

## IN-VEHICLE SERVICE (Continued)

22. Install the accessory drive belt. Refer to Section 03-05.
23. Connect fuel lines as outlined. Refer to Section 03-04A.
24. Install fuel line safety clips as outlined.
25. Connect upper radiator and heater hoses. Tighten clamps securely.
26. Connect vacuum lines to premarked locations.  
**CAUTION: Engine coolant is corrosive to all engine bearing material. Replace engine oil after removal of a coolant carrying component to help prevent future failure.**
27. Drain and change engine oil.
28. Install air cleaner outlet tube to throttle body and air cleaner. Install closure tube to rocker arm cover. Tighten clamps to 2.7-5.4 N·m (28-48 lb-in).  
**CAUTION: This engine has aluminum components and requires a special corrosion inhibited coolant formulation to avoid cooling system damage. Refer to Section 03-03 for coolant specifications.**
29. Fill and bleed cooling system.
30. Connect battery ground cable.
31. Start engine and check for coolant, fuel, oil, vacuum and exhaust leaks.
32. Verify base ignition timing as outlined (unleaded gasoline only).
33. Check, and if necessary, adjust the transaxle throttle linkage and speed control.
34. Install IAC protective snowshield.
35. Install distributor cap rubber boot (unleaded gasoline only).

**Tappet**

**NOTE:** Before replacing a tappet for noisy operation, ensure the noise is not caused by improper valve-to-rocker arm clearance or by worn rocker arms or push rods. Refer to Section 03-00.

**Removal**

1. Rotate crankshaft to 0 degrees TDC on the compression stroke.
2. Disconnect battery ground cable and set aside.
3. Drain engine cooling system.
4. Remove PCV system closure tube from rocker arm cover and air cleaner outlet tube.
5. Remove aspirator hose from air cleaner outlet tube. Remove air cleaner outlet tube from throttle body and engine air cleaner.  
**WARNING: COVER THE VALVE WITH A SHOP RAG TO PREVENT ACCIDENTAL FUEL SPRAY INTO THE EYES.**
6. Carefully relieve fuel pressure at fuel pressure relief Schrader valve. Refer to Section 03-04A.

7. Disconnect fuel lines. Refer to Section 03-04A.
8. Mark location and remove vacuum lines.
9. Disconnect IAT and distributor connectors (unleaded gasoline only). Disconnect CSI and camshaft sensor connectors (FF only). On either model, disconnect TP, IAC, ECT, ignition coil, coolant temperature sending unit and PFE or DPFE sensor electrical connectors.
10. Disconnect upper radiator hose from thermostat housing. After loosening retaining clamp, use a twisting motion on hose to loosen from housing.
11. Remove brace from generator bracket to throttle body stud.
12. Remove EGR valve to exhaust manifold tube.
13. Remove throttle body as outlined.
14. Disconnect fuel charging wiring retaining stand offs from inboard rocker arm cover studs. Carefully disconnect electrical connectors from each injector and remove fuel charging wiring from engine.
15. Disconnect heater hoses.
16. Remove ignition wires from spark plugs by using a twisting motion on the rubber boot. Remove harness retaining stand offs from rocker arm cover studs.
17. On unleaded gasoline only, mark distributor housing to block and note rotor position. Remove distributor retaining bolt and washer. Remove distributor.
18. Remove ignition coil from rear of LH cylinder head.
19. Remove rocker arm covers as outlined.
20. Loosen cylinder No. 3 intake valve rocker arm retaining nut and rotate arm off of push rod and away from top of valve stem. Remove push rod.  
**NOTE:** Intake manifold assembly may be removed with fuel supply manifold and injectors in place.
21. Remove intake manifold retaining bolts using a Torx® head socket. Before attempting to remove intake manifold, break seal between intake manifold and cylinder block. Wedge a large screwdriver or similar tool between intake manifold and block. Pry upward on tool using area between thermostat and transaxle as a leverage point.
22. Loosen rocker arm fulcrum retaining bolt of tappet to be replaced enough to allow rocker arm to be lifted off the push rod and rotated to one side.  
**NOTE:** Push rods should be installed in their original location and position during reassembly.
23. Remove push rod(s). If more than one is removed, identify each push rods location.
24. Loosen two roller tappet guide plate retaining bolts. Remove guide plate retainer assembly from tappet valley.