

## DISASSEMBLY AND ASSEMBLY (Continued)

2. Remove exhaust manifold and exhaust manifold. When exhaust manifold is removed, note location of dipstick tube support bracket.
3. Remove following positive crankcase ventilation system components:
  - a. Front and rear PCV tubes.
  - b. PCV valve.
  - c. PCV valve grommet.
4. Disconnect engine coolant bypass hose at water pump and intake manifold. Remove hose.
5. Disconnect secondary wires from spark plugs. Remove distributor cap (with secondary wires) and rotor.
 

When removing a wire from a spark plug, use Spark Plug Wire Remover T74P-6666-A. Grasp and twist boot back and forth on plug insulator to free boot. Use tool to pull boot from plug. Do not pull on wire directly or it may become separated from connector inside boot.
6. Remove following components:
  - a. Throttle body (9E926) assembly and gasket.
  - b. EGR valve assembly.
7. Remove intake manifold upper gasket.
8. Remove injector fuel rail assembly.
9. Remove crankshaft pulley and vibration damper. Use Crankshaft Damper Remover T58P-6316-D and Vibration Damper Remover Adapter T82L-6316-B to remove vibration damper.
10. Remove distributor hold-down clamp and distributor.
11. Remove rocker arm covers.
 

**CAUTION: Use care to prevent damage to machined surfaces.**

NOTE: Before attempting to remove lower intake manifold, break seal between intake manifold and cylinder block. Wedge a large screwdriver between intake manifold and block. Pry downward on screwdriver using lug on water pump as a leverage point.
12. Remove lower intake manifold and intake manifold to cylinder head gaskets. Discard intake manifold to cylinder head gaskets and seals.
13. Remove spark plugs.
14. Remove rocker arms and push rods.
 

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.
15. Remove cylinder heads. Discard cylinder head retaining bolts. Remove and discard cylinder head gaskets.

16. Remove valve tappets and guide plate and retainer assemblies.
 

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

If tappets are stuck in bores due to excessive varnish or gum deposits, it may be necessary to use a magnet or a claw-type tool to aid removal. When using a remover tool, rotate tappet back and forth to loosen it from any gum or varnish that may have formed on tappet.
17. Remove oil filter.
18. Remove oil pan and clean off RTV gasket.
 

NOTE: On Taurus Police applications remove windage tray.
19. Remove oil pickup tube and filter assembly. Discard pickup tube gasket.
 

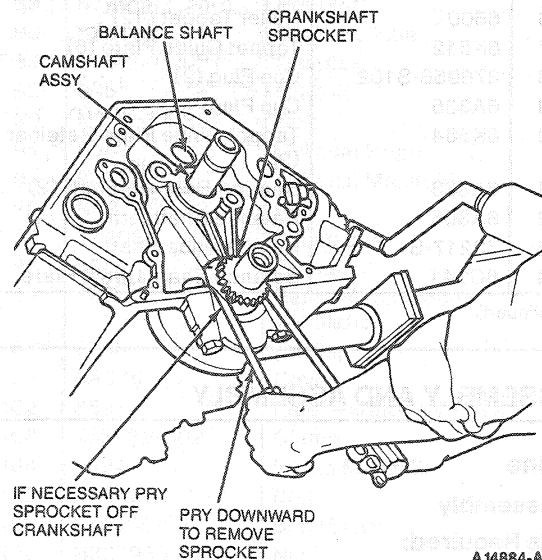
NOTE: If necessary, water pump can be removed from front cover. Discard pump gasket after removal.
20. Remove water pump and front cover as an assembly. Remove and discard cover gasket.
 

After removing cover, remove bolt and washer from end of camshaft.
21. Remove distributor drive gear.
 

**CAUTION: Use care to prevent damage to finished areas on crankshaft and sprocket.**

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

Remove camshaft sprocket, crankshaft sprocket, timing chain and tensioner assembly.



22. Remove balance shaft drive gear and spacer.
23. Remove camshaft thrust plate.