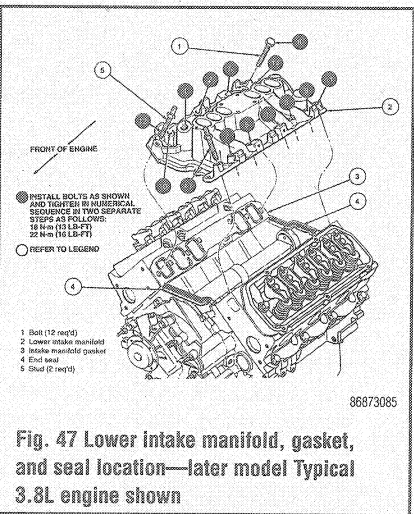
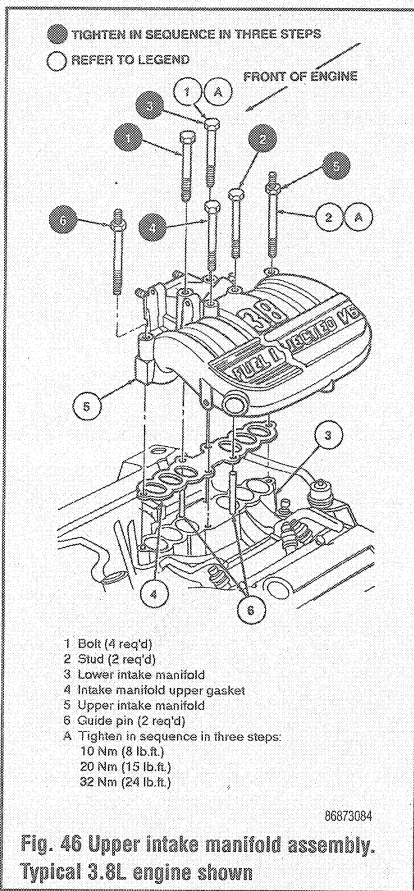
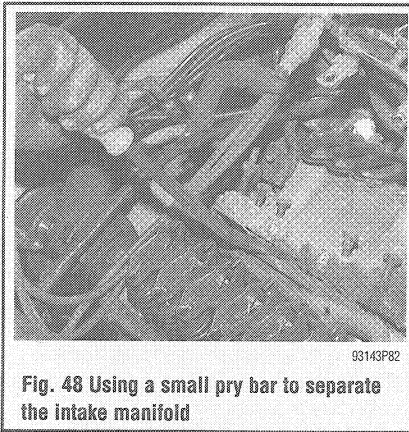


# 3-14 ENGINE AND ENGINE OVERHAUL



- a. Step 1: 8 ft. lbs. (11 Nm)
- b. Step 2: 15 ft. lbs. (20 Nm)
28. Install the injectors and fuel rail assembly. Tighten the screws to 6–8 ft. lbs. (8–11 Nm).
29. Connect the heater water outlet tube to the lower intake manifold. Make sure to fasten the hose clamp securely.
30. Connect the heater water hose to the lower intake manifold, making sure to fasten the hose clamp securely.
31. Connect the upper radiator hose to the water hose connection and tighten clamp securely.
32. Position the upper intake gasket and mani-



fold on top of the lower intake. Use locating pins to secure position of gasket between manifolds.

33. Install bolts and studs in their original locations. Tighten the four center bolts, then tighten the end bolts. Tighten the bolts in numerical sequence to the following specifications in two steps:

- a. Step 1: 13 ft. lbs. (18 Nm)
- b. Step 2: 16 ft. lbs. (22 Nm)

34. Install the EGR valve assembly on the manifold if removed earlier. Tighten the attaching bolt to 15–22 ft. lbs. (20–30 Nm).

35. Install the throttle body if removed earlier. Cross-tighten the retaining nuts to 15–22 ft. lbs. (20–30 Nm).

36. Connect the rear crankcase ventilation hoses at the PCV valve and the upper intake manifold.

37. Engage all electrical connectors and vacuum hoses.

38. Connect the fuel line(s) at injector fuel rail assembly.

39. Position the accelerator cable mounting bracket, then install and tighten the retaining bolts to 15–22 ft. lbs. (20–30 Nm). Install the return spring.

40. Connect the transaxle linkage at the upper intake manifold.

41. Install the alternator mounting brace, then install the drive belt. For drive belt installation procedures, please refer to Section 1 of this manual.

42. Fill the cooling system to the proper level with the specified coolant.

43. Install the air cleaner assembly and air intake duct.

44. Connect the negative battery cable, then start the engine, and check for coolant or fuel leaks.

45. Check and, if necessary, adjust engine idle speed, transaxle throttle linkage and speed control.

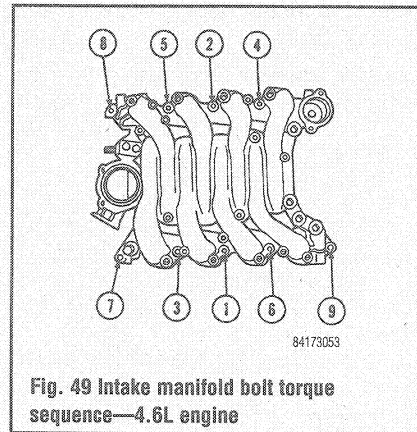
## 4.6L Engine

### ▶ See Figure 49

1. Disconnect the negative battery cable.
2. Drain the cooling system. Relieve the fuel system pressure and disconnect the fuel lines; 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. Remove the wiper module and the air inlet tube. Release the belt tensioner and remove the accessory drive belt.

4. Tag and disconnect the spark plug wires from the spark plugs. Disconnect the spark plug wire brackets from the valve cover studs.

5. Disconnect both of the ignition coils and the CID sensor. Tag and disconnect all spark plug wires from both ignition coils. Remove the 2 bolts retaining the spark plug wire tray to the coil brackets and remove the spark plug wire assembly.

6. Disconnect the alternator wiring harness from the junction block at the fender apron and alternator. Remove the bolts retaining the alternator brace to the intake manifold and the alternator to the engine block and remove the alternator.

7. Raise and safely support the vehicle. Disconnect the oil sending unit and EVO harness sensor and position the wiring harness out of the way.

8. Disconnect the EGR tube from the right exhaust manifold and lower the vehicle.

9. Remove the 42-pin engine harness connector from the retaining bracket on the vacuum brake booster and disconnect the connector.

10. Disconnect the air conditioning compressor, crankshaft position sensor and canister purge solenoid.

11. Remove the PCV valve from the valve cover and disconnect the canister purge vent hose from the PCV valve.

12. Disconnect the accelerator and cruise control cables from the throttle body using a small pry-bar. Remove the accelerator cable bracket from the intake manifold and position out of the way.

13. Disconnect the throttle valve cable from the throttle body and the vacuum hose from the throttle-body adapter port.

14. Disconnect both oxygen sensors and the heater supply hose.

15. Remove the 2 bolts retaining the thermostat housing to the intake manifold and position the upper hose and thermostat housing out of the way.