

→The 2 thermostat housing bolts also retain the intake manifold.

16. Remove the bolts retaining the intake manifold to the cylinder heads and remove the intake manifold. Remove and discard the gaskets.

To install:

17. Clean all gasket-mating surfaces. Position new intake manifold gaskets on the cylinder heads. Make sure the alignment tabs on the gaskets are aligned with the holes in the cylinder heads.

18. Install the intake manifold and the retaining bolts. Tighten the bolts, in sequence, to 15–22 ft. lbs. (20–30 Nm).

19. Inspect and replace the O-ring seal on the thermostat housing. Position the housing and upper hose and install the 2 bolts. Tighten to 15–22 ft. lbs. (20–30 Nm).

20. Connect the heater supply hose and connect both oxygen sensors.

21. Connect the vacuum hose to the throttle-body adapter port. Connect and, if necessary, adjust the throttle valve cable.

22. Install the accelerator cable bracket on the intake manifold and connect the accelerator and cruise control cables to the throttle body.

23. Install the PCV valve in the valve cover and connect the canister purge solenoid vent hose. Connect the air conditioning compressor, crankshaft position sensor and canister purge solenoid.

24. Connect the 42-pin engine harness connector. Install the connector on the retaining bracket on the vacuum brake booster.

25. Raise and safely support the vehicle. Connect the EGR tube to the right exhaust manifold and tighten the line nut to 26–33 ft. lbs. (35–45 Nm).

26. Connect the EVO sensor and oil-sending unit. Lower the vehicle.

27. Position the alternator and install the retaining bolts. Tighten to 15–22 ft. lbs. (20–30 Nm). Install the 2 bolts retaining the alternator brace to

the intake manifold and tighten to 6–9 ft. lbs. (8–12 Nm).

28. Connect the alternator wiring harness to the alternator, right-hand fender apron and junction block.

29. Position the spark plug wire assembly on the engine and install the 2 bolts retaining the spark plug wire tray to the coil brackets. Tighten the bolts to 6.0–8.8 ft. lbs. (8–12 Nm).

30. Connect the spark plug wires to the ignition coils in their proper positions. Connect the spark plug wires to the spark plugs.

31. Connect the spark plug wire brackets on the valve cover studs. Connect both ignition coils and CID sensor.

32. Install the accessory drive belt and the air inlet tube. Install the wiper module and connect the fuel lines.

33. Fill the cooling system. Connect the negative battery cable, start the engine, and bring to normal operating temperature. Check for leaks.

5.0L Engine

▶ See Figures 50, 51, 52 and 53

1. Disconnect the negative battery cable.
2. Drain the cooling system. Relieve the fuel system pressure; refer to Section 5.

*** CAUTION

Never open, service, or drain the radiator or cooling system when hot; serious burns can occur from the steam and hot coolant. In addition, when draining engine coolant, keep in mind that cats and dogs are attracted to ethylene glycol antifreeze and could drink any that is left in an uncovered container or in puddles on the ground. This will prove fatal in sufficient quantities. Always drain coolant into a sealable container. Coolant should be reused unless it is contaminated or is several years old.

3. Disconnect the accelerator cable and cruise control linkage, if equipped, from the throttle body. Disconnect the throttle valve cable, if equipped. Label and disconnect the vacuum lines at the intake manifold fitting.

4. Label and disconnect the spark plug wires from the spark plugs. Remove the wires and bracket assembly from the rocker arm cover attaching stud. Remove the distributor cap and wires assembly.

5. Disconnect the fuel lines (see Section 5) and the distributor wiring connector. Mark the position of the rotor on the distributor housing and the position of the distributor housing in the block. Remove the hold-down bolt and remove the distributor.

6. Disconnect the upper radiator hose at the thermostat housing and the water temperature sending unit wire at the sending unit. Disconnect the heater hose from the intake manifold and disconnect the 2 throttle body cooler hoses.

7. Disconnect the water pump bypass hose from the thermostat housing. Label and disconnect the connectors from the engine coolant temperature, air charge temperature, throttle position and EGR sensors and the idle speed control solenoid. Disconnect the injector wire connections and the fuel charging assembly wiring.

8. Remove the PCV valve from the grommet at the rear of the lower intake manifold. Disconnect the fuel evaporative purge hose from the plastic connector at the front of the upper intake manifold.

9. Remove the upper intake manifold cover plate and upper intake bolts. Remove the upper intake manifold.

10. Remove the heater tube assembly from the rear of the lower intake manifold studs. Remove the alternator and air conditioner braces from the intake studs. Disconnect the heater hose from the lower intake manifold.

11. Remove the lower intake manifold retaining bolts and remove the lower intake manifold.

→If it is necessary to pry the intake manifold away from the cylinder heads, be careful to avoid damaging the gasket sealing surfaces.

To install:

12. Clean all gasket-mating surfaces. Apply a 1/8 in. bead of silicone sealer to the points where the cylinder block rails meet the cylinder heads.

