

DISASSEMBLY AND ASSEMBLY (Continued)

9. Remove crankshaft pulley and the vibration damper. Use Crankshaft Damper Remover T58P-6316-D and Vibration Damper Remover Adapter T82L-6316-B to remove vibration damper.

10. On unleaded gasoline only, remove distributor hold-down clamp and the distributor.

11. Remove rocker arm covers as outlined in this section.

CAUTION: Use care to prevent damage to machined surfaces.

Before attempting to remove the intake manifold, break the seal between the intake manifold and the cylinder block. Wedge a large screwdriver between the intake manifold and the block. Pry downward on the screwdriver using the lug on the water pump as a leverage point.

12. Remove rocker arms and push rods as outlined in this section.

The location of each rocker arm, push rod and fulcrum should be noted. When engine is assembled each component should be installed in its original position.

13. Remove spark plugs.

14. Remove intake manifold and manifold side gaskets as outlined. Discard intake manifold gaskets.

15. Remove cylinder heads. Discard cylinder head retaining bolts.

16. Remove and discard cylinder head gaskets.

NOTE: The location of each tappet should be identified. When the engine is assembled each tappet should be installed in its original position.

If the tappets are stuck in the bores due to excessive varnish or gum deposits, it may be necessary to use a magnet, or claw-type tool to aid removal. When using a remover tool rotate the tappet back and forth to loosen it from the gum or varnish that may have formed on the tappet.

17. Remove valve tappets.

18. Remove oil filter.

19. Remove oil pan and gasket. Discard gasket.

20. Remove oil pump.

NOTE: If necessary, the water pump can be removed from the front cover. Discard pump gasket after removal.

21. Remove water pump and front cover as an assembly. Remove and discard cover gasket.

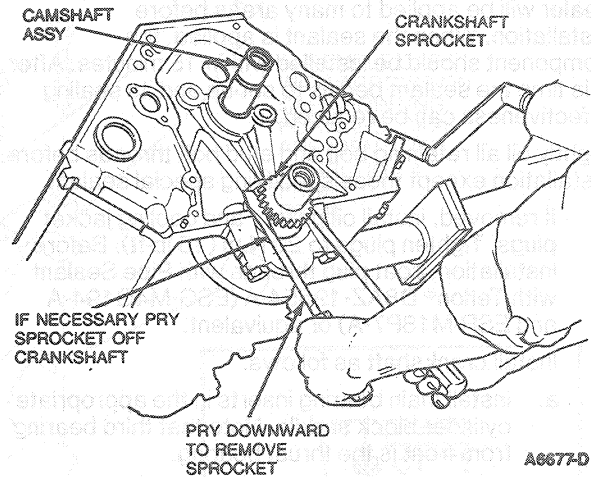
22. Remove thrust plate bolts and thrust plate from the end of the camshaft.

23. Remove camshaft sprocket retaining bolt.

CAUTION: Use care to prevent damage to finished areas on the crankshaft.

NOTE: If the crankshaft sprocket is difficult to remove, it can be pried off using two large screwdrivers.

24. Remove camshaft sprocket, the crankshaft sprocket and the timing chain as outlined.



25. Remove camshaft. Use care to prevent damage to camshaft bearing surfaces.

26. If necessary, remove camshaft plug from the back of the engine.

NOTE: Before removing the pistons, inspect the top of the cylinder bores. If necessary, remove the ridge and/or carbon deposits from each cylinder using Rotunda Cylinder Ridge Reamer 014-00292 or equivalent. Before the ridge or deposits are removed, turn the crankshaft until the piston is at the bottom of its stroke. Cover the piston with a clean shop towel to collect the cuttings. After the cutting operation, turn the crankshaft until the piston is at the top of its stroke and remove the shop towel with the cuttings.

CAUTION: Never cut into the ring travel area in excess of 0.794mm (0.03125-inch).

NOTE: The cylinder number is stamped on the top of the piston. Matched letters are stamped on the sides of corresponding rod and cap.

27. Remove connecting rod caps and pistons.

The location of each piston, crank bearing and rod cap should be noted. When the engine is assembled each component should be installed in its original position.

28. Remove main bearing caps and crankshaft.

The location of the main bearings should be identified. When the engine is assembled each bearing should be installed in its original position.

29. For cleaning purposes, oil gallery and cooling jacket plugs can be removed.