.

SAS KEYWORDS:

SERVICER ONLY	PSY2ERR	PSY2COMM	PSY2
PSY2BRD	PSY2PART	TRAP	HANG
ABEND	ABENDS	BLUE SCREEN	

1.4.1006 PC SERVER 720 HANGS WITH WINDOWS NT SERVER

Record number: H137828

Device: D/T8642
 Model: M
 Tip key:
 Date created: 097/05/20
 Date last altered: A98/01/20

SYMPTOM:

The PC Server 720 hangs at the same time on the same day each month.

PROBLEM ISOLATION AIDS:

All of the following must be true for this tip to apply:

- Windows NT Server hangs; it does NOT trap to a blue screen
- The Real-time-clock power-on mode is enabled

FIX:

Disable the Real-time-clock power mode as follows:

1. Boot the Reference Diskette
2. Select Set Features
3. Select Set power-on features
4. Select Real-time-clock power-on mode
5. Press <F9> to Disable
6. Press <F3> to Exit

The Real-time-clock mode is used to set a wake-up time and day for the Server. If this mode is enabled and then the Server is powered off, the Server will remain off until the wake-up time. At that time, the Server will power up automatically.

But if the Server is up and running with Windows NT and the Real-time-clock is enabled, the Server will hang at the exact day and time that the wake-up is set for.

Other Operating Systems are not affected.

Windows NT is a trademark of Microsoft Corporation.

SAS KEYWORDS:

PSY2 PSY2ERR PSY2OPER UNCLASSIFIED
 HEALTH

1.4.1007 PC 100 FAILS TO REMOTE IPL W/3COM 3C509-B CARD

Record number: H136383

Device: D/T6260
 Model: M
 Tip key:
 Date created: 097/01/28
 Date last altered: A97/01/28

SYMPTOM:

IBM PC 100 Series 6260 systems may fail to RPL (Remote Program Load) with a 3Com 3C509-B communications adapter installed.

PROBLEM ISOLATION AIDS:

Advanced Diagnostics run without errors.

FIX:

Update the Flash BIOS to level 21A or higher. The current BIOS level for the PC 100 6260 is level 24A.

Flash BIOS updates are customer installable and available from the IBM PC Company BBS system by calling 1-919-517-0001. Search the "IBM PC 300/700 Files" section (section #21) for the file titled:

LYJT21A.EXE - Flash BIOS updt diskette 6260 v21
 OR
 LYJT24A.EXE - Flash BIOS updt diskette 6260 v24

The updates may also be downloaded via the Internet from the IBM Personal Computer File Library located at the following URL:
<http://www.pc.ibm.com/files.html>

The search facility may be used to locate the update using the filename stated above.

3Com 3C509 is a trademark of the 3Com Corporation.

SAS KEYWORDS:

PSVP	6260	PSVPERR	PSY2ERR
IBMPC	54388	PC100	PSVPCOMM
PSY2	PSY2COMM	PSVPOEM	PSY2OEM
PSVPADPT	PSY2ADPT	UNCLASSIFIED	

1.4.1008 PC 100 SETUP INCORRECTLY SHOWS 2 CDROM DRIVES

Record number: H132494

Device: D/T6260
 Model: M
 Tip key:
 Date created: 096/11/07
 Date last altered: A96/11/07

SYMPTOM:

IBM PC 100 Series 6260 systems may incorrectly display 2 CDROM drives installed after installing a single CDROM drive on the Secondary IDE port as MASTER.

PROBLEM ISOLATION AIDS:

The IDE Drives Setup screen in the Setup Utility may correctly display the newly installed CDROM drive on the Secondary IDE port as "Adapter 1 Master" and falsely display a CDROM drive at "Adapter 1 Slave." The System Summary screen also detects the extra CDROM drive.

FIX:

Update the Flash BIOS to level 24A or higher.

Flash BIOS updates are customer installable and available from the IBM PC Company BBS system by calling 1-919-517-0001. Search the "IBM PC 300/700 Files" section (section #21) for the file titled:

LYJT24A.EXE - Flash BIOS updt diskette 6260 v24

The update may also be downloaded via the Internet from the IBM Personal Computer File Library located at the following Internet URL:

<http://www.pc.ibm.com/files.html>

The search facility may be used to locate the file using the filename stated above.

SAS KEYWORDS:

PSVP	6260	PSVPERR	PSY2ERR
IBMPC	45189	PC100	PSVPCDROM
PSY2	PSY2CDROM	PSVPMCD	PSY2MCD

1.4.1009 PC 300 FAILS TO FORMAT a 1.44MB DISKETTE

Record number: H136244

Device: D/T6576
 Model: M
 Tip key:
 Date created: 097/02/03
 Date last altered: A97/02/03

SYMPTOM:

IBM PC 300 Series 6576 and 6586 systems may fail to format a 1.44Mb diskette if the system was booted using a 720Kb formatted diskette.

PROBLEM ISOLATION AIDS:

When attempting to format a 1.44Mb diskette using the "FORMAT /f: 144" command, the system may display a "Write Fault Error - /F: 144" or similar error message.

The Flash BIOS level is LPJT59A or lower.

FIX:

Obtain and install Flash BIOS level LPJT60A or higher.

Flash BIOS updates may be obtained from the IBM PC Company BBS system by calling 1-919-517-0001. View the "IBM PC 300/700 Files" section (section #21) for the file titled:

LPJT60A.EXE - Flash BIOS updt diskette 6576/6586 v60

The Flash BIOS update may also be downloaded via the Internet from the IBM Personal Computer File Library by searching the following Internet URL:

<http://www.pc.ibm.com/files.html>

SAS KEYWORDS:

PSVP	PSY2	IBMPC	PSY2DSKT
PSVPDSKT	PC 330	PC 350	D/T6887
UNCLASSIFIED	PSVPERR	PSY2ERR	45633

1.4.1010 PC 300 FAILS TO LOAD S3 TRIO64 VIDEO DRIVERS

Record number: H131446

Device: D/T6576
 Model: M
 Tip key:
 Date created: O95/10/25
 Date last altered: A95/10/25

SYMPTOM:

IBM PC 300 Series 6576 and 6586 systems may fail to load the S3 Trio64 version 2.41 video device drivers for WARP and OS/2 2.11.

PROBLEM ISOLATION AIDS:

When attempting to install version 2.41 S3 Trio64 video device drivers, the system returns the following error message:

"Invalid argument count in a configuration file (.dsc).
 Check the configuration file."

FIX:

Install S3 Trio64 version 2.52 or higher video device drivers.

Obtain the latest S3 Trio64 video device drivers from the IBM PC Company BBS system by calling 1-919-517-0001. Locate the "IBM PC 300/700 Files" section (section #21) for the files titled:

S3TOS251.EXE - Driver update for OS/2 2.11 &
 WARP (diskette #1)
 S3TOS252.EXE Driver update for OS/2 2.11 &
 WARP (diskette #2)

The new drivers may also be downloaded via the Internet from the IBM Personal Computer File Library by searching the following Internet URL:

<http://www.pc.ibm.com/files.html>

The driver is located in the IBM PC 300 & 700 Series Files section or by using the search facility to locate the files by the names listed above.

If the error persists, continue normal problem determination procedures.

Trio64 is a trademark of S3 Incorporated.

SAS KEYWORDS:

PSY2	D/T65XX	65XX	6576
IBMP	PSVP	PSVPDISP	PSY2DISP
D/T6586	6586	PSY2PROG	PSVPPROG
PC 350	PC330	PC300	PC 330
PC350			

1.4.1011 PC 300 HARDFILES ENTER APM MODE PREMATURELY

Record number: H135953

Device: D/T6576
 Model: M
 Tip key:
 Date created: 097/01/06
 Date last altered: A97/01/06

SYMPTOM:

IBM PC 300 Series 6576 & 6586 systems running OS/2 2.X or OS/2 WARP 3.x with APM (Advanced Power Management) enabled, may intermittently put the hardfiles in a power managed state every 60 seconds.

PROBLEM ISOLATION AIDS:

The user enables APM mode via the Setup Utility and determines the time frame in which the hardfiles will enter a power managed state. The minimum time is 20 minutes. Systems affected by this problem will intermittently enter the power managed state every 60 seconds which slows system performance.

FIX:

Obtain and install an updated version of BIOS APM device driver APMBI0DD.SYS.

The BIOS APM update may be obtained from the IBM PC Company BBS system by calling 1-919-517-0001. View the "IBM PC 300/700 Files" section (section #21) for the file titled:

ZG1T01A.EXE - OS/2 APM driver 6576/6586

A README file is contained on the diskette with instructions for installing and updating the OS/2 CONFIG.SYS file.

The BIOS APM update may also be downloaded via the Internet from the IBM Personal Computer File Library by searching the following Internet URL:

<http://www.pc.ibm.com/files.html>

SAS KEYWORDS:

PSVP	PSY2	IBMPC	PSY2FDSK
PSVPFDSK	PSY2MCD	PSVPMCD	D/T6586
UNCLASSIFIED	PC 350	PC 330	47606

1.4.1012 PC 300 REBOOTS OR BOOTS TO SETUP UTILITY

Record number: H133688

Device: D/T6576
 Model: M
 Tip key:
 Date created: 096/08/20
 Date last altered: A96/08/20

SYMPTOM:

IBM PC 300 Series 6576 or 6586 systems may intermittently boot to the systems Configuration/Setup Utility or reboot after loading the operating system.

PROBLEM ISOLATION AIDS:

This failure has been reported on systems using OS/2 and Windows95. The failure does not occur while using DOS or Windows 3.x.

FIX:

Perform all system diagnostics and checkouts using the PC 300/700 HMM and QAPLus/Pro Advanced Diagnostics. Upon successful completion of the diagnostic routines, begin eliminating the adapters and the system base hardware, including the processor, one part at a time to isolate the failing FRU. If the failure persists, continue normal problem determination procedures.

Windows & Windows95 are trademarks of the Microsoft Corporation.

SAS KEYWORDS:

PSVP	PSY2	PSVPPROG	PSY2PROG
PSVPERR	PSY2ERR	PC 330	IBMPC
PC 330	PC 350	D/T6586	

1.4.1013 PC 300 6576/6586 FAILS TO BOOT W/FVC ATM ADAPTER

Record number: H131137

Device: D/T6576
Model: M
Tip key:
Date created: 096/07/30
Date last altered: A96/08/01

SYMPTOM:

IBM PC 300 Series 6576 & 6586 systems may fail to complete POST and IPL the operating system with a First Virtual Corporation (FVC) ATM adapter installed along with one or more other ISA or PCI adapters.

PROBLEM ISOLATION AIDS:

The 6576/6586 will complete POST and IPL normally if the FVC ATM adapter OR one or more of the other adapters is removed from the system.

The system and the FVC ATM adapter function normally if there are no other adapters installed.

FIX:

The FVC ATM adapter level E4 is not compatible with the IBM PC 300 6576/6586 system. Users should contact their point of purchase for an upgraded version of the FVC ATM adapter.

SAS KEYWORDS:

PSVP	PSY2	PSVPOEM	PSY2OEM
PSVPERR	PSY2ERR	PC 330	IBMPC
D/T6586	PC 300	PC 350	6576
6586			

1.4.1014 PC 300 6576/6586 W/WINDOWS95 BOOTS TO SETUP UTILITY

Record number: H062669

Device: D/T6576
 Model: M
 Tip key:
 Date created: 096/09/26
 Date last altered: A96/09/26

SYMPTOM:

IBM PC 300 Series 6576/6586 systems may boot to the Setup Utility following a shutdown and reboot of the Windows95 operating system. The system contains an IBM Auto 16/4 Token Ring Adapter and an ISA Creative Labs SoundBlaster 16 adapter.

The system will enter the Setup Utility on each boot cycle which prevents the use of the system.

PROBLEM ISOLATION AIDS:

If the SoundBlaster 16 adapter is set to I/O address "220" (default I/O address) and the IBM Auto 16/4 Token Ring adapter is in "manual mode" and set for "primary" which is I/O address A20, an I/O address conflict exists which may cause the SoundBlaster card to respond when the Token Ring adapter is being accessed.

FIX:

- 1) Reset CMOS by turning ON switch 4 of switch block SW1. Power the system ON and allow it to complete POST (beep code). Power the system OFF and return switch 4 to the OFF position.
- 2) Set switch 5 of SW1 to the ON position. This will prevent the system from accessing the Setup Utility at power-on.
- 3) Change the I/O base address of the SoundBlaster 16 card to and address other than 220.
- 4) Insert the LANAIID diskette that ships with the IBM Auto 16/4 Token Ring adapter. Load the LANAIID program and set the adapter for "enhanced" or "PnP" mode. Remove the LANAIID diskette and re-ipl Windows95. Verify proper operation of the Auto 16/4 Token Ring adapter and the SoundBlaster 16 adapter.
- 5) Power OFF and return switch 5 of SW1 to the OFF position.
- 6) (Optional) Install Windows95 Service Pak 1 which is available from Microsoft. Service Pak 1 will change the way Windows95 handles resource conflicts.

Service Pak 1 may be downloaded from the Microsoft Home Page on the Internet at the following URL:

<http://www.microsoft.com/>

Windows95 is a trademark of the Microsoft Corporation.

SoundBlaster is a trademark of Creative Labs, Inc.

SAS KEYWORDS:

PSVP	PSY2	PSVPOEM	PSY2OEM
PSVPADPT	PSY2ADPT	SOUND BLASTER	ISA 16
D/T6586	CONFIGURATION	PSVPERR	PSY2ERR

1.4.1015 PC 300 6586 FAILS TO POWER ON WITH 220V

Record number: H136483

Device: D/T6586
Model: M
Tip key:
Date created: 097/02/05
Date last altered: A97/02/05

SYMPTOM:

IBM PC 300 Series 6586 systems may fail to power on if the power supply is set for 220 volts and connected to a 220 volt outlet.

PROBLEM ISOLATION AIDS:

The system may power on initially, however, after powering the system off and then back on using the On/Off switch on the system unit, the power supply will not function.

The power supply will function normally at 220 volts if the system is powered off by disconnecting the system from the 220v source, such as a power strip, surge suppressor or circuit breaker.

Affected power supplies are manufactured for IBM by Golden Systems Inc. and contain either of the following two bar code headers: B16M5
B182T

FIX:

Replace power supply FRU P/N06H2968.

SAS KEYWORDS:

PSVP	PSY2	IBMPC	PSY2PWR
PSVPPWR	PC 350	53157	UNCLASSIFIED

1.4.1016 PC 300/700 ERRORS WITH PCI LAN CARD INSTALLED

Record number: H134691

Device: D/T6577
 Model: M
 Tip key:
 Date created: 096/10/25
 Date last altered: A97/01/17

SYMPTOM:

IBM PC 300/700 series 6577, 6587, 6877 and 6887 systems may experience operating system, application, or data file errors when performing file transfers via a PCI network card.

Failures could be replicated by engineering during a remote install of OS/2 Warp Connect. The error manifests itself in one of two ways:

- 1) After the first reboot during installation, the system would hang with the cursor in the upper left corner, displaying the error message, "The file OS2KRNL is unacceptable."
- 2) The OS/2 logo screen would be corrupted, displaying strange colors.

Other intermittent, random fails may also occur, including trap E's, and network disconnects.

PROBLEM ISOLATION AIDS:

This tip applies to systems which do not have all three PCI slots populated. Install PCI Lan Adapters beginning with slot 1 (bottom slot) and continue with Slot 2. Use slot 3 (top slot) for the third PCI adapter.

If two or more PCI adapters are installed this tip does not apply.

FIX:

Relocate the PCI Network adapter to the first slot.

Engineering is still investigating this symptom; this tip will be modified as additional pertinent information becomes available.

SAS KEYWORDS:

PSY2	PSY2COMM	PSY2ADPT	PSVP
PSVPCOMM	PSVPADPT	PC330	PC350
D/T6587	PSY2ERR	PSVPERR	UNCLASSIFIED
D/T6589	D/T6877	D/T6887	6877
6887	PC 730	PC 750	

1.4.1017 PC 300/700 FAILS TO BOOT W/CORNERSTONE IMAGEACCEL CARD

Record number: H136382

Device: D/T6577
 Model: M
 Tip key:
 Date created: 097/01/28
 Date last altered: A97/01/28

SYMPTOM:

IBM PC 300 & 700 Series 6577, 6587, 6877, or 6887 systems may fail to start POST (Power-on Self Test) and will not IPL the operating system with a Cornerstone ImageAccel/2 PCI 1608C/25 video adapter installed.

PROBLEM ISOLATION AIDS:

The failure may be reported as a system hang condition during POST or that the system fails to boot.

The failure occurs with ImageAccel/2 PCI 1608C/25 adapters containing BIOS level 12. Adapters with BIOS level 11, 13 or higher do not exhibit the failure.

FIX:

Install ImageAccel/2 BIOS level 13 or higher.
 Obtain BIOS and device driver updates from the Cornerstone Internet site at the following URL:

[Http: //www.corimage.com/files/support.nsf/](http://www.corimage.com/files/support.nsf/)

BIOS level 13 is titled: PCIC2X13.ZIP

ImageAccel/2 is a trademark of Cornerstone Imaging, Inc.

SAS KEYWORDS:

PSY2	D/T6587	D/T6877	D/T6887
IBMPC	PSVP	PSVPDISP	PSY2DISP
PSY2ADPT	PSVPADPT	PSVPOEM	PSY2OEM
PC 330	PC 350	PC 730	PC 750
UNCLASSIFIED	51505	HUNG	

1.4.1018 PC 300/700 FAILS TO DISPLAY GRAY SHADES W/4707

Record number: H131438

Device: D/T6571
 Model: M
 Tip key:
 Date created: 095/10/25
 Date last altered: A96/08/09

SYMPTOM:

IBM PC 300 & 700 Series systems may fail to correctly display shades of gray with an IBM 4707 Monochrome Display attached.

The IBM 4707 also does not correctly display dark shades on a black background in OS/2 windowed mode. The colors appear to be black on black.

PROBLEM ISOLATION AIDS:

Missing shades of gray may be reported as corrupted video images, or as no image at all.

The OS/2 symptom does not occur in an OS/2-DOS window or in OS/2 full screen mode.

FIX:**Step #1 Fix:**

Power the system unit on prior to powering on the IBM 4707 Monochrome display. Allow at least a 5 second interval between powering on the system and powering on the display.

If the PC 300 and the IBM 4707 Display are powered on at the same time, the system sets the video mode for VGA rather than monochrome.

Step #2 Fix (OS/2)

If dark colors appear as black on black when viewed in an OS/2 windowed environment, either select full screen mode or change to a lighter foreground shade. OS/2 support is investigating the cause of this problem and will incorporate a resolution into future products and product fix packs.

If the error persists, continue normal problem determination procedures.

SAS KEYWORDS:

PSY2	D/T65XX	65XX	6571
IBMPC	PSVP	PSVPDISP	PSY2DISP
D/T6571	6573	D/T6573	D/T6581
PC 350	PC330	PC300	PC 330
PC350	D/T6583	6583	6581
D/T6576	D/T6577	D/T6586	D/T6587
D/T6875	D/T6885	D/T6876	D/T6877
D/T6886	D/T6887	D/T6598	D/T6560
D/T6575	D/T6585		

1.4.1019 PC 300/700 MAY FAIL TO CONNECT AT 57.6 BAUD RATE

Record number: H121195

Device: D/T6577
 Model: M
 Tip key:
 Date created: 096/11/14
 Date last altered: A96/11/14

SYMPTOM:

IBM PC 300 Series 6577/6587, PC 700 Series 6877/6887, and PC 365 Series 6589 systems with an external modem attached may fail to connect at a 57.6Kbps baud rate.

PROBLEM ISOLATION AIDS:

This failure does not affect all brands of external modems.

The modem may consistently fail to connect regardless of the operating system and/or the communication application used.

The system may display a modem not attached or not powered-on type error message while attempting to connect. Some applications may fail to connect without posting an error message.

The system does not exhibit a failure if the baud rate is set at a higher rate such as 115.2Kbps or a lower baud rate of 38.4Kbps.

FIX:

Do not replace system hardware. This is not a system unit hardware failure.

To resolve this failure, set the baud rate of the external modem to the next higher baud rate (115.2Kbps) or the next lower baud rate (38.4Kbps).

SAS KEYWORDS:

PSVP	PSY2	IBMPC	PSY2COMM
PSVPCOMM	PSY2ERR	PSVPERR	PSVPOEM
PSY2OEM	D/T6587	D/T6589	D/T6877
D/T6887	UNCLASSIFIED	PC300	PC 330
PC 350	PC700	PC 730	PC 750
PC365			

1.4.1020 PC 300GL SYSTEM DOES NOT BOOT AFTER POWER-ON

Record number: H161009

Device: D/T6282
 Model: M
 Tip key:
 Date created: 097/09/10
 Date last altered: A97/11/18

SYMPTOM:

The IBM PC 300GL Series 6272 & 6282 may exhibit the following symptoms after pressing the power-on button located at the front of the system unit, or by powering on the system unit via a power strip/surge suppressor:

- 1) When the system is powered on, the green LED on the front of the system unit turns on and the internal fan begins to turn.
- 2) The display remains blank. There is no synchronization of display with the system unit.
- 3) The hardfile LED, diskette LED, and CDROM LED (if present) do not turn on.
- 4) No audible beep is heard from the system unit to indicate a successful completion of the Power On Self Test (POST).

PROBLEM ISOLATION AIDS:

The symptom described above is exhibited only after the installation of ISA adapters. Systems with no adapters installed will not exhibit this symptom.

IF THE SYMPTOM IS INTERMITTENT:

Powering the system OFF then ON allows the system to power-up normally and function properly.

IF THE SYMPTOM IS A SOLID FAILING CONDITION:

1. Remove all ISA adapter cards from the riser.
2. Power ON the system unit and determine if the hang condition continues.
3. If the hang condition no longer remains, re-install the ISA adapter cards one at a time to determine if the failing condition re-occurs.
4. If one ISA adapter can be isolated as the cause of the failing condition, check/replace the adapter and return to step 2.
5. If replacing the ISA adapter does not resolve the failing condition, replace the system board.

FIX:

Do not replace parts until adapter conflicts are ruled out.

The symptom described above is caused by the "Address Transition Detection" (ATD) circuit used in the Flash BIOS ROM module to improve the performance of data transfer to the ISA Bus. On rare occasions, the sensitivity of this circuit prevents the system from POSTing due to the detection of noise typically produced by the introduction of certain ISA adapter cards.

If the system exhibits the intermittent or consistet symptom as stated above, simply depress the power button again or follow the isolation procedures. This symptom does not damage any adapters, system unit hardware, peripherals or software. The symptom does not in any way affect the operation of the system once POST is completed successfully.

SAS KEYWORDS:

PSVP	PSY2	PSVPERR	PSY2ERR
PSVPPART	PSY2PART	IBMPC	LOCKUP
D/T6272	HANG	PSVPBRD	PSY2BRD
PSY2ADPT	UNCLASSIFIED	PSVPADPT	300 GL

1.4.1021 PC 360 6598 HANGS DURING RIPL TO AN OS/2 WARP SERVER

Record number: H016887

Device: D/T6598
 Model: M
 Tip key:
 Date created: 096/04/02
 Date last altered: A96/04/02

SYMPTOM:

The IBM PC 360-S200 6598 system may exhibit a system hang condition while attempting to Remote IPL (RIPL) to an OS/2 WARP server.

PROBLEM ISOLATION AIDS:

Affected systems contain an Adaptec PCI SCSI adapter which is standard on the PC 360-S200 6598 model Fxx system.

A RIPL operation to a DOS server works properly.

FIX:

Engineering is currently investigating the cause of this problem. This tip will be updated with additional information as it becomes available.

SAS KEYWORDS:

IBMPC	PSVP	PSY2	D/T65XX
6598	PC360	PENTIUMPRO	PSVPTBD
PSY2TBD	PSVPADPT	PSY2ADPT	PSVPOEM
PSY2OEM	PSVPPROG	PSY2PROG	PSVPERR
PSY2ERR	PSVPCOMM	PSY2COMM	

1.4.1022 PC 700 FAILS TO BOOT AFTER UPDATING FLASH BIOS

Record number: H135906

Device: D/T6885
 Model: M
 Tip key:
 Date created: 097/01/02
 Date last altered: A97/01/09

SYMPTOM:

IBM PC 700 Series 6875, 6885, 6876 or 6886 systems may not function after exiting from a Flash BIOS update procedure when it is determined that the system already contains the same BIOS level as the Flash update diskette.

PROBLEM ISOLATION AIDS:

**** DO NOT ATTEMPT TO RECREATE THE FAILURE SYMPTOM ****

The failure occurs as a result of performing a flash update on a system containing the same level as the flash update diskette.

The system warns the user that "The Flash level currently installed on the system is the same as the flash update diskette." If the user selects option to discontinue the update when prompted "Do you want to continue Y/N?", the system will appear to function normally following the prompted Ctl+Alt+Del sequence, but will exhibit no video, no POST (Power On Self Test), and no beep code following a power off/on cycle.

FIX:

The system board must be replaced in the systems that have been affected by this problem.

To prevent this failure from reoccurring, perform the following step as a standard procedure PRIOR to installing a flash BIOS update:

- 1) Determine the flash BIOS level currently installed on the by accessing the Configuration Setup Utility by pressing F1 during the memory count. The fifth, sixth and seventh positions of the Flash BIOS Revision Level represents the code level; for example: N1JT84AUS is code level 84A.

Compare the flash BIOS Revision Level of the system to the flash BIOS update diskette or image. DO NOT install the BIOS update if the levels are the same.

An updated version of the Flash Update utility has been developed to prevent the symptom stated above from occurring. The new Flash Update utility, FLSHUPDT.EXE is contained in the current PC 700 6875/6885 6876/6886 Flash Update diskettes. The updated versions are: N1JT85A.EXE ISA/PCI
 N2JT48A.EXE Micro Channel

If the FLSHUPDT.EXE on the flash update diskette is dated 7 - 20 - 96 or earlier and has a byte count of 66460, this update has the capability to cause the symptoms stated above.

SAS KEYWORDS:

PSVP	PSY2	IBMPC	PSY2BRD
PSVPBRD	PSY2MCD	PSVPMCD	PSY2PROG
PSVPPROG	UNCLASSIFIED	PC 750	D/T6875
6875	PC750	PC730	6885
D/T6876	D/T6886	6876	6886
MICROCHANNEL			

1.4.1023 PC 700 FAILS TO PRINT GRAPHICS

Record number: H133403

Device: D/T6885
Model: M
Tip key:
Date created: 096/04/26
Date last altered: A96/04/26

SYMPTOM:

IBM PC 700 Series 6875, 6885, 6876 and 6886 systems may fail to print graphics to a printer in a Windows environment if the Printer Setup option is set for 300 x 300.

PROBLEM ISOLATION AIDS:

The default graphics print options of the S3 864 video chipset is 300 x 300. Due to limitations of some applications used in a Windows environment, graphics print may only be achieved if the printer is set for 150 x 150 resolution. For example, if the user is running Microsoft Paintbrush or Windows Write, graphic output to the printer in 300 x 300 resolution may appear to take place, however, there will be nothing printed on the paper and no error code posted.

This failure is most evident if the S3 864 video device driver for Windows is set for a resolution of 640 x 480 x 32K colors or higher. Some applications may print graphics if the video driver is set for 640 x 480 x 256 colors and the graphics print resolution is set for 300 x 300.

FIX:

Use the Printer Setup menu in Windows to set the print output resolution for 150 x 150 mode. The video resolution can then be set to any resolution above 640 x 480 x 256 colors.

Windows is a trademark of the Microsoft Corporation.

SAS KEYWORDS:

PSVP	PSY2	PSVPPROG	PSY2PROG
PSVPPRT	PSY2PRT	IBMPC	D/T6886
D/T6876	D/T6875		

1.4.1024 PC 700 FAILS TO RIPL W/ADAPTEC 2940 SCSI CARD

Record number: H084384

Device: D/T6885
 Model: M
 Tip key:
 Date created: 096/07/10
 Date last altered: A96/07/10

SYMPTOM:

IBM PC 700 Series 6875, 6885, 6886, or 6876 with an Adaptec 2940 PCI SCSI adapter and an IBM 16/4 Token Ring adapter installed may fail to RIPL to an OS/2 WARP Server.

PROBLEM ISOLATION AIDS:

The PC 700 system serving as the client contains an Adaptec 2940 PCI SCSI adapter with the Adaptec BIOS "enabled" and an IBM 16/4 Token Ring adapter. Setting the Adaptec BIOS to "disabled" eliminates the failure.

The failure does not occur with another type of SCSI adapter or when using IDE hardfiles.

The failure symptom does not occur if the client is RIPL'ing to a DOS Server even with the Adaptec BIOS "enabled."

FIX:

An updated version of the "RPLBOOT.SYS" file must be loaded on the server.

To determine if the updated file is required, locate RPLBOOT.SYS in the "\IBMLAN\RPL\DOS" subdirectory. If the date stamp on the "RPLBOOT.SYS" file is prior to 01/20/96, contact IBM Personal Software Support at 1-800-992-4777 to obtain an updated "RPLBOOT.SYS" file. Request the fix for APAR #IC12029.

The RPLBOOT.SYS fix will also be included in Fix Pack IP08222, and may be downloaded via the Internet using the following steps:

- . Open Internet web browser application
- . Select option that allows the user to enter a URL.
- . Enter ftp: //service.boulder.ibm.com
- . Click on PS
- . Click on PRODUCTS
- . Click on LAN
- . Click on FIXES
- . Click on V4.0
- . Click on desired language.
- . Look for IP08222 and download it.

CompuServ subscribers may download the fix from the OS/2 Support Forum (GO OS2SUPPO).

Prodigy subscribers may download the fix from the OS2CLUB. Locate the file in the IBM Files-fixes area of the Download Library.

If the failure persists, continue normal problem determination to isolate the failing FRU.

Adaptec 2940 is a trademark of Adaptec, Inc.

SAS KEYWORDS:

PSVP	PSY2	PSVPCOMM	PSY2COMM
PSVPADPT	PSY2ADPT	IBMPC	6885
PSY2OEM	PSVPOEM	PSY2PROG	PSVPPROG
PSVPFDSK	PSY2FDSK		

1.4.1025 PC 700 FAILURES AFTER INSTALLING MICROCHANNEL BUS

Record number: H131363

Device: D/T6875
 Model: M
 Tip key:
 Date created: 095/10/20
 Date last altered: A95/10/20

SYMPTOM:

A limited number of early production PC 700 ISA/PCI Series systems 6875 and 6885 may exhibit one or more of the following symptoms after installing the Microchannel SelectaBus Option.

1. Intermittent system hangs
2. Errors loading or using Crystal Business Audio Drivers
3. Errors loading or using Microchannel adapter device drivers
4. Microchannel adapter configuration errors

PROBLEM ISOLATION AIDS:

The symptoms stated above may be related to the level of system board installed in the PC 700 6885 or 6875. Early ship levels of this system which are typically used for Marketing demonstrators, loaners, or sold to end users, were not released with support for the SelectaBus option.

The SelectaBus option changes the bus type from ISA/PCI to Microchannel by replacing the existing riser card with a Microchannel version and updating the Flash BIOS.

System boards with the following manufacturing part numbers on the barcode label attached to system board FRU P/N88G4270 are affected:

P/N11H5588
 P/N11H5589
 P/N11H5590
 P/N11H5611
 P/N11H5618
 P/N12H1970
 P/N39H8258

FIX:

If the system contains a system board with one of the affected part numbers, installation of the SelectaBus option is not supported. Do not replace the system board. The customer should be directed back to their point of sale.

SAS KEYWORDS:

PSVP	PSY2	PSVPPROG	PSY2PROG
D/T6876	D/T6886	6886	6876
IBMPC	D/T68XX	68XX	D/T6875
6875	D/T6885	6885	LOCKUP
HUNG	PC 730	PSVPPART	PSY2PART
PC750	PC 750	PC730	PSVPBRD
PSY2BRD			

PC 700 HANGS WHEN FULLY POPULATED WITH ADAPTERS

1.4.1026 PC 700 HANGS WHEN FULLY POPULATED WITH ADAPTERS

Record number: H133434

Device: D/T6885
 Model: M
 Tip key:
 Date created: 096/04/29
 Date last altered: A96/04/30

SYMPTOM:

IBM PC 700 Series 6885 systems may exhibit intermittent or solid system hangs during IPL or after running normally for 30 minutes or more.

PROBLEM ISOLATION AIDS:

Intermittent or solid system hang conditions in PC 700 6885 systems may be the result of a fully populated riser card. For example, if the user has installed the following adapters, hangs may occur during boot or after the system has warmed up:

Riser Slot 1 (bottom) = 3270 Adapter
 Slot 2 = WAC Adapter
 Slot 3 = Token Ring Adapter
 Slot 4 = Empty
 Slot 5 = SCSI Adapter

FIX:

If the system is exhibiting the failure stated above, and has a fully populated riser card with ANY combination of adapters, change the order of the adapters on the riser to eliminate the failure. For example, change the order of the adapters listed above to the following:

Riser Slot 1 (bottom) = WAC Adapter
 Slot 2 = Token Ring Adapter
 Slot 3 = 3270 Adapter
 Slot 4 = Empty
 Slot 5 = SCSI Adapter

If the failure persists, continue normal problem determination to isolate the failing FRU.

SAS KEYWORDS:

PSVP	PSY2	PSVPADPT	PSY2ADPT
PSVPERR	PSY2ERR	IBMPC	6885
HUNG	LOCKUP		

1.4.1027 PC 700 IPL'S WHEN THE AC LINE CORD IS ATTACHED

Record number: H13119

Device: D/T6875
 Model: M
 Tip key:
 Date created: 095/06/15
 Date last altered: A95/06/21

SYMPTOM:

An IBM PC 700 system may power on, complete POST and boot from the hardfile if the AC line cord is removed and reinstalled.

PROBLEM ISOLATION AIDS:

Remove and reinstall the AC line cord. If the system powers on without depressing the power on/off switch, completes POST and loads the operating system or boots from a bootable diskette, this tip applies.

If the system powers on without depressing the power on/off switch, completes POST and powers itself off WITHOUT BOOTING FROM THE HARDFILE OR DISKETTE, this tip does NOT apply. This is a normal function.

The IBM PC 700 system SHOULD power on and complete the Power On Self Test (POST) and then power itself off when the AC line cord is installed. The power on/off button does not have to be depressed to initiate this activity. The system is going through BIOS initiated "Housekeeping" during this brief power-on cycle. The system SHOULD NOT begin to IPL an operating system or boot from a diskette during this process.

FIX:

If the operating system is Microsoft Windows95, and the symptom occurs after an orderly shutdown (the system should power itself off at the end of the Windows95 shutdown process), a flash BIOS update is required to prevent this symptom. This tip will be updated with the level of flash BIOS required to eliminate this symptom as soon as it is available.

If the operating system is NOT Windows95, replace the riser card FRU P/N06H4003 for 6875 or P/N06H4008 for 6885.

If the failure persists, utilize normal problem determination procedures to isolate the failing FRU.

Windows95 is a trademark of Microsoft Corp.

SAS KEYWORDS:

IBMPC	PSY2	PSVP	6885
6875	D/T6885	PSVPPWR	PSY2PWR
PSVPPART	PSY2PART	PSVPERR	PSY2ERR
D/T68XX	68XX	PSVPMCD	PSY2MCD
PSVPPROG	PSY2PROG		

1.4.1028 PC-DOCTOR DRIVE INFORMATION IS INCORRECT

Record number: H161696

Device: D/T6898
 Model: M
 Tip key:
 Date created: 097/11/04
 Date last altered: A97/11/04

SYMPTOM:

After starting PC-Doctor for Windows95 and selecting the "Drive Info" tab, the information shown under "Logical Drive Information" is incorrect.

PROBLEM ISOLATION AIDS:

This tip applies to PC-Doctor for Windows95, distributed with the IBM IntelliStation M-Pro, M/T6898, RTC CDROM. The error is seen when PC-Doctor is run after installing shrinkwrap Windows95, OSR1.

FIX:

None for Windows95, OSR1.

PC-Doctor for Windows95 is only supported under preloaded Windows95, OSR2.1.

For systems installed with shrinkwrap Windows95, it is recommended that the bootable DOS version of PC-Doctor, file name T3GT03A.EXE be used.

T3GT03A.EXE may be downloaded via the Internet from the IBM Personal Computer File Library by searching the following Internet URL: www.us.pc.ibm.com/files.html

T3GT03A.EXE may also be obtained from the IBM PC Company BBS system by calling 919-517-0001.

Windows and Windows95 are trademarks of Microsoft Corporation. PC-Doctor is a trademark of Watergate Software.

SAS KEYWORDS:

PSY2	PSY2ERR	PSY2DIAGS	PSY2OPER
PSVP	PSVPERR	PSVPDIAGS	PSVPOPER
D/T6898	M/T6898	6898	75996
UNCLASSIFIED			

1.4.1029 PC/300 OR PC/700 FAILS TO POWER OFF OR ON

Record number: H126582

Device: D/T68XX
 Model: M
 Tip key:
 Date created: 095/03/02
 Date last altered: A95/06/23

SYMPTOM:

The PC/300 or PC/700 system fails to power off or on when the on/off switch button is depressed.

PROBLEM ISOLATION AIDS:

Before beginning the following procedure, remove any option cards and disconnect any I/O devices attached to the serial or parallel connectors and retest. If the problem is eliminated by removing an adapter or device, this tip does not apply; suspect the device removed.

Check the following items.

1 - Mechanical Problem

Remove the top cover. If the system can be turned on and off with the top cover removed, look for a mechanical problem in the switch and button area and check the cover for proper fit and latching.

2 - ON/OFF SWITCH

The on/off switch is a SPST (single pole, single throw) switch and can be tested with an ohm meter. Correct resistance will be open (infinity) with the switch released and closed (zero ohms) with the switch depressed. If the switch fails this test, replace the switch assembly; if the switch tests good; continue.

3 - POWER SUPPLY

A. Remove the power cord from the power supply.
 B. Remove the 3-pin power supply connector (J30) from the system board.
 C. Reinstall the power cord.
 If the system powers up, replace the power supply; if the system does not power up, disconnect the power cord from the power supply; reinstall the 3-pin connector and power cord, and continue.

NOTE: The 3-pin connector is a locking connector. If the latch is not depressed before attempting to remove the cable, the housing may pull loose from the system board. Reinstall the housing on the system board so the black wire in the 3-pin cable will connect to pin 1 on the system board connector.

4 - RISER CARD

Remove the riser card and test on/off function. the system may not function with the riser card removed; observe the power supply fan to determine if the system is on or off. If the fan can be turned off and on with the riser card removed, replace the riser card; if the system cannot be powered off with the riser removed, continue.

5 - System Board

If the above tests have not isolated the problem, replace the system board.

FIX:

Refer to the PC300/PC700 Hardware Maintenance Manual (S83G-7789) for FRU numbers and replace the appropriate FRU. If the above procedure has failed to isolate the problem, continue with normal problem escalation.

SAS KEYWORDS:

PSY2	PSY2PWR	D/T6571	6571
IBMPC	6573	D/T6573	6581
PC700	D/T6581	6583	D/T6583
PC 700	6575	D/T6575	6585
PC300	D/T6585	6875	D/T6875
PC 300	6876	D/T6876	6885
PSVP	D/T6885	6886	D/T6886
PSVPPRD	PSVPPWR	PSY2BRD	D/T65XX

1.4.1030 PC/300 OR PC/700 RECURRING DISK NOISE

Record number: H126602

Device: D/T68XX
Model: M
Tip key:
Date created: 095/03/03
Date last altered: A95/03/03

SYMPTOM:

The PC/300 or PC/700 systems may produce an unexpected noise from the fixed disk drive when no apparent read/write activity is occurring.

PROBLEM ISOLATION AIDS:

Fixed disk drives are programmed to perform normal drive maintenance to insure optimum drive performance. This maintenance may include a short period of rapid head seeks that occur approximately every 10 minutes producing an audible fixed disk noise.

FIX:

Programmed drive maintenance is normal and no parts should be replaced in an attempt eliminate the drive activity.

Programmed drive maintenance activity can be reduced by enabling fixed disk drive power management. Information on using power management is provided in the PC300 and PC700 user's guide titled "Using Your Personal Computer."

SAS KEYWORDS:

PSY2	PSY2FDSK	D/T6571	6571
IBMPC	6573	D/T6573	6581
PC700	D/T6581	6583	D/T6583
PC 700	6575	D/T6575	6585
PC300	D/T6585	6875	D/T6875
PC 300	6876	D/T6876	6885
PSVP	D/T6885	6886	D/T6886
PSVPFDSK			

1.4.1031 PCI ADAPTERS FAIL AFTER WARM BOOT IN PC 300/700

Record number: H132842

Device: D/T6885
 Model: M
 Tip key:
 Date created: 096/02/28
 Date last altered: A96/02/28

SYMPTOM:

IBM PC 300/700 Series systems may exhibit an intermittent system hang condition or fail to recognize a PCI adapter after a warm boot.

PROBLEM ISOLATION AIDS:

PCI adapters installed in a PC 300/700 Series systems may not function after a warm boot cycle due to the adapter not resetting. The effect of this will be that the application that uses the adapter will fail. This failure is most commonly associated with PCI communication adapters, but can occur with other types of PCI adapters.

The system hang or adapter reset failure does NOT occur if the system is powered off/on.

System and adapter diagnostics run without failures.

FIX:

Install the latest BIOS update for the PC 300/700 systems AND "BUSMASTR.ZIP" file which enables or disables PCI Busmastering for specific PCI slots installed in the system. View the "readme" file on the BUSMASTR diskette for installation instructions.

PC 300 Series 6576 and 6586 do not require the BUSMASTR.ZIP file.

BUSMASTER.ZIP does not operate on PC 700 Series Micro Channel systems. The Reference Partition must be updated with a current level Reference Diskette to allow the Busmaster setting to appear on the Micro Channel PCI Setup Configuration screen. The PC 700 Micro Channel Reference diskette is available on the IBM PC Company BBS in the "IBM PC 300/700 Files" section.

Obtain the latest PC 300/700 Series Flash BIOS updates from the IBM PC Company BBS system by calling 1-919-517-0001. Locate the "IBM PC 300/700 Files" section (section #21) for the Flash BIOS files:

BUSMASTR.ZIP - FIX FOR PCI ADAPTERS
 LEJT63A.DSK - ISA/PCI FLASH UPDATE LEVEL 63A (6571/6573
 6581/6583)
 N1JT80A.DSK - ISA/PCI FLASH UPDATE LEVEL 80A (6575/6585
 6875/6885)

Flash BIOS updates and Reference Diskettes may also be downloaded via the Internet from the IBM Personal Computer File Library by searching the following Internet URL:
<http://www.pc.ibm.com/files.html>

The updates are located in the IBM PC 300 & 700 Series Files section or by using the search facility to locate the files by the names listed above.

If the failure persists continue normal problem determination procedures to isolate the failing application or FRU.

SAS KEYWORDS:

PSVP	PSY2	PSVPCOMM	PSY2COMM
PSVPADPT	PSY2ADPT	PSVPMCD	PSY2MCD
IBMPC	D/T68XX	68XX	D/T6875
6875	D/T6876	6876	D/T6886
6886	HUNG	PC 730	LOCKUP
PC750	PC 750	PC730	D/T6571
D/T6573	D/T6581	D/T6583	D/T6575
D/T6585	D/T6576	D/T6586	

PCI RAID SERVER TRAPS OR HANGS INTERMITTENTLY

1.4.1032 PCI RAID SERVER TRAPS OR HANGS INTERMITTENTLY

Record number: H135499

Device: D/T8641
 Model: M
 Tip key:
 Date created: 096/11/25
 Date last altered: A98/01/20

SYMPTOM:

PC Servers with an IBM PCI RAID adapter trap or hang intermittently.

PROBLEM ISOLATION AIDS:

The system is a PC Server 320, 325, 330, 520, or 720 with an IBM PCI RAID Adapter FRU p/n06H5078 (Option p/n94G2764).

FIX:

Remove and inspect the 4MB memory SIMM FRU p/n60G2175 installed on the PCI RAID adapter. If the card number on the back of the SIMM is HYM536120W-70 (Hyundai), replace it with FRU p/n60G2175. Although the FRU number has not changed, current Option, FRU, and Manufacturing stock do not contain the affected SIMM.

The suspect 4MB Hyundai SIMMs have modules on ONE side of the card and are NOT compatible for use on the RAID adapter. Other Hyundai SIMMs (modules on BOTH sides of the card, Hyundai card number HYM536100AM-70), IBM SIMMs, and Oki SIMMs are good and do NOT need replacing.

If the suspect Hyundai SIMM (HYM536120W-70) is NOT installed, continue normal problem determination procedures to isolate the failing application or FRU.

Note: Refer to RETAIN record H133523 for inspection of the PCI RAID adapter (ECA006).

Hyundai is a trademark of Hyundai Electronics Industries Co., Ltd.

Oki is a trademark of Oki Electric Industry Co., Ltd.

SAS KEYWORDS:

PSY2	PSY2ADPT	UNCLASSIFIED	PSY2MEM
PSY2PART	TRAPS	HANGS	06H5078
94G2764	D/T8640	D/T8642	60G2175
HEALTH			

PSY2 RETAIN TIPS
PCI SCSI DEVICES ARE NOT RECOGNIZED.

1.4.1033 PCI SCSI DEVICES ARE NOT RECOGNIZED.

Record number: H001552

Device: D/T8640
Model: M
Tip key:
Date created: 094/11/08
Date last altered: A95/11/07

SYMPTOM:

The system does not recognize the SCSI hardfile. (Eventually, the system will timeout attempting to identify it, however this could take a long time.)

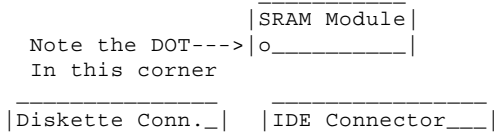
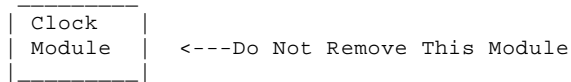
PROBLEM ISOLATION AIDS:

All of the following must apply:

1. The system has a Pentium processor installed.
2. The system has a SCSI-2 FAST PCI-Bus adapter installed.
3. The correct PCI slot is enabled (0, 1 or 2) and IRQ 5, 11 or 15 is selected.
4. The SCSI fixed disk is properly cabled, jumpered and terminated.

FIX:

- a. Remove the SRAM (Static Random Access Memory - CMOS) module from the socket at U50, located just above the IDE and diskette drive connectors (Refer to page 51 of the "User's Handbook" for the system board connector locations.)
- b. Wait for 5 minutes (to allow the module drain or discharge),
- c. Re-install the SRAM module in its socket, being careful not to bend the pins. Also be certain the MODULE IS PROPERLY ORIENTED, otherwise it could be DAMAGED. See diagram below:
- d. Then, run the SETUP again.



Caution: Refer to page 16 of the User's Handbook, shipped with each system, and observe the precautions for handling Static Sensitive devices while handling the system board and other components of the 8640.

SAS KEYWORDS:

PSY2	PCSERVER	PSY2FDSK	CONFIGURATION
PYS2ADPT	PSVP	8640	300
PASSWORD	POWER	ON	BOOT
SERVER			

1.4.1035 PCI VIDEO ADAPTERS FAIL IN SECONDARY PCI SLOTS

Record number: H134041

Device: D/T6589
 Model: M
 Tip key:
 Date created: 096/09/18
 Date last altered: A96/09/18

SYMPTOM:

IBM PC 365 Series 6589 systems may exhibit video corruption followed by a system hang condition when an OEM PCI video adapter, using an S3 video chipset, is installed in one of the Secondary PCI slots on the riser card.

This failure affects only the Model 3xx systems. The PCI slots are labelled Primary and Secondary. The Primary slots are the top two PCI slots on the riser card.

Model 1xx and Model 2xx systems use only a primary PCI bus on the riser card and are not affected.

PROBLEM ISOLATION AIDS:

The failure may occur with any operating system following the operating systems logo being displayed in VGA mode. Once the device drivers for the adapter are loaded and the resolution switches from VGA to a higher resolution, the video becomes corrupted and the system hangs.

FIX:

Install PCI video adapters using an S3 video chipset in either of the Primary PCI slots on the riser card.

If the failure persists, continue normal problem determination to isolate the failing FRU.

S3 is a trademark of S3 Incorporated.

SAS KEYWORDS:

PSY2	PSVP	IBMPC	PSVPDISP
PSY2DISP	PSVPOEM	PSY2OEM	PSY2ADPT
PSVPADPT	50723	PC365	

Record number: H136891

Device: D/T6899
 Model: M
 Tip key:
 Date created: 097/03/18
 Date last altered: A97/03/18

SYMPTOM:

IBM IntelliStation Z Pro 6899 systems may not communicate at 100Mbps with an IBM 100/10Mbps PCI Ethernet adapter or an Intel EtherExpress Pro/100B PCI Ethernet adapter. Other 100Mbps PCI Ethernet adapters may also fail to communicate at 100Mbps.

PROBLEM ISOLATION AIDS:

Both the IBM and Intel adapters communicate at the 10Mbps rate.

Adapter diagnostics run without errors and the Responder test will override the speed setting and test only 10Mbps.

With the adapter set to use the 100Mbps rate, the workstation will only be able to recognize itself on the network. No other network resources will be available. The workstation will also not be able to ping any other TCP/IP addresses on the network.

Setting the adapter for half or full duplex does not resolve the problem.

The Diagnostic/Setup diskette for the IBM 100/10 PCI Ethernet adapter is level 2.0 or lower.

FIX:

Updated device drivers for the IBM and Intel Ethernet adapters are being developed to allow 100Mbps support on the IBM IntelliStation Z Pro 6899 system.

Updated device drivers for the IBM 100/10 PCI Ethernet adapter may be obtained from the following Internet URL:

<http://www.networking.ibm.com/nes/neshome.html>

Updated device drivers for the Intel Pro100/B Ethernet adapter may be obtained from the following Internet URL:

<http://www.intel.com/network/products/>

EtherExpress is a trademark of the Intel Corporation.

SAS KEYWORDS:

PSVP	PSY2	PSVPADPT	PSY2ADPT
PSY2OEM	PWS	PSY2COMM	IBMPC
UNCLASSIFIED	60485	PSVPCOMM	PSVPOEM

PCI/EISA SERVER DOESN'T RECOGNIZE 1.44MB DISKETTES

1.4.1037 PCI/EISA SERVER DOESN'T RECOGNIZE 1.44MB DISKETTES

Record number: H132043

Device: D/T8640
 Model: M
 Tip key:
 Date created: 095/12/18
 Date last altered: A96/01/03

SYMPTOM:

The Server 320 or 520 system does not recognize a 1.44MB diskette, resulting in a diskette read or system boot errors.

PROBLEM ISOLATION AIDS:

The Server 320 or 520 EISA/PCI system is running BIOS version 07. PCI/Micro Channel systems are not affected.
 A 2.88 diskette drive is installed (An optional feature, but could be standard on some models).

FIX:

This problem is corrected by BIOS version 09x or higher.

M54PE_09N Is the filename for the current version. The filename is 320BIOSY.DSK and may be downloaded from the IBM PC Company Bulletin Board System by calling 919-517-0001. The file may be found in section 22 on SERVERS.

SAS KEYWORDS:

PSY2	SERVER	320	520
PSY2DSKT	8640	8641	D/T8641
EISA	PCI	PSY2ERR	PSY2ADPT

1.4.1038 PCI/EISA SERVER HANGS WITH IBM 100/10 ETHERNET ADAPTER

Record number: H134555

Device: D/T8640
 Model: M
 Tip key:
 Date created: 096/10/14
 Date last altered: A97/05/15

SYMPTOM:

PC Server 320 or 520 (PCI/EISA) systems running Windows NT 3.51 fail to load the Ethernet driver and/or the Server hangs while installing the Ethernet driver.
 The following error messages may be displayed in the Windows NT event viewer:

(stop) The IBM 100/10 PCI Ethernet Adapter Driver service failed to start due to the following error:
 A device attached to the system is not functioning.
 (stop) IBMFE1: Could not connect to interrupt number supplied.
 (!) IBMFE1: There is a interrupt conflict at interrupt #
 (!) IBMFE1: There is an i/o port conflict.

After the error, the I/O port assignments for the Ethernet adapter are different from those reported in POST/BIOS.

PROBLEM ISOLATION AIDS:

The system is a PC Server 320 or 520 PCI/EISA model running Windows NT 3.51 AND the following adapters are installed:

IBM 100/10 PCI Ethernet Adapter FRU p/n25H4383 (Option p/n 25H4374).

-AND-

IBM PCI RAID Adapter FRU p/n06H5078 (Option p/n07H0508).

FIX:

Follow this procedure:

1. Remove the IBM 100/10 Ethernet Adapter.
2. Install Windows NT 3.51 Service Pack 5 which can be downloaded from the following Microsoft Web site URL:

Ftp: //ftp.microsoft.com/
 bussys/winnt/winnt-public/fixes/usa/nt351/ussp5/i386

3. Reinstall and configure the Ethernet adapter.

Note: Refer to RETAIN records H132041 and H134937 for additional tips on the 10/100 or 100/10 Ethernet adapters.

Windows NT is a trademark of Microsoft Corporation.

SAS KEYWORDS:

PSY2	PSY2ADPT	PSY2ERROR	25H4383
P/N25H4374	06H5078	07H0508	PSY2COMM
TRAP	TRAPS	HANG	10/100
8641	D/T8641		

1.4.1039 PCI/MCA SERVER HANGS WITH IBM 100/10 ETHERNET ADAPTER

Record number: H134937

Device: D/T8640
 Model: M
 Tip key:
 Date created: 096/11/04
 Date last altered: A96/12/02

SYMPTOM:

PC Server 320 or 520 MicroChannel (MCA) systems running Windows NT 3.51 fail to load the Ethernet driver and/or the Server hangs while installing the Ethernet driver. The following error messages may be displayed in the Windows NT event viewer:

(stop) The IBM 100/10 PCI Ethernet Adapter Driver service failed to start due to the following error:
 A device attached to the system is not functioning.
 (!) IBMFE1: Could not allocate the resources necessary for operation.
 (!) IBMFE1: The dependency service on group failed to start.

PROBLEM ISOLATION AIDS:

The system is an 8640-Mxx or 8641-Mxx MicroChannel model running Windows NT 3.51 with an IBM 100/10 PCI Ethernet Adapter FRU p/n 25H4383 (Option p/n 25H4374).

FIX:

Follow this procedure:

1. Download the MCA Windows NT Support Diskette Version 1.01 (MCANTSMP.EXE). Follow the directions found in the readme.txt.
2. Configure the IBM 100/10 PCI Ethernet Adapter.

```

-----IMPORTANT-----
|
| Diskette images are customer installable. Customers should
| review any "README" files located on the diskette for
| installation information. Contact the IBM PC HelpCenter at
| 800-772 - 2227 if download/installation assistance is needed. |
|
| IBM PC Server files are located in Directory 22 on the PC
| Company Bulletin Board Service (BBS) at 1-919-517-0001 or
| tieline 255-0001.
| The files may also be downloaded via the Internet from the
| IBM PC File Library by searching the following Internet URL:
| http: //www.pc.ibm.com/files.html
|
-----

```

Note: Refer to RETAIN records H132041 and H134555 for additional tips on the 10/100 or 100/10 Ethernet adapters.

Windows NT is a trademark of Microsoft Corporation.

SAS KEYWORDS:

PSY2	PSY2ADPT	PSY2ERROR	P/N25H4383
25H4374	PSY2COMM	TRAP	TRAPS
HANG	UNCLASSIFIED	10/100	

1.4.1040 PCMCIA SERIES II ADAPTERS FAILS IN 9576/77

Record number: H005131

Device: D/T9576
Model: M
Tip key:
Date created: 096/08/02
Date last altered: A96/08/02

SYMPTOM:

IBM PCMCIA Host Adapter with an IBM PCMCIA Series II Token Ring or Ethernet card installed may fail to be recognized when installed in an IBM 9576i/s or 9577i/s system.

PROBLEM ISOLATION AIDS:

Applications like the "Play-at-Will" function in the OS/2 System folder which initiates the IBM PCMCIA Host adapter function may not recognize that an IBM PCMCIA Series II adapter is installed.

IBM Series III PCMCIA adapters installed in an IBM PCMCIA Host adapter function normally.

FIX:

The IBM PCMCIA Host Adapter with an IBM Series II PCMCIA adapter installed is not supported in the 9576i/s or 9577i/s system. IBM Series III PCMCIA adapters have been tested and are supported when used with the IBM PCMCIA Host Adapter in a 9576/9577i/s system.

SAS KEYWORDS:

PSY2	IBMPC	PSY2ADPT	PSY2COMM
9576I	9576S	9577I	9577S
D/T9577			

1.4.1041 PCSERVER 300 (8640) TRAP 0002'S AND HANGS

Record number: H126795

Device: D/T8640
 Model: M
 Tip key:
 Date created: 095/03/08
 Date last altered: A95/03/20

SYMPTOM:

PCSERVER 300 (8640 models xNx or xPx) may experience an intermittent Trap 0002 or system hangs while formatting the fixed disk, when running MS Mail or ADSM (ADSTAR Distributed Storage Manager) under OS/2.

Other applications may be affected.

PROBLEM ISOLATION AIDS:

A PCI SCSI Adapter is installed in the system.

FIX:

A new PCI SCSI device driver for OS/2 named IBMPSCSI.ADD dated 2 - 23 - 95 (size = 49531) is available on the IBM PCCO BBS and may be downloaded by calling 919-517-0001.

Ensure this driver is loaded prior to other hardware or software problem determination.

```

=
= THIS DRIVER IS CUSTOMER INSTALLABLE. CUSTOMERS SHOULD BE
= ADVISED TO CONTACT THE PC COMPANY HELPCENTER AT 800-772-2227
= TO OBTAIN THE FILE AND REQUEST ASSISTANCE WITH INSTALLATION
= IF REQUIRED.
=
=

```

ADSM is a registered trademark of ADSTAR.

MS MAIL is a registered trademark of Microsoft.

SAS KEYWORDS:

PSY2	8640	PSY2PROG	PSY2ERR
OS2	SERVER	300	PCSERVER
SERVER300	2	TRAP2	

PC300 AND PC700 GARBLED SOUND OR CHOPPY VIDEO

1.4.1042 PC300 AND PC700 GARBLED SOUND OR CHOPPY VIDEO

Record number: H13302

Device: D/T68XX
 Model: M
 Tip key:
 Date created: 095/06/26
 Date last altered: A95/06/26

SYMPTOM:

PC300 and PC700 (all models) may experience garbled sound or choppy video while playing DOS and Windows multimedia applications from CD-ROM.

PROBLEM ISOLATION AIDS:

Affected CD-ROM drives are:

FRUs are p/n10H3091 and p/n71G0297

CDROM option p/n70G8519

Multimedia kits p/n92G7583, p/n92G7584, and p/n92G7585.

FIX:

Install version 1.21 (dated 12/06/94) or higher of CD-RO device driver IBMIDECD.SYS.

This update may be downloaded from the IBM PC Company Bulletin Board System by calling 919-517-0001.

Customers and dealers in Canada may download updates from their respective IBM regional bulletin board service.

----- IMPORTANT -----

| THE UPDATES ARE CUSTOMER INSTALLABLE. CUSTOMERS SHOULD |
 | BE ADVISED TO CONTACT THE PC COMPANY HELPCENTER AT |
 | 800-772 - 2227 IF ASSISTANCE IS REQUIRED IN GETTING OR |
 | INSTALLING THE APPROPRIATE UPDATE. |

If problems persist, continue with normal problem determination.

Windows is a trademark of Microsoft Corporation.

SAS KEYWORDS:

PSY2	IBMPC	PC300	D/T6586
PSVPBRD	PSY2BRD	PC330	PC350
PC700	PC730	PC750	D/T6571
D/T6573	D/T6581	D/T6583	D/T6875
D/T6885	D/T6876	D/T7875	CD ROM
CDROM			

1.4.1043 PC300 PENTIUM, PC700, & 64XX SERIAL PORT ERRORS

Record number: H13332

Device: D/T68XX
 Model: M
 Tip key:
 Date created: 095/06/28
 Date last altered: A97/07/13

SYMPTOM:

While communicating through an external modem attached to serial port A or B, characters are dropped.

PROBLEM ISOLATION AIDS:

This problem may affect any system that contains the S3 Vision864 video subsystem.

Failures occur when the following three conditions are met:

- 1 - The failing application is Windows Terminal or other communication application running under Windows.
- 2 - The data rate is 9600 or higher.
- 3 - The video mode is SVGA (800x600 or higher).

FIX:

Perform the following:

64xx Systems-

- 1 - Install S3864 video driver version 1.41 or higher (FROM IBM ONLY).
- 2 - Install flash level 63 or higher.
- 3 - Add the following statement to the MONITOR area of the Windows SYSTEM.INI file:
 BUS-THROTTLE=ON
- 4 - Cold boot the system.

S3864 video driver v1.41 is titled "VPPWIN14.DSK", and may be downloaded from the IBM PC CO. Bulletin Board service by calling 919 - 517 - 0001.

= THESE UPDATES ARE CUSTOMER INSTALLABLE. CUSTOMERS THAT =
 = NEED ASSISTANCE GETTING OR INSTALLING THE UPDATES SHOULD =
 = CONTACT THE IBM PC COMPANY HELPCENTER AT 800 772-2227. =

6575, 6585, 68xx Systems-

- 1 - Install S3864 video driver version 1.41 or higher (FROM IBM ONLY). This is the current level that ships with these models.
- 2 - Add the following statement to the MONITOR area of the Windows SYSTEM.INI file:
 BUS-THROTTLE=ON
- 3 - Cold boot the system.

If problems persist after making the above changes, continue with normal problem determination.

Windows is a trademark of Microsoft Corporation.
 Vision864 is a trademark of the S3 Incorporated.

SAS KEYWORDS:

PSY2	IBMPC	PC300	D/T6575
PSVPBRD	PSY2BRD	PC330	PC350
PSY2COMM	PSVPCOMM	BUS-THROTTLE	BUSTHROTTLE
D/T6876	D/T6886	D/T6885	D/T6875
PC700	PC730	PC750	D/T6472
D/T6482	D/T6484	D/T6492	D/T6494
S3864	BUS-THROTTLE=ON		

1.4.1044 PC300 W/COLORADO TAPE DRIVE HANGS OR REBOOTS

Record number: H127696

Device: D/T65XX
Model: M
Tip key:
Date created: 095/05/23
Date last altered: A95/06/22

SYMPTOM:

PC300-486 system with a Colorado 120Mb tape drive may experience a hang condition or unexpected reboot.

PROBLEM ISOLATION AIDS:

The application failing is Colorado Tape Backup WINLITE Version 1.3 for Windows. The failure occurs after the Trakker 120 tape drive is selected.

FIX:

The customer should install version 2.50 or higher of Colorado Tape Backup for Windows. Customers can download this package by calling Colorado Memory Products bulletin board at 907 635-0650. Customers that require assistance downloading or installing the S/W should contact their point of purchase or Colorado Memory Products technical support at 907 635-1501. Windows is a trademark of Microsoft Corporation.

SAS KEYWORDS:

PSY2	IBMPC	PC300	D/T6571
D/T6573	D/T6581	D/T6583	PSY2NLGO
PSVPNLGO	OEM		

1.4.1045 PC300 6576 OR 6586 SYSTEM BOARD APPEARS DEAD

Record number: H127969

Device: D/T6576
 Model: M
 Tip key:
 Date created: 095/06/07
 Date last altered: A96/08/15

SYMPTOM:

PC300-Pentium 6576 and 6586 system board appears dead.

PROBLEM ISOLATION AIDS: None**FIX:**

The appearance of a dead system board can be the result of flash BIOS corruption. Before replacing a system board, attempt to reinstall the flash code using the following procedure. No video will be available; use the speaker and drive LED to monitor status.

- 1 - Change the flash recovery jumper (RCVR jumper J5J1) to the recovery mode position (jumper pins 1 and 2). This jumper is numbered as follows:

```

          2 4 6 8
          -----
J5J1    | x o o o |
RCVR    | x o o o |
          -----
          1 3 5 7
  
```

Note: The first two characters of the jumper title represent the coordinates of the physical location of the jumper on the system board using the grid system. The system board is marked A through K front to rear and 1 through 9 left to right. Jumper J5J1 will be found at the intersection of coordinates J and 5 (1.5" in front of serial port B).

- 2 - Install the flash update diskette into drive A.
- 3 - Turn on the computer. If the flash was corrupted, the system will boot from the diskette. When the system beeps and the floppy drive LED lights, the system is loading the recovery code. As soon as the system beeps twice and the drive LED goes off, the recovery is complete.
- 4 - Turn the system off.
- 5 - Move the flash recover jumper back to the default position (jumper pins 1 and 3).
- 6 - Leave the update diskette in drive A and turn the system on.
- 7 - Continue with a normal flash update installation.

If the system does not respond as described in step 3, continue with normal problem determination.

SAS KEYWORDS:

PSY2	IBMPC	PC300	D/T6586
PSY2BRD	PSVPBRD	HANG	HANGS
PC330	PC350		

1.4.1046 PC300/700 & VALUEPOINT ERRATIC MOUSE OPERATION

Record number: H011829

Device: D/T68XX
 Model: M
 Tip key:
 Date created: 095/07/20
 Date last altered: A95/07/20

SYMPTOM:

ValuePoint, PC300, and PC700 systems running DOS DOS/Windows exhibit erratic mouse operation.

PROBLEM ISOLATION AIDS:

Diagnostics on the mouse and system board will complete without error.

Systems that experience the problem are running applications that bypass system BIOS and use direct driver software to interface to the keyboard and mouse.

FIX:

This is not a hardware problem and no parts should be replaced in an attempt to fix the erratic mouse behavior. A software patch is available from IBM which may enable the customer's direct driver software to function properly.

NOTE: THE FOLLOWING PROCEDURE SHOULD BE PERFORMED BY THE CUSTOMER OR THEIR RESPONSIBLE SOFTWARE SUPPORT PERSONNEL.

- 1 - Download "SETSRATE.COM" from the IBM Personal Computer Company BBS at 919 517-0001.
- 2 - Copy the file "SETSRATE.COM" to the root directory.
- 3 - Add the following statement to the Autoexec.bat file after any mouse drivers such as MOUSE.COM.

SETSRATE /T

```
----- IMPORTANT -----
| Updates are customer installable. Customers should be |
| advised to contact the IBM PC Company HelpCenter at   |
| 800 772 - 2227 if assistance is required in getting or |
| installing the appropriate update. Customers in Canada |
| should call IBM's HelpPC at 800 565-3344.             |
-----
```

If the mouse problem persists, continue with normal problem determination.

SAS KEYWORDS:

PSY2	IBMPC	PC300	D/T6571
D/T6573	D/T6581	D/T6583	PSY2PROG
PSVPPROG	WILD MOUSE	D/T6472	D/T6482
D/T6484	D/T6492	D/T6494	D/T6575
D/T6576	D/T6585	D/T6586	D/T6875
D/T6876	D/T6885	D/T6886	D/T6381
D/T6384	D/T6382	D/T6387	

1.4.1047 PC300/700 SERIAL DEVICE RESPONDS DURING POST

Record number: H095191

Device: D/T68XX
Model: M
Tip key:
Date created: 095/07/28
Date last altered: A95/08/15

SYMPTOM:

Serial devices other than modems (printers, displays, cash registers, etc.) exhibit unexpected responses during system POST such as printing or displaying characters.

PROBLEM ISOLATION AIDS:

The serial devices may be attached to the system board serial ports or serial adapters.

FIX:

- 1 - Enter the system Configuration/Setup Utility by depressing F1 during POST memory count.
- 2 - Select Rapid Resume.
- 3 - Disable APM BIOS Mode.
- 4 - Exit and save this configuration.

If problems persist, continue with normal problem determination

SAS KEYWORDS:

PSY2	IBMPC	PC300	PC330
PC350	PC730	PC750	PC700
PSY2MISC	PSVPMISC	D/T6571	D/T6573
D/T6581	D/T6583	D/T6575	D/T6576
D/T6585	D/T6586	D/T6876	D/T6875
D/T6885	D/T6886	SERIAL PORT	

1.4.1048 PC300, PC700 REAR PANEL INTERFERES WITH I/O CABLES

Record number: H126808

Device: D/T68XX
 Model: M
 Tip key:
 Date created: 095/03/20
 Date last altered: A95/03/21

SYMPTOM:

The PC300 and PC700 rear decorative panel may prevent attaching cables from OEM monitors, printers, or serial devices to system board I/O ports.

PROBLEM ISOLATION AIDS:

The following decorative panels may be affected:

p/n06H5742 3x3 (6575, 6875, 6876)
 p/n06H5744 5x5 (6581, 6583, 6585, 6586)

The following decorative panel is NOT affected:

p/n10H2925 3x3 (6571, 6573)

FIX:

Until decorative panels are available with larger openings for the system board I/O connectors, the panel should be removed when it interferes with I/O cables.

This tip will be updated when additional information is available.

SAS KEYWORDS:

PSY2	6875	D/T6875	D/T6885
D/T6876	D/T6886	6885	6876
6886	COVER	PSY2OEM	IBMPC
PC 750	PC 730	PSVP	PC 330
PC 300	PC 350	D/T65XX	D/T6571
D/T6573	D/T6581	D/T6583	D/T6585
D/T6575	6571	6573	6581
6583	6575	6585	PSY2TBD

1.4.1049 PC SERVER 720&COLON. INSTALLING LONG ADAPTERS

Record number: H16452

Device: D/T8642
Model: M
Tip key: 005
Date created: 097/07/16
Date last altered: A97/07/16

It is important to adjust the two card guides (which are independent from each other) when installing long adapters. Improper adjustment and/or installation of the card guides can cause long adapters to be improperly seated. This can cause the adapter to pop up on one end causing intermittent errors and hangs.

Be sure to review pages 72 to 75 of the PC Server 720 User's Handbook entitled "Installing Long Adapters". Reviewing these pages will ensure proper installation of adapters.

Refer to the five(5) diagrams on page 74: They are referenced below as TOP LEFT, TOP RIGHT, CENTER, BOTTOM LEFT, and BOTTOM RIGHT.

TOP LEFT - This diagram shows how to remove the card guide from the system for adjustment. There are two card guides per system and each card guide can be adjusted independent of the other one.

TOP RIGHT - This diagram shows the two possible locations for re-installing the card guides if the length of the card changed but the width did not. The CENTER, BOTTOM LEFT, and BOTTOM RIGHT diagrams show the adjustment of the card guide to accommodate adapters of different widths.

CENTER - This diagram shows how to position each slot of the card guide. Each card guide has 4 individual adjustable retainers. These retainers snap/unsnap for removal/installation and can be adjusted for different widths as shown in the BOTTOM LEFT and BOTTOM RIGHT diagrams.

BOTTOM LEFT - This diagram shows how to separate the individual position retainer into its component pieces. The pieces are held together by snaps and this diagram shows how to unsnap them.

BOTTOM RIGHT - This diagram shows a position retainer separated into its component pieces. The arrow in the diagram shows how to resnap the component pieces to accommodate adapters of different widths.

SAS KEYWORDS:

PSY2 PSY2BRD PSY2DOC SERVICER ONLY
PSY2PART PSY2ADPT

PSY2 RETAIN TIPS
PC700 EMITS HIGH PITCHED NOISE

1.4.1050 PC700 EMITS HIGH PITCHED NOISE

Record number: H126559

Device: D/T68XX
Model: M
Tip key:
Date created: 095/03/03
Date last altered: A95/05/16

SYMPTOM:

PC700 emits an unexpected high pitched noise from the speaker.

PROBLEM ISOLATION AIDS:

If the high pitched sound can be eliminated by depressing the mute button on the front panel, this tip applies. If the noise cannot be eliminated by depressing the mute button, this tip does not apply; continue with normal problem determination.

FIX:

If the system meets the criteria above, replace the system board using FRU p/n88G4270. The FRU number was not changed, however inventories have been purged of down level system boards.

SAS KEYWORDS:

PSY2	PC 700	D/T6875	D/T6885
D/T6885	D/T6886	6875	PSVPBRD
6885	88G4270	PSY2BRD	PSVP
AUDIO	NOISE	HUM	IBMPC

1.4.1051 PC700 HANGS AFTER INSTALLING SYSTEM BOARD

Record number: H127396

Device: D/T68XX
 Model: M
 Tip key:
 Date created: 095/04/25
 Date last altered: A95/05/16

SYMPTOM:

PC700 fails to complete POST after installing system board FRU.

PROBLEM ISOLATION AIDS:

After installing system board, system will count memory and then hang; keyboard will be inactive, diskette and fixed disk drives are not accessed.

FIX:

The above condition may not be a defect. It may take three minutes or longer for a system board FRU to complete POST and enter the configuration utility after initial install in a system.

If the hang conditions persists for more than five minutes, continue with normal problem determination.

SAS KEYWORDS:

PSY2	PSVP	D/T6876	D/T6886
D/T6875	DEAD	PSY2BRD	PSVPBRD
6875	6876	6885	6886
D/T6885	88G4270	P/N88G4270	11H5545
P/N11H5545	IBMPC		

1.4.1052 PC700 HANGS USING BUSINESS AUDIO WITH OS/2

Record number: H131330

Device: D/T6876
 Model: M
 Tip key:
 Date created: O95/10/18
 Date last altered: A95/10/18

SYMPTOM:

IBM PC 700 Microchannel Series systems 6876 and 6886 may exhibit intermittent system hangs when opening a WIN/OS2 Full Screen session under OS/2 2.11 and WARP FullPack.

PROBLEM ISOLATION AIDS:

Systems that may be affected by intermittent system hangs are 6876 and 6886 Microchannel systems and PC 700 Series 6875 and 6885 ISA/PCI systems that have the Microchannel riser card option installed (SelectaBus).

The system hang occurs while the Crystal Business Audio drivers are loading when a WIN/OS2 Full Screen session is started, or after opening the WIN/OS2 session and starting one or more applications.

System and adapter diagnostics run without failures.

FIX:

Install the following updates depending on the version of OS/2 being used:

WARP: 700AUD.EXE

OS/2 2.11: CRYST211.ZIP
 CRYSTAL1.EXE (For WIN/OS2 support)
 CRYSTAL2.EXE (For WIN/OS2 support)

The updates may be obtained from the IBM PC Company BBS system by calling 1 - 919-517-0001. Locate the "IBM PC 300/700 Files" section (section #21) for the updates.

The updates may also be downloaded via the Internet from the IBM Personal Computer File Library by searching the following Internet URL:

<http://www.pc.ibm.com/files.html>

The updates are located in the IBM PC 300 & 700 Series Files section or by using the search facility to locate the files by the names listed above.

If the failure persists continue normal problem determination procedures to isolate the failing application or FRU.

SAS KEYWORDS:

PSVP	PSY2	PSVPPROG	PSY2PROG
D/T6876	D/T6886	6886	6876
IBMPC	D/T68XX	68XX	D/T6875
6875	D/T6885	6885	LOCKUP
HUNG	PC 730	PC750	PC 750
PC730			

1.4.1053 PD/CD ROM DRIVE FAILS IN WINDOWS 3.1

Record number: H134207

Device: D/T6589
 Model: M
 Tip key:
 Date created: 096/09/30
 Date last altered: A96/09/30

SYMPTOM:

The PD/CD ROM drive in the IBM PC 365 Series 6589 system may fail to function in a Windows 3.1 environment. The drive will not be recognized by Windows 3.1.

PROBLEM ISOLATION AIDS:

The PD/CD ROM drive is configured as the MASTER drive on the PRIMARY IDE port.

FIX:

Configure the PD/CD ROM drive on the SECONDARY IDE port as MASTER. This is the configuration used by IBM Manufacturing when installing the PD/CD ROM drive in a PC 365 system.

If the user configuration requires that the PD/CD ROM drive attach to the PRIMARY connector as MASTER, perform the following changes to the Windows SYSTEM.INI file:

386Enh

```
virtualHDIRQ=off      (change from ON to OFF)
32BitDiskAccess=off  (Add this entry if not present and
                      ensure that the setting is OFF)
```

Windows is a trademark of the Microsoft Corporation.

SAS KEYWORDS:

PSY2	PSVP	IBMPC	PSVPPROG
PSY2PROG	PSVPERR	PSY2ERR	LOCKUP
54958	PC365	HUNG	PSVPCDROM
PSY2CDROM	PD	CDROM	

PERSONAL SYSTEM/2 FAILS TO READ SOME 720KB PROGRAM DISKETTES

1.4.1054 PERSONAL SYSTEM/2 FAILS TO READ SOME 720KB PROGRAM DISKETTES

Record number: H024148

Device: D/T8550
 Model: M
 Tip key:
 Date created: 087/09/28
 Date last altered: A92/05/01

SYMPTOM: INTERMITTENT READ FAILURES ON 720KB ORIGINAL APPLICATION SOFTWARE DISKETTES. "NOT READY ERROR READING DRIVE A" WHEN ATTEMPTING TO INSTALL AN APPLICATION PROGRAM. ATTEMPTS TO PERFORM "DIR" OR "COPY" COMMANDS FROM THE DISKETTE WILL ALSO PRODUCE THE ERROR MESSAGE.

MACHINES AFFECTED: 8550, 8560 AND 8580 (MODELS 041, 071)

PROBLEM ISOLATION AIDS: NONE

FIX:

CONTACT THE ACCOUNT WORKSTATION SYSTEM ENGINEER TO INSTALL THE DASDDRV.SYS MODULE UPDATE VERSION 1.2 (698 BYTES). THE DASDDRV.SYS INFORMATION IS AVAILABLE ON HONE/EQUAL, ITEM #913MN DATED 9/28/87.

NOTE: DASDDRV IS ALSO AVAILABLE ON THE SYSTEM UPDATE DISKETTE. THE DISKETTE MAY BE OBTAINED BY FOLLOWING INSTRUCTIONS IN HSF RECORD NUMBER H037906. THIS FILE IS ALSO LOCATED ON THE SYSTEM UPDATE DISKETTE.

SAS KEYWORDS:

PSY2	PSY2PROG	PSY2MISC	8550SYSPROG
8560SYSPROG	8580SYSPROG	8550SYSMISC	8560SYSMISC
8580SYSMISC	D/T8550	D/T8560	D/T8565
D/T8580			

1.4.1055 PLANAR BOARD DIAGNOSTICS HANG WITH DIAGNOSTIC LEVEL 1.03

Record number: H027271

Device: D/T8570
Model: M
Tip key:
Date created: 088/06/02
Date last altered: A90/07/11

SYMPTOM: IN ADVANCED DIAGNOSTIC MODE IF THE MOUSE PORT TEST IS RUN AND IMMEDIATELY FOLLOWED BY THE SYSTEM UNIT (PLANAR) TEST, A HANG CONDITION WILL OCCUR.

PROBLEM ISOLATION AIDS: NONE

FIX: THE HANG CONDITION MAY BE CIRCUMVENTED BY TESTING ANY OTHER DEVICE BETWEEN THE MOUSE AND SYSTEM UNIT TESTS. THIS PROBLEM IS FIXED IN THE MODEL 70/80 REFERENCE DISKETTE LEVEL 1.04 AND LATER

SAS KEYWORDS:

PSY2

PSY2DIAG

8570SYSDIAG

1.4.1056 POSSIBLE DRIVE FAILURES IN 3518/3519 ENCLOSURE

Record number: H162911

Device: D/T8640
 Model: M
 Tip key:
 Date created: 098/02/16
 Date last altered: A98/02/27

SYMPTOM:

When the server is powered up, the following error is displayed by the ServeRAID or ServeRAID II Adapter:

"The Drive Configuration Has Changed"

"The following drives are not responding: "

"(old state)/(new state)"

" Your System has a configuration error due to the above conditions"

"Press F4 - Retry command"

"Press F5 - Update Adapter Configuration to exclude non-responding Drives"

" Warning: non-responding drives will be set to DDD"

"Press F10 - Exit without any change"

----- OR -----

When the System is powered up, the non-RAID SCSI Adapter BIOS loads. The following is a example of what the BIOS may display if there is a CDRom and one Hard drive attached to the non-RAID SCSI Adapter:

SCSI ID #0 IBMDFHSS2W Drive C: (80h)
 SCSI ID #6 IBMCDRM00203
 Press <CTRL A> For SCSISelect (TM) Utility
 <<< Press <F1> to resume, <F2> setup

NOTE: The Drives in the external enclosure are not recognized.

PROBLEM ISOLATION AIDS:

All of the following must be true for this Tip to apply:

- The Enclosure is a IBM Type 3518 model 001 or Type 3519 model R01 configured with supported hard drives.
- The 3518/3519 is connected to the external port of any supported SCSI Controller/Adapter or ServeRAID/ServeRAID II Controller/Adapter that is properly configured in any Supported IBM PC Server or Netfinity server using a supported SCSI Cable.
- The 3518 Enclosure is configured with a SCSI Repeater Card Option p/n40H4869 / FRU p/n94G5565, or Option p/n94G7585 / FRU p/n 93H6409.
- The 3519 Enclosure is configured with a SCSI Repeater Card Option p/n94G7585 / FRU p/n93H6409 (ships standard with the 3519 Enclosure).

FIX:

- 1 - Configure the 3518 Enclosure using the SCSI Repeater Card Option p/n94G7585 FRU p/n07L8624.

NOTE: The 3519 enclosure ships configured with the FRU p/n07L8624. There is no Fix for the Symptom as it relates to the 3519 at this time. Use the workaround below.

WORKAROUND:

- 1 - Do NOT press F4 at the system message, power Off, then power On the 3518/3519 Enclosure.

----- OR -----

- 1 - Cycle the power on each of the drives using the switch on the front of the drives that are located in the 3518/3519 to recover the drive status.

POSSIBLE DRIVE FAILURES IN 3518/3519 ENCLOSURE

2 - Power Off, then power On the server to Reset the SCSI Adapter

Note:

- Refer to RETAIN TIP Record #H125499 for issues specific to drives configured in a 3518 Enclosure.
- Refer to ECA012 and ECA015 for issues related to Hard Drive failures.

Use standard Warranty Replacement Procedures when replacing the Repeater Card.

SCSIselect is a trademark of Adaptec, Inc.

SAS KEYWORDS:

PSY2	D/T3518	D/T8638	D/T8640
D/T8641	D/T8642	D/T8650	D/T8651
D/T8644	UNCLASSIFIED	HEALTH	D/T3519
P/N40H4869	P/N94G5565	P/N94G7585	P/N93H6409
P/N07L8624			

1.4.1057 POST ERROR CODE 200001 ON THINKPAD 300

Record number: H12339

Device: D/T2615
Model: M
Tip key:
Date created: 093/12/07
Date last altered: A96/11/11

SYMPTOM:

WHEN POWER IS TURNED ON, THE SYSTEM POSTS AN ERROR CODE 200001.
WHEN RUNNING HARDFILE DIAGNOSTICS, FROM THE REFERENCE DISKETTE,
A DIAGNOSTIC ERROR CODE OF 11029 OCCURS.

PROBLEM ISOLATION AIDS:**FIX:**

PERFORM THE FOLLOWING UNTIL THE PROBLEM IS RESOLVED.

- 1.CHECK DRIVE CABLE CONNECTION.
- 2.BOOT THE COMPUTER FROM THE DISKETTE DRIVE, BACK UP THE
HARD DRIVE, THEN PREP AND FORMAT THE HARD DRIVE.
- 3.REPLACE THE HARD DRIVE.
- 4.REPLACE VIDEO/POWER BOARD.

SAS KEYWORDS:

PSY2	ERROR	PSY2ERR	PSY2DIAG
HARDFILE	2615	PSY2FDSK	THINKPAD
UNCLASSIFIED			

POST ERRORS OR NO VIDEO IN IBM PC300XL SYSTEMS

1.4.1058 POST ERRORS OR NO VIDEO IN IBM PC300XL SYSTEMS

Record number: H161965

Device: D/T6588
 Model: M
 Tip key:
 Date created: 097/11/24
 Date last altered: A97/11/24

SYMPTOM:

In some IBM PC300XL and IntelliStation M-Pro systems, Machine Types 6588/6888, users my experience no video or possible beep codes indicating various system level errors during POST.

PROBLEM ISOLATION AIDS:

This tip applies to systems equipped with Pentium II type processors only.

A limited number of these systems may have been shipped with processors not fully seated and latched. Servicercs and Business Partners should visually inspect the Pentium II processor latches to ensure that the processors are fully seated and latched.

FIX:

Systems displaying the symptoms described above should have the processor checked/reseated and latched prior to any parts replacement.

In the unlatched position, the two clips are positioned towards the center of the processor module. In the latched position, the two clips are positioned towards the outside of the processor module.

For additional information, IBM Servicercs and Business Partners can reference "Microprocessor Removal/Installation" on pages 210 - 212 in the October 1997 IBM Personal Computer HMM.

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SAS KEYWORDS:

PSY2	PSY2BRD	PSY2PART	PSVP
PSVPBRD	PSVPPART	KLAMATH	D/T6588
D/T6888	6588	6888	SERVICER ONLY

1.4.1059 POST OR CONFIGURATION ERRORS W/ SERVERGUARD INSTALLED

Record number: H127676

Device: D/T9595
 Model: M
 Tip key:
 Date created: 095/05/22
 Date last altered: A95/06/12

SYMPTOM:

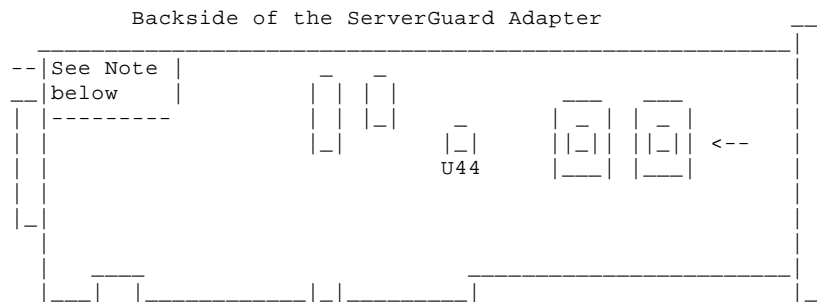
The following symptoms may be caused by the ServerGuard Adapter:

166 errors (configuration) during POST.
 The ServerGuard Adapter not being recognized in Configuration.

This exposure is limited to POST. Once the ServerGuard adapter has successfully completed POST, it will function normally, without further exposure to the problem until the system is once again powered on (POST is run again).

PROBLEM ISOLATION AIDS:

Inspect the ServerGuard card for a component (chip) at location U44. If this module is missing, the adapter is NOT exposed to this problem. The location of U44 is printed on the card, but the lettering is very small. Refer to the following diagram for the location of U44:

**FIX:**

This problem is being corrected in current production. A new version of the ServerGuard adapter is available under FRU P/N06H8091.

Note:

Some field failures have been isolated to the connector for the Power Control Cable being inverted in its socket on the ServerGuard Adapter. This is a keyed rectangular connector, but it may be plugged inverted if forced. This situation may damage either the power control module, the Adapter, or both.

SAS KEYWORDS:

PSY2	RAID	PCSERVER	PC
SERVER	500	9595	9595A
8641	D/T8641	WATCHMAN	WATCH
MAN	PSY2ADPT	GUARD	PSY2ERR
61G3628	PSY2TBD		

POST 8603 ERROR ON MOD A21 WHEN USING MICRO-SOFT MOUSE

1.4.1060 POST 8603 ERROR ON MOD A21 WHEN USING MICRO-SOFT MOUSE

Record number: H032409

Device: D/T8570
Model: M
Tip key:
Date created: 089/02/10
Date last altered: A89/02/10

SYMPTOM: A POST ERROR CODE 8603 AND MICRO-SOFT MOUSE FAILURE.
ON 8570 MODEL A21 SYSTEMS.

PROBLEM ISOLATION AIDS: NONE

FIX: CIRCUMVENTION: INSTRUCT THE CUSTOMER TO INSTALL THE MOUSE
ON THE SYSTEM SERIAL PORT USING THE SERIAL CABLE SUPPLIED IN THE
MICRO-SOFT MOUSE OPTION. THIS TIP WILL BE UPDATED WHEN FINAL
SOLUTION IS AVAILABLE FROM ENGINEERING.

SAS KEYWORDS:

PSY2 PSY2ERR 8570SYSERR 8570SYSBRD
PSY2BRD

1.4.1061 POTENTIAL DATA MODIFICATION W/NETFINITY

Record number: H133305

Device: D/T6875
 Model: M
 Tip key:
 Date created: 096/04/22
 Date last altered: A96/12/03

SYMPTOM:

This is an update to the original RETAIN tip released in April 1996 on this subject.

Through on-going product testing at IBM, a potential data modification problem was identified in Desktop PC systems being tested with OS/2 2.x or 3.x and either Netfinity, SystemView for OS/2, or WARP Server.

The original failure was discovered in a controlled lab environment while stress-testing a system using the software stated above and lab tools.

More recent findings reveal that any brand of Personal Computer or Server can be affected. The exact failure symptoms vary; however the most frequently encountered are: System Hangs and TRAP 000D, usually followed by the file "FOUND.XXX" being created if "CHKDSK" is properly executed during the next system re-boot, (Where XXX could be numbers ranging from 000 - 999).

PROBLEM ISOLATION AIDS:

The results from testing indicated the failure could occur if the following conditions were met.

- Two installed hardfiles performing multiple sustained file writes simultaneously. Disk activity of both drives is at or near 100%.
- And using the following software:
 OS/2 v2.x or v3.x installed.
 Netfinity, SystemView for OS/2, or WARP Server installed.

FIX:

A software fix is available from the IBM PC Company BBS at 919 - 517 - 0001. The file is located in Netfinity section, Directory #40, and is titled: NFDASD.FLT

The fix image may also be downloaded via the Internet at the following URL:

<http://www.pc.ibm.com/files.html>

NFDASD.FLT replaces the file by the same name used in Netfinity, SystemView for OS/2, and WARP Server applications. The new NFDASD.FLT filter corrects flawed logic in the disk I/O chaining routine under high activity to multiple hard drives.

SAS KEYWORDS:

PSVP	PSY2	PSVPPROG	PSY2PROG
PSVPFDSK	PSY2FDSK	IBMPC	PSY2PROG
D/T65XX	D/T68XX	D/T6384	D/T6381
D/T6382	D/T6387	D/T6472	D/T6482
D/T6492	D/T6494	D/T6571	D/T6573
D/T6581	D/T6583	D/T6575	D/T6585
D/T6576	D/T6586	D/T6598	D/T6876
D/T6886	D/T6875	D/T6885	D/T6887
D/T6877	D/T6484	SERVER	OS2
D/T8639	D/T8640	D/T8641	D/T8595
D/T9595	D/T9585	D/T8642	D/T8650

POTENTIAL DISKETTE EJECTION PROBLEMS WITH OLD STYLE BEZEL

1.4.1062 POTENTIAL DISKETTE EJECTION PROBLEMS WITH OLD STYLE BEZEL

Record number: H046870

Device: D/T8530
Model: M
Tip key:
Date created: 088/01/18
Date last altered: A89/02/01

SYMPTOM: IF A NEW DISKETTE DRIVE IS INSTALLED IT IS POSSIBLE TO EXPERIENCE EJECTION PROBLEMS WITH OLD STYLE DISKETTE DRIVE BEZEL ASSEMBLY.

PROBLEM ISOLATION AIDS: OLD STYLE BEZEL HAS A MANUFACTURING P/N90X9242 (NOT A FRU PART NUMBER) STAMPED ON THE BACK OF THE BEZEL.

FIX: LATER LEVEL DRIVE BEZELS HAVE A REDESIGNED OPENING FOR EASIER EJECTION OF THE DISKETTES. IF YOU ARE EXPERIENCING DISKETTE EJECTION PROBLEMS LOOK TO SEE IF YOU HAVE AN OLD STYLE DISKETTE DRIVE BEZEL. IF SO, SUSPECT THE BEZEL AS A POTENTIAL CAUSE. OLD STYLE BEZELS HAVE BEEN PURGED FROM STOCK.

SAS KEYWORDS:
8530SYSDSKT PSY2DSKT PSY2

1.4.1063 POTENTIAL UNDETECTED DATA MODIFICATION ON 9585

Record number: H12989

Device: D/T9585
 Model: M
 Tip key:
 Date created: 093/08/23
 Date last altered: A94/08/15

SYMPTOM:

WHEN AN IBM SERVER 85 IS CONFIGURED WITH A DATA STREAMING ADAPTER, AND THE ADAPTER'S DATA STREAMING MODE IS IN USE, DATA LOSS OR DATA MODIFICATION MAY RESULT WITH NO ERROR MESSAGE TO THE USER.

TESTING HAS SHOWN THIS EXPOSURE EXISTS WHEN A LANSTREAMER MC 32 ADAPTER OR ETHERSTREAMER MC 32 ADAPTER IS INSTALLED IN THE 9585.

PROBLEM ISOLATION AIDS:

- IBM LANSTREAMER MC 32 ADAPTER:
FRU P/N92F8941, OPTION 92F8942, FEATURE CODE 8942 OR 1100
- IBM ETHERSTREAMER MC 32 ADAPTER:
FRU P/N59G9081, OPTION 59G9066, FEATURE CODE 9066 OR 3310

FIX:

A CIRCUMVENTION IS TO TURN OFF THE LAN STREAMER OR ETHERSTREAMER ADAPTER'S DATA STREAMING FUNCTION USING "CHANGE CONFIGURATION." IF A DATA STREAMING ADAPTER IS NOT INSTALLED IN THE SERVER 85, NO ACTION IS REQUIRED.

A PERMANENT SOLUTION IS BEING INVESTIGATED. THIS TIP WILL BE UPDATED AS NEW INFORMATION DEVELOPS.

IBM IS TAKING IMMEDIATE ACTION TO NOTIFY POTENTIALLY AFFECTED CUSTOMERS OF THIS SITUATION.

2/08/94 UPDATE:

Corrected Lan Streamer adapters are now shipping and the rollout of adapters will continue over the next 90 days. There are new part numbers and FRU numbers associated with these adapters. Any adapter with the old FRU number needs to be replaced.

To register the adapters for replacement, call 1-800-426-2269 from 9:00 AM to 8:00 PM EST. These adapters will be replaced free of charge. Following is a list of associated part numbers and FRU numbers.

ADAPTER NAME	OLD PART#	NEW PART#	OLD FRU#	NEW FRU#
LANStreamer 32	92F8942	74G0103	P/N92F8941	P/N74G0098
LANStreamer 16	59G8998	74G0801	P/N58G8999	P/N74G0800
EtherStreamer	59G9066	74G0850	P/N59G9081	P/N74G0865

Additional information for this problem is also contained in RETAIN Record H122376.

SAS KEYWORDS:

PSY2	9585	TOKEN-RING	PS/2
PS2	PSY2COMM	TOKN-RNG	TKN-RNG
ETHERNET			

1.4.1064 POWER MANAGEMENT FAILS WITH IBMIDECD.SYS LOADED

Record number: H132800

Device: D/T6877
 Model: M
 Tip key:
 Date created: 096/02/27
 Date last altered: A96/02/27

SYMPTOM:

IBM PC 700 Series 6877 and 6887 may not go into a low power (Managed) state with the Advanced Power Management (APM) feature enabled AND OS/2 loaded.

PROBLEM ISOLATION AIDS:

6877 and 6887 systems may not exhibit the low power state that was selected in the Advanced Power Management setup. The most obvious way to detect this failure is that power management capable monitors will not go blank.

Following is an example of an APM setup that may fail:

Level-1 5 min - System Power On
 CPU Speed 25%
 Display Standby

Level-2 10 min - System Power Off

After 15 minutes, if the display and system are still active, this tip applies. If the display is blank and the system is off, this does not apply.

FIX:

Update the systems Flash BIOS level to level 31A or higher. Flash updates are available from the IBM PC Company Bulletin Board Service at 1-919-517-0001.

If the failure persists, continue normal problem determination.

SAS KEYWORDS:

PSY2	D/T68XX	6887	6877
IBMPC	PSVP	PSVPPROG	PSY2PROG
D/T6887	PSY2MCD	PSVPMCD	PC730
PC 750	PC750	PC700	PC 730
40084			

POWER SUPPLY "FAILS" AFTER ADDING FIXED DISK OPTIONS

1.4.1065 POWER SUPPLY "FAILS" AFTER ADDING FIXED DISK OPTIONS

Record number: H08816

Device: D/T8550
 Model: M
 Tip key:
 Date created: 092/01/10
 Date last altered: A95/06/23

SYMPTOM:

THE SYSTEM UNIT POWER SUPPLY APPEARS TO FAIL IMMEDIATELY AFTER INSTALLING EITHER, OR BOTH, OF THE FOLLOWING OPTIONAL FEATURES:

1. FIXED DISK OPTIONS.
2. AN OPTIONAL AUXILIARY POWER SUPPLY FEATURE.

THE POWER SUPPLY(S) APPEAR TO HAVE INSUFFICIENT CAPACITY TO SUPPORT THE ADDITIONAL LOAD.

PROBLEM ISOLATION AIDS: NONE

WHEN ONE OR MORE FIXED DISKS ARE REMOVED THE PROBLEM GOES AWAY

THIS MAY BE EITHER A DESKTOP OR FILE SERVER SYSTEM.

NOTE: PS/2 POWER SUPPLIES ARE DESIGNED TO "SELF PROTECT" IF CURRENT SURGES BEYOND CERTAIN LIMITS ARE EXCEEDED. REMOVAL OF THE EXCESSIVE CURRENT LOAD WILL RESTORE NORMAL POWER SUPPLY OPERATION. THE "SELF PROTECTION" ACTION BY THE POWER SUPPLY WILL NOT CAUSE DAMAGE.

SCSI FIXED DISK DEVICES SUPPLIED BY IBM AND OEM VENDORS HAVE A MOTOR START SEQUENCE OPTION. THE OPTION ALLOWS A CHOICE OF EITHER THE MOTOR STARTING IMMEDIATELY WITH SYSTEM POWER-ON, OR TO BE SEQUENCE STARTED ONE AT A TIME BY POST (POWER ON SYSTEM TEST).

ON A FULLY CONFIGURED SYSTEM (MAXIMUM MEMORY, ALL OR NEARLY ALL EXPANSION SLOTS FILLED, ETC.), WITH MULTIPLE LARGE CAPACITY FIXED DISKS WHICH HAVE THE MOTOR SEQUENCE OPTION DISABLED, (ALL FIXED DISK MOTORS START IMMEDIATELY) THE POWER SUPPLY MAY "SELF PROTECT" BY SHUTTING ITSELF OFF. THIS MAY OCCUR BECAUSE THE TOTAL MOTOR START SURGE CURRENT OF MULTIPLE FIXED DISKS STARTING SIMULTANEOUSLY MAY EXCEED THE RESERVE CURRENT CAPACITY OF THE POWER SUPPLY.

SOME PS/2 SYSTEMS MANUFACTURED SINCE AUGUST 1991, MAY HAVE THE MOTOR SEQUENCE OPTION DISABLED (JUMPER INSTALLED) ON THE SCSI FIXED DISK (SCSI ID 6). IF ADDITIONAL OPTIONAL DRIVES ARE INSTALLED, WITH THE MOTOR SEQUENCE OPTION DISABLED, POWER SUPPLY "SELF-PROTECT" EVENTS MAY BE EXPERIENCED.

FIX:

IF THIS SITUATION OCCURS, THE MOTOR START SEQUENCE OPTION SHOULD BE ENABLED ON ALL DRIVES EXCEPT DRIVE "C" (SCSI ID 6) TO ALLOW NORMAL START-UP SEQUENCING BY THE SYSTEM POST. RAID DISK ARRAY SYSTEMS ARE NOT JUMPERED FOR IMMEDIATE POWER-ON.

THE MOTOR SEQUENCE JUMPER IS LOCATED NEAR THE ADDRESS JUMPERS ON MOST FIXED DISKS, AS ILLUSTRATED BELOW.

```

-----
| o o o o o o o | 1,2,3 & 4 = ADDRESS JUMPERS
| o o o o o o o | 5 = KEY
-----          6 = MOTOR START JUMPER
 1 2 3 4 5 6 7 8   7 & UP = POSSIBLE ADDITIONAL JUMPERS
                    MAY VARY BY DRIVE TYPE & VENDOR

```

NOTE:

THE MOTOR SEQUENCE OPTION IS FOUND ON IBM AND OTHER VENDOR DRIVES. THE METHOD OF ENABLING THE OPTION COULD BE EITHER A SWITCH OR A JUMPER. THE PHYSICAL LOCATION COULD VARY WITH THE TYPE AND VENDOR OF THE SPECIFIC DEVICE.

IF REMOVAL OF THE MOTOR SEQUENCE JUMPERS FAILS TO RESOLVE THE PROBLEM, NORMAL POWER SUPPLY PROBLEM ISOLATION PROCEDURES SHOULD BE USED.

NOTES:

WHEN REPLACING A DEFECTIVE FIXED DISK WHICH HAS THE MOTOR START JUMPER INSTALLED, IT MAY BE NECESSARY TO REMOVE THE MOTOR START JUMPER FROM THE DEFECTIVE DRIVE AND INSTALL IT ON THE REPLACEMENT DRIVE, IF NOT ALREADY PRESENT.

THERE ARE TYPES OF FIXED DISK DRIVES WHICH DO NOT HAVE A MOTOR

PSY2 RETAIN TIPS

POWER SUPPLY "FAILS" AFTER ADDING FIXED DISK OPTIONS

START SEQUENCE OPTION. THESE DRIVES WILL START WHEN THE SYSTEM POWER IS TURNED ON.

THE SCSI FIXED DISK DOCUMENTATION PROVIDED WITH THE OPTION SHOULD CONTAIN THE APPROPRIATE REFERENCES TO THE MOTOR SEQUENCE OPTION.

SAS KEYWORDS:

PSY2	PSY2FDSK	PSY2PWR	8550PWR
D/T8525	D/T8530	D/T8535	D/T8540
D/T8543	D/T8551	D/T8554	D/T8550
D/T8555	D/T8556	D/T8557	D/T8573
D/T8560	D/T8565	D/T8570	D/T9576
D/T8580	D/T8590	D/T8595	D/T9585
D/T9577	D/T9556	D/T9557	D/T9595
D/T9577I	D/T9577S	D/T9576I	D/T9577S
D/T9590	D/T9595A	D/T8641	D/T8642
D/T9533	D/T8640	D/T8560	D/T8580
D/T8565	D/T8595	D/T9595	8565
PSVP	VALUEPOINT	VALUE	POINT
D/T8560	D/T8580	D/T8565	D/T8595
D/T9595	8565	SERVER	720
500	D/T8641	D/T8642	95
8641	8642	3516	D/T3516
RAID	06H3237	EXPANSION	P/N06H3237
D/T6384	D/T6381	D/T6382	D/T6387
D/T6492	D/T6484	D/T6494	D/T6472
D/T6482	D/T6583	D/T6581	D/T6573
D/T6571	D/T6585	D/T6575	D/T6886
D/T6885	D/T6876	D/T6875	D/T6576
D/T6586	9595A	8641	8642
PSVP	VALUEPOINT	VALUE	POINT
D/T9595	8565	SERVER	720
500	D/T8641	D/T8642	95
8641	8642	3516	D/T3516
300			

1.4.1066 POWER-ON PASSWORD CAN'T BE RESET

Record number: H006197

Device: D/T8640
 Model: M
 Tip key:
 Date created: 095/07/18
 Date last altered: A95/07/18

SYMPTOM:

8640 system has a power on password set, but the password has been lost by the customer and needs to be reset to allow system use or service access.

There is no reference in the service or user documentation of the Server 300 for setting or removing the power-on password.

PROBLEM ISOLATION AIDS:

The system is a Pentium model.

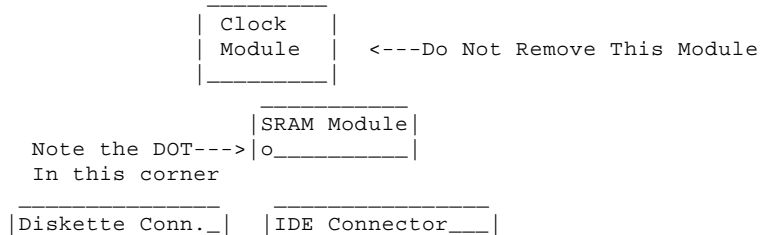
FIX:

There is no jumper on the system board which will clear a Power-on Password.

To remove a lost power-on password, CMOS memory on the system board must be cleared. The following procedure will clear the power-on password, but will also require the system to be totally reconfigured.

FIX:

- a. Remove the SRAM (Static Random Access Memory - CMOS) module from the socket at U50, located just above the IDE and diskette drive connectors (Refer to page 51 of the "User's Handbook" for the system board connector locations.)
- b. Wait for 5 minutes (to allow the module drain or discharge),
- c. Re-install the SRAM module in its socket, being careful not to bend the pins. Also be certain the MODULE IS PROPERLY ORIENTED, otherwise it could be DAMAGED. See diagram below:
- d. Then, run the SETUP again.



Caution: Refer to page 16 of the User's Handbook, shipped with each system, and observe the precautions for handling Static Sensitive devices while handling the system board and other components of the 8640.

SAS KEYWORDS:

PSY2	SERVER	300	PSY2DOC
POWER	ON	PASSWORD	PASS
WORD			

Record number: H161203

Device: D/T6562
 Model: M
 Tip key:
 Date created: 097/09/25
 Date last altered: A97/09/26

SYMPTOM:

After assembly and setup of a new system, the system exhibits no video, or a no-power condition when the Off/On button is pressed.

The same symptoms may also be seen in systems that have been moved, or changed from a horizontal operating position to a vertical operating position.

PROBLEM ISOLATION AIDS:

This tip applies to IBM PC PC300PL, machine type 6562 systems only.

FIX:

Remove and reseat the system planar as described on pages 32-36 of the "Installing Options In Your Personal Computer" guide.

```
*****
* WARNING: DO NOT ATTEMPT THIS PROCEDURE UNTIL THE POWER CORD *
*           HAS BEEN UNPLUGGED FROM THE SYSTEM UNIT!           *
*                                                                 *
* Failure to unplug the power cord from the system unit       *
* BEFORE reseating the planar may result in permanent         *
* damage to the planar.                                        *
*****
```

It is not necessary to completely remove the planar from the system unit. Withdrawal the planar until it has just become disconnected from the riser card. Then, reseat the planar as described in step 5, page 34 of the guide.

If the failure persists, continue normal problem determination procedures to isolate the failing FRU or application.

SAS KEYWORDS:

PSY2	PSY2BRD	PSY2PWR	PSVP
PSVPBRD	PSVPPWR	D/T6562	6562
DEAD SYSTEM	UNCLASSIFIED		

1.4.1068 POWER-ON VIDEO/SYSTEM FAILURE IN IBM PC300PL

Record number: H162483

Device: D/T6562
 Model: M
 Tip key:
 Date created: 098/01/19
 Date last altered: A98/01/22

SYMPTOM:

After assembly and setup of a new system, the system exhibits a no-video, or a no-power condition when the Off/On button is pressed.

PROBLEM ISOLATION AIDS:

This tip applies to IBM PC PC300PL systems, Machine Types 6562 and 6592.

This tip only applies to those systems where the no-video or no-power condition is seen after assembly and setup of a new system.

If the error conditions are seen in machine type 6562, see steps 1 - 3 below. If the no-video error condition is seen in machine type 6592, see steps 2-3 below.

FIX:

1. Remove and re-seat the system board as described on pages 32 - 36 of the "Installing Options In Your Personal Computer" guide.

```
*****
* WARNING: DO NOT ATTEMPT THIS PROCEDURE UNTIL THE POWER CORD *
*           HAS BEEN UNPLUGGED FROM THE SYSTEM UNIT!           *
*                                                                 *
* Failure to unplug the power cord from the system unit       *
* BEFORE reseating the system board may result in permanent  *
* damage to the planar.                                        *
*****
```

It is not necessary to completely remove the system board from the system unit. Withdraw the system board until it has become disconnected from the riser card. Then, re-seat the system board as described in step 5, page 34 of the guide.

After re-seating the system board, power on the system unit to re-test for the error condition.

2. If the no-video failure persists after re-seating the system board, or, if the no-video condition is seen in machine type 6592, re-seat the processor 2 or 3 times and re-test for the error condition.
3. If the no-video or no-power condition persists after completing the above steps, replace the system board with FRU P/N07L6997.

SAS KEYWORDS:

PSY2	PSY2BRD	PSY2PWR	PSVP
PSVPBRD	PSVPPWR	D/T6562	D/T6592
6562	6592	DEAD SYSTEM	UNCLASSIFIED
07L6997			

1.4.1069 POWERPC FAILS TO BOOT FROM 1GB WITH WINDOWSNT

Record number: H13324

Device: D/T6050
 Model: M
 Tip key:
 Date created: 095/06/27
 Date last altered: A95/06/27

SYMPTOM:

IBM Power Personal Computer Series 830 (M/T6050) and Series 850 (M/T6070) may fail to boot from a 1GB IDE hardfile with Microsoft WindowsNT for Workstations version 3.51 installed.

This symptom is most likely to occur after replacing the 1GB hardfile.

PROBLEM ISOLATION AIDS:

This tip applies to Power Personal Computer 6050 or 6070 preinstalled with WindowsNT for Workstations version 3.51 (PowerPC Edition) and an IBM 1GB IDE hardfile, FRU P/N06H6111. WindowsNT for Workstations version 3.51 is only available preinstalled from manufacturing.

After replacing the hardfile, the system will function properly until WindowsNT is reinstalled and run, then the symptom will return.

The power on cycle will occur normally, however, the system will function as though there is no bootable drive.

FIX:

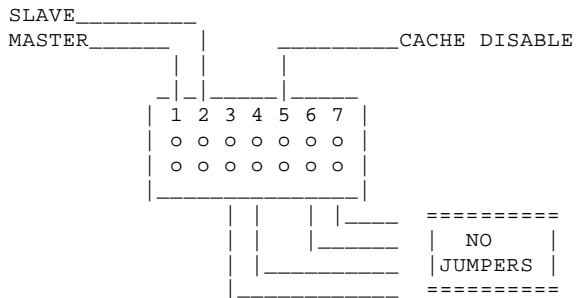
If the system meets the criteria above, replace the drive.

--- IMPORTANT ---

WHEN REPLACING THE 1GB HARDFILE, ENSURE THAT POSITION 5 IS JUMPERED, IN ADDITION TO POSITION 1 OR 2.

HARDFILES IN FRU STOCK DO NOT HAVE A JUMPER LOCATED ON POSITION 5. REMOVE JUMPERS AS REQUIRED FROM THE FAILING DRIVE, TO USE ON THE FRU REPLACEMENT.

Systems currently being manufactured with a 1GB hardfile are being configured to prevent the failure from occurring. The jumper is installed in the #5 position located on the file control card to disable write caching. This change has little or no effect on operating system performance.



Engineering is currently working with Microsoft to provide a permanent resolution. A new release of WindowsNT for Workstations will be released in manufacturing on preloaded systems, and will also be available from Microsoft on or about 7/24/95. The jumper is not required in position 5 if WindowsNT for Workstations is higher than version 3.51.

WindowsNT is a trademark of Microsoft Corp.

SAS KEYWORDS:

D/T6070 PSY2 PSY2FDSK

1.4.1070 POWERPOINT SLIDE SHOW IN BLACK/WHITE UNDER OS/2 WARP

Record number: H134334

Device: D/T6576
Model: M
Tip key:
Date created: 096/10/08
Date last altered: A96/10/08

SYMPTOM:

MS PowerPoint 4.0 may display the slide show feature in black & white instead of color when run in seamless mode in OS/2 WARP 3.0 on an IBM PC 300 Series 6576/6586.

PROBLEM ISOLATION AIDS:

The OS/2 WARP video device driver for "SVGA" at 256 colors is the only resolution affected.

If MS PowerPoint is run in Full Screen mode, the slide show feature runs normally at any resolution.

Systems configured to use the S3 Trio 64/64v+ video drivers are not affected.

FIX:

An update for OS/2 WARP 3.0 has been developed to eliminate this problem. Contact IBM PSP Support at 1-800-237-5511 and request the latest Fix Pak for OS/2 WARP (Fix Pak 18 or higher) or the update that resolves APAR PJ21470.

The latest Fix Pak for OS/2 WARP may also be obtained via the Internet at the following URL: <http://ps.software.ibm.com/>

MS PowerPoint is a trademark of the Microsoft Corporation.

SAS KEYWORDS:

PSVP	PSY2	PSVPPROG	PSY2PROG
PSVPERR	PSY2ERR	PC 330	IBMPC
PC 330	PC 350	D/T6586	PSVPDISP
PSY2DISP			

1.4.1071 PREVENT FALSE DDD ERRORS ON SERVER HARD DRIVES

Record number: H134111

Device: D/T8640
 Model: M
 Tip key:
 Date created: 096/09/18
 Date last altered: A98/01/20

SYMPTOM:

Hard drives in machine types 8640, 8641, 8642, and 9595 appear DDD. The "Replace/Rebuild" function in the RAIDADM utility or on the RAID Option Diskette completes successfully without physically replacing the drive(s). No hardware failure actually occurs; this is a false DDD.

PROBLEM ISOLATION AIDS:

The following hard drives in both RAID and non-RAID Servers will be updated with the firmware update:

1GB FRU p/n06H8560 (Option p/n07H0386)
 2GB FRU p/n06H8561 (Option p/n07H0387)
 4GB FRU p/n06H8562 (Option p/n07H0834)

The simplest way to identify the drives is to remove the system cover and view the front of the drives. These drives have a silver seal around them.

FIX:

The IBM Hard Disk Drive Update Utility Version 4.1 (C43.EXE) updates the firmware on the silver hard drives connected to all IBM SCSI-2 adapters (including RAID adapters) and integrated SCSI-2 controllers supported in PC Servers except the ServeRAID adapter (FRU p/n06H9334). Servers manufactured with the ServeRAID adapter do NOT require the hard drive update. Hard drives with firmware 81K6 will be updated to 6C43. Hard drives with firmware other than 81K6 will NOT be updated. The firmware level of the drives can be viewed on the Drive Information screen on Main Menu of RAID Option Diskette.

Note:

If dissimilar SCSI adapters are installed, or if the Server has an integrated SCSI controller (PCI/MicroChannel Servers) and a SCSI-2 adapter (including RAID), then the utility will only update the hard drives attached to the primary SCSI adapter. Therefore, the utility must be run separately for each type of adapter.

Follow this procedure:

1. Download C43.EXE from the IBM PC Company BBS and expand the image onto a blank diskette using the command: C43.EXE A:
2. Ensure that the customer has a current backup of all data.
3. Shutdown the operating system.
4. Boot the Server using the firmware diskette.
5. An error message may appear as different device drivers load. This is normal. Wait for the update to complete.
6. Power off the Server.
7. If the Server has dissimilar SCSI adapters or an integrated SCSI controller (PCI/MCA systems), remove the primary SCSI adapter or disable the integrated SCSI controller by moving the system board jumper J26 to pins 2-3 (adapter position). Reboot the Server using the firmware diskette and the drives connected to the secondary adapter(s) will be updated.
8. After the update is complete, remove the diskette and power off the server.
9. Replace any adapters removed or return jumper J26 to its original position.

Notes:

1. The following message: "Hard Disk Drive updates complete. Remove the diskette, turn off the system power and back on to activate the update. Thank you." indicates that hard drives connected to the PRIMARY (similar) SCSI adapter(s) were updated. Make certain that hard drives connected to secondary (dissimilar) SCSI adapter(s), if any, are also updated. See step 7 above.
2. If the message "No hard disk drives requiring firmware update are present" appears, then either no hard drives require the update, OR the hard drives are connected to secondary (dissimilar) adapter OR the integrated SCSI controller (PCI/Microchannel Servers) needs to be disabled.

The C43.EXE image is available on the IBM PC Company BBS at

PSY2 RETAIN TIPS

PREVENT FALSE DDD ERRORS ON SERVER HARD DRIVES

919 - 517 - 0001 or via the internet at URL
<http://www.pc.ibm.com/files.html>

SAS KEYWORDS:

PSY2	PSY2FDISK	HARDFILE	QUANTUM
06H8560	06H8561	06H8562	PASS 4
PASS 2	PASS	1.12GB	2.25GB
4.51GB	SERVER	300	320
500	520	720	D/T8641
D/T8642	07H0386	07H0387	07H0834
HEALTH			

1.4.1072 PROBLEMS USING WORDPERFECT ON VALUEPOINT 64XX

Record number: H122781

Device: D/T6484
 Model: M
 Tip key:
 Date created: 094/06/27
 Date last altered: A97/07/13

SYMPTOM:

ValuePoint Performance Series systems running WordPerfect for DOS may display incorrect or extra characters at the left margin while using the up or down keys to scroll through text.

PROBLEM ISOLATION AIDS:

The above problem has been reported on system meeting the following conditions.

- 1 - The failure occurs with WordPerfect for DOS versions 5.x and 6.x. WordPerfect for Windows is NOT affected.
- 2 - The system FLASH level is lower than 56.

FIX:

Install FLASH level 56 or higher.
 ***** IMPORTANT *****
 * The FLASH is customer installable. Customer's should *
 * be advised to contact the IBM PC Company HelpCenter *
 * at 800-772 - 2227 if assistance is required in getting *
 * or installing the FLASH. Customers in Canada should *
 * call IBM's HelpPC at 800-565-3344.

The FLASH code may be downloaded from the IBM PC Company Bulletin Board System by calling 919-517-0001. If the customer cannot receive the code by modem, the HelpCenter will send the customer a copy on diskette.

Customers and dealers in Canada may download the code from their respective IBM regional bulletin board service.

Refer to tip H122782 for the current level 64xx flash level.

SAS KEYWORDS:

PSY2	6484	PSVP	VALUE POINT
PS/VALUEPOINT	PS/VP	PSY2BRD	PSVPBRD
D/T6482	D/T6494	PSY2MCD	PSVPMCD
6482	6494	D/T6472	6472
D/T6492	6492	D/T6482	BIOS
EPROM			

1.4.1073 PROBLEMS USING WORDPERFECT ON VALUEPOINT 63XX

Record number: H124314

Device: D/T6384
 Model: M
 Tip key:
 Date created: 094/06/13
 Date last altered: A97/07/13

SYMPTOM:

ValuePoint 6382/S, 6387/T, and 6384/D (except P60) running WordPerfect for DOS may display incorrect or extra characters at the left margin while using the up or down keys to scroll through text.

PROBLEM ISOLATION AIDS:

The above problem has been reported on system meeting the following conditions.

- 1 - The failure occurs with WordPerfect for DOS versions 5.x and 6.x. WordPerfect for Windows is NOT affected.
- 2 - The system FLASH level is 60A or 61A.

FIX:

Install FLASH level 62A.

***** IMPORTANT *****
 * The FLASH is customer installable. Customer's should *
 * be advised to contact the IBM PC Company HelpCenter *
 * at 800-772 - 2227 if assistance is required in getting *
 * or installing the FLASH. Customers in Canada should *
 * call IBM's HelpPC at 800-565-3344.

The FLASH code may be down-loaded from the IBM PC Company Bulletin Board System by calling 919-517-0001. If the customer cannot receive the code by modem, the HelpCenter will send the customer a copy on diskette.

Customers and dealers in Canada may down-load the code from their respective IBM regional bulletin board service.

SAS KEYWORDS:

PSY2	6384	PSVP	VALUE POINT
PS/VALUEPOINT	PS/VP	PSY2BRD	PSVPBRD
D/T6282	D/T6387	PSY2MCD	PSVPMCD
6382	6387		

1.4.1074 PROCESSOR TYPE IS INCORRECT IN NETFINITY

Record number: H161697

Device: D/T6898
Model: M
Tip key:
Date created: 097/11/04
Date last altered: A97/11/06

SYMPTOM:

After starting Netfinity and selecting "System Information," the processor is identified as a "Pentium Pro with MMX."

PROBLEM ISOLATION AIDS:

This tip applies to the IBM IntelliStation M-Pro, M/T6898, supplied with Netfinity version 5.0 and equipped with one or more Pentium II type processors.

The condition may also be seen on other IBM Commercial Desktop systems supplied with Netfinity version 5.0 and equipped with Pentium II type processors.

FIX:

None for Netfinity version 5.0.

If the user desires to verify the type and speed of processor installed, they can do so via "System Information" in the F1 BIOS setup utility.

Pentium, Pentium Pro, and Pentium II are trademarks of INTEL Corporation.

SAS KEYWORDS:

PSY2	PSY2DIAGS	PSY2OPER	PSVP
PSVPDIAGS	PSVPOPER	D/T6898	M/T6898
6898	76019	UNCLASSIFIED	

1.4.1075 PROGRAM MANAGER MENU BAR TURNS BLACK AFTER OPEN_GL DEMO

Record number: H161499

Device: D/T6898
Model: M
Tip key:
Date created: 097/10/16
Date last altered: A97/10/21

SYMPTOM:

After running the OpenGL Demo under WindowsNT 3.51, the Program Manager menu bar changes to solid black.

PROBLEM ISOLATION AIDS:

This tip applies to the IBM IntelliStation M-Pro, machine type 6898, installed with the Intergraph Intense 3D 2200T video adapter and running WindowsNT 3.51.

FIX:

Download and install the current WindowsNT 3.51 Intergraph Intense 3D video driver diskettes for the IBM IntelliStation M-Pro, machine type 6898.

The current WindowsNT 3.51 video driver may be downloaded via the Internet from the IBM Personal Computer File Library by searching the following Internet URL:

[Www.us.pc.ibm.com/files.html](http://www.us.pc.ibm.com/files.html)

The video drivers may also be obtained from the IBM PC Company BBS system by calling 919-517-0001.

WindowsNT is a trademark of Microsoft Corporation.
Intense 3D is a trademark of Intergraph Corporation.

SAS KEYWORDS:

PSY2	PSY2MISC	PSY2OPER	PSVP
PSVPMISC	PSVPOPER	D/T6898	6898
OPENGL	79644	71157	79664F_1
UNCLASSIFIED			

1.4.1076 PROSET DIAGNOSTICS FAILS LOOPBACK TEST

Record number: H161694

Device: D/T6898
Model: M
Tip key:
Date created: 097/11/04
Date last altered: A97/11/04

SYMPTOM:

When running INTEL PROSet diagnostics under Windows95, the internal loopback test fails.

PROBLEM ISOLATION AIDS:

This tip applies to the IBM IntelliStation M-Pro, M/T6898, preloaded with Windows95 OSR2.1.

FIX:

Disable the Universal Serial Bus (USB) ports in Windows95 before running the INTEL PROSet diagnostics.

Windows and Windows95 are trademarks of Microsoft Corporation. PROSet is a trademark of INTEL Corporation.

SAS KEYWORDS:

PSY2	PSY2ERR	PSY2DIAG	PSY2OPER
PSVP	PSVPERR	PSVPDIAG	PSVPOPER
D/T6898	M/T6898	6898	70734
UNCLASSIFIED			

PROSHARE UNINSTALL DOES NOT REMOVE ALL FILES

1.4.1077 PROSHARE UNINSTALL DOES NOT REMOVE ALL FILES

Record number: H133503

Device: D/T6560
Model: M
Tip key:
Date created: 096/08/02
Date last altered: A96/08/02

SYMPTOM:

IBM PC 340 Series 6560 systems preloaded with Microsoft Windows95 and ProShare may leave some product files on the hardfile after executing the ProShare Uninstall program.

PROBLEM ISOLATION AIDS:

The files left by the ProShare Uninstall program will be left in the C: \PROSHARE directory. The files remaining may be ARPSDATA.DLL and PSAREG.EXE. These files remain due to the ProShare application sharing these files with other applications.

FIX:

To completely remove the ProShare application, perform the Uninstall program and check for the presence of the C: \PROSHARE directory. If the directory and files still remain, delete the files, then remove the directory manually.

Windows95 is a trademark of the Microsoft Corporation.

SAS KEYWORDS:

PSVP	PSY2	PSVPPROG	PSY2PROG
PSVPERR	PSY2ERR	49663	PC 300
IBMPC			

1.4.1078 PS/VALUEPOINT FAILS REMOTE PRINTING W/HP DESKJET

Record number: H124837

Device: D/T6384
Model: M
Tip key:
Date created: 094/08/11
Date last altered: A97/07/13

SYMPTOM:

A PS/ValuePoint 6382/S, 6384/D or 6387/T may fail to print to a Hewlett Packard Deskjet 500 printer being used as a remote printer in a Novell Netware 3.11 network.

PROBLEM ISOLATION AIDS:

The HP Deskjet 500 printer functions properly if attached directly to the PS/ValuePoint.

All ValuePoint diagnostics run without errors.

FIX:

Install version 2.4B8 or higher S3 video drivers.

The S3 Drivers may also be downloaded from the IBM PC Company Bulletin Board System by calling 919-517-0001. The file name for the S3 Driver package is S3DRVRS.DSK.

#####
The S3 Drivers are customer installable. Customers
should be advised to contact the PC Company HelpCenter at
800-772 - 2227 if assistance is required in obtaining the
S3 Video Device Drivers.
#####

SAS KEYWORDS:

VALUE POINT PS/VP PSVP PSY2
6382 6387 6384 D/T6382
D/T6387 VALUE POINT PSY2PRT PSVPPRT
PSVPMCD PSY2MCD

1.4.1079 PS/VALUEPOINT WILL NOT POWER ON OR POWER OFF

Record number: H106259

Device: D/T6384
 Model: M
 Tip key:
 Date created: 093/05/13
 Date last altered: A93/07/12

SYMPTOM:

THE PS/VALUEPOINT 6382/S, 6384/D OR 6384 SYSTEM WILL NOT POWER ON OR POWER OFF USING THE EXTERNAL ON/OFF BUTTON.

PROBLEM ISOLATION AIDS:

REMOVE THE TOP COVER ASSEMBLY AND TEST THE SYSTEM OPERATION BY USING THE POWER SUPPLY SWITCH (LOCATED AT THE LOWER RIGHT CORNER OF THE BASE FRAME).

FIX:

IF THE POWER SUPPLY SWITCH WORKS PROPERLY WITH THE TOP COVER REMOVED, REPLACE THE POWER ON/OFF BUTTON LOCATED IN THE FRONT BEZEL ASSEMBLY, WITH FRU P/N61G3204.

REPLACING THE POWER SUPPLY FOR THIS FAILURE WILL NOT RESOLVE THE PROBLEM.

IF THE PS/VALUEPOINT DOES NOT POWER ON/OFF PROPERLY WHEN THE TOP COVER IS REMOVED, CONTINUE NORMAL PROBLEM DETERMINATION.

SAS KEYWORDS:

PSVP	VALUE POINT	PSVPPART	PSVPPWR
PSY2PWR	PSY2PART	PSY2	52G8752
D/T6382	6382	92F0415	92F0411
61G3204			

1.4.1080 PS/VP POST ERROR 12904, HANG, OR LOOP

Record number: H121682

Device: D/T6384
 Model: M
 Tip key:
 Date created: 093/10/25
 Date last altered: A94/05/20

SYMPTOM:

VALUEPOINT 6382/S, 6384/D AND 6387/T SYSTEMS WITH INSTALLED 128KB OR 256KB (LEVEL 2) CACHE MODULES MAY EXPERIENCE ANY OF THE FOLLOWING CONDITIONS:

- 1 - POST STOPS WITH ERROR CODE 12904.
- 2 - THE SYSTEM WILL HANG DURING POST WITH THE IBM LOGO AND THE AMOUNT OF INSTALLED MEMORY DISPLAYED ON THE SCREEN.
- 3 - THE SYSTEM WILL RUN THE POST TEST MORE THAN ONE TIME.

PROBLEMS MAY BE INTERMITTENT OR SOLID.

IMPROPER INSTALLATION OF THE CACHE MODULE MAY ALSO RESULT IN HIGHLY INTERMITTENT AND DIFFICULT TO DIAGNOSE APPLICATION ERRORS AND SYSTEM HANG CONDITIONS.

PROBLEM ISOLATION AIDS:

REMOVE AND REINSTALL THE EXTERNAL CACHE MODULE INSURING THAT BOTH ENDS OF THE MODULE ARE FULLY SEATED IN THE SIMM CONNECTOR.

ONCE THE SYSTEM DETECTS AN EXTERNAL CACHE ERROR, THE ERROR IS STORED IN CMOS AND WILL OCCUR ON EACH SUBSEQUENT POWER ON. REPLACING THE CACHE MODULE WILL NOT CLEAR THE 12904 ERROR.

FIX:

TO CLEAR A 12904 ERROR AFTER REPLACING OR RESEATING AN EXTERNAL CACHE MODULE, RUN THE SYSTEM UNIT TEST ON THE PS/VALUEPOINT DIAGNOSTICS DISKETTE. DURING THIS TEST YOU WILL RECEIVE THE MESSAGE "DO YOU WANT TO LEAVE THE CACHE DISABLED?" ANSWER "NO" AND CONTINUE THE TEST. THIS WILL CLEAR THE 12904 ERROR.

AFTER THE 12904 ERROR IS CLEARED FROM CMOS, SYSTEM UNIT TESTS SHOULD BE RUN AGAIN TO INSURE THE CACHE IS FUNCTIONING CORRECTLY.

IF THE PROBLEM CONTINUES AND THE CACHE MODULE IS PROPERLY INSTALLED, USE NORMAL PROBLEM DETERMINATION TO ISOLATE THE FAILING FRU.

SAS KEYWORDS:

PSVP	VALUE POINT	PSVPERR	6384
PSY2	PSY2ERR	PSVPBRD	PSY2BRD
6387	6382	6381	D/T6381
D/T6387	D/T6382	PSY2DIAG	PSVPDIAG
PSVPMEM	PSY2MEM		

1.4.1081 PS/2 "E" MACHINE ERROR CODES 301 303 305

Record number: H123703

Device: D/T9533
 Model: M
 Tip key:
 Date created: 094/04/25
 Date last altered: A94/04/26

SYMPTOM:

POST ERROR CODE 301, 303, OR 305 IS DISPLAYED.

PROBLEM ISOLATION AIDS:

POST ERROR CODE 301, 303, OR 305 IS USUALLY CAUSED BY A DEFECTIVE KEYBOARD, KEYBOARD CABLE, OR SYSTEM BOARD.

HOWEVER, THESE ERRORS CAN ALSO BE CAUSED BY A DEFECTIVE 9533 MONITOR CABLE. THIS CABLE INCLUDES A MOUSE AND KEYBOARD CONNECTION. WITH THE 305 ERROR CODE, USUALLY THE FUSIBLE RESISTOR "F1" ON THE 9533 SYSTEM BOARD IS BLOWN AS WELL, REQUIRING REPLACEMENT OF BOTH THE MONITOR CABLE AND THE SYSTEM BOARD.

IF 305 ERROR CODES ARE PRESENT CHECK THE FUSIBLE RESISTOR ON THE SYSTEM BOARD. THE FUSIBLE RESISTOR IS LOCATED ON THE SYSTEM BOARD NEAR THE KEYBOARD PORT. IT IS LOCATED AT POSITION F1.

NOTE:

- DO NOT CONFUSE THE NORMAL 305 POST ERROR CODE WITH ERROR CODE I9990305 (INDICATES NO OPERATING SYSTEM INSTALLED).
- ATTEMPTING TO PLUG THE MOUSE OR KEYBOARD CONNECTORS UPSIDE DOWN, MAY RESULT IN A BLOWN "F1" FUSE. POWER SYSTEM OFF BEFORE ATTEMPTING TO PLUG CONNECTORS.

TO CHECK THE FUSIBLE RESISTOR:

REMOVE ALL CABLES FROM THE BACK OF THE SYSTEM UNIT. USING THE RX1 SCALE, PLACE THE METER LEADS AT EACH END OF THE FUSIBLE RESISTOR. A READING OF 0 OHMS INDICATES THE FUSE IS GOOD. IF A READING OTHER THAN 0 OHMS IS MEASURED, THE FUSE IS BLOWN.

FIX:

IF NORMAL KEYBOARD PROBLEM DETERMINATION DOES NOT RESOLVE THE 3XX ERROR, REPLACE THE MONITOR CABLE (FRU P/N39G5727). IF YOUR METER INDICATES THE FUSIBLE RESISTOR IS OPEN (OTHER THAN 0 OHMS), REPLACE THE SYSTEM BOARD. THE FRU PART NUMBER FOR THE SYSTEM BOARD CAN BE DETERMINED BY THE LABEL ON THE SYSTEM BOARD (EMBOSSSED ON THE FRONT RIGHT CORNER). THE CORRECT FRU PART NUMBER CAN ALSO BE DETERMINED BY LOOKING ON PAGE 13, INDEX 13 OF THE HMM SUPPLEMENT (S71G-6781) FOR THE IBM PERSONAL SYSTEM/2 HMM (S52G-9971).

SAS KEYWORDS:

9533	9507	PSY2	PSY/2
DISPLAY	TFT	PLANAR	D/T9507
PSY2ERR	PSY2BRD	PSY2KBD	

1.4.1083 PS/2 FAXCONCENTRATOR FAILS TO CONNECT TO REMOTE FAX MACHINE

Record number: H034793

Device: D/T8550
 Model: M
 Tip key:
 Date created: 091/05/14
 Date last altered: A94/11/18

SYMPTOM:

DURING FAX MANAGER OPERATION, THE FAXCONCENTRATOR FAILS TO CONNECT TO A REMOTE FAX MACHINE AND ERROR MESSAGE "FMX NON FAX" IS DISPLAYED.

PROBLEM ISOLATION AIDS:

DETERMINE WHICH VERSION OF FAX MANAGER IS INSTALLED:

1. AT THE FAX MANAGER MAIN WINDOW, CLICK ON "HELP" IN THE ACTION BAR, OR SELECT IT AND PRESS ENTER.
2. CLICK ON "ABOUT", OR SELECT IT AND PRESS ENTER ON THE "HELP" PULL-DOWN MENU.
3. ON THE "ABOUT" PANEL, THE VERSION IS SHOWN.

THE PROBLEM EXISTS IN FAX MANAGER VERSION 1.01 AND EARLIER, THE PLANNED FIX WILL BE INCORPORATED IN SUBSEQUENT VERSIONS OF THE FAX MANAGER SOFTWARE. MORE INFORMATION WILL BE PUBLISHED IN THIS TIP WHEN AVAILABLE.

FIX:

THIS SYMPTOM CAN BE CORRECTED BY MODIFYING A FILE IN THE IBM FAX MANAGER SOFTWARE. CUSTOMERS WITH FAX MANAGER VERSION 1.01 OR EARLIER SHOULD BE DIRECTED TO THEIR POINT OF SALE FOR A SOFTWARE SOLUTION (REF. HONE-FLASH 1066).

SAS KEYWORDS:

PSY2	PSY2ADPT	PSY2PROG	PSY2ERR
PSY2MISC	D/T8550	D/T8555	D/T8560
D/T8565	D/T8570	D/T8580	D/T8590
D/T8595			

1.4.1084 PS/2 HANGS OR VIDEO CORRUPTION W/IMAGE-I ADAPTER/A

Record number: H002463

Device: D/T95XX
Model: M
Tip key:
Date created: 096/05/13
Date last altered: A96/05/13

SYMPTOM:

PS/2 MicroChannel systems with an Image-I Adapter/A installed may exhibit intermittent system hangs, video corruption, or other system/application failures.

PROBLEM ISOLATION AIDS:

This tip applies to systems using Image Adapter "Beta 17" video device drivers and OS/2 WARP Fix Pack 17 (or higher).

FIX:

The use of the Image-I Adapter/A in a PS/2 MicroChannel system with OS/2 WARP is an unsupported configuration.

If the Image-I Adapter/A is installed, do not use the combination of "Beta 17" device drivers and OS/2 WARP Fix Pack 17 (or higher).

SAS KEYWORDS:

PSY2	PSY2DISP	PSY2ADPT	PSY2PROG
D/T9577	D/T9556	D/T9557	D/T8590
D/T8595	D/T8556	D/T8557	D/T9595
MICRO CHANNEL	MICRO-CHANNEL		

Record number: H001371

Device: D/T8550
 Model: M
 Tip key:
 Date created: 091/11/05
 Date last altered: A91/11/06

SYMPTOM:

PS/2 SYSTEM INTERMITTENTLY HANGS, THEN BEEPS CONTINUOUSLY.

PROBLEM ISOLATION AIDS:

WHEN THE SYSTEM HANGS IT PRODUCES CONTINUOUSLY REPEATING SHORT BEEPS, SIMILAR TO THE SOUND GENERATED WHEN A KEYBUTTON IS HELD DOWN TOO LONG AT THE DOS PROMPT. THIS PROBLEM TENDS TO OCCUR DURING THE WINTER MONTHS, WHEN HUMIDITY IS LOWEST.

USUALLY THE SYSTEM KEYBOARD AND KEYBOARD CABLE ARE ON A METAL DESK WITH A PAINTED OR FORMICA TOP.

FIX:

SYSTEM HANGS, AND CONTINUOUS BEEPING, CAN BE CAUSED BY SOFTWARE OR HARDWARE FAILURES, BUT IN MANY ISOLATED CASES, STATIC ELECTRICITY HAS CAUSED THIS COMBINATION OF SYMPTOMS. THE STATIC CHARGE APPEARS TO ENTER THE KEYBOARD OR KEYBOARD CABLE, LOCKING THE SYSTEM. IN TEST CASES, WHERE THE KEYBOARD AND CABLE WERE ON A METAL DESK, THE SYMPTOMS WERE REDUCED OR ELIMINATED BY CONNECTING A STATIC GROUND STRAP FROM THE DESK TO THE SYSTEM UNIT CHASSIS. THIS IS EFFECTIVE ONLY WHEN THE SYSTEM IS PLUGGED INTO A PROPERLY GROUNDED POWER RECEPTACLE. IF THE PROBLEM IS DIAGNOSED AS ENVIRONMENTAL, SUCH AS STATIC, IT IS THE CUSTOMER'S RESPONSIBILITY TO TAKE CORRECTIVE ACTION.

SAS KEYWORDS:

PSY2	PSY2ERR	8525SYSERR	8530SYSERR
8550SYSERR	8555SYSERR	8560SYSERR	8565SYSERR
8570SYSERR	8573SYSERR	8580SYSERR	8590SYSERR
8595SYSERR	D/T8525	D/T8530	D/T8555
D/T8560	D/T8565	D/T8570	D/T8573
D/T8580	D/T8590	D/T8595	D/T8535
D/T8540	D/T8557	8557SYSERR	8535SYSERR
8540SYSERR	8530SYSKBD	8535SYSKBD	8540SYSKBD
PSY2KBD	8543SYSKBD	8555SYSKBD	8556SYSKBD
8525SYSKBD	8557SYSKBD	8560SYSKBD	8565SYSKBD
8570SYSKBD	8573SYSKBD	8580SYSKBD	8590SYSKBD
8595SYSKBD			

1.4.1086 PS/2 MODEL 8556 & 8557 DISPLAY a 161 BATTERY ERROR

Record number: H122727

Device: D/T8556
Model: M
Tip key:
Date created: 094/01/20
Date last altered: A94/08/15

SYMPTOM:

The 8556 and 8557 system unit may display a 161 POST error. Battery replacement and subsequent reconfiguration are performed, however an error reoccurs intermittently.

PROBLEM ISOLATION AIDS:

The 8556 or 8557 may be connected to a Network.

FIX:

Before replacing the battery it should be checked with a meter. For correct machine operation the battery voltage should be between 2.5 volts and 3.7 volts.

161 errors may occur if the voltage on the battery drops below 2.5 volts.

To check the battery voltage:

- TURN OFF THE SYSTEM UNIT POWER
- REMOVE THE BATTERY FROM THE BATTERY HOLDER.
- CHECK THE BATTERY FOR A VOLTAGE OF 2.5V - 3.7V DC.

If the battery voltage drops below 2.5 volts, it should be replaced with FRU P/N33F8354.

After replacing the battery, the system unit should be powered on and checked for proper operation.

Problem determination has shown that some workstations connected to Networks may have their time and date or configurations inadvertently changed during Network operations. Upon a subsequent boot or reboot of the workstation the system detects this change, interprets it as if the battery went dead, and the workstation posts the 161 battery error. The customer should be referred to their network administrator or software support center for assistance in a solution to this problem.

An attempt should be made to understand what jobs and application programs are being run, on the network and/or customers work station that may cause this error to appear. This information would be helpful in identifying the cause of the problem. Programs that do network interrogation, backups, etc. may be a cause of this problem.

SAS KEYWORDS:

PSY2 D/T8557 PSY2BRD LAN

1.4.1087 PS/2 OR VALUEPOINT DISKETTE DRIVE FAILURES

Record number: H096993

Device: D/T8550
 Model: M
 Tip key:
 Date created: 093/06/03
 Date last altered: A93/08/02

SYMPTOM:

IN PS/2 OR VALUEPOINT SYSTEMS THE DISKETTE DRIVE FAILS TO READ, WRITE, OR FORMAT. THE FAILURES MAY BE INTERMITTENT OR SOLID. THE DISKETTE DRIVE DIAGNOSTICS RUN WITHOUT ERROR.

PROBLEM ISOLATION AIDS:

THIS TIP APPLIES TO ALL PS/2 SYSTEMS AND ALL VALUEPOINT SYSTEMS WITH EMM386 MEMORY MANAGER INSTALLED.

IF THE SYSTEM CONFIGURATION ALLOWS, REMOVE THE EMM386 DRIVER. IF THE DISKETTE DRIVE FAILURES CONTINUE AFTER REMOVING EMM386, THIS TIP DOES NOT APPLY AND NORMAL PROBLEM DETERMINATION METHODS SHOULD BE FOLLOWED. IF EMM386 CANNOT BE REMOVED FOR TESTING, INSTALL THE DEVICE DRIVER ZERO_DMA.SYS AS DESCRIBED BELOW.

FIX:

IF THE DISKETTE DRIVE FUNCTIONS CORRECTLY AFTER REMOVING EMM386, THE CUSTOMER SHOULD INSTALL DEVICE DRIVER ZERO_DMA.SYS. THE DEVICE DRIVER SHOULD BE COPIED TO THE ROOT DIRECTORY, AND THE FOLLOWING STATEMENT SHOULD BE ADDED AS THE FIRST LINE IN THE CONFIG.SYS FILE:

DEVICE=ZERO_DMA.SYS

THE FILE ZERO_DMA.SYS CAN BE DOWNLOADED ON VM FROM PCTOOLS. IF DISKETTE DRIVE FAILURES CONTINUE, RETURN TO NORMAL PROBLEM DETERMINATION.

NOTE: *****

-THIS PROBLEM WAS CORRECTED IN DOS RELEASE 6.0

-OTHER MEMORY MANAGER SOFTWARE WHICH OPERATES SIMILAR TO EMM386 MAY ALSO REQUIRE THE ZERO_DMA.SYS DRIVER.

SAS KEYWORDS:

PSY2PROG	PSY2DSKT	PSVPDSKT	PSVPADPT
PSY2ADPT	D/T6387	D/T6384	PSVPERR
PSY2ERR	VALUE POINT	PSVP	PSY2
ZERO	DMA	PS/2	PS2
D/T8540	D/T8543	D/T8525	D/T9595
D/T8554	D/T8555	D/T8550	D/T8530
D/T8560	D/T8565	D/T8556	D/T8551
D/T8580	D/T8590	D/T8570	D/T8573
D/T9552	D/T9556	D/T8595	D/T8600
D/T9577	D/T9585	D/T9557	D/T9576
D/T8535	D/T9590	D/T2521	D/T2614
D/T2615	D/T6152		

1.4.1088 PS/2 SERVER 95A (9595A) HANGS DURING WARM BOOT

Record number: H122213

Device: D/T9595
Model: M
Tip key:
Date created: 093/12/14
Date last altered: A94/08/15

SYMPTOM:

Hangs may be experienced during re-boot (warm boot) of the PS/2 Server 95A (9595A) running DOS 6.0 or 6.1.

PROBLEM ISOLATION AIDS:

Both of the following statements must exist for this tip to apply.

1. DOS 6.0 or DOS 6.1 is the operating system being used.
2. EMM386.EXE is in the CONFIG.SYS file.

FIX:

Remove the "EMM386.EXE" statement from the CONFIG.SYS file. using the following procedure:

1. Reboot the system.
2. After POST completes (a single "beep"), when DOS starts loading, press F5 quickly. This bypasses the CONFIG.SYS and AUTOEXEC.BAT files.
3. Using a file editor, such as Edlin, edit the CONFIG.SYS file and remove or "rem out" the EMM386.SYS line.
4. Save the changes and reboot the system.

Future releases of DOS will make loading of EMM386 optional.

SAS KEYWORDS:

PSY2	PSY2PROG	D/T9595A	9595A
PSY2OPER	RAID	ARRAY	

1.4.1089 PS/2 SYSTEM HANGS WHEN EXITING WRITING ASSISTANT

Record number: H124445

Device: D/T95XX
 Model: M
 Tip key:
 Date created: 094/06/24
 Date last altered: A94/08/15

SYMPTOM:

The system hangs when exiting the IBM Writing Assistant 2 application under DOS.

PROBLEM ISOLATION AIDS:

- Writing Assistant 2 was exited by pressing ESC (Escape.)
- The following message was observed:

"YOU ARE ABOUT TO EXIT QUICK MENU SETUP - EXIT (Y/N)?"
- If "Y" is pressed, the system hangs while displaying a "ONE MOMENT PLEASE" message.
- An XGA-2 adapter is installed.

FIX:

The hang condition exists because the MENU.EXE file in Writing Assistant does not reserve enough stack space to accomodate both the DOS DISPLAY.SYS driver and the XGA-2 driver.

As a workaround for this problem the user should remove or comment out (REM out) the DOS DISPLAY.SYS driver in CONFIG.SYS.

This problem will not normally occur since this driver is not loaded during the default configuration.

SAS KEYWORDS:

PSY2	XGA	PSY2PROG	D/T8573
D/T8560	D/T8565	D/T8570	D/T9576
D/T8580	D/T8590	D/T8595	D/T9585
D/T9577	D/T9556	D/T9557	D/T9595
D/T9590	D/T9595A	D/T9533	

PS/2 WORKSTATION FAILS TO RPL ON ETHERNET NETWORK

1.4.1090 PS/2 WORKSTATION FAILS TO RPL ON ETHERNET NETWORK

Record number: H081622

Device: D/T8550
 Model: M
 Tip key:
 Date created: 091/04/24
 Date last altered: A91/07/03

SYMPTOM:

ETHERNET REMOTE PROGRAM LOAD (RPL) FAILS IF THERE IS MORE THAN ONE NOVELL NETWARE (286 OR 386) SERVER ON THE NETWORK.

PROBLEM ISOLATION AIDS:

THE IBM "PS/2 ADAPTER/A FOR ETHERNET NETWORKS" OPTION DISKETTE CONTAINS TWO FILES (BOOTSTRAP PROGRAMS) WHICH SUPPORT RPL FROM SERVERS. THESE TWO FILES HAVE BEEN UPDATED.

- ETHER.RPL BOOTSTRAP PROGRAM FOR NETWARE 286 V2.15C FOUND IN THE SYS: LOGIN DIRECTORY ON THE SERVER.

ETHER.RPL	SIZE	TIME	DATE
-----	-----	-----	-----
OLD	10,673	12: 00	10-3-90
NEW	11,625	12: 00	4-3-91 OR LATER

- ETHERRPL.NLM BOOTSTRAP PROGRAM FOR NETWARE 386 V3.1.

ETHERRPL.NLM	SIZE	TIME	DATE
-----	-----	-----	-----
OLD	14,346	12: 00	10-3-90
NEW	15,298	12: 00	4-3-91 OR LATER

FIX:

THE BOOTSTRAP PROGRAM FILES MUST BE UPDATED IN ALL NETWORK SERVERS THAT SUPPORT RPL TO THE IBM ETHERNET WORKSTATIONS. FUTURE RELEASES OF THE IBM OPTION DISKETTE WILL CONTAIN THE UPDATED FILES. UNTIL THEN, THESE FILES ARE AVAILABLE FROM THE CUSTOMER'S POINT OF SALE OR MAY BE DOWN LOADED BY A MARKETING/SE FROM THE NATIONAL BULLETIN BOARD IN ATLANTA WHEN APPLICABLE.

SAS KEYWORDS:

PSY2	PSY2ADPT	PSY2COMM	PSY2PROG
8550SYSADPT	8550SYSCOMM	8550SYSPROG	8555SYSADPT
8555SYSCOMM	8555SYSPROG	8560SYSADPT	8560SYSCOMM
8560SYSPROG	8565SYSADPT	8565SYSCOMM	8565SYSPROG
8570SYSADPT	8570SYSCOMM	8570SYSPROG	8580SYSADPT
8580SYSCOMM	8580SYSPROG	8590SYSADPT	8590SYSCOMM
8590SYSPROG	D/T8555	D/T8560	D/T8565
D/T8570	D/T8580	D/T8590	D/T8595

1.4.1091 PS/2 8535/40 EXHIBIT SYSTEM HANG WITH IRMA 3T CARD INSTALLED

Record number: H007232

Device: D/T8535
 Model: M
 Tip key: 004
 Date created: 092/05/14
 Date last altered: A92/05/21

SYMPTOM:

PS/2 8535 AND 8540 SYSTEMS EXHIBIT SYSTEM HANG WITH AN IRMA 3/3T 3270 EMULATION CARD INSTALLED WHEN USING E78+ EMULATION SOFTWARE VERSION 1.41 AND BELOW.

FIX:

UPGRADE E78+ EMULATION SOFTWARE TO VERSION 1.42 OR ABOVE.

CUSTOMERS NEEDING ASSISTANCE SHOULD BE DIRECTED TO THE CARD MANUFACTURER (DIGITAL COMMUNICATIONS ASSOCIATES-DCA) AT THE FOLLOWING TELEPHONE NUMBER:

DCA HOTLINE - 1-404/740-0300

CURRENT IRMA* 3/3T CARDS ARE SHIPPING WITH E78+ VERSION 1.42 OR ABOVE.

IF THE SYSTEM HANG SYMPTOM PERSISTS AFTER UPGRADING THE E78+ SOFTWARE, NORMAL PROBLEM DETERMINATION METHODS SHOULD BE USED TO ISOLATE THE PROBLEM TO THE DEFECTIVE FRU.

* REGISTERED TRADEMARK OF DCA.

SAS KEYWORDS:

PSY2	D/T8540	8540SYSADPT	8535SYSADPT
PSY2ADPT	PSY2COMM	PSY2ERR	8535SYSCOMM
8540SYSCOMM	8535SYSERR	8540SYSERR	

1.4.1092 PS/2 8555 486SLC UPGRADE PERFORMANCE FAILURE

Record number: H127022

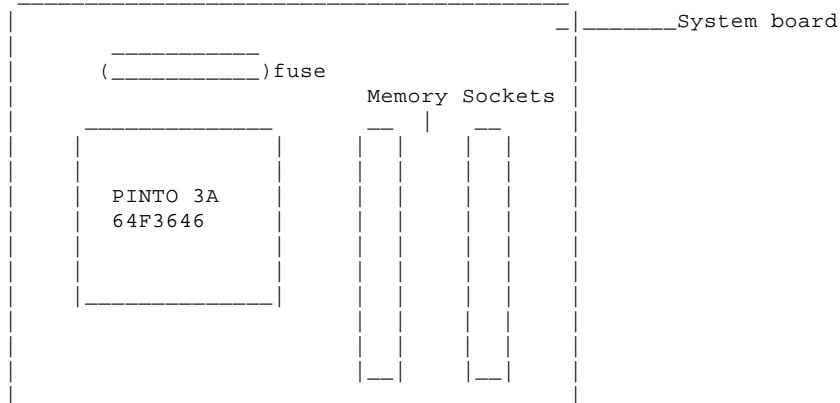
Device: D/T8550
 Model: M
 Tip key:
 Date created: 095/04/03
 Date last altered: A95/04/03

SYMPTOM:

IBM PS/2 8555SX systems may fail to function at an increased processor speed after installing the 486SLC processor upgrade.

PROBLEM ISOLATION AIDS:

A limited number of PS/2 8555SX system boards contain a module located to the left of the memory simm sockets labelled "Pinto 3A #64F3646." This chip may conflict with the bus timings of the 486SLC Processor upgrade which results in a reduction in processor performance. The "Pinto 3A" chip only affects IBM option P/N13H6694, FRU P/N13H6697, card assembly P/N78G2521.



The diskette utility provided with the 486SLC Processor Upgrade contains a benchmark test called PUZZLE.EXE. When this test is performed on a system with the processor upgrade, the results are consistent with the test results of the original system board with the Intel 386SX processor installed (45-125 seconds).

FIX:

The affected processor cards have been purged from manufacturing and Mechanicsburg inventories.

Customers or servicers that are experiencing this failure should contact the IBM PC Company HelpCenter for additional assistance in determining if the system is affected prior to replacing the processor card/board.

SAS KEYWORDS:

PSY2	D/T8555	8555	PSY2BRD
PSY2PART	PSY2PROG	PSY2OPER	PSY2ADPT
486 SLC	486SLC2	486 SLC2	

1.4.1093 PS2 CHANNEL TIMEOUTS, FIXED DISK AND MEMORY PARITY ERRORS

Record number: H02284

Device: D/T8550
 Model: M
 Tip key:
 Date created: 091/10/29
 Date last altered: A94/03/14

SYMPTOM: PS2 systems that contain certain levels of Everex Tape

Adapters may experience:

1. Channel checks
2. Fixed disk errors
3. OS2 trap 0002 w/ errcd=0003
4. AIX or Zenix/Unix non maskable interrupts (NMI)
5. DOS 110 parity errors

PROBLEM ISOLATION AIDS:

Everex Tape Adapters without "REV "x" level written on the card have this problem. The x in the REV level equals any character.

FIX:

If the customer needs a Everx Tape Adapter they have to call Everx Support at 510-498-1115. It is important to ask for a fully upgraded adapter with all ECO's (Engineering Change Orders) installed.

SAS KEYWORDS:

PSY2	PSY2ADPT	PSY2OEM	PSY2ERR
D/T8550	D/T8555	D/T8557	D/T8560
D/T8570	D/T8573	D/T8565	D/T8580
D/T8590	D/T8595	D/T8565	D/T9576
D/T8580	D/T8590	D/T8595	D/T9585
D/T9577	D/T9556	D/T9557	D/T9595

1.4.1094 P50 MONITOR IMAGE IS SHIFTED TO THE RIGHT

Record number: H131365

Device: D/T6553
Model: M
Tip key:
Date created: O95/10/20
Date last altered: A95/10/20

SYMPTOM:

A limited number of the P50 monitor may appear to be defective out of the box due to the screen image being shifted horizontally 3 to 5 millimeters (1/8 to 1/4 inch) to the right.

PROBLEM ISOLATION AIDS:

The shift would be apparent on all pre-set modes.

FIX:

No monitor should be replaced for this situation. The customer can correct this by moving the image with the front panel user controls. (The re-adjusted image position will be retained in the monitor storage). No other monitor function is affected.

SAS KEYWORDS:

PSY2 PSY2DISP 6553 FOS

1.4.1095 P60/D HANGS RUNNING DOS APPLICATIONS UNDER OS/2

Record number: H122589

Device: D/T6384
 Model: M
 Tip key:
 Date created: 094/02/04
 Date last altered: A94/02/04

SYMPTOM:

PS/VALUEPOINT 6384 P60/D MAY HANG OR EXPERIENCE APPLICATION FAILURES WHILE EXECUTING IN A DOS WINDOW OR DOS FULL SCREEN UNDER OS/2 2.1.

PROBLEM ISOLATION AIDS:

ONLY THE RETAIL VERSION (SHRINK WRAPPED COPY) OF OS/2 2.1 WILL EXHIBIT THIS FAILURE. SYSTEMS PRE-INSTALLED WITH OS/2 2.1 (FACTORY INSTALLED BY IBM) WILL NOT EXHIBIT THIS FAILURE.

FIX:

A FIX IS AVAILABLE FROM OS/2 SUPPORT TO RESOLVE THIS FAILURE. CONTACT OS/2 SUPPORT AT 1-800-992-4777 AND REFERENCE APAR PJ09814.

SAS KEYWORDS:

PSVP	PSY2	PSVPMISC	PSY2MISC
PSVPPROG	PSY2PROG	PSVPOPER	PSY2OPER
6384	PENTIUM	P60D	189
199	VALUE POINT	PS VP	

1.4.1096 QAPLUS/PRO V5.44 FAILS TO RUN MULTIPLE LAPS

Record number: H134035

Device: D/T6589
Model: M
Tip key:
Date created: 096/09/18
Date last altered: A96/09/18

SYMPTOM:

QAPlus/Pro v5.44 (IBM PC 300/700 Advanced Diagnostics) may not perform multiple test laps on PC 365 Series 6589 systems.

PROBLEM ISOLATION AIDS:

Perform the following steps to recreate the problem:

- 1) From the QAPlus/Pro main menu, select Diagnostics, Options and Test Preferences.
- 2) Mark "Halt on Error" and unmark "Pause between Group."
- 3) Set Lap count to a number greater than 1.
- 4) Press ESC to return to the main Diagnostic menu.
- 5) At the Diagnostic menu, select "Module Test."
- 6) Select "Run all selected."

Follow the instructions on the screen and wait for the completion of the first lap. QAPlus/Pro does not start the next lap.

FIX:

An updated version of QAPlus/Pro (v5.45 or higher) will be made available from the IBM PC Company Bulletin Board System during September 1996 to resolve this failure. The IBM PC Company BBS may be accessed by calling 919-517-0001 or from the IBM PC Company File Library via the Internet at the following URL:
"http: //www.pc.ibm.com/files.html"

SAS KEYWORDS:

PSY2	PSVP	IBMPC	PSVPPROG
PSY2PROG	PSVPDIAG	PSY2DIAG	PSY2ERR
PSVPERR	51397	PC365	

1.4.1097 QAPLUS/WIN-WIN FAILS MOUSE TEST ON PC 340 6560

Record number: H133502

Device: D/T6560
Model: M
Tip key:
Date created: 096/08/02
Date last altered: A96/08/02

SYMPTOM:

IBM PC 340 Series 6560 systems preloaded with Microsoft Windows95 may fail the Mouse Test in QAPLUS/WIN-WIN if the test is run in full screen mode.

PROBLEM ISOLATION AIDS:

When performing the Mouse Test in QAPLUS/WIN-WIN in full screen mode, the mouse must be moved down rapidly to show the bottom screen coordinates. Normal movement of the mouse may fail to show the bottom screen coordinates.

This failure does not occur if QAPLUS/WIN-WIN is run in a window rather than full screen mode.

FIX:

An updated version of QAPLUS/WIN-WIN will be made available to eliminate this problem. The new version will be available from the IBM PC Company BBS at 919-517-0001 during 9/96.

Windows95 is a trademark of the Microsoft Corporation.

SAS KEYWORDS:

PSVP	PSY2	PSVPPROG	PSY2PROG
PSVPDIAG	PSY2DIAG	50738	PSY2ERR
PSVPERR	PC 300	IBMPC	

1.4.1098 QAPLUS/WIN-WIN FAILS TO PRINT IN WINDOWS95

Record number: H01745

Device: D/T6577
 Model: M
 Tip key:
 Date created: 096/06/19
 Date last altered: A96/06/19

SYMPTOM:

IBM PC 300 Series 6577 and 6587 preloaded with Windows95 may fail to print the Printer Test Page in QAPLUS/WIN-WIN.

PROBLEM ISOLATION AIDS:

When attempting to print the Printer Test Page in QAPLUS/WIN-WIN to verify printer connection and output, the page will not print.

The system does print to the printer outside of the QAPLUS/WIN-WIN application.

The Printer Test Page prints normally with QAPLUS/WIN-WIN in the Windows 3.11 environment.

FIX:

The user may use any print operation under operating system control or the printer's self-test feature to verify proper operation of the printer. QAPLUS/PRO (IBM PC 300/700 Diagnostic diskette) should be used to verify proper operation of the parallel port.

QAPLUS/WIN-WIN, included in the systems preloaded software, is being updated to eliminate this failure. An updated version of the application should be available from the IBM PC Company BBS on 6/1/96 in the PC 300/700 Files section (#21).

QAPLUS/WIN-WIN & QAPLUS/PRO are trademarks of Diagsoft, Inc. Windows & Windows95 are trademarks of the Microsoft Corporation.

SAS KEYWORDS:

PSY2	D/T65XX	6577	6587
IBMPC	PSVP	PSVPPRT	PSY2PRT
D/T6587	PC 350	PC350	PC300
PC 330	PC330	43176	PSVPDIAG
PSY2DIAG	PSVPPROG	PSY2PROG	

1.4.1099 QAPLUS/WIN-WIN INCORRECTLY DISPLAYS 109 KEY KEYBOARD

Record number: H133510

Device: D/T6560
 Model: M
 Tip key:
 Date created: 096/08/02
 Date last altered: A96/08/02

SYMPTOM:

IBM PC 340 Series 6560 systems running QAPlus/WIN-WIN may display an incorrect keyboard layout for the 109 key DBCS (Double Byte Character Set) Japanese keyboard.

QAPlus/WIN-WIN may display the following descriptions for certain keys:

Expected	Received
-----	-----
HF	"
Yen symbol	(blank)
@	
	\
\	(blank)
:	'(apostrophe)
	=
0	Insert (Numeric Keypad)
.	Delete (Numeric Keypad)

PROBLEM ISOLATION AIDS:

The keys are displayed correctly in the QAPlus/WIN-WIN 106 key Keyboard test.

The level of QAPlus/WIN-WIN is version 1.15 or earlier.

FIX:

Do not replace hardware.

QAPlus/WIN-WIN is being updated to eliminate this failure. Version 1.16 or higher will be available from the IBM PC Company File Library, accessible via the Internet during August 1996. Search the following Internet URL for the update:
 "http://www.pc.ibm.com/files.html"

Use QAPlus/Pro standalone diagnostics to diagnose suspected a keyboard failure. The QAPlus/Pro (IBM Advanced Diagnostics) diskette can be created using the preloaded Diskette Factory.

Performing tests with QAPlus/Pro is recommended prior to any parts replacement in any PC 300 or 700 product.

Windows95 is a trademark of the Microsoft Corporation.

SAS KEYWORDS:

PSVP	PSY2	PSVPERR	PSY2ERR
PSVPDIAG	PSY2DIAG	47231	PSVPKBD
PSY2KBD	IBMPC		

1.4.1100 QAPLUS/WIN-WIN QUICK TEST LOOPS ON PC 700

Record number: H132805

Device: D/T6877
 Model: M
 Tip key:
 Date created: 096/02/27
 Date last altered: A96/02/27

SYMPTOM:

IBM PC 700 Series 6877 and 6887 preloaded with Windows95 may run the QAPlus/WIN-WIN "Quick Test" in a continuous loop.

PROBLEM ISOLATION AIDS:

While running the QAPlus/WIN-WIN "Quick Test" from Windows95, the system may begin to run the test in a continuous loop requiring the system to be powered off/on to clear the problem.

FIX:

- 1) Start QAPlus/WIN-WIN from the Windows95 Desktop.
 - 2) Do not run the Quick Test.
 - 3) Select "Tools" from the menu bar and then select "Test Preferences."
 - 4) In the "Number of Passes" area, change INFINITY to ONE.
 - 5) Return to the Menu and select the "Quick Test."
- The Quick Test should run only one time per selection.

This problem will be resolved in the next release of QAPlus/WIN-WIN. The new version will be available from the IBM Bulletin Board system in March 1996.

QAPlus/WIN-WIN is a trademark of DiagSoft, Inc.

SAS KEYWORDS:

PSY2	D/T68XX	6887	6877
IBMPC	PSVP	PSVPDIAG	PSY2DIAG
D/T6887	PSY2PROG	PSVPPROG	40704
PC750	PC700	PC 730	PC 750
PC730			

1.4.1101 QAPLUS/2 FAILS TO PRINT THE TEST PAGE

Record number: H01567

Device: D/T6577
 Model: M
 Tip key:
 Date created: 096/06/19
 Date last altered: A96/06/19

SYMPTOM:

IBM PC 300 Series 6577 and 6587 preloaded with OS/2 WARP Connect may fail to print the Printer Test Page from the Printer Test submenu in QAPLUS/2.

PROBLEM ISOLATION AIDS:

When attempting to print the Printer Test Page in QAPLUS/2 to verify printer connection and output, the page will not print.

The system does print to the printer outside of the QAPLUS/2 application.

FIX:

The user may use any print operation under operating system control or the printer's self-test feature to verify proper operation of the printer. QAPLUS/PRO (IBM PC 300/700 Diagnostic diskette) should be used to verify proper operation of the parallel port.

QAPLUS/2, included in the systems preloaded software, is being updated to eliminate this failure. An updated version of the application should be available from the IBM PC Company BBS on 6/1/96 in the PC 300/700 Files section (#21).

QAPLUS/2 & QAPLUS/PRO are trademarks of Diagsoft, Inc.
 Windows & Windows95 are trademarks of the Microsoft Corporation.

SAS KEYWORDS:

PSY2	D/T65XX	6577	6587
IBMPC	PSVP	PSVPPRT	PSY2PRT
D/T6587	PC 350	PC350	PC300
PC 330	PC330	44255	PSVPDIAG
PSY2DIAG	PSVPPROG	PSY2PROG	

1.4.1102 RAID DISK DRIVES SHOW DDD (DEFUNCT)

Record number: H124967

Device: D/T9595
Model: M
Tip key:
Date created: 094/08/19
Date last altered: A94/08/23

SYMPTOM:

A RAID Array disk drive shows a status of "DDD" which means defunct as viewed using the RAID Controller Support Diskette. This means either an on-line or "hot-spare" drive does not respond. The drive will not return to a ready status after repeated attempts to restart (or enable) it.

PROBLEM ISOLATION AIDS:

Replacing or swapping the drive does not resolve the problem. The system is a 9595A model 3NG, 3NT, 3PG, 3PT, 3QG, or 3QT. The system may have been physically moved from one location to another just prior to the DDD condition occurring.

FIX:

The DDD condition may be caused by one or more of the following:

- A. The fixed disks power and signal connectors not being fully seated.
- b. The upper bays fixed disk power cable (4 plug cable) may be defective.
- c. Physical strain may be placed on power cables when the power supply is lowered for service.
- d. Installation of the 4mm tape drive option may cause SCSI cable interference or damage.

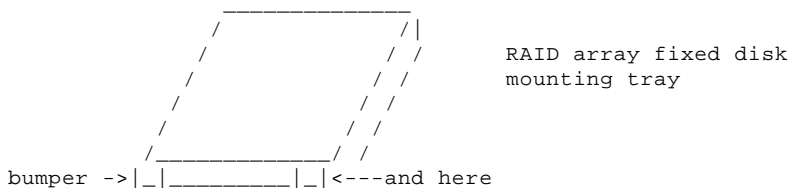
The following items should performed or checked:

1. In order to provide physical restraint to prevent the fixed disks from being accidentally unplugged from the signal and power connectors, black foam rubber bumpers have been added to the fixed disk drive mounting trays on current production systems.

If there are no black foam rubber bumpers present on the front of the fixed disk drive mounting trays, the servicer should order FRU P/N06H3287 which will provide 20 self adhesive bumpers.

Note: The above referenced FRU part part number will not be available in the Mechanicsburg part system until approximately October, 1994.

Install the rubber bumpers on the front of the fixed disk mounting tray as shown below. Each tray requires one bumper to be placed at each front corner, over the spot welding mark.



2. Inspect the fixed disk power cable (4 plug cable) of the upper fixed disk drive bays for a 4 digit date code. Replace any found to have a date code earlier than 31/94. The first two numbers are the week and the second two numbers the year of manufacture. Order FRU P/N61G3522. All current inventory is dated thirty-first week of ninety-four (31/94) or later.
3. Prior to lowering the system unit power supply to its service position, all DASD cables should be removed from the power supply connectors. This is to prevent unnecessary strain on the cable connectors. This should be standard practice on the 9595A RAID Array systems, as referenced in the documentation which is shipped with each system.
4. In order to prevent physical interference and possible damage to the RAID Array SCSI signal cables, one of the following actions is required if a 4mm tape drive option is installed and a full length micro channel adapter card is located in slot 4.
 - A. The original full size card handle, must be replaced with

PSY2 RETAIN TIPS

RAID DISK DRIVES SHOW DDD (DEFUNCT)

the modified blue plastic handle (P/N8191389), which is only supplied with the 4mm Tape Option Kit for Server 95 Array, feature code 7499, option number 74G8632. -or-

- B. The original blue plastic handle attached to full length adapters must be carefully removed from that adapter.

Notes:

P/N90X6627 is molded into the underside of the full size blue plastic handle). P/N8191389 is not a FRU and is only available in the 4mm tape option kit.

SAS KEYWORDS:

PSY2	PSY2ERR	SCSI	ARRAY
9595A	D/T9595A	SERVER	95
PSY2FDSK	06H3287		

1.4.1103 RAID FIXED DISKS CONFIGURATION & READY PROBLEMS

Record number: H125561

Device: D/T9595
 Model: M
 Tip key:
 Date created: 094/11/02
 Date last altered: A94/12/02

SYMPTOM:

Fixed disk configuration failures, or problems with the disks coming "Ready" may be experienced on 9595A RAID Array systems. Some drives may also show a status of DDD (Disk Drive Defunct).

PROBLEM ISOLATION AIDS:

A limited number of RAID Fast/Wide fixed disk tray assemblies, FRU P/N71G0212, were manufactured with the ribbon cable cut too long at the 68 position connector. The extra length of the cable may allow the exposed wires, on the cut end of the cable, to contact metal parts of the bay causing it to "short out" when the drive is inserted into the system.

Inspect the fixed disk tray assemblies for this problem. Refer to FRU P/N71G4982, Index 9 on page 280 of the HMS (Hardware Maintenance & Service Manual, S52G-9971-02, to visually identify the tray. The FRU P/N listed on page 281 is for a tray for the 540mb or 1GB Fast drives. The Fast/Wide drives require a wider signal cable, and FRU P/N71G0212 is available. to meet that need.

Note: Refer to page 282 under the heading DASD for the correct FRU P/N for the Blank (plastic) Tray.

FIX:

Replace any tray assemblies having ribbon cables that are not cut flush with the connector, or appear long enough to be a potential "shorting" problem. The ribbon cable should be cut flush with the connector.

Action has been taken to correct the problem. Current FRU parts have cables of the correct length.
 Order FRU P/N71G0212 using normal parts ordering procedures.

SAS KEYWORDS:

PSY2	RAID	D/T9595A	9595A
PSY2FDSK	SCSI	DEFUNCT	CONFIG
SERVER95	SERVER	95	PSY2FDSK

RAID SERVER DOES NOT BOOT TO CORRECT OPERATING SYSTEM

1.4.1104 RAID SERVER DOES NOT BOOT TO CORRECT OPERATING SYSTEM

Record number: H132270

Device: D/T8641
 Model: M
 Tip key:
 Date created: 096/01/19
 Date last altered: A98/01/20

SYMPTOM:

After flashing to BIOS 16T3B/16T3C or later, from BIOS 09N/09F, the following symptoms may be observed:

- Error 1300, No Operating System found;
- OR-
- The system boots to the wrong operating system.

PROBLEM ISOLATION AIDS:

The system is an IBM PC Server 320/520 (PCI/EISA) with multiple IBM PCI RAID Adapters: FRU p/n06H5078 (Option p/n07H0508) and/or FRU p/n06H9334 (Option p/n 70G8489). The BIOS has been upgraded from 09N/09F to 16T3B/16T3C.

FIX:

This is not a hardware failure. After the BIOS upgrade, swap the RAID adapter in the PCI slot nearest the memory sockets(J23) with the RAID adapter in the middle PCI slot (J22).

Servers with BIOS 16T3B and 16T3C will now correctly boot from the RAID adapter in the PCI slot (J23) if multiple RAID adapters are installed.

Servers with BIOS 09F and 09N incorrectly booted from the RAID adapter in the middle PCI slot (J22) if multiple RAID adapters were installed.

System Board Slot Location	Server 320 PCI Slot #	Server 520 PCI Slot #
J21	0	1
J22	1	2
J23	2	3

SAS KEYWORDS:

PSY2	SERVER	520	8641
RAID	PSY2FDSK	PSY2OPER	UNCLASSIFIED
SERVERAID	SERVER RAID	D/T8640	8640
320	HEALTH		

1.4.1105 READ ERRORS WITH IBM 2X IDE CDROM DRIVE

Record number: H131910

Device: D/T6885
 Model: M
 Tip key:
 Date created: 095/12/12
 Date last altered: A95/12/12

SYMPTOM:

Read errors may occur when transferring data from an IBM 2X IDE CDROM Drive.

PROBLEM ISOLATION AIDS:

A failure has been reported to IBM that involves a read failure during an XCOPY routine from a CD that was written by an OEM "CDROM Maker" device. The failure was determined to be caused by the brand of CD Media that the customer was using.

The affected CD's would read without failure in an IBM 4X IDE CDROM drive.

This failure may occur on any brand of system.

FIX:

If read failures are occurring on systems using an IBM 2X IDE CDROM drive with CD's written locally by the customer's CD read/write hardware, perform all diagnostic routines prior to any parts replacements. Recommend that the customer use either of the following brands of CD's that IBM Engineering has tested and shown to be well within CD media specifications:

Kodak CD Media
 MTC (Mitsui-Toatsy) CD Media

If the failure persists, continue with normal problem isolation procedures.

SAS KEYWORDS:

PSVP	PSY2	D/T68XX	IBMPC
PSY2ERR	PSVPERR	PSY2CDROM	PSVPCDROM
PSY2OEM	PSVPOEM	D/T65XX	D/T9577
D/T6381	D/T6382	D/T6384	D/T6387
D/T6472	D/T6482	D/T6484	D/T6492
D/T6494	D/T6571	D/T6573	D/T6581
D/T6583	D/T6575	D/T6585	D/T6576
D/T6586	D/T6875	D/T6885	D/T6876
D/T6886	D/T5150	D/T5160	D/T5170
D/T8525	D/T8535	D/T8540	VALUEPOINT
PC750	PC730	PC300	PC330
PC350	D/T9576		

Record number: H162592

Device: D/T6561
Model: M
Tip key:
Date created: 097/12/18
Date last altered: A98/02/03

SYMPTOM:

When attempting to run IBMSETUP.EXE from the RTC, the following, or similar error is displayed in the RTC main window:

"An Error Has Occurred In Your Application.
If you choose ignore you should save your work..."

PROBLEM ISOLATION AIDS:

This tip applies to the IBM PC300GL, Machine Types 6561/6591, where the user has installed DOS and Windows 3.x.

Selecting Close or Ignore may result in a General Protection Fault (GPF) or lost control of the mouse.

FIX:

Run or install the DOS SHARE.EXE utility prior to running IBMSETUP.EXE from the RTC CDROM.

DOS SHARE.EXE may be run from a C: \> prompt before starting Windows or added to the AUTOEXEC.BAT file to load each time the system is rebooted.

Windows is a trademark of Microsoft Corporation.

SAS KEYWORDS:

PSY2	PSY2ERR	PSY2OPER	PSVP
PSVPERR	PSVPOPER	D/T6561	D/T6591
6561	6591	83348	UNCLASSIFIED

1.4.1107 RECORD NUMBER H122991 HAS REPLACED THIS TIP

Record number: H122717

Device: D/T9557
Model: M
Tip key:
Date created: 094/02/10
Date last altered: A94/08/15

SYMPTOM:

THIS RETAIN TIP HAS BEEN DELETED AND REPLACED BY
ECA001 D/T9556, RETAIN RECORD H122991.

PROBLEM ISOLATION AIDS:

FIX:

SAS KEYWORDS:
PSY2

1.4.1108 RECOVERY BOOT DISKETTE REPEATEDLY REQUESTS CD TYPE

Record number: H133627

Device: D/T6576
 Model: M
 Tip key:
 Date created: 096/08/14
 Date last altered: A96/08/14

SYMPTOM:

IBM PC 300/700 Series systems booting the Software Recovery Boot diskette may exhibit a symptom of repeatedly asking the user to enter the CDROM drive type each time the system reboots.

The Software Recovery Boot diskette is a part of the Software Recovery Package that is shipped by request from IBM PC Company Helpcenter to customers requiring reinstallation of the preloaded software.

PROBLEM ISOLATION AIDS:

Recovery Boot diskettes for the PC 300/700 Series 6576, 6586, 6877, and 6887 may be affected.

Install the Boot diskette per the instructions. Enter the CD ROM drive type installed at the initial menu. When the system reboots, the same menu and questions appear. This cycle repeats.

FIX:

Either of the following two procedures may be used to resolve the problem.

- 1) Boot the Recovery Boot diskette and EXIT from the first menu to an A: prompt. From the A: prompt, type the following command and press ENTER:

```
"attrib autoexec.bat -r"
```

Ensure that the diskette is not write-protected.
 The ATTRIB command is present on the boot diskette.

- 2) Create a new Boot diskette using the CD shipped with the recovery package, if possible. Enter the following commands with the Recovery CD inserted in the CD ROM drive:

A) x: (x = the drive letter of the CDROM drive)

B) CD\LOADSOFT

C) LOADDSKF RECOVERY.DSK A:

SAS KEYWORDS:

PSVP	PSY2	PSVPERR	PSY2ERR
PSVPCDROM	PSY2CDROM	PC 330	IBMPC
PC 330	PC 350	D/T6586	D/T6877
D/T6887	PSVPPROG	PSY2PROG	

1.4.1109 REINSTALLATION OF QAPLUS/2 FAILS ON PC 700

Record number: H132793

Device: D/T6877
 Model: M
 Tip key:
 Date created: 096/02/27
 Date last altered: A96/02/27

SYMPTOM:

Reinstalling QAPLus/2 on a PC 700 Series 6877 or 6887 preloaded with OS/2 WARP Connect may fail with error messages preventing the installation process.

PROBLEM ISOLATION AIDS:

QAPLus/2 is read-only after installation on the hardfile. The Installation program on the RTC (Ready to Configure) CD which ships with the system tries to overwrite the existing QAPLus/2 file when the user attempts to reinstall the package.

FIX:

- Change to the directory on the hardfile where QAPLus/2 is located (CD\QAPLUS2).
- Enter "ATTRIB -R QAPLUS2.PKG"

This removes the read-only attribute from the QAPLUS2.PKG file and allows the user to reinstall the complete package. This command must be used anytime the user needs to reinstall the QAPLus/2 package.

QAPLus/2 is a trademark of DiagSoft, Inc.

SAS KEYWORDS:

PSY2	D/T68XX	6887	6877
IBMPC	PSVP	PSVPPROG	PSY2PROG
D/T6887	PSY2DIAG	PSVPDIAG	41628
PC750	PSY2ERR	PSVPERR	PC 750
PC730	PC700	PC 730	

REMOTE INSTALL OF WINDOWSNT FAILS W/ETHEREXPRESS

1.4.1110 REMOTE INSTALL OF WINDOWSNT FAILS W/ETHEREXPRESS

Record number: H123708

Device: D/T6577
 Model: M
 Tip key:
 Date created: 097/02/03
 Date last altered: A97/02/03

SYMPTOM:

Any IBM PC 300/700 Series or PS/ValuePoint system may exhibit a system hang condition while attempting to install WindowsNT 3.51 from a server via an Intel EtherExpress Pro 100B communications adapter.

The system hang occurs during the soft-reboot phase of the WindowsNT installation and also during the soft-reboot following the WindowsNT setup of the EtherExpress Pro 100B adapter.

PROBLEM ISOLATION AIDS:

None

FIX:

Install the latest Intel EtherExpress Pro 100B device driver. The driver is titled: 100BDISK.EXE
 File Date: 08/20/96 or later

Obtain the device driver update from the Intel Corporation Internet site at the following URL:

Http: //support.intel.com/enduser_reseller/software/etherexpress_lan_adapters.htm

WindowsNT is a trademark of the Microsoft Corporation. EtherExpress is a trademark of the Intel Corporation.

SAS KEYWORDS:

PSVP	PSY2	IBMPC	PSY2COMM
PSVPCOMM	PSY2ADPT	PSVPADPT	HUNG
PC 330	PC 350	UNCLASSIFIED	54279
PSVPOEM	PSY2OEM	D/T6571	VALUEPOINT
D/T6573	D/T6581	D/T6583	D/T6575
D/T6585	D/T6560	D/T6260	D/T6577
D/T6587	D/T6586	D/T6589	D/T6598
D/T6875	D/T6885	D/T6876	D/T6886
D/T6877	D/T6887	PC 750	PC 730
D/T6384	D/T6382	D/T6387	D/T6472
D/T6482	D/T6484	D/T6492	D/T6494
LOCKUP			

1.4.1111 RESOURCE CONFLICTS WITH SHARED INTERRUPTS RUNNING NETWORK

Record number: H123132

Device: D/T8640
 Model: M
 Tip key:
 Date created: 098/03/12
 Date last altered: A98/04/08

SYMPTOM:

Resource conflicts may result in (and are not limited to) any of the following symptoms:

NetWare Abends, SCSI bus timeouts, drivers fail loading, Server fails to service clients under high LAN and/or Hard Drive activity.

PROBLEM ISOLATION AIDS:

- The System is any PC Server / Netfinity server configured with any supported version of Novell NetWare.
- The System is configured to share Interrupts across 2 or more Disk subsystem Adapter/Controllers, LAN Adapters/Controllers, or Communication Adapters.
- The System is configured to share ROM/RAM addresses across Adapters/Controllers that are not designed to do so.
- The System is configured with PCI device(s) assigned interrupt 15.

Note: Some PCI/ISA Servers (310/315/325/330) will allocate interrupts and resources to PCI devices as needed REGARDLESS of resources set in any ISA Adapter(s) IF those resources are left "Available" (default) in the Systems "Legacy Resources" table.

Note: The PCI/ISA Netfinity Server 3500 will SHARE interrupts across PCI Adapters/Controllers IF the CMOS Utility has the "AUTOMATIC" (default) settings assigned to a PCI Adapter or on-board Controller. In this case, the first interrupt automatically assigned is IRQ15. The configuration of ISA resources is the same as in the Server 310/315 and some 325 / 330.

Note: The PCI/EISA Server 300 WILL SHARE the interrupt assigned to the PCI bus.

Note: The PCI/EISA Servers (325/330/704/7000) SHARE interrupts across PCI Adapters/Controllers IF the CMOS Utility (SCU in the 704/7000) has the "AUTOMATIC" setting assigned to a PCI Adapter, PCI Slot, or on-board Controller by default.

Note: A "AUTOMATIC" Setting will typically assign Interrupt 15 first, then other secondary interrupts second. IF there are more devices than interrupts available, one interrupt will be assigned to more than one device resulting in "sharing" of interrupts.

FIX:

Note: The Scope of this fix identifies the reduction /elimination of sharing interrupts as well as isolating interrupt 15 from use by Adapters/Controllers as they relate to Novell NetWare. However, the need to configure all hardware properly prior to installing Novell NetWare is essential and therefore the instructions contained in this document should be followed PRIOR to a Novell NetWare installation.

- 1 - Ensure that the Disk Subsystem(s), LAN Adapter(s), communication Adapter(s) are not sharing interrupts.
 - Set each Disk subsystem Adapter/Controller, LAN Adapter/Controller, Communication Adapter to a specific interrupt whenever possible via:
 - EISA Configuration Utility (300/320/325/330/520)
 - SCU (704/7000)
 - CMOS Setup Utility (325/330/3500)
 - On the ISA Adapter, and in the ISA Legacy resource table in the CMOS Setup Utility (310/315/325/330/3500)
 - Reference Diskette (500/720)

Note: IF a interrupt must be shared for reasons of

RESOURCE CONFLICTS WITH SHARED INTERRUPTS RUNNING NETWORK

accommodating several Adapters/Controllers, then only do so with on-board controllers OR Adapters of identical model/mfg'r designed to do so and located on the SAME bus. In such cases, whenever possible, avoid sharing interrupts across Adapters that play primary service roles such as primary LAN Adapter or Disk subsystem.

- 2 - Ensure that interrupt 15 is not allocated for use.
 - Assign interrupt 15 to a dummy adapter via:
 - The Legacy Resource table in the CMOS Setup Utility (310/315/325/330/3500)
 - The EISA Configuration Utility (300/320/520/325/330)
 - The SCU (704/7000)
 - Ensure that MCA Adapters are not using interrupt 15 via:
 - The MCA Reference diskette (500/720)
 - Ensure that PCI Adapters are not using interrupt 15 via:
 - The MCA Reference diskette (720)
 - The CMOS Setup Utility (300)

NOTE: BIOS Flash Updates to some Systems will return settings to default. Be sure to keep a configuration backup when possible or a configuration Log as identified in the System Users Guide to recover the configuration after a System BIOS upgrade if required.

NOTE: It is suggested that Novell's latest fixpack 4 is installed after initial installation of NetWare 4.11.

NOTE: Details with regards to the impact of using interrupt 15 as well as sharing interrupts on a NetWare Server are identified (but not limited to) in Novell's TID #'s: 21620, 2906943, and 2924364.

COMPANION:

The following RETAIN Records provide Support and Service information relative to the above Symptoms and NetWare:

H005765: NETWORK ERROR ON 8640 W/NOVELL AND 3COM ETHERNET ADAPTER.

H007138: PC SERVER 325/330 LOST HARDWARE INTERRUPT WITH NETWARE 3X/4X

H007813: SERVER 320 TRAPS WITH 8 PARITY SIMMS INSTALLED

H023369: SERVER 704 TRAPS OR HANGS DURING OS INSTALLATION

H123817: NETWARE 3X / 4X WILL NOT AUTO REGISTER >16MB OR >64MB

H126233: SERVER HANGS WITH CDROM AND NOVELL NETWORK

H13823: NETWARE SERVER NMI PROBLEM DETERMINATION PROCEDURE

H132253: SYSTEM HANG DURING FILE TRANSFER W/IBM ETHERNET

H132289: SERVER HANGS WITH PCI SCSI ADAPTER INSTALLED

H132301: ECA002, 8642 100MHZ PROCESSOR FOR NETWARE SMP

H132489: NOVELL NETWARE LOST HARDWARE INTERRUPTS

H134622: NETWARE 3.12: LOST HARDWARE INTERRUPT

H134640: SERVER 720 (133MHZ OR 166MHZ) TRAPS OR HANGS

H137977: PC SERVER 704 ABEND DIVIDE BY ZERO EXCEPTION

H162681: SSA ADAPTER HANGS W/ 9.1GB DRIVES USING 32 BLOCK STRIPE STRIPE SIZE

H162688: MEMORY LEAKS/HANG W/ NETFINITY SERVICES AND ASMA W/NETWARE

Novell NetWare is a trademark of Novell Inc.

SAS KEYWORDS:

PSY2	NETWARE	D/T8638	D/T8639
D/T8640	D/T8641	D/T8642	D/T8650
D/T8651	D/T8644	SERVICER ONLY	ABEND
HANG	SLOW		

1.4.1112 RIGHT ALT KEY NOT FUNCTIONAL WITH DOS 3.30

Record number: H024232

Device: D/T8550
Model: M
Tip key:
Date created: 087/08/20
Date last altered: A93/09/01

SYMPTOM: THE RIGHT ALTERNATE (ALT) KEY ON THE 101 KEY ENHANCED KEYBOARDS WILL NOT WORK ON SYSTEMS USING PC DOS VERSION 3.3. THE SYSTEM DOES NOT RESPOND TO THE KEY BEING DEPRESSED.

PROBLEM ISOLATION AIDS: PRESS AND HOLD THE LEFT ALTERNATE KEY, THE CONTROL KEY AND THE DELETE KEY, THE SYSTEM SHOULD RE-BOOT. REPEAT THE PROCESS USING THE RIGHT ALTERNATE KEY, IF THE SYSTEM DOES NOT RE-BOOT THE KEY IS NOT BEING RECOGNIZED BY THE SYSTEM.

FIX: AT INITIAL INSTALLATION OF DOS 3.30, THE SELECT COMMAND CREATED AN AUTOEXEC.BAT FILE WHICH CONTAINS A STATEMENT "KEYB US 437" THAT DEFINES THE KEYBOARD CODE. THERE IS AN ERROR IN THE EXECUTION OF THE KEYB.COM FILE WHICH CAUSES THE RIGHT ALTERNATE (ALT) KEY NOT TO FUNCTION CORRECTLY. SINCE THE ROM DEFAULT FOR THE KEYBOARD CODE IS "KEYB US 437", THE CUSTOMER SHOULD BE DIRECTED TO DELETE THE "KEYB US 437" ENTRY FROM THE AUTOEXEC.BAT FILE USING EITHER AN EDITOR OR THE DOS "EDLIN" COMMAND.

SAS KEYWORDS:

PSY2

PSY2KBD

PSY2PROG

RIPL ABORT <HOME> KEY DOES NOT STOP RIPL PROCESS

1.4.1113 RIPL ABORT <HOME> KEY DOES NOT STOP RIPL PROCESS

Record number: H161385

Device: D/T6272
Model: M
Tip key:
Date created: 097/10/07
Date last altered: A97/10/21

SYMPTOM:

During the Remote Initial Program Load (RIPL) in a Novell Netware environment, pressing the abort <HOME> key does not stop the RIPL process.

PROBLEM ISOLATION AIDS:

None

FIX:

None is required. The RIPL process and abort <HOME> key are functioning as designed.

The purpose of the option to abort by pressing the <HOME> key is to stop the RIPL process in the event the client cannot find the server. The connection made at the Novell server occurs almost instantaneously, therefore, the software routine to abort has already been cleared from memory. If the server could not be found, the abort code would still reside in memory, providing the opportunity to abort.

The customer may report that the abort function does work in a WindowsNT environment. In a WindowsNT environment, the "handshaking" process is slower, allowing the abort <HOME> key to be pressed and stop the RIPL process before the server is found.

Netware is a trademark of Novell Incorporated.
WindowsNT is a trademark of Microsoft.

SAS KEYWORDS:

PSY2	PSY2OPER	PSY2COMM	PSVP
PSVPOPER	PSVPCOMM	D/T6272	6272
NMPC	75868	77056	UNCLASSIFIED

RMP INOPERABLE MESSAGE DURING BOOT

1.4.1114 RMP INOPERABLE MESSAGE DURING BOOT

Record number: H121400

Device: D/T8600
 Model: M
 Tip key:
 Date created: 093/09/30
 Date last altered: A94/08/15

SYMPTOM:

During system boot an error message is displayed stating the "RMP is inoperable."

PROBLEM ISOLATION AIDS:

This occurs on Server 195/295 systems with RMP boards (REMOTE Maintenance Processor) at revision levels 28 or lower.

FIX:

Replace the RMP board if it is at version 28 or lower. FRU P/N92F0200 will provide the current level (revision 29 or higher).

Note: Ensure the firmware on the RMP is "re-flashed" to match the level being replaced to assure system compatibility.

Temporary work-around:

Reset the RMP by pressing (only once*) the white button on top of the RMP next to the red LED and reboot the system. If the error message goes away, the cause was a drained battery on the RMP. Determine the cause of the drain.

Typically the cause of the drain would be a terminal or modem attached to the RMP without power to the system. Once the battery is recharged, the error message will no longer occur.

* Note:

*****WARNING*****
 DO NOT HOLD DEPRESSED FOR MORE THAN 2 seconds. (Failure to observe this limitation may result in severe system damage).

SAS KEYWORDS:

PSY2	295	PARALLAN	195
PSY2PWR	SERVER	PSY2ERR	

1.4.1115 RPL ERRORS WITH ONBOARD ETHERNET UNDER OS/2 WARP 3.0/4.0

Record number: H162541

Device: D/T6272
 Model: M
 Tip key:
 Date created: O98/01/27
 Date last altered: A98/01/27

SYMPTOM:

When attempting a Remote Program Load (RPL), one or more of the following error messages is displayed:

EEPROM Failed Checksum Validation
 EEPROM Read Failure
 BIOS Configuration Not Found
 BIOS Configuration Read Failure

If booting to OS/2 Warp versions 3 or 4, Network Requester may fail to start and return error messages.

PROBLEM ISOLATION AIDS:

This tip applies to IBM PC300GL, Machine Types 6272/6282 equipped with onboard ethernet adapters. The error condition is most often seen in systems booting to OS/2 Warp versions 3.0 and 4.0 when attempting to connect to a network.

The error condition may also be seen in systems installed with Windows95 or WindowsNT, but attempting a Remote Program Load (RPL).

FIX:

Download and apply Crystal Ethernet EEPROM update, file name Q5QT02A.EXE for machine types 6272/6282. See file name Q5QT02A.TXT for installation instructions.

Q5QT02A.EXE and Q5QT02A.TXT may be downloaded via the Internet from the IBM Personal Systems Group by searching the following Internet URL: www.us.pc.ibm.com/files.html

Q5QT02A.EXE and Q5QT02A.TXT may also be obtained from the IBM Personal Systems Group BBS by calling 919-517-0001.

Windows95 and WindowsNT are trademarks of Microsoft Corporation

SAS KEYWORDS:

PSY2	PSY2COMM	PSY2ADPT	PSY2MCD
PSVP	PSVPCOMM	PSVPADPT	PSVPMCD
D/T6272	D/T6282	6272	6282
HLPCT_5861	UNCLASSIFIED		

1.4.1116 RTC CDROM SCSI DRIVER INSTALLATION FAILS

Record number: H133201

Device: D/T6877
 Model: M
 Tip key:
 Date created: 096/03/25
 Date last altered: A96/03/25

SYMPTOM:

The installation of SCSI device drivers from the RTC (Ready to Configure) CD that ships with the IBM PC 700 Series 6877 and 6887 may fail due to the following reasons:

- 1) Downlevel SCSI device drivers were used to create the RTC CD.
- 2) The Adaptec Easy Lite device drivers are for Windows 3.1 and Windows95, not for OS/2 WARP or WindowsNT.

PROBLEM ISOLATION AIDS:

None

FIX:

All IBM PC 300 Series 6877 and 6887 SCSI models are shipped with a complete set of SCSI device drivers. Labels are attached to the diskettes showing which operating systems are supported. Customers should use the SCSI diskettes rather than the RTC CD to install SCSI device drivers.

Windows, Windows95, and WindowsNT are trademarks of the Microsoft Corporation.

SAS KEYWORDS:

PSY2	D/T68XX	6887	6877
IBMPC	PSVP	PSY2PROG	PSVPPROG
D/T6887	PC750	PC700	PC 730
PC 750	PC730	41500	41501
PSVPFDSK	PSY2FDSK	PSVPCDROM	PSY2CDROM

1.4.1117 SAFE RECOVERY MESSAGE DURING INITIAL BOOT OF PC 300

Record number: H017829

Device: D/T6577
 Model: M
 Tip key:
 Date created: 096/06/18
 Date last altered: A96/06/18

SYMPTOM:

IBM PC 300 Series 6577 and 6587 system preloaded with Windows95 may display a "Safe Recovery" message during the initial IPL of the operating system. The message will state the following:

"Setup has encountered problems or did not complete a previous installation. Setup will skip the part of Setup that caused the problem last time."

PROBLEM ISOLATION AIDS:

During manufacture of a limited number of IBM PC 300 Series systems, an update was required for the preloaded software package. The affected systems were powered-on, updated, and powered-off. This update cycle prompts the Safe Recovery function on the next power-on and bootup cycle.

The affected systems did not receive another power on/off to eliminate the Safe Recovery function from being displayed during end user installation. The affected systems can be identified by the date of manufacture printed on the IBM shipping carton or by the serial number of the system.

Affected systems were manufactured between 5/01/96 and 5/24/96, and are within the serial number/model ranges listed below:

6577 - 59T --- S/N range = 23KMC00 - 23KMX64

6577 - 7AT --- S/N range = 23RR125 - 23RR325

6587 - 59T --- S/N range = 23AXPW0 - 23AYZM2

6587 - 5AT --- S/N range = 23WW000 - 23WW200

6587 - 7AT --- S/N range = 23DHD00 - 23DKT87
 23DLA70 - 23DLA88

FIX:

When the Safe Recovery message is displayed, the only option available to the user is to click on NEXT. The system will then go into the Windows95 License screens. The Safe Recovery screen will not return after the user has accepted the Windows95 License agreement.

No software was lost or corrupted as a result of this problem.

SAS KEYWORDS:

PSY2	D/T65XX	6577	6587
IBMPC	PSVP	PSVPERR	PSY2ERR
D/T6587	PC 350	PC350	PC300
PC 330	PC330	PSVPPROG	PSY2PROG

1.4.1118 SAP INSTALLATION ON PC 300 TAKES UP TO 30 MINUTES

Record number: H135889

Device: D/T6576
Model: M
Tip key:
Date created: 097/01/15
Date last altered: A97/01/15

SYMPTOM:

IBM PC 300 Series 6576 or 6586 systems may take up to 30 minutes to complete the installation of SAP Version 3.0C (System Application Product). Normal installation time should be 2 - 5 minutes.

PROBLEM ISOLATION AIDS:

The lengthy installation time may be seen when installing from either CDROM or from a server.

FIX:

Updates have been made available from SAP America to replace the following files: SAPSETUP.EXE
SAPICONS
INSTFONT

Contact SAP America support at 1-800-677-7271 for information on downloading the fix patches for "SAPSERV4" from their FTP server.

SAP is a trademark of SAP America, Inc.

SAS KEYWORDS:

PSVP	PSY2	IBMPC	PSY2PROG
PSVPPROG	PSY2OEM	PSVPOEM	D/T6586
PC 330	PC 350	UNCLASSIFIED	53639

1.4.1119 SCANDINAVIAN INTERGRAPH INFO TAB IS IN ENGLISH

Record number: H161770

Device: D/T6898
 Model: M
 Tip key:
 Date created: 097/11/09
 Date last altered: A97/11/11

SYMPTOM:

After installing Scandinavian language versions of WindowsNT 4.0, information on the "Intergraph Monitor" tab under Display Properties appears in English.

PROBLEM ISOLATION AIDS:

This tip applies to the Intergraph WindowsNT 4.0 driver version 4.3.1.24 when installed under the following Scandinavian language versions of WindowsNT 4.0:

Danish, Finish, Dutch, Norwegian, and Swedish

The condition may also be seen on other models of Commercial Desktop systems equipped with the Intergraph Intense 3D video adapter, and installed with the above Scandinavian language versions of WindowsNT 4.0.

FIX:

Download and install the following updated version of the Scandinavian Intergraph WindowsNT 4.0 video drivers.

ZU8T25A.EXE Disk 1 of 2
 ZU8225A.EXE Disk 2 of 2

The current WindowsNT 4.0 video driver may be downloaded via the Internet from the IBM Personal Computer File Library by searching the following Internet URL:

[Www.us.pc.ibm.com/files.html](http://www.us.pc.ibm.com/files.html)

The video drivers may also be obtained from the IBM PC Company BBS system in the U.S. by calling 919-517-0001.

WindowsNT is a trademark of Microsoft Corporation.
 Intense 3D is a trademark of Intergraph Corporation.

SAS KEYWORDS:

PSY2	PSY2ADPT	PSY2OPER	PSVP
PSVPADPT	PSVOPER	D/T6898	M/T6898
6898	82902	UNCLASSIFIED	

1.4.1120 SCANDISK REQUIRED AFTER APM SHUTDOWN ON IBM PC

Record number: H16125

Device: D/T6282
Model: M
Tip key:
Date created: 097/06/16
Date last altered: A97/08/25

SYMPTOM:

Scandisk is required when the system is powered on after being shut down (turned off) with the Advanced Power Management (APM) function.

PROBLEM ISOLATION AIDS:

This tip applies to IBM PC Commercial Desktop systems that can be set to power off with the APM function.

System BIOS does not inform the operating system that it is powering the system off. The operating system may not close all open files. This is neither a defect of the BIOS or the operating system.

FIX:

The customer must disable this function if they are using an operating system that must first be shutdown before the system is powered off.

SAS KEYWORDS:

PSY2	PSY2OPER	PSVP	PSVPOPER
APM	SCANDISK	PSY2MCD	PSVPMCD
BIOS	UNCLASSIFIED	67103	67103F_1

PSY2 RETAIN TIPS
SCANNER FAILS WITH SCSI-2 ADAPTER

1.4.1121 SCANNER FAILS WITH SCSI-2 ADAPTER

Record number: H12996

Device: D/T95XX
Model: M
Tip key:
Date created: 093/08/27
Date last altered: A94/08/15

SYMPTOM:

Failures may be encountered when a IBM or a RICOH flat bed scanner, or a Wangtek 5150ES SCSI tape drive, is attached to the IBM PS/2 SCSI-2 Fast/Wide Adapter/A.

PROBLEM ISOLATION AIDS:

Only the RICOH model IS50 and the IBM model 2456 scanners and the Wangtek 5150ES SCSI tape are affected.

All of these devices fail during normal operation.

During scanner diagnostics the IBM 2456 will exhibit a hardware failure. The failure will occur when the diagnostic routine requests that an image be scanned.

The RICOH IS50 does not have any diagnostic routines, however it will exhibit garbled images, on the PS/2, after the scan is complete.

System diagnostics do not fail.

FIX:

Replace the SCSI-2 Fast/Wide Adapter/A, FRU P/N92F0160.

To determine if replacement is required, inspect ALL of the 3 large IBM chips on the adapter. If ANY of the chips (one or more) are labeled with part numbers 61G2444, or 82G2645, the adapter is at the current level and DOES NOT need to be replaced.

Adapters received from FRU inventory will not exhibit the problems identified and will contain a chip with either part number 61G2444 or 82G2645.

Note:

The FRU part number on the old and the new adapter is the same.

If the symptom exists on a current level adapter, continue normal problem determination.

Wang is a trademark of Wang Laboratories, Inc.

SAS KEYWORDS:

PSY2	SCSI 2	PSY2ERR	OEM
D/T9595A	SERVER	95	D/T2456
FAST	WIDE	D/T8555	D/T8556
D/T8557	D/T8573	D/T8560	D/T8565
D/T8570	D/T9576	D/T8580	D/T8590
D/T8595	D/T9585	D/T9577	D/T9556
D/T9557	D/T9595	D/T9533	

1.4.1122 SCO UNIX FAILS TO INSTALL ON a PC SERVER 310

Record number: H133956

Device: D/T8639
Model: M
Tip key:
Date created: 096/09/10
Date last altered: A96/09/13

SYMPTOM:

During the installation of SCO UNIX, the following error message appears: "PANIC hd: no root disk controller found."

PROBLEM ISOLATION AIDS:

The system is an 8639-xxx with a 1.08GB hard drive FRU p/n06H9079 (Option p/n06H8891) installed.

FIX:

Replace the 1.08GB hard drive with the 1.2GB hard drive FRU p/n07H0390.

All orders for FRU p/n06H9079 will automatically substitute to the new FRU p/n07H0390 (Option p/n75H8974).

This incompatibility only affects systems with SCO UNIX. This tip does not apply to systems running other operating systems. Adaptec is a trademark of Adaptec, Inc.
SCO is a trademark of The Santa Cruz Organization, Inc.

SAS KEYWORDS:

PSY2	PSY2FDISK	06H9079	07H0390
06H8891	D/T8640	D/T8641	D/T8642
8639	8640	8641	8642

1.4.1123 SCO UNIX INSTALLATION FAILURES

Record number: H126131

Device: D/T8641
Model: M
Tip key:
Date created: 095/01/24
Date last altered: A98/02/09

SYMPTOM:

IBM Server 500 fails to boot after the installation of SCO UNIX if the primary (boot) SCSI hard drive has a capacity of 1024 MB or greater.

PROBLEM ISOLATION AIDS:

All of the following must apply:

1. The system is an IBM PC Server 500 (8641).
2. The system has a primary (boot) SCSI hard drive with a capacity greater than 1024 MB.
3. SCO UNIX/Open Server just installed without error.

FIX:

The SCO UNIX/Open Server device driver for IBM SCSI hard drives does not currently support drives with capacities greater than 1024 MB as the primary (boot) drive.

Please note that disks greater than 1024 MB capacity are supported by SCO as secondary non-boot drives.

SCO is also making enhancements to its device driver to support drives greater than 1024 MB as primary drives and plans to make this driver available to customers at a later date.

If customer has a SCSI-2 F/W Adapter, they must have previously obtained and installed one of the following from SCO:

- A) SLS UOD383A (recommended)
- b) AHA 3.3 or
- c) AHS 3.4

SCO has tested and will support the IBM PC Server 500 models 8641 - 0YT (1.12 GB), 8641-0YV (2.25 GB), and 8641-0Y0 (open-bay) when configured with any of the IBM drives listed below as a primary boot drive:

- SCSI-2 Fast (narrow) 1.0 GB (Option P/N 70G8492) see notes
- SCSI-2 Fast/Wide 1.0 GB (Option P/N 70G9743) below
- SCSI-2 Fast (narrow) 540 MB (Option P/N 70G8491)

Notes:

PC Server 500 Hot-Swap Tray for narrow drives (Option p/n 70G9851 = Tray FRU p/n71G6292 + ID Cables FRU p/n06H3592, 06H3957) required.

PC Server 500 Hot-Swap Tray for wide drives (Option p/n 70G9741 = Tray FRU p/n06H3956 + ID Cable FRU p/n06H3957) required.

SCO Unix is a registered trademark of Santa Cruz Operations.

SAS KEYWORDS:

PSY2	PSY2PROG	SERVER	8641
PCSERVER	PSY2FDSK		

1.4.1124 SCO XENIX, SCO UNIX AND SCO OPEN DESKTOP INCOMPATIBILITY

Record number: H086184

Device: D/T8550
 Model: M
 Tip key:
 Date created: 091/07/11
 Date last altered: A91/09/17

SYMPTOM: 8570, 8555, AND 8550 SYSTEMS CONTAINING SEAGATE FIXED DISKS MAY FAIL WHEN LOADING OR OPERATING WITH SCO XENIX * , SCO UNIX * OR SCO OPEN DESKTOP *. IF THE SYSTEM FAILS WHILE LOADING THE SCO OPERATING SYSTEM, THE PROBLEM WILL APPEAR AS A LOCKED SYSTEM. IF THE SYSTEM FAILS WHILE OPERATING UNDER THE SCO OPERATING SYSTEM, THE ERROR WILL BE A BUSS TIME OUT THAT WILL ALSO APPEAR AS A LOCKED SYSTEM WITH A POSSIBLE SCO ERROR MESSAGE "PANIC ERROR" DISPLAYED ON THE SCREEN.

SANTA CRUZ OPERATIONS (SCO) HAS STATED THAT THIS PROBLEM OCCURS ONLY WITH SCO XENIX RELEASE 2.3.2 AND EARLIER, SCO UNIX RELEASE 3.2.0 AND SCO OPEN DESKTOP RELEASE 1.0 AND THAT FUTURE RELEASES OF SCO XENIX, UNIX, AND OPEN DESKTOP DO NOT HAVE THIS PROBLEM.

PROBLEM ISOLATION AIDS:

THE SEAGATE FIXED DISK MAY EXPERIENCE ERRORS ON TRACK 0 AND REQUIRE A DIAGNOSTIC FORMAT.

FIX:

SANTA CRUZ OPERATIONS HAS STATED, IF THE ABOVE PROBLEMS OCCUR A CUSTOMER FIX IS AVAILABLE FROM SCO SUPPORT. ASK YOUR CUSTOMER TO REFER TO FIX XNX232B WHEN CALLING SANTA CRUZ OPERATIONS AT 1-800-347-4381.

* SCO XENIX, SCO UNIX AND SCO OPEN DESKTOP ARE TRADEMARKS OF THE SANTA CRUZ OPERATION.

SAS KEYWORDS:

PSY2	PSY2PROG	8550SYSFDSK	8555SYSFDSK
8570SYSFDSK	PSY2FDSK	8550SYSFDSK	8555SYSFDSK
8570SYSFDSK			

1.4.1125 SCROLLING CHARACTERS/TRAPS WITH OS/2 V 2.XX

Record number: H13208

Device: D/T9595
 Model: M
 Tip key:
 Date created: 095/06/19
 Date last altered: A95/09/07

SYMPTOM:

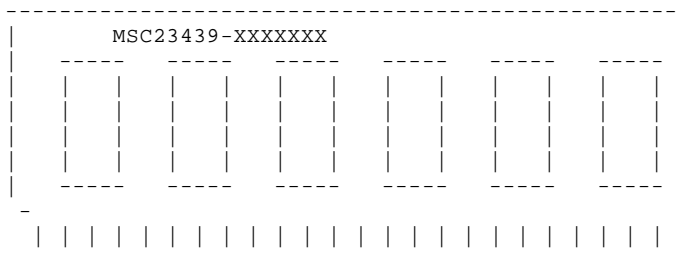
The customer observes scrolling E's or T's while running OS/2 version 2.XX. The system then stops, or hangs. Trap 2 or Trap E may also occur.

PROBLEM ISOLATION AIDS:

The following systems are affected:
 Servers 8595, 9595 and Server 500 (8641).
 Desktop systems 8590, 9590, 9576 and 9577.

If 16MB ECC memory SIMMs are installed, check for the presence of manufacturing part number MSC23439.

Refer to the following diagram for the location of the SIMM Part number:



NOTE:

SIMMs containing OKI modules with part number MSC23439A are NOT AFFECTED and should not be replaced.

FIX:

If the above symptoms are being experienced, replace any IBM memory SIMMS (FRU P/N96F9100) which contain the OKI manufacturing part number MSC23439. The FRU Part number of the IBM 16MB ECC SIMM has not changed. Action is being taken to purge the affected SIMMs from IBM inventories.

IBM memory SIMMs are manufactured with either IBM or qualified vendor sourced memory modules. OEM memory SIMMs may also contain memory modules from various sources, therefore OEM memory could also be affected.

If the system contains OEM memory SIMMs having the affected OKI part number, inform the customer of this potential problem. DO NOT REPLACE OEM MEMORY WITH IBM MEMORY SIMM FRU's.

OKI is a trademark of OKI Electric Industry Co., Ltd.

SAS KEYWORDS:

PSY2	PSY2MEM	PSY2PROG	PSY2ERR
E	TRAP	SERVER	95
500	8595	9595	8641
D/T8595	D/T8641	RAID	957X
9577	9576	D/T9576	D/T9577
91F9100	0002	000E	

1.4.1126 SCSI BIOS ERROR&COLON. "SCSI TERMINATION NOT FOUND"

Record number: H163735

Device: D/T6889
 Model: M
 Tip key:
 Date created: 098/05/19
 Date last altered: A98/05/19

SYMPTOM:

When booting the system, the SCSI BIOS returns the following, or similar error message:

"SCSI Termination Not Found"

The SCSI subsystem will not be enabled.

PROBLEM ISOLATION AIDS:

This tip applies to IBM IntelliStation M-Pro Series 6889 and Netfinity 3500 Series 8644 systems.

The "SCSI Termination Not Found" error message will manifest itself as an "out-of-box" error in new systems preconfigured for SCSI operation.

In systems preconfigured for IDE operation, the SCSI error message may not be seen until the on-board SCSI BIOS is enabled in the F1 Setup utility, and a SCSI hardfile is installed.

Planar FRU numbers exposed to this condition are P/N93H7269 and P/N08L0046.

FIX:

Follow normal problem determination steps to eliminate possible SCSI adapter, SCSI cable, or SCSI hardfile errors.

If the "SCSI Termination Not Found" error persists, replace the system board with FRU P/N08L0606.

Note: When servicing Netfinity 3500, Type 8644-1xx/2xx systems, see Retain Tip number H106654 for instructions on planar replacement, and saving the CMOS configuration.

SAS KEYWORDS:

PSY2	PSY2ERR	PWS	PWSERR
D/T6889	6889	NETFINITY 3500	8644
UNCLASSIFIED			

1.4.1127 SCSI DISK FORMAT FAILURES

Record number: H124814

Device: D/T8550
Model: M
Tip key:
Date created: O94/08/01
Date last altered: A94/08/29

SYMPTOM:

The following message is displayed while attempting to format a SCSI fixed disk using the Banyan Vines Disk Utilities:

"Disk 1 (or other #) is not recognized."

PROBLEM ISOLATION AIDS:

A. The drives are attached to an IBM PS/2 SCSI-2 Fast/Wide Adapter, FRU P/N92F0160.

B. The fixed disks being used are 270, 364, 540, or 728 MB SCSI Disk Drives, as follows:

	Marketing OPTION	FRU	OBI (Options by IBM)
	P/N	P/N	P/N
270MB SCSI	94G2439	82G5930	84G3492
364MB SCSI	94G2440	82G5931	84G3493
540MB SCSI	94G2441	82G5932	84G3494
728MB SCSI	94G2442	82G5933	84G3495

FIX:

The referenced SCSI drives do not support "Wide Messages."

The fix for this problem is to disable wide messages from the SCSI-2 adapter using the following procedure:

- A. Boot the System Partition (Reference diskette).
- b. Select "Set Configuration" from the Main Menu.
- c. Next, select "Change Configuration."
- d. Page down to the IBM PS/2 SCSI-2 Fast/Wide Adapter and change the setting called, "Wide SCSI Messages" from enabled to disabled, for the internal files.

If the drives are installed in an external enclosure, change the setting of "Wide SCSI messages - External," from enabled to disabled.

E. Save the configuration changes and reboot the system.

Note: Only the referenced direct driver operating system is known to be affected. Disabling the wide messages will NOT impact performance.

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SAS KEYWORDS:

PSY2	PSY2FDSK	PSVP	D/T9590
PSY2ADPT	D/T8556	D/T8557	D/T8553
D/T8560	D/T8570	D/T8565	D/T8580
D/T8590	D/T8595	D/T9556	D/T9557
D/T9595	D/T9590		

1.4.1128 SCSI FIXED DISK LOW LEVEL FORMAT FAILS

Record number: H124755

Device: D/T8640
Model: M
Tip key:
Date created: 094/07/27
Date last altered: A94/11/02

SYMPTOM:

When attempting to low-level format the 1GB drive, according to the instructions in the User's Guide, the following error message is encountered: "DEVICES NOT RESPONDING."
When attempting to low-level format a 540MB SCSI drive, the system format program runs without completion.

PROBLEM ISOLATION AIDS:

The fixed disk is attached to a PCI SCSI-2 FAST adapter.

FIX:

No hardware troubleshooting should be performed, or parts replaced to attempt to resolve this situation. An updated version of the diagnostic diskette is now available to correct this problem.

Customers requiring the updated diagnostics, should contact the HelpCenter and request QAPRO522.DSK from the BBS (bulletin board). The phone number for bulletin board is 1-919-517-0001.

NOTE: Authorized servicers may request "next day" shipment. However, persons requiring "next day" service are advised to seek electronic delivery through the HelpCenter, 1-800-426-7763.

SAS KEYWORDS:

PSY2	PC	SERVER	8640
SCSI	PSY2FDSK	PCI	PSY2TBD

1.4.1129 SCSI-2 OPTION INSTALLATION IN 9595A RAID SYSTEM

Record number: H033768

Device: D/T9595
 Model: M
 Tip key:
 Date created: 094/06/21
 Date last altered: A94/08/15

SYMPTOM:

The PS/2 9595A (Server 95) RAID Array System may "hang" while loading OS/2 when configured with an optional SCSI-2 Fast/Wide adapter.

NOTE:

The RAID Array Controller is also a SCSI adapter, but should not be confused with the Fast/Wide SCSI-2 Adapter/A, which may also be installed as an option in this system. (Fast Wide SCSI-2 Adapter/A = FRU P/N92F0160, RAID Array Controller = FRU P/N92F0335)

PROBLEM ISOLATION AIDS:

This problem can be isolated by checking the date of the device driver file (IBM2SCSI.ADD) on the SCSI-2 option diskette. If it is dated prior to 7/22/93 it is version 1.00, which is unable to share interrupt levels.

The CONFIG.SYS file should also be checked to insure the correct sequence of the IBMRAID.ADD and IBM2SCSI.ADD device drivers. The IBMRAID.ADD device driver statement MUST BE LISTED FIRST.

FIX:

Replace the down-level version of the device driver with the current version V 1.01, which allows sharing of interrupts. The current version may be downloaded from the IBM PC Company Bulletin Board System by calling 919-517-0001.

```
*****
* THIS DEVICE DRIVER IS CUSTOMER INSTALLABLE. CUSTOMERS *
* SHOULD BE ADVISED TO READ THE "README" FILE LOCATED ON *
* DEVICE DRIVER DISKETTE FOR INSTALLATION INFORMATION. *
* CONTACT THE PERSONAL SYSTEMS HELPCENTER AT 1-800-772-2227 *
* IF ASSISTANCE IS REQUIRED IN OBTAINING THE DEVICE DRIVER. *
*****
```

Temporary work-around:

Until the current device driver is obtained, there are two temporary work-arounds for this problem:

1. If you are using an IBM2SCSI.ADD device driver dated prior to 7/22/93, change the interrupt level of the RAID Controller to an interrupt level different from the Fast/Wide SCSI Adapter. Use the system reference diskette to change the configuration optional settings.

2. Install OS/2 on your 9595A system prior to adding the optional SCSI adapter. After OS/2 is installed, you can add your SCSI adapter option.

SAS KEYWORDS:

PSY2	PSY2PROG	PSY2FDSK	PSY2ADPT
SCSI	OS2	D/T9595A	HANGS
RAID	ARRAY	9595A	9595

1.4.1130 SDLC COMMUNICATION ERRORS ON 3545 DOCK I

Record number: H124944

Device: D/T3545
Model: M
Tip key:
Date created: 094/08/19
Date last altered: A96/11/11

SYMPTOM:

3270PC program displays error message 1201 when loading an SDLC driver in OS/2 2.1, or communications can't be established with the SDLC adapter in the dock 1.

PROBLEM ISOLATION AIDS:

Check for the following:

1. Incorrect I/O card logic signal. Only current I/O cards with EC C82182 written on them are supported in the Dock I.
and / or
2. The SDLD card and the ThinkPad Audio feature have the same DMA address.

FIX:

If the I/O card EC is any number other than EC C82182 do steps 1 and 2. If the card is at EC C82182 only do step 2.

1. Replace the I/O card P/N66G3571. The new level card has EC C82182 written on the FRU box and the card. This EC corrects the signal level within the adapter.
2. Disable the ThinkPad Audio Feature as follows.
 1. Select "System Information" from the menu of "PS2.EXE".
 2. Select "Disable" from audio device IRQ selection. If audio drivers were already installed (e.g. from the Audio Feature Diskette), remove them before you disable the audio feature.

SAS KEYWORDS:

PSY2	PSY2ADPT	PSY2COM	PSY2ERR
9545	D/T9545	3270	THINKPAD
UNCLASSIFIED			

1.4.1131 SEAMLESS APPLICATIONS HANG UNDER OS/2 2.11

Record number: H132707

Device: D/T6885
 Model: M
 Tip key:
 Date created: 096/02/20
 Date last altered: A96/02/20

SYMPTOM:

IBM PC 300 & 700 Series and PS/ValuePoint Performance Series systems with S3 Vision864 integrated video chipsets may experience highly intermittent system hang conditions while running applications in OS/2 seamless mode (in a window as opposed to full screen mode). This symptom has been experienced with applications such as Microsoft Word 6.0 and Microsoft PowerPoint.

PROBLEM ISOLATION AIDS:

Applications running in a seamless mode on the OS/2 Desktop may intermittently hang with no displayed error codes.

Only system boards with the S3 Vision864 chipset are affected.

FIX:

Install updated S3 864/868 video device drivers. The current version of the drivers is titled:

S3_864.ZIP

The update may be obtained from the IBM PC Company BBS system by calling 1 - 919-517-0001. Locate the "IBM PC 300/700 Files" section (section #21) for the updates.

The updates may also be downloaded via the Internet from the IBM Personal Computer File Library by searching the following Internet URL:

<http://www.pc.ibm.com/files.html>

The updates are located in the IBM PC 300 & 700 Series Files section or by using the search facility to locate the files by the names listed above.

If the failure persists continue normal problem determination procedures to isolate the failing application or FRU.

SAS KEYWORDS:

PSVP	PSY2	PSVPDISP	PSY2DISP
IBMPC	PSY2BRD	PSVPBRD	OS2
D/T68XX	D/T6875	D/T6885	D/T6876
D/T6886	DISPLAY	88G4270	11H5545
12H1947	12H1954	40H4759	40H4760

1.4.1132 SECOND ADAPTEC SCSI ADAPTER NOT RECOGNIZED IN M/T 6898

Record number: H161503

Device: D/T6898
 Model: M
 Tip key:
 Date created: 097/10/21
 Date last altered: A97/10/21

SYMPTOM:

After installing an additional Adaptec dual channel SCSI host adapter in an IBM IntelliStation M-Pro, M/T 6898, the adapter is not recognized.

PROBLEM ISOLATION AIDS:

This tip applies to systems utilizing the onboard Adaptec AHA-7895 SCSI controller and equipped with the optional Adaptec ARO-1130 PCI RAID port adapter. The condition is seen with the following Adaptec PCI SCSI adapters:

AIC-7895	AHA-3940AUW
AIC-7895/ARO-1130	AHA-3940AUWD
AHA-3940	

This incompatibility only exists with other Adaptec products based on the AIC-7895 controller. All other Adaptec products are compatible and can co-reside with the ARO-1130 PCI RAID option installed in the system.

FIX:

If the user desires to install a second Adaptec SCSI adapter under the conditions stated above, contact Adaptec technical support for assistance in selecting an appropriate SCSI adapter.

SAS KEYWORDS:

PSY2	PSY2ADPT	PSY2OEM	PSY2ERR
PSVP	PSVPADPT	PSVPOEM	PSVPERR
D/T6898	6898	76799	UNCLASSIFIED

1.4.1133 SECOND DISKETTE DRIVE NOT SEEN IN 6588/6888 SETUP

Record number: H137871

Device: D/T6588
Model: M
Tip key:
Date created: 097/05/23
Date last altered: A97/05/28

SYMPTOM:

IBM PC 300 Series 6588 and Intellistation M Pro 6888 systems will not automatically detect the presence of a second diskette drive in the systems Setup Utility.

PROBLEM ISOLATION AIDS:

Access the Setup Utility by pressing F1 during the memory count. Select "Devices and I/O Ports." The "Diskette Drive B: " entry will show "Disabled" following the installation of a second diskette drive.

FIX:

This is not a defect, but rather a design characteristic of the 6588/6888 Flash BIOS.

To enable a second diskette drive, access the systems Setup Utility. Select Devices and I/O Ports. Use the left/right arrow keys to manually configure the type of diskette drive installed.

For additional information, refer to the systems User's Guide.

SAS KEYWORDS:

PSY2	PSVP	IBMPC	PSVPDOC
PSY2DOC	62255F_1	PSY2MCD	PSVPMCD
PC 330	PC 350	D/T6888	UNCLASSIFIED

SECONDARY IDE PORT NOT PRESENT AFTER WIN95 REBOOT

1.4.1134 SECONDARY IDE PORT NOT PRESENT AFTER WIN95 REBOOT

Record number: H017452

Device: D/T6560
 Model: M
 Tip key:
 Date created: 097/03/10
 Date last altered: A97/03/10

SYMPTOM:

IBM PC 340 Series 6560 with Windows95 installed may not recognize any IDE devices installed on the secondary IDE port on the system board after removing the IDE controller from the Device Manager and rebooting the system.

PROBLEM ISOLATION AIDS:

If the IDE controller is inadvertently removed via the Device Manager in Windows95 and the system is rebooted, the Install Wizard may not properly detect the secondary IDE controller on the system board. Any device installed on that port, whether configured for Primary or Slave, will not be recognized.

Viewing the IDE controller via the Device Manager will only show the presence of one IDE controller (Primary controller single FIFO).

FIX:

A fix has been developed to allow Windows95 to properly identify the IDE controller on the PC 340 system board. This file will prevent this failure from occurring and restore the secondary controller in systems that are exhibiting this symptom.

Obtain and install IDE340FX.EXE from the IBM PC Company BBS.

The file may be obtained from the IBM PC Company BBS system by calling 1 - 919 - 517-0001. View the "IBM PC 300/700 Files" section (section #21) for the file titled:

IDE340FX.EXE - Patch for Win95 IDE Issues on 6560

The file may also be downloaded via the Internet from the IBM Personal Computer File Library by searching the following Internet URL:
<http://www.pc.ibm.com/files.html>

View the README file for installation instructions.

Windows95 is a trademark of the Microsoft Corporation.

SAS KEYWORDS:

PSY2	PSVP	6560	PC340
PC 300	PC300	PSY2FDSK	PSY2FDSK
PSY2CDROM	PSY2CDROM	IBMPC	PSY2ERR
PSVPERR	UNCLASSIFIED		

1.4.1135 SECTOR NOT FOUND ERRORS W/360KB DISKETTES IN 6381

Record number: H124864

Device: D/T6381
 Model: M
 Tip key:
 Date created: 094/08/12
 Date last altered: A94/08/12

SYMPTOM:

The use of low density 360kb 5.25" diskettes may fail with "sector not found" errors in a PS/ValuePoint 6381/Si.

PROBLEM ISOLATION AIDS:

The low density 360kb 5.25" diskette was previously formatted to 720kb. Once the newly formatted 720kb diskette is used, errors may occur if the diskette is then re-formatted back to 360kb.

The errors occur as a result of the formatting process. The 720Kb formatting process single steps the floppy drive heads, formatting a total of 80 tracks. The 360K formatting process double steps the drive heads, formatting a total of 40 tracks. The 360K formatting process essentially writes only on the even tracks of a 720K format. Therefore, the information put on the odd tracks of a 720K format will still be there even after the media has been reformatted to 360kb.

FIX:

To reuse low density 360kb 5.25" media that has been formatted to 720kb capacity, the diskette must be bulk erased (using a device that produces strong alternating magnetic fields typically called bulk eraser or video/audio tape eraser) before it can be reformatted to 360K density again.

SAS KEYWORDS:

PSVP	PSY2	PS/VP	6381
PSVPDSKT	PSY2DSKT	VALUEPOINT	360K
720K	5 1/4	PSVPERR	PSY2ERR

1.4.1136 SECURITY ERROR NOT POSTED BY PC-730

Record number: H126813

Device: D/T6875
 Model: M
 Tip key:
 Date created: 095/03/21
 Date last altered: A95/03/21

SYMPTOM:

The PC 730 system, machine type 6875, does NOT display the expected 176 POST error. In normal operation, the 176 POST error would indicate the system C-2 security feature detected the system cover was removed.

PROBLEM ISOLATION AIDS:

Verify operation of the C2 security feature, as follows:

- 1) Set an Administrator Password using the Setup Utility
 NOTE - Make note of the administrator password prior to turning system power off. If the administrator password is forgotten or misplaced, the system board must be replaced.
- 2) Turn the system power off.
- 3) Remove and replace the top cover assembly.
- 4) Power on the system unit and display.
- 5) Check for a 176 POST error.

If there is no 176 POST error indicated, verify that the tamper switch located on the top rear of the system is installed properly and connected to the riser card.

Advanced diagnostics run without errors.

FIX:

If the system did not display a 176 POST error and the switch is installed and connected properly, replace riser card FRU P/N06H4003. The FRU part number has not been changed, but FRU stock has been purged of the affected parts.

SAS KEYWORDS:

PSY2	D/T68XX	6875	68XX
PSY2PART	PC 700	PC730	PSVPPART
IBMPC	PSVP	PSVPERR	PSY2ERR
06H4003			

1.4.1137 SERIAL PORT ERRORS (DATA, DEVICE, OR DRIVERS)

Record number: H132258

Device: D/T8641
Model: M
Tip key:
Date created: 096/01/18
Date last altered: A96/02/15

SYMPTOM:

COM ports do not function correctly when the parallel port is disabled. The COM port device drivers may not load, devices attached to the COM port may not work, or data errors may occur over the COM port.

PROBLEM ISOLATION AIDS:

The system is an EISA model of the IBM PC Server 320 (8640) or PC Server 520 (8641).

The parallel port is "disabled" in setup.
The errors do not occur if the parallel port is not disabled.

The COM port failure will likely occur when a user is trying to acquire an additional IRQ by disabling the LPT port.

FIX:

The parallel port can be disabled without causing this symptom.

While in System Set-Up, disable the parallel port, then CHANGE THE PARALLEL PORT MODE SETTING TO "OUTPUT ONLY."

SAS KEYWORDS:

PSY2	SERVER	520	8641
PSY2TBD	COMPARES	PSY2COMM	PARALLEL
D/T8642	8642	COMM	LPT1

1.4.1138 SERIAL PORT FAILURES ON 6381 & 6384 P60/D

Record number: H123471

Device: D/T6384
Model: M
Tip key:
Date created: 094/04/07
Date last altered: A95/06/06

SYMPTOM:

PS/VALUEPOINT 6381 AND 6384 P60/D SYSTEMS MAY EXPERIENCE COMMUNICATION FAILURES OR SYSTEM HANGS WHEN USING A DEVICE ATTACHED TO EITHER OF THE TWO SERIAL PORTS.

PROBLEM ISOLATION AIDS:

THE FAILURE MAY OCCUR USING DOS, WINDOWS 3.1, WINDOWS FOR WORKGROUPS OR OS/2 2.X APPLICATIONS.

FAILURES MAY BE OBSERVED IF THE PS/VALUEPOINT IS POWERED ON PRIOR TO THE SERIAL DEVICE. THE SERIAL DEVICE MAY FAIL TO FUNCTION OR HANG THE SYSTEM DURING THE INITIAL ATTEMPT AT USING THE DEVICE, OR MAY FUNCTION ON THE FIRST ATTEMPT THEN FAIL ON SUBSEQUENT TRIES.

DETAIL:

POWERING THE SYSTEM ON FIRST MAY PUT THE HARDWARE IN A CONDITION, CAUSING SOME APPLICATIONS TO RUN IN A LOOP TRYING TO CLEAR A REGISTER. THIS WILL GIVE THE APPEARANCE OF A FAILING SERIAL DEVICE, APPLICATION OR SYSTEM HANG.

FIX:

A FIX HAS BEEN DEVELOPED IN THE FORM OF A PATCH FOR DOS, WINDOWS 3.1, AND WINDOWS FOR WORKGROUPS. THE PATCHES ARE AVAILABLE FROM THE IBM PC COMPANY BULLETIN BOARD AT (919) 517 - 0001, OR THROUGH THE STANDARD MICROSYSTEMS CORPORATION (SMC) BULLETIN BOARD AT (516) 273-4936. CUSTOMERS MAY ALSO CALL SMC FOR A COPY OF THE PATCH DISKETTE AT (800) 443 - 7364.

IF STANDARD MICROSYSTEMS CORPORATION (SMC) IS CONTACTED FOR FOR A COPY OF THE PATCH, USE THE FOLLOWING NAMES TO OBTAIN THE APPROPRIATE PATCH DISKETTE:

UART550.EXE - DOS
COMM.DRV - WINDOWS 3.1
SERIAL.386 - WINDOWS FOR WORKGROUPS

THE NAMES OF THE PATCHES ON THE IBM PC COMPANY BULLETIN BOARD ARE AS FOLLOWS:

DOSSMC.ZIP - DOS
WINSMC.ZIP - WINDOWS 3.1
WINWGSMC.ZIP - WINDOWS FOR WORKGROUPS

THE OS/2 PATCH IS AVAILABLE BY CONTACTING THE OS/2 SUPPORT CENTER AT (800)992-4777. THE APAR NUMBER USED TO ADDRESS THIS PROBLEM IS PJ13341. EACH PATCH DISKETTE CONTAINS A "README" FILE WITH INSTALLATION INSTRUCTIONS.

SAS KEYWORDS:

PSVP	PSY2	PSVPBRD	PSY2BRD
PSVPERR	PSY2ERR	PSVPCOMM	PSY2COMM
PSY2PROG	PSVPPROG	PS VP	VALUE POINT
COM1	COM2	COM3	COM4
D/T6381	6381		

1.4.1139 SERIAL PORT ON 8550 SYSTEM BOARD MAY NOT FUNCTION

Record number: H027304

Device: D/T8550
 Model: M
 Tip key:
 Date created: 088/06/07
 Date last altered: A92/03/05

SYMPTOM:

8550 Z (MODEL 031 OR 061) MAY BE UNABLE TO COMMUNICATE TO AN EXTERNAL MODEM OR PLOTTER/PRINTER ATTACHED TO THE SERIAL PORT. ADVANCED DIAGNOSTICS RUN TO COMPLETION WITH NO ERRORS.

PROBLEM ISOLATION AIDS: SOME SOFTWARE PACKAGES BYPASS BIOS ON THE SYSTEM AND WRITE DIRECTLY TO HARDWARE. THESE PACKAGES MAY EXPERIENCE FAILURES WHEN ATTEMPTING TO COMMUNICATE TO A DEVICE (MODEM, PRINTER, PLOTTER) THROUGH THE SERIAL PORT. IF THE CUSTOMER EXPERIENCES THIS SYMPTOM AND DIAGNOSTICS RUN TO COMPLETION WITHOUT ERROR, THE CUSTOMER MAY REQUIRE ADDITIONAL DRIVERS OR TECHNICAL SUPPORT FROM THE SOFTWARE DEVELOPER.

SOFTWARE PACKAGES KNOWN TO REQUIRE A PATCH INCLUDE:
 (PACKAGE) (DEVELOPER AND PHONE NUMBER)
 SYMPHONY...COMMUNICATIONS LOTUS 1-800-345-1043
 EXPRESS...COMMUNICATIONS LOTUS 1-800-345-1043
 123...POST SCRIPT DRIVER LOTUS 1-800-345-1043
 (PART OF IN-TUNE AND VALUE PACK)
 FREELANCE LOTUS 1-800-345-1043
 (USING PLOTTERS,HP LASERJET,APPLE LASERWRITER,AND VIDEO SHOW)
 GRAPHWRITER LOTUS 1-800-345-1043
 (USING PLOTTERS,HP LASERJET,APPLE LASERWRITER,AND VIDEO SHOW)
 MICROSOFT WINDOWS MICROSOFT 1-206-882-8089
 MICROSOFT ACCESS MICROSOFT 1-206-882-8089
 (NOT COMPATIBLE WITH 8550Z)
 COMM LIBRARY GREENLEAF 1-214-248-2561

FIX: DIRECT THE CUSTOMER TO THEIR SOFTWARE DEVELOPER OR POINT OF SALE FOR THE REQUIRED DEVICE DRIVER OR TECHNICAL SUPPORT.

SAS KEYWORDS:

PSY2 PSY2PROG PSY2COMM 8550SYSPROG
 8550SYSCOMM 8550SYSERR PSY2ERR

1.4.1140 SERIAL PORT OPERATIONS ON IML SYSTEMS

Record number: H025847

Device: D/T8590
 Model: M
 Tip key:
 Date created: 091/09/03
 Date last altered: A93/09/07

SYMPTOM:

SERIAL PORT ATTACHED MOUSE, OR OTHER DEVICES INCLUDING PRINTERS, ARE INOPERATIVE WHEN RUNNING OS/2 OR OTHER SOFTWARE WHICH TAKE ADVANTAGE OF THE DMA (DIRECT MEMORY ACCESS) CAPABILITY OF THE SERIAL PORT HARDWARE.

A MESSAGE INDICATING THAT THE MOUSE DRIVER DID NOT LOAD, OR DID NOT DETECT A MOUSE, MAY BE DISPLAYED, OR THE SYSTEM MAY EXPERIENCE HANGS DURING OPERATIONS TO THE SERIAL PORT.

THE DIAGNOSTICS RUN ERROR-FREE AND THE SERIAL MOUSE WORKS CORRECTLY UNDER DOS (DISK OPERATING SYSTEM).

PROBLEM ISOLATION AIDS: NONE**FIX:**

THIS IS NOT A HARDWARE FAILURE. THE FOLLOWING PROCEDURE SHOULD CORRECT THE PROBLEM.

THE SERIAL PORT TRANSMIT AND RECEIVE ARBITRATION LEVELS MUST BE SET TO "DISABLED," BY USING THE FOLLOWING PROCEDURE:

- A. IML (INITIAL MICROCODE LOAD) THE SYSTEM PARTITION.
- B. AT THE MAIN MENU, SELECT "SET CONFIGURATION."
- C. AT THE "SET CONFIGURATION" MENU, SELECT "CHANGE CONFIG."
- D. USING THE KEYBOARD ARROW KEY, MOVE THE SELECTOR BAR TO "SERIAL TRANSMIT ARBITRATION LEVEL," UNDER THE "BUILT IN FEATURES" HEADING.
- E. USING THE F6 KEY, TOGGLE THROUGH THE SELECTIONS UNTIL "DISABLED" IS VISIBLE.
- F. AGAIN, USING THE ARROW KEY, MOVE THE SELECTOR BAR DOWN TO "SERIAL RECEIVE ARBITRATION LEVEL."
- G. REPEAT STEP E.
- H. SAVE THE CHANGES USING THE F10 KEY. PRESS "ENTER," THEN "EXIT," AND FOLLOW INSTRUCTIONS ON THE SCREEN.

THE CONFIGURATION CHANGE WILL BECOME EFFECTIVE ON THE NEXT IML.

NOTE: THE CHANGE IN CONFIGURATION SHOULD ALSO BE SAVED ON THE CUSTOMER'S BACK-UP REFERENCE DISKETTE.

SAS KEYWORDS:

PSY2	PSY2ADPT	PSY2ERR	8590SYSERR
8595SYSERR	8590SYSADPT	8595SYSADPT	D/T8595
PSY2COMM	8590SYSCOMM	8595SYSCOMM	PSY2PROG
8590SYSPROG	8595SYSPROG	PS/2	OS/2
PRINT	PRINTER	PS2	OS2
ASYN	COMM	D/T8556	D/T8557
D/T9576	D/T9577	D/T9595	D/T8590
D/T9556	D/T9557	D/T9590	D/T9595
D/T9590	D/T9585		

SERVER BACKPLANE ADDRESS JUMPER CONFIGURATION

1.4.1141 SERVER BACKPLANE ADDRESS JUMPER CONFIGURATION

Record number: H133777

Device: D/T8641
 Model: M
 Tip key:
 Date created: 096/08/17
 Date last altered: A98/01/20

SYMPTOM:

Servers with hot-swap backplanes may experience intermittent drive errors, defunct (DDD) drives that don't spin down or drive LEDs that don't blink when a drive has failed.

PROBLEM ISOLATION AIDS:

The system is an 8641, 8642 or 3518 with one or more hot swap backplanes installed.

FIX:

Check the Backplane Address Jumper:

1. Shutdown the operating system
2. Power off the server.
3. Verify the Backplane Address Jumper configuration:
 - a. For ALL 8641 backplanes: Jumpers should NOT be present on the pins for Bank0, Bank1, or Bank2 on any backplane. Refer to Figure 1. The PC Server 520 (8641) may have shipped with a backplane address jumper installed; it should be removed.
 - b. For 8642 and 3518 backplanes: Each backplane MUST have a unique address. A jumper should be present on the pins for Bank0, Bank1, OR Bank2 depending on the backplane's location within the server or expansion enclosure. Refer to Figure 1 and Table 1 below to determine the correct jumper setting for an 8642 or 3518 backplane:

For additional jumper information on the 3518 backplane, refer to RETAIN record H134356.

Figure 1 BACKSIDE of BACKPLANE (Not to Scale)

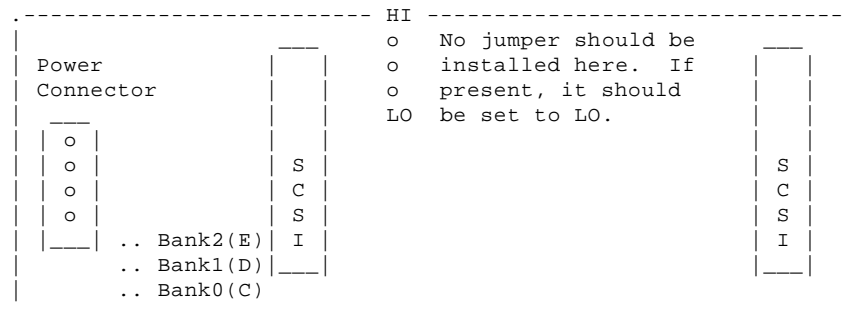


Table 1

Jumper Position	Backplane Location
Bank0	Bank C
Bank1	Bank D
Bank2	Bank E

Note:

The documentation in the Server 520 User's Handbook, part number 62H7096, page 177 is incorrect. Backplane address jumpers should NOT be installed on any Server 520 backplanes.

SAS KEYWORDS:

PSY2	D/T8642	PSY2FDSK	DEFUNCT
PC SERVER	SERVER	DASD	P/N71G6291
P/N06H8388	P/N06H7669	P/N70G9740	P/N94G4605
P/N76H2670	P/N70G9855	P/N76H2671	P/N06H8629
D/T3518	PSY2DOC	HEALTH	

1.4.1142 SERVER HANGS W/ BLACK SCREEN WHEN USING "ADMCHART"

Record number: H163272

Device: D/T8644
Model: M
Tip key:
Date created: 098/03/31
Date last altered: A98/04/06

SYMPTOM:

Upon Running ADMCHART from GDDM and selecting "0", the resulting menu is partially written then the Server Hangs and the screen is black. The Server will no longer respond to keyboard input.

PROBLEM ISOLATION AIDS:

- The System is a Netfinity server 3500 Type 8644 model 10U, 10X, 20U, 20X, 21U, 21X.
- The Symptoms occur when running GDDM version 3.2.0 program number 5684 - 168 on any of the following 3270 Terminal Emulators:
 - PMANT
 - Communications manager2 version 1.11
- The Network Operating System used is OS/2 Warp Server Advanced version 4.
- The Symptoms result in a hard lock of the System requiring a cold boot to recover.

FIX:

Change the System video setting to VGA mode as follows:

- 1 - Press <Ctrl-Alt-Numlock-Numlock> to reboot the Server (if this fails, cold boot the Server).
- 2 - Press <Alt + F1> when the white box appears in the upper left corner of the screen.
- 3 - Press <V> when prompted to restore the video subsystem to VGA mode.

DETAIL:

The problem is specific to the Host Based Graphics Application (GDDM).

SAS KEYWORDS:

PSY2	PSY2CODE	PSY2HANG	PSY2LOCK
UNCLASSIFIED	GDDM	ADMCHART	D/T8644
PSY2WARP			

SERVER HANGS WITH CDROM AND NOVELL NETWARE

1.4.1143 SERVER HANGS WITH CDROM AND NOVELL NETWARE

Record number: H126233

Device: D/T9595
 Model: M
 Tip key:
 Date created: 095/01/26
 Date last altered: A95/01/31

SYMPTOM:

While running Novell Netware, version 3.12, with ARCServ 5.01E, the system appears hung during the mounting of a CD-ROM volume containing a large amount of data.

PROBLEM ISOLATION AIDS:

The customer is using PS2SCSIA.DSK as the disk driver for Netware 1.02 along with IBMASPI and IBMENTRY.

"File Server Utilization", indicates 100% use while the mounting is taking place. Utilization returns to normal after the mounting is completed, however when utilization is at 100% clients on the server run slow or may lose their connection.

Diagnostics complete without error.

FIX:

No hardware should be replaced to attempt to resolve this situation.

Novell has provided a fix for this problem. The fix can be obtained from Novell at 1-800-NETWARE. The customer should request CDROM3.EXE.

The file may also be downloaded from the IBM PC Company Bulletin Board System at 919-517-0001.

```

=
= THE FILE IS CUSTOMER INSTALLABLE. CUSTOMERS SHOULD BE
= ADVISED TO CONTACT THE PC COMPANY HELPCENTER AT
= 800-772 - 2227 IF ASSISTANCE IS REQUIRED IN GETTING OR
= OR INSTALLING THE APPROPRIATE FILE.
=
=

```

Novell is a trademark of Novell Inc.
 Netware is a trademark of Novell Inc.
 ARCserve is a trademark of Cheyenne Software Inc.

SAS KEYWORDS:

PSY2	PSY2DRVR	PSY2ERR	D/T9585
D/T9577	D/T9576	D/T9595A	9595A

95

SERVER HANGS WITH PCI SCSI ADAPTER INSTALLED.

1.4.1144 SERVER HANGS WITH PCI SCSI ADAPTER INSTALLED.

Record number: H132289

Device: D/T8640
Model: M
Tip key:
Date created: 096/01/19
Date last altered: A96/01/22

SYMPTOM:

The system hangs running applications which generate heavy disk I/O activity. The server may not process keyboard requests. Rebooting the system may be required.

PROBLEM ISOLATION AIDS:

This could be any systems, such as the PC Server 300, 320 or 520, which has the following fixed disk configuration:

A CMS SCSI fixed disk drive, attached to an IBM FAST PCI SCSI Adapter (Option 32G3100, FRU P/N53G0382).

The operating system could be Novell Netware and possibly others unknown at the time of this writing.

FIX:

The problem has been isolated to the CMS SCSI fixed disk hanging on the PCI SCSI bus. The microcode on the hardfile must be upgraded.

The micro code fix for the fixed disk may be obtained by calling CMS Bulletin Board System (BBS) at (714)-437-9794.

At the BBS Main Menu, choose option "D" to download the file HP2.EXE. When prompted for a password, enter CMSAQS.

This utility requires the customer to boot DOS and have the IBMASPCI.SYS driver loaded in the CONFIG.SYS file. The following statement should be in the CONFIG.SYS:

```
DEVICE=C: \PATH\IBMASPCI.SYS
```

The file IBMASPCI.SYS ships on the IBM FAST PCI SCSI Option diskette. If necessary, the latest IBM FAST PCI SCSI Option diskette can be downloaded from the IBM PC Company Bulletin Board System by calling (919)-517-0001.

SAS KEYWORDS:

PSY2	SERVER	PSY2ADPT	PSY2PROG
300	320	8640	

1.4.1145 SERVER RAID DRIVES DDD WITH ARCSERVE TAPE BACKUP

Record number: H136613

Device: D/T8641
 Model: M
 Tip key:
 Date created: 097/02/14
 Date last altered: A98/01/20

SYMPTOM:

One or more drives become DDD while the ARCserve program is loading OR during a tape backup with ARCserve.

The following message may also appear after exiting NetWare:
 "Bad or missing Command Interpreter"

PROBLEM ISOLATION AIDS:

- The system is a PC Server with an IBM RAID adapter
- The Operating System is NetWare 3.x or 4.x
- The tape backup application is ARCserve version 6.0

FIX:

Edit the file TAPESRV.CFG (usually located on the SYS volume in the ARCSERVE.6\NLM subdirectory).

Add the following two(2) statements to the bottom of the file:

```
-
-
| Config | Note: "Config" should be enclosed by a left square
- -      bracket and a right square bracket located
NOLUN=ENABLE on a keyboard next to the letter "P".
              RETAIN is unable to display these brackets.
```

Note:

Before downing a NetWare Server with ARCserve version 6.0, always issue the command "ASTOP6" from the NetWare console. This action performs a graceful shutdown of the ARCserve application.

ARCserve is a trademark of Cheyenne Software Inc.

NetWare is a trademark of Novell, Inc.

SAS KEYWORDS:

PSY2	PSY2TAPE	PSY2FDSK	PSY2OPER
PSY2PROG	D/T8639	8639	D/T8640
8640	8641	D/T8642	8642
D/T8650	8650	310	325
330	500	520	720
704	DEFUNCT	HEALTH	

SERVER SERVICE ERROR AFTER NETWORKING INSTALLATION

1.4.1146 SERVER SERVICE ERROR AFTER NETWORKING INSTALLATION

Record number: H161976

Device: D/T6898
 Model: M
 Tip key:
 Date created: 097/11/25
 Date last altered: A97/11/25

SYMPTOM:

When a user installs Networking after the first WindowsNT setup has completed, and restarts the operating system, they are presented with the following, or similar error message:

"Server Service Failed: Insufficient Storage"

PROBLEM ISOLATION AIDS:

This tip applies to the IBM IntelliStation M-Pro, Machine Type 6898, preloaded with WindowsNT 4.0.

If a customer installs Networking after the initial setup of WindowsNT (i.e., answering Yes to the prompt "Install Networking at a later time?"), WindowsNT prompts for files from drive A: \. The path should be changed to C: \I386 which contains Service Pack 3 (SP3) files.

If the user instead installs files from the \I386 directory on the WindowsNT CDROM included with the system, they will load generic (non-Service Pack) files for the network configuration.

FIX:

If the user has installed the generic (non-Service Pack) files from the CDROM, they must reinstall WindowsNT 4.0 SP3.

Windows NT 4.0 Service Pack 3 can be downloaded from the Microsoft Internet site at the following URL:

Http: //www.microsoft.com/ntworkstation/

Windows and WindowsNT are trademarks of Microsoft Corporation.

SAS KEYWORDS:

PSY2	PSY2ERR	PSY2ADPT	PSY2COMM
PSVP	PSVPERR	PSVPADPT	PSY2COMM
D/T6898	6898	UNCLASSIFIED	

SERVER WON'T POWER OFF WITH ADV SYS MGMT OPT INSTALLED

1.4.1147 SERVER WON'T POWER OFF WITH ADV SYS MGMT OPT INSTALLED

Record number: H003210

Device: D/T8650
Model: M
Tip key:
Date created: 097/03/03
Date last altered: A97/03/04

SYMPTOM:

The PC Server 704 will not stay powered down after the power button is pressed. The Server powers down, then restarts itself after approximately twenty(20) seconds.

PROBLEM ISOLATION AIDS:

The system is a PC Server 704 (8650) with the following parts:
- Systems Management Adapter FRU p/n76H3240 (Option p/n94G5570)
- Systems Management Cable FRU p/n76H6828 (Option p/n94G6970)

FIX:

Unplug the PC Server 704 power cord from the back of the Server. Inspect the white label on the Systems Management cable FRU p/n 76H6828. If the p/n on the cable is 76H0585, replace the cable with FRU p/n76H6828. Although the FRU number has not changed, the affected cables have been cleared from stock.

SAS KEYWORDS:

PSY2 PSY2OPER PSY2ADPT UNCLASSIFIED
PSY2PWR

1.4.1148 SERVER 300 HANGS

Record number: H1391

Device: D/T8640
Model: M
Tip key:
Date created: 095/06/09
Date last altered: A95/08/15

SYMPTOM:

System hangs are experienced under heavy disk I/O operation on 8640 Pentium systems particularly in networking or disk mirroring environments.

PROBLEM ISOLATION AIDS:

- 8640 xPx models with system board FRU P/N71G0747.
- Current production with FRU P/N06H8756 are not affected.

FIX:

8640 model xPx systems that experience hangs should have their system boards replaced with FRU P/N06H8756. Orders for FRU P/N71G0747 are being subbed to FRU P/N06H8756.

SAS KEYWORDS:

PSY2	HANG	SERVER300	PSY2ERR
PSY2FOF	06H8756		

SERVER 310 HANGS WITH INTEL ETHEREXPRESS ADAPTER

1.4.1149 SERVER 310 HANGS WITH INTEL ETHEREXPRESS ADAPTER

Record number: H121333

Device: D/T8639
Model: M
Tip key:
Date created: 096/10/22
Date last altered: A96/11/11

SYMPTOM:

Upon booting the Server 310 (8639) and after loading the Adaptec SCSI BIOS, the system hangs with the following error message:
110 F000: D81D

PROBLEM ISOLATION AIDS:

The Server is an 8639-0EV with an Intel EtherExpress PCI PRO/100 Smart Adapter (P/N PILA8485) AND an Adaptec UltraSCSI Adapter FRU p/n60H7823.

FIX:

Move the Adaptec UltraSCSI Adapter to PCI slot 3 and install the Intel EtherExpress Adapter in PCI slot 1 or 2.

The PCI Hold Time on the EtherExpress Adapter is not within the PCI specification. Moving the adapter closer to the planar reduces the delay to the PCI bus.

Adaptec is a trademark of Adaptec, Inc.
EtherExpress and Intel are trademarks of Intel Corporation.

SAS KEYWORDS:

PSY2	PSY2ADPT	PSY2ERROR	PSY2COMM
TRAP	TRAPS	HANG	PSY2BRD
PSY2OEM	POEM	OEM	60H7823
UNCLASSIFIED			

SERVER 320 520 ERRONEOUS CONFIGURATION ERROR MESSAGE

1.4.1150 SERVER 320 & 520 ERRONEOUS CONFIGURATION ERROR MESSAGE

Record number: H132256

Device: D/T8641
Model: M
Tip key:
Date created: 096/01/18
Date last altered: A96/03/08

SYMPTOM:

When the PC Servers 320 & 520 (EISA models) are booted from the EISA Configuration Diskette (version 3.30), the following message is seen:

Configuration Changes

The following changes have automatically been made:

Boards removed:

Embedded 10690001

PROBLEM ISOLATION AIDS:

The system is an IBM PC Server 320 or 520 (EISA models only) with the SCSI-2 PCI RAID Adapter option (FRU P/N06H5078) installed .

FIX:

The error message should be disregarded.
No hardware has failed and none should be replaced.

Engineering investigation has identified the problem and a new revision of the System BIOS and the EISA Configuration Diskettes is in process to resolve the problem.

This tip will be updated with the appropriate information when the revisions are available.

SAS KEYWORDS:

PSY2	SERVER	520	8641
CONFIG	PSY2ERR	PSY2TBD	FLASH
8640	320	D/T8640	

1.4.1151 SERVER 320 DUAL PROCESSOR NETWORKING FAILURES W/ETHERNET

Record number: H093917

Device: D/T8640
 Model: M
 Tip key:
 Date created: 095/07/28
 Date last altered: A95/07/28

SYMPTOM:

One or more of the following failures are experienced on a Server 320 (8640) in a networking environment (Ethernet).

1. Network disconnects
2. Trap 000D (Trap D)
3. System hangs

PROBLEM ISOLATION AIDS:

1. The system is an 8640 Model 0YX or 1YX with TWO PROCESSORS.
2. The Operating system is OS/2 version 2.11 SMP (Symmetrical Multi-Processing) and LAN SERVER 4.0.
3. One or more of the following Non-IBM PCI Ethernet Adapters and Device Drivers may be installed:

Name	Rev Level	Device Driver/Date
ACCTON	REV 01C	ETHPCI.OS2 1/14/95
COMPEX		ENPCI.OS2 12/5/94
DLINK	REV A3	DC21x4.OS2 1/5/95
SMC	REV E	SMCPWR.OS2 2/28/95
ZNYX	REV04	ZX312.OS2 12/4/95

FIX:

Customers should be advised to contact the specific vendors identified to determine if they have device drivers which have been updated to support OS/2 2.1 SMP (Symmetrical Multi-Processing).

The referenced adapters run without problems in single processor mode in the server 320.

DLINK (714) 455-1688
 ACCTON (800) 926-9288
 ZYNYX (510) 249-0800

Note:

EtherAction is a trademark of the ZNYX Corporation.
 D-Link is a trademark of the D-Link Corporation.
 EtherDuo is a trademark of the Accton Technology Corporation.
 SMC is a trademark of Standard Microsystems Corporation.
 COMPEX is a trademark of Compex Corporation.

SAS KEYWORDS:

PSY2	PSY2BRD	PSY2OEM	8640
POEM	PSY2COMM	PSY2ADPT	OEM
PSY2TBD			

1.4.1152 SERVER 320 FAILS TO LOAD WINDOWS NT 3.51

Record number: H086614

Device: D/T8640
 Model: M
 Tip key:
 Date created: 095/07/26
 Date last altered: A95/07/27

SYMPTOM:

Windows NT v3.51 fails to load (install) on 8640 model xYx (Server 320). The following error message is seen:

"HAL: NO RTC DEVICE INTERRUPT" while loading Setup disk # 2.

PROBLEM ISOLATION AIDS:

The Server 320 has only 1 processor installed.

Note:

There are no known problems installing WinNT 3.51 with two processors installed in the 8640 models xYx.

FIX:

There are two possible methods to circumvent this problem.

Temporary work-around:

Override the HAL selected by NT during install. The following instructions allow installing Win NT 3.51 with ONE PROCESSOR.

- A. Boot the Windows Nt Setup Boot diskette and start the install process.
- b. When the following message appears:
 "Setup is inspecting your computer's hardware information," Press PF5. This will cause the install program to ask for another diskette LATER.
- C. When the following message appears:
 "Setup could not determine the type of computer you have, or you have chosen to manually specify the computer type." Move the cursor to the, "Standard PC with C-Step 486," then press ENTER.

Note: If a message prompting you to insert "Windows Nt Setup Disk 2" appears, then PF5 was not pressed at the appropriate time. Reboot and start the process again.

Permanent fix:

Install BIOS version M54PE_09P, which creates an MPS table compatible with Windows NT for systems running one processor. (Targeted availability is early August, 1995. This tip will be updated when it is available.)

The current BIOS versions may be down-loaded from the IBM PC Company Bulletin Board System by calling 919-517-0001.

```

|-----|
| FLASH UPDATES ARE CUSTOMER INSTALLABLE. CUSTOMERS SHOULD |
| REVIEW THE "README" FILE LOCATED ON THE DISKETTE FOR      |
| INSTALLATION INFORMATION. CONTACT THE PERSONAL SYSTEMS   |
| HELPCENTER AT 1-800-772-2227, IF ASSISTANCE IS REQUIRED IN  |
| OBTAINING OR INSTALLING THIS BIOS UPGRADE                 |
|-----|
  
```

Windows NT is a trademark of Microsoft Corp.

SAS KEYWORDS:

PSY2	SERVER	320	8640
PSY2PROG	PSY2ERR	WINDOWS	

1.4.1153 SERVER 320 FAILS W/TRAP 000D TRAP 000E W/OEM ADAPTER

Record number: H127989

Device: D/T8640
 Model: M
 Tip key:
 Date created: 095/06/05
 Date last altered: A95/06/16

SYMPTOM:

A Server 320 (8640) generates a Trap 000D or Trap 000E error after the OEM Network Adapter driver fails to load.

OR

Drivers load but report multiple adapters are in the same slot and IRQ.

Clients attached to one of multiple adapters in the server cannot connect to the server.

PROBLEM ISOLATION AIDS:

One or more of the following OEM adapters may be installed in the Server 320:

- Accton EtherDuo PCI (EN1203)
- D-Link DE-530CT
- ZYNX ZX312

FIX:

This problem is caused by a limitation that applies to all adapters which use a Digital NIC chip. It must be fixed in the design of the adapter's device driver, not the system hardware, Operating System or Network Operating System.

The DLINK, ZYNX and ACCTON adapters may not reside in the same system unit until the device drivers have been updated.

Customers should be advised to contact the Vendors identified below to determine if their device drivers have been updated to support multiple PCI Network adapters in the same system.

DLINK (714) 455-1688
 ACCTON (800) 926-9288
 ZYNX (510) 249-0800

Note:

DLINK expects to have new device drivers to resolve the DLINK adapter symptoms available via the DLINK BBS by approximately 6/23/95.

EtherAction is a trademark of the ZNYX Corporation.

D-Link is a trademark of the D-Link Corporation.

EtherDuo is a trademark of the Accton Technology Corporation.

SAS KEYWORDS:

PSY2	PSY2BRD	PSY2OEM	8640
POEM	PSY2COMM	PSY2ADPT	OEM
PSY2TBD			

1.4.1154 SERVER 320 HANGS RUNNING OS/2 SMP OR OS/2 WARP

Record number: H13678

Device: D/T8640
Model: M
Tip key:
Date created: 095/08/31
Date last altered: A95/08/31

SYMPTOM:

The Server 320 hangs during periods of intense disk activity. The SCSI Activity light stops (indicating no disk activity), but the system does respond to I/O interrupts, such as mouse commands.

PROBLEM ISOLATION AIDS:

All of the following must apply.

1. The system is a PC Server 320. Both the PCI/Micro Channel and the PCI/EISA systems are affected.
2. The operating system is either:
OS/2 Version 2.11 SMP (Symmetrical Multi-Processing), or
OS/2 Version 3.0 0 (WARP).
3. The failures occur only during periods of heavy fixed disk activity.
4. All diagnostics run error free.

FIX:

This is not a hardware failure. No FRU's should be replaced.

The following OS/2 APAR's have been released to correct these problems:

APAR PJ19712 OS/2 kernal fix for WARP 3.0.
APAR PJ19722. This is a new version of PMWIN.DLL.
APAR PJ20015 OS/2 SMP 2.11 kernel fix.

Customers may obtain the referenced APAR fixes from the OS/2 Software Support Center by calling 1-800-992-4777.

SAS KEYWORDS:

PSY2	SERVER	320	8640
SMP	OS2	PSY2PROG	PSY2ERR

1.4.1155 SERVER 320 HANGS W/ADAPTEC SCSI CARD

Record number: H13150

Device: D/T8640
Model: M
Tip key:
Date created: 095/06/12
Date last altered: A95/06/16

SYMPTOM:

After a period of heavy usage, system hangs are experienced when a Server 320 is connected to a LAN.

Other symptoms include, lost video, requestor disconnects, or SCSI hardfile light stays on.

PROBLEM ISOLATION AIDS:

- Multiple network adapter cards are installed along with an Adaptec EISA SCSI card.
- OS/2 2.11 SMP is installed along with Lanserver 4.0.

FIX:

- Change the Adaptec BCLK setting in the EISA configuration to "2".
- If problems are still encountered after changing the setting, the Adaptec card can be removed or the customer can be referred to Adaptec Technical Support at 1-800-959-7274.
- No other FRU parts should be swapped in attempt to fix this problem.

"Adaptec" is a trademark of Adaptec Inc.

SAS KEYWORDS:

PSY2	8640	SERVER320	2742T
AHA	PSY2FDSK	PSY2ADPT	PSY2COMM

1.4.1156 SERVER 320 HARD DRIVES LOSE POWER OR HANG

Record number: H003814

Device: D/T8640
 Model: M
 Tip key:
 Date created: 096/05/15
 Date last altered: A98/01/20

SYMPTOM:

Intermittent drive failures or system hangs may occur on the PC Server 320 during power-up or during normal operation due to poor contact on one or more of the seven power connectors. The female connector is enlarged causing a device to lose power on the 12V line. The loose connection can affect power to any internal device including backplanes which distribute power to hot-swap drives. On a RAID system, the hard drives would appear as DDD (Defunct).

PROBLEM ISOLATION AIDS:

- The system is a PC Server 320.
- A defective contact can be observed visually by examining the female power connectors. If defective, the cylindrical metal contact in the plastic connector will be spread open wider at the top.

FIX:

Reform the metal contact(s) in the plastic connector on the power cable with a small screw driver to reduce the size of the contact.

SAS KEYWORDS:

PSY2	PWR	FDISK	D/T8640
8640	320	D/T8639	8639
310	D/T8641	8641	500
520	D/T8642	8642	720
D/T8650	8650	704	HEALTH

1.4.1157 SERVER 320 TRAPS WITH 8 PARITY SIMMS INSTALLED

Record number: H007813

Device: D/T8640
 Model: M
 Tip key:
 Date created: 096/05/21
 Date last altered: A98/01/20

SYMPTOM:

PCI/EISA versions of the IBM PC Server 320, with eight(8) PARITY memory SIMMs installed, trap or hang. These errors occur intermittently under heavy system load and have been seen with NetWare, OS/2, SCO, and Windows NT.

PROBLEM ISOLATION AIDS:

- The system is an 8640 PCI/EISA model with PARITY memory. EOS (ECC-on-SIMM) memory systems are NOT affected.
- The system board is fully populated with 8MB PARITY SIMMs, with 32MB PARITY SIMMs, or with a combination of both SIMMs.
- All SIMMs are double-sided with twenty-four(24) DRAM modules.
- Removing a pair of SIMMs fixes the problem.
- Diagnostics usually run without error.

Follow this procedure:

1. Verify that the processor speed jumpers, W2, W6, W40 are set correctly. Refer to the system label for processor speed jumper settings.
2. Verify that the amount of installed memory matches the amount saved in the EISA Configuration.
3. If 1 or 2 were changed, boot the operating system, and monitor the system. This may have been the problem.
4. If the operating system is stable, exit this tip.
5. If the operating system still traps or hangs, proceed.
6. Remove the memory SIMMs from sockets U46 and U47.
7. Update the EISA Configuration.
8. Boot the operating system and monitor the system for proper operation.

FIX:

1. If the operating system is now stable, replace the system board with FRU P/N06H2173, reinstall the memory, and update the EISA Configuration.
2. If the operating system still traps or hangs, continue with failure isolation until the failing component is identified.

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SCO is a trademark of The Santa Cruz Organization, Inc.

Windows NT is a trademark of Microsoft Corp.

SAS KEYWORDS:

PSY2	D/T8640	PSY2PART	8640
PSY2PROG	PSY2ERR	SERVER	PENTIUM
PSY2MEM	320	PSY2BRD	HEALTH

1.4.1158 SERVER 320 TRAPS/HANGS WITH NEC 32MB PARITY SIMM

Record number: H135791

Device: D/T8640
Model: M
Tip key:
Date created: 096/12/10
Date last altered: A98/01/20

SYMPTOM:

PC Server 320 systems may trap or hang intermittently.

PROBLEM ISOLATION AIDS:

The system is a PC Server 320 (8640) with NEC 32MB Parity SIMMs installed FRU p/n73G3235 (Option p/n92G7205).

FIX:

Inspect the 32MB Parity SIMMs FRU p/n73G3235 for the IBM barcode label and/or a white NEC label. If the product code on the IBM label is "14UP" and/or a white NEC label is found, replace the the SIMM(s) with FRU p/n73G3235.

NOT all PC Server 320s with the NEC 32MB SIMMs installed will experience failures; do NOT replace the NEC SIMMs unless failures are observed.

Diagram showing a sample memory SIMM with barcode label and product code. Includes fields for NEC, B14UP##### 74G1020 NEC ###, 32MB 8MX36 P 70NS 5.0V 14UP, and IBM FRU: 73G3235 OPT: 92G7205.

SAMPLE NEC LABEL:

NEC SINGAPORE
MC-428000#####-70
96#####

Although the FRU number has not changed, current Option, FRU, and Manufacturing stock do not contain affected SIMMs. DUE TO EXISTING FIELD STOCK LEVELS, EXAMINE THE SIMMs BEFORE INSTALLATION TO ENSURE THEY ARE NOT AFFECTED.

NEC is a Trademark of NEC Corporation.

SAS KEYWORDS:

PSY2 PSY2ERR PSY2MEM PSY2PART
UNCLASSIFIED 8640 73G3235 92G7205
74G1020 HEALTH

1.4.1159 8556/57 FAILS WITH "STB" OEM VIDEO ADAPTER

Record number: H102782

Device: D/T8557
Model: M
Tip key:
Date created: 092/10/13
Date last altered: A92/10/13

SYMPTOM:

The monitor attached to the STB Video Adapter* is active when system is first powered up after video card installation. After configuration, only the system board video port is active. The monitor attached to the STB adapter will remain blank. With a display connected to the system board video port and viewing "set and view configuration" an address conflict is present but cannot be changed.

* STB Video Adapter Models EGRO-VGA/MC or MVP-2/MC.

PROBLEM ISOLATION AIDS:

System will function normally with adapter card removed. Video diagnostics run to completion without error with card removed.

FIX:

This problem is caused by a fixed-address configuration conflict. This conflict has been corrected with Reference Diskette version 2.02 or higher.

SAS KEYWORDS:

PSY2	D/T8556	PSY2ADPT	PSY2OEM
DISPLAY	PSY2DISP	8556	8557

1.4.1160 SERVER 320/520 HANGS BOOTING DIAGS OR SERVERGUIDE

Record number: H133070

Device: D/T8640
 Model: M
 Tip key:
 Date created: 096/03/15
 Date last altered: A96/12/02

SYMPTOM:

PCI/EISA versions of the IBM PC Server 320 and 520 hang when booting the PC Server System Board Diagnostic Diskette version 5.32, or when installing ServerGuide (any version).

This tip applies only to systems with two IBM PCI RAID adapters.

PROBLEM ISOLATION AIDS:

- The server hangs during the initial boot of the diagnostic or ServerGuide diskette.
- The system is a PCI/EISA Server 320 running BIOS version M54PE-09N or lower.
- OR-
- The system is a PCI/EISA Server 520 running BIOS version M54PE-09F or lower.
- Two IBM PCI RAID Adapters are installed.
 (PCI RAID Adapter FRU p/n06H5078).

FIX:

Apply BIOS 16T3B (320BIOSE.EXE) for the Server 320 PCI/EISA.
 Apply BIOS 16T3C (520BIOSE.EXE) for the Server 520 PCI/EISA.
 The BIOS files are available on the IBM PC Company BBS.

-OR-

As a workaround, use the following procedure:

1. Remove the PCI RAID Adapter in the PCI slot nearest the memory connectors.
2. Boot the diskette that experienced the hang. For the Diagnostics Diskette, run the diagnostics with the second PCI RAID Adapter removed. For the ServerGuide diskette, install the Operating System from ServerGuide on a logical drive configured on the remaining PCI RAID Adapter (which should be in the middle PCI slot).
3. Reinstall the second PCI RAID Adapter back to its original slot (nearest the memory connectors).

-----IMPORTANT-----

BIOS images are customer installable. Customers should review any "README" files located on the diskette for installation information. Contact the IBM PC HelpCenter at 800-772 - 2227 if download/installation assistance is needed.

IBM PC Server files are located in Directory 22 on the PC Company Bulletin Board Service (BBS) at 1-919-517-0001 or tieline 255-0001.
 The files may also be downloaded via the Internet from the IBM PC File Library by searching the following Internet URL:
<http://www.pc.ibm.com/files.html>

SAS KEYWORDS:

PSY2	D/T8641	PSY2DIAG	PSY2DSKT
PSY2ADPT	HUNG	PCSERVER	8640
8641	PSY2TBD		

1.4.1161 SERVER 320/520 MICROCHANNEL PARITY MEMORY TRAPS

Record number: H015437

Device: D/T8640
 Model: M
 Tip key:
 Date created: 096/06/20
 Date last altered: A98/01/20

SYMPTOM:

MicroChannel versions of the IBM PC Server 320 or 520 may trap or hang with eight(8) PARITY memory SIMMs installed. These errors occur intermittently under heavy system load and have been seen with NetWare, OS/2, SCO, and Windows NT.

Note: The PC Server 520 MicroChannel systems come standard with EOS (ECC-on-SIMM) memory and are only affected if the EOS memory has been replaced with PARITY memory.

PROBLEM ISOLATION AIDS:

All of the following must be true for this tip to apply:

- The system is an 8640-Mxx or 8641-Mxx MicroChannel model with PARITY memory. EOS memory systems are NOT affected.
- The memory high rise card is fully populated with 8MB PARITY SIMMs, with 32MB PARITY SIMMs, or with a combination of both.
- All SIMMs are double-sided with twenty-four(24) DRAM modules.
- Removing a pair of SIMMs fixes the problem.
- The memory high rise card installed is FRU P/N96G1339.
- Diagnostics usually run without error.

Follow this procedure:

1. Verify that the processor speed jumpers, J12 and J43 are set correctly. Refer to the system label for processor speed jumper settings.
2. Verify that the amount of installed memory matches the amount saved in Setup.
3. Remove the memory SIMMs from bank 3 (sockets J7 and J8).
4. Verify the memory configuration in Setup.
5. Boot the operating system and monitor the system for proper operation.

FIX:

1. If the operating system is now stable, replace the memory high rise card with FRU P/N96G3692, reinstall the memory, and verify the memory configuration in Setup.
2. If the operating system still traps or hangs, continue with failure isolation.

Note:

In MicroChannel systems, memory should be installed starting with bank 0. However, when troubleshooting memory failures, the memory may be installed in any memory bank as long as the memory SIMMs are paired. A defective memory bank (a defective pair of memory sockets) on the high rise card can be isolated by moving a known good pair of memory SIMMs to different memory bank locations. Use this procedure to isolate a memory high rise card failure from a memory SIMM failure.

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SCO is a trademark of The Santa Cruz Organization, Inc.

Windows NT is a trademark of Microsoft Corp.

SAS KEYWORDS:

PSY2	D/T8641	8640	PSY2ERR
SERVER	PENTIUM	PSY2MEM	320
8641	RISER	520	96G1339
96G3692	HEALTH		

1.4.1162 SERVER 320/520 PCI/EISA WON'T ACCEPT BIOS FLASH

Record number: H136740

Device: D/T8640
Model: M
Tip key:
Date created: 097/02/24
Date last altered: A97/02/24

SYMPTOM:

The BIOS update fails. The following message may appear:
"error 0024: Vpp Low Error Detected"

PROBLEM ISOLATION AIDS:

- The system is a PC Server 320/520 PCI/EISA model.
- Jumper W17 is open (missing)

FIX:

Ensure that jumper W17 is installed. This is the default position for the jumper.

Refer to the PC Server HMM or to the system label on the Server for the location of jumper W17.

SAS KEYWORDS:

PSY2	PSY2ERR	PSY2BRD	PSY2DOC
UNCLASSIFIED	D/T8641	8641	

Record number: H001481

Device: D/T8641
 Model: M
 Tip key:
 Date created: 096/05/08
 Date last altered: A96/05/08

SYMPTOM:

PCI/MicroChannel versions of the IBM PC Server 320 and 520, with a PCI or MicroChannel RAID Adapter, fail to install NetWare, Windows NT, or SCO from ServerGuide Version 2.5.

- The NetWare 3.12 and 4.1 installations display the following even after inserting the NetWare CD:
 "INSERT THE NETWARE CD INTO THE CD-ROM
 DRIVE AND WAIT FOR
 BAD COMMAND OR FILENAME
 PRESS ANY KEY TO CONTINUE..."

--OR--

- The SCO V3.0 installation displays the following:
 "F33
 WARNING: no root disk controller
 H6
 PANIC: srmountfun-error 19 mounting
 rootdev(1/40) Trying to dump 8095 pages
 to DUMPDEV RAM (31/8) at block 32
 4 pages dumped
 NOTICE: FLUSHING DAC 960P 0 CACHE ...DONE
 SAFE to POWER OFF
 or
 Press ANY KEY to REBOOT"

--OR--

- The Windows NT Server 3.51 installation displays the following:
 "STOP: C00012F The specified image file did not have the Correct Format It did not have an Initial MZ.
 Restart and set the Recovery options in the system control panel or the \crash debug system start option. If this message reappears, contact your system administrator or Technical Support Group."

PROBLEM ISOLATION AIDS: NONE**FIX:**

A permanent fix is being developed and will be included in the next release of ServerGuide.

As a workaround, use the following procedure:

- (Works for NetWare, SCO, and Windows NT)
1. Power off the server and open or remove the system cover.
 2. Move Jumper J26 to the "ADAPTER" position (jumper pins 2-3). Refer to the system board schematic located on the server.
 3. Close up the server, insert the ServerGuide license diskette into drive A: , insert the ServerGuide V2.5 Main CD into the CD-ROM, power on the server, and complete the installation.
 4. When the installation is complete, shutdown the operating system, power off the server, and move Jumper J26 back to the "PLANAR" position (jumper pins 1-2).

--OR--

For NetWare installations only, do the following:

1. After the NetWare installation fails, insert the ServerGuide license diskette into drive A: , insert the ServerGuide Main CD into the CD-ROM, reboot the server, select the appropriate NetWare versions and proceed to the Configuring NetWare screen.
 Note that the default disk controller is: SCSI-2 PCI
2. Change this selection to the controller connected to both the RAID drives and the CD-ROM (ie. SCSI-2 Fast/Wide PCI-Bus RAID adapter).
3. Continue the installation normally.

NetWare, SCO Unix, and Windows NT default to installing to the SCSI controller integrated on the planar when Jumper J26 is set to the "PLANAR" setting. By disabling the integrated SCSI controller, ServerGuide installs using the controller that has the hard drives and CD-ROM attached to it.

NetWare is a trademark of Novell Inc.
SCO is a trademark of The Santa Cruz Operation Inc.
Windows NT is a trademark of Microsoft Corp.

SAS KEYWORDS:

PSY2	D/T8641	D/T8640	SY2DSKT
PSY2ADPT	HUNG	PCSERVER	8640
8641	PSY2TBD	CDROM	DISK
D/T8639	8639	D/T8642	8642

1.4.1164 SERVER 320/520 TRAPS AFTER CACHE UPGRADE

Record number: H001115 Number of altered copies: 1

Device: D/T8640
 Model: M
 Tip key:
 Date created: 096/05/06
 Date last altered: A98/01/20

SYMPTOM:

PCI/EISA versions of the IBM PC Server 320 and 520 hang or reboot while booting or loading an operating system. These errors have been seen with OS/2, Windows NT, and SCO/UNIX.

PROBLEM ISOLATION AIDS:

- The system is an 8640 or 8641 PCI/EISA model.
- A 256KB L2 cache upgrade (Option P/N 94G3141) was installed.
- The system may have a second processor installed.
- Symptoms disappear when disabling cache in BIOS with <F2>.
- Diagnostics run without error.

FIX:

1. Verify that the cache modules are installed correctly and that no pins are bent.
2. Verify the system board cache jumpers:
 256KB cache: W5 and W10 should have pins 1 and 2 jumpered.
 512KB cache: W5 and W10 should have pins 2 and 3 jumpered.
3. Replace any cache modules that have the word "Alliance" or or the number AS7C3256-15PC with FRU P/N06H8510.

SCO is a trademark of The Santa Cruz Organization, Inc.
 Windows NT is a trademark of Microsoft Corp.

SAS KEYWORDS:

PSY2	D/T8640	PSY2PART	8640
PSY2PROG	PSVPERR	PSY2ERR	SERVER
PENTIUM	PSY2MEM	320	D/T8641
8641	520	HEALTH	

1.4.1165 SERVER 325/330 HANG AT POST WITH PCI ARTIC ADAPTER

Record number: H136402

Device: D/T8640
Model: M
Tip key:
Date created: 097/01/28
Date last altered: A97/01/29

SYMPTOM:

PC Servers 325 (8639) and 330 (8640) hang at POST.

PROBLEM ISOLATION AIDS:

All of the following must be true for this tip to apply:

- The system is a PC Server 325 or 330 with BIOS 25A
- The IBM ARTIC X.25 Interface Co-Processor PCI Adapter FRU p/n 55H4513 (Option p/n55H4501) is installed.

FIX:

Flash the system BIOS to level 27A or higher. The latest BIOS for the PC Server 325 and 330 can be found on the IBM BBS by searching for "PC Server 325/330 BIOS".

-----IMPORTANT-----

Diskette images are customer installable. Customers should review any "README" files located on the diskette for installation information. Contact the IBM PC HelpCenter at 800-772 - 2227 if download/installation assistance is needed.

IBM PC Server files are located in Directory 22 on the PC Company Bulletin Board Service (BBS) at 1-919-517-0001 or tieline 255-0001.

The files may also be downloaded via the Internet from the IBM PC File Library by searching the following Internet URL:
<http://www.pc.ibm.com/files.html>

SAS KEYWORDS:

PSY2

UNCLASSIFIED

PSY2ERR

PSY2COMM

PSY2ADPT

D/T8639

1.4.1166 SERVER 325/330 HARD DRIVE IN-USE LED NOT FLASHING

Record number: H136565

Device: D/T8639
Model: M
Tip key:
Date created: 097/02/11
Date last altered: A97/02/12

SYMPTOM:

The amber SCSI Hard Drive In-Use Indicator on the Server Operator Panel is not flashing during hard drive activity.

PROBLEM ISOLATION AIDS:

- The system is a PC Server 325 (8639) or 330 (8640)
- The hard drives are connected to a SCSI adapter or RAID adapter and NOT connected to the on-board (integrated) SCSI controller.

FIX:

Do not replace any hardware. The SCSI Hard Drive In-Use Indicator will NOT light during hard drive activity on drives connected to a SCSI adapter or RAID adapter. The LED on the Server Operator Panel only indicates activity for hard drives attached to the on-board (integrated) SCSI controller.

SAS KEYWORDS:

PSY2 PSY2FDSK PSY2BRD UNCLASSIFIED
PSY2ADPT D/T8640

SERVER 500 DIAGNOSTIC ERROR WITH 851X MONITOR ATTACHED

1.4.1167 SERVER 500 DIAGNOSTIC ERROR WITH 851X MONITOR ATTACHED

Record number: H006217

Device: D/T8641
 Model: M
 Tip key:
 Date created: 095/07/17
 Date last altered: A95/07/19

SYMPTOM:

While looping video diagnostics on the Server 500 (8641), the system halts with the following error code:

02610950 Note: this is not a valid error code (spurious).

If the keyboard "Enter" key is depressed the system may hang.

PROBLEM ISOLATION AIDS:

1. The monitor attached to the system is an 851X (8515, etc.).
2. The system error log contains no information related to this error.

FIX:

851X Monitors will work, but will experience the error code referenced above if the diagnostics are looped long enough. The diagnostic error does not indicate defective hardware, therefore no parts should be replaced. No further action is planned.

The 8641 is shipped from IBM with an SVGA video adapter installed. 951X monitors, which require XGA-2 graphics adapters, are not supported on the basic system configuration as shipped from IBM.

This problem does not exist with monitors which use multi-scan technology such as the 9527 (952X monitors).

SAS KEYWORDS:

PSY2	PSY2DISP	PSY2ERR	SERVER500
SERVER95	9595A	9595	8641
D/T8641	8515	FALSE	

1.4.1168 SERVER 500 DIAGNOSTIC HANG

Record number: H127365

Device: D/T8641
Model: M
Tip key:
Date created: 095/03/20
Date last altered: A95/05/02

SYMPTOM:

The Server 500 (8641) Advanced Diagnostics hang when running in loop mode. When running in single test mode, no failures occur.

PROBLEM ISOLATION AIDS:

The Following adapters are installed:

An SVGA Adapter/A, FRU P/N71G0650 and either:

1. A Dual Ethernet Adapter/A, FRU P/N73G7141,
-or-
2. A Dual Token Ring Adapter/A, FRU P/N73G7140.

Note: The SVGA adapter in the 8641 (Server 500) is not identical to the SVGA-NI adapter in the Server 95 (9595, 9595A, which is FRU P/N71G4877).

FIX:

Problem background:

The SVGA adapter diagnostic reads and saves the POS (Programmable Option Select) register data from all installed adapters during the "Presence Test." At "run time," the SVGA diagnostic disables other installed adapters through POS 102, runs its own tests, and then restores the POS register data to the other adapters.

The Dual Ethernet/Dual Token Ring adapter diagnostics change POS register 102 value during setup time, so an incorrect POS value is written back when the SVGA diagnostic completes, causing Dual Ethernet and Dual Token Ring diagnostics to hang.

Work-around:

There are two methods to work-around this situation:

1. When running Advanced Diagnostics:
 - a. Remove the SVGA diagnostic. (Delete this entry, from the diagnostic "Installed Devices" list.)
 - b. Run diagnostics with this altered configuration.
 - c. When the diagnostics complete, delete the Dual Ethernet Adapter or Token Ring Adapter diagnostic and reinstall the SVGA diagnostic.
 - d. Run the diagnostics again.

-OR-
2. Because this problem only occurred in Loop Mode, by running the diagnostics individually, the problem will not occur.

Permanent Fix:

The SVGA Adapter/A diagnostic has been corrected to read POS registers after setup has been run on all adapters. The fix was implemented in the Common Diagnostic Diskette version 2.32 or higher.

The latest Reference and Common Diagnostic Diskette versions referenced in this tip may be downloaded from the IBM PC Company Bulletin Board System (BBS) by calling 919-517-0001.

SAS KEYWORDS:

PSY2	8641	SERVER	500
VIDEO	PSY2DIAG	D/T9595	D/T9595A

Record number: H132397

Device: D/T8641
 Model: M
 Tip key:
 Date created: 096/01/29
 Date last altered: A96/04/26

SYMPTOM:

A single drive failed, but 2 RAID fixed disk drives appear as DDD (Defunct, the drive is not responding to commands). Routine recovery procedures are ineffective in bringing the DDD drive(s) back on-line.

Note: This tip is for the MicroChannel RAID adapter. For the PCI RAID adapter, refer to Record H133382. The system may have run without problems for some time.

PROBLEM ISOLATION AIDS:

- The system is a Server 500 or 520 RAID Array (8641) with a MicroChannel SCSI-2 F/W Streaming RAID adapter installed.
 - More than one DASD Backplane installed.
 - The system diagnostics do not fail.
 - The RAID Administration program appears normal.
- Also refer to Record H131887 regarding multiple DDD disks.

FIX:

Background:

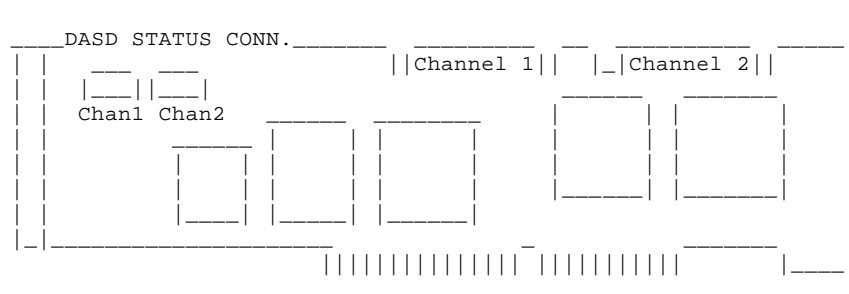
The MicroChannel RAID adapter requires two cables attached to the DASD backplane in order to maintain control of the RAID subsystem, the SCSI signal cable (wide), and a much smaller Status cable. The Backplane in Bank C must be attached to SCSI edge Connector Channel 1. The DASD backplane in Bank D would be attached to SCSI edge Connector Channel 2. The same is true of the Status cables. Status connector 1 must be attached to DASD Backplane C and Status connector 2 must be attached to DASD Backplane D, if installed.

On the RAID Adapter installed in the Server 500, the signal cable (FRU P/N82G3613) and Status cables (FRU P/N06H5081) for each channel may not be connected to the same backplane. (For example: The Status cable for the Backplane in Bank C is mistakenly connected to Bank D, and vice-versa). In this case, the RAID Adapter is not communicating with the correct Backplane (but has no way of knowing this), so erroneous status information is being presented to the RAID Adapter.

Attempting to rebuild a fixed disk with the cables mis-connected in this manner will probably result in customer data loss.

In systems which have more than one DASD Backplane installed, make certain that the RAID Channel 1 (SCSI) signal cable and the RAID Channel 1 Status cable are both attached to the same Backplane (are not crossed).

SCSI-2 Fast/Wide Streaming RAID Controller, FRU P/N06H3059



Note: The HMM (Hardware Maintenance Manual) S52G-9971-02, and The PC 500 User's Manual do not show the identification of the DASD Status Connectors, as shown above.

Note: While the SERVER 500 and the Server 720 both use the same RAID controller and a similar Backplane, there is no Status Cable attached directly to the RAID Controller in the Server 720. In the Server 720, the Status Cable on the Backplane is daisy-chained to the Controller Card mounted behind the operator power sequence panel. The RAID controller communicates to the DASD Backplane through the micro channel bus, the system board and the Controller Card. In the Hardware Maintenance Manual Supplement for the Server 720 (S30H-2352-00) page 29, index 1,

PSY2 RETAIN TIPS

SERVER 500 MICROCHANNEL RAID DRIVES DDD, CABLE INSTRUCTIONS

this status cable is called the System Status Cable,
FRU P/N82G3617.

SAS KEYWORDS:

PSY2	SERVER	500	RAID
8641	PSY2ADPT	720	PSY2PART
8642	520		

1.4.1170 SERVER 500 S/390 - FALSE PROCESSOR DIAGNOSTIC ERROR

Record number: H132461

Device: D/T8641
 Model: M
 Tip key:
 Date created: O96/01/31
 Date last altered: A96/01/31

SYMPTOM:

When running PC Server diagnostics from the Reference diskette, Pentium processor and/or the RAID controller tests fail.

The Pentium diagnostics fail with error code "0000". A black box appears on the screen with:

"Message number 0000 was not found."

Then, a red error box will appear with:

"Error slot=0, 90MHz Pentium CPU Board Error Code = 00000000."

The RAID controller tests fail with the following error:

"Error = 02707011. The transfer logic test failed.

Failure ID = 1480. Test # 10."

PROBLEM ISOLATION AIDS:

The system is an IBM PC Server 500 S/390.

(PC Server 500 with a P/390 processor installed-all models)

FIX:

No hardware should be replaced. These are false errors caused by software errors in the P/390 diagnostic file (@8F9E.DGS). They are not related to any hardware failures (Pentium, Raid or P/390).

The faulty module is @8F9E.DGS, with file size 1,818 bytes and file date of 1/20/95 at 12: 57 pm. This file was included on version 1.01 of the "IBM PC Server 500 S/390 Advanced Diagnostics and Option Diskette."

Local Fix:

Remove (erase) the file "@8F9E.DGS" from the Diagnostic Diskette.

The full test for the P/390 adapter is run from a self-booting diskette, so the removal of this file has little effect other than to remove the bug. After erasing the file, rerun the server diagnostics.

Permanent Fix:

Obtain a corrected update of the @8F9E.DGS file. The corrected version is file size 1,819 bytes and file date 12/11/95 at 3: 59 pm. The fix is included on any "IBM PC Server 500 S/390 Advanced Diagnostics and Option Diskette" after version 1.01.

This updated replacement file is available and may be downloaded from the PC Company Bulletin Board System (BBS) by calling 919 - 517-0001. The file is named P390DGS.ZIP and is located in the OS/2 Device Drivers section.

Instructions on how to apply the fix are included.

This fix may also be obtained through the Internet.

Via WorldWideWeb: <http://www.pcco.ibm.com/files.html>

Select OS/2 Device Drivers

or search for P390DGS

Via Anonymous FTP: <ftp.pcco.ibm.com>

login as user anonymous, password=your_id.

cd /pub/os2_drivers

binary

get p390dgs.zip

For IBM Internals, the following VM Command may be used:

TOOLS SENDTO PKVMWFB1 TOOLS P370 GET P390DGS ZIPBIN

Pentium is a trademark of INTEL Inc.

SAS KEYWORDS:

PSY2	SERVER	500	S390
390	PSY2ERR	PSY2ADPT	APAR
PJ21294	P390	MAIN	FRAME
8641			

1.4.1171 SERVER 500 WARP VIDEO INSTALLATION

Record number: H131199

Device: D/T8641
 Model: M
 Tip key:
 Date created: O95/10/03
 Date last altered: A95/10/10

SYMPTOM:

During the installation of WARP (OS/2 V3.X), one of the required steps is to select the video support mode. When SVGA (Cirrus Logic) is selected for the Server 500, the OS/2 Desktop appears distorted.

PROBLEM ISOLATION AIDS:

1. The system is a Server 500 (8641).
2. SVGA Support Diskette, 41H6604 is being used.
3. OS/2 version 3.x0 (WARP) is the operating system.

FIX:

If the symptoms described above are encountered, the following procedure should correct the problem:

1. Reboot the system. When OS/2 is rebooting, a solid rectangle followed by the letters "OS/2" appears in the upper left hand corner of the screen. At this time, depress and hold the ALT key and press F1.
2. When the next screen appears, press the V key. This will install VGA support.
3. When the desktop is reestablished, insert the SVGA Support Diskette in drive A.
4. At an OS/2 command prompt, type the following:

```
Copy a: CLMODE.*
```

Then, press Enter or select OK.

5. After the files have been copied, remove the SVGA Support Diskette from drive A. This diskette should be kept with the other system diskettes in a safe place.
6. Open the System Setup folder.
7. Open the Selective Install folder.
8. At the System Configuration window, select Primary Display.
9. At the Display Driver Install window, select Cirrus Logic 5426, 5428, 5430, 5434; then press Enter or select OK.
10. At the System Configuration window, select OK.
11. At the OS/2 Setup and Installation window, press Enter or select Install.
12. Select the source drive and directory which contains the video drivers; select Install.
13. At the Monitor Configuration/Selection Utility window, select Install Using Display Adapter Utility Program; then press Enter or select OK.
11. At the Monitor Configuration/Selection Utility Location, type the following:


```
C: CLMODE.EXE
```

 (assuming the copy in step 4 was to C:)

Then press Enter or select OK.

SAS KEYWORDS:

PSY2 SERVER 500 PSY2ADPT
 PSY2PROG

1.4.1172 SERVER 520 BOOTS AS a SERVER 320

Record number: H133109

Device: D/T8641
 Model: M
 Tip key:
 Date created: 096/03/19
 Date last altered: A96/03/19

SYMPTOM:

When booting the system, the 8641 PC Server 520 appears as a "Server 320" on the logo screen.

PROBLEM ISOLATION AIDS:

- This symptom appeared after the PCI/MicroChannel system board was replaced (FRU p/n96G2648).
- Diagnostics and system operation do not fail.

FIX:

Obtain a copy of the SERVICER version 520 BIOS from the IBM PCCo Bulletin Board System. This version of the current system BIOS will correct the model ID shown while booting. The customer version 520 BIOS diskette on the BBS cannot force this change.

Once the system is flashed with the servicer BIOS, the system will always display the correct model. The customer can apply future flash releases using the normal BBS customer versions.

This BIOS is for the PCI/MicroChannel Server 520 only; do not attempt to install it on PCI/EISA Server 520 models.

Note: The servicer 520 BIOS flashes the system in English only. For other languages, use the servicer version first, then install the customer version of the BIOS Flash Diskette. Installation instructions are also included in a readme file on the servicer BIOS diskette.

```

-----
| The MicroChannel Server 520 BIOS for SERVICERS is available |
| on the PC Company Bulletin Board System. The file is      |
| titled SERV520.DSK and is located in Files Section 22.    |
|                                                            |
| The direct line for modem connection to The PCCo BBS is   |
| 1 - 919 - 517 - 0001 or tieline 255-0001.                |
|                                                            |
| Contact the IBM PC Company HelpCenter at 800-772-2227 if  |
| assistance is required in getting the file.               |
|                                                            |
| Customers in Canada should call IBM's HelpPC at 800-565-3344 |
| for assistance. The Canadian BBS phone numbers are:      |
| Montreal-514-938-3022, Toronto-905-316-4255,            |
| Winnipeg-204-934-2735, Vancouver-604-664-6464.           |
|                                                            |
| The file may also be downloaded via the Internet from     |
| the IBM Personal Computer File Library by searching the  |
| following Internet URL:  http://www.pc.ibm.com/files.html  |
-----

```

SAS KEYWORDS:

PSY2 D/T8640 8640 PSY2BRD
 96G2648 PSY2MCD

Record number: H133382

Device: D/T8641
 Model: M
 Tip key:
 Date created: 096/04/24
 Date last altered: A96/09/17

SYMPTOM:

A single drive failed, but 2 RAID fixed disk drives appear as DDD (Defunct, the drive is not responding to commands). Routine recovery procedures are ineffective in bringing the DDD drive(s) back on-line.

Note: This tip is for the PCI RAID Adapter. For the MicroChannel RAID Adapter, refer to Record H132397.
 The system may have run without problems for some time.

PROBLEM ISOLATION AIDS:

- The system is a Server 520 PCI RAID Array 8641-EXX, 8641-MXX
- The system diagnostics do not fail.
- The RAID Administration program appears normal.
- More than one DASD Backplane is installed.

ALSO REFER TO RECORD H131887 REGARDING MULTIPLE DDD DISKS.

FIX:

Background:

The PCI F/W Streaming RAID Adapter (FRU 06H5078) uses two PCI SCSI signal cables and one DASD status cable to communicate with two SCSI bus channels.

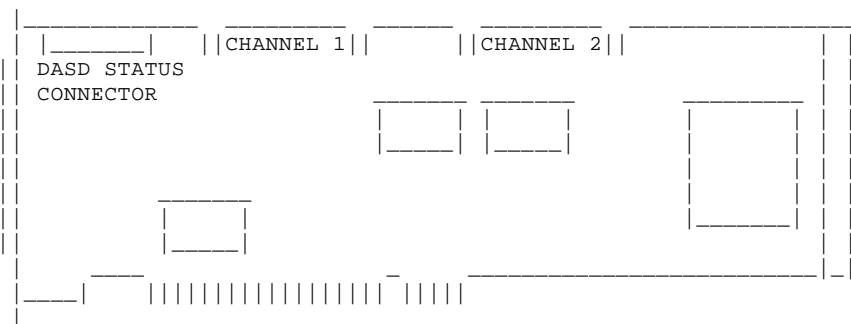
The two SCSI signal cables (FRU 06H6876) attach to two separate edge connectors on the PCI RAID Adapter. Channel 1 is the edge connector closest to the system unit towards the external port. Channel 2 is the edge connector closest to the front of the system unit.

The DASD status cable (FRU 06H9343) is a two drop cable with two channel specific connectors. The connector at the end of the cable is Channel 1 and the connector in the middle of the cable is Channel 2.

In systems which have more than one DASD Backplane installed, make certain that the RAID Channel 1 SCSI signal cable and the RAID Channel 1 DASD status cable connector are both attached to the same Backplane (are not crossed).

The location of the connectors on the PCI RAID Adapter are indicated on the diagram below:

PCI SCSI-2 FAST/WIDE STREAMING RAID CONTROLLER, FRU P/N06H5078



SAS KEYWORDS:

PSY2	SERVER	520	RAID
8641	PSY2ADPT	PSY2PART	P/N06H5078
P/N06H6876	P/N06H9343		

1.4.1174 SERVER 704 RAID TIMEOUT WITH MICROSOFT EXCHANGE SERVER

Record number: H135274

Device: D/T8650
 Model: M
 Tip key:
 Date created: 096/11/19
 Date last altered: A98/01/20

SYMPTOM:

The IBM PC Server 704 (8650) may receive a RAID timeout error while running the Performance Optimizer in Microsoft Exchange Server.
 The following error messages may be displayed in the Windows NT event viewer:

(stop) Source: DAC960NT.SYS

(stop) The, \DEVICE\SCSI\PORT0, did not respond within the timeout period.

PROBLEM ISOLATION AIDS:

All of the following must be true for this tip to apply:

- The PC Server 704 has an IBM PCI RAID Adapter FRU p/n75H9011
- The RAID Adapter firmware level is 2.60
- The Operating System is Windows NT Server 3.51
- The error occurs with Microsoft Exchange Server or other applications running under Windows NT 3.51 Server

FIX:

Do not replace any hardware.

Flash the IBM RAID Adapter with firmware version 2.63.

Call the IBM HelpCenter to obtain instructions for downloading the RAID firmware version 2.63 which is located on a private directory on the IBM Bulletin Board.

```

.----- IMPORTANT -----
| The firmware is customer installable. Customer's should |
| contact the IBM PC HelpCenter at 800-772-2227 to obtain |
| the current firmware. Customers in Canada should call |
| IBM's HelpPC at 800-565-3344. |
-----

```

Windows NT is a trademark of Microsoft Corporation.

SAS KEYWORDS:

PSY2	PSY2ADPT	PSY2ERROR	TRAP
TRAPS	HANG	UNCLASSIFIED	75H9011
HEALTH			

1.4.1175 SERVER 704 TRAPS OR HANGS DURING OS INSTALLATION

Record number: H023369

Device: D/T8650
 Model: M
 Tip key:
 Date created: 096/06/28
 Date last altered: A98/01/20

SYMPTOM:

The PC Server 704 (8650) traps or hangs during the installation of NetWare, OS/2, or Windows NT.

-or-

The PC Server 704 traps or hangs intermittently after these operating systems have been installed.

PROBLEM ISOLATION AIDS:

- NetWare traps or hangs.
- OS/2 traps or hangs on the OS/2 logo screen.
- Windows NT traps or hangs on the initial blue screen.
- Diagnostics run without error

FIX:

Use the System Configuration Utility (SCU) diskette and set the Multi-processing (MP) Specification as follows:

For OS/2 or NetWare systems select MP Specification 1.1

For Windows NT systems select MP Specification 1.4

Follow this procedure to change the MP Specification:

1. Make a backup copy of the SCU diskette using an operating-system command such as the DOS DISKCOPY command.
2. Start the SCU program:
 - a. For SCU Version 3.1 diskettes, boot to a DOS version 6.0 or later diskette, and press <Esc> to receive a command prompt. Then insert the backup copy of the SCU diskette, and type SCU <Enter> to start the utility.
 - b. For SCU Version 3.4 diskettes, boot to the backup copy of the SCU diskette.
3. Press <Enter> when the SCU title screen appears.
4. Select "Step 3: Change Configuration Settings" (75 seconds)

Note: If the administrative password entry prompt appears, then enter the password to access this selection or press <Esc> if an administrative password has not been set.

5. Select "System Board"
6. Down arrow to the "MP Specification Version"; Press <Enter>
 For OS/2 or Netware systems, select MP Specification 1.1 or, for Windows NT systems, select MP Specification 1.4.
7. Press <Esc> <Esc> to return to the menu selection screen.
8. Select "Step 4: Save Configuration" (130 seconds)
9. Select "Step 6: Exit", then press <F10> to reboot.
10. Remove the SCU diskette from the diskette drive.

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Windows NT is a trademark of Microsoft Corp.

SAS KEYWORDS:

PSY2	8650	PSY2PROG	704
SERVER	HEALTH		

1.4.1176 SERVER 720 (133MHZ AND 166MHZ) PANIC WITH SCO SMP

Record number: H027075

Device: D/T8642
Model: M
Tip key:
Date created: 096/11/08
Date last altered: A96/11/14

SYMPTOM:

After the installation of SCO OpenServer SMP the following message is displayed:

PANIC: Trap in kernel mode 0x000000E

PROBLEM ISOLATION AIDS:

- The system is a Server 720 with multiple processors.
- The primary processor is 133MHz or higher.
- SCO OpenServer 5.0.0 or 5.0.2 with SMP support is installed.

FIX:

Do not replace any hardware.

Type `unix.safe` at the SCO Boot prompt, and remove SMP using Software Manager.

SCO SMP is currently not compatible on a Server 720 with a primary CPU of 133MHz or higher.

SCO is working on a software patch to the Operating System. This RETAIN tip will be updated when additional information is available.

SCO is a trademark of The Santa Cruz Operation, Inc.

SAS KEYWORDS:

PSY2	PSY2OPER	PSY2PROG	UNCLASSIFIED
TRAPS	HANG	HANGS	

1.4.1177 SERVER 720 (133MHZ OR 166MHZ) TRAPS OR HANGS

Record number: H134640

Device: D/T8642
 Model: M
 Tip key:
 Date created: 096/10/04
 Date last altered: A98/01/20

SYMPTOM:

Only a very small number of systems will experience the exact symptoms described in this tip. Read and understand the entire tip before taking any action.

PC Server 720 systems with 133MHz or 166MHz processors may trap (Trap 002), hang, or experience a Non-maskable Interrupt (NMI).

PROBLEM ISOLATION AIDS:

- The system is a PC Server 720 (8642) with one or more of the following processors installed:

FRU p/n	Option p/n	Description
75H9686	94G6055	133MHz Option I non-NetWare SMP
75H9688	94G6056	133MHz Option II
75H9690	94G6057	166MHz
76H0610	94G6057	166MHz
76H3545	94G6057	166MHz (Current 166MHz FRU)

Note: Option I card does NOT support NetWare SMP.
 Option II card supports all Network Operating Systems supported on the PC Server 720 using the device drivers from 720NOS.EXE which is available on the IBM BBS.

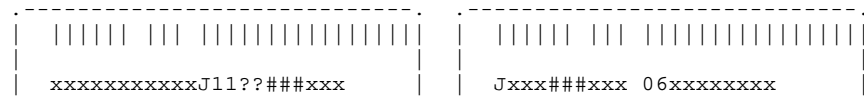
FIX:

Boot the diagnostic diskette version 1.11 or later and test the memory and processors. Refer to RETAIN Record H084333 for processor testing information.

Note: Versions 1.11 and later require BIOS level 09 or later for SIMM failure isolation. Refer to RETAIN Record H131754.
 If the memory and processor tests complete without error, and replacing the memory card (FRU p/n71G0696) does not correct the trap/hang error, then inspect the processor card(s) as follows:

1. Locate the three digit date code (###) on the bar code:

Bar codes may have one of two formats:



2. Locate the cache chips at locations U6, U7, U8, and U9. Look for the IBM logo on the cache chips.
3. If the date code (###) is 966 thru 985 AND the cache chips have the IBM logo, then replace the processor card.

If Motorola and Micron Technology cache chips are located, or the Server is not experiencing these exact symptoms, then there is no reason to replace the processor card. Continue normal problem determination procedures to isolate the failing application or FRU.

Only 15 - 30 processor cards manufactured between June 1 through June 30, 1996 may have the suspect IBM cache chips.

SAS KEYWORDS:

PSY2	PSY2ERR	PSY2ADPT	PSY2MEM
P/N75H9686	P/N75H9688	P/N75H9690	P/N76H0610
P/N76H3545	P/N94G6055	P/N94G6056	P/N94G6057
TRAP 002	TRAP 2	TRAP2	002
HEALTH			

1.4.1178 SERVER 720 BOOTS SLOWLY AFTER a WARM BOOT

Record number: H134921

Device: D/T8642
 Model: M
 Tip key:
 Date created: 096/10/30
 Date last altered: A97/06/20

SYMPTOM:

Any of the following symptoms are observed:

- The Server takes a long time to POST (5-7 minutes).
- POST error 173 (Configuration Error) is displayed.

If the Operating System is running slowly, refer to RETAIN record H134877 (TechTips document RMIE-3AZFRX).

PROBLEM ISOLATION AIDS:

- Netfinity was running on the system prior to the shutdown
- The system was restarted with a warm boot (<Ctrl> <Alt>)

FIX:

To fix permanently, install the latest Systems Management device drivers (PC Server 720 Processor Device Drivers Version 1.12 or later).

Follow this procedure:

1. Download and expand the latest Systems Management device drivers from the IBM BBS. Search for the following file:
"PC Server 720 Processor Device Driver".
2. Follow the instructions in the README.TXT

-OR- As a temporary work-around, follow this procedure:

1. Shutdown the Operating System if necessary.
2. Power off the Server.
3. Power on the Server.

During normal operation, Netfinity loads microcode to the Service Processor. On a Server 720 reboot, the Service Processor needs to be in a quiet state. But if an orderly shutdown is NOT performed, the Service Processor remains at a high activity level which interferes with the next POST.

The new device drivers allow Netfinity to shutdown in an orderly manner.

-----IMPORTANT-----

Diskette images are customer installable. Customers should review any "README" files located on the diskette for installation information. Contact the IBM PC HelpCenter at 800-772 - 2227 if download/installation assistance is needed.

IBM PC Server files are located in Directory 22 on the PC Company Bulletin Board Service (BBS) at 1-919-517-0001 or tieline 255-0001.
 The files may also be downloaded via the Internet from the IBM PC File Library by searching the following Internet URL:
<http://www.us.pc.ibm.com/files.html>

SAS KEYWORDS:

PSY2 UNCLASSIFIED PSY2ERR 00017300
 PSY2PROG PSY2OPER

1.4.1179 SERVER 720 ERROR CODE EP&COLON. 1043

Record number: H132374

Device: D/T8642
Model: M
Tip key:
Date created: 096/01/26
Date last altered: A96/01/26

SYMPTOM:

A Server 720 halts with error code EP: 1043 (EP: 104X). This code can not be found in the Server 720 HMM (Hardware Maintenance Manual) supplement, S30H-2352-00, dated October 1995.

PROBLEM ISOLATION AIDS: None**FIX:**

Error code EP: 1043 is not listed in the HMM. This error code reflects a memory adapter failure. First reseal the memory adapter, as it could be loose or not fully seated in the connector on the system board. If the error persists, the memory adapter is the most likely failing FRU (FRU P/N71G0696).

The HMM will reflect this additional error code in the next update.

SAS KEYWORDS:

PSY2	SERVER	720	PSY2DOC
PSY2ERR	PSY2MEM	EP	104X
1043	8642		

SERVER 720 HANGS AT CP 69 AFTER PLANAR REPLACEMENT

1.4.1180 SERVER 720 HANGS AT CP 69 AFTER PLANAR REPLACEMENT

Record number: H136842

Device: D/T8642
Model: M
Tip key:
Date created: 097/03/14
Date last altered: A97/07/10

SYMPTOM:

The PC Server 720 (8642) hangs at Check Point 69 (CP 69) during POST or MicroChannel adapters are not recognized by the system after the system board FRU p/n06H1810 has been replaced.

PROBLEM ISOLATION AIDS:

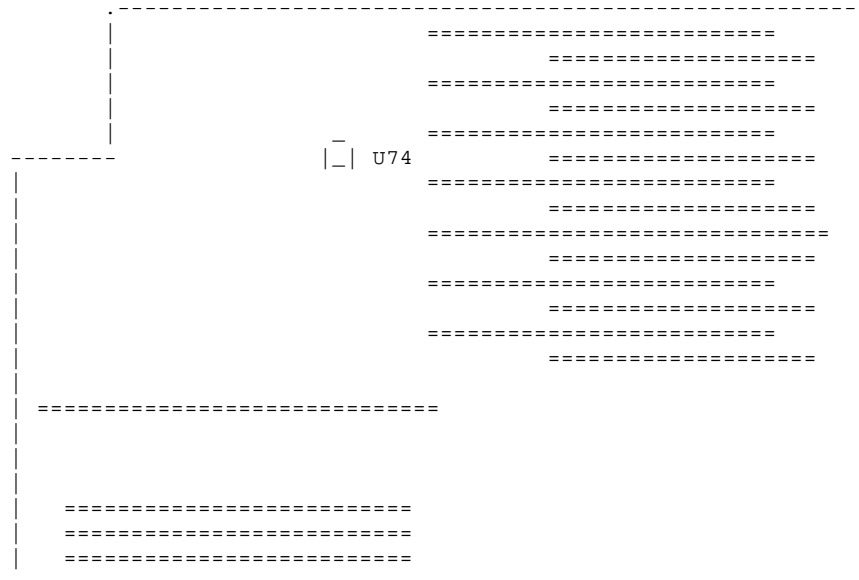
- The Server 720 has MicroChannel adapter(s) such as the RAID adapter FRU p/n06H3059

FIX:

If replacing a system board on a Server 720 with MicroChannel adapter(s), inspect the system board first:

Locate the small chip at U74 and look for a tiny blue dot the size of a period (.). If this chip has a blue dot, the system board is good and can be installed. In the unlikely event that the tiny blue dot is missing and the Server 720 does not boot properly, order another system board FRU p/n 06H1810.

Although the FRU number has not changed, the affected system boards have been cleared from stock.



SAS KEYWORDS:

PSY2 PSY2ERR PSY2BRD PSY2PART
CP69 SERVICER ONLY

SERVER 720 HANGS WITH SERVERAID AND/OR PCI TOKEN RING

1.4.1181 SERVER 720 HANGS WITH SERVERAID AND/OR PCI TOKEN RING

Record number: H135767

Device: D/T8642
 Model: M
 Tip key:
 Date created: 096/12/16
 Date last altered: A98/01/20

SYMPTOM:

The PC Server 720 (8642) traps or hangs without any error messages.

PROBLEM ISOLATION AIDS:

The system is a PC Server 720 (8642) with a ServeRAID adapter FRU p/n06H9334, FRU p/n76H3574, or FRU p/n76H6875 (Option p/n70G8489) AND/OR a Token Ring adapter FRU p/n41H8874 (Option p/n41H8900 or p/n75H9800) installed.

FIX:

Follow this procedure:

1. Verify that the Server 720 BIOS is at level 08 or higher.
2. Inspect the Bridge card. If FRU p/n71G0694 is installed, replace it with FRU p/n76H7134.

Note: Only replace the Bridge card if the Server 720 is configured with the ServeRAID adapter AND/OR the PCI Token Ring Adapter mentioned above.

Order Parts via normal FRU distribution.

If the failure persists, continue normal problem determination procedures to isolate the failing application or FRU.

The Bridge card FRU p/n71G0694 has been cleared from stock.

SAS KEYWORDS:

PSY2	PSY2ADPT	PSY2COMM	UNCLASSIFIED
06H9334	70G8489	41H8874	41H8900
75H9800	71G0694	76H7134	TRAP
HANG	HEALTH		

1.4.1182 SERVER 720 RUNNING SCO DISPLAYS PANIC OR WARNING

Record number: H135179

Device: D/T8642
 Model: M
 Tip key:
 Date created: 096/11/05
 Date last altered: A96/11/18

SYMPTOM:

After installing SCO OpenServer, the Server 720 displays any of the following error messages (or something similar):

PANIC: IP Spinning
 PANIC: key trap kernel mode trap type 0x000000E
 WARNING: eeE allocB failure during initialization

PROBLEM ISOLATION AIDS:

The affected Operating Systems are as follows:

- SCO OpenServer 5.0.0
- SCO OpenServer 5.0.2

FIX:

Apply the SCO software supplements and follow this procedure:

A. For SCO OpenServer 5.0.0, install software in this order:

1. SCO OpenServer 5.0.0 licenses, boot diskette, and CD.
2. SCO OpenServer 5 Release Supplement "D" (three diskettes):
 - Download the rs500d.doc.Z and the three diskettes VOL.000.000, VOL.001.000, AND VOL.002.000 from the SCO URL: ftp: //ftp.sco.com/pub/patches/os/osr5/rs500d
3. RAID Adapter Driver:
 - Download RAIDSCO.EXE from IBM BBS/WEB.
4. SCO Networking Supplement 1.00 (three diskettes):
 - Download the README and the three diskettes VOL.000.000, VOL.001.000, and VOL.002.000 from the following SCO URL: ftp: //ftp.sco.com/Supplements/net100
5. SCO Advanced Hardware Supplement 5.2 (six diskettes):
 - Download the README and the six diskettes VOL.000.000, VOL.001.000, VOL.002.000, VOL.003.000, VOL.004.000, VOL.005.000 from the following SCO Internet URL: ftp: //ftp.sco.com/AHS/5.0/sco/5.2
6. Corollary Supplement v5.30
 - Download CBUS530.EXE from IBM BBS/WEB and expand the image onto a blank diskette using the command: CBUS530.EXE A:
 - At SCO command prompt, type custom and press <Enter>.
 - Select "software" from the main menu.
 - Select "install new" from the software menu.
 - Insert the CBUS530 diskette and select "floppy drive 0".
 - Select "Full"
 - Shutdown and reboot system so the changes will take effect.

Note: If SCO SMP is installed after this supplement is applied, CBUS530 must be re-installed.

B. For SCO OpenServer 5.0.2, install software in this order:

1. SCO OpenServer 5.0.2 licenses, boot diskette, and CD
2. SCO Advanced Hardware Supplement 5.2 (six diskettes)
 - On SCO 5.0.2 CD-ROM
3. Corollary Supplement v5.30
 - Follow the procedure in step A.6. above.

IBM Diskette images are available on the IBM BBS at 919-517-0001 or via the internet at URL <http://www.pc.ibm.com/files.html>

SCO Diskette images are available on the SCO internet site at: ftp: //ftp.sco.com

SCO is a trademark of The Santa Cruz Operation, Inc.

SAS KEYWORDS:

PSY2	UNCLASSIFIED	PSY2OPER	PSY2PROG
TRAP	TRAPS	HANG	HANGS

1.4.1183 SERVER 720 RUNS SLOW AFTER RUNNING DIAGNOSTICS

Record number: H134877

Device: D/T8642
Model: M
Tip key:
Date created: 096/10/30
Date last altered: A98/01/20

SYMPTOM:

The Operating System and applications run slowly. Performance is degraded.

PROBLEM ISOLATION AIDS:

After running diagnostics (version 1.11 or earlier), the Server was restarted with a warm boot (<Ctrl> <Alt> <Delete>).

FIX:

Follow this procedure:

Run diagnostics version 1.12 or later. The current BIOS, reference and diagnostic diskettes are bundled in the file 720UPD.EXE on the IBM BBS.

-OR-

1. Shutdown the Operating System if necessary.
2. Power off the Server.
3. Power on the Server.

Diagnostic version 1.12 and later properly reset the memory cache after testing.

-----IMPORTANT-----

Diskette images are customer installable. Customers should review any "README" files located on the diskette for installation information. Contact the IBM PC HelpCenter at 800-772 - 2227 if download/installation assistance is needed.

IBM PC Server files are located in Directory 22 on the PC Company Bulletin Board Service (BBS) at 1-919-517-0001 or tieline 255-0001.

The files may also be downloaded via the Internet from the IBM PC File Library by searching the following Internet URL:
<http://www.pc.ibm.com/files.html>

SAS KEYWORDS:

PSY2	UNCLASSIFIED	PSY2ERR	PSY2PROG
PSY2DIAG	PSY2MEM	PSYSOPER	DIAGNOSTIC
HEALTH			

1.4.1184 SERVER 720 WON'T BOOT AFTER FLASHING TO BIOS 10

Record number: H136594

Device: D/T8642
 Model: M
 Tip key:
 Date created: 097/02/11
 Date last altered: A97/02/14

SYMPTOM:

The PC Server 720 (8642) completes POST but fails to boot the Operating System.

PROBLEM ISOLATION AIDS:

- The PC Server 720 was just flashed to BIOS level 10

FIX:

Download ZPLUS.EXE from the IBM PC Co. Bulletin Board (BBS). The diskette image is located on a private directory so it must be accessed via the BBS dial-up interface and not via the WEB.

Logon to the BBS using the following:

First name: Server
 Last name: Hidden
 Password: Server

After downloading ZPLUS.EXE, use the following procedure:

1. Expand the ZPLUS image onto a blank diskette.
2. Insert and boot to this diskette.
3. The following messages will appear:
 "Clearing CD boot data area"
 "Program complete"
 "Restart you server"
4. Remove the diskette and reboot to the Operating System.

Not all systems flashed to BIOS 10 will experience this hang. ZPLUS clears the area of NVRAM causing the hang.

An engineering investigation is currently in progress. This RETAIN tip will be updated when additional information is available.

```

-----
| Files are located on the PC Company Bulletin Board Service |
| (BBS). The direct line for modem connection to the BBS is |
| 1 - 919 - 517-0001 or tieline 255-0001. Contact the IBM PC |
| HelpCenter at 800-772-2227 if download/installation |
| assistance is needed. |
| |
| The Canadian BBS phone numbers are: |
| Montreal: 514-938-3022, Toronto: 905-316-4255, |
| Winnipeg: 204-934-2735, Vancouver: 604-664-6464. |
| Canadian customers may contact IBM's HelpPC at 800-565-3344 |
| if download/installation assistance is needed. |
-----

```

SAS KEYWORDS:

PSY2 PSY2ERR PSY2ADPT UNCLASSIFIED
 FLASH HUNG

1.4.1185 SERVERAID ADAPTERS&COLON. ERRORS RUNNING 2.23 RAID UTILITY

Record number: H161856

Device: D/T8640
 Model: M
 Tip key:
 Date created: O97/10/31
 Date last altered: A97/11/14

SYMPTOM:

Running the EZ-Raid utility from the ServeRaid Configuration/Utility diskette reports "Error in starting Device", "Press any key to return to menu". From this point, any attempt to create then define a logical drive using the RAID configuration utility will result in a RED error window(the contents of the window will be meaningless)

PROBLEM ISOLATION AIDS:

- The System is any PC Server or Netfinity server that supports and is configured with any of the following ServeRAID adapters/controller.
 - ServeRAID adapter: Option p/n70G8489 (FRU p/n06H9334)
 - ServeRAID adapter: Option p/n70G8489 (FRU p/n76H6875)
 - ServeRAID II adapter: Option p/n76H3584 (FRU p/n76H3587)
 - On-Board ServeRAID controller
- The EZ-Raid utility is being run from the ServeRAID Configuration/Utility diskette version 2.23.12 or lower.
- 1, 2, or 3 hard drives are installed in the system.
- This TIP applies regardless of the Firmware or BIOS level of the adapter.

FIX:

- 1 - Download the "IBM ServeRAID, ServeRAID II, and On-Board ServeRAID configuration diskette" version 2.30 or higher (it is a self-extracting file that creates a diskette).
- 2 - Download the latest "ServeRAID, ServeRAID II, and On-Board ServeRAID BIOS/Firmware update diskette" version 2.30 (it is a self-extracting file that creates a diskette).

NOTE: Diskette image files may be downloaded from the IBM Website at URL:

Http: //www.us.pc.ibm.com/files.html

Search on ServeRAID 2.30

- 3 - Apply the appropriate Firmware flash and BIOS update to the specific adapter/controller present in the system.
- 4 - Boot the Server with the "IBM ServeRAID, ServeRAID II, and On-Board configuration diskette" version 2.30 or higher. Proceed to create the disk array as required.

IBM recommends that customers read the following White Papers to ensure a thorough understanding of RAID and hardfile technologies:

Document	Faxback Document #
- Using IBM RAID Adapters to avoid data loss	11202
- Understanding Hard Disk drive Media Defects	11205
- Ensuring High Availability Using the PC ServeRAID Adapter	11203

The IBM Faxback may be accessed by calling 1-800-IBM-3395

----- OR-----

The IBM Website at URL: <http://www3.pc.ibm.com/support>
 Choose Servers, then choose Hints and Tips.

See Retain TIP # H134082 as a companion to this TIP.

SAS KEYWORDS:

SERVERAID ADAPTERSCOLON. ERRORS RUNNING 2.23 RAID UTILITY

PSY2	UNCLASSIFIED	SERVERAID	SCSI
UTILITY	CONFIGURATION	D/T8638	D/T8640
D/T8650	D/T8651	315	330
704	7000	8638-PJ0	8638-PS0
8638 - PSV	8638-PSW	8640-ES0	8640-ES2
8640-ESS	8640-EMS	8640-PT0	8640_PB0
8640-PM0	8650-4BW	8650-7AX	8650-4M0
8650-5M0	8650-6MM	8651-RH0	8651-TH0
8651 - RM0	8650-TM0	D/T8639	325
8639 - EJ0	8639-ES0	8639-ESV	8639-RS0

PSY2 RETAIN TIPS
SERVERGUARD DIAGNOSTIC FAILURES

1.4.1186 SERVERGUARD DIAGNOSTIC FAILURES

Record number: H127335

Device: D/T8641
Model: M
Tip key:
Date created: O95/04/27
Date last altered: A95/05/22

SYMPTOM:

WHEN RUNNING THE SERVERGUARD ADAPTER DIAGNOSTICS, ERROR CODE 02755640 IS DISPLAYED INDICATING THE 12 VOLTS FROM THE POWER SUPPLY IS BAD.

PROBLEM ISOLATION AIDS:

NO SYSTEM FAILURES ARE REPORTED AND NO OTHER DIAGNOSTIC FAILURES ARE EXPERIENCED.

FIX:

THIS SHOULD BE CONSIDERED A FALSE DIAGNOSTIC ERROR. NO HARDWARE SHOULD BE REPLACED. ENGINEERING IS INVESTIGATING THE PROBLEM. THIS TIP WILL BE UPDATED WHEN THE FIX TO THE DIAGNOSTIC IS AVAILABLE.

SAS KEYWORDS:

PSY2	PSY2ADPT	SERVER	500
95	D/T9595	9841	9595
9595A	D/T9595A	PSY2TBD	PSY2ERR

Record number: H163355

Device: D/T8639
 Model: M
 Tip key:
 Date created: 098/03/19
 Date last altered: A98/04/13

SYMPTOM:

When using ServerGuide V 4.01 to configure the System, the HardwareGuide CD (CD1) completes with a prompt to insert the SoftwareGuide CD (CD2). After doing so and selecting "OK", the system will not respond.

PROBLEM ISOLATION AIDS:

All of the following must be true for this TIP to apply:

- The System is a PC Server 325 Type 8639 model PTW, PB0, RB0, 1RY.
- The System is properly configured with supported hardware.
- The System passes all Diagnostics.
- With respect to the Symptoms (above) the System appears "hung", there are no error messages displayed, and the CD does not load.
- The above Symptoms occur using ServerGuide Version 4.01.

FIX:

This problem will be fixed in the next release of ServerGuide (version 4.03). See the following workaround.

WORKAROUND:

When the system hang occurs, verify that the SoftwareGuide CD (CD2) is in the drive, then cold-boot the System. This will ensure that the SoftwareGuide CD boots.

DETAIL:

The HardwareGuide CD (CD1) does not perform a required shutdown prior to having the SoftwareGuide CD (CD2) inserted.

SAS KEYWORDS:

PSY2	D/T8639	UNCLASSIFIED	PT0
PTW	PB0	RB0	1RY
SERVERGUIDE	4.01	4.03	PSY2HANG
HANG	05L2022		

1.4.1188 SERVERGUIDE/NETWARE V4.02 INSTALLATION

Record number: H127008

Device: D/T8641
 Model: M
 Tip key:
 Date created: O95/03/14
 Date last altered: A95/04/03

SYMPTOM:

During the installation of Novell Netware Version 4.02, a message appears stating that a Netware partition does not exist, even though a Netware partition can be seen in the disk options screen.

(Without a Netware partition existing, customers can have difficulties mirroring drives and using the change hot-fix option.)

BACKGROUND:

During a normal Netware V4.02 installation process, a black screen appears with the following statement across the top:

"Do not use the keyboard or interrupt ServerGuide during the installation, or the installation might fail."

When the installation completes, the following message appears below the previous message:

"Do not touch keyboard screen"

"ServerGuide has completed installation and tuning of your system. Press ENTER to complete the installation."

At the very bottom of the screen, this message appears:

"<Press any key to close screen>"

If the installation DID NOT complete successfully, only the "Press any key to close screen" message appears at the bottom of the screen, along with the "Do not touch keyboard" message at the top. Then, when a key is pressed, the user gets the system console screen.

PROBLEM ISOLATION AIDS:

This symptom can also be caused by the system not being attached to the network. Therefore, verify that the system is attached to the network before concluding that the following procedure will correct the problem.

FIX:

A fix is being developed. Until it is available, the customer may work-around this problem with the following procedure:

1. DOWN server at the system console prompt.
2. EXIT at the system console prompt out to DOS.
3. Place the ServerGuide Main CD into the CD ROM drive.
4. Change to the Q: drive. ServerGuide assigns the CD ROM drive Q: .
5. Change to the UTILS subdirectory (i.e. CD UTILS)
6. At the Q: UTILS prompt type:
CLFDISK /QUERY /DISK: 1
CLFDISK is a DOS fdisk utility that allows DOS to see NON-DOS (in this case, specifically Netware) partitions.
7. CLFDISK should display two lines of information. Each line represents a partition on disk 1. The first line should appear as drive C: . The second line should not have a drive letter assigned to it; this is your Netware Partition. The first column should be a 1 which designates the disk #. The second column is an 8 digit number that indicates the name given to this partition. This 8 digit number assigned to the Netware Partition (on the second line) is what you need.
8. At the Q: UTILS prompt type:
CLFDISK /DELETE /NAME: xxxxxxxx (This should be the 8 digit number from the above query) This deletes the netware partition.
9. Place the ServerGuide Netware CD into the CD ROM Drive.
10. Change back to C: \SERVER.40 subdirectory.
11. At the C: \Server.40 subdirectory type: SERVER -NA
12. At System Console Prompt, type: MOUNT SYS
13. At System Console Prompt, type: LOAD INSTALL
14. Choose Maintenance/Selective Install
15. Choose Disk Options
16. Choose Modify Disk Partitions and Hot Fix
17. Choose Device # 0 from the Available Disk Drives Screen
18. A DOS Partition and a Free Space should appear. At the

SERVERGUIDE/NETWARE V4.02 INSTALLATION

- Disk Partition Options, choose Create NetWare Partition.
19. After Netware Partition has been recreated, exit INSTALL.
 20. At System Console Prompt, DOWN and EXIT to DOS.
 21. To restart installation, type SERVER at C: \SERVER.40 prompt.
 22. The same DO NOT TOUCH KEYBOARD screen should appear.
- However, this time the installation should complete and come back with the ServerGuide Installation complete message.

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SAS KEYWORDS:

PSY2	PSY2PROG	NOVELL	NOVEL
8641	SERVER	500	PSY2COMM

1.4.1189 SETUP READ.ME ERROR INSTALLING INFRARED PDA DRIVERS FROM RTC

Record number: H16915

Device: D/T6562
Model: M
Tip key:
Date created: 097/08/15
Date last altered: A97/08/26

SYMPTOM:

When running the setup utility from the Ready-To-Configure (RTC) CD to install the infrared Personal Digital Assistant (PDA) drivers, the following error message is displayed:

"File copy operation failed- incorrect number of bytes written to disk. Source file or destination disk may be corrupted."

PROBLEM ISOLATION AIDS:

None

FIX:

An "Abort, Retry, Ignore" message will be displayed. Select "Ignore" to bypass the error message and continue the driver installation.

SAS KEYWORDS:

PSY2	PSY2ERR	PSY2OPER	PSVP
PSVPERR	PSVPOPER	D/T6562	D/T6592
6562	6592	69945	IRPDA
UNCLASSIFIED			

Record number: H161500

Device: D/T6898
 Model: M
 Tip key:
 Date created: 097/10/16
 Date last altered: A97/11/20

SYMPTOM:

After installing NT Service Pack 2 or 3 on a SCSI system and rebooting, the system traps and must be reloaded.

PROBLEM ISOLATION AIDS:

This tip applies if the following conditions are met:

1. The system is an IBM IntelliStation M-Pro, Machine Type 6898, equipped with a SCSI hardfile.
2. The original factory preload has been deleted and replaced with a shrinkwrap version of WindowsNT 4.0.
3. WindowsNT Service Pack 2 has been installed, OR, WindowsNT Service Pack 3 has been installed and the user elects to replace the existing SCSI drivers during the installation.

FIX:

1. Upon reloading WindowsNT, the Adaptec SCSI drivers will have to be supplied from diskette. Failing to do so will cause the reinstallation to hang and have to be restarted.

The Adaptec SCSI driver diskette can be created from the Ready-To-Configure (RTC) CDROM included with the system. The required diskette is created by building the "Adaptec 7800 Family Manager Set" disk via the Diskette Factory utility on the RTC. Insert this diskette when prompted for "Additional Devices" during the reinstallation.

In the event the CD-ROM drive is inaccessible on the target system, in most instances, the RTC can be taken to a system with an operating CD-ROM drive and the Adaptec driver disk created there. Running IBMSETUP.EXE on the RTC will start the utility to run the Diskette Factory.

2. When re-installing WindowsNT Service Pack 3, the user must answer "No" when warned that they are about to overwrite an existing SCSI device driver.

NOTE: WindowsNT Service Pack 2 is not supported on the IBM IntelliStation M-Pro, Machine Type 6898.

Windows and WindowsNT are trademarks of Microsoft Corporation.

SAS KEYWORDS:

PSY2	PSY2ERR	PSY2OPER	PSVP
PSVPERR	PSVPOPER	D/T6898	6898
SP2	SP3	68762	68762F_1
ADAPTEC	AIC-7895	UNCLASSIFIED	

SIMPLY SPEAKING DOES NOT UNINSTALL IN WINDOWS NT 3.51

1.4.1191 SIMPLY SPEAKING DOES NOT UNINSTALL IN WINDOWS NT 3.51

Record number: H161506

Device: D/T6898
 Model: M
 Tip key:
 Date created: 097/10/21
 Date last altered: A97/10/21

SYMPTOM:

After installing IBM VoiceType Simply Speaking Gold in WindowsNT 3.51, the user may find that the uninstall feature of the program does not work.

PROBLEM ISOLATION AIDS:

The user may have deleted the preloaded WindowsNT 4.0 and installed WindowsNT 3.51.

FIX:

None for WindowsNT 3.51.

Simply Speaking Gold is only supported under WindowsNT 4.0 and Windows95.

Windows95 and WindowsNT are trademarks of Microsoft Corporation.

SAS KEYWORDS:

PSY2	PSY2OPER	PSY2MISC	PSVP
PSVPOPER	PSVPMISC	D/T6898	6898
80207	UNCLASSIFIED		

1.4.1192 SLOW LAN PERFORMANCE W/RACAL ETHERBLASTER & 6381

Record number: H01551

Device: D/T6381
Model: M
Tip key:
Date created: 094/07/21
Date last altered: A94/07/21

SYMPTOM:

Network performance may appear to be slow or erratic in a PS/ValuePoint 6381/Si system with a Racal Etherblaster TP adapter installed.

PROBLEM ISOLATION AIDS:

Applications such as Windows 3.1 may take longer than 2 minutes to load from the server.

FIX:

Racal has replaced the affected adapter with a newer level card. The "older" card may be identified by part number 620 - 0331 - 01 REV AC. The newer level card, called the Racal EtherBlaster TP-8INT, may be identified by part number 620 - 0380-00 REV AA.

Advise the customer to contact Racal INTERLAN at 1-800-526-8255 for information regarding the replacement of the "older" level adapter.

SAS KEYWORDS:

PSVP	PSY2	PS/VP	6381
PSVPADPT	PSY2ADPT	VALUEPOINT	PSVPOEM
PSY2OEM	ETHER BLASTER	PSVPCOMM	PSY2COMM
ETHERNET			

1.4.1193 SLOW PERFORMANCE W/ WINDOWS 386 VERSION 2.11

Record number: H006705

Device: D/T8555
 Model: M
 Tip key:
 Date created: 090/11/08
 Date last altered: A90/11/09

SYMPTOM:

PS/2 SYSTEMS 8555, 8570, 8573, AND 8580 MAY FUNCTION WITH A NOTICEABLE DECREASE IN OPERATING SPEED WHEN USING MICROSOFT WINDOWS 386, VERSION 2.11.

PROBLEM ISOLATION AIDS:

SYSTEM UNIT ADVANCED DIAGNOSTICS WILL RUN WITHOUT ERROR. THIS PROBLEM WILL OCCUR ONLY IN 368 OR 386SX SYSTEMS OPERATING WITH AN ESDI FIXED DISK. SYSTEMS OPERATING WITH SCSI OR ST-506 FIXED DISKS ARE NOT AFFECTED.

DRIVE TYPE CAN BE DETERMINED BY USING "VIEW CONFIGURATION" ON THE SYSTEM REFERENCE DISKETTE. ST-506 DRIVES ARE IDENTIFIED AS "TYPE OF DRIVE...XX" (XX CAN BE ANY NUMBER). ESDI DRIVES DO NOT LIST A DRIVE TYPE, AND SCSI DRIVES CAN BE IDENTIFIED BY THE ATTACHED SCSI ADAPTER.

FIX:

CUSTOMERS EXPERIENCING THIS PROBLEM CAN OBTAIN A COPY OF THE "WIN386 VER 2.11 ESDI HARDFILE SYSTEM UPDATE DISKETTE" BY CALLING 1 - 800-426-7282. THE UPDATE DISKETTE CONTAINS A DEVICE DRIVER FILE (WIND211.SYS) WHICH IS A SOFTWARE ENHANCEMENT FOR THE PS/2 RUNNING WINDOWS 386 VERSION 2.11.

THIS DISKETTE IS AVAILABLE AT NO CHARGE TO THE CUSTOMER. INSTALLATION INSTRUCTIONS ARE INCLUDED WITH THE DISKETTE.

SAS KEYWORDS:

PSY2	PSY2PROG	PSY2ERR	PSY2FDSK
8555SYSFDSK	8555SYSERR	8555SYSFDSK	8570SYSFDSK
8570SYSERR	8570SYSFDSK	8573SYSFDSK	8573SYSERR
8573SYSFDSK	8580SYSFDSK	8580SYSERR	8580SYSFDSK

1.4.1194 SMC ETHEREZ ADAPTER FAILS IN 6899

Record number: H136897

Device: D/T6899
Model: M
Tip key:
Date created: 097/03/18
Date last altered: A97/03/18

SYMPTOM:

IBM IntelliStation Z Pro 6899 system with WindowsNT v4.0 may fail to connect to a network with an SMC EtherEZ PnP ISA adapter card installed. The operating system reports that "the adapter card is not present" or "Could not connect to the interrupt supplied."

PROBLEM ISOLATION AIDS:

None

FIX:

An updated device driver is being developed by SMC to eliminate the adapter card failure. SMC device driver updates may be obtained via the Internet at the following URL:

<http://www.smc.com>

SMC EtherEZ is a trademark of Standard Microsystems Corporation.

SAS KEYWORDS:

PSVP	PSY2	IBMPC	PSY2COMM
PSVPCOMM	PWS	PSVPOEM	PSY2OEM
UNCLASSIFIED	PSVPADPT	PSY2ADPT	58645

1.4.1195 SMC 10/100 ETHERNET DIAGNOSTIC FAILURE

Record number: H135115

Device: D/T8639
Model: M
Tip key:
Date created: 096/11/13
Date last altered: A96/11/13

SYMPTOM:

The SMC 10/100 EISA Ethernet adapter diagnostics fail or hang during the DMA test.

PROBLEM ISOLATION AIDS:

The system is an 8639 or 8640 with an SMC 10/100 EISA Ethernet adapter.

FIX:

The SMC adapter may not be defective.
Disable the DMA logic on the adapter as noted in the SMC 10/100 User's Manual BEFORE running the diagnostics.
Re-enable the DMA logic after running the diagnostics.

SMC is a trademark of Standard Microsystems Corporation.

SAS KEYWORDS:

PSY2	PSY2ADPT	PSY2DIAG	325
D/T8640	PSY2COMM	PSY2OEM	UNCLASSIFIED

SOME OEM ADAPTERS MAY FAIL TO FUNCTION IN 8535/8540 SYSTEMS

1.4.1196 SOME OEM ADAPTERS MAY FAIL TO FUNCTION IN 8535/8540 SYSTEMS

Record number: H096128

Device: D/T8540
 Model: M
 Tip key:
 Date created: 091/12/19
 Date last altered: A92/10/15

SYMPTOM:

SOME OEM (OTHER EQUIPMENT MANUFACTURER) ADAPTER CARDS MAY FAIL TO FUNCTION CORRECTLY UPON INITIAL INSTALLATION IN A 8535 OR 8540 SYSTEM. SYMPTOMS INCLUDE, BUT ARE NOT LIMITED TO;

1. ADAPTER NOT RECOGNIZED.
2. SYSTEM HANG.
3. ADAPTER WILL NOT FUNCTION PROPERLY.

PROBLEM ISOLATION AIDS:

SYSTEM WILL FUNCTION NORMALLY UPON REMOVAL OF OEM ADAPTER CARD.

POSSIBLE CAUSE:

SOME OEM ADAPTERS ERRONEOUSLY IDENTIFY 8535 OR 8540 SYSTEMS AS MICROCHANNEL BUS SYSTEMS THEREBY CAUSING FAILURES AS LISTED ABOVE. IN MANY CASES THESE PROBLEMS ARE CAUSED BY THE METHOD THE ADAPTER CARD USES TO IDENTIFY THE SYSTEM BUS TYPE. SOME ADAPTER CARD MANUFACTURERS INCORRECTLY USE THE MODEL BYTE TO DETERMINE THE SYSTEM BUS TYPE. THESE ADAPTERS MAY MISTAKENLY INTERPRET THIS BYTE, THUS EXPECTING THE 8535 OR 8540 TO BE A MICROCHANNEL BUS SYSTEM. WHEN THIS HAPPENS, THE SYSTEM AND ADAPTER WILL NOT FUNCTION TOGETHER.

NOTE: PS/2 ECA089 MAY APPLY TO THE 8535/8540 SYSTEM.

FIX:

IF THE OEM ADAPTER IS NOT AN IBM SUPPORTED OPTION FOR THE 8535 OR 8540, AND THE SYSTEM FUNCTIONS PROPERLY WHEN THE ADAPTER IS REMOVED, THE CUSTOMER SHOULD BE REFERRED BACK TO THEIR OEM POINT OF SALE TO:

1. DETERMINE IF THE ADAPTER IS SUPPORTED (TESTED, AND WORKS) ON THE SYSTEM TYPE IN WHICH THE FAILURES ARE BEING EXPERIENCED.
2. VERIFY THE SOFTWARE RELATED TO THE ADAPTER (DRIVERS, OPERATING SYSTEM, ETC) IS AT A LEVEL THAT WILL FULLY SUPPORT THE ADAPTER OPERATION, WITHIN THE SYSTEM WHICH IT IS INSTALLED.

IN SITUATIONS WHERE THE OEM CARD IS SUPPORTED (#1 ABOVE) AND HAS THE CORRECT ASSOCIATED SOFTWARE (#2 ABOVE) FOR THE SYSTEM IN WHICH THEY ARE INSTALLED, BUT STILL FAILS TO FUNCTION, NORMAL PROBLEM DETERMINATION PROCEDURES SHOULD BE USED.

SAS KEYWORDS:

PSY2	D/T8535	PSY2ADPT	PSY2OEM
8535SYSADPT	8535SYSOEM	8540SYSADPT	8540SYSOEM
PSY2ERR	853SSYSERR	8540SYSERR	

1.4.1197 SONY 17SEII DISPLAY NOT SEEN AS DDC COMPLIANT

Record number: H133499

Device: D/T6560
 Model: M
 Tip key:
 Date created: 096/08/02
 Date last altered: A96/08/06

SYMPTOM:

IBM PC 340 Series 6560 systems may fail to recognize the Sony MultiScan 17seII Display as a DDC compliant monitor in the Setup Utility and may cause display failures during operation.

PROBLEM ISOLATION AIDS:

During the setup of the Sony MultiScan 17seII display in the PC 340 6560 system Setup Utility, the option for DDC1 capability may not be shown as an available setting. This setting is only available if the system detects that the monitor attached is DDC1 or DDC2B compliant. The Sony MultiScan 17seII display is DDC1/DDC2B compliant.

FIX:

Use either of the following procedures to setup the Sony MultiScan 17seII maximum supported refresh rates:

Systems using DOS/Windows 3.11 or OS/2 WARP

- 1 - Press F1 during POST to access the Setup Utility.
- 2 - Select Devices and I/O ports.
- 3 - Select Video
- 4 - Disable DDC
- 5 - Select Custom Monitor type
- 6 - Fill in the refresh rates for the Sony MultiScan display.
 - 640X480 - 85 hz
 - 720x400 - 70 hz
 - 800x600 - 85 hz
 - 1024x768 - 75 hz
 - 1152x870 - 75 hz
 - 1280x1024 - 75 hz
- 7 - Press ESC twice.
- 8 - Select Save and Exit

Systems using Windows95

- 1 - Boot to the Windows95 Desktop.
- 2 - Click right mouse button on the Desktop.
- 3 - Select Properties.
- 4 - Select Refresh Rates.
- 5 - Fill in the refresh rates for the Sony MultiScan display.
 - 640X480 - 85 hz
 - 720x400 - 70 hz
 - 800x600 - 85 hz
 - 1024x768 - 75 hz
 - 1152x870 - 75 hz
 - 1280x1024 - 75 hz
- 6 - Click OK.

Users with multiples of the SAME machine type may use the CONFIG.ZIP file available from the IBM PC Company BBS to copy a systems CMOS configuration to another system. This eliminates the need to manually configure each system using the Setup Utility.

The file may be obtained from the PC Company BBS at 919-517-0001 or from the PC Company File Library via the Internet at the following URL: "<http://www.pc.ibm.com/files.html>"

Windows & Windows95 are trademarks of the Microsoft Corporation.

SAS KEYWORDS:

PSVP	PSY2	PSVPDISP	PSY2DISP
PSVPERR	PSY2ERR	48277	PSVPOEM
PSY2OEM	PC 300	IBMPC	

SOUNDBLASTER AWE32 DRIVER FAILS TO LOAD

1.4.1198 SOUNDBLASTER AWE32 DRIVER FAILS TO LOAD

Record number: H132790

Device: D/T6877
 Model: M
 Tip key:
 Date created: 096/02/27
 Date last altered: A96/03/11

SYMPTOM:

The SoundBlaster AWE32 adapter device driver does not load after installing it from the Multimedia section of the "Selective Install" menu in OS/2 WARP on a PC 700 Series 6877 or 6887 system.

PROBLEM ISOLATION AIDS:

PC 700 Series 6877/6887 system preloaded with OS/2 WARP and a SoundBlaster AWE32 PnP adapter.

FIX:

The AWE32 device driver shipped with OS/2 WARP is not compatible with the SoundBlaster AWE32 PnP adapter.

The latest SoundBlaster device drivers for the AWE32 PnP adapter may be obtained from the Creative Labs BBS by calling 1 - 405 - 742 - 6660 or search the following Internet URL to retrieve the driver from the Creative Labs web site via the Technical Support area:

Http: //www.creaf.com/welcome.html

SoundBlaster AWE32 PnP is a trademark of Creative Labs, Inc.

SAS KEYWORDS:

PSY2	D/T68XX	D/T6887	6887
6877	PC 750	PC700	PC750
68XX	IBMPC	PSVP	PC730
PC 730	PSVPOEM	PSY2OEM	PSY2ERR
PSVPERR	40871		

SOUNDPIPER 16 MICRO CHANNEL ADAPTER FAILS IN PC 700

1.4.1199 SOUNDPIPER 16 MICRO CHANNEL ADAPTER FAILS IN PC 700

Record number: H031607

Device: D/T6876
 Model: M
 Tip key:
 Date created: 096/08/08
 Date last altered: A96/08/08

SYMPTOM:

A Piper Research Soundpiper 16 Micro Channel sound adapter installed in a PC 700 Series 6876 or 6886 system may exhibit a system hang condition when using the record function and while playing large WAV files.

PROBLEM ISOLATION AIDS:

The system hang occurs when using the utility software supplied with the Soundpiper 16 adapter in a Windows 3.1x environment. Other operating systems supported by the Soundpiper 16 adapter and the utility software may also exhibit the failure symptom.

FIX:

A timing incompatibility exists between the Soundpiper 16 adapter and the PC 700 Series Micro Channel systems.

The Piper Research Soundpiper 16 Micro Channel sound adapter was not tested and is not supported in the PC 700 Series Micro Channel systems. Customers experiencing failures with the adapter should be directed back to the point of purchase.

Soundpiper 16 is a trademark of Piper Research.

SAS KEYWORDS:

PSVP	PSY2	PSVPOEM	IBMPC
PSY2OEM	PSVPADPT	PSY2ADPT	PSVPERR
PSY2ERR	D/T6886	6886	D/T6885
D/T6875	6876	6885	6875
PC750	PC730	D/T68XX	HUNG
LOCKUP			

PSY2 RETAIN TIPS
SPURIOUS CHARACTERS ON SCREEN

1.4.1201 SPURIOUS CHARACTERS ON SCREEN

Record number: H02268

Device: D/T8543
Model: M
Tip key:
Date created: 091/05/16
Date last altered: A97/02/28

SYMPTOM:

SPURIOUS CHARACTERS APPEARING ON SCREEN

PROBLEM ISOLATION AIDS:

IF SPURIOUS OR DUPLICATE CHARACTERS APPEAR ON THE SCREEN ON EARLY PRODUCTION UNITS. REPLACEMENT OF THE KEYBOARD ELEMENT WITH IT'S FRU EQUIVALENT WILL SOLVE THE PROBLEM.

FIX:

REPLACE THE KEYBOARD.

SAS KEYWORDS:

PSY2	PSY2KBD	PSY2DISP	8543SYSKBD
8543SYSDISP	PSY2BRD	8543SYSBRD	8543DISP
UNCLASSIFIED			

PSY2 RETAIN TIPS
SPURIOUS CHARACTERS ON SCREEN

1.4.1202 SPURIOUS CHARACTERS ON SCREEN

Record number: H02268

Device: D/T8543
Model: M
Tip key:
Date created: 091/05/16
Date last altered: A97/02/28

SYMPTOM:

SPURIOUS CHARACTERS APPEARING ON SCREEN

PROBLEM ISOLATION AIDS:

IF SPURIOUS OR DUPLICATE CHARACTERS APPEAR ON THE SCREEN ON EARLY PRODUCTION UNITS. REPLACEMENT OF THE KEYBOARD ELEMENT WITH IT'S FRU EQUIVALENT WILL SOLVE THE PROBLEM.

FIX:

REPLACE THE KEYBOARD.

SAS KEYWORDS:

PSY2	PSY2KBD	PSY2DISP	8543SYSKBD
8543SYSDISP	PSY2BRD	8543SYSBRD	8543DISP
UNCLASSIFIED			

SYS HANGS WITH PC NETWORK ADAPTER II/A AND ARTIC INSTALLED

1.4.1203 SYS HANGS WITH PC NETWORK ADAPTER II/A AND ARTIC INSTALLED

Record number: H096331

Device: D/T8550
 Model: M
 Tip key:
 Date created: 092/02/17
 Date last altered: A92/02/17

SYMPTOM:

HANGS WITH BOTH PC NETWORK ADAPTER II/A AND ARTIC
 INSTALLED IN THE SAME SYSTEM.

PROBLEM ISOLATION AIDS:

CHECK CONFIGURATION TO DETERMINE IF ARTIC IS SET AT INTERRUPT
 LEVEL 2 OR 9. THE PC NETWORK ADAPTER II/A DEFAULTS TO INTERRUPT
 LEVEL 2 AND DOES NOT CASCADE INTERRUPTS CAUSING A CONFLICT WITH
 THE ARTIC ADAPTER.

FIX:

USING THE CHANGE CONFIGURATION FACILITY, SET THE ARTIC
 ADAPTER TO OTHER THAN INTERRUPT LEVEL 2 OR 9.

SAS KEYWORDS:

ARTIC	PSYCOMM	PSY2ADPTR	8550SYSCOMM
8550SYSADPT	8555SYSADPT	8555SYSCOMM	8560SYSADPT
8560SYSCOMM	8570SYSADPT	8570SYSCOMM	8580SYSADPT
8580SYSCOMM	8565SYSADPT	8568SYSCOMM	8590SYSADPT
8590SYSCOMM	8595SYSADPT	8590SYSCOMM	

1.4.1204 SYSTEM BOOT/HANG FAILURES W/IBM (ADAPTEC) PCI SCSI-2

Record number: H132523

Device: D/T8640
 Model: M
 Tip key:
 Date created: 096/02/06
 Date last altered: A96/02/06

SYMPTOM:

There are two basic failure symptoms which may occur as a result of incorrect setting of the "Reverse scan" option on the IBM (Adeptec) PCI 2940W SCSI Adapter.

1. The operating system may fail to boot.

This occurs when either:

- A. An adapter that did not have the reverse scanning option enabled is replaced with a FRU or option adapter that has the reverse scanning option enabled.
- B. When the reverse scanning option is enabled after the operating system has been installed to a disk while the reverse scanning option was disabled.
- C. If the operating system is installed while the reverse scanning option is enabled, then the reverse scanning option is disabled at a later time.

2. System hangs during or after system boot.

This may occur because some operating system device drivers do not support the reverse scanning option. Even if the system boots with the reverse scanning option enabled, there may be problems accessing disks once the operating system is fully booted, or during the boot process.

This could also make it appear as if files or directories have been corrupted on some or all of the attached disks.

PROBLEM ISOLATION AIDS:

The SCSI adapter installed is the IBM (ADAPTEC AHA-2940W) PCI SCSI-2 F/W Adapter, FRU P/N06H8574.

FIX:

IBM systems do not support the reverse scan option that is on the Adaptec AHA-2940W PCI SCSI-2 adapter.

When installing a system with an Adaptec 2940W card from IBM, follow the instructions as directed in the User's Handbook (Server 320, page 122) titled "Using the SCSISelect Utility Program" to check the for proper configuration, as follows:

1. Start the Server.
2. The SCSISelect prompt appears after the "IBM PC Server" screen appears briefly and then disappears.
3. Press Ctrl+A immediately after the SCSISelect prompt appears.
4. At the first screen select "Configure/View Host Adapter Setting".
5. Under "Additional Options" choose "Advanced Configuration Options".
6. Under "Advanced Configuration Options" Ensure that "Reverse Scan", "IBM Int13 Extensions", and "Boot from CD-ROM" are all disabled. (None of these should be enabled unless you know exactly what you are doing.)
7. Before saving and exiting "SCSISelect," you might want to check "SCSI Device Configuration" under "Additional Options" (on the screen that showed "Advanced Configuration Options"). On this screen check to make sure that hard disk devices that are installed on the SCSI bus show the proper settings such as "Send Start Unit Command" YES.

The AHA-2940/2940W User's Guide discusses the options on this and other screens.

SAS KEYWORDS:

PSY2	SERVER	SCSI	D/T8640
8640	300	320	520

1.4.1205 SYSTEM DISPLAYS UNEXPECTED GRAPHICS & HANGS

Record number: H107120

Device: D/T9576
Model: M
Tip key:
Date created: 092/09/24
Date last altered: A94/08/15

SYMPTOM:

Unexpected screen patterns may be encountered when exiting the Demo Program supplied with the Audio Capture/Playback Adapter/A (ACPA). This will occur in a model 9576 or 9577 Multimedia system with CD-ROM multimedia drivers installed.

The screen will be filled with postage stamp size patterns, preventing further use of the screen.

PROBLEM ISOLATION AIDS:**FIX:**

The user will need to reboot their system to clear the screen. This problem will be corrected in future releases of the ACPA Demo program.

The Demo Program is not required for running diagnostics. If the Demo Program is used, it will work properly until exit, at which time the screen will fill with the unwanted pattern.

SAS KEYWORDS:

PSY2	PSY2PROG	PSY2DIAG	OPTION
CD ROM	D/T9576		

1.4.1206 SYSTEM FAILS TO BOOT FROM THE CD-ROM

Record number: H127337

Device: D/T9595
Model: M
Tip key:
Date created: 095/04/12
Date last altered: A95/08/30

SYMPTOM:

The system will not boot to the CD-ROM attached to the RAID Controller on 9595A (SERVER 95) or 8641 (Server 500).

PROBLEM ISOLATION AIDS:

1. This is a RAID array system.
2. The CD-ROM is selected as a valid boot device in the system startup sequence.
3. The CD-ROM is attached to the RAID controller.
4. The CD-ROM address jumpering is not 0 through 3, which is reserved for fixed disks on a RAID system. Address 6 is standard for this configuration.

FIX:

There are two known causes for this problem:

1. The system will not boot from CD-ROM if the RAID array is in an inoperative state. This prevents the RAID controller from accessing the device drivers required to support the bootable CD-ROM.

Cold-boot the RAID Support Diskette (power-off, then power-on with the diskette in the A-drive) to bring up the RAID Utility screens. Using normal RAID problem resolution techniques outlined in "Configuring Your RAID Array," correct the RAID setup problem (drive offline, DDD, etc.). This should "free-up" the RAID controller and allow the CD-ROM to boot normally. See note below.

2. When an IBM SCSI adapter (Non-RAID Array) is added to a system which has a CD-ROM attached to a RAID controller and the system BIOS is at versions 1, 2, or 3, a firmware (BIOS) conflict prevents polling the channel for a CD-ROM attached to the RAID adapter. Thus when POST completes, the CD-ROM attached to the RAID controller can no longer be booted (but it will otherwise function normally).

A temporary work-around is to move the CD-ROM to the non-array SCSI adapter.

Permanent Fix:

This problem has been corrected in BIOS version 5.00 which is available from the IBM PC Company Bulletin Board system (BBS) which may be accessed by calling 919-517-0001. The BIOS version 5.00 Update Diskette filename is: BIOS05.DSK.

Note: A RAID Support diskette should have been created immediately upon initial system installation. If this diskette was not made, or cannot be found, contact the PC Company HelpCenter (800-772-2227) for assistance downloading or obtaining a RAID support diskette.

SAS KEYWORDS:

PSY2	PSY2FDSK	SCSI	SCSI-2
PCSERVER	SERVER95	SERVER	500
SERVER500	D/T8641	9595A	9595
8641	CD	ROM	

SYSTEM FAILS TO START POST AFTER POWER-ON

1.4.1207 SYSTEM FAILS TO START POST AFTER POWER-ON

Record number: H133653

Device: D/T6484
 Model: M
 Tip key:
 Date created: 096/08/15
 Date last altered: A96/08/15

SYMPTOM:

IBM PS/ValuePoint Performance Series 6472, 6482, 6484, 6492, and 6494 systems may intermittently fail to start the Power On Self Test (POST) routines after the system is powered off, then on.

PROBLEM ISOLATION AIDS:

The initial daily startup of the system functions normally. If the system is powered off for any reason, and quickly powered-on again, the system may intermittently fail to begin the POST routine. The power supply fan is turning, the hardfile is spinning, and the power-on LED is on.

FIX:

Users experiencing this situation should ensure that the system unit is not powered-on for at least 10 seconds following power off. This procedure allows the system board components sufficient time to drain and reset prior to the power-on cycle. Due to component tolerances, some system boards may take as long as 30 seconds before resetting.

If the system does not begin the POST routine after a 30-45 second power-off cycle, continue normal problem determination to isolate the failing FRU.

SAS KEYWORDS:

VALUE POINT	PSY2	PSVP	IBMPC
PSVPPWR	PSY2PWR	PSVPBRD	PSY2BRD
S3 REV. L	D/T6472	D/T6482	D/T6492
D/T6494	PSY2ERR	VALUEPOINT	PSVPERR

PSY2 RETAIN TIPS
SYSTEM FAILURES WITH 16MB ECC MEMORY INSTALLED

1.4.1208 SYSTEM FAILURES WITH 16MB ECC MEMORY INSTALLED

Record number: H103954

Device: D/T9595
Model: M
Tip key:
Date created: 094/09/26
Date last altered: A95/03/14

SYMPTOM:

A limited number of 16MB memory SIMMs could cause NMI errors in a multitasking application environment such as OS/2, AIX, Novell Netware and Windows. (NMI errors are reported as Trap 0002 by OS/2. Other operating systems may refer them as "PANIC" errors.)

PROBLEM ISOLATION AIDS:

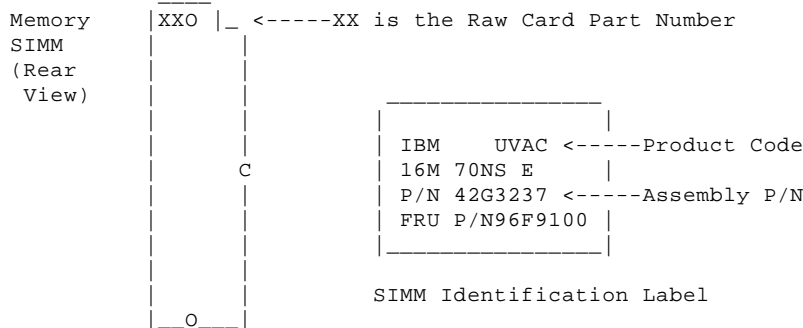
The affected systems are:

1. 9595 - xNx, xPx and xQx
2. Any 8595, 9595 systems upgraded with either:
 - a. a 486DX/2-66Mhz processor card, option part number 32G3961, FRU P/N61G2343.
 - b. a Pentium 60 MHz processor card FRU P/N52G9362
 - c. a Pentium 66 Mhz processor card FRU P/N92F0120
3. 9577 - VTG. (Note: Other 9576/77i 9576/77s models xUx, xNx, or xTx that contain this Simm are also affected.

Refer to the Following diagram to determine if a given SIMM in the system might exhibit the problem:

NOTE: All of the following conditions must apply for this tip to be applicable.

1. The system is exhibiting the failure symptoms.
2. The memory installed is IBM 16MB ECC 70ns, FRU P/N96F9100, Option 92G7209,
3. It must be assembly P/N 42G3237.
4. The raw card part number must be 32G8299-01. This number is located on the back side, above the notch of the card.
5. A product code 'UVAC' on the small white identification label on top one of the modules.



FIX:

If NMI error symptoms are being experienced, only the memory SIMMs which meet the criteria described above should be replaced. If none of the SIMMs meet the description, normal problem resolution procedures should be performed.

SAS KEYWORDS:

PSY2	PSY2MEM	SERVER95	D/T8595
9595A	PSY2PROG	OS2	NOVELL
AIX	2	D/T9577	9577
D/T9577I	D/T9577S	D/T9576I	D/T9577S
RAID	PENTIUM		

SYSTEM HANG ACCESSING SELECTIVE INSTALL WITH WARP

1.4.1209 SYSTEM HANG ACCESSING SELECTIVE INSTALL WITH WARP

Record number: H131380

Device: D/T6885
 Model: M
 Tip key:
 Date created: O95/10/20
 Date last altered: A95/10/20

SYMPTOM:

IBM PC 300/700 Series systems and PS/ValuePoint systems with an IBM ISA LAN Adapter for Ethernet card installed may hang when the Selective Install function is accessed in OS/2 WARP.

PROBLEM ISOLATION AIDS:

When accessing the Selective Install function in OS/2 WARP, the system will hang prior to the System Configuration screen appearing. A cold boot (off/on) is required to clear the hang condition.

The ISA Ethernet adapter is configured for an I/O address of 300h or 320h.

Advanced diagnostics run without failures.

FIX:

OS/2 WARP reserves I/O address 300h and 320h for its own use during installation and Selective Install.

Using the configuration program supplied with the IBM ISA LAN Adapter for Ethernet, assign an I/O address other than 300h or 320h.

Verify that there are no other adapters installed that are using I/O address 300h or 320h.

SAS KEYWORDS:

PSVP	PSY2	PSVPPROG	PSY2PROG
IBMPC	PSY2ADPT	PSVPADPT	HUNG
D/T6381	D/T6382	D/T6384	D/T6387
D/T6472	D/T6482	D/T6484	D/T6492
D/T6494	D/T6571	D/T6573	D/T6581
D/T6583	D/T6575	D/T6585	D/T6576
D/T6586	D/T6875	D/T6885	D/T6876
D/T6886	D/T65XX	D/T68XX	OS2
PSY2COMM	PSVPCOMM		

1.4.1210 SYSTEM HANG ACCESSING SELECTIVE INSTALL WITH WARP

Record number: H131630

Device: D/T8639
Model: M
Tip key:
Date created: 095/11/08
Date last altered: A95/11/09

SYMPTOM:

Server 310 (8639) systems with an IBM ISA LAN Adapter for Ethernet card installed may hang when the Selective Install function is accessed in OS/2 WARP.

PROBLEM ISOLATION AIDS:

When accessing the Selective Install function in OS/2 WARP, the system will hang prior to the System Configuration screen appearing. A cold boot (off/on) is required to clear the hang condition.

The ISA Ethernet adapter is configured for an I/O address of 300h or 320h.

Advanced diagnostics run without failures.

FIX:

OS/2 WARP reserves I/O address 300h and 320h for its own use during installation and Selective Install.

Using the configuration program supplied with the IBM ISA LAN Adapter for Ethernet, assign an I/O address other than 300h or 320h.

Verify that there are no other adapters installed that are using I/O address 300h or 320h.

SAS KEYWORDS:

PSY2	SERVER	PSY2PROG	310
IBMPC	PSY2ADPT	HUNG	PSY2COMM
OS2	D/T68XX	PSVP	

SYSTEM HANG AFTER INSTALLING OS/2 S3 DRIVERS

1.4.1211 SYSTEM HANG AFTER INSTALLING OS/2 S3 DRIVERS

Record number: H134465

Device: D/T9577
 Model: M
 Tip key:
 Date created: 096/10/14
 Date last altered: A96/10/14

SYMPTOM:

IBM PS/2 Micro Channel 9576/77 i/s systems, and PS/ValuePoint 6382/S, 6384/D and 6387/T systems may exhibit a system hang condition during IPL after installing the S3_16M video drivers for OS/2 2.11 and WARP 3.0.

PROBLEM ISOLATION AIDS:

During the installation of the S3_16M video device drivers, the system may not request video driver diskette #2. The installation will appear to complete successfully, however, on the final reboot to activate the changes, the system will hang with a blinking cursor in the upper left corner of the display.

FIX:

Boot the system using the OS/2 Utility Diskettes or a bootable DOS diskette. Edit the OS/2 CONFIG.SYS file and locate the following series of video statements:

```
**SET VIDEO_DEVICES=VIO_SVGA
SET VIO_VGA=DEVICE(BVHVGA)
DEVICE=C: \OS2\MDOS\VSVGASYS
DEVINFO=SCR,VGA,C: \OS2\VIOTBL.DCP
**SET VIO_SVGA=DEVICE(BVHVGA,BVHSVGA)
```

**--Indicates the statements are either corrupted or missing.

Correct/add the corrupted or missing statements. The system should boot normally after correcting the CONFIG.SYS statements.

An updated version of the S3_16M video driver for OS/2 has been developed to eliminate this failure. The update may be obtained from the IBM PC Company BBS system by calling 1 - 919 - 517 - 0001. The driver is located in the section titled "OS/2 Device Drivers".

The driver may also be downloaded via the Internet from the IBM Personal Computer File Library located at the following Internet URL:

<http://www.pc.ibm.com/files.html>

The updated driver was posted on the PC Company BBS & web site on 09 - 11 - 1996.

S3 is a trademark of S3 Incorporated.

SAS KEYWORDS:

PSY2	PSVP	IBMPC	PSY2PROG
PSVPPROG	PSVPDISP	PSY2DISP	D/T9556
D/T6382	D/T6384	D/T6387	HUNG
LOCKUP			

1.4.1212 SYSTEM HANG AT POST W/IBM 2456 SCANNER ATTACHED

Record number: H125465

Device: D/T6384
 Model: M
 Tip key:
 Date created: 094/11/01
 Date last altered: A95/11/06

SYMPTOM:

PS/ValuePoint 6382/S, 6384/D and 6387/T may exhibit a system hang condition after the completion of POST if an IBM 16 Bit AT Fast SCSI adapter is installed and connected to an IBM 2456 Scanning Device.

PROBLEM ISOLATION AIDS:

A 16 Bit AT Fast SCSI adapter with BIOS version of 2.01 or earlier. The level of the BIOS is written on the label attached to the pluggable EEPROM on the adapter card.

The system does not hang if the Scanner is disconnected from the SCSI adapter or if the SCSI adapter is removed from the system.

FIX:

An updated EEPROM is available from Future Domain by calling (407)362 - 6005. and requesting the updated BIOS version 2.02 or higher, to correct the IBM 2456 Scanning Device problem. Additional information may be obtained from Future Domain Technical Support at (714) 253-0440.

----- IMPORTANT -----

| THE BIOS EEPROM UPDATE IS CUSTOMER INSTALLABLE. CUSTOMERS
 | SHOULD BE ADVISED TO CONTACT THE IBM PC COMPANY TECHNICAL
 | SUPPORT VIA THE PC COMPANY HELPCENTER IF ASSISTANCE IS
 | REQUIRED IN OBTAINING THE UPDATE. |

The IBM 16 Bit AT Fast SCSI adapter is manufactured for IBM by Future Domain.

Future Domain is a trademark of the Future Domain Corporation.

SAS KEYWORDS:

VALUE POINT	PS/VP	PSVP	6384
6382	6387	D/T6382	D/T6387
PSY2	D/T2456	PSY2ADPT	PSVPADPT

1.4.1213 SYSTEM HANG AT WARP LOGO ON PC 700 6877/87

Record number: H132801

Device: D/T6877
 Model: M
 Tip key:
 Date created: 096/02/27
 Date last altered: A96/02/27

SYMPTOM:

IBM PC 700 Series 6877 and 6887 systems may exhibit a system hang condition at the OS/2 WARP logo screen while attempting to install OS/2 WARP from CD.

PROBLEM ISOLATION AIDS:

NONE

FIX:

Edit the CONFIG.SYS file on the OS/2 WARP Installation Diskette number 1. Insert a REM statement at the beginning of the statement BASEDEV=CMD640X.ADD.

For systems with SCSI hard files, after the installation is complete, but before the system is restarted, edit the CONFIG.SYS file that has been created on the OS/2 boot drive (C: \). Insert a REM statement at the beginning of the statement BASEDEV=CMD640X.ADD.

This problem will be resolved in future releases of OS/2 WARP.

SAS KEYWORDS:

PSY2	D/T68XX	D/T6887	6887
6877	PC 750	PC700	PC750
68XX	IBMPC	PSVP	PC730
PC 730	LOCKUP	HUNG	PSY2ERR
PSVPERR	PSVPPROG	PSY2PROG	PSVPCDROM
37036			

1.4.1214 SYSTEM HANG BOOTING WINDOWS95 W/O ETHERNET CABLE

Record number: H132878

Device: D/T6887
 Model: M
 Tip key:
 Date created: 096/03/04
 Date last altered: A96/03/04

SYMPTOM:

IBM PC 700 Series 6877 and 6887 systems preloaded with the Windows95 operating system may exhibit a system hang condition while booting without a terminated Ethernet cable attached to the IBM EtherJet Ethernet adapter.

PROBLEM ISOLATION AIDS:

None

FIX:

Connect the Ethernet cable to the EtherJet adapter card or remove the adapter from the system prior to booting Windows95.

This problem has been resolved in the current level of the IBM EtherJet device drivers. The driver may be obtained from the IBM PC Company BBS at 919-517-0001. The file is located in section 32 "Network Support Files" and is titled ETIJ01.DSK.

The driver may also be downloaded via the Internet at the following URL: <http://www.pc.ibm.com/files.html>

Windows95 is a trademark of the Microsoft Corporation.

SAS KEYWORDS:

PSY2	D/T68XX	D/T6877	6887
6877	PC 750	PC700	PC750
68XX	IBMPC	PSVP	PC730
PC 730	PSVPADPT	PSY2ADPT	HUNG
LOCKUP	41172	PSY2COMM	PSVPCOMM

PSY2 RETAIN TIPS
SYSTEM HANG COPYING TO DISK ON PC300

1.4.1215 SYSTEM HANG COPYING TO DISK ON PC300

Record number: H13957

Device: D/T6581
Model: M
Tip key:
Date created: 095/09/20
Date last altered: A95/09/20

SYMPTOM:

IBM PC 300 Intel 486 based systems (6571, 6573, 6581 and 6583) may exhibit a system hang while copying files to another disk or to a server for periods of time greater than 2 minutes.

PROBLEM ISOLATION AIDS:

The failure occurs under the following conditions:

- 1) Maxtor 540Mb IDE Hardfile installed.
- 2) Using the XCOPY Command for disk to disk transfers.
-OR-
- 3) Copying files to a server.

The Maxtor 540Mb hardfile is incompatible with the "High Performance" hardfile setting in the PC 300 Setup Utility. There are no PC 300 systems manufactured using the Maxtor 540Mb hardfile.

NOTE: This failure may affect other Maxtor IDE hardfiles with capacities less than 540Mb. The PC 300 is compatible with the Maxtor 80Mb and the Maxtor 245Mb IDE hardfiles.

Advanced Diagnostics run without errors.

FIX:

Access the PC 300 Setup Utility by pressing F1 during the memory count. Change the IDE Drive Setup from "High Performance" to "Compatible" under the Devices & I/O section.

If the failure persists, contact the place of purchase for the Maxtor 540Mb hardfile.

SAS KEYWORDS:

PSY2	D/T65XX	65XX	6571
IBMPC	PSVP	PSVPFDSK	PSY2FDSK
D/T6571	D/T6573	D/T6583	PSVPPART
PSY2PART	PSVPERR	PSY2ERR	6573
6581	6583	PC300	PC 330
PC 350	PC330	PC350	PSY2OEM
PSVPOEM			

SYSTEM HANG DOWNLOADING FILES W/AUTO WAKE TOKEN RING

1.4.1216 SYSTEM HANG DOWNLOADING FILES W/AUTO WAKE TOKEN RING

Record number: H086910

Device: D/T6877
 Model: M
 Tip key:
 Date created: 096/09/27
 Date last altered: A96/09/27

SYMPTOM:

IBM PC 300 or 700 Series systems may exhibit a system hang condition while downloading large files from a local server via the IBM Auto Wake Token Ring adapter.

PROBLEM ISOLATION AIDS:

When the system hangs, the LED's on the Auto Wake Token Ring adapter will be flickering.

FIX:

Use the adapter configuration software that ships with the Auto Wake Token Ring adapter to enable "Auto Sense."

If the failure persists, continue normal problem determination to isolate the failing FRU or application.

SAS KEYWORDS:

PSVP	PSY2	PSVPPROG	PSY2PROG
6877	PC 700	PC730	PSVPERR
PSY2ERR	HUNG	LOCKUP	D/T6887
D/T6577	D/T6587	D/T6573	D/T6581
D/T6583	D/T6571	D/T6585	D/T6576
D/T6586	D/T6575	D/T6885	D/T6876
D/T6886	D/T6875	D/T6887	PC 360
D/T6598	D/T6877	D/T6577	D/T6587
PC750	D/T6560	PC300	PC330
PC350	PC730	PC 340	PC 365
D/T6260			

1.4.1217 SYSTEM HANG DURING FILE TRANSFER W/IBM ETHERNET

Record number: H132253

Device: D/T6571
 Model: M
 Tip key:
 Date created: 096/01/18
 Date last altered: A96/01/29

SYMPTOM:

Any brand of system using an IBM Ethernet adapter, FRU P/N60G0611, and configured as a server, may experience a system hang condition while the clients are performing file transfers from the server.

PROBLEM ISOLATION AIDS:

The server may hang within 5 minutes when 2 or more clients are performing file transfers from the server using an application like XCOPY.

The operating system is Novell Netware 3.12.

The hang condition does not occur if there is only one client performing the file transfer (XCOPY).

The IBMENIO.LAN driver which ships with the IBM Ethernet adapter has a file date prior to 11/93.

FIX:

Install the latest IBM device driver IBMENIO.LAN with a file date of 11/93 or later.

Obtain the current Ethernet device drivers from the IBM PC Company BBS system by calling 1-919-517-0001. Locate the "Network Support Files" section (section #32). Download the file titled: ETILAN.ZIP

The updated drivers may also be downloaded via the Internet from the IBM Personal Computer File Library by searching the following Internet URL:

<http://www.pc.ibm.com/files.html>

The drivers are located in the "Network Support Files" section under filename ETILAN.ZIP.

SAS KEYWORDS:

PSY2	PSVP	IBMPC	PC330
PC350	PC 330	PC 350	PSVPADPT
PSY2ADPT	D/T65XX	D/T68XX	PSVPCOMM
PSY2COMM	PSVPPART	PSY2PART	D/T6381
D/T6382	D/T6384	D/T6387	D/T6482
D/T6484	PSY2ERR	PSVPERR	D/T6472
D/T6492	D/T6494	D/T6573	D/T6581
D/T6583	D/T6575	D/T6585	D/T6576
D/T6586	D/T6875	D/T6885	D/T6876
D/T6886			

1.4.1218 SYSTEM HANG DURING FLASH BIOS UPDATE

Record number: H163036

Device: D/T6561
 Model: M
 Tip key:
 Date created: 098/03/16
 Date last altered: A98/03/16

SYMPTOM:

During a flash BIOS update, the system enters into a hang condition and will not respond to further input (<Enter>, <CTRL-ALT-DEL>, etc.).

PROBLEM ISOLATION AIDS:

This tip applies to IBM PC300GL Series 6561/6591 systems only.

FIX:

To recover from the hang condition and reflash the system, complete the following steps:

1. Power off the system, disconnect the AC power cord, and remove the top cover.
2. Find jumpers J6C1 and J7H1 located to the right of the processor assembly.
3. Move both jumpers from their default positions on pins 1&2 to pins 2&3.
4. With the flash BIOS diskette inserted in drive A: , reconnect the AC power cord and power on the system. (Note: On machine type 6561 you will need to use a pencil to reach the power button with the top cover removed.)
5. Follow the on-screen instructions for updating the system BIOS as directed. After the BIOS update is completed and the message to restart the computer is displayed, power off the system, disconnect the AC power cord, and remove the diskette from drive A: .
6. Move both jumpers back to their default positions on pins 1&2.
7. Replace the top cover, reconnect the AC power cord, and power on the system. (Note: Any user specified changes to BIOS settings will have been reset to their default values at this point. Press <F1> to run the Setup utility to reset any user specified changes.)

SAS KEYWORDS:

PSY2	PSY2MCD	PSVP	PSVPMCD
D/T6561	D/T6591	6561	6591
UNCLASSIFIED			

1.4.1219 SYSTEM HANG DURING IPL W/3COM 3C509B ADAPTER

Record number: H014469

Device: D/T6598
 Model: M
 Tip key:
 Date created: 096/04/02
 Date last altered: A96/04/02

SYMPTOM:

The IBM PC 360-S200 6598 system may exhibit a system hang condition during IPL with a 3Com 3C509B Etherlink III adapter and an Adaptec PCI SCSI adapter installed.

When attempting to boot the PC 360 6598 with the "Boot Prom" feature installed on the 3Com adapter, the system will display an error message stating: "ROMShield Data Destroyed."

PROBLEM ISOLATION AIDS:

The "Boot Prom" feature enables the RIPL function of the 3Com 3C509B Etherlink III Adapter.

FIX:

Remove the "Boot Prom" from the 3Com 3C509B adapter prior to installing it in a PC 360-S200 6598 system. RIPL is not supported on the PC 360-S200 with the 3Com 3C509B Etherlink III adapter.

3Com 3C509B Etherlink Adapter III is a trademark of the 3Com Corporation.

SAS KEYWORDS:

IBMPC	PSVP	PSY2	D/T65XX
6598	PC360	PENTIUMPRO	PSVPOEM
PSY2OEM	PSVPADPT	PSY2ADPT	PSVPERR
PSY2ERR	PSVPCOMM	PSY2COMM	

1.4.1220 SYSTEM HANG DURING OS/2 WARP 4 NETWORK INSTALL

Record number: H136902

Device: D/T6899
 Model: M
 Tip key:
 Date created: 097/03/18
 Date last altered: A97/03/18

SYMPTOM:

IBM IntelliStation Z Pro 6899 systems may exhibit a system hang condition during the "Selective Install for Networking" phase of the OS/2 WARP v4.x installation.

PROBLEM ISOLATION AIDS:

The Crystal Audio feature is has been ENABLED via the Setup Utility.

The hang occurs with or without a network adapter installed.

FIX:

DISABLE the Audio feature via the Setup Utility, then complete the Networking installation. The Audio feature can be reenabled following the Networking installation.

An updated version of the Crystal Audio device driver is being developed to eliminate the failure. The updated driver will be available during April 1997 from the IBM PC Company BBS at 919 - 517-0001 and from the IBM PC Company File Library via the Internet at the following URL:

<http://www.pc.ibm.com/files.html>

SAS KEYWORDS:

PSVP	PSY2	PSVPPROG	PSY2PROG
PSVPADPT	PSY2ADPT	PSY2COMM	IBMPC
UNCLASSIFIED	60334	PSVPCOMM	HUNG
LOCKUP	PWS		

SYSTEM HANG DURING POST W/256KB L2 CACHE INSTALLED

1.4.1221 SYSTEM HANG DURING POST W/256KB L2 CACHE INSTALLED

Record number: H137714

Device: D/T6577
 Model: M
 Tip key:
 Date created: 097/05/13
 Date last altered: A97/05/13

SYMPTOM:

IBM PC 300 Series 6577 & 6587 systems may exhibit intermittent system hangs during Power On Self Test (POST) with 256kb L2 Cache made for IBM by ISSI installed.

PROBLEM ISOLATION AIDS:

Affected cache modules may be identified by the ISSI brand logo on the cache modules. The IBM FRU part number is 07H1150. The IBM Assembly part numbers and barcode headers for the affected cache modules are:

IBM P/N40H8145 - Barcode header J12TU
 J11H4
 J121M
 IBM P/N40H8582 - Barcode header J12XK

Advanced Diagnostics run without errors.

Remove the 256Kb L2 cache module from the system and attempt to recreate the failure. If the error can be recreated with the cache module removed, this tip does not apply. Utilize normal problem determination procedures to isolate the failing FRU or application.

If the failure cannot be recreated with the 256Kb cache module removed, this tip does apply. Proceed to the "FIX" section of this tip.

FIX:

The cause of the failure is a buildup of debris between the cache module tabs and the contacts on the system board cache socket.

Remove the cache from the socket and reseal the module several times to remove the debris and provide a solid connection between the tabs and the contacts. Retest the system.

If the system continues to exhibit the failure after reseating the cache module, replace the cache module FRU P/N07H1150.

All affected ISSI brand cache modules stocked under FRU P/N07H1150 have been purged from FRU inventory, reworked and restocked with a new barcode number. The FRU part number was not changed.

ISSI is a trademark of Integrated Silicon Solution, Inc.

SAS KEYWORDS:

PSVP	PSY2	PSVPBRD	PSY2BRD
PSVPPART	PSY2PART	IBMPC	LOCKUP
D/T6587	PSY2MEM	PSVPMEM	PSVPADPT
PSY2ADPT	UNCLASSIFIED	PSVPERR	PSY2ERR

1.4.1222 SYSTEM HANG ENTERING "WIN" FROM DOS PROMPT

Record number: H13861

Device: D/T6885
 Model: M
 Tip key:
 Date created: 095/09/14
 Date last altered: A95/09/14

SYMPTOM:

IBM PC 700 Series systems may exhibit a system hang condition when exiting from Windows to the DOS prompt and reentering Windows using the "WIN" command.

PROBLEM ISOLATION AIDS:

The system is using the Voyetra Audio drivers and the DPMS (DOS Protected Mode Services) driver shipped with Stacker 4.0, (which is bundled with PC DOS version 7.0).

An incompatibility exists between VGAME.386 (included with the Voyetra drivers) driver and DPMS (included with Stacker 4.0/PC DOS 7.0) that prevents upper memory from being cleared when exiting from Windows.

FIX:

Remove the DPMS driver from the CONFIG.SYS file or delete the VGAME.386 driver (DEVICE=VGAME.386) statement from the "386ENH" section of the Windows SYSTEM.INI file.

- OR -

The Voyetra Business Audio drivers may be deleted and replaced with the Crystal Business Audio drivers. Both the Crystal and Voyetra drivers ship with the preloaded DOS/Windows systems.

Windows is a trademark of the Microsoft Corporation

SAS KEYWORDS:

PSVP	PSY2	D/T6875	IBMPC
D/T6876	D/T6886	PSY2ERR	PSVPERR
HUNG	LOCK UP	PSVPPROG	PSY2PROG
6885	6875	6886	6876
PC750	PC730	PC 730	PC 750

1.4.1223 SYSTEM HANG IN WINDOWS RUNNING PCS SOFTWARE

Record number: H127597

Device: D/T6384
 Model: M
 Tip key:
 Date created: 095/05/18
 Date last altered: A95/05/18

SYMPTOM:

In a Windows 3.X environment, all PS/ValuePoint and IBM PC 300 and 700 systems may intermittently exit a communication session to the DOS prompt without user intervention, or exhibit a hang condition while running PC Support Software (PCS) for 5250 emulation.

PROBLEM ISOLATION AIDS:

32 Bit disk access is enabled in Windows 3.X.

System and 5250 adapter diagnostics run without errors.

FIX:

The above symptoms may occur if the application is not being kept in memory. Parts of the application are being swapped from the hardfile into memory. Microsoft recommends that non-Windows communication applications utilize the "Lock Application Memory" function when setting up the application to run in a Windows environment. This is documented in the "Readme" file in the Windows "Main" folder.

To enable this function for the PC Support software application, perform the following steps:

- 1) Open the Work Station Function ICON and note the "Properties" file name (Filename.PIF).
- 2) Open the Windows PIF Editor and open this file.
- 3) Click on the "Advanced Options" button.
- 4) Put a check mark in the box called "Lock Application Memory."
- 5) Save and exit.

NOTE - This change will only last as long as the PCSWWSF.PIF is not changed. The PC Support program is generally updated online which causes the PCSWWSF.PIF to be overwritten after they have made their change. To avoid continually updating the PIF file, make the changes as shown above and save the file under a different name. Change the name on the Workstation Function ICON on the Windows Program Manager screen to reflect the new file name.

Windows is a trademark of the Microsoft Corporation.

SAS KEYWORDS:

VALUE POINT	PS/VP	PSVP	6384
6382	6387	D/T6382	D/T6387
D/T6381	6381	D/T6472	D/T6482
D/T6484	D/T6492	D/T6494	6472
6482	6484	6492	6494
PSY2	PSVPPROG	PSY2PROG	PSVPADPT
PSY2ADPT	PSY2ERR	PSVPERR	PSVPCOMM
PSY2COMM			

1.4.1224 SYSTEM HANG IN WINDOWS W/8MB PARITY MEMORY SIMM

Record number: H132302

Device: D/T6484
 Model: M
 Tip key:
 Date created: 096/01/22
 Date last altered: A96/01/22

SYMPTOM:

PS/ValuePoint Performance Series systems (6472, 6482, 6484, 6492 & 6494) with FRU P/N92G7521 8Mb parity memory SIMM(s) installed may exhibit intermittent system hang conditions or memory related errors running Microsoft Windows. Trap 000E and Trap 0002 errors may intermittently occur while running OS/2.

PROBLEM ISOLATION AIDS:

Other operating systems may display memory related errors with this configuration of memory, such as parity, panic, or NMI errors.

The combination of memory may include all 8Mb SIMMs, or a mixture of 8Mb SIMMs with 4Mb, 16Mb or 32Mb SIMMs.

Remove the 8Mb SIMM(s) and retest the system. If the errors do NOT reoccur, this tip applies. If the errors continue with the 8Mb SIMM removed, this tip does not apply.

FIX:

If the errors do NOT occur with the 8Mb parity SIMM removed, replace SIMM FRU P/N92G7521.

If the failure persists, continue normal problem determination to isolate the failing FRU or application.

Windows is a trademark of the Microsoft Corporation.

SAS KEYWORDS:

VALUE POINT	PSY2	PSVP	6484
6482	6472	D/T6482	D/T6472
6492	6494	D/T6492	D/T6494
D/T64XX	IBMPC	TRAP002	TRAP00E
TRAP 002	TRAP 00E	PSVPMEM	PSY2MEM
PSVPPART	PSY2PART	PSVERR	PSY2ERR

1.4.1225 SYSTEM HANG IN WINDOWS W/ETHERNET 10/100 ADAPTER

Record number: H105274

Device: D/T6571
 Model: M
 Tip key:
 Date created: 096/04/17
 Date last altered: A96/04/17

SYMPTOM:

IBM PC 300 Series 6571, 6573, 6581, and 6583 (PCI/ISA Models) may exhibit a system hang condition during network access with an IBM PCI Ethernet 10/100 adapter and IBMFEODI.COM v1.22 or older DOS ODI driver installed.

PROBLEM ISOLATION AIDS:

The system hang condition may occur during network access such as XCOPY to and from the server in Windows 3.11

The failure does not occur in a native DOS environment.

Affected PC 300 systems will have the IBMFEODI.COM v1.22 or older DOS ODI driver with a file date of 9/95 or earlier installed. This level of driver is capable of interrupt sharing. The PC 300 6571, 6573, 6581 and 6583 systems with an ISA/PCI riser installed DO NOT support interrupt sharing.

PS/ValuePoint Performance Series systems with an ISA/PCI riser installed and an IBM PCI Ethernet 10/100 adapter using the IBMFEODI.COM v1.22 or older driver may also be affected.

FIX:

Install the updated DOS ODI driver IBMFEODI.COM, file date 1/19/96 or higher.

Obtain the updated driver from the IBM PC Company BBS system by calling 1 - 919-517-0001. Locate the "IBM PC 300/700 Files" section (section #21) for the driver update:

IBMFEODI.COM - DOS ODI Device Driver V1.22i

The driver update may also be downloaded via the Internet from the IBM Personal Computer File Library by searching the following Internet URL:

<http://www.pc.ibm.com/files.html>

The update is located in the IBM PC 300 & 700 Series Files section or by using the search facility to locate the files by the name listed above.

SAS KEYWORDS:

PSY2	D/T65XX	65XX	6571
IBMPC	PSVP	PSVPERR	PSY2ERR
PSY2ADPT	PSVPADPT	D/T6573	D/T6581
D/T6571	D/T6583	PSVPCOMM	PSY2COMM
PC 330	PC 350		

1.4.1226 SYSTEM HANG IN WINDOWS W/WANG WINLOC CARD

Record number: H133485

Device: D/T6576
 Model: M
 Tip key:
 Date created: 096/08/01
 Date last altered: A96/08/01

SYMPTOM:

IBM PC 300 and 700 Series systems may exhibit a system hang condition loading Windows with a Wang WINLOC communication adapter installed.

PROBLEM ISOLATION AIDS:

The Setup for the Wang WINLOC adapter is configured for the default memory address of D000-DFFF.

FIX:

Change the memory address range in the Wang WINLOC Setup to E000-EFFF. The later level WANG WINLOC E Rev1 adapter also resolves this failure.

Wang WINLOC is a trademark of Wang Laboratories, Inc.

SAS KEYWORDS:

PSVP	PSY2	PSVPOEM	PSY2OEM
PSVPERR	PSY2ERR	PC 330	IBMPC
PSVPCOMM	PSY2COMM	PSVPADPT	PSY2ADPT
D/T6586	D/T6571	D/T6573	D/T6581
D/T6583	D/T6575	D/T6585	D/T6577
D/T6587	D/T6598	D/T6560	D/T6260
D/T6876	D/T6886	D/T6875	D/T6885
D/T6877	D/T6887		

1.4.1227 SYSTEM HANG INSTALLING WINDOWS NT FROM CDROM

Record number: H13862

Device: D/T6886
 Model: M
 Tip key:
 Date created: 095/09/14
 Date last altered: A95/09/15

SYMPTOM:

IBM PC 700 Series systems 6876 and 6886 may exhibit a system hang condition while installing Windows NT version 3.51 from and IDE CDROM drive.

PROBLEM ISOLATION AIDS:

The IDE CDROM drive is installed on the primary IDE connector on the system board as the slave drive behind the primary IDE hardfile.

This failure does not occur if the CDROM drive or the primary hardfile is SCSI.

FIX:

To install Windows NT version 3.51 from a CDROM, the following two steps are required:

- 1) Copy files ABIOS.SYS and SF83900.BIO from the Reference Diskette to the root directory of the boot drive (C: \).
- 2) Remove the CDROM drive from the primary hardfile connector and install it on the secondary connector on the system board. Set the jumper on the IDE CDROM for slave.

Windows NT should now install properly. The CDROM may be replaced as the slave drive on the primary connector after the installation is complete.

If the failure persists, contact the PC Company HelpCenter at 1 - 800-772 - 2227 for further assistance.

Windows NT is a trademark of the Microsoft Corporation

SAS KEYWORDS:

PSVP	PSY2	D/T6876	IBMPC
6876	PSVPPROG	PSY2PROG	6886
HUNG	LOCK UP	PC750	PC730
PC 730	PC 750		

1.4.1228 SYSTEM HANG ON INITIAL BOOT TO WINDOWSNT 3.51

Record number: H137867

Device: D/T6588
 Model: M
 Tip key:
 Date created: 097/05/23
 Date last altered: A97/05/28

SYMPTOM:

IBM PC 300 Series 6588 and Intellistation M Pro 6888 systems may exhibit a system hang condition on the initial boot to Microsoft WindowsNT v3.51. This failure occurs if the native S3 device drivers are selected during the installation process.

PROBLEM ISOLATION AIDS:

When installing WindowsNT v3.51, select the generic VGA drivers instead of the native S3 drivers. The native S3 drivers included with WindowsNT v3.51 were developed prior to the introduction of the 6588 and 6888 systems and are not compatible.

FIX:

At the initial boot of WindowsNT v3.51, a message stating "Please select the operating system to start..." is displayed. Select the following option to allow WindowsNT to boot successfully:

"WINDOWS NT WORKSTATION VERSION 3.51 VGA MODE "

S3 Video device drivers for WindowsNT will be available for the PC 300 6588 and Intellistation M Pro 6888 systems from the IBM PC Company BBS at 1-919-517-0001 following product availability in May 1997. The drivers may also be obtained via the IBM PC Company File Library on the Internet at the following URL: <http://www.us.pc.ibm.com/files.html>

WindowsNT is a trademark of the Microsoft Corporation.

SAS KEYWORDS:

PSY2	PSVP	IBMPC	PSVPPROG
PSY2PROG	63478	PSY2DISP	PSVPDISP
PC 330	PC 350	UNCLASSIFIED	LOCKUP
PSVPMCD	PSY2MCD	HUNG	D/T6888

1.4.1229 SYSTEM HANG ON PC 700 WITH 256KB L2 CACHE

Record number: H136209

Device: D/T6875
 Model: M
 Tip key:
 Date created: 097/01/20
 Date last altered: A97/01/20

SYMPTOM:

IBM PC 700 Series 6875, 6885, 6876, or 6886 systems with 256Kb Level 2 cache installed may exhibit intermittent system hangs in OS/2 2.x, OS/2 WARP 3.x or in a Windows operating system environment.

PROBLEM ISOLATION AIDS:

Disable the 256Kb Level 2 Cache via the Setup Utility and retest the system. If the system does not exhibit further system hangs, continue with the following step:

- A) Locate the level 2 cache modules on the system board.
 If either of the modules are ALLIANCE brand cache modules with a date code of 9539, 9540 or 9542 this tip applies.

If the system hangs continue after Disabling the 256Kb level 2 cache, continue normal problem determination.

Advanced diagnostics run without errors.

FIX:

If the system does not exhibit the failure symptom with the cache Disabled, replace the cache with FRU P/N06H6052.

Windows is a trademark of the Microsoft Corporation.

SAS KEYWORDS:

PSVP	PSY2	PSVPPART	IBMPC
PSY2PART	PSVPERR	PSY2ERR	PSVPMEM
PSY2MEM	PSVPBRD	PSY2BRD	D/T6886
D/T6876	PC300	PC 330	PC 350
LEVEL 2	D/T6885	TRAP	HUNG
SERVICER ONLY			

1.4.1230 SYSTEM HANG ON 8590/95 W/IMAGE ADAPTER/A & OS/2 2.0

Record number: H06160

Device: D/T8550
 Model: M
 Tip key: 126
 Date created: 092/07/10
 Date last altered: A92/10/09

SYMPTOM:

A SYSTEM HANG CONDITION MAY OCCUR IN ANY MODEL 8590 OR 8595 WHEN INSTALLING AN IMAGE ADAPTER/A CARD IN A SYSTEM RUNNING OS/2 2.0 WITH EXTENDED SERVICES (ES) OR LAN SERVER (LS).

THE SYSTEM HANG MAY ALSO OCCUR IF THE CUSTOMER IS INSTALLING ES OR LS IN A SYSTEM CURRENTLY RUNNING OS/2 2.0 AND USING AN IMAGE ADAPTER/A.

THE HANG CONDITION WOULD APPEAR AS A BLANK DISPLAY WITH THE CURSOR BLINKING IN THE UPPER LEFT CORNER. THE DISKETTE DRIVE AND HARDFILE LIGHTS WOULD BE OFF.

THE CURRENT IMAGE ADAPTER/A FRU P/N06G8224 AND BELOW ARE AFFECTED REGARDLESS OF THE AMOUNT OF VIDEO MEMORY INSTALLED ON THE IMAGE ADAPTER/A CARD. IMAGE ADAPTER/A OPTION DISKETTE VERSION 1.03 AND BELOW ARE AFFECTED. IMAGE ADAPTER/A DEVICE DRIVER DISKETTE'S VERSION 1.04 AND BELOW ARE ALSO AFFECTED.

THE SYSTEM HANG IS CAUSED BY THE MISPLACEMENT OF COMMANDS IN THE CONFIG.SYS FILE DURING INSTALLATION OF EITHER THE IMAGE ADAPTER/A, ES OR LS.

FIX:

TO PREVENT THE SYSTEM HANG FROM OCCURRING, THE CUSTOMER OR APPROPRIATE PERSON RESPONSIBLE FOR THE SOFTWARE SHOULD FOLLOW THESE STEPS:

CASE #1 - OS/2 2.0 BASE IS ALREADY INSTALLED AND THE IMAGE ADAPTER/A AND ES OR LS WILL BE INSTALLED.

- 1) INSTALL ES OR LS AS INSTRUCTED BY THE DOCUMENTATION THAT ACCOMPANIES THE PRODUCT.
- 2) INSTALL THE IMAGE ADAPTER/A ACCORDING TO THE INSTRUCTIONS CONTAINED WITH THAT OPTION. WHEN OS/2 PROMPTS THE USER TO "REBOOT THE SYSTEM FOR THE CHANGES TO TAKE EFFECT", DO NOT REBOOT.
- 3) RETURN TO THE OS/2 DESKTOP AND USING THE SYSTEM EDITOR (E.EXE) OR THROUGH A DOS FULL SCREEN SESSION USING A DOS EDITOR, EDIT THE CONFIG.SYS FILE LOCATED IN THE ROOT DIRECTORY AS FOLLOWS:

A. MOVE THE LINE: "DEVICE=C: \OS2\XGARINGO.SYS" BELOW THE LINE THAT READS: "FILES=XX (WHERE XX=20, 30 OR ETC.)"

- 4) SAVE THE CONFIG.SYS FILE AND EXIT THE EDITOR.
- 5) RETURN TO THE DESKTOP AND PERFORM AN ORDERLY SHUTDOWN OF OS/2. THE SYSTEM CAN NOW BE REBOOTED.

CASE #2 - OS/2 2.0 BASE AND THE IMAGE ADAPTER/A ARE ALREADY INSTALLED AND ES OR LS WILL BE ADDED.

- 1) INSTALL ES OR LS AS INSTRUCTED BY THE DOCUMENTATION THAT ACCOMPANIES THE PRODUCT.
- 2) WHEN INSTRUCTED TO SHUTDOWN AND REBOOT THE SYSTEM FOR THE CHANGES TO TAKE EFFECT, RETURN TO "DESKTOP" AND EDIT THE CONFIG.SYS AS STATED IN STEPS 3 THRU 5 OF CASE #1 ABOVE.

CASE #3 - OS/2 2.0 BASE AND ES OR LS IS ALREADY INSTALLED AND THE IMAGE ADAPTER/A IS TO BE INSTALLED.

- 1) INSTALL THE IMAGE ADAPTER/A AS INSTRUCTED BY THE DOCUMENTATION THAT ACCOMPANIES THE OPTION.
- 2) WHEN INSTRUCTED TO SHUTDOWN AND REBOOT THE SYSTEM FOR THE CHANGES TO TAKE EFFECT, RETURN TO "DESKTOP" AND EDIT THE CONFIG.SYS AS STATED IN STEPS 3 THRU 5 OF CASE #1 ABOVE.

 TO CORRECT THE PROBLEM AFTER A HANG CONDITION HAS BEEN ENCOUNTERED, THE FOLLOWING STEPS MAY BE TAKEN:

- 1) INSERT THE OS/2 2.0 INSTALLATION DISKETTE PROVIDED WITH THE OS/2 2.0 PRODUCT AND REBOOT THE SYSTEM. WHEN INSTRUCTED,

INSERT DISKETTE 1 INTO DRIVE A: .

- 2) AT THE "WELCOME TO OS/2" INSTALLATION SCREEN ON DISKETTE #1, PRESS ESCAPE TO EXIT TO THE A: PROMPT.
- 3) CHANGE TO THE DRIVE PROMPT THAT OS/2 2.0 HAS BEEN INSTALLED (C:). ISSUE THE FOLLOWING COMMANDS THAT WILL REPLACE THE CONFIG.SYS FILE IN THE ROOT DIRECTORY WITH A BASE CONFIG.SYS FILE THAT WILL ALLOW OS/2 TO REBOOT.
 - A. RENAME CONFIG.SYS CONFIG.OLD
 - B. CD\OS2\INSTALL
 - C. COPY CONFIG.SYS C: \
- 4) REBOOT OS/2 2.0 FROM THE HARDFILE.
- 5) WHEN THE SYSTEM HAS COMPLETED THE IPL OF OS/2 2.0, EXIT TO AN OS/2 FULL SCREEN OR WINDOW AND ERASE THE CONFIG.SYS FILE THAT WAS COPIED TO THE ROOT DIRECTORY. RENAME CONFIG.OLD TO CONFIG.SYS.
- 6) USE THE OS/2 2.0 SYSTEM EDITOR TO EDIT THE CONFIG.SYS FILE AS DETAILED IN STEPS 3 THROUGH 5 IN CASE #1 ABOVE. IF THE SYSTEM HANG PERSISTS, VERIFY THAT THE ABOVE INSTRUCTIONS HAVE BEEN FOLLOWED AND UTILIZE NORMAL PROBLEM DETERMINATION PROCEDURES IF NECESSARY.

THIS PROBLEM WILL BE RESOLVED IN FUTURE RELEASES OF THE IMAGE ADAPTER/A DEVICE DRIVERS.

SAS KEYWORDS:

PSY2	PSY2PROG	PSY2ERR	PSY2DISP
8590SYSPPROG	8595SYSPPROG	8590SYSERR	8595SYSERR
D/T8590	D/T8595		

PSY2 RETAIN TIPS
SYSTEM HANG OR TRAP 000D LOADING OS/2

1.4.1231 SYSTEM HANG OR TRAP 000D LOADING OS/2

Record number: H094258

Device: D/T6484
Model: M
Tip key:
Date created: 094/10/31
Date last altered: A94/10/31

SYMPTOM:

PS/ValuePoint Performance Series (64XX) systems may experience a system hang condition or post a Trap 000D error when trying to load OS/2 either from diskette or via a network.

PROBLEM ISOLATION AIDS:

All Performance Series diagnostics run without errors.

FIX:

There are two IDE hardfile connectors on the Performance Series systems. The connector on the edge of the board is the "Primary" and the "Secondary" connector is located between the "Primary" connector and the diskette drive cable connector.

Ensure that the cable is installed in the "Primary" IDE hardfile connector on the edge of the system board.

If the failure persists, utilize normal problem determination procedures to isolate the failing application or fru.

SAS KEYWORDS:

VALUE POINT	PSY2	PSVP	6484
6482	6472	D/T6482	D/T6472
6492	6494	D/T6492	D/T6494
PSVPFDSK	PSY2FDSK	PSVPDSKT	PSY2DSKT
PSY2PROG	PSVPPROG	OS2	00D
TRAP000D	TRAP00D		

1.4.1232 SYSTEM HANG PERFORMING MULTIPLE XCOPY ROUTINES IN OS/2

Record number: H135914

Device: D/T6885
 Model: M
 Tip key:
 Date created: 097/01/02
 Date last altered: A97/01/02

SYMPTOM:

IBM PC 700 Series 6875 or 6885 systems may exhibit a system hang condition while multiple sessions in OS/2 WARP 3.x are simultaneously using the XCOPY command to copy files from one directory to another on a SCSI hardfile.

PROBLEM ISOLATION AIDS:

When the failure occurs, the system must be powered off/on to recover.

IDE hardfiles are not affected.

Failure analysis indicated that the failure is more likely to occur on older, low capacity SCSI hardfiles such as 360MB drives.

FIX:

Use following two steps to eliminate this failure from occurring:

- 1) Change the following statement in the OS/2 WARP CONFIG.SYS file if present:
 - change from: BASEDEV=aic7870.add
 - change to: BASEDEV=aic7870.add /A: 0 /TAG: 1
- 2) Verify that the SCSI devices are properly terminated. Consult the users guide for the SCSI adapter and/or devices for proper termination procedures.

If the failure persists, continue normal problem determination to isolate the failing FRU or application.

SAS KEYWORDS:

PSVP	PSY2	IBMPC	PSY2PROG
PSVPPROG	PSY2ADPT	PSVPADPT	PSY2FDSK
PSVPFDSK	UNCLASSIFIED	PC 750	D/T6875
6875	PC750	PC730	6885

1.4.1233 SYSTEM HANG PERFORMING XCOPY WITH PCI LANSTREAMER

Record number: H132741

Device: D/T6586
 Model: M
 Tip key:
 Date created: 096/02/22
 Date last altered: A96/02/22

SYMPTOM:

IBM PC 300 Series 6576 and 6586 systems may exhibit a system hang condition with an OS/2 3193/3195 error in the LAN Error Log.

PROBLEM ISOLATION AIDS:

The system hang condition occurs while the system is performing multiple XCOPY sessions across the token ring network between a client and the server using the PCI LANStreamer Token Ring card and OS/2 2.11.

FIX:

Our failure analysis has indicated that this type of failure is most likely a fault with the PCI LANStreamer adapter or the memory SIMMs installed.

Isolate the system failure to the PCI LANStreamer adapter or system memory SIMMs by using a replacement adapter and memory for diagnostics purposes. Contact the IBM PC Company HelpCenter if additional assistance is required in isolating a system failure.

Canadian servicers should contact their respective support area.

If the failure persists after replacing the PCI LANStreamer adapter, replace the memory SIMM(s) one at a time until the failure is eliminated.

SAS KEYWORDS:

PSY2	D/T65XX	65XX	6576
IBMPC	PSVP	PSVPMEM	PSY2MEM
D/T6576	PSY2ADPT	PSVPADPT	92G7245
P/N92G7245	PSVPERR	PSY2ERR	PSVPCOMM
PSY2COMM			

1.4.1234 SYSTEM HANG PRINTING REPORTS W/QAPLUS/PRO 5.32

Record number: H132810

Device: D/T6877
 Model: M
 Tip key:
 Date created: 096/02/27
 Date last altered: A96/02/27

SYMPTOM:

IBM PC 700 Series 6877 and 6887 may exhibit a system hang condition while using the report printing selection under QAPlus/Pro version 5.32.

PROBLEM ISOLATION AIDS:

None

FIX:

The report printing capability of QAPlus/Pro can be used to save the data to a file rather than output to a printer. The file can then be printed outside of the QAPlus/Pro application.

This problem will be resolved in the next release of QAPlus/Pro which will be available from the IBM PC Company Bulletin Board Service at 1 - 919-517-0001.

QAPlus/Pro is a trademark of DiagSoft, Inc.

SAS KEYWORDS:

PSY2	D/T68XX	6887	6877
IBMPC	PSVP	PSVPDIAG	PSY2DIAG
D/T6887	QA PLUS	QAPLUSPRO	QA+
LOCKUP	PC750	HUNG	QAPLUS PRO
PC 750	PC730	PC700	PC 730
40075			

1.4.1235 SYSTEM HANG RUNNING MS EXCEL WITH OS/2 WARP CONNECT

Record number: H134453

Device: D/T6877
 Model: M
 Tip key:
 Date created: 096/10/14
 Date last altered: A96/10/14

SYMPTOM:

IBM PC 700 Series 6877 & 6887 systems preloaded with OS/2 WARP Connect may exhibit a system hang condition running Microsoft Excel in seamless mode with a video resolution above 640 x 480 (VGA).

When Excel is started, the OS/2 Desktop colors begin to change. The following error message is displayed after Excel is started in seamless mode when the user tries to access an Excel object:

"An application error has occurred, if you choose to ignore, your data will be lost"

PROBLEM ISOLATION AIDS:

This failure does not occur if the video resolution is configured for 640 x 480. All resolutions from 800 x 600 through 1600 x 1200 exhibit the failure.

The IBM OS/2 Base Operating System CSD Level is "XR03003" or lower when viewed with the SYSLEVEL command in an OS/2 Window or OS/2 Full Screen.

Systems configured to use the S3 Trio 64/64v+ video drivers are not affected.

FIX:

An update for OS/2 WARP Connect has been developed to eliminate this problem. Contact IBM PSP Support at 1-800-237-5511 and request the latest Fix Pak for OS/2 WARP Connect or the update that resolves APAR PJ22696.

The latest Fix Pak for OS/2 WARP may also be obtained via the Internet at the following URL: <http://ps.software.ibm.com/>

MS Excel is a trademark of the Microsoft Corporation.

SAS KEYWORDS:

PSVP	PSY2	PSVPPROG	PSY2PROG
PSVPERR	PSY2ERR	PC 730	IBMPC
PC 750	D/T6586	HUNG	LOCKUP
46093			

1.4.1236 SYSTEM HANG RUNNING PERSONAL COMMUNICATION FOR OS/2

Record number: H131115

Device: D/T6484
 Model: M
 Tip key:
 Date created: 095/10/03
 Date last altered: A95/10/03

SYMPTOM:

IBM PS/ValuePoint Performance Series systems may experience a system hang condition when running 3270 sessions with Personal Communications for OS/2 v4.0 (PCOMM 4.0 for OS/2).

PROBLEM ISOLATION AIDS:

- The system hang condition occurs immediately upon starting a 3270 emulator session.
- Advanced diagnostics run without errors.
- The system is a 6472, 6482, 6484, 6492 or 6494.

FIX:

Install the latest S3 Vision 864 video device drivers for OS/2 2.11 and WARP.

Obtain S3 Vision 864 video device drivers from the IBM PC Company BBS system by calling 1-919-517-0001. Locate the "IBM PC 300/700 Files" section (section #21) for the files titled: S3VOS1.EXE - Diskette #1
 S3VOS2.EXE - Diskette #2

The new drivers may also be downloaded via the Internet from the IBM Personal Computer File Library by searching the following Internet URL:
<http://www.pc.ibm.com/files.html>

The driver is located in the IBM PC 300 & 700 Series Files section or by using the search facility to locate the files by the names listed above.

If the error persists, continue normal problem determination procedures.

S3 Vision 864 is a trademark of S3 Incorporated.

SAS KEYWORDS:

VALUE POINT	PSY2	PSVP	6484
6482	6472	D/T6482	D/T6472
6492	6494	D/T6492	D/T6494
PSVPCOMM	PSY2COMM	PSVDISP	PSY2DISP
PSY2ADPT	PSVPADPT	HUNG	OS2
WARP			

1.4.1237 SYSTEM HANG SETTING BAUD RATE TO 19.2

Record number: H134235

Device: D/T6576
Model: M
Tip key:
Date created: 096/10/01
Date last altered: A96/10/01

SYMPTOM:

IBM PC 300 Series 6576/6586 systems may exhibit a system hang condition when setting the baud rate to 19200 (19.2) using the DOS MODE command. For example; "mode com1: baud=19200" or "mode com2: 19,n,7,1,n" entered at the DOS prompt may cause the system to hang immediately.

PROBLEM ISOLATION AIDS:

The Flash BIOS level of the system is LPJT49A, LPJT51A, LPJT52A, LPJT53A, or LPJT56A. Access the Setup Utility by pressing F1 during the memory count. View the Flash BIOS level in the Product Data section.

FIX:

Install Flash BIOS update level 59A.

Obtain the latest PC 300/700 Series Flash BIOS updates from the IBM PC Company BBS system by calling 1-919-517-0001. Locate the "IBM PC 300/700 Files" section (section #21) for the Flash BIOS file:

LPJT59A.EXE - PC 300 6576/6586 FLASH UPDATE v59

Flash BIOS updates may also be downloaded via the Internet from the IBM Personal Computer File Library by searching the following Internet URL:

<http://www.pc.ibm.com/files.html>

The updates are located in the IBM PC 300 & 700 Series Files section or by using the search facility to locate the file by the name listed above.

SAS KEYWORDS:

PSVP	PSY2	PSVPPROG	PSY2PROG
PSVPERR	PSY2ERR	PC 330	IBMPC
PSVPCOMM	PSY2COMM	PSVPADPT	PSY2ADPT
D/T6586	SERIAL	PORT	

SYSTEM HANG STARTING WINDOWS 3.1 FROM SCSI DRIVE

1.4.1238 SYSTEM HANG STARTING WINDOWS 3.1 FROM SCSI DRIVE

Record number: H134029

Device: D/T6589
Model: M
Tip key:
Date created: 096/09/18
Date last altered: A96/09/18

SYMPTOM:

IBM PC 365 Series 6589 systems may exhibit a system hang condition at the Windows 3.1 logo screen if Windows is started from a SCSI hardfile connected to an adapter configured for IRQ 14.

PROBLEM ISOLATION AIDS:

None

FIX:

Set the SCSI adapter to use an IRQ other than 14. If the adapter is Plug n play, access the systems Setup Utility and make IRQ 14 NOT AVAILABLE in the IRQ Resources section.

Windows is a trademark of the Microsoft Corporation.

SAS KEYWORDS:

PSY2	PSVP	IBMPC	PSVPPROG
PSY2PROG	PSVPERR	PSY2ERR	LOCKUP
55024	PC365	HUNG	

1.4.1239 SYSTEM HANG USING COSESSION VIA NETBIOS

Record number: H01525

Device: D/T6577
 Model: M
 Tip key:
 Date created: 096/06/19
 Date last altered: A96/06/19

SYMPTOM:

IBM PC 300 Series 6577 or 6587 systems preloaded with OS/2 and Microsoft Windows may exhibit a system hang condition or reboot when the mouse is moved across the OS/2 Desktop while CoSession for Windows Host is running via NetBIOS.

PROBLEM ISOLATION AIDS:

None

FIX:

Before connecting CoSession for Windows Host via NetBIOS, ensure that the Windows Program Manager is maximized (full screen). The user may then use the CoSession for Windows Host via NetBIOS in the WIN-OS/2 environment.

An updated version of CoSession for Windows Host will be available from the IBM PC Company BBS to resolve this failure. The new version should be posted on the BBS by 6/1/1996.

Customers experiencing this failure should download and install the updated version or use CoSession for Windows Host in the WIN-OS/2 environment only.

Windows is a trademark of the Microsoft Corporation.

SAS KEYWORDS:

PSY2	D/T65XX	6577	6587
IBMPC	PSVP	PSVPPROG	PSY2PROG
D/T6587	PC 350	PC350	PC300
PC 330	PC330	45320	

SYSTEM HANG USING IBM PCMCIA ADAPTER IN PC 365

1.4.1240 SYSTEM HANG USING IBM PCMCIA ADAPTER IN PC 365

Record number: H134033

Device: D/T6589
Model: M
Tip key:
Date created: 096/09/18
Date last altered: A96/09/18

SYMPTOM:

IBM PC 365 Series 6589 systems may exhibit a system hang condition when using the IBM ISA 4 slot or PCI 2 slot PCMCIA Adapter cards. The system hang occurs on bootup and may clear itself after approximately 30 seconds.

PROBLEM ISOLATION AIDS:

If system activity resumes after the 30 seconds of system inactivity, which may be perceived as a system hang condition, the card and the installed PCMCIA adapter(s) may function normally.

FIX:

The 4 slot IBM ISA PCMCIA adapter and the 2 slot IBM PCI PCMCIA adapter cards are not supported in the PC 365 Series systems. Customers using these adapters and experiencing failures should be directed back to their point of purchase.

SAS KEYWORDS:

PSY2	PSVP	IBMPC	PSVPADPT
PSY2ADPT	PSVPERR	PSY2ERR	LOCKUP
51694	PC365	HUNG	

1.4.1241 SYSTEM HANG USING LOTUS 3.1 ON 6384

Record number: H20557

Device: D/T6384
Model: M
Tip key:
Date created: 093/02/26
Date last altered: A93/02/26

SYMPTOM:

THE PS/VALUEPOINT 6384 SYSTEM (486 MODELS) MAY EXPERIENCE AN INTERMITTENT SYSTEM HANG WHILE USING LOTUS 1-2-3 VERSION 3.1.

PROBLEM ISOLATION AIDS:

DIAGNOSTICS ON THE 6384 AND ADAPTERS RUN SUCCESSFULLY.

THE SYSTEM WILL INTERMITTENTLY HANG, REQUIRING A POWER OFF/ON CYCLE TO RECOVER. THE SYSTEM WILL NOT POST AN ERROR CODE OR MESSAGE.

FIX:

A PERMANENT FIX HAS BEEN IMPLEMENTED IN LOTUS 1-2-3 VERSION 3.4.

FOR CUSTOMERS THAT DO NOT WANT TO UPGRADE THEIR SOFTWARE, A PATCH IS AVAILABLE FROM LOTUS THAT WILL RESOLVE THE PROBLEM. THE PATCH IS CALLED "MOD31DSK.ZIP" (PKZIP FORMAT) AND IS AVAILABLE FROM LOTUS SUPPORT AT 1-800-343-5414 OR THROUGH THE LOTUS BULLETIN BOARD SERVICE AT 617-693-7000 (X7001 AT 9600 BPS) OR THROUGH COMPUSERV IN THE LOTUSA BULLETIN BOARD.

SAS KEYWORDS:

PSVP	PSVPERR	PSVPPROG	PSVPOPER
PSVPMISC	PSY2	PSY2ERR	PSY2OPER
PSY2PROG	PSY2MISC		

1.4.1242 SYSTEM HANG VIEWING PORT SETTINGS OF STB DSP-550

Record number: H136893

Device: D/T6899
 Model: M
 Tip key:
 Date created: 097/03/18
 Date last altered: A97/03/18

SYMPTOM:

IBM IntelliStation Z Pro 6899 systems may exhibit a system hang condition when viewing the COM port settings via the WindowsNT v3.51 Control Panel with an STB DSP-550 communication adapter installed.

PROBLEM ISOLATION AIDS:

Performing the following steps in WindowsNT v3.51 may cause a system hang with an STB DSP-550 adapter installed:

- 1) Select Control Panel
- 2) Select Ports
- 3) Four COM (1-4) ports should be displayed.
- 4) Highlight COM1
- 5) Select Settings - system hang occurs

If the DSP-550 adapter is removed or the COM ports are disabled via the Setup Utility, the failure does not occur.

The failure does not occur using WindowsNT v4.0.

FIX:

WindowsNT v3.51 and the STB DSP-550 adapter are an incompatible combination in the IBM IntelliStation Z Pro 6899. Upgrading to WindowsNT v4.0 will allow this combination to function properly.

Contact Microsoft WindowsNT Technical Support or STB for additional information.

WindowsNT is a trademark of the Microsoft Corporation.
 DSP-550 is a trademark of STB Systems, Inc.

SAS KEYWORDS:

PSVP	PSY2	PSVPCOMM	PSY2COMM
PSVPERR	PSY2ERR	PWS	IBMPC
UNCLASSIFIED	HUNG	LOCKUP	59632
PSVPADPT	PSY2ADPT	PSVPOEM	PSY2OEM
PSVPPROG	PSY2PROG		

1.4.1243 SYSTEM HANG W/BUE & BLACK LINES ACROSS DISPLAY

Record number: H136456

Device: D/T6877
 Model: M
 Tip key:
 Date created: 097/02/04
 Date last altered: A97/02/04

SYMPTOM:

IBM PC 700 Series 6877 and 6887 systems may intermittently exhibit blue and black lines across the display along with a system hang after the Windows95 logo is displayed.

PROBLEM ISOLATION AIDS:

This failure has only been recreated at the system board manufacturing site. Affected system boards contained NEC video chips with a date code of 9610-9615.

FIX:

If the system exhibits the failure symptom stated above and the NEC video chip contains a date code of 9610-9615, replace the system board. Not all system boards with video chips in the date code range will fail.

If failures persist, continue normal problem determination.

Windows95 is a trademark of the Microsoft Corporation.

SAS KEYWORDS:

PSVP	PSY2	IBMPC	PSY2DISP
PSVPDISP	PC 700	PC730	D/T6887
SERVICER ONLY	PSVPBRD	PSY2BRD	57047

1.4.1244 SYSTEM HANG W/DIAMOND VIPER VLB ADAPTER IN PC 300

Record number: H132931

Device: D/T6571
 Model: M
 Tip key:
 Date created: 096/03/06
 Date last altered: A96/03/06

SYMPTOM:

IBM PC 300 Series 6571 and 6581 may exhibit a system hang condition after setting the video resolution of the Diamond Viper VLB or Diamond Viper SE VLB video adapter to SVGA mode.

PROBLEM ISOLATION AIDS:

The system hang condition may occur after installing the Diamond Viper VLB or Diamond Viper SE VLB adapter's device drivers for Windows 3.1. If the adapter is configured to run any resolution higher than VGA (640 X 480) using the Diamond Viper device drivers, the system may hang following the restart of Windows 3.1.

FIX:

Use the VPRMODE command on the Diamond Viper install diskette to set the adapter address from "800000000" to "200000000."
 Diamond Viper is a trademark of Diamond Computer Systems

SAS KEYWORDS:

PSVP	PSY2	IBMPC	6571
6581	D/T6581	D/T65XX	PSY2DISP
PSVPDISP	PSY2ADPT	PSVPADPT	HUNG
LOCKUP	PSY2OEM	PSVPOEM	

SYSTEM HANG W/MIRO DUAL MONITOR ADAPTER IN PC 300

1.4.1245 SYSTEM HANG W/MIRO DUAL MONITOR ADAPTER IN PC 300

Record number: H132966

Device: D/T6576
 Model: M
 Tip key:
 Date created: 096/03/07
 Date last altered: A96/03/07

SYMPTOM:

IBM PC 300 Series 6576 or 6586 may exhibit a system hang condition when starting the "miroMonitorSelect" (MONSEL.EXE) option to configure the MIRO 40SV Twin Monitor adapter.

PROBLEM ISOLATION AIDS:

The MIRO 40SV Twin Monitor adapter is a high performance PCI video adapter capable of running two displays while using a single PCI slot.

The MIRO video adapter functions properly in the 6576/6586 if there is only one monitor attached.

FIX:

The MIRO 40SV Twin Monitor adapter was not tested by IBM for use in the PC 300 or 700 Series systems. The adapter is not compatible with the BIOS functions of the PC 300 Series 6576 and 6586.

Customers should be directed to their point of purchase for the adapter for additional assistance.

SAS KEYWORDS:

PSVP	PSY2	IBMPC	6576
6586	D/T6586	D/T65XX	PSY2DISP
PSVPDISP	PSY2ADPT	PSVPADPT	HUNG
LOCKUP	PSY2OEM	PSVPOEM	

SYSTEM HANG WHEN DEVICES ARE ADDED/REMOVED ON SCSI ADAPTER(S)

1.4.1246 SYSTEM HANG WHEN DEVICES ARE ADDED/REMOVED ON SCSI ADAPTER(S)

Record number: H016490

Device: D/T8550
 Model: M
 Tip key:
 Date created: O90/03/07
 Date last altered: A92/03/05

SYMPTOM:

IF YOU ARE ADDING OR REMOVING ONE OR MORE DEVICES TO SCSI ADAPTER(S), OTHER THAN THE ONE IN THE LOWEST (NUMERICALLY) NUMBERED I/O SLOT, AND ARE EXPERIENCING A PROBLEM WITH THE SYSTEM HANGING, THE FOLLOWING PROCEDURE WILL CORRECT THE PROBLEM.

PROBLEM ISOLATION AIDS: NONE**FIX:**

1. DISCONNECT ANY ONE OF THE FIXED DISK DRIVES ATTACHED TO THE SCSI ADAPTER IN THE LOWEST (NUMERICALLY) NUMBERED I/O SLOT EXCEPT FOR THE DRIVE AT ID 6.
2. ATTACH THE NEW DEVICE(S) TO THE SCSI ADAPTER(S) WHERE THEY ARE TO BE CONFIGURED, OR DISCONNECT THE DEVICES YOU WANT REMOVED FROM THE CONFIGURATION.

CAUTION: ENSURE THAT ALL DEVICES ATTACHED TO EACH SCSI ADAPTER (INCLUDING THE ADAPTER ITSELF, WHICH HAS ITS OWN ID) HAVE A UNIQUE ID, YOU MAY WANT TO RUN "VIEW CONFIGURATION" FROM THE "SET CONFIGURATION" MENU TO IDENTIFY THE ID ASSIGNED TO THE ADAPTER ITSELF BEFORE ADDING THE NEW DEVICE(S).

IT IS ACCEPTABLE FOR TWO DEVICES TO HAVE THE SAME ID PROVIDED THEY ARE NOT BOTH ATTACHED TO THE SAME ADAPTER.

3. POWER-ON THE SYSTEM AND DISREGARD THE 0210XXXX 190I ERROR CODE THAT IS REPORTED. THE 0210XXXX IN THE ERROR CODE IDENTIFIES THE DRIVE YOU JUST DISCONNECTED IN STEP 1. THE 190I INDICATES THAT THE DEVICE SPECIFIED (0210XXXX) IS LISTED IN THE EXPECTED CONFIGURATION, BUT IS NOT PRESENT.
4. RUN "SET AND VIEW SCSI DEVICE CONFIGURATION" FROM THE SET CONFIGURATION MENU.

NOTE: DO NOT RUN AUTOMATIC CONFIGURATION.

SELECT THE "KEEP" AND "DISABLE/ENABLE" OPTIONS AS APPROPRIATE FOR THE DEVICES OTHER THAN FIXED DISK DRIVES, AND SELECT THE "KEEP" OPTION FOR THE DRIVE THAT WAS DISCONNECTED IN STEP 1. DISREGARD THE WARNING ABOUT THE FIXED DISK DRIVES THAT WERE NOT FOUND. IF YOU ARE REMOVING FIXED DISK DRIVES, DO NOT SELECT THE "KEEP" OPTION FOR THESE DRIVES.

NOTE: IF MORE THAN ONE FIXED DISK DRIVE IS IDENTIFIED AS NOT BEING INSTALLED WHEN IT IS ATTACHED, ENSURE THAT ALL FIXED DISK DRIVES ARE POWERED-ON, HAVE A UNIQUE ID, AND THAT ALL CABLES ARE CONNECTED PROPERLY. SELECT THE "KEEP" OPTION FOR THESE DRIVES AND HAVE THE DRIVES SERVICED IF THE PROBLEM IS NOT CORRECTED BY THIS PROCEDURE.

5. SAVE THIS CONFIGURATION INFORMATION (F10 KEY).

FOLLOW THE DIRECTIONS ON THE SCREEN TO EXIT BACK TO THE "SET CONFIGURATION" MENU. IF YOU HAVE JUST ATTACHED DEVICES OTHER THAN FIXED DISK DRIVES THAT MAY NOT ALWAYS BE PRESENT WHEN THE SYSTEM IS POWERED-ON OR RESET, YOU MAY WANT TO SET THE "KEEP" AND "DISABLE/ENABLE" OPTIONS FOR THESE DEVICES AT THIS TIME. TO SELECT THESE OPTIONS, CONTINUE WITH THE NEXT STEP, OTHERWISE CONTINUE WITH STEP 7.

6. DISCONNECT OR POWER-DOWN THE DEVICE(S) THAT WILL NOT ALWAYS BE ATTACHED OR POWERED-ON WHEN THE SYSTEM IS POWERED-ON OR RESET. FIXED DISK DRIVES MUST ALWAYS BE ATTACHED AND POWERED-ON DURING A SYSTEM POWER-ON OR RESET CYCLE.

SELECT "SET AND VIEW SCSI DEVICE CONFIGURATION" FROM THE "SET CONFIGURATION" MENU, AND SELECT THE "KEEP" AND "DISABLE/ENABLE" OPTIONS FOR THESE DEVICES. YOU MUST ALSO SELECT THE "KEEP" OPTION AGAIN FOR THE DRIVE THAT WAS DISCONNECTED IN STEP 1 AND FOR ANY DEVICES AS IDENTIFIED IN STEP 4.

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SYSTEM HANG WHEN DEVICES ARE ADDED/REMOVED ON SCSI ADAPTER(S)

SAVE THIS CONFIGURATION INFORMATION (F10 KEY).

7. POWER-DOWN THE SYSTEM AND RE-CONNECT THE FIXED DISK DRIVE DISCONNECTED IN STEP 1.
THE SYSTEM HAS NOW BEEN FULLY CONFIGURED FOR THE DEVICE(S) ADDED.

SAS KEYWORDS:

PSY2	PSY2FDSK	PSY2ADPT	8580SYSADPT
8560SYSADPT	8550SYSADPT	8570SYSADPT	8565SYSADPT
8580SYSFDSK	8560SYSFDSK	8550SYSFDSK	8570SYSFDSK
PSY2ERR	8565SYSFDSK	8550SYSERR	8555SYSERR
8560SYSERR	8565SYSERR	8570SYSERR	8580SYSERR
8555SYSADPT	8555SYSFDSK	D/T8550	D/T8555
D/T8556	D/T8557	D/T8560	D/T8565
D/T8570	D/T8573	D/T8580	

1.4.1247 SYSTEM HANG WITH ADAPTEC 3940 CARDS IN SLOT 1 & 2

Record number: H01650

Device: D/T6577
 Model: M
 Tip key:
 Date created: 096/06/19
 Date last altered: A96/06/19

SYMPTOM:

IBM PC 300 Series 6577 and 6587 may exhibit a system hang condition after executing the POST test and loading the Adaptec BIOS code for an Adaptec AHA-3940 PCI Multichannel SCSI Host adapter.

PROBLEM ISOLATION AIDS:

The failure is due to having two Adaptec 3940 SCSI adapters in slots 1 & 2 (lower two slots) on the riser card. When this adapter is installed in pairs in slots 1 & 2, both cards are forced to use the same interrupt which creates a conflict.

FIX:

Placing the adapters in slots 1 & 3 or 2 & 3 will eliminate this failure.

- OR -

Obtain the version 1.13 or higher BIOS update for the Adaptec AHA-3940 PCI SCSI adapter. The update may be downloaded from the Adaptec BBS at 408-945-7727 or through the Internet at the following URL:

"http://www.adaptec.com/techsupp/bbs_eprm.html"

Adaptec AHA-3940 is a trademark of Adaptec, Inc.

SAS KEYWORDS:

PSY2	D/T65XX	6577	6587
IBMPC	PSVP	PSVPOEM	PSY2OEM
D/T6587	PC 350	PC350	PC300
PC 330	PC330	43018	PSVPADPT
PSY2ADPT			

SYSTEM HANG WITH MILLENNIUM WAN ADAPTER INSTALLED

1.4.1248 SYSTEM HANG WITH MILLENNIUM WAN ADAPTER INSTALLED

Record number: H134195

Device: D/T6576
Model: M
Tip key:
Date created: 096/09/30
Date last altered: A96/09/30

SYMPTOM:

IBM PC 300 Series 6576/6586 systems may exhibit a system hang condition during POST with a Millennium EON-2A WAN adapter installed.

PROBLEM ISOLATION AIDS:

None

FIX:

The failure occurs as a result of a Plug 'n Play configuration conflict. The conflict has been resolved in Flash BIOS update level 59A.

Obtain the latest PC 300/700 Series Flash BIOS updates from the IBM PC Company BBS system by calling 1-919-517-0001. Locate the "IBM PC 300/700 Files" section (section #21) for the Flash BIOS file:

LPJT59A.EXE - PC 300 6576/6586 FLASH UPDATE v59

Flash BIOS updates may also be downloaded via the Internet from the IBM Personal Computer File Library by searching the following Internet URL:

<http://www.pc.ibm.com/files.html>

The updates are located in the IBM PC 300 & 700 Series Files section or by using the search facility to locate the file by the name listed above.

Millennium EON-2A is a trademark of Millennium Engineering, Inc.

SAS KEYWORDS:

PSVP	PSY2	PSVPOEM	PSY2OEM
PSVPERR	PSY2ERR	PC 330	IBMPC
PSVPCOMM	PSY2COMM	PSVPADPT	PSY2ADPT
D/T6586			

SYSTEM HANG WITH QAPLUS/PRO AT CDROM LINEAR ACCESS TEST

1.4.1249 SYSTEM HANG WITH QAPLUS/PRO AT CDROM LINEAR ACCESS TEST

Record number: H161282

Device: D/T6562
 Model: M
 Tip key:
 Date created: 097/10/01
 Date last altered: A97/10/02

SYMPTOM:

After booting the system to QAPLUS/PRO diagnostics (DOS version) and selecting "Run All Tests," the system hangs at the CDROM Linear Access test.

PROBLEM ISOLATION AIDS:

The hang condition is seen with, but not limited to, CDROM drives manufactured by Sony and Hitachi, tested under QAPLUS/PRO diagnostics for DOS version 5.50.

FIX:

Download and run PC Doctor diagnostic software, file name T3GT03A.EXE, to test the system.

The IBM PC 300/700 Enhanced Diagnostic Diskette may be downloaded via the Internet from the IBM Personal Computer File Library by searching the following Internet URL:

Http: //www.us.pc.ibm.com/files.html

The IBM PC 300/700 Enhanced Diagnostic diskette may also be obtained from the IBM PC Company BBS system by calling 1 - 919 - 517 - 0001. Locate the "IBM PC 300/700 Files" (section #21) for the file titled:

T3GT03A.EXE - IBM PC 300/700 Enhanced Diag. Dskt. v1.8.312
 T3GT03A.TXT - Text file describing the new diagnostic package.

QAPLUS/PRO is a trademark of DiagSoft, Inc.
 PC Doctor is a trademark of Watergate Software, Inc.

SAS KEYWORDS:

PSY2	PSY2ERR	PSY2DIAG	PSVP
PSVPERR	PSVPDIAG	PSY2CDRM	PSVPCDRM
D/T6562	6562	D/T6592	6592
68660	71028	UNCLASSIFIED	

1.4.1250 SYSTEM HANG/DISTORTED VIDEO BOOTING OS/2

Record number: H126799

Device: D/T6875
 Model: M
 Tip key:
 Date created: 095/03/21
 Date last altered: A97/07/13

SYMPTOM:

IBM PC 300/700 Series systems 6575,6585,6875 and 6885, and PS/ValuePoint Performance Series systems (64XX), may exhibit a system hang condition with an oversized blinking cursor in the upper left corner of the display or a loss of video synch (distorted video) when attempting to load the OS/2 2.X or WARP 3.0 Presentation Manager screen.

This failure is likely to be seen during the installation of OS/2 2.X or WARP if a high resolution video mode is chosen, or after installation when a resolution other than VGA is selected.

PROBLEM ISOLATION AIDS:

The failure may be caused by a video DAC (Digital to Analog Converter) on the system board which is not recognized by the OS/2 2.X and V3.0 WARP.

Utilize the following list of system boards and locations to determine the manufacturer of the video DAC in the system:

The video DAC on a PC 300 Pentium system board (FRU P/N88G4282) is located in position U3, next to the battery.

The video DAC on a PC 700 system board (FRU P/N88G4270) is located in position U3, next to the battery.

The video DAC on a PS/ValuePoint Performance Series system board (FRU P/N82G2397 or P/N06H6355) is located in position U36, next to the video memory upgrade sockets.

If the video DAC is manufactured by S3 (S3 Logo written on the module), this tip does not apply.

If the video DAC is manufactured by SGS-Thompson (ST Logo written on the module), ICS (ICS written on the module), or AT&T (AT&T written on the module), this tip does apply.

Advanced diagnostics run without errors.

FIX:

Do not replace hardware.

A fix has been released on a utility diskette which will properly detect and function with the SGS-Thompson, ICS, and AT&T video DACs. The utility diskette is a temporary workaround until an OS/2 Fix Pack is released which will permanently fix the problem. This tip will be updated when the OS/2 Fix Pack is available (reference APAR #PJ17395,#PJ17148).

The utility diskette may be obtained by calling the IBM PC Company HelpCenter Bulletin Board system at 919-517-0001 and requesting the file titled OS2_DACS.DSK. For those customers that do not have bulletin board access, a diskette copy may be requested from the PC Company HelpCenter by calling 1 - 800-772 - 2227.

Future revisions and service updates for OS/2 will contain the updated version of the S3 864 display drivers.

If the error persists after installing the utility diskette update and the latest S3 864 video device drivers, continue normal problem determination to isolate the failing FRU.

SAS KEYWORDS:

PSY2	D/T68XX	D/T6885	6875
6885	PC 750	PC 730	PC750
68XX	IBMPC	PSVP	PSVPDISP
PSY2DISP	PSVPERR	PSY2ERR	PSVPBRD
PSY2BRD	PSVPPROG	PSY2PROG	PC730
PC300	PC 330	PC 350	D/T6585
D/T6575	6575	6585	D/T65XX
D/T6472	D/T6482	D/T6484	D/T6492
D/T6494	6472	6482	6484
6492	6494	D/T6324	D/T6325

D/T9424

D/T9525

1.4.1251 SYSTEM HANG/DIVIDE BY 0 ERROR USING PROCOMM PLUS

Record number: H134043

Device: D/T6589
Model: M
Tip key:
Date created: 096/09/18
Date last altered: A96/09/18

SYMPTOM:

IBM PC 365 Series 6589 systems may exhibit a system hang condition whenever ProComm Plus is started in a DOS environment.

The system will display a "Divide by 0" Run-time Error message followed a system hang.

PROBLEM ISOLATION AIDS:

This failure may occur on any system running at 200Mhz or faster.

FIX:

An update is available from DataStorm to allow ProComm Plus to function properly in a DOS environment on systems running at 200Mhz or faster. Contact DataStorm at (573)875-0530 (voice) or (573)499 - 1552 (fax) to request the ProComm Plus update. The update is NOT available from IBM through the IBM PC Company HelpCenter or the IBM Bulletin Board System.

The failure can be circumvented on the PC 365 6589 by setting the processor speed to 180Mhz and disabling Cache in the Advanced Options section of the Setup Utility. Consult the Users Guide for Processor Speed switch settings.

ProComm Plus is a trademark of DataStorm, Inc.

SAS KEYWORDS:

PSY2	PSVP	IBMPC	PSVPPROG
PSY2PROG	PSVPOEM	PSY2OEM	PSY2ERR
PSVPERR	49693	PC365	

Record number: H136503

Device: D/T6576
 Model: M
 Tip key:
 Date created: 097/02/06
 Date last altered: A97/02/06

SYMPTOM:

Any IBM PC 300 or 700 Series system may exhibit the following error indications in systems running WindowsNT version 3.51 or higher and an Adaptec AVA-1515 SCSI adapter installed:

- 1) System hang condition with a General Protection Fault (GPF) during installation.
- 2) Network errors during file copying to the local hard file.
- 3) System hang condition during long idle periods.
- 4) System hang with a blue screen displaying version number, number of processors and memory size after the initial power-on following the WindowsNT installation.

PROBLEM ISOLATION AIDS:

None

FIX:

Microsoft WindowsNT v3.51 or higher does not support the Adaptec AVA-1515 SCSI adapter.

Use the integrated IDE controller in the PC 300 or 700 system to install and run WindowsNT or upgrade to the Adaptec 2940 SCSI adapter.

Adaptec AVA-1515 & Adaptec 2940 are trademarks of Adaptec, Inc. WindowsNT is a trademark of the Microsoft Corporation.

SAS KEYWORDS:

PSVP	PSY2	IBMPC	PSY2PROG
PSVPPROG	PC 330	PC 350	PC 730
UNCLASSIFIED	PC 750	PSY2ERR	PSVPERR
HUNG	LOCKUP	53923	D/T6571
D/T6573	D/T6581	D/T6583	D/T6575
D/T6585	D/T6560	D/T6260	D/T6577
D/T6587	D/T6586	D/T6589	D/T6598
D/T6875	D/T6885	D/T6876	D/T6886
D/T6877	D/T6887	PC 750	PC 730
D/T6384	D/T6382	D/T6387	D/T6472
D/T6482	D/T6484	D/T6492	D/T6494

PSY2 RETAIN TIPS
SYSTEM HANGS TRAP ERRORS IN PC300

1.4.1253 SYSTEM HANGS & TRAP ERRORS IN PC300

Record number: H131482

Device: D/T6571
Model: M
Tip key:
Date created: O95/10/27
Date last altered: A95/11/07

SYMPTOM:

IBM PC 300 Series systems (Intel 486 based models) 6571, 6573, 6581, and 6583 may exhibit intermittent trap C,D,or E errors running OS/2, or intermittent system hang conditions with other operating systems and applications such as Microsoft Windows.

PROBLEM ISOLATION AIDS:

System hang conditions and trap C,D or E errors are most commonly due to:

- 1) Known operating system, application or device driver defects
- 2) Incorrect software/driver setup
- 3) Improper memory management configuration
- 4) Unavailable system resources
- 5) Improperly configured or conflicting adapter cards
- 6) Hardware failures or component tolerances

Verify that the appropriate system resources are available for all installed adapters by reviewing RETAIN tip #H126246 (CONFIGURING ISA/PCI ADAPTERS IN PC 300/700 SYSTEMS).

The PC 300 Series system may also contribute to what may appear to be a software related failure. This exposure should be addressed in the following manner:

- 1) Perform all system unit diagnostics routines using the IBM PC 300/700 Advanced Diagnostic diskette (QAPLus/PRO 5.28 or higher).
- 2) Ensure that the memory installed is the correct IBM FRU part number. Eliminate non-IBM memory during the troubleshooting of an intermittent problem.
- 3) Verify that the IBM 8Mb memory SIMM installed contains the following information on the barcode label:
Barcode Header - B14RH
Product codes - V3AJ, V3AQ or V3AT
Manufacturing P/N05H0906
Option P/N92G7541
FRU P/N92G7542

This information is contained RETAIN tip #H127538 which lists several types of memory SIMM's that are unsupported in the PC 300 Series systems.

FIX:

Problem determination of a suspected memory problem should only be performed using supported types of memory SIMM's. If the system contains an 8Mb memory SIMM that matches either the criteria above OR any of the other unsupported SIMM's listed in RETAIN tip #H127538, replace the SIMM.

Contact the appropriate technical support for the operating system being used to determine if the traps or system hangs are being caused by known operating system, driver or software problems. Correct memory management and application driver setup should also be verified.

If the failure persists continue normal problem determination procedures to isolate the failing application or FRU.

Windows is a trademark of the Microsoft Corporation.

SAS KEYWORDS:

PSVP	PSY2	PSVPMEM	PSY2MEM
PSVPPROG	PSY2PROG	PSVPPART	PSY2PART
IBMPC	D/T65XX	65XX	D/T6571
D/T6573	D/T6581	D/T6583	D/T6571
6573	6581	6583	HUNG
LOCKUP	PC350	PC 350	PC330
PC 330	PANIC	NMI	TI

1.4.1254 SYSTEM HANGS & TRAP ERRORS WITH 256KB L2 CACHE

Record number: H162649

Device: D/T6282
 Model: M
 Tip key:
 Date created: 098/02/05
 Date last altered: A98/03/09

SYMPTOM:

IBM PC300GL Series 6272/6282 systems with 256Kb level 2 cache installed may intermittently exhibit the following error indications:

1. OS/2 Warp 3.x or 4.x - Trap 000D and 000E errors.
2. Microsoft WindowsNT 3.xx or 4.x Blue Screen system hang condition.
3. Microsoft Windows95 General Protection Faults (GPF) and system hang conditions.
4. System hangs when running Scandisk or Check Disk (CHKDSK) fixed disk utilities.

PROBLEM ISOLATION AIDS:

Remove the 256Kb L2 cache module from the system and attempt to recreate the failing condition. If the problem can be recreated with the cache module removed, THIS TIP DOES NOT APPLY. Continue with normal problem determination to isolate the failing FRU or application.

If the error cannot be recreated with the cache module removed, the 256Kb level 2 cache may be the cause of the failing condition.

System failures that have been reported to IBM as of this date have contained the following brand of 256Kb level 2 cache installed. Note that only a small percentage of systems containing this module type have exhibited any of the failing conditions:

1. ISSI brand logo printed on the chips.
2. Label attached to the rear of the module contains "ISSI000210x" (x=any alpha character, typically A or B).
3. IBM FRU P/N01K1554.

Note that there are other brands of cache modules used in the manufacture of the PC 300GL systems which also contain a label indicating IBM FRU P/N01K1554.

FIX:

If the system is exhibiting failures consistent with the symptoms stated above AND the failure has been verified using the Isolation Aids and the cache module description, contact the IBM PC Company HelpCenter for additional assistance or replace the cache with IBM FRU P/N01K4400.

As a temporary fix, the system may be operated with the 256Kb level 2 cache module removed from the system. Windows95 and WindowsNT are trademarks of Microsoft Corporation.

SAS KEYWORDS:

PSY2	PSY2ERR	PSY2MEM	PSY2PART
PSVP	PSVPERR	PSVPMEM	PSVPPART
D/T6272	D/T6282	6272	6282
01K1554	01K4400	PSY2OEM	PSVPOEM
UNCLASSIFIED	ISSI		

SYSTEM HANGS AFTER CHANGING RESOLUTION IN WINDOWS (WFW)

1.4.1255 SYSTEM HANGS AFTER CHANGING RESOLUTION IN WINDOWS (WFW)

Record number: H162591

Device: D/T6561
 Model: M
 Tip key:
 Date created: 097/12/16
 Date last altered: A98/02/03

SYMPTOM:

After changing the screen resolution via the Main and System Setup icons, the system hangs after rebooting and attempting to start Windows for Workgroups.

PROBLEM ISOLATION AIDS:

This tip applies to the IBM PC300GL, Machine Types 6561/6591, installed with DOS and Microsoft Windows for Workgroups.

FIX:

Download and install the updated virtual keyboard driver, file name WG0974.EXE, from the Microsoft Internet support URL: www.microsoft.com/support

Follow the instructions contained in the README.TXT file to apply the update.

For those users who's system currently exhibits the hang condition, Windows access can be restored via the following steps:

1. Reboot the system, and, when presented with the line "Starting PC-DOS...", press the <F5> key to clean-boot the system to a C: prompt.
2. Run SETUP.EXE from the C: \Windows directory.
3. Reset the video resolution to plain VGA and reboot the system normally.

Windows and Windows for Workgroups are trademarks of Microsoft Corporation.

SAS KEYWORDS:

PSY2	PSY2ERR	PSY2OPER	PSVP
PSVPERR	PSVPOPER	D/T6561	D/T6591
6561	6591	80534	80534F_1
WFW	UNCLASSIFIED		

SYSTEM HANGS AFTER INSTALLING PCMCIA ADAPTER

1.4.1256 SYSTEM HANGS AFTER INSTALLING PCMCIA ADAPTER

Record number: H01846

Device: D/T6577
 Model: M
 Tip key:
 Date created: 096/06/19
 Date last altered: A96/06/19

SYMPTOM:

IBM PC 300 Series 6577 and 6587 systems preloaded with Windows95 may exhibit a system hang condition during IPL after installing an IBM Ethernet I or II PCMCIA adapter card.

PROBLEM ISOLATION AIDS:

This failure has only been reproduced using the IBM Ethernet I and II PCMCIA adapter cards. Other PCMCIA adapters may exhibit the same failure symptom.

Removing the adapter from the PCMCIA slot eliminates the system hang condition.

FIX:

To eliminate this failure, perform the following steps:

1. Click the right mouse button on "My Computer."
2. Go to Properties.
3. Click on Device Manager
4. Highlight PCMCIA adapter and click on Properties.
5. In Properties, DESELECT Original Configuration.
6. Reboot the system.

The system should recognize the adapter after rebooting. If the system continues to hang with the PCMCIA adapter installed, continue normal problem determination to isolate the failing FRU or application.

SAS KEYWORDS:

PSY2	D/T65XX	6577	6587
IBMPC	PSVP	PSVPADPT	PSY2ADPT
D/T6587	PC 350	PC350	PC300
PC 330	PC330	45289	

1.4.1257 SYSTEM HANGS DURING POST WITH NO VIDEO

Record number: H013777

Device: D/T8640
Model: M
Tip key:
Date created: 094/11/18
Date last altered: A94/11/23

SYMPTOM:

Some 8640-486DX/2 systems may hang with a blank screen after a cold boot (Power-on boot).

PROBLEM ISOLATION AIDS:

All of the following must be true:

1. The system hangs with no video after a cold boot, (may be intermittent).
2. The 8640 has a 486DX2-66 processor, system board FRU P/N71G0033.
- 3: The barcode label of the system board (planar) is either: 06H2668 or 06H2681.

FIX:

If either of the referenced bar code labels are on the system board, and system hangs are being experienced, replace the system board (FRU P/N71G0033).

Only system boards with Bar code part numbers 06H2668 and 06H2681 are affected.

This tip does not apply to the Pentium system board.

SAS KEYWORDS:

PSY2	PCSERVER	8640	PSY2PART
HANGS	PSY2BRD		

1.4.1258 SYSTEM HANGS DURING POST WITH 4/10GB TAPE DRIVE

Record number: H015029

Device: D/T6885
 Model: M
 Tip key:
 Date created: 097/02/26
 Date last altered: A97/03/21

SYMPTOM:

Systems with an IBM 4/10GB 4mm DAT tape drive attached to an IBM AT Fast SCSI Adapter may hang during POST.

PROBLEM ISOLATION AIDS:

All of the following must be true for this tip to apply:

- The system hangs at POST (no Beeps).
- The system has an IBM AT Fast SCSI Adapter FRU P/N82G4879 or FRU P/N92F0330 with an IBM 4/10GB tape drive FRU p/n16G8454 or FRU p/n16G8456
- The tape drive has JUMPERS as opposed to dip switches.
- The model number on the label on the bottom of the drive is CTD8000H or CTD8000R

FIX:

Contact the IBM PC HelpCenter, Options by IBM tech support, at 800-426 - 7299 and request the upgrade kit which includes the following:

- PowerSCSI 4.1 driver diskette
- Microcode update diskette or tape cartridge
- EEPROM version 3.61
- Microcode update instructions

The BIOS EPROM for the AT SCSI adapter will fix the system hang at POST, but the PowerSCSI software must be installed on DOS/Windows 3.11 and earlier systems for the tape software to function properly.

Note: Refer to Record H013309 for updating tape microcode.

PowerSCSI is a trademark of Future Domain Corp.

Windows 3.11 is a trademark of Microsoft Corp.

SAS KEYWORDS:

PSY2	D/T6885	6885	PSY2TAPE
MAGNETIC	PSY2ERR	16G8454	16G8455
16G8456	74G8631	74G8632	70G8496
32G4088	16G8452	59H2681	59H2682
59H8453	82G4879	92F0330	SEAGATE
FUTURE DOMAIN	POWERSCSI	POWER SCSI	BIOS
EPROM	4/10		

1.4.1259 SYSTEM HANGS ON PENTIUM & 486SL SYSTEMS

Record number: H123220

Device: D/T8550
 Model: M
 Tip key:
 Date created: 094/02/25
 Date last altered: A94/08/15

SYMPTOM:

Application session hangs may be encountered while running the following software applications under OS/2, in a DOS window, on systems featuring INTEL Pentium* or 486SL processors:

MS-Multiplan V4.20	MultiMedia Explore
Borland Paradox	Linkway Live
MSD	Media Master
QBASIC	Mannequin
Animator Pro	Storyboard Live
Color Tools	Castle Wolfenstein
Lumena	Leisure Suit Larry
Flight Simulator	Stealth Fighter
Clock01.Exe	Banyan Vines
Debug.Com, Codeview, Turbo Debugger (essentially all debuggers)	

PROBLEM ISOLATION AIDS: None

The hang condition is not a hardware failure or an IBM OS/2 operating system failure and cannot be fixed by hardware replacement.

The affected software applications use direct driver software code which functioned correctly on earlier processors. However, earlier versions of this code may not be compatible with the Pentium and 486SL processors. The result is the hang condition.

FIX:

Even though this is not an IBM OS/2 software defect, in an effort to provide a solution, OS/2 APAR #PJ09814 was written.

All affected PS/2 systems sold with OS/2 2.1 preloaded have had this fix applied. A CSD (Corrective Service Diskette) is available to provide this fix for OS/2 V 2.1 and OS2 for Windows.

If hangs are experience on the above applications, running under OS/2 V2.1 or OS/2 for Windows, customer's should contact OS/2 software support and request APAR #PJ09814.

* Registered Trademark of INTEL Inc.

SAS KEYWORDS:

PSY2	PSY2PROG	PSY2ERR	HANGS
D/T9595	D/T9595A	D/T9556	D/T9557
486	SL	486DX	486SX

Record number: H016609

Device: D/T8550
 Model: M
 Tip key:
 Date created: 090/03/09
 Date last altered: A92/03/05

SYMPTOM:

SYSTEM HANGS RUNNING CHKDSK OR WHEN EXECUTING MULTIPLE CONTROL-BREAKS (CONTROL AND BREAK KEY DEPRESSED SIMULTANEOUSLY, INTENTIONALLY OR ACCIDENTLY) ON FILE SERVER SYSTEMS WITH CD-ROM DRIVES AND IFSFUNC.EXE (DOS 4.0 SOFTWARE MODULE) INSTALLED.

1. MULTIPLE CTRL-BREAK SEQUENCES CAUSES SYSTEM LOCK-UP
2. RUNNING CHKDSK CAUSES SYSTEM LOCK-UP
3. PC LAN "NET USE" COMMAND DOES NOT SHOW SHARED NETWORK CD-ROM DRIVES IF REQUESTING SYSTEM HAS LOCAL CD-ROM DRIVES INSTALLED.

ADDITIONAL INFORMATION:

THESE PROBLEMS WILL OCCUR ON DOS 4.0 SYSTEMS WITH THE IBM PC LAN OR FBSS (BANKING/FINANCIAL SYSTEM) AND IFSFUNC.EXE INSTALLED, IF DOS CORRECTIVE SERVICE DISKETTE (CSD) LEVEL LEVEL UR29015 IS NOT INSTALLED ON THE SYSTEM.

PROBLEM ISOLATION AIDS: NONE**FIX:**

INSTALLING THE DOS 4.0 CORRECTIVE SERVICE DISKETTE (CSD) LEVEL UR29015 OR LATER, WHICH CONTAINS AN UPDATED VERSION OF IFSFUNC.EXE WILL ALLOW THESE FUNCTIONS TO OPERATE PROPERLY. THE CORRECTIVE SERVICE DISKETTE IS AVAILABLE THROUGH YOUR IBM REGISTERED SERVICE COORDINATOR.

SAS KEYWORDS:

PYS2	PSY2ERR	8550SYSERR	8560SYSERR
8565SYSERR	8555SYSERR	8570SYSERR	8580SYSERR
PSY2PROG	8550SYSPROG	8555SYSPROG	8565SYSPROG
8560SYSPROG	8570SYSPROG	8580SYSPROG	D/T8550
D/T8555	D/T8556	D/T8557	D/T8560
D/T8565	D/T8570	D/T8573	D/T8580

SYSTEM HANGS USING OS/2 TO FORMAT a SECOND HARDFILE

1.4.1261 SYSTEM HANGS USING OS/2 TO FORMAT a SECOND HARDFILE

Record number: H122445

Device: D/T9556
Model: M
Tip key:
Date created: 093/12/29
Date last altered: A94/08/15

SYMPTOM:

During the OS/2 2.1 format of a second hardfile installed in a 9556 or 9557, the second hardfile seems to be formatting but never completes. The system appears to hang.

PROBLEM ISOLATION AIDS:

A CDROM drive is installed in or attached to the 9556 or 9557.

FIX:

Until the permanent fix is provided either of the following work-arounds may be utilized.

1. Pre-format the OS/2 partition on the second hardfile using DOS before installing OS/2 version 2.1.

OR

2. REM out device driver IBM2M57.ADD in CONFIG.SYS.

Note -- Use work-around #1 if you have a CD ROM. This device driver is required for CD ROM drives shipped with Multi Media machines. After completion of the format on the hardfile, the device driver may be re-activated in config.sys.

A software fix is also available and may be obtained by calling Software Support at 1-800-237-5511. Request APAR PJ11015. This problem will be fixed with the next refresh of OS/2.

SAS KEYWORDS:

PSY2	9557	D/T9557	9556
PSY2PROG	PSY2FDISK	CD-ROM	CDROM

SYSTEM HANGS USING OS/2 WITH a MOUSE INSTALLED

1.4.1262 SYSTEM HANGS USING OS/2 WITH a MOUSE INSTALLED

Record number: H00723

Device: D/T8570
 Model: M
 Tip key:
 Date created: 089/12/22
 Date last altered: A92/01/16

SYMPTOM: AN IBM PS/2 MODEL 70, USING OS/2 1.1 EXTENDED OR OS/2 1.2 WITH AN INSTALLED MOUSE OPTION, MAY EXPERIENCE A SYSTEM HANG CONDITION DURING INITIAL PROGRAM LOAD. THE HANG CONDITION CAN OCCUR IN TWO DIFFERENT WAYS:

1. WHILE THE PROGRAMS ARE BEING LOADED THE SYSTEM CAN HANG BEFORE THE MOUSE DRIVER IS LOADED. IN THIS SITUATION, MOVING THE MOUSE WILL ALLOW SYSTEM OPERATION TO CONTINUE.
2. WHILE THE PROGRAMS ARE BEING LOADED THE SYSTEM WILL TEMPORARILY HANG, DISPLAY A MESSAGE THAT THE MOUSE DRIVER IS NOT INSTALLED, AND THEN CONTINUE TO LOAD THE REST OF THE OS/2 OPERATING SYSTEM.

PROBLEM ISOLATION AIDS: THIS PROBLEM MAY OCCUR ON AN IBM MOUSE WITH EITHER A BLACK OR GRAY ROLLER ASSEMBLE OR ON AN OEM MOUSE THAT USES THE SAME INTERFACE.

FIX:

A CUSTOMER HAVING AN IBM OR OEM MOUSE WITH THE ABOVE FAILURE SHOULD OBTAIN AN OS/2 (CSD) CORRECTIVE SERVICE DISKETTE LISTED BELOW:

OS/2 VERSION	STANDARD EDITION	EXTENDED EDITION
1.1	XR03090	WR03089
1.2	XR04095	WR04098
1.3	XR05016	WR05016

NOTE: LATER LEVEL 1.3 CSD'S ALSO CONTAIN THIS FIX.

THIS FIX IS AVAILABLE THROUGH THE CUSTOMER'S NORMAL SUPPORT CHANNEL. IBM CUSTOMERS SHOULD CONTACT OS/2 SUPPORT THROUGH THEIR SERVICE COORDINATOR, DEALER CUSTOMERS SHOULD CONTACT THEIR POINT OF SALE.

SAS KEYWORDS:

PSY2	8570SYSMISC	PSY2MISC	PSY2PROG
8570SYSPROG	PSY2OEM	8570SYSOEM	

SYSTEM HANGS USING OS/2 WITH a MOUSE INSTALLED

1.4.1263 SYSTEM HANGS USING OS/2 WITH a MOUSE INSTALLED

Record number: H063433

Device: D/T8573
 Model: M
 Tip key:
 Date created: 090/11/01
 Date last altered: A92/01/16

SYMPTOM: AN IBM PS/2 MODEL P70, USING OS/2 1.1 EXTENDED OR OS/2 1.2 WITH AN INSTALLED MOUSE OPTION, MAY EXPERIENCE A SYSTEM HANG CONDITION DURING INITIAL PROGRAM LOAD. THE HANG CONDITION CAN OCCUR IN TWO DIFFERENT WAYS:

1. WHILE THE PROGRAMS ARE BEING LOADED THE SYSTEM CAN HANG BEFORE THE MOUSE DRIVER IS LOADED. IN THIS SITUATION, MOVING THE MOUSE WILL ALLOW SYSTEM OPERATION TO CONTINUE.
2. WHILE THE PROGRAMS ARE BEING LOADED THE SYSTEM WILL TEMPORARILY HANG, DISPLAY A MESSAGE THAT THE MOUSE DRIVER IS NOT INSTALLED, AND THEN CONTINUE TO LOAD THE REST OF THE OS/2 OPERATING SYSTEM.

PROBLEM ISOLATION AIDS: THIS PROBLEM MAY OCCUR ON AN IBM MOUSE WITH EITHER A BLACK OR GRAY ROLLER ASSEMBLY OR ON AN OEM MOUSE THAT USES THE SAME INTERFACE.

FIX:

A CUSTOMER HAVING AN IBM OR OEM MOUSE WITH THE ABOVE FAILURE SHOULD OBTAIN AN OS/2 (CSD) CORRECTIVE SERVICE DISKETTE LISTED BELOW:

OS/2 VERSION	STANDARD EDITION	EXTENDED EDITION
1.1	XR03090	WR03089
1.2	XR04095	WR04098
1.3	XR05016	WR05016

NOTE: LATER LEVELS OF 1.3 CSD'S ALSO CONTAIN THIS FIX.

THIS FIX IS AVAILABLE THROUGH THE CUSTOMER'S NORMAL SUPPORT CHANNEL. IBM CUSTOMERS SHOULD CONTACT OS/2 SUPPORT THROUGH THEIR SERVICE COORDINATOR, DEALER CUSTOMERS SHOULD CONTACT THEIR POINT OF SALE.

SAS KEYWORDS:

PSY2	8573SYSMISC	PSY2MISC	PSY2PROG
8573SYSPROG	PSY2OEM	8573SYSOEM	

SYSTEM HANGS W/ TOKEN RING VIDEO ADAPTER INSTALLED

1.4.1264 SYSTEM HANGS W/ TOKEN RING & VIDEO ADAPTER INSTALLED

Record number: H02448

Device: D/T6384
 Model: M
 Tip key:
 Date created: 094/03/24
 Date last altered: A94/03/24

SYMPTOM:

PS/VALUEPOINT 6382/S, 6384/D AND 6387/T SYSTEMS MAY EXPERIENCE SYSTEM HANGS OR LOST/DROPPED COMMUNICATION SESSIONS IF A VIDEO ADAPTER IS INSTALLED ALONG WITH A TOKEN RING ADAPTER THAT IS SET FOR IRQ2 OR 9. COMMUNICATION SESSIONS VIA THE TOKEN RING NETWORK MAY BE DROPPED OR THE SYSTEM WILL HANG WHILE ACCESSING THE NETWORK.

PROBLEM ISOLATION AIDS:

-TOKEN RING ADAPTER IS INSTALLED AND SET FOR INTERRUPT 2 (IRQ2).
 (REFER TO THE ADAPTER DOCUMENTATION TO VERIFY IRQ SETTINGS)

** AND **

-A VIDEO ADAPTER IS INSTALLED AND THE SYSTEM BOARD S3 VIDEO HAS BEEN DISABLED BY MOVING THE "VIDEO ENABLE" JUMPER ON THE SYSTEM BOARD.

** AND **

-THE SYSTEM FLASH BIOS EEPROM LEVEL IS AT LEVEL 54A OR HIGHER.

PS/VALUEPOINT ADVANCED DIAGNOSTICS RUN WITHOUT ERRORS.
 TOKEN RING DIAGNOSTICS MAY FAIL WITH AN INITIALIZATION ERROR.

FIX:

SET THE IRQ LEVEL OF THE TOKEN RING ADAPTER TO IRQ3, OR AN IRQ OTHER THAN 2 OR 9. IF IRQ3 IS USED, THE CONFIGURATION FOR SERIAL PORT B, WHICH DEFAULTS TO IRQ3, WILL HAVE TO BE DISABLED OR MODIFIED USING THE RESIDENT "CONFIGURATION UTILITY" TO PREVENT AN IRQ CONFLICT WITH THE TOKEN RING ADAPTER.

SAS KEYWORDS:

PSVP	PSY2	PSVPBRD	PSY2BRD
PSVPPART	PSY2PART	PSVPDISP	PSY2DISP
PSY2COMM	PSVPCOMM	16/4	VALUE POINT
ISA-16	TOKEN RING II		

1.4.1265 SYSTEM HANGS W/DOS 6.3 AND PCI NETWORK ADAPTERS

Record number: H067030

Device: D/T6876
 Model: M
 Tip key:
 Date created: 096/04/10
 Date last altered: A96/04/10

SYMPTOM:

IBM PC 300/700 Series and PS/ValuePoint products may exhibit a system hang condition while running a communication program using a PCI network adapter (Ethernet, Token Ring & etc.) in a DOS 6.3 environment.

PROBLEM ISOLATION AIDS:

The CONFIG.SYS statement calls the DOS EMM386.EXE with a file date earlier than 9-20-1994.

FIX:

The version of EMM386.EXE that shipped with DOS 6.3 was developed before there were PCI adapters. This version does not take into account PCI Plug 'n Play requirements when making upper memory available.

An updated version of EMM386.EXE has been made available to correct this problem. Later versions of IBM PC DOS contain the level of EMM386.EXE which functions with PCI Plug 'n Play adapters.

Download D63EMM.ZIP from the IBM BBS at 919-517-0001. The file is located in section #4, Corrective Service Software.

This file may also be obtained via the Internet from the IBM PC Company File Library at the following Internet URL:
<http://www.pc.ibm.com>

If the failure persists continue normal problem determination procedures to isolate the failing application or FRU.

SAS KEYWORDS:

PSVP	PSY2	PSVPCOMM	PSY2COMM
PSVPPROG	PSY2PROG	IBMPC	D/T65XX
D/T68XX	D/T6384	D/T6381	D/T6382
D/T6387	D/T6472	D/T6482	D/T6484
D/T6492	D/T6494	D/T6571	D/T6573
D/T6581	D/T6583	D/T6575	D/T6585
D/T6576	D/T6586	D/T6598	D/T6876
D/T6886	D/T6875	D/T6885	D/T6887
D/T6877			

SYSTEM HANGS WITH a CORNERSTONE IMAGEACCEL ADAPTER

1.4.1266 SYSTEM HANGS WITH a CORNERSTONE IMAGEACCEL ADAPTER

Record number: H122562

Device: D/T6384
 Model: M
 Tip key:
 Date created: 094/02/02
 Date last altered: A94/02/02

SYMPTOM:

PS/ValuePoint 6382/S, 6384/D and 6387/T 466DX2 models with a Cornerstone ImageAccel PC168CI adapter installed may exhibit a system hang condition while dragging a window or resizing a window.

PROBLEM ISOLATION AIDS:

This tip applies only for systems with the following hardware and software configuration:

1. 466DX2 (486 DX 33/66mhz) Wxx and Xxx models
2. Write-thru or Write-back option installed
3. Windows 3.1, Windows N/T, or OS/2 2.1
4. Cornerstone ImageAccel driver at the following level:
 Version 1.00, 1.01, 1.02 or 1.03 for Windows 3.1
 Version 1.00 (beta) for Windows N/T
 Version 1.00 for OS/2 2.1

FIX:

Updated drivers are being developed by Cornerstone to resolve this failure. A beta level driver is currently available from Cornerstone support for Windows 3.1. Drivers for Windows N/T and OS/2 2.1 will be available by the end of March 1994.

Cornerstone Technical Support may be contacted for the Windows 3.1 driver, version 1.04, and updates regarding the availability of other drivers by calling 1-800-562-2552 and reference problem report ID# PROB0043.TXT. The Cornerstone Bulletin Board may be accessed by dialing (408) 435-8943.

SAS KEYWORDS:

PSVP	PSY2	PSVPMISC	PSY2MISC
PSVPMCD	PSY2MCD	PSVPNLGO	PSY2NLGO
D/T6387	D/T6382	6382	6384
6387	VALUE POINT	PS VP	IMAGE ACCEL

SYSTEM HANGS WITH BUSLOGIC SCSI ADAPTERS IN WINDOWS NT

1.4.1267 SYSTEM HANGS WITH BUSLOGIC SCSI ADAPTERS IN WINDOWS NT

Record number: H082086

Device: D/T6898
 Model: M
 Tip key:
 Date created: 097/10/23
 Date last altered: A97/10/23

SYMPTOM:

The Buslogic SCSI adapter is recognized in BIOS, but the system locks at the blue WindowsNT operating system selection screen during boot.

PROBLEM ISOLATION AIDS:

The hang condition is seen with, but not limited to, the Buslogic Fast SCSI PCI host adapter.

FIX:

PCI Parity generation must be disabled under PCI Control via the following steps:

1. Press <F1> during post to run the setup utility.
2. Highlight "Advanced Setup" and press <Enter>.
3. Highlight "PCI Control" and press <Enter>.
4. Highlight "PCI Parity" and change to Disabled.
5. Save the change and reboot the system.

WindowsNT is a trademark of Microsoft Corporation.

SAS KEYWORDS:

PSY2	PSY2ERR	PSY2ADPT	PSY2OEM
PSY2MCD	PSVP	PSVPERR	PSVPOEM
PSVPADPT	PSVPMCD	D/T6898	6898
76332	76332F_1	UNCLASSIFIED	

SYSTEM HANGS WITH DISTORTED VIDEO AFTER WINDOWS LOGO

1.4.1268 SYSTEM HANGS WITH DISTORTED VIDEO AFTER WINDOWS LOGO

Record number: H133775

Device: D/T6577
 Model: M
 Tip key:
 Date created: 096/08/28
 Date last altered: A96/08/28

SYMPTOM:

IBM PC 300 & 700 Series 6577, 6587, 6877, and 6887 systems may exhibit the following error conditions after starting either Windows 3.x or Windows95:

- System hang condition with the Windows 3.x logo displayed on the screen.
- System hang condition and a blank display after displaying the Windows 3.x logo.
- System hang condition with blue and/or black horizontal bars across the display after displaying the Windows95 logo.

These failures DO NOT occur on systems running OS/2 2.x or 3.x.

PROBLEM ISOLATION AIDS:

A limited number of PC 300 and 700 Series 6577, 6587, 6877, and 6887 systems manufactured prior to 8/6/96 (Date of Manufacture is printed on the IBM shipping carton) may contain a set of video memory that may intermittently cause the symptoms stated above.

This tip applies ONLY to those systems with the following system board assembly part numbers and an NEC video memory module in location U23 on 6577/6587, or U22 on 6877/6887 system boards:

System Board	6577/6587	6877/6887
Assembly P/N's:	93H1675 93H1677	96G3713, 96G3715, 96G3730 60H7885, 60H7884, 60H7886 60H6948, 60H6950, 60H6952
FRU P/N:	93H1699	60H7020
NEC video module:	U23	U22

NEC424210_60_A

96xxH5011

(xx = Date code range from 9610 to 9615)

The 6877/6887 systems contain 4 soldered video modules. Only the module in position U22 is affected by this problem. The same applies to the 6577/6587 systems with an NEC module in position U23. The 6577/6587 contains 2 soldered video modules.

The video memory is located at the left rear of the system board, next to the larger S3 module.

ALL OTHER SYSTEM BOARD ASSEMBLY PART NUMBERS WITH NEC VIDEO MODULES WITHIN THE DATE CODE RANGE LISTED ABOVE HAVE BEEN MODIFIED TO ELIMINATE THE POTENTIAL OF FAILURE.

NOTE: Not all NEC video memory modules matching the criteria above will fail. The failure symptom is highly intermittent and only occurs with Windows 3.x or Windows95.

FIX:

Indications of this highly intermittent failure will occur early in the product life or not at all, following the introduction of Windows 3.x or Windows95. The potential for failure does not become greater as the product ages.

The system board should be replaced in systems exhibiting the failure symptoms and meeting the criteria above. Windows & Windows95 are trademarks of the Microsoft Corporation.

SAS KEYWORDS:

PSVP	PSY2	PSVPMEM	PSY2MEM
PSVPPART	PSY2PART	PSVPBRD	PSY2BRD
PSVPERR	PSY2ERR	PC 330	IBMPC
PC 330	PC 350	D/T6586	PSVPDISP
PSY2DISP			

SYSTEM HANGS WITH VIDEO ROM SHADOWING DISABLED

1.4.1270 SYSTEM HANGS WITH VIDEO ROM SHADOWING DISABLED

Record number: H00598

Device: D/T6875
Model: M
Tip key:
Date created: 096/05/06
Date last altered: A96/05/06

SYMPTOM:

IBM PC 700 Series 6875 and 6885 may exhibit intermittent system hang conditions with an ISA video adapter installed AND Video ROM Shadowing disabled.

PROBLEM ISOLATION AIDS:

Access the system Setup Utility and view the Advanced Setup section for ROM Shadowing. If the "C0000h-C7FFFh (Adapter Video BIOS): " entry is Disabled AND an ISA video adapter is being used, this tip applies.

FIX:

The configuration of a PC 700 system with an ISA video adapter installed requires that video ROM Shadowing is Enabled. Access the Setup Utility Advanced Setup menu and enable Adapter Video BIOS ROM Shadowing.

If system hangs persists with this configuration after enabling the video ROM Shadowing, continue normal problem determination procedures to isolate the failing application or FRU.

SAS KEYWORDS:

PSVP	PSY2	PSVPDISP	PSY2DISP
PSVPERR	PSY2ERR	IBMPC	D/T6886
D/T6876	HUNG	LOCKUP	

1.4.1271 SYSTEM HANGS WITH 5250 EMULATION

Record number: H037904

Device: D/T8530
Model: M
Tip key:
Date created: 090/05/10
Date last altered: A92/04/29

SYMPTOM: SOME 8530 SYSTEMS MAY INTERMITTENTLY HANG WHEN A USER ACCESSES DISKETTE OR FIXED DISK FILES WITH A IBM ENHANCED 5250 DISPLAY STATION EMULATION ADAPTER (EDSEA), FRU P/N30F5307, INSTALLED. THE ACCESSED DRIVE LIGHT REMAINS ON WHEN THE SYSTEM IS IN THE HANG CONDITION. DIAGNOSTICS RUN WITHOUT ERROR.

PROBLEM ISOLATION AIDS:

FIX: REPLACE THE 5250 EDSEA ADAPTER FRU P/N30F5307 WITH A NEW FRU P/N64F7148.

SAS KEYWORDS:

PSY2	PSY2FDSK	PSY2ADPT	8530SYSADPT
PSY2COMM	8530SYSCOMM	5360WSA	5362WSA
5364WSA	5381WSA	5382WSA	9402WSA
9404WSA	9406WSA		

1.4.1272 SYSTEM HANGS WITH 5250 EMULATION

Record number: H1271

Device: D/T8550
Model: MCP1
Tip key:
Date created: 093/04/01
Date last altered: A93/04/01

SYMPTOM: SOME 8530 SYSTEMS MAY INTERMITTENTLY HANG WHEN A USER ACCESSES DISKETTE OR FIXED DISK FILES WITH A IBM ENHANCED 5250 DISPLAY STATION EMULATION ADAPTER (EDSEA), FRU P/N30F5307, INSTALLED. THE ACCESSED DRIVE LIGHT REMAINS ON WHEN THE SYSTEM IS IN THE HANG CONDITION. DIAGNOSTICS RUN WITHOUT ERROR.

PROBLEM ISOLATION AIDS:

FIX: REPLACE THE 5250 EDSEA ADAPTER FRU P/N30F5307 WITH A NEW FRU P/N64F7148.

SAS KEYWORDS:

PSY2	PSY2FDSK	PSY2ADPT	8530SYSADPT
PSY2COMM	8530SYSCOMM	5360WSA	5362WSA
5364WSA	5381WSA	5382WSA	9402WSA
9404WSA	9406WSA		

1.4.1273 SYSTEM HANGS WITH 5250 EMULATION

Record number: H1274

Device: D/T8550
Model: MCP1
Tip key:
Date created: 093/05/18
Date last altered: A93/05/18

SYMPTOM: SOME 8530 SYSTEMS MAY INTERMITTENTLY HANG WHEN A USER ACCESSES DISKETTE OR FIXED DISK FILES WITH A IBM ENHANCED 5250 DISPLAY STATION EMULATION ADAPTER (EDSEA), P/N30F5384, INSTALLED. THE ACCESSED DRIVE LIGHT REMAINS ON WHEN THE SYSTEM IS IN THE HANG CONDITION. DIAGNOSTICS RUN WITHOUT ERROR.

PROBLEM ISOLATION AIDS:

FIX: REPLACE THE 5250 EDSEA ADAPTER FRU P/N30F5384 WITH NEW FRU P/N64F7148. THE OLD FRU CAN STILL BE USED TO REPAIR FAMILY 1 PC SYSTEMS. THE OPTION KIT HAS ALSO BEEN UPGRADED TO CONTAIN THE NEW LEVEL CARD P/N 64F7145.

=====
----- This replacement should be done under Warranty -----
=====

SAS KEYWORDS:

PSY2 PSY2FDSK PSY2ADPT 8530SYSADPT
PSY2COMM 8530SYSCOMM

SYSTEM HANGS, PERSONAL/370 ADAPTER/A INSTALLED

1.4.1274 SYSTEM HANGS, PERSONAL/370 ADAPTER/A INSTALLED

Record number: H014101

Device: D/T8557
 Model: M
 Tip key:
 Date created: 092/10/21
 Date last altered: A92/10/22

SYMPTOM:

8556 or 8557 with a Personal/370 Adapter/A Installed hangs during user applications.
 POST memory count is 256Kb less than installed memory.

PROBLEM ISOLATION AIDS:

If the above symptoms are experienced, verify the following:
 - System has a Personal/370 Adapter/A installed
 - IML Code is Ver 1.24 or lower
 - Memory is installed in one of the following configurations:

Total Mem	SIMM 1	SIMM 2	SIMM 3	Post Memory
Installed				count
2Mb	2Mb	--	--	1760
4Mb	2Mb	2Mb	--	3776
6Mb	2Mb	2Mb	2Mb	5792
4Mb	4Mb	--	--	3776
8Mb	4Mb	4Mb	--	7808

(8Mb SIMMs and other memory configurations do not have this problem)

FIX:

This symptom is corrected with the IML code on Reference Diskette Version 2.02 or higher.

If symptom remains after installing version 2.02 or higher, use normal problem determination.

Note:

Current level Reference Diskette images are available on PCPROD.

SAS KEYWORDS:

PSY2	D/T8556	PSY2ADPT	PSY2MEM
D/T8557	PSY2ERR	8556	8557
7473			

SYSTEM INFORMATION TOOL "USING HELP" FUNCTION FAILS

1.4.1275 SYSTEM INFORMATION TOOL "USING HELP" FUNCTION FAILS

Record number: H01819

Device: D/T6577
 Model: M
 Tip key:
 Date created: 096/06/19
 Date last altered: A96/06/19

SYMPTOM:

The "Using Help" icon on the "Help" pulldown menu under the System Information Tool in Netfinity v3.05 may fail to execute the function on PC 300 Series 6577 and 6587 systems.

This failure occurs on systems preloaded with Microsoft Windows 3.11 or Windows95.

PROBLEM ISOLATION AIDS:

If the user clicks on the "Using Help" icon, the other Help functions of the System Information Tool may begin to fail. Closing Netfinity and reopening the application resets the other Help functions except the "Using Help" icon.

FIX:

The "Using Help" icon in version 3.05 of Netfinity System Information Tool is not available and should not have been present in this release of the application. An error was made in the preloaded release not "grey" (deactivate) the "Using Help" icon.

Version 3.06 and higher of the Netfinity System Information Tool does contain an active "Using Help" function. Users requiring this function may contact the IBM PC Company HelpCenter at 1-800-772-2227 for information on upgrading the preloaded Netfinity application.

Windows & Windows95 are trademarks of the Microsoft Corporation.

SAS KEYWORDS:

PSY2	D/T65XX	6577	6587
IBMPC	PSVP	PSVPPROG	PSY2PROG
D/T6587	PC 350	PC350	PC300
PC 330	PC330	46193	

1.4.1276 SYSTEM INFORMATION TOOL "USING HELP" FUNCTION FAILS

Record number: H133512

Device: D/T6560
Model: M
Tip key:
Date created: 096/08/02
Date last altered: A96/08/02

SYMPTOM:

The "Using Help" icon on the "Help" pulldown menu under the System Information Tool in Netfinity v4.0 may fail to execute the function on PC 340 Series 6560 systems preloaded with Microsoft Windows95. When the user clicks on Using Help, nothing happens.

PROBLEM ISOLATION AIDS:

None

FIX:

The "Using Help" icon in version 4.0 of Netfinity System Information Tool is not available and should not have been present in this release of the application. An error was made in the preloaded release not "grey" (deactivate) the "Using Help" icon.

Future revisions of the Netfinity System Information Tool will contain an active "Using Help" function. Users requiring this function may contact the IBM PC Company HelpCenter at 1-800-772-2227 for information on upgrading the preloaded Netfinity application.

Windows & Windows95 are trademarks of the Microsoft Corporation.

SAS KEYWORDS:

PSY2	D/T65XX	PSVP	IBMPC
PSVPPROG	PSY2PROG	PC 300	47943

1.4.1277 SYSTEM LOCKS UP WITH 110 ERROR OR TRAP 0002 / TRAP 000C

Record number: H037846

Device: D/T8550
 Model: M
 Tip key:
 Date created: 089/07/18
 Date last altered: A94/08/09

SYMPTOM: SYSTEMS MAY LOCKUP WITH A 110 ERROR, TRAP 0002 ERROR, TRAP 000C ERROR, OR AN NMI INTERMITTENT.

PROBLEM ISOLATION AIDS: NONE

FIX:

THESE ERRORS MAY OCCUR IF AN OPERATING SYSTEM DETECTS A MEMORY ERROR.

HIGHLY INTERMITTENT MEMORY ERRORS CAN ESCAPE DETECTION BY DIAGNOSTICS IF NO FAILURE ACTUALLY OCCURS DURING THE TEST. MEMORY INTENSIVE OPERATING SYSTEMS, SUCH AS OS/2, AIX AND OTHERS ARE CAPABLE OF REVEALING HIGHLY INTERMITTENT MEMORY BIT FAILURES WHICH DIAGNOSTICS MAY NOT REVEAL.

MEMORY FAILURES UNDER DOS COULD DISPLAY A 110 MEMORY FAILURE, WHILE FAILURES RUNNING UNDER OS/2 COULD DISPLAY A TRAP 0002 OR A TRAP 000C ERROR MESSAGE. AIX WILL GIVE AN NMI ERROR.

THE OS/2 ERROR MESSAGE WILL INFORM THE USER THAT THE OPERATING SYSTEM HAS DETECTED A HARDWARE MEMORY ERROR ON THE SYSTEM BOARD OR THE CHANNEL. THE INFORMATION DISPLAYED ON THE SCREEN BY OS/2 DOES NOT CORRELATE TO AN ACTUAL FAILING MEMORY MODULE. THE DATA DISPLAYED BY OS/2 IS INVALID FOR HARDWARE PROBLEM DETERMINATION, BUT IS MEANINGFUL FOR SOME TYPES OF SOFTWARE TRAP PROBLEM DETERMINATION.

TRAP 000D (TRAP000D) ERRORS ARE USUALLY RELATED TO SOFTWARE PROBLEMS AND MAY BE CAUSED BY SEVERAL DIFFERENT PROGRAMMING ERRORS. OS/2 SOFTWARE SUPPORT SHOULD BE CONSULTED FOR TRAP 000D ERRORS.

THE MOST COMMON TYPE OF TRAP 0002 ERROR IS CAUSED BY MEMORY, BUT IT MAY ON RARE OCCASIONS BE CAUSED BY A SYSTEM BOARD FAILURE. (IF THE SYSTEM BOARD DIAGNOSTICS RUN ERROR-FREE, THE CHANCES OF IT BEING DEFECTIVE ARE REMOTE.)

THE MOST EFFECTIVE TROUBLESHOOTING METHOD FOR THIS PROBLEM IS TO REPLACE THE SYSTEM MEMORY, STARTING WITH THE MEMORY ON THE SYSTEM BOARD. IF THE ERROR REMAINS, CONTINUE THE REPLACEMENT PROCESS WITH THE MEMORY EXPANSION SIMS UNTIL THE FAILURE NO LONGER OCCURS.

THE MEMORY DIAGNOSTIC WAS REVISED AND IMPROVED ON THE FOLLOWING LEVELS OF SYSTEM REFERENCE DISKETTES:

8570/8580 REFERENCE DISKETTE VERSION 1.10
 8550/8560 REFERENCE DISKETTE VERSION 1.04
 8555/8565 REFERENCE DISKETTE VERSION 1.03

NOTE:

HIGHLY INTERMITTENT ERRORS MAY GO UNDETECTED BY ANY MEMORY DIAGNOSTIC. MULTIPLE REPLACEMENTS MAY BE NECESSARY TO ISOLATE THE FAILURE IN EXTREME CASES.

NOTE:

SYSTEMS WHICH HAVE THE ENHANCED 80386 MEMORY EXPANSION ADAPTER INSTALLED (FRU P/N34F2825) MAY ALSO EXPERIENCE OS/2 TRAP ERRORS IF THE ENHANCED 80386 MEMORY ADAPTER DOES NOT HAVE RESISTORS LOCATED DIAGONALLY ACROSS THE MODULES LOCATED IN POSITIONS U21, U22, U23, AND U24. RETAIN RECORD # H037481 SHOULD BE REFERENCED FOR ADDITIONAL DETAILS.

SAS KEYWORDS:

PSY2	PSY2MEM	PSY2ERR	PSY2ADPT
D/T8560	D/T8570	D/T8580	D/T8555
D/T8565	D/T8565	D/T8573	

1.4.1278 SYSTEM LOSES CONNECTION W/3COM 3C59X ETHERNET CARDS

Record number: H003850

Device: D/T6576
 Model: M
 Tip key:
 Date created: 096/05/20
 Date last altered: A96/08/05

SYMPTOM:

IBM PC 300 Series 6576 and 6586 systems with a 3Com Etherlink III PCI Bus Master 3C590 or 3C595 Ethernet adapter installed may intermittently lose connection to the LAN.

The system intermittently loses connection with the LAN when LAN traffic is heavy.

PROBLEM ISOLATION AIDS:

The failure reported to IBM involved a PC 300 Series 6576 with a 3Com Etherlink III PCI Bus Master 3C59x Ethernet adapter using v4.1 3Com adapter device drivers.

FIX:

The failure was resolved by installing a later level of 3Com adapter device drivers. Version 5.1 was installed and the failure no longer occurred.

3Com driver updates may be obtained either from the 3Com BBS at 408 - 980-8204 or through the Internet at the following URL:
<http://www.3com.com>

If failures persists after updating the device drivers, continue normal problem determination to isolate the failing FRU.

3Com Etherlink III 3C590 & 3C595 are trademarks of the 3Com Corporation.

SAS KEYWORDS:

PSY2	D/T65XX	65XX	IBMPC
PSVP	PSVPOEM	PSY2OEM	PSY2ADPT
PSVPADPT	6576	D/T6586	PSVPCOMM
PSY2COMM	PC 330	PC 350	

SYSTEM REBOOTS ON POWER OFF, DRAINS BATTERY

1.4.1279 SYSTEM REBOOTS ON POWER OFF, DRAINS BATTERY

Record number: H121332

Device: D/T2615
Model: M
Tip key:
Date created: 093/09/16
Date last altered: A97/11/07

SYMPTOM:

SOME SYSTEMS REBOOT WHEN POWER SWITCH IS TURNED TO THE OFF POSITION. THE CUSTOMER MAY NOT OBSERVE THE SYSTEM RE-BOOTING, AND ONLY REPORT A BATTERY LIFE PROBLEM.

PROBLEM ISOLATION AIDS:

CHECK THE MANUFACTURING NUMBER ON THE 2615 VIDEO CARD FRU P/N33G9296. THE CURRENT LEVEL NUMBER IS 239-1071-03. IF THE LAST TWO NUMBERS ARE 03 OR HIGHER, THIS TIP DOES NOT APPLY.

FIX:

IF THE 2615 VIDEO CARD IS NOT AT LEVEL 239-1071-03 OR HIGHER, ORDER FRU P/N33G9296 FROM MECHANICSBURG. IF CHANGING THE VIDEO CARD DOES NOT RESOLVE THE FAILURE, UTILIZE NORMAL PROBLEM DETERMINATION PROCEDURES.

SAS KEYWORDS:

PSY2	D/T2615	PSY2PART	PSY/2
2615	BATTERY	THINKPAD	UNCLASSIFIED

SYSTEM TRAPS OR HANGS AFTER SETUP IS MODIFIED

1.4.1280 SYSTEM TRAPS OR HANGS AFTER SETUP IS MODIFIED

Record number: H011412

Device: D/T8650
Model: M
Tip key:
Date created: 096/06/03
Date last altered: A98/01/20

SYMPTOM:

The PC Server 704 (8650) traps or hangs after a modifying the Setup with <F1>.
These errors occur intermittently and have been observed with all operating systems.
Diagnostics run without error.

PROBLEM ISOLATION AIDS: NONE**FIX:**

Boot to the Setup utility by pressing <F1> during the memory count. Select Advanced, then select Advanced Chipset Configuration. Load Setup Defaults by pressing <F5> <Enter>, then Save and Exit by pressing <F10> <Enter>.
This action resets system register settings to their default values.
Changing system register settings, such as IOQ Depth, through BIOS Setup, could cause traps or hangs.

SAS KEYWORDS:

PSY2 8650 D/T8650 704
HEALTH

1.4.1281 SYSTEM TRAPS/HANGS WITH 16MB OKI PARITY SIMM INSTALLED

Record number: H131928

Device: D/T8640
 Model: M
 Tip key:
 Date created: 095/12/08
 Date last altered: A95/12/08

SYMPTOM:

Intermittent trap errors, system hangs or system reboots.
 The problem may be highly intermittent or may fail often enough to prevent installation or use the operating system.

This symptom may be experienced on any brand system compatible with 16MB Industry Standard SIMM's.

PROBLEM ISOLATION AIDS:

Affected systems:

All systems which use Industry Standard SIMM's are potentially affected, if SIMM's which meet the following description are installed:

OKI 16 MB Parity SIMM, Option P/N 92G7204, FRU P/N60G2950, identified by the following markings on the 8 data modules on the front side of the simm:

OKI Japan
 M5117400xxxxxx Note: x = any character
 YYYxxxxxxxx

If the 2nd line on the data modules shows the above number and if the YYY in the third line is less than 520, the SIMM is in the affected range.

No other OKI SIMM is affected.

FIX:

If the symptoms as described above are being experienced, and the system has OKI 16MB PARITY SIMM's which meet the above description installed, replaced them with FRU P/N60G2950. All affected SIMMs were marketed only as Options. No IBM systems were manufactured with this SIMM. The affected SIMM's have been purged from FRU stock.

OKI is a trademark of OKI Electric Industry Co., Ltd.

SAS KEYWORDS:

PSY2	SERVER	PSY2MEM	PSY2ERR
SERVER	320	300	310
PSVP	VALUEPOINT	INDUSTRY	STANDARD
8640	8641	520	92G7204
60G2950	PSY2PART	PSVP	D/T8639
D/T8641	8639	OEM	TRAP0002
0002	TRAP	2	

1.4.1282 SYSTEM W/INTERNAL TAPE BACKUP MAY HANG OR REBOOT

Record number: H1267

Device: D/T8550
 Model: MCP1
 Tip key:
 Date created: 093/04/01
 Date last altered: A93/04/01

SYMPTOM: UNDER CERTAIN ENVIRONMENTAL CONDITIONS, A USER CAN INTRODUCE ELECTROSTATIC DISCHARGE (ESD) THROUGH INSERTION OF THE TAPE CARTRIDGE. THIS CAN PRODUCE A SYSTEM REBOOT OR SYSTEM HANG CONDITION IN THE PS/2 8550 AND 8570.

PROBLEM ISOLATION AIDS: A SMALL QUANTITY OF INTERNAL TAPE BACKUP UNITS ARE SUSCEPTIBLE TO THIS ESD PROBLEM. THEY CAN BE IDENTIFIED BY A CR-01 CONFIGURATION ON THE TAPE DRIVE UNIT LABEL.

FIX: WHEN EXPERIENCING AN INTERMITTENT SYSTEM REBOOT OR SYSTEM HANG IN AN 8550 OR 8570 WITH AN INTERNAL TAPE BACKUP UNIT (CONFIGURATION CR-01) INSTALLED, REPLACE BOTH THE TAPE UNIT (P/N30F5273) AND THE TAPE COVER PLATE (P/N30F5275). THE TAPE COVER PLATE IS SPECIALLY COATED TO DISCHARGE THE TAPE.

SAS KEYWORDS:

8550SYSMISC	8570SYSMISC	PSY2MISC	8550SYSTAPE
8570SYSTAPE	PSY2TAPE	PSY2	8550SYSERR
8570SYSERR	PSY2ERR		

SYSTEM WILL NOT BOOT AFTER REPLACING SYSTEM BOARD

1.4.1283 SYSTEM WILL NOT BOOT AFTER REPLACING SYSTEM BOARD

Record number: H007539

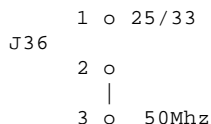
Device: D/T6484
 Model: M
 Tip key:
 Date created: 095/05/19
 Date last altered: A95/07/26

SYMPTOM:

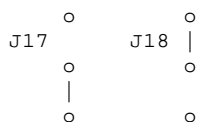
PS/ValuePoint Performance Series (64XX) 100Mhz systems may not POST or hang at the end of the memory count after installing a replacement system board.

PROBLEM ISOLATION AIDS:

This tip applies only to system board FRU P/N06H6355. This system board has a J36 jumper location between the IDE connector and the processor. The J36 jumper should be in the 2-3 position (default) as shown below.



All other jumpers are in the correct position for operating at 100Mhz (J17 towards the front and J18 towards the rear of the system).



With the jumpers in the positions shown above, the system may hang at the end of the memory count OR the display will be blank after power-on, there are no audible beeps and the power supply fan is turning.

NOTE - The same symptom applies if there is NO jumper installed on the J36 position.

The system DOES complete POST and passes all Advanced Diagnostic tests without failures if the J36 jumper is placed in the 25/33 position as shown above.

FIX:

If the failure meets the conditions above, replace the system board using FRU p/n06H6355. Field stock has been purged.

See RETAIN Tip H105203 for further explanation of the purpose of the J36 jumper.

If the failure persists, utilize normal problem determination procedures to isolate the failing application or fru.

SAS KEYWORDS:

VALUE POINT	PSY2	PSVP	6484
6482	D/T6482	6492	6494
D/T6492	D/T6494	PSVPBRD	PSY2BRD
PSVERR	PSY2ERR	PSY2PART	PSVPPART
DEAD	HANG	HUNG	D/T7585
D/T7590	7585	7590	

SYSTEM WON'T BOOT THE OPERATING SYSTEM AFTER PROCESSOR SWAP

1.4.1284 SYSTEM WON'T BOOT THE OPERATING SYSTEM AFTER PROCESSOR SWAP

Record number: H066432

Device: D/T9595
 Model: M
 Tip key:
 Date created: 095/07/21
 Date last altered: A95/07/27

SYMPTOM:

The system hangs while booting the operating system after a processor board and/or flash BIOS change. The following error message is seen:

C: \OS2\SYSTEM\COUNTRY.SYS not found or not valid.

If the original processor is re-installed, the same problem occurs.

PROBLEM ISOLATION AIDS:

The system is a Server 95 (9595) or a Server 500 (8641) with a Type 4 Processor Board and a SCSI-2 Fast/Wide Adapter/A installed.

The Reference and Diagnostics diskette are at the correct level for the flash BIOS version installed and the diagnostics run error-free. (See RETAIN record # H126229 for additional information.)

The operating system is OS/2 Version 2.1.

FIX:

The device driver (IBM2SCSI.ADD) for the SCSI-2 Fast/Wide Adapter/A is most likely downlevel.

The IBM2SCSI.ADD driver that supports the Server 500 and 9595 systems with TYPE 4 processor cards that have been updated to system BIOS level 3 or higher, must be dated 9/26/94 or later. In order to support booting OS/2 from 4GB or larger drives, the driver must be dated 10/26/94 or later.

This device driver may be found on the Option Diskette for the SCSI-2 F/W Adapter (FRU P/N92F0160).

Servicers and customers requiring the latest version of the IBMSCSI.ADD, may obtain it from the IBM PC Co. Bulletin Board System at 919 - 517-0001. The file is identified as IBM2.ZIP and when unpacked will provide the updated device driver.

The latest SCSI-2 F/W Adapter Option Diskette may also be downloaded from the BBS system. Additional information regarding the IBM2SCSI.ADD may be found in the README file on the option diskette.

```

+***** IMPORTANT *****+
+ THESE FILES ARE CUSTOMER INSTALLABLE. CUSTOMERS SHOULD +
+ BE ADVISED TO CONTACT THE PC COMPANY HELPCENTER +
+ AT 800-772-2227 IF ASSISTANCE IS REQUIRED IN GETTING +
+ OR INSTALLING THE APPROPRIATE FILES. +
+*****+
    
```

Note:

After the BIOS is changed the system resets the default boot sequence. The diskette (A:) drive is the only active device in the boot sequence). The boot sequence should be checked and changed if necessary.

SAS KEYWORDS:

PSY2	SERVER	500	95
PSY2BRD	OS2	D/T8641	RAID
8641	9595	8595	D/T8595
D/T8590	8590	D/T9590	9590
PSY2ADPT	ECA003	PENTIUM	PSY2FDSK
4	GB		

Record number: H062314

Device: D/T8550
 Model: M
 Tip key:
 Date created: 090/05/17
 Date last altered: A93/02/10

SYMPTOM:

THE FOLLOWING PROBLEMS MAY BE EXPERIENCED WITH THE MICRO-CHANNEL 5250 EMULATION ADAPTER.

- A. SYSTEM HANGS WITH A BLANK SCREEN AT POST (POWER-ON SELF TEST)
- B. HOST NETWORK MAY HANG OR FAIL WHEN THE PS/2 (WITH THE AFFECTED ADAPTER) IS POWERED-ON. WORKSTATIONS RETURN TO SIGN-ON SCREEN AFTER LOSS OF COMMUNICATION.
- C. RUNNING AUTO-CONFIGURATION OR SET CONFIGURATION RESULTS IN PARITY ERROR.
- D. AN ERROR OF " lll - ????? " during POST
- E. FOLLOWING SUCCESSFUL AUTO CONFIGURATION, THE SYSTEM HANGS WITH MEANINGLESS PATTERNS, SUCH AS VERTICAL BARS, ON THE SCREEN.

PROBLEM ISOLATION AIDS:

PRIOR TO REPLACING ANY HARDWARE ENSURE THE LATEST LEVEL CORRECTIVE SERVICE DISKETTE (WSE010003 OR LATER) FOR SYSTEM 36/38 WORKSTATION EMULATION IS INSTALLED. THIS DISKETTE IS NOT NECESSARY IF RUNNING AS/400 PC SUPPORT.

EARLY LEVEL SYSTEM 36 / 38 EMULATION ADAPTERS MAY BE IDENTIFIED BY FRU P/N69X6282, FRU P/N69X6283 OR FRU P/N69X6292 ON THE ADAPTER. IF ONE OF THESE ADAPTERS IS FAILING IN A 95XX SYSTEM REPLACE THE ADAPTER WITH FRU P/N69X6294.

FIX:

AN UP-LEVEL SYSTEM 36/38 WORKSTATION EMULATION ADAPTER (FRU P/N69X6294) WITH OPTION DISKETTE IS AVAILABLE FROM MECHANICSBURG PARTS DISTRIBUTION SYSTEM.

SAS KEYWORDS:

PSY2	PSY2ERR	PSY2ADPT	PSY2COMM
8580SYSCOMM	8550SYSERR	8555SYSERR	8560SYSERR
8565SYSERR	8580SYSERR	8570SYSERR	8550SYSADPT
8555SYSADPT	8560SYSADPT	8565SYSADPT	8570SYSADPT
8580SYSADPT	8550SYSCOMM	8555SYSCOMM	8560SYSCOMM
8565SYSCOMM	8570SYSCOMM	D/T8580	D/T8570
D/T8560	D/T8555	D/T8565	D/T95XX
D/T9585	D/T9556	D/T9576	D/T9557
D/T9577			

1.4.1286 SYSTEM 36/38 WORKSTATION EMULATION ADAPTER (5250 EMULATION)

Record number: H062883

Device: D/T8550
 Model: M
 Tip key:
 Date created: 090/07/25
 Date last altered: A95/06/06

SYMPTOM:

DIAGNOSTICS FOR THE SYSTEM 36/38 WORKSTATION EMULATION ADAPTER (5250 EMULATION ADAPTER) MAY BE EITHER MISSING, OR DEFECTIVE, ON DISKETTES WHICH ARE INCLUDED IN THE SIM (SERVICE INFORMATION MANUAL).

A 1657 ERROR IS REPORTED WHEN ATTEMPTING TO RUN DIAGNOSTICS WITH THE BAD OPTION FILES. (THE BAD OPTION FILES, @FFF8.DGS, ARE DATED 8 - 28 - 87.) LATER SHIPMENTS OF THE SIM REVISIONS WERE CORRECTED.

VERSION (LEVEL) 1.01 DIAGNOSTICS ARE REQUIRED TO BE ON THE SYSTEM REFERENCE DISKETTE TO SUPPORT THE 1/2 SIZE MICROCHANNEL 5250 WORKSTATION EMULATION ADAPTER. A 1614 ERROR IS REPORTED IF DOWN-LEVEL (VERSION 1.00) DIAGNOSTICS ARE RUN.

DIAGNOSTICS CANNOT BE RUN ON THE 5250 EMULATION ADAPTER IF IT IS INSTALLED IN MICROCHANNEL SLOT 8. THE ADAPTER SHOULD ONLY BE INSTALLED IN SLOTS 1-7.

PROBLEM ISOLATION AIDS:

THE DEFECTIVE DIAGNOSTICS SHIPPED WITH THE SIM ARE DATED 8 - 28 - 87.

DIAGNOSTICS FILE @FFF8.DGS, SHOULD BE DATED 9-09-87 OR LATER.

THE DIAGNOSTICS FILE SHIPPED WITH VERSION 1.01 OPTION DISKETTE IS DATED 11 - 16-88.

FIX:

UPDATE THE SYSTEM REFERENCE DISKETTE WITH A SYSTEM 36/38 WORKSTATION EMULATION ADAPTER OPTION DISKETTE VERSION 1.01 PRIOR TO RUNNING DIAGNOSTICS ON THE ADAPTER.

NOTE: THE CURRENT FRU, P/N69X6282 CONTAINS THE LATEST ADAPTER AND THE VERSION 1.01 OPTION DISKETTE.

SAS KEYWORDS:

PSY2	PSY2ERR	PSY2ADPT	PSY2COMM
PSY2DIAG	8580SYSDIAG	D/T8555	D/T8560
D/T8565	D/T8570	D/T8580	D/T8590
D/T8595	D/T8556	D/T8557	D/T9590
D/T9595	D/T9585	D/T9577	D/T9576
D/T9557	D/T9590		

1.4.1287 SYS1217 ERROR WHEN USING OS/2 SELECTIVE INSTALL

Record number: H124190

Device: D/T6384
 Model: M
 Tip key:
 Date created: 094/06/07
 Date last altered: A94/06/07

SYMPTOM:

When using the OS/2 Selective Install function in the System Setup Folder, the installation program will post a SYS1217 error. After clicking on OK the installation may appear to work correctly but will ask for more diskettes than required. The selected option files will not be unpacked or loaded to the system. System diagnostics run without error.

PROBLEM ISOLATION AIDS:

OS/2 Version 2.1 Diskettes shipped with systems have either a Blue or Salmon colored label. The color of the label indicates the method of compression used to create the diskettes. The Salmon labeled diskettes are not compatible with the Blue labeled diskettes, as the code used for decompression of files is not compatible from one type to another. For example, if "Blue" code is installed on the system, then the Blue diskettes should be used for any changes that require the diskettes. Likewise if "Salmon" code is installed then Salmon diskettes should be used.

A small number of machines may have been shipped with a mismatch of diskette and preloaded OS/2. The situation may also exist if the customer has both types of diskettes available to the operator.

To determine the type of code installed on a system, enter SYSLEVEL at the OS/2 C: prompt. Locate the section titled: "IBM OS/2 Base Operating Sys." Information in this section will identify the diskettes that should be used when changes are made to the OS/2 installed on the system.

The characters following (Type) indicate compression code and if the code was pre-installed.

(Type P) = Pre-install Use Blue colored label diskettes.
 (Type 0) = Disk install Use Blue colored label diskettes.
 (Type P-2) = Pre-install Use Salmon colored label diskettes.
 (Type 0-2) = Disk install Use Salmon colored label diskettes.

FIX:

Re-installing OS/2 with the shipped diskettes will eliminate this mismatch. Users may also contact OS/2 support for an alternative solution.

SAS KEYWORDS:

PSY2	PSY2PROG	PSY2FDSK	PSY2ADPT
D/T9595	D/T9590	D/T9585	D/T9577
D/T8570	D/T8565	D/T8580	D/T8590
D/T8595	D/T8555	HANG	VALUEPOINT
D/T8590	D/T8565	D/T8555	D/T8573
D/T8525	D/T8530	D/T8557	D/T8556
D/T8540	PSVP	D/T6384	OEM
PSY2OEM	APAR	OS2	D/T6387
D/T6381	D/T6382	PSVP	

1.4.1288 SYS2170 ERROR IN NETVIEW DM CID INSTALL OF S3 DRIVERS

Record number: H06894

Device: D/T6576
Model: M
Tip key:
Date created: 096/09/26
Date last altered: A96/11/13

SYMPTOM:

IBM PC 300 Series 6576 or 6586 systems running OS/2 may exhibit a SYS2170 error in PRODUCT.EXE at the end of a NetView DM (Distribution Manager) CID installation of the S3 Trio64/64V+ video drivers.

PROBLEM ISOLATION AIDS:

The failure does not occur if the S3 drivers are installed directly onto the system via diskette or via LAN CID installation.

The driver level is 2.80.16 or higher. Earlier driver levels do not exhibit this failure.

FIX:

- 1) Set the display resolution to a 3 character string (256, 32K, 64K, 16M) for the Color field in the NetView DM setup profile.
- 2) Remove the call to PRODUCT.EXE in the SETUP.CMD file.

S3 Trio64 & Trio64V+ are trademarks of S3 Incorporated.

SAS KEYWORDS:

PSVP	PSY2	PSVPERR	PSY2ERR
PSVPPROG	PSY2PROG	PC 330	IBMPC
PC 330	PC 350	D/T6586	PSVPCOMM
PSY2COMM			

1.4.1289 SYS3175 ERROR RUNNING COMM MANAGER/2 1.11 W/WARP

Record number: H136519

Device: D/T6877
 Model: M
 Tip key:
 Date created: 097/02/07
 Date last altered: A97/02/07

SYMPTOM:

IBM PC 300/700 Series 6577, 6587, 6877, and 6887 systems may display a SYS3175 error when running Communication Manager/2 v1.11 in OS/2 WARP 3.x with APL Fonts and GDDM enabled.

PROBLEM ISOLATION AIDS:

Disabling GDDM and removing the APL fonts eliminates the SYS3175 error. Refer to the OS/2 WARP Users Guide for information regarding APL Fonts and GDDM.

FIX:

Obtain and install S3 Trio64/64v+ Video Device Drivers for OS/2 version 2.85.02 or higher.

Device driver updates may be obtained from the IBM PC Company BBS system by calling 1-919-517-0001. View the "IBM PC 300/700 Files" section (section #21) for the file titled:

Z01T32A.EXE - S3 Trio 64v+ OS/2 driver v2.85.02

The device driver update may also be downloaded via the Internet from the IBM Personal Computer File Library by searching the following Internet URL:

<http://www.pc.ibm.com/files.html>

S3 Trio64 & S3 Trio64v+ are trademarks of S3 Incorporated.

SAS KEYWORDS:

PSY2	PSVP	IBMPC	PSVPPROG
PSY2PROG	PSVPERR	PSY2ERR	PSVPDISP
SYS 3175	PSY2DISP	UNCLASSIFIED	50705
D/T6577	D/T6587	PC 330	PC 350
PC 730	PC 750		

1.4.1290 SYS3175 ERROR USING SYSTEM INFORMATION TOOL IN WARP

Record number: H134040

Device: D/T6589
Model: M
Tip key:
Date created: 096/09/18
Date last altered: A96/09/18

SYMPTOM:

A SYS3175 Access Violation error may be displayed when the System Information Tool in Netfinity v3.05 is executed on PC 365 Series 6589 systems with OS/2 WARP Server installed.

PROBLEM ISOLATION AIDS:

None

FIX:

Netfinity version 3.05 is incompatible with the PC 365 Series 6589 systems.

Netfinity Version 4.00.1 or higher with the System Information Tool is required to eliminate the failure symptom. Users requiring this function may contact the IBM PC Company HelpCenter at 1-800-772-2227 or IBM OS/2 Support at 1 - 800-237 - 5511 for information on upgrading the Netfinity application.

SAS KEYWORDS:

PSY2	PSVP	IBMPC	PSVPPROG
PSY2PROG	PSVPERR	PSY2ERR	TRAP
SYS 3175	PC365	51105	

1.4.1291 TAPE BACKUPS OF COMPRESSED FILES MAY FAIL

Record number: H162989

Device: D/T8650
 Model: M
 Tip key:
 Date created: 098/02/18
 Date last altered: A98/03/11

SYMPTOM:

- 1 - Customer expects data compression during tape backups but sees very little.
- 2 - Tape backups/restores fail to complete, or systems take excessive time to backup/restore files.

Typical Error messages may include:

- E56 errors when using Sytos Premium
- Intermittent backup and / or restores
- Re-occurrence of failures may be as long as several weeks

Note:

Exact symptoms on all Operating System Platforms with any of the supported backup applications is not known.

PROBLEM ISOLATION AIDS:

All of the following must be true for this TIP to apply:

- The System is any IBM PC Server / Netfinity server properly configured* with any supported Tape Drive.
 - The System is properly configured* with any of the following supported Operating Systems:
 - = Banyan Vines, all System supported versions
 - = Citrix, all System supported versions
 - = Windows NT versions 3.51, and 4.0
 - = OS/2, all System supported versions
 - = SCO Open Server, all System supported versions
 - = SunSoft, all System supported versions
 - = Novell NetWare Versions 3.12, 4.0, and 4.11
 - The system is properly configured with any of the following supported tape backup applications:
 - = Cheyenne Arcserve, all System/NOS supported versions
 - = Sytos, all System / NOS supported versions
 - = Novaback Backup Exec, all System /NOS supported versions
 - = Any other System / Nos supported backup application
 - Use of a supported cleaning cartridge to clean the Tape Drive does not fix the problem.
 - Compression is enabled on the tape drive via Jumper or DIP Switch, or compression is enabled in the backup application.
 - The data being backed up has been compressed by the Operating System / or Application.
 - The correct supported Media is being used in the Tape drive.
 - The Tape Drive has been cleaned on a regular basis.
- * The term "properly configured" implies the following:
- Hardware is properly configured ie: cables, Adapter/ Controller SCSI Bus settings
 - Correct drivers are used
 - Correct firmware levels are used at the SCSI Adapter/ Controller, and the Tape Drive

FIX:

Make sure the data being backed up is compressed only once, either within the Operating System/Application software or via the tape backup (thru hardware or backup software).

WORKAROUND:

Disable compression in one of the mediums. Refer to the software application or tape backup application manuals for instructions on disabling data compression.

DETAIL:

Double Compressing data by engaging Compression in the Operating System and In the Tape backup results in problems that can be very difficult to diagnose. Most Tape Backup devices today incorporate some type of built-in hardware data compression. Problems occur when both the Operating System AND the Tape Drive are compressing data.

SAS KEYWORDS:

PSY2	PSY2TAPE	D/T8650	UNCLASSIFIED
COMPRESSION	DATA	TAPE	D/T8642
D/T8641	D/T8640	D/T8639	D/T8638
BACKUP			

TAPE CANNOT BE FORMATTED USING ARCSERVE V5.X AND NETWARE

1.4.1292 TAPE CANNOT BE FORMATTED USING ARCSERVE V5.X AND NETWARE

Record number: H131938

Device: D/T8641
 Model: M
 Tip key:
 Date created: 095/12/11
 Date last altered: A95/12/11

SYMPTOM:

Formatting tape appears to be endless (should take only a few minutes), while being formatted using ARCSERVE V5.X and Netware.

PROBLEM ISOLATION AIDS:

ARCSERVE 5.X and one or more of the following adapters are installed:

IBM Fast PCI SCSI Adapter, P/N32G3100, FRU P/N53G0382.
 IBM SCSI-2 Fast/Wide Adapter, P/N70G8498, FRU P/N92F0160.

FIX:

This problem may be resolved by downloading the following file from the Arcserve BBS by calling 516-465-3900:

Ecn075.zip

This file contains the new files needed to fix this problem as well as an installation document.

Customer should log onto BBS as account "IBM" and password "media" (type media in lower case). The installation document specifies that the customer must be at Arcserve v5.01g. For customers at a lower level of software, the upgrade is also on Arcserve's BBS.

Arcserve is a registered trademark of Cheyenne Inc.
 Netware and Novell are registered trademarks of Novell Inc.

SAS KEYWORDS:

PSY2	PSY2PROG	MAGNETIC	TAPE
SERVER	300	310	500
320	520	PSY2PROG	NOVELL
DRIVE	BACKUP	FORMAT	HANG
HANGS			

1.4.1293 TAPE SECURING SCSI CONNECTORS MAY CAUSE HARD DRIVE FAILURES

Record number: H162482

Device: D/T8640
 Model: M
 Tip key:
 Date created: 098/01/19
 Date last altered: A98/01/20

SYMPTOM:

Hard drives may fail or Hard drives in a array may be marked DDD.

PROBLEM ISOLATION AIDS:

All of the following must be true for this tip to apply:

- The System is a model 8639 or 8640 that has a strip of tape on the 68-pin SCSI connector at one or both ends of the SCSI cable.
- The tape is touching/covering any portion of the ends of the SCSI cable leads that are exposed on one side of the SCSI Cable Connector -----AND/OR----- the tape is in contact with any conductive surface of a backplane or system board that the end of the SCSI Cable is connected to.

FIX:

- 1 - Remove the Tape and re-seat the connectors.
- 2 - If the Server is to be moved/relocated, check that the SCSI cables are connected securely after the move/relocation of the server.

DETAIL:

A conductive tape was used to help ensure that the SCSI cable connections do not loosen during shipping. In SOME cases, the tape may touch nearby electrical connections or the exposed ends of the SCSI cable leads.

It is POSSIBLE that the conductive tape may short some portion of the SCSI Bus or SCSI Bus related circuits of a backplane or system board which may result in the above described "Symptoms".

Systems are now manufactured with non-conductive tape.

Conductive tape may be identified by a metallic surface on the adhesive side of the tape (depending on the adhesive, more or less identifiable). Since identification requires removal of the tape which is for shipping purposes, removal of any tape from the described connector locations will eliminate any occurrence of conductive tape touching any SCSI Bus circuits.

SAS KEYWORDS:

PSY2	D/T8639	D/T8640	UNCLASSIFIED
SCSITAPE	SCSI CONNECTOR	DDD	DEFUNCT
DASD	HEALTH		

1.4.1294 TCP/IP CONFLICT W/HEYWOOD & IBM INTERNET CONNECTION

Record number: H132791

Device: D/T6877
 Model: M
 Tip key:
 Date created: 096/02/27
 Date last altered: A96/02/27

SYMPTOM:

IBM PC 700 Series 6877 and 6887 systems preloaded with OS/2 WARP Connect may exhibit a system hang condition when the IBM Internet Connection program is started before the Heywood Communication application.

PROBLEM ISOLATION AIDS:

The IBM Internet Connection and the Heywood Communication software is a part of the OS/2 WARP Bonus Pak.

Both packages contain their own version of TCP/IP. Loading TCP/IP through the IBM Internet Connection first may cause a system hang when the Heywood application is started. The hang condition is most likely to be seen while executing the "Network Setup Utility" from within the Heywood application.

FIX:

Load the TCP/IP using the Heywood package first, using the "Network Setup Utility." This should allow the use of both applications.

SAS KEYWORDS:

PSY2	D/T68XX	6887	6877
IBMPC	PSVP	PSVPPROG	PSY2PROG
D/T6887	PSY2COMM	PSVPCOMM	HUNG
LOCKUP	PC750	PSY2ERR	PSVPERR
PC 750	PC730	PC700	PC 730
42150			

1.4.1295 TEST PATTERN NOT SEEN AT 640X480@60HZ INTERLACED RESOLUTION

Record number: H161053

Device: D/T6588
Model: M
Tip key:
Date created: 097/09/16
Date last altered: A97/09/16

SYMPTOM:

When a resolution of 640x480@60Hz interlaced is selected and tested from any other resolution, the test pattern is not seen. If the test is performed with the display already set at 640x480@60Hz resolution, the test pattern is seen.

PROBLEM ISOLATION AIDS:

If the user has an IBM PC300XL or IntelliStation M-Pro (Machine types 6588 or 6888) equipped with the Intergraph video adapter using stereo mode, a model 6555-733 P200 display, and running WindowsNT 3.51, this tip applies.

FIX:

None in WindowsNT 3.51.

The error has been corrected in WindowsNT 4.0.
Under WindowsNT 3.51, the user must answer that the test pattern was displayed correctly when prompted by the operating system. The resolution will then be set to the selected choice of 640x480@60Hz interlaced.

WindowsNT is a trademark of Microsoft Corporation.

SAS KEYWORDS:

PSY2	PSY2OPER	PSY2ADPT	PSY2OEM
PSVP	PSVPOPER	PSVPADPT	PSVPOEM
D/T6588	D/T6888	66773	66773F_1
INTENSE3D	UNCLASSIFIED		

1.4.1296 TESTING PC SERVER 720 PROCESSORS (8642)

Record number: H084333

Device: D/T8642
 Model: M
 Tip key:
 Date created: 096/07/10
 Date last altered: A96/07/17

SYMPTOM:

If the performance has degraded on the PC Server 720 with more than one processor, or if the operating system does not detect all of the processors, then one or more processors may be failing. Any of the following errors are possible during POST:

- Multiprocessor Error IP: lxxDSxx or FP: lxxDSxx appears on the LCD panel.
- Test Error EP: 106S appears on the LCD panel.
- Error 0095xxxx appears on the display or the LCD panel.

PROBLEM ISOLATION AIDS:

Note: A Test Error EP: 106S, or Multiprocessor Error IP: lxxDSxx or FP: lxxDSxx, where (S) is the slot number of the processor card, indicates the slot number of the failing processor card or indicates the slot number of a good processor card that is reporting the error caused by the failing processor card.

FIX:

- Follow this procedure to isolate the failing processor:
1. Power off the system and connect an ascii terminal or laptop to the serial port. Use the serial port on the Server 720 which connects to the internal ribbon cable labeled P2.
 2. On the laptop, start a terminal emulation program like HyperACCESS and configure the port for 9600 baud, 8 bits, No parity, and 1 stop bit.
 3. Reboot the Server 720 using the System Diagnostic Diskette.
 4. Select option 3: Extended ROM Resident Diagnostics.
 5. Note the slot number of the failing processor.
 6. Replace the failing processor and rerun the diagnostics.

Refer to the IBM PC Server HMM, publication number S30H-2501-01, page 377, for additional information on error codes.

The PC Server 720 Extended ROM Resident Diagnostics can isolate a failing processor card in any of the six(6) processor slots.

HyperACCESS is a trademark of Hilgraeve, Inc.

SAS KEYWORDS:

PSY2	8642	720	SERVER
PSY2DIAG	MULTIPLE	SMP	

1.4.1297 TEXAS INSTRUMENTS MODEL 885 PRINTS GARBAGE

Record number: H035202

Device: D/T1326
 Model: ME03
 Tip key:
 Date created: O89/06/16
 Date last altered: A89/06/16

SYMPTOM: TEXAS INSTRUMENTS MODEL 885 PRINTS UNREADABLE GARBAGE AFTER BEING INSTALLED OR AFTER BEING REPLACED AS AN ELEMENT EXCHANGE.

PROBLEM ISOLATION AIDS: THE BAUD RATE OF THE TI 885 PRINTER MAY NOT MATCH THE BAUD RATE SET IN THE "SYSTEM ONE" SOFTWARE IN THE PS/2 RESULTING IN GARBAGE PRINT. TO VERIFY THE CORRECT BAUD RATE (4800 BAUD) FOR THE TI 885 WHEN USED AS A "SYSTEM ONE" TICKET AND BOARDING PASS PRINTER PRINT THE CONFIGURATION CODES USING THE FOLLOWING PROCEDURE:

START FROM NORMAL MODE WITH PAPER LOADED.

1. PRESS THE "COMMAND" KEY.
2. PRESS THE "MENU" KEY.
3. PRESS THE "ACCEPT" KEY. A CONFIGURATION REPORT WILL PRINT WHICH CONTAINS THE CURRENT BITS THAT ARE SET "ON".
4. COMPARE THE PRINT OUT WITH ONE OF THE CONFIGURATION LISTS BELOW:

FEATURE DIAL POSITION "A"	THE SECOND NUMBER IN THE
14 27 32 41 81 82 84 91 92 9B 9E	PRINT OUT FOR ALL DIAL
	POSTIONS SHOULD BE 27.
FEATURE DIAL POSITION "B"	THE NUMBER 27 IN THE
14 27 32 41 81 84 9B 9E	SECOND POSITION REPRESENTS
	4800 BAUD.
FEATURE DIAL POSITION "C"	
14 27 32 41 81 82 84 9B 9E	
FEATURE DIAL POSITION "D"	
14 27 32 41 81 84 9B 9E	
5. IF THE SECOND NUMBER OF THE CONFIGURATION PRINT OUT IS NOT 27 THE BAUD RATE IS INCORRECT CAUSING GARBAGE TO PRINT
6. TO CHANGE THE BAUD RATE TO 27 USE THE FOLLOWING STEPS:
7. PRESS "CHANGE" 14 WILL PRINT
8. PRESS "ACCEPT" 14 WAS STORED, CURRENT BAUD RATE WILL PRINT
9. PRESS "CHANGE" UNTIL 27 PRINTS
10. PRESS "ACCEPT" TO STORE CODE 27
11. PRESS "ACCEPT" UNTIL ALL REMAINING CONFIGURATION CODES ARE STORED AFTER THE LAST CODE IS STORED NEW CODES WILL PRINT.
12. VERIFY THAT THE BAUD RATE IS 27
13. PRESS "NORMAL" KEY TO RETURN TO NORMAL

FIX: SEE ISOLATION AID

SAS KEYWORDS:

1326SYS	1326	1326PRT	PSY2
PSY2PRT	PSY2DIAG	PSY2MISC	PSY2NLGO
PSY2PART	8530SYSNLGO	8550SYS	8550SYSOPER
8550SYSNLGO	POEM	PSY2OEM	OEMPRT

1.4.1298 TEXAS INSTRUMENTS 885 COMMON SYMPTOMS AND SOLUTIONS

Record number: H035308

Device: D/T1326
 Model: ME01
 Tip key:
 Date created: 089/06/19
 Date last altered: A89/06/19

SYMPTOM: THIS SYMPTOM FIX DESCRIBES MULTIPLE SYMPTOMS AND THEIR SOLUTIONS FOR THE TEXAS INSTRUMENTS MODEL 885 AIRLINE TICKET AND BOARDING PASS PRINTER.

1. PRINTER DOES NOT STORE ADJUSTMENTS:
 PRINTER WAS NOT IN "COMMAND" MODE.
 "FORM FEED" WAS NOT PRESSED BEFORE SETTING "BURST LINE".
 "SET FIRST PRINT LINE" WAS NOT PRESSED BEFORE SETTING "FIRST PRINT LINE".
2. PRINTER BEEPS WITH "ERROR LIGHT".
 STACKER COUNTER REACHED "65". PRESS "RESET COUNT".
 OUT OF PAPER.
 TOP COVER NOT IN PLACE.
 PAPER JAM.
3. PRINTER DOES NOT BURST COUPONS.
 PRINT FEATURE SWITCH NOT IN POSITION "A".
 CONFIGURATION CODE "91" NOT TURNED ON.
4. PRINTER DOES NOT BURST COUPONS AT PERFORATIONS.
 COUPONS NOT LOADED CORRECTLY.
 WRONG LENGTH COUPONS FOR FEATURE SWITCH SETTING.
5. PRINTS ON EVERY OTHER COUPON.
 SOFTWARE SENDS "FORM FEED" AFTER EACH COUPON.
 FIRST PRINT LINE IS TOO LOW.
6. PRINTER DOES NOT EJECT COUPONS PROPERLY.
 TOP COVER NOT IN PLACE.
 STACKER NOT IN PLACE.
 STACKER TRAY NOT IN PLACE.
7. COUPON DOES NOT EJECT WHEN ONLY ONE IS PRINTED.
 PRESS "TEAR OFF" OR PRINT ANOTHER COUPON.
8. COUPONS JAMMING.
 COUPONS NOT INSTALLED CORRECTLY.
 PRINT HEAD TOO CLOSE.
 RIBBON TWISTED OR NOT INSTALLED CORRECTLY.
 BURSTER GROOVE IS CLOGGED.
9. LAST COPY UNREADABLE.
 PRINT HEAD TOO CLOSE.
 FORM TOO THICK.

OTHER HELPFUL HINTS:

1. TO RESET PRINTER PRESS "ACCEPT", "CHANGE" AND "MENU" ALL AT THE SAME TIME.
2. SET "BURST LINE" BEFORE SETTING "FIRST PRINT LINE".
3. INSTALL STACKER BEFORE ADJUSTING "BURST LINE" AND "PRINT LINE".
4. LISTEN FOR BEEP WHEN PRESSING BUTTONS.
5. WHEN IN "ONLINE" MODE ONLY "TEAR OFF", "FORM FEED", "RESET COUNT" AND "ON LINE" BUTTONS ARE ACTIVE.
6. PRESS "RESET COUNT" EVERY TIME COUPONS ARE REMOVED FROM SATCKER.

PROBLEM ISOLATION AIDS: NONE

FIX: SEE SYMPTOM SECTION OF THIS SYMPTOM FIX.

SAS KEYWORDS:

PSY2	PSY2PRT	PSY2DIAG	PSY2MISC
PSY2NLGO	8530SYSNLGO	8550SYS.	8550SYSOPER
8550SYSNLGO	POEM	PSY2OEM	OEMPRT
1326	1326PRT	TI885	

1.4.1299 TEXAS INSTRUMENTS 885 DOUBLE SPACES AFTER EACH LINE PRINTED

Record number: H035309

Device: D/T1326
 Model: ME01
 Tip key:
 Date created: 089/06/19
 Date last altered: A90/01/03

SYMPTOM: TEXAS INSTRUMENTS MODEL 885 DOUBLE SPACES (SKIPS A LINE) AFTER EACH LINE PRINTED WHEN ATTACHED TO A "SYSTEM ONE" TRAVEL AGENCY SYSTEM. SYMPTOM IS PRESENT WHEN INSTALLING A NEW ACCOUNT OR AFTER REPLACING A DEFECTIVE PRINTER.

PROBLEM ISOLATION AIDS: NONE

FIX: IF PRINTER IS ATTACHED TO A IBM PC OR AN IBM PS/2 VERIFY THAT CONFIGURATION CODE 85 IS TURNED "OFF" (NOT IN LIST WHEN CONFIGURATION CODES ARE PRINTED). IF CONFIGURATION CODE 85 IS ON THEN TURN IT OFF USING THE FOLLOWING STEPS:

1. START FROM NORMAL MODE WITH FORMS LOADED.
2. PRESS THE "COMMAND" KEY.
3. PRESS THE "MENU" KEY.
4. PRESS THE "ACCEPT" KEY. A CONFIGURATION REPORT WILL PRINT.
5. CHECK THE REPORT TO SEE IF CODE "85" IS LISTED.
6. IF CODE "85" IS LISTED PRESS "ACCEPT UNTIL 85 IS PRINTED.
7. AFTER "85" HAS PRINTED PRESS "CHANGE" TO SET 85 OFF.
8. PRESS "ACCEPT FOR ALL REMAINING CODES UNTIL NEW CONFIGURATION PRINTS OUT.
9. VERIFY THAT "85" IS NOW MISSING FROM REPORT (OFF).
10. PRESS "NORMAL" TO RETURN TO NORMAL MODE.
11. PRINT A TEST TICKET TO VERIFY SINGLE LINE SPACING.

SAS KEYWORDS:

PSY2	PSY2PRT	PSY2DIAG	PSY2MISC
PSY2NLGO	8530SYSNLGO	8550SYS	8550SYSOPER
8550SYSNLGO	POEM	PSY2OEM	OEMPRT
1326	1326/E01	1326PRT	

1.4.1300 TEXT FILE PRINTING ERRORS FROM WINDOWS95 DOS WINDOW

Record number: H16903

Device: D/T6282
 Model: M
 Tip key:
 Date created: 097/08/26
 Date last altered: A97/08/26

SYMPTOM:

When printing text files larger than 5kb in size from a DOS window in Windows95 (e.g. COPY FILE.TXT LPT1), the command results in application shutdowns, exception errors, or system hangs.

PROBLEM ISOLATION AIDS:

This tip applies to Commercial Desktop Systems equipped with Universal Serial Bus (USB) ports and preloaded with Windows95.

FIX:

The printing error can be corrected by using the ".DOS" extension in the DOS window (e.g. COPY FILE.TXT LPT1.DOS) each time a file is printed, or by the following steps:

1. Remove USB support via the "Add/Remove Programs" in Control Panel.
2. Enable the "Print directly to the printer" option through the following steps in Windows95:
 - Double click on "My Computer" icon.
 - Double click on the "Printers" icon.
 - Right click on the installed printer's icon.
 - Click on "Properties".
 - Click on the "Details" tab.
 - Click on "Spool Settings."
 - Click on the "Print directly to the printer" radio button.

Windows and Windows95 are trademarks of Microsoft Corporation.

SAS KEYWORDS:

PSY2	PSY2ERR	PSY2OPER	PSVP
PSVPERR	PSVPOPER	D/T6272	D/T6282
D/T6577	D/T6587	D/T6588	D/T6888
D/T6899	D/T6562	D/T6592	68911
USB	UNCLASSIFIED		

THE SYSTEM HANGS/DEVICE DRIVER WON'T BIND TO NETWORK PROTO.

1.4.1301 THE SYSTEM HANGS/DEVICE DRIVER WON'T BIND TO NETWORK PROTO.

Record number: H132485

Device: D/T8641
Model: M
Tip key:
Date created: 096/02/01
Date last altered: A96/02/01

SYMPTOM:

The system hangs or device driver won't bind to network protocol.

PROBLEM ISOLATION AIDS:

The affected system:
IBM PC Server 520, Model 8641-EZX, with the IBM Auto 16/4
Token-Ring ISA Adapter, FRU P/N41H8452.

FIX:

1. Install IBM Auto 16/4 Token-Ring ISA Adapter in the first available EISA/ISA expansion slot.
2. Run the LANAIID utility (included with the adapter) to configure the adapter for Plug and Play mode, making sure Lock Current Resources option is not selected.
3. Run EISA Configuration Utility to update EISA configuration database with resources for this adapter. Ignore the resources reported in the EISA Configuration Utility (since these values are maintained automatically via Plug and Play).

Due to a BIOS problem, this adapter runs only in 8-bit mode. This problem will be fixed in a subsequent release of the BIOS.

SAS KEYWORDS:

PSY2	SERVER	520	8641
PSY2COMM	PSY2TBD	PSY2ADPT	

1.4.1302 THINKPAD MWAVE EXPERIENCES AUDIO CD SOUND CLIPPING.

Record number: H106131

Device: D/T9547
Model: M
Tip key:
Date created: 097/03/12
Date last altered: A97/03/12

SYMPTOM:

When Audio CDs are played on MWave machines with Windows NT 3.5 or 4.0 the sound is distorted (clipping distortion). MWave Code version 2.2 is being used. It is contained in the IBM PCCO BBS files MWavent1 and MWavent2.

PROBLEM ISOLATION AIDS:

FIX: DO NOT REPLACE FRU PARTS BEFORE THE FOLLOWING IS DONE.
Change the INI file setting in the MWave.INI file located in the PCMWAVE" section from ALINEGAIN=100 to ALINEGAIN=0.

SAS KEYWORDS:

PSY2	PSY2PROG	PSY2ERR	THINKPAD
UNCLASSIFIED	D/T9546	D/T9545	

THINKPAD SPEAKER NOISE WITH DATA/FAX MODEM INSTALLED

1.4.1303 THINKPAD SPEAKER NOISE WITH DATA/FAX MODEM INSTALLED

Record number: H121685

Device: D/T2618
Model: M
Tip key:
Date created: 093/11/03
Date last altered: A95/05/04

SYMPTOM:

THE IBM DATA/FAX MODEM MAY GENERATE SPEAKER NOISE DURING THE ENTIRE TRANSMISSION OF DATA. NORMALLY, DATA TRANSMISSION NOISE WILL STOP WHEN AN OFF-HOOK SIGNAL IS RECOGNIZED BY THE SYSTEM UNIT.

PROBLEM ISOLATION AIDS:

INFORMATION ABOUT THE DATA/FAX MODEM THAT HAS THE PROBLEM:

MODEM FRU NUMBER IS P/N92F0290
FEATURE CODE IS FC3635
OPTION NUMBER IS 42G2582

FIX:

A NEW LEVEL OF THE MODEM FIXES THE PROBLEM. THE NEW LEVEL CAN BE IDENTIFIED BY LOOKING AT THE SERIAL NUMBER. THE FIRST THREE DIGITS MUST BE 345 OR GREATER. THE SERIAL NUMBER IS LOCATED ON THE BACK OF THE MODEM.

EXAMPLE OF SERIAL NUMBER: 345RCXXXXY X=NUMERIC Y=ALPHA

SAS KEYWORDS:

PSY2	COMM	PCMCIA	MODEM
D/T9552	D/T9545	D/T2603	D/T9533
D/T2620			

THINKPAD SUSPEND RESUME PROBLEM WHEN USING WARP 4.

1.4.1304 THINKPAD SUSPEND RESUME PROBLEM WHEN USING WARP 4.

Record number: H135180

Device: D/T9545
 Model: M
 Tip key:
 Date created: 096/11/12
 Date last altered: A96/11/18

SYMPTOM:

System operation works correctly after the first suspend and resume, following a system boot, but after subsequent suspend / resume operations the system can experience failures in the, area of Mwave, ESS audio, or PCMCIA modem ring indicator etc.

The symptoms would be as follows:

- Mwave or ESS audio does not work after a second resume.
- PCMCIA ring indicator resume does not work after second incoming call.

PROBLEM ISOLATION AIDS:

The operating system is WARP 4.

FIX: DO NOT REPLACE HARDWARE (FRUs).

An OS2 APAR has been opened to address this condition. Customers should contact IBM OS2 support and request to be included in the investigation of APAR number JR09440. A solution will be posted in the OS2 area of the PCCO BBS when it becomes available. As of 11/12/96 this condition is still a restriction.

The Support Telephone number is listed in the OS2 customer Documentation.

SAS KEYWORDS:

PSY2	PSY2PROG	PSY2	THINKPAD
UNCLASSIFIED	D/T9546	D/T9547	D/T2625
D/T2640	D/T2630	D/T2620	

1.4.1305 THINKPAD WITH OS/2 2.11. SUSPEND LOCKS UP SYSTEM

Record number: H10543

Device: D/T9545
 Model: M
 Tip key:
 Date created: 094/08/29
 Date last altered: A95/09/08

SYMPTOM:

Suspend or hibernation does not complete on ISA buss ThinkPad systems using OS/2 2.11. The suspend light will blink for a few seconds, the system will beep and the display will blank. The system must be turned off and then turned on to correct the hang.

PROBLEM ISOLATION AIDS:

OS/2 2.1 will work correctly.

FIX:

An OS/2 Software APAR PJ12413 has been created and a work around has been released on the RTP BBS. The Three BBS files are:

BRAPPK1.DSK
 BRAPPK2.DSK
 BRAPPK3.DSK

These files should be down loaded to diskette. They are self booting and have read me files to describe their use.

Customers can also call their OS/2 support number for further assistance at 1-800-992-4777.

----- IMPORTANT -----

Diskette fixes are customer installable. Customers should be advised to contact the IBM PC Company HelpCenter at 800-772 - 2227 if assistance is required in getting or installing this information. Files are located on the PC company's Bulletin Board Service (BBS). The direct line for modem connection to The PC Company BBS is 1-919-517-0001 or tieline 255-0001.

Customers in Canada should call IBM's HelpPC at 800-565-3344 for Assistance or down load information. The Canadian BBS phone numbers are:
 Montreal-514-938-3022, Toronto-905-316-4255,
 Winnipeg-204-934-2735, Vancouver-604-664-6464.

The data may also be downloaded via the Internet from the IBM Personal Computer File Library by searching the following Internet URL: <http://www.pc.ibm.com/files.html>

SAS KEYWORDS:

PSY2 D/T2610 D/T2605 PSY2PROG
 THINKPAD

1.4.1306 THINKPAD 340CSE - BATTERY CHARGING

Record number: H131671

Device: D/T2610
Model: M
Tip key: 002
Date created: 095/11/10
Date last altered: A96/11/11

SYMPTOM: INTERMITTENT CONDITION:

The two following intermittent conditions stop the battery charging cycle before it is completed.

1. Resume from standby or suspend.
2. Change from CRT to LCD or from LCD to CRT.

FIX:

Update BIOS to 1.00 or above. Refer to file SYTPW140.EXE on the IBM PC Company Bulletin Board Service.

----- IMPORTANT -----

Diskette fixes are customer installable. Customers should be advised to contact the IBM PC Company HelpCenter at 800-772 - 2227 if assistance is required in getting or installing this information.

Files are located on the PC company's Bulletin Board Service (BBS). The direct line for modem connection to The PC Company BBS is 1-919-517-0001 or tieline 255-0001.

Customers in Canada should call IBM's HelpPC at 800-565-3344 for Assistance or down load information. The Canadian BBS phone numbers are:
Montreal-514-938-3022, Toronto-905-316-4255,
Winnipeg-204-934-2735, Vancouver-604-664-6464.

The data may also be downloaded via the Internet from the IBM Personal Computer File Library by searching the following Internet URL: <http://www.pc.ibm.com/files.html>

SAS KEYWORDS:

PSY2 THINKPAD PSY2PWR PSY2MCD
UNCLASSIFIED

1.4.1307 THINKPAD 510 PAGE FAULT ERROR

Record number: H124479

Device: D/T2604
Model: M
Tip key:
Date created: 094/06/27
Date last altered: A96/11/11

SYMPTOM:

AFTER THE SYSTEM BOOTS UP AND THE WINDOWS DESKTOP IS DISPLAYED, IF THE MACHINE IS PUT INTO SUSPEND MODE, IT WILL NOT RESUME WITHOUT AN ERROR MESSAGE. THE ERROR MESSAGE IS "PROGRAM MANAGER HAS DETECTED A PAGE FAULT ERROR."

PROBLEM ISOLATION AIDS:

TO TEST, PRESS FN + F4 FROM WINDOWS DESKTOP TO SUSPEND. PRESS ANY KEY TO RESUME. IF THE PROBLEM EXISTS AN ERROR MESSAGE WILL OCCUR AS DESCRIBED ABOVE.

FIX:

THE CUSTOMER SHOULD MAKE A CHANGE TO THE SYSTEM.INI FILE IN THE WINDOWS DIRECTORY FROM THE DOS PROMPT C: ENTER THE FOLLOWING:

1. USING A FILE EDITOR, EDIT THE SYSTEM.INI FILE LOCATED IN THE "WINDOWS" SUB-DIRECTORY.
2. FIND THE EMM386 STATEMENTS AND LOOK FOR 32BIT DISK ACCESS=ON. CHANGE THIS TO 32BIT DISK ACCESS=OFF
3. REBOOT THE MACHINE AND TEST AS DESCRIBED ABOVE.

SAS KEYWORDS:

PSY2	PSY2ERR	PS/2	2604
PSY2PROG	THINKPAD	UNCLASSIFIED	

1.4.1308 THINKPAD 700C POST ERROR CODES 00019104 AND 00019111

Record number: H124830

Device: D/T9552
Model: M
Tip key:
Date created: 094/08/05
Date last altered: A94/08/10

SYMPTOM:

ERROR CODES 00019104 AND 00019111 WHEN SYSTEM BOOTS.

PROBLEM ISOLATION AIDS:

THIS TIP APPLIES ONLY TO SYSTEM BOARDS WITH A PLUGGABLE "U16" MODULE.

FIX:

THE ERROR MAY BE CAUSED BY POOR ELECTRICAL CONTACT BETWEEN THE MODULE AT "U16" AND IT'S SOCKET. PRIOR TO REPLACING THE SYSTEM BOARD, THE MODULE SHOULD BE RE-PLUGGED.

THERE ARE ONLY TWO REMOVEABLE MODULES ON THE SYSTEM BOARD. THE MODULE AT POSITION "U16" IS THE SMALLER OF THE TWO. IT IS LOCATED NEAR THE BASE MEMORY CARD INTERFACE CONNECTOR. RATHER THAN PIN AND SOCKET, THIS MODULE USES TENSION CONTACTS AROUND THE PERIMETER OF THE MODULE AND SOCKET HOUSING.

CAREFULLY PRY THE MODULE FROM THE SOCKET USING A VERY SMALL SCREW DRIVER OR A MODULE REMOVAL TOOL, IF AVAILABLE. ALTERNATELY PRY EACH CORNER USING THE ACCESS HOLES IN THE SOCKET. BE CAREFUL TO NOTE THE ORIENTATION OF THE MODULE SO IT MAY BE RE-PLUGGED CORRECTLY. AFTER THE MODULE IS REMOVED, CLEAN THE SOCKET AND MODULE PINS WITH A LINT FREE CLOTH AND ISOPROPAL ALCOHOL.

CARE SHOULD BE TAKEN WHEN RE-PLUGGING THE MODULE TO INSURE THAT IT IS FULLY SEATED.

SAS KEYWORDS:

PSY2 PSY/2 PLANAR PSY2ERR
SYSTEM BOARD

1.4.1309 THINKPAD 750 MAP FALLOUT FOR "NO BEEP"

Record number: H123681

Device: D/T9545
Model: M
Tip key:
Date created: 094/04/25
Date last altered: A94/04/25

SYMPTOM:

NO BEEP DURING POST BUT SYSTEM RUNS CORRECTLY.

PROBLEM ISOLATION AIDS:

ON PAGE 194 OF THE IBM MOBILE SYSTEMS HARDWARE MAINTENANCE MANUAL VOLUME 2 (S82G-1502) A CHART LABELED "MISCELLANEOUS SYMPTOMS" CALLS OUT:

1. SPEAKER
2. AUDIO CARD
3. DC/DC CARD

THE HEADING "FRU/ACTION IN SEQUENCE" SHOULD ALSO CALL OUT THE SYSTEM BOARD AS A POSSIBLE FIX AS SHOWN BELOW:

4. SYSTEM BOARD

FIX:

REPLACE THE SYSTEM BOARD IF ITEMS 1-3 DO NOT FIX THE PROBLEM.

SAS KEYWORDS:

PSY2 PSY/2 PSY2MISC PSY2PART
SPEAKER

1.4.1310 THINKPAD 760CD CDROM NOISE

Record number: H021600

Device: D/T9546
Model: M
Tip key: 004
Date created: 096/03/22
Date last altered: A96/04/08

Symptom: Grinding noise in 760CD.
Cause: The top CD cover is bent inward to the point where it is touching the drive spindle. The noise is a result of the CD bearing scraping on the CD's top cover. If this occurs follow the procedure in the FIX section of this tip. The condition can occur when pressure is placed on any area of the top cover outside of the installation markings on the top cover label.

Example of installation markings
located at the rear of the cover: |////////////////////|

Bending can occur from improper installation or by carrying the CDROM in a tightly packed carrying case.

FIX:
Replacement of the CDROM drive is NOT necessary. The top cover of the CDROM drive can be reformed by the following procedure:

1. Remove the top cover screws using a philips jewellers screwdriver. The 760CD drive FRU P/N29H9231 has two (2) screws - one on the left front and one left rear of the top cover. The 755CD drive FRU P/N85G1914 has three (3) screws - one on the left front, one on the left rear and one on the right rear of the top cover.
2. Remove top cover.
3. Place the cover on a flat surface, top down.
4. Reform the cover until it becomes flat. Do not flatten raised areas. These are needed for proper air movement in the enclosure.
5. Reinstall the cover and check for 1 to 1.5 mm of clearance between the bearing and the cover while sliding the drawer in and out.

NOTE: The drawer may be unlatched when the drive is not installed or there is no drive power by pressing the manual release button. The manual button is accessed through a hole in the CDROM cover to the left of blue release button.

Also ensure that the right hand channel is parallel to CD. If it is not, it will also have to be reformed to make it so.

6. Install CDROM drive in ThinkPad, and run advanced diagnostics using the TEST CD to ensure correct CDROM operation.
7. Explain the proper handling, installation, removal and care of the CDROM drive to the customer.

SAS KEYWORDS:
PSY2 PSY2PART THINKPAD D/T9545

THOMAS CONRAD TOKEN RING NOT RECOGNIZED IN SETUP

1.4.1311 THOMAS CONRAD TOKEN RING NOT RECOGNIZED IN SETUP

Record number: H133593

Device: D/T6571
 Model: M
 Tip key:
 Date created: 096/08/09
 Date last altered: A96/08/09

SYMPTOM:

Thomas Conrad 4145 ISA PnP Token Ring adapter is not recognized by the Thomas Conrad Setup Utility, Qset4145 v1.04, in a PC 300 Series 6571, 6573, 6581, or 6583 system.

PROBLEM ISOLATION AIDS:

The Thomas Conrad 4145 ISA PnP adapter is recognized by the adapters diagnostics programs and does connect and function on the network.

FIX:

Obtain the Thomas Conrad Setup Utility, Qset4145 v1.03, from the Compaq FTP site at the following Internet URL:

"<http://www.compaq.com>"

Choose the Service & Support area at the Compaq Home Page. From the Service & Support page, select the FTP Site File Library. Locate and download the file titled TOKQS3.EXE in the "<ftp://ftp.compaq.com/pub/softpaq/IPG/tcc/drivers/token-ring>" directory.

Thomas Conrad 4145 PnP Token Ring is a trademark of Thomas-Conrad, Inc.

SAS KEYWORDS:

PSVP	PSY2	PSVPOEM	PSY2OEM
PSVPADPT	PSY2ADPT	PC 330	IBMPC
PC 330	PC 350	D/T6573	D/T6581
D/T6583	45850	PSVPCOMM	PSY2COMM

1.4.1312 TOKEN RING & COM 2 CONFLICT IN PC 700

Record number: H132811

Device: D/T6887
 Model: M
 Tip key:
 Date created: 096/02/27
 Date last altered: A96/02/27

SYMPTOM:

The IBM Auto 16/4 Token Ring adapter may conflict with COM 2 IRQ 3 under Windows95.

PROBLEM ISOLATION AIDS:

The conflict is posted when using the Windows95 "Device Manager" to configure COM 2 while an IBM Auto 16/4 Token Ring adapter is installed.

FIX:

Remove the IBM Auto 16/4 Token Ring adapter from the system. Disable COM 2 using the Device Manager then re-install the Auto 16/4 Token Ring adapter. After the adapter has been installed COM 2 can be re-enabled using the Device Manager.

SAS KEYWORDS:

PSY2	D/T68XX	6887	6877
IBMPC	PSVP	PSVPCOMM	PSY2COMM
D/T6887	PSY2PROG	PSVPPROG	PSVPERR
PSY2ERR	PC750	PC700	PC 730
PC 750	PC730	PSVPADPT	PSY2ADPT
39891			

1.4.1313 TOKEN RING ERRORS W/SOUNDBLASTER-16 INSTALLED

Record number: H122902

Device: D/T6384
 Model: M
 Tip key:
 Date created: 094/02/25
 Date last altered: A95/05/16

SYMPTOM:

PS/ValuePoint systems (All Models) may experience system hang conditions or Token Ring initialization errors with an IBM Shared RAM Token Ring adapter and a Creative Labs SoundBlaster 16 adapter installed. IBM Shared RAM Token Ring Adapters include the:

IBM Token Ring Adapter - Long card (FRU P/N83X9147)
 IBM Token Ring Adapter II - Short 8 Bit Card (FRU P/N16F0463)
 IBM 16/4 Token Ring Adapter - Short 8 Bit Card (FRU P/N93F0334)
 IBM 16/4 ISA-16 Token Ring Adapter - (FRU P/N73G2048)

PROBLEM ISOLATION AIDS:

If the SoundBlaster 16 adapter is set to I/O base address "220" and the IBM Token Ring adapter is set for "primary," an I/O address conflict exists which may cause the Token Ring adapter to fail to initialize or cause the system to hang.

The I/O base address for the IBM Shared RAM Token Ring adapters as well as many OEM Token Ring Adapters is A20. This I/O address is hard coded and cannot be changed unless the Token Ring adapter is switched from "primary" to "secondary."

The SoundBlaster 16 adapter defaults to I/O base address 220.

When set at 220, the SoundBlaster 16 adapter will respond to I/O accesses intended for the Token Ring adapter. The result is an I/O conflict.

FIX:

Change the I/O base address of the SoundBlaster 16 card to something other than 220.

SAS KEYWORDS:

PSVP	PSY2	PSVPOEM	PSY2OEM
PSVPADPT	PSY2ADPT	SOUND BLASTER	ISA 16
D/T6381	D/T6382	D/T6387	6384
6381	6382	6387	VALUE POINT

1.4.1314 TOKEN RING, 5250 OR 3270 ADAPTER FAILS IN 6384

Record number: H20514

Device: D/T6384
 Model: M
 Tip key:
 Date created: 093/02/23
 Date last altered: A96/03/25

SYMPTOM:

A LIMITED NUMBER OF PS/VALUEPOINT 425SX, 433DX AND 466DX2 SYSTEMS MAY FAIL TO COMMUNICATE VIA A TOKEN RING, 5250 OR 3270 ADAPTER.

THE SYSTEMS AFFECTED ARE THE 6384 425SX (FXX MODELS), 433DX (MXX MODELS) AND THE 6384 466DX2 (W5X MODELS).

PROBLEM ISOLATION AIDS:

DIAGNOSTICS FOR THE TOKEN RING, 3270 AND 5250 ADAPTER WILL FAIL CONSISTENTLY WITH A DIAGNOSTIC ERROR OR A SYSTEM HANG DUE TO THE INABILITY OF THE CARD TO INITIALIZE DURING IPL. LAN AND EMULATOR SOFTWARE WILL FAIL TO LOAD PROPERLY AND POST AN ERROR MESSAGE OR CAUSE THE SYSTEM TO HANG. COMMUNICATIONS WITH THE HOST OR LAN WILL NOT BE ESTABLISHED.

THE SYSTEM BOARDS AFFECTED CAN BE IDENTIFIED BY THE FOLLOWING:

FRU P/N	BIOS P/N'S	PAL MODULE (LOC.U301)* (IN 425SX LOC. U206)*
52G8780 (433DX)	52G6928/52G6930	59-81109-01 KEN U301
OR		
52G8770 (466DX2)	52G6928/52G6930	59-81109-01 KEN U301
OR		
52G8752 (425SX)	52G6928/52G6930	32G1789 1990 IBM XXXXXXXXX A

SYSTEM BOARDS THAT DO NOT MATCH EACH OF THE ABOVE CRITERIA ARE NOT AFFECTED BY THIS PROBLEM.

***** I M P O R T A N T *****
 * SYSTEM BOARD FRU P/N'S 52G8770 & 52G8780 WITH BIOS MODULES*
 * LABELED WITH 52G6928/52G6930 AND THE FOLLOWING PAL MODULE *
 * IN LOCATION U301 ARE NOT AFFECTED. *
 * *
 * ----- *
 * | 59-81109-11 | *
 * | KEN U301 REV 2 | *
 * ----- *
 * *
 * SYSTEM BOARD FRU P/N'S 60G9711, 60G9712 AND 60G9713 ARE *
 * ALSO NOT AFFECTED BY THIS PROBLEM. THESE NEW BOARDS WILL *
 * CONTAIN BIOS P/N'S 52G6928/52G6930 OR HIGHER. *
 * *****

*NOTE - FROM THE FRONT OF THE SYSTEM UNIT, POSITION U301 IS LOCATED ON THE RIGHT EDGE OF THE SYSTEM BOARD, IN FRONT OF THE 486 MICRO-PROCESSOR LOCATED IN POSITION U300. U300 IS PICTURED IN THE SYSTEM BOARD LAYOUT SECTION OF THE PS/VALUEPOINT HMS/R DOCUMENT.

THE DASD TRAY/RISER SUPPORT BRACKET MUST BE REMOVED TO VIEW THE U301 POSITION.

ON 425SX SYSTEMS, THE PAL MODULE IS LOCATED IN POSITION U206. U206 IS A 24 PIN MODULE LOCATED NEXT TO THE 80487SX MATH COPROCESSOR SOCKET. PAL MODULES IN THIS POSITION WITH P/N52G6995 ARE NOT AFFECTED BY THIS PROBLEM. SYSTEMS WITH BIOS P/N'S 52G6434 & 52G6436 AND PAL MODULE 32G1789 ARE ALSO NOT AFFECTED.

FIX:

IF THE SYSTEM MEETS THE ABOVE CRITERIA, REPLACE THE SYSTEM BOARD. CURRENT INVENTORY OF THE SYSTEM BOARD CONTAIN AN UPDATED BIOS EEPROM THAT WILL ELIMINATE THE FAILURE.

IF THE SYSTEM IS FAILING WITH A TOKEN RING, 5250 OR 3270 ADAPTER AND DOES NOT MATCH THE CRITERIA IN THIS TIP, REFER TO TDR#

PSY2 RETAIN TIPS

TOKEN RING, 5250 OR 3270 ADAPTER FAILS IN 6384

H101998 AND TDR# H032967 FOR INFORMATION REGARDING THE
CONFIGURATION OF THESE ADAPTERS IN A VALUEPOINT SYSTEM. IF
THE PROBLEM PERSISTS, UTILIZE NORMAL PROBLEM DETERMINATION
PROCEDURES TO ISOLATE THE FAILING FRU.

SAS KEYWORDS:

PSVP	PSVPCOMM	PSVPERR	PSVPADPT
PSY2	PSY2COMM	PSY2ERR	PSY2ADPT
VALUE POINT	VALUEPOINT	P/N52G8780	P/N52G8770
P/N52G8752			

1.4.1315 TOKEN-RING LAN ERROR DURING OS/2 BOOT

Record number: H102545

Device: D/T8550
 Model: M
 Tip key:
 Date created: 092/09/18
 Date last altered: A92/09/23

SYMPTOM:

After an Automatic Configuration, the following error is displayed when booting OS/2:

"ACS0503: A LAN ERROR OCCURRED. FOR ADDITIONAL INFORMATION, ACCESS THE ACSLAN.LOG FILE. PRESS ANY KEY TO CONTINUE."

An additional error message appears:

"LAN ADAPTER 00 CANNOT BE OPENED;... INSUFFICIENT RECEIVE BUFFER SPACE."

DETAILS:

This problem will occur under the following conditions:

- The system has been configured with Automatic Configuration.
 ** and **
- The system is running OS/2 version 1.X, or is running OS/2 version 2.X with LAN configuration files migrated from version 1.X.
 ** and **
- The LAN software is set up with a requirement for more than a total 8K buffer space.

CAUSE:

The current automatic configuration algorithm will always select the adapter configuration address option that occupies the smallest amount of space in the "adapter ROM area." Depending on the software set-up options and application, this may not be adequate. These address options are the same choices displayed during the manual "Change Configuration" function.

This will set the Token-Ring adapter at the 8K RAM selection.

PROBLEM ISOLATION AIDS: NONE**FIX:**

1. Use the Reference Diskette (or system partition) "View Configuration, Change Configuration" function, to manually configure the token ring RAM buffer to 16K or greater. (16K is recommended)
 *** OR ***
2. Alter the LAN adapter configuration file to reduce the total size of adapter buffers required to less than 8K.

SAS KEYWORDS:

PSY2	PS2	PS/2	D/T8595
D/T8590	D/T8580	D/T8570	D/T8565
D/T8560	D/T8555	PSY2ADPT	PSY2COMM
D/T8556	D/T8557	D/T8576	D/T8575
D/T8596	D/T8597	D/T9554	D/T9557
D/T9576	D/T9577	D/T9585	D/T9595
PSY2ERR	D/T95XX		

TRACKPOINT II KEYBOARD CANNOT BE ON SERIAL PORT

1.4.1316 TRACKPOINT II KEYBOARD CANNOT BE ON SERIAL PORT

Record number: H126242

Device: D/T8550
 Model: M
 Tip key:
 Date created: O95/01/31
 Date last altered: A96/09/12

SYMPTOM:

If the pointer connector of the Trackpoint II Keyboard is connected to the serial port (using a mini-DIN to serial-port conversion device), the pointer function of the keyboard may not function. System board damage may also result.

PROBLEM ISOLATION AIDS:

The TrackPoint II keyboards can only be attached to systems which have a PS-style mouse port.

OBI Option P/N's:

p/n92G7458 - Quiet Touch Keyboard w/TrackPoint II
 p/n92G7461 - 101-Key Enhanced Keyboard w/TrackPoint II
 p/n13H6710 - 101-Key Enhanced Keyboard w/TrackPoint II (Black)

These keyboards may be installed on IBM and non-IBM systems. If the pointer connector has been attached to the serial port, the system board could be damaged. This may require problem determination to be performed on a known-good system, with the pointer connector attached via the prescribed PS-style mouse port.

FIX:

The TrackPoint II keyboards should NOT be attached to computers which don't have a PS-style mouse port.

The TrackPoint II interface and serial ports are not compatible. The TrackPoint II pointing device can only be attached via a PS-style mouse port.

The connector requirements for these keyboards are identified in marketing and user documentation.

SAS KEYWORDS:

PSY2	PSY2KBD	MOUSE	TRACK
OEM	PSVP	COMM	PC
D/T8525	D/T8530	D/T8535	D/T8540
D/T8543	D/T8551	D/T8554	D/T8550
D/T8555	D/T8556	D/T8557	D/T8573
D/T8560	D/T8565	D/T8570	D/T9576
D/T8580	D/T8590	D/T8595	D/T9585
D/T9577	D/T9556	D/T9557	D/T9595
D/T9577I	D/T9577S	D/T9576I	D/T9577S
D/T6384	D/T6381	D/T6382	D/T6387
D/T9590	D/T9595A	D/T9533	D/T2603
D/T2614	D/T2615	D/T2618	D/T9552
D/T9545	D/T2521	D/T2604	D/T6472
D/T6482	D/T6492	D/T6494	D/T6571
D/T6573	D/T6581	D/T6583	D/T6875
D/T6876	D/T6885	D/T6586	D/T6585
D/T6585	D/T8640	D/T8641	D/T2610
D/T2619	D/T2620	D/T8600	IBMPC

1.4.1317 TRAP ERRORS WITH IBM ISA ATM ADAPTER IN PC 365

Record number: H134036

Device: D/T6589
Model: M
Tip key:
Date created: 096/09/18
Date last altered: A96/09/18

SYMPTOM:

IBM PC 365 Series 6589 systems may exhibit various software related Trap errors in OS/2 while using an IBM ISA ATM 25 Network adapter.

PROBLEM ISOLATION AIDS:

Trap 0003 is the most common trap error exhibited by the system when using the ISA ATM adapter.

PCI versions of the IBM ATM adapters do not exhibit trap errors.

No failures have been reported using the ISA ATM 25 adapter with other operating systems.

FIX:

The combination of the IBM ISA ATM 25 Network adapter and the OS/2 device drivers is incompatible with the PC 365 Series 6589.

Customers experiencing failures with the adapter should be directed back to their point of purchase.

SAS KEYWORDS:

PSY2	PSVP	IBMPC	PSVPADPT
PSY2ADPT	PSVPCOMM	PSY2COMM	PSY2ERR
PSVPERR	51366	PC365	

TRAP 0 ERRORS ON 8590 OR 8595 WITH 50 MHZ PROCESSORS

1.4.1318 TRAP 0 ERRORS ON 8590 OR 8595 WITH 50 MHZ PROCESSORS

Record number: H096638

Device: D/T8590
 Model: M
 Tip key:
 Date created: 092/02/13
 Date last altered: A93/12/03

SYMPTOM:

TRAP 0 (0000) ERRORS MAY OCCUR ON PS/2 8590 & 8595 SYSTEMS WITH 80486/50MHZ PROCESSOR BOARDS WHEN RUNNING OS/2 VERSION 1.3.

THIS SITUATION IS CAUSED BY TIMING DEPENDENT CODE IN THE OS/2 DEVICE DRIVER (DASEDDO2.SYS). THE SOFTWARE TRIES TO DETERMINE THE SPEED OF THE SYSTEM BY EXECUTING A COMMAND, THEN SUBTRACTING THE TIME OF THE START OF THE COMMAND, FROM THE TIME OF THE END OF COMMAND. THE RESULT IS THEN USED AS A DIVISOR. THE 50MHZ PROCESSOR SPEED IS SO FAST, THE DIVISOR MAY BE ZERO! A DIVIDE BY ZERO IS INVALID AND CAUSES A TRAP 0 ERROR.

THIS IS NOT A HARDWARE FAILURE. FRU REPLACEMENT IS UNNECESSARY IF DIAGNOSTICS RUN ERROR FREE.

NOTE:

IF POSITIVE IDENTIFICATION OF THE PROCESSOR IS REQUIRED, THE 80486/50MHZ PROCESSOR BOARD FRU IS P/N92F0048.

PROBLEM ISOLATION AIDS:

IF THE SYSTEM WILL BOOT OS/2, SELECT OS/2 FULL SCREEN MODE, THEN TYPE "SYSLEVEL" AT THE OS/2 PROMPT. IF THE CSD NUMBER DISPLAYED IS LESS THAN 05050, THEN CSD 05050 OR HIGHER IS NEEDED.

FIX:

THE CUSTOMER SHOULD BE DIRECTED TO CONTACT OS/2 SUPPORT AT 1 - 800-992 - 4777. OS/2 CORRECTIVE SERVICES DISKETTE (CSD) 05050 OR HIGHER WILL CORRECT THIS CONDITION.

SAS KEYWORDS:

PSY2	PSY2PROG	PSY2ERR	D/T8595
D/T8590	8590SYSPROG	8590SYSERR	8595SYSERR
8595SYSPROG	PS2		

1.4.1319 TRAP 000D W/TOKEN RING 16/4 ADAPTER II

Record number: H13734

Device: D/T6885
 Model: M
 Tip key:
 Date created: 095/09/06
 Date last altered: A95/09/06

SYMPTOM:

IBM PC 300 and 700 Series systems may exhibit a Trap 000D error with OS/2 2.X or WARP, an IBM Token Ring 16/4 Adapter II card, and a tape backup device installed.

PROBLEM ISOLATION AIDS:

Trap 000D errors may be seen during normal operation with either of the following configurations:

- A single Token Ring 16/4 Adapter II card and a tape drive, during a backup operation.
- Multiple Token Ring 16/4 Adapter II cards and a tape drive, during a backup operation.
- Multiple Token Ring 16/4 Adapter II cards under normal network operations.

Reduce the number of Token Ring 16/4 Adapter II cards installed to one AND/OR remove the tape backup device and retest. If the Trap 000D error reoccurs with only Token Ring 16/4 Adapter II installed, contact OS/2 Software Support.

If the failures do not occur with only one Token Ring 16/4 Adapter II card installed, this tip may apply.

FIX:

The failure is caused by error handling routine in the "IBM16TR.OS2" Token Ring driver, version 3.00.00.

Obtain the "IBM16TR.OS2" Token Ring driver version 3.1 from the IBM PC Company BBS system by calling 1-919-517-0001. Locate the Network Support Files (section 32) for the file titled "TRI1642.ZIP." This file contains a README file with driver installation instructions.

The new driver may also be downloaded via the Internet from from the IBM Personal Computer File Library by searching the following Internet URL:

<http://www.pc.ibm.com/files.html>

The driver is located in the Network Support Files section or by using the search facility to locate "TRI1642.ZIP."

IBM internal users may download the driver from the LANPROD disk.

SAS KEYWORDS:

PSVP	PSY2	PSVPPART	IBMPC
PSY2PART	PSVPERR	PSY2ERR	TRAP 00D
PSVPADPT	PSY2ADPT	PSVPCOMM	PSY2COMM
D/T6571	D/T6573	D/T6581	D/T6583
D/T6575	D/T6585	D/T6576	D/T6586
D/T6875	D/T6876	D/T6886	TRAP000D
PC 300	PC 700	PC300	PC700
PC 330	PC 350	PC 730	PC 750
D/T65XX	D/T68XX		

1.4.1320 TRAP 000E & L2 CACHE ERRORS AFTER INTELDX4 UPGRADE

Record number: H132895

Device: D/T9576
 Model: M
 Tip key:
 Date created: 096/03/05
 Date last altered: A96/03/05

SYMPTOM:

IBM PS/2 9576/77 i/s models that have been upgraded with an IntelDX4 486 100Mhz Processor Upgrade or an IntelDX4 OverDrive Processor Upgrade (DX40DPR100) may exhibit the following error symptoms:

- Intermittent Trap 000E Errors under OS/2
 - L2 Cache diagnostics errors
- Message states "L2 Cache installed not supported."

PROBLEM ISOLATION AIDS:

A standard IntelDX4 486 Processor Upgrade requires a separate voltage regulator to step down 5v DC to 3.3v DC. The Intel OverDrive Processor has a built-in voltage regulator.

FIX:

If the system is experiencing intermittent Trap 000E errors, remove the IntelDX4 Upgrade or OverDrive Processor and re-install the original processor. If errors persist, this tip does not apply. If the errors do not reoccur, replace the IntelDX4 Processor Upgrade or IntelDX4 OverDrive Processor.

IBM does not market the IntelDX4 OverDrive processor upgrades. The customer should contact their point of purchase or Intel for additional assistance.

Replacements for the IBM upgrade Option (Standard IntelDX4 Processor Upgrade requiring a voltage regulator) are available through normal IBM parts distribution processes using the FRU numbers published in the HMM.

For systems experiencing L2 Cache failures during diagnostics, obtain the current level PS/2 9576/77 Reference Diskette. Earlier versions of the Reference Diskette did not contain the code necessary to identify the ID of the IntelDX4 Processor Upgrade or the IntelDX4 OverDrive Processor upgrade.

The updated 9576/77 Reference Diskette titled "7677DIAG.DSK" may be downloaded from the IBM PC Company Bulletin Board service at 919-517-0001. The file is located in section 27 under "Reference and Adapter Diskettes."

The PS/2 9576/77 Reference Diskette may also be downloaded via the Internet from the IBM Personal Computer File Library by searching the following Internet URL:

<http://www.pc.ibm.com/files.html>

OverDrive and IntelDX4 are trademarks of the Intel Corporation.

SAS KEYWORDS:

PSY2	IBMPC	PSY2ADPT	PSY2OEM
PSY2PART	D/T9577	9577	9576
PSY2DIAG			

1.4.1321 TRAP 000E ERRORS USING IBM FAST SCSI-2 PCI CARD

Record number: H13357

Device: D/T6885
 Model: M
 Tip key:
 Date created: 095/06/29
 Date last altered: A95/10/27

SYMPTOM:

The IBM PC 300 and 700 Series systems may experience Trap 000E errors while running OS/2 WARP V3.0 from a SCSI hardfile attached to an IBM Fast SCSI-2 PCI Adapter card.

PROBLEM ISOLATION AIDS:

Trap 000E errors occur after opening multiple applications under OS/2 WARP.

The following entry is found in the CONFIG.SYS statement:
 "BASEDEV=IBMPSCSI.ADD"

FIX:

The IBM Fast SCSI-2 PCI Adapter (made for IBM by Future Domain) has no compatible drivers for the IBM PC 300 or 700 Series systems. This adapter and the drivers were developed for IBM PCI/Microchannel Servers.

The IBM Fast SCSI-2 PCI Adapter is not supported in the IBM PC 300 and 700 Series systems, however, customers already using this configuration and experiencing the symptom stated above should edit the CONFIG.SYS in the following manner to eliminate the Trap 000E errors:

Remove "BASEDEV=IBMPSCSI.ADD"
 Add "BASEDEV=IBMINT13.I13" (Located in the \OS2 directory)

The customer should be advised that the "IBMINT13.I13" driver cannot utilize all of the features of the adapter. For example, A SCSI CDROM drive will not function.

If failures persists, continue normal problem determination procedures to isolate the failing application or FRU.

SAS KEYWORDS:

IBMPC	PSY2	PSVP	6885
6875	D/T6885	D/T6571	D/T6573
D/T6581	D/T6583	D/T6575	D/T6585
D/T6576	D/T6586	D/T68XX	D/T65XX
6571	6573	6581	6583
6575	6585	6576	6586
PSVPPART	PSY2PART	PSVPERR	PSY2ERR
68XX	65XX	PSVPFDSK	PSY2FDSK
PSVPADPT	PSY2ADPT	OS2	P/N92G3100
P/N06H5250			

1.4.1322 TRAP 000E OR XMS MEMORY ERRORS ON 6875/6885

Record number: H126344

Device: D/T6875
Model: M
Tip key:
Date created: 095/02/08
Date last altered: A95/05/03

SYMPTOM:

IBM PC 700 Series systems, 6875 and 6885, may exhibit Trap 000E errors with OS/2 2.X or OS/2 WARP;

-- OR --

The system will display an error message stating "Unreliable XMS memory at location XXXXXXXX" (X=any character) or HIMEM.SYS errors using MS DOS.

-- OR --

Failures when attempting to install WindowsNT from either Diskettes or CDROM. The installation will not complete.

PROBLEM ISOLATION AIDS:

Only system board FRU P/N88G4270 with 256Kb cache manufactured by IDT for IBM installed in positions U31, U32 and U34 is affected. IDT brand cache in the remainder of the cache locations are not affected. The 1Mb Cache upgrade is not affected.

Below is the serial number range of the systems known to have been manufactured with IDT brand cache in all 8 cache sockets. There may be a limited number of systems with IDT brand cache installed that do not appear in the list below. All PC 700 series systems manufactured after February 17, 1995 will have Alliance or Micron cache installed in positions U31, U32 & U34.

- IBM PC 730 6875-44G 23FCZ01 - 23FCZ71
IBM PC 730 6875-44G 23FDA31 - 23FDA80
IBM PC 730 6875-44G 23FDB48 - 23FDD99
IBM PC 730 6875-44G 23FDF01 - 23FDG32
IBM PC 750 6885-45J 23PBN01 - 23PBN95
IBM PC 750 6885-45J 23PBP01 - 23PBP95
IBM PC 750 6885-45J 23PBR00 - 23PBR99
IBM PC 750 6885-45J 23PBT00 - 23PBT99
IBM PC 750 6885-45J 23PBV00 - 23PBV37

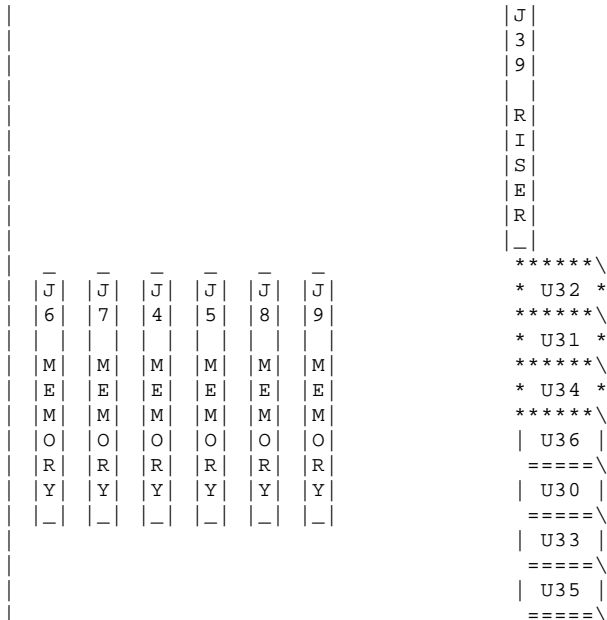
Advanced diagnostics run without errors.

The "Unreliable XMS" and HIMEM.SYS memory errors do NOT occur using IBM PC DOS 6.X.

This failure also does NOT occur if the HIMEM.SYS file from IBM PC DOS 6.X is copied to hardfile and executed through the CONFIG.SYS file rather than the MS DOS HIMEM.SYS file.

FIX:

If the cache modules in locations U31, U32 and U34 are IDT brand cache (the IDT logo is written on the module), see ECA 002 for the 6875 and 6885. The ECA provides replacement modules for U31, U32 and U34 using FRU P/N06H8004.



PSY2 RETAIN TIPS

TRAP 000E OR XMS MEMORY ERRORS ON 6875/6885

U28

If the failure persists, utilize normal problem determination procedures to isolate the failing application or FRU.

SAS KEYWORDS:

PSVP	PSY2	PSVPPART	IBMPC
PSY2PART	PSVPERR	PSY2ERR	TRAP 00E
PSVPMEM	PSY2MEM	PSVPBRD	PSY2BRD
D/T6875	D/T6885	PC700	PC 730
PC 750	LEVEL 2	TRAP E	D/T68XX
TRAP	TRAP000E		

1.4.1323 TRAP 000E OR XMS MEMORY ERRORS ON 6576/6586

Record number: H13626

Device: D/T6576
 Model: M
 Tip key:
 Date created: 095/08/28
 Date last altered: A96/10/31

SYMPTOM:

IBM PC 300 Series systems, 6576 and 6586 with a 90Mhz Intel Pentium Processor installed (4XX models only) may exhibit Trap 000E errors with OS/2 2.X or OS/2 WARP

-- OR --

The system will display an error message stating "Unreliable XMS memory at location XXXXXXX" (X=any character) or HIMEM.SYS errors using MS DOS

-- OR --

Failures when attempting to install WindowsNT from either Diskettes or CDROM. The installation will not complete.

PROBLEM ISOLATION AIDS:

Disable the 256Kb Level 2 Cache via the Setup Utility and retest the system.

Advanced diagnostics run without errors.

The "Unreliable XMS" and HIMEM.SYS memory errors do NOT occur using IBM PC DOS 6.X or 7.X.

This failure also does NOT occur if the HIMEM.SYS file from IBM PC DOS 6.X is copied to hardfile and executed through the CONFIG.SYS file rather than the MS DOS HIMEM.SYS file.

FIX:

If the system does not exhibit the failure symptom(s) with the cache Disabled, replace the cache with FRU P/N06H6052.

If the failure persists, utilize normal problem determination procedures to isolate the failing application or FRU.

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SAS KEYWORDS:

PSVP	PSY2	PSVPPART	IBMPC
PSY2PART	PSVPERR	PSY2ERR	TRAP 00E
PSVPMEM	PSY2MEM	PSVPBRD	PSY2BRD
D/T6586	D/T65XX	PC300	PC 330
PC 350	LEVEL 2	TRAP E	D/T68XX
TRAP	TRAP000E		

1.4.1324 TRAP 000E USING 12X CDROM IN 6899

Record number: H136894

Device: D/T6899
Model: M
Tip key:
Date created: 097/03/18
Date last altered: A97/03/18

SYMPTOM:

IBM IntelliStation Z Pro 6899 systems with OS/2 WARP 3.x or OS/2 WARP Connect 3.x may exhibit a Trap 000E error during a diskette write operation with a 12x IDE CDROM drive installed.

PROBLEM ISOLATION AIDS:

When performing a diskette write operation, the CDROM drive light remains on for an extended length of time before the actual diskette write.

Unplugging the CDROM drive and rebooting the system will eliminate the Trap 000E during a diskette write.

FIX:

Obtain and install OS/2 WARP 3.x FixPak 22 or higher.

Contact IBM PSP Support at 1-800-237-5511 and request the latest Fix Pak for OS/2 WARP 3.x and OS/2 WARP Connect 3.x.

The latest Fix Pak for OS/2 WARP may also be obtained via the Internet at the following URL: <http://ps.software.ibm.com/>

SAS KEYWORDS:

PSVP	PSY2	PSVPPROG	PSY2PROG
PSVPERR	PSY2ERR	PWS	IBMPC
UNCLASSIFIED	HUNG	LOCKUP	59402
TRAP 00E	TRAP E		

1.4.1325 TRAP 000E/0002 ERRORS W/4MB PARITY MEMORY SIMM

Record number: H13735

Device: D/T6484
 Model: M
 Tip key:
 Date created: 095/09/06
 Date last altered: A95/09/06

SYMPTOM:

PS/ValuePoint Performance Series systems (6472, 6482, 6484, 6492 and 6494) with a 4Mb parity memory SIMM installed, may exhibit Trap 000E and Trap 0002 errors running OS/2

PROBLEM ISOLATION AIDS:

PS/ValuePoint Performance Series systems with a combination of memory that includes a 4Mb parity memory SIMM, FRU P/N73G3233, may exhibit trap 000E or trap 0002 errors with OS/2 2.x or OS/2 WARP 3.0.

Other operating systems may display memory related errors with this configuration of memory such as parity errors.

The combination of memory may include all 4Mb SIMMs or a mixture of 4Mb, 8Mb, 16Mb or 32Mb SIMM.

Remove the 4Mb SIMM(s) and retest the system. If the trap errors do NOT reoccur, this tip applies. If the trap errors continue with the 4Mb SIMM(s) removed, this tip does not apply.

FIX:

If the trap errors do NOT occur with the 4Mb parity SIMM removed, replace SIMM FRU P/N73G3233.

If the failure persists, continue normal problem determination to isolate the failing FRU or application.

SAS KEYWORDS:

VALUE POINT	PSY2	PSVP	6484
6482	6472	D/T6482	D/T6472
6492	6494	D/T6492	D/T6494
D/T64XX	IBMPC	TRAP002	TRAP00E
TRAP 002	TRAP 00E	PSVPMEM	PSY2MEM
PSVPPART	PSY2PART	PSVERR	PSY2ERR

1.4.1326 TRAP 0002 ERRORS WITH P/N92G7521 MEMORY

Record number: H007519

Device: D/T6384
 Model: M
 Tip key:
 Date created: 095/02/01
 Date last altered: A95/08/28

SYMPTOM:

PS/ValuePoint 6384 P60/D and Server 300 (8640) systems may exhibit Trap 0002 (NMI errors) when a combination of FRU P/N73G3234 (8MB Simm) and FRU P/N92G7521 (8MB Simm) are installed in a system.

PROBLEM ISOLATION AIDS:

Trap 0002 errors do not occur if P/N73G3234 is the only P/N memory simm installed.

Trap 0002 errors are displayed after opening multiple sessions in OS/2.

Advanced diagnostics run without errors.

The 8MB simm FRU P/N92G7521 is made up of several manufacturers memory products. This is done to meet the demand for FRU replacements.

The trap 0002 errors may be caused by one manufacturer of FRU P/N92G7521 used in combination with FRU P/N73G3234. The affected memory simm is IBM Manufacturing P/N05H0910 and contains a label stating "Made in Japan," and is manufactured by Hitachi. The option part number is: 92G7520

FIX:

Other brands of memory which are used to build FRU P/N92G7521 are not affected.

FRU P/N73G3234 is the only 8mb memory simm that should be installed in the 6384 P60/D or SERVER 300 systems as a replacement part. The memory simm mentioned above (P/N05H0910) is NOT used in the production of FRU P/N73G3234.

If trap 0002 errors continue after eliminating the combination of P/N73G3234 and P/N92G7521 (Hitachi simm ONLY), utilize normal problem determination procedures to isolate the failing application or FRU.

SAS KEYWORDS:

PSVP	PSY2	PSVPPART	PSY2PART
PSVPPROG	PSY2PROG	PSVPERR	PSY2ERR
PENTIUM	VALUE POINT	TRAP 002	D/T8640
SERVER	300	PSY2MEM	PSVPMEM

1.4.1328 TRAP 0002 W/MPCA AND OS/2 COMM MGR.

Record number: H126574

Device: D/T95XX
 Model: M
 Tip key:
 Date created: 095/03/02
 Date last altered: A95/03/02

SYMPTOM:

Intermittent OS/2 Trap 0002 errors while running OS/2 Communications Manager with an MPCA (Multiprotocol Adapter).

Affected systems: Any MicroChannel machine

The frequency of failure may increase after OS/2 is upgraded to version 2.11.

PROBLEM ISOLATION AIDS:

At the OS/2 prompt, use the "SYSLEVEL" command and note the version and level of the Communication Manager.

This problem has been linked to OS/2 Communication Manager version 1.1.

FIX:

This problem has been addressed by APAR JR08347. If this problem is being experienced, customers should contact OS/2 software support and reference the above APAR.

SAS KEYWORDS:

PSY2	PSY2PROG	2	02
ARBITRATION	PSY2ERR	RAID	SERVER
PC	DMA	TIMEOUT	TRAP 02
TRAP 2	PSY2COMM	PSY2ADPT	D/T8555
D/T8556	D/T8557	D/T8573	D/T8560
D/T8565	D/T8570	D/T9576	D/T8580
D/T8590	D/T8595	D/T9585	D/T9577
D/T9556	D/T9557	D/T9595	D/T9577I
D/T9577S	D/T9576I	D/T9577S	D/T9590
D/T9595A	D/T8550		

PSY2 RETAIN TIPS
TRAP 2 ERROR DURING POST

1.4.1329 TRAP 2 ERROR DURING POST

Record number: H121399

Device: D/T8600
Model: M
Tip key:
Date created: 093/09/30
Date last altered: A94/08/15

SYMPTOM:

A Trap 0002 (TRAP 2) error message is displayed during POST (Power-On System Test).

Note: If the system booted successfully (completed POST), THIS TIP DOES NOT APPLY.

PROBLEM ISOLATION AIDS:

Verify:

- a. the trap 2 error occurs during POST.
- b. the system has a full backplane.
- c. the IDC board level is 27, or lower.

If all the above are true, replace the IDC boards, ensuring they are at revision 28 or higher.

FIX:

Order FRU P/N92F0188, which will provide a current level IDC board (at version 28 or higher).

SAS KEYWORDS:

PSY2	295	PARALLAN	195
PSY2PWR	SERVER		

TRIPLE PCI LANSTREAMER FAILS NETWARE CLIENT LOGIN

1.4.1330 TRIPLE PCI LANSTREAMER FAILS NETWARE CLIENT LOGIN

Record number: H161135

Device: D/T8641
Model: M
Tip key:
Date created: 097/09/04
Date last altered: A97/09/17

SYMPTOM:

NetWare clients may not be able to login to the Server or may experience data miscompares under heavy LAN loads.

PROBLEM ISOLATION AIDS:

All of the following must be true for this Tip to apply:

- The System is a PC Server 520 type 8641-Mxx (Micro Channel).
- The Triple PCI LANStreamer FRU# p/n25H6305 is configured as the Primary LAN Adapter in the Server.
- The PCI ServeRaid Adapter FRU# p/n76H6875 or p/n06H9334 is configured in the server.
- The server is running Novell NetWare 4.0 , 4.01 , 4.1 , 4.11

FIX:

- 1 - Obtain the latest LAN driver and associated NetWare loadable modules (.NLM) from the IBM BBS/WEB (download TRPTLS2.EXE). Create the diskette from the image file located on the IBM BBS (919 - 517-0001) or the IBM WEB site (WWW.US.PC.IBM.COM). The file is a self-extracting executable file. Upon creating the diskette, the LAN driver and NLM's will be located in the a: \novell\netware directory.
- 2 - Apply the latest LAN drivers and associated NLM's as described in steps 4-6 located on pages 19-20 of the Triple PCI LANStreamer manual p/n25H6321.
- 3 - Down, Exit, and restart the server.

Note: For NetWare 4.11, apply ONLY the latest LAN driver.

NetWare, NetWare Client, and NLM are trademarks of Novell, Inc.

SAS KEYWORDS:

PSY2	PSY2COMM	UNCLASSIFIED	25H6305
76H6875	06H9334	NIC	

1.4.1331 TR4 TAPE DRIVE INSTALLATION IN PC SERVER 330

Record number: H137377

Device: D/T8640
Model: M
Tip key:
Date created: 097/04/11
Date last altered: A97/04/11

SYMPTOM:

The IBM TR4 Tape Drive FRU p/n06H9721 (Option p/n06H9716) fails during a backup or does not function at all.

PROBLEM ISOLATION AIDS:

The TR4 tape drive is installed in bay 2 on the PC Server 330 (8640-Exx).

FIX:

Move the TR4 tape drive to the bottom 3.5 inch bay 3 or move it to any available 5.25 inch bay (non-Hot-swap systems).

The tape drive will not work properly in bay 2 due to pulleys on top of the tape drive which may rub against the metal RF interference shield located between bays 1 and 2. This shield should not be removed.

SAS KEYWORDS:

PSY2

PSY2TAPE

UNCLASSIFIED

PSY2PART

1.4.1332 UNABLE TO EDIT DICTIONARY OR VIEW HELP IN MONOLOGUE

Record number: H133216

Device: D/T6877
 Model: M
 Tip key:
 Date created: 096/03/25
 Date last altered: A96/03/27

SYMPTOM:

IBM PC 700 Series 6877 and 6887 systems preloaded with Microsoft Windows95 and the Monologue application may not allow the user to key data into the Edit Dictionary function of Monologue.

Some Help functions are disabled in Monologue.

PROBLEM ISOLATION AIDS:

This failure occurs when the user enters Dictionary Edit mode in Monologue with the intention of altering the content. The user will be unable to enter data.

The "Speaking Through DDE/Example: AmiPro for Windows" and "Open Dictionary File" Help functions are not accessible in Monologue.

FIX:

An updated version of the Monologue application is being developed to eliminate this problem. The new release will be made available from the IBM PC Company BBS system. This tip will be updated with the availability date and any additional information as soon as it becomes available.

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SAS KEYWORDS:

PSY2	D/T68XX	6887	6877
IBMPC	PSVP	PSY2PROG	PSVPPROG
D/T6887	PC750	PC700	PC 730
PC 750	PC730	42935	PSY2OPER
PSVPOPER	PSVPERR	PSY2ERR	PSY2TBD
42936			

1.4.1333 UNABLE TO INSTALL SVGA SUPPORT UNDER WINDOWS NT 3.51

Record number: H022744

Device: D/T8641
 Model: M
 Tip key:
 Date created: 096/02/13
 Date last altered: A96/04/02

SYMPTOM:

After installing SVGA support, the user receives a "Driver successfully installed," message. After restarting the system, the user receives a message indicating the default (VGA) video device driver has been installed.

PROBLEM ISOLATION AIDS:

The following micro channel systems with Cirrus logic video are affected:

Server 320 (8640-Mxx)
 Server 500 (8641)
 Server 520 (8641-MXX),
 Server 720 (8642).

FIX:

A temporary fix is available from the PC Company Bulletin Board system named NT351FIX.DSK. This is a "hidden" file on the BBS and can not be seen or downloaded without assistance. The file may be obtained by calling the PC HelpCenter, 1 - 800-772 - 2227 and requesting assistance in downloading it.

A permanent fix will be available from Microsoft and/or Cirrus Logic in a fix pak or new release of WindowsNT.

In addition to the IBM Bulletin Board above, customers and dealers in Canada may download the files from any of the following regional IBM Canada bulletin board numbers:

Vancouver: (604) 664-6464
 Montreal: (514) 938-3022
 Markham/Toronto: (905) 316-4255

----- IMPORTANT -----

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| THE UPDATES ARE CUSTOMER INSTALLABLE. CUSTOMERS SHOULD |
| BE ADVISED TO CONTACT THE PC COMPANY HELPCENTER AT |
| 800-772 - 2227 IF ASSISTANCE IS REQUIRED IN GETTING OR |
| INSTALLING THE APPROPRIATE UPDATE. |
| IN CANADA THE HELPPC NUMBER IS 1-800-565-3344 |

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Windows NT is a trademark of Microsoft Inc.

SAS KEYWORDS:

PSY2	SERVER	320	500
520	720	8640	D/T8640
D/T8642	PSY2PROG	PSY2TBD	

UNABLE TO INSTALL WINDOWS NT 4.0 FROM CDROM BOOT

1.4.1334 UNABLE TO INSTALL WINDOWS NT 4.0 FROM CDROM BOOT

Record number: H161606

Device: D/T6898
 Model: M
 Tip key:
 Date created: 097/10/30
 Date last altered: A97/11/03

SYMPTOM:

After booting the system from the supplied WindowsNT 4.0 CD, the system stops and indicates that "the system does not have any hard disk drive" after selecting the "S" option to install vendor device drivers.

PROBLEM ISOLATION AIDS:

This tip applies to the IBM IntelliStation M-Pro, M/T6898, equipped with the Adaptec AIC-7895 SCSI controller. The condition is seen when the supplied WindowsNT CD is used to install WindowsNT on a new fixed disk drive, or to reinstall WindowsNT on a reformatted fixed disk drive.

The condition applies to the supplied WindowsNT 4.0 CD marked "For Distribution Only with a New PC" which is bootable.

FIX:

It is recommended that WindowsNT 4.0 be installed using the three WindowsNT 4.0 installation diskettes.

The installation diskettes can be created from the supplied WindowsNT 4.0 CD by entering the following command from the \I386 directory on the WindowsNT 4.0 CD:

"winnt/ox" (without quotations).

Windows and WindowsNT are trademarks of Microsoft Corporation.

SAS KEYWORDS:

PSY2	PSY2ERR	PSY2OPER	PSVP
PSVPERR	PSVOPER	D/T6898	6898
69967	UNCLASSIFIED		

1.4.1335 UNDETERMINED PROBLEM (SYSTEM DEAD)

Record number: H123427

Device: D/T8550
 Model: M
 Tip key: 198
 Date created: 094/04/05
 Date last altered: A95/06/15

Symptom:

Personal Computer System will not power up or powers down immediately after being turned on. The cooling fan may start to turn, and/or the power-good light may flicker then turn off. The power supply will not stay on long enough to allow voltage measurements.

Problem Determination:

- Systems with auto-switching power supplies should be plugged directly into a wall receptacle, not into a power strip or surge protector.
- Systems with switchable power supplies (115v/220v) must be set to the correct voltage setting.
- The following switches may be checked with meter to verify correct operation:
 - * Power switches that connect to the system board
 - * C-2 security (Cover Lock and Tamper-Evident) switches
 | (these two switches and related cables must be connected
 | and operating correctly before the system will power on)

Use the Undetermined Problem section of the HMM, and include the following items to the list of devices to be disconnected:

- * Battery
- * Internal and/or External Speaker
- * Power-good and Hardfile Activity LED's
- * Memory (system board, video and cache)
- * Cooling Fan
- * Riser Card or Buss Adaptor
- * Cables (display, serial, parallel, adapter and keyboard)

| When a power supply is cycled (switched off then switched on
 | or line voltage is interrupted) the voltages in the system are
 | allowed to drain to a near zero value. This resets controller
 | modules on the system board, option cards, drives and internal
 | devices to the necessary condition for a stable power-up
 | sequence. If an external device has been found to prevent the
 | system from powering up, then the device may be applying
 | voltage back to the system. If the device is operating
 | properly, then that device may have to be powered off prior to
 | the system unit being powered-on.
 | Some external devices known to cause this problem are modems,
 | printer switching devices, printers, ARTIC attachments, all
 | having a power source external to the PC.

SAS KEYWORDS:

PSVP	PSY2	PSY2ERR	PSVPERR
D/T8525	D/T8530	D/T8535	D/T8540
D/T8550	D/T8555	D/T8556	D/T8557
D/T8573	D/T8560	D/T8565	D/T8570
D/T9576	D/T8580	D/T8590	D/T8595
D/T9585	D/T9577	D/T9556	D/T9557
D/T9595	D/T9577I	D/T9577S	D/T9576I
D/T9577S	D/T9590	D/T9595A	D/T8641
D/T8642	D/T9533	D/T8640	SERIAL

UNINSTALL OF IBM PRODUCT REGISTRATION FAILS

1.4.1336 UNINSTALL OF IBM PRODUCT REGISTRATION FAILS

Record number: H137869

Device: D/T6588
Model: M
Tip key:
Date created: 097/05/23
Date last altered: A97/05/28

SYMPTOM:

The Uninstall Registration icon in the IBM Registration folder remains on the desktop following the uninstall of the IBM Product Registration application. This failure occurs on IBM PC 300 Series 6588 and Intellistation M Pro 6888 systems preloaded with Microsoft WindowsNT v4.0, Microsoft Windows95, and OS/2 WARP. Only the French and Polish language preloads are affected.

PROBLEM ISOLATION AIDS:

Only systems with a French preload of OS/2 WARP or WindowsNT are affected.

Only systems with a Polish preload of Windows95 are affected.

FIX:

To completely remove the IBM Registration application, perform the Uninstall Registration program and check for the presence of the "C: \IBM\REGISTER\IBM REGISTRATION" folder or directory. The remaining files must be deleted manually. The remaining icon and folder must also be deleted manually.

This problem will be resolved in future releases of the preloaded IBM Product Registration application.

Windows95 & WindowsNT are trademarks of the Microsoft Corporation.

SAS KEYWORDS:

PSY2	PSVP	IBMPC	PSVPPROG
PSY2PROG	PC 330	PC 350	62307
D/T6888	UNCLASSIFIED		

1.4.1337 UNRECOGNIZED FAST/WIDE SCSI-2 RAID DRIVE

Record number: H126512

Device: D/T9595
 Model: M
 Tip key:
 Date created: 095/02/01
 Date last altered: A96/05/07

SYMPTOM:

Intermittent "unrecognized drive" failures may occur on 9595 RAID Array systems due to a printed circuit trace on the 68 pin position connector card, mounted on the FAST/WIDE tray assembly FRU P/N71G0212, contacting the sheet metal structure.

This short circuit affects SCSI address line, Bit 3. In the normal condition, the drive would be addressed from SCSI ID=0 to SCSI ID=7. In the failing condition, the drive would become addressed SCSI ID=8 to SCSI ID=15.

The operator would probably see a POST error or a RAID configuration error due to an unrecognized drive, or both.

PROBLEM ISOLATION AIDS:

The following systems, manufactured prior to February, 1995 may contain affected Fast/Wide tray assemblies:

9595 RAID Array Systems (SERVER 95, Models 3NT, 3PT, 3QT)
 3516 OBI DASD Hot Swap Storage Expansion Enclosure

PARTS AFFECTED:

68 Pin Fast/Wide Tray Assembly ----- FRU P/N71G0212
 1GB SCSI-2 Fast/Wide Option ----- Option P/N 70G9743
 Hot Swap Fast/Wide Tray Option -----Option P/N 94G3346

Current manufacturing and FRU parts are not affected.

A small dot (dimple) will be stamped into the front of the sheet metal tray to designate that the part is at the current level.

Refer to Page 293 and 294, index 14, of the HMM (Hardware Maintenance Manual, S52G-9971-02, dated Oct. 1994, for visual reference of the affected FRU part.

FIX:

Replace suspected failing hot swap trays with the new version tray, FRU P/N06H7757 (includes tray and four(4) screws).

Orders for FRU P/N71G0212 will be automatically substituted to the new FRU part number.

SAS KEYWORDS:

PSY2	PSY2FDSK	RAID	9595A
SCSI	F/W	PCSERVER	SERVER
PC	D/T3516	D/T9595A	D/T8641
06H7757			

USB KEYBOARDS FAIL POWER-ON TEST IN PC DOCTOR

1.4.1338 USB KEYBOARDS FAIL POWER-ON TEST IN PC DOCTOR

Record number: H162604

Device: D/T6561
 Model: M
 Tip key:
 Date created: 098/02/02
 Date last altered: A98/02/02

SYMPTOM:

After booting the system to the PC Doctor for DOS diagnostics diskette, and starting the Keyboard Interface test, the keyboard power-on self test fails.

PROBLEM ISOLATION AIDS:

This tip applies, but is not limited to, the IBM PC300GL Machine Types 6561/6591 utilizing a USB keyboard.

FIX:

Perform the interactive keyboard test if a keyboard error is suspected.

An updated version of PC Doctor for DOS will be posted on the IBM BBS that corrects this condition when it becomes available.

Users can check for the updated version of PC Doctor for DOS by searching either the IBM BBS or PC Support web pages for "IBM Enhanced Diagnostics Diskette" for machine types 6561 and 6591.

PC Doctor is a trademark of Watergate Software.

SAS KEYWORDS:

PSY2	PSY2DIAG	PSY2ERR	PSY2KBD
PSY2OEM	PSVP	PSVPDIAG	PSVPERR
PSVPKBD	PSVPOEM	D/T6561	D/T6591
6561	6591	84927	UNCLASSIFIED

USING HELP FAILS IN NETFINITY SERVICE MANAGER

1.4.1339 USING HELP FAILS IN NETFINITY SERVICE MANAGER

Record number: H136885

Device: D/T6899
Model: M
Tip key:
Date created: 097/03/18
Date last altered: A97/03/18

SYMPTOM:

IBM IntelliStation Z Pro 6899 systems preloaded with Microsoft WindowsNT v4.0 or Windows95 may fail to display help text in the "Using Help" section of the Netfinity Service Manager Software Inventory application.

PROBLEM ISOLATION AIDS:

To recreate the problem, perform the following steps:

- 1) Click on Start, Programs, and Netfinity.
- 2) Click on Netfinity Service Manager.
- 3) Open the Software Inventory window.
- 4) Click on the Help Menu, then click on Using Help. The Using Help button does not function and there is no Help text displayed.

FIX:

The Using Help feature is not supported in the version of Netfinity that ships on the RTC CD with the 6899 system. This feature will be enabled in future releases of Netfinity.

WindowsNT is a trademark of the Microsoft Corporation.

Windows95 is a trademark of the Microsoft Corporation.

SAS KEYWORDS:

PSVP	PSY2	PSVPPROG	PSY2PROG
PSY2ERR	PWS	PSVPERR	IBMPC
UNCLASSIFIED	61546		

1.4.1340 VALUEPOINT "UNKNOWN FLASH ID" MESSAGE

Record number: H124008

Device: D/T6381
 Model: M
 Tip key:
 Date created: 094/05/06
 Date last altered: A94/05/19

SYMPTOM:

ValuePoint 6381 SX and DX systems may display the following message when attempting to install FLASH BIOS:

"UNKNOWN FLASH ID 55AA"
 "CHECK JUMPER 03"

PROBLEM ISOLATION AIDS:

Inspect the system board for the following jumper:

6381 SX J11
 6381 DX J10

If this jumper location is present, this TIP applies.

If this jumper location is not present, Flash Enable is always "ENABLED" and this TIP does not apply.

Error code information and installation instructions are on the Flash diskette in a file titled "README.FIL." To display the file, at an "A: " prompt key the following

"TYPE README.FIL | more"

FIX:

Move the Flash Enable jumper from pins 2 and 3 to pins 1 and 2 (rear 2 pins) and continue with flash installation per the instructions in "README.FIL."

If the 2 pin jumper is missing, order jumper FRU P/N93F0067 (2 position - 4 pack).

SAS KEYWORDS:

PSY2	6381	PSVP	VALUE POINT
PS/VALUEPOINT	PS/VP	PSY2BRD	PSVPBRD
PSY2ERR	PSVPERR	PSY2MCD	PSVPMCD

1.4.1341 VALUEPOINT ADVANCED DIAGS 189 ERROR W/80486 DX4

Record number: H127592

Device: D/T6384
 Model: M
 Tip key:
 Date created: 095/05/17
 Date last altered: A95/05/17

SYMPTOM:

After installing an Intel 80486 DX4 Overdrive micro-processor in a ValuePoint 6382/S, 6384/D, or 6387/T, the following messages are observed.

- 1) Advanced Diagnostics returns a 189 error when running system board tests.
- 2) The System Configuration Utility detects the internal cache size as 8kb instead of 16kb.

PROBLEM ISOLATION AIDS: None**FIX:**

The system Configuration Utility and Advanced Diagnostics do not support internal cache sizes greater than 8kb, therefore the above responses should not be considered as indications of a defect.

The IBM Personal Computer Company has not tested Intel DX4 processors in these models. If functional problems are exhibited remove the DX4 and install the original SX, DX or DX2. If the problems do not occur with the original processor installed, refer the customer to the point of purchase of the DX4 or Intel technical support. If the problems can be reproduced with an SX, DX, or DX2 installed, continue with normal problem determination.

Note: Insure the two processor upgrade jumpers are installed on the correct pins for for the type processor installed.
 Jumper information is available in the Installing Options booklet provided with each system and tip H124005.
 Intel is a Trademark of Intel Corporation.

SAS KEYWORDS:

PSY2	PS/VALUEPOINT	PS/VP	PSVP
D/T6382	D/T6387	6382	6384
6387	PSY2BRD	PSVPBRD	PSY2BRD
PSVPERR	PSY2ERR	PSY2NLGO	PSVPNLGO

1.4.1342 VALUEPOINT DATE AND TIME CHANGES

Record number: H124016

Device: D/T6384
 Model: M
 Tip key:
 Date created: 094/05/20
 Date last altered: A94/12/29

SYMPTOM:

ValuePoint 6382/S, 6387/T, and 6384/D (except P60) experience intermittent time and/or date changes. Time or date may be set to invalid values (hours greater than 24, months greater than 12, etc).

PROBLEM ISOLATION AIDS:

This TIP applies only if all of the following conditions are met:

- 1 - POST and diagnostics complete without error.
- 2 - The operating system is DOS.
- 3 - CMOSCLK.SYS is installed in the CONFIG.SYS file.

FIX:

- 1 - Remove CMOSCLK.SYS from the CONFIG.SYS file.

-and-

- 2 - Insure DOS 5.02 or higher is installed. This is the lowest level supported on the above systems.

Applications running under DOS 5.x and above do not require CMOSCLK.SYS to insure proper advancing of the date.

If problems persist, continue normal problem determination.

SAS KEYWORDS:

PSY2	PSVP	PS/VP	PS/VALUEPOINT
VALUE POINT	6382	6384	6387
D/T6382	PSY2BRD	PSVPBRD	PSY2PROG
PSVPPROG	D/T6387	CLOCK	

1.4.1343 VALUEPOINT DIAGNOSTICS ERROR 105

Record number: H123836

Device: D/T6384
 Model: M
 Tip key:
 Date created: 094/04/28
 Date last altered: A94/05/05

SYMPTOM:

New ValuePoint 6384 system board FRUs may experience the following problems:

- 1 - Diagnostics error 105 running system board and parallel port tests.
 - and -
- 2 - The system board parallel port will be missing from the diagnostics "Installed Devices" list.

PROBLEM ISOLATION AIDS:

The following system board FRUs may be affected:

425SX (486SX 25MHZ) P/N60G9713
 433DX (486DX 33MHZ) P/N60G9712
 466DX2 (486DX2 33/66MZH) P/N60G9711

FIX:

Clear CMOS using the following procedure:

Note: Removing the battery is not an effective procedure for clearing CMOS on the above models.

- 1 - Power-off the system.
- 2 - Move the jumper on JP8* so that it connects pins 2 and 3.
- 3 - Apply a momentary short across the two ends of capacitor C17*.
- 4 - Move the jumper on JP* back to pins 1 and 2.
- 5 - Run the configuration utility to restore the configuration settings.

Restoring the configuration will clear a manufacturing test bit and the problem will not reocur.

The problem has been corrected in manufacturing.

SAS KEYWORDS:

PSY2	PSVP	PSVPDIAGS	PSY2DIAG
PSY2ERR	PSVPERR	VALUE POINT	PS/VP
PS/VALUEPOINT	60G9711	60G9712	60G9713
PSY2BRD	PSVPBRD		

1.4.1344 VALUEPOINT DISKETTE ERRORS W/5250 INSTALLED

Record number: H12758

Device: D/T6384
 Model: M
 Tip key:
 Date created: 093/07/30
 Date last altered: A94/01/12

SYMPTOM:

PS/VALUEPOINT SYSTEMS MAY EXPERIENCE DISKETTE DRIVE ACCESS FAILURES ON SYSTEMS USING 5250 EMULATION APPLICATIONS.

DISKETTE DRIVE ACCESS FAILURES MAY CONSIST OF MESSAGES INDICATING AN INABILITY TO ACCESS DRIVE "A" (DRIVE NOT READY) OR ERRORS WHILE READING FROM, OR WRITING TO, DRIVE "A".

PROBLEM ISOLATION AIDS:

- A)VALUEPOINT DIAGNOSTICS DO NOT INDICATE A FAILURE.
- B)AN IBM 5250 EMULATION ADAPTER IS INSTALLED. APPLICATION SOFTWARE IS RUNNING OR LOADING IN A DOS ENVIRONMENT.
- C)THE FAILURE IS MOST EVIDENT WHEN SWITCHING FROM A 5250 SESSION TO A DOS SESSION AND ATTEMPTING A DISKETTE DRIVE OPERATION.
- D)SOFTWARE APPLICATIONS USED ARE EITHER:
 IBM ENHANCED 5250 EMULATION PROGRAM VERSION 2.2* OR HIGHER
 IBM PC SUPPORT/400 V2.11*, OR HIGHER

FIX:

THE DISKETTE DRIVE FAILURES ARE CAUSED BY AN INTERRUPT CONFLICT BETWEEN THE 5250 ADAPTER AND DISKETTE DRIVE CONTROLLER.

IF THE APPLICATION IS THE IBM PC SUPPORT/400 V2.11, OR HIGHER USE THE FOLLOWING PROCEDURE:

- 1.CHANGE THE CURRENT DIRECTORY ON THE SYSTEM TO THE PC SUPPORT DIRECTORY. THE DEFAULT IS: "C: \PCS"
- 2.EDIT THE BATCH FILE BEING USED TO START PC SUPPORT. THE DEFAULT IS: "STARTPCS.BAT"
- 3.SEARCH FOR THE LINE THAT READS: "E5250AH ..."
- 4.MODIFY THIS LINE TO READ AS FOLLOWS: "E5250AH /Lx ..."

 THE "x" CAN BE EITHER 3 OR 6 OR 7, BUT TRY 3 FIRST.

 THE "..." MEANS THERE MAY BE OTHER TEXT/PARAMETERS AFTER THE "E5250AH."
- 5.SAVE THE ABOVE CHANGES TO THE BATCH FILE.
- 6.REBOOT THE PC AND RESTART PC SUPPORT.

IF THE APPLICATION BEING USED IS THE IBM ENHANCED 5250 EMULATION PROGRAM VERSION 2.3* OR HIGHER, UTILIZE THE "ADVANCED OPTIONS" FUNCTION CONTAINED IN THE 5250 EMULATION PACKAGE TO ACCESS THE E5250 CONFIGURATION PROGRAM. THE CONFIGURATION PROGRAM ALLOWS CHANGES TO THE INTERRUPT LEVELS THAT THE 5250 ADAPTER USES. SET THE INTERRUPT TO EITHER 3, 6, OR 7, BUT TRY 3 FIRST.

THERE ARE NO SWITCH SETTINGS ON THE CARD THAT WILL ELIMINATE THE DISKETTE DRIVE ACCESS FAILURES.

THIS FAILURE HAS BEEN RECREATED BY ENGINEERING USING IBM HARDWARE AND IBM SOFTWARE ON THE PS/VALUEPOINT SYSTEMS. OEM SOFTWARE AND HARDWARE MAY EXHIBIT SIMILAR SYMPTOMS. MODIFY THE INTERRUPT SETTINGS FOR THE OEM CONFIGURATION TO ISOLATE A POTENTIAL CONFLICT.

IF THE ABOVE PROCEDURES HAVE BEEN FOLLOWED AND DISKETTE ERRORS ARE STILL PRESENT, CHECK/REPLACE MEDIA BEING USED AND UTILIZE NORMAL PROBLEM DETERMINATION PROCEDURES TO ISOLATE THE FAILING FRU.

*VERSION 2.2 OR HIGHER OF THE ENHANCED 5250 EMULATION PROGRAM AND VERSION 2.11 OR HIGHER OF THE PC SUPPORT/400 PROGRAM ARE SUPPORTED ON PS/VALUEPOINT SYSTEMS.

SAS KEYWORDS:

PSVP	VALUE POINT	PSVPERR	6384
PSY2	PSY2ERR	36/38	EDSEA
PSVPDSKT	PSY2DSKT	PSY2COMM	6382
D/T6382	D/T6387	6387	PSVPCOMM

1.4.1345 VALUEPOINT FLOATING POINT & STACK ERRORS

Record number: H125280

Device: D/T6384
 Model: M
 Tip key:
 Date created: 094/10/17
 Date last altered: A95/10/30

SYMPTOM:

ValuePoint 6382/S, 6387/T, and 6384/D (except P60) systems MAY experience one of the following error conditions as a result of Math-coprocessor operations:

- Stack underflow error
- Stack overflow error
- Floating Point error
- System hang condition

PROBLEM ISOLATION AIDS:

This TIP applies only when the following criteria are met:

- 1 - The system model is a 433DX, 450DX2, 466DX2.

-OR-

The system is a 425SX or 433SX with an optional "DX" processor upgrade installed in the available processor upgrade socket on the system board.

-AND-

- 2 - When the failure occurs, the application is utilizing the Math-coprocessor feature which is integrated in the Intel 486DX or Overdrive processors.

FIX:

Customers running DOS, Windows or OS/2 2.11 should install one or more of the following updates depending on the applications being used, AND Flash BIOS update 65A or higher.

OPERATING SYSTEM	UPDATE
DOS	FLPT_D.DSK
WINDOWS 3.1	FLPT_W.DSK
OS/2 2.11	FLPT_O2.DSK

Users of operating systems other than those listed above should contact the IBM PC Company HelpCenter at
 1 - 800-772 - 2227.

```
-----IMPORTANT-----
|Updates for DOS, WINDOWS, OS/2 and BIOS are customer
|installable. Customers should be advised to contact the IBM
|PC Company HelpCenter at 1-800-772-2227 if assistance is
|required in obtaining or installing the appropriate update.
|Customers in Canada should call IBM's HelpPC at
|1 - 800-565 - 3344.
|
```

The update diskettes may be downloaded from the IBM PC Company Bulletin Board System by calling (919)517-0001.

Customers and Dealers in Canada may download the updates from their respective IBM regional bulleting board service.

If the problem continues to occur after the installation of the update(s), verify that the updates were installed properly, then continue normal problem determination.

SAS KEYWORDS:

PSY2	PSVP	6384	D/T6382
PSY2BRD	D/T6387	6382	6387
PSVPBRD	PSVPCOMM	PS/VP	PS/VALUEPOINT
MINITAB	PSVPERR	PSY2ERR	VALUE POINT

1.4.1346 VALUEPOINT HANGS OR DROP OFF LINE WITH OS/2 2.1

Record number: H123646

Device: D/T6384
 Model: M
 Tip key:
 Date created: 094/04/14
 Date last altered: A97/07/13

SYMPTOM:

ValuePoint 6382/S, 6384/D or 6387/T may experience any of the following problems.

- 1 - Communication sessions are dropped or the system hangs after opening a WIN/OS/2 session.
- 2 - Communication Manager terminates a 3270 emulation session and generates an ACS2389 error.

PROBLEM ISOLATION AIDS:

This TIP applies only when all of the following conditions are met:

- 1 - The token ring adapter is set for interrupt* 2 or 9.
- 2 - The Flash BIOS level is 54A or higher.
- 3 - The operating system is OS/2 2.1 and CSD XR06200 is NOT installed.

*Note: Interrupt 2 and interrupt 9 are the same interrupt.
 An 8 bit adapter will call this interrupt 2; a 16 bit adapter may call this interrupt 2 or 9.

FIX:

- 1 - Install flash BIOS update level 61A or higher AND the latest level S3 drivers for OS/2.

The latest S3 drivers may be downloaded from the IBM PC Co. Bulletin Board System by calling (919)517-0001 and request "S3 - 16M.DSK"

** OR **

- 2 - Change the interrupt level of the token ring card.

** OR **

- 3 - Install OS/2 CSD XR06200.

If the problem continues, use normal problem determination.

SAS KEYWORDS:

PSY2	PSVP	6384	D/T6382
TOKENRING	D/T6387	6382	6387
PSY2COMM	PSVPCOMM	PS/VP	PS/VALUEPOINT
PSY2ADPT	PSVPADPT	WIN_OS/2	WIN-OS/2
WIN/OS2			

1.4.1347 VALUEPOINT HANGS W/ 3270 ERRORS&COLON. NET805 & NET810

Record number: H121602

Device: D/T6384
 Model: M
 Tip key:
 Date created: 093/10/20
 Date last altered: A94/08/15

SYMPTOM:

VALUEPOINT SYSTEM HANGS WHEN RUNNING PC/3270 EMMULATION SOFTWARE.

ERRORS RECEIVED ARE "NET 810: UNEXPECTED NETWORK ERROR" FOLLOWED BY "NET805: NETWORK DEVICE NO LONGER EXISTS READING DRIVE 0" FOLLOWED BY AN OPTION TO "ABORT, RETRY OR FAIL."

PROBLEM ISOLATION AIDS:

THE FAILURE OCCURS ONLY WHEN RUNNING CODE DOWNLOADED ACROSS A LOCAL AREA NETWORK (LAN) AND WHEN AN .EXE FILE IS EXECUTED BETWEEN LOADING AND UNLOADING PC/3270.

THIS IS NOT A HARDWARE PROBLEM AND NO HARDWARE SHOULD BE REPLACED IN AN ATTEMPT TO ELIMINATE THE HANG CONDITION. THE HANG CONDITION IS CAUSED BY CONFLICT BETWEEN PC/3270 AND DOS 5.X EXPANDED MEMORY DRIVERS. BOTH DRIVERS CANNOT BE USED AT THE SAME TIME. PC/3270 DEVICE DRIVERS ARE NOT SUPPORTED IN CONJUNCTION WITH HIMEM.SYS AND EMM386.SYS.

FIX:

THE CUSTOMER SHOULD BE REFERRED TO CHAPTER 11 OF THE PC/3270 V3.0 INSTALLATION ADMINISTRATION GUIDE FOR FULL DOS AND WINDOWS MODE.

SAS KEYWORDS:

PSVP	6282	D/T6382	PSY2ERR
PSY2	6384	D/T6387	PSVPERR
VALUE POINT	6387	PSY2OPER	PSY2COMM
PS/VP	PSVP	PSVOPER	PSVPCOMM
PSVPPROG	SSY2PROG	3270	D/T6381
6381			

1.4.1348 VALUEPOINT HANGS, DRIVE ERRORS, NO VIDEO OR DEAD

Record number: H123052

Device: D/T6384
 Model: M
 Tip key:
 Date created: 094/02/15
 Date last altered: A95/10/12

SYMPTOM: VALUEPOINT 63xx and 64xx MAY FAIL WITH THE FOLLOWING SYMPTOMS:

1 - SYSTEM HANGS DURING POST. THERE WILL BE NO ERROR MESSAGES.

OR

2 - NO VIDEO DISPLAYED (NO CURSOR).

OR

3 - DRIVE ERRORS WILL BE REPORTED WHEN THE SYSTEM TRIES TO READ FROM THE DISKETTE OR HARD FILE.

PROBLEM ISOLATION AIDS:

IN SOME CASES, FAILURE ANALYSIS HAS SHOWN DEFECTIVE RISER CARDS TO CAUSE THE ABOVE SYMPTOMS. USE THE FOLLOWING PROCEDURE TO ISOLATE A DEFECTIVE RISER CARD:

REMOVE ANY INSTALLED OPTION CARDS. IF THE PROBLEM IS ELIMINATED, SUSPECT A PROBLEM WITH AN OPTION CARD.

REMOVE THE RISER CARD. IF THE PROBLEM IS ELIMINATED, REPLACE THE RISER CARD.

FIX: REPLACE THE RISER CARD.

SAS KEYWORDS:

PSVP	PS/VP	VALUEPOINT	6384
PSY2DSKT	PSVPDSKT	PSVPMISC	PSY2MISC
82G3507	82G2509	P/N82G3507	P/N82G3509
6382	D/T6382	PS/VALUEPOINT	PSVPFDSK
PSY2FDSK	NO VIDEO	6494	6484
D/T6472	D/T6482	D/T6484	6494
D/T6492	D/T6494	6472	6482
6492			

1.4.1349 VALUEPOINT LOSING/GAINING TIME RUNNING NOVELL

Record number: H13356

Device: D/T6384
 Model: M
 Tip key:
 Date created: 095/06/29
 Date last altered: A95/06/29

SYMPTOM:

PS/ValuePoint 6384/D, 6382/S or 6387/T systems attached to a server running Novell version 3.11 may exhibit a symptom of the system clock gaining or losing time.

PROBLEM ISOLATION AIDS:

The operating system clock gains or loses up to 2 hours per month. The CMOS clock (Configuration Utility) remains accurate.

The failure does not occur on standalone systems.

Advanced diagnostics run without errors.

FIX:

The failure is caused by the gradual loss of time experienced by the server due to missing clock ticks while the server is in Real Mode. The ValuePoint's system clock is updated from the server.

A patch is available called SYNCTIME.NLM that is loaded onto the server. SYNCTIME.NLM is available in the 311PTD.EXE Fix Patch for Novell. It may be obtained from the Novell Support Group at (404) 858-8931 or from the IBM PC Company Bulletin Board service at (919)517-0001. The file is located in the "Netware Update for Novell Version 3.11 and 4.0" section.

A copy of the patch may also be obtained through Compuserve.

SAS KEYWORDS:

VALUE POINT	PS/VP	PSVP	6384
6382	6387	D/T6382	D/T6387
PSY2	PSVPPROG	PSY2PROG	PSY2COMM
PSVPCOMM			

PSY2 RETAIN TIPS
VALUEPOINT SCSI READ ERRORS

1.4.1350 VALUEPOINT SCSI READ ERRORS

Record number: H121558

Device: D/T6384
Model: M
Tip key:
Date created: 093/10/27
Date last altered: A94/08/15

SYMPTOM:

VALUEPOINT 6382/S, 6384/D AND 6387/T SYSTEMS WITH AN IBM FAST SCSI-2 ADAPTER INSTALLED MAY EXPERIENCE INTERMITTENT OR SOLID FAILURES, INCLUDING DASD READ ERRORS, HANG CONDITIONS, POST 1047 ERRORS, AND FAILURE TO BOOT.

PROBLEM ISOLATION AIDS:

THIS TIP APPLIES TO THE IBM FAST SCSI-2 ADAPTER, FRU P/N92F0330, MADE FOR IBM BY FUTURE DOMAIN.

FIX:

INSTALL NEW RISER CARD AS FOLLOWS:

MODEL	FRU NUMBER
6382/S	P/N82G3507
6384/D	P/N82G3509
6387/T	P/N82G3511

WHEN THE RISER CARD IS VIEWED AS INSTALLED IN THE SYSTEM, THERE MUST BE A JUMPER INSTALLED ON THE BOTTOM TWO PINS OF J12. J12 IS LOCATED ON THE CONNECTOR SIDE OF THE 6387/T RISER CARD AND ON THE BACK SIDE OF THE 6382/S AND 6384/D RISER CARDS.

IF THE PROBLEM CONTINUES AND THIS RISER CARD IS JUMPERED CORRECTLY, USE NORMAL PROBLEM DETERMINATION.

SAS KEYWORDS:

PSY2	D/T6382	6282	6384
PSVP	D/T6387	6387	92F0330
VALUE POINT	PS/VP	PSVPPART	PSVPFDSK
PSY2ADPT	PSY2PART	PSY2FDSK	PSVPADPT
SCSI II	82G3507	82G3509	82G3511
1047	PSY2ERR	PSVPERR	

1.4.1351 VALUEPOINT SERIAL PORT DISABLED AFTER SOFT BOOT

Record number: H121353

Device: D/T6384
 Model: M
 Tip key:
 Date created: 093/09/20
 Date last altered: A94/11/30

SYMPTOM:

VALUEPOINT 6382/S, 6384/D AND 6387/T EXPERIENCE DISABLING OF ONE THE SYSTEM BOARD SERIAL PORTS AFTER "SOFT BOOT" (CTRL, ALT, DEL).

PROBLEM ISOLATION AIDS: VIEW THE FLASH EEPROM LEVEL BY ACCESSING THE CONFIGURATION UTILITY PROGRAM. THE FIFTH, SIXTH, AND SEVENTH POSITIONS OF THE EEPROM LEVEL REPRESENT THE CODE LEVEL; FOR EXAMPLE L6ET51AUS IS CODE LEVEL 51A.

FIX: INSTALL FLASH EEPROM CODE LEVEL 53A (OR HIGHER). REFER TO TIP H122782 FOR THE CURRENT LEVEL 64XX FLASH AND DOWNLOADING INSTRUCTIONS.

INSTRUCTIONS FOR LOADING THE CODE ARE ON THE DISKETTE IN THE "READ ME" FILE (README.FIL).

IF THIS CODE (OR A HIGHER CODE) IS ALREADY INSTALLED, USE NORMAL PROBLEM DETERMINATION.

NOTE: FLASH IS A TERM USED FOR ELECTRICALLY ERASABLE PROGRAMABLE READ ONLY MEMORY (EEPROM). THE SYSTEM BIOS IS CONTAINED IN THIS MEMORY. BIOS CHANGES CAN BE MADE TO SYSTEMS THAT CONTAIN FLASH MEMORY WITHOUT REPLACING HARDWARE.

SAS KEYWORDS:

VALUE POINT	PS/VP	PSVP	D/T6382
6382	6384	EPR0M	ROM
PSVPMISC	PSVPMCD	PSY2	6387
D/T6387	ASYNc	COMM	PSVPCOMM
PSY2COMM	PSY2MCD	PSY2BRD	PSVPBRD
SYSTEM BOARD	MODEM		

1.4.1352 VALUEPOINT VIDEO DIAGNOSTICS 2418 ERROR

Record number: H102449

Device: D/T6384
 Model: M
 Tip key:
 Date created: 093/09/17
 Date last altered: A94/08/15

SYMPTOM:

PS/VALUEPOINT SYSTEMS MAY EXPERIENCE INTERMITTENT 2418
 ERRORS WHEN RUNNING DIAGNOSTICS IN "LOOP" MODE.

PROBLEM ISOLATION AIDS:

ONLY THE FOLLOWING DIAGNOSTICS DISKETTES WILL EXPERIENCE
 THIS FAILURE:

6382/S, 6384/D, AND 6387/T DIAGNOSTICS VERSION 1.0
 425SX, 433SX, 433DX, AND 433DX2 DIAGNOSTICS V 1.1

FALSE ERRORS WILL NOT OCCUR WHEN THE DIAGNOSTICS ARE RUN IN THE
 "ONE TIME" MODE.

FIX:

INTERMITTENT 2418 VIDEO DIAGNOSTICS ERRORS USING DOWN LEVEL
 DIAGNOSTICS DISKETTES SHOULD BE IGNORED.

DIAGNOSTICS V1.2 AND ABOVE WILL NOT EXPERIENCE THE FAILURE.

IF THE 2418 ERROR IS SOLID, USE NORMAL PROBLEM DETERMINATION.

SAS KEYWORDS:

VALUE POINT	PS/VP	PSVP	PSY2
PSVPDISP	PSVPERR	PSVPDIAG	PSY2OPER
6282	6384	6387	PSY2OPER
PSY2DISP	PSY2ERR	PSY2DIAG	DISPLAY
MONITOR	D/T6387	D/T6382	

1.4.1353 VALUEPOINT VIDEO PROBLEMS

Record number: H12334

Device: D/T6384
Model: M
Tip key:
Date created: 093/05/20
Date last altered: A93/09/28

SYMPTOM: THE FOLLOWING SYMPTOMS MAY BE EXPERIENCED ON
6382/S, 6384/D AND 6387/T:

- 1 - LOSS OF VIDEO WHEN SWITCHING BETWEEN GRAPHICS MODE
AND TEXT MODE WHEN USING A CUSTOM CHARACTER FONT SET
IN ADDITION TO THE STANDARD CHARACTER FONT SET.
- 2 - UNREADABLE VIDEO AFTER INSTALLING SCO UNIX * OPERATING
SYSTEM.

* SCO UNIX IS A REGISTERED TRADEMARK OF SANTA CRUZ OPERATIONS.

PROBLEM ISOLATION AIDS: VIEW THE FLASH EEPROM LEVEL
BY ACCESSING THE CONFIGURATION UTILITY PROGRAM.
THE FIFTH, SIXTH, AND SEVENTH POSITIONS OF THE EEPROM
LEVEL REPRESENT THE CODE LEVEL; FOR EXAMPLE L6ET50AUS IS
CODE LEVEL 50A.

FIX: INSTALL FLASH EEPROM CODE LEVEL 51A (OR HIGHER).
THIS FILE IS TITLED VP2FL51A AND CAN BE DOWN LOADED
FROM THE TECHNICAL SUPPORT BULLETIN BOARD BY
CALLING 919 517-0001.

INSTRUCTIONS FOR LOADING THE CODE ARE IN THE READ ME
FILE (README.FIL).

* NOTE:
AFTER LOADING FLASH EEPROM LEVEL 51A ON UNIX
SYSTEMS, ADD OR REMOVE A MOUSE (DEPENDING ON THE
ORIGINAL SYSTEM CONFIGURATION) AND RUN THE CONFIGURATION
UTILITY. THEN REMOVE OR ADD THE MOUSE, RETURNING THE
SYSTEM TO ITS ORIGINAL CONFIGURATION, AND RUN THE
CONFIGURATION UTILITY AGAIN. THIS WILL ENABLE UNIX
TO RECOGNIZE THE CHANGE TO THE FLASH LEVEL.

IF THIS CODE (OR A HIGHER CODE) IS ALREADY INSTALLED,
USE NORMAL PROBLEM DETERMINATION.

NOTE: FLASH IS A TERM USED FOR ELECTRICALLY ERASABLE
PROGRAMABLE READ ONLY MEMORY (EEPROM). THE SYSTEM
BIOS IS CONTAINED IN THIS MEMORY. BIOS CHANGES CAN
BE MADE TO SYSTEMS THAT CONTAIN FLASH MEMORY WITHOUT
REPLACING HARDWARE.

SAS KEYWORDS:

VALUE POINT	PS/VP	PSVP	D/T6382
6382	6384	EPROM	ROM
PSVPMISC	PSVPMCD	PSVPADP	XENIX
PSY2	6387	D/T6387	

1.4.1354 VALUEPOINT 3.5" DISKETTE DRIVE FAILS

Record number: H121632

Device: D/T6384
 Model: M
 Tip key:
 Date created: 093/10/26
 Date last altered: A94/08/15

SYMPTOM:

THE 3.5" DISKETTE DRIVE FAILS TO FUNCTION OR THE CONFIGURATION UTILITY DOES NOT RECOGNIZE AN INSTALLED 3.5" IBM DISKETTE DRIVE AFTER INSTALLING AN IBM 5.25" DISKETTE DRIVE OPTION.

PROBLEM ISOLATION AIDS:

THIS TIP APPLIES ONLY WHEN ALL OF THE FOLLOWING CONDITIONS ARE MET:

- 1 - THE SYSTEM IS A 6382/S OR 6384/D.
- 2 - THE 3.5" DISKETTE DRIVE IS MANUFACTURED FOR IBM BY ALPS, AND THE ALPS P/N IS DFR723F34A.
- 3 - THERE IS AN IBM 1.2MB 5.25" DISKETTE DRIVE OPTION INSTALLED.
- 4 - THE VALUEPOINT CONTAINS A SYSTEM BOARD WITH FOUR MEMORY SIMM SOCKETS PARALLEL TO THE FRONT EDGE OF THE SYSTEM BOARD. ILLUSTRATIONS OF THE 6382/S AND 6384/D SYSTEM BOARDS CAN BE FOUND ON PAGE 62 OF THE PS/VALUEPOINT HARDWARE MAINTENANCE SERVICE AND REFERENCE S61G-1302 (MARCH 1993).

FIX:

INSTALL 3.5" DISKETTE DRIVE FRU P/N93F2361. THE NEW FRU WILL CONTAIN AN UP-LEVEL ALPS DRIVE (P/N DFR723F34B) OR A DRIVE FROM ANOTHER VENDOR.

IF THE SYSTEM DOES NOT MATCH ALL FOUR OF THE CONDITIONS LISTED ABOVE, UTILIZE NORMAL PROBLEM DETERMINATION PROCEDURES TO ISOLATE THE FAILING FRU.

SAS KEYWORDS:

PSVP	PSVPDSKT	6382	VALUE POINT
PSY2	PSY2DSKT	6384	PS/VP
D/T6382	93F2361		

1.4.1355 VALUEPOINT 3.5" DISKETTE DRIVE FAILS

Record number: H121655

Device: D/T6384
 Model: M
 Tip key:
 Date created: 093/09/28
 Date last altered: A94/08/15

SYMPTOM:

THE 3.5" DISKETTE DRIVE FAILS TO FUNCTION OR THE CONFIGURATION UTILITY DOES NOT RECOGNIZE AN INSTALLED 3.5" IBM DISKETTE DRIVE AFTER INSTALLING AN IBM 5.25" DISKETTE DRIVE OPTION.

PROBLEM ISOLATION AIDS:

THIS TIP ONLY APPLIES IF ALL OF THE FOLLOWING CONDITIONS ARE MET:

- 1 - THE SYSTEM IS A 6382/S OR 6384/D.
- 2 - THE DISKETTE DRIVE IS MANUFACTURED FOR IBM BY ALPS, AND THE ALPS P/N IS DFR723F34A.
- 3 - THERE IS AN IBM 1.2MB 5.25" DISKETTE DRIVE OPTION INSTALLED.
- 4 - THE VALUEPOINT CONTAINS A SYSTEM BOARD WITH FOUR MEMORY SIMM SOCKETS PARALLEL TO THE FRONT EDGE OF THE SYSTEM BOARD. ILLUSTRATIONS OF THE 6382/S AND 6384/D SYSTEM BOARDS CAN BE FOUND ON PAGE 62 OF THE PS/VP HARDWARE MAINTENANCE SERVICE AND REFERENCE S61G-1302 (MARCH 1993).

FIX:

INSTALL 3.5" DISKETTE DRIVE FRU P/N 93F2361. THE NEW FRU WILL CONTAIN AN UP-LEVEL ALPS DRIVE (P/N DFR723F34B) OR A DRIVE FROM ANOTHER VENDOR.

IF THE SYSTEM DOES NOT MEET ALL FOUR OF THE CONDITIONS LISTED ABOVE, UTILIZE NORMAL PROBLEM DETERMINATION TO ISOLATE THE FAILING FRU.

SAS KEYWORDS:

PSVP	PSVPDSKT	6384	VALUEPOINT
PSY2	PSY2DSKT	6382	PS/VP
D/T6382	92F2361	PSY2PART	PSVPPART

1.4.1356 VALUEPOINT 6381 COMPLETES POST WITH 2 BEEPS

Record number: H001328

Device: D/T6381
 Model: M
 Tip key:
 Date created: 093/10/11
 Date last altered: A95/10/30

SYMPTOM:

PS/VALUEPOINT 6381 WITH FLASH CODE LEVEL L8ET22AUS (22A) WILL COMPLETE A SUCCESSFUL POST WITH TWO BEEPS INSTEAD OF THE EXPECTED ONE BEEP.

PROBLEM ISOLATION AIDS:

VIEW THE FLASH EEPROM LEVEL BY ACCESSING THE CONFIGURATION UTILITY PROGRAM. THE FIFTH, SIXTH AND SEVENTH POSITIONS OF THE EEPROM LEVEL REPRESENT THE CODE LEVEL; FOR EXAMPLE: L8ET22AUS IS CODE LEVEL 22A.

FIX:

IF THE 6381 EXHIBITS NO OTHER POST OR OPERATIONAL FAILURE SYMPTOMS, THE TWO BEEPS SHOULD NOT BE CONSIDERED AN ERROR, AND NO SERVICE ACTION IS REQUIRED.

UPDATING THE FLASH EEPROM TO THE LATEST LEVEL WILL RESULT IN ONE BEEP AT THE COMPLETION OF A SUCCESSFUL POST.

FLASH BIOS UPDATES MAY BE DOWNLOADED FROM THE IBM PC COMPANY BULLETIN BOARD SYSTEM BY CALLING 919 517-0001.

INSTRUCTIONS FOR LOADING THE FLASH UPDATE ARE CONTAINED IN THE "README.FIL" FILE ON UPDATE DISKETTE.

SAS KEYWORDS:

PSVP	PSY2	PSVPERR	PSY2ERR
PSVPDIAG	PSY2DIAG	PSVPBRD	PSY2BRD
PSY2OPER	PSVPOPER	VALUE POINT	PS/VP
6381			

1.4.1357 CD-ROM SOFTWARE MAY NOT RUN CORRECTLY

Record number: H015167

Device: D/T8550
 Model: M
 Tip key: 054
 Date created: 090/05/09
 Date last altered: A95/11/16

CERTAIN CD-ROM SOFTWARE PACKAGES WILL NOT RUN CORRECTLY ON PS/2 SYSTEMS UNDER DOS (DISK OPERATING SYSTEM) EQUIPPED WITH THE SCSI INTERFACE 3510, EXTERNAL CD-ROM OR INTERNAL CD-ROM OPTION.

DURING TESTING OF THE CD-ROM DRIVE, SOME SOFTWARE WAS DISCOVERED WHICH WOULD NOT RUN CORRECTLY ON PS/2 SYSTEMS. ANALYSIS REVEALED ERRORS WITHIN THE APPLICATION SOFTWARE.

IF ERRORS ARE ENCOUNTERED USING THE CD-ROM, AND THE DIAGNOSTICS RUN ERROR-FREE, REFER THE CUSTOMER TO THE POINT-OF-SALE OF THE APPLICATION SOFTWARE FOR ASSISTANCE.

THIS SITUATION WILL MOST LIKELY BE ENCOUNTERED WHEN NEW SOFTWARE IS ADDED TO SYSTEMS WHICH HAVE PREVIOUSLY RUN ERROR-FREE.

SAS KEYWORDS:

PSY2	PSY2ERR	PSY2PROG	8550SYSERR
8555SYSERR	8560SYSERR	8565SYSERR	8570SYSERR
8580SYSERR	8550SYSPROG	8555SYSPROG	8560SYSPROG
8565SYSPROG	8570SYSPROG	8580SYSPROG	3510SYSPROG
3510SYSERR	D/T8550	D/T8560	D/T8570
D/T8580	D/T3510	D/T8555	D/T8565
CDROM	PSY2CDROM		

1.4.1358 VIDEO CORRUPTION IN OS/2 W/4777 OR 4778 INSTALLED

Record number: H123307

Device: D/T6272
 Model: M
 Tip key:
 Date created: 097/04/15
 Date last altered: A97/04/15

SYMPTOM:

IBM PC 300GL Series 6272 & 6282 systems may exhibit the following symptoms in OS/2 3.x or 4.x with Cirrus video drivers and the IBM 4777/4778 Magnetic Stripe Reader drivers installed:

- A. OS/2 WARP 3.x intermittently fails to boot. When the system does successfully IPL, operation is erratic. An OS/2 Full Screen may take up to a minute to display.
- B. OS/2 WARP 4.x boots consistently, however, opening an OS/2 Full Screen takes approximately a minute to display.
- C. In 800x600 resolution, switching from a DOS Full Screen to the Desktop and back to the DOS Full Screen causes video corruption.

PROBLEM ISOLATION AIDS:

The failure does not occur when using the native OS/2 VGA device drivers.

FIX:

Use the "/X" parameter (do not report error messages) when installing the 4777/4778 drivers in the OS/2 CONFIG.SYS file. This parameter will allow OS/2 to boot consistently, however, the OS/2 Full Screen in OS/2 WARP v4.0 will be displayed as a window.

To eliminate the failure on both versions of OS/2, use the native OS/2 VGA drivers in place of the Cirrus video device drivers.

This problem is still being investigated. This tip will be updated with additional information as it becomes available.

SAS KEYWORDS:

PSVP	PSY2	PSVPDISP	PSY2DISP
IBMPC	60544	D/T6282	HANG
UNCLASSIFIED	HUNG	LOCKUP	D/T4777
D/T4778	SCANNER	PC300GL	

1.4.1359 VIDEO CORRUPTION IN WINDOWS 3.11 ON PC 340 6560

Record number: H133506

Device: D/T6560
Model: M
Tip key:
Date created: 096/08/02
Date last altered: A96/08/02

SYMPTOM:

IBM PC 340 Series 6560 systems preloaded with Microsoft Windows 3.11 may exhibit video corruption when viewing text files such as the Windows Readme File or when opening and closing windows.

PROBLEM ISOLATION AIDS:

The corruption occurs if the video resolution of the Windows Cirrus video drivers is set for 1152 x 864 HC (64) @ 75Hz or 640 x 480 x TC (24bit or 16M colors) @ 85Hz.

The video corruption of text files viewed in Windows will consist of unreadable characters and blinking lines.

The video corruption when opening or closing windows will display as a double shadow of the window off to the right side of the primary image.

FIX:

To eliminate this failure, choose a different resolution other than the two listed above or set the video resolution of the Windows Cirrus video drivers to a resolution with a maximum refresh rate of 75Hz at any color depth.

A Flash BIOS update for the PC 340 6560 is being developed to eliminate the failure from occurring in either of the resolutions listed above. This update should be available during 8/96 from the IBM PC Company BBS at 919-517-0001.

SAS KEYWORDS:

PSVP	PSY2	PSVPDISP	PSY2DISP
PSVPPROG	PSY2PROG	51371	IBMPC
51377			

1.4.1360 VIDEO CORRUPTION IN WINDOWS NT 3.51 GAMES ON 6899 AND 8638

Record number: H136905

Device: D/T6899
 Model: M
 Tip key:
 Date created: 097/03/18
 Date last altered: A97/07/08

SYMPTOM:

IBM IntelliStation Z Pro 6899 and PC Server 315 (8638) systems with a Matrox Millennium Graphics adapter installed may exhibit video corruption while running either Solitaire or Freecell games included with Windows NT 3.51.

The corruption may appear at various points in either of the games when the video resolution is configured for 800x600x32K or 800x600x64K, at any refresh rate.

PROBLEM ISOLATION AIDS:

The failure occurs with Matrox Millennium video device driver version 2.21.063.

In the Solitaire game, after all cards are removed from the pull stack, a black box remains. Moving cards around the screen causes traces of the card image to remain on the screen.

The failure does not occur at 800x600x16M colors or at 640x480, 1024x768 or 1280x1024 resolutions.

The native Windows NT video drivers do not exhibit the failure.

FIX:

An updated version of the Matrox Millennium video device driver is available on the IBM PC Company BBS at 919-517-0001 and on the IBM PC Company File Library via the Internet at the following URL:

Http: //www.us.pc.ibm.com/files.html

Search for "Matrox NT 3.51 driver" to obtain the updated driver.
 -OR-

Configure the video resolution of the Matrox Millennium adapter to 800x600x16M colors or a higher or lower resolution or use the native Windows NT video drivers.

Windows NT is a trademark of the Microsoft Corporation.
 Matrox Millennium is a trademark of Matrox Electronic Systems Ltd.

SAS KEYWORDS:

PSVP	PSY2	PSVPDISP	PSY2DISP
PSVPADPT	PSY2ADPT	PWS	IBMPC
UNCLASSIFIED	60012	PSVPOEM	PSY2OEM
D/T8638	8638		

VIDEO CORRUPTION OF ICONS IN QAPLUS/WIN-WIN

1.4.1361 VIDEO CORRUPTION OF ICONS IN QAPLUS/WIN-WIN

Record number: H01767

Device: D/T6577
 Model: M
 Tip key:
 Date created: 096/06/19
 Date last altered: A96/06/19

SYMPTOM:

IBM PC 300 Series 6577 and 6587 preloaded with Windows95 may exhibit video corruption of the icons within the QAPLUS/WIN-WIN application if the video resolution is higher than 640x480x256.

PROBLEM ISOLATION AIDS:

When QAPLUS/WIN-WIN is opened to the Hardware and DOS Configuration screens and the Windows Environment Resources screen, the icons across the top of the screen will not have a bitmap applied (no picture).

When the cursor is moved over the icons, the text descriptions at the bottom of the screen will indicate the function of the action buttons. The information produced by each button is not affected by this problem.

FIX:

The user may use the text descriptions at the bottom of the screen to select the appropriate action button or change the video resolution to 640x480x256 or lower.

QAPLUS/WIN-WIN, included in the systems preloaded software, is being updated to eliminate this failure. An updated version of the application should be available from the IBM PC Company BBS on 6/1/96 in the PC 300/700 Files section (#21).

QAPLUS/WIN-WIN is a trademark of Diagsoft, Inc.
 Windows & Windows95 are trademarks of the Microsoft Corporation.

SAS KEYWORDS:

PSY2	D/T65XX	6577	6587
IBMPC	PSVP	PSVPDISP	PSY2DISP
D/T6587	PC 350	PC350	PC300
PC 330	PC330	43090	PSVPPROG
PSY2PROG			

1.4.1362 VIDEO CORRUPTION OR SYNC LOSS W/3278/79 ADAPTER

Record number: H132816

Device: D/T6877
 Model: M
 Tip key:
 Date created: 096/02/28
 Date last altered: A96/02/28

SYMPTOM:

IBM PC 700 Series 6877 and 6887 may exhibit video corruption in the form of wavy images or even a loss of video sync with a 3278/79 Emulation adapter. Other "older" adapters that are configured to use IRQ 2 may also cause this type of failure symptom.

PROBLEM ISOLATION AIDS:

The 3278/79 Emulation adapter requires specific system resources to operate correctly. The 3278/79 adapter must utilize IRQ 2 and an 8kb memory page at address "CE00."

Adapters that utilize IRQ 2 are also using IRQ 9. IRQ 2 and IRQ 9 are tied together. The video subsystem in the IBM PC 700 uses IRQ 9.

FIX:

The following "workarounds" are available to minimize the impact that may be caused by the design characteristics of the PC 700 and the 3278/79 adapter:

- 1) Set IRQ 9 to "ENABLED" in the Activity Monitor section under the Advanced Power Management section of the Configuration/Setup Utility.
- OR
- 2) Set the display to "DISABLED" in the Advanced Power Management section of the Configuration Utility.
- OR
- 3) Use a DDC Power Manageable monitor.

If the error persists, continue normal problem determination procedures.

SAS KEYWORDS:

PSY2	D/T68XX	6887	6877
IBMPC	PSVP	PSVPDISP	PSY2DISP
D/T6887	PSY2ADPT	PSVPADPT	PSVPCOMM
PSY2COMM	PC750	PSY2ERR	PSVPERR
PC 750	PC730	PC700	PC 730
39102			

1.4.1363 VIDEO CORRUPTION USING VIDEO ADAPTERS IN PC 365 6589

Record number: H134042

Device: D/T6589
 Model: M
 Tip key:
 Date created: 096/09/18
 Date last altered: A96/09/18

SYMPTOM:

IBM PC 365 Series 6589 systems may exhibit video corruption with an OEM video adapter installed. Video distortion or corruption with adapters such as Diamond Stealth, Voyager 64, and Number Nine GXE64 adapters may be seen in VGA and SVGA resolutions.

PROBLEM ISOLATION AIDS:

The video adapters that exhibit this failure use S3 Video chipsets.

FIX:

Access the Video Setup section of the system Setup Utility by pressing F1 during the memory count. Change the setting for Palatte Snooping from ENABLED to DISABLED.

If the failure persist, continue normal problem determination to isolate the failing FRU.

Number Nine GXE64 is a trademark of Number Nine Visual Technologies, Inc.

Diamond Stealth is a trademark of Diamond Computer Systems.

Voyager 64 is a trademark of Boca Research, Inc.

S3 is a trademark of S3 Incorporated.

SAS KEYWORDS:

PSY2	PSVP	IBMPC	PSVPDISP
PSY2DISP	PSVPOEM	PSY2OEM	PSY2ADPT
PSVPADPT	48219	PC365	

1.4.1364 VIDEO CORRUPTION W/ARTIST GRAPHICS ADAPTER IN PC 300

Record number: H133294

Device: D/T6576
 Model: M
 Tip key:
 Date created: 096/04/19
 Date last altered: A96/04/19

SYMPTOM:

IBM PC 300 Series 6576 and 6586 systems may exhibit video corruption and poor system performance or no video at all with an Artist Graphics Video adapter installed.

PROBLEM ISOLATION AIDS:

PC 300 6576 and 6586 systems with Flash BIOS level LPJT34A installed may exhibit corrupted POST video and poor system performance using the Artist Graphics Video adapter.

With Flash BIOS levels LPJT49A, LPJT51A, and LPJT52A, the system will exhibit no video using the Artist Graphics Video adapter.

The video corruption and no video symptoms were seen on PC 300 6576 and 6586 systems using either OS/2 or Microsoft Windows.

FIX:

Install Flash BIOS level LPJT56A or higher.

Obtain the latest PC 300/700 Series Flash BIOS updates from the IBM PC Company BBS system by calling 1-919-517-0001. Locate the "IBM PC 300/700 Files" section (section #21) for the Flash BIOS file:

LPJT56A.EXE - PC 300 6576/6586 FLASH UPDATE

Flash BIOS updates may also be downloaded via the Internet from the IBM Personal Computer File Library by searching the following Internet URL:

<http://www.pc.ibm.com/files.html>

The updates are located in the IBM PC 300 & 700 Series Files section or by using the search facility to locate the files by the name listed above.

SAS KEYWORDS:

PSY2	D/T65XX	65XX	IBMPC
PSVP	PSVPERR	PSY2ERR	PSY2ADPT
PSVPADPT	D/T6576	D/T6586	PSVPOEM
PSY2OEM	PC 330	PC 350	

1.4.1365 VIDEO CORRUPTION W/COLORGRAPHICS VIDEO ADAPTER

Record number: H134359

Device: D/T6576
 Model: M
 Tip key:
 Date created: 096/10/09
 Date last altered: A96/10/09

SYMPTOM:

IBM PC 300 & 700 Series systems, with a 100Mhz or faster Pentium Processor installed, may exhibit video corruption with a ColorGraphics Quad Pro Lightning video adapter installed.

PROBLEM ISOLATION AIDS:

The ColorGraphics adapter is designed to allow multiple monitors to be attached to a single card. Video corruption may occur when moving windows from screen to screen or executing graphic intensive applications.

The failure reported to IBM involved 4 displays connected to the ColorGraphics adapter. One display functioned as a command display and the additional 3 displays displayed a single large image such as an OS/2 Desktop. The corruption occurred while moving windows around the large image while simultaneously executing a hardfile utility program. Screen refresh took up to 3 minutes to occur.

FIX:

The ColorGraphics Quad Pro Lightning adapter version 612166 and 612165 were designed for use in systems running at 90Mhz or less. The current version of the adapter, 612167, 612168, and 612169 are designed to operate on systems running at 100Mhz or faster.

Customers experiencing failures with the ColorGraphics Quad Pro Lightning adapter should be directed back to their point of purchase for additional support.

ColorGraphics Quad Pro Lightning is a trademark of ColorGraphics Communications Ltd., Atlanta USA & Colorgraphics Communication Ltd., U.K.

Pentium is a trademark of the Intel Corporation.

SAS KEYWORDS:

PSVP	PSY2	PSVPDISP	PSY2DISP
PSVPOEM	PSY2OEM	PSVPADPT	IBMPC
PSY2ADPT	PC 350	D/T6587	D/T6589
D/T6260	D/T6571	D/T6573	D/T6581
D/T6583	D/T6575	D/T6585	D/T6576
D/T6586	D/T6875	D/T6885	D/T6876
D/T6886	D/T6577	D/T6587	D/T6598
D/T6877	D/T6887		

1.4.1366 VIDEO CORRUPTION W/CORNERSTONE IMAGEACCEL2

Record number: H134202

Device: D/T6384
 Model: M
 Tip key:
 Date created: 096/09/30
 Date last altered: A96/09/30

SYMPTOM:

IBM PS/ValuePoint and PS/ValuePoint Performance Series systems may exhibit video corruption in a Windows 3.1 environment while using a Cornerstone ImageAccel2 ISA video adapter card.

PROBLEM ISOLATION AIDS:

The user may report that the icons on the Windows 3.1 desktop are corrupted/distorted. White vertical bars may also be seen while moving objects around the desktop.

This failure may occur with other applications or operating systems.

The video corruption is not present when using the on-board video controller integrated in the PS/ValuePoint system.

FIX:

Replace the Cornerstone ImageAccel2 video adapter.

Customers experiencing failures with the adapter installed in a PS/ValuePoint system should be directed back to their point of purchase.

ImageAccel2 is a trademark of Cornerstone Imaging, Inc.

SAS KEYWORDS:

PSY2	PSVP	IBMPC	PSVPOEM
PSY2OEM	PSVPADPT	PSY2ADPT	PSY2DISP
PSVPDISP	D/T6381	D/T6382	D/T6387
D/T6472	D/T6482	D/T6484	D/T6492
D/T6494	VALUEPOINT	VALUE POINT	HUNG
LOCKUP			

1.4.1367 VIDEO CORRUPTION WHILE RUNNING ADOBE ACROBAT 2.0

Record number: H132836

Device: D/T6877
 Model: M
 Tip key:
 Date created: 096/02/28
 Date last altered: A96/02/28

SYMPTOM:

IBM PC 700 Series 6877 and 6887 systems preloaded with OS/2 WARP may experience video corruption while running the Adobe Acrobat application from the WIN-OS/2 Groups folder.

PROBLEM ISOLATION AIDS:

From the OS/2 Desktop, select WIN-OS/2 Group followed by Adobe Acrobat 2.0. Select the Acrobat Reader 2.0. Open the file named "1_OPENME.PDF" and click on some of the icons to go to different areas. Some video corruption may occur at this point.

Select EXIT, press ESC and then ALT+F4. The information displayed from the opened file is still displayed over the Adobe Acrobat 2.0 windowed icon view.

This symptom may occur with the video mode set for VGA, or with the S3 driver for OS/2 or a Matrox Millennium device driver loaded with different resolutions.

The video corruption does NOT occur using the S3 Trio765 driver under DOS/Windows. The distortion also does NOT occur if the Adobe Acrobat 2.0 application is opened with the WIN-OS/2 Program Manager.

FIX:

Remove the Adobe Acrobat 2.0 icon from the WIN-OS/2 Groups folder. Open the application using the WIN-OS/2 Program Manager.

Adobe Acrobat is a trademark of Adobe Systems Incorporated.

SAS KEYWORDS:

PSY2	D/T68XX	6887	6877
IBMPC	PSVP	PSVPDISP	PSY2DISP
D/T6887	PSY2PROG	PSVPPROG	PSVPERR
PSY2ERR	PC750	PC700	PC 730
PC 750	PC730	40727	

1.4.1368 VIDEO CORRUPTION WITH INTERCEPT V4.0 IN WIN-OS/2

Record number: H134391

Device: D/T6576
 Model: M
 Tip key:
 Date created: 096/10/10
 Date last altered: A96/10/31

SYMPTOM:

IBM PC 300 Series 6576 and 6586 systems with OS/2 2.11 or OS/2 WARP 3.0 may exhibit video corruption in WIN-OS/2 while using the Intercept v4.0 application.

The system fails to refresh the screen as windows are opened or objects are moved around the display. The WIN-OS/2 session eventually becomes unusable.

PROBLEM ISOLATION AIDS:

When the corruption begins, the available system resources are less than 9%. The resources are displayed by selecting "HELP", then "About Program Manager" in the WIN-OS/2 session. The resources will continue to drop as activity within the session continues. Eventually, the WIN-OS/2 session must be closed and reopened to refresh system resources.

This failure does not occur if the S3 Trio64/64v+ video driver is configured for VGA. All SVGA resolutions may exhibit the symptom in seamless mode, Full Screen or from the WIN-OS/2 Desktop.

FIX:

Install the latest version of the S3 Trio 64/64v+ video device drivers for OS/2. The current level S3 Trio64/64v+ video device driver for OS/2 is level 2.85.02

The latest S3 device driver may be obtained from the IBM PC Company BBS system by calling 1-919-517-0001. View the "IBM PC 300/700 Files" section (section #21) for the file titled:

Z01T32A.EXE - V2.85.02 S3 Trio 64/64v+ Driver for OS/2

The updated device driver may also be downloaded via the Internet from the IBM Personal Computer File Library by searching the following Internet URL:

<http://www.pc.ibm.com/files.html>

For users of OS/2 WARP 3.0, an update has been developed, in addition to the video driver, to eliminate this problem. Contact IBM PSP Support at 1-800-237-5511 and request the latest Fix Pak for OS/2 WARP 3.0 (Fix Pak 22 or higher).

The latest Fix Pak for OS/2 WARP may also be obtained via the Internet at the following URL: <http://ps.software.ibm.com/>

SAS KEYWORDS:

PSVP	PSY2	PSVPPROG	PSY2PROG
PSVPERR	PSY2ERR	PC 330	IBMPC
PC 330	PC 350	D/T6586	PSVPDISP
PSY2DISP			

1.4.1369 VIDEO DISTORTION IN WINDOWS ON PC 300 (486)

Record number: H131113

Device: D/T6571
 Model: M
 Tip key:
 Date created: O95/10/03
 Date last altered: A95/10/03

SYMPTOM:

IBM PC 300 Series 6571, 6573, 6581, and 6583 (Intel 486 Models) preloaded with Windows 3.1 and OS/2 may experience video corruption while using Windows 3.1 or WIN-OS/2.

PROBLEM ISOLATION AIDS:

Video corruption may occur when several windows are opened in the Windows environment and one of the windows is dragged around the screen leaving a trail of video corruption.

Similar video corruption may be seen in the WIN-OS/2 Full Screen environment under OS/2.

Advanced diagnostics run without errors.

FIX:

Install the latest Cirrus video device drivers.

Obtain the latest Cirrus video device drivers from the IBM PC Company BBS system by calling 1-919-517-0001. Locate the "IBM PC 300/700 Files" section (section #21) for the files titled:

CL30OS.EXE - Driver update for OS/2 2.11 &
 WARP
 CL30WN11.EXE - v1.1 driver update for Windows 3.1
 CL30DS11.EXE - v1.1 driver update for DOS

The new drivers may also be downloaded via the Internet from the IBM Personal Computer File Library by searching the following Internet URL:

<http://www.pc.ibm.com/files.html>

The driver is located in the IBM PC 300 & 700 Series Files section or by using the search facility to locate the files by the names listed above.

If the error persists, continue normal problem determination procedures.

Windows is a trademark of the Microsoft Corporation.

SAS KEYWORDS:

PSY2	D/T65XX	65XX	6571
IBMPC	PSVP	PSVPDISP	PSY2DISP
D/T6573	6573	PSY2PROG	PSVPPROG
D/T6581	6581	D/T6583	6583
PC 350	PC330	PC300	PC 330
PC350			

1.4.1370 VIDEO DISTORTION MOVING WINDOWS IN OS/2 WARP

Record number: H132798

Device: D/T6877
 Model: M
 Tip key:
 Date created: 096/02/27
 Date last altered: A96/02/27

SYMPTOM:

Video distortion may occur on IBM PC 700 Series 6877 and 6887 systems running OS/2 WARP while moving a window with multiple windows open on the Desktop.

PROBLEM ISOLATION AIDS:

Open multiple windows on the Desktop. Move the windows around the screen. Video distortion of the windows may occur WHILE MOVING the windows.

The Matrox Millennium MGA video device drivers are installed. The video resolution is 640 X 480 X 256 colors.

FIX:

The failure has only been reported using the Matrox Millennium MGA video device drivers at 640 X 480 X 256 colors. Change the video resolution to 1024 X 768 or higher. There is no planned update for this problem at this time.

SAS KEYWORDS:

PSY2	D/T68XX	6887	6877
IBMPC	PSVP	PSVPDISP	PSY2DISP
D/T6887	PSY2PROG	PSVPPROG	PSVPERR
PSY2ERR	PC750	PC700	PC 730
PC 750	PC730	40213	

VIDEO DISTORTION OF WINDOWS PROGRAM GROUP BUTTONS

1.4.1371 VIDEO DISTORTION OF WINDOWS PROGRAM GROUP BUTTONS

Record number: H133497

Device: D/T6560
Model: M
Tip key:
Date created: 096/08/02
Date last altered: A96/08/02

SYMPTOM:

IBM PC 340 Series 6560 systems running OS/2 WARP may exhibit video distortion of the upper left and right corners of a WIN-OS/2 program group window when using large fonts.

PROBLEM ISOLATION AIDS:

The distortion appears as a misalignment of the upper left and right corners of a program group window. A portion of the Desktop is visible through each corner.

Both buttons on the upper left and right corners of the program group window functions properly.

FIX:

An updated video device driver is being released to eliminate this problem. The driver will be available from the IBM PC Company BBS at 919-517-0001 during 9/96.

Windows is a trademark of the Microsoft Corporation.

SAS KEYWORDS:

PSVP	PSY2	PSVPPROG	PSY2PROG
PSVPDISP	PSY2DISP	49173	PC 300
IBMPC			

1.4.1372 VIDEO DISTORTION W/WINDOWS FOR WORKGROUPS

Record number: H132743

Device: D/T6384
 Model: M
 Tip key:
 Date created: 096/02/22
 Date last altered: A96/02/22

SYMPTOM:

Any ISA Bus IBM PC, PS/2 or PS/ValuePoint may exhibit a blank screen or corrupted video after toggling from a DOS full screen to the Windows for Workgroups Desktop.

PROBLEM ISOLATION AIDS:

This failure may occur with any ISA Bus system. The video device drivers provided with IBM systems for use in the Windows environment are NOT the cause of the failure.

FIX:

A fix for this problem is not available from IBM. There is no IBM hardware or software that causes the failure to occur.

Contact Microsoft Technical Support at (206) 637-7098 for additional information regarding a resolution to this problem. Windows for Workgroups is a trademark of the Microsoft Corporation.

SAS KEYWORDS:

PSY2	IBMPC	PSVP	6384
6382	6387	D/T6382	D/T6387
D/T6381	D/T6472	D/T6482	D/T6484
D/T6492	D/T6494	D/T6571	D/T6573
D/T6581	D/T6583	D/T6575	D/T6585
D/T6576	D/T6586	D/T6875	D/T6885
D/T6876	D/T6886	D/T6598	D/T8525
D/T8530	D/T8535	D/T8540	D/T5170
PSY2PROG	PSVPPROG	PSY2DISP	PSVPDISP
SERVER 310	310		

1.4.1373 VIDEO MEMORY SIZE IS INCORRECT W/NETFINITY

Record number: H132823

Device: D/T6877
 Model: M
 Tip key:
 Date created: 096/02/28
 Date last altered: A96/02/28

SYMPTOM:

IBM PC 700 Series 6877 and 6887 may show an incorrect amount of video memory installed in the system when viewed with the NetFinity for Windows "System Information Tool."

PROBLEM ISOLATION AIDS:

The NetFinity for Windows "System Information Tool" may show the amount of video memory to be 1Mb larger than what is physically present.

FIX:

Access the Configuration/Setup Utility by pressing F1 during the memory count. Select "Devices and I/O Ports" followed by "Video Setup" to get an accurate system level view of the amount of video memory installed.

Windows is a trademark of the Microsoft Corporation.

SAS KEYWORDS:

PSY2	D/T68XX	6887	6877
IBMPC	PSVP	PSVPPROG	PSY2PROG
D/T6887	PC730	PC700	PC 730
PC 750	PC750	PSVPDISP	PSY2DISP
PSY2MEM	PSVPMEM	40676	

1.4.1374 VIDEO PROBS W/ "AQUILA" AND "MICROSTATION" SOFTWARE

Record number: H105906

Device: D/T6384
 Model: M
 Tip key:
 Date created: 093/08/18
 Date last altered: A93/10/11

SYMPTOM:

VALUEPOINT 6382/S, 6484/D AND 6387/T SYSTEMS DISPLAY INCORRECT VIDEO OR APPLICATION FAILS TO RUN CORRECTLY WHILE USING THE FOLLOWING APPLICATIONS:

- 1 - AQUILA ADI 4.2
- 2 - MICROSTATION PC (IN PROTECT MODE ONLY)

PROBLEM ISOLATION AIDS:

SYSTEM DIAGNOSTICS AND OTHER APPLICATIONS RUN WITHOUT ERROR.

CHECK THE S3 GRAPHICS ACCELERATOR (A LARGE MODULE LOCATED ON THE SYSTEM BOARD BETWEEN THE VIDEO MEMORY CONNECTORS AND THE MEMORY SIMM CONNECTORS FOR THE FOLLOWING PRINT:

P86C805
 1XX1-0002

FIX:

INSTALL S3 DRIVERS VERSION 2.0. THESE DRIVERS CAN BE DOWN LOADED FROM THE TECHNICAL SUPPORT BULLETIN BOARD BY CALLING 919 - 517 - 0001.

THE DRIVERS ARE IN THE VALUEPOINT DIRECTORY AS FOLLOWS:

S3DOS20.DSK - DOS AND CAD S3 DRIVERS VERSION 2.0.
 S3WIN20.DSK - MICROSOFT WINDOWS 3.1 S3 DRIVERS VERSION 2.0.

THE DRIVERS CAN ALSO BE REQUESTED THROUGH VM/OFFICEVISION BY ENTERING THE FOLLOWING COMMAND:

"TOOLCAT PCWIN GET S3DRIVER PACKAGE"

SVGA DEVICE DRIVERS INSTALLATION INSTRUCTIONS HAVE BEEN SHIPPED WITH EACH SYSTEM.

IF THE S3 MODULE HAS DIFFERENT PRINT OR THE ABOVE DRIVERS ARE ALREADY INSTALLED, USE NORMAL PROBLEM DETERMINATION.

SAS KEYWORDS:

PSY2	PS/VP	PSVDPDISP	HANG
VALUE POINT	PSVPOPER	6382	6384
6387	D/T6387	D/T6382	AUTOCAD
PSVP			

1.4.1375 VIDEO RGB MIXER TEST FAILS IN QAPLUS/2

Record number: H01789

Device: D/T6577
 Model: M
 Tip key:
 Date created: 096/06/19
 Date last altered: A96/06/19

SYMPTOM:

When running the QAPLus/2 Video RGB Mixer test on IBM PC 300 Series 6577 and 6587, the user may be restricted from selecting the dials to mix the primary colors.

PROBLEM ISOLATION AIDS:

This failure occurs after selecting the Video Mixer test and running it to completion and then selecting ALL video tests including the Video Mixer test and retesting. At the last screen, the RGB Mixer test will not allow the user to select the dials.

FIX:

Do not replace hardware. There is no video hardware failure. To perform the test, select the Video RGB Mixer test separately OR depress the TAB key immediately upon entering the Video RGB Mixer test if all other video test were previously selected.

QAPLUS/2 is a trademark of Diagsoft, Inc.

SAS KEYWORDS:

PSY2	D/T65XX	6577	6587
IBMPC	PSVP	PSVPDISP	PSY2DISP
D/T6587	PC 350	PC350	PC300
PC 330	PC330	44908	PSVPDIAG
PSY2DIAG	PSVPPROG	PSY2PROG	

1.4.1376 VPD (VITAL PRODUCT DATA) ERRORS 187 & 188, CONTINUOUS LOOPS

Record number: H127429

Device: D/T8641
 Model: M
 Tip key:
 Date created: 095/05/04
 Date last altered: A95/11/30

SYMPTOM:

On an 8641, 9595 or 9595A, one or more of the following errors appear after a boot to the Reference Diskette to set a feature or change an option:

"01299000 VPD error; processor board replaced?"
 "Processor board serial number does not match the serial number stored."

"000188XX Vital Product data error."

"000187XX Vital Product data. Serial number information corrupted."

The error codes indicate "Processor complex has changed," "VPD invalid," and "Configuration invalid."

All attempts to correct the VPD data cause the system to reboot with the same series of errors, repeatedly.

PROBLEM ISOLATION AIDS:

The system is a 9595 (Server 95) or 8641 (Server 500) which uses the Type 4 Reference Diskette, at or below Version 1.33.

Changing the system board does not correct the problem.

1. Automatic Configuration is run without success.
2. Attempts to select "SET SYSTEM IDENTIFICATION" from the Reference Diskette and enter the system serial number are also unsuccessful.

FIX:

Do not change either the system board or the processor card to correct this error.

There are two methods which will resolve this problem:

1. A new Reference Diskette is now available which will interrupt the VPD-Boot loop and allow correct configuration. The new Type 4 Reference Diskette is Version 1.34. It may be obtained from the PC Company Bulletin Board System by downloading filename RF90954A.DSK from section 22, by calling 919-517-0001.
2. A manual configuration work-around.

With either method, once the VPD configuration loop is broken and the the system is correctly configured, the VPD problem cannot recur.

The following work-around should resolve this situation if the newer Reference Diskette is not available:

1. Remove the battery for 10 minutes to drain CMOS, also remove the SCSI adapter and/or RAID adapter.
2. Reinstall the battery, but not the SCSI or RAID adapter.
3. Boot to a Reference Diskette and you should receive the following messages:

00017300 Configuration not valid or system complex error.

00016300 The date and time are not set.

4. ----- DO NOT press ENTER at the following message: -----
 "Warning: The system had an error in the battery powered configuration data. Press Enter to attempt to restore the configuration and continue using the system. If the configuration cannot be restored or Esc is pressed, additional information will be displayed and automatic configuration will be run. ENTER Esc=Cancel"

---- Important have the customer press <Esc>.----

5. Now you will receive another message:

"Warning: If you do not restore the configuration now, the system identification information will be lost. Press Enter to attempt to restore the configuration."

---- Important. Have the customer press <Esc> again. ----
6. You will receive another message:

"System identification information has been lost."

Enter

---- Have the customer press <Enter> ---- (Actually they do not have a choice at this time.)

If the customer's prompts don't follow the above situation exactly, just have them keep pressing <Esc> whenever they can and <Enter> when it's the only choice.

- 7. After Auto-Configuration completes, reboot the system using the Reference Diskette to verify errors are corrected.
- 8. Power down and reinstall the SCSI and/or RAID adapter.
- 9. Boot the Reference diskette. You will receive an 00016500 Configuration error.

---- Important, DO NOT run Auto-Configuration this time. ----

- 10. Boot Reference Diskette to Main Menu, select "Set Configuration." Next, select "Change Configuration." Make any configuration changes needed, also verify there are no configuration conflicts. (Look for asterisks beside the entries in the View Configuration/Change Configuration screen.
- 11. Press F10 to save the configuration.
- 12. Follow the prompts to Exit, remove the Reference Diskette and reboot the system.
- 13. The system should now boot to customer's operating system without error.

Note:

The SCSI Adapter or RAID Array controller will not auto configure out of this conflict.

SAS KEYWORDS:

PSY2	PSY2ERR	D/T9595	D/T9595A
SYSTEM	PARTITION	VPD	187
188	1299	00129900	00018800
00018700	SERIAL	NUMBER	129
PSY2TBD	SERVER	500	95
95A			

1.4.1377 WAC ADAPTER OVERLAYS SYSTEM DIAGNOSTICS

Record number: H124455

Device: D/T9557
 Model: M
 Tip key:
 Date created: 094/06/17
 Date last altered: A94/08/15

SYMPTOM:

When attempting to run system diagnostics on the 9557 (after booting the system partition and doing a CONTROL/ A), the only diagnostic that is available is the WAC adapter (Wide Area Connector Adapter) diagnostic. All other system diagnostics have "disappeared."

Note: The problem may be seen on any PS/2 IML system.

PROBLEM ISOLATION AIDS:

1. A WAC Adapter (FRU P/N33G8453) is installed in the system.
2. When running diagnostics from the System Partition, only the WAC Adapter diagnostic is available. No other hardware diagnostics are visible.
3. The system diagnostics may still be run by booting the back-up Reference Diskette (set) from the diskette drive. Refer to the label on the diskette and determine if the WAC Adapter Option Diskette is version 2.1.

Version 2.1 of the WAC Adapter Option diskette erroneously overwrites critical diagnostic control program files on the system partition of the PS/2 system.

Version 2.1 of the WAC Adapter Option diskette was only available from the IBM PC Company Bulletin Board from 3/31/94 through 6/26/94 and was never shipped with the option.

FIX:

A current WAC Adapter Option Diskette (version 2.20), which corrects this problem, is available from the IBM PC Company Bulletin Board at 1-919-517-0001. Assistance obtaining the diskette, or downloading the file is available by calling 1 - 800-426 - 7763.

All copies of the down-level option diskette (version 2.1, IBMWAC21.DSK) should be destroyed.

SAS KEYWORDS:

PSY2	PSY2COMM	PSY2ADPT	PSY2ERR
WIDE AREA	CONNECTOR	ADAPTER	33G8465
PS2VP	PCOM	D/T3511	CONNECTION
D/T9595	D/T8595	D/T8590	D/T8560
D/T8556	D/T9585	D/T9577	D/T9576
D/T8556	D/T8557	D/T8565	D/T8555
8557	9557	33G8466	33G8467
33G8468			

1.4.1378 WAC CARD FAILS IN PC300

Record number: H126511

Device: D/T6581
Model: M
Tip key:
Date created: O95/02/13
Date last altered: A95/02/22

SYMPTOM:

The Wide Area Connection (WAC) adapter may fail when installed in PC300 (486). Symptoms include, but not limited to, system fails to recognize an installed WAC adapter, loses host connection, or hangs while communicating.

PROBLEM ISOLATION AIDS:

The problem may be intermittent. Running WAC diagnostics in single test mode may fail to isolate the failure. Running diagnostics in loop mode will typically result in diagnostics stopping with an interrupt error.

FIX:

Configure the WAC adapter at interrupt 9; IRQ 9 is the only interrupt supported when this adapter is installed in PC300 (486). If problems persist with this adapter set to IRQ 9, continue with normal problem determination.

SAS KEYWORDS:

PSY2	PSVP	PC300	D/T6573
D/T6583	D/T6571	6571	6573
6581	6583	PSY2COMM	PSVPCOMM
PSY2ADPT	PSVPADPT	IBMPC	D/T65XX

WAKE ON LAN FEATURE HALTS AT MOUSE ERROR MESSAGE

1.4.1379 WAKE ON LAN FEATURE HALTS AT MOUSE ERROR MESSAGE

Record number: H101069

Device: D/T6877
 Model: M
 Tip key:
 Date created: 096/07/24
 Date last altered: A96/08/07

SYMPTOM:

IBM PC 700 Series 6877 & 6887 and PC 300 Series 6577 & 6587 systems may halt the Wake on LAN Client startup when a "Mouse disabled" error is detected and displayed.

PROBLEM ISOLATION AIDS:

This problem was reported on clients using either OS/2 or Microsoft Windows95 operating systems.

This situation occurs because the "Dual" power-on password feature is enabled. When this feature is enabled via the Setup Utility, the system disables the mouse port. When the system Wakes on LAN, the operating system posts an error when the mouse driver load fails due to the disabled mouse port.

The Dual power-on password feature is a part of the C2 Security package.

FIX:

Do not replace hardware. This is an User configuration setup problem.

To bypass the error message and allow the system to complete the Wake on LAN startup, perform the following steps depending on the operating system. The User will still be required to enter the power-on password at the completion of the startup.

OS/2 -

Edit the OS/2 CONFIG.SYS file to add "PAUSEONERROR=NO" near the top of the file.

Windows95 -

- 1) When the mouse error is displayed, enter the password to enable the keyboard.
- 2) Use the keyboard to put a "checkmark" in the box that states:
 "Do not display this message in the future"

Windows95 is a trademark of the Microsoft Corporation.

SAS KEYWORDS:

PSVP	PSY2	PSVPPROG	PSY2PROG
6877	PC 700	PC730	PSVPERR
PSY2ERR	PSY2OPER	PSVOPER	D/T6887
D/T6577	D/T6587	50537	

WANG MC-LOC * ADAPTER CARD CAUSES a HANG DURING POST

1.4.1380 WANG MC-LOC * ADAPTER CARD CAUSES a HANG DURING POST

Record number: H033205

Device: D/T8580
Model: M
Tip key:
Date created: 091/02/25
Date last altered: A94/03/14

SYMPTOM:

SOME WANG MC-LOC * ADAPTERS MAY NOT OPERATE PROPERLY WITH SOME MODEL 8580 SYSTEMS. A HANG MAY BE EXPERIENCED DURING SYSTEM POST.

PROBLEM ISOLATION AIDS:

THE WANG MC-LOC * ADAPTER IS USED AS AN INTERFACE TERMINAL CARD TO WANG'S MINI COMPUTER. AFTER REMOVING THIS ADAPTER, THE 8580 PASSES ALL DIAGNOSTICS, POSTS AND OPERATES CORRECTLY.

FIX:

IF YOUR SYSTEM IS EXPERIENCING DIFFICULTY WITH THIS ADAPTER, HAVE YOUR CUSTOMER CONTACT WANG HARDWARE SUPPORT AT 1 - 800-247 - 9264 FOR ASSISTANCE.

* MC-LOC IS A REGISTERED TRADE MARK OF THE WANG CORPORATION

SAS KEYWORDS:

PSY2 PSY2ADPT PSY2OEM PSY2COMM

WARP CONNECT UNINSTALL DOES NOT REMOVE ALL FILES

1.4.1381 WARP CONNECT UNINSTALL DOES NOT REMOVE ALL FILES

Record number: H01506

Device: D/T6577
Model: M
Tip key:
Date created: 096/06/19
Date last altered: A96/06/19

SYMPTOM:

The OS/2 WARP Connect Uninstall program preloaded on IBM PC 300 Series 6577 or 6587 systems may not remove all product folders and icons of features selected for removal.

PROBLEM ISOLATION AIDS:

The OS/2 WARP Connect Uninstall program does remove the product files of the Connect features such as TCP/IP or LAN Requestor, however, the folders and Icons may remain on the Desktop.

FIX:

Manually remove any remaining folders and icons after running the Uninstall program. This may be done by dragging the folder and/or icon to the Shredder icon.

SAS KEYWORDS:

PSY2	D/T65XX	6577	6587
IBMPC	PSVP	PSVPPROG	PSY2PROG
D/T6587	PC 350	PC350	PC300
PC 330	PC330	41534	

WARP 3 INSTALLS SOUNDBLASTER DRIVERS FOR CRYSTAL AUDIO

1.4.1382 WARP 3 INSTALLS SOUNDBLASTER DRIVERS FOR CRYSTAL AUDIO

Record number: H16199

Device: D/T6588
Model: M
Tip key:
Date created: 097/06/20
Date last altered: A97/06/24

SYMPTOM:

During installation, OS/2 Warp 3.0 installs SoundBlaster Pro drivers for the Crystal 4236 Audio chipset.

PROBLEM ISOLATION AIDS:

None

FIX:

The user must manually remove SoundBlaster Pro from the Multimedia Device Support list during installation.

When the "System Configuration" screen is displayed during installation, SoundBlaster Pro will be displayed under "Multimedia Device Support."

1. Click on the icon next to "Multimedia Device Support."
The "Device Selections and Settings" screen will be displayed.
2. Click on the Remove radio button to remove the device from the "Device(s) in System to be Installed" window.
The "Multimedia Device Support" should now say "None."
3. Click on OK until you are returned to the System Configuration screen.
4. Continue with the OS/2 Warp 3.0 installation.

SAS KEYWORDS:

PSY2	PSY2OPER	PSVP	PSVPOPER
D/T6588	D/T6888	6588	6888
UNCLASSIFIED	64608		

1.4.1383 WAVERUNNER AND WINDSURFER FAIL IN 6381

Record number: H126815

Device: D/T6381
 Model: M
 Tip key:
 Date created: 095/03/14
 Date last altered: A95/04/11

SYMPTOM:

PS/ValuePoint 6381 (all models) fails to recognize an installed M-Wave Windsurfer Communication adapter (FRU p/n92f4020) or Waverunner Digital Modem ISA adapter (FRU p/n73G1392) or the adapter fails to function as expected.

PROBLEM ISOLATION AIDS: None**FIX:**

Configure the Waverunner or Windsurfer adapter card for interrupt 3 (IRQ3) and disable serial port B on the system board. IRQ3 is the only interrupt supported for these adapters when installed in 6381 systems.

If the Waverunner or Windsurfer continues to fail when set to IRQ 3, inspect the riser card. If the riser card can be identified as FRU p/n52g7065, replace the riser using FRU p/n88G4178. FRU p/n88G4178 may be marked with manufacturing p/n88g4177.

Not all systems will experience problems with riser p/n52g7065 and only systems that fail when Waverunner or Windsurfer adapters are configured for IRQ3 should have risers replaced.

SAS KEYWORDS:

PSY2	PSVALUEPOINT	PSVP	PS/VP
6381	PSVPADPT	PSYSADPT	PSY2MISC
PSVPMISC	P/N92F4020	P/N73G1392	92F4020
73G1392	88G4177	P/N88G4178	88G4178
P/N88G4178			

1.4.1384 WEB BROWSERS HANG WHEN STARTING JAVA APPS

Record number: H017405

Device: D/T6898
 Model: M
 Tip key:
 Date created: 098/03/25
 Date last altered: A98/04/17

SYMPTOM:

When accessing a Java web page, or starting Java applications in True Color mode, Internet Explorer and Netscape enter a hang condition.

PROBLEM ISOLATION AIDS:

This tip applies when the following conditions are met:

1. System type is one of the following:
 - IntelliStation M-Pro Series 6888/6898
 - IntelliStation Z-Pro Series 6899
 - IBM PC300XL Series 6588
2. Video adapter may be either Intergraph Intense 3D, Matrox Millenium, or Permedia-2 included with the system.
3. The video adapter is running in True Color mode (24-bit or 16.7 million colors).

FIX:

Download and install the following Post Service Pack 3 fix for US English versions of WindowsNT 4.0 from Microsoft at the following Internet URL:

Ftp: //ftp.microsoft.com/bussys/winnt/winnt-public/fixes/usa/NT40/hotfixes-postSP3/getadmin-fix

Click on directory "getadmin-fix" and follow instructions included in the README.TXT file.

Note: For Non US English versions of WindowsNT 4.0, refer to Microsoft's web page for availability of the fix in other languages.

Windows and WindowsNT are trademarks of Microsoft Corporation.

SAS KEYWORDS:

PSY2	PSY2ERR	PSY2OPER	PSVP
PSVPERR	PSVOPER	IE40	COMMUNICATOR
D/T6888	D/T6898	D/T6899	D/T6588
JAVA	UNCLASSIFIED		

1.4.1385 WHITE SCREEN OR TRAP SWITCHING FROM WIN-OS/2 TO OS/2

Record number: H01721

Device: D/T6577
 Model: M
 Tip key:
 Date created: 096/06/19
 Date last altered: A96/06/19

SYMPTOM:

IBM PC 300 Series 6577 and 6587 may exhibit an all or partially white screen or a Trap error when switching between a WIN-OS/2 session and the OS/2 WARP Desktop.

PROBLEM ISOLATION AIDS:

The following scenario is required to recreate the failing

symptom:

- 1) Open the OS/2 System folder.
- 2) Open the Command Prompts folder.
- 3) Open an OS/2 or DOS Full Screen session.
- 4) Type "WIN" or "WINOS2" and press Enter.
- 5) Press ALT + ESC until the system hangs or traps.
 If the system hangs, the display will be all or partially white and the cursor may be displayed as a large black box.
- 6) Press Ctrl-Alt-Del to recover the system.

The failure does not occur if the system is configured for VGA mode.

FIX:

The following changes must be made to the system configuration to eliminate this failure:

1. Obtain the latest S3 Trio64/64V+ video device drivers. The current driver level is v2.81-05 and is located in the IBM PC 300/700 Files section (#21) on the IBM PC Company BBS at 919 - 517-0001.
2. Update the DOS Full Screen video settings in the following manner:
 - 1) Click the right mouse button over the DOS Full Screen session icon.
 - 2) Click on Settings.
 - 3) Click on Session
 - 4) Click on DOS settings...
 - 5) Click on DOS video settings, then OK.
 - 6) Verify that: VIDEO_8514A_XGA-IOTRAP = OFF
 VIDEO_SWITCH_NOTIFICATION = ON
 - 7) Click on Save. Exit, shutdown and reboot the system.
3. View the README file on the video device driver update diskette to determine if the users system requires the following command to be added to the AUTOEXEC.BAT file:

"COPY C: \WINDOWS\WINOS2.COM C: \WINDOWS\WIN.COM"

The AUTOEXEC.BAT file executes whenever WIN or WINOS2 is entered at an OS/2 or DOS Full screen command prompt.

NOTE - When starting a Windows session from a DOS command line, use the WINOS2 command rather than the WIN command.

SAS KEYWORDS:

PSY2	D/T65XX	6577	6587
IBMPC	PSVP	PSVPDISP	PSY2DISP
D/T6587	PC 350	PC350	PC300
PC 330	PC330	43047	PSVPERR
PSY2ERR			

WIDE AREA CONNECTOR ADAPTER DATA ERRORS

1.4.1386 WIDE AREA CONNECTOR ADAPTER DATA ERRORS

Record number: H12916

Device: D/T5150
 Model: M
 Tip key:
 Date created: 093/08/11
 Date last altered: A94/12/13

SYMPTOM:

Failure symptoms:

Machine NMI, POST hangs (CP-40) or data corruption problems may be experienced on PC and PS/2 systems related to use with the Wide Area Connector Adapters P/Ns:

33G8465, 33G8466, 33G8467, 33G8468, 33G8469, 33G8470, 33G8471, 33G8472, 33G9171, 33G9172, 33G9173, 33G9174, 33G9175, 33G9176, 33G9177, and 33G9178.

Check for the EC level on the P/N label on the back side of the base card.

EC levels C41111 and C41618 should be replaced by EC level C41821 or higher.

PROBLEM ISOLATION AIDS: None**FIX:**

For Microchannel base cards order FRU P/N33G8453.

For ISA (Industry Standard Architecture) base cards order FRU P/N33G8454.

SAS KEYWORDS:

PSY2	PSY2COMM	PSY2ADPT	PSY2ERR
WIDE AREA	CONNECTOR	ADAPTER	33G8465
PS2VP	PCOM	CP40	D/T3511
D/T9595	D/T8595	D/T8590	D/T8560
D/T8580	D/T9585	D/T9577	D/T9576
D/T8556	D/T8557	D/T8565	D/T8555
D/T8570	D/T8640	D/T5170	D/T5160
D/T5162	D/T8540	D/T8530	D/T8535
CONNECTION	WAC	5150	

1.4.1387 WIN-OS/2 FAILS AFTER DUAL BOOTING FROM DOS/WINDOWS

Record number: H133219

Device: D/T6877
 Model: M
 Tip key:
 Date created: 096/03/25
 Date last altered: A96/03/25

SYMPTOM:

IBM PC 700 Series 6877 and 6887 may fail to run any groups or icons in the WIN-OS/2 or Windows Program folder after the system has been dual booted from DOS/Windows.

PROBLEM ISOLATION AIDS:

This failure occurs if CoSession was loaded in Windows 3.11 while in the DOS/Windows environment and the "Go to OS/2" icon is used to dual boot back to an OS/2 environment.

FIX:

Either of the following methods may be used to eliminate exposure to this situation if CoSession was started while in the DOS/Windows environment:

- 1) Exit out of Windows 3.11 and use the "BOOT /OS2" command from the C: \OS2 directory.
- 2) Exit out of Windows and then restart Windows. The "Go to OS/2" icon may then be used to dual boot to OS/2.

Windows is a trademark of the Microsoft Corporation.

SAS KEYWORDS:

PSY2	D/T68XX	6887	6877
IBMPC	PSVP	PSY2PROG	PSVPPROG
D/T6887	PC750	PC700	PC 730
PC 750	PC730	42915	PSY2OPER
PSVPOPER	PSVPERR	PSY2ERR	

1.4.1388 WIN-OS/2 SESSION VIDEO CORRUPTION ON PC 700

Record number: H132799

Device: D/T6877
 Model: M
 Tip key:
 Date created: 096/02/27
 Date last altered: A96/02/27

SYMPTOM:

IBM PC 700 Series 6877 and 6887 systems may exhibit video corruption in a WIN-OS/2 Full Screen session if ALT+ESC keys are pressed to return to the OS/2 Desktop prior to the WIN-OS/2 session completely loading.

PROBLEM ISOLATION AIDS:

The failure symptom has been experienced when following the steps below:

1. Place the WIN-OS/2 Full Screen session and an OS/2 Full Screen session icon in the Startup Folder.
2. Restart the system and allow it to boot to the OS/2 Desktop. The Windows Full screen session should start minimized.
3. Double-click on the WIN-OS/2 Full Screen session icon.
4. While the system is loading the WIN-OS/2 Full Screen session, press the ALT+ESC keys to switch back to the OS/2 Desktop AND then switch back to the WIN-OS/2 session. The WIN-OS/2 Desktop will be corrupted.

Additionally, the failure may occur when ALT+ESC is pressed between any full screen session and the OS/2 Desktop.

FIX:

When the WIN-OS/2 Full Screen corruption occurs, allow the session to complete loading then press the ALT+ESC keys to return to the OS/2 Desktop. Terminate the WIN-OS/2 Full Screen session. At this point the WIN-OS/2 Full Screen session can be restarted without any video corruption.

SAS KEYWORDS:

PSY2	D/T68XX	D/T6887	6887
6877	PC 750	PC700	PC750
68XX	IBMPC	PSVP	PC730
PC 730	PSVPDISP	PSY2DISP	PSY2ERR
PSVPERR	PSVPPROG	PSY2PROG	40112

1.4.1389 WIN-OS2 FULL SCREEN FAILURE W/ARTIST GRAPHICS CARD

Record number: H136378

Device: D/T6576
 Model: M
 Tip key:
 Date created: 097/01/28
 Date last altered: A97/01/28

SYMPTOM:

IBM PC 300 & 700 Series 6576, 6586, 6877, or 6887 systems may fail to display a WIN-OS2 full screen session at 1600x1200x256 colors at 82Hz or 85Hz with an ARTIST Graphics 3GA 2000i PCI video adapter installed.

PROBLEM ISOLATION AIDS:

The failure occurs in systems with a 100Mhz or faster processor running OS/2 2.11 or OS/2 3.x WARP.

The failure does not occur if the Level 2 cache is disabled via the Setup Utility.

Lowering the refresh rate to a value of less than 82Hz eliminates the failure symptom regardless of the processor speed.

FIX:

Install an updated version of the ARTIST Graphics video device driver for OS/2.

Obtain the current level ARTIST Graphics video device driver from the ARTIST Graphics BBS by calling (612) 631-7664 or download the driver from the ARTIST Graphics Technical Support Internet site at the following URL:

[Http: //artgraphics.com/files/drivers/2000/](http://artgraphics.com/files/drivers/2000/)

The driver is titled: OS3GA111.ZIP

ARTIST Graphics 3GA 2000i is a trademark of ARTIST Graphics.

SAS KEYWORDS:

PSY2	D/T6586	D/T6877	D/T6887
IBMPC	PSVP	PSVPDISP	PSY2DISP
PSY2ADPT	PSVPADPT	PSVPOEM	PSY2OEM
PC 330	PC 350	PC 730	PC 750
UNCLASSIFIED	52975		

1.4.1390 WINDOWS NT HANGS WITH SONY 16X CDROM DRIVE INSTALLED

Record number: H161150

Device: D/T6588
 Model: M
 Tip key:
 Date created: 097/09/22
 Date last altered: A97/09/22

SYMPTOM:

When the system is powered on, it completes POST normally and begins to load the operating system. At the initial WindowsNT blue screen, the system appears to hang anywhere from 2 to 5 minutes.

If left undisturbed, the Initial Program Load (IPL) continues and the system functions normally. This is an intermittent symptom.

PROBLEM ISOLATION AIDS:

This tip applies to IBM PC Model PC300XL, machine type 6588, systems equipped with a Sony CDU-511 16X CDROM drive and preloaded with WindowsNT 4.0.

The hang condition is only seen in those systems where the 16X CDROM drive is installed as a primary device on the secondary IDE port. In systems where the 16X CDROM is installed as a secondary device on the primary IDE port, the hang condition does not occur.

FIX:

Download and apply FLASH11J.EXE

Installation Instructions:

1. Insert the diskette created by FLASH11J.EXE into the diskette drive and power on the system.
2. After the system boots, the following is displayed at the bottom of the screen:

```
"Converting 511_I11J.HEX to binary data...<"
```
3. When this message disappears from the display, and "Replace? Y/N" is seen, press "Y" to update the Sony CDROM microcode.
4. Afterwards, remove the diskette and reboot the system normally.

This flash diskette will update the Sony CDU-511 16X Max CDROM to firmware level 1.1J. The update will not install on, or damage CDROM drives not affected.

FLASH11J.EXE may be downloaded via the Internet from the IBM Personal Computer File Library by searching the following Internet URL: www.us.pc.ibm.com/files.html

FLASH11J.EXE may also be downloaded from the IBM PC Company BBS system by calling 1-919-517-0001.

WindowsNT is a trademark of Microsoft Corporation.

SAS KEYWORDS:

PSY2	PSY2MCD	PSY2OPER	PSY2OEM
PSVP	PSVPMCD	PSVPOPER	PSVPOEM
D/T6588	6588	UNCLASSIFIED	

Record number: H013851

Device: D/T8642
 Model: M
 Tip key:
 Date created: 096/06/24
 Date last altered: A97/04/11

SYMPTOM:

After running Disk Administrator in Windows NT or after rebuilding a disk with RAIDADM, the message "invalid boot partition" or "no boot record found" is displayed when the PC Server 720 is rebooted.

PROBLEM ISOLATION AIDS: NONE**FIX:**

Use the following procedure to install Windows NT Server on the IBM PC Server 720. If assistance is required at any time, contact the IBM PC HelpCenter at the following phone numbers:

- * In the U.S.A., 1-800-772-2227
- * In Canada, 1-800-565-3344

Outside the USA and Canada, contact your IBM authorized reseller or IBM marketing representative.

1. Download and expand the following files from the IBM BBS:

- A. 720NOS.EXE Only needed if installing NT Server 3.51
- b. 720UPD.ZIP BIOS, Reference, and Diagnostic Diskettes
- c. 4227109.EXE PCI Streaming RAID Option Diskette
- FLASH243.EXE PCI RAID firmware flash version 2.43
- or-
- 4227110.EXE MCA Streaming RAID Option Diskette 1/2
- 4227111.EXE MCA Streaming RAID Option Diskette 2/2
- RAID221A.EXE MCA Streaming RAID firmware version 2.21
- or-
- 84H7118.EXE PC ServeRAID Configuration Disk V2.00
- 84H7121.EXE PC ServeRAID Driver and Util Disk V2.00
- 84H7130.EXE PC ServeRAID BIOS/Firmware V2.00

2. Flash the BIOS to the latest level available on the IBM BBS.
 Note: The reference diskette and diagnostic diskette must be at the appropriate level along with the BIOS.
 The current BIOS, reference, and diagnostic diskettes are packaged together in the file 720UPD.ZIP on the IBM BBS.

- A. Download the following file: 720UPD.ZIP
- B. Unpack the file using the following command:
PKUNZIP 720UPD.ZIP
- C. Expand the BIOS diskette using the following command:
4227101.EXE A:
- D. Boot the flash BIOS diskette and follow the on-screen instructions to flash the BIOS.

3. If a RAID Adapter is present, flash the RAID firmware to the latest level by booting the appropriate RAID firmware diskette and following the on-screen instructions.

4. Initialize and Synchronize RAID hard drives or Format Non-RAID hard drives.

Note: The version number that appears on the Main Menu Screen must be Ver. 3.40 or later for PCI and MCA RAID adapters or Ver. 2.00 or later for ServeRAID adapters.

- A. For RAID systems, boot the current RAID Option Diskette:
4227110.EXE for MCA RAID adapters
- or-
- 4227109.EXE for PCI RAID adapters
- or-
- 84H7118.EXE for ServeRAID adapters

1. Select Create/delete array, Create disk array, choose the drives for the array, then select Define Logical drive, and define a logical drive of 300MB to 500MB.
2. Confirm, Exit and wait for the configuration to be saved.
3. Select Initialize/synchronize array, then select Initialize logical drive.
4. For RAID level 5, select Synchronize logical drive.

- B. For non-RAID systems:
1. During boot, press <Ctrl> A when the following message appears: "SCSI BIOS has installed successfully."
This action will invoke the SCSISelect utility program.
 2. Select "Configure/View Host Adapter settings".
 3. Select "Advanced Configuration Options".
 4. Set "Extended BIOS Translation for DOS Drives > 1 GByte" to "Disable"
 5. Set "Reverse Scan" to "Disable".
 6. Press <Esc> and Save these settings.
 7. Select SCSI DISK Utilities.
 8. Select one of the hard drives listed, then choose FORMAT the drive. Repeat for every hard drive in the system.
5. (NT 3.51 only) If installing NT3.51, download the latest version of the Windows NT Server 3.51 Service Pack. The Service Pack will contain a file called NTKRNLMP.EX_. This is an updated kernel for NT 3.51. The latest Service Service Pack can be obtained at the following WEB URL:
<http://www.microsoft.com>
 6. Create the NT boot diskettes from the Windows NT Server CD using the following procedure:
 - a. Place the NT Server CD in any computer with a CD-ROM drive
 - b. Select the drive letter for that CD-ROM (ie. D:)
 - c. Change to the i386 directory (cd i386)
 - d. If this computer is running Windows NT, type the following at a command prompt: winnt32 /ox (the /ox is important)
-or-
for any other operating system, type the following at a command prompt: winnt /ox (the /ox is important)
 7. Make a copy of the Windows NT Setup Boot Disk and label it "Modified NT Boot Disk".
 8. (NT 3.51 only) The NT Service Pack contains a compressed file named NTKRNLMP.EX_. (If using the diskette version, it is on diskette 1) From a command prompt, type the following to expand the file (for example):

EXPAND A: NTKRNLMP.EX_ C: NTKRNLMP.EXE
 9. (NT 3.51 only) Copy the new NTKRNLMP.EXE over the original on the diskette labeled "Modified NT Boot Disk."
 10. Boot to a DOS Version 6.0 or later diskette, and run FDISK to create an active partition the size of the logical drive if used above in step 4.a.1. It is not necessary to format this partition as NT will format during the installation.
 11. (NT 3.51 only) Boot the Modified NT Boot Disk and press <F5> when the following message appears on the black screen:
"Setup is inspecting your computer's hardware configuration"
A blue Windows NT Setup screen will appear with the following message:
"Setup could not determine the type of computer you have, or you have chosen to manually specify the computer type."

Note: If you are prompted to insert the Windows NT Setup Disk 2, then you did not press <F5> at the appropriate time. Reboot the server with the Modified NT Boot Disk.
 12. (NT 3.51 only) Select "Other" and press <Enter>
 13. (NT 3.51 only) Insert the PC Server 720 Network Operating System Support Diskette (720NOS.EXE) and press <Enter>.
 14. (NT 3.51 only) IBM PC Server 720 will be highlighted. Press <Enter>
 15. Follow the on-screen instructions until the Express/Custom menu appears.
 16. Press <C> for Custom Setup.
 17. Press <S> to Skip Mass Storage Detection.
 18. Press <S> to Specify additional SCSI adapters.
 19. Press <Enter> to select "Other."
 20. For MCA RAID Systems, insert the MCA Streaming RAID Option Diskette 2/2 in drive A: (4227111.EXE on the BBS)
-or-
For PCI RAID Systems, insert the "PCI Streaming RAID Option Diskette 1/1 in drive A: (4227109.EXE on the BBS)

-or-

For ServeRAID systems, insert the IBM ServeRAID Adapter Support Diskette (2 of 2) in drive A:

-or-

For non-RAID systems, insert the "Adaptec 7800 Family Manager Set" diskette in drive A.

21. Press <Enter> to continue.
22. Select the device driver for NT Version 3.5 and press <Enter> to continue. (Applies to both NT 3.51 and 4.0)
23. Press <Enter> to avoid further detection of mass storage devices.
24. Follow the on-screen instructions to complete the install.
25. After completing the custom install of NT, apply the Service Pack BEFORE running any of the applications, especially Disk Administrator.
26. After applying the Service Pack, shutdown and re-boot, then run Disk Administrator and partition the drives.

-----IMPORTANT-----

Diskette images are customer installable. Customers should review any "README" files located on the diskette for installation information. Contact the IBM PC HelpCenter at 800-772 - 2227 if download/installation assistance is needed.

IBM PC Server files are located in Directory 22 on the PC Company Bulletin Board Service (BBS) at 1-919-517-0001 or tieline 255-0001.

The files may also be downloaded via the Internet from the IBM PC File Library by searching the following Internet URL:
<http://www.pc.ibm.com/files.html>

Windows NT is a trademark of Microsoft Corp.
SCSISelect is a trademark of Adaptec, Inc.

SAS KEYWORDS:

PSY2	8642	720	OPER
PROG	SERVER	RAID	WINNT
WINDOWS	PSY2PROG	4.0	3.51

WINDOWS NT SHUTDOWN HANGS WITH LANSTREAMER ADAPTER

1.4.1392 WINDOWS NT SHUTDOWN HANGS WITH LANSTREAMER ADAPTER

Record number: H134918

Device: D/T8640
 Model: M
 Tip key:
 Date created: 096/11/04
 Date last altered: A96/11/04

SYMPTOM:

PC Server 320 or 520 (PCI/EISA) systems running Windows NT 3.51 hang during a normal shutdown of the Operating System.

PROBLEM ISOLATION AIDS:

The system is a PC Server 320 or 520 PCI/EISA model running Windows NT 3.51 AND any of the following adapters are installed:

- IBM Auto LANstreamer PCI Adapter FRU p/n04H8098 (Option p/n 04H8095)
- IBM Triple LANstreamer PCI Adapter FRU p/n25H6305 (Option p/n 25H6304)

FIX:

Install Windows NT 3.51 Service Pack 5 which can be obtained from the following Microsoft Web site URL:

Ftp: //ftp.microsoft.com/
 bussys/winnt/winnt-public/fixes/usa/nt351/ussp5/i386

Windows NT is a trademark of Microsoft Corporation.

SAS KEYWORDS:

PSY2	PSY2ADPT	PSY2ERROR	PSY2COMM
TRAP	TRAPS	HANG	25H6304
25H6305	04H8095	04H9098	P/N25H6304
P/N04H8095	UNCLASSIFIED		

1.4.1393 WINDOWS NT TRAPS ON RAID SERVERS

Record number: H134690

Device: D/T8641
 Model: M
 Tip key:
 Date created: 096/10/24
 Date last altered: A97/05/06

SYMPTOM:

Windows NT traps to the blue screen while running the System Information Tool with any version of Netfinity.

PROBLEM ISOLATION AIDS:

The trap may occur on any IBM PC Server running any version of Netfinity and Windows NT with the following IBM RAID adapters:

F/W Streaming MCA RAID Adapter FRU p/n92F0335 (Opt. p/n none)
 F/W Streaming MCA RAID Adapter FRU p/n06H3059 (Opt. p/n70G9263)
 F/W Streaming PCI RAID Adapter FRU p/n06H5078 (Opt. p/n94G2764)
 F/W Server 704 PCI RAID Adapter FRU p/n75H9011 (Opt. p/n94G5884)

Note: This symptom has not been observed on the ServerAID adapter FRU p/n06H9334 (Opt. p/n70G8489).

FIX:

Download the latest RAID Option Diskette and install the RAID device driver following the procedure in the README file.

For MCA RAID adapters: IBM Fast/Wide Streaming RAID Adapter/A Option Diskette 2 of 2 V2.31 or later

For PCI RAID adapter: PCI Fast/Wide Streaming RAID Adapter (FRU p/n06H5078) Option Diskette V2.02 or later

Note: For Windows NT 3.51 and 4.0, install the device driver IBM960NT.SYS, dated 12-17-96 or later, from the NT35 subdirectory.

Temporary Work-around:

For PC Server 704 RAID systems with the F/W Server 704 PCI RAID Adapter FRU p/n75H9011 (Option p/n94G5884):

1. Rename the file SINGDASD.DLL to SINGDASD.OLD in the WNETFIN subdirectory.
2. Run the Netfinity System Information Tool several times to make certain the Trap condition has been corrected.

This action will remove the RAID System and SCSI System icons from the Netfinity System Information view.

The RAID Manager icon will still be available for monitoring the RAID Subsystem.

The F/W Server 704 PCI RAID Adapter device drivers are currently in test. This RETAIN tip will be updated when they are available.

```

-----IMPORTANT-----
|
| Diskette images are customer installable. Customers should
| review any "README" files located on the diskette for
| installation information. Contact the IBM PC HelpCenter at
| 800-772 - 2227 if download/installation assistance is needed.
|
| IBM PC Server files are located in Directory 22 on the PC
| Company Bulletin Board Service (BBS) at 1-919-517-0001 or
| tieline 255-0001.
| The files may also be downloaded via the Internet from the
| IBM PC File Library by searching the following Internet URL:
| http: //www.us.pc.ibm.com/files.html
|
-----

```

Windows NT is a trademark of Microsoft Corporation.

SAS KEYWORDS:

PSY2	PSY2PROG	PSY2ADPT	PSY2ERROR
PSY2FDISK	SCSI	SCSI-2	ARRAY
D/T9595	D/T9595A	D/T8640	D/T8642
D/T3516	9595A	D/T3517	D/T3518
D/T8650	06H5078	92F0335	06H3059
06H9334	D/T9585	9585	9595
8640	8641	8642	8650

WINDOWS NT TRAPS ON RAID SERVERS

300	320	500	520
720	UNCLASSIFIED	SERVERAID	SERVER RAID
TMEDDD	325	330	

PSY2 RETAIN TIPS
WINDOWS NT 3.51 FAILS TO INSTALL

1.4.1394 WINDOWS NT 3.51 FAILS TO INSTALL

Record number: H133635

Device: D/T8640
Model: M
Tip key:
Date created: 096/08/13
Date last altered: A96/09/09

SYMPTOM:

Windows NT 3.51 with networking support hangs during the installation.

-or-

Windows NT 3.51 without networking support installs successfully but the system clock is not functioning properly.

-or-

POST Error Code 163.

PCI/MicroChannel systems may experience these symptoms after the system board has been replaced.

PROBLEM ISOLATION AIDS:

- The system is an 8640-Mxx or 8641-Mxx.
- The BIOS level is 23A or earlier.

FIX:

1. Reboot the server and press <F2> during the memory count.
2. Set the correct date and time. Save and exit.
3. Restart the Windows NT 3.51 installation.

An engineering investigation is currently in progress. This RETAIN tip will be updated when a permanent fix is available.

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SAS KEYWORDS:

PSY2	PSY2BRD	PSY2PROG	P/N96G2648
96G2648	P/N96G3694	96G3694	P/N96G1340
96G1340	PSY2ERR		

1.4.1395 WINDOWS NT 3.51 REPORTS LANSTREAMER MISSING

Record number: H132268

Device: D/T8641
 Model: M
 Tip key:
 Date created: 096/01/19
 Date last altered: A96/01/24

SYMPTOM:

Windows NT Server 3.51 Event Viewer reports the IBM Auto-LANStream PCI Adapter cannot be found when the LANStream adapter is installed in PCI Slot 1 (nearest the memory sockets).

PROBLEM ISOLATION AIDS:

The system is the IBM PC Server 520 (8641-EZ1, EZS, and EZE, or models EZ0 and EZV) with the IBM PCI RAID Adapter option installed (FRU P/N06H5078).

FIX:

The combination of IBM PCI RAID Adapter and the IBM Auto LANStream PCI Adapter must be installed in one of the 4 following configurations. Slot 1 is the shared PCI/EISA slot, slot 2 is the middle PCI slot, and slot 3 near the memory connectors.

CONFIG	ADAPTER	IRQ	Slot#
1	PCI RAID Adapter	10	2
	Auto LANStream PCI	11	3
2	PCI RAID Adapter	11	2
	Auto LANStream PCI	10	1
3	PCI RAID Adapter	11	3
	Auto LANStream PCI	10	2
4	PCI RAID Adapter	10	3
	Auto LANStream PCI	11	2

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SAS KEYWORDS:

PSY2 SERVER 520 8641
 RAID PSY2COMM PSY2ADPT

WINDOWS NT 4.0 ICONS ARE DISPLAYED WITH INCORRECT COLORS

1.4.1396 WINDOWS NT 4.0 ICONS ARE DISPLAYED WITH INCORRECT COLORS

Record number: H161497

Device: D/T6898
 Model: M
 Tip key:
 Date created: 097/10/15
 Date last altered: A98/04/09

SYMPTOM:

After installing the WindowsNT 4.0 Intergraph video driver, small icons on the WindowsNT taskbar may be displayed with incorrect colors when subsequent applications are installed.

PROBLEM ISOLATION AIDS:

This tip applies to the IBM IntelliStation M-Pro Series 6898 and 6889 systems installed with Intergraph Intense 3D video adapters and running WindowsNT 4.0.

Other systems that have been upgraded to the Intergraph Intense 3D video adapter may also display the same symptoms.

FIX:

The "Pixel Color Format" setting in the Intergraph "Settings/Performance" dialog box under "Display Properties" should be changed from RGB to BGR.

The user will be prompted to restart WindowsNT for the change to take effect.

WindowsNT is a trademark of Microsoft Corporation.
 Intense 3D is a trademark of Intergraph Corporation.

SAS KEYWORDS:

PSY2	PSY2MISC	PSY2ADPT	PSVP
PSVPMISC	PSVPADPT	D/T6898	6898
INTENSE3D	78230	UNCLASSIFIED	ICONS
D/T6889	6889	91285	

1.4.1397 WINDOWS NT 4.0 INSTALL HALTS ON INTELLISTATION M-PRO (6898)

Record number: H162332

Device: D/T6898
 Model: M
 Tip key:
 Date created: 098/01/07
 Date last altered: A98/01/07

SYMPTOM:

During the installation of retail WindowsNT 4.0, or reinstalling WindowsNT 4.0 from the supplied CDROM (marked "For Distribution Only with a New PC") the installation halts after Mass Storage Device Detection with the following, or similar message:

"Windows NT Setup did not detect any mass storage devices in your system. The installation is halted. Press F3 to exit"

PROBLEM ISOLATION AIDS:

This tip applies to the IBM IntelliStation M-Pro, Machine Type 6898, equipped with SCSI hardfiles.

The halted installation results from the absence of Adaptec 7800 SCSI device drivers on both the retail and IBM supplied WindowsNT 4.0 installation CDROM's.

FIX:

After inserting the second WindowsNT installation diskette, the Setup program prompts the user that it is about to begin Mass Storage Device Detection.

At this point, the user must press "S" to skip detection. Press <Enter> when "Other (Requires disk provided by hardware manufacturer)" is highlighted in the dialog box and insert the Adaptec 7800 Family Manager Set diskette that is provided with the system.

The Adaptec SCSI driver diskette can be created from the Ready-To-Configure (RTC) CDROM included with the system. The required diskette is created by building the "Adaptec 7800 Family Manager Set" disk via the Diskette Factory utility on the RTC.

In the event the CD-ROM drive is inaccessible on the target system, in most instances, the RTC can be taken to a system with an operating CDROM drive and the Adaptec driver disk created there. Running IBMSETUP.EXE on the RTC will start the utility to run the Diskette Factory.

After the installation is complete, the user may be required to download and reinstall WindowsNT Service Pack 3.

WindowsNT 4.0 Service Pack 3 can be downloaded from the Microsoft Internet site at the following URL:

Http: //www.microsoft.com/networkstation/

Windows and WindowsNT are trademarks of Microsoft Corporation.

SAS KEYWORDS:

PSY2	PSY2FDSK	PSY2OPER	PSVP
PSVPFDSK	PSVPOPER	D/T6898	6898
WINNT	NT40	UNCLASSIFIED	

1.4.1398 WINDOWS NT 4.0 INSTALL HALTS ON INTELLISTATION M-PRO (6889)

Record number: H163400

Device: D/T6889
 Model: M
 Tip key:
 Date created: 098/04/02
 Date last altered: A98/04/18

SYMPTOM:

During the installation of retail WindowsNT 4.0, or reinstalling WindowsNT 4.0 from the supplied CDROM (marked "For Distribution Only with a New PC") the installation halts after Mass Storage Device Detection with the following, or similar message:

"Windows NT Setup did not detect any mass storage devices in your system. The installation is halted. Press F3 to exit"

PROBLEM ISOLATION AIDS:

This tip applies to the IBM IntelliStation M-Pro, Machine Type 6889, equipped with SCSI hardfiles.

The halted installation results from the absence of Adaptec 7800 SCSI device drivers on both the retail and IBM supplied WindowsNT 4.0 installation CDROM's.

FIX:

After inserting the second WindowsNT installation diskette, the Setup program prompts the user that it is about to begin Mass Storage Device Detection.

At this point, the user must press "S" to skip detection. Press <Enter> when "Other (Requires disk provided by hardware manufacturer)" is highlighted in the dialog box and insert the Adaptec 7800 Family Manager Set diskette that is provided with the system.

The Adaptec SCSI driver diskette can be created from the Ready-To-Configure (RTC) CDROM included with the system. The required diskette is created by building the "Adaptec 7800 Family Manager Set" disk via the Diskette Factory utility on the RTC.

In the event the CD-ROM drive is inaccessible on the target system, in most instances, the RTC can be taken to a system with an operating CDROM drive and the Adaptec driver disk created there. Running IBMSETUP.EXE on the RTC will start the utility to run the Diskette Factory.

After the installation is complete, the user may be required to download and reinstall WindowsNT Service Pack 3.

WindowsNT 4.0 Service Pack 3 can be downloaded from the Microsoft Internet site at the following URL:

Http: //www.microsoft.com/networkstation/

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SAS KEYWORDS:

PSY2	PSY2FDSK	PSY2OPER	PSVP
PSVPFDSK	PSVPOPER	D/T6889	6889
WINNT	NT40	UNCLASSIFIED	85164

Record number: H162377

Device: D/T8644
 Model: M
 Tip key:
 Date created: O98/01/12
 Date last altered: A98/01/12

SYMPTOM:

After installing WindowsNT Service Pack 2 or 3 and rebooting, the system traps and WindowsNT must be reloaded.

PROBLEM ISOLATION AIDS:

This tip applies if the following conditions are met:

- The system is an IBM Netfinity 3500 (8644-1xx/2xx/3xx)
- WindowsNT Service Pack 2 has been installed,
- or-
- WindowsNT Service Pack 3 has been installed and the user elects to replace the existing SCSI drivers during the installation.

FIX:

Use ServerGuide (V4.0.1 or later) to install Network Operating Systems so that the current device drivers and service packs are installed automatically.

-or-

1. Upon reloading WindowsNT, the Adaptec SCSI drivers will have to be supplied from diskette. Failing to do so will cause the reinstallation to hang and have to be restarted.

The Adaptec SCSI driver diskette can be created from the ServerGuide Diskette Factory CD included with the system. The required diskette is created by building the "Adaptec 7800 Family Manager Set" diskette via the Diskette Factory. Insert this diskette when prompted for "Additional Devices" during the Windows NT reinstallation.

Diskette images are also available on the IBM BBS (919-517-0001) or via the internet at URL <http://www.pc.ibm.com/files.html>

2. When re-installing WindowsNT Service Pack 3, the user must answer "No" when warned that they are about to overwrite an existing SCSI device driver.

NOTE: WindowsNT Service Pack 2 is not supported on the IBM Netfinity 3500, Machine Type 8644.

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SAS KEYWORDS:

PSY2	PSY2ERR	PSY2OPER	68762F_1
68762F_1	ADAPTEC	AIC-7895	UNCLASSIFIED

1.4.1400 WINDOWS 3.11 LOOPS ON S3 VIDEO DRIVER INSTALLATION

Record number: H01855

Device: D/T6577
 Model: M
 Tip key:
 Date created: 096/06/19
 Date last altered: A96/06/19

SYMPTOM:

When installing the S3 video device drivers from the diskette created using the Diskette Factory, the PC 300 6577 or 6587 system may continuously request that the diskette be inserted even after it appears to have loaded the drivers successfully.

This failure occurs on systems preloaded with Microsoft Windows 3.11.

PROBLEM ISOLATION AIDS:

To recreate the failure, follow these steps:

1. Click on Main.
2. Click on Windows Setup.
3. Click on Options.
4. Click on Change.
5. Click on Display.
6. Click on "Other display requires disk from OEM."
7. Insert diskette created using the Diskette Factory and click on OK.
8. Select S3 640 x 480 and click OK.
9. Click on New.

The drivers will load from the diskette and the system will then ask for the S3 driver to be inserted again. This cycle will repeat.

FIX:

When installing the S3 video drivers from the diskette created using the Diskette Factory, use either of the following methods to load the device drivers:

1. Access the IBM Welcome Center
2. Select "Installing Operating system Video Drivers."
3. Select "Installing Windows 3.1 Video Drivers."

- OR -

1. From a DOS prompt change the \WINDOWS directory
2. Type Setup and follow the instructions for installing video device drivers.

Windows is a trademark of the Microsoft Corporation.

SAS KEYWORDS:

PSY2	D/T65XX	6577	6587
IBMPC	PSVP	PSVPERR	PSY2ERR
D/T6587	PC 350	PC350	PC300
PC 330	PC330	47077	PSVPDISP
PSY2DISP	PSVPPROG	PSY2PROG	

1.4.1401 WINDOWS 32 BIT DISK ACCESS ERRORS ON PC 300 & 700

Record number: H13275

Device: D/T6875
 Model: M
 Tip key:
 Date created: O95/06/23
 Date last altered: A95/10/02

SYMPTOM:

IBM PC 300 and 700 may post the following error messages while running Windows 3.X, while loading Windows, or after installing Windows 3.X or Windows for Workgroups if a hardfile larger than 528Mb is installed (Cylinders > 1024).

- 1) Driver Validation errors
- 2) Compatibility Warnings when enabling 32 Bit Disk Access
- 3) Driver failure loading Windows 3.X
- 4) Driver failures within the Windows 3.X environment
- 5) Drivers fail to load after installing Windows for Workgroups

PROBLEM ISOLATION AIDS:

The Windows SYSTEM.INI files should contain the following statements IF the customer requires 32 Bit Disk Access:

```
Device=INT13IBM.386
device=WDCTRLSP.386
32BitDiskAccess=on
```

Reinstalling Windows 3.X or installing Workgroups for Windows may overwrite or erase the files listed above. Verify that the files are present in the \WINDOWS\SYSTEM directory under the following names, file sizes and file dates:

```
IBM13IBM.386    5371 Bytes    5-31-95
WDCTRLSP.386   13911 Bytes   5-31-95
```

NOTE: If the machine type is a 6576 or 6586 and the drive size is 850Mb or larger, replace the files listed above with:

```
IBM13IBM.386    5371 Bytes    7-21-95
WDCTLIBM.386   14007 Bytes   7-21-95
```

These files are contained in the 6586BHF.ZIP package on the IBM PC Company Bulletin Board.

FIX:

Obtain the drivers listed above from the IBM PC Company BBS system by calling 1-919-517-0001. Locate the "IBM PC 300/700 Files" section (section #21) for the files titled: PCWINBHF.EXE

OR
6585BHF.ZIP

The new drivers may also be downloaded via the Internet from the IBM Personal Computer File Library by searching the following Internet URL:

<http://www.pc.ibm.com/files.html>

The driver is located in the IBM PC 300 & 700 Series Files section or by using the search facility to locate the files by the names listed above.

If the failures persists after installing the updated 32 Bit Disk Access drivers, continue normal problem determination.

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SAS KEYWORDS:

IBMPC	PSY2	PSVP	6885
6875	D/T6885	D/T6571	D/T6573
D/T6581	D/T6583	D/T6575	D/T6585
D/T6576	D/T6586	D/T68XX	D/T65XX
6571	6573	6581	6583
6575	6585	6576	6586
PSVPPROG	PSY2PROG	PSVPERR	PSY2ERR
68XX	65XX		

1.4.1402 WINDOWS 95 DISKETTE FACTORY HANGS THE SYSTEM

Record number: H161601

Device: D/T6282
 Model: M
 Tip key:
 Date created: 097/10/30
 Date last altered: A97/10/30

SYMPTOM:

While creating the Windows95 install diskettes via the IBM Diskette Factory, the system hangs.

PROBLEM ISOLATION AIDS:

This tip applies to IBM PC PC300GL, machine type 62x2, systems preloaded with Windows95 OSR2.

The hang condition is most often seen while creating the third installation diskette.

FIX:

After restarting the system, modify file name DMFWRITE.PIF using the following steps:

1. Open Windows Explorer.
2. Highlight the C: \WINDOWS\OPTIONS directory.
3. Right click on file name DMFWRITE.PIF.
4. Click on "Properties."
5. Select the "Memory" tab.
6. Change the "Initial Environment" setting to "Auto."
7. Click OK.

Windows95 is a trademark of Microsoft Corporation.

SAS KEYWORDS:

PSY2	PSY2OPER	PSY2MISC	PSVP
PSVPOPER	PSVPMISC	D/T6272	D/T6282
6272	6282	62X2	68913
UNCLASSIFIED			

1.4.1403 WINDOWS-NT FAILS TO LOAD ON 6384-P60/D W/527MB DASD

Record number: H123067

Device: D/T6384
 Model: M
 Tip key:
 Date created: 094/03/10
 Date last altered: A97/07/13

SYMPTOM:

PS/VALUEPOINT 6384 P60/D SYSTEMS MAY EXPERIENCE A SYSTEM HANG CONDITION LOADING WINDOWS-NT ONTO A MAXTOR 527MB IDE HARDFILE.

THE SYSTEM HANG CONDITION WILL OCCUR AFTER DISKETTE #9 HAS LOADED AND THE SYSTEM HAS BEEN REBOOTED PER IN THE INSTALLATION INSTRUCTIONS.

PROBLEM ISOLATION AIDS:

SYSTEMS AFFECTED ARE 6384 P60/D MODELS MANUFACTURED WITH A MAXTOR 527MB HARDFILE (MADE FOR IBM BY MAXTOR) OR A 527MB HARDFILE OPTION PURCHASED FROM IBM FOR THE PS/VALUEPOINT P60/D SYSTEMS, WITH THE FOLLOWING INFORMATION PRINTED ON THE BAR CODE LABEL:

"L18C0" OR "L18C1" (FIRST 5 CHARACTERS OF THE BAR CODE HEADER)

FIX:

A FIELD PLAN INVOLVING A HARD DRIVE MICROCODE PATCH HAS BEEN DEVELOPED. THE PATCH WILL UPDATE THE MICROCODE ON THE HARDFILE TO RESOLVE THIS FAILURE.

THE PATCH MAY ALSO BE OBTAINED FROM THE IBM PC COMPANY TECHNICAL SUPPORT BULLETIN BOARD AT (919)517-0001. THE PATCH IS TITLED "P60NT.DSK." A COPY OF THE PATCH MAY ALSO BE OBTAINED FROM THE IBM PERSONAL SYSTEMS HELPCENTER AT 800-PS2-2227.

SAS KEYWORDS:

PSVP	PSY2	PSVPFDSK	PSY2FDSK
PSVPPART	PSY2PART	540MB	520MB
PENTIUM	P60	VALUE POINT	

1.4.1404 WINDOWSNT 4.0/3.51 TRAP (BLUE SCREEN) ERROR ON IBM PC300

Record number: H16857

Device: D/T6577
 Model: M
 Tip key:
 Date created: 097/08/21
 Date last altered: A97/08/26

SYMPTOM:

IBM PC330/350 Series 6577 and 6587 systems may exhibit a WindowsNT Trap Error (Blue Screen) on systems containing an IBM 16MB DIMM and either 2 or 4 additional SIMMs. The error can occur during installation or during normal operation.

PROBLEM ISOLATION AIDS:

Affected systems contain one of the following configurations:

1. One IBM 16MB EDO DIMM, FRU P/N42H2779 manufactured for IBM by Hyundai and at least two additional SIMMs (any vendor or size). Affected Hyundai 16Mb DIMMs contain one of the following bar code headers: J10CV or J11UW.
2. One IBM DIMM of any size or manufacturer and at least two 8MB EDO SIMMs manufactured for IBM by Hyundai FRU P/N92G7321. Affected Hyundai SIMMs will contain one of the following bar code headers: J13C9 or J11X2.

If the system contains only a Hyundai 16Mb DIMM and no SIMMs, there is no exposure to the error. For the error to occur, the system must contain one of the above configurations.

Hyundai memory modules with barcode headers other than what is specified above are NOT affected. Affected Hyundai memory modules will have DRAM chips with part number HY5117804B J-60.

FIX:

If the system is exhibiting the error condition stated above AND contains a combination of a 16Mb DIMM manufactured for IBM by Hyundai and at least two additional SIMMs, replace the 16Mb DIMM, with FRU P/N42H2779.

If the system is exhibiting the failure symptom stated above AND contains at least two 8MB SIMMs manufactured for IBM by Hyundai, replace the 8MB SIMMs, with FRU P/N92G7321.

If the failure persists, continue normal problem determination.

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SAS KEYWORDS:

PSY2	PSY2ERR	PSY2PART	PSVP
PSVPERR	PSVPPART	D/T6577	D/T6587
42H2779	92G7321	UNCLASSIFIED	

WINDOWS95 INFRARED FAILS TO CONNECT AT HIGH SPEED

1.4.1405 WINDOWS95 INFRARED FAILS TO CONNECT AT HIGH SPEED

Record number: H136900

Device: D/T6899
 Model: M
 Tip key:
 Date created: 097/03/18
 Date last altered: A97/03/25

SYMPTOM:

IBM IntelliStation Z Pro 6899 systems may not communicate at high transmission rates with TranXit and Windows95 Infrared. Low speed communications function normally, but the 1.2Mbit rate fails to connect.

PROBLEM ISOLATION AIDS:

The Infrared & TranXit device drivers for Windows95 are at version 2.1.06 or lower.

FIX:

Download the latest level Infrared & TranXit device drivers for Windows95 from the IBM PC Company BBS.

Device driver updates may be obtained from the IBM PC Company BBS system by calling 1-919-517-0001. Locate the drivers in the "IBM PC 300/700 Files" section (section #21).

The device driver update may also be downloaded via the Internet from the IBM Personal Computer File Library by searching the following Internet URL:

<http://www.pc.ibm.com/files.html>

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 TranXit is a trademark of PUMA, Inc.

SAS KEYWORDS:

PSVP	PSY2	PSVPPROG	PSY2PROG
HANG	PWS	PSY2COMM	IBMPC
UNCLASSIFIED	60408	PSVPCOMM	HUNG
LOCKUP			

1.4.1406 WINDOWS95 VIDEO ERROR AFTER CHANGING RESOLUTION

Record number: H011600

Device: D/T6877
 Model: M
 Tip key:
 Date created: 096/06/07
 Date last altered: A96/06/07

SYMPTOM:

IBM PC 700 Series 6877 and 6887 systems preloaded with Microsoft Windows95 may display the following error indication after the user has changed the video resolution via the Display Utility in the Windows95 Control Panel:

"There is a problem with your display settings. The adapter type is incorrect, or the current settings do not work with your hardware."

Windows95 will then force the user to select another resolution, which may not be compatible with the system board video chipset.

PROBLEM ISOLATION AIDS:

IBM PC 700 Series 6877 and 6887 systems contain the S3 Trio64V+ video chipset. The latest revision of the S3 Trio64V+ video chipset (Rev. F) currently being used in production of 6877 and 6887 systems is undetectable by the preinstalled Window95 operating system.

Because Windows95 cannot detect the newer level Rev. F chip integrated on the system board, Windows95 defaults to the "S3 Trio64" video driver that ships standard with Windows95. This standard driver allows the user to select resolutions that are not compatible with the S3 Trio64V+ video chipset. Those selections are:

640 x 400 TrueColor (32 bit)
 640 x 480 16 Color
 800 x 600 16 Color
 1024 x 768 16 Color
 1152 x 864 256 Color

Systems preloaded with Windows95 that may be affected by the new Rev. F S3 Trio64V+ video chip can be determined by viewing the SYSLEVEL.IBM file with an editor. If preload level CFFBGUS or CFFBMUS are present in the SYSLEVEL.IBM file, the system may be affected.

FIX:

Install version 2.10.01 or higher Windows95 S3 Trio64V+ video device drivers. The current version of the drivers is titled:

Z03T03A.EXE - S3 Trio 64/64V+ Windows95 driver v2.10-01

The update may be obtained from the IBM PC Company BBS system by calling 1 - 919-517-0001. Locate the "IBM PC 300/700 Files" section (section #21) for the driver.

The driver may also be downloaded via the Internet from the IBM Personal Computer File Library located at the following Internet URL:

<http://www.pc.ibm.com/files.html>

The search facility may be used to locate the file using the filename stated above.

SAS KEYWORDS:

PSY2	PSVP	IBMPC	PSVPERR
PSY2ERR	PSVPDISP	PSVPDISP	D/T6887
PC 750	PC750	PC700	PC 730
PC730			

1.4.1407 WINDOW95 REASSIGNS DISABLED COM & LPT PORTS

Record number: H135271

Device: D/T6560
 Model: M
 Tip key:
 Date created: 096/11/20
 Date last altered: A96/11/20

SYMPTOM:

COM & LPT ports that are disabled in the Setup Utility of an IBM PC 300 or 700 Series system, to free resources for the installation of an ISA Legacy Adapter, may be reassigned and active when Windows95 is loaded.

PROBLEM ISOLATION AIDS:

A COM port that is disabled from the Devices and I/O Ports menu selection in the systems Setup Utility, such as COM 2 (2F8h-IRQ 3), will be reassigned to COM 3, IRQ 3 when Windows95 is loaded.

The Parallel Port (LPT) disabled in the same manner may be reassigned to IRQ 5 and active when Window95 is loaded.

FIX:

When installing an ISA Legacy Adapter that requires a specific resource assignment, ensure that the following steps are performed:

- 1) Power on the system and press F1 during the memory count to access the systems Setup Utility.
- 2) From the Main Menu, select Devices and I/O Ports.
- 3) Disable the device that is assigned the resource required by the ISA Legacy Adapter being installed.
- 4) Return to the Main Menu and select ISA Legacy Resources.
- 5) Alter the fields under each of the menu selections in ISA Legacy Resources from "Available" to "Not Available" that correspond to the resources required by the ISA Legacy adapter. For example, if the ISA adapter requires I/O address range 220-240h, DMA channel 7, and IRQ 9, set each of these selections to "Not Available."
- 6) Save the changes and exit the Setup Utility.

For additional information on configuring the system for ISA, PCI, or Plug n Play adapters, refer to the users guide shipped with the system and the documentation that accompanies the adapter. A quick reference is also available in RETAIN Tip #H126246.

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SAS KEYWORDS:

PSY2	6875	D/T6875	D/T6885
D/T6876	D/T6886	6885	6876
6886	PSY2ADPT	PSY2OEM	PSY2PART
PSY2BRD	PSY2DIAG	IBMPC	PSY2ERR
PC 750	PC 730	PSVP	PC 330
PC 300	PC 350	D/T65XX	D/T6571
D/T6573	D/T6581	D/T6583	D/T6585
D/T6575	6571	6573	6581
6583	6575	6585	6576
6586	D/T6576	D/T6586	19XX
D/T6577	D/T6587	D/T6877	D/T6887
D/T6560	D/T6260	D/T6598	D/T6589
57439	UNCLASSIFIED	PC 365	PC 340

1.4.1408 WIN95 SYSTEM HANGS AFTER INSTALLING NOVELL CLIENT 32

Record number: H125101

Device: D/T6272
 Model: M
 Tip key:
 Date created: 097/08/08
 Date last altered: A97/08/08

SYMPTOM:

IBM 6272, 6282, 6588, 6888, or 6899 system hangs when rebooting after installing Novell Client 32.

PROBLEM ISOLATION AIDS:

This tip applies to the above systems when using Windows 95 operating system, Novell Client 32, and Crystal Audio driver file ZO3T07A.EXE or earlier.

Note: In the above filename, the second character is the letter "O" and not a ZERO.

FIX:

This problem is corrected in the current version of the Crystal Audio driver; it is not a system defect and no hardware should be replaced.

The user should download two files: ZO3T08A.EXE and UPDATE.BAT Run the UPDATE.BAT file and follow instructions for updating the driver.

Note: In the above filename, the second character is the letter "O" and not a ZERO.

These files are available on the IBM PC Company BBS at 919 - 517 - 0001, and from the IBM PC Company File Library via the Internet at the following URL:
<http://www.pc.ibm.com/files.html>

Windows 95 is a trademark of the Microsoft Corporation.
 Novell Client 32 is a trademark of Novell, Inc.

SAS KEYWORDS:

PSY2	PSVP	UNCLASSIFIED	PSY2OPER
PSVPOPER	D/T6282	D/T6588	D/T6888
D/T6899	300GL	PC	INTELLISTATION
MPRO	ZPRO	PRO	

1.4.1409 WIN95 USER NAME AND PASSWORD PROMPT FAILS TO APPEAR

Record number: H161114

Device: D/T6282
 Model: M
 Tip key:
 Date created: 097/09/19
 Date last altered: A97/09/19

SYMPTOM:

When attempting to log into the network, the user is not presented with a dialog box prompting them for a user name and password.

PROBLEM ISOLATION AIDS:

This tip applies to IBM PC Model PC300GL, machine types 6272 and 6282, preloaded with Windows95 being used in a network environment.

FIX:

Download and apply REGDEL.EXE.

Installation instructions:

1. Boot Windows95.
2. Start Windows Explorer.
3. Insert the diskette created by REGDEL.EXE.
4. Select the A: drive in Windows Explorer.
5. Double click on REGDEL.EXE.
6. Click OK to modify the registry entry.
7. Remove the diskette, shut down, and restart Windows95.

REGDEL.EXE may be downloaded via the Internet from the IBM Personal Computer File Library by searching the following Internet URL: www.us.pc.ibm.com/files.html

REGDEL.EXE may also be obtained from the IBM PC Company BBS system by calling 919-517-0001.

Windows and Windows Explorer are trademarks of Microsoft Corporation.

SAS KEYWORDS:

PSY2	PSY2OPER	PSY2MISC	PSVP
PSVPOPER	PSY2MISC	D/T6272	D/T6282
HLPCT_3957	UNCLASSIFIED		

1.4.1410 0002251R ERROR OCCURS AFTER REPLACING PROCESSOR CARD

Record number: H127505

Device: D/T9595
Model: M
Tip key:
Date created: 095/05/10
Date last altered: A95/05/11

SYMPTOM:

A 9595 system with a Type 4 processor and a 32 Mb ECC SIMM generates a POST error of: 0002251R.

PROBLEM ISOLATION AIDS:

The processor card FRU P/N52G9362 or P/N06H4008 was replaced.

The PS/2 contains 32 Mb ECC memory SIMMs, FRU P/N73G3136.

The Flash level on the processor card is at 1.00.

FIX:

Type 4 Processor Card FRU, P/N52G9362 or FRU P/N06H4008, at a Flash level of 1.00 does not provide support for 32 Mb ECC memory SIMMs (Reference H126229). Servicers should temporarily install a pair of SIMMs smaller than the 32 Mb ECC SIMMs, then Flash the unit to 2.00 or higher and then re-install the 32 Mb ECC SIMMs.

SAS KEYWORDS:

PSY2	PSY2MEM	32MB	225
000225	000225XX		

1.4.1411 01291300 ERRORS CAUSED BY MULTIPROTOCOL ADAPTER/A

Record number: H104733

Device: D/T9595
 Model: M
 Tip key:
 Date created: 094/10/11
 Date last altered: A94/10/11

SYMPTOM:

01291300 errors and OS/2 Trap 0002 errors while running applications which use the MPCA (Multiprotocol Adapter/A).

PROBLEM ISOLATION AIDS:

1. The system unit has a 66Mhz or faster processor.
2. A Multiprotocol Adapter/A is installed.
3. No diagnostics fail.

FIX:

On higher speed PS/2 systems (66MHZ and greater), a DMA timeout error may occur due to timing factors associated with speed of the system processor.

The fix for this problem is to replace the MPCA Adapter/A with FRU P/N96F9156 which corrects the problem. If the MPCA adapter currently installed is FRU P/N96F9156, this tip does not apply and routine problem determination should continue. Refer to RETAIN record # H017325 for additional information and guidance.

When current inventories of FRU P/N85F0004 are exhausted, all All orders for it will be automatically substituted to the new FRU, P/N 96F9156.

Non Pentium processor Systems running at speeds at, or below, 33mhz have no operational problems with FRU P/N85F0004 and this adapter should not be swapped to the new FRU part number unless:

1. The MPCA adapter installed is failing -and-
2. Current inventories of 85F0004 are exhausted.

For information on having FRU P/N85F0004 reworked to the current level (FRU P/N96F9156) contact Charlie Hoffecker at T/L 795-4517 or (407) 595 - 4517.

SAS KEYWORDS:

PSY2	PSY2ADPT	PSY2ERR	PSY2COMM
9595	8590	D/T8595	D/T9585
D/T9590	9590	9585	

1.4.1412 1 LONG & 3 SHORT BEEPS ON PC 700 W/IMAGE ADAPTER/A

Record number: H133539

Device: D/T6876
 Model: M
 Tip key:
 Date created: 096/08/05
 Date last altered: A96/08/05

SYMPTOM:

IBM PC 700 Series 6876 and 6886 Micro Channel systems may exhibit a 1 long, 3 short Beep code during POST indicating that there is video error if the system is equipped with one display attached to an IBM Image Adapter/A card.

PROBLEM ISOLATION AIDS:

With the primary display attached to the Image Adapter/A card, there is no visible display during POST or when the operating system starts to IPL. A visible image is only displayed after the operating system has loaded the Image Adapter/A device drivers. The display operates normally after the device drivers are loaded.

FIX:

The IBM Image Adapter/A card was not tested for standalone operation on the PC 700 Micro Channel systems. The Image Adapter/A was intended to be used as the secondary display adapter in conjunction with the S3 864 video chipset on the system board for high resolution and text display, not primary operation. The operating system must also have the capability of supporting two displays such as OS/2.

During POST, the system checks the bus for a video adapter card and returns a 1 long, 3 short Beep code if the display is attached to the Image Adapter/A card and no display is attached to the system board video port.

To bypass the error indication during POST, perform either of the following steps:

- 1) Install a video connector terminator on the system board SVGA port (purchase locally). This will allow the system to display POST status and operating system startup.
- 2) Enable the "Bypass system programs on error" feature in the Configuration Menu.

NOTE - Using option #2 will disable all error messages including the 1 long, 3 short beep code during POST. This setting will not allow the User to view the operating system startup until the Image Adapter/A device drivers are loaded.

SAS KEYWORDS:

PSVP	PSY2	PSVPDISP	IBMPC
PSY2DISP	PSVPADPT	PSY2ADPT	PSVPERR
PSY2ERR	D/T6886	6886	D/T6885
D/T6875	6876	6885	6875
PC750	PC730	D/T68XX	

1.4.1413 1 19499-XXXXX POST ERROR ON 8555 OR 8565 W/ 2-8MB AND XGA

Record number: H087638

Device: D/T8555
 Model: M
 Tip key:
 Date created: 091/05/31
 Date last altered: A92/10/28

SYMPTOM:

A 19499 - XXXXX POST ERROR OCCURS ON AN 8555 OR 8565 WHERE THE XXXXX IS 14208, 15232, OR 16256. ADVANCED DIAGNOSTICS ALSO FAIL, INDICATING A DEFECTIVE MEMORY MODULE ON THE ADAPTER CARD.

PROBLEM ISOLATION AIDS:

THIS FAILURE WILL OCCUR IN THE FOLLOWING CONFIGURATION:

- AN XGA ADAPTER CARD AND A 2-8MB ADAPTER CARD INSTALLED IN THE SYSTEM, WITH 14MB, 15MB, OR 16MB TOTAL INSTALLED SYSTEM MEMORY.

FIX:

THIS ERROR IS CAUSED BY A MEMORY ADDRESS CONFLICT, AND IS NOT CORRECTABLE BY PARTS REPLACEMENT. AN XGA OPTION DISKETTE, VERSION 1.01 (OR HIGHER), IS AVAILABLE THAT WILL ALLOW 16MB OF MEMORY TO BE INSTALLED IN THE SYSTEM ALONG WITH THE XGA CARD.

THE CUSTOMER MAY OBTAIN A COPY OF THE XGA OPTION DISKETTE BY CONTACTING THE SPECIAL DISTRIBUTION DESK, AT 1-800-845-4263, AND REQUESTING PART NUMBER 10G3362, THE DISKETTE WILL BE SENT FREE OF CHARGE.

SAS KEYWORDS:

PSY2	PSY2MEM	PSY2ERR	PSY2ADPT
8555SYSTEM	8555SYSERR	8555SYSADPT	8565SYSTEM
8565SYSERR	8565SYSADPT	D/T8555	D/T8565

1.4.1414 1.44MB DISKETTE MADE WITH "COPY DISK" IS UNREADABLE

Record number: H122112

Device: D/T8550
 Model: M
 Tip key:
 Date created: 093/12/14
 Date last altered: A94/08/15

SYMPTOM:

A 1.44mb diskette created using the Windows* 3.1 Copy Disk function may not be readable on a 1.44mb diskette drive, but can be read on a 2.88mb diskette drive.

PROBLEM ISOLATION AIDS: None

This problem occurs only under the following conditions:

The software configuration is:
 Windows 3.1 and DOS 5 or 6.

The Hardware configuration is:
 A 2.0mb (1.44) Source diskette and
 A 2.0mb UNFORMATTED target diskette in a 2.88mb Diskette drive.

Copy Disk formats while copying to target diskette. When the operation is complete everything seems OK, and the target diskette can now be used in a 2.88mb diskette drive. CHKDSK reports a normal 1.44mb format.

The problem occurs because Copy Disk MISFORMATS the 2mb target diskette to 2.88mb capacity (36 sectors/track @ 1Mbps data rate) instead of correctly formatting the target diskette to 1.44mb capacity (18 sectors/track a 500Kbps data rate).

FIX:

This is not a hardware failure. If the diskette drive diagnostics run error free, no hardware has failed and none should be replaced.

This failure will not occur if the target diskette is formatted prior to the "Copy Disk" operation. This software problem is expected to be corrected in the next Windows release.

* Windows is a trademark of Microsoft Inc.

SAS KEYWORDS:

PSY2	PSY2DSKT	PSY2PROG	PSY2ERR
D/T8535	D/T8540	D/T9556	D/T9557
D/T9576	D/T9577	DASD	

1.4.1415 1/2 CHARACTERS DISPLAYED WITH ENTRY LEVEL EMULATION

Record number: H021571

Device: D/T3270
Model: M
Tip key:
Date created: 090/06/14
Date last altered: A90/06/14

SYMPTOM:

AN OPERATOR JUMPS FROM A PC SESSION TO A HOST SESSION AND UPON RETURN TO THE PC SESSION 1/2 CHARACTERS ARE DISPLAYED.

THIS IS CAUSED BY THE ENTRY LEVEL EMULATION PROGRAM. THE PROGRAM USES A LOOKUP TABLE, WHICH DOES NOT CONTAIN THE 8530 286. THE PROGRAM THEN DEFAULTS TO CGA MODE. A PATCH IS AVAILABLE FOR THIS PROBLEM.

PROBLEM ISOLATION AIDS:**FIX:**

INSTRUCT YOUR CUSTOMER TO OBTAIN A PATCH FROM THEIR POINT OF SALE VIA NSD DEFECT SUPPORT AT 1-800-237-5511. THE PATCH NUMBER IS IR79951.

SAS KEYWORDS:

PSY2	PSY2COMM	PSY2MISC	8530SYSCOMM
8530SYSMISC	8530SYSADPT	PSY2ADPT	

1.4.1416 1/2 CHARACTERS DISPLAYED WITH ENTRY LEVEL EMULATION

Record number: H062873

Device: D/T3270
Model: M
Tip key:
Date created: 090/08/30
Date last altered: A90/10/23

SYMPTOM:

AN OPERATOR JUMPS FROM A PC SESSION TO A HOST SESSION AND UPON RETURN TO THE PC SESSION 1/2 CHARACTERS ARE DISPLAYED.

THIS IS CAUSED BY THE ENTRY LEVEL EMULATION PROGRAM. THE PROGRAM USES A LOOKUP TABLE, WHICH DOES NOT CONTAIN THE 8530 286. THE PROGRAM THEN DEFAULTS TO CGA MODE. A PATCH IS AVAILABLE FOR THIS PROBLEM.

PROBLEM ISOLATION AIDS:

NONE

FIX:

The Patch is available in EMEA through the Software Support Path; ask for IR79951.

SAS KEYWORDS:

PSY2	PSY2COMM	PSY2MISC	8530SYSCOMM
8530SYSMISC	8530SYSADPT	PSY2ADPT	D/T8530
8530			

1.4.1417 100MHZ 6482/6492, HANG OR OP-SYSTEM ERROR

Record number: H124721

Device: D/T6482
 Model: M
 Tip key:
 Date created: 094/07/25
 Date last altered: A95/02/02

SYMPTOM:

The PS/ValuePoint 6482 or 6492 fails with an operating system error (such as TRAP, Fatal Error, NMI Error, etc.), or hangs with no error message displayed. Most reported errors have occurred while installing OS/2, UNIX, Windows NT, or other operating system.

PROBLEM ISOLATION AIDS:

- This tip applies only if the 6482 or 6492 is a DX4 - 100Mhz system.
- Systems shipped within the following serial number ranges may be affected:

6482 - X0D	23MDZCA - 23MFAND
6482 - X4F	23RGGCP - 23RGGMV
6482 - X5F	23TWLCZ - 23TWLYV
6492 - X4F	23LLKCW - 23LLLVB

- Diagnostics complete without error.

FIX:

- If the failing system meets all three conditions above, replace the DX4-100Mhz processor with FRU P/N71G0796.

If the failure continues after replacing the processor, re-install the original one and continue normal system problem determination, including software support if necessary.

- If the system does not meet all three conditions above, do not replace the processor. Continue normal system problem determination.
- OS/2 is a trademark of IBM Corporation.
- UNIX is a trademark of UNIX System Laboratories.
- Windows NT is a trademark of Microsoft Corporation.

SAS KEYWORDS:

PSY2	PSVP	OS2	D/T6492
TRAP000B	000B	TRAP000D	TRAP000E
TRAP	000D	000E	NON-MASKABLE
INTERRUPT	NON MASKABLE	HUNG	LOCKED
VALUEPOINT	VALUE POINT	64XX	

1.4.1418 102 OR 225 ERROR ON 8570 W/486 UPGRADE INSTALLED

Record number: H121477

Device: D/T8570
Model: M
Tip key:
Date created: 093/10/07
Date last altered: A94/08/15

SYMPTOM:

- After replacing a 80386 processor, in a model 8570, with a 486DX33 Processor Upgrade, FRU P/N92F0436, a 102 configuration error, or 225 error, may be encountered.
- After replacing a battery, in a model 8570, a 102 configuration error, or 225 error, may be encountered.

PROBLEM ISOLATION AIDS:

The system's battery was removed during installation or was just replaced.

FIX:

- Remove the 486DX33 processor, FRU P/N92F0436.
- Install the 80386 processor.
- Insure that the system battery is connected.
- Configure the system using Auto-Config or Restore-Config.
- Remove the 80386 processor and re-install the 486DX33 Processor Upgrade per instructions provided with the option, P/N 32G4144. The upgrade instructions indicate that the battery is not to be removed during installation.

SAS KEYWORDS:

PSY2

HYPERTECH

8570

HYPERTEC

1.4.1419 1024X768 RESOLUTION FAILS ON IBM G50 MONITORS

Record number: H123342

Device: D/T6272
Model: M
Tip key:
Date created: 097/04/15
Date last altered: A97/04/15

SYMPTOM:

IBM PC 300GL Series 6272 & 6282 systems preloaded with Windows95 may exhibit a blank screen after setting the video resolution of an IBM G50 Color Monitor to 1024x768x256 or 1024x768x16m.

PROBLEM ISOLATION AIDS:

This failure only affects system preloaded with French or Asia Pacific languages.

FIX:

1. Press the right mouse button in an open area of the desktop to display the pull-down menu.
2. Highlight "Properties" on the pull-down menu and press the right mouse button to display the "Display Properties" window.
3. Click on Monitor Refresh.
4. Deselect "Set Highest."
5. Click OK.

The resolution can now be set for 1024x768x256 or 1024x768x16m.

Windows95 is a trademark of the Microsoft Corporation.

SAS KEYWORDS:

PSVP	PSY2	PSVPDISP	PSY2DISP
IBMPC	61469F_1	D/T6543	PC300GL
UNCLASSIFIED	PC 330	PC 340	

1.4.1420 10482 OR 10483 POST ERROR ON 8555

Record number: H08943

Device: D/T8555
Model: M
Tip key:
Date created: 091/05/07
Date last altered: A91/05/14

SYMPTOM:

10482 OR 10483 POST ERRORS ARE DISPLAYED ON AN 8555 EQUIPPED WITH OEM ADAPTER(S).

PROBLEM ISOLATION AIDS:

OEM ADAPTERS THAT DO NOT OPERATE WITHIN IBM TECHNICAL SPECIFICATIONS CAN CAUSE MISLEADING ERROR CODES, INCLUDING 10482 OR 10483 FIXED DISK POST ERRORS. THE 55SX IS SHIPPED WITH EITHER AN IBM OR SEAGATE FIXED DISK. SINCE THESE DISKS HAVE DIFFERENT SIGNAL CHARACTERISTICS, IT IS POSSIBLE THAT SUSPECT ADAPTERS MAY AFFECT ONLY ONE TYPE OF DRIVE.

FIX:

WHEN A 10482 OR 10483 POST ERROR IS EXPERIENCED ON AN 8555 WITH ANY OEM ADAPTER INSTALLED, REMOVE THE OEM ADAPTER AND TEST THE SYSTEM. IF THE SYSTEM FUNCTIONS CORRECTLY WITHOUT THE OEM ADAPTER, DO NOT REPLACE THE FIXED DISK. DIRECT THE CUSTOMER TO THEIR OEM POINT OF SALE FOR ASSISTANCE.

SAS KEYWORDS:

PSY2	PSY2FDISK	PSY2ERR	PSY2ADPT
PSY2OEM	8555SYSFDISK	8555SYSERR	8555SYSADPT
8555SYSOEM	061		

1.4.1421 10482 OR 10483 POST ERROR ON 8550 & 8570

Record number: H091270

Device: D/T8550
 Model: M
 Tip key:
 Date created: 091/10/02
 Date last altered: A93/10/21

SYMPTOM:

10482 OR 10483 POST ERRORS ARE DISPLAYED ON AN 8550 & 8570 EQUIPPED WITH OEM ADAPTER(S).

PROBLEM ISOLATION AIDS:

OEM ADAPTERS THAT DO NOT OPERATE WITHIN IBM TECHNICAL SPECIFICATIONS CAN CAUSE MISLEADING ERROR CODES, INCLUDING 10482 OR 10483 FIXED DISK POST ERRORS. THE FIXED DISK FOR ANY MODEL PS/2 MAY BE SUPPLIED FROM DIFFERENT VENDERS. SINCE THESE DISKS HAVE DIFFERENT SIGNAL CHARACTERISTICS, IT IS POSSIBLE THAT SUSPECT ADAPTERS MAY AFFECT ONLY ONE TYPE OF DRIVE.

FIX:

WHEN A 10482 OR 10483 POST ERROR IS EXPERIENCED ON A PSY/2 WITH ANY OEM ADAPTER INSTALLED, REMOVE THE OEM ADAPTER AND TEST THE SYSTEM. IF THE SYSTEM FUNCTIONS CORRECTLY WITHOUT THE OEM ADAPTER, DO NOT REPLACE THE FIXED DISK. DIRECT THE CUSTOMER TO THEIR OEM POINT OF SALE FOR ASSISTANCE.

NOTE: ADAPTER CARDS, SUCH AS TOKEN RING HAVE ALSO BEEN KNOWN TO CAUSE 10482 OR 10483 ERRORS. WHEN EXPERIENCING THESE ERRORS, CREATE A MINIMUM CONFIGURATION. NEXT ADD EACH ADAPTER ONE AT A TIME UNTIL THE DEFECTIVE ADAPTER IS FOUND.

SAS KEYWORDS:

PSY2	PSY2FDISK	PSY2ERR	PSY2ADPT
PSY2OEM	8550SYSFDISK	8550SYSERR	8550SYSADPT
8550SYSOEM	8570SYSFDISK	8570SYSERR	8550SYSADPT
8570SYSOEM			

1.4.1422 11XX SERIAL PORT DIAGNOSTIC ERRORS

Record number: H121805

Device: D/T6381
 Model: M
 Tip key:
 Date created: 093/11/17
 Date last altered: A95/05/16

SYMPTOM:

PS/VALUEPOINT 6381/Si MAY FAIL WITH FALSE 11XX ERRORS WHEN THE SERIAL PORT DIAGNOSTIC TESTS ARE PERFORMED, USING PS/VALUEPOINT TYPE 3 ADVANCED DIAGNOSTICS V1.00.

PROBLEM ISOLATION AIDS:

- THE SERIAL PORTS OPERATE PROPERLY.
- THE SYSTEM FAILS ONLY WHEN USING THE PS/VALUEPOINT ADVANCED DIAGNOSTICS TYPE 3 VERSION 1.00.
- THE FAILURE WILL OCCUR ALMOST IMMEDIATELY INTO THE SERIAL PORT TEST ROUTINE.
- NO OTHER DIAGNOSTIC ROUTINE ON THE DIAGNOSTIC DISKETTE IS AFFECTED.

FIX:

DO NOT REPLACE ANY HARDWARE.
 THESE ARE FALSE ERRORS REPORTED BY THE DIAGNOSTIC ROUTINES.

THE 6381/Si ADVANCED DIAGNOSTIC DISKETTE AND THE PRELOADED "DISKETTE FACTORY" ON THE 6381/Si SYSTEMS HAVE BEEN UPDATED TO ELIMINATE THESE FALSE ERRORS.

OBTAIN THE LATEST 6381 TYPE 3 DIAGNOSTIC DISKETTE, VERSION 1.01 OR HIGHER.

SAS KEYWORDS:

PSVP	PSY2	PSVPERR	PSY2ERR
PSVPDIAG	PSY2DIAG	PSVPBRD	PSY2BRD
PSY2OPER	PSVPOPER	VALUE POINT	PS/VP
6381	1135		

1.4.1423 110 MEMORY PARITY ERROR ON 8580

Record number: H006554

Device: D/T8580
Model: M
Tip key:
Date created: 088/12/13
Date last altered: A93/05/07

SYMPTOM:

INTERMITTENT PARITY ERROR 110 DURING POST, DIAGNOSTICS, OR APPLICATION PROGRAMS.

PROBLEM ISOLATION AIDS:

WHEN ADVANCED DIAGNOSTICS FAIL TO DETECT A BAD SYSTEM BOARD MEMORY CARD, THE CARDS IN J15 AND J16 SHOULD BE SWAPPED AND DIAGNOSTICS RERUN.

ADVANCED DIAGNOSTICS LOADS INTO THE FIRST 256K OF MEMORY AND WILL TEST ALL MEMORY ABOVE 256K WITH MULTIPLE BIT PATTERNS THAT STRESS TEST THE MEMORY CARDS. STRESS TESTING THE FIRST 256K IS NOT POSSIBLE BECAUSE THE TEST WOULD WRITE OVER THE DIAGNOSTIC PROGRAM.

BY SWAPPING THE CARDS AND REPEATING THE MEMORY TEST ALL MEMORY WILL BE STRESS TESTED.

FIX:

REPLACE THE CARD CALLED OUT BY DIAGNOSTICS.

SAS KEYWORDS:

PSY2	8580SYSTEMEM	8580SYSDIAG	8580SYSERR
PSY2MEM	PSY2DIAG	PSY2ERR	

1.4.1424 1101 ERROR DURING POST ON 8550 8555 8560 AND 8530 286

Record number: H035418

Device: D/T8550
 Model: M
 Tip key:
 Date created: 089/06/21
 Date last altered: A90/10/31

SYMPTOM: INTERMITTENT 1101 ERROR DURING POST.

PROBLEM ISOLATION AIDS: ERROR DOES NOT RE-OCCUR AFTER POWERING THE SYSTEM OFF AND BACK ON AGAIN. NOTE: AN 1101 ERROR CAN OCCUR WHEN A DEVICE ATTACHED TO THE SERIAL PORT IS TRANSMITTING TO THE SYSTEM DURING SYSTEM POST. DISCONNECT THE SERIAL PORT COMMUNICATIONS CABLE TO INSURE THAT THIS CONDITION DOES NOT EXIST.

FIX: DISREGARD THIS 1101 ERROR. IT WILL NOT AFFECT SERIAL PORT OPERATIONS.

SAS KEYWORDS:

PSY2	PSY2ERR	PSY2COMM	PSY2DIAG
8550SYSERR	8550SYSCOMM	8550SYSDIAG	8555SYSERR
8555SYSCOMM	8555SYSDIAG	8530SYSDIAG	8530SYSCOMM
8530SYSERR	8560SYSCOMM	8560SYSDIAG	8560SYSERR

1.4.1425 1101 POST ERROR

Record number: H005965

Device: D/T8580
Model: M
Tip key:
Date created: 088/09/27
Date last altered: A94/03/14

SYMPTOM:

AN 1101 POST ERROR MAY OCCUR WHEN A SERIAL DEVICE IS ATTACHED TO THE PLANAR SERIAL PORT AND THAT DEVICE IS TRANSMITTING DATA DURING SYSTEM POWER ON SELF TEST. THIS IS A RESULT OF DATA FROM THE SERIAL DEVICE CONTAMINATING A SYSTEM BOARD ASYNC BUFFER DURING THE POST ASYNC TEST.

PROBLEM ISOLATION AIDS:

BOTH POST AND DIAGNOSTICS WILL COMPLETE WITHOUT ERROR WHEN THE ASYNC CABLE IS DISCONNECTED.

FIX:

POWER THE SYSTEM "ON" BEFORE THE SERIAL DEVICE OR USE "F1" TO BYPASS THE ERROR.

SAS KEYWORDS:

PSY2	PSY2ERR	PSY2COMM	PSY2OPER
D/T8550	D/T8560	D/T8580	D/T8555
D/T8570	D/T8565		

1.4.1426 1101 POST ERROR

Record number: H031472

Device: D/T8530
Model: M
Tip key:
Date created: 089/11/15
Date last altered: A94/02/02

SYMPTOM:

AN 1101 POST ERROR MAY OCCUR WHEN A SERIAL DEVICE IS ATTACHED TO THE PLANAR SERIAL PORT AND THAT DEVICE IS TRANSMITTING DATA DURING SYSTEM POWER ON SELF TEST. THIS IS A RESULT OF DATA FROM THE SERIAL DEVICE CONTAMINATING A SYSTEM BOARD ASYNC BUFFER DURING THE POST ASYNC TEST.

PROBLEM ISOLATION AIDS:

BOTH POST AND DIAGNOSTICS WILL COMPLETE WITHOUT ERROR WHEN THE ASYNC CABLE IS DISCONNECTED.

FIX:

POWER THE SYSTEM "ON" BEFORE THE SERIAL DEVICE OR USE "F1" TO BYPASS THE ERROR.

SAS KEYWORDS:

PSY2	PSY2ERR	PSY2COMM	PSY2OPER
8550SYSERR	8560SYSERR	8570SYSERR	8530SYSERR
D/T8550	D/T8560	D/T8555	D/T8565
D/T8570	D/T8580	D/T8590	D/T8525
D/T8540	D/T8535	D/T6384	D/T6382
D/T6387	D/T6381	PSVP	6384
6382	6381	6387	VALUE POINT

1.4.1427 114 OR 3052 ERROR ON 8580 W/PC NETWORK ADPT.

Record number: H107519

Device: D/T8580
Model: M
Tip key:
Date created: 093/01/14
Date last altered: A94/08/15

SYMPTOM:

114 POST ERRORS ARE GENERATED ON AN 8580 WITH A PC NETWORK ADAPTER INSTALLED.

PROBLEM ISOLATION AIDS:

THE POST ERROR CODE 114, DUE TO AN INCORRECT LEVEL OF PC NETWORK ADAPTER, MAY BE INTERMITTENT OR SOLID. NETWORK ADAPTER DIAGNOSTICS WILL AID IN ISOLATING THIS INTERMITTENT CONDITION. IF DIAGNOSTICS ARE USED TO FIND THE PROBLEM, THE ERROR CODE WILL BE 3052.

FIX:

WHEN SERVICING A D/T 8580 WITH A PC NETWORK ADAPTER INSTALLED, CHECK THE CHARACTERS ON THE BAR CODE LABEL OF THE COMPONENT SIDE OF THE ADAPTER. THE FIRST 4 CHARACTERS SHOULD BE 236C, FOR EXAMPLE 236C0000356. IF THESE CHARACTERS ARE NOT 236C, REPLACE THE ADAPTER. USE THE FOLLOWING FRU NUMBERS WHEN REPLACING THE ADAPTERS:

P/N72X8102 - PC NETWORK BASEBAND ADAPTER/A
P/N72X8106 - PC NETWORK ADAPTER II/A

BE SURE REPLACEMENT ADAPTERS ALSO HAVE THE CHARACTERS 236C AS DESCRIBED ABOVE.

INCORRECT LEVELS OF THE PC NETWORK ADAPTERS USED IN THE PS/2 D/T 8580 MAY CAUSE AN ERROR CODE OF 114 DURING POST (NOTE THAT POST ERROR CODE 114 IS A VALID ERROR CODE AND MAY ALSO BE CAUSED BY OTHER DETECTED HARDWARE FAILURES.)

SAS KEYWORDS:

PS/2 PSY2ADPT PSY2 PSY2ERR
PSY2COMM PS2

1.4.1428 12902/12904 CACHE ERRORS ON VALUEPOINT 6384/D

Record number: H12846

Device: D/T6384
 Model: M
 Tip key:
 Date created: 093/08/13
 Date last altered: A95/10/30

SYMPTOM:

PS/VALUEPOINT 6384/D 466DX2 MAY EXPERIENCE 12902 AND 12904 CACHE ERRORS DURING POST, AFTER REPLACEMENT OF THE SYSTEM BOARD. 162/163 POST ERRORS MAY ALSO OCCUR ALONG WITH THE CACHE ERRORS. REBOOTING THE SYSTEM WILL CAUSE THE ERRORS TO ALTERNATE BETWEEN 162/163 AND 12902/12904.

PROBLEM ISOLATION AIDS:

- 1) THE 12902 ERROR IS AN INTERNAL CACHE ERROR AND THE 12904 ERROR IS AN EXTERNAL CACHE ERROR.
- 2) THESE ERRORS MAY BE SEEN AFTER REPLACING FRU P/N92F0395 WITH THE SUBSTITUTE BOARD, FRU P/N 71G3161.
- 3) THE CUSTOMER'S APPLICATIONS RUN WITHOUT FAILURES IF THE CACHE ERRORS ARE BYPASSED.
- 4) REMOVING THE L2 CACHE CARD FROM THE SYSTEM BOARD ELIMINATES THE 12904 ERROR. 12902 ERROR REMAINS.
- 5) THE FLASH EEPROM LEVEL OF THE SYSTEM BOARD IS "L6ET21AUS" VIEW THE FLASH EEPROM LEVEL BY ACCESSING THE CONFIGURATION UTILITY PROGRAM. THE FIFTH, SIXTH AND SEVENTH POSITIONS OF THE EEPROM LEVEL REPRESENT THE CODE LEVEL; FOR EXAMPLE: L6ET21AUS IS CODE LEVEL 21A.
- 6) DIAGNOSTICS FOR THE SYSTEM UNIT FAIL WITH AN INTERNAL CACHE ERROR, AND RECOMMEND SYSTEM BOARD REPLACEMENT.

*** DO NOT REPLACE THE SYSTEM BOARD ****

FIX:

THE FAILURE IS CAUSED BY A DOWNLEVEL FLASH EEPROM LEVEL. OBTAIN AND INSTALL THE LATEST LEVEL FLASH EEPROM UPDATE.

THE UPDATES MAY BE DOWNLOADED FROM THE IBM PC COMPANY BULLETIN BOARD SYSTEM BY CALLING 919-517-0001.

INSTALL THE FLASH UPDATE AND RUN ALL SYSTEM DIAGNOSTICS. IF THE CACHE ERRORS OR THE 162/163 ERRORS REMAIN, UTILIZE NORMAL PROBLEM DETERMINATION TO ISOLATE THE FAILING FRU.

SAS KEYWORDS:

PSVP	VALUE POINT	PSVPERR	6384
PSY2	PSY2ERR	PSVPBRD	PSY2BRD
PSY2DIAG	PSVPDIAG	PSY2MEM	PSVPMEM
6384 /D			

1.4.1429 152 ERRORS
Record number: H02697

Device: D/T8550
Model: M
Tip key:
Date created: 087/04/14
Date last altered: A91/09/03

SYMPTOM:

FALSE 152 ERRORS WILL OCCUR WHEN DIAGNOSTICS ARE RUN AFTER A POWER ON PASSWORD WAS CREATED. THIS FALSE ERROR WILL FAIL ON BOTH CUSTOMER AND ADVANCED LEVEL DIAGNOSTICS WHEN RUN FROM THE IBM SYSTEM/2 MODEL 50/60 REFERENCE DISKETTE.

TO REMOVE THE PASSWORD:

1. TURN POWER OFF
2. SHORT THE PINS LOCATED ON THE SPEAKER ASSEMBLY.
3. SWITCH ON THE SYSTEM AND LEAVE THE TWO PINS SHORTED UNTIL "POST" IS FINISHED.

IF THE POWER ON PASSWORD IS USED, CUSTOMER OPERATION WILL BE NORMAL. HOWEVER, THE 152 ERROR WILL OCCUR WHEN RUNNING DIAGNOSTICS FOR THE SYSTEM BOARD. ON CUSTOMER LEVEL OR ADVANCED LEVEL DIAGNOSTICS, WHEN THE "ESC" KEY IS DEPRESSED THE ERROR WILL BE BYPASSED.

NOTE: THE PS/2 REFERENCE DISKETTE REQUIRES A COLD BOOT (NOT CTRL-ALT-DEL). FAILURE TO DO SO CAN RESULT IN FALSE ERRORS. SEE RETAIN TIP D/T8550 TIP 018 FOR DETAILS.

PROBLEM ISOLATION AIDS: NONE

FIX:

FALSE 152 ERRORS WERE FIXED ON RELEASE 1.01 AND HIGHER OF THE PS/2 MODEL 50/60 REFERENCE DISKETTE.

SAS KEYWORDS:

PSY2	8560SYSMISC	8550SYSMISC	PSY2MISC
PSY2ERR	8550SYSERR	8560SYSERR	D/T8560

1.4.1430 16 / 20MHZ 8570 HANGS OR HAS INCORRECT KEYBOARD OPERATION

Record number: H096761

Device: D/T8570
 Model: M
 Tip key:
 Date created: 092/03/10
 Date last altered: A92/03/12

SYMPTOM:

8570 systems containing system board FRU P/N33F5835, P/N33F5834, or P/N96F7402 may hang and lock the keyboard or experience incorrect keyboard operation, when running MICROSOFT WINDOWS * 3.0 and 3.0a with any software that remaps the keyboard.

PROBLEM ISOLATION AIDS:

Powering the system off and then on will temporarily unlock the system.
 System and Keyboard diagnostics pass.

FIX:

The configuration listing screen, shown in the beginning of the Windows installation, must be manually modified to circumvent this problem. The program sees an 84/86 key keyboard; this must be changed to the 101/102 enhanced keyboard that the 8570 uses. Once the customer changes the Windows configuration, the software will correctly recognize the keyboard.

Customers requiring further assistance should contact Microsoft.

Future releases of Windows will include this fix.

* MICROSOFT IS A REGISTERED TRADEMARK OF THE MICROSOFT CORPORATION.

SAS KEYWORDS:

PSY2	PSY2PROG	8570SYSPROG	PSY2ERR
8570SYSERR	MODEL	E61	U61
061	081	121	161

1.4.1431 16X CD HANGS OR LOADS 2 COPIES OF APPLICATION

Record number: H137713

Device: D/T6899
 Model: M
 Tip key:
 Date created: 097/05/13
 Date last altered: A97/05/13

SYMPTOM:

IBM PC 300 & IBM IntelliStation Z Pro systems preloaded with WindowsNT, and IBM Aptiva systems preloaded with Windows95, may exhibit either of the following symptoms when a CD with an "AUTORUN" or "AUTOSTART" file is placed in the 16X CDROM drive:

NOTE: An AUTORUN or AUTOSTART file is an executable file that is intended to start automatically when the CD is inserted. Usually these types of files are INSTALL or DEMO files.)

1) The application will take at least 10 seconds longer to load, and two copies of the program will start.

-OR-

2) The AUTORUN or AUTOSTART application will not start and the CDROM drive will stop functioning. The LED on the CDROM drive will remain on or begin flashing. The system will continue to accept commands from the keyboard and mouse, however, the CDROM will not function until the system is restarted.

PROBLEM ISOLATION AIDS:

The following systems are available in models which contain a 16X CDROM. Only these systems are affected. Systems containing a 16X CDROM purchased from Options by IBM (OBI) may also be affected.

IBM PC 365 Series - 6589
 IBM IntelliStation Z Pro - 6899
 IBM PC 300 Series - 6272 & 6282
 IBM Aptiva - 2161

The affected CDROM drives can be identified by the part number information on the drive label. The brand name of the affected CDROM drive is Hitachi 16maX CD-ROM, model CDR-8130.

IBM Assembly P/N and barcode header:

- 76H6100 H/C J12BG
 - 76H6396 H/C J1367 and J130J
 - 00K7891 H/C J13D3
 - 76H6104 H/C J12BJ

IBM Option Part Number (OBI):

- 76H6108

IBM FRU Part Number:

- 00K7892
 - 76H6107

The brand name and model of the CDROM drive may also be viewed in WindowsNT via the SCSI Adapters icon in the Control Panel. Double-click on the Intel PIIX PCI Bus Master IDE Controller to display the IDE Hard File and CDROM drive information.

In Windows95, access the System icon in the Control Panel, then click on the CDROM drive for the brand name/model information.

FIX:

Do not replace the CDROM Drive.

A software update been developed to eliminate the failure.

The update adds a program called CDSWDM2.EXE to the Windows95 AUTOEXEC.BAT file to change the DMA transfer rate for compatibility with the Hitachi 16maX CDR-8130 CDROM drive.

In WindowsNT, the update program changes Hitachi 16maX device driver DMA parameter setting for compatibility with the system unit hardware and the operating system (WindowsNT).

The Hitachi 16maX CDROM software update may be obtained from the IBM PC Company BBS system by calling 1-919-517-0001. View the "IBM PC 300/700 Files" section (section #21) for the file titled:

SUPP95NT.EXE - IBM 16X Max CD-ROM Driver Supplement
 Windows95, WindowsNT 3.51, WindowsNT 4.0

The update may also be downloaded via the Internet from the IBM

PSY2 RETAIN TIPS

16X CD HANGS OR LOADS 2 COPIES OF APPLICATION

Personal Computer File Library by searching the following
Internet URL:
http: //www.us.pc.ibm.com/files.html

WindowsNT & Windows95 are trademarks of the Microsoft
Corporation.
Hitachi 16maX CDR-8130 is a trademark of Hitachi, Ltd.

SAS KEYWORDS:

PSVP	PSY2	IBMPC	PSY2PROG
PSVPPROG	PC 330	PC 350	PSVPCDROM
UNCLASSIFIED	PSY2CDROM	PSY2ERR	PSVPERR
HUNG	LOCKUP	D/T6272	D/T6282
D/T6899			

1.4.1432 161/162/163 POST ERRORS ON 425SX VALUEPOINT MODELS

Record number: H12873

Device: D/T6384
 Model: M
 Tip key:
 Date created: 093/12/07
 Date last altered: A93/12/07

SYMPTOM:

PS/VALUEPOINT 6382/S AND 6384/D 425SX (FXX) MODELS MAY EXHIBIT 161,162 OR 163 POST ERRORS INDICATING THAT DATE/TIME NEEDS TO BE SET OR THE BATTERY NEEDS TO BE REPLACED EACH TIME THE SYSTEM IS POWERED ON. THE ERROR MAY OCCUR EVEN IF THE DATE AND TIME WERE SET AND SAVED USING THE CONFIGURATION UTILITY.

PROBLEM ISOLATION AIDS:

THIS TIP APPLIES ONLY TO 6382/S AND 6384/D FXX MODELS WITH TYPE 2 SYSTEM BOARDS, FRU P/N61G3215, WITH MEMORY SIMM SOCKETS LABELED J19 THROUGH J22.

1. POWER ON THE SYSTEM AND PRESS F1 DURING THE MEMORY COUNT TO ENTER THE CONFIGURATION UTILITY.
2. VERIFY THE DATE AND TIME SETTINGS IN THE CONFIGURATION UTILITY. RESET IF NECESSARY. PRESS ESCAPE TO SAVE THE CHANGES.
3. POWER THE SYSTEM OFF. ALLOW THE SYSTEM TO REMAIN POWERED OFF FOR AT LEAST 10 MINUTES. POWER ON THE SYSTEM AND ALLOW THE SYSTEM TO COMPLETE POST.
4. IF THE SYSTEM DOES NOT POST A 161,162 OR 163 DATE/TIME OR BATTERY ERROR, AND THE TIME ENTRY IN THE CONFIGURATION UTILITY REFLECTS THE 10 MINUTES THAT HAVE PASSED, THIS TIP DOES NOT APPLY.
5. IF THE SYSTEM DOES POST A 161,162 OR 163 DATE/TIME OR BATTERY ERROR AND THE SYSTEM BOARD MEMORY SIMM CONNECTORS ARE NUMBERED J18 THROUGH J21 (TYPE 1 SYSTEM BOARD) THIS TIP DOES NOT APPLY. UTILIZE NORMAL PROBLEM DETERMINATION PROCEDURES TO ISOLATE THE FAILING FRU.
6. IF THE SYSTEM DOES POST A 161,162 OR 163 DATE/TIME OR BATTERY ERROR AND THE SYSTEM BOARD MEMORY SIMM CONNECTORS ARE NUMBERED J19 THROUGH J22 (TYPE 2 SYSTEM BOARD) THIS TIP DOES APPLY.

FIX:

IF THE SYSTEM MEETS THE CRITERIA STATED ABOVE, USE THE FOLLOWING PROCEDURE TO RESOLVE THE FAILURE:

- A) MEASURE THE BATTERY VOLTAGE. SHOULD BE APPROXIMATELY 3 VOLTS. IF THE BATTERY VOLTAGE IS NOT CORRECT, REPLACE THE BATTERY.
- B) IF THE BATTERY VOLTAGE IS CORRECT AND THE SYSTEM MEETS THE CRITERIA STATED ABOVE, REPLACE THE SYSTEM BOARD. THE SYSTEM BOARD FRU NUMBER IS P/N61G3215.

THERE ARE NO OTHER PS/VALUEPOINT SYSTEM BOARDS AFFECTED BY THIS PROBLEM.

SAS KEYWORDS:

PSVP	PSY2	PSVPBRD	PSY2BRD
PSVPERR	PSY2ERR	PSVPPART	PSY2PART
6382	D/T6382	161	162
163	DATE	TIME	6384
61G3215	92F0394		

1.4.1433 162 / DISKETTE PROBLEM USING REFERENCE DISKETTE

Record number: H004338

Device: D/T8550
 Model: M
 Tip key:
 Date created: 090/03/15
 Date last altered: A92/04/03

SYMPTOM:

A PROBLEM WITH THE CURRENT LEVEL REFERENCE DISKETTES CAUSES THE FOLLOWING FALSE ERRORS WHEN USED ON A SYSTEM PREVIOUSLY CONFIGURED WITH AN EARLIER VERSION REFERENCE DISKETTE:

1. INSTALLED DISKETTE DRIVE(S) "DISAPPEAR" FROM ANY CONFIGURATION SCREEN. 162 ERROR NOT REPORTED BY POST.
2. 162 ERROR REPORTED BY POST; NO DEVICES HAVE BEEN ADDED OR REMOVED.
3. DISKETTE DIAGNOSTICS FAIL.
4. INOPERATIVE DISKETTE DRIVES.
5. SYSTEM HANGS AND/OR OTHER DEFECTIVE SYMPTOMS. SUCH AS BLANK SCREENS, UNIT APPEARS DEAD.

CURRENT (AFFECTED) REFERENCE DISKETTES:

8580/8570 REFERENCE DISKETTE VER. 1.10
 8550/8560 REFERENCE DISKETTE VER. 1.04
 8555/8565 REFERENCE DISKETTE VER. 1.03

PROBLEM ISOLATION AIDS:

THIS IS NOT A HARDWARE FAILURE. CONFIGURATION RECORDS CREATED BY EARLIER VERSION REFERENCE DISKETTES ARE NOT COMPATIBLE WITH THE CURRENT VERSION REFERENCE DISKETTES. IF THE SYSTEM WAS PREVIOUSLY CONFIGURED WITH AN EARLIER VERSION REFERENCE DISKETTE AND EXHIBITS ANY SYMPTOM LISTED ABOVE, PROCEED TO THE FIX IDENTIFIED BELOW.

FIX:

THE SYMPTOMS REFERENCED ABOVE CAN BE CORRECTED BY RUNNING AUTOMATIC OR MANUAL CONFIGURATION FROM THE CURRENT VERSION REFERENCE DISKETTE USING ONE OF THE FOLLOWING PROCEDURES:

1. SELECT SET CONFIGURATION FROM THE MAIN MENU.
 2. SELECT RUN AUTO CONFIGURATION.
 3. RESTART THE SYSTEM.
- OR -
1. SELECT SET CONFIGURATION FROM THE MAIN MENU.
 2. SELECT CHANGE CONFIGURATION
 3. USE THE F5 AND F6 KEY TO TOGGLE THE CORRECT SELECTION FOR EACH OF THE INSTALLED DISKETTE DRIVES.
 4. PRESS F10 TO SAVE CONFIGURATION.
 5. RESTART THE SYSTEM.

IF THIS DOES NOT CORRECT THE ERROR, NORMAL HARDWARE PROBLEM DETERMINATION PROCEDURES SHOULD BE UTILIZED. THIS PROBLEM WILL BE CORRECTED ON LATER VERSIONS OF THE REFERENCE DISKETTES.

SAS KEYWORDS:

PSY2	PSY2DIAG	PSY2ERR	8550SYSERR
8560SYSERR	8570SYSERR	8580SYSERR	8550SYSDIAG
8560SYSDIAG	8570SYSDIAG	8580SYSDIAG	PSY2SYSADPT
PSY2DSKT	8550SYSDSKT	8555SYSDSKT	8560SYSDSKT
8565SYSDSKT	8570SYSDSKT	8580SYSDSKT	8550SYSDIAG
8555SYSDIAG	8560SYSDIAG	8565SYSDIAG	8570SYSDIAG
8580SYSDIAG	8550SYSERR	8555SYSERR	8560SYSERR
8565SYSERR	8570SYSERR	8580SYSERR	D/T8580
D/T8550	D/T8560	D/T8565	D/T8570
D/T8555			

1.4.1434 162 / 601 ERROR AT POWER-ON

Record number: H12386

Device: D/T8550
Model: M
Tip key:
Date created: 093/06/17
Date last altered: A94/08/15

SYMPTOM:

162/601 ERRORS DURING POST (POWER-ON SYSTEM TEST).

UNDER CERTAIN CONDITIONS, THE HEAD LEADSCREW ASSEMBLY MAY BIND, CAUSING DISKETTE DRIVE ERRORS.

AFTER POWER-ON, OR WARM BOOT, IF THE MACHINE SHOWS 162 AND 601 ERRORS, CHECK THE DISKETTE DRIVE FOR THE CONDITIONS LISTED BELOW.

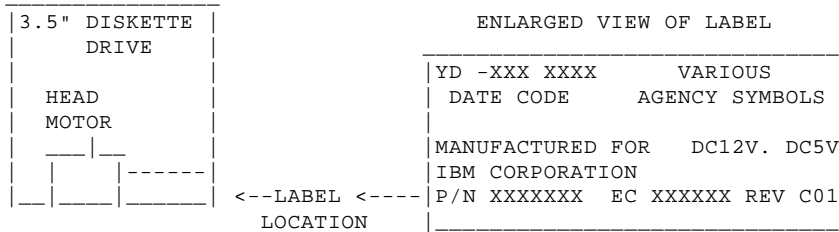
PROBLEM ISOLATION AIDS: NONE

FIX:

ONLY DISKETTE DRIVES "MANUFACTURED FOR IBM CORPORATION," WITH A "YD" AS THE FIRST CHARACTERS OF THE TOP LINE OF PRINT ON THE IDENTIFICATION LABEL, AND A REVISION CODE OF C01, C02 AND C03 ARE AFFECTED BY THIS PROBLEM.

THE AFFECTED DRIVES MAY BE IDENTIFIED BY REFERRING TO THE LAST NUMBER IN THE BOTTOM LINE OF PRINT OF THE LABEL IDENTIFIED IN THE FOLLOWING DIAGRAM:

TOP VIEW OF DISKETTE DRIVE ASSEMBLY



ALL OTHER LEVELS OF DISKETTE DRIVES MANUFACTURED FOR IBM ARE UNAFFECTED AND THEREFORE, SHOULD NOT BE REPLACED.

SAS KEYWORDS:

PSY2 PSY2ERR PSY2DSKT D/T8550
D/T8555 D/T8560 D/T8565 D/T8570
D/T8580

PSY2 RETAIN TIPS
162 ERROR

1.4.1435 162 ERROR

Record number: H03946

Device: D/T8550
Model: M
Tip key:
Date created: 088/07/27
Date last altered: A91/09/03

SYMPTOM: 162 ERROR DURING BOOT FROM DISKETTE OR FIXED DISK.

PROBLEM ISOLATION AIDS: REMOVE THE EXT DRIVE OPTION CARD AND ADAPTER.

FIX: REPLUG THE CABLE TO THE DRIVE CONNECTOR ASSY. THE CABLE CAN BE PLUGGED UPSIDE DOWN OR 1 PIN OFF. THE COLORED STRIPE ON THE CABLE SHOULD BE TOWARD THE REAR OF THE MACHINE WHEN INSTALLED.

SAS KEYWORDS:

PSY2	8550SYSDSKT	8560SYSDSKT	8580SYSDSKT
PSY2DSKT	8550SYSERR	8560SYSERR	8580SYSERR
PSY2ERR	8570SYSDSKT	8570SYSERR	D/T8560
D/T8570	D/T8580		

1.4.1436 162 ERROR AFTER BOOTING FROM FIXED DISK ON PS/2

Record number: H016629

Device: D/T8550
 Model: M
 Tip key:
 Date created: 088/04/19
 Date last altered: A92/09/30

SYMPTOM:

THE PS/2 DISPLAYS A 162 POST ERROR AFTER BOOTING FROM THE HARDFILE.

PROBLEM ISOLATION AIDS:

THIS PROBLEM MAY BE CAUSED BY SOFTWARE DRIVERS INVOKED WHILE BOOTING FROM THE FIXED DISK. TO DETERMINE IF THIS IS HAPPENING, PERFORM THE FOLLOWING:

- AFTER RECEIVING A 162 ERROR, RECONFIGURE THE SYSTEM; DO NOT BOOT TO THE HARDFILE. POWER-ON THE SYSTEM AT LEAST TWO TIMES WITH A REFERENCE DISKETTE OR DOS DISKETTE IN DRIVE A.
- IF THE SYSTEM DOES NOT DISPLAY A POST ERROR, RE-BOOT TWICE TO THE HARDFILE. THE FIRST HARDFILE BOOT SHOULD NOT GENERATE A 162 ERROR. IF HARDFILE SOFTWARE IS CAUSING A 162, THE POST ERROR WILL OCCUR ON THE NEXT (SECOND) BOOT AND ANY SUBSEQUENT BOOTS.
- THIS IS USUALLY CAUSED BY A DEVICE DRIVER BEING LOADED WITHOUT THE APPROPRIATE HARDWARE ATTACHED AND FUNCTIONING. MOST INCIDENTS HAVE BEEN GENERATED BY EXTERNAL 5.25" DRIVERS GETTING INVOKED FROM THE AUTOEXEC.BAT OR CONFIG.SYS FILE(S).

FIX:

IF THE ABOVE PROBLEM DETERMINATION INDICATES A PROBABLE SOFTWARE PROBLEM, THE CUSTOMER SHOULD REMOVE ANY INVALID DEVICE DRIVER STATEMENTS FROM THE AUTOEXEC.BAT AND CONFIG.SYS FILES BEFORE HARDWARE IS REPLACED.

IF THE PD RESULTS DO NOT INDICATE SOFTWARE, CONTINUE WITH NORMAL HARDWARE FRU ISOLATION. THE 162 ERROR CAN BE CAUSED BY ANY DEVICE, INCLUDING THE DISKETTE DRIVE OR CABLE.

SAS KEYWORDS:

PSY2	PSY2DSKT	PSY2ERR	D/T8555
D/T8556	D/T8557	D/T8560	D/T8565
D/T8570	D/T8573	D/T8580	D/T8590
D/T8595	D/T9556	D/T9557	D/T9576
D/T9577	D/T95XX		

1.4.1437 162 ERROR AFTER INSTALLING SCSI ADAPTER W/CACHE

Record number: H102073

Device: D/T8580
Model: M
Tip key:
Date created: 092/10/07
Date last altered: A94/08/15

SYMPTOM:

- UPON INITIAL INSTALLATION OF THE A SCSI ADAPTER WITH CACHE THE SYSTEM DISPLAYS A 162 POST ERROR.
- THE ERROR CANNOT BE ELIMINATED BY PERFORMING AUTOMATIC CONFIGURATION .

PROBLEM ISOLATION AIDS: NONE**FIX:**

- REMOVE ALL ADAPTERS FROM THE SYSTEM, INCLUDING THE SCSI ADAPTER.
- PERFORM AUTOMATIC CONFIGURATION.
- INSTALL THE NEW SCSI ADAPTER, FRU P/N85F0063.
- PERFORM AUTOMATIC CONFIGURATION.
- INSTALL REMAINING OPTIONS AND COMPLETE CONFIGURATION.

THE 162 ERROR WILL NO LONGER BE PRESENT AFTER PERFORMING THESE STEPS. FUTURE CONFIGURATIONS OF OPTIONS AND ADAPTERS CAN BE COMPLETED WITH OUT INCIDENT.

SAS KEYWORDS:

PSY2	PSY2ADPT	PSY2ERR	CONFIG
MEMORY	CONFIGURE	REBOOT	RE BOOT

1.4.1438 162 ERROR WITH ACTION MEDIA II INSTALLED

Record number: H125112

Device: D/T6482
 Model: M
 Tip key:
 Date created: 094/09/02
 Date last altered: A94/09/22

SYMPTOM:

ValuePoint 64xx Performance Series system with an Action Media II card (FRU p/n69f9731) installed displays POST error 162 after a warm boot.

PROBLEM ISOLATION AIDS:

- PS/ValuePoint diagnostics will complete without error.
- The Action Media II diagnostics will run without error.
- The Action Media II "Confidence Test" will run without error.
- There are no errors after a cold boot.

FIX:

ValuePoint Performance Series systems are "Plug and Play" compatible. The Action Media II adapter was designed before "Plug and Play" was developed. The customer should press "Enter" to bypass the error. The system will function normally after pressing enter.

SAS KEYWORDS:

PSY2	PSVP	PS/VALUEPOINT	VALUE POINT
D/T6472	D/T6484	D/T6492	D/T6494
6472	6484	6492	6494
6482	PSY2ADPT	PSVPADPT	AM2
AMII	AM-2	AM-II	PSVPTBD
69F9731	69F9730	P/N69F9730	

1.4.1439 162 POST ERRORS W/TRAKKER TAPE DRIVE INSTALLED

Record number: H062835

Device: D/T6384
 Model: M
 Tip key:
 Date created: 093/07/01
 Date last altered: A93/07/01

SYMPTOM:

ALL MODELS OF THE PS/VALUEPOINT SYSTEMS MAY EXPERIENCE 162 POST ERRORS IF A TRAKKER EXTERNAL TAPE DRIVE IS INSTALLED. THE 162 INDICATES A CONFIGURATION ERROR HAS OCCURRED AND THE RESIDENT CONFIGURATION UTILITY OR THE SETUP UTILITY ON THE ADVANCED DIAGNOSTIC DISKETTE NEEDS TO BE RUN.

PROBLEM ISOLATION AIDS:

AFTER A 162 POST ERROR CONFIGURATION UTILITY OR SETUP SHOWS THE HARDFILE(S)"NOT INSTALLED." RUN SETUP TO REINSTALL THE HARDFILE(S).

THE HARDFILE MOTOR IS NOT ACTIVATED (DRIVE DOESN'T SPIN-UP).

REMOVE THE TRAKKER TAPE DRIVE'S AC LINE CORD FROM THE AC RECEPTACLE AND ATTEMPT TO RECREATE THE FAILURE BY POWERING THE 6384 ON/OFF SEVERAL TIMES (THE TRAKKER TAPE DRIVE DOES NOT HAVE A POWER ON/OFF SWITCH). THE 162 POST ERROR SHOULD NOT REOCCUR. IF IT DOES, THIS TIP DOES NOT APPLY, AND NORMAL PROBLEM DETERMINATION SHOULD BE UTILIZED.

FIX:

THE FAILURE DOES NOT OCCUR IF POWER IS REMOVED FROM THE TRAKKER TAPE DRIVE BEFORE THE SYSTEM IS POWERED ON, OR IF THE TRAKKER TAPE DRIVE IS POWERED ON SIMULTANEOUSLY WITH THE SYSTEM THROUGH A POWER STRIP, SURGE SUPPRESSOR, UPS, ETC. THE TRAKKER TAPE DRIVE SHOULD NOT BE LEFT IN A CONSTANT POWER-ON CONDITION WHEN NOT IN USE.

CUSTOMERS USING THIS CONFIGURATION SHOULD BE ADVISED OF THIS POWER-ON PROCEDURE TO PREVENT THE 162 CONFIGURATION ERRORS.

SAS KEYWORDS:

PSVP	VALUE POINT	PSVPERR	PSVPOEM
PSY2	PSY2ERR	PSY2OEM	PSVPTAPE
PSY2PWR	PSVPPWR	TRACKER	6382
D/T6382	D/T6387	6387	

1.4.1440 162/163 ERRORS ON 6384 RUNNING OS/2

Record number: H20612

Device: D/T6384
Model: M
Tip key:
Date created: 092/11/19
Date last altered: A93/12/02

SYMPTOM:

PS/VALUEPOINT SYSTEMS (ALL MODELS) MAY POST A 162/163 ERROR DAILY. THIS ERROR IS DUE TO SOFTWARE RESETTING THE TIME AND DATE IN CMOS.

THIS FAILURE MAY OCCUR ONLY ON SYSTEMS USING OS/2 1.3, OS/2 2.00 OR OS/2 2.00.1.

TIME AND DATE WILL BE RESET AFTER A POWER OFF/ON CYCLE, USUALLY AFTER THE DAY/DATE HAS CHANGED (AFTER MIDNIGHT). THE CONFIGURATION UTILITY MAY SHOW THE DATE AND TIME CORRECTLY OR THE DATE AND TIME MAY NEED TO BE RESET.

PROBLEM ISOLATION AIDS:

WARM BOOTING (CTRL-ALT + DEL) THE SYSTEM WITHOUT MAKING A CHANGE TO THE DATE/TIME WILL NOT CAUSE THE POST ERROR. THE ERROR MAY BE DISPLAYED WITH A WARM BOOT IF THE DATE/TIME IS CHANGED BY USING THE OS/2 FULL SCREEN.

FIX:

DO NOT REPLACE ANY PARTS IN THE SYSTEM FOR THIS ERROR. THIS IS NOT A HARDWARE PROBLEM.

CONTACT OS/2 SUPPORT AT 1-800-992-4777, AND REQUEST THE FIX UNDER APAR# PJ06747 FOR OS/2 2.00 AND OS/2 2.00.1 OR APAR# JR06843 AND PJ08155 FOR OS/2 1.3.

THE FIX FOR THIS PROBLEM WILL BE INCLUDED IN FUTURE RELEASES OF THE OS/2 PRODUCT.

SAS KEYWORDS:

PSVP	PSVPPROG	PSVPERR	PSY2
PSY2PROG	PSY2ERR	161	163
VALUE POINT	VALUEPOINT	162	

1.4.1441 163 POST ERROR - DATE & TIME INCORRECT

Record number: H133285

Device: D/T6598
Model: M
Tip key:
Date created: 096/04/19
Date last altered: A96/04/19

SYMPTOM:

IBM PC 360 6598 systems may exhibit a 163 POST error indicating that the date and time are incorrect. This error will occur if the system date is between October 20-31 or December 30-31 and the Flash BIOS level is 13 or 14.

PROBLEM ISOLATION AIDS:

When the 163 POST error occurs, the system will send the user into the Setup Utility. The system time will be 00: 00: 00 with seconds incrementing and the date will show as 01/01/1990.

Once in the Setup Utility the user will likely reenter a date which falls in the range listed above. When the system is rebooted the 163 POST error will occur again and lead the user into the Setup Utility to correct the error. This loop will continue until the user enters a date outside of the range listed above.

FIX:

Do not replace parts. This is not a hardware problem.

The user may temporarily work around the problem by entering a system date outside of the range stated above.

Obtain the latest Flash BIOS update to eliminate this problem. The current version is 15 and may be obtained from the IBM PC Company BBS at 919-517-0001. The file is titled LTJT15A.EXE and is located in the PC 300/700 Files section #21.

BIOS updates may also be downloaded via the Internet from the IBM Personal Computer File Library at the following Internet URL:

<http://www.pc.ibm.com/files.html>

SAS KEYWORDS:

IBMPC	PSVP	PSY2	D/T65XX
6598	PC360	PENTIUMPRO	PSVPMCD
PSY2MCD	PSVPERR	PSY2ERR	

1.4.1442 165 ERRORS WITH NOVELL OPERATING SYSTEM

Record number: H037058

Device: D/T8550
Model: M
Tip key:
Date created: 090/02/05
Date last altered: A94/03/21

SYMPTOM:

165 CONFIGURATION ERRORS WHEN INSTALLING NOVELL OPERATING SYSTEM ON 8560 AND 8580 MODEL 041 (44MB FIXED DISK) SYSTEMS.

PROBLEM ISOLATION AIDS:

USE THE ADVANCED DIAGNOSTIC FORMAT ROUTINE, WHICH RESIDES ON THE REFERENCE DISKETTE, TO FORMAT THE HARDFILE. FORMAT SHOULD TAKE 45 MINUTES OR LESS TO COMPLETE ON A 44MB FIXED DISK.

NOTE: FORMAT DESTROYS ALL DATA ON THE FIXED DISK. BE CERTAIN APPROPRIATE SOFTWARE BACK-UP PROCEDURES ARE IN PLACE.

NEXT, RUN THE ADVANCED DIAGNOSTICS ON THE FIXED DISK. SUCCESSFUL COMPLETION OF THE ADVANCED DIAGNOSTIC TESTS INDICATES THE FIXED DISK IS SERVICABLE AND THE SYSTEM SHOULD CONFIGURE NORMALLY. AFTER CONFIGURATION, RETURN THE SYSTEM TO THE CUSTOMER FOR LOADING OF THE SOFTWARE.

IF CONFIGURATION ERRORS ARE EXPERIENCED AGAIN AFTER THE NOVELL OPERATING SYSTEM IS INSTALLED, OR DURING THE SOFTWARE INSTALLATION PROCESS, RUN DIAGNOSTICS AGAIN. IF DIAGNOSTIC ERRORS ARE EXPERIENCED OR CONFIGURATION ERRORS APPEAR AGAIN, REFORMAT THE FIXED DISK DRIVE AGAIN. SUCCESSFUL REFORMAT AND COMPLETION OF FIXED DISK DIAGNOSTICS AND NORMAL SYSTEM CONFIGURATION AT THIS POINT, INDICATES THE SOFTWARE IS CORRUPTING THE FIXED DISK.

CERTAIN AREAS OF THE FIXED DISK CONTAIN SYSTEM DEPENDENT DATA WHICH IS REQUIRED FOR SUCCESSFUL CONFIGURATION AND DIAGNOSTIC TESTING, AND MUST NOT BE OVER-WRITTEN BY SOFTWARE.

FIX:

IF THIS PROBLEM IS BEING EXPERIENCED, THE CUSTOMER'S SOFTWARE PERSONNEL SHOULD CONTACT THE SOURCE OF THEIR SOFTWARE FOR ASSISTANCE.

DO NOT REPLACE THE HARDFILE IF THE ADVANCED DIAGNOSTIC FORMAT AND TESTING ROUTINES RUN TO COMPLETION WITHOUT ERROR.

SAS KEYWORDS:

PSY2	PSY2FDSK	PSY2ERR	PSY2DIAG
D/T8560	D/T8580	OEM	SOFTWARE

1.4.1443 166 POST ERROR WITH IBM SERVERGUARD ADAPTER

Record number: H132209

Device: D/T8641
 Model: M
 Tip key:
 Date created: 096/01/03
 Date last altered: A96/01/16

SYMPTOM:

During POST (Power-On System Test) a 166 error is received indicating the installed ServerGuard Adapter is "busy."

PROBLEM ISOLATION AIDS:

ALL PS/2 Servers with the serverguard adapter, FRU P/N06H8091, installed may be affected.

FIX:

Do not replace the ServerGuard Adapter. This error may be caused by either inserting or removing the modem from the PCMCIA socket, or connecting/disconnecting the battery-pack to the adapter while system power is on.

TO CORRECT THE PROBLEM:

1. Power off the system, then remove the adapter.
2. Make sure the battery-pack is fully charged.
3. Disconnect the battery-pack from the adapter for a few seconds.
4. Reconnect the battery-pack, and make sure the 3 LED's, located on top of the PCMCIA modem socket, follow this sequence:
 - CR3 comes on first.
 - Seconds later, CR2 blinks 5 TIMES in a 5 second time interval, then stays on for a few seconds and goes off.
 - Seconds later, CR3 goes off.
 - CR1 remains off the whole time.

If problems continue, use normal problem isolation procedures.

SAS KEYWORDS:

PSY2	SERVER	PSY2ADPT	PSY2ERR
D/T95XX	720	500	95
D/T9595	D/T8642	D/T8641	D/T9595A
9595A	8642	8641	SERVER
GUARD			

1.4.1444 1709 DIAGNOSTIC ERROR ON THINKPAD 350

Record number: H122262

Device: D/T2618
 Model: M
 Tip key:
 Date created: 094/01/10
 Date last altered: A96/11/11

SYMPTOM:

IF A 252MB HARDFILE IS INSTALLED, AND LEVEL 1.0 DIAGNOSTICS ARE USED, FALSE 1709 ERRORS WILL OCCUR.

PROBLEM ISOLATION AIDS:

IF NO HARDFILE ERRORS ARE EXPERIENCED DURING NORMAL OPERATION, THE 1709 DIAGNOSTIC ERROR SHOULD BE CONSIDERED FALSE.

FIX:

THIS PROBLEM WAS FIXED IN RELEASE 1.01 OF THE 2618 ADVANCED DIAGNOSTIC DISKETTE.

IF 1709 ERRORS OCCUR AFTER USING RELEASE 1.01 OF THE ADVANCED DIAGNOSTIC DISKETTE, UTILIZE NORMAL PROBLEM DETERMINATION PROCEDURES.

----- IMPORTANT -----

Diskette fixes are customer installable. Customers should be advised to contact the IBM PC Company HelpCenter at 800-772 - 2227 if assistance is required in getting or installing this information.

Files are located on the PC company's Bulletin Board Service (BBS). The direct line for modem connection to The PC Company BBS is 1-919-517-0001 or tieline 255-0001.

Customers in Canada should call IBM's HelpPC at 800-565-3344 for Assistance or down load information. The Canadian BBS phone numbers are:

Montreal-514-938-3022, Toronto-905-316-4255,
 Winnipeg-204-934-2735, Vancouver-604-664-6464.

The data may also be downloaded via the Internet from the IBM Personal Computer File Library by searching the following Internet URL: <http://www.pc.ibm.com/files.html>

SAS KEYWORDS:

PSY2	PSY2ERR	ERROR	HARDFILE
DISK DRIVE	DISK	FIXED	PSY2FDSK
HDD	DIAG	DIAGS	2618
THINKPAD	UNCLASSIFIED		

1.4.1445 171 POST ERRORS ON 8595 AND 9595 SYSTEMS

Record number: H124085

Device: D/T9595
 Model: M
 Tip key:
 Date created: 094/05/27
 Date last altered: A94/08/15

SYMPTOM:

A 00017100 (171) error occurs on POST (Power-On System Test). This problem may occur on 8595/9595 models xLx or xHx systems during the installation of any of the following adapters in micro channel slot 8: (The x may be any character.)

- IBM LANStreamer (TM) MC 32
- IBM LANStreamer (TM) MC 16
- IBM EtherStreamer (TM) MC 32

ADAPTER NAME	OLD OPTION PART #	NEW OPTION PART #	OLD FRU PART #	NEW FRU PART #
LANStreamer 32	92F8942	74G0103	P/N92F8941	P/N74G0098
LANStreamer 16	59G8998	74G0801	P/N58G8999	P/N74G0800
EtherStreamer	59G9066	74G0850	P/N59G9081	P/N74G0865

PROBLEM ISOLATION AIDS:

Check micro channel slot 8 for the presence of any of the referenced adapter cards.

FIX:

Do not install any of the above referenced adapters in slot 8. Relocate the adapter to one of the other micro channel slots. (All micro channel slots on this system are 32 bit slots.)

No further engineering action is planned.

SAS KEYWORDS:

PSY2	PSY2ADPT	PSY2COMM	PROM
D/T8595	9595	8595	

1.4.1446 174 ERRORS AFTER RUNNING AUTO CONFIG

Record number: H095027

Device: D/T9576
Model: M
Tip key:
Date created: 092/09/25
Date last altered: A94/08/15

SYMPTOM:

AFTER RUNNING AUTOMATIC CONFIGURATION FOR A 174 ERROR ON A 9576 OR 9577, THE SYSTEM REBOOTS AND POSTS ANOTHER 174 ERROR. THE POST MESSAGE THEN INSTRUCTS YOU TO RUN AUTOMATIC CONFIGURATION AGAIN. THIS WILL OCCUR AFTER CHANGING THE HARDFILE SCSI ID TO A LOWER ID. FOR EXAMPLE, 6 to 5, 5 to 4, ETC.

PROBLEM ISOLATION AIDS:

THIS PROBLEM WILL ONLY OCCUR WITH REFERENCE DISKETTE VERSION 1.00.

FIX:

WHEN ASKED TO RUN AUTOMATIC CONFIGURATION A SECOND TIME, ANSWER NO. CONTINUE INTO "SET CONFIGURATION" AND "SET AND VIEW SCSI DEVICES." REMOVE THE UNUSED SCSI ID AND SAVE THIS CONFIGURATION. YOUR UNIT WILL NOW POST CORRECTLY WITHOUT THE 174 ERROR. THIS PROBLEM WILL BE FIXED IN THE NEXT RELEASE OF IML CODE FOR THE 9576 AND 9577.

SAS KEYWORDS:

PSY2	PSY2PROG	D/T9577	D/T9576
PSY2DIAG	PSY2FDSK	PSY2ERR	HARDFILE
HARD FILE	FIXED DISK		

1.4.1447 176 POST COVER TAMPERING ERROR POSTED BY PC 700

Record number: H083626

Device: D/T6877
 Model: M
 Tip key:
 Date created: 096/07/09
 Date last altered: A97/02/06

SYMPTOM:

IBM PC 700 Series 6877 or 6887 systems may display a 176 POST error following a cold boot after setting the Administrators password.

PROBLEM ISOLATION AIDS:

A 176 POST error is intended to alert the user that the cover of the system has been removed or tampered with (C2 Security feature). The 176 POST error is only active if the Administrators password is enabled. The error is cleared by entering the Administrators password.

Affected systems will post a 176 error on cold boot even with no prior top cover tampering or removal.

Verify operation of the C2 security feature as follows:

- 1) Set an Administrator Password using the Setup Utility
 NOTE - Make note of the administrator password prior to turning system power off. If the administrator password is forgotten or misplaced, the system board must be replaced.
- 2) Turn the system power off.
- 3) Power on the system unit and display.
- 4) The system should come up error free and request only the Power-on password.

If a 176 POST error is displayed, enter the Administrators password to allow the system to IPL, then perform an orderly shutdown. Power the system off/on. If the 176 POST error is displayed again, this system is affected.

FIX:

The failure may be caused by the top cover plunger not contacting the tamper switch on the base frame properly.

If the system is displaying 176 POST errors without tampering with the top cover assembly, replace the C2 Security switch assembly, FRU P/N06H9971 (6877) or P/N06H9972 (6887).

SAS KEYWORDS:

PSVP	PSY2	PSVPPART	PSY2PART
6877	PC 700	PC730	PSVPERR
PSY2ERR	D/T6887	6887	

1.4.1448 1762 POST ERROR ON IBM PC365 WITH 4.2GB HARDFILE

Record number: H16269

Device: D/T6589
 Model: M
 Tip key:
 Date created: 097/07/01
 Date last altered: A97/07/02

SYMPTOM:

IBM PC365 Series systems equipped with an IBM 4.2GB IDE hardfile may experience intermittent 1762 post errors.

PROBLEM ISOLATION AIDS:

This tip applies if the customer is using a model 6589-15U or other 6589 system that is equipped with an IBM 4.2GB IDE hardfile part number P/N73H7681 and FRU P/N76H5820.

The likelihood of experiencing this error is very low. The customer can recover from the 1762 post error by powering the system off and back on.

FIX:

1. Download file 42GBFIX.EXE from the IBM BBS or Internet web page.
2. Run the downloaded file to create a bootable diskette.
3. Shutdown the operating system and power off the PC.
4. Insert the diskette and power on the system.
5. Wait until the status bar on the display has reached "100 Percent Processed."
6. Remove the diskette and power off the system.
7. Reboot for the changes to take effect.

This file updates the hardfile to a newer level of microcode which corrects the intermittent 1762 post error. Applying this update will not affect performance, result in data loss, or data corruption on the hardfile.

Applying this file to an unaffected 4.2GB IDE hardfile will not result in data loss or corruption.

The hardfile update may be obtained from the IBM PC Company BBS at 1 - 919 - 517-0001 or downloaded from the IBM Personal Computer file library by searching the following Internet URL:
<http://www.us.pc.ibm.com/searchfiles.html>.

SAS KEYWORDS:

PSY2	PSY2ERR	PSY2FDSK	PSY2MCD
PSVP	PSVPERR	PSVPFDSK	PSVPMCD
D/T6589	6589	UNCLASSIFIED	

1.4.1449 178/161/163 POST ERRORS ON IBM PC 700

Record number: H126729

Device: D/T6875
 Model: M
 Tip key:
 Date created: 095/03/14
 Date last altered: A95/03/14

SYMPTOM:

IBM PC 700 Series systems, 6875 and 6885, may experience one or more of the following error conditions:

- 178 POST error
- 161/163 POST errors indicating a defective CMOS battery or a Date/Time error has occurred.

PROBLEM ISOLATION AIDS:

- The system AC line cord is attached to a power source that is disconnected daily, such as a power strip, surge protector or an AC receptacle that is powered off at the circuit breaker.
- Battery needs replacement every 100-140 days of use.
- The system contains an ISA (Industry Standard Architecture) riser card, FRU P/N06H4003 or P/N06H4008.

FIX:

If the system meets the criteria above, replace riser card 06H4003 (6875) or 06H4008 (6885). The FRU numbers were not changed, however, field inventories have been purged of the defective riser cards.

If the failure persists, continue problem determination to isolate the failing FRU.

SAS KEYWORDS:

PSY2	68XX	D/T68XX	D/T6885
PSY2ERR	PSY2DIAG	IBMPC	PSY2PART
06H4003	06H4008	PSVP	PSVPPART
PSVPERR	PC-700	PC700	PC 730
PC 750			

1.4.1450 1790 POST ERROR AFTER REPLACING HARDFILE

Record number: H062790

Device: D/T8560
Model: M
Tip key:
Date created: 090/10/23
Date last altered: A92/10/02

SYMPTOM:

AN 8560 MODEL 041 OR 8580 MODEL 041 DISPLAYS A 1790 POST ERROR AFTER REPLACING THE 44MB FIXED DISK.

ADVANCED DIAGNOSTICS RESULT IN A 1752 OR 00175270 OR 00175280 ERROR WHEN THE FIXED DISK TESTS ARE RUN.

PROBLEM ISOLATION AIDS: NONE**FIX:**

THE 8560 AND 8580 USE TWO DIFFERENT TYPES OF 44MB FIXED DISKS. THESE DISKS ARE DESIGNATED AS "TYPE 31" AND "TYPE 32."

A 1790 POST ERROR WILL BE DISPLAYED IF THE REPLACEMENT FIXED DISK IS NOT THE SAME TYPE AS THE REPLACED DISK. TO CORRECT THE ERROR CONDITION, THE MACHINE MUST BE RECONFIGURED. THIS CAN BE DONE BY SELECTING THE CHANGE CONFIGURATION OPTION AND SAVING WITH F10.

AUTOMATIC CONFIGURATION CAN ALSO BE USED, BUT THIS WILL REMOVE ANY CUSTOM CHANGES PREVIOUSLY MADE TO THE SYSTEM CONFIGURATION.

SAS KEYWORDS:

PSY2	PSY2FDSK	PSY2ERR	8560SYSFDSK
8560SYSERR	8580SYSERR	8580SYSFDSK	HARDFILE
TYPE	DRIVE		

1.4.1451 187 ERROR AFTER AUTO-CONFIG

Record number: H124191

Device: D/T9557
Model: M
Tip key:
Date created: 094/06/07
Date last altered: A94/06/07

SYMPTOM:

187 Error after running auto-configuration with Reference Diskette or IML Reference Version 1.00. System will not allow entry into the Vital Product Data area when trying to correct error.

PROBLEM ISOLATION AIDS:

This problem only affects systems configured with 16Mb of memory. The 187 error occurred on the first reboot after running auto-configuration. System now gets error on every reboot and operator or servicer cannot set or change information on the Vital Product Data screen.

FIX:

- o From the main menu of the system partition make a Backup the System Partition.
- o View the system configuration and copy any customized setup settings. Print Screen key may be used if a printer is attached.
- o Reboot the system with Reference Diskette Version 1.02 or later in the A drive, then Restore the system partition.
- o Power OFF system
- o Remove one memory SIMM to reduce installed memory to less than 16Mb.
- o Remove or insulate the battery on the riser card to drain NVRAM and CMOS. CMOS will reset in aprox 20 to 25 min.

Before reapplying power:

- o Move the Override-jumper JMP1 (Jumper closest to riser card)
- o Unplug the fixed disk power cable for drive with SCSI ID 6.
- o Reinstall the riser battery or remove insulator.
- o With new Reference Diskette in drive A:
Power ON the system.
- o Run Auto-Config then Power the system off.
- o Reconnect power cable to fixed disk.
- o Power ON the system, Answer NO to Autoconfig ? (Y/N)

When the main menu re-appears, select:

#5. Set Features

#1. Set Time and Date

After setting time & date, return to the main menu then select:

#6 Copy an Option Diskette

Insert any option diskettes that may applicable, if the diskettes are unavailable, use the system partition backup created in the first step as the option diskette.

After the options have been copied return to the main menu then select:

#8. More Utilities

#4. Set system identification

#1. Set system identification

Follow instructions to verify or re-enter the systems serial number. Example (9557-23-AAAAA). After VPD has been reset or verified, return to Main Menu then power off the system.

SAS KEYWORDS:

PSY2

D/T9556

D/T9557

PSY2ERR

1.4.1452 19498 ERRORS W/2-8MB 80286 MEMORY ADAPTER

Record number: H12398

Device: D/T8550
 Model: M
 Tip key:
 Date created: 093/06/08
 Date last altered: A94/08/15

SYMPTOM:

THIS RETAIN TIP IDENTIFIES A REPLACEMENT EPROM AND OPTION DISKETTE FOR 2-8MB 80286 MEMORY EXPANSION ADAPTERS THAT MAY FAIL WITH A 19498-16XXX POST ERROR (XXX CAN BE ANY NUMBER).

FAILING SYSTEMS WILL MEET THE FOLLOWING CONDITIONS:

- 2 - 8MB 80286 MEMORY EXPANSION ADAPTER INSTALLED, FRU P/N15F8292 PRINTED ON BACK OF CARD.
- TOTAL OF 16MB INSTALLED IN THE SYSTEM.
- SYSTEM FAILS WITH A 19498-16XXX POST ERROR.

PROBLEM ISOLATION AIDS: NONE

FIX:

SOME 2 - 8MB MEMORY EXPANSION ADAPTERS MAY FAIL WITH A POST ERROR OF 19498-16XXX (XXX CAN BE ANY NUMBER). THIS IS A FALSE ERROR IN SYSTEMS WITH 16MB TOTAL INSTALLED MEMORY, AND CAN BE CORRECTED BY REPLACING THE MEMORY ADAPTER EPROM. PS/2 SYSTEMS THAT SUPPORT THE 2-8MB 80286 MEMORY EXPANSION OPTION SHOULD NOT BE CONFIGURED WITH MORE THAN 16MB TOTAL MEMORY. IF MORE THAN 16MB IS INSTALLED, A 19498 POST ERROR IS VALID AND WILL NOT BE CORRECTED BY EPROM REPLACEMENT.

IF THE FAILING SYSTEM EXPERIENCES THE LISTED ERROR CODE, REPLACE THE ADAPTER EPROM WITH FRU P/N57F2905. IN SYSTEMS WITH TWO 2-8MB ADAPTERS INSTALLED, THE EPROM SHOULD BE REPLACED ON BOTH CARDS.

THE 2 - 8MB ADAPTER HAS ONLY ONE PLUGGABLE EPROM, LOCATED ALONG THE TOP EDGE OF THE CARD AT LOCATION U1. A CORRECTLY INSTALLED EPROM WILL HAVE ITS SMALL NOTCH FACING LEFT, AWAY FROM THE BUS CONNECTOR.

** IMPORTANT **

THE REPLACEMENT EPROM IS SHIPPED WITH OPTION DISKETTE VERSION 1.1 AND A COPY OF THE ADAPTER INSTALLATION INSTRUCTIONS. THE DISKETTE AND INSTRUCTIONS ARE TO REMAIN WITH THE CUSTOMER, AS THEY CONTAIN UPDATED FILES AND DEVICE DRIVER INFORMATION. THE UPDATED DEVICE DRIVER ON OPTION DISKETTE VERSION 1.1 SHOULD BE USED WITH THE REPLACEMENT EPROM.

UNTIL THE EPROM IS REPLACED, A 19498 ERROR MAY BE BYPASSED WITH THE F1 KEY, LEAVING THE SYSTEM FULLY FUNCTIONAL.

- ORDER FRU P/N57F2905 THROUGH NORMAL PARTS DISTRIBUTION.
- SCRAP REMOVED EPROMS LOCALLY.

SAS KEYWORDS:

PSY2	PSY2ERR	PSY2ADPT	PSY2MEM
D/T8555	D/T8560	D/T8565	16256

1.4.1453 2 GIGABYTE HARDFILE FAILS TO CONFIGURE

Record number: H017182

Device: D/T95XX
 Model: M
 Tip key:
 Date created: 093/07/20
 Date last altered: A94/08/15

SYMPTOM:

A LIMITED NUMBER OF 2 GIGABYTE HARDFILES, FRU P/N92F0440, MAY FAIL TO CONFIGURE WHEN ATTACHED TO A DRIVE SLIDE AND INSTALLED IN A SYSTEM.

PROBLEM ISOLATION AIDS: NONE

IF A PROBLEM IS ENCOUNTERED DURING INSTALLATION, INSPECTION OF THE CIRCUIT CARD AND THE DRIVE SLIDE MAY BE REQUIRED. THE DRIVE SLIDE MAY BE MAKING CONTACT WITH THE CIRCUIT CARD.

FIX:

REMOVE THE DRIVE SLIDE AND LOOKING AT THE BOTTOM OF THE DRIVE, ORIENT IT SO THAT THE POWER AND SCSI CONNECTORS POINT AWAY FROM YOU. THE CIRCUIT CARD IS BASICALLY RECTANGULAR WITH A "V" SHAPED PROJECTION AT THE LOWER LEFT. COPPER COLORED TRANSLUCENT INSULATING TAPE IS USED TO ISOLATE THE CIRCUIT CARD FROM THE SLIDE. IF THE TAPE IS TOO SHORT AND DOES NOT INSULATE ALL SOLDER POINTS FROM THE DRIVE SLIDE, INSTALL BLACK ELECTRICAL TAPE OVER THE SOLDER DOTS TO INSULATE THE CIRCUIT CARD FROM THE DRIVE SLIDE.

THE DRIVE MAY NOW BE INSTALLED AND CONFIGURED.

THIS PROBLEM HAS BEEN ADDRESSED AND WILL BE FIXED ON FUTURE OPTION AND FRU DRIVES.

SAS KEYWORDS:

PSY2	2GB	GIG	ERROR
D/T9577	D/T8556	D/T8557	D/T9595
32G4336	PSY2FDSK	D/T8570	D/T9576
PSY2DSK	D/T8590	D/T8595	D/T9585
HARD	D/T9556	D/T9557	FILE
SCSI	P/N32G4336	92F0440	210
PSY2ERR			

2.3G BYTE INTERNAL TAPE BACK-UP UNIT DIAGNOSTIC CONFLICT

1.4.1454 2.3G BYTE INTERNAL TAPE BACK-UP UNIT DIAGNOSTIC CONFLICT

Record number: H021859

Device: D/T8595
 Model: M
 Tip key:
 Date created: 090/11/30
 Date last altered: A92/07/01

SYMPTOM:

CONFIGURATION CONFLICT ON SCSI DEVICE DIAGNOSTICS:

WHEN RUNNING DIAGNOSTICS, AN ADDRESSING CONFLICT MAY OCCUR WITH THE 2.3 GIGA-BYTE INTERNAL TAPE DRIVE ON 8595 SYSTEMS WHICH HAVE MORE THAN ONE SCSI ADAPTER INSTALLED.

THIS CONFLICT OCCURS IF ANOTHER SCSI ADAPTER HAS ANY DEVICE INSTALLED WITH THE SAME ID AS THE 2.3 GIGA-BYTE INTERNAL TAPE UNIT ATTACHED TO THE FIRST SCSI ADAPTER.

THIS IS CAUSED BY A SOFTWARE ERROR IN THE DEVICE OPTION CODE VERSION 1.00 OF THE 2.3 GIGA-BYTE INTERNAL TAPE UNIT OPTION DISKETTE.

THIS IS A DIAGNOSTIC ERROR ONLY AND DOES NOT AFFECT NORMAL SYSTEM OPERATIONS.

PROBLEM ISOLATION AIDS: NONE**FIX:**

DISCONNECT THE CONFLICTING SCSI DEVICE AND RECONFIGURE THE SYSTEM WHILE RUNNING DIAGNOSTICS ON THE 2.3 GIGA-BYTE TAPE DRIVE OR REASSIGN THE ADDRESS, IF POSSIBLE.

A FUTURE RELEASE OF THE OPTION DISKETTE WILL CORRECT THE PROBLEM.

SAS KEYWORDS:

PSY2	PSY2ADPT	PSY2PROG	8595SYSADPT
PSY2MISC	8580SYSMISC	D/T8580	8580SYSADPT
GIGABYTE	GIG	TAPE	2.3

1.4.1455 201 MEMORY ERRORS WITH 2MB OKI MEMORY SIMM

Record number: H124916

Device: D/T9553
Model: M
Tip key:
Date created: 094/08/09
Date last altered: A94/08/17

SYMPTOM:

A small number of 2Mb memory Simms, FRU P/N92F0102, when installed on a 9553, may cause a 201 34 memory error during configuration.

PROBLEM ISOLATION AIDS:

- Only 2Mb Simms, using OKI memory modules, are affected; however not all Simms with OKI modules will fail.
- Removing the suspect 2Mb memory Simm eliminates the problem.

FIX:

Servicers should contact Boca Level 2 through their normal technical support structure and request a replacement Simm. The affected Simm must be returned to Boca Raton.

Note:

Not all 2Mb Simms utilize OKI modules. Affected Simms that contain OKI modules may be used in other system types.

OKI is a trademark of OKI Electric Industry Co., Ltd.

SAS KEYWORDS:

PSY2 PSY2MEM PSY2ERR

1.4.1456 2010601 DIAGNOSTIC ERROR ON 540MB SATSUMA HARDFILE

Record number: H127288

Device: D/T9577
 Model: M
 Tip key:
 Date created: O95/04/19
 Date last altered: A95/05/02

SYMPTOM:

A diagnostic error "2010601 Read Write Buffer Test Failed" occurs on a 540MB Satsuma Hardfile, FRU P/N82G5932, when attached to a Future Domain MCA SCSI card, FRU P/N71G3576.

PROBLEM ISOLATION AIDS:

- This tip applies only if the 9576 or 9577 is a 9576i, 9576s, 9577i or 9577s and is a model xUx, xNx, or xTx.
- The system operates correctly.
- A 540 MB SCSI drive P/N82G5932, manufactured for IBM by Satsuma, is installed.
- The error occurs with only diagnostics BELOW version 3.10 release 2.05

FIX:

If the diagnostic diskette is below version 3.10, release 2.05 and the system operates properly, the error should be considered false. Obtain the current reference and diagnostic diskettes and test the drive.

The current versions of the diskettes are as follows:

Diagnostic - Version 3.10 Release 2.05
 Reference - Version 3.0 Release 2.1

The files may be downloaded from the IBM PC Company Bulletin Board System at 919-517-0001.

The files on the BBS are:

7677DIAG.DSK
 7677REF.DSK

```

=
= THESE DISKETTES ARE CUSTOMER INSTALLABLE. CUSTOMERS
= SHOULD BE ADVISED TO CONTACT THE PC COMPANY HELPCENTER AT
= 800-772 - 2227 IF ASSISTANCE IS REQUIRED IN GETTING OR
= INSTALLING THE APPROPRIATE UPDATE.
=
=
    
```

SAS KEYWORDS:

PSY2	PSY2FDSK	PSY2ERR	9577SYSERR
9576SYSERR	D/T9577I	D/T9577S	D/T9576I
D/T9577S	20106	02010601	FALSE

1.4.1457 2380 PRINTER CONTINUOUSLY RESETS ON PC300

Record number: H131114

Device: D/T6586
 Model: M
 Tip key:
 Date created: 095/10/03
 Date last altered: A95/10/03

SYMPTOM:

A Lexmark 2380-001 (PPS II model) printer attached to an IBM PC 300 Series 6576 and 6586 may exhibit continuous printer resets when the system unit is powered off.

PROBLEM ISOLATION AIDS:

When the 6576/86 system unit is powered off, the print head in the 2380-001 continuously seeks back and forth until the printer is powered off or until the system unit is powered on. With the system unit and 2380 powered on, the 2380-001 functions normally.

This failure does not affect the 2380-002 (Plus Model) which replaced the withdrawn 2380-001 model.

FIX:

The 2380-001 is not compatible with the 6576/86 system, however, the 2380-001 should function normally under program control.

Since the failure occurs as a result of powering the system unit off prior to powering off the 2380, power both units off simultaneously or power the 2380 off before powering the system unit off.

SAS KEYWORDS:

PSY2	D/T65XX	65XX	6576
IBMPC	PSVP	PSVPPRT	PSY2PRT
D/T6576	6586	PSY2OEM	PSVPOEM
PC 350	PC330	PC300	PC 330
PC350			

1.4.1458 2390 PRINTER CONTINUOUSLY RESETS ON EDUQUEST 9614

Record number: H134100

Device: D/T6384
 Model: M
 Tip key:
 Date created: 096/09/20
 Date last altered: A96/09/20

SYMPTOM:

A Lexmark 2390-001 (PPS II model) printer attached to an IBM 9614 Eduquest system may exhibit continuous printer resets when the system unit is powered off.

PROBLEM ISOLATION AIDS:

When the 9614 system unit is powered off, the print head in the 2390-001 continuously seeks back and forth until the printer is powered off or until the system unit is powered on. With the system unit and 2390 powered on, the 2390-001 functions normally.

This failure does not affect the 2390-Plus model which replaced the withdrawn 2390-001 model.

FIX:

The 2390-001 is not compatible with the 6576/86 system, however, the 2390-001 should function normally under program control.

Since the failure occurs as a result of powering the system unit off prior to powering off the 2390, power both units off simultaneously or power the 2390 off before powering the system unit off.

SAS KEYWORDS:

PSY2	D/T65XX	65XX	6576
IBMPC	PSVP	PSVPPRT	PSY2PRT
D/T6576	6586	PSY2OEM	PSVPOEM
PC 350	PC330	PC300	PC 330
PC350	D/T9614	9614	EDUQUEST

2401 ERRORS CAUSED BY SYSTEM BOARD VIDEO CABLE

1.4.1459 2401 ERRORS CAUSED BY SYSTEM BOARD VIDEO CABLE

Record number: H034217

Device: D/T8530
Model: M
Tip key:
Date created: 089/03/13
Date last altered: A89/03/24

SYMPTOM: A 2401 ERROR OCCURS ON AN 8530-286 SYSTEM, MODELS E21 & E01. THE SYSTEM BOARD AND THE DISPLAY DID NOT FIX THE PROBLEM AND THE MACHINE IS STILL FAILING.

PROBLEM ISOLATION AIDS: SUSPECT THE SYSTEM BOARD VIDEO CABLE.

FIX: REPLACE THE SYSTEM BOARD VIDEO CABLE, FRU P/N27F4163.

SAS KEYWORDS:

PSY2	8530SYSPART	8530SYSERR	PSY2PART
PSY2DISP	8530SYSBRD	8530SYSDIAG	PSY2BRD
PSY2ERR	PSY2DIAG		

Record number: H022797

Device: D/T8550
 Model: M
 Tip key:
 Date created: 088/06/14
 Date last altered: A95/06/06

SYMPTOM:

2401 OR 2402 ERRORS, FLICKERING/CHANGING COLORS ON A COLOR DISPLAY ATTACHED TO PS/2 MODEL 30-286,50,55,60,65,70,80,90.

PROBLEM ISOLATION AIDS: NONE

FIX:

WHEN EXPERIENCING ANY OF THE DESCRIBED SYMPTOMS, THE FOLLOWING PROCESS SHOULD BE USED FOR PROBLEM DETERMINATION AND TO AVOID UNNECESSARY REPLACEMENT OF THE SYSTEM UNIT PLANAR BOARD.

REPORTED SYMPTOM -----	CORRECTIVE ACTION -----
2401 OR 2402 ERROR BEING DISPLAYED IN WHITE NUMBERS ON BLACK BACKGROUND AND NO REPORTED FLICKERING OR CHANGING OF COLORS ON THE DISPLAY:	REPLACE THE SYSTEM UNIT PLANAR BOARD.
2401 OR 2402 ERROR DISPLAYED IN A COLOR OTHER THAN WHITE ON A BLACK BACKGROUND:	REPLACE THE COLOR DISPLAY.
CUSTOMER REPORTS FLICKERING OR CHANGING OF COLORS ON THE DISPLAY WITH NO ERROR CODE OCCURRING:	REPLACE THE COLOR DISPLAY.

THE ABOVE PROCEDURES SHOULD BE USED IN PLACE OF THE MAP 2400 PAGES, SERVICE INFORMATION MANUAL 24XX ERROR INDEX, AND PS/2 SERVICE SUMMARY CARDS FOR THESE ERRORS ONLY.

SAS KEYWORDS:

PSY2	PSY2ERR	PSY2BRD	8512DISP
8513DISP	8514DISP	PSY2DISP	D/T8512
D/T8513	D/T8530	D/T8550	D/T8555
D/T8560	D/T8565	D/T8570	D/T8580
D/T8590	D/T8514		

1.4.1461 2610 340CSE SYSTEM LOCKUP IN DOS ENVIRONMENT.

Record number: H131907 Number of altered copies: 1

Device: D/T2610
Model: M
Tip key:
Date created: 095/12/04
Date last altered: A95/12/07

SYMPTOM:

The system will lockup (hang) in DOS Shell when clicking on the A: drive without a diskette installed. The system may also have problems loading DOS programs.

PROBLEM ISOLATION AIDS:

Occurs when the following line is in the AUTOEXEC.BAT:

LOADHIGH C: \THINKPAD\YPTF\$013.COM.

FIX: Both steps - BIOS upgrade and AUTOEXEC change are required:

1. Install the following BIOS fix from the IBM PC Company BBS or IBM internal DOSCS D facility.

The BIOS update on the PC Company BBS is called:
SYTPW140.EXE System Disk v.1.40-340CSE, 345, 370C
The BIOS update on DOSCS D is called:
RSS340A 1.40 95/11/07 ThinkPad 340CSE/345's/370C System
Program Diskette.

2. Install the following AUTOEXEC.BAT change:
Key REM in front of the following AUTOEXEC.BAT statement:
LOADHIGH C: \THINKPAD\YPTF\$013.COM
The new line will be.
REM LOADHIGH C: \THINKPAD\YPTF\$013.COM

SAS KEYWORDS:

PSY2 THINKPAD PSY2BIOS PSY2PROG

1.4.1462 2615 MODEM DOES NOT INITIALIZE.

Record number: H20419

Device: D/T2615
Model: M
Tip key:
Date created: 093/02/15
Date last altered: A96/11/11

SYMPTOM: The Modem will intermittently not initialize when trying to use it. This occurs more on DC than AC.

PROBLEM ISOLATION AIDS:

FIX: Replace the modem. Note: a new FRU will be shipped in place of some early modem FRU numbers.

SAS KEYWORDS:

PSY2	D/T2615	PSY2COM	PSY2ADPT
THINKPAD	UNCLASSIFIED		

1.4.1463 2618 FLOATING MOUSE POINTER

Record number: H122094

Device: D/T2618
Model: M
Tip key:
Date created: 093/11/29
Date last altered: A96/11/11

SYMPTOM: A floating mouse pointer describes a condition where the mouse pointer drifts or floats across the display when there is no track point activity. If this problem is occurring the pointer will normally drift to one edge of the screen and stay there.

PROBLEM ISOLATION AIDS: Ensure the system is being used in an area that is within its operating temperature specifications and that the system has had time to reach the same temperature as the surrounding air. It is normal for the pointer to float until this occurs; this is because of the varying amounts of pressure placed on the trackpoint strain gauges as the system's temperature stabilizes. If the pointer still floats after the ambient temperature is reached, determine if the condition is intermittent or solid.

If the floating pointer stops when the system is switched from AC to battery or from battery to AC consider it a solid problem.

FIX:

1. Solid failures: Pointer always floats. Reseat the trackpoint cable. If float still occurs replace the system board.
2. Intermittent failures: Replace the keyboard.

SAS KEYWORDS:

PSY2 PSY2KBD PSY2BRD THINKPAD
UNCLASSIFIED

1.4.1464 2620 MODS 360CE, CSE AND PE FAIL TO STANDBY.

Record number: H133692

Device: D/T2620
Model: M
Tip key:
Date created: 096/08/16
Date last altered: A97/11/07

SYMPTOM:

The system will not go into standby with the keyboard command.

PROBLEM ISOLATION AIDS:

If the ThinkPad Utility can make the system go into standby use the replacement information in the FIX section to correct the problem. If the ThinkPad Utility does not make the system go into standby continue following the steps in the HMM.

FIX:

Replace the interposer card with the following FRU Part number:
360CE or CSE FRU P/N39H4457
360PE FRU P/N39H4459

SAS KEYWORDS:

PSY2 PSY2ADPT PSY2PART THINKPAD
UNCLASSIFIED

1.4.1465 2625 FAILS TO RESUME WHEN STANDBY IS DISABLED.

Record number: H132486

Device: D/T2625
 Model: M
 Tip key:
 Date created: 096/02/01
 Date last altered: A97/02/28

SYMPTOM:

The system will not resume if the following conditions occur:

1. Disable standby is selected.
2. System is placed in suspend by closing the LCD lid.
3. System suspend timer is set and activated or Auto Hibernate is enabled.

PROBLEM ISOLATION AIDS:

BIOS is dated 11/08/95 or earlier.

The BIOS date is displayed during POST. The information will read: "IBM ThinkPad 365 + v1.00.00 xx/xx/95" (xx = any date prior to 11/09/95).

FIX: Load 2625 ThinkPad 365 BIOS level 1.03. File SY36B103.EXE is located on the PC Co BBS in file area 37.

Work around:

Until BIOS 1.03 is loaded do not select Disable Standby.

----- IMPORTANT -----

Diskette fixes are customer installable. Customers should be advised to contact the IBM PC Company HelpCenter at 800-772 - 2227 if assistance is required in getting or installing this information.

Files are located on the PC company's Bulletin Board Service (BBS). The direct line for modem connection to The PC Company BBS is 1-919-517-0001 or tieline 255-0001.

Customers in Canada should call IBM's HelpPC at 800-565-3344 for Assistance or down load information. The Canadian BBS phone numbers are:

Montreal-514-938-3022, Toronto-905-316-4255,
 Winnipeg-204-934-2735, Vancouver-604-664-6464.

The data may also be downloaded via the Internet from the IBM Personal Computer File Library by searching the following Internet URL: <http://www.pc.ibm.com/files.html>

SAS KEYWORDS:

PSY2	PSY2PROG	PSY2MCD	THINKPAD
HANG	LOCKUP	UNCLASSIFIED	

1.4.1466 2630 DOCK II ADAPTER OPTION FAILS AT INSTALLATION

Record number: H131666

Device: D/T2630
Model: M
Tip key:
Date created: 095/11/07
Date last altered: A95/11/10

SYMPTOM:

A small number of Dock II Adapter Kits option part number 04H6196 have been found to fail at installation. The symptom is the Dock II power Icon comes on for about five seconds and then goes off.

PROBLEM ISOLATION AIDS:

The system will not power up when connected to the Dock II, but will power up and operate correctly on battery or its own AC adapter.

The condition is solid and occurs during power up after installation.

FIX:

Replace the Dock II Adapter Kit with FRU P/N04H8353. Options currently being manufactured have been corrected.

SAS KEYWORDS:

PSY2 THINKPAD PSY2ADPT D/T3546
PSY2PWR

2630 FAILS POWER UP ON FIRST SWITCH DEPRESSION.

1.4.1467 2630 FAILS POWER UP ON FIRST SWITCH DEPRESSION.

Record number: H13760

Device: D/T2630
Model: M
Tip key:
Date created: 095/09/07
Date last altered: A97/02/28

SYMPTOM: The 2630 701C 25/50MHz system fails to power on during the first depression of the power on switch, but the system will power on during the second depression of the switch.

PROBLEM ISOLATION AIDS:

This condition pertains to the 25/50MHz systems only.

No errors are generated.

Depress the FN + right shift + right cntl keys. Record the value of the first character in the upper left corner of the unit. It should be "7a" or "ba".

FIX:

If the condition exists and the value on the display is "ba", replace the bottom system board (25MHz/50MHz) FRU P/N04H8342.

All old level FRU stock has been purged.

SAS KEYWORDS:

PSY2 PSY2BRD PSY2PART THINKPAD
UNCLASSIFIED

2630 HANGS WHEN RESUME PASSWORD 640X480X 16M ARE ENABLED.

1.4.1468 2630 HANGS WHEN RESUME PASSWORD & 640X480X 16M ARE ENABLED.

Record number: H136434 Number of altered copies: 1

Device: D/T2630
Model: M
Tip key:
Date created: 097/02/03
Date last altered: A97/02/03

SYMPTOM:

The 2630 ThinkPad 701 will hang during a resume operation when the Resume Password is enabled or the system display is set at 640 by 480 with a 16M color depth.

PROBLEM ISOLATION AIDS:

Disabling the Resume Password or changing the color depth eliminates the hang condition.

FIX: / WORK AROUND - DO NOT REPLACE FRU PARTS -

Either work around corrects the hang condition.

1. Disable the Resume Password using the EasySetup Configuration Utility.
2. Change 16M color depth to a different level.

NOTE:

This problem is operating system independent. It can occur with any version of any operating system.

SAS KEYWORDS:

PSY2 PSY2PROG THINKPAD UNCLASSIFIED
PSY2PART

1.4.1469 2630 LONG POST TIME AND DISCOLORED WHITE ON THE LCD.

Record number: H131539

Device: D/T2630
Model: M
Tip key:
Date created: O95/11/01
Date last altered: A96/11/11

SYMPTOM:

POST takes an abnormally long time (over 40 seconds) and the LCD blinks off and on during POST. When POST is completed white text areas of the LCD may be purple, green or blue.

PROBLEM ISOLATION AIDS:

Operating on AC with the battery removed eliminates the symptoms.

FIX:

The battery requires replacing. Use current FRU stock.

SAS KEYWORDS:

PSY2 THINKPAD PSY2PART PSY2PWR
UNCLASSIFIED

1.4.1470 2630. CANNOT ENTER MORE THAN a 40 CHARACTER STRING.

Record number: H131522

Device: D/T2630
 Model: M
 Tip key:
 Date created: 095/10/30
 Date last altered: A96/11/11

SYMPTOM:

Customer can input a maximum of 40 characters into a command string.

PROBLEM ISOLATION AIDS:

Modem BIOS (firm ware) is at level 6.10 or below.

FIX:

This is not a hardware or BIOS failure do NOT replace FRUS.

SPECIAL INFORMATION

 Customers should contact the IBM PC Company Help Center at 1 - 800-772 - 2227 and request special download procedures for file BFMOD611.EXE. This file pertains to Modem BIOS upgrade 6.11.

A unique sign-on / password is required to download this code.

GENERAL INFORMATION

IMPORTANT

 | Diskette fixes are customer installable. Customers should |
 | be advised to contact the IBM PC Company HelpCenter at |
 | 800-772 - 2227 if assistance is required in getting or |
 | installing this information. |

| Files are located on the PC company's Bulletin Board Service |
 | (BBS). The direct line for modem connection to The PC |
 | Company BBS is 1-919-517-0001 or tieline 255-0001. |

| Customers in Canada should call IBM's HelpPC at 800-565-3344 |
 | for Assistance or down load information. The Canadian BBS |
 | phone numbers are: |
 | Montreal-514-938-3022, Toronto-905-316-4255, |
 | Winnipeg-204-934-2735, Vancouver-604-664-6464. |

| The data may also be downloaded via the Internet from |
 | the IBM Personal Computer File Library by searching the |
following Internet URL: <http://www.pc.ibm.com/files.html>

Modem BIOS upgrade 6.11

 Increases input string from 40 to 70 Characters.

INSTALLATION CAUTION

 Ensure the battery is fully charged and the system is operating on AC power before upgrading the Modem BIOS. Interrupting the BIOS upgrade will necessitate modem replacement.

SAS KEYWORDS:

PSY2 THINKPAD PSY2CODE PSY2MCD
 PSY2COMM UNCLASSIFIED

3.5 INCH DISKETTE WILL NOT EJECT FROM DISKETTE DRIVE

1.4.1471 3.5 INCH DISKETTE WILL NOT EJECT FROM DISKETTE DRIVE

Record number: H096794

Device: D/T8535
 Model: M
 Tip key:
 Date created: 092/01/10
 Date last altered: A92/03/16

SYMPTOM:

DISKETTE CAN NOT BE REMOVED BY PUSHING EJECT BUTTON.

PROBLEM ISOLATION AIDS:

IF A 3.5" DISKETTE IS INSERTED UPSIDE-DOWN INTO A DISKETTE DRIVE AND THEN EXCESSIVE FORCE IS USED TO FULLY INSERT THE DISKETTE, THE DISKETTE'S METAL SLIDE MAY BE BENT, FORCED OFF IT'S TRACK, OR NO LONGER ATTACHED. IF A DISKETTE WITH A DAMAGED METAL SLIDE IS INSERTED, THE SLIDE MAY CATCH WITHIN THE DRIVE AND NOT ALLOW THE DISKETTE TO EJECT PROPERLY.

SOME DISKETTE DRIVES HAVE A MECHANISM THAT DOES NOT ALLOW A DISKETTE (UPSIDE-DOWN) TO BE INSERTED FAR ENOUGH TO BE DAMAGED AS DESCRIBED ABOVE. HOWEVER, THIS WILL NOT STOP A DISKETTE, ONCE DAMAGED, FROM NOT EJECTING PROPERLY FROM THIS TYPE DRIVE.

FIX:

CAREFULLY REMOVE STUCK DISKETTE FROM DRIVE. ONCE REMOVED, USE ADVANCED DIAGNOSTICS AND A GOOD DISKETTE TO TEST THE DRIVE.

NOTIFY USER OF CAUSE OF THE DISKETTE'S FAILURE TO EJECT. ADVISE USER TO INSPECT AND REPLACE ALL DAMAGED DISKETTES.

IF IT IS NECESSARY TO COPY A DAMAGED DISKETTE, REMOVE THE DAMAGED METAL SLIDE, COPY THE DISKETTE AND THEN DISCARD THE DAMAGED DISKETTE.

SAS KEYWORDS:

PSY2	PSY2DSKT	D/T8525	D/T8530
D/T8535	D/T8540	D/T8550	D/T8555
D/T8560	D/T8565	D/T8543	D/T8570
D/T8573	D/T8580	D/T8590	D/T8595
8525SYSDSKT	8530SYSDSKT	8535SYSDSKT	8540SYSDSKT
8543SYSDSKT	8555SYSDSKT	8560SYSDSKT	8565SYSDSKT
8570SYSDSKT	8573SYSDSKT	8580SYSDSKT	8590SYSDSKT
8595SYSDSKT	D/T8556	D/T8557	D/T4865
8556SYSDSKT	8557SYSDSKT	8550SYSDSKT	4865SYSDSKT

3COM MADGE NETWORK ADAPTERS FAIL TO CONFIGURE

1.4.1472 3COM & MADGE NETWORK ADAPTERS FAIL TO CONFIGURE

Record number: H136899

Device: D/T6899
 Model: M
 Tip key:
 Date created: 097/03/18
 Date last altered: A97/03/18

SYMPTOM:

A Madge Smart 16/4 PCI Ringnode adapter and a 3Com Fast Etherlink XL (3C905-TX) adapter may fail to configure when both adapters are installed in an IBM IntelliStation Z Pro 6899.

PROBLEM ISOLATION AIDS:

Both adapters will fail to configure and fail to be recognized by the operating system and adapter drivers regardless of the IRQ resources assigned to each adapter.

Installing either of the adapters alone will allow the system to recognize the adapter and function properly.

FIX:

Do not replace any system hardware.

The combination of a Madge Smart 16/4 PCI Ringnode adapter and a 3Com Fast Etherlink XL (3C905-TX) adapter in an IBM IntelliStation Z Pro 6899 is not supported.

3Com Etherlink XL is a trademark of the 3Com Corporation.
 Madge Smart 16/4 PCI Ringnode is a trademark of Madge Networks, Ltd.

SAS KEYWORDS:

PSVP	PSY2	IBMPC	PSY2ERR
PSVPERR	PWS	PSVPCOMM	PSY2COMM
UNCLASSIFIED	PSVPOEM	PSY2OEM	60318
PSVPADPT	PSY2ADPT		

1.4.1473 3COM ETHERLINK III ADAPTER NOT RECOGNIZED IN 6381

Record number: H124863

Device: D/T6381
 Model: M
 Tip key:
 Date created: 094/08/12
 Date last altered: A94/11/28

SYMPTOM:

The 3COM 3C509 Etherlink III adapter card may fail to initialize or fail to communicate intermittently in a PS/ValuePoint 6381/Si system.

PROBLEM ISOLATION AIDS:

- (1) The adapter is not recognized by the 3COM adapter diagnostics and communication applications.
- (2) The adapter is installed in slot 2 or 3 of the riser card.

FIX:

Move the adapter to slot 1 of the riser card and attempt to recreate the failure. If the failure cannot be reproduced, the adapter should remain in slot 1. If the customer's configuration prevents the use of slot 1 for the 3COM adapter, or if the failure reoccurs in slot 1, replace the riser card FRU p/n52G7065 with FRU p/n88G4178.

With FRU P/N88G4178, install the 3COM card in slot 3 (the upper-most slot) on the riser card.

If failures persists after following the steps above, utilize normal problem determination procedures to isolate the failing part.

3COM and Etherlink are trademarks of 3COM Corporation.

SAS KEYWORDS:

PSVP	PSY2	PS/VP	6381
PSVPADPT	PSY2ADPT	VALUEPOINT	PSVPOEM
PSY2OEM	ETHER LINK	PSVPCOMM	PSY2COMM
ETHERNET			

1.4.1474 3COM 3C509 ADAPTER MAY NOT CONFIGURE IN 6576

Record number: H132745

Device: D/T6586
 Model: M
 Tip key:
 Date created: 096/02/22
 Date last altered: A96/02/22

SYMPTOM:

3Com 3C509 - B-TPO Ethernet adapter may not configure in an IBM PC 300 Series 6576 with the Configuration/Diagnostics software that ships with the adapter.

PROBLEM ISOLATION AIDS:

The Configuration/Diagnostic software does recognize the 3Com adapter in the system.

FIX:

If possible, verify that the adapter fails in other "Like" systems, such as another IBM PC 300 6576. If the adapter DOES fail in another system, verify that the installation instructions from the manufacturer are being followed correctly and replace the adapter.

If the adapter cannot be tested in another system, verify that the installation of the 3Com adapter is being done according to the manufacturers instructions. Obtain a replacement 6576 riser card and 3COM adapter for diagnostic purposes. Retest the installation.

If the failure persists, continue normal problem determination to isolate the failing FRU.

3Com is a trademark of the 3Com Corporation.

SAS KEYWORDS:

PSY2	D/T65XX	65XX	6576
IBMPC	PSVP	PSVPCOMM	PSY2COMM
D/T6576	PSY2OEM	PSVPOEM	PSVPADPT
PSY2ADPT			

1.4.1475 32-BIT DISK ACCESS ERRORS W/CDROM INSTALLED

Record number: H135198

Device: D/T6877
Model: M
Tip key:
Date created: 096/11/19
Date last altered: A96/11/19

SYMPTOM:

IBM PC 700 Series 6877 & 6887 systems may exhibit random 32-Bit Disk Access errors using Microsoft Windows for Workgroups 3.11 with a CDROM drive installed.

PROBLEM ISOLATION AIDS:

The drive configuration of the 6877/6887 consists of an IDE hardfile on the Primary port as MASTER and an IDE CDROM drive on the Primary port as SLAVE. No other drives installed.

When 32 - Bit Disk Access is enabled in Windows for Workgroups, and commands are sent to the IDE hardfile, the CDROM drive may attempt to respond, causing 32-Bit Access errors.

FIX:

Disable Windows for Workgroups 32-Bit Disk Access.

- OR -

Remove the CDROM drive from the Primary IDE port connector and install it on the Secondary IDE connector on the system board. Set the jumper on the IDE CDROM for MASTER.

Windows & Windows for Workgroups are trademarks of the Microsoft Corporation.

SAS KEYWORDS:

PSVP	PSY2	PSVPPROG	PSY2PROG
PSVPERR	PSY2ERR	PC 730	IBMPC
PC 750	D/T6586	32 BIT	49784
UNCLASSIFIED	PSVPCDROM	PSY2CDROM	PSVPFDSK
PSY2FDSK			

3270 ADAPTER OPTION/DIAGNOSTIC DISKETTE INFORMATION

1.4.1476 3270 ADAPTER OPTION/DIAGNOSTIC DISKETTE INFORMATION

Record number: H004818

Device: D/T8550
 Model: M
 Tip key:
 Date created: 088/12/09
 Date last altered: A92/10/02

SYMPTOM:

CONFIGURATION/DIAGNOSTIC PROBLEMS MAY BE EXPERIENCED WHEN
 3270 ATTACHMENT CARD IS INSTALLED IN PS/2'S.

PROBLEM ISOLATION AIDS:

NONE

FIX:

CONFIGURATION AND DIAGNOSTIC TESTING SHOULD BE DONE WITH
 THE OPTION/DIAGNOSTIC DISKETTE INCLUDED WITH THE ATTACHMENT
 CARD. CONFIGURATION ERRORS AND/OR ERRONEOUS DIAGNOSTIC ERRORS
 MAY RESULT IF INCORRECT OPTION/DIAGNOSTIC DISKETTE IS USED.

REFER TO RETAIN RECORD NUMBER H022488 (3270 TIP 115) FOR
 ADDITIONAL INFORMATION.

SAS KEYWORDS:

PSY2	PSY2ADPT	PSY2MISC	PSY2DIAG
PSY2COMM	8550SYSADPT	8560SYSADPT	8570SYSADPT
8580SYSADPT	8550SYSERR	8560SYSERR	8570SYSERR
8580SYSERR	8550SYSDIAG	8560SYSDIAG	8570SYSDIAG
8580SYSDIAG	8555SYSADPT	8555SYSDIAG	8555SYSERR
8565SYSADPT	8565SYSDIAG	8565SYSERR	8573SYSERR
8573SYSDIAG	8573SYSADPT	D/T8550	D/T8555
D/T8560	D/T8565	D/T8570	D/T8573
D/T8580			

1.4.1477 3270 CARD FAILS W/MATROX VIDEO ADAPTER INSTALLED

Record number: H136099

Device: D/T6885
 Model: M
 Tip key:
 Date created: 097/01/15
 Date last altered: A97/01/15

SYMPTOM:

A 3270 Communications adapter may fail to function in an IBM PC 700 Series 6875 or 6885 system with a Matrox Millennium PCI video adapter installed.

PROBLEM ISOLATION AIDS:

The Matrox Millennium PCI video adapter may conflict with the fixed IRQ requirements of the 3270 adapter (IRQ 2). The Matrox adapter may default to IRQ 9 which is equivalent to IRQ 2 (IRQ 2 & 9 are cascading interrupts).

FIX:

Obtain and install Flash BIOS level N1JT84A or higher. This update will allow the system to reroute the video adapter IRQ requirements to an available ISA IRQ.

Flash BIOS updates may be obtained from the IBM PC Company BBS system by calling 1-919-517-0001. View the "IBM PC 300/700 Files" section (section #21) for the file titled:

N1JT84A.EXE - Flash BIOS updt diskette 6875/6885 v84

The Flash BIOS update may also be downloaded via the Internet from the IBM Personal Computer File Library by searching the following Internet URL:

<http://www.pc.ibm.com/files.html>

Matrox is a trademark of Matrox Electronic Systems, Ltd.

SAS KEYWORDS:

PSVP	PSY2	IBMPC	PSY2ADPT
PSVPADPT	PSY2COMM	PSVPCOMM	6875
UNCLASSIFIED	PC 750	D/T6875	6885
PC750	PC730		

Record number: H065354

Device: D/T8550
 Model: M
 Tip key:
 Date created: 090/09/18
 Date last altered: A91/10/07

SYMPTOM: THE SYSTEM DOES NOT COMMUNICATE THROUGH THE 3270 / B ADAPTER. THE DIAGNOSTICS DO NOT FAIL AND THE PROBLEM STAYS WITH THE SYSTEM WHEN PORTS ARE CHANGED.

THE OPERATOR OR SERVICER MAY ALSO REPORT A ROW OF "FEMALE" CHARACTERS ALONG THE BOTTOM OF THE DISPLAY. THE FEMALE CHARACTERS ARE FROM THE INTERNATIONAL "MALE/FEMALE" SYMBOLS, AND ARE DESCRIBED AS "CIRCLES WITH PLUS SIGNS BELOW THEM"

PROBLEM ISOLATION AIDS:

RUN VIEW CONFIGURATION WITH THE SYSTEM REFERENCE DISKETTE. IF THE 3270/B ADAPTER IS CONFIGURED AT ADDRESS DE00, THE CARD WILL NOT WORK WITH SOME EMULATION APPLICATIONS.

RUNNING AUTOMATIC CONFIGURATION WITH THE FOLLOWING REFERENCE DISKETTES WILL ADDRESS THE 3270/B CARD AT DE00:

- 8550/8560 REFERENCE DISKETTE VERSION 1.06 OR HIGHER
- 8555/8565 REFERENCE DISKETTE VERSION 1.03 OR HIGHER
- 8570/8580 REFERENCE DISKETTE VERSION 1.10 OR HIGHER

FIX: USE THE CHANGE CONFIG OPTION ON THE REFERENCE DISKETTE TO CHANGE THE ADDRESS TO CE00. TO DO THIS, MOVE THE CURSOR TO THE 3270 ADAPTER LINE AND PRESS F6 UNTIL CE00 APPEARS. THEN PRESS F10 TO SAVE THE CHANGE. ADVISE THE CUSTOMER THAT RUNNING AUTOMATIC CONFIGURATION WILL RETURN THE 3270/B CARD TO THE FAILING DE00 ADDRESS (REQUIRING A MANUAL CHANGE TO CE00).

SAS KEYWORDS:

PSY2	PSY2ADPT	PSY2OPER	8570SYSCOMM
PSY2COMM	8550SYSADPT	8550SYSCOMM	8550SYSOPER
8555SYSCOMM	8555SYSADPT	8555SYSOPER	8560SYSADPT
8560SYSCOMM	8560SYSOPER	8565SYSCOMM	8565SYSADPT
8565SYSOPER	8570SYSADPT	8570SYSCOMM	8570SYSOPER
8573SYSOPER	8573SYSCOMM	8573SYSADPT	8580SYSOPER
8580SYSADPT	8580SYSCOMM	D/T8550	D/T8560
D/T8555	D/T8570	D/T8573	D/T8565
D/T8565	D/T8580		

1.4.1479 3270/B COMMUNICATION PROB OR OTHER ADPT NOT OPERATIONAL

Record number: H007404

Device: D/T8570
 Model: M
 Tip key:
 Date created: 090/05/03
 Date last altered: A91/09/27

SYMPTOM: THE SYSTEM DOES NOT COMMUNICATE THROUGH THE 3270 / B ADAPTER OR OTHER TYPES OF IBM OR OEM ADAPTERS DO NOT FUNCTION. THE DIAGNOSTICS DO NOT FAIL AND THE 3270 PROBLEM STAYS WITH THE SYSTEM WHEN THE COMMUNICATION PORTS ARE CHANGED.

THE OPERATOR OR SERVICER MAY ALSO REPORT A ROW OF "FEMALE" CHARACTERS ALONG THE BOTTOM OF THE DISPLAY. THE FEMALE CHARACTERS ARE FROM THE INTERNATIONAL "MALE/FEMALE" SYMBOLS, AND ARE DESCRIBED AS "CIRCLES WITH PLUS SIGNS BELOW THEM."

PROBLEM ISOLATION AIDS:

RUN VIEW CONFIGURATION WITH THE SYSTEM REFERENCE DISKETTE. IF THE 3270/B ADAPTER IS CONFIGURED AT ADDRESS DE00, THE CARD WILL NOT WORK WITH SOME EMULATION APPLICATIONS.

CHECK WITH THE CUSTOMER ON OTHER OEM ADAPTER ADDRESS REQUIREMENTS.

RUNNING AUTOMATIC CONFIGURATION WITH THE FOLLOWING REFERENCE DISKETTES WILL ADDRESS THE 3270/B CARD AT DE00 AND MAY ALSO CAUSE PROBLEMS WITH OTHER ADDRESS SENSITIVE ADAPTERS.

- 8550/8560 REFERENCE DISKETTE VERSION 1.06 OR HIGHER
- 8555/8565 REFERENCE DISKETTE VERSION 1.03 OR HIGHER
- 8570/8580 REFERENCE DISKETTE VERSION 1.10 OR HIGHER

FIX:

A NEW FUNCTION OF THE REFERENCE DISKETTE AUTO CONFIGURATION IS TO COMPRESS THE MEMORY ASSIGNMENTS SO THERE ARE NO UNUSED AREAS BETWEEN THEM. THIS ENABLES THE USE OF OPTIONS AND ADAPTERS WITH LARGER MEMORY REQUIREMENTS. SOME EMULATION APPLICATIONS REQUIRE THE 3270 ADAPTER CARD TO BE ADDRESSED AT THE ORIGINAL CE00 LOCATION.

USE THE CHANGE CONFIG OPTION ON THE REFERENCE DISKETTE TO CHANGE THE ADDRESS TO CE00. TO DO THIS, MOVE THE CURSOR TO THE 3270 ADAPTER LINE AND PRESS F6 UNTIL CE00 APPEARS. THEN PRESS F10 TO SAVE THE CHANGE. ADVISE THE CUSTOMER THAT RUNNING AUTOMATIC CONFIGURATION WILL RETURN THESE ADAPTERS TO THE FAILING ADDRESS (REQUIRING A MANUAL CHANGE TO THE ORIGINAL ADDRESS)

SAS KEYWORDS:

PSY2	PSY2ADPT	PSY2OPER	8570SYSCOMM
PSY2COMM	8550SYSADPT	8550SYSCOMM	8550SYSOPER
8555SYSCOMM	8555SYSADPT	8555SYSOPER	8560SYSADPT
8560SYSCOMM	8560SYSOPER	8565SYSCOMM	8565SYSADPT
8565SYSOPER	8570SYSADPT	8570SYSCOMM	8570SYSOPER
8573SYSOPER	8573SYSCOMM	8573SYSADPT	8580SYSOPER
8580SYSADPT	8580SYSCOMM		

1.4.1480 3270/5250 DIAGNOSTIC FAILURES ON VALUE POINT SYSTEMS

Record number: H20239

Device: D/T6384
Model: M
Tip key:
Date created: 092/12/23
Date last altered: A93/07/12

SYMPTOM:

3270 or 5250 Diagnostics fail with a variety of error codes.

PROBLEM ISOLATION AIDS:

NONE

FIX:

Ensure that the Diagnostics are at the highest level of code.
For 3270 adapter the current level is 4.12.
For 5250 adapter the current level is 1.03
Check that the jumpers on the planars are situated in the
correct positions. See H101998
(CXX - J16 / Fxx - J17 / MXX - JP305)
(early production of CXX may not have jumpers see H043231)

SAS KEYWORDS:

PSY2	VALUEPOINT	VALUE POINT	PSY2ADAPT
PSY2COMM	PSVP	PSVPADPT	PSVPCOMM

1.4.1481 3278/79 ADAPTER NOT FOUND OR 2810 S ERROR

Record number: H131048

Device: D/T6586
 Model: M
 Tip key:
 Date created: 095/09/27
 Date last altered: A96/09/23

SYMPTOM:

IBM PC 300 and 700 Series systems may display an "Adapter Not Found" error using a communication application or POST a "2810 S" error when running the 3278/79 Emulation Adapter Diagnostics.

PROBLEM ISOLATION AIDS:

The 3278/79 Emulation adapter requires specific system resources to operate correctly. The 3278/79 adapter must utilize IRQ 2 and an 8kb memory page at address "CE00."

The PC 300/700 systems default configuration reserves the "CE00" area for ROM Shadowing. A memory conflict exists when the 3278/79 Emulation adapter is installed.

FIX:

The memory address at "CE00" must be made available to the 3278/79 Emulation adapter by using the following procedure:

- 1) Access the Setup Utility by pressing F1 during the memory count.
- 2) Select Advanced Setup
- 3) Select ROM Shadowing
- 4) Disable the ROM Shadowing in the CC000h-CFFFFh area.
- 5) Save/Exit the Setup Utility and allow the system to reboot.

If the error persists, continue normal problem determination procedures.

SAS KEYWORDS:

PSY2	D/T65XX	65XX	6576
IBMPC	PSVP	PSVPCOMM	PSY2COMM
D/T6576	6586	PSY2PART	PSVPPART
PSY2ADPT	PSVPADPT	PSY2ERR	PSVPERR
PC 350	PC330	PC300	PC 330
PC350	3270	D/T6571	D/T6573
D/T6581	D/T6583	D/T6575	D/T6585
D/T6560	D/T6260	D/T6577	D/T6587
D/T6589	D/T6598	D/T6876	D/T6875
D/T6885	D/T6886	D/T6877	D/T6887

1.4.1482 3516 ON/OFF BUTTON STICKS WHEN PRESSED

Record number: H133421

Device: D/T3516
 Model: M
 Tip key:
 Date created: 096/04/29
 Date last altered: A97/02/04

SYMPTOM:

The on/off button sticks when pressed in. Once the button is stuck, the 3516 cannot be turned off or on.

PROBLEM ISOLATION AIDS: NONE**FIX:**

Replace the power button with FRU p/n76H3953.

-OR-

Modify the existing power button using the following procedure:

1. Remove the main cover assembly.
2. Remove the four hex-head screws that attach the front plastic panel to the metal cover assembly.
3. When the front plastic panel is removed, the on/off button legs are exposed. Squeeze the legs together and push the button out of the front plastic panel.
4. The button must be modified. On each side of the square button are two 2mm x 4mm rectangular pads (8 total). Using a file or blade, remove material from the 8 small pads. This will eliminate any bind between the on/off button and the square opening in the front plastic cover.
5. Install the modified button (with spring) and test.
6. When the button operates properly, reassemble the cover assembly.

SAS KEYWORDS:

PSY2	PSY2PWR	POWER	SWITCH
STUCK	FIXED DISK	HARDFILE	RAID
SCSI	PSY2FDSK	06H2605	P/N06H2605
UNCLASSIFIED	76H3953		

1.4.1483 3518 LCD AND CONTROL PANEL NOT FUNCTIONING

Record number: H134356

Device: D/T3518
 Model: M
 Tip key:
 Date created: O96/10/08
 Date last altered: A96/10/08

SYMPTOM:

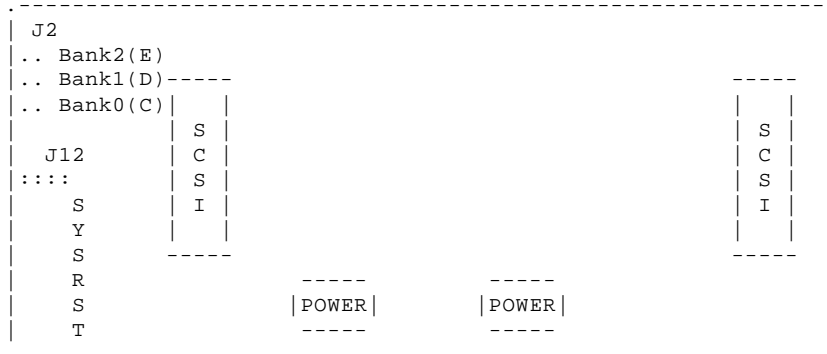
The LCD panel is blank and the control panel buttons do not function properly.

PROBLEM ISOLATION AIDS:

The unit is a PC Server Enterprise Expansion Enclosure (3518) with one or more hot-swap backplanes installed.

FIX:

1. Shutdown the operating system on the Server.
2. Power off the Server and the 3518 enclosure.
3. Unplug the 3518 for at least five(5) seconds. This action will ensure a full reset of the bus.
4. Verify the Backplane Jumper configuration for J2 and J12 on the 3518. Refer to pages 439-440 of the March 1996 PC Server HMM (publication number S30H-2501-01) and the diagram below.
 - a. J2 (Backplane Address jumper): Jumper MUST be installed on the pins for Bank0 for a single backplane system. If additional backplanes are installed, each backplane MUST have a jumper on the appropriate pins to ensure proper operation.
 - b. J12 (Backplane SCSI ID jumper): No jumpers should be present on pins 7-8 (labeled SYSRST).
5. Reconnect the power cord and power on the 3518.



Note: 3518 Enclosures manufactured before 10/1/96 (MFG Date: 610 and earlier on the rear serial number label) shipped with a jumper incorrectly installed on J12. This jumper MUST be removed for proper operation.

SAS KEYWORDS:

PSY2	D/T8640	D/T8642	PSY2FDSK
DASD	P/N71G8388	P/N06H8388	D/T8641
D/T8650	D/T8639	300	310
320	500	520	704
720	P/N70G9855	71G8388	06H8388
3518001			

1.4.1484 3518 STORAGE ENCLOSURE&COLON. SYNCHRONIZATION MAY FAIL W/ 2.25GB

Record number: H125499

Device: D/T3518
 Model: M
 Tip key:
 Date created: O98/01/07
 Date last altered: A98/01/07

SYMPTOM:

"Check Consistency" errors during synchronization of RAID 5 Logical drives, or Defunct (DDD) drives with any RAID level may be experienced.

PROBLEM ISOLATION AIDS:

All of the following must be true for this Tip to apply:

- There are more than 6 x 2.25GB Hard Drives FRU p/n76H0958 (Option p/n's 07H0387 / 94G2650 / 70G9862) in a IBM 3518 External Storage Enclosure.with daisy-chained backplanes
- The backplane (s) that these drives are connected to are daisy-chained.
- The 3518 is attached to any RAID / ServerRAID / ServerRAID II Adapter / Controller in a IBM PC Server / Netfinity server.

FIX:

Connect each populated Backplane in the 3518 to a separate SCSI Channel.

Refer to RETAIN TIP Record# H133777 for additional info on backplane jumper settings.

SAS KEYWORDS:

PSY2	PSY2DASD	UNCLASSIFIED	D/T3518
DEFUNCT	DDD	P/N76H0958	P/N07H0387
P/N94G2650	P/N70G9862		

1.4.1486 370 CHANNEL ATTACH UNABLE TO ALLOCATE MEMORY

Record number: H124322

Device: D/T8580
 Model: M
 Tip key:
 Date created: 094/06/15
 Date last altered: A94/08/15

SYMPTOM:

8560, 8565 or 8580 systems that have a 486 DX33 or 486 BL2-66 Upgrade System Board installed may encounter memory allocation errors when a System 370 Channel Emulator Adapter/A, Option part number 1674899 or FRU P/N06F3160, is installed.

PROBLEM ISOLATION AIDS:

- The machine configuration is as follows:
 - 24MB memory (six 4MB SIMMs)
 - 370/A card installed in Slot 1
 - OS/2 2.1
 - No other adapters installed
 - 486 system board upgrade installed
- The System Board Upgrade or Channel Emulator card was just installed.
- The customer is able to run configuration but is unable to allocate memory for the adapter in slot 1.
- Reducing the quantity of system memory from 24MB to 8MB eliminates the problem.

FIX:

- 1 - If the customer is going to use the memory address space between C0000H-DFFFFH for the 370 adapter, do the following:
 - A)- Install the 370 adapter.
 - B)- Run Reference Diskette and select run "Automatic Configuration" from the main menu. The RED message about memory allocation should be ignored. Do not exit program.
 - C)- When setup screen appears, go to the "SLOT SETUP" window.
 - D)- Change the option to "I/O Buffer" and select any choice that does not create a conflict, Do not select ">1M".
 - E)- Save the configuration.
- 2 - If the customer is going to use address space between 1MB and 16MB, do the following:
 - A)- Install the 370 adapter.
 - B)- Run Reference Diskette and select "Set Configuration" from the main menu. The RED message about memory allocation should be ignored. Do not exit the program.
 - C)- When setup screen appears, go to "Extra Features" window.
 - D)- Change the option "Disable memory below 16MB". Select 1MB.
 - E)- Save the configuration.
 - F)- Run Reference Diskette. Select "Set Configuration" from the main menu.
 - G)- When setup screen appears, go to the "SLOT SETUP" window.
 - H)- Change the option to "I/O Buffer". Select ">1M".
 - I)- Save the configuration.

SAS KEYWORDS:

PSY2	REPLY	PSY2OEM	D/T8565
D/T8580	PSY2ADPT	P/N71G2643	P/N71G2610
REPLY			

1.4.1487 4/10GB TAPE BACKUPS HANG SERVER WITH ARCSERVE

Record number: H161549

Device: D/T8639
 Model: M
 Tip key:
 Date created: 097/10/24
 Date last altered: A97/10/27

SYMPTOM:

During tape backups on a dedicated NetWare server the following symptoms may occur:

- The backup hangs and the cleaning light on the tape drive is activated.
- The system hangs and the cleaning light on the tape drive is activated.
- The tape cartridge cannot be manually ejected unless power supplied to the tape drive is cycled off then on.

PROBLEM ISOLATION AIDS:

- This TIP applies to any IBM PC Server or Netfinity Server that supports and is properly configured with the following IBM 4/10GB SCSI DAT drive:

4/10GB tape drive FRU p/n16G8454, Option p/n74G8631 (5.25")
 4/10GB tape drive FRU p/n16G8456, Option p/n74G8632 (3.5")

Both the jumper version and DIP switch version drive applies.

- The server is running Novell NetWare ver. 3.12 or higher.
- The backup software is any version of ARCserve below 6.0.
- The tape cartridge used is of the DDS2 or DDS format that is supported by the tape drive.

FIX:

- 1 - Ensure that the tape drive is at the current version firmware level;
 4BKC for the DIP switch version drive,
 5AJ for the Jumper switch version drive.

See Retain TIP H013309 for details on use of the flash utilities to identify and flash the firmware level of the tape drive.

- 2 - Ensure that the tape drive has been properly cleaned.
 See the "4/10GB Tape Drive Option Kit User's Guide" p/n21H2724 for tape drive cleaning details.

- 3 - Upgrade the version of ARCserve to 6.0 or higher.
 Details:

When the tape drive determines that it needs cleaning while performing a backup, it reports this information to the server to be interpreted by the backup program. Older versions of ARCserve do not correctly interpret the message from the tape drive correct, which causes the backup to hang. Installing the latest version of the backup software will correctly interpret the message from the tape drive.

ARCserve is a trademark of Cheyenne Software Inc.

NetWare is a trademark of Novell, Inc.

SAS KEYWORDS:

PSY2	PSY2TAPE	UNCLASSIFIED	16G8454
74G8631	16G8456	74G8632	NETWARE
ARCSERVE	SERVER	CLEANING LIGHT	EJECT
4BKC	5AJ	21H2724	DDS
DDS2	ARCSERVE 6.0		

1.4.1488 4/10GB TAPE DRIVE APPEARS HUNG, ERROR RECOVERY

Record number: H133402

Device: D/T8641
 Model: M
 Tip key:
 Date created: 096/04/26
 Date last altered: A97/03/21

SYMPTOM:

During tape backup operations the 4/10GB 4mm Tape drive may appear to hang for extended periods of time (up to 15 minutes).

PROBLEM ISOLATION AIDS:

The tape drive is a 4mm, 4/10GB DAT SCSI Tape Drive, FRU P/N16G8454 or FRU P/N16G8456.

FIX:

The tape drive may be in an Error Recovery Process (ERP). During this process, the tape drive may appear to be hung or inoperative for up to 15 minutes. Do not reboot or force ejection during the ERP. This is a normal tape drive function and no action is necessary. When ERP is complete, the backup will continue.

The Error Recovery Process occurs if the tape drive experiences data write errors above a certain threshold level. Write errors may occur due to the presence of foreign matter, dust, or tape oxide. The tape drive detects a write error, reverses to the beginning of the data block, then moves forward spacing over that area of tape, and re-writes the data record. Then normal write operations continue. While the exact ERP varies by model, this is a normal error recovery occurrence in magnetic tape drives.

If ERP is occurring often, the customer should clean the tape drive with a cleaning cartridge FRU P/N21F8763, or try a new tape, or try a new brand of tape.

SAS KEYWORDS:

PSY2	PSY2TAPE	720	300
MAGNETIC	D/T9595	520	9595A
8641	SCSI	PSY2ERR	320
SERVER	9595	500	310
D/T8640	D/T8642	D/T9595	LED
D/T8639	D/T9585	HANGS	16G8454
16G8456	4/10		

1.4.1489 4/10GB TAPE DRIVE & COLON. CLEANING PROCEDURES

Record number: H136743

Device: D/T8641
 Model: M
 Tip key:
 Date created: 097/01/03
 Date last altered: A97/02/24

SYMPTOM:

The amber Disturbance light (lightning bolt symbol) on the IBM 4/10GB 4MM DAT Tape drive option flashes or remains on continuously.

PROBLEM ISOLATION AIDS:

The tape drive is one of the following 4/10GB 4mm DAT Drives:

FRU p/n	Option p/n
-----	-----
16G8454	8191359 or 74G8631
16G8456	8191339 or 74G8632

FIX:

1. If the amber Disturbance LED is on solid, clean the drive one(1) time. An internal cleaning algorithm calculates when the drive needs to be cleaned and turns on this LED.
2. If the Disturbance light is FLASHING, clean four(4) times.

Note: If the Disturbance light continues to FLASH after the cleaning AND after a system reset, replace the tape drive.

The following are additional tape cleaning recommendations:

1. Clean the tape drive after every 24 hours of tape operation.
2. Increase the frequency of tape cleanings when new tapes are used.
3. Clean the tape drive one(1) time before any FULL backup or after any tape backup failure.

Customers are responsible for cleaning the tape drive with a cleaning cartridge. Customers may order this cartridge as FRU p/n21F8763.

SAS KEYWORDS:

PSY2	PSY2TAPE	720	300
MAGNETIC	D/T9595	520	9595A
8641	SCSI	PSY2ERR	320
SERVER	95	500	310
D/T8640	D/T8642	D/T9595	LED
PSVP	21F8763	PC 300	PC 700
PC300	PC700		

1.4.1490 4/10GB TAPE DRIVE & COLON. CLEANING PROCEDURES

Record number: H133024

Device: D/T8641
 Model: M
 Tip key:
 Date created: 096/03/12
 Date last altered: A97/03/21

SYMPTOM:

The amber Disturbance light (lightning bolt symbol) on the IBM 4/10GB 4MM DAT Tape drive option flashes or remains on continuously.

PROBLEM ISOLATION AIDS:

The tape drive is one of the following 4/10GB 4mm DAT Drives:

FRU p/n	Option p/n
-----	-----
16G8454	8191359 or 74G8631
16G8456	8191339 or 74G8632

FIX:

1. If the amber Disturbance LED is on solid, clean the drive one(1) time. An internal cleaning algorithm calculates when the drive needs to be cleaned and turns on this LED.
2. If the Disturbance light is FLASHING, clean four(4) times.

Note: If the Disturbance light continues to FLASH after the cleaning AND after a system reset, replace the tape drive.

The following are additional tape cleaning recommendations:

1. Clean the tape drive after every 24 hours of tape operation.
2. Increase the frequency of tape cleanings when new tapes are used.
3. Clean the tape drive one(1) time before any FULL backup or after any tape backup failure.

Customers are responsible for cleaning the tape drive with a cleaning cartridge. Customers may order this cartridge as FRU p/n21F8763.

SAS KEYWORDS:

PSY2	PSY2TAPE	720	300
MAGNETIC	D/T9595	520	9595A
8641	SCSI	PSY2ERR	320
SERVER	95	500	310
D/T8640	D/T8642	D/T9595	LED
PSVP	21F8763	PC 300	PC 700
PC300	PC700	4/10	

1.4.1491 4MM TAPE DRIVE ON SCSI-2 FAST WIDE FAILS DIAGS

Record number: H123885

Device: D/T8550
 Model: M
 Tip key:
 Date created: 094/04/25
 Date last altered: A94/08/15

SYMPTOM:

4mm 2.0GB Tape Drive fails the tape drive diagnostics when connected to a FAST/WIDE SCSI-2 Adapter, FRU P/N92F0160, Option part number 55F9464.

PROBLEM ISOLATION AIDS:

The SCSI-2 Adapter supports Wide Data transfer while the 4mm 2.0 Tape Drive does not. During diagnostics, the adapter 'asks' the drive if it can handle Wide Data transfer. The drive doesn't respond correctly, because it was not originally designed to run with a FAST/WIDE SCSI-2 Adapter.

This is a diagnostics problem only. Application Software does not have this problem.

Diagnostic error of 02112000 occurs.

This problem only effects Servers with an embedded SCSI-2.

FIX:

The diagnostics can be effectively run by disabling WIDE SCSI MESSAGES using the following procedure:

Configure the FAST/WIDE/SCSI-2 Adapter to disable WIDE MESSAGE communication. Use the REFERENCE DISKETTE shipped with the system or the system reference programs (system partition).

- From the main menu select SET CONFIGURATION
- Select CHANGE CONFIGURATION
- View the IBM PS/2 SCSI-2 Adapter
- Select WIDE SCSI MESSAGES = DISABLED
 (The default setting = ENABLED)
- Use F10 and Save the configuration change.

Note:

There are two listings for WIDE SCSI MESSAGES in the configuration of the FAST/WIDE SCSI ADAPTER.

Select either:

WIDE SCSI MESSAGES-EXTERNAL, if the drive is connected to the external SCSI Bus on the rear of the adapter, or WIDE SCSI MESSAGE-INTERNAL if the tape drive is attached to the internal SCSI bus.

The diagnostics should now run without failure.

CAUTION:

After running the diagnostics, the configuration should be returned to the original settings, as other FAST/WIDE SCSI devices are probably installed in the system. Rochester, Tape Product Engineering is also providing Ucode Upgrade Tape Kits, included are labels containing the new EC Level. The Ucode Upgrade is only available via tape and cannot be distributed online. The new EC label should be placed on the drive covering the old EC number for drives that have been upgraded. Or the new EC can be hand written on the existing drive label with a pen. The EC number of an upgraded drive containing the Ucode upgrade is D46815. The Upgrade Tape can be requested from Rochester, Tape Products Engineering, RCHVMP3(OLSON).

SAS KEYWORDS:

PSY2	PSY2ADPT	D/T9595	SCSI
MAGNETIC	PSY2DIAG	D/T9585	

1.4.1492 4MM TAPE OPTION FAILS

Record number: H123994

Device: D/T9595
Model: M
Tip key:
Date created: 094/05/11
Date last altered: A94/08/15

SYMPTOM:

The magnetic tape application software fails to function. OS/2 V2.1 is the Operating System. The hardware diagnostics run error-free.

Note: The information in this tip is also useful in problem determination for other operating systems.

PROBLEM ISOLATION AIDS:

Routine hardware troubleshooting does not resolve the problem. (The diagnostics run without error.)

Additional Information:

There is no BIOS support for either magnetic tape or MPCA (Multiprotocol Adapter) in any PS/2 system. Therefore, these adapters require device drivers (direct driver software) to control their functions.

Note: The diagnostics are a form of direct driver software, as this software is written to control (test) a specific device. If the diagnostics run to completion without error, it is verification that the hardware is functional. Therefore, the most likely cause of the problem is either:

- A. Incorrect installation of the device driver software, or
- b. Down-level device driver software.
- c. Media that does not meet the required specifications, or is damaged or worn. (Usually intermittent problems.)
- d. Failure to clean the drive as required.

View the OS/2 CONFIG.SYS file and look for the following statement:

```
BASEDEV=OS2SCSI.DMD
```

If this statement is not found, it could be due to the tape drive being installed after the operating system was installed.

OS/2 requires either Sytos Plus* by Sytron Corp., NovaBack* by NovaStor Corp., or ARCserve* by Cheyenne Software, Inc. to be installed to control magnetic tape operations. Other operating systems also require appropriate drivers. The responsible software support organization should be contacted for additional information concerning the requirements for the specific operating system being used.

FIX:

Correct the config.sys file by adding the statement above.

- * SYTOS is a registered trademark of SYTRON Corp.
- Novaback is a registered trademark of NovaStor Corp.
- ARCserve is a registered trademark of Cheyenne Software Inc.

SAS KEYWORDS:

PSY2	PSY2ADPT	PSY2PROG	PSY2DIAG
RAID	SERVER	95	ARRAY
MAGNETIC	PSY2TAPE	D/T9595	D/T8595
D/T9585	D/T8580	D/T8570	D/T9577
D/T8560	D/T8550	D/T8557	D/T8556
D/T8600	D/T8565	D/T9556	D/T8590
D/T9590	D/T6382	D/T6384	D/T6387
D/T6472	D/T6482	D/T6492	D/T6484
D/T6494	PSVP	VALUEPOINT	

1.4.1493 4X SCSI CDROM READ ERRORS ON SERVER-720

Record number: H132071

Device: D/T8642
 Model: M
 Tip key:
 Date created: 095/12/21
 Date last altered: A96/01/16

SYMPTOM:

Read errors or a general CDROM drive failure may occur in PC SERVER 720 (M/T8642) if a 4X CDROM Drive is attached between the SCSI adapter and hard disk drive (HDD) Backplane with cable FRU P/N 06H6661 for array systems or FRU P/N 06H6675 for non-array systems.

Note: Refer to 8642 ECA001 (RETAIN Record # H132199) for for additional information.

PROBLEM ISOLATION AIDS:

Early levels of the Server 720 contained a single multi-drop SCSI cable (FRU P/N 06H6661 for Array Systems or FRU P/N 06H6675 for Non-Array Systems) which attaches to the CDROM in Bay "A" as well as the "front connector" of the HDD Backplane in Bay "C." The position of the CDROM drive on the SCSI cable places it between the HDD Backplane and the SCSI adapter.

CDROM Diagnostics may indicate a general failure or read errors. The frequency of failure may change with the removal or addition of hardfiles.

2X SCSI CDROM drives are not affected. The speed of the CDROM can be determined by its width. The 4X CDROM Device is 1 5/8" wide whereas the 2X CDROM Device is 1" wide.

FIX:

PC Server 720 systems exhibiting CDROM failures with the single multi-drop cable installed, should have that cable replaced by FRU P/N06H3751 AND either P/N06H6876 (Non-Array) OR P/N82G3613 (Array).

The original single multi-drop cable in the 8642 PC Server 720 is routed from the SCSI Hard Disk Controller to the CDROM and then to the "front" connector of the Backplane.

A new two cable design improvement has been developed to attach the CDROM directly to the HDD Backplane and provide an additional 68 pin connector to attach an option in the second upper bay.

Cable FRU P/N82G3613 (Array) OR FRU P/N06H6876 (Non-Array) will connect from the SCSI Hard Disk controller directly to the "front" connector of the Backplane.

Cable FRU P/N06H3751 (Backplane-CDROM-Terminator Cable) will connect from the second "rear" or "bottom" connector on the Backplane to the CDROM drive and will contain termination. If the failure persists, continue with normal problem isolation procedures.

SAS KEYWORDS:

PSY2	PSY2CDROM	8642	IBMPC
PSY2ERR	PSY2PART	SERVER	RAID
720	CD	ROM	4X
ECA001	ECA	001	

1.4.1494 4029 PRINTER FAILS ON 8570 SYSTEM BOARD UPGRADE

Record number: H124032

Device: D/T8570
 Model: M
 Tip key:
 Date created: 094/05/17
 Date last altered: A95/02/24

SYMPTOM:

4029 printers may print "garbage" when used; other printers such as a 4019, 4039, etc may work fine.

PROBLEM ISOLATION AIDS:

An 8570 Upgrade System Board was just installed, and the operating system is OS/2.

FIX:

Customers who experience this problem should update their Flash Bios with version 1.18.02.

The update, 1.18.02, may be downloaded from the IBM PC Company Bulletin Board System at 919-517-0001.

```

=
= THESE FLASH UPDATES ARE CUSTOMER INSTALLABLE. CUSTOMERS
= SHOULD BE ADVISED TO CONTACT THE PC COMPANY HELPCENTER AT
= 800-772 - 2227 IF ASSISTANCE IS REQUIRED IN GETTING THE
= APPROPRIATE UPDATE.
=
=

```

No hardware should be replaced in an attempt to fix this problem.

If updating the Flash Bios does not circumvent the problem, the servicer should use normal problem determination procedures.

Additional information on obtaining Flash Bios is contained in Retain Record H121912, BIOS IMAGES FOR IBM PS/2 PLANAR UPGRADES.

SAS KEYWORDS:

PSY2	PRINT	PSY2PRT	PSY2BRD
D/T4029	D/T4019	D/T4039	FLASH

1.4.1495 4680 STORE LOOP ERRORS B4/S008/E023 RC=68

Record number: H102242

Device: D/T4683
Model: M
Tip key:
Date created: 092/07/30
Date last altered: A95/01/25

SYMPTOM: controller event log shows the above message or B4/S009/E023 with unique data of 68 (see 4680 msg. book). the unique data of 68 indicates an internal error on the SLA. New part P/N93F1444 should be used as a replacement for the old P/N96X4852. Present stock of 96X4852 has been reworked and can be used if the Raw card is P/N74F4017. If the Raw card is P/N39F8013 or P/N53F7446 the new part 93F1444 should be used. ***NOTE: 93F1444 now subs to P/N34G1185.

PROBLEM ISOLATION AIDS: NONE

FIX: to eliminate error log records for the loop adapter in a PS/2 controller you should order p/n93F1444 or use local card stock of 96X4852 only if that p/n is made with raw logic card 74F4017.

SAS KEYWORDS:

PSY2	PSY2ADPT	D/T8550	D/T8560
D/T8570	D/T8580	D/T8555	D/T8557
D/T8590	D/T8595	4683	

1.4.1496 486 & 386SLC PROCESSOR HANGS USING LOTUS 3.1 & DOS 5.0

Record number: H094837

Device: D/T8550
Model: M
Tip key:
Date created: 091/09/26
Date last altered: A91/10/17

SYMPTOM:

A SYSTEM WITH A 486 OR 386SLC PROCESSOR AND DOS 5.0 HANGS WHEN LOADING LOTUS 3.1.

PROBLEM ISOLATION AIDS:

THIS EFFECTS 486 OR 386SLC SYSTEMS RUNNING DOS 5.0, WITH THE SMARTDRV CACHE PROGRAM.

FIX:

LOTUS IS DEVELOPING A FIX TO THEIR 3.1 LEVEL PROGRAM. UNTIL IT IS AVAILABLE, THE SYSTEM OPERATOR CAN CIRCUMVENT THE CONDITION BY ALTERING THEIR CONFIG.SYS FILE WITH AN EDITOR. USING THE EDITOR REMOVE THE SMARTDRV STATEMENT IN THE CONFIG.SYS FILE.

SAS KEYWORDS:

PSY2	8570SYSPROG	D/T8570	8590SYSPROG
D/T8590	8595SYSPROG	D/T8595	PSY2PROG
D/T8557	8557SYSPROG		

1.4.1497 4869 EXTERNAL DRIVE FAILS ON 8525

Record number: H03633

Device: D/T8525
 Model: M
 Tip key:
 Date created: 088/10/03
 Date last altered: A92/01/08

SYMPTOM:

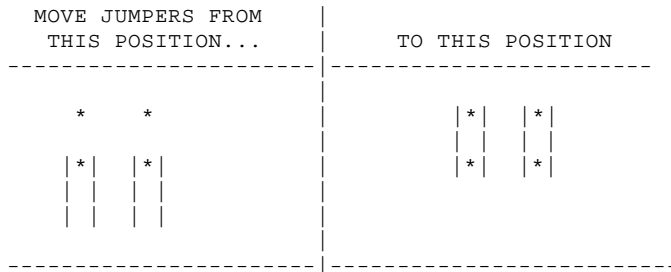
A PERSONAL SYSTEM/2 MODEL 8525 EQUIPPED WITH A 20MB HARDFILE AND 5.25" EXTERNAL DISKETTE DRIVE CAN FAIL TO OPERATE WITH BOTH OPTIONS INSTALLED, DISPLAYING POST ERROR "IO ROM C8000H".

PROBLEM ISOLATION AIDS:

IF THE 8525 WILL OPERATE PROPERLY WITH THE 20MB HARDFILE "OR" THE 4869 EXTERNAL 5.25" DISKETTE DRIVE INSTALLED, BUT WILL NOT FUNCTION WITH BOTH OPTIONS INSTALLED, THE JUMPERS ON THE HARDFILE ADAPTER CARD MAY NEED TO BE MOVED.

FIX:

HOLDING THE HARDFILE ADAPTER CARD HORIZONTALLY WITH THE METAL CARD GUIDE ON THE RIGHT AND THE COMPONENTS FACING UP, LOCATE THE FOUR PINS ARRANGED IN A SQUARE PATTERN, NEAR THE CENTER OF THE CARD. MOVE THE JUMPERS LOCATED ON EACH OF THE TWO BOTTOM PINS SO THAT EACH BOTTOM PIN IS CONNECTED TO THE PIN DIRECTLY ABOVE IT. MOVING BOTH JUMPERS WILL CHANGE THE MEMORY SEGMENT ADDRESS FROM C8000H TO E0000H, MAKING THE TWO ADAPTER CARDS COMPATIBLE.



IF THE 8525 IS STILL NOT OPERATING WITH BOTH OPTIONS INSTALLED AND THE JUMPERS HAVE BEEN MOVED AS DESCRIBED ABOVE, USE NORMAL DIAGNOSTIC PROCEDURES FOR PROBLEM ISOLATION.

SAS KEYWORDS:

PSY2	4869DSKT	8525SYSDSKT	8525SYSERR
PSY2FDSK	8525SYSFDSK	4869SYSDSKT	D/T8525

1.4.1498 5250 ADAPTER DROPS LINE WHEN 6384 IS POWERED ON

Record number: H20964

Device: D/T6384
 Model: M
 Tip key:
 Date created: 093/04/30
 Date last altered: A94/06/14

SYMPTOM:

THE PS/VALUEPOINT 6384, MODELS CXX, FXX AND MXX MAY CAUSE OTHER TERMINALS CONNECTED ON THE SAME PORT VIA THE 5250 EMULATION ADAPTER TO DISCONNECT FROM THE HOST. THIS SYMPTOM OCCURS WHEN THE VALUEPOINT IS INITIALLY POWERED ON.

PROBLEM ISOLATION AIDS:

DIAGNOSTICS FOR THE PS/VALUEPOINT SYSTEM RUNS WITHOUT ERRORS. 5250 ADAPTER DIAGNOSTICS RUN ERROR FREE.

OTHER TERMINALS CONNECTED TO THE HOST WILL IMMEDIATELY DISCONNECT WHEN THE VALUEPOINT IS POWERED ON. AFTER BEING DISCONNECTED, THE OTHER TERMINALS WILL BE ABLE TO SIGN ON WITHOUT FAILURE. THE VALUEPOINT SYSTEM WILL SHOW NO ERRORS AND WILL CONNECT TO THE HOST. THE USER OF THE AFFECTED VALUEPOINT WILL BE ABLE TO SIGN ON TO THE HOST AND WILL SHOW NO INDICATION THAT THE SYSTEM IS AFFECTING THE OTHERS ON THE SAME PORT.

THIS FAILURE WILL AFFECT ANY LEVEL OF 5250 EMULATION ADAPTER.

FIX:

THE FAILURE IS DUE TO A TIMING INCOMPATIBILITY BETWEEN THE 5250 EMULATION ADAPTER AND THE +5V RISE TIME IN THE POWER SUPPLY. INVALID DATA IS SENT ACROSS THE TWINAX CONNECTION VIA THE 5250 ADAPTER FROM THE VALUEPOINT CAUSING THE HOST TO LOSE CONNECTION WITH THE OTHER TERMINALS.

IF THE CUSTOMER IS EXPERIENCING THIS FAILURE, REPLACE THE POWER SUPPLY, FRU P/N52G8741. NOT ALL POWER SUPPLIES EXHIBIT THIS INCOMPATIBILITY; THEREFORE, REPLACE ONLY THOSE IN FAILING SYSTEMS. FRU STOCK IS NOT SUBJECT TO THIS INCOMPATIBILITY PROBLEM WITH THE 5250 ADAPTER.

SAS KEYWORDS:

PSVP	VALUE POINT	PSVPPART	PSVPDIAG
PSY2DIAG	PSY2PART	PSY2	PSVPPWR
PSY2PWR	PSY2ADPT	PSVPADPT	PSVPCOMM
PSY2COMM			

1.4.1499 5250 CARD FAILS IN 64XX SYSTEM

Record number: H12319

Device: D/T6492
Model: M
Tip key:
Date created: 095/06/05
Date last altered: A95/06/05

SYMPTOM:

Enhanced 5250 Display Station Emulation adapter (any level), and other adapters that require -5 volts from the system power supply, fail to function when installed in ValuePoint Performance Series machine types 6492 and 6494.

PROBLEM ISOLATION AIDS:

Inspect the three power supply cables with 6 pin connectors identified as P1, P2, and P3. These connectors are all keyed differently but can be forced into the wrong sockets. Connectors P1 and P2 should be plugged into the system board. If P3 is plugged into the system board where P2 should be installed, any adapter that requires -5 volts will fail.

Power supply connector P3 is not used on these models.

The system and any adapters that do not use -5 volts will function as designed.

FIX:

Plug P1 and P2 into system board connector J1 per the connector keys. If problems persist, continue with normal problem determination.

SAS KEYWORDS:

PSY2	PSVP	D/T6494	PSY2PWR
PSY2ADPT	PSVPADPT	PSVPPWR	PS/VALUEPOINT
P/N64G3956	P/N82G7061		

1.4.1500 5250 MSG&COLON. "DIAG ERROR ON COMMUNICATION ADAPTER"

Record number: H096868

Device: D/T6384
 Model: M
 Tip key: 025
 Date created: 093/05/04
 Date last altered: A93/11/08

SYMPTOM:

PS/2 and ValuePoint systems may fail with the following error message when the REMOTE 5250 EMULATION application is started:
 "DIAGNOSTIC ERROR ON COMMUNICATION ADAPTER"
 Advanced diagnostics run successfully on both the PS/2 and the communication adapter.

FIX:

This problem may be caused by an invalid diagnostic test in the 5250 emulation software. The test is automatically invoked by a line in the REMP.BAT file when the application starts.

Hardware should not be replaced.

To eliminate the error, the REMP.BAT file can be edited or replaced. Updated files are available via VM by entering the following command:

REQUEST R5250PTF FROM COMPPROD AT CLTVM1

Instructions are included.

SAS KEYWORDS:

PSY2	PSY2ERR	PSY2COMM	D/T8525
8525	D/T8530	8530	D/T8535
8535	D/T8540	8540	D/T8550
8550	D/T8555	8555	D/T8556
8556	D/T8557	8557	D/T8560
8560	D/T8565	8565	D/T8570
8570	D/T8573	8573	D/T8580
8580	D/T8590	8590	D/T8595
8595	8525SYSERR	8530SYSERR	8535SYSERR
8540SYSERR	8550SYSERR	8555SYSERR	8556SYSERR
8557SYSERR	8560SYSERR	8565SYSERR	8570SYSERR
8573SYSERR	8580SYSERR	8590SYSERR	8595SYSERR
8525SYSCOMM	8530SYSCOMM	8535SYSCOMM	8540SYSCOMM
8550SYSCOMM	8555SYSCOMM	8556SYSCOMM	8557SYSCOMM
8560SYSCOMM	8565SYSCOMM	8570SYSCOMM	8573SYSCOMM
8580SYSCOMM	8590SYSCOMM	8595SYSCOMM	SDLC
MPCA	MULTIPROTOCOL	36/38	ENHANCED
EDSEA	VALUE	POINT	D/T6384
D/T6382	D/T6387		

1.4.1501 5250 MSG&COLON. "DIAG ERROR ON COMMUNICATION ADAPTER"

Record number: H103857

Device: D/T8550
 Model: M
 Tip key: 131
 Date created: 092/08/13
 Date last altered: A93/05/21

SYMPTOM:

PS/2 and ValuePoint systems may fail with the following error message when the REMOTE 5250 EMULATION application is started:
 "DIAGNOSTIC ERROR ON COMMUNICATION ADAPTER"
 Advanced diagnostics run successfully on both the PS/2 and the communication adapter.

FIX:

This problem may be caused by an invalid diagnostic test in the 5250 emulation software. The test is automatically invoked by a line in the REMP.BAT file when the application starts.

Hardware should NOT be replaced. To eliminate the error, the REMP.BAT file can be edited or replaced.

The error may also be eliminated by requesting the following patch: Type the following command at a VM "Ready" prompt:

Request R5250PTF from R5250EM at CLTVM3

A total of 9 files will be sent. Directions are provided in the 'R5250PTF PACKAGE' file included.

For details, contact REMOTE 5250 EMULATION software support at VM ID: R5250EM at CLTVM3.

SAS KEYWORDS:

PSY2	PSY2ERR	PSY2COMM	D/T8525
8525	D/T8530	8530	D/T8535
8535	D/T8540	8540	D/T8550
8550	D/T8555	8555	D/T8556
8556	D/T8557	8557	D/T8560
8560	D/T8565	8565	D/T8570
8570	D/T8573	8573	D/T8580
8580	D/T8590	8590	D/T8595
8595	8525SYSERR	8530SYSERR	8535SYSERR
8540SYSERR	8550SYSERR	8555SYSERR	8556SYSERR
8557SYSERR	8560SYSERR	8565SYSERR	8570SYSERR
8573SYSERR	8580SYSERR	8590SYSERR	8595SYSERR
8525SYSCOMM	8530SYSCOMM	8535SYSCOMM	8540SYSCOMM
8550SYSCOMM	8555SYSCOMM	8556SYSCOMM	8557SYSCOMM
8560SYSCOMM	8565SYSCOMM	8570SYSCOMM	8573SYSCOMM
8580SYSCOMM	8590SYSCOMM	8595SYSCOMM	SDLC
MPCA	MULTIPROTOCOL	36/38	ENHANCED
EDSEA	VALUE	POINT	D/T6384
D/T6382	D/T6387	PSVP	PSVPADPT
PSVPERR	PSVPCOMM	D/T6382	VALUEPOINT
VALUE POINT	6382	6384	6387
PS/VP			

1.4.1502 540MB DISK APPEARS AS 340MB IN a 9545.

Record number: H13652

Device: D/T9545
Model: M
Tip key:
Date created: 095/07/12
Date last altered: A95/08/30

SYMPTOM:

The 540Mb fixed disk appears to be a 340Mb fixed disk when a CHKDSK is done.

PROBLEM ISOLATION AIDS:

The 540Mb file was installed in a system when the BIOS level was below 1.05.

NOTE: BIOS must be at 1.05 level or higher when the 540Mb drive is installed.

FIX:

Remove the 540Mb fixed disk and upgrade BIOS to the current BIOS level 1.05 or higher, then reinstall the 540Mb fixed disk.

SAS KEYWORDS:

PSY2

PSY2BIOS

PSY2FDSK

PSY2PROG

1.4.1503 55LS HANGS AT POST W/ REPLACEMENT SYSTEM BOARD

Record number: H084555

Device: D/T8555
Model: M
Tip key:
Date created: 091/06/21
Date last altered: A91/06/24

SYMPTOM:

AFTER REPLACING THE 55LS SYSTEM BOARD WITH FRU P/N57F3003, THE SYSTEM HANGS DURING POST. THE MEMORY COUNT AND BLINKING CURSOR REMAIN AT THE UPPER LEFT CORNER OF THE DISPLAY. THE SYSTEM WILL NOT BOOT TO A DISKETTE, DISK, OR NETWORK, AND DOES NOT DISPLAY ANY ERROR CODES.

PROBLEM ISOLATION AIDS: NONE**FIX:**

THE FAILING REPLACEMENT SYSTEM BOARD MAY HAVE A DEFECTIVE CLOCK MODULE. ON A SMALL NUMBER OF SYSTEM BOARDS, THE CLOCK MODULE CONTAINS CMOS INFORMATION THAT WILL NOT ALLOW POST TO COMPLETE SUCCESSFULLY. IF AVAILABLE, REMOVE THE CLOCK MODULE FROM THE OLD SYSTEM BOARD AND INSTALL IT ON THE FAILING FRU SYSTEM BOARD, OR REPLACE THE CLOCK MODULE WITH ONE FROM FRU STOCK (FRU P/N8509237).

CORRECTIVE ACTION HAS BEEN TAKEN TO ELIMINATE AFFECTED SYSTEM BOARDS IN DISTRIBUTION CENTER FRU STOCK.

SAS KEYWORDS:

PSY2 PSY2BRD 8555SYSBRD

1.4.1504 6157 FAILS AFTER SYSBRD IS REPLACED

Record number: H016559

Device: D/T6157
 Model: M
 Tip key:
 Date created: 093/01/14
 Date last altered: A93/01/14

SYMPTOM: 6157 FAILS AFTER THE SYSTEMBOARD IN A MICRO CHANNEL PS/2 HAS BEEN REPLACED. CHANGES TO CERTAIN MODULES ON SOME SYSTEM BOARDS MAKE THE 6157 TAPE ADAPTER INCOMPATIBLE WITH THESE SYSTEMS.

PROBLEM ISOLATION AIDS: 6157 WAS INSTALLED AND WORKING BEFORE THE MICRO CHANNEL PS/2 SYSTEM BOARD WAS REPLACED. YOU NOW ARE EXPERIENCING 6157 TAPE BACK UP PROBLEMS.

FIX: REPLACE THE TAPE DRIVE ADAPTER WITH P/N37F6718.

SAS KEYWORDS:

6157	TAPE	D/T8550	D/T8580
D/T8570	D/T8560	D/T8565	D/T8555
D/T8590	D/T8595	D/T8525	D/T8530
PSY2ADPT	8550SYSADAPT	8580SYSADAPT	8570SYSADAPT
8560SYSADAPT	8565SYSADAPT	8555SYSADAPT	8525SYSADAPT
8530SYSADAPT	8590SYSADAPT	8595SYSADAPT	PSY2TAPE
PSY3			

1.4.1505 6157 FAILS AFTER SYSBRD IS REPLACED

Record number: H036838

Device: D/T6157
 Model: M
 Tip key:
 Date created: 091/05/30
 Date last altered: A93/04/19

SYMPTOM: 6157 FAILS AFTER THE SYSTEMBOARD IN A MICRO CHANNEL PS/2 HAS BEEN REPLACED. CHANGES TO CERTAIN MODULES ON SOME SYSTEM BOARDS MAKE THE 6157 TAPE ADAPTER INCOMPATIBLE WITH THESE SYSTEMS.

PROBLEM ISOLATION AIDS: 6157 WAS INSTALLED AND WORKING BEFORE THE MICRO CHANNEL PS/2 SYSTEM BOARD WAS REPLACED. YOU NOW ARE EXPERIENCING 6157 TAPE BACK UP PROBLEMS.

FIX: REPLACE THE TAPE DRIVE ADAPTER WITH P/N37F6718.

SAS KEYWORDS:

6157	TAPE	D/T8550	D/T8580
D/T8570	D/T8560	D/T8565	D/T8555
D/T8590	D/T8595	D/T8525	D/T8530
PSY2ADPT	8550SYSADAPT	8580SYSADAPT	8570SYSADAPT
8560SYSADAPT	8565SYSADAPT	8555SYSADAPT	8525SYSADAPT
8530SYSADAPT	8590SYSADAPT	8595SYSADAPT	PSY2TAPE
PSY3			

6157 TAPE ADAPTER CAUSES TRAP OR HANG SYMPTOMS

1.4.1506 6157 TAPE ADAPTER CAUSES TRAP OR HANG SYMPTOMS

Record number: H20840

Device: D/T8550
 Model: M
 Tip key:
 Date created: 093/03/29
 Date last altered: A94/08/15

SYMPTOM:

The 6157 Streaming Tape Drive may not operate properly or cause the PS/2 Micro Channel (TM) system that it is installed in to hang unexpectedly, perform incomplete tape backups or cause TRAP errors. The problem is potentially caused by direct memory access (DMA) timing variances between the 6157 Streaming Tape Adapter and the Micro Channel (TM) system bus.

PROBLEM ISOLATION AIDS: NONE**FIX:**

Inspect the bar code label on the 6157 Tape Adapter Card. If the bar code of the 6157 adapter does not contain the numbers 37F6717, it is down level and should be replaced using normal service procedures.

SAS KEYWORDS:

PSY2	TRAPERROR	PSY2ADPT	6157ADPT
D/T6157	D/T8555	D/T8556	D/T8557
D/T8573	D/T8560	D/T8565	D/T8570
D/T9576	D/T8580	D/T8590	D/T8595
D/T9585	D/T9577	D/T9556	D/T9557
D/T9595			

1.4.1507 6272/6282 SYSTEMS HANG DURING POST AT CHECKPOINT 60

Record number: H137949

Device: D/T6272
Model: M
Tip key:
Date created: 097/06/03
Date last altered: A97/06/05

SYMPTOM:

IBM 6272/6282 PC300GL SYSTEMS HANG DURING POST AT CHECKPOINT 60. THE NUMBER 60 WILL BE DISPLAYED IN THE UPPER RIGHT HAND CORNER OF THE DISPLAY.

PROBLEM ISOLATION AIDS:

AFFECTED SYSTEMS ARE AT FLASH BIOS LEVEL 15.

FIX:

UPDATING THE SYSTEM FLASH BIOS ABOVE LEVEL 15 WILL CORRECT THE ERROR.

IN SYSTEMS THAT ARE EXHIBITING THE ERROR, THE CMOS MUST BE CLEARED BEFORE UPDATING THE BIOS.

1. POWER-OFF THE COMPUTER.
2. MOVE CMOS CLEAR (PASSWORD) JUMPER J6 TO PINS 2-3 AND POWER-ON THE COMPUTER.
3. AFTER THE SYSTEM BEEPS TWICE, POWER-OFF THE COMPUTER AND MOVE JUMPER J6 BACK TO PINS 1-2.
4. INSERT THE FLASH BIOS DISKETTE AND POWER-ON THE COMPUTER.

THE CURRENT FLASH BIOS MAY BE OBTAINED FROM THE PC COMPANY BBS AT 919 - 517 - 0001 OR FROM THE PC COMPANY FILE LIBRARY VIA THE INTERNET AT "[HTTP://WWW.US.PC.IBM.COM/SEARCHFILES.HTML](http://www.us.pc.ibm.com/searchfiles.html)". SEARCH ON "NDJT" TO OBTAIN THE MOST CURRENT LEVEL.

SAS KEYWORDS:

PSY2	PSVP	PSY2MCD	PSY2ERR
IBMPC	UNCLASSIFIED	D/T6282	6282

1.4.1508 63XX/95XX MONITORS APPEAR TO BOOT IN 40 COLUMN MODE

Record number: H123717

Device: D/T6324
 Model: M
 Tip key:
 Date created: 094/04/25
 Date last altered: A95/05/19

SYMPTOM:

A limited number of early level 6324, 6325, 9524, and 9525 (14V, 15V, 14P, 15P, 14T, 15T) monitors, when attached to PS/VP 6384 Models 425SX, 433DX, 466DX2, may appear to display a 40 column mode at system POST or on warm boot (Ctrl-Alt-Del).

The DOS prompt, memory count & cursor are very wide, and offset to the center of the screen. DOSSHELL and BOOT MANAGER screens are wrapped across themselves.

Blanking and other various display problems may also occur.

PROBLEM ISOLATION AIDS:

When the screen exhibits these problems, turn the monitor off, wait 10 seconds and turn the monitor on. If the screen appears correct the microprocessor may be down level. Check the level of the microprocessor by disconnecting the power cable and signal cable from the monitor and system unit. Remove the rear cover and locate a large socketed module at the rear of the analog card, in position Z500, directly below the video card.

FIX:

If the microprocessor is identified with a level of XC86201B, XC86202B, XC86203B, XC86204B, or XC86205B it is down level and should be replaced with:

- Microprocessor FRU P/N73G0685 for the 6324 and 9524
- Microprocessor FRU P/N73G0686 for the 6325 and 9525

To replace the module the following steps should be utilized.

- Ensure ESD strap is used prior to handling the microprocessor.
- Remove the video card to improve access to the microprocessor.
- Remove the old microprocessor.

Note:

Caution should be taken not to damage this part. In the event of a failure with the replacement part, the old microprocessor can be reinstalled until another is obtained.

- Locate the new microprocessor over the empty socket and take care when installing the new module. If pressure is applied at one end, the module will tilt. This may cause damage to the legs.
- Reconnect the video card.
- Before applying power, ensure that insulating material has been placed between the video card and analog card; otherwise, electrical shorting will occur.

If problems are still encountered after replacing the module, or identifying that the module is not down level, the servicer should use normal problem determination procedures to isolate the defect.

SAS KEYWORDS:

PSY2	D/T9524	D/T9525	D/T6324
PSY2DISP	PSY2PART	BLANKING	BLINKING
BLANKS	OUT	MICRO	

1.4.1509 63XX/95XX MONITORS GEOMETRY / COLOR PROBLEMS

Record number: H124397

Device: D/T95XX
 Model: M
 Tip key:
 Date created: 094/06/21
 Date last altered: A95/03/08

SYMPTOM:

6324, 6325, 9524, and 9525 (14V, 15V, 14P, 15P, 14T, 15T) monitors may appear to display incorrect Front-Of-Screen (FOS) geometry or changing colors.

PROBLEM ISOLATION AIDS:

When the screen exhibits these problems, the microprocessor may be defective.

FIX:

No diagnostics are available which can differentiate between a microprocessor failure and a card tray failure, therefore this procedure is not intended to be a primary repair process. It's purpose is to be an alternate step prior to replacing a card tray.

To replace the microprocessor, disconnect the monitor power and signal cables. Remove the rear cover and locate a large socketed module at the rear of the card tray, in position Z500, directly below the video card.

- Microprocessor FRU P/N73G0685 for the 6324 and 9524
- Microprocessor FRU P/N73G0686 for the 6325 and 9525

To replace the module the following steps should be utilized.

- Ensure ESD strap is used prior to handling the microprocessor.
- Remove the video card to improve access to the microprocessor.
- Remove the old microprocessor.

Note:

Caution should be taken not to damage this part. In the event of a failure with the replacement part, the old microprocessor can be reinstalled until another is obtained.

- Locate the new microprocessor over the empty socket and take care when installing the new module. If pressure is applied at one end, the module will tilt. This may cause damage to the legs.
- Reconnect the video card.
- Before applying power, ensure that insulating material has been placed between the video card and analog card; otherwise, electrical shorting will occur.

If problems are still encountered after replacing the module, the servicer should use normal problem determination procedures to isolate the defect.

SAS KEYWORDS:

PSY2	D/T9524	D/T9525	D/T6324
PSY2DISP	PSY2PART	WASH	WASHING
FADING	FADE		

1.4.1510 6318, IMAGE IS NARROW OR JITTERS

Record number: H123503

Device: D/T6318
 Model: M
 Tip key:
 Date created: 094/04/04
 Date last altered: A94/08/15

SYMPTOM:

The 6318 Monitor jitters when set to 640 x 480, 60Hz.
 The top of the displayed image shakes or you observe a reduced image width while in this mode.

PROBLEM ISOLATION AIDS:

Jitter may also be caused by magnetic interference from an external electrical device. Isolate and verify failure first.

FIX:

Before replacing any parts obtain the following tools and test equipment, and complete the following adjustment procedure.

- Digital Voltmeter
- Plastic 2mm Hex Head Adjustment Tool, FRU P/N39F8405
- IBM PS/2 Color Displays Test-Pattern Diskette part number S41G-8502.

Adjustment procedure:

BEFORE STARTING ADJUSTMENTS ENSURE POWER
 IS REMOVED FROM THE SYSTEM AND MONITOR UNIT.

1. Remove the rear cover from the 6318 Monitor.
2. Locate R934 and RV900. They are located towards the front of the Analog Card Tray Assembly, near the Power on/off Switch.
3. Connect the Multimeter positive lead to the leg of the resistor, identified as R934, nearest the side of the Analog Card.
4. Connect the Multimeter negative lead to the metal card tray.
5. Insert the 2mm plastic Hex Head Adjustment Tool into RV900.
6. Connect the Power cord to the monitor.
7. Connect the I/O cable to the System Unit.

 * CAUTION SHOULD BE EXERCISED WHEN MAKING *
 * ADJUSTMENTS WITH THE REAR COVER REMOVED.*

8. Switch on AC power to the Monitor and the System Unit.
9. Boot the system to the Test Pattern Diskette, select 800 x 600 Mode.

Note: 800 x 600 is used because jitter is more perceptible in this mode. Any mode may be used to make the following adjustments. Any modes checked should be within the specified range. Also be sure that the monitor has been warmed up (20 minutes) prior to observing the correct setting.

10. Adjust RV900 until the Multimeter reads between 11.6 VDC and 11.8 VDC. Exercise care as this adjustment is sensitive and critical to proper operation in this mode.
11. Carefully remove the adjustment tool to prevent altering the adjustment.
12. Power off the Monitor and disconnect the Multimeter leads.
13. Reassemble the Monitor and test.

If problems are still encountered after making the above adjustments, normal problem determination should be performed to determine the cause of defect.

SAS KEYWORDS:

PSY2

PSY2DISP

6318

2 MM

1.4.1511 6327 EXHIBITS BLANKING

Record number: H123707

Device: D/T6327
Model: M
Tip key:
Date created: 094/04/22
Date last altered: A94/08/04

SYMPTOM:

A limited number of 6327 monitors may exhibit a blank screen when one of the following modes are used:

- 1024 x 768 64K colors 86 Hz
- 1280 x 1024 256 colors 88 Hz

PROBLEM ISOLATION AIDS: NONE

FIX:

Replacement 6327 monitor FRUs, P/N39G3362, are available to fix this problem.

If using a mode other than those identified above, or replacing the monitor does not circumvent the problem, the servicer should use normal problem determination procedures to isolate the defect.

SAS KEYWORDS:

PSY2	6327	D/T8535	PSY2DISP
D/T8555	D/T8556	D/T8557	D/T8540
D/T8560	D/T8565	D/T8570	D/T9576
D/T8580	D/T8590	D/T8595	D/T9585
D/T9577	D/T9556	D/T9557	D/T9595
D/T9590	D/T9595A	D/T9533	D/T8530
D/T6384	D/T6381	D/T6382	D/T6387
MFI	MODE	5	

1.4.1512 6327, IMAGE SHIFTS TO THE LEFT

Record number: H123500

Device: D/T6327
Model: M
Tip key:
Date created: 094/04/07
Date last altered: A94/08/15

SYMPTOM:

A limited number of 6327 monitors may have their image shift (approximately 4 inches) to the left, at random.

PROBLEM ISOLATION AIDS:

This problem may occur at any time.

FIX:

Replacement 6327 monitor FRUs, P/N39G3362, are available to fix this problem.

As a work around, customers may power the monitor off and back on. This will allow the monitor to establish sync and display a corrected image. Since the problem may reoccur, the same action may be required.

Since very few customers may experience this problem, monitors should not be replaced unless the problem is encountered.

No other FRU parts should be replaced in an attempt to fix this problem.

If powering the monitor off and on does not circumvent the problem, the servicer should use normal problem determination procedures to isolate the defect.

SAS KEYWORDS:

PSY2	PSY2DISP	D/T8555	D/T8556
D/T8557	D/T8560	D/T8565	D/T8570
D/T9576	D/T8580	D/T8590	D/T8595
D/T9585	D/T9577	D/T9556	D/T9557
D/T9595	D/T9590	D/T9595A	D/T9533
D/T6384	D/T6381	D/T6382	D/T6387

1.4.1513 6381 FAILS TO CONNECT TO SERVER W/SMC ARCNET

Record number: H125168

Device: D/T6381
 Model: M
 Tip key:
 Date created: 095/11/08
 Date last altered: A95/11/08

SYMPTOM:

IBM PS/ValuePoint 6381/Si systems using an SMC Arcnet PC270E adapter may fail to connect to a server.

PROBLEM ISOLATION AIDS:

During connection to a server, the system will hang with a blinking cursor.

FIX:

The SMC Arcnet PC270E adapter was not tested and is incompatible with the IBM PS/ValuePoint 6381/Si (All Models).

Upgrading the SMC Arcnet adapter to the 16 bit SMC Arcnet PC650 adapter will eliminate this incompatibility.

Arcnet is a trademark of Standard Microsystems Corporation.

SAS KEYWORDS:

PSY2	PSVP	PS/VALUEPOINT	VALUE POINT
6381	PSVPCOMM	PSY2COMM	PSVPADPT
PSY2ADPT	PSY2NLGO	PSVPNLGO	PSVPOEM
PSY2OEM	PSVPPART	PSY2PART	

1.4.1514 6381 HANGS WITH WINDOWS FOR WORKGROUPS 3.11

Record number: H122504

Device: D/T6384
 Model: M
 Tip key:
 Date created: 094/01/26
 Date last altered: A97/07/13

SYMPTOM:

PS/VALUEPOINT 6381/Si MAY HANG AT THE WINDOWS LOGO SCREEN AFTER UPGRADING TO OR INSTALLING MICROSOFT "WINDOWS FOR WORKGROUPS 3.11."

PROBLEM ISOLATION AIDS:

AFTER UPGRADING TO OR INSTALLING WINDOWS FOR WORKGROUPS 3.11, IPL THE SYSTEM AND START WINDOWS. IF WINDOWS LOADS PROPERLY, THIS TIP DOES NOT APPLY. IF THE SYSTEM HANGS AT THE WINDOWS LOGO SCREEN, THIS TIP MAY APPLY. THE SYSTEM BOARD MUST ALSO MEET THE FOLLOWING CRITERIA:

IF THE SYSTEM IS A 486 DX OR DX2 (MXX OR WXX MODEL):

LOCATE JUMPER POSITION J26 AND J27 ON THE FRONT EDGE OF THE SYSTEM BOARD. THIS TIP APPLIES ONLY IF THERE ARE NO PINS AT THOSE POSITIONS AND P/N52G6998 IS PRESENT ON THE EDGE OF THE SYSTEM BOARD, NEAR THE MEMORY SIMM CONNECTORS. IF JUMPER PINS ARE PRESENT AT J26 AND J27, THIS TIP DOES NOT APPLY.

IF THE SYSTEM IS A 486 SX (FXX OR KXX MODEL):

VIEW THE FRONT EDGE OF THE SYSTEM BOARD NEAR THE MEMORY SIMM CONNECTORS. IF MANUFACTURING PART NUMBER 65G3708 IS PRESENT, THIS TIP DOES APPLY. 486 SX SYSTEM BOARDS WITH ANY OTHER PART NUMBERS ARE NOT AFFECTED. (486 SX SYSTEM BOARDS WILL NOT HAVE JUMPER LOCATIONS J26 OR J27)

FIX:

A PATCH HAS BEEN RELEASED TO RESOLVE THIS FAILURE AND MAY BE OBTAINED IN FOLLOWING MANNER:

THE PATCH IS TITLED "6381WG31.ZIP" AND MAY BE DOWNLOADED FROM THE TECHNICAL SUPPORT BULLETIN BOARD BY CALLING 919 517-0001.

THE PATCH DISKETTE CONTAINS A "README" FILE WITH INSTRUCTIONS FOR INSTALLING THE FIX.

SAS KEYWORDS:

PSVP	PSY2	PSVPBRD	PSY2BRD
PSVPPART	PSY2PART	PSVPADPT	PSY2ADPT
6381	VALUE POINT	PS VP	

1.4.1515 6381 POST HANG WHEN 1ST 128KB L2 CACHE IS INSTALLED

Record number: H121712

Device: D/T6381
 Model: M
 Tip key:
 Date created: 093/11/05
 Date last altered: A93/12/06

SYMPTOM:

PS/VALUEPOINT 6381 MAY EXHIBIT A SYSTEM HANG CONDITION WHEN THE FIRST 128K L2 CACHE OPTION IS INSTALLED.

PROBLEM ISOLATION AIDS:

LOCATE JUMPER POSITIONS J26 AND J27 (REFER TO 6381 HMS/R SUPPLEMENT FOR SYSTEM BOARD LOCATIONS) WHICH ARE LOCATED ALONG THE FRONT EDGE OF THE SYSTEM BOARD, NEXT TO THE MEMORY SIMM CONNECTORS. VERIFY THE PRESENCE OF THE PINS IN POSITIONS J26 AND J27. THIS TIP APPLIES ONLY TO SYSTEMS WITH NO PINS PRESENT IN POSITIONS J26 AND J27. SYSTEM WILL NOT FAIL WHEN THE SECOND 128Kb OF CACHE IS INSTALLED (TOTAL 256Kb).

FIX:

REMOVE THE 128Kb CACHE OPTION. VERIFY PROPER OPERATION OF THE SYSTEM AFTER THE REMOVING THE CACHE OPTION. SERVICERS SHOULD CONTACT THE IBM PERSONAL SYSTEMS HELPCENTER AT 1 - 800-772 - 2227 FOR ASSISTANCE. HELPCENTER PERSONNEL WILL REQUEST MACHINE TYPE/MODEL, FAILURE INFORMATION, AND REQUEST A MAILING ADDRESS SO THAT A FIX FOR THE FAILURE CAN BE SENT TO THE CUSTOMER.

SAS KEYWORDS:

PSVP	PSY2	PSVPERR	PSY2ERR
PSVPMEM	PSY2MEM	P/N73G3139	71G3139
P/N52G7017	52G7017	P/N52F7016	52G7016
6381			

1.4.1516 6381 PS/VALUEPOINT POWER ON PASSWORD FAILS

Record number: H122400

Device: D/T6381
 Model: M
 Tip key:
 Date created: 094/01/21
 Date last altered: A97/07/13

SYMPTOM:

ON PS/VALUEPOINT 6381/SI SYSTEMS WITH FLASH LEVELS PRIOR TO 33A, THE POWER-ON PASSWORD MAY BE INEFFECTIVE IN PREVENTING UNAUTHORIZED USER ACCESS.

PROBLEM ISOLATION AIDS:

VIEW THE FLASH EPROM LEVEL BY ACCESSING THE CONFIGURATION UTILITY PROGRAM. THE FIFTH, SIXTH AND SEVENTH POSITIONS OF THE EPROM LEVEL REPRESENT THE CODE LEVEL; FOR EXAMPLE: L8ET33AUS IS CODE LEVEL 33A. IF YOU FIND ANY LEVEL PRIOR TO 33A, FOLLOW THE INSTRUCTIONS BELOW TO OBTAIN THIS LEVEL OF FLASH AND UPDATE THE CUSTOMERS SYSTEM.

FIX:

THE UPDATE IS TITLED "VPL8JT36.DSK" AND MAY BE DOWNLOADED FROM THE TECHNICAL SUPPORT BULLETIN BOARD BY CALLING (919) 517-0001.

WHEN REPLACING THE SYSTEM BOARD, VERIFY THAT THE FLASH LEVEL ON THE NEW BOARD IS AT THIS LEVEL OR HIGHER. IF IT IS NOT, REQUEST THE FLASH UPDATE DISKETTE AND UPDATE THE FRU AFTER INSTALLATION. FUTURE FLASH EPROM UPDATES WILL ALSO CONTAIN THIS FIX.

SAS KEYWORDS:

PSVP	PSY2	PS/VP	6381
EPROM	PSVPMCD	ROM	BIOS
27A	30A	VALUEPOINT	PSVPBRD
PSY2BRD	PSY2MCD		

1.4.1517 6381 SYSTEM HANG LOADING OS/2 FROM SERVER

Record number: H121245

Device: D/T6384
 Model: M
 Tip key:
 Date created: 093/09/17
 Date last altered: A93/09/17

SYMPTOM:

THE PS/VALUEPOINT 6381 SYSTEM MAY FAIL TO REMOTE PROGRAM LOAD (RPL) THE OS/2 OPERATING SYSTEM FROM A SERVER WHICH IS USING OS/2 LAN SERVER VERSION 3.0.

PROBLEM ISOLATION AIDS:

THE SYSTEM MAY HANG WHILE EXECUTING "NETBIND". THE "NETBIND" MESSAGE WILL REMAIN ON THE DISPLAY, REQUIRING A REBOOT TO CLEAR THE SYSTEM HANG.

VALUEPOINT DIAGNOSTICS RUN WITHOUT ERRORS.

FIX:

AN UPDATED VERSION OF THE "RPLBOOT.SYS" FILE MUST BE LOADED ON THE SERVER.

TO DETERMINE IF THE UPDATED FILE IS REQUIRED, LOCATE THE FILE IN THE "\IBMLAN\RPL\DOS" SUBDIRECTORY. IF THE TIME AND DATE STAMP ON THE "RPLBOOT.SYS" FILE IS PRIOR TO 09/10/93, CONTACT OS/2 LAN SERVER TECHNICAL SUPPORT AT 1-800-992-4777 TO OBTAIN A NEW "RPLBOOT.SYS" FILE. REQUEST THE FIX FOR APAR # IC05982.

SAS KEYWORDS:

PSVP	VALUE POINT	PSVPERR	PSY2ERR
PSY2	PSY2COMM	PSVPCOMM	PSVPPROG
PSY2PROG	PSVPOPER	PSY2OPER	LOCK UP
LOCK-UP	D/T6381	6381	

1.4.1518 6382/84/87 FAILS TO RECOGNIZE COM3 OR COM4

Record number: H127571

Device: D/T6384
 Model: M
 Tip key:
 Date created: 095/05/16
 Date last altered: A95/05/17

SYMPTOM:

PS/ValuePoint 6382/S, 6384/D (except P-60), and 6387/T fail to recognize an internal modem or other serial communication adapter configured as COM3 or COM4.

PROBLEM ISOLATION AIDS:

The supported I/O addresses on the above systems for COM3 and COM4 are 3220 and 3228. Many serial communication adapter utilize 03E8 and 02E8 as COM3 and COM4. These are not supported I/O address and will require device drivers that are the responsibility of the adapter manufacturer.

FIX:

Contact the place of purchase of the adapter or the vendor's technical support for drivers to use I/O address 3220 or 3228.

WORK AROUND:

Serial port A on the system board is programmable as serial ports 1 through 8. The customer can configure his system for three COMM ports by configuring the adapter as COM1 and the system board serial port A as COM3. Should the customer require four COMM ports, he will require a serial adapter that can be configured for supported I/O addresses or direct driver software.

SAS KEYWORDS:

PSVP	PSY2	PSY2BRD	PSVPBRD
VALUE POINT	PS/VP	6382	D/T6382
6484	6387	D/T6387	PSY2COMM
PSVPCOMM	PSY2ADPT	PSVPADPT	OEM

1.4.1519 6384 HANGS AFTER INSTALLING ATI VIDEO ADAPTER

Record number: H121457

Device: D/T6384
 Model: M
 Tip key:
 Date created: 093/09/28
 Date last altered: A93/10/07

SYMPTOM:

PS/VALUEPOINT 6384, MODELS FXX AND MXX (425SX & 433DX)
 MAY HANG AFTER INSTALLING AN ATI VIDEO ACCELERATOR OPTION
 CARD.

PROBLEM ISOLATION AIDS:

THERE ARE NO POST ERRORS ASSOCIATED WITH THIS FAILURE.

THE SYSTEM HANG MAY BE SEEN AS A SYSTEM HALT WHILE LOADING
 APPLICATION SOFTWARE DURING IPL, OR AS A SYSTEM HALT WHILE
 EXECUTING AN APPLICATION.

VALUEPOINT DIAGNOSTICS DO NOT FAIL.

FIX:

THE ATI VIDEO CARD IS INCOMPATIBLE IN THE 6384 IN 16 BIT
 WIDE VGA ROM MEMORY MODE. CONFIGURE THE ATI VIDEO CARD
 TO 8 BIT MODE. THE ATI CARD'S VGA ROM MAY BE CONFIGURED
 TO 8 BIT MODE BY USING THE "SET POWER-UP CONFIGURATION"
 SCREEN. REFER TO THE ATI USER'S GUIDE FOR DETAILED
 INSTRUCTIONS.

THE SYSTEM HANG CONDITION, USING THE ATI CARD IN 16 BIT MODE
 DOES NOT AFFECT THE 6384/D, 6382/S OR 6387/T. THE ATI CARD
 IS COMPATIBLE WITH THESE SYSTEMS IN EITHER 8 OR 16 BIT MODE.

SAS KEYWORDS:

PSVP	PSY2	VALUE POINT	PSY2OEM
PS/VP	PSY2OPER	PSVOPER	6382
6384	6387	D/T6382	D/T6387
DISPLAY	PSVNLGO	PSY2NLGO	PSVPOEM

1.4.1520 6384 HANGS WITH DIALOGIC ADAPTER INSTALLED

Record number: H12255

Device: D/T6384
 Model: M
 Tip key:
 Date created: 093/05/25
 Date last altered: A93/05/27

SYMPTOM:

THE 6384 PS/VALUEPOINT 425SX, 433DX OR 466DX2 SYSTEMS MAY HANG DURING POWER ON SELF TEST (POST) WITH A DIALOGIC D/xxB OR D/xxD ADAPTER INSTALLED.

PROBLEM ISOLATION AIDS:

THE SYSTEM MAY BE POWERED OFF/ON TO BYPASS THE HANG CONDITION. SEVERAL POWER OFF/ON CYCLES MAY BE NECESSARY TO BYPASS THE SYSTEM HANG.

PS/VALUEPOINT DIAGNOSTICS RUN ERROR FREE WITH THE DIALOGIC ADAPTER REMOVED FROM THE SYSTEM.

THIS FAILURE DOES NOT EFFECT THE PS/VALUEPOINT 6382/S, 6384/D OR 6387/T SYSTEMS.

FIX:

THE DIALOGIC D/xxB OR D/xxD ADAPTERS HAVE A DEFAULT BASE SHARED MEMORY ADDRESS OF "D0000". THE SYSTEM HANG CONDITION CAN BE ELIMINATED BY SETTING THE BASE MEMORY ADDRESS TO "C0000."

THE PROCEDURE FOR CHANGING THE BASE MEMORY ADDRESS IS DOCUMENTED IN THE DIALOGIC INSTALLATION INSTRUCTIONS. IF THE INSTRUCTIONS ARE NOT AVAILABLE, THE CUSTOMER SHOULD CONTACT THE DIALOGIC TECHNICAL SUPPORT CENTER AT (201) 334 - 8450 EXT.157 FOR FURTHER ASSISTANCE.

IF THE SYSTEM HANG CONDITION PERSISTS AFTER THE DIALOGIC ADAPTER CARD ADDRESS HAS BEEN CHANGED, UTILIZE NORMAL PROBLEM DETERMINATION PROCEDURES TO ISOLATE THE FAILING FRU.

SAS KEYWORDS:

PSVP	VALUE POINT	PSVPCOMM	PSVPERR
PSY2	PSY2COMM	PSY2ERR	PSY2OEM
PSVPOEM	PSVPADPT	PSY2ADPT	

1.4.1521 6384 P60/D BEEPS 3 TIMES THEN HANGS

Record number: H13958

Device: D/T6384
Model: M
Tip key:
Date created: 095/09/20
Date last altered: A95/09/20

SYMPTOM:

PS/ValuePoint 6384 P60/D systems may intermittently exhibit a 3 beep error followed by a system hang while using OS/2 2.X or WARP and LAPS version 2.2.

PROBLEM ISOLATION AIDS:

All system diagnostics run without errors.

FIX:

Install LAPS version 2.60.2 titled MPTS 2.60.2, CSD level WR08000 or higher.

SAS KEYWORDS:

VALUE POINT	PS/VP	PSVP	P60D
PSY2ERR	PSVPERR	PSVPPROG	PSY2PROG
PSY2COMM	PSVPCOMM	PSY2	OS2

1.4.1522 6384 P60/D HANGS DURING OS/2 INSTALLATION

Record number: H124676

Device: D/T6384
 Model: M
 Tip key:
 Date created: 094/07/20
 Date last altered: A94/07/20

SYMPTOM:

The installation OS/2 2.X may fail after diskette 4 or 5 when the installer is instructed to remove the diskette and reboot the system. The system will hang at this point.

PROBLEM ISOLATION AIDS:

The failure may occur if the system has been previously set to an SVGA resolution. The OS/2 installation process requires that the 6384 P60/D is set to a VGA resolution.

FIX:

The system can be reset to VGA by executing the INSTALL.EXE on DISK 1 of 3 of the MACH32 ATI video drivers that are shipped with the system. Utilize the following steps to reset the system to VGA.

- 1) Use a bootable DOS diskette or boot DOS from the hardfile.
- 2) Insert DISK 1 of 3 in the A: drive. Change to the A: prompt and type INSTALL.
- 3) At the Main Menu, select the "Set Power-up Configuration" option.
- 4) At the next screen, select "Monitor Type" and press ENTER.
- 5) Choose the first selection in the list of monitor types which is "VGA 60Hz 640x480" and press Enter.
- 6) Press F10 to save the changes and Escape to exit the INSTALL program.
- 7) The system should be powered off/on before attempting to install OS/2.

After the installation of OS/2, the steps above can be used to setup the system for the monitor being used and SVGA. OS/2 may be customized with the desired video resolution after the installation is complete.

SAS KEYWORDS:

VALUE POINT	PS/VP	PSVP	P60D
PSVOPER	PSY2OPER	PSVPPROG	PSY2PROG
193	PSY2	189	199
OS2			

1.4.1523 6384 P60/D HANGS W/ATI DRIVERS & WINDOWS OR OS/2

Record number: H125679

Device: D/T6384
 Model: M
 Tip key:
 Date created: 094/11/29
 Date last altered: A97/07/13

SYMPTOM:

PS/ValuePoint 6384 P60/D systems may exhibit a system hang condition using the ATI MACH32 video device drivers, Windows 3.1, OS/2 2.X or WARP and a Token Ring adapter.

PROBLEM ISOLATION AIDS:

System diagnostics run without errors.

The hang condition occurs after Windows or OS/2 is loaded and several applications are started within the environment.

The Token Ring adapter and network drivers are loaded and functional.

The system hang condition does not occur if VGA or SVGA drivers are used instead of the ATI MACH32 video drivers.

FIX:

A patch is available that prevents a potential conflict between the Token Ring adapter and the ATI MACH32 video drivers. The patch may be obtained from the IBM PC Company BBS system or from the IBM Internal "VALUE" disk.

The file names are "DOSDCATI.DSK" and "DCODEATI.DSK" and may be downloaded from the IBM PC Company BBS at 919-517-0001.

----- IMPORTANT -----

```

| THE PATCHES ARE CUSTOMER INSTALLABLE. CUSTOMERS SHOULD
| BE ADVISED TO CONTACT THE PC COMPANY HELPCENTER AT
| 800-772 - 2227 IF ASSISTANCE IS REQUIRED IN GETTING THE
| APPROPRIATE UPDATE.

```

The diskette image will contain a "README" file with installation instructions.

If system hangs continue after the installation of the patch, continue normal problem determination to isolate the failing application(s) or fru.

Windows is a trademark of the MicroSoft Corporation
 ATI is a trademark of ATI Technologies, Inc.

SAS KEYWORDS:

VALUE POINT	PS/VP	PSVP	P60D
PSVPOPER	PSY2OPER	PSVPPROG	PSY2PROG
193	PSY2	189	199
PSVPCOMM	PSY2COMM	PENTIUM	

1.4.1524 6384 P60/D INTERMITTENT HANGS DURING MEMORY COUNT

Record number: H131348

Device: D/T6384
Model: M
Tip key:
Date created: 095/10/19
Date last altered: A95/10/19

SYMPTOM:

PS/Valuepoint 6384 P60/D systems may exhibit the following intermittent symptoms during POST:

1. Hang during memory count
2. Hang during memory count with green lines appearing through the "IBM" logo
3. Blank screen after completing POST

PROBLEM ISOLATION AIDS:

The incident that was reported from the field through the support structure, and root caused by engineering, could be reproduced by powering the system off/on at least 10 consecutive times.

FIX:

If the system intermittently fails with green lines through the "IBM" logo, or a blank screen after POST and/or hangs during the memory count, replace the system board.

SAS KEYWORDS:

VALUE POINT	PS/VP	PSVP	P60D
PSVPBRD	HANG	HUNG	PSY2BRD
PSY2DISP	PSVPDISP	PSVPPART	PSY2PART

1.4.1525 64XX FAILS WITH MORE THAN 16MB MEMORY INSTALLED

Record number: H124956

Device: D/T6482
 Model: M
 Tip key:
 Date created: 094/08/22
 Date last altered: A96/02/08

SYMPTOM:

The PS/ValuePoint Performance Series systems 6472, 6482, 6484, 6492, and 6494 with more than 16mb of system memory installed may experience any of the following problems.

- 1 - The IBM Token Ring 16/4 Adapter II or other busmaster adapter may fail to be recognized by the software, or fail to connect to the LAN.
- 2 - OS/2 returns a "SYS 3175" or other SYS messages when installing application software from diskette.
- 3 - OS/2 hangs during diskette drive read or write operations.
- 4 - OS/2 returns a "TRAP 02" message when starting Communication Manager.
- 5 - Windows NT returns a "SYS 3175" or other SYS message when installing application software from diskette.
- 6 - Unix returns a "Critical SYS Error" when installing application software from diskette.
- 7 - DOS DiskCopy may fail to reproduce diskettes correctly.
- 8 - General Protection Faults running Windows applications.

PROBLEM ISOLATION AIDS:

This tip applies ONLY if the failure can be eliminated by reducing the system memory to 16mb or less.

FIX:

If the failing system meets the conditions above, replace the system board.

- Windows NT is a trademark of Microsoft Corporation.
- Unix is a trademark of UNIX System Laboratories, Inc.

SAS KEYWORDS:

PSY2	PSVP	OS2	D/T6492
PS/VALUEPOINT	PS/VP	D/T6472	6472
TRAP	D/T6484	6484	D/T6494
6494	PSVPBRD	PSY2BRD	PSVPDSKT
VALUEPOINT	VALUE POINT	82G2397	PSY2DSKT
PSVPMEM	PSY2MEM	PSY2ADPT	PSVPADPT
HANG			

1.4.1526 64XX HANGS AFTER INSTALLING PCI ADAPTER

Record number: H126986

Device: D/T6484
 Model: M
 Tip key:
 Date created: 095/05/08
 Date last altered: A95/05/08

SYMPTOM:

The PS/ValuePoint 6484 or 6494 system hangs after installing a PCI adapter.

PROBLEM ISOLATION AIDS:

- This tip applies to 486DX2-33/66 MHZ PCI models:
 6484 - L4F, and L4G
 6494 - L5F,

And

6482 and 6492 486DX2-33/66 MHZ models with the PCI riser card option installed.

- This tip does NOT apply to VESA/ISA system or system running at micro-processor speeds other than 33/66mhz.
- Move the system board micro-processor speed jumpers (J17 and J18) from 33mhz to 25mhz; if the error can be reproduced at 25mhz, this tip does NOT apply, continue with normal problem determination.

FIX:

- If the system is a DX/2 33/66mhz PCI model and the failure can be eliminated by moving the processor speed jumpers from 33mhz to 25mhz, replace the riser card using FRU p/n82G3555 for 648x and FRU p/n82g3563 for 649x.

SAS KEYWORDS:

PSY2	PSVP	64XX	D/T6492
VALUEPOINT	PSY2ADPT	D/T6484	D/T6494
PSVPADPT	PSY2MISC	PSVPMISC	PS/VALUEPOINT
82G3555	82G3563	LOCK	

1.4.1527 64XX SYSTEM FAILURES W/128KB CACHE INSTALLED

Record number: H125116

Device: D/T6482
Model: M
Tip key:
Date created: 094/09/02
Date last altered: A97/07/13

SYMPTOM:

After installing 128kb L2 Cache Memory option p/n92g7228, or FRU p/n92G7430, ValuePoint 433SX-33 and 433DX-33 Performance Series systems may experience data modification, or fail with an operating system error (such as TRAP, parity, NMI, Fatal Error, etc.) or hang without displaying an error message.

PROBLEM ISOLATION AIDS:

- PS/ValuePoint diagnostics will run with out error.
- Systems with flash level 57A or higher are NOT affected.

FIX:

If the system meets the conditions listed above, install flash EEPROM level 57A or higher. 128KB cache options requiring Flash level 57A are packaged with customer instructions identifying this requirement.

If the failure occurs and flash 57A or higher is installed, continue with normal problem determination.

----- IMPORTANT -----
Flash updates are customer installable. Customers should be advised to contact the IBM PC Company HelpCenter at 800-772-2227 if assistance is required in getting or installing the appropriate update. Customers in Canada should call IBM's HelpPC at 800-565 - 3344

The FLASH code may be down-loaded from the IBM PC Company Bulletin Board System by calling 919-517-0001. If the customer cannot receive the code by modem, the HelpCenter will send the customer a copy on diskette.

Customers and dealers in Canada may download the code from their respective IBM regional bulletin board service.

SAS KEYWORDS:

PSY2	PSVP	PS/VP	VALUE POINT
D/T6472	D/T6484	D/T6492	D/T6494
6472	6482	6484	6492
6494	PSVPMEM	PSY2MEM	INTEGRITY
PSVPMCD	PSY2MCD		

1.4.1528 64XX SYSTEM HANG OR OPERATING SYSTEM ERROR

Record number: H025733

Device: D/T6482
 Model: M
 Tip key:
 Date created: 094/11/16
 Date last altered: A95/02/15

SYMPTOM:

PS/ValuePoint Performance Series system with Level 2 Cache fails with an operating system error (such as TRAP, Fatal Error, Panic Error, Critical System Error, General Protection Fault, etc.) or hangs with no error message displayed.

PROBLEM ISOLATION AIDS:

Use the System Configuration Utility to disable the level 2 cache and attempt to reproduce the error. If the error continues after the L2 cache is disabled, this tip does not apply. Re-enable the L2 Cache and continue with normal problem determination. If the error cannot be reproduced with the L2 cache disabled, this tip applies.

Note: Each time the system is powered on, L2 cache is automatically re-enabled.

FIX:

Replace the Level 2 cache modules using FRU p/n92G7430 for 128kb and FRU p/n92G7431 for 256kb.

SAS KEYWORDS:

PSY2	PSVP	OS2	D/T6492
TRAP000B	000B	TRAP000D	TRAP000E
TRAP	000D	000E	NON-MASKABLE
INTERRUPT	NON MASKABLE	HUNG	LOCKED
VALUEPOINT	VALUE POINT	64XX	D/T6494
D/T6472	6492	D/T6484	6472
6482	6484	6494	92G7430
92G7431			

PSY2 RETAIN TIPS
64XX VIDEO PROBLEMS

1.4.1529 64XX VIDEO PROBLEMS

Record number: H122328

Device: D/T6482
Model: M
Tip key:
Date created: O95/02/15
Date last altered: A95/02/24

SYMPTOM:

A limited number of ValuePoint Performance Series systems (64xx) contain video memory that, under some circumstances, may cause video problems such as:

- 1 - Characters, often unreadable, randomly appear on the screen
- 2 - A checker board pattern is displayed.
- 3 - Horizontal black lines pass through the displayed image.

PROBLEM ISOLATION AIDS:

Only system boards with video memory modules from Micron Technology are affected. The video memory modules are located between the video memory expansion sockets (VMEM 1 and VMEM 2) and the riser card connector. Modules from Micron Technology have "MT" before the part number printed on the module.

If the video memory modules are not marked "MT," this tip does not apply.

FIX:

If the system board contains video memory modules from Micron Technology, replace the system board.

Order p/n82G2397 for 25mhz, 33mhz, and 66mhz system boards and p/n06h6355 for DX/4 100mhz systems.

If the video memory modules are from any other manufacturer, continue with normal problem determination.

SAS KEYWORDS:

PSY2	PSVP	PSVPDISP	PSY2DISP
PSY2BRD	PSVPBRD	6472	6484
6492	6494	D/T6472	D/T6484
D/T6492	D/T6494	6482	

PSY2 RETAIN TIPS
64XX WITH QUATECH CARD HANGS

1.4.1530 64XX WITH QUATECH CARD HANGS

Record number: H124754

Device: D/T6482
Model: M
Tip key:
Date created: 094/07/27
Date last altered: A94/07/28

SYMPTOM: ValuePoint 64xx Performance series fails to start POST after the installation of a Quatech DS100S dual port serial card.

PROBLEM ISOLATION AIDS:

This TIP applies only if all the following conditions are met:

- 1 - The problem can be eliminated by removing the Quatech card.
- 2 - The card is Quatech DS100F revision B or higher. The revision is printed on a label on the card.
- 3 - The Quatech card has a capacitor in location c14.

If the failing system does not meet all of the above conditions, this TIP does not apply; continue with normal problem determination.

FIX:

If the system meets all the conditions listed above, the customer should be instructed to contact Quatech Technical Support at 1 - 800-553-1170 x122.

SAS KEYWORDS:

PSY2	PSVP	PS/VALUEPOINT	VALUE POINT
D/T6472	D/T6484	D/T6492	D/T6494
6472	6484	6492	6494
6482	PSY2ADPT	PSVPADPT	HANG

1.4.1531 6553 MONITOR - 2401 POST ERROR WITH DDC ENABLED

Record number: H132433 Number of altered copies: 1

Device: D/T6553
Model: M
Tip key:
Date created: 096/01/30
Date last altered: A96/01/30

SYMPTOM:

A 2401 POST error codes may be experienced on systems which have 6553 - 503 monitors attached.

PROBLEM ISOLATION AIDS:

Only 6553 - 503 monitors, in serial number range 2300001 to 2308886 are affected.

FIX:

A limited number of 6553-503 monitors have been distributed with a wrong DDC check sum code. This can result in a POST (Power-On System Test) error on systems that support DDC, if the DDC function is enabled in the system unit.

Temporary work-around:

The monitor and system will function normally if the DDC is disabled. This can be done in the Video Setup section of the BIOS (Basic Input-Output System).

Having disabled DDC, to ensure flicker free operation the following refresh rates should be entered in the Video Setup section of the BIOS:

Set the monitor type to: Custom

Set 640 by 480 to: 85Hz
Set 800 by 600 to: 85Hz
Set 1024 by 768 to: 75Hz
Set 1280 by 1024 to: 60Hz

An engineering investigation is currently in progress. A permanent solution for the problem is being formulated. This RETAIN tip will be updated when the final fix is available.

SAS KEYWORDS:

PSY2 PSY2DISP PSVP DISPLAY
6553 CRT PSY2TBD

1.4.1532 6554/6555 MONITOR DISPLAYS a GREEN TINT

Record number: H13655

Device: D/T8550
 Model: M
 Tip key:
 Date created: 095/08/28
 Date last altered: A95/11/09

SYMPTOM:

After connecting a 6554 or 6555 (P70/P200) monitor to a RISC, Power-PC, or X-Station system, an overall greenish tint may be observed.

PROBLEM ISOLATION AIDS:

This Tip is applicable only to the following monitor models:

Machine type: 6554 (P70) models 603 and 604
 6555 (P200) models 703 and 704

When attaching to RISC/6000, POWER PC and X-Station.

FIX:

This is probably not a hardware defect.

There is a switch on the rear panel of the monitor labeled, "BACKGROUND NORMAL/ADJUST." This switch is pre-set in the factory at the "NORMAL" setting. Some graphics adapters, when configured for certain modes, require this switch to be set to the "ADJUST" position. This change is due to the adapter supplying both external and composite syncs. The monitor can not distinguish which sync to use.

The following action should resolve the problem:

1. Power the system unit and monitor off.
2. Move the Background switch, located in the back of the monitor, to the "Adjust" position.
3. Power the system unit and monitor back on.

If the green tint is still observed, use normal problem determination procedures to isolate the defect.

SAS KEYWORDS:

PSY2	PSY2DISP	PLUTO	RISC 6000
D/T6555	D/T6554	DISPLAY	COLORPOINT
P70	P200	RS6000	RS/6000
GTX	VIDEO	NORMAL	ADJUST
FOS	FRONT		

Record number: H162608

Device: D/T967X
 Model: M
 Tip key:
 Date created: 098/02/03
 Date last altered: A98/02/03

SYMPTOM: After assembly and setup of a new system, the system exhibits a no-video or a no-power condition when the Off/On button is pressed.

Machine Type : 967X, 2003, 3000
 Machine Model: All
 Driver : 98G Above

PROBLEM ISOLATION AIDS: This TDR applies to IBM PC PC300PL systems. Machine Types 6562 and 6592.

This TDR only applies to those systems where the no-video or no-power condition is seen after assembly and setup of a new system. (IE: Planner Board Replacement)

If the error conditions are seen in machine type 6562, see steps 1 - 3 below.

If the no-video error condition is seen in machine type 6592, see steps 2 - 3 below.

FIX:

1. Remove and re-seat the system board as described on pages 32 - 36 of the 'Installing Options In Your Personal Computer' guide or refer to the IBM Personal Computer Hardware Maintenance Manual S83G-7789.

```
*****
* WARNING: DO NOT ATTEMPT THIS PROCEDURE UNTIL THE POWER CORD *
*           HAS BEEN UNPLUGGED FROM THE SYSTEM UNIT!           *
*                                                                 *
* Failure to unplug the power cord from the system unit       *
* BEFORE reseating the system board may result in permanent   *
* damage to the planar.                                        *
*****
```

It is not necessary to completely remove the system board from the system unit. Withdraw the system board until it has become disconnected from the riser card. Then, reseat the system board as described in step 5, page 34 of the 'Installing Options In Your Personal Computer' or refer to the IBM Personal Computer Hardware Maintenance Manual S83G-7789.

After reseating the system board, power on the system unit to retest for the error condition.

2. If the no-video failure persists after reseating the system board, or, if the no-video condition is seen in machine type 6592, reseat the processor 2 or 3 times and retest for the error condition.
3. If the no-video or no-power condition persists after completing the above steps, replace the system board with FRU P/N01K2145.

SAS KEYWORDS:

PSY2	PSY2BRD	PSY2PWR	PSVP
PSVPBRD	PSVPPWR	D/T6562	D/T6592
6562	6592	DEAD SYSTEM	UNCLASSIFIED
01K2145	9672HMC	967XHMC	2003SE
3000SE	9672	967X	

1.4.1534 6577/6587 SYSTEM W/2.5GB DRIVE SHOWS 2.0GB AVAILABLE

Record number: H137318

Device: D/T6577
 Model: M
 Tip key:
 Date created: 097/04/11
 Date last altered: A97/04/11

SYMPTOM:

IBM PC 300 Series 6577 and 6587 systems preloaded with Windows95 may display 2.0GB of "total disk space" with ScanDisk or CHKDSK, when performed on an IBM 2.5GB IDE hardfile containing only one partition.

PROBLEM ISOLATION AIDS:

A limited number of PC 300 Series 6577/6587 models KBT, 9BT, and LBV systems with Dates of Manufacture of 1/16/97 through 1/29/97, were manufactured with a 2.5GB IDE hardfile, FRU P/N76H0961, formatted for a single 2.0GB partition. The reason for the 2.0GB partition instead of a 2.5GB partition is due to the 2.0GB partition size limitation of the DOS operating system.

The result of this partitioning will make the remaining 500MB of disk unavailable.

The 2.5GB IDE hardfile should have contained a 2.0GB partition and a 500MB partition.

FIX:

To resolve this problem, run FDISK from Windows95 or a bootable DOS diskette to partition the remaining 500Mb.

If additional assistance is required, contact the IBM PC Company HelpCenter at 1-800-772-2227 or your country support center.

Windows95 is a trademark of the Microsoft Corporation.

SAS KEYWORDS:

PSVP	PSY2	PSVFDSK	PSY2FDSK
PSVPPART	PSY2PART	PSVPOPER	PSY2OPER
PSVPPROG	PSY2PROG	6587	D/T6587
UNCLASSIFIED			

1.4.1535 6598 FAILS WHEN AN AUDIO ADAPTER IS INSTALLED

Record number: H013820

Device: D/T6598
 Model: M
 Tip key:
 Date created: 096/04/02
 Date last altered: A96/04/02

SYMPTOM:

IBM PC 360-S200 6598 systems may fail with the following error conditions after installing an audio adapter card.

- The mouse fails to function after installing a Creative Labs SoundBlaster AWE 32 adapter card.
- The system repeatedly boots to the Setup Utility screen after installing a Media Vision Pro AudioSpectrum 16 or Pro AudioStudio 16XL.
- Various system failures not listed above following the installation of an Audio adapter.

PROBLEM ISOLATION AIDS:

Affected systems are PC 360-S200 6598 systems with a 200Mhz Intel Pentium Pro processor and an Adaptec PCI SCSI adapter installed. The operating system is Windows95. The failure occurs due to a resource conflict between the PCI, ISA, Plug 'n Play, and planar devices. The PCI and planar resources are setup by POST/BIOS code and the ISA Plug 'n Play resources are setup by Windows95. There is no user intervention available in any of the setup processes that will prevent the error from occurring.

FIX:

NOTE: The following steps will lead the servicer through the procedure for resetting CMOS. User documentation states that this procedure should NOT be used if the operating system is Windows95. The problem(s) outlined in this tip REQUIRE these steps to eliminate the failing condition.

- 1) Power the system off and remove the system unit top cover assembly.
- 2) Locate the configuration jumpers in position J25 on the system board.
- 3) Move jumper F from the Up position (default) to Down.
- 4) Turn the system unit on and wait for the prompt to enter the Setup Utility.
- 5) Power the system off prior to entering the Setup Utility and move jumper F back to the Up (default) position.
- 6) Power the system on and access the system Setup Utility by pressing F1 during the memory count.
- 7) Select the option to "Load Default Settings." Adapter resource settings may need to be verified in Windows95 after performing these steps.

Resetting CMOS is documented in the "Using Your Personal Computer" manual in Appendix C.

If the failure persists, continue normal problem determination to isolate the failing FRU or application.

Windows95 is a trademark of the Microsoft Corporation.

SAS KEYWORDS:

IBMPC	PSVP	PSY2	D/T65XX
6598	PC360	PENTIUMPRO	PSVPADPT
PSY2ADPT	PSVPOEM	PSY2OEM	PSVPERR
PSY2ERR			

1.4.1536 6877/6887 FAILS TO LOAD APPLICATIONS FROM a SERVER

Record number: H136004

Device: D/T6877
Model: M
Tip key:
Date created: 097/01/08
Date last altered: A97/01/08

SYMPTOM:

IBM PC 700 Series 6877 and 6887 systems may fail to load an application from a server.

PROBLEM ISOLATION AIDS:

The 6877/6887 will run the application locally from a hardfile or CDROM, but fails to run the application from a server.

This failure was reported on systems attempting to load WindowsNT Workstation 3.51 from a server and the operating system failed to run.

FIX:

Reseat the Level 2 Cache module and retest the failure. Perform all system diagnostics. If the failure reoccurs, perform hardware isolation (Remove-Retest-Replace) to eliminate the failing FRU or application.

WindowsNT is a trademark of the Microsoft Corporation.

SAS KEYWORDS:

PSVP	PSY2	IBMPC	PSY2PROG
PSVPPROG	PC 700	PC730	D/T6887
UNCLASSIFIED	PSVPMEM	PSY2MEM	52182

1.4.1537 6899 FAILS TO BOOT W/3COM ETHERLINK XL CARD

Record number: H136881

Device: D/T6899
 Model: M
 Tip key:
 Date created: 097/03/18
 Date last altered: A97/03/18

SYMPTOM:

IBM IntelliStation Z Pro 6899 systems may fail to boot with a 3Com Etherlink XL adapter and a Matrox Millennium MGA adapter are installed in "secondary" PCI slots.

PROBLEM ISOLATION AIDS:

The failure does not occur if one or both of the adapters are moved to a "Shared (Primary)" PCI slot.

FIX:

Ensure that the BIOS level of the system is level NKJT03A or higher.

Flash BIOS updates may be obtained from the IBM PC Company BBS system by calling 1-919-517-0001.

The Flash BIOS update may also be downloaded via the Internet from the IBM Personal Computer File Library by searching the following Internet URL:

<http://www.pc.ibm.com/files.html>

3Com Etherlink XL is a trademark of the 3Com Corporation.

Matrox Millennium is a trademark of Matrox Electronic Systems Ltd.

SAS KEYWORDS:

PSVP	PSY2	IBMPC	PSY2MCD
PSVPMCD	PWS	HANG	HUNG
UNCLASSIFIED	PSVPERR	PSY2ERR	LOCKUP
PSVPADPT	PSY2ADPT	PSVPOEM	PSY2OEM
57175			

1.4.1538 6899 FAILS TO POWER ON/OFF

Record number: H137768

Device: D/T6899
Model: M
Tip key:
Date created: 097/05/16
Date last altered: A97/05/16

SYMPTOM:

The IntelliStation Z Pro 6899 systems may fail to power on or off using the external on/off button.

PROBLEM ISOLATION AIDS:

Cover alignment can affect operation of the on/off button. Verify all AC power connections and check AC input power to the system unit. Remove the cover and test the system operation. If the system can not be turned on and off with the cover removed this tip does not apply.

FIX:

Loosen the top two screws and realign the top cover of the system. Before the screws are tightened press the power button to see if the unit powers up. If so, the problem has been fixed and should not reoccur. The two top cover screws can be retightened

SAS KEYWORDS:

PSVP	PSY2	PSY2PWR	PSVPPWR
DEAD	PWS	IBMPC	

1.4.1539 800X600 RESOLUTION CAUSES BLANK SCREEN IN WINDOWSNT

Record number: H123246

Device: D/T6272
Model: M
Tip key:
Date created: 097/04/15
Date last altered: A97/04/15

SYMPTOM:

IBM PC 300GL Series 6272 and 6282 systems may exhibit a blank screen when 800x600 resolution is selected from the Screen Control panel in the preloaded Japanese version of WindowsNT Workstation v3.51.

PROBLEM ISOLATION AIDS:

The Cirrus video drivers are not installed.

When VGA Graphics Adapter is selected in the Screen Control panel, 640x480 and 800x600 become selectable resolutions. When the user selects 800x600 and the Test button is clicked, the screen will blank requiring a system reboot.

FIX:

Restart the operating system and install the Cirrus video drivers for the PC 300GL 6272/6282 or select 640x480 resolution to use the native WindowsNT video drivers.

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SAS KEYWORDS:

PSVP	PSY2	PSVPDISP	PSY2DISP
IBMPC	60446	PSVPPROG	PSY2PROG
UNCLASSIFIED	PC 330	PC 340	PC300GL

PSY2 RETAIN TIPS

8513 CONNECTED TO a PS-2 8530 MAY DROP POWER.

1.4.1540 8513 CONNECTED TO a PS-2 8530 MAY DROP POWER.

Record number: H061062

Device: D/T8513
Model: M
Tip key:
Date created: O88/06/01
Date last altered: A93/06/07

SYMPTOM:

AN 8513 CONNECTED TO A PS-2 8530 MAY OCCASIONALLY DROP POWER
IF IT IS POWERED ON PRIOR TO POWERING ON THE PS-2 8530.

PROBLEM ISOLATION AIDS:

NONE

FIX:

THE PS-2 8530 SHOULD BE POWERED ON PRIOR TO POWERING
UP THE 8513.

SAS KEYWORDS:

D/T8530	D/T8513	8513DISP	PSY2DISP
FAILS	TO	LOOSE	LOSE
POWER	UP	DEAD	SHUTS
DOWN			

1.4.1541 8514/8515/8516 JITTER IN HIGH RESOLUTION MODES

Record number: H011356

Device: D/T8550
 Model: M
 Tip key:
 Date created: 090/05/11
 Date last altered: A94/02/22

SYMPTOM:

SOME USERS MAY PERCEIVE APPARENT FLICKER OR JITTER WHEN USING EITHER THE 8514/8515/8516 DISPLAYS IN HIGH RESOLUTION MODE (1024 X 768) ONLY. SOME APPLICATION PACKAGES, SUCH AS CAD SOFTWARE, INTENSIFY THIS EFFECT. THE EFFECT IS ALSO VISIBLE, WHILE RUNNING ADVANCED DIAGNOSTICS, BY SELECTING THE DISPLAY ADAPTER 8514/A TEST, AND VIEWING THE 1024 X 768 TEST PATTERN (REFERENCE 1 INCH BLOCK OF HORIZONTAL LINES).

THIS PERCEIVED FLICKER/JITTER EFFECT IS DUE TO THE INTERLACE DESIGN OF THE DISPLAY REFRESH. THIS IS A CHARACTERISTIC OF INTERLACED DISPLAYS AND DOES NOT INDICATE A DEFECTIVE DISPLAY.

PROBLEM ISOLATION AIDS:

PERCEIVED JITTER IS DUE TO THE WAY THAT THE HUMAN VISUAL SYSTEM INTERPRETS DISCRETE, SEQUENTIAL IMAGES (SUCH AS SEEN IN CINEMATOGRAPHY) AS SMOOTH AND CONTINUOUS. PERCEIVED JITTER IS NOT DUE TO ACTUAL MOVEMENT OF THE IMAGE, BUT INSTEAD TO THE RATE OF REFRESH.

TO DETERMINE IF THERE IS MOVEMENT WITHIN THE IMAGE:

- EXAMINE THE IMAGE AT A CLOSE DISTANCE (APPROX. 3 TO 4 INCHES) OR WITH A MAGNIFYING DEVICE, TO CONFIRM/DENY THE JITTER IS REAL.
- INTERLACE MODES ARE MORE SUSCEPTIBLE TO INTERFERENCE CAUSED BY MAGNETIC FIELDS RADIATED BY OTHER EQUIPMENT AND CARE SHOULD TAKEN TO DETERMINE THAT MAGNETIC INTERFERENCE IS NOT A PROBLEM (EG. INCREASE THE SEPARATION OR TURN OFF THE OTHER EQUIPMENT).
- IF ACTUAL JITTER IS FOUND, THE PROBLEM IS REAL AND THE DEFECTIVE FRU SHOULD BE DETERMINED BY NORMAL DEFECT DETERMINATION METHODS.

FIX:

THE FOLLOWING STEPS WILL MINIMIZE THE EFFECT:

- REDUCE THE BRIGHTNESS OF THE IMAGE.
- REDUCE THE CONTRAST BETWEEN FOREGROUND AND BACKGROUND.
- AVOID HORIZONTAL SINGLE PEL LINES.
- USE REVERSE VIDEO IMAGES (BLACK ON WHITE)

SAS KEYWORDS:

PSY2	8514DISP	8515DISP	PSY2DISP
8516DISP	D/T8514	D/T8515	D/T8516

1.4.1542 8515/8516 EXHIBITS DISTORTED VIDEO WHEN ATTACHED TO 8530

Record number: H094152

Device: D/T8530
 Model: M
 Tip key:
 Date created: 091/10/03
 Date last altered: A91/10/09

SYMPTOM:

PS/2 8530(8086 VERSION) EXHIBITS COMPRESSED AND DISTORTED VIDEO WHEN CONNECTED TO A 8515 OR 8516 DISPLAY.

PROBLEM ISOLATION AIDS:

-8530 (8086 VERSION) MODELS 001, 002, AND 021 DO NOT SUPPORT ATTACHED PS/2 8515 AND 8516 DISPLAYS.

-8530 (8086 VERSION) MODELS 001, 002, AND 021 ARE SUPPORTED WITH THE FOLLOWING ATTACHED PS/2 DISPLAYS: 8503, 8504, 8507, 8512, 8513, 8514.

-8530 (286 VERSION) MODELS E01, E21, E31, AND E41 ARE SUPPORTED WITH THE FOLLOWING ATTACHED PS/2 DISPLAYS: 8503, 8504, 8512, 8513, 8514, 8515, 8516.

FIX:

ADVISE CUSTOMER THAT 8515 AND 8516 DISPLAYS ARE NOT SUPPORTED ON 8086 VERSION OF THE 8530, AND THEY SHOULD CONSULT THEIR POINT OF SALE IF REQUIRED. NORMAL PROBLEM ISOLATION PROCEDURES SHOULD BE USED ON SUPPORTED DISPLAYS EXHIBITING THE ABOVE SYMPTOMS.

SAS KEYWORDS:

D/T8515	D/T8616	PSY2DISP	PSY2
8515DISP	8516DISP		

1.4.1543 8525 DISPLAY EXHIBITS CURVED, SHADOWY LINES

Record number: H081172

Device: D/T8525
Model: M
Tip key:
Date created: 091/03/21
Date last altered: A91/08/07

SYMPTOM:

AN 8525 DISPLAY MAY EXHIBIT A PATTERN OF CURVED SHADOWY LINES. THESE LINES, OR STRIPES, WILL TYPICALLY BE SEEN ONLY IN SOLID BLOCKS OF COLOR, SUCH AS IN THE DISPLAY BACKGROUND. THIS EFFECT OCCURS ONLY WHILE IN 640 X 480 OR 640 X 200 MODES.

PROBLEM ISOLATION AIDS:

THE SHADOWY LINES WILL NOT APPEAR NOTICEABLE IN ALL DISPLAY MODES. THE EFFECT MAY BE NOTICEABLE IN THE GRAY BLOCKS OF THE 640 X 480 DISPLAY TEST OF ADVANCED DIAGNOSTICS. THE LINES CAN VARY IN SIZE AND DIRECTION, AND THEIR PROMINENCE CAN BE ALTERED BY CHANGING BRIGHTNESS AND/OR CONTRAST.

FIX:

THIS PERCEPTION OF SHADOWY LINES OR STRIPES IS CALLED "MOIRE" EFFECT. THIS EFFECT IS THE PRODUCT OF CRT PHOSPHOR, FIXED DOT PITCH, SELECTED VIDEO MODE, AND SELECTED COLOR. MOIRE EFFECT IS A DESIGN CONSIDERATION AND NOT A DEFECT, AND CANNOT BE ELIMINATED BY HARDWARE REPLACEMENT.

IF THE MOIRE EFFECT IS NOTICEABLE AND UNDESIRABLE, THE COLOR AND/OR DISPLAY MODE SHOULD BE CHANGED IN SOFTWARE. CUSTOMERS SHOULD BE DIRECTED TO THEIR SOFTWARE SUPPORT OR POINT OF SALE IF ASSISTANCE IS REQUIRED.

SAS KEYWORDS:

PSY2 PSY2DISP 8525SYSDISP 8525SYSDIAG
PSY2DIAG

1.4.1544 8525 DISPLAY IMAGE ROLL

Record number: H025907

Device: D/T8525
Model: M
Tip key:
Date created: 088/03/02
Date last altered: A92/01/08

SYMPTOM: LOSS OF HORIZONTAL AND/OR VERTICAL SYNCRONIZATION (SYNC) ON 8525 COLOR DISPLAYS.
LOSS OF SYNC MEANS THAT THE DISPLAY IMAGE WILL APPEAR TO "ROLL" HORIZONTALLY OR VERTICALLY.

PROBLEM ISOLATION AIDS:

THE FOLLOWING VOLTAGE MEASUREMENTS CAN IDENTIFY FAILING FRU'S.

FIX:

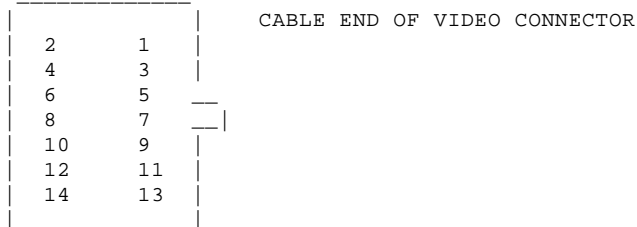
THE FOLLOWING TEST PROCEDURE WILL HELP TO IDENTIFY FAILING FRU'S FOR A ROLLING SCREEN CONDITION.

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-- TEST PROCEDURE --

- 1) WITH THE POWER SWITCH OFF REMOVE THE AC LINE CORD FROM THE WALL OUTLET AND THEN FROM THE 8525. OPEN THE SYSTEM UNIT AND UNPLUG VIDEO CONNECTOR (J4) FROM SYSTEM BOARD. LEAVE THE SYSTEM UNIT OPEN AT THIS TIME.
- 2) PLUG THE AC LINE CORD INTO 8525 AND THE WALL OUTLET. TURN THE 8525 POWER SWITCH ON. ENSURE THAT THE POWER IS ON BY LISTENING TO THE FAN.

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TEST PROCEDURES CONTINUE ON NEXT SCREEN

- 3) LOCATE PIN 9 (HORIZONTAL SYNC) AND PIN 11 (VERTICAL SYNC) ON THE CABLE END OF THE VIDEO CONNECTOR (J4).



- 4) WITH A DIGITAL VOLTMETER, MEASURE THE VOLTAGE BETWEEN PIN 9 AND GROUND, AND THEN BETWEEN PIN 11 AND GROUND (PINS 7 AND 8 ARE GROUND) AND RECORD VOLTAGES.
- 5) THE VOLTAGE MEASUREMENTS SHOULD BE BETWEEN 4.9 AND 5.2 VOLTS DC, BUT MORE IMPORTANTLY, BOTH SHOULD BE THE SAME VALUE (WITHIN .1 VOLT OF EACH OTHER).
- 6) IF THE VOLTAGES MEASUREMENTS ARE WITHIN TOLERANCE, THE SYSTEM BOARD SHOULD BE REPLACED.
- 7) IF THE VOLTAGE MEASUREMENTS ARE NOT WITHIN TOLERANCE, THE DISPLAY SHOULD BE REPLACED. IF THE SCREEN CONTINUES TO ROLL AFTER REPLACING THE DISPLAY, THEN THE SYSTEM BOARD HAS BEEN DAMAGED AND SHOULD ALSO BE REPLACED.

SAS KEYWORDS:

PSY2 8525DISP 8525SYSBRD PSY2DISP
PSY2BRD D/T8525

1.4.1545 8525-286,1.44MB DISKETTE DRIVE OPTION INSTALLATION PROBLEM

Record number: H066795

Device: D/T8525
Model: M
Tip key:
Date created: 091/05/24
Date last altered: A91/05/24

SYMPTOM:

A LIMITED NUMBER OF 8525-286, 1.44MB DISKETTE DRIVE OPTIONS (P/N6451063) WERE SHIPPED WITH AN INCORRECT MOUNTING BRACKET. THIS BRACKET DOES NOT ALLOW THE DISKETTE DRIVE TO BE CORRECTLY INSTALLED IN THE 8525-286 SYSTEM UNIT. AFFECTED OPTION STOCK WILL BE SORTED AND REWORKED.

PROBLEM ISOLATION AIDS:

MOUNTING HOLES IN THE DISKETTE DRIVE BRACKET WILL NOT LINE UP WITH MOUNTING HOLES IN THE SYSTEM FRAME.

FIX:

CUSTOMER SHOULD RETURN THE DEFECTIVE OPTION TO THEIR POINT OF SALE FOR REPLACEMENT.

NOTE:

DO NOT ORDER A DISKETTE DRIVE FRU AS A REPLACEMENT FOR THE DEFECTIVE OPTION. FRU INSTALLATION REQUIRES USE OF THE ORIGINAL DISKETTE DRIVE MOUNTING HARDWARE, WHICH IN THIS CASE WILL BE INCORRECT DUE TO THE DEFECTIVE OPTION.

SAS KEYWORDS:

PSY2	D/T8525	PSY2MISC	PSY2PART
PSY2DSKT	8525SYSDSKT	8525SYSMISC	8525SYSPART

1.4.1546 8525SX HARD DISK ERRORS 1780, 1712, NOISE

Record number: H06952

Device: D/T8525
Model: M
Tip key:
Date created: 093/07/12
Date last altered: A94/06/22

SYMPTOM:

8525SX WITH AN IBM 16/4 TOKEN RING CARD AND 80MB HARD
FILE INSTALLED MAY EXPERIENCE ANY OF THE FOLLOWING PROBLEMS.
PROBLEMS MAY BE INTERMITTENT OR SOLID.

- 1 - POST ERROR 1780
- 2 - DIAGNOSTICS ERROR 1712
- 3 - NOISY HARD FILE; NOISE MAY APPEAR TO BE METAL TO METAL
SCRAPING OR CLICKING.

PROBLEM USUALLY OCCURS AFTER HARDWARE CONFIGURAION IS CHANGED
BY ADDING A TOKEN RING CARD OR IBM 80MB HARD FILE.

PROBLEM ISOLATION AIDS:

IT IS POSSIBLE THAT ADAPTERS OTHER THAN THE IBM 16/4 TOKEN RING
WILL CAUSE THE ABOVE ERRORS. IF REMOVING AN ADAPTER ELIMINATES
THE ERROR, THIS TIP APPLIES.

FIX:

CONTACT LEVEL 2 HARDWARE SUPPORT IN BOCA RATON VIA
THE NORMAL SERVICE SUPPORT STRUCTURE.

ENGINEERING WILL PROVIDE A TOROID (HIGH FREQUENCY CHOKE)
TO BE INSTALLED ON THE HARD FILE CABLE BETWEEN THE REAR FOOT
AND RIGHT SIDE OF THE FRAME.

SAS KEYWORDS:

PSY2	PSY2ERR	PSY2COMM	PSY2FDSK
PSY2ADPT	8525	COMMUNICATIONS	COMM
ETHERNET	E-NET	TOROID	

1.4.1547 8525SX, 8535, 8540 COM1/LPT1 DISABLED AFTER AUTO-CONFIG

Record number: H011931

Device: D/T8535
 Model: M
 Tip key: 003
 Date created: 092/05/06
 Date last altered: A92/10/02

SYMPTOM:

ON PS/2 MODELS 8525SX, 8535, AND 8540, THE SERIAL PORT (COM1) OR PARALLEL PORT (LPT1) MAY FAIL TO FUNCTION AFTER RUNNING AUTOMATIC CONFIGURATION WHEN TWO SERIAL ADAPTERS OR TWO OR MORE PARALLEL ADAPTERS ARE INSTALLED.

THIS PROBLEM HAS BEEN FIXED IN ADVANCED DIAGNOSTIC DISKETTE VERSION 1.21 AND ABOVE. ALSO, STARTER DISKETTE VERSION 1.21 AND ABOVE WILL CONTAIN THIS FIX. THESE VERSIONS ARE NOT CURRENTLY AVAILABLE, BUT ARE SCHEDULED FOR RELEASE IN DECEMBER 1992.

FIX:

THE FOLLOWING PROCEDURE CAN BE USED TO BYPASS THE COM1/LPT1 PROBLEM UNTIL USING THE VERSION 1.21 DISKETTE.

A. "COM1" DISABLED:

- REMOVE SERIAL ADAPTERS.
- RUN AUTOMATIC CONFIGURATION.
- USE SET CONFIGURATION TO DISABLE THE SYSTEM BOARD SERIAL PORT.
- REINSTALL SERIAL ADAPTERS.
- DO NOT RERUN AUTOMATIC CONFIGURATION.

B. "LPT1" DISABLED:

- REMOVE PARALLEL ADAPTERS.
- RUN AUTOMATIC CONFIGURATION.
- USE SET CONFIGURATION TO DISABLE THE SYSTEM BOARD PARALLEL PORT.
- REINSTALL PARALLEL ADAPTERS.
- DO NOT RERUN AUTOMATIC CONFIGURATION.

IF THE ABOVE PROCEDURES DO NOT CORRECT THE PROBLEM, NORMAL PROBLEM DETERMINATION METHODS SHOULD BE USED TO ISOLATE THE PROBLEM TO THE DEFECTIVE FRU.

SAS KEYWORDS:

PSY2	D/T8525	D/T8540	PSY2DIAG
PSY2COMM	PSY2PRT	8525SYSDIAG	8525SYSCOMM
8525SYSPRT	8535SYSDIAG	8535SYSCOMM	8535SYSPRT
8540SYSDIAG	8540SYSCOMM	8540SYSPRT	

1.4.1548 8530 CURSOR KEYS PRODUCE CHARACTERS ON SCREEN

Record number: H06118

Device: D/T8530
Model: M
Tip key:
Date created: 090/06/18
Date last altered: A90/06/18

SYMPTOM:

ON A LIMITED NUMBER OF PS/2 8530 SYSTEMS, USE OF THE CURSOR MOVEMENT KEYS MAY CAUSE UNEXPECTED CHARACTERS TO APPEAR ON THE DISPLAY. THIS PROBLEM IS LIMITED TO 8530 MODELS 001 AND 021 ONLY. THIS PROBLEM MAY BE INTERMITTENT, AND MAY NOT BE DETECTED BY ADVANCED DIAGNOSTICS.

PROBLEM ISOLATION AIDS:

IF SYMPTOMS APPEAR AS DESCRIBED, VISUALLY INSPECT THE 8530 SYSTEM BOARD I/O GATE ARRAY CHIP IN POSITION U9. THIS ONE INCH SQUARE CHIP WILL HAVE PART NUMBER 72X8203 PRINTED ON IT, AND WILL BE LOCATED NEXT TO THE CENTER MOUNTING SCREW OF THE SYSTEM BOARD.

GOOD CHIPS WILL HAVE THE WORD "JAPAN" PRINTED ON THEM; AFFECTED CHIPS WILL NOT.

FIX:

IF THE I/O GATE ARRAY CHIP IN POSITION U9 DOES NOT HAVE "JAPAN" PRINTED ON IT, THE SYSTEM BOARD, FRU P/N33F8474, SHOULD BE NEW REPLACED.

SAS KEYWORDS:

PSY2 PSY2SYSBRD 8530SYSBRD

1.4.1549 8535 W/OEM DISK SHUTS DOWN JUST AFTER POWER ON

Record number: H101787

Device: D/T8535
Model: M
Tip key:
Date created: 092/11/18
Date last altered: A92/11/18

SYMPTOM:

PS/2 8535 WITH AN OEM HARDFILE MAY INTERMITTENTLY SHUT DOWN SEVERAL SECONDS AFTER SYSTEM POWER IS TURNED ON. THE SYSTEM POWER ON INDICATOR WILL BE OFF, THE DISPLAY WILL BE BLANK.

PROBLEM ISOLATION AIDS:

SOME OEM HARDFILES HAVE POWER REQUIREMENTS THAT EXCEED THE CAPABILITIES OF THE 8535 POWER SUPPLY. WHEN THIS INCOMPATIBILITY EXISTS, THE 8535 POWER SUPPLY WILL SELF-PROTECT BY SHUTTING DOWN.

FIX:

REMOVE THE OEM HARDFILE; IF THE SYSTEM FUNCTIONS PROPERLY AND PASSES DIAGNOSTIC TESTING, REFER THE CUSTOMER TO THEIR OEM HARDFILE POINT OF SALE FOR PROBLEM RESOLUTION. IF THE SYMPTOM REMAINS, ISOLATE AND REPLACE FAILING FRU USING NORMAL PROBLEM DETERMINATION.

SAS KEYWORDS:

PSY2 PSY2FDSK SEAGATE ST351A
FIXED

1.4.1550 8535/40 W/OEM HAS BLANK SCREEN, NO POWER ON LED

Record number: H10579

Device: D/T8540
 Model: M
 Tip key: 009
 Date created: 092/08/14
 Date last altered: A93/03/12

SYMPTOM:

PS/2 8535 AND 8540 SYSTEMS MAY EXHIBIT A BLANK SCREEN WHEN OEM HARDWARE IS CONNECTED TO THE SYSTEM BOARD SERIAL OR PARALLEL PORT, OR TO AN ADAPTER CARD. THE SYSTEM UNIT POWER ON "LED" INDICATOR, LOCATED JUST TO THE LEFT OF THE POWER SWITCH, WILL REMAIN OFF WHEN POWER SWITCH IS ON.

THIS FAILURE SYMPTOM MAY BE CAUSED BY INCORRECT VOLTAGE OR CURRENT BEING APPLIED BY OEM HARDWARE TO THE PS/2 PARALLEL OR SERIAL PORT, OR TO AN ADAPTER CARD. THE UNEXPECTED VOLTAGE OR CURRENT CONDITION IS SENSED (AT POWER ON) BY THE PS/2 POWER SUPPLY AS AN ERROR CONDITION. THE POWER SUPPLY WILL NOT TURN ON UNTIL THIS ERROR CONDITION IS REMOVED (EXTERNAL HARDWARE TURNED OFF, REMOVED, OR INTERCONNECTING CABLE DISCONNECTED)

FIX:

PS/2 SYSTEMS THAT EXHIBIT A BLANK SCREEN SHOULD BE RETESTED WITH ALL OEM SERIAL, PARALLEL, AND I/O DEVICES DISCONNECTED. IF REMOVAL OF THESE DEVICES AND CABLES ELIMINATE THE FAILURE SYMPTOM, THE PROBLEM IS NOT IN THE PS/2 SYSTEM. PROBLEM DETERMINATION SHOULD CONTINUE, AS DESCRIBED BELOW, UNTIL THE PROBLEM IS ISOLATED TO A FAILING DEVICE AND/OR CABLE.

1. RECONNECT OEM DEVICES ONE AT A TIME. TURN ON OEM DEVICE POWER FIRST AND THEN SYSTEM POWER, UNTIL THE BLANK SCREEN SYMPTOM RETURNS (SEE NOTE BELOW).
2. UPON RETURN OF SYMPTOM, REVERSE POWER ON SEQUENCE (TURN ON SYSTEM POWER FIRST). IF THE PROBLEM DOES NOT RETURN, THIS POWER ON SEQUENCE COULD BE USED AS A TEMPORARY WORK-AROUND UNTIL A PERMANENT OEM SOLUTION CAN BE OBTAINED (SEE "CAUTION" BELOW).
3. WHEN THE FAILING OEM DEVICE HAS BEEN ISOLATED, THE CUSTOMER SHOULD BE ADVISED TO CONTACT THE POINT OF SALE OR THE MANUFACTURER OF THE DEVICE FOR ASSISTANCE TO RESOLVE THE PROBLEM. THE FAILING DEVICE SHOULD NOT BE RECONNECTED TO THE SYSTEM UNTIL THE PROBLEM IS FIXED (SEE CAUTION BELOW).

***** CAUTION *****
 INCORRECT VOLTAGES OR CURRENT APPLIED TO ANY PS/2 SYSTEM BOARD PORT MAY CAUSE PERMANENT DAMAGE TO THE SYSTEM. THE SYSTEM DOES NOT HAVE TO BE OPERATING FOR THESE VOLTAGES OR CURRENTS TO CAUSE PERMANENT DAMAGE TO INTERNAL COMPONENTS OF THE PS/2 SYSTEM. TIME IS A FACTOR; THE LONGER THE INCORRECT VOLTAGE OR CURRENT IS APPLIED THE HIGHER PROBABILITY THERE WILL BE PERMANENT DAMAGE. THIS FACTOR SHOULD BE ADDRESSED PRIOR TO USING THE "TEMPORARY WORK AROUND" DESCRIBED IN THIS TIP.

NOTE:

IF REMOVAL OF OEM DEVICES AND CABLES DOES NOT ELIMINATE THE BLANK SCREEN SYMPTOM, LEAVE ALL THESE DEVICES AND CABLES DISCONNECTED AND FOLLOW NORMAL PROBLEM DETERMINATION PROCEDURES TO ISOLATE AND REPLACE THE FAILING FRU.

SAS KEYWORDS:

PSY2	D/T8535	PSY2ERR	PSY2PRT
PSY2ADPT	PSY2PWR	8535SYSVRT	8540SYSVRT
8535SYSADPT	8540SYSADPT		

8543 KEYBOARD ENTRY GIVES UNEXPECTED RESULTS

1.4.1551 8543 KEYBOARD ENTRY GIVES UNEXPECTED RESULTS

Record number: H102353

Device: D/T8543
Model: M
Tip key:
Date created: 092/10/07
Date last altered: A92/10/07

SYMPTOM:

UNEXPECTED RESULTS CAN OCCUR WHEN KEYING QUICKLY ON SOME 8543s.
IN SOME CASES THE "TH" COMBINATION WILL APPEAR TO BE A PF6 KEY
STROKE. OTHER KEYING VARIATIONS COULD ALSO OCCUR.

PROBLEM ISOLATION AIDS:

FIX:

A FIX IN THE FORM OF A PATCH IS AVAILABLE ON PCTOOLS. THE FILE
IS CALLED "L40_FIX".

SAS KEYWORDS:

PSY2 PSY2ERR PSY2KYBD KEYBOARD
D/T8543

1.4.1552 8550 LOSS OF TIME

Record number: H014814

Device: D/T8550
Model: M
Tip key:
Date created: 088/12/13
Date last altered: A93/05/07

SYMPTOM: 8550'S MAY EXPERIENCE A LOSS OF TIME. IN MOST CASES THE CAUSE OF THESE PROBLEMS WILL BE OF SOFTWARE ORIGIN (I.E. OPERATING SYSTEM/PROGRAMS).

PROBLEM ISOLATION AIDS: NONE

FIX: A SOFTWARE PATCH IS REQUIRED TO CIRCUMVENT FAILURES NOT CAUSED BY A HARDWARE DEFECT. VERIFICATION OF THE CORRECT INSTALLATION OF THE APPROPRIATE SOFTWARE PATCH IS THE RESPONSIBILITY OF THE CUSTOMER OR THEIR POINT OF SALE (I.E. AUTHORIZED DEALER OR IBM SYSTEMS ENGINEER (SE)).

FOR CUSTOMERS RUNNING UNDER DOS, ENSURE THAT THE DASDDRVR PATCH IS INSTALLED CORRECTLY. IN ADDITION, THERE IS A PATCH REQUIRED SPECIFICALLY FOR THE 3270 WORKSTATION PROGRAM (SEE APAR #IR78323 IN THE SOFTWARE SUPPORT FACILITY OF RETAIN)
NOTE: THE SYSTEM UPDATE DISKETTE CONTAINS DASDDRVR. THE UPDATE CAN BE OBTAINED BY INSTRUCTIONS PROVIDED IN HSF RECORD NUMBER H037906

ADDITIONAL SOFTWARE PATCH INFORMATION IS AVAILABLE TO SOFTWARE SUPPORT REPRESENTATIVES VIA THE HONE AND CSS SYSTEMS.

DIAGNOSTICS SHOULD BE RUN USING THE PERSONAL SYSTEM/2 REFERENCE DISKETTE VERSION 1.02 OR ABOVE. EARLIER LEVELS OF THE REFERENCE DISKETTE HAVE THE POTENTIAL TO FORCE THE LOSS OF TIME PROBLEM IF THE SYSTEM IS POWERED OFF WHILE RUNNING DIAGNOSTICS. THE CURRENT MODEL 50/60 REFERENCE DISKETTE IS VERSION 1.06

NOTE: AN APPLICATION PROGRAM RUNNING UNDER DOS VERSION 3.3 WHICH RECORDS THE TIME IN HOURS AND MINUTES ONLY COULD CAUSE THE SYSTEM TO LOOSE SECONDS WHEN THE PROGRAM UPDATES THE SYSTEM CMOS. FOR EXAMPLE, IF THE SYSTEM TIME WAS 10: 30: 39 THEN 39 SECONDS WOULD BE LOST WHEN THE PROGRAM UPDATED TIME IN THE CMOS CIRCUITRY. THE AMOUNT OF LOST TIME PER DAY WOULD BE DEPENDENT ON HOW OFTEN THE CUSTOMER LOADS THE APPLICATION PROGRAM. IF THE SYSTEM LOSES TIME WHILE ITS POWERED OFF, THEN THE APPLICATION PROGRAM IS NOT A FACTOR.

SAS KEYWORDS:

PSY2	8550SYSPROG	8550SYSERR	8550SYSDIAG
PSY2PROG	PSY2ERR	PSY2DIAG	CLOCK

1.4.1553 8550Z HANGS ON POST WITH 3270 ADAPTER

Record number: H037659

Device: D/T8550
Model: M
Tip key:
Date created: 090/04/20
Date last altered: A90/04/20

SYMPTOM: 8550Z MOD 031 AND 061 WITH 3270 CONNECTION ADAPTER
FRU P/N74F3458 INSTALLED MAY FAIL TO COMPLETE POST WITH NO BEEP
AND NO ERROR CODE POSTED.

PROBLEM ISOLATION AIDS: SHOULD THE ABOVE CONDITION EXIST,
REMOVE THE 3270 ADAPTER CARD AND RECONFIGURE THE SYSTEM. IF
THE 8550 WILL THEN COMPLETE POST WITHOUT ERROR, REPLACE THE
3270 CONNECTION ADAPTER WITH FRU P/N74F4459.

FIX: REPLACE WITH LATEST LEVEL 3270 CONNECTION ADAPTER
FRU P/N74F4459.

SAS KEYWORDS:

PSY2	8550SYSADPT	PSY2ADPT	8550SYSCOMM
PSY2COMM	8550SYSERR	PSY2ERR	

1.4.1554 8550Z W/PROCESSOR UPGRADE HANGS DURING POST

Record number: H124797

Device: D/T8550
 Model: M
 Tip key:
 Date created: O94/08/08
 Date last altered: A94/08/15

SYMPTOM:

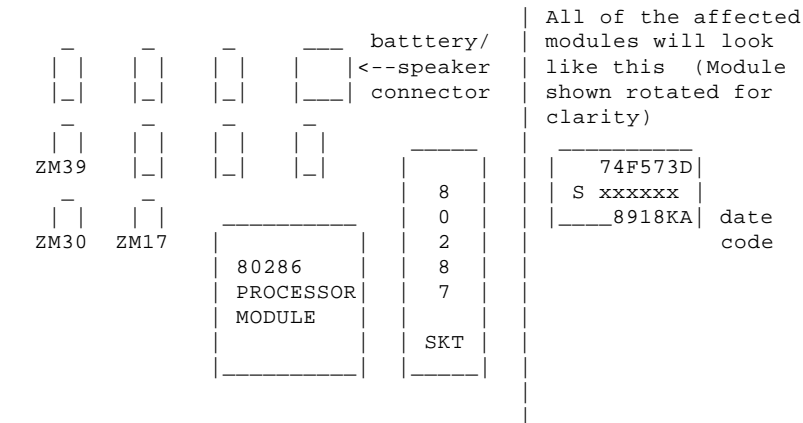
A limited number of 8550Z systems may experience a hang during the POST (Power-On-System-Test) memory count after installation of the 8550Z 486SLC2-50 Processor Upgrade, marketing part number 70G7092, FRU P/N71G2633.

PROBLEM ISOLATION AIDS:

ALL of the following MUST BE TRUE, for this tip to apply:

- A. The system functioned normally prior to the upgrade.
- B. If the upgrade is removed, the system will function normally and the diagnostics will run error-free.
- C. The modules at system board locations ZM17, ZM30 and ZM39 must have a large "S" on the left side of the module. Refer to the following diagram for the locations of the affected these modules:
- D. The module identified above, also has a six character date code such as, 8918KA. If the sixth character position of this code is either an "A" or is blank, the module is affected. If any other Alphanumeric character is in this position the system board is NOT AFFECTED.

Refer to the following diagram for the locations of these modules:



FIX:

If this problem is encountered during the installation of the processor upgrade:

Replace the system board with one which does not have the large "S" on the modules referenced above or with one which DOES HAVE a large "S" on the module but DOES NOT have an "A" as the last character of the date code suffix.

It has been determined that only a small percentage of 8550Z system boards were manufactured with the affected modules. No other functional problem is associated with these modules. This is a compatibility problem related only to the 80486 processor upgrade.

Because of the limited exposure and the large quantity of this FRU throughout the Mechanicsburg Parts System, no stock action will be initiated to purge this specific system board FRU. However, action has been taken with the FRU parts source to eliminate the identified module from future FRU stock replenishments.

Upon physical inspection, unused system board FRU's with the large "S" and the "A" in the suffix should be returned to the parts distribution system as "good," because they are useable in non-upgraded systems.

FRU 72X8516 - 8550Z SYSTEM BOARD

PSY2 RETAIN TIPS

8550Z W/PROCESSOR UPGRADE HANGS DURING POST

SAS KEYWORDS:

PSY2

HYPERTEC

PROCESSOR

PSY2ERR

HYPERACE

COMPLEX

PSY2ADPT

72X8516

PSY2PART

HANGS

8550Z

1.4.1555 8551 MOUSE FAILS CUSTOMER OPERATION. DIAGS WORK.

Record number: H10533

Device: D/T8551
Model: M3T1
Tip key:
Date created: 092/11/10
Date last altered: A97/12/05

SYMPTOM:

The 8551 Model 3T1 ACIS (Academic Information Systems) may experience out of box mouse failure because some systems were not factory configured with the mouse attached.

PROBLEM ISOLATION AIDS:

Advanced diagnostics and customer level diagnostic will not fail if this is the problem.

FIX: Do not replace any FRUs. Reconfigure the system with the mouse attached using the auto-configuration option on the reference diskette. This will reset the factory "run in bit," used for line testing, to a customer ship configuration allowing normal mouse operation.

SAS KEYWORDS:

PSY2	PSY2MOUSE	PSY2BRD	P/N95F5723
P/N61X8923	FRU	UNCLASSIFIED	

1.4.1556 8551 SUSPENDS AFTER POWER ON

Record number: H083491

Device: D/T8551
Model: M
Tip key:
Date created: 094/12/28
Date last altered: A97/12/05

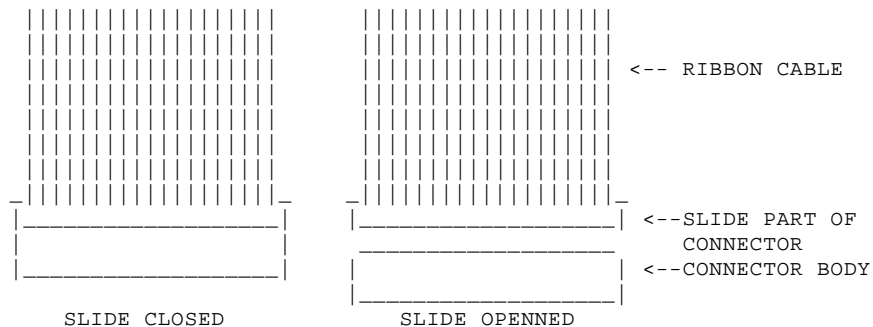
SYMPTOM:

The 8551 may suspend after or during post if the ribbon cable connecting the square voltage converter board to the main voltage converter is loose. The square voltage converter circuit board, cable, and main power board make up the voltage converter, FRU P/N07G1219.

PROBLEM ISOLATION AIDS:

FIX:

This cable has zero insertion force (ZIF) connectors. Ensure the cable is fully inserted and the connectors are locked down.



SAS KEYWORDS:

PSY2

PSY2ERROR

PSY2

UNCLASSIFIED

1.4.1557 8555 HANGS WITH MICROSOFT WINDOWS 2.11

Record number: H001066

Device: D/T8555
Model: M
Tip key:
Date created: 090/11/08
Date last altered: A91/10/03

SYMPTOM:

MICROSOFT WINDOWS VERSION 2.11 MAY FAIL IN AN 8555.

THE SYMPTOMS MAY APPEAR AS FOLLOWS:

1. THE SYSTEM MAY HANG WHEN LOADING WINDOWS 2.11 FROM THE FIXED DISK.
2. THE SYSTEM MAY HANG WHEN LOADING A DIFFERENT APPLICATION FROM THE FIXED DISK WHILE THE SYSTEM IS OPERATING UNDER WINDOWS 2.11.

PROBLEM ISOLATION AIDS:

8555 DIAGNOSTICS RUN WITHOUT ERROR.

THIS PROBLEM WILL OCCUR ONLY IN 55SX MACHINES OPERATING WITH AN ESDI FIXED DISK. SYSTEMS OPERATING WITH SCSI OR ST-506 FIXED DISKS ARE NOT AFFECTED.

DRIVE TYPE CAN BE DETERMINED BY USING "VIEW CONFIGURATION" ON THE SYSTEM REFERENCE DISKETTE. ST-506 DRIVES ARE IDENTIFIED AS "TYPE OF DRIVE...33". ESDI DRIVES DO NOT LIST A DRIVE TYPE, AND SCSI DRIVES CAN BE IDENTIFIED BY THE INSTALLED SCSI ADAPTER.

FIX:

CUSTOMERS EXPERIENCING THIS PROBLEM CAN OBTAIN A COPY OF THE "WIN386 VER 2.11 ESDI HARDFILE SYSTEM UPDATE DISKETTE" BY CALLING 800-426-7282 AND ASKING FOR DISKETTE "85F1680".

THE UPDATE DISKETTE CONTAINS A DEVICE DRIVER FILE (WIND211.SYS) WHICH IS A SOFTWARE ENHANCEMENT FOR THE PS/2 RUNNING WINDOWS 386 VERSION 2.11.

THIS DISKETTE IS AVAILABLE AT NO CHARGE TO THE CUSTOMER. INSTALLATION INSTRUCTIONS ARE INCLUDED WITH THE DISKETTE. SAS KEYWORDS:

PSY2	PSY2PROG	8555SYSPROG	PSY2FDSK
8555SYSFDSK	PSY2ERR	8555SYSERR	

1.4.1558 8555/8570 HARDFILE ERRORS/NMI'S WITH WINDOWS 3.0

Record number: H096687

Device: D/T8570
 Model: M
 Tip key:
 Date created: 092/02/04
 Date last altered: A92/03/06

SYMPTOM:**SYMPTOM:**

PS/2 8555 AND 8570 SYSTEMS RUNNING *MICROSOFT WINDOWS 3.0, IN THE 386 ENHANCED MODE ONLY, CAN EXPERIENCE DATA PROBLEMS ON THE FIXED DISK CAUSED BY A MEMORY PARITY NMI (NON-MASKABLE INTERRUPT). AN NMI OCCURRENCE DURING A WRITE OPERATION CAN CAUSE CORRUPTED AREAS ON THE HARDFILE LEADING TO A SYSTEM HANG CONDITION.

SYMPTOMS MAY INCLUDE:

- A) THE UNSUCCESSFUL LOADING OF THE OPERATING SYSTEM FROM THE HARDFILE. THIS CONDITION MAY BE INDICATED BY THE PRESENCE OF A BLINKING CURSOR IN THE UPPER LEFT CORNER OF THE DISPLAY, WITH NO TEXT OR ERROR CODES DISPLAYED.
- B) DEPENDING ON THE STATUS OF THE SYSTEM AT THE TIME OF THE NMI, THE SYSTEM MAY CONTINUE TO OPERATE NORMALLY UNTIL LEAVING THE APPLICATION. AT THAT TIME THE SYSTEM MAY HANG WITH THE "HARDFILE IN USE" LIGHT ON SOLID, OR DISPLAY THE MESSAGE "CANNOT READ FROM DRIVE C."
- C) A SYSTEM HANG CONDITION REQUIRING A POWER OFF/ON RESET.
- D) LOST OR CORRUPTED FILES ON THE HARDFILE IF THE NMI OCCURS DURING A FILE TRANSFER WRITE OPERATION. THE SYSTEM MAY DISPLAY THE ERROR "CANNOT READ FROM DRIVE C: " WHEN TRYING TO LOAD THE FILE OR APPLICATION THAT WAS IN PROCESS AT THE TIME OF THE NMI OCCURRENCE.

PROBLEM ISOLATION AIDS:

NONE

FIX:

A LOW LEVEL FORMAT OF THE HARDFILE USING THE REFERENCE DISKETTE WILL RECOVER THE HARDFILE AND ALLOW IT TO BE USED AGAIN; HOWEVER, ALL DATA ON THE DISK WILL BE ERASED. THE CUSTOMER MUST CONTACT MICROSOFT FOR A PATCH WHICH IMPROVES THE NMI HANDLING CAPABILITY OF MICROSOFT WINDOWS 3.0.

THE MICROSOFT PATCH THAT ADDRESSES THIS PROBLEM WILL NOT RESTORE THE HARDFILE BUT WILL PREVENT THE CORRUPTION FROM REOCCURRING. IF AN NMI OCCURS WITH THE PATCH INSTALLED, THE SYSTEM DISPLAYS AN ERROR MESSAGE WHICH STATES:

"SYSTEM ERROR
 MEMORY PARITY ERROR. SYSTEM HALTED."

THE PATCH PREVENTS THE LOSS OF DATA AND OR HARDFILE CORRUPTION WHEN A MEMORY PARITY NMI OCCURS. THE PATCH DOES NOT PREVENT NMI OCCURRENCES. UTILIZE THE ADVANCED DIAGNOSTIC ROUTINES AND THE RETAIN DATABASE FOR INFORMATION REGARDING NMI'S AND TROUBLESHOOTING TECHNIQUES. SEARCH RETAIN USING THE FOLLOWING SEARCH ARGUMENT: PSY2 NMI

THE PATCH IS *MICROSOFT'S "PARITY.386" PATCH. THE CUSTOMER SHOULD CONTACT THEIR DEALER OR MICROSOFT DIRECTLY. IBM INTERNAL CUSTOMERS SHOULD OBTAIN THE PATCH BY SENDING A PROFS NOTE TO BCRVMPC1(WIN30).

*MICROSOFT IS A REGISTERED TRADEMARK OF THE MICROSOFT CORP.

SAS KEYWORDS:

PSY2	PSY2PROG	PSY2ERR	PSY2FDSK
PSY2MEM	D/T8555	8555SYSPROG	8570SYSPROG
8555SYSERR	8570SYSERR	8555SYSFDSK	8570SYSFDSK
8555SYSTEMEM	8570SYSTEMEM		

1.4.1559 8555, 8565 DISKETTE FORMAT & COPY PROBLEMS W/ WINDOWS 386

Record number: H024767

Device: D/T8555
 Model: M
 Tip key:
 Date created: 090/08/16
 Date last altered: A91/09/03

SYMPTOM:

WHEN USING MICROSOFT * WINDOWS 386 VERSION 2.11 IN AN 8555 OR 8565, A USER MAY EXPERIENCE DISKETTE FORMAT AND/OR COPY FAILURES.

A WINDOWS ERROR MESSAGE, "SYSTEM ERROR - CANNOT WRITE TO DRIVE A" WILL BE DISPLAYED WHEN THE FORMAT OR COPY OPERATION FAILS.

PROBLEM ISOLATION AIDS:

THE FORMAT AND COPY FAILURES ARE LIMITED TO THE 55SX AND 65SX, AND WILL OCCUR ONLY WHEN RUNNING UNDER WINDOWS VERSION 2.11. THIS FAILURE OCCURS WHEN USING 720KB AND 1.44MB DISKETTES. IBM ADVANCED DIAGNOSTICS COMPLETE SUCCESSFULLY, AND THE SYSTEM WILL OPERATE PROPERLY WHEN NOT IN WINDOWS 2.11.

FIX:

TO PERFORM A COPY OR FORMAT COMMAND TO THE DISKETTE DRIVE, THE USER MUST EXIT WINDOWS 2.11, EXECUTE THE COMMAND UNDER THE MAIN OPERATING SYSTEM (SUCH AS DOS), THEN RE-ENTER WINDOWS.

MICROSOFT HAS CORRECTED THIS PROBLEM IN WINDOWS 386 VERSION 3.0.

* MICROSOFT IS A REGISTERED TRADEMARK OF THE MICROSOFT CORPORATION.

SAS KEYWORDS:

PSY2	PSY2PROG	PSY2DSKT	PSY2ERR
8555SYSPROG	8555SYSDSKT	8555SYSERR	8565SYSERR
8565SYSPROG	8565SYSDSKT	D/T8565	

1.4.1560 8555, 8565 POWER ON PASSWORD PROBLEMS

Record number: H064826

Device: D/T8565
Model: M
Tip key:
Date created: 090/07/11
Date last altered: A95/06/06

SYMPTOM:

THE 8555 OR 8565 WILL NOT RETAIN OR REMOVE THE POWER-ON PASSWORD WHEN THE SYSTEM IS TURNED OFF.

PROBLEM ISOLATION AIDS:

VERIFY THAT THE FAILING 55SX OR 65SX HAS THE CORRECT SPEAKER ASSEMBLY INSTALLED. THE ABOVE SYMPTOM WILL RESULT IF AN INCORRECT BATTERY/SPEAKER ASSEMBLY IS INSTALLED, SUCH AS AN 8560 OR 8580 FRU. THE 8555 AND 8565 SPEAKER ASSEMBLIES DO NOT UTILIZE A BATTERY.

THE 8555/65 SPEAKER ASSEMBLY USES A 6-PIN FEMALE CONNECTOR. TWO OF THE PINS ARE CONNECTED TO THE SPEAKER. TWO OTHER PINS MUST HAVE A SHORT JUMPER WIRE ATTACHED. IF THIS JUMPER WIRE IS MISSING OR OPEN, THE SYSTEM MAY NOT RETAIN OR REMOVE THE POWER-ON PASSWORD WHEN TURNED OFF.

FIX:

IF THE POWER-ON PASSWORD STILL FAILS WITH THE CORRECT SPEAKER/CABLE ATTACHED, REPLACE THE REAL-TIME CLOCK MODULE BEFORE REPLACING THE SYSTEM BOARD.

- 8555 SPEAKER/CABLE ASSEM...P/N27F4672
8565 SPEAKER/CABLE ASSEM...P/N57F1437
8555/8565 REAL-TIME CLOCK MODULE...P/N8509237

SAS KEYWORDS:

PSY2 PSY2OPER PSY2MISC D/T8555

1.4.1561 8556 / 8557 "TYPE MANAGER V2.0 FOR WINDOWS BY ADOBE

Record number: H025546

Device: D/T8550
 Model: M
 Tip key:
 Date created: 092/04/18
 Date last altered: A95/03/09

SYMPTOM:

"Type Manager Ver 2.0 for Windows" by Adobe, does not FUNTION funtion properly when Windows is started in the enhanced mode. System may reboot while loading software.

PROBLEM ISOLATION AIDS:

Diagnostic run without error.
This problem will occur only in 8556/57SLC'S OR 8556/57'S that have been up-graded with the CACHED Processor Option FRU P/N92F0078.

FIX:

An update is available from Adobe.
Customers experiencing this problem may contact Adobe for assistance at: (408) 986-6530

Adobe is a regestered trademark.

SAS KEYWORDS:

PSY2	PSY2PROG	8556SYSPROG	8556SYSERR
8557SYSPROG	PSY2ERR	8557SYSERR	D/T8556
D/T8557			

1.4.1562 8556 OR 8557 1200/2400 INTERNAL MODEM HANG

Record number: H107522

Device: D/T8557
Model: M
Tip key:
Date created: 092/10/14
Date last altered: A92/10/16

SYMPTOM:

8556 OR 8557 SYSTEMS EXPERIENCING MODEM HANG PROBLEMS WITH AN IBM OR HAYES 1200/2400 BAUD INTERNAL MODEM.

PROBLEM ISOLATION AIDS:

RUN ADVANCED DIAGNOSTICS TO ELIMINATE HARDWARE FAILURES.
ENSURE YOUR CUSTOMER HAS SET ALL COMMUNICATION PROGRAM AND MODEM PARAMETERS TO THE CORRECT OPERATIONAL SPECIFICATIONS AS OUTLINED IN THEIR INSTALLATION PROCEDURES.

FIX: IF THE ABOVE PROCEDURES DO NOT RESOLVE THE PROBLEM HAVE YOUR CUSTOMER INCREASE THE DELAY TIME BETWEEN DATA TERMINAL READY (DTR) AND THE ATTENTION COMMAND (AT) TO MORE THEN 30 MILLISECONDS.

SAS KEYWORDS:

D/T8556	PSY2	PSY2PROG	PSY2ADPT
LOCKUP	PSY2COMM	1200	2400

1.4.1563 8556/57 FAILS WITH "STB" OEM VIDEO ADAPTER

Record number: H102782

Device: D/T8557
Model: M
Tip key:
Date created: O92/10/13
Date last altered: A92/10/13

SYMPTOM:

The monitor attached to the STB Video Adapter* is active when system is first powered up after video card installation. After configuration, only the system board video port is active. The monitor attached to the STB adapter will remain blank. With a display connected to the system board video port and viewing "set and view configuration" an address conflict is present but cannot be changed.

* STB Video Adapter Models EGRO-VGA/MC or MVP-2/MC.

PROBLEM ISOLATION AIDS:

System will function normally with adapter card removed. Video diagnostics run to completion without error with card removed.

FIX:

This problem is caused by a fixed-address configuration conflict. This conflict has been corrected with Reference Diskette version 2.02 or higher.

SAS KEYWORDS:

PSY2	D/T8556	PSY2ADPT	PSY2OEM
DISPLAY	PSY2DISP	8556	8557

1.4.1564 8556/57 POST MEMORY COUNT MISSING 256KB

Record number: H103270

Device: D/T8557
 Model: M
 Tip key:
 Date created: 092/10/22
 Date last altered: A92/10/22

SYMPTOM:

The 8556 or 8557 POST memory count is 256Kb less than the total installed memory.

PROBLEM ISOLATION AIDS:

If the above symptoms are experienced, verify the following:
 - System has a Personal/370 Adapter/A installed
 - IML Code is Ver 1.24 or lower
 - Memory is installed in one of the following configurations:

Total Mem	SIMM 1	SIMM 2	SIMM 3	Post Memory
Installed				count
2Mb	2Mb	--	--	1760
4Mb	2Mb	2Mb	--	3776
6Mb	2Mb	2Mb	2Mb	5792
4Mb	4Mb	--	--	3776
8Mb	4Mb	4Mb	--	7808

(8Mb SIMMs and other memory configurations do not have this problem)

FIX:

This symptom is corrected with the IML code on Reference Diskette Version 2.02 or higher.

If symptom remains after installing version 2.02 or higher, use normal problem determination.

Note:

Current level Reference Diskette images are available on PCPROD.

SAS KEYWORDS:

PSY2	D/T8556	PSY2ADPT	PSY2MEM
D/T8557	PSY2ERR	8556	8557
7473			

1.4.1565 8557 & 9557 BACKGROUND SPEAKER NOISE

Record number: H004817

Device: D/T8557
Model: M
Tip key:
Date created: 093/03/27
Date last altered: A93/09/22

SYMPTOM: Some 8557 and 9557 systems may emit a low volume background noise that changes pitch or volume during screen refreshes or mouse movement. This noise is only emitted from the speaker on the control panel assembly. This panel assembly is NOT used on the Ultimedia models of the 8557 and 9557.

PROBLEM ISOLATION AIDS:

FIX: The Control Panel Assembly FRU P/N92F0002 will be replaced with a new FRU assembly for the model 8557 and 9557 machines to eliminate this problem. This noise can be eliminated ONLY by the new control panel assembly. The NEW FRU# For the Control Panel Assembly is FRU P/N52G7711 , do not replace any other FRUs for this problem.

SAS KEYWORDS:

PSY2PART	D/T8557	D/T9557	PSY2
SOUND	52G7711	92F0002	

1.4.1566 8560 W/PROCESSOR UPGRADE HANGS DURING POST

Record number: H123851

Device: D/T8560
 Model: M
 Tip key:
 Date created: 094/06/23
 Date last altered: A94/08/15

SYMPTOM:

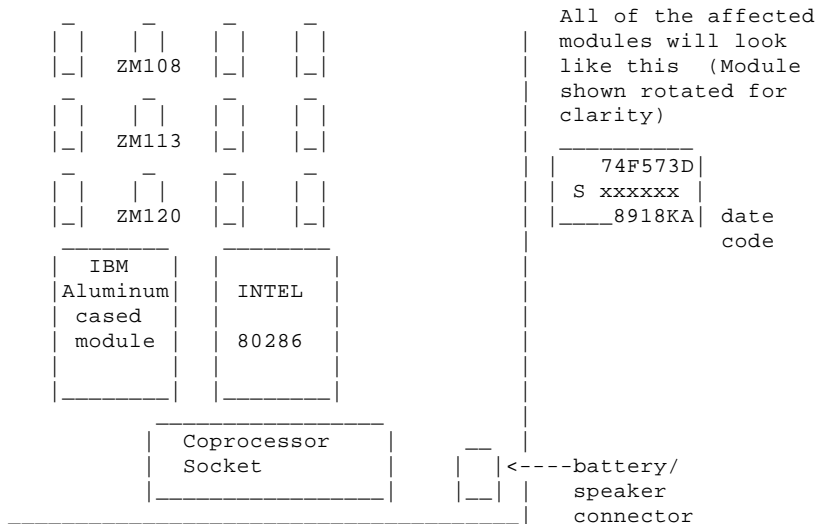
A limited number of 8560 systems may experience a hang during the POST (Power-On-System-Test) memory count after installation of the Model 50/60 486SLC2-50 Processor Upgrade, marketing part number 70G7088, FRU P/N71G2625.

PROBLEM ISOLATION AIDS:

ALL of the following MUST BE TRUE, for this tip to apply:

- A. The system functioned normally prior to the upgrade.
- B. If the upgrade is removed, the system will function normally and the diagnostics will run error-free.
- C. The modules at system board locations ZM120, ZM113 and ZM108 have a large "S" on the left side of the module.
- D. The module identified above, also has a six character date code such as, 8918KA. If the sixth character position of this code is either an "A" or is blank, the module is affected. If any other Alphanumeric character is in this position the system board is NOT AFFECTED.

Refer to the following diagram for the locations of these modules:



FIX:

If this problem is encountered during the installation of the processor upgrade:

Replace the system board with one which does not have the large "S" on the modules referenced above or with one which DOES HAVE a large "S" on the module but DOES NOT have an "A" as the last character of the date code suffix.

It has been determined that only a small percentage of 8560 system boards were manufactured with the affected modules. No other functional problem is associated with these modules. This is a compatibility problem related only to the 80486 processor upgrade.

Because of the limited exposure and the large quantity of this FRU throughout the Mechanicsburg Parts System, no stock action will be initiated to purge this specific system board FRU. However, action has been taken with the FRU parts source to eliminate the identified module from future FRU stock replenishments.

Upon physical inspection, unused system board FRU's with the large "S" and the "A" in the suffix should be returned to the parts distribution system as "good," because they are useable in non-upgraded systems.

PSY2 RETAIN TIPS

8560 W/PROCESSOR UPGRADE HANGS DURING POST

The 8560 system board FRU is: P/N64F3708.

Intel is a trademark of Intel Corporation

SAS KEYWORDS:

PSY2	PSY2ERR	PSY2ADPT	HANGS
HYPERTEC	HYPERACE	64F3708	8560
PROCESSOR	COMPLEX	PSY2PART	

1.4.1567 8560 8565 8580 9585 CONFIG PROBLEMS WITH 5 OR MORE ADAPTERS

Record number: H006186

Device: D/T8580
 Model: M
 Tip key:
 Date created: 090/06/06
 Date last altered: A94/01/19

SYMPTOM:

1. CONFIGURATION ERRORS AFTER CONFIGURATION IS SETUP.
2. SYSTEM REQUIRES EXCESSIVE TIME TO CONFIGURE OR SYSTEM HANGS DURING CONFIGURATION SETUP. (CONFIGURATION MAY TAKE OVERNIGHT TO COMPLETE.)

ONE OR MORE OF THE FOLLOWING ADAPTERS MAY BE INVOLVED:

TOKEN RING
 8514/A
 3270
 SCSI ADAPTER WITH CACHE (1 OR MORE)
 SCSI ADAPTER WITHOUT CACHE (1 OR MORE)
 S/370 CHANNEL EMULATION ADAPTER/A

PROBLEM ISOLATION AIDS:

CERTAIN ADAPTERS REQUIRE SPECIFIC (UNIQUE) ADDRESSES IN ROM (READ ONLY MEMORY). IF CONFIGURATION DIFFICULTIES ARE EXPERIENCED, THE FOLLOWING STEPS SHOULD BE TAKEN:

- A. REMOVE ENOUGH ADAPTERS SO THAT A MAXIMUM OF 4 ARE LEFT IN THE SYSTEM (THERE IS NO SPECIFIC INSTALLATION ORDER). RUN SETUP. POWER-OFF THE SYSTEM.
- B. ADD ANOTHER ADAPTER AND RUN SETUP. THIS STEP SHOULD BE REPEATED AS MANY TIMES AS NECESSARY TO COMPLETE THIS SYSTEM'S UNIQUE CONFIGURATION.
- C. IF AFTER ADDING ALL ADAPTERS, ONE AT A TIME, SETUP HAS SUCCESSFULLY RESOLVED ALL CONFLICTS, THE USER IS DONE. IF CONFLICTS REMAIN EVEN AFTER STEPS A & B, THEN PROCEED TO TO STEP D. AND CONSULT "ADDITIONAL INFORMATION" WHICH FOLLOWS BELOW.
- D. REMOVE ENOUGH ADAPTERS SO THAT A MAXIMUM OF 4 AGAIN REMAIN. REARRANGE THESE 4 ADAPTERS INTO DIFFERENT SLOTS. RUN SETUP. PROCEED TO STEP B.

ADDITIONAL INFORMATION:

1. ANY REMAINING CONFIGURATION CONFLICTS CAN USUALLY BE CLEARED BY MAKING MANUAL CHANGES. THIS CAN BE DONE BY SELECTING "SET CONFIGURATION" FROM THE MAIN MENU, FOLLOWED BY SELECTING "CHANGE CONFIGURATION." AT THIS POINT YOU WILL SEE AN ASTERISK (*) NEXT TO THE ADAPTER RESOURCE THAT IS IN CONFLICT. YOU MAY ALTER THE SETUP SELECTIONS MANUALLY ON SOME ADAPTERS UNTIL ALL CONFLICTS ARE RESOLVED. (THIS IS DONE USING THE PF5 AND PF6 KEYS, TO STEP THRU THE ALLOWABLE CONFIGURATION SELECTIONS FOR A GIVEN ADAPTER LINE ITEM). AFTER ALL CONFLICTS ARE RESOLVED USING THIS METHOD, PF10 SHOULD BE PRESSED TO SAVE THE CONFIGURATION. CONFLICT RESOLUTION WILL BE APPARENT BECAUSE THE ASTERISK (*) SHOULD NOT BE PRESENT ON ANY ADAPTER LINE ITEM.

2. TOKEN RING AND BROADBAND/BASEBAND ADAPTERS CAN CO-EXIST. IF THE SYSTEM HAS ONE OF EACH KIND, THEY MAY BOTH BE CONFIGURED TO "PRIMARY" BY THE SETUP PROGRAM.

TWO TOKEN RING ADAPTERS CAN CO-EXIST. ONE WILL BE CONFIGURED AS "PRIMARY;" THE OTHER AS "ALTERNATE" BY THE SETUP PROGRAM.

TWO BROADBAND/BASEBAND ADAPTERS CAN CO-EXIST. SETUP WILL CONFIGURE ONE AS "PRIMARY;" THE OTHER AS "ALTERNATE." ALTERING OR ASSIGNING A "PRIMARY" ADAPTER TO "ALTERNATE" MAY ALLOW CERTAIN CONFIGURATIONS TO COMPLETE SUCCESSFULLY, BUT THE "ALTERNATE" SELECTION FOR A BROADBAND/BASEBAND ADAPTER SHOULD BE SELECTED ONLY IF A "PRIMARY" BROADBAND/BASEBAND ADAPTER HAS ALREADY BEEN CONFIGURED.

3. CONSIDER CHANGING 3270 ADDRESS TO "CE000"

NOTE: SPECIAL APPLICATION SOFTWARE CONSIDERATIONS MAY APPLY TO THE "SETTING-UP" OF THE ADAPTERS. THE USER SHOULD CONSULT ANY LITERATURE THAT ACCOMPANIED THE APPLICATION SOFTWARE TO CONFIRM THESE CONSIDERATIONS.

PSY2 RETAIN TIPS

8560 8565 8580 9585 CONFIG PROBLEMS WITH 5 OR MORE ADAPTERS

MODEL 80 REQUIRES REFERENCE DISKETTE 1.10 OR LATER FOR SCSI CONFIGURATION. SCSI MEMORY MAP ADDRESS CANNOT BE CHANGED.

FIX:

NONE

SAS KEYWORDS:

PSY2	8560SYSADPT	8580SYSADPT	PSY2ADPT
PSY2ERR	8560SYSERR	8565SYSERR	8580SYSERR
8565SYSADPT	PSY2DIAG	8560SYSDIAG	8565SYSDIAG
8580SYSDIAG	PSY2COMM	8560SYSCOMM	8565SYSCOMM
8580SYSCOMM	D/T8560	D/T8565	D/T9585
9585SYSADPT			

1.4.1568 8560/8580 DISK FORMAT AND 1755 ERRORS

Record number: H021845

Device: D/T8560
 Model: M
 Tip key:
 Date created: 090/11/28
 Date last altered: A92/04/22

SYMPTOM: THERE IS A KNOWN PROBLEM WITH DOWN-LEVEL CUSTOMER AND ADVANCED DIAGNOSTICS WHEN TYPE 31 AND TYPE 32 44MB FIXED DISKS ARE BOTH INSTALLED IN THE SAME SYSTEM (8560 MODEL 041 OR 8580 MODEL 041 ONLY).

THE SYMPTOMS WILL BE AS FOLLOWS:

- 1) A 1755 ERROR WHEN RUNNING CUSTOMER AND ADVANCED LEVEL DIAGNOSTICS.
- 2) FIXED DISK FORMAT ERRORS (ADVANCED DIAGNOSTICS ONLY).

PROBLEM ISOLATION AIDS: USING THE REFERENCE DISKETTE, A 1755 ERROR MAY BE EXPERIENCED IF THE SET CONFIGURATION MENU IS EXITED PRIOR TO RUNNING CUSTOMER OR ADVANCED LEVEL DIAGNOSTICS. IN ADDITION, FIXED DISK FORMAT FAILURES COULD OCCUR USING THE DIAGNOSTICS IF THE SET CONFIGURATION MENU WAS EXITED PRIOR TO THE ATTEMPTED FORMAT.

FIX: THIS ERROR EXISTS ON THE IBM PS/2 MODEL 50/60 REFERENCE DISKETTE (VERSION 1.04) AND THE IBM PS/2 MODEL 70/80 REFERENCE DISKETTE (VERSION 1.06). THIS PROBLEM HAS BEEN CORRECTED IN LATER RELEASES OF THESE DISKETTES.

SAS KEYWORDS:

PSY2	PSY2ERR	PSY2DIAG	PSY2FDSK
8560SYSERR	8560SYSDIAG	8580SYSDIAG	8580SYSERR
8560SYSFDSK	8580SYSFDSK	D/T8580	ST506
44 MEG			

1.4.1569 8560, 8565, 8580 UPGRADE PLANAR / MEMORY REQUIREMENTS

Record number: H081879

Device: D/T8560
 Model: M
 Tip key:
 Date created: 094/08/23
 Date last altered: A94/09/28

SYMPTOM:

The following error messages may occur after adding memory to an 8560, 8565 or 8580 system with a 486 BL2-66 or 486 DX2 33-66 Planar Board Upgrade installed.

- CRC
- TRAP 000E
- Error code 110 - NMI: System board memory error

PROBLEM ISOLATION AIDS:

- 486 BL2 66MHz, Option Part Number 32G3296, FRU P/N71G2610
- 486 DX2 33 - 66 MHz, Option Part Number 70G8992, FRU P/N71G2643

These upgrades support 2MB, 4MB and 8MB Industry Standard PARITY memory simms. 16MB memory simms, if installed, must be Industry Standard ECC memory. IBM ECC memory is not supported on these planar upgrades.

FIX:

Remove any 16MB non Industry Standard ECC memory that may have been installed on the upgrade system board.

16MB support is provided via Industry Standard ECC memory only.

Note:

- When memory speeds are mixed, the memory subsystem will default to the slowest speed installed in the system.
- Marketing and User Documentation explain the memory requirements for these system board upgrades.

SAS KEYWORDS:

PSY2	PSY2ERR	PSY2MEM	MB
BL2	SIM	DL	486
REPLY			

1.4.1570 8565 FALSE 201 ERROR DURING SOFT BOOT (CTL-ALT-DEL)

Record number: H085828

Device: D/T8565
Model: M
Tip key:
Date created: 091/08/26
Date last altered: A92/12/18

SYMPTOM:

A PS/2 8555 AND 8565 DISPLAYS A 201 ERROR WHEN A SOFT BOOT (CTL-ALT-DEL) IS PERFORMED. THIS ERROR IS DISPLAYED ONLY DURING A SOFT BOOT AND DOES NOT OCCUR AT POWER-ON. ADVANCED DIAGNOSTICS DO NOT FAIL.

PROBLEM ISOLATION AIDS:

THE 201 ERROR WILL OCCUR ONLY IN 55SX AND 65SX SYSTEMS THAT HAVE EIGHT SERIAL PORTS INSTALLED. TYPICALLY, THIS HARDWARE CONFIGURATION INCLUDES THREE DUAL-ASYNC CARDS, ONE INTERNAL MODEM, AND THE SYSTEM BOARD SERIAL PORT. HOWEVER, ANY CONFIGURATION WITH EIGHT SERIAL PORTS MAY YIELD THE SAME SYMPTOM.

FIX:

THE 201 ERROR DURING A SOFT BOOT IS A FALSE ERROR, AND CANNOT BE CORRECTED BY REPLACING PARTS. IT CAN BE CIRCUMVENTED IN THREE WAYS, ALLOWING THE SYSTEM TO FUNCTION NORMALLY:

- PHYSICALLY REMOVE A SERIAL DEVICE, LEAVING THE SYSTEM WITH LESS THAN 8 SERIAL PORTS.
- DISABLE THE SYSTEM BOARD SERIAL PORT WITH THE REFERENCE DISKETTE.
- PRESS "F1" WHEN THE ERROR IS DISPLAYED. THIS WILL ALLOW THE SYSTEM TO CONTINUE NORMAL OPERATION WITH ALL 8 SERIAL PORTS CONFIGURED.

A PERMANENT SOLUTION TO THIS FALSE ERROR IS BEING EVALUATED. THIS TIP WILL BE UPDATED WHEN APPLICABLE INFORMATION BECOMES AVAILABLE.

SAS KEYWORDS:

PSY2	PSY2ERR	PSY2MEM	8565SYSERR
8565SYSTEMEM	MEMORY	D/T8555	8555SYSTEMEM
8555SYSERR			

1.4.1571 8565 HANGS DURING TAPE BACKUP

Record number: H063305

Device: D/T8565
Model: M
Tip key:
Date created: 090/10/18
Date last altered: A95/06/06

SYMPTOM:

8565 (PS/2 MODEL 65SX) MAY HANG WHEN CONFIGURED WITH ALL OF THE FOLLOWING:

- 3270 CONNECTION ADAPTER
- IMAGE ADAPTER/A
- TAPE DRIVE
- OS/2 OPERATING SYSTEM

PROBLEM ISOLATION AIDS:

THE SYSTEM WILL HANG ONLY WHEN THE FOLLOWING ACTIVITIES OCCUR SIMULTANEOUSLY:

- OS/2 COMMUNICATIONS MANAGER IS TRANSFERRING FILES FROM THE HOST TO THE 8565 FIXED DISK (DOWNLOAD), AND...
- TAPE BACKUP OF THE FIXED DISK IS IN PROCESS, AND...
- SCREEN REFRESH ACTIVITY OCCURS VIA THE IMAGE ADAPTER CARD.

FIX:

THIS PROBLEM CAN BE CIRCUMVENTED BY AVOIDING SIMULTANEOUS TAPE DRIVE BACKUP AND HOST DOWNLOAD TO THE 65SX.

SAS KEYWORDS:

PSY2	PSY2ADPT	PSY2MISC	PSY2ERR
PSY2COMM	BACK UP	BACKUP	

1.4.1572 8570 / DOS 4.01 (DOSSHELL) TIME DELAYS, SCREEN ERRORS

Record number: H036701

Device: D/T8570
Model: M
Tip key:
Date created: 089/12/15
Date last altered: A90/03/26

SYMPTOM: AN IBM PS/2 MODEL 70 UTILIZING DOS 4.01 AND CONCURRENTLY RUNNING THE IBM 3270 EMULATION PROGRAM ENTRY LEVEL VER. 1.21, MAY EXPERIENCE PROBLEMS WITH THE DOSSHELL FUNCTION. THE SYMPTOMS MAY SHOW UP AS TIME DELAYS AND/OR UNWANTED CAPITALIZED CHARACTERS WHEN SHIFT-F9 IS PRESSED TO GO FROM DOSSHELL TO THE COMMAND PROMPT.

PROBLEM ISOLATION AIDS: THIS PROBLEM WILL ONLY OCCUR ON SYSTEMS WHICH DO NOT HAVE A MOUSE INSTALLED. IF THE SYSTEM HAS A MOUSE INSTALLED, FOLLOW NORMAL PROBLEM DETERMINATION PROCEDURES.

FIX:

A CORRECTIVE SERVICES DISKETTE (CSD) IS AVAILABLE FOR CUSTOMERS THROUGH THEIR DOS SUPPORT CENTER. UNTIL THE CUSTOMER RECEIVES THE DISKETTE THAT THEY ORDER, THIS PROBLEM CAN BE CIRCUMVENTED IN TWO WAYS:

- 1) INSTALL A MOUSE.
*** OR ***
- 2) ELIMINATE REFERENCE TO THE MOUSE DRIVER IN THE DOSSHELL.BAT FILE.

BEFORE UTILIZING CIRCUMVENTION NUMBER TWO, THE CUSTOMER SHOULD BACK-UP THE DOSSHELL.BAT FILE IN THE EVENT THAT A MOUSE IS INSTALLED AT A FUTURE DATE.

USING A FILE EDITOR (E.G. DOS "EDLIN" COMMAND), THE CUSTOMER SHOULD MAKE THE FOLLOWING CHANGE TO THE DOSSHELL.BAT FILE.

CHANGE THE FOLLOWING BAT FILE LINE FROM:

@SHELLC /MOS: PCIBMDRV.MOS/TRAN/COLOR/DOS/MENU/.....ETC.

TO:

@SHELLC /TRAN/COLOR/DOS/MENU/.....ETC.

SAS KEYWORDS:

PSY2

PSY2PROG

8570SYSPROG

1.4.1573 8570 / 4680 OPERATING SOFTWARE HANGS ON SOFT IPL

Record number: H00160

Device: D/T8570
Model: M
Tip key:
Date created: 089/12/14
Date last altered: A91/10/08

SYMPTOM: AN IBM PS/2 MODEL 70 MAY HANG WHEN BOOTING THE 4680 OPERATING SYSTEM. AT SYSTEM POWER UP, THE OPERATING SYSTEM WILL LOAD WITHOUT FAILURE, HOWEVER, A SOFT-IPL BY THE OPERATOR (CTRL-ALT-DEL) OR A SOFTWARE INITIATED IPL, MAY CAUSE THE SYSTEM TO HANG.

PROBLEM ISOLATION AIDS:

FIX: A 4680 OPERATING SYSTEM SOFTWARE PATCH IS AVAILABLE FOR THIS PROBLEM. CONTACT THE 4680 STORE CONTROLLER LEVEL 2 SUPPORT GROUP TO OBTAIN THIS FIX (REFERENCE APAR IR86844).

THIS FIX IS INCLUDED ON THE 4680 CORRECTIVE SERVICES DISKETTE RELEASED ON JANUARY 9, 1990

SAS KEYWORDS:

PSY2

PSY2PROG

8570SYSPROG

D/T4680

1.4.1574 8570 DISKETTE DATA ERRORS USING MICROSOFT * WINDOWS/386

Record number: H036753

Device: D/T8570
 Model: M
 Tip key:
 Date created: 089/12/15
 Date last altered: A93/07/27

SYMPTOM: AN IBM PS/2 MODEL 70 MAY EXPERIENCE TWO TYPES OF PROBLEMS WITH DISKETTE OPERATIONS USING MICROSOFT * WINDOWS/386.

1. TRACK 0 ERRORS OCCUR AT THE BEGINNING OF DISKETTE FORMAT OPERATIONS.
2. DATA MAY BE OVERWRITTEN DURING DISKETTE WRITE OPERATIONS WITH NO ERROR INDICATIONS.

THIS PROBLEM HAS BEEN ISOLATED TO 8570 SYSTEMS MODEL E61, 061, AND 121 WITHIN THE FOLLOWING SERIAL NUMBER RANGES:

MOD E61
 7,161,007 THROUGH 7,208,999
 F001,000 THROUGH F003,793
 MOD 061 8,007,049 THROUGH 8,041,499
 5,001,500 THROUGH 5,002,444
 MOD 121 9,075,500 THROUGH 9,107,999
 5,505,500 THROUGH 5,506,937

TO DATE IBM AND MICROSOFT* ARE UNAWARE OF ANY OTHER PROGRAMS, INCLUDING WINDOWS/286, THAT ARE INVOLVED.

PROBLEM ISOLATION AIDS: NONE

FIX:

TEMPORARY CIRCUMVENTION:

CUSTOMERS EXPERIENCING THIS PROBLEM SHOULD BE ADVISED TO USE THEIR FIXED DISK TO STORE DATA; WHEN IT IS NECESSARY TO STORE DATA ONTO DISKETTE, THE FOLLOWING PROCEDURES SHOULD BE USED UNTIL THE SOFTWARE FIX DISKETTE CAN BE APPLIED: (SEE FIX BELOW)

- SAVE FILES ON THE FIXED DISK
- EXIT WINDOWS 386
- USE THE DOS COPY COMMANDS TO COPY THE FILE(S) TO DISKETTE.

FIX:

A SOFTWARE FIX DISKETTE FOR THIS PROBLEM IS NOW AVAILABLE TO CUSTOMERS THROUGH IBM MARKETING BRANCH OFFICES AND AUTHORIZED DEALERS.

AN ENGINEERING CHANGE ELIMINATING THE NEED FOR THIS SOFTWARE FIX HAS BEEN INCORPORATED IN FRU STOCK AND SYSTEMS CURRENTLY BEING SHIPPED. INSTALLATION OF THE SOFTWARE FIX ON SYSTEMS CONTAINING THE HARDWARE FIX WILL NOT EFFECT SYSTEM OPERATION.

* MICROSOFT IS A REGISTERED TRADEMARK OF THE MICROSOFT CORPORATION.

SAS KEYWORDS:

PSY2 8570SYSDSKT PSY2DSKT 8570SYSPROG
 PSY2PROG

1.4.1575 8570 ERROR CODES 10483 AND 10458 FRU CALL OUT

Record number: H033552

Device: D/T8570
Model: M
Tip key:
Date created: 089/03/10
Date last altered: A93/07/27

SYMPTOM:

SOLID OR INTERMITTENT 10483 POST OR 10458 DIAGNOSTIC ERROR CODES.

PROBLEM ISOLATION AIDS:

HMS MANUAL DOCUMENTATION AND REFERENCE DISKETTE

FIX:

REPLACE THE HARDFILE FOR INTERMITTENT, AS WELL AS SOLID, 10483 POST OR 10458 DIAGNOSTIC ERRORS ON SYSTEM HARDFILES.

SAS KEYWORDS:

PSY2 PSY2ERR 8570SYSERR 8570SYSFDSK
PSY2FDSK

1.4.1576 8570 EXPERIENCING INTERMITTENT 165 POST ERRORS W/ TOKEN RING

Record number: H021809

Device: D/T8570
Model: M
Tip key:
Date created: 090/06/13
Date last altered: A91/07/29

SYMPTOM:

8570 SYSTEMS ON A TOKEN RING NETWORK EXPERIENCE INTERMITTENT 165 POST ERRORS THAT CAN NOT BE RESOLVED BY RUNNING SET CONFIGURATION, SET FEATURES OR NORMAL MAP STEPS.

PROBLEM ISOLATION AIDS:

REMOVAL OF THE 4/16 TOKEN RING ADAPTER FROM THE 8570 SYSTEM WILL ELIMINATE THE INTERMITTENT 165 ERROR.

FIX:

INSTALL THE NEW TYPE 4/16 TOKEN RING ADAPTER P/N93F0331 IN THE 8570 SYSTEM.

SAS KEYWORDS:

PSY2	PSY2ADPT	PSY2SYSBRD	PSY2ERR
8570SYSBRD	8570SYSERR	8570SYSADPT	PSY2COMM
8570SYSCOMM			

1.4.1577 8570 HOT KEY ERRORS USING GRAPHICS WORKSTATION PROGRAM

Record number: H036702

Device: D/T8570
Model: M
Tip key:
Date created: 089/12/14
Date last altered: A93/12/06

SYMPTOM: AN IBM PS/2 MODEL 70 MAY EXPERIENCE PROBLEMS WHEN
HOT KEYING FROM THE GRAPHICS WORK STATION PROGRAM TO PC
MODE. IN PC MODE THE LETTER (P) OR A (DIVIDE SIGN) WILL
APPEAR ON THE SCREEN WHEN ATTEMPTING TO KEY INPUT.

PROBLEM ISOLATION AIDS: NONE

FIX: A SOFTWARE FIX IS AVAILABLE FOR THIS PROBLEM VIA THE
LEVEL 1 SOFTWARE SUPPORT CENTER (1-800-992-4777). REFER
THE CUSTOMER TO THEIR APPROPRIATE SOFTWARE SUPPORT FUNCTION.

SAS KEYWORDS:

PSY2 PSY2COMM 8570SYSCOMM 8570SYSPROG
PSY2PROG

1.4.1578 8570 MOD A21 DOS 3.3 ERROR FORMATTING MULTIPLE DSKTS

Record number: H036203

Device: D/T8570
Model: M
Tip key:
Date created: 089/10/04
Date last altered: A90/05/30

SYMPTOM: THE 8570 MODEL A21 USING DOS 3.3 WILL EXPERIENCE AN "INVALID PARAMETER" ERROR WHEN TRYING TO FORMAT MORE THAN ONE DISKETTE. THE PROBLEM IS CAUSED BY A WRITE TO CACHE. THIS IS A MEMORY AREA IN THE SYSTEM. OTHER MODELS NOT HAVING THIS CACHE AREA WRITE TO ROM AND DO NOT HAVE THESE SYMPTOMS.

PROBLEM ISOLATION AIDS:**FIX:**

A FIX FOR THIS PROBLEM HAS BEEN RELEASED WITH THE MOD 70/80 1.10 REFERENCE DISKETTE. THIS DISKETTE CAN BE ORDERED WITH FORM NUMBER S15F2185. THE COMMAND "INSTALL" WILL LOAD THE DASDDVR PATCH TO THE SYSTEM.

NOTE: THE SYSTEM UPDATE DISKETTE ALSO CONTAINS DASDDVR. THE DISKETTE CAN BE OBTAINED BY FOLLOWING INSTRUCTIONS IN HSF RECORD NUMBER H037906.

UNTIL YOUR CUSTOMER OBTAINS THE 1.10 MOD 70/80 REFERENCE DISKETTE HAVE THEM DO THE FOLLOWING WHEN FORMATTING MULTIPLE DISKETTES.

FORMAT A DISKETTE, SAY NO TO THE PROMPT "DO YOU WANT TO FORMAT ANOTHER DISKETTE", DO A DIRECTORY LIST (DIR) OF ANY DIRECTORY ON DRIVE B OR C, FORMAT THE 2ND DISKETTE, SAY NO TO THE PROMPT "DO YOU WANT TO FORMAT ANOTHER DISKETTE," DO A DIRECTORY LIST OF ANY DIRECTORY OTHER THEN THE DIRECTORY IN THE PREVIOUS STEP, FORMAT THE 3RD DISKETTE. THE OPERATOR WILL DO THIS PROCESS OF LISTING ANY DIRECTORY OTHER THAN THE PREVIOUS ONE UNTIL ALL THE DISKETTES ARE FORMATTED.

SAS KEYWORDS:

PSY2 8570SYSDSKT PSY2DSKT PSY2MCD
8570SYSMCD

1.4.1579 8570 MOD 061,121 "RACAL INTERLAN" NI9210 COM FAILURE

Record number: H064161

Device: D/T8570
 Model: M
 Tip key:
 Date created: 090/05/09
 Date last altered: A90/07/09

SYMPTOM:

THE RACAL INTERLAN* NI9210 COMMUNICATION ADAPTER MAY NOT FUNCTION IN THE 8570 061 AND 121 MODELS. IF THE ADAPTER FAILS, RACAL INTERLAN* CONTROLLER DIAGNOSTICS WILL DISPLAY A 82586 ERROR IN ITS ERROR LOG. (NOTE) THE ERROR WILL NOT BE SEEN UNLESS THE ERROR LOG IS DISPLAYED.

PROBLEM ISOLATION AIDS:

THE "RACAL INTERLAN" NI9210 MAY FAIL IN THE FOLLOWING 8570 20MHZ SYSTEMS:

8570 MODEL 061 WITHIN SERIAL NUMBER RANGES:
 5001500 TO 5549999
 8007000 TO 8999999

8570 MODEL 121 WITHIN SERIAL NUMBER RANGES:
 5505500 TO 5605500
 9075500 TO 9999999

FIX: ***DO NOT REPLACE 8570 SYSTEM PARTS*******

IF THE "RACAL INTERLAN" FAILS IN AN 8570 WITHIN THE ABOVE SERIAL NUMBER RANGES, HAVE THE CUSTOMER CONTACT THEIR MICOM ADAPTER POINT OF SALE.

* "RACAL INTERLAN" ARE REGISTERED TRADEMARKS OF THE RACAL DATA GROUP.

SAS KEYWORDS:

PSY2	PSY2BRD	PSY2ADPT	POEM
PSY2COMM	8570SYSBRD	8570SYSADPT	8570SYSCOMM
PSY2OEM	PSY2ERR	8570SYSERR	

1.4.1580 8570 MOD 061,121 EMERALD SYSTEMS* TAPE DRIVE FAILURE

Record number: H06467

Device: D/T8570
 Model: M
 Tip key:
 Date created: 090/05/09
 Date last altered: A90/06/08

SYMPTOM:

8570 MODELS 061 AND 121 MAY EXPERIENCE TAPE BACKUP FAILURES WHEN ATTEMPTING TO USE THE EMERALD SYSTEMS* RAPID RECOVER* 1/4 INCH CARTRIDGE TAPE DRIVE. THE FOLLOWING ERRORS MAY BE DISPLAYED: EM0101 ERROR OPENING TAPE DRIVE.
 XM1001 ERROR INTERRUPT

PROBLEM ISOLATION AIDS:

THE EMERALD SYSTEMS* RAPID RECOVER* TAPE BACKUP UNIT MAY FAIL IN THE FOLLOWING 8570 SYSTEMS:

8570 MODEL 061 WITHIN SERIAL NUMBER RANGES:
 5001500 TO 5549999
 8007000 TO 8999999

8570 MODEL 121 WITHIN SERIAL NUMBER RANGES:
 5505500 TO 5605500
 9075500 TO 9999999

FIX: ***DO NOT REPLACE 8570 SYSTEM PARTS*******

IF THE EMERALD SYSTEMS* RAPID RECOVER* TAPE UNIT FAILS IN 8570 SYSTEMS WITHIN THE ABOVE SERIAL NUMBER RANGES, HAVE THE CUSTOMER CONTACT EMERALD SYSTEMS* CUSTOMER SERVICE AT 1-800-366-4349.

* " EMERALD SYSTEMS " AND " RAPID RECOVER " ARE REGISTERED TRADEMARKS OF THE EMERALD SYSTEMS CORPORATION.

SAS KEYWORDS:

PSY2	PSY2BRD	PSY2ADPT	POEM
8570SYSBRD	8570SYSADPT	PSY2OEM	PSY2ERR
8570SYSERR			

1.4.1581 8570 MODEL A21 OR 121 10463 HARDFILE ERROR CODE

Record number: H017288

Device: D/T8570
Model: M
Tip key:
Date created: O88/12/20
Date last altered: A88/12/20

SYMPTOM:

A 10463 READ / WRITE SECTOR ERROR CODE THAT OCCURS WHILE RUNNING HARDFILE ADVANCED DIAGNOSTICS ON A 120MB HARDFILE MANUFACTURED PRIOR TO 10/88 SHOULD BE CONSIDERED A FALSE ERROR IF THE CUSTOMER HAS NOT REPORTED ANY HARDFILE PROBLEMS. THE HARDFILE SHOULD ONLY BE REPLACED IF THERE ARE OTHER HARDFILE ERRORS OCCURING OR THE CUSTOMER IS HAVING HARDFILE PROBLEMS.

PROBLEM ISOLATION AIDS:

NONE

FIX:

THE MICROCODE WAS CORRECTED ON 120MB HARDFILES MANUFACTURED AFTER 10/01/88. READ / WRITE ERROR 10463 IS NOT FALSE ON DRIVES DATED 10/88 OR NEWER, THE NORMAL DIAGNOSTIC CALL OUT SHOULD BE FOLLOWED.

SAS KEYWORDS:

PSY2	8570SYSERR	8570SYSDIAG	8570SYSFDSK
PSY2ERR	PSY2DIAG	PSY2FDSK	

1.4.1582 8570 OEM EXTERNAL DISKETTE DRIVE ERRORS

Record number: H036680

Device: D/T8570
Model: M
Tip key:
Date created: 089/12/21
Date last altered: A89/12/28

SYMPTOM: 8570 MODELS E61,061, OR 121 WITH AN ATTACHED
PROCOM TECHNOLOGY EXTERNAL DISKETTE DRIVE MAY EXPERIENCE
GENERAL FAILURES WHEN ATTEMPTING A READ OR WRITE OPERATION
ON THE PROCOM TECHNOLOGY DRIVE.

PROBLEM ISOLATION AIDS: NONE

FIX: IF THE CUSTOMER EXPERIENCES THE DESCRIBED EXTERNAL DISKETTE
DRIVE FAILURES, REFER THE CUSTOMER TO THEIR AUTHORIZED PROCOM
TECHNOLOGY DEALER TO OBTAIN THE LATEST LEVEL OF THE PROCOM
TECHNOLOGY SOFTWARE EXTERNAL DISKETTE DRIVER.

SAS KEYWORDS:

PSY2 PSY2COMM 8570SYSCOMM 8570SYSPROG
PSY2PROG

1.4.1583 8570 OR 8580 COMM LINK FAILURE W/ 486 UPGRADE

Record number: H002552

Device: D/T8580
Model: M
Tip key:
Date created: 096/05/13
Date last altered: A96/05/13

SYMPTOM:

The 8570 or 8580 experiences disconnects on an SDLC communication link established via a Multi Protocol adapter, and only with an IBM 486SLC2 processor upgrade installed.

PROBLEM ISOLATION AIDS:

This failure was experienced in the following configuration:

- The base system is (was) an 386 25MHz 8570 or 8580.
- An IBM Blue Lightning 486SLC2 Processor Upgrade is installed, Option # 13H6698, FRU 71G2602 (8570) or 71G2610 (8580).
- The system is running an SDLC link via the MultiProtocol adapter.
- The system is running 4690 Retail Environment Operating System.

FIX:

If normal problem determination and diagnostics do not isolate the problem, replace the 486SLC2 Processor upgrade.

SAS KEYWORDS:

D/T8570	D/T8580	P/N71G2606	P/N71G2610
PSY2	MPCA	MULTI-PROTOCOL	HANG
70 80			

1.4.1584 8570 POWER PLATFORM MES UPGRADE INFORMATION

Record number: H036205

Device: D/T8570
Model: M
Tip key:
Date created: 089/10/05
Date last altered: A91/03/06

SYMPTOM: BLANK SCREEN AND NO BEEP AFTER INSTALLATION OF THE POWER PLATFORM MES.

PROBLEM ISOLATION AIDS: REMOVE THE POWER PLATFORM AND THE TWO ROM MODULES.

FIX: ENSURE THAT THE ROM MODULES WERE INSTALLED WITH THE NOTCH FACING TOWARD THE REAR OF THE SYSTEM. IF THE NOTCH WAS TOWARD THE FRONT OF THE SYSTEM THE ROM MODULES ARE NOW DEFECTIVE AND THE NEXT HIGHER ASSEMBLY, SYSTEM BOARD P/N92F0581, MUST BE INSTALLED AND WRITTEN OFF TO MES BR5220.

SWAPPING THE POSITION OF THE ROM MODULES WHILE KEEPING THE NOTCH IN THE CORRECT POSITION, TOWARD THE REAR OF THE SYSTEM, WILL DISPLAY A BLANK SCREEN AND NO BEEP, BUT WILL NOT CAUSE DAMAGE TO THE MODULES.

RE-INSTALL THE ROM CORRECTLY. REMEMBER TO USE THE EXTRACTION TOOL AS A SUPPORT UNDER THE SYSTEM AS STATED IN THE INSTALLATION INSTRUCTIONS. THE FOLLOWING MAY HELP: EACH ROM HAS A PART NUMBER PRINTED ON IT. THE EVEN NUMBERED ROM, AS INDICATED BY THE LAST DIGIT IN THE NUMBER, PLUGS INTO THE EVEN NUMBERED SOCKET U58. THE ODD NUMBERED ROM PLUGS INTO THE ODD NUMBERED SOCKET U57.

AGAIN USE THE EXTRACTION TOOL AS A SUPPORT UNDER THE SYSTEM AS THE INSTRUCTIONS STATE WHILE YOU ARE RE-INSTALLING THE POWER PLATFORM. MAKE SURE THE SPACE BETWEEN EITHER END OF THE PLATFORM CONNECTOR AND THE SYSTEM BOARD IS NO GREATER THAN THE THICKNESS OF A STANDARD PLASTIC CREDIT CARD. FOR PROPER OPERATION OF THE POWER PLATFORM IT IS IMPORTANT THAT IT IS SEATED PROPERLY IN ITS SOCKET.

SAS KEYWORDS:

PSY2 8570SYSMES PSY2SYSBRD 8570SYSBRD
PSY2MES

1.4.1585 8570 UPGRADE PLANAR 006 ERROR / MEMORY REQUIREMENTS

Record number: H096122

Device: D/T8570
Model: M
Tip key:
Date created: 094/03/23
Date last altered: A94/08/15

SYMPTOM:

A 006 error occurs after adding memory to an 8570 with either of the following system board upgrades installed:

- 486DX 33MHz, Option P/N70G8988
- 486BL2 66MHz, Option P/N32G3300

PROBLEM ISOLATION AIDS:

The 8570 upgrade only supports 4MB and 16MB Industry Standard Memory Simms. Memory transferred from the previously installed system board will not function on the upgrade boards.

FIX:

Remove any non Industry Standard memory that was installed on the upgrade system board. At this time IBM offers a 4MB Industry Standard Simm, Feature Code 7634, Option P/N73G3131 and a 16MB Industry Standard Simm, Feature Code 2011, Option P/N92G7204 or P/N60G1622. Memory must be identical in size and speed if using both memory SIMM sockets.

Note: Marketing and User Documentation explain the memory requirements for these system board upgrades.

SAS KEYWORDS:

PSY2	PSY2ERR	32G3300	PSY2MEM
73G3131	MB	BL2	SIM
70G8988	DL	486	REPLY

1.4.1586 8570 W/4700 KEYBRD HANGS SELECTING DOSSHELL COMMAND PROMPT

Record number: H037386

Device: D/T8570
 Model: M
 Tip key:
 Date created: 090/02/12
 Date last altered: A90/03/26

SYMPTOM: AN IBM PS/2 MODEL 70 CONNECTED TO A 4700 KEYBOARD MAY HANG WHEN USING THE KEYBOARD TO SELECT THE COMMAND PROMPT FROM DOSSHELL.

PROBLEM ISOLATION AIDS: THIS PROBLEM WILL ONLY OCCUR ON SYSTEMS WHICH DO NOT HAVE A MOUSE INSTALLED. IF THE SYSTEM HAS A MOUSE INSTALLED, FOLLOW NORMAL PROBLEM DETERMINATION PROCEDURES.

FIX:

A CORRECTIVE SERVICES DISKETTE (CSD) IS AVAILABLE TO CUSTOMERS THROUGH THEIR DOS SUPPORT CENTER. UNTIL THE CUSTOMER RECEIVES THE DISKETTE THAT THEY ORDER, THIS PROBLEM CAN BE CIRCUMVENTED IN TWO WAYS:

- 1) INSTALL A MOUSE.
 *** OR ***
- 2) ELIMINATE REFERENCE TO THE MOUSE DRIVER IN THE DOSSHELL.BAT FILE.

BEFORE UTILIZING CIRCUMVENTION NUMBER TWO, THE CUSTOMER SHOULD BACK-UP THE DOSSHELL.BAT FILE IN THE EVENT THAT A MOUSE IS INSTALLED AT A FUTURE DATE.

USING A FILE EDITOR (E.G. DOS "EDLIN" COMMAND), THE CUSTOMER SHOULD MAKE THE FOLLOWING CHANGE TO THE DOSSHELL.BAT FILE.

CHANGE THE FOLLOWING BAT FILE LINE FROM:

```
@SHELLC /MOS: PCIBMDRV.MOS/TRAN/COLOR/DOS/MENU/.....ETC.
```

TO:

```
@SHELLC /TRAN/COLOR/DOS/MENU/.....ETC.
```

SAS KEYWORDS:

```
PSY2                PSY2PROG                8570SYSPROG                PSY2KBD
8570SYSKBD
```

8570, NO DISPLAY AT POST W/ OEM MOUSE AND KEYBOARD.

1.4.1587 8570, NO DISPLAY AT POST W/ OEM MOUSE AND KEYBOARD.

Record number: H096411

Device: D/T8570
Model: M
Tip key:
Date created: 092/11/09
Date last altered: A92/11/10

SYMPTOM: A boot failure resulting in a blank display occurs on 8570 short system boards when a Microsoft mouse and a Keytronics 101 Plus Professional Series keyboard is installed.

PROBLEM ISOLATION AIDS:

Model E61, with the short 16Mhz system board or models 061, 121, 081, and 161 with the short 20Mhz system board can be affected when using the above combination of OEM components.

FIX: Do not replace any IBM or OEM fru stock. Have the customer call Keytronics at 1-800-262-6006 for instructions.

SAS KEYWORDS:

PSY2	PSY2DISP	PSY2KBD	PSY2NLGO
PSY2OEM	OTHER EQUIPMENT	MANUFACTURER	BOOT FAILURE

1.4.1588 8570, 8573 MOD 061,121 EVEREX EVERCOM 24* MODEM PROBLEM

Record number: H063579

Device: D/T8570
 Model: M
 Tip key:
 Date created: 090/03/22
 Date last altered: A91/06/07

SYMPTOM:

8570 OR 8573 MODELS 061 AND 121 MAY EXPERIENCE COMMUNICATION FAILURES WHEN AN EVEREX* EVERCOM 24* MODEL EV-942 INTERNAL MODEM IS INSTALLED. THE 8570 MAY NOT DIAL OR ANSWER PROPERLY, AND THE MODEM DIAGNOSTICS WILL NOT RUN SUCCESSFULLY.

PROBLEM ISOLATION AIDS:

THE EVEREX* EVERCOM 24* MODEL EV-942 MODEM MAY FAIL IN THE FOLLOWING 8570 20MHZ SYSTEMS:

8570 MODEL 061 WITHIN SERIAL NUMBER RANGES:
 5001500 TO 5549999
 8007000 TO 8999999

8570 MODEL 121 WITHIN SERIAL NUMBER RANGES:
 5505500 TO 5605500
 9075500 TO 9999999

8573 MODEL 061 ABOVE SERIAL NUMBER:
 1049999

8573 MODEL 121 ABOVE SERIAL NUMBER:
 1049999

FIX: *****DO NOT REPLACE 8570/8573 SYSTEM PARTS*****
 IF THE EVEREX* MODEM CARD FAILS IN AN 8570/8573 WITHIN THE ABOVE SERIAL NUMBER RANGES, HAVE THE CUSTOMER CONTACT THE EVEREX CORPORATION* AT (415)-498-1115 FOR AN EVEREX "RMA" NUMBER. EVEREX WILL MODIFY THE MODEM AT NO CHARGE.

* " EVEREX " AND " EVERCOM 24 " ARE REGISTERED TRADEMARKS OF THE EVEREX CORPORATION

SAS KEYWORDS:

PSY2	PSY2NLGO	PSY2ADPT	POEM
PSY2COMM	8570SYSNLGO	8570SYSADPT	8570SYSCOMM
D/T8570	D/T8573	8573SYSNLGO	8573SYSCOMM
8573SYSADPT			

1.4.1589 8573 HANGS OR 110 ERRORS ON COLD BOOT.

Record number: H124003

Device: D/T8573
Model: M
Tip key:
Date created: 094/05/18
Date last altered: A94/05/19

SYMPTOM:

The system hangs with information on the display with no keyboard response or a POST 110 error occurs intermittantly on a cold boot.

PROBLEM ISOLATION AIDS:

1. A Ctl - Alt - Del (soft boot) will always boot without the POST 110 error.

*** AND ***

2. A math co-processor is installed in the system.

FIX:

Ensure the correct level MHz math co-processor is installed. The above problem was caused by installing a 25 MHz math co-processor in a system board that requires the 20 MHz version.

SAS KEYWORDS:

PSY2 PSY2ERR PSY2BRD PSY2PROC
D/T8570

1.4.1590 8573 162 ERRORS WITH TOKEN RING INSTALLED

Record number: H031209

Device: D/T8573
Model: M
Tip key:
Date created: 089/10/31
Date last altered: A89/11/06

SYMPTOM:

A 162 POST ERROR OCCURRS WHEN BOOTING THE SYSTEM, AND WHEN DOING AN AUTO CONFIG THE FIXED DISK DISPLAYS AS 0 INSTALLED.

PROBLEM ISOLATION AIDS:

REMOVING THE TOKEN RING CARD ALLOWS AUTO CONFIG TO DISPLAY THE FIXED DISK AS INSTALLED AND THE SYSTEM DOES COMPLETE AUTO CONFIG WITHOUT AN ERROR.

FIX:

REPLACE THE FIXED DISK CABLE P/N65X1573 BECAUSE OF OPEN OR SHORT CONDITIONS.

SAS KEYWORDS:

PSY2 PSY2FDSK 8573SYSFDSK PSY2ERR
8573SYSERR

PSY2 RETAIN TIPS

8580 SYSTEM DOES NOT COUNT MEMORY, HANGS AT POST

```
| will be run. |  
| Enter   Esc=Cancel |  
|-----|
```

IF THE ABOVE PROCESS DOES NOT ALLEVIATE THE
HANG CONDITION, NORMAL PROBLEM DETERMINATION
SHOULD BE CONTINUED.

THE NEXT RELEASE OF THE DIAGNOSTIC DISKETTE WILL BE CHANGED,
TO EMPHASIZE THE CORRECT PROCEDURE.

SAS KEYWORDS:

PSY2	8580SYSDIAG	8580SYSERR	8580SYSOPER
8580SYSBRD	PSY2DIAG	PSY2ERR	PSY2OPER
PSY2BRD	8580SYSDIAG	P/N33F8416	33F8416
DEAD	BLANK	SCREEN	APPEARS
NEW	DEFECTIVE	162	DISPLAY
NO	BEEP		

1.4.1592 8580 W/486 UPGRADE HANGS W/TWO ESDI HARDFILES

Record number: H037657

Device: D/T8580
Model: M
Tip key:
Date created: 094/06/21
Date last altered: A95/02/24

SYMPTOM:

8560, 8565 or 8580 systems that have a 486 DX33 or 486 BL2-66 Upgrade System Board installed may encounter BOOT problems with OS/2.

PROBLEM ISOLATION AIDS:

- Diagnostics configure the two ESDI hardfiles correctly.
- Diagnostics complete without error.
- Removing the "D" or second physical hardfile will allow the system to complete POST and BOOT successfully.
- The System Board Upgrade or 2nd hardfile was just installed.
- The system completes POST, beeps once and then hangs.

FIX:

No parts should be replaced in an attempt to fix this problem.

This problem has been fixed in Flash Bios version 1.31.

The flash BIOS image may down loaded from the IBM PC Company Bulletin Board System by calling 919-517-0001. If using the Bulletin Board, the Flash BIOS file name to search for is 80_FLASH.EXE.

If the new Flash Bios, identified above, does not correct the problem, the servicer should use normal problem determination procedures to isolate the defect.

IMPORTANT
#
THESE FLASH UPDATES ARE CUSTOMER INSTALLABLE. CUSTOMERS
SHOULD BE ADVISED TO CONTACT THE PC COMPANY HELPCENTER AT
800-772 - 2227 IF ASSISTANCE IS REQUIRED IN GETTING THE
APPROPRIATE UPDATE.
#
#####

SAS KEYWORDS:

PSY2 REPLY PSY2OEM D/T8565
UP PSY2ADPT P/N71G2643 P/N71G2610
REPLY D/T8560 GRADE DUAL

1.4.1593 8580 W/486 UPGRADE WITH TWO SCSI ADAPTERS

Record number: H124800

Device: D/T8580
 Model: M
 Tip key:
 Date created: 094/08/05
 Date last altered: A94/09/06

SYMPTOM:

8560, 8565 or 8580 systems with a 486 DX33 or 486 BL2-66 Upgrade System Board installed (FRU P/N71G2643 or P/N71G2610) may encounter a problem recognizing a hardfile attached to the first SCSI adapter when two SCSI adapters are installed along with an XGA-2 adapter.

PROBLEM ISOLATION AIDS:

- The System Board Upgrade, the 2nd SCSI adapter, or the XGA-2 adapter were just installed.
- The system will configure correctly with all adapters.
- Diagnostics complete without error.
- Removing the second SCSI adapter or the XGA-2 adapter will allow the system to recognize the hardfiles.

FIX:

At this time IBM is aware of this problem and a fix is being developed.

No parts should be replaced in an attempt to fix this problem.

As a workaround, Flash Bios version 1.32 may be obtained. Servicicers should contact Boca Level 2 through their normal technical suport structure.

When Flash Bios version 1.32 is generally available it will be communicated via this RETAIN Tip.

If the Flash Bios, identified above, does not correct the problem, the servicicer should use normal problem determination procedures to isolate the defect.

SAS KEYWORDS:

PSY2	REPLY	PSY2OEM	D/T8565
PSY2ADPT	P/N71G2643	P/N71G2610	REPLY
D/T8560	PSY2TBD	PSY2FDSK	DUAL

1.4.1594 8580 80386/80387 CONFLICT CAUSES SYS HANG

Record number: H12387

Device: D/T8580
Model: M
Tip key:
Date created: 093/06/15
Date last altered: A94/08/15

SYMPTOM:

THE 8580 MAY HANG UNDER CERTAIN CONDITIONS AS A RESULT OF A CONFLICT BETWEEN THE INTEL 80386 PROCESSOR, AND THE 80387 CO-PROCESSOR. ALL 8580 MODELS WERE AFFECTED BY THIS PROBLEM HOWEVER IT WILL MANIFEST ITSELF ONLY UNDER CERTAIN OPERATING CONDITIONS. IT MUST BE ASSUMED THAT DATA HAS BEEN LOST IF THE SYSTEM HANGS. TURNING THE SYSTEM OFF AND BACK ON IS NECESSARY TO REGAIN CONTROL OF THE SYSTEM.

PROBLEM ISOLATION AIDS: NONE**FIX:**

IF THE SYSTEM IS EQUIPPED WITH A MATH CO-PROCESSOR, AND IS ENCOUNTERING CONDITIONS AS DESCRIBED ABOVE, CONTINUE TO DETERMINE IF THE SYSTEM BOARD SHOULD BE REPLACED. THE SYSTEM BOARD SHOULD BE CHECKED AS FOLLOWS:

ON THE 8580 MODEL 041 / 071 LOCATE THE FRU P/N ON THE SYSTEM BOARD. IF THE SYSTEM BOARD HAS FRU P/N72X6668, OR THE FRU P/N CANNOT BE DETERMINED, THE SYSTEM BOARD SHOULD BE REPLACED.

ON THE 8580 MODEL 111 / 311 CHECK THE FRU P/N LOCATED ON THE LABEL NEAR THE I/O CARD SOCKETS, IF THE SYSTEM BOARD HAS FRU P/N90X7390, OR THE FRU P/N CANNOT BE DETERMINED, THE SYSTEM BOARD SHOULD BE REPLACED.

NOTE:

THE MATH CO-PROCESSOR SHOULD BE REMOVED FROM THE OLD SYSTEM BOARD AND INSTALLED ON THE NEW ONE.

SAS KEYWORDS:

PSY2	PSYMISC	8580SYSMISC	PSY2BRD
8580SYSBRD	D/T8580	HUNG	ECA011
ECA 011			

1.4.1595 8580, 110 PARITY ERRORS, WIZARD / BUSMASTER

Record number: H12397

Device: D/T8580
Model: M
Tip key:
Date created: 093/06/08
Date last altered: A94/08/15

SYMPTOM:

8580 MODELS 111 AND 311 MAY EXPERIENCE A 110 MEMORY PARITY ERROR IF THE CUSTOMER IS USING THE PS/2 WIZARD ADAPTER OR OTHER BUSMASTER ADAPTERS.

NOTE: THE IBM SCSI ADAPTER WITH CACHE MEMORY AND SCSI ADAPTER WITHOUT CACHE MEMORY ARE "BUSMASTERS".

PROBLEM ISOLATION AIDS: NONE**FIX:**

SUSPECT SYSTEM BOARDS ARE IDENTIFIED WITH A FRU P/N90X7390 OR A FRU PART NUMBER THAT CANNOT BE IDENTIFIED.

IF 110 PARITY ERROR IS EXPERIENCED WHEN USING A BUSMASTER ADAPTER, REPLACE THE SYSTEM BOARD WITH A CURRENT SYSTEM BOARD FRU.

NOTE:

MARKETING LITERATURE REFERS TO EC C00835 AS BEING REQUIRED ON 8580 SYSTEMS USING THE WIZARD ADAPTER. THIS EC HAS BEEN INCORPORATED ON ALL SYSTEM BOARDS EXCEPT FRU P/N90X7390, WHICH WAS THE INITIAL SYSTEM BOARD FOR 8580 MODELS 111 & 311.

SAS KEYWORDS:

PSY2 PSY2ERR 8580SYSERR ECA031
ECA 031

1.4.1596 8590 AND 8595 50MHZ SYSTEMS HANG WITH 36/38 ADAPT

Record number: H093927

Device: D/T8590
 Model: M
 Tip key:
 Date created: 091/08/12
 Date last altered: A93/02/09

SYMPTOM:

SYSTEM HANGS MAY BE EXPERIENCED ON 8590 AND 8595 SYSTEMS WITH A 50 MHZ PROCESSOR AND AN EARLY VERSION SYSTEM 36/38 EMULATION ADAPTER INSTALLED. THE HANG CONDITION WILL ONLY OCCUR DURING POST (POWER-ON SYSTEM TEST) OR SET CONFIGURATION.

IF THE HANG CONDITION OCCURS AT ANY OTHER TIME WHILE RUNNING THE SYSTEM 36/38 WORK STATION EMULATION PROGRAM ON THE ABOVE REFERENCED SYSTEMS, CONFIRM THAT PTF #IM00479 (PROGRAMMING TEMPORARY FIX) IS INSTALLED.

PROBLEM ISOLATION AIDS:

THE EARLY SYSTEM 36/38 EMULATION ADAPTER MAY BE IDENTIFIED BY A FRU LABEL ON THE SYSTEM 36/38 EMULATION ADAPTER OF EITHER: FRU P/N69X6282, FRU P/N69X6283 OR FRU P/N69X6292.

REMOVE THE SYSTEM 36/38 EMULATION ADAPTER TO MAKE SURE THE PS/2 SYSTEM IS OPERATING CORRECTLY WITHOUT THE ADAPTER. (ALSO REMOVE OTHER ADAPTERS.)

FIX:

THE EARLY VERSION SYSTEM 36/38 (5250 EMULATION) WORK STATION EMULATION ADAPTER SHOULD BE REPLACED BY THE CURRENT FRU, P/N69X6294.

SAS KEYWORDS:

PSY2	PSY2ADPT	PSY2COMM	8590SYSADPT
8595SYSADPT	8590SYSCOMM	8595SYSCOMM	D/T8590
D/T8595			

1.4.1597 8600 REDUNDANT POWER SUPPLY

Record number: H121413

Device: D/T8600
Model: M
Tip key:
Date created: 093/03/18
Date last altered: A93/10/04

SYMPTOM: MASS (Maximum Availability Support Subsystem) shows no redundant power supply when viewing the the power supply icon within the MASS screen.

PROBLEM ISOLATION AIDS:

Check to see if there are two distinct bus connectors on the RMP (REMOTE MAINTENANCE PROCESSOR) Board. Also the RMP board may be interrogated via MASS to determine revision level of the RMP. This revision level must be 1.0 or above.

FIX:

Replace the RMP board with FRU P/N92F0200, which will provide the current version. If the RMP board is already at revision level 1.0 or higher, use normal problem isolation procedures.

SAS KEYWORDS:

PSY2	295	PARALLAN	195
PSY2PWR	SERVER		

1.4.1598 8600 SYSTEM FIXED DISK GO OFF-LINE OR NOT READY

Record number: H122387

Device: D/T8600
 Model: M
 Tip key:
 Date created: O93/11/17
 Date last altered: A94/08/15

SYMPTOM:

A hard file goes OFF-LINE, or NOT READY. The green LED on the Hot Insertion Carrier Module (FRU 92F0215) that contains the hard file may be on or off.

8600 Models 1, 2 and 3 are affected.

PROBLEM ISOLATION AIDS:

The problem is usually caused by a loose screw on the carrier. (Part number 92F0215 may be found on the fixed disk carrier assembly, which is used for both 400MB and 1GB fixed disks.)

The following items are applicable and should be checked:

1. Software recovery attempts have failed.
2. The physical connections to the file should be verified:
 - a. The SCSI ribbon cable and the power cord are securely connected to the carrier and their respective backplane connectors.
 - b. The keylock switch is fully engaged clockwise in a horizontal position.

FIX:

The problem may be a loose screw associated with the switch mechanism on the fixed disk carrier.

The COMPLETE carrier assembly (the assembly with the handle that contains the file AND the assembly that is attached to the server chassis with two 1/4" screws) should be removed from the server.

NOTE:

Removal of the COMPLETE carrier assembly MUST ALWAYS take place with the server POWER OFF!

Examine the keylock mechanism to determine if it is loose or has come apart. This keylock controls the switch in the carrier that enables/disables power to the hard file.

The keylock can be found on the right side of the carrier attached to the key. Starting from the key and working toward the back of the carrier, the keylock is comprised of a key cylinder, collar, large washer, large hex nut, cylinder, pawl, small washer, and a small hex nut.

Ensure that the two nuts are secure on the keylock assembly. The small nut in particular seems to be more susceptible to loosening than the larger nut. Tighten both nuts if loose. Use "Loctite"* if necessary.

If the keylock assembly was found to be noticeably loose, reinstall the combined hard file/carrier assembly back into the server to determine if the carrier was responsible for the OFF-LINE or NOT READY conditions.

* Registered trademark

SAS KEYWORDS:

PSY2	8600	295	195
PARALLAN	SERVER	HARD	FILE
PSY2FDSK	DASD		

1.4.1600 8640 ERROR 020860FU 61EI DURING SYSTEM BOOT

Record number: H125060

Device: D/T8640
Model: M
Tip key:
Date created: 094/08/29
Date last altered: A95/02/09

SYMPTOM:

During system boot two "beeps" are heard and the following error message is displayed:

Device Error: 020860FU 61EI

Attempts to boot a diskette also fail with the same error code.

PROBLEM ISOLATION AIDS:

1. The system is an 8640 model OPT
2. A PCI SCSI-2 FAST adapter is installed.
3. The system board may have just been replaced, or the system configuration changed.

Boot the system.

When the error occurs, depress the CTL-ALT-S keys.

The Configuration screen should appear.

Using the Page Down keys, view the PCI Configuration screen (page 2 of 3) and make note of the "Device Select: " line.

Note: There are Three PCI slots: 0, 1 & 2 (top to bottom).

Using the +/- keys, select the correct PCI slot and make note of the "Device IRQ Interrupt" line. If the IRQ is set to 5, 11 or 15, this tip does not apply and problem determination should continue. (See Note below if the "Device IRQ Line: " is blank.)

FIX:

If the PCI Device IRQ line is set to "NONE," use the +/- keys and change it to either 5, 11 or 15. Escape, then depress the F4 key to save the configuration change.

Reboot the system to enable the configuration change.

The system should now operate correctly.

PCI IRQ Interrupt = "NONE" is an invalid option and will cause the system to hang with the fixed disk and the diskette drive inoperative.

Note:

If the "Device IRQ Line: " is blank (This setting should change from "None, to 5, 11, 15 and repeat), Then an auto configuration should be done as follows:

1. Depress the ESC key
2. Depress SHIFT and F5 together

This will set the default values into the configuration and

Device IRQ Line: should show a valid setting (5, 11 or 15).

SAS KEYWORDS:

PSY2	PCSERVER	PC	SERVER
8640	300		

1.4.1601 8640 HANGS OR TRAP 000D RUNNING NTS/2

Record number: H125249

Device: D/T8640
 Model: M
 Tip key:
 Date created: 094/10/13
 Date last altered: A94/10/13

SYMPTOM:

When OS/2 2.11 with IBM NTS/2 (Network Transport Services, also known as LAPS) are installed on an 8640 (PCSERVER) with the IBM PCI Fast SCSI-2 Adapter, system hangs or TRAP000D errors may be experienced while NTS/2 is copying files to a fixed disk. Hangs may also be encountered during other NTS/2 operations.

PROBLEM ISOLATION AIDS:

1. Machines Affected: 8640-models OPT, and 1PT.
2. System diagnostics run without error.
3. A PCI SCSI-2 Adapter is installed.
4. The operating system is OS/2 Version 2.11.
5. NTS/2 (LAPS) application execution.

FIX:

The PCI Fast SCSI-2 Adapter Device Support Diskette currently shipped with the system is version 1.10. Version 1.20 of the PCI Fast SCSI-2 Adapter Device Support Diskette is now available. A new OS/2 Device Driver (IBMPSCSI.ADD, dated 08/04/94) for the PCI SCSI-2 Adapter is included with the version 1.20 diskette. This driver must be installed.

The new version of the IBM PCI Fast SCSI-2 Adapter Device Support Diskette may be obtained from the IBM PC Company BBS by calling (919) 517-0001 and downloading 8640PCI.DSK. The disk image should be uncompressed with Loaddisk, which is also available on the PC Company BBS.

----- IMPORTANT -----

Diskette fixes are customer installable. Customers should be advised to contact the IBM PC Company HelpCenter at 800-772 - 2227 if assistance is required in getting or installing the update.

The files are located on the PC company's Bulletin Board Service (BBS). The direct line for modem connection to The PC Company BBS is 1-919-517-0001 or tieline 255-0001.

Customers in Canada should call IBM's HelpPC at 800-565-3344 for Assistance or down load information. The Canadian BBS phone numbers are:

Montreal-514-938-3022, Toronto-905-316-4255,
 Winnipeg-204-934-2735, Vancouver-604-664-6464.

To install the new driver at an OS/2 Window type "DDINSTAL" and press ENTER. A device driver installation screen will appear. Insert the IBM PCI Fast SCSI-2 Adapter Device Support Diskette version 1.20 and click on OK. Once the installation is complete the system must be rebooted for the changes to take affect.

The version 1.20 PCI Fast SCSI-2 Adapter Device Support Diskette will be included in future product shipments.

SAS KEYWORDS:

PSY2	PSY2PROG	PSY2ERR	PC
SERVER	8640	HANG	TRAPD
D	INSTALL	INSTALLATION	LOADING
LOAD	NTS	2	

1.4.1602 8640 HANGS WHILE BOOTING OS/2 V2.1

Record number: H124344

Device: D/T8640
Model: M
Tip key:
Date created: 094/06/06
Date last altered: A94/08/15

SYMPTOM:

The system will intermittently hang attempting to execute the STARTUP.COM file when loading OS/2 Ver. 2.1 on the PCSERVER (8640).

If a DOS full screen opens during IPL, the system will hang and recovery is not possible. If no DOS FULL SCREEN opens during IPL, the system goes to the desktop screen and STARTUP.COM will now execute normally.

PROBLEM ISOLATION AIDS:

The following conditions must apply:

1. The operating system is OS/2 version 2.1.
2. The system bootable fixed disk is a SCSI fixed disk.
3. HPFS (High Performance File System) is being used.
4. The STARTUP.COM is configured to automatically run upon system boot up.

FIX:

The customer should contact the OS/2 Support Center at 1 - 800-992 - 4777 and request the following OS/2 version 2.1 PATCHES to correct this problem:

PMSHAPI.DLL
PMSHAPI.SYM

Note:

A new subdirectory should be created containing these patch files. The CONFIG.SYS file is then modified so these patches will be called from the subdirectory.

SAS KEYWORDS:

PSY2	PSY2PROG	PSY2ERR	PC
SERVER	8640	PSVP	

1.4.1603 8641 (SERVER 500) WILL NOT POWER OFF

Record number: H121478

Device: D/T8641
Model: M
Tip key:
Date created: 095/06/07
Date last altered: A95/06/08

SYMPTOM:

The 8641 will not power off unless the power cable is removed from the rear of the system.

When the power cable (line cord) is reconnected the system powers-on normally, but once again will not power off.

PROBLEM ISOLATION AIDS:

Inspect the System Status Cable (1X4), attached to the Operator Control Panel, and determine if the other end is mistakenly plugged into the System Board. This is a narrow ribbon cable approximately 1/2 inch wide (FRU P/N06H3404). The other ribbon cable attached to the Operator Panel is approximately 2 inches wide (FRU P/N06H3406, Planar/Control Panel Cable).

FIX:

The System Status Cable (1x4), FRU P/N06H3404, should be connected between the Operator Control Panel Card Assembly and the Processor board.

This cable is not keyed, therefore it may be accidentally plugged into the system board.

SAS KEYWORDS:

PSY2	PSY2PWR	SERVER500	500
SERVER	RAID	CABLES	

1.4.1604 95XX SYSTEM HANGS WHILE INSTALLING OS/2 2.1

Record number: H126918

Device: D/T95XX
Model: M
Tip key:
Date created: O95/03/28
Date last altered: A95/03/28

SYMPTOM:

During the installation of OS/2 version 2.1 on any 95xx system, a hang may be experienced.

PROBLEM ISOLATION AIDS:

- The system contains, or has been upgraded with, an IBM SCSI Fast/Wide Adapter, FRU P/N92F0160, Option Part Number 70G8498 or 6451280.
- OS/2 Version 2.1 is being installed.
- Diagnostics complete without error.

Note:

This tip applies only if the OS/2 version 2.1 is being installed. The installation of OS/2 version 2.11 or Warp is not affected.

FIX:

No parts should be replaced prior to the customer utilizing any one of the following fixes:

- Install OS/2 version 2.11 or Warp.
- Make a backup copy of OS/2 2.1 diskette 1. Copy IBM2SCSI.ADD and IBM2M57.ADD from an OS/2 2.11 diskette 1 to the backup copy of the of OS/2 2.1 diskette 1. Use this new diskette during the installation.

Customers requiring IBMSCSI.ADD OR IBM2M57.ADD, may obtain these files from the IBM PC Co. Bulletin Board System at 919-517-0001. The file is identified as IBM2.ZIP. This file when inpacked will provide required files.

- Utilize another SCSI adapter other than the IBM SCSI Fast/Wide Adapter, FRU P/N92F0160.

IMPORTANT
+ THESE FILES ARE CUSTOMER INSTALLABLE. CUSTOMERS SHOULD +
+ BE ADVISED TO CONTACT THE PC COMPANY HELPCENTER +
+ AT 800-772-2227 IF ASSISTANCE IS REQUIRED IN GETTING +
+ OR INSTALLING THE APPROPRIATE FILES. +

If the new code identified above does not correct the problem, the servicer should use normal problem determination procedures to isolate the defect.

SAS KEYWORDS:

PSY2 PSY2PROG D/T9577I D/T9577S
D/T9576I D/T9577S D/T9577 HUNG
D/T9590 D/T9595A D/T9595 D/T9585
D/T9533 D/T9557 D/T9556 PSY2TBD
D/T8641

1.4.1605 9507 MONITOR GOES BLANK

Record number: H121055

Device: D/T9507
Model: M
Tip key:
Date created: 093/08/31
Date last altered: A94/08/15

SYMPTOM:

A limited quantity of 9507 monitors may experience a problem where the backlight on the monitor goes out. This gives the effect of a display failure since the display is blank.

PROBLEM ISOLATION AIDS:

Reseat the cable attached to the monitor and check for a loose cable restraint clamp. This problem may result if the cable is pulled excessively. Failures are not expected under normal operating conditions.

FIX:

If reseating the cable allows proper operation of the monitor, and the cable clamp was loose and cannot be securely fastened, contact Level 2 Hardware Support through the normal hardware support structure to obtain an improved version of the clamp. The new version is being used in Manufacturing.

SAS KEYWORDS:

PSY2	FLAT SCREEN	PANEL	PSY2DISP
IMAGE	TFT	LCD	D/T9533
9533			

1.4.1606 9524 TOUCH SCREEN MONITOR DEAD OR BLANK

Record number: H136484

Device: D/T9524
Model: M
Tip key:
Date created: 097/02/05
Date last altered: A97/02/14

SYMPTOM:

The 9524 - T01 (14PT) touch-screen monitor appears blank or dead.

PROBLEM ISOLATION AIDS:

This symptom is typically diagnosed as a defective card-tray assembly; however, in this case, replacing the card-tray FRU does not correct the problem. In some cases, the card-tray is replaced multiple times by servicicers suspecting defective FRU stock.

FIX:

Replace the 9524-T01 ITC assembly, FRU p/n68G3147. Failure analysis has shown that a small cable connecting the ITC to the touch-screen circuitry of the card-tray may fail, creating the above symptom. This is not the typical cause of a blank or dead monitor, so should not be suspected until the card-tray has been replaced. (card-tray is FRU p/n68g3151)

SAS KEYWORDS:

UNCLASSIFIED	PSY2DISP	PSY2	CRT
95G9204	P/N68G3151	68G3151	DISP
DISPLAY	68G3147		

1.4.1607 9527 IMAGE SHIFTS WHEN CONNECTED TO a 3483 OR 3488.

Record number: H107708

Device: D/T9527
Model: M
Tip key:
Date created: 093/12/29
Date last altered: A94/08/15

SYMPTOM:

A 9527 monitor when connected to a D/T3483 or a D/T3488 system may experience some degree of picture shift. This will result in the image appearing offset to the left or vertically, in Modes 2, 3 or 4.

PROBLEM ISOLATION AIDS:

This problem is limited to Monitors manufactured prior to December 20, 1993. The date is located on label on the underside of the rear cover.

In addition, monitors manufactured after December 20, 1993 that have had the signal cable replaced may also display this symptom when connected to a 3483 or 3488.

FIX:

An adapter cable has been developed which will provide the necessary signal cable ID bits for the 3483 and 3488 system units.

If you have the above symptom and your 9527 is connected to a 3483 or 3488 system, contact the Personal Systems HelpCenter at 1 - 800-PS2 - 2227 to obtain the adapter cable.

SAS KEYWORDS:

PSY2 PSY2DISP PSY2PART 68G2543
DISPLAY

1.4.1608 9545 (ALL MODS) KEYBOARD HANGS USING WP 6.1

Record number: H131833

Device: D/T9545
Model: M
Tip key:
Date created: 095/11/30
Date last altered: A95/12/01

SYMPTOM:

Both system and external keyboards do not respond and the Caps light stays on when using Word Perfect 6.1 under Windows 3.1. The mouse arrow can still move.

PROBLEM ISOLATION AIDS:

Windows 95 and OS2/WARP are not affected.

FIX: WordPerfect has released a fix for the international version of this program, but the US fix will not be completed until the next 16 bit release of WordPerfect in April 1996.

WORK AROUND:

Until a fix is released by WordPerfect a change to the SYSTEM.INI file will eliminate this symptom. The customer should change this file as follows:

OLD: KEYBOARD.DLL=KBDUS.DLL

To

NEW: KEYBOARD.DLL=

If this symptom occurs while using any program other than Windows 3.1 follow normal problem determination to resolve the failure.

WordPerfect is a trade mark of the WordPerfect Corporation.

SAS KEYWORDS:

PSY2 THINKPAD PSY2PROG PSY2KYBD
PSY2BD

1.4.1609 9545 BLANK SCREEN DURING RESUME ON AC POWER.

Record number: H13933

Device: D/T9545
Model: M
Tip key:
Date created: 095/09/11
Date last altered: A95/09/19

SYMPTOM:

When on AC power (either power supply or docking station) the system displays a blank LCD on resume. Resuming under DC power works correctly.

The above condition also relates to partial and full suspend conditions.

PROBLEM ISOLATION AIDS:

Condition only occurs when a power-on password is used.

FIX:

This is not a hardware defect. The operator must key the power on password at the blank screen before the system will continue.

During DC operation (full suspend and one beep) a power-on password prompt is placed on the screen, but the prompt is not present during a resume under AC operation (partial suspend, two beeps.)

SAS KEYWORDS:

PSY2 PSY2BRD PSY2LCD PSY2DISP
THINKPAD PSY2OPER

1.4.1610 9545 FAILS TO HIBERNATE USING OS2 2.1

Record number: H131239

Device: D/T9545
Model: M
Tip key:
Date created: O95/10/12
Date last altered: A95/10/16

SYMPTOM:

The system will suspend but not go into hibernation when using OS/2 2.1.

PROBLEM ISOLATION AIDS:

Ensure that the hibernation file is sized according to the memory installed in the system

FIX:

Down load and install the HIBERFIX.EXE from the PC Company BBS.

----- IMPORTANT -----

Diskette fixes are customer installable. Customers should be advised to contact the IBM PC Company HelpCenter at 800-772 - 2227 if assistance is required in getting or installing this information.

Files are located on the PC company's Bulletin Board Service (BBS). The direct line for modem connection to The PC Company BBS is 1-919-517-0001 or tieline 255-0001.

Customers in Canada should call IBM's HelpPC at 800-565-3344 for Assistance or down load information. The Canadian BBS phone numbers are:

Montreal-514-938-3022, Toronto-905-316-4255,
Winnipeg-204-934-2735, Vancouver-604-664-6464.

The data may also be downloaded via the Internet from the IBM Personal Computer File Library by searching the following Internet URL: <http://www.pc.ibm.com/files.html>

SAS KEYWORDS:

PSY2

PSY2PUB

PSY2DOC

PSY2PROG

THINKPAD

1.4.1611 9545 HANGS WHEN WORD PERFECT IS USED.

Record number: H123874

Device: D/T9545
Model: M
Tip key:
Date created: 094/04/29
Date last altered: A94/05/12

SYMPTOM:

The 9545 system hangs when Word Perfect 4.1 or later is invoked.

PROBLEM ISOLATION AIDS:

Removing EMM386 will allow the program to run without locking up.

FIX:

DO NOT REPLACE ANY HARDWARE.

Word Perfect has determined that their software is causing the lockup condition. They have requested that customers use the "/NC option" when using version 4.1 or later. If a customer has a problem using this fix please have them contact their Word Perfect support center.

Word Perfect is a trade mark of The Word Perfect Corporation.

SAS KEYWORDS:

PS2PS PSY2PROG

1.4.1612 9545 KEYBOARD HANGS

Record number: H122579

Device: D/T9545
Model: M
Tip key:
Date created: 094/02/03
Date last altered: A94/02/03

SYMPTOM:

The 9545 keyboard hangs leaving all data on the display.
A cold boot must be done to unhang the system.

PROBLEM ISOLATION AIDS:

Check the FUELDOS.COM level as the system is booting. Level 1.2
has a hang problem. It is being corrected in a future release.

FIX:

Install FUELDOS.COM level 1.0. This is on the level 1.0 Utility
diskette. Call your support center if you can not obtain this
level Utility diskette or a level higher than 1.2.

SAS KEYWORDS:

PSY2 PSY2HANG LOCKUP PSY2PROG
LOCKS

1.4.1613 9545 LCD IMAGES SMEARING OR BLEEDING IN 640X480 MODE.

Record number: H122858

Device: D/T9545
Model: M
Tip key:
Date created: 094/02/09
Date last altered: A94/04/29

SYMPTOM: A bleeding or smearing condition can occur in the demo program, Windows, or a DOS shell when a 640 x 480 graphic mode is used. The condition does not occur in diagnostic mode.

PROBLEM ISOLATION AIDS:

Check BIOS for a date before (earlier than) 11/25/93. BIOS dated 11/25/93 or later will not have this condition.

To see the BIOS date:

1. Boot the system while holding down the F1 key.
2. At the Easy Set-Up screen select "Config".
3. Select "System Board" at the Config menu.

FIX:

Load the Video Features Diskette 1.21 or later. It is located on the NSC bulletin board, internal VM DOSCD and it shipped with each system. Insert the diskette and load the VINSTALL.EXE. This replaces the VESA.EXE and will allow selection of the correct display mode for the 9545 systems.

Detailed information on installing the Video Device Driver for DOS, OS/2, and Windows is located in the 750 Users's Guide under "Installing ThinkPad 750 Video Device Driver".

SAS KEYWORDS:

PSY2 PSY2UCODE PSY2MICRO PSY2
PSY2DISP PSY2MCD

1.4.1614 9545 LCD SHIFTS ONE PIXEL OFF LEFT SIDE OF SCREEN.

Record number: H131393

Device: D/T9545
Model: M
Tip key:
Date created: 095/10/13
Date last altered: A95/10/23

SYMPTOM:

The entire image on the LCD shifts one vertical pixel row to the left.

PROBLEM ISOLATION AIDS:

System is installed in a Dock I with an Analog-to-Digital Video Converter Adapter option.

FIX: NOTE: This adjustment should be made by the customer.

The LCD can be adjusted to display the missing vertical row of pixels by using a program located on the Analog-to-Digital Video Converter utility diskette that comes with the option.

Insert the utility diskette in the A: drive and copy the tuning program to the hard disk. (COPY A: *. * drive: \path)
The program name is:

ADVCDOS.EXE for DOS

ADVCWIN.EXE for Windows

ADVCDOS.EXE is used in a DOS full screen for OS2.

Run the exec for the operating system you are using and choose the "3. Screen Position Adjustment" option. The horizontal and vertical arrow keys will now allow centering of the display on the LCD.

SAS KEYWORDS:

PSY2 THINKPAD PSY2DRV PSY2DISP
D/T3545

1.4.1615 9545 LI-ION BATTERY INFORMATION.

Record number: H132156

Device: D/T9545
Model: M
Tip key:
Date created: 095/12/28
Date last altered: A96/01/04

SYMPTOM:

The following Tip is applicable to 755CX and other 755 models using a Li-Ion (Lithium Ion) main battery FRU P/N29H9232.

The system:

1. fails to power up using the battery.
2. will power up using the AC Adapter.
3. will fail to charge the battery during a normal charge cycle with the system off.
4. will not charge at all while it is powered on.

PROBLEM ISOLATION AIDS:

1. The battery fuel icon shows the battery as a dashed line instead of a solid out line.
2. The charge indicator will blink during the charge cycle when the system is turned off.

CAUSE:

The Li-Ion battery was completely discharged for an extended period of time due to use or new battery shelf life. Follow the recovery procedure in FIX section to correct this condition and obtain full battery potential.

FIX:

The battery must be charged for a minimum of eight (8) hours. This can be done in the system while it is off or with the external battery charger.

To ensure this does not occur again, recharge the main battery when the system indicates a charge is needed. The Li-Ion battery can be recharged at any time during the normal discharge cycle and obtain a full charge - they do not have to be completely dis-charged before recharging.

Once the battery is charged it can be stored for extended periods of time (up to a year) without incurring this condition.

This condition will not effect the life of the battery.

SAS KEYWORDS:

PSY2 PSY2PWR THINKPAD LED

1.4.1616 9545 PC CARD MODEM FAILS TO RESUME

Record number: H124218

Device: D/T9545
Model: M
Tip key:
Date created: 094/06/10
Date last altered: A94/06/10

SYMPTOM:

EZPLAY indicates the modem is off after a second suspend / resume cycle.

PROBLEM ISOLATION AIDS:

The modem can be made ready again by ejecting and re-inserting it.

FIX:

Install EASYPLAY from Utility Diskette 1.31 or later.

SAS KEYWORDS:

PSY2	HANGS	PSY2PROG	THINKPAD
PCMCIA	PSY2COMM		

1.4.1617 9545 SLOW BOOTING TO OS/2 2.11

Record number: H13836

Device: D/T9545
Model: M
Tip key:
Date created: O95/09/11
Date last altered: A95/09/11

SYMPTOM:

OS/2 2.11 takes 6 minutes plus to boot, with the appropriate amount of memory.

PROBLEM ISOLATION AIDS:

No diagnostic or post errors.

Config.sys shows THREADS=512

FIX:

Change the CONFIG.SYS THREADS command to THREADS=256.

SAS KEYWORDS:

PSY2 PSY2PROG PSY2MEM PSY2BD
THINKPAD

1.4.1618 9545 755C & 755CS EXTERNAL CRT FLICKER ON 640X480

Record number: H124572

Device: D/T9545
 Model: M
 Tip key:
 Date created: 094/07/07
 Date last altered: A95/01/18

SYMPTOM:

An external CRT with a device type of 632x or 952x (x = any number used in the forth digit of a display) may jitter when using a VGA mode of 640x480.

PROBLEM ISOLATION AIDS:

Changing the display mode to SVGA 1024x768 will eliminate any visible jitter.

FIX:

Use the 1024x768 mode as a permanent fix or as a short term work around if the customer must use the 640x480 mode. A new sysbrd FRU P/N85G0993 has been released to correct jitter for customers requiring the 480x640 VGA mode. All Mechanicsburg stock has been sorted. This part should be replaced under the system warranty.

Note: FRU P/N85G0993 will now subs to FRU P/N84G5632

SAS KEYWORDS:

PSY2	PSY2PART	PSY2BRD	PSY2DISP
D/T6324	D/T6325	D/T6327	D/T9521
D/T9525	D/T9527	D/T9524	

1.4.1619 9545 755CSE. LINES ON LCD AFTER SUSPEND/RESUME.

Record number: H126577

Device: D/T9545
Model: M
Tip key:
Date created: 095/03/02
Date last altered: A95/03/02

SYMPTOM:

After a suspend / resume cycle the LCD data is replaced with vertical lines on the left and right of the LCD with a blank separation in the middle.

PROBLEM ISOLATION AIDS:

1. An external CRT is not affected.
2. The system is functional (not hung.)
3. Intermittent problem (About 1 out of 50 suspend / resume cycles.)

FIX:

DO NOT REPLACE ANY FRUs.

Engineering is doing root cause determination. This tip will be updated with the final fix.

WORK AROUND:

Suspend and resume again.

SAS KEYWORDS:

PSY2 PSY2DISP COLOR CORRUPTED
PSY2TBD

1.4.1620 9545/46/47 & 2625 POST 8603 OR 8611 AND KYBD RESETS.

Record number: H134978

Device: D/T9546
Model: M
Tip key:
Date created: 096/10/17
Date last altered: A97/02/11

SYMPTOM: Full size and space saver external Trackpoint keyboards can cause an 8603 or 8611 POST error during boot or cause a keyboard reset to occur during normal operation.

PROBLEM ISOLATION AIDS:

Ensure the software work around or the hardware cable kit listed in the fix section of this tip is installed before replacing any other FRU parts.

FIX:

A partial work around is now available on the PCCO BBS. The file for DOS / Windows / Windows 95 is called YPTF\$034.EXE; the OS/2 file is called YPTF\$035.EXE.

NOTE: The software work around is not effective when hot or warm docking is used.

Setting the internal trackpoint to OFF with ThinkPad features will prevent either error condition, but the internal trackpoint will not operate.

A hardware fix will be available by the end of November. It will consist of a TrackPoint keyboard adapter cable. The kit is FRU P/N83H6472.

This kit is a Customer Replaceable Unit (CRU) and can now be obtained by your customer at no charge when they call the IBM PCCO Help Center at 1-800-PS2-2227 (1-800-772-2227).

ThinkPad 760 and 365X Systems:

Plug the Adapter Cable, FRU P/N83H6472, into the keyboard cable connector with the mouse symbol or if the keyboard and mouse are separate cables, into the mouse cable.

Figure 1

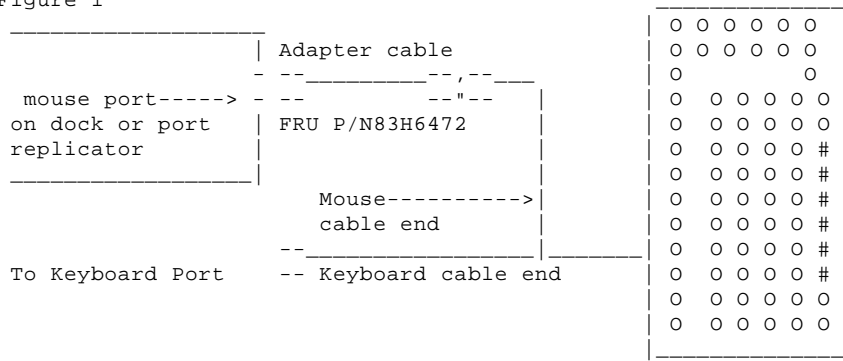
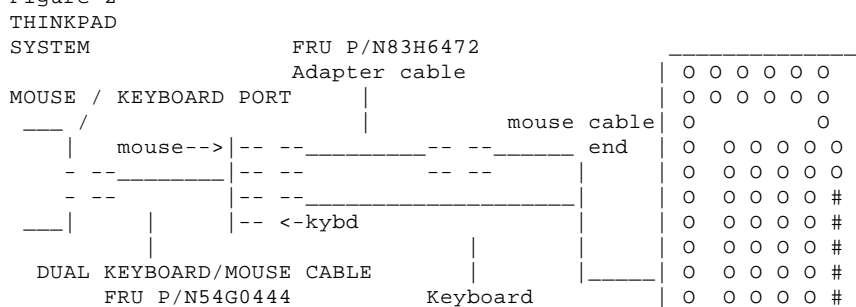
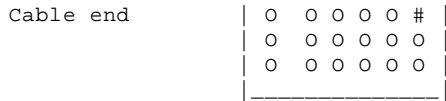


Figure 2





ThinkPad 755 Systems:

Plug the Adapter Cable, FRU P/N83H6472, into the keyboard cable connector with the Keyboard symbol or if the keyboard and mouse are separate cables, into the keyboard cable. Plug the other end of the Adapter Cable into the Docking station or Port Replicator keyboard port connector (Figure 1). If a ThinkPad is being used stand-alone, plug the other end of the Adapter Cable into the keyboard / mouse connector cable's system keyboard port in figure 2.

Figure 1

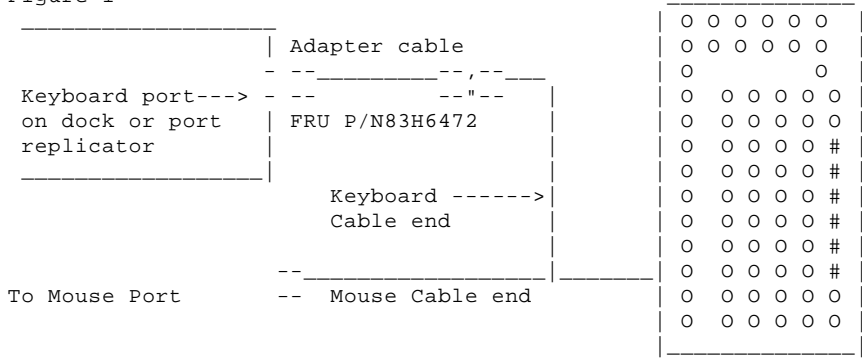
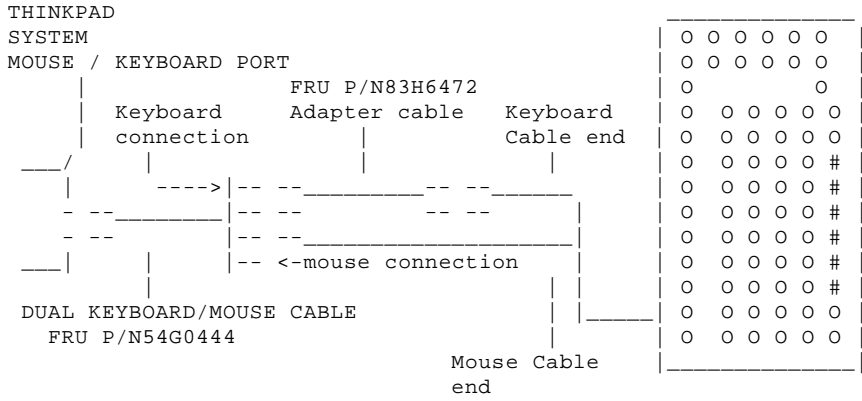


Figure 2



IMPORTANT

Diskette fixes are customer installable. Customers should be advised to contact the IBM PC Company HelpCenter at 800-772 - 2227 if assistance is required in getting or installing this information. Files are located on the PC company's Bulletin Board Service (BBS). The direct line for modem connection to The PC Company BBS is 1-919-517-0001 or tieline 255-0001.

Customers in Canada should call IBM's HelpPC at 800-565-3344 for Assistance or down load information. The Canadian BBS phone numbers are:
 Montreal-514-938-3022, Toronto-905-316-4255,
 Winnipeg-204-934-2735, Vancouver-604-664-6464.

The data may also be downloaded via the Internet from the IBM Personal Computer File Library by searching the following Internet URL: <http://www.pc.ibm.com/files.html>

SAS KEYWORDS:

- | | | | |
|---------|---------|--------------|----------|
| PSY2 | PSY2KBD | PSY2ERR | PSY2DOC |
| HANG | LOCKUP | D/T2625 | THINKPAD |
| D/T9545 | D/T9547 | UNCLASSIFIED | |

1.4.1621 9546 & 9547 THINKPAD 760 12.1 LCD FLICKER.

Record number: H16505

Device: D/T9547
 Model: M
 Tip key:
 Date created: 097/04/18
 Date last altered: A97/07/22

SYMPTOM:

LCD flicker occurs:

Condition 1.
 In AC Mode only when the battery is below 50% charge.

Condition 2.
 Intermittently in AC or DC mode when the battery has a low charge (less then 20%). The condition is more pronounced when the brightness is set to minimum.

PROBLEM ISOLATION AIDS:

Condition 1: A 40 Watt AC Adapter is being used.

Condition 2: The LCD inverter card is NOT FRU:
 P/N82H5508 in the XGA LCD panel
 OR
 P/N82H5509 in the SVGA LCD panel

FIX:

Condition 1. Replace the 40 Watt AC Adapter with a 35 Watt AC Adapter FRU P/N85G6705.

NOTE: A New AC Power cord is also required. See the attached AC Power Cord chart.

Condition 2. Replace the Inverter Card.

For systems with a 12.1 XGA LCD use Inverter card FRU P/N82H5508.

For systems with a 12.1 SVGA LCD use Inverter care FRU P/N82H5509.

AC Power Cord Chart

IBM Power Cord FRU Part Number	Used in These Countries
P/N25H2205	Argentina, Australia, New Guinea, New Zealand, Papua, Paraguay, Uruguay.
P/N25H2207	Bahamas, Barbados, Bermuda, Bolivia, Canada, Cayman Islands, Colombia, Costa Rica, Dominican Republic, Haiti, Honduras, Jamaica, Korea, Nicaragua, Panama, Peru, Philippines, Trinidad (West Indies), United States of America, Venezuela
P/N25H2209	Austria, Belgium, Bulgaria, Czech Republic, Egypt, Finland, France, Germany, Greece, Hungary, Iceland, Indonesia, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Spain, Sweden, Turkey, former Yugoslavia.
P/N25H2211	Denmark
P/N25H2213	Bangladesh, Pakistan, South Africa, Sri Lanka.
P/N25H2215	Abu Dhabi, Albania, Antigua, Bahrain, Brunei, Dubai, Fiji, Hong Kong, India, Ireland, Kenya, Kuwait, Macao, Malaysia, Nigeria, Oman, People's Republic of China, Qatar, Singapore, United Kingdom
P/N25H2219	Thailand
P/N25H2221	Switzerland
P/N25H2223	Chile, Italy
P/N25H2225	Israel

SAS KEYWORDS:

PSY2

PSY2PW

PSY2DISP

THINKPAD

UNCLASSIFIED

1.4.1622 9546 FALSE LCD DIAGNOSTIC ERROR IN EASY SETUP

Record number: H006835

Device: D/T9546
 Model: M
 Tip key:
 Date created: 096/05/23
 Date last altered: A96/05/23

SYMPTOM:

When running EASY SETUP diagnostics on the LCD the following error message may occur:

DEV 053
 ERR 02
 FRU 0042

PROBLEM ISOLATION AIDS:

BIOS dated before 5/15/96 must be updated.

MODELS EFFECTED:

760E, 760ED Enhanced Video.

U3A, F3A, S3A, P3A, J31, J3A, E3A, A3A

FIX:

Upgrade BIOS to a level dated 5/15/96 or later. As of 5/23/96 the name of the latest BIOS file on the IBM PC Company BBS is SYTPG100.EXE. The file description is:

System Disk V 1.00 - TP760E/ED/EL/ELD.

----- IMPORTANT -----

Diskette fixes are customer installable. Customers should be advised to contact the IBM PC Company HelpCenter at 800-772 - 2227 if assistance is required in getting or installing this information.

Files are located on the PC company's Bulletin Board Service (BBS). The direct line for modem connection to The PC Company BBS is 1-919-517-0001 or tieline 255-0001.

Customers in Canada should call IBM's HelpPC at 800-565-3344 for Assistance or down load information. The Canadian BBS phone numbers are:

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 Winnipeg-204-934-2735, Vancouver-604-664-6464.

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SAS KEYWORDS:

PSY2

PSY2DSP

PSY2MCD

THINKPAD

PSY2ERR

1.4.1623 9546 POST FAILURE AT FRU OR OPTION INSTALLATION.

Record number: H131950

Device: D/T9546
Model: M
Tip key:
Date created: 095/12/07
Date last altered: A95/12/12

SYMPTOM:

POST failure resulting in a blank display screen and a locked (hung) system prior to POST completion.

PROBLEM ISOLATION AIDS:

The POST failure occurs on power up of a new system or power up after a FRU or option installation.

CAUSE:

Plugging the DSP card J3 connector or DIMM adapter card J1 connector into their receiving connectors at an angle can cause the receiving connector contacts to separate and short between the DSP or DIMM contacts.

FIX:

No damage is done to any parts and a straight reinstallation using the following method is all that is necessary:

- (1) Put connectors face to face, but do not insert them yet.
- (2) Verify the 2 ribs at the right and left edge of the male connector are in the square holes at the right and left edge of the receiving connector.
- (3) Push down the male (J1 or J3) connector in parallel with your two thumbs and seat it fully.

SAS KEYWORDS:

PSY2

PSY2MEM

PSY2ADPT

THINKPAD

1.4.1624 9546 760CD. AUDIO BUT NO VIDEO DURING MPEG CLIP PLAY BACK.

Record number: H131528

Device: D/T9546
Model: M
Tip key:
Date created: 095/10/30
Date last altered: A95/11/01

SYMPTOM:

During an MPEG clip play back the following occurs in:

- O Windows
MPEG play back window will be created on the LCD screen but the window area is painted black while the MPEG audio is is being played.
- O OS2
MPEG play back window is not created, but MPEG audio will play.

PROBLEM ISOLATION AIDS: Model 760CD only.

Video out is selected when a television is not connected to the system.

FIX:

A television must be connected when using Video-out. If a television is not connected select Video-in. The ThinkPad Utility can be used to select either video function.

SAS KEYWORDS:

PSY2 THINKPAD PSY2DRV DRIVER

1.4.1626 9552 "PS2" COMMAND WILL NOT CHANGE MODEM (ON/OFF).

Record number: H12508

Device: D/T9552
Model: M
Tip key:
Date created: 093/03/31
Date last altered: A94/02/23

SYMPTOM: The PS2 setup command for turning the modem off or on at the C: prompt will not perform its function unless the system is turned off after the command is executed.

The command is: PS2 SET MODEM OFF (ON can be substituted
or PS2 MODEM OFF for OFF in either case.)

PROBLEM ISOLATION AIDS:

The failing system is using a PS2 program that was produced with reference version 1.00.

FIX: Create a new PS2 setup program using the reference diskette version 1.10 or later. Insert the new level diagnostic diskette in the diskette drive and key A: UINSTALL. The information is on the diagnostic diskette, so when the prompt asks for the diskette with the data, leave the diagnostic diskette in the drive and press enter. When the source dirve is asked for press enter again; it's the same drive and diskette. At the next screen select "Install the Installation Utility." Let the system default to the C: root directory unless the customer wants it in another area. The PS2 setup program will be updated to the latest level which will allow correct operation of the set modem feature.

SAS KEYWORDS:

PSY2

PSY2PROG

PSY2ADPT

UINSTALL

1.4.1627 9552 HANGS WITH POST CP80 USING NE-2 NOVELL ADAPTER.

Record number: H123009

Device: D/T9552
Model: M
Tip key:
Date created: 094/02/22
Date last altered: A94/03/07

SYMPTOM:

The 9552 hangs with a CP 80 during post when plugged into a 3550 docking station containing a Novell NE-2 adapter card.

PROBLEM ISOLATION AIDS:

The hang occurs at the CP 80 point when the adapter IRQ is set to 5. If the IRQ is at 9 with an address of C3D0H-C3FFH the system will boot but will hang when simple commands such as copy or xcopy are performed.

FIX:

Have your customer contact Novell and request Document ID: TID01450 for Novell NetWare 2.2, 3.12, or 4.01. The document provides installation and configuration information on the NE2 network board for the 3550 docking station.

Novell, NetWare and NE-2 adapter are registered trademarks of the Novell Corporation.

SAS KEYWORDS:

PSY2

PSY2ERROR

PSY2OEM

PSY2COMM

1.4.1628 9552 MOUSE ARROW FLOATS ACROSS THE SCREEN.

Record number: H20645

Device: D/T9552
Model: M
Tip key:
Date created: 093/03/02
Date last altered: A93/03/12

SYMPTOM:

THE MOUSE POINTER ARROW MAY FLOAT ACROSS THE LCD WHEN THE
POINTER STICK IS NOT BEING TOUCHED OR THE POINTER ARROW
MAY MOVE ERRATICALLY WHILE POINTER STICK IS BEING USED.

PROBLEM ISOLATION AIDS:

REMOVE THE EXTERNAL MOUSE FROM THE MOUSE PORT.

FIX:

IF THIS SOLVES THE PROBLEM REPLACE THE MOUSE. IF THE POINTER
ARROW STILL FLOATS REPLACE THE KEYBOARD.

SAS KEYWORDS:

PSY2	PSY2KBRD	PSY2ADPT	VOLTAGE
REGULATOR	PSY2SYSBRD	SYSTEM BOARD	

PSY2 RETAIN TIPS
9552 POST BEEP INFORMATION

1.4.1629 9552 POST BEEP INFORMATION

Record number: H10142

Device: D/T9552
Model: M
Tip key:
Date created: 092/11/04
Date last altered: A92/11/04

SYMPTOM:

TWO LONG BEEPS AND TWO SHORT BEEPS DURING POST FOLLOWED BY A
BLANK SCREEN AND A BLINKING SPEAKER ICON.

PROBLEM ISOLATION AIDS:

FIX:

REPLACE THE VIDEO CARD.

THE 9552 THINKPAD 700 AND 700C HARDWARE MAINTENANCE SERVICE
MANUAL FORM NUMBER S42G-2022-00 (P/N42G2022) WILL BE UPDATED IN
THE NEXT RELEASE TO INCLUDE THE ABOVE BEEP CODE AND SYMPTOM.

SAS KEYWORDS:

PSY2 PSY2ADPT PSY2DIAG PSY2DOC

1.4.1630 9552 POST ERROR 173 & 11350 CAN NOT BE BYPASSED OR CLEARED

Record number: H20643

Device: D/T9552
 Model: M
 Tip key:
 Date created: 093/02/11
 Date last altered: A94/03/24

SYMPTOM:

POST ERRORS 00017300 AND 00011350 ARE DISPLAYED AND CAN NOT BE BYPASSED OR CLEARED.

PROBLEM ISOLATION AIDS:

THE BACKUP BATTERY VOLTAGE IS CORRECT (+2.5 TO +3.7 VOLTS D.C.) REMOVING THE BACKUP BATTERY AND RECONNECTING IT WILL CLEAR THE ERRORS.

FIX:

FOLLOW THESE PROCEDURES BEFORE REPLACING PARTS IF A POST ERROR COMBINATION OF 00017300 AND 00011350 IS DISPLAYED AND CAN NOT BE CLEARED OR BYPASSED.

1. TURN OFF THE SYSTEM AND DETACH THE FIXED DISK (HARD FILE) (FOLLOW HMR REMOVAL AND REPLACEMENT STEPS.)
2. INSERT THE REFERENCE DISKETTE AND BOOT THE SYSTEM.
3. PRESS THE "ESC" KEY WHEN AN ERROR MESSAGE OCCURS.
4. PRESS THE "F8" KEY AND THEN THE "ENTER" KEY TO RUN AUTO CONFIG.
5. PRESS THE "ENTER" KEY AND SET THE TIME AND DATE.
6. PRESS THE "ENTER" KEY ONCE. TIME AND DATE IS SET.
8. PRESS THE "ENTER" KEY TO AGAIN START AUTO CONFIGURATION.
9. IGNORE THE ERROR "AN ERROR OCCURRED WHILE UPDATING CONFIG." AND TURN OFF THE SYSTEM.
10. ATTACH THE FIXED DISK AND BOOT FROM THE REFERENCE DISKETTE.
11. A 00016500 POST ERROR WILL APPEAR. PRESS Y TO START AUTO CONFIGURATION.
12. IGNORE THE PANEL "AN ERROR OCCURRED WHILE UPDATING CONFIGURATION" AND TURN OFF THE SYSTEM.
13. REMOVE THE REFERENCE DISKETTE AND TURN ON THE SYSTEM. THE SYSTEM WILL BOOT FROM THE OPERATING SYSTEM WITHOUT ERROR.

To prevent this error install 3550 ECA001 it if applies to your 3550.

SAS KEYWORDS:

PSY2	PSY2MISC	HANGS	LOCKUP
LOCKS	PSY2ERR	C-MOS	CMOS
CONFIGURATION	D/T3550		

1.4.1631 9552 720 (C), OS2 2.1 TRAP 000D AFTER RESUME.

Record number: H12632

Device: D/T9552
Model: M
Tip key:
Date created: 093/07/14
Date last altered: A93/10/13

SYMPTOM: The 9552 720 system with OS/2 2.1 traps with 000D when coming out of suspend mode.

PROBLEM ISOLATION AIDS:

The trap will occur if:

1. The IBM ThinkPad 720/720C PCMCIA Device Driver Diskette version 1.10 or earlier was used.
AND
2. The system PCMCIA cards/sockets are turned off. This is done through a set command and travel mode.

FIX:

To correct this have the customer turn the PCMCIA card on after the system has been put into TRAVEL. Key the following at the command prompt to do this "PS2 SET CARD ON". This turns the card back on after the PS2 TRAVEL command turned it off. A correction can also be made to the 1.10 PCMCIA Device Driver Diskette by replacing \$ICPMOS2.SYS with a new version. The new version is available on the IBM BBS bulletin board. The file is called ICPMOS2.SYS. It should be changed to \$ICPMOS2.SYS before copying it to the diskette.

To connect to the Bulletin board dial 1-919-517-0001.

A permanent fix is available in the PCMCIA Device Driver Diskette Version 1.12 or later. For more information on PCMCIA installation, see record number H121512.

SAS KEYWORDS:

PSY2	PSY2DOC	PSY2PROG	HANG
LOCKUP	INSTALLATION	PSY2ERR	

1.4.1632 9552 720 LOOSE SCREW

Record number: H123904

Device: D/T9552
Model: M
Tip key:
Date created: 094/05/12
Date last altered: A94/05/12

SYMPTOM:

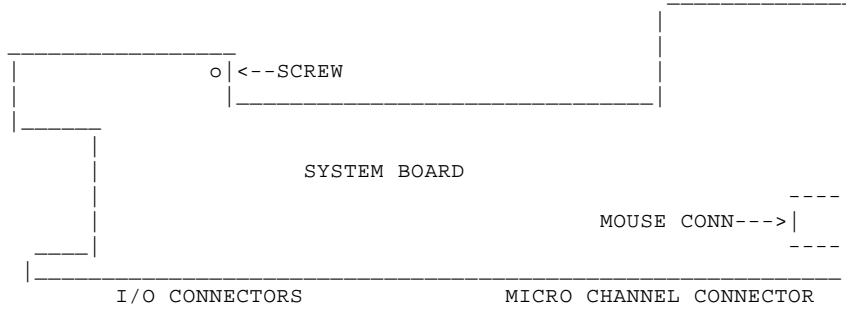
Reported loose screw in the following location on 720C systems.

PROBLEM ISOLATION AIDS:

Check for a missing or loose system board screw.

FIX:

Check the system board for a missing or loose screw when working on the 720C. This does not seem to be a problem concerning all systems, but it was brought to our attention that a small number of systems were reported to have a loose screw in this location.



SAS KEYWORDS:

PSY2 PSY2BRD

1.4.1633 9552&COLON. ERROR CODE 00861000 OR 00861XXX

Record number: H20737

Device: D/T9552
 Model: M
 Tip key:
 Date created: 093/03/19
 Date last altered: A93/03/22

SYMPTOM:

The system receives a post error code of 00861XXX

Note: X indicates any number.

PROBLEM ISOLATION AIDS:

none

FIX:

The following information will be inserted in the next release of the HMS manual.

Symptom/Error	FRU/Action
00861XXX	Keyboard (Pointing stick) Keyboard control card System board

The FRU part numbers are:

Keyboard	P/N44G3794	(U.S. and European Countries.)
Keyboard Control card	P/N44G3783	(84- Key)
System Board	P/N49G1975	(Color)
System Board	P/N44G3780	(Mono)

SAS KEYWORDS:

PSY2	PSY2ERR	PSY2PART	PSY2KYBD
PSY2DOC	PSY2PUB	PUBLICATION	

PSY2 RETAIN TIPS

9552,8554,8551COLON. NOISE USING HIGH SPEED MODEM.

1.4.1634 9552,8554,8551&COLON. NOISE USING HIGH SPEED MODEM.

Record number: H12506

Device: D/T9552
Model: M
Tip key:
Date created: 093/05/14
Date last altered: A93/09/30

SYMPTOM: A small number of High Speed Modems, Fru P/N42G2592, could exhibit a noise when the system is turned on. This does not prevent the modem from operating.

PROBLEM ISOLATION AIDS:

FIX:

The customer should edit the DOS AUTOEXEC.BAT file or the OS/2 startup.cmd in the root directory to include the following statements:

PS2 SET MODEM OFF
PS2 SET MODEM ON

The PS2.EXE must be located in the root directory to allow these commands to operate. To load the PS2.EXE refer to the system user's guide.

This work around will stop the noise after the autoexec or startup command is loaded at boot.

Engineering has released a new high speed modem that will correct this. The new FRU part number is P/N92F0288.

The above software fix can still be used to prevent the noise.

SAS KEYWORDS:

PSY2 D/T8551 D/T8554 PSY2PART
PSY2ADPT PSY2COM

1.4.1635 9553 DOES NOT POWER UP

Record number: H125038

Device: D/T9553
Model: M
Tip key:
Date created: 094/08/26
Date last altered: A94/08/29

SYMPTOM:

After replacing a system board, FRU P/N71G5955, or removing and replacing the Floppy and IDE cables on a 9553, the system will not power up and appears hung. No video appears, no beeps occur, and the power supply does not operate.

PROBLEM ISOLATION AIDS:

- The system board may have been removed or replaced.
- The Floppy drive and IDE cables were removed or replaced.

FIX:

If the above symptoms are encountered, the servicer should verify that the IDE and Floppy diskette drive cables are in the correct system board connectors. The connectors are identical in shape and size.

The system board connections are identified as "IDE" for the hardfile and "Floppy" for the diskette drive. "IDE" and "Floppy" are printed on the system board, next to the respective hardfile and diskette controller.

If the cables are connected properly, and the problem is still encountered, continue normal problem determination.

SAS KEYWORDS:

PSY2	PSY2ERR	PSY2DSKT	PSY2FDSK
PSY2PWR	DEAD	HUNG	

1.4.1636 9553 RUNNING NOVELL HANGS AFTER INSTALLING 540MB DASD

Record number: H081441

Device: D/T9553
Model: M
Tip key:
Date created: 096/07/10
Date last altered: A96/07/10

SYMPTOM:

IBM PS/2 9553 systems running Novell Netware may exhibit a system hang condition when attempting to connect to the network.

PROBLEM ISOLATION AIDS:

This failure occurs if a 540Mb hardfile is installed as a replacement for the 527Mb drive. The standard Novell Netware IDE disk driver in version 3.12 and earlier does not recognize hardfiles larger than 527Mb.

FIX:

Install NOV_IDE.EXE IDE disk device driver.

Obtain NOV_IDE.EXE from the Reply Corporation web site at the following Internet URL: <http://www.reply.com/>

The file is located in the System Compatibility File Library in the Technical Support area of the web site.

The file may also be obtained by contacting the Reply BBS at (408) 956 - 2784.

SAS KEYWORDS:

PSY2	IBMPC	PSY2BRD	PSY2FDSK
9553	PSY2OEM		

1.4.1637 9556 / 9557 SYSTEM WILL NOT POWER UP

Record number: H10856

Device: D/T9557
 Model: M
 Tip key:
 Date created: 092/10/16
 Date last altered: A93/04/15

SYMPTOM:

The 9556 or 9557 will not power up. There is no indication of power from the fan, drives, power good LED, or keyboard lights. There is no indication from the display that the system power switch has been cycled.

PROBLEM ISOLATION AIDS:

Disconnect all external devices, printers, modems or switching devices that are attached to the serial or parallel ports. Remove the top cover and locate the Tamper-Evident Switches, which are part of the Adapter Guide Assembly. Attached to this assembly, and extending through the front frame, is the blue service slider. As the slider is moved upward, it will contact the metal actuator arms of two micro switches, allowing the machine to be powered up with the top cover removed. Both switches must activate for complete machine operation. (The micro-switches produce a click that can be heard and felt when activated.)

FIX:

If one or both switches fail to transfer, they must be adjusted or replaced. To adjust the micro-switch actuator arm, remove the adapter guide (with switches) from the system. Move the blue slider to the bottom of its travel and form the actuator arms, so that the switches activate when the slider is moved up 1/2 to 3/4 of its travel. Caution should be used when reinstalling the top cover. An extension on the inside of the top cover will contact the slider and move it to the bottom of its travel, then contact the actuator arms and activate the switches approximately 1/2 inch before the cover fully seats.

The 9556/57 HMS will be updated to identify the Tamper-Evident switches as a possible cause of "No Power" symptoms.

Note:

There is also a keylock activated micro-switch on the adapter guide assembly; it does not affect system power-up.

9556 adapter guide with switches: FRU P/N92F0243.
 9557 adapter guide with switches: FRU P/N96F7758.

SAS KEYWORDS:

PSY2	D/T9556	PSY2ERR	PSY2PWR
BLANK	P/N92F0058	92F0058	P/N79F3443
79F3443	TAMPER		

1.4.1638 9556 SLC3 W/CDROM FAILS AT POST

Record number: H123051

Device: D/T9556
Model: M
Tip key:
Date created: 094/03/07
Date last altered: A94/08/15

SYMPTOM:

Installing a CD-ROM option in the lower bay of the 9556 SLC3 system may cause a short between the CDROM and a component (Heat Sink) on the system board.

The short will prevent the system from completing POST.

The most probable symptom is a system hang.

PROBLEM ISOLATION AIDS: NONE**FIX:**

Engineering is identifying a permanent fix, until then, the ground tab on the CD-ROM may be removed or insulated. The tab is not used.

If you still encounter problems during POST, normal problem determination should be performed.

This RETAIN TIP will be updated as new information becomes available.

| 3/14/94

| A permanent fix has been provided by engineering as follows:

| A 5/16 inch shrink tubing will be placed over the metal tab on the top portion of the heatsink in such a way that it covers the top metal tab (only.) It will extend a 1/4 inch above the Tab. This will prevent contact of the metal heat sink with the bottom or ground tab of the CDROM. All new build and field returns will have this fix applied.

| Note: Servicicers should continue to remove or insulate the tab on the CDROM.

SAS KEYWORDS:

PSY2	9556	SLC	3
HUNG	STOP	486SLC3	

1.4.1639 9556-57 WITH 1184 DIAGNOSTIC ERROR AND/OR HANG

Record number: H121982

Device: D/T9556
Model: M
Tip key:
Date created: 093/12/03
Date last altered: A93/12/30

SYMPTOM:

On some PS/2 9556 and 9557 systems, an 1184 serial port diagnostic error may be experienced. This usually occurs only when the serial port (async) diagnostics are looped several times.

During normal operation, this failure has a very low probability of occurring; but would probably result in system hang with no error code or message.

PROBLEM ISOLATION AIDS:

Loop the serial port (async) diagnostics for at least 10 minutes.

This tip applies only to the following models:

- 9556 mod DBA, DB6, and 2BX
- 9557 mod DBA, DBG, and DB6

FIX:

If the looped serial port diagnostics fail with an 1184 error, replace the system board. If the diagnostics run error free, continue normal problem determination.

SAS KEYWORDS:

PSY2	D/T9556	D/T9557	SERIAL
PSY2BRD	PSY2ERR	PSY2DIAG	PSY2COMM
HANGS			

1.4.1640 9576 9556 SYSTEMS WITH 212MB HARDFILE ERRORS

Record number: H12911

Device: D/T9576
 Model: M
 Tip key:
 Date created: 093/08/12
 Date last altered: A95/02/24

SYMPTOM:

EXCESSIVE SOFT ERRORS MAY BE EXPERIENCED WHEN RUNNING HARDFILE DIAGNOSTICS.

SOFT ERRORS ARE READ ERRORS WHICH DO NOT EXHIBIT AN ERROR CODE BUT MAY SHOW SOME OR ALL OF THE FOLLOWING SYMPTOMS:

- FAILURE TO FORMAT
- EXCESSIVE TIME ELAPSED WHEN BOOTING TO HARDFILE
- EXCESSIVE TIME ELAPSED DURING CUSTOMER APPLICATIONS

IN SOME CASES THE HARDFILE SIZE CANNOT BE RECOGNIZED BY THE SYSTEM.

PROBLEM ISOLATION AIDS:

WHEN RUNNING HARDFILE DIAGNOSTICS SOFT ERRORS MAY OCCUR IF POWER SUPPLY INTERFERENCE IS PRESENT.

IF THE HARDFILE ERRORS ARE OCCURRING FREQUENTLY, THE FOLLOWING PROCEDURE CAN BE USED TO DETERMINE IF POWER SUPPLY INTERFERENCE IS CAUSING THE PROBLEM:

1. BOOT THE REFERENCE DISKETTE IN DRIVE A.
2. FROM THE MAIN MENU SELECT "SET CONFIGURATION".
3. SELECT "SET AND VIEW SCSI DEVICE CONFIGURATION".
4. THE "DEVICE SIZE" MAY HAVE ?????? IF POWER SUPPLY INTERFERENCE IS BEING EXPERIENCED.

NOTE: THERE CAN BE OTHER CONDITIONS WHICH CAUSE THE "DEVICE SIZE" TO CONTAIN ??????.EXAMPLE: HARD DISK NOT SPINNING. HOWEVER, IF THE HARD DISK IS SPINNING BUT THE "SIZE" CONTAINS ?????? POWER SUPPLY INTERFERENCE SHOULD BE SUSPECTED.

IF SOLID HARDFILE ERRORS ARE OCCURRING, EXTEND THE HARDFILE AS FAR FROM THE POWER SUPPLY AS POSSIBLE. IF THE ERRORS DISAPPEAR POWER SUPPLY INTERFERENCE SHOULD BE SUSPECTED.

FIX:

ISOLATE THE DC POWER CABLE SO IT DOES NOT TOUCH THE HARD DISK SHELF WHICH MAY BE ACCOMPLISHED BY TWISTING THE CABLE 360 DEGREES. THE CABLE GOES FROM THE POWER SUPPLY TO THE "P1" CONNECTOR ON THE SYSTEM BOARD.

MANUFACTURING HAS TAKEN ACTION TO CORRECT THIS PROBLEM. THIS TIP WILL BE UPDATED AS NEW INFORMATION BECOMES AVAILABLE.

SAS KEYWORDS:

D/T9556	HARDFILE	PSY2ERR	ERROR
DIAGS	PSY2FDSK	PWR	POWER
DIAG	PSY2	PS2	PS/2
D/T9576	SUPPLY	212MB	

1.4.1641 9576/77 & 9576/77 S&I MODELS WON'T LOAD OS/2

Record number: H124647

Device: D/T9577
 Model: M
 Tip key:
 Date created: 094/07/11
 Date last altered: A95/07/27

SYMPTOM:

Customers may report that OS/2 will not install onto a 9576 or 9577 model xUx, xNx, or xTx.

PROBLEM ISOLATION AIDS:

- This tip applies only if the 9576 or 9577 is a model xUx, xNx, or xTx.
- This tip applies only if the unit is a 9576i, 9576s, 9577i or 9577s.
- OS/2 may not install on the 9576 or 9577 if the ABIOS.SYS file, along with all other files with a .BIO extension were not updated on the OS/2 operating system installation diskette.

FIX:

The servicer should refer the customer to the SETUP manual that was shipped with the system. Appendix B has the instructions for updating the OS/2 installation diskette for OS/2 2.1, 2.0, or 1.3.

|An additional file is required when installing OS/2 |
 |version 1.3. This file, "DISK02.SYS" will need to |
 |be copied to the OS/2 installation diskette. |

|DISK02.SYS may be downloaded from the IBM PCCompany |
 |Bulletin Board System at 919-517-0001. |

=	=
= THESE UPDATES ARE CUSTOMER INSTALLABLE. CUSTOMERS	=
= SHOULD BE ADVISED TO CONTACT THE PC COMPANY HELPCENTER	=
= 800-772 - 2227 IF ASSISTANCE IS REQUIRED IN GETTING THE	=
= APPROPRIATE UPDATE.	=
=	=

If following the instructions in the SETUP manual does not correct the problem, the customer should contact OS/2 support at 1-800-237-5511 for assistance.

SAS KEYWORDS:

PSY2	PSY2PROG	OS2	76I
77I	77S	76S	D/T9576
D/T9577I	D/T9577S	D/T9576I	D/T9577I
9576I	9576S	9576I	9576S

1.4.1642 9576/77 NOVELL LAN FAILURES WITH SAA ADAPTER INSTALLED

Record number: H12831

Device: D/T9577
 Model: M
 Tip key:
 Date created: 093/08/05
 Date last altered: A94/08/15

SYMPTOM:

9576/77 EXPERIENCES NOVELL LAN FAILURES, RUNNING NOVELL "NETWARE FOR SAA", GENERATING THE FOLLOWING NOVELL NETWARE ERROR MESSAGES:
 - TOKEN RING ADAPTER CHECKS
 - INTERRUPT 9 ERRORS
 AFTER MANY OF THESE ERROR MESSAGES, THE SYSTEM MAY NOT RECOVER, AND THE WHOLE TOKEN RING NETWORK MAY BE DISCONNECTED.

PROBLEM ISOLATION AIDS:

THIS PROBLEM OCCURS ON 9576/77 SYSTEMS RUNNING NOVELL "NETWARE FOR SAA" WITH A NOVELL "NETWARE FOR SAA SYNCHRONOUS ADAPTER" (REV LEVEL A OR B) INSTALLED. THE SAA ADAPTER MAY WORK WITHOUT FAILURES IN OTHER SYSTEMS.

FIX:

ENGINEERING HAS DETERMINED THIS PROBLEM IS CAUSED BY THE NOVELL SAA ADAPTER (REV LEVEL A OR B). THE REV LEVEL CAN BE DETERMINED BY LOOKING TO THE LEFT OF THE MICROCHANNEL CONNECTER ON THE COMPONENT SIDE OF THE SAA ADAPTER (BLACK LETTER A OR B ON A WHITE BACKGROUND). THE SAA ADAPTER IS MANUFACTURED FOR NOVELL BY MICRODYNE, INC.

CUSTOMERS SHOULD BE DIRECTED TO THEIR ADAPTER POINT OF SALE FOR SUPPORT OR, CONTACT MICRODYNE TECH. SUPPORT, 1-800-578-3270.

Novell is a trademark of Novell, Inc.
 NetWare is a trademark of Novell, Inc
 Microdyne is a trademark of Microdyne, Inc.

SAS KEYWORDS:

PSY2	D/T9576	PS/2	NETWORK
NETWARE	NOVELLE	ERR	PS2
PSY/2	PSY2COMM	PSY2ERR	NOVELL
NOVEL			

1.4.1643 9576/77 S MODEL CONFIGURES SCSI HARDFILE AS 6,1

Record number: H126789

Device: D/T9577
 Model: M
 Tip key:
 Date created: 095/03/13
 Date last altered: A95/05/23

SYMPTOM:

The 9576 or 9577 system configures the hardfile with a SCSI ID of 6,1 instead of 6,0.

A POST error of 1047000 107 may also occur.

PROBLEM ISOLATION AIDS:

- This tip applies only if the 9576 or 9577 is a Model xUx, xNx, or xTx.
- This tip applies only if the unit is a 9576s, or 9577s.

FIX:

- The problem is caused by a failing SCSI adapter. The SCSI adapter, FRU P/N71G3576, should be replaced.
- If the symptom remains, utilize normal problem determination procedures to isolate the failing FRU or application.

SAS KEYWORDS:

PSY2	D/T9576	D/T9576S	D/T9577S
FUTURE	DOMAIN	PSY2FDSK	PSY2ERR
ID	SCSI		

1.4.1644 9576/77 S&I MODEL HANGS EXITING DPM, BLANK SCREEN

Record number: H124017

Device: D/T9577
 Model: M
 Tip key:
 Date created: 094/05/20
 Date last altered: A95/05/12

SYMPTOM:

The 9576 or 9577 Models xUx, xNx, xTx may intermittently encounter a hang condition and display a blank screen when Display Power Management (DPM) is used under Windows.

PROBLEM ISOLATION AIDS:

- Monitor is in DPM state (screen blank, monitor light blinking)
- The user attempted to exit DPM by pressing a key or moving a mouse.
- This problem does not appear under OS/2.
- This tip applies only if the unit is a 9576i, 9576s, 9577i or 9577s.

FIX:

If the system is experiencing the above problem, the user should obtain the new S3 Video Driver Disk. The new disk is being shipped with current production systems.

The driver may be obtained on-line by entering the following command at the VM prompt:

```
TOOLS SENDTO BCRVMS1 PCWIN PCWIN GET 7677POW PACKAGE
```

The diskette image may also be down loaded from the IBM PC Company Bulletin Board System by calling 919-517-0001.

If using the IBM PC Company Bulletin Board System, the file name to search for is "7677DOSD.EXE.

```
***** IMPORTANT *****
*
* THIS UPDATE IS CUSTOMER INSTALLABLE. CUSTOMERS SHOULD *
* BE ADVISED TO CONTACT THE PC COMPANY HELPCENTER AT *
* 1 - 800-772-2227 IF ASSISTANCE IS REQUIRED IN GETTING *
* AND INSTALLING THE APPROPRIATE UPDATE. *
*****
```

No FRU parts should be replaced in an attempt to fix this problem.

Windows is a trademark of Microsoft Corporation

SAS KEYWORDS:

PSY2	HUNG	OS2	D/T9515
D/T9517	D/T9518	D/T9524	D/T9525
D/T9507	D/T9521	D/T9527	D/T6312
D/T6314	D/T6317	D/T6319	D/T6324
D/T6325	D/T6327	D/T9576	PSY2PWR
D/T9577I	D/T9577S	D/T9576I	D/T9577I

1.4.1645 9576/77 S&I MODEL OS/2 CID DOWNLOAD FAILS

Record number: H08410

Device: D/T9577
Model: M
Tip key:
Date created: 094/10/04
Date last altered: A95/05/12

SYMPTOM:

While downloading and installing OS/2 through a Configuration, Installation & Distribution (CID) process the 9576i, 9576s or 9577i, 9577s system IML partition is overwritten or destroyed. The system indicates that files are missing.

PROBLEM ISOLATION AIDS:

This tip applies only if the 9576 or 9577 is a Model xUx, xNx, or xTx.

Installing OS/2 via diskettes allows successful installation.

This tip applies only if the unit is a 9576i, 9576s, 9577i or 9577s.

FIX:

If the customer is experiencing the symptom above, the customer should be directed to OS/2 Software Support at 1 - 800-992 - 4777. The customer should request APAR PJ15049. This APAR provides a fix to the DELETE: ALL command in FDISK.COM.

This APAR may be downloaded from the IBM PC Company Bulletin Board System at 919-517-0001. If assistance is required in downloading the APAR the customer can contact the Help Center at 1-800-772-2227.

OS/2 support will send the customer a diskette, if required with the fix. Instructions for installation are included in the READ.ME file.

No parts should be replaced in an attempt to fix this problem.

If following the instructions identified above does not correct the problem, the servicer should use normal problem determination procedures.

SAS KEYWORDS:

PSY2	PSY2FDSK	DASD	D/T9576
9576	9577	D/T9577I	D/T9576I

1.4.1646 9576/77 S&I MODELS BLACK SPOT, REVERSED IMAGE

Record number: H067292

Device: D/T9577
 Model: M
 Tip key:
 Date created: 094/09/15
 Date last altered: A95/05/12

SYMPTOM:

While running OS/2 characters appear blacked out or look like the image has been reversed.

PROBLEM ISOLATION AIDS:

While viewing the system board in the area of the video port inspect the component in position U18 for the characters "Bt"

This tip applies only if the 9576 or 9577 is a Model xUx, xNx, or xTx.

This tip applies only if the unit is a 9576i, 9576s, 9577i or 9577s.

FIX:

If the characters "Bt" are contained on the system board and the customer is experiencing the symptom above, the customer should be directed to OS/2 Software Support at 1 - 800-992 - 4777. The customer should request APAR PJ15241. This APAR provides two files, a READ.ME file and a SVGA.EXE file.

OS/2 support will send the customer a diskette with the fix. Instructions for installation are included in the READ.ME file.

This APAR may also be downloaded from the IBM PC Company Bulletin Board System at 919-517-0001. If assistance is required in downloading the APAR the customer can contact the Help Center at 1-800-772-2227.

No parts should be replaced in an attempt to fix this problem.

If following the instructions identified above does not correct the problem, the servicer should use normal problem determination procedures to isolate the defect.

SAS KEYWORDS:

PSY2	PSY2DISP	SVGA	D/T9576
9576	9577	D/T9577I	D/T9577S
D/T9576I	D/T9577I		

1.4.1647 9576/77 S&I MODELS HARD DISK LIGHT DOES NOT WORK

Record number: H127489

Device: D/T9577
 Model: M
 Tip key:
 Date created: 095/05/04
 Date last altered: A95/08/29

SYMPTOM:

The IDE hardfile activity light on a 9576 or 9577 fails to operate when an IBM or OEM IDE CD-ROM drive is installed and the hardfile is accessed. This occurs under OS/2 and when the CD-ROM device drivers are installed.

PROBLEM ISOLATION AIDS:

The CD-ROM Drive and the IDE hardfile work properly.

The CD-ROM and IDE hardfile are installed in a 9576i, 9576s, 9577i or 9577s and is a model xUx, xNx, or xTx.

FIX:

The problem has been fixed with new CD-ROM device drivers on a new CD-ROM Option Diskette.

The diskette may be downloaded from the IBM PC Company Bulletin Board System (BBS) at 919-517-0001.

The name to search for on the BBS is: IDECDROM.EXE

Customers should be advised to copy the files, IBM2IDE.ADD and IBMIDECD.FLT from the diskette to the root directory of the hardfile. Delete IBM2IDEJ.ADD, IBMIDEC.FLT and earlier copies of IBMIDECD.FLT. Edit the CONFIG.SYS file and change the following lines:

BASEDEV=IBM2IDEJ.ADD change to: BASEDEV=IBM2IDE.ADD
 BASEDEV=IBM2IDEC.FLT change to: BASEDEV=IBMIDECD.FLT

=

= THE DISKETTE IS CUSTOMER INSTALLABLE. CUSTOMERS SHOULD
 = BE ADVISED TO CONTACT THE PC COMPANY HELPCENTER AT
 = 800-772 - 2227 IF ASSISTANCE IS REQUIRED IN GETTING AND
 = INSTALLING THE APPROPRIATE FILE.

=

If using the process identified above does not correct the problem, the servicer should use normal problem determination procedures to isolate the defect.

No parts should be replaced in an attempt to fix this problem.

SAS KEYWORDS:

PSY2	D/T9576	D/T9577I	D/T9577S
D/T9576I	D/T9577S	CDROM	CD
ROM	PSY2FDISK	PSY2FDSK	

1.4.1648 9576/77 S&I MODELS HARDFILE LED DOES NOT LIGHT

Record number: H124484

Device: D/T9577
 Model: M
 Tip key:
 Date created: 094/06/27
 Date last altered: A95/08/29

SYMPTOM:

Hardfile light doesn't come on with OS/2 2.X when using
 "IBM Personal System/2 SCSI-2 Adapter/A" FRU P/N71G3576.

PROBLEM ISOLATION AIDS:

- This tip applies only if the 9576 or 9577 is a Model xUx, x4x, xLx, xNx, xTx, xSx or xDx.
- Device drivers that shipped with OS/2 2.X, were used on this system.
- After OS/2 2.X was loaded, the customer observes that the drive light doesn't work after the completion of POST.
- The drive works properly, diagnostics complete without error.

FIX:

The device driver from the "IBM Personal System/2 SCSI-2 Adapter/A" option diskette fixes this problem. The customer should replace the OS/2 driver with the driver from the option diskette.

Procedure:

From the OS/2 desktop, select OS/2 System, then select command prompts. Select either OS/2 Window, or OS/2 Full Screen. Insert the option diskette into drive "A" and type the following:

```
A:          (press enter)
Type:      DDINSTAL (press enter)
           (Customer can also use "System Setup" and
           use "Device Driver Install" to accomplish
           this).
```

Follow the instructions on the screen to install the device driver. When complete, exit DDINSTAL and shut-down OS/2 on the system. Restart system to activate support.

The OS/2 2.X device driver will be fixed in the next release of OS/2.

SAS KEYWORDS:

PSY2	76I	77I	76S
77S	9576	OS2	PSY2PROG

Record number: H013861

Device: D/T9577
 Model: M
 Tip key:
 Date created: 094/11/29
 Date last altered: A95/05/12

SYMPTOM:

The system is generating the following symptom:

- The display screen is Flashing, or exhibiting a "Checker Board" pattern. This will usually be seen in yellow but may also occur in any other color.

This is caused by one of the following:

- Internal Processing Error
- Trap Error
- Kernel Panic Error
- Any error that causes a "The system is Stopped" message to appear.

PROBLEM ISOLATION AIDS:

- This tip applies only if the 9576 or 9577 is a Model xUx, xNx, or xTx and is running OS/2 or WARP.
- This tip applies ONLY if the unit is a 9576i, 9576s, 9577i or 9577s.

FIX:

1. Review the units Hardware Configuration and remove any IRQ or DMA conflicts.
2. If no conflicts exist, and the problem continues, the customer should be advised to contact the IBM PC Company Help Center at 1-800-772-2227 for a driver to fix this problem.

Servicers may contact RTP Level 2 through their normal technical support structure to obtain the the same driver.

```
=
= THIS DRIVER IS CUSTOMER INSTALLABLE. CUSTOMERS SHOULD BE
= ADVISED TO CONTACT THE PC COMPANY HELPCENTER AT 800-772-2227
= TO OBTAIN THE FILE AND REQUEST ASSISTANCE WITH INSTALLATION
= IF REQUIRED.
=
```

This driver requires that WARP or OS/2 2.11 with a maintenance level of XR_A038 or higher be installed. If the maintenance level is below XR_A038, the customer should be advised to contact OS/2 Support to request the current version before continuing the installation of this driver.

If assistance is required in determining the maintenance level or obtaining the current version of the maintenance package OS/2 support can be reached at 1-800-992-4777.

After obtaining the driver, copy it to the root directory of the hardfile containing OS/2 version 2.11 or WARP, the name should remain as "SFFDD.SYS".

Add the following line to CONFIG.SYS, identifying the correct drive letter and path.

```
DEVICE=drive: /path/SFFDD.SYS
```

Reboot the system.

The subject file is not generally available because installation on other than the specific machines identified WILL cause problems.

No parts should be replaced in an attempt to fix this problem.

If the symptom remains, utilize normal problem determination procedures to isolate the failing FRU or application.

SAS KEYWORDS:

PSY2	PSY2ERR	D/T9577I	D/T9577S
D/T9576I	D/T9576S	D/T8515	D/T8516
D/T8517	D/T8518	D/T9515	D/T9517
D/T9518	D/T9524	D/T9525	D/T9507

PSY2 RETAIN TIPS

9576/77 SI MODELS SCREEN SYMPTOMS OR SYSTEM ERRORS

D/T9521
D/T6317
D/T6327

D/T9527
D/T6319
D/T6321

D/T6312
D/T6324

D/T6314
D/T6325

Record number: H104007

Device: D/T9576
 Model: M
 Tip key:
 Date created: 094/07/21
 Date last altered: A95/05/12

SYMPTOM:

The PS/2 9576s, 9576i, 9577s, or 9577i fails with an operating system error (such as TRAP, Fatal Error, NMI Error, etc.), or hangs with no error message displayed. Most reported errors have occurred while installing the OS/2, UNIX, Windows NT or other operating systems.

PROBLEM ISOLATION AIDS:

- This tip applies only if the 9576i, 9576s, 9577i or 9577s is a model xTx or has been upgraded with a DX4-100Mhz processor.

- Systems shipped within the following serial number ranges may be affected:

9576-ATB:	23MYBRT - 23MYCWK
9576-BTB:	23NDYHN - 23NDYZT
9577-ATB:	23F7C0A - 23F7D6N
9577-ATG:	234L21X - 234L26B
9577-BTB:	235N27F - 235N40W
9577-BTG:	236R32H - 236R55H
9577-VTG:	237V36X - 237V45W

- Diagnostics complete without error.

FIX:

- If the failing system meets all three conditions above, replace the DX4-100Mhz processor with FRU P/N06H3305.

If the failure continues after replacing the processor, re-install the original one and continue normal system problem determination, including software support if necessary.

- If the system does not meet all three conditions above, do not replace the processor. Continue normal system problem determination.

UNIX is a trademark of UNIX System Laboratories.
 Windows NT is a trademark of Microsoft Corporation.

SAS KEYWORDS:

PSY2	PSY2PROG	OS2	76I
77I	77S	76S	D/T9577I
D/T9577S	D/T9576I	D/T9577I	TRAP000B
000B	TRAP000D	TRAP000E	TRAP
000D	000E	NON-MASKABLE	INTERRUPT
NON MASKABLE	HUNG	LOCKED	D/T9577

1.4.1651 9576/77 S&I MODELS TRAP W/5250 OR SYSTEM 36/38 ADPT.

Record number: H125304

Device: D/T9577
 Model: M
 Tip key:
 Date created: 094/10/12
 Date last altered: A95/05/12

SYMPTOM:

The 9576s or 9577s may exhibit a TRAP 0002 or other system failures, such as hangs, while running OS/2 2.1 or 2.11.

PROBLEM ISOLATION AIDS:

- This tip applies only if the 9576 or 9577 is a Model xUx, xNx, or xTx.
- A Future Domain SCSI Adapter, FRU P/N71G3576, is installed in the system in combination with one of the following adapters:
 - | - 5250 Emulation Adapter/A, FRU P/N64G3506
 - System 36/38 Emulation adapter, FRU P/N69X6294

FIX:

The Emulation adapters and the Future Domain SCSI adapter both attempt to use the same interrupt level. To eliminate this conflict, the interrupt level of the adapters must be manually changed using Change Configuration.

Note: Running Auto Configuration will not fix this problem.

If changing the interrupt level as identified above does not correct the problem, the servicer should use normal problem determination procedures.

Future Domain, is a trade mark of the Future Domain Corporation.

SAS KEYWORDS:

PSY2	PSY2ERR	69X6294	82G7061
D/T9577S	D/T9577I	PSY2ADPT	

PSY2 RETAIN TIPS
9576/77 SI MODELS 118 ERRORS

SAS KEYWORDS:

PSY2	PSY2MEM	PSY2ERR	D/T9576I
D/T9577I	D/T9576S	D/T9577S	D/T9576
MB	4	8	16

1.4.1653 9576I/9577I HANGS DURING AUTO CONFIGURATION

Record number: H126135

Device: D/T9576
Model: M
Tip key:
Date created: 095/01/25
Date last altered: A95/05/02

SYMPTOM:

9576i or 9577i systems may hang while running automatic configuration if an IBM SCSI FAST/WIDE adapter, FRU P/N92F0160, is installed.

PROBLEM ISOLATION AIDS: NONE**FIX:**

Until a permanent fix is available the servicer should use the change configuration option from the set configuration menu.

Engineering is aware of this problem and will release a BIOS upgrade to fix it.

After rebooting the system, it is necessary to reset the time and date.

Hangs will not be observed if any other type of SCSI adapters are installed.

This tip will be updated when the new BIOS becomes available.

SAS KEYWORDS:

D/T9577I	D/T9576I	D/T9576	D/T9577
PSY2ADPT	SCSI CARD	PSY2PROG	AUTOMATIC

1.4.1654 9576S/77S INTERNAL 270MB SCSI DRIVE NOT RECOGNIZED

Record number: H126630

Device: D/T9577
 Model: M
 Tip key:
 Date created: 095/03/07
 Date last altered: A95/03/07

SYMPTOM:

9576/77s Systems will not recognize the internal 270Mb fixed disk after an external SCSI device is connected to the external SCSI connector (J6).

PROBLEM ISOLATION AIDS:

After removing the 50 pin terminator from the external SCSI device, the system recognizes the internal 270Mb SCSI drive.

FIX:

Replace the 50 pin external terminator with the new 50 pin active terminator. Mechanicsburg has inventory of the new active terminator. It can be identified by the word ACTIVE printed on the terminator, following the FRU number (FRU#92F0057A-Active) Some external devices that use this terminator are the 3509, 3510, 3532 expansion units, 2456 Scanners, etc.

SAS KEYWORDS:

PSY2	D/T9576	D/T2456	D/T3509
D/T3510	D/T3532	9576	9577
D/T9576S	D/T9577S		

1.4.1655 9577 9576 DISPLAYS a 605 POST ERROR

Record number: H127284

Device: D/T9577
 Model: M
 Tip key:
 Date created: 095/04/26
 Date last altered: A95/04/26

SYMPTOM:

A 605 POST error may occur if a diskette drive manufactured by Melco for IBM, FRU P/N85F0050, is installed.

PROBLEM ISOLATION AIDS:

- This tip applies only if the 9576 or 9577 is a 9576i, 9576s, 9577i or 9577s and is a model xUx, xNx, or xTx.
- The Flash BIOS revision level is at level 04, Version 3.03 or lower.

PROBLEM ISOLATION AIDS:

- This tip applies only if the 9576 or 9577 is a 9576i, 9576s, 9577i or 9577s and is a model xUx, xNx, or xTx.
- The Flash BIOS revision level is at level 04, Version 3.03 or lower.

FIX:

This problem has been fixed with 9576/77 Flash BIOS revision level 05, Version 3.03.

The Flash update, 7677FLSH.DSK may be downloaded from the IBM PC Company Bulletin Board System (BBS) at 919-517-0001.

The file on the BBS is 7677FLSH.DSK

```

=
= THESE FLASH UPDATES ARE CUSTOMER INSTALLABLE. CUSTOMERS
= SHOULD BE ADVISED TO CONTACT THE PC COMPANY HELPCENTER AT
= 800-772 - 2227 IF ASSISTANCE IS REQUIRED IN GETTING THE
= APPROPRIATE UPDATE.
=
=

```

If updating the Flash level does not correct the problem, the servicer should use normal problem determination procedures to isolate the defect.

SAS KEYWORDS:

PSY2	PSY2ERR	D/T9576	9576I
9576S	9577I	9577S	76I
77I	76S	77S	D/T9576I
D/T9576S	D/T9577I	D/T9577S	PSY2DSKT

1.4.1656 9577 9576 HANGS DURING POST W/IMAGE-I ADAPTER/A

Record number: H124991

Device: D/T9577
 Model: M
 Tip key:
 Date created: 094/08/16
 Date last altered: A95/03/16

SYMPTOM:

The Image-I Adapter/A, when installed in a 9576 i/s or 9577 i/s, may fail to configure and hang during post.

PROBLEM ISOLATION AIDS:

- This tip applies only if the 9576 or 9577 is a Model xUx, xNx, or xTx.
- This tip applies only if the unit is a 9576i, 9576s, 9577i or 9577s.
- The Image-I Adapter/A, Option part number 49G2716, Feature Code 5501 or FRU P/N49G2716 was just installed.
- Removing the Image-I Adapter/A and utilizing the SVGA video on the system board allows the unit to complete POST.

FIX:

Servicers should contact IBM PC Company Level 2 support through their normal technical support structure and request a replacement Image-I Adapter/A that is compatible with the the above models. Until the replacement adapter is installed the customer may use the local bus SVGA.

The replaced Image-I Adapter/A must be returned to the following address:

IBM Corporation
 Dept 2AW Bldg 656
 500 Park Offices Drive
 RTP, NC 27709-2195
 Attention Dave Asaibene

When a final fix is available it will be communicated via this RETAIN Tip. No additional parts should be replaced in an attempt to fix this problem.

If removing the Image-I Adapter/A as identified above does not correct the problem, the servicer should use normal problem determination procedures to isolate the defect.

SAS KEYWORDS:

PSY2	PSY2ERR	D/T9576	9576I
9576S	9577I	9577S	76I
77I	76S	77S	IMAGE
IMAGE	D/T9576I	D/T9576S	D/T9577I
D/T9577S	ADAPTER	PSY2TBD	

1.4.1657 9585 ERROR CODE 00015300 STEP 140

Record number: H125302

Device: D/T9585
Model: M
Tip key:
Date created: 094/10/05
Date last altered: A94/10/19

SYMPTOM:

When running the 9585 System Board Diagnostics for the first time after a cold or warm boot, the following error code may occur:

SERVER 85 System Board
Error Code = 00015300
A system board failure occurred at test step 140. The most likely cause is the System Board . . .

PROBLEM ISOLATION AIDS:

Back up the system partition to diskette, then view the directories. Look for one of the following DGS files:

@FE92.DGS MicroChannel to Mainframe Connection
Adapter (MMC) FRU P/N12G8067.

SCSITAPE.DGS IBM SCSI Tape Drive Diagnostics

FIX:

If one the above files were present, the error may be considered a false error and should be ignored. Diagnostics should be rerun without rebooting the system and should complete with out error. Replacing system unit FRUs or adapters will not resolve this problem. No parts should be replaced.

If one of the above DGS files are not present on the system partition, then normal problem determination procedures apply.

SAS KEYWORDS:

PSY2 PSY2TBD PSY2ERR PSY2BRD

1.4.1658 9585 TRAP, FAST CURSOR, DISKETTE, MOUSE OS/2 PROBLEMS

Record number: H125303

Device: D/T9585
Model: M
Tip key:
Date created: 094/10/05
Date last altered: A94/10/19

SYMPTOM:

During or after an install of OS/2 1.3 or 2.x on a 9585, one or more of the following symptoms may occur:

- TRAP 0002 errors.
- Cursor flashing very fast in an OS/2 window.
- Diskette drive is not functional.
- Mouse buttons do not work correctly.
- "The system detected an internal processing error at..."
- I9990303 system partition boot failure with OS/2 installed.

PROBLEM ISOLATION AIDS: None**FIX:**

The Server 85 (9585) reference diskettes are model specific.

Ensure that the reference diskette installed on the machine is correct for the particular model (see below).

Ensure that the correct ABIOS.SYS and *.BIO files are used on the OS/2 Diskettes for the proper systems.

- If you are installing OS/2 on a 9585-0Xx, use the ABIOS.SYS and the *.BIO from the 1.11 reference diskette.
- If you are installing OS/2 on a 9585-0Kx or 9585-0Nx, use the ABIOS.SYS and the *.BIO from the 1.32 reference

Additional information on the use of the ABIOS.SYS and *.BIO files for OS/2 installation is available in RETAIN tips H20850 and H121779. For information on the 9585 Reference diskette versions, see RETAIN tip H122446.

SAS KEYWORDS:

PSY2

PSY2DSKT

PSY2DIAG

PSY2REF

1.4.1659 9595 SYSTEM FAILS TO POWER-ON

Record number: H124000

Device: D/T9595
Model: M
Tip key:
Date created: 094/03/30
Date last altered: A94/08/15

SYMPTOM:

The system will not power-on from the operators panel.
There is no "Power Good"* light on the front panel.

* The "Power Good" light is erroneously referred to as a "Power-on" light in the customer's documentation. A power-on light usually indicates that system power has been turned on. "Power-Good" indicates the system power supply is not only turned on, but is providing all the required voltages and they are within specifications.

PROBLEM ISOLATION AIDS:

- a. The system unit is plugged into the customer's power receptacle and the correct input voltage is present.
- B. Remove the side cover. Depress the small pushbutton on the top left corner of the power supply. A small green LED (light emitting diode) is located next to the switch. This is the self test feature of the power supply. If the power supply starts (LED turns-on and the power supply fan runs), the power supply is operational.

FIX:

Inspect the system board for a jumper located just to the right of the operator panel ribbon cable connector. Refer to Page 137 of the PS/2 Hardware Maintenance Manual (HMM) dated Sept. 1993 HMM (S52G-9971-01) for the exact location. The jumper is reference number 14 on this page.

If it is missing...Replace it. Pins 1 and 2 must be connected to enable the operator panel power switch to be functional. Page 137 of the HMM references this jumper as being required.

FRU's are shipped from the plant with all required jumpers in place.

Note: Additional information.
The information in the numbered list at the top of page 137 of the HMM is correct. However, in the illustration below the list, numbers 7 and 11 are reversed.

To correct the illustration, change the "11" to a "7" and change the "7" to an "11".

This will be corrected in the next update of the HMS.

SAS KEYWORDS:

PSY2	PSY2POWER	D/T9595A	RAID
PS	SERVER	95	

1.4.1660 9595A FIXED DISK ACTIVITY LIGHT

Record number: H122847

Device: D/T9595
Model: M
Tip key:
Date created: 094/02/17
Date last altered: A95/06/28

SYMPTOM:

The fixed disk activity light does not come on during system fixed disk operations, or when running diagnostics on the 9595A.

PROBLEM ISOLATION AIDS:

None

FIX:

This is not a hardware defect. The 9595A uses a RAID Disk Controller (FRU P/N92F0335), which does not utilize the fixed disk activity indicator light. However, if the optional Fast/Wide SCSI-2 Adapter/A (FRU P/N92F0160) is also installed, the disk activity indicator will be functional for activity on that device.

On other models of the 9595 which use the Fast/Wide SCSI-2 Adapter/A as a standard feature, the fixed disk activity indicator is operational.

SAS KEYWORDS:

PSY2	D/T9595A	RAID	PSY2FDSK
PSY2ADPT	DASD	LITE	HARD
FILE			

L A S T P A G E