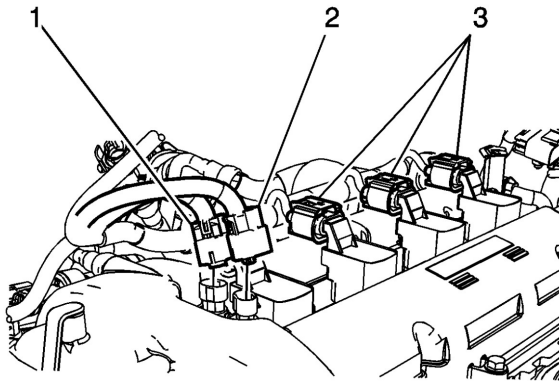
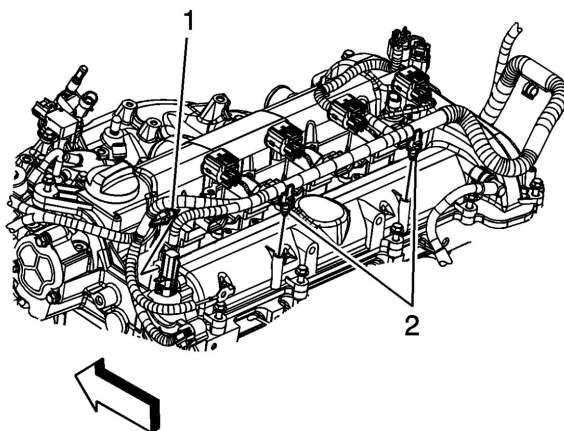


Camshaft Cover Replacement

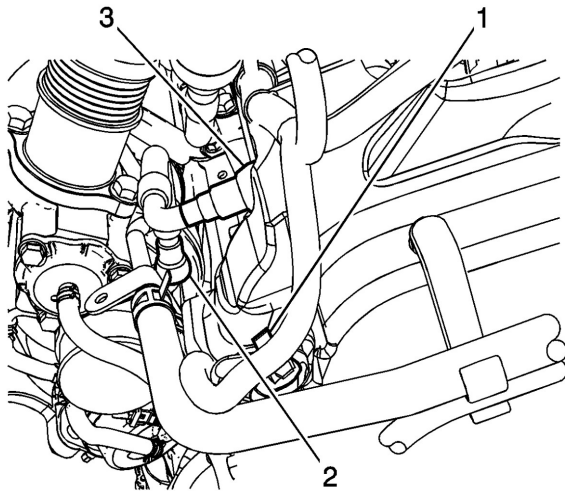
Removal Procedure



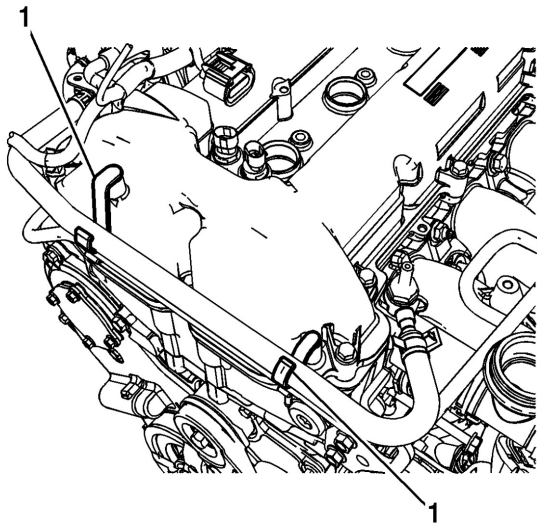
1. Remove the air cleaner. Refer to [Air Cleaner Assembly Replacement](#).
2. Remove the air cleaner outlet duct. Refer to [Air Cleaner Outlet Duct Replacement](#).
3. Remove the charge air cooler inlet pipe. Refer to [Charge Air Cooler Inlet Pipe Replacement](#).
4. Disconnect the engine wiring harness intake (2) and exhaust (1) electrical connectors from the camshaft position actuator solenoid valves.



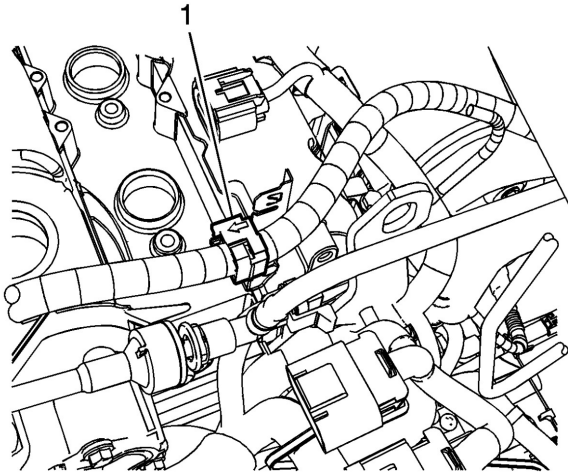
5. Remove the engine wiring harness clips (1, 2) from the camshaft cover.
6. Disconnect the engine wiring harness electrical connector from the evaporative emission (EVAP) canister purge solenoid valve.
7. Remove the ignition coils. Refer to [Ignition Coil Replacement](#).



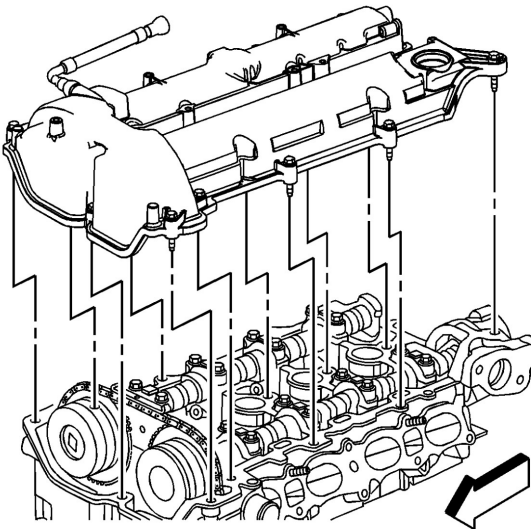
8. Remove the engine wiring harness clip (1) from the turbocharger.
9. Disconnect the PCV hose (2). Refer to [Metal Collar Quick Connect Fitting Service](#).



10. Remove the engine wiring harness clips (1) from the camshaft cover.



11. Disconnect the fuel line (1) from the valve cover.

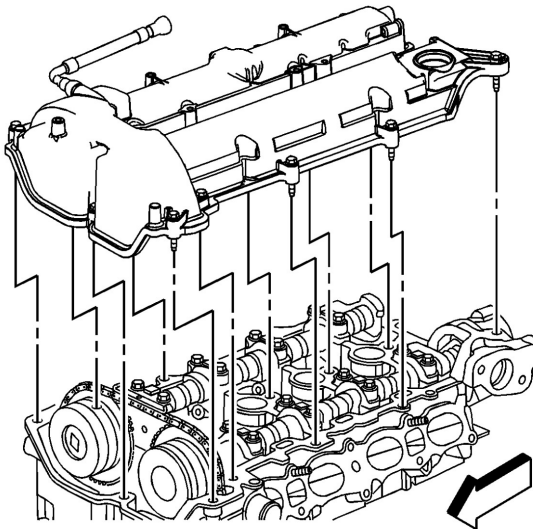


Important: The PCV hose should NOT be disconnected from the camshaft cover as damage to the hose connection will result.

12. Remove the camshaft cover bolts.

13. Remove the camshaft cover.

Installation Procedure

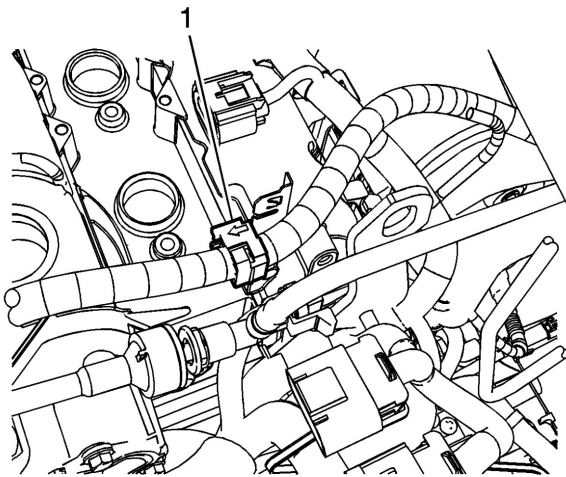


Notice: Refer to [Fastener Notice](#).

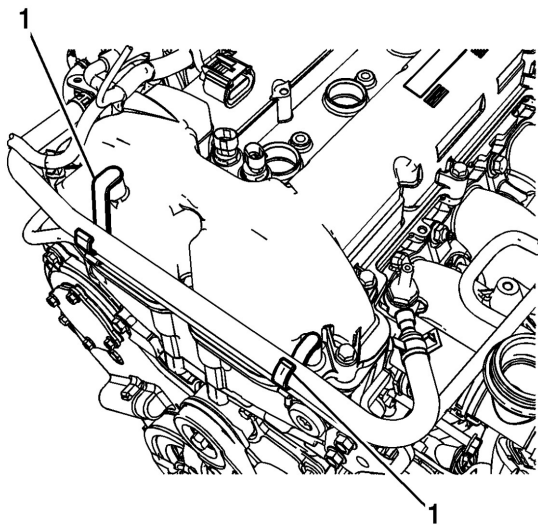
1. Install the camshaft cover and bolts.

Tighten

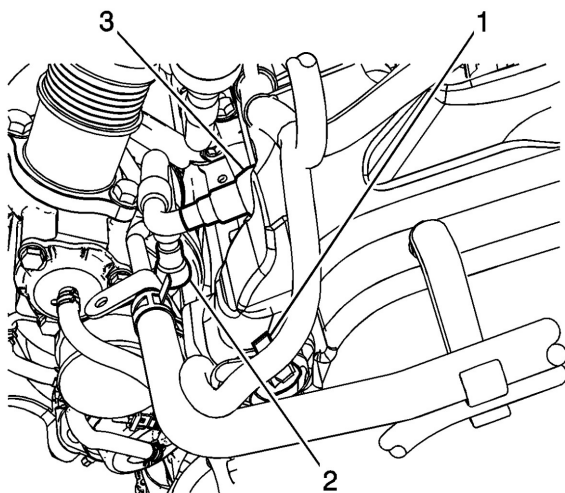
Tighten the bolts to 10N•m (89 lb in).



2. Connect the fuel line (1) to the valve cover.

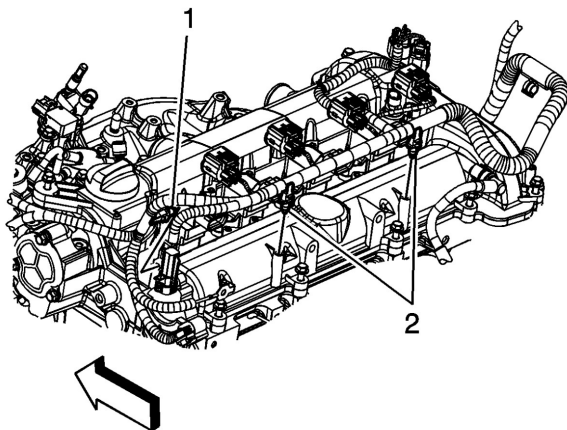


3. Install the engine wiring harness clips (1) from the camshaft cover.

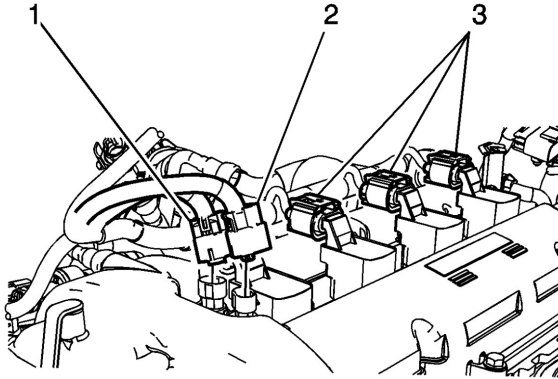


4. Connect the PCV hose (2). Refer to [Metal Collar Quick Connect Fitting Service](#).

5. Install the engine wiring harness clip (1) to the turbocharger.



6. Install the ignition coils. Refer to [Ignition Coil Replacement](#).
7. Connect the engine wiring harness electrical connector from the EVAP canister purge solenoid valve.
8. Install the engine harness clips (1, 2) to the camshaft cover.



9. Connect the engine wiring harness intake (2) and exhaust (1) electrical connectors to the camshaft position actuator solenoid valves.
10. Install the charge air cooler inlet pipe. Refer to [Charge Air Cooler Inlet Pipe Replacement](#).
11. Install the air cleaner outlet duct. Refer to [Air Cleaner Outlet Duct Replacement](#).
12. Install the air cleaner. Refer to [Air Cleaner Assembly Replacement](#).