

<- Back

Forward ->

Document ID# 512239
2000 Chevrolet/Geo Blazer - 4WD

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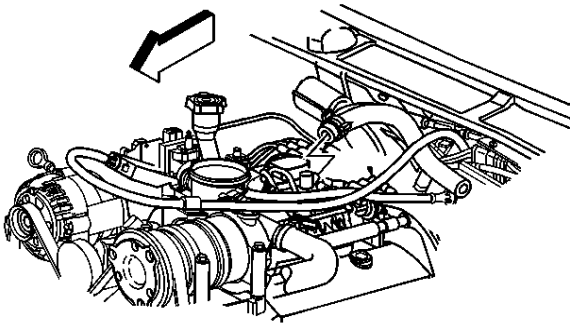
Intake Manifold Replacement Lower

Removal Procedure

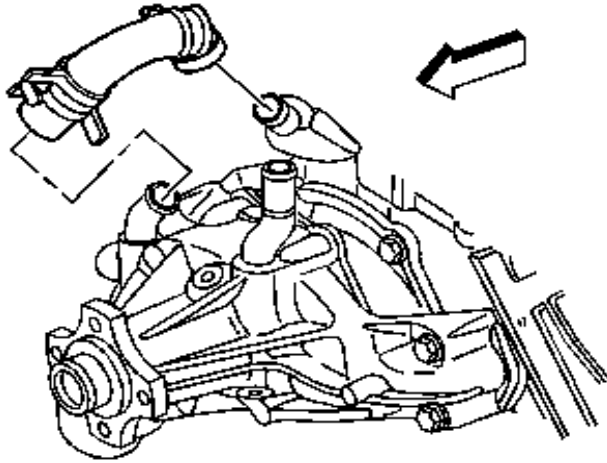
Important

You do not have to remove the upper intake manifold in order to remove the lower intake manifold.

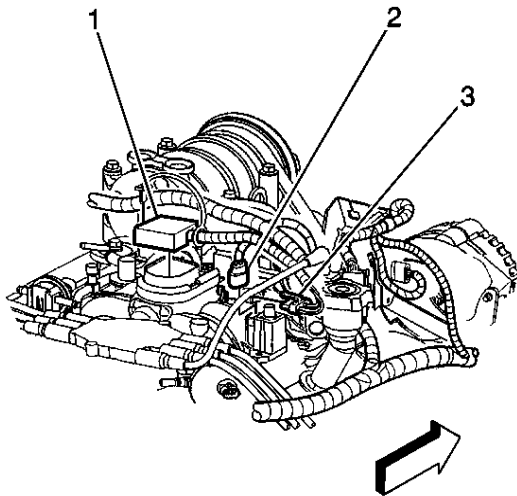
1. Disconnect the battery negative cable. Refer to [Battery Replacement](#) in Engine Electrical.
2. Remove the air cleaner outlet duct from the throttle body. Refer to [Air Cleaner Outlet Duct Replacement](#) in Engine Controls.
3. Disconnect the accelerator control cable from the throttle shaft and the accelerator cable bracket. Refer to [Accelerator Controls Cable Replacement](#) in Engine Controls.
4. Disconnect the cruise control cable, if equipped from the throttle shaft and the accelerator cable bracket. Refer to [Cruise Control Cable Replacement](#) in Cruise Control.



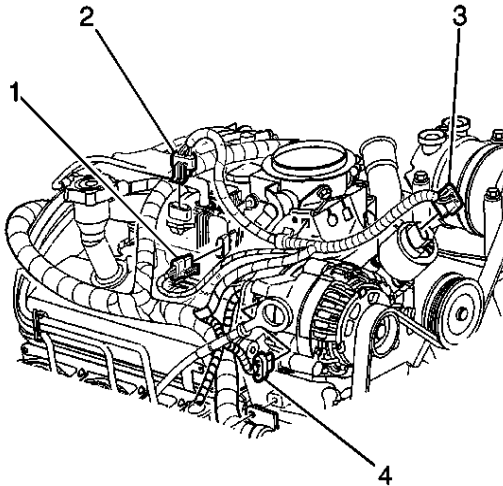
5. Disconnect the vacuum hose from the intake manifold, if equipped with A/C.
6. Disconnect the power brake booster vacuum hose



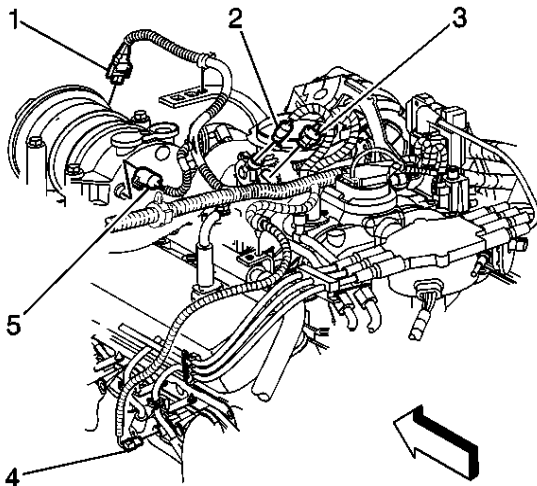
7. Drain the cooling system. Refer to [Draining and Filling Cooling System](#) in Engine Cooling.
8. Remove the radiator inlet hose at the water outlet. Refer to [Radiator Hose Replacement](#) in Engine Cooling.
9. Remove the heater hose from the intake manifold. Refer to [Heater Hoses Replacement](#) in Heating Ventilation and Air Conditioning.
10. Remove the water pump inlet hose form the intake manifold.



11. Disconnect the following electrical connectors:
 - The fuel meter body assembly (1)
 - The EVAP canister purge solenoid valve (2)
 - The manifold air pressure (MAP) sensor (3)

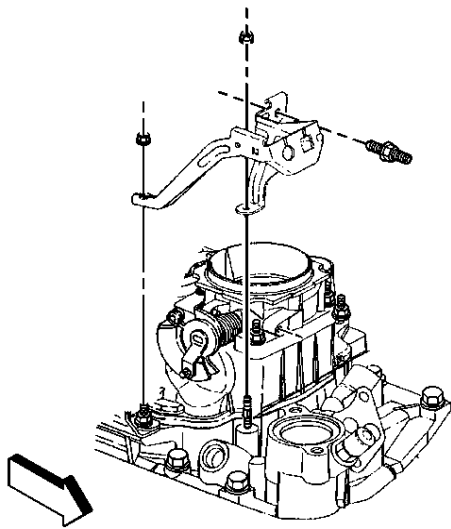


12. Disconnect the following electrical connectors:
- The exhaust gas recirculation (EGR) valve (3)
 - The ignition coil (2)
 - The ignition control module (ICM) (1)
 - The generator (4)

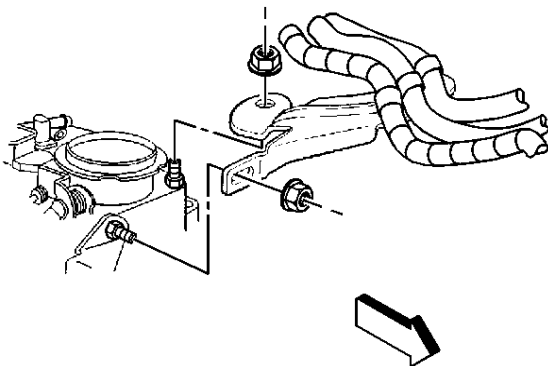


13. Disconnect the following electrical connectors:
- The idle air control (IAC) motor (3)
 - The throttle position (TP) sensor (2)
 - The A/C compressor cutoff switch, if equipped (5)
 - The A/C clutch switch, if equipped (1)
 - The engine coolant temperature (ECT) sensor (4)

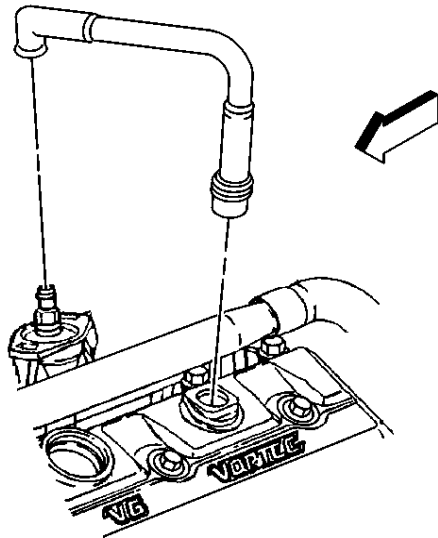
14. Remove the engine wiring harness clips from the brackets.
15. Move the engine wiring harness aside.



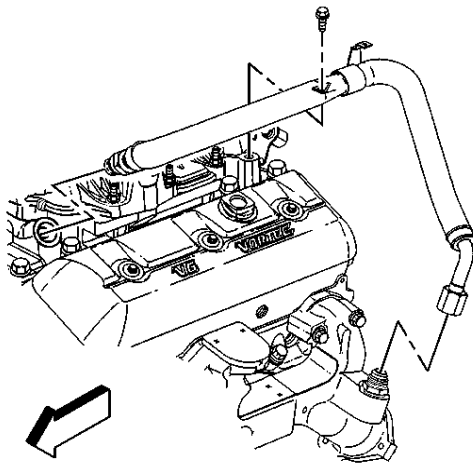
16. Remove the accelerator cable bracket from the throttle body and the intake manifold.



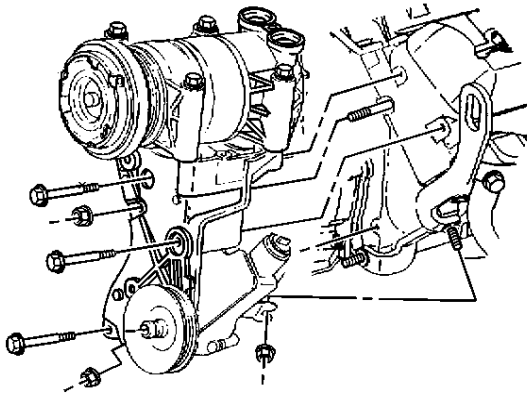
17. Remove the accelerator and the cruise control cable bracket from the throttle bracket. Leave the accelerator and cruise control cables on the bracket.



18. Disconnect the PCV hose assembly from the intake manifold and the valve rocker arm cover.
19. Remove the EVAP canister purge solenoid valve. Refer to [Evaporative Emission \(EVAP\) Canister Purge Solenoid Valve Replacement](#) in Engine Controls.



20. Remove the spark plug wire harness retainer from the exhaust gas recirculation (EGR) valve inlet pipe.
21. Remove the clamp bolt for the EGR valve inlet pipe.
22. Remove the EGR valve inlet pipe from the intake and the exhaust manifolds.
23. Remove the distributor. Refer to [Distributor Replacement](#) in Engine Electrical.
24. Disconnect the fuel supply and return pipes at the rear of the intake manifold. Refer to [Fuel Hose/Pipes Replacement - Engine Compartment](#) in Engine Controls.



Important

Do not discharge the refrigerant.

25. Perform the following in order to remove the left front bolt for the intake manifold:
 - A. Remove the drive belt. Refer to [Drive Belt Replacement](#) .
 - B. Loosen the nut for the power steering pump rear bracket at the side of the engine.
 - C. Remove the secondary air injection (AIR) reactor pipe bracket nut from the power steering pump rear bracket front stud, if equipped.
 - D. Remove the nut for the power steering pump rear bracket at the front of the engine.
 - E. Remove the bolts and the nut for the power steering pump mounting bracket.
 - F. Leave the A/C compressor, if equipped, and the power steering pump on the power steering pump mounting bracket.
 - G. Slide the power steering pump bracket forward to access the bolt at the front of the intake manifold.
26. Remove the lower intake manifold. Refer to [Intake Manifold Removal](#) .
27. Disassemble the intake manifold assembly if replacing the lower intake manifold. Refer to [Intake Manifold Disassemble](#) .

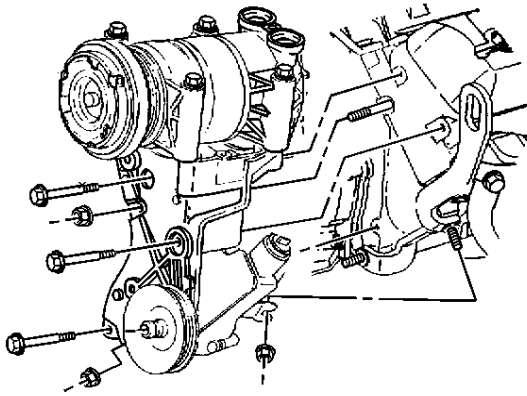
Important

Do not immerse the assembled intake manifold in cleaning solvent.

28. Clean all sealing surfaces. Refer to [Intake Manifold Cleaning and Inspection](#) .

Installation Procedure

1. Assemble the intake manifold assembly if replacing the lower intake manifold. Refer to [Intake Manifold Assemble](#) .
2. Install the lower intake manifold. Refer to [Intake Manifold Installation](#) .



3. Position the power steering pump mounting bracket.
4. Loosely install the power steering pump mounting bracket bolts and nuts.

Notice

Use the correct fastener in the correct location. Replacement fasteners must be the correct part number for that application. Fasteners requiring replacement or fasteners requiring the use of thread locking compound or sealant are identified in the service procedure. Do not use paints, lubricants, or corrosion inhibitors on fasteners or fastener joint surfaces unless specified. These coatings affect fastener torque and joint clamping force and may damage the fastener. Use the correct tightening sequence and specifications when installing fasteners in order to avoid damage to parts and systems.

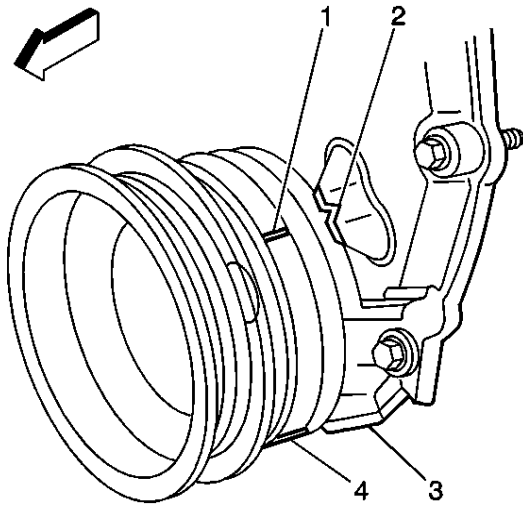
5. Install the nut for the power steering pump rear bracket at the front of the engine. **Tighten**

Tighten the power steering pump mounting bracket bolts and the power steering pump rear bracket nuts to 41 N·m (30 lb ft).

6. Install the AIR reactor pipe bracket nut to the power steering pump rear bracket front stud, if equipped. **Tighten**

Tighten the AIR reactor pipe bracket nut to 41 N·m (30 lb ft).

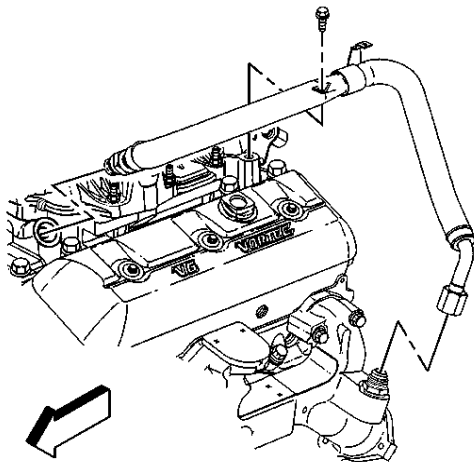
7. Install the drive belt. Refer to [Drive Belt Replacement](#) .
8. Install the fuel supply and return pipes to the rear of the intake manifold. Refer to [Fuel Hose/Pipes Replacement - Engine Compartment](#) in Engine Controls.



Important

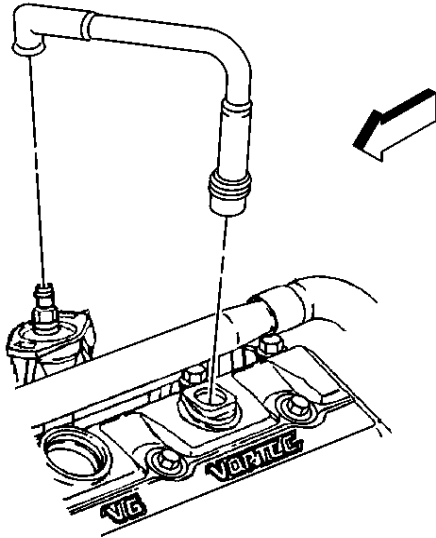
In order to install the distributor for the correct engine timing, position the engine to number one cylinder top dead center.

9. Remove the spark plug for number one cylinder.
10. Rotate the crankshaft until number one cylinder is in the compression stroke.
11. Align the two reference marks on the crankshaft balancer (1) and (4) with the two alignment marks (2) and (3) on the front cover.
12. Install the spark plug. Refer to [Spark Plug Replacement](#) in Engine Electrical.
13. Install the distributor. Refer to [Distributor Replacement](#) in Engine Electrical.
14. Install the EVAP canister purge solenoid valve. Refer to [Evaporative Emission \(EVAP\) Canister Purge Solenoid Valve Replacement](#) in Engine Controls.

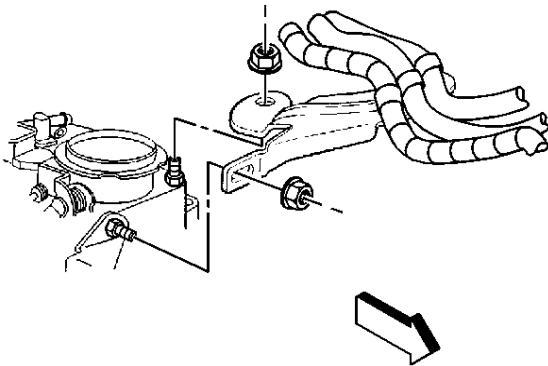




15. Install the EGR valve inlet pipe to the intake manifold and the exhaust manifold. **Tighten**
 - a. Tighten the EGR valve inlet pipe intake manifold nut to 25 N·m (18 lb ft).
 - b. Tighten the EGR valve inlet pipe exhaust manifold nut to 30 N·m (22 lb ft).
 - c. Tighten the EGR valve inlet pipe clamp bolt 25 N·m (18 lb ft).
16. Install the spark plug wire harness retainer on the EGR valve inlet pipe.

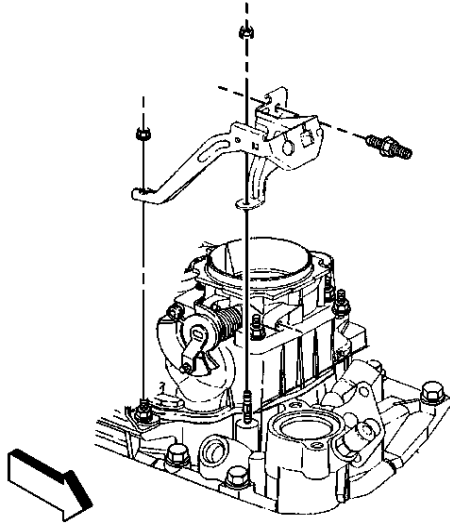


17. Install the PCV hose assembly to the intake manifold and the valve rocker arm cover.



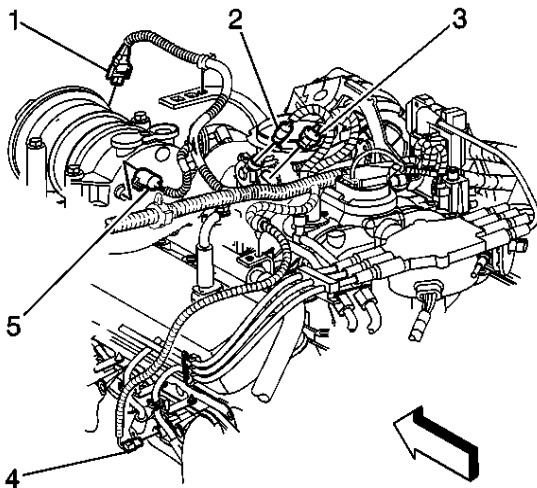
18. Install the accelerator cable and cruise control cable bracket to the throttle body. **Tighten**

Tighten the accelerator cable and cruise control bracket nuts to 9 N·m (80 lb in).



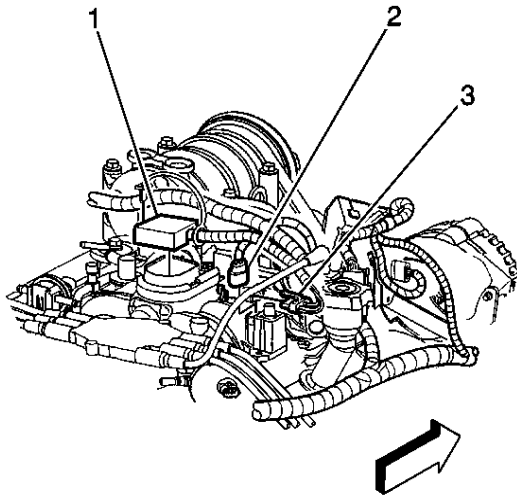
19. Install the accelerator cable bracket to the intake manifold and the throttle body. **Tighten**

Tighten the accelerator cable bracket studs and nuts to 12 N·m (106 lb in).

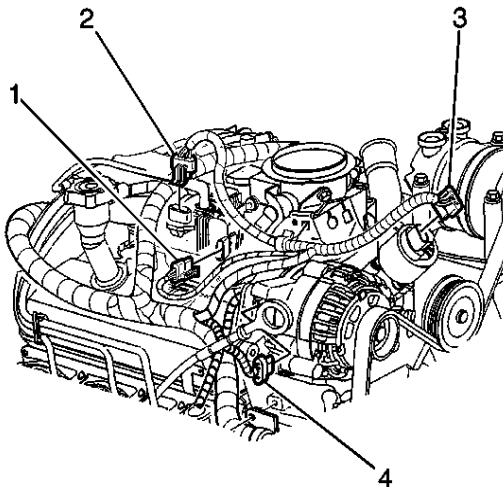


20. Position the engine wiring harness.
 21. Install the engine wiring harness clips in the brackets.
 22. Connect the following electrical connectors:
- The idle air control (IAC) motor (3)
 - The throttle position (TP) sensor (2)
 - The A/C compressor cutoff switch, if equipped (5)

- The A/C clutch switch, if equipped (1)
- The engine coolant temperature (ECT) sensor (4)

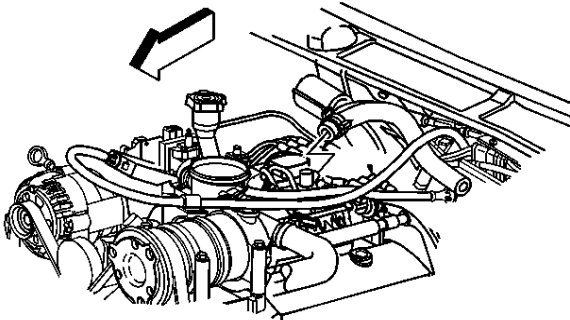


23. Connect the following electrical connectors:
- The fuel meter body assembly (1)
 - The EVAP canister purge solenoid valve (2)
 - The manifold air pressure (MAP) sensor (3)

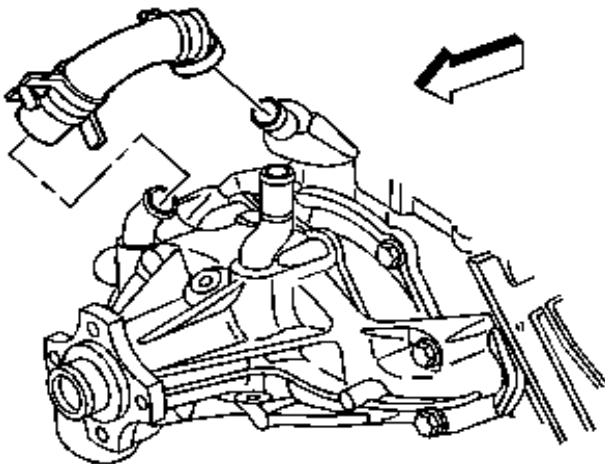


24. Connect the following electrical connectors:
- The exhaust gas recirculation (EGR) valve (3)
 - The ignition coil (2)
 - The ignition control module (ICM) (1)

- The generator (4)



25. Connect the power brake booster vacuum hose.
26. Connect the vacuum hose to the intake manifold, if equipped with A/C.



27. Install the water pump inlet hose to the intake manifold.
28. Install the heater hose to the intake manifold. Refer to [Heater Hoses Replacement](#) in Heating Ventilation and Air Conditioning.
29. Install the radiator inlet hose to the water outlet. Refer to [Radiator Hose Replacement](#) in Engine Cooling.
30. Install the accelerator control cable to the bracket and the throttle shaft. Refer to [Accelerator Controls Cable Replacement](#) in Engine Controls.
31. Install the cruise control cable, if equipped to the bracket and the throttle shaft. Refer to [Cruise](#)

[Control Cable Replacement](#) in Cruise Control.

32. Fill the cooling system. Refer to [Draining and Filling Cooling System](#) in Engine Cooling.
33. Install the air cleaner outlet duct to the throttle body. Refer to [Air Cleaner Outlet Duct Replacement](#) in Engine Controls.
34. Connect the battery negative cable. Refer to [Battery Replacement](#) in Engine Electrical.

<- Back

Forward ->

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Print