REMOVAL AND INSTALLATION (Continued)

Installation

The camshaft bearings are available prefinished to size and require no reaming for standard and 0.38mm (0.015 inch) undersize journal diameters.

CAUTION: Failure to use the correct expanding collet can cause severe bearing damage.

- Position new bearings at the bearing bores and press them in place with Camshaft Bearing Set T65L-6250-A. Center the pulling plate and puller screw to avoid damage to the bearing.
 - NOTE: Align the oil holes in the bearings with the oil holes in the cylinder block before pressing bearings into place.
 - Ensure the front bearing is installed 0.51-0.89mm (0.020-0.035 inch) below the front face of the cylinder block.
- Install camshaft rear bearing bore plug as outlined.
- 3. Install camshaft, crankshaft, flywheel and related parts as outlined. Do not check connecting rod and main bearing clearances as part of camshaft bearing replacement.
- 4. Install engine in vehicle as outlined in this section.

Camshaft Rear Bore Plug Tools Required:

Impact Slide Hammer T50T-100-A or T59L-100-B

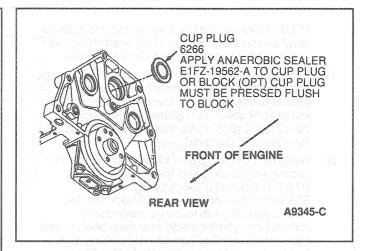
Removal

- Remove engine assembly as outlined in this section.
- 2. Remove flywheel.
- 3. Using a sharp chisel or punch and hammer, cut a hole in the center of the plug.
 - CAUTION: Use care to prevent damage to the plug bore.
- 4. Remove the plug using Impact Slide Hammer T59L-100-B or T50T-100-A. The plug can also be pried from the bore using a large punch.

Installation

Prior to installing a core plug the plug bore should be inspected for any damage that would interfere with the proper sealing of the plug. If the bore is damaged it will be necessary to true the surface by boring for the next specified oversize plug. Oversize (OS) plugs are identified by the OS stamped in the flat located on the cup side of the plug.

- Install bore plug using a suitable driver.
 Apply a light coating of Anaerobic Sealer or equivalent to the sealing edge of the plug before installation.
- 2. Install flywheel. Tighten bolts to 80 N·m (59 lb-ft).
- 3. Install engine assembly as outlined in this section.



DISASSEMBLY AND ASSEMBLY

Engine

Tools Required:

- Crankshaft Damper Remover T58P-6316-D
- Spark Plug Wire Remover T74P-6666-A
- Vibration Damper Remover T82L-6316-B
- Crankshaft Seal Replacer T88L-6701-A
- Rotunda Piston Ring Compressor 014-00290
- Rotunda Cylinder Ridge Reamer 014-00292

Disassembly

Before starting disassembly, remove accessories and any emission control equipment which is not directly attached to the engine.

- 1. Remove flywheel.
- Remove exhaust manifolds as outlined.
 When exhaust manifold is removed, note the location of the dipstick tube support bracket.
- 3. Remove the oil filler cap and closure tube.
- 4. Remove PCV valve.
- 5. Remove PCV valve grommet and hose, if necessary.
- Disconnect secondary wires from the spark plugs. Remove distributor cap (with secondary wires) and rotor (unleaded gasoline only).

When removing a wire from a spark plug, use Spark Plug Wire Remover T74P-6666-A. Grasp and twist the boot back and forth on the plug insulator to free the boot. Use the tool to pull the boot from the plug. Do not pull on the wire directly or it may become separated from the connector inside the boot.

- 7. Remove EGR valve and EGR gasket, if so required.
- Remove the throttle body and disconnect the fuel charging wiring harness (9D930) as outlined.