

# Engine Rebuilders Checklist

(approved by the Automotive Engine Rebuilders Association)

you found it at: <http://devestech.net>

Following these few basic operations will help save time and provide you with a well installed, trouble free dependable engine assembly. Please check off each item as required.

## PRE-ASSEMBLY CHECKLIST

- Thoroughly clean any parts which are to be re-used. Be sure no vacuum or EGR passages are restricted with carbon. Clean out any carbon build-up in throttle body areas.
- Thoroughly clean the threads of any bolts to be re-used.
- Check all gasket and seal mating surfaces for warpage and bent or damaged areas which could result in sealing failures. Clean all gasket surfaces of oil, paint, etc.
- Prime the oil pump with engine oil or assembly lube before installing it on the new engine.
- Replace and/or clean the oil pickup tube and screen.
- Read and follow all gasket set instructions. Only use gasket adhesives/sealers where required by the gasket manufacturer.
- Inspect the radiator for any signs of leakage or clogged/corroded tubes. Have the radiator repaired or replaced if it isn't in perfect condition.
- Clean the air conditioning condenser fins to provide plenty of air flow to the radiator.
- Visually inspect the new engine to be certain it is an equivalent match to the engine being replaced. Inspect the new engine for any obvious defects.
- Determine and correct the cause of engine failure prior to installing the new engine. (overheating, transmission slippage, fuel in oil, etc.)

## ASSEMBLY CHECKLIST

- Use your torque wrench. Torque all bolts in sequence where specifications are available. Lightly lube bolt threads.
- Use a thread sealer where bolts enter any fluid areas, (coolant or oil) to prevent leakage around threads.
- Pre-lube the lifters, push rods and rockers with assembly lube prior to installing.
- Install a new cooling system thermostat.
- Install new cooling system hoses and clamps. (radiator, heater, bypass, etc.)
- Install a new water pump and fan clutch.
- Install new belt drives.
- Install new timing belts and any idler/tensioner pulleys that the timing belt contacts.
- Overhaul or replace the carburetor. Replace the carburetor and EGR base gaskets. Check EGR operation, replace if needed.
- Install a new fuel pump (if mechanical, engine mounted type.)
- Inspect motor and transmission mounts. Replace if needed.
- Inspect the clutch, flywheel, flex plate, etc. and replace as needed. If the thrust bearing was bad, check for swelling of the torque converter.
- Fill the new oil filter with motor oil before installing.
- Fill the engine with break-in oil recommended by the engine rebuilder.