

FRONT

PICTURE 1

March 21, 1990

This pamphlet contains procedures for isolating problems to a FRU, a Symptom-To-FRU Index, and a parts listing for the IBM(*) Personal System/2(*) Model 25 and Model 30.

This pamphlet is intended to be used with the IBM Personal System/2 *Hardware Maintenance Reference* manual (part number 15F2190) and the IBM Personal System/2 *Hardware Maintenance Service* manual (part number 15F2200).

Part Number 15F2191

Form Number S15F-2191-00

FRONT_1 Safety Information

Refer to the *Hardware Maintenance Service General Information* pamphlet for the following information:

- General Safety
- Electrical Safety
- Safety Inspection Guide.

First Edition (March 1990)

The following paragraph does not apply to the United Kingdom or any country where such provisions are inconsistent with local law:

INTERNATIONAL BUSINESS MACHINES CORPORATION PROVIDES THIS PUBLICATION "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. Some states do not allow disclaimer of express or implied warranties in certain transactions, therefore, this statement may not apply to you.

This publication could include technical inaccuracies or typographical errors. Changes are periodically made to the information herein; these changes will be incorporated in new editions of the publication. IBM may make improvements and/or changes in the product(s) and/or the program(s) described in this publication at any time.

It is possible that this publication may contain reference to, or information about, IBM products (machines and programs), programming, or services that are not announced in your country. Such references or information must not be construed to mean that IBM intends to announce such IBM products, programming, or services in your country.

Requests for technical information about IBM products should be made to your IBM Authorized Dealer or your IBM Marketing Representative.

IBM may have patents or pending patent applications covering subject matter in this document. The furnishing of this document does not give you any license to these patents. You can send license inquiries, in writing, to the IBM Director of Commercial Relations, IBM Corporation, Purchase, NY 10577.

| Copyright International Business Machines Corporation 1990. All rights reserved.

Note to US Government users-Documentation related to Restricted rights-Use, duplication, or disclosure is subject to restrictions set forth in GSA ADP Schedule Contract with IBM Corp.

FRONT_2 Special Notices

References in this publication to IBM products, programs, or services do not imply that IBM intends to make these available in all countries in which IBM operates. Any reference to an IBM product, program or service is not intended to state or imply that only IBM's product, program, or service may be used. Any functionally equivalent product, program, or service that does not infringe any of IBM's intellectual property rights or other legally protectible rights may be used instead of the IBM product, program, or service. Evaluation and verification of operation in conjunction with other products, programs, or services, except those expressly designated by IBM, are the user's responsibility.

IBM may have patents or pending patent applications covering subject matter in this document. The furnishing of this document does not give you any license to these patents. You can send license inquiries, in writing, to the IBM Director of Commercial Relations, IBM Corporation, Purchase, NY 10577.

The following terms, denoted by an asterisk (*) in this publication, are trademarks of the IBM Corporation in the United States and/or other countries:

IBM
Personal System/2.

CONTENTS Table of Contents

FRONT_1	Safety Information
FRONT_2	Special Notices
CONTENTS	Table of Contents
1.0	General Checkout
2.0	Memory
3.0	Printer
4.0	Display Self-Test
5.0	Installed Devices
6.0	Undetermined Problem
7.0	Power Supply / Fan
8.0	Symptom-to-FRU Index
9.0	How To Use This Parts Catalog
9.1	Example of a Parts List
10.0	Parts

1.0 General Checkout

The advanced diagnostic tests are intended to test *only* IBM products. Non-IBM products, prototype cards, or modified options can give false errors and invalid system responses.

IMPORTANT:

- If more than one error code is displayed, diagnose the first error code first. The cause of the first error code can cause false error codes to be displayed.
- If an adapter or device consists of more than one FRU, an error code may be caused by any of the FRUs. Before replacing the adapter or device, remove the FRUs, one by one, to see if the symptoms change.

Note: "8525" or "8530" following a part number or instruction applies only to that system. If a system type is not specified, the part number or instruction applies to both systems.

+----+

|001|

+----+

- Check all cables and power cords.
- If you cannot load a diagnostic diskette, go to "Symptom-to-FRU Index."
- Load the Advanced Diagnostics diskette and check for the following responses:
 1. Memory test
 2. One or two short beeps
 3. First diagnostic menu.

ARE ALL THREE RESPONSES CORRECT?

Yes No

| |

| +----+

| |002|

| +----+

| Go to "Symptom-to-FRU Index."

+----+

|003|

+----+

IS THE INSTALLED DEVICES LIST CORRECT?

Yes No

| |

| +----+

| |004|

| +----+

| Go to "Installed Devices."

+----+

|005|

+----+

- Run the Advanced Diagnostic tests.

ARE THE TESTS SUCCESSFUL?

Yes No

| |

| +----+

| |006|

| +----+

| Go to "Symptom-to-FRU Index."

+----+

|007|

+----+

You may have an intermittent problem.

1. Check for damaged cables and connectors.
2. Reseat all adapters, drives, and modules.
3. Start an error log and run the tests multiple times.

2.0 Memory

PARITY CHECK 1 indicates that memory on the system board has failed. If the system has a total of 512KB memory installed (8525), replace the memory-module packages. If the system has a total of 640KB memory installed and the address (number displayed below PARITY CHECK 1) is less than 20000, replace the optional memory modules (8525), or the system board (8530). Otherwise, replace the memory module (8525) or S1 and S2 (8530).

PARITY CHECK 2 indicates that an adapter memory module has failed. See "Undetermined Problem" to identify the failing adapter.

+----+
|001|
+----+

Memory errors are displayed as:

AAAAAA BB CCCC 20X

To isolate a memory failure, answer the following questions.

DID YOU RECEIVE A "205 MEMORY ERROR" MESSAGE DURING POST OR WHEN RUNNING THE MEMORY TESTS?

Yes No

| |
| +----+
| |002|
| +----+
| Go to Step 011.
|

+----+
|003|
+----+

IS THE SYSTEM A TYPE 8530?

Yes No

| |
| +----+
| |004|
| +----+
| Go to Step 006.
|

+----+
|005|
+----+

Replace the system board.

+----+
|006|
+----+

IS CCCC FOUR ZEROS (0000)?

Yes No

| |
| +----+
| |007|
| +----+
| For any C in CCCC that is not zero, replace the corresponding module as shown:

 C C C C
 U35 U34 U22 U16

+----+
|008|
+----+

WAS THE SIXTH DIGIT IN AAAAAA 1, 3, 5, 7, 9, B, D, or F?

Yes No

| |
| +----+
| |009|
| +----+
| Replace memory-module ZM1.
|

+----+
|010|
+----+

Replace memory-module ZM2.

+----+
|011|
+----+

IS BB AN 01?

Yes No

+---+
|012|

IS CCCC FOUR ZEROS?

Yes No

+---+
|013|

ARE THE LAST TWO Cs IN CCCC ZEROS (00)?

Yes No

+---+
|014|

Replace Memory-Module Package 1 (8525) or S2 (8530).

+---+
|015|

Replace Memory-Module Package 2 (8525) or S1 (8530).

+---+
|016|

WAS THE SIXTH DIGIT IN AAAAAA 1, 3, 5, 7, 9, B, C, D, OR F?

Yes No

+---+
|017|

Replace Memory-Module Package 1 (8525) or S2 (8530).

+---+
|018|

Replace Memory-Module Package 2 (8525) or S1 (8530).

+---+
|019|

Failing adapter memory, see "Undetermined Problem."

3.0 Printer

1. Make sure the printer is properly connected and powered-on.
2. Run the printer self-test.

If the printer self-test does not run correctly, the problem is in the printer. Refer to the printer service manual.

If the printer self-test runs correctly, install a wrap plug on the parallel port and run the advanced diagnostic tests to determine which of the following FRUs is failing:

- System board
- Parallel adapter
- Printer cable.

4.0 *Display Self-Test*

1. Power-off the system.
2. Power-off the display (8530).
3. Unplug the display signal cable from the system.
4. Power-on the display (8530).
5. Power-on the system (8525).
6. Turn the Brightness and Contrast controls to their maximum setting.
7. The display should have a white or light gray screen with a black margin on both sides. If not, replace the display assembly (8525) or display (8530).

5.0 Installed Devices

If an adapter or device is missing from the Installed Devices list, replace that adapter or device.

If an adapter is shown in the Installed Devices list and is not present in the system, remove the bus adapter. If the error remains, replace the system board.

6.0 *Undetermined Problem*

1. Power-off the system.
2. Remove or disconnect the following adapters and devices, one at a time:
 - a. Non-IBM devices
 - b. Any external devices (modem, printer, or mouse)
 - c. Math coprocessor
 - d. Any adapter
 - e. Bus adapter (ignore the 161 error)
 - f. Diskette drive cable
 - g. Fixed disk drive cable.
3. Power-on the system.
4. Repeat the previous steps until you find the failing adapter or device.

7.0 Power Supply / Fan

If the power-on indicator (8525) is not glowing, or if the power-supply fan is not running, check the voltage selector switch setting (8525), if correct, replace the display assembly (8525), or power supply (8530).

If all adapters and devices have been removed and the problem remains, check the power-supply output voltages. If the output voltages are good, replace the system board.

PICTURE 2

Vdc Minimum	Vdc Maximum	-Lead Pin	+Lead Pin
+4.8	+5.2	P7-5	P7-10
+4.5	+5.4	P7-9	P7-5
+11.5	+12.6	P7-5	P7-3
+10.8	+12.9	P7-4	P7-8

PICTURE 3

Vdc Minimum	Vdc Maximum	-Lead Pin	+Lead Pin
+4.8	+5.2	P3-5	P4-4
+4.6	+5.5	P4-3	P3-6
+11.5	+12.6	P4-1	P3-3
+10.8	+13.2	P3-4	P4-2

8.0 Symptom-to-FRU Index

The Symptom-to-FRU Index lists error symptoms and the causes that could be responsible. The most likely cause is listed first.

Important: To determine what is actually failing, always begin with "General Checkout" if you are using the Advanced Diagnostics diskette.

If the system displays an error message and gives an incorrect audio response, the FRUs that have most-likely failed are those listed for the error message. An X in an error message can be any number.

Symptom/Error	FRU/Action
No power, or fan not running	Check Voltage Selector Switch Setting
No beep during POST	System Board Power Supply (8530) (Check voltage selector switch setting 8525) Display Assembly (8525) Memory Module Package (8525) Any Adapter Bus Adapter
One long and two short beeps during POST	System Board Display Adapter (8530)
More than one beep during POST	System Board Any Adapter
Continuous beep	System Board
Blank or unreadable display	See "Display Self-test" System Board Power Supply (8530) Display Adapter (8530) Display Assembly
Other Display Problems	See "Display Self-test" System Board Display Adapter (8530) Display
Insert-Diskette Icon	Diskette Drive System Board Diskette Cable Network Adapter
Bad-Diskette Icon	Diskette Diskette Drive System Board Diskette Cable
System enters BASIC	Diskette Drive System Board Diskette Cable Network Adapter
Incorrect memory size during POST	See "Memory" System Board

Parity Check 1	See "Memory" System Board
Parity Check 2	See "Memory" Adapter Memory Modules Memory Adapter (8530) Bus Adapter System Board
Serial or Parallel port device failure	Device Self-Test OK? Device Cable System Board Alternate Adapter Bus Adapter
XXXX ROM Error	Any Adapter
Some (or all) of the keys on the keyboard don't work.	Keyboard System Board Keyboard Cable
Real-Time Clock keeps wrong time (8530)	Bus Adapter System Board
161 (8530)	Set Time and Date Bus Adapter System Board
199	See "Installed Devices"
1XX	System Board
2XX	See "Memory" System Board
302	Is the Keylock Locked? Keylock Assembly System Board
3XX	Keyboard System Board Keyboard Cable
5XX	System Board Display Adapter (8530)
602	System Board Diskette Drive Diskette Cable
6XX	Diskette Drive System Board Display Assembly (8525) Power Supply (8530) Diskette Cable
7XX	Math Coprocessor

IBM PS/2 Model 25/30
Symptom-to-FRU Index

	System Board
9XX	See "Printer"
1002	Alt. Parallel Adapter Jumpers Alt. Parallel Adapter
10XX	Alt. Parallel Adapter Bus Adapter
11XX	System Board
1202	Alt. Serial Adapter Jumpers Alt. Serial Adapter Bus Adapter
12XX	Alt. Serial Adapter Bus Adapter
13XX	Game Control Adapter Bus Adapter
15XX	SDLC Adapter Bus Adapter
17XX	Fixed Disk Drive System Board Fixed Disk Cable Display Assembly (8525) Power Supply (8530)
20XX	BSC Adapter Bus Adapter
21XX	Alt. BSC Adapter Bus Adapter
28XX	3278/79 Adapter Coaxial Cable Bus Adapter
3015, 3040	Network Attached? LF Translator Cable Problem PC Network Adapter Bus Adapter
30XX	PC Network Adapter LF Translator Cable Problem Bus Adapter
3115, 3140	Network Attached? LF Translator Alt. PC Network Adapter Cable Problem

IBM PS/2 Model 25/30
Symptom-to-FRU Index

	Bus Adapter
31XX	Alt. PC Network Adapter LF Translator Cable Problem Bus Adapter
36XX	GPIB Adapter Bus Adapter
38XX	DAC Adapter Bus Adapter
74XX (8530)	Display Adapter Bus Adapter
84XX	Speech Adapter Speech Control Assembly Bus Adapter
85XX (8530)	2MB Exp. Memory Adapter Bus Adapter
86XX	Mouse System Board
89XX	Music Card MIDI Adapter Unit Bus Adapter

If Problem remains, see "Undetermined Problem".

Symptom-to-FRU Supplement:

9.0 How To Use This Parts Catalog

SIMILAR ASSEMBLIES: If two assemblies contain a majority of identical parts, they are broken down on the same list. Parts peculiar to one or the other of the assemblies are listed separately and identified by description.

AR: (As Required) indicates that the quantity is not the same for all machines.

R: (Restricted) indicates that the part has a restricted availability.

INDENTURE the indenture is marked by a series of dots located before the parts description. The indenture indicates the relationship of a part to the next higher assembly. For example:

Indenture Relationship of Parts

(No dot) Main Assembly
(One dot) □ Detail parts of a main assembly
(One dot) □ Subassembly of the main assembly
(Two dot) □ □ Detail part of a one-dot subassembly
(Two dot) □ □ Subassembly of a one-dot subassembly

Subtopics

9.1 Example of a Parts List

9.1 Example of a Parts List

System Unit

Cover	72X8501
Front Bezel/Logo (R)	72X8502
Miscellaneous Hardware Kit (AR)	72X8580
<input type="checkbox"/> Knob Assembly, Fixed Disk Drive Support Structure	
<input type="checkbox"/> Knob	
<input type="checkbox"/> Washer	

10.0 Parts

System Unit Exterior - 8525

Cover - Top, Rear and Sides	00F2110
Cover - Front Bezel	00F2111
Cover - Blank Bezel	00F2117
Cover - Diskette Drive Bezel	00F2112
Diskette Cover (Tool Lockable)	00F2108
Front Bezel/Logo (R) (Exchange Basis Only)	61X8908
Logo Package	00F2119
Rear Cover	61X8916
Shipping Material (System)	00F2115
<input type="checkbox"/> Shipping Carton	
<input type="checkbox"/> Shipping Cushion, Top	
<input type="checkbox"/> Shipping Cushion, Bottom	
Tilt Assembly	00F2105

System Unit Interior - 8525

Bus Adapter	00F2101
Bus Adapter Support	00F2118
Base Frame Assembly	00F2104
Diskette Drive Cable	00F2109
Foot Assembly	00F2114
Color Display Assembly, (110/220V) U.S. and Canada	00F2053
Color Display Assembly, (Northern Hemisphere)	00F2056
Color Display Assembly, (Southern Hemisphere)	00F2057
Monochrome Display Assembly, (110/220V) U.S. and Canada	00F2052
Monochrome Display Assembly, (Northern Hemisphere)	00F2054
Monochrome Display Assembly, (Southern Hemisphere)	00F2055
Memory Package 1 and 2 - 256Kb (Qty 1)	61X8906
Memory Module ZM1 and ZM2 (64KB)	00F2120
Memory Module U16,U22,U34,U35 (64KB)	00F2121
System Board	00F2100
Tilt Assembly	00F2105
8087 Coprocessor	61X8922

System Unit Interior - 8525 (continued)

Miscellaneous Parts Kit	00F2113
<input type="checkbox"/> Screw (Qty 13)	
<input type="checkbox"/> Knob - CRT Adjust (2)	
<input type="checkbox"/> Shock Mount, Fan (4)	
<input type="checkbox"/> C Clip, Tilt Assembly	
<input type="checkbox"/> Cover - Top Cover Screw (2)	
<input type="checkbox"/> Cover - Expansion Slot	
<input type="checkbox"/> Retainer - Feature Card	
<input type="checkbox"/> Spring - Rear Tilt Leg (2)	
<input type="checkbox"/> Clip - Foot Assembly (2)	
<input type="checkbox"/> Standoff/Washer (2)	
Retainer (Base Frame Assembly to Cover)	00F2134

System Unit - 8530

Base Frame Assembly (Exchange Basis Only)	61X8897
<input type="checkbox"/> Rubber Feet (Qty 4)	61X8917
Blank Drive Bezel	72X7534
Bus Adapter	61X8910
Bus Adapter Support	61X8911
Drive Cradle	61X8909
Front Bezel/Logo (Exchange Basis Only)	61X8908
Keylock Assembly	61X8912
Memory Module Package (256KB)(Qty 1)	61X8906
Miscellaneous Parts Kit	61X8915
<input type="checkbox"/> Captive Screw (Qty 4)	
<input type="checkbox"/> Screw (Qty 5)	
<input type="checkbox"/> Spring (Qty 4)	
<input type="checkbox"/> Lock, Slide Assembly	
Power Switch	61X8918
Power Switch Link	61X8919
Power Supply (120/220V)	61X8905

Parts

Rear Cover	61X8916
Sliding Support Bracket	61X8926
Support Bracket	61X8914
System Board (1) (Use if S/N not in note)	61X8907
System Board (1) (Use if S/N in note)	33F8474
System Board Clip	61X8933
Top Cover	61X8913
(Exchange Basis Only)	
8087 Math Coprocessor	61X8922

Diskette Drive - 8525

Diskette Drive, 720KB (1/2 High) (3)	6820821
Diskette Drive Shipping Insert	60X5599
Diskette Drive Shipping Insert	60X5600
(Note: Order both Shipping Inserts)	
Diskette Drive Shield (1/2 High) (3)	33F4904
Diskette Drive Cable (1/2 High) (3)	00F2109
Diskette Drive Bezel (1/2 High) (3)	00F2112
Diskette Drive, 720KB (1/3 High) (4)	27F4119
Diskette Drive Bezel (1/3 High) (4)	33F4947
Diskette Drive Spacer (1/3 High) (4)	33F4948
Diskette Drive Cable (1/3 High) (4)	33F4949

Diskette Drive - 8530

Diskette Drive, 720KB (1/2 High)	61X8899
Diskette Drive Cable (1/2 High)	61X8900
Diskette Drive Bezel (1/2 High)	61X8901
Diskette Drive, 720KB (1/3 High) (5)	27F4119
Diskette Drive Bezel (1/3 High) (5)	27F4230
Diskette Drive Cable (1/3 High) (5)	34F0002

Fixed Disk Drive - 8525 and 8530

Fixed Disk Drive, 20MB (8525-8530)	61X8929
Fixed Disk Drive, 20MB (8530) (2)	6128285
Fixed Disk Drive, 30MB (8530-001)	6128279
Fixed Disk Drive Bezel (8530)	61X8904
Fixed Disk Drive Cable (8530-021)	61X8903
Fixed Disk Drive Cable (8530-001)	27F4178
Fixed Disk Drive Cable (8525)	78X9089
Fixed Disk Bezel and Keylock (8525)	78X9088
Fixed Disk Drive (8525) (with adapter)	27F4130
Fixed Disk Drive Cables	33F8471
(8525 - for 27F4130)	

External Diskette Drive

360KB External (4869-001)	72X6759
360KB External (4869-501)	72X6768
□ Diskette Drive	72X6771
□ Power Supply	72X6769
External Diskette Drive Adapter	72X6757
External Diskette Drive Cable	27F4211
(from system board to adapter)	
5.25-Inch External Diskette Drive Adapter	33F8472
Cable (For systems with 1/3 High Diskette	
Drives, from B Connector to Adapter)	

Options and Adapters

BSC Adapter	8286098
Bus Adapter (8525)	00F2101
Bus Adapter (8530)	61X8910
Bus Adapter (8530-001)	27F4964
Communications Adapter Cable	8529274
Data Acquisition Adapter (DAC)	6181768
Display Adapter PS/2 (8530)	1887743
Enhanced 5250 Emulation Adapter	30F5384
External Diskette Drive Adapter	72X6757
Game Control Adapter	8529151
GPIO Adapter	6181770
MIDI Adapter Unit	81X8624
PC Music Adapter	81X8620
PC Network Adapter	8286171
PC Network Adapter Cable	8286172
PC Network Adapter II	72X8105
PC Network Baseband Adapter	72X8101
PhoneCommunicator Adapter	33F4846
PhoneCommunicator Cable (Black-L)	57F1261
PhoneCommunicator Cable (Black-S)	57F1262

Parts

PhoneCommunicator Cable (Beige-L)	57F1263
PhoneCommunicator Cable (Beige-S)	57F1264
Printer Cable	8529214
PS/2 Multifunction Adapter	30F5447
□ Memory Pack - 256KB	1497256
□ Memory Pack - 1MB	74X8637
2MB Expanded Memory Adapter	1497250
Screen Reader Adapter	33F4842
Screen Reader Keypad	1393515
Screen Reader Keypad Cable	72X8537
SpeechViewer Adapter	15F8511
Test Plug (for 15F8511)	15F8512
SDLC Adapter	8286099
Serial/Parallel Adapter	8286147
Serial Adapter Cable	8286170
Serial Adapter Connector	8286194
Speech Adapter	61X8921
Token Ring Adapter	16F0463
Token Ring 16/4 Adapter	25F8884
Token Ring RPL (Module)	83X7839
2MB Expanded Memory Adapter	1497250
3278/3279 Emulation Adapter	8665792
8087 Math Coprocessor	61X8922

Keyboards (101/102 Key) / Mouse

Arabic	1392014
Belgian	1392012
Canadian French	1392011
Danish	1392005
French	1392000
German	1392001
Hebrew	1392006
Italian	1392002
Netherlands	1392013
Norwegian	1392007
Portuguese	1392008
Spanish	1392003
Spanish/Latin	1392015
Swedish	1392009
Swiss/French/German	1392010
U.K. English	1392004
U.S. English	1392090
101/102-Key Keyboard Cable	61X8898
Mouse	61X8923
Mouse Ball and Pop-Off Retainer	33F8461
Mouse Ball and Twist-Off Retainer	33F8462

Space Saving Keyboard (84/85 Key)

Canadian French	1391992
Spanish/Latin	1391993
U.S. English	1391987
Cable Assembly, External	1393082

Monochrome Display Assembly (8525)

115/230 V, U.S./Canada	00F2052
Display Assembly (Northern Hemisphere)	00F2054
Display Assembly (Southern Hemisphere)	00F2055

Color Display Assembly (8525)

115/230 V, U.S./Canada	00F2053
Display Assembly (Northern Hemisphere)	00F2056
Display Assembly (Southern Hemisphere)	00F2057

8503 Monochrome Display

110/120 Volt	68X3045
220/240 Volt (Northern Hemisphere)	68X3046
220/240 Volt (Southern Hemisphere)	72X7878
Tilt/Swivel Stand	68X3061

8506 Monochrome Display

110/125 Vac (US/Canada)	39F8087
110/125 or 200/240 Vac (Northern Hemisphere)	39F8088
110/125 or 220/240 Vac (Southern Hemisphere)	39F8089

8507 Monochrome Display

110/120 or 220/240 Vac (Universal Model)	6247808
------------------------------------------	---------

8508 Monochrome Display

110/125 Vac (US/Canada)	6247838
110/125 or 200/240 Vac (Northern Hemisphere)	39F8067
110/125 or 220/240 Vac (Southern Hemisphere)	39F8068

8512 Color Display

110/120 Volt	61X8924
220/240 Volt (Northern Hemisphere)	61X8928
220/240 Volt (Southern Hemisphere)	61X8927
Tilt/Swivel Stand	61X8925

8513 Color Display

110/120 Volt	68X3088
220/240 Volt (Northern Hemisphere)	72X7870
220/240 Volt (Southern Hemisphere)	72X7877
Tilt/Swivel Stand	68X3061

8514 Color Display

110/120 Volt	75X5945
220/240 Volt (Northern Hemisphere)	75X5946
220/240 Volt (Southern Hemisphere)	75X5947
Tilt/Swivel Stand	75X5907

Power Cords

Warning: Use the power cord certified for your country.

Power Cord, System Unit, for: Colombia, U.S., Venezuela	62X1045
Power Cord, System Unit, for: Hong Kong, Singapore, U.K.	8529341
Power Cord, System Unit, for: France, Germany, Spain	8529281
Power Cord, System Unit, for: Italy	8529282
Power Cord, System Unit, for: Australia, New Zealand	8529284

Tools and Miscellaneous

Data Acquisition Distribution Panel	61X1769
Data Migration Connector Adapter	61X8936
Mouse	61X8923
Mouse Ball and Pop-Off Retainer	33F8461
Mouse Ball and Twist-Off Retainer	33F8462
Speech Control Assembly	61X8934
Tri-Connector Wrap Plug	72X8546
Shipping Material (System)	72X7541

Supplemental Parts:

Printed in the United States of America

- (1) All 8530-001 systems, 8530-002 systems with S/N 55A0001 to 55Z9999 and S/N 7000000 to 7499999, 8530-021 with S/N 2500000 to 2999999 and S/N 55AA001 to 55ZZ999.
- (2) All 8530-001 systems, and 8530-021 systems with S/N 2500000 to 2999999 and S/N 55AA001 to 55ZZ999.
- (3) All 8525 systems below S/N ZZ999.
- (4) All 8525 systems above S/N 0100000.
- (5) All 8530-001 systems, 8530-002 systems with S/N 55A0001 to 55Z9999 and S/N 7000000 to 7499999, 8530-021 with S/N 2500000 to 2999999 and S/N 55AA001 to 55ZZ999.