

## REMOVAL AND INSTALLATION (Continued)

NOTE: Fulcrum must be fully seated into cylinder head and push rod must be fully seated in rocker arm and lifter sockets prior to final tightening.

19. Inspect front cover crankshaft oil seal for damage and replace if required. Install new front cover gasket cover alignment dowels on cylinder block. Install front cover and tighten retaining bolts to 20-30 N·m (15-22 lb-ft). Install water pump and new gasket if removed.
20. Install new oil pan gasket to cylinder block and secure with Gasket and Trim Adhesive D7AZ-19B508-B (ESR-M11P17-A and ESE-M2G52-A) or equivalent. Make sure the gasket retaining tab features are properly installed on cylinder block, rear main bearing and front cover. Install oil pan and all retaining bolts. Tighten four corner bolts to 10-14 N·m (7-10 lb-ft), then the remaining bolts to the same value. Back off all 16 retaining bolts and retighten to 10-14 N·m (7-10 lb-ft).
21. Install crankshaft damper and pulley as outlined in this section.
22. Install rocker arm covers as outlined in this section.
23. Install fuel charging wiring to each injector. Secure with stand offs to inboard rocker arm cover studs.
24. Install ignition coil to rear of LH cylinder head. Tighten retaining bolts to 48 N·m (35 lb-ft).
25. Install throttle body assembly and new gasket. Refer to Section 03-04A.
26. Install distributor cap and ignition wires (unleaded gasoline only). Install wire harness stand offs to rocker arm cover studs and connect wires to spark plugs and ignition coil.
27. Install engine in vehicle.
28. Fill and bleed cooling system with specified mixture and amount.
29. Fill crankcase with the correct viscosity and amount of engine oil.
30. Start engine and check for coolant, oil, exhaust, vacuum and fuel leaks. Check and, if necessary adjust base ignition timing as outlined in the Powertrain Control / Emissions Diagnosis Manual<sup>4</sup> (unleaded gasoline only).

## Camshaft Bearings

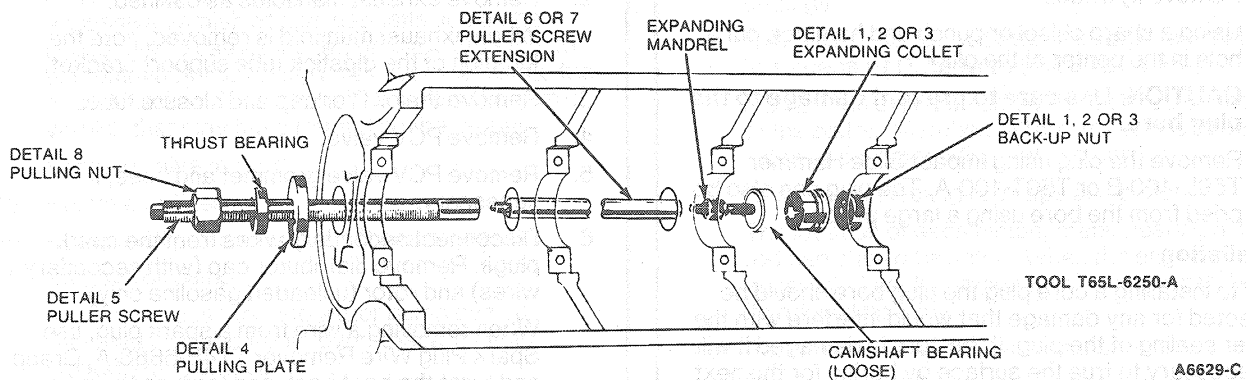
## Tool Required:

- Camshaft Bearing Set T65L-6250-A

## Removal

1. Remove engine, as outlined and place on work stand and remove camshaft, crankshaft and rear bearing bore plug as outlined.

2. Remove camshaft bearing with Camshaft Bearing Set T65L-6250-A.
3. Select proper size expanding collet and backup nut, and assemble on the expanding mandrel. With the expanding collet collapsed, install collet assembly in the camshaft bearing, and tighten backup nut on the expanding mandrel until the collet fits the camshaft bearing.



4. Assemble puller screw and extension if necessary, and install on the expanding mandrel. Wrap a cloth around the threads of the puller screw to protect the bearing or journal. Tighten the puller nut against the thrust bearing and pulling plate to remove camshaft bearing. Hold the end of the puller screw to prevent it from turning.

5. Repeat Step 4 for each bearing. To remove the front bearing, install the puller from the rear of the block.

<sup>4</sup> Can be purchased as a separate item.