#### 6A5-16 3.1 L ENGINE VIN T RPO LHO

- 27. Any necessary wiring.
- Coolant sensor, refer to DRIVEABILITY AND EMISSIONS (SECTION 6E3-C1).
- 29. Fuel lines at bracket.
- 30. Throttle body heater hose.
- 31. Heater pipe at intake.
- 32. Intake manifold bolts.

# ? Important

- Retain Belleville washers in same orientation on 4 center bolts.
- 33. Loosen rocker arms.
- 34. Pushrods.
  - Intake and exhaust pushrods are different lengths with the exhaust pushrod being the longer of the two. Intake pushrods are marked orange; and are 6 inches long; exhaust pushrods are marked blue and are 6-3/8 inches long.
- 35. Intake gasket.

# Inspect

• Flatness of inlet flanges.

### Clean

- Gasket material from mating surfaces.
- Excess RTV sealant from front and rear ridges of cylinder.
- · Block.
- · Sealing surfaces with degreaser.

#### ++ Install or Connect

- Place a 2-3 mm bead of GM RTV sealer P/N 1052917 or equivalent on each ridge where the front and rear of the inake manifold contact the block.
- 2. Intake manifold gasket.
- 3. Pushrods.
  - Intake pushrods are marked orange and are 6 inches long.
  - Exhaust pushrods are marked blue and are 6 3/8 inches long.
  - · Make sure pushrods seat in lifter.
- 4. Rocker arm nuts.

### **1** Tighten

- Rocker arm nuts to 25 Nom (18 lb. ft.).
- 5. Intake manifold.
- 6. Intake manifold bolts.

#### **Q** Tighten

 Intake manifold bolts in proper sequence, refer to Figure 15.

- 7. Heater pipe to manifold.
- 8. Throttle body heater hose.
- Coolant sensor, refer to DRIVEABILITY ANI EMISSIONS (SECTION 6E3-C1).
- 10. Any necessary wiring.
- 11. Upper radiator hose.
- Rear valve cover, refer to "Valve Cover" in this section.
- Generator bracket, refer to CHARGING SYSTEM (SECTION 6D3).
- 14. Generator brace, refer to CHARGING SYSTEM (SECTION 6D3).
- 15. PCV hose.
- Front valve cover, refer to "Valve Cover" in this section.
- 17. Heater pipe at water pump and cylinder head.
- 18. Plug wires.
- Fuel rail, refer to DRIVEABILITY AND EMISSIONS (SECTION 6E3-C2).
- 20. Wires at injectors.
- Power steering pump, refer to POWER STEERING GEAR AND PUMP (SECTION 3B1).
- 22. Power steering line at generator bracket.
- 23. Generator, refer to CHARGING SYSTEM (SECTION 6D3).
- 24. Fuel lines to fuel rail, refer to ENGINE FUEL (SECTION 6C).
- 25. Fuel lines at bracket.
- 26. Serpentine belt, refer to "Serpentine Drive Belt" in this section.
- 27. Plenum, refer to DRIVEABILITY AND EMISSIONS (SECTION 6E3-C2).
- 28. Plug harness.
- 29. EGR valve, refer to DRIVEABILITY AND EMISSIONS (SECTION 6E3-C7).
- 30. Throttle body, refer to DRIVEABILITY AND EMISSIONS (SECTION 6E3-C2).
- 31. Air intake duct.
- 32. Cable bracket.
- 33. Brake vacuum pipe.
- 34. Cables to throttle body.
- 35. Fill cooling system. Refer to COOLING AND RADIATOR (SECTION 6B).
- 36. Negative battery cable.
- 37. Air cleaner assembly.

# Inspect

- Proper fluid levels.
- Leaks.
- · Completion of repair.