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# **11-16 LML High Pressure Fuel Line Kit**

**1050170**

**2011-2016 Chevrolet Silverado 6.6L  
2011-2016 GMC Sierra 6.6L**

## Kit Contents

1501170	1501171
	
Fuel Line; Cylinder 1/8	Fuel Line; Cylinder 3/6
<b>Qty: 2</b>	<b>Qty: 2</b>
1501172	1501173
	
Fuel Line; Cylinder 4/5	Fuel Line; Cylinder 2/7
<b>Qty: 2</b>	<b>Qty: 2</b>

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## Introduction

This kit is designed to give you true to OEM fuel line fitment to allow for easy installation. Every single line is checked for quality and fitment to guarantee fit for the 2011-2016 GM LML 6.6L engine. This is a great complement for BD's 1050495 CP3 conversion kit.

## Tools Required for Installation

- Various sockets and ratchets
- Torque wrench
- 1/2", 3/8" fuel disconnect tools
- 17mm, 19mm crow's foot

## Installation

**IMPORTANT:** If engine fails to start or continuously stalls after replacing the fuel lines, perform the **Fuel Feed and Return Pipe Purge Procedure** at the end of this installation manual.

Disconnect both vehicle batteries before installation for safety.

### Injector Line Removal

Safely lift the vehicle and remove the front wheels.

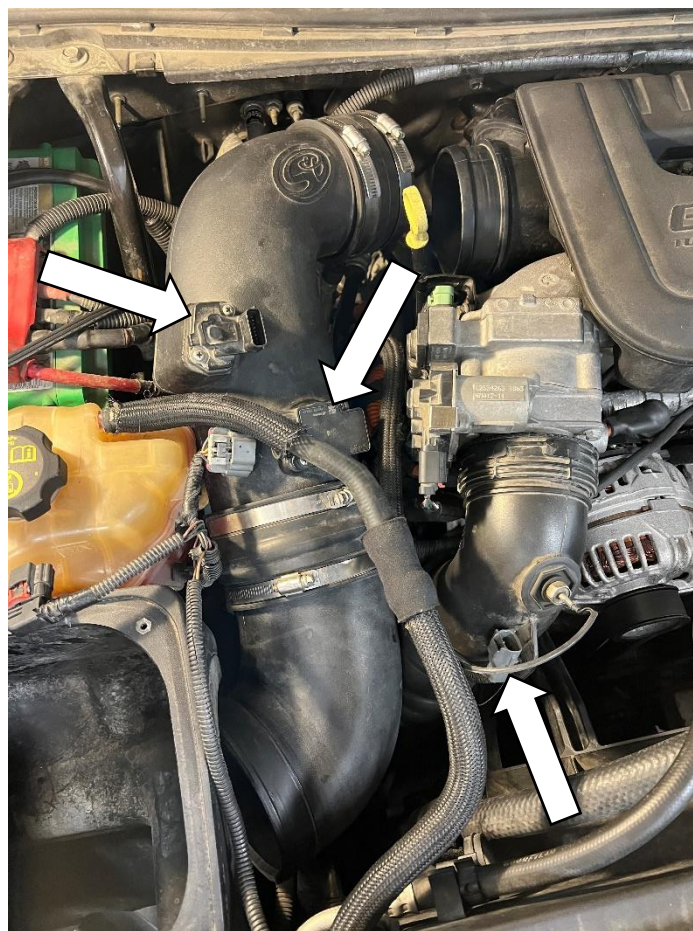
Remove both LH and RH fender liners (RH side shown).



Remove air filter tube, and charge air cooler (CAC) pipe between throttle body and CAC.

Remember to disconnect the 3 electrical connectors (2 on the air filter tube and 1 on the CAC pipe).

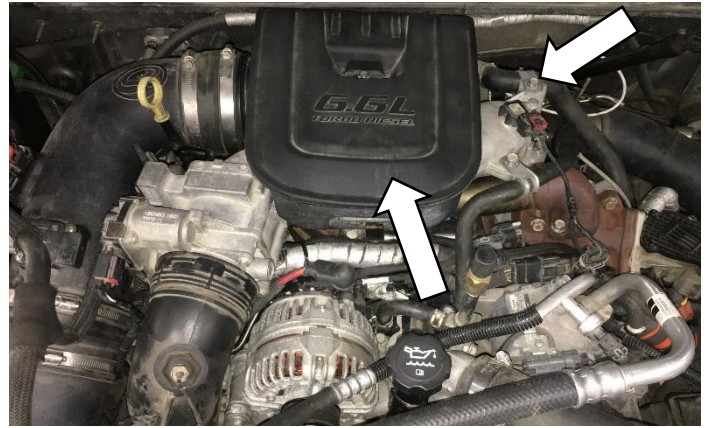
**Note:** To disconnect CAC pipe, gently rotate locking rings counter clockwise.





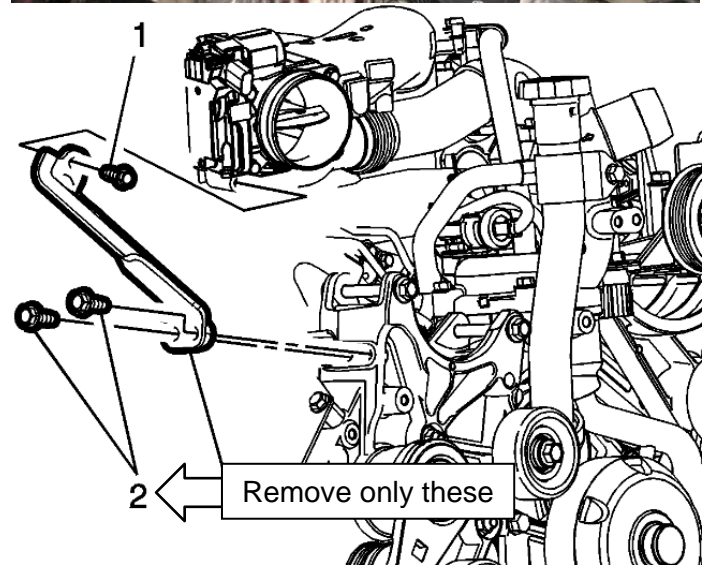
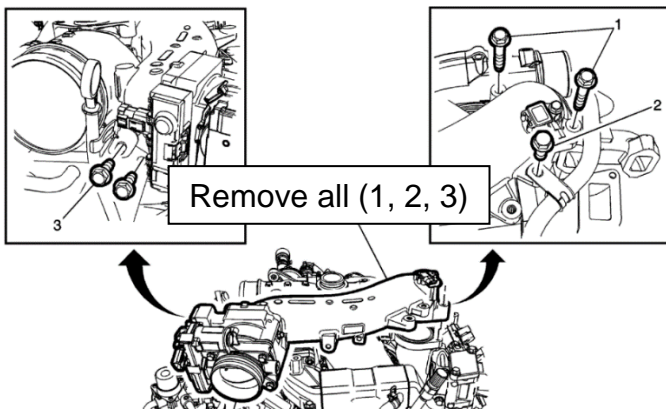
Remove plastic intake manifold cover and positive crankcase ventilation tube.

The intake manifold cover has 2 bolts and the PCV tube is held onto the aluminum intake with 1 bracket bolt.



Unclip 3 electrical connectors, the electrical wire nut, and remove the aluminum intake with throttle body and support bracket.

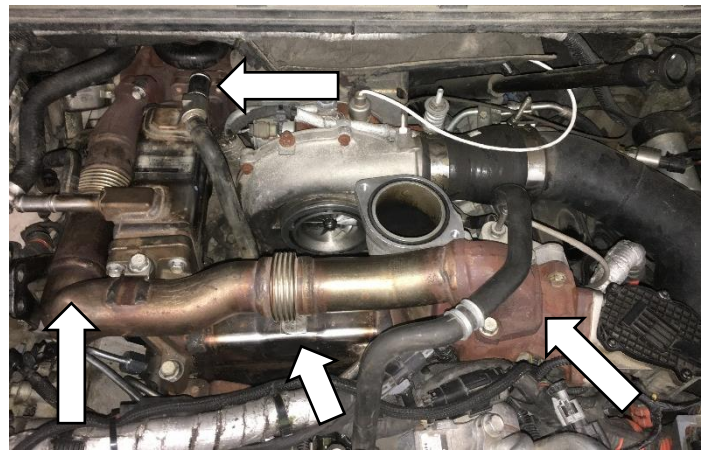
It is suggested to only remove the bolts labeled '2' in the last picture; the bracket can remain on the manifold for easier positioning during reinstall.



Loosen the worm gear clamp and remove the plastic intake elbow from turbo inlet.

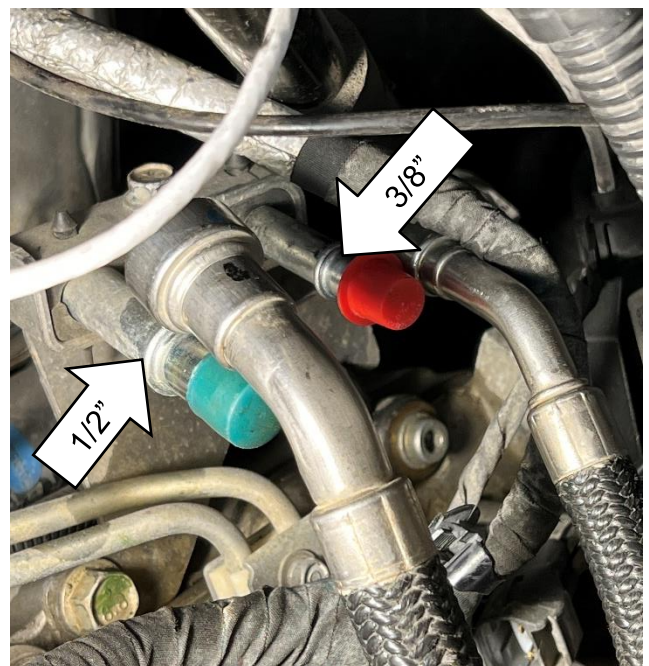


Remove the EGR system including the coolers, bypass pipe, valves, and coolant hoses.



Disconnect the fuel feed and return lines (LH side near the turbo compressor outlet) using  $\frac{1}{2}$ " and  $\frac{3}{8}$ " quick disconnect tools.

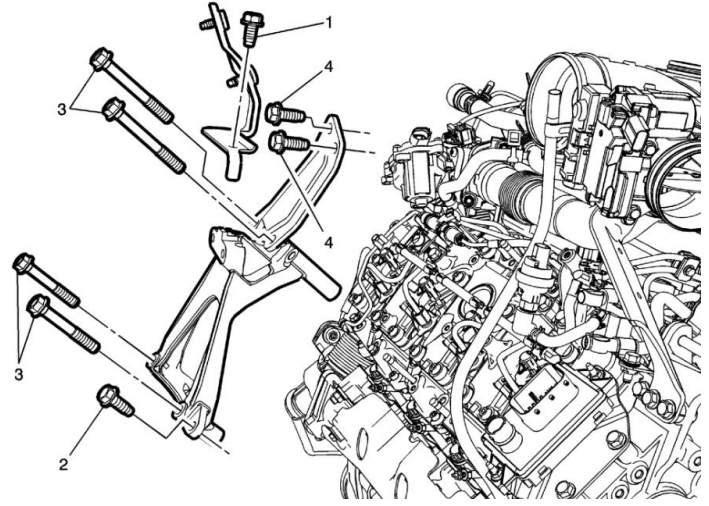
**IMPORTANT:** Cap or plug off the lines to prevent debris from entering.



Reposition the engine wiring harness as necessary.

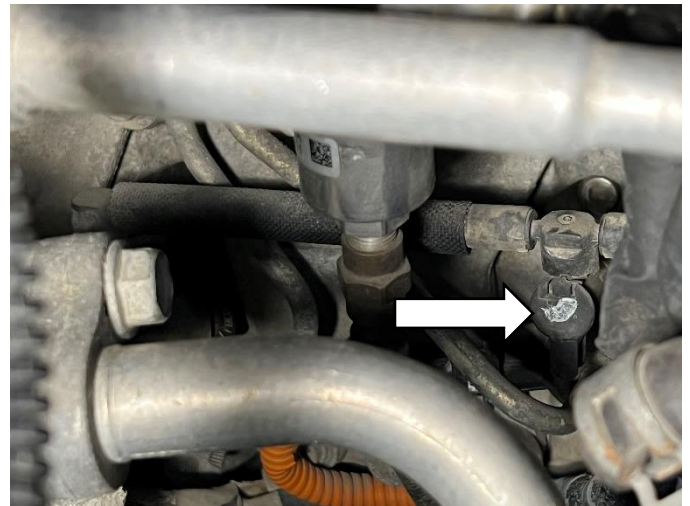
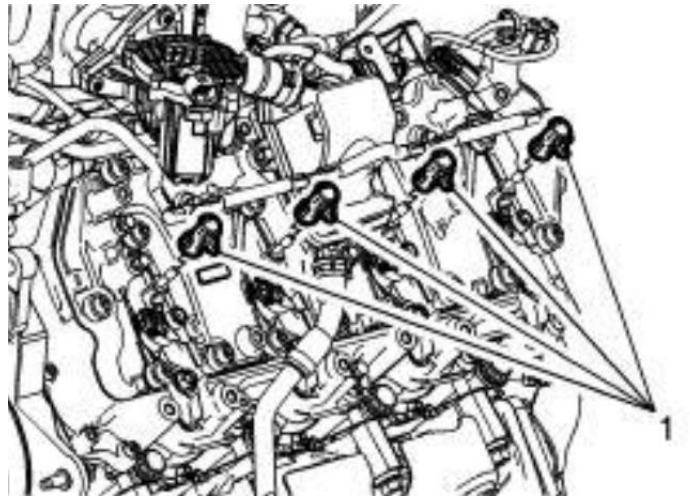


Remove the fuel filter bracket by removing the bolts labeled 1, 2, and 3. The two bolts labeled 4 were removed previously.



Disconnect and reposition the fuel return hose. There are 4 quick connects on each side of the engine.

**Note:** Use caution when undoing the clips as they are fragile. Clips are not individually replaceable so an entire new return line must be purchased if clip is broken.

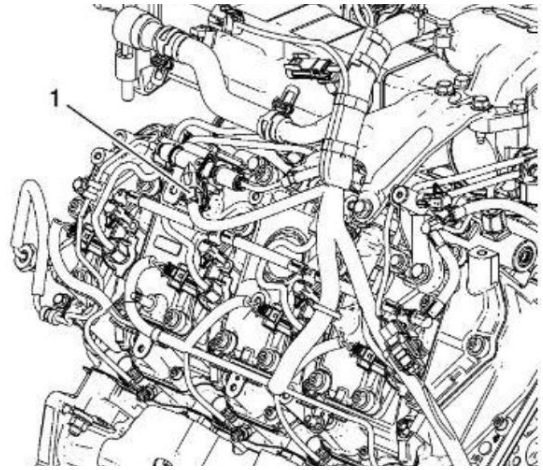


Remove the fuel injector electrical connectors (4 each side).

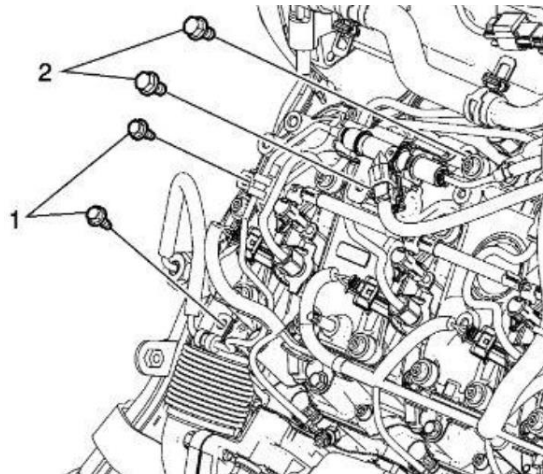
**Note:** RH side pictured.



Remove the 9<sup>th</sup> injector electrical connector (1), on the RH side of the engine close to the firewall.

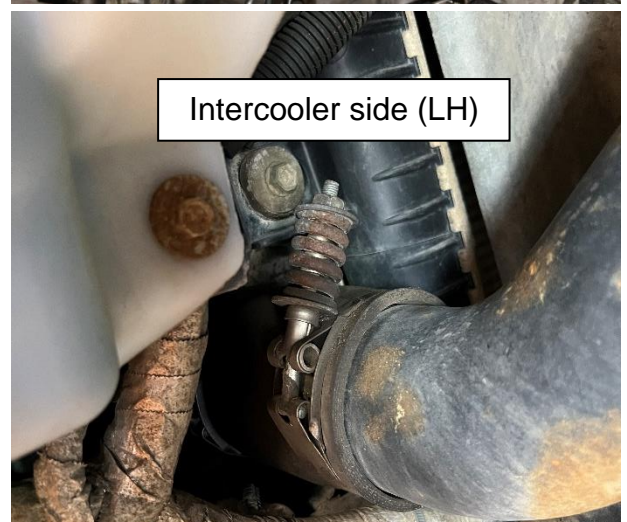


Remove the 9<sup>th</sup> injector fasteners and reposition (1, 2).



**Optional:**

It may be necessary/desired to remove the turbocharger outlet pipe to allow greater access to the high-pressure fuel injector lines on the driver side.





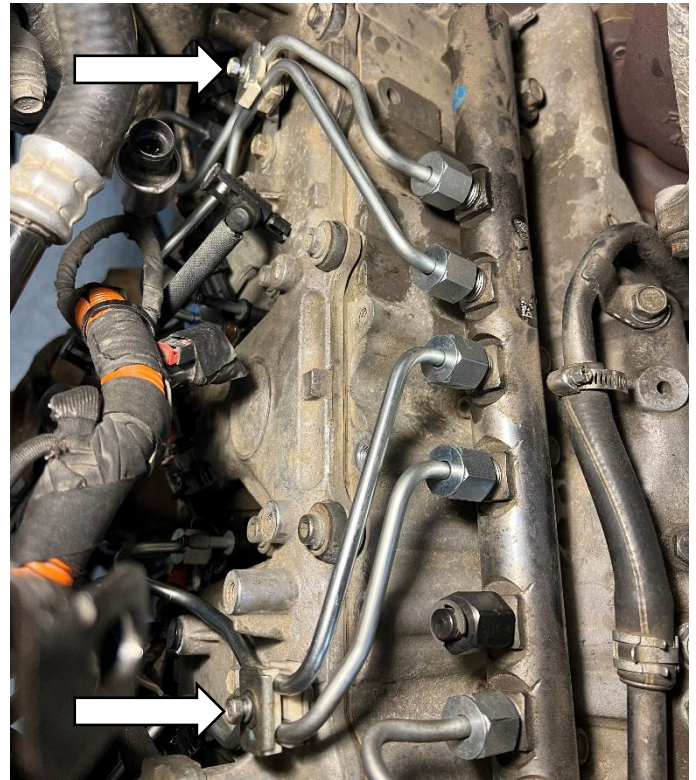
Use compressed air to blow away any debris from the area near the fuel lines.  
Wipe the fittings clean of any dirt or debris.

**Note:** You may wish to spray lithium grease between the fuel lines and fittings to help contain any remaining debris on the line during removal.

Remove the fuel line bracket fasteners  
(2 brackets on each side).

Remove and discard the fuel lines.

**Note:** RH side pictured.



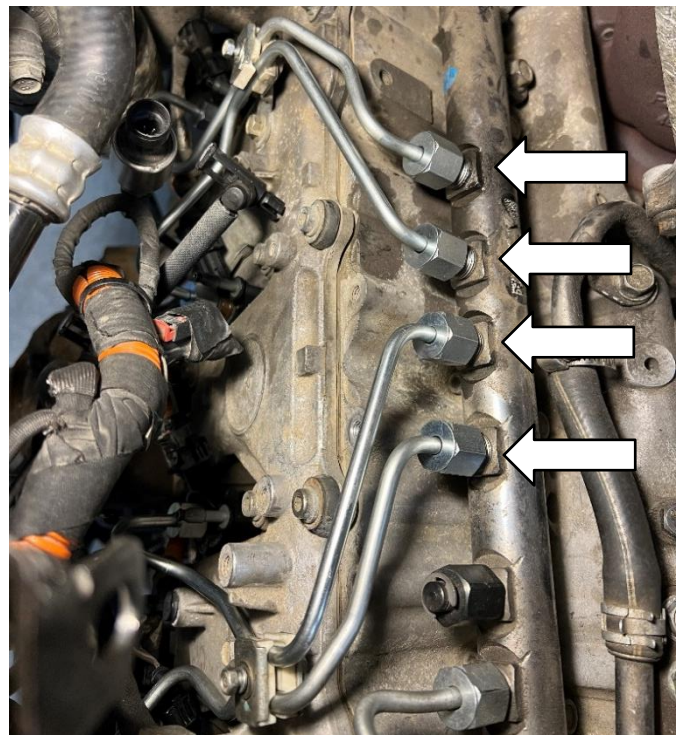
### ***Injector Line Installation***

Ensure ALL fittings are clean and dry before assembly.

Install the BD fuel lines and tighten the fittings to **30 Nm (22 lb-ft)**.

**Note:** RH side pictured.

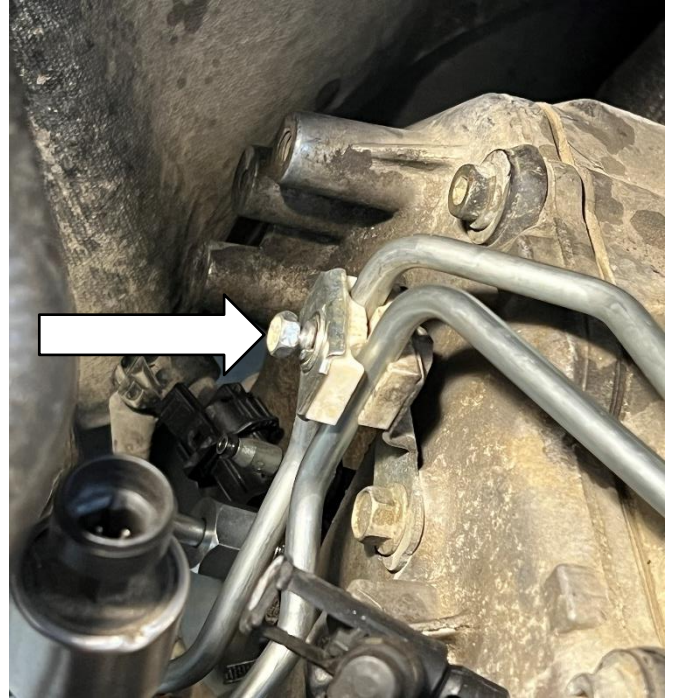
**IMPORTANT:** Proper torquing is vital to the operation of the fuel system. Under-torquing will not seal properly and over-torquing will damage the fuel injector fitting. Either can cause fuel leaks.





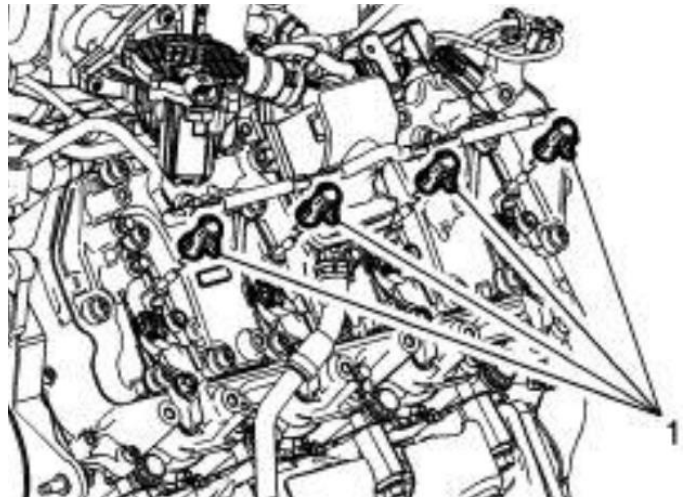
Install the fuel line bracket fasteners.

Tighten to **10 Nm (89 in-lb)**.

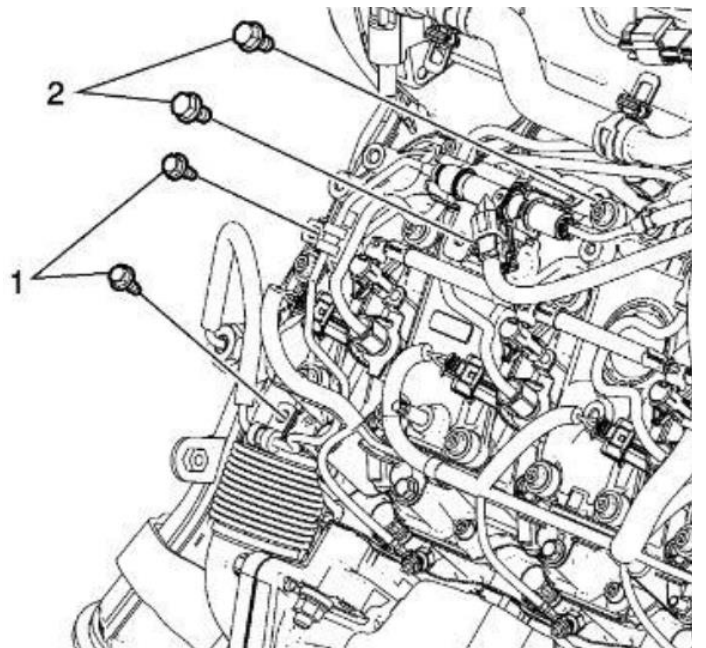


Reposition and connect the return hose.

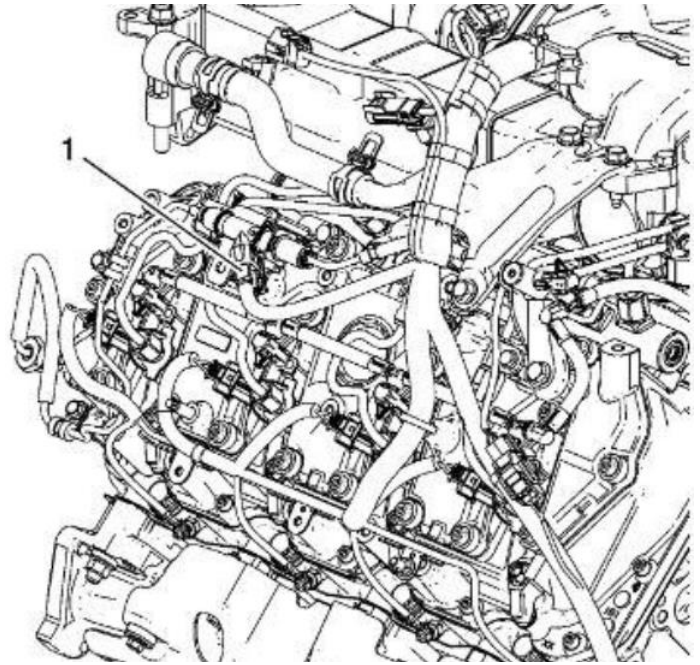
**IMPORTANT:** Ensure each quick connect is fully seated on the injector port before clicking in the quick connect.



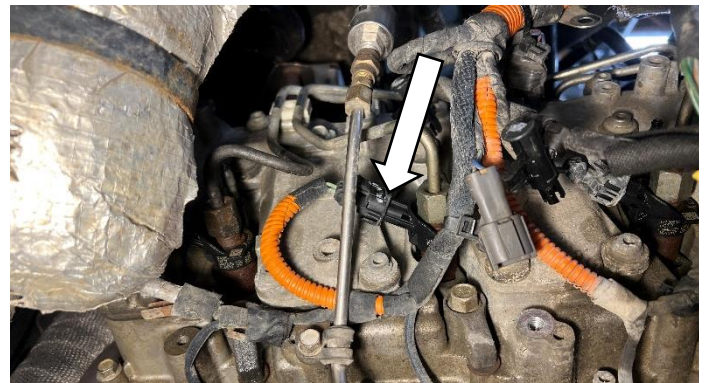
Connect the 9<sup>th</sup> injector fasteners (1, 2).



Connect the 9<sup>th</sup> injector electrical connector (1).



Connect the fuel injector electrical connectors (4 each side).

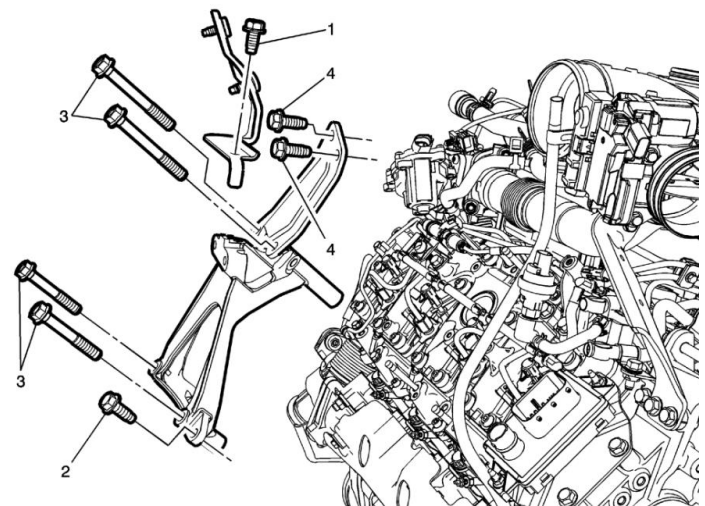


Install fuel filter bracket.

Torque **1x** oil fill tube bracket bolt (2) to **25 Nm (18 lb-ft)**.

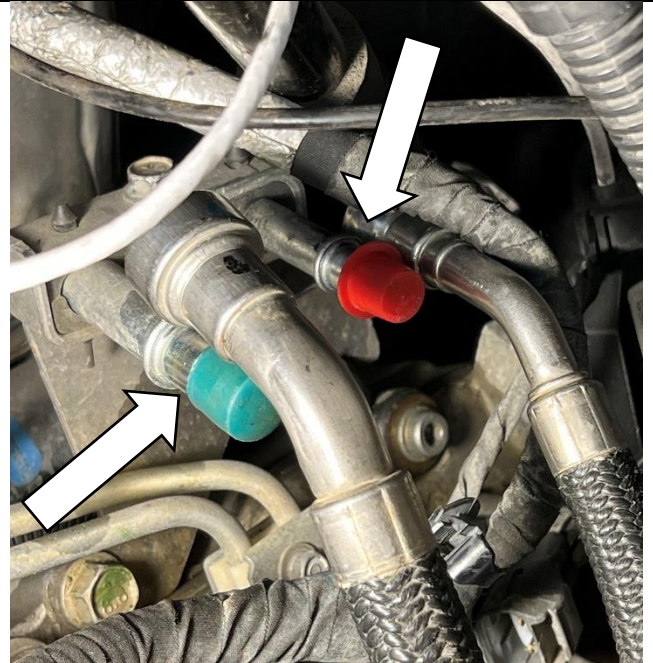
Torque **4x** fuel filter bracket bolts (3) to **20 Nm (15 lb-ft)**.

The **2x** upper intake manifold support bracket bolts (4) will be installed later after the aluminum intake has been installed.



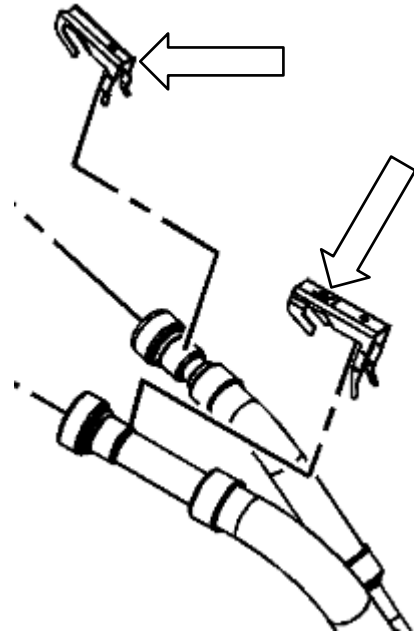
Install/position engine wiring harness if necessary.





Connect fuel feed and return lines.

Remember to clip in the retainers.



Install plastic intake elbow into turbo inlet.

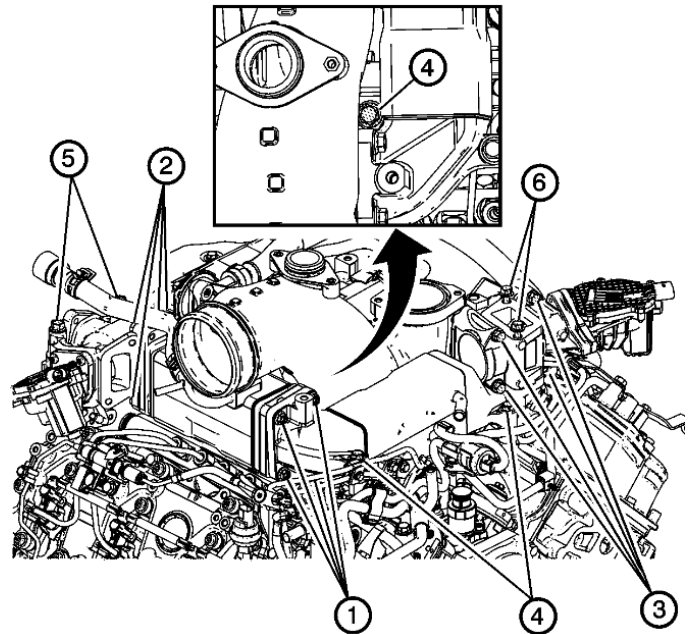
Tighten the worm gear clamp.



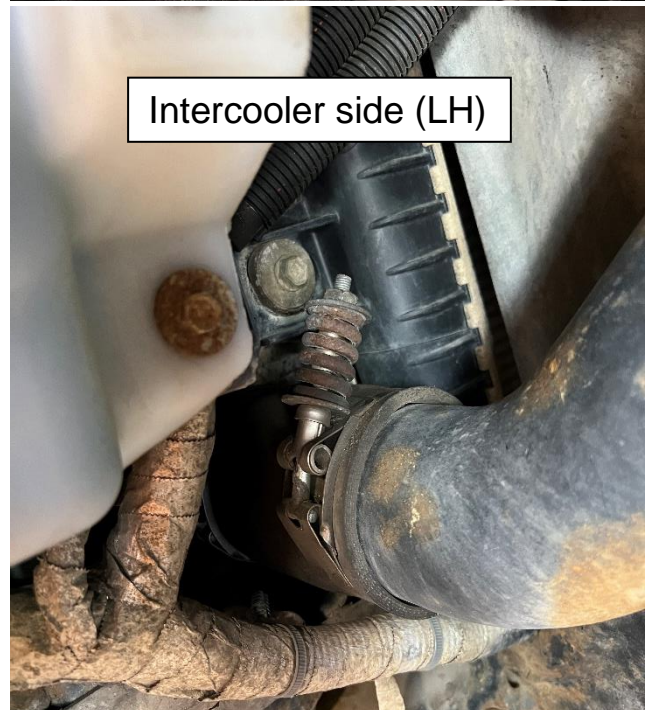
Install the EGR system including the coolers, bypass pipe, valves, and coolant hoses.

Tighten in the sequence shown:

- 1-4: **25 Nm (18 lb-ft)**
- 5: **50 Nm (37 lb-ft)**
- 6: **25 Nm (18 lb-ft)**



Install the turbo outlet pipe if removed.

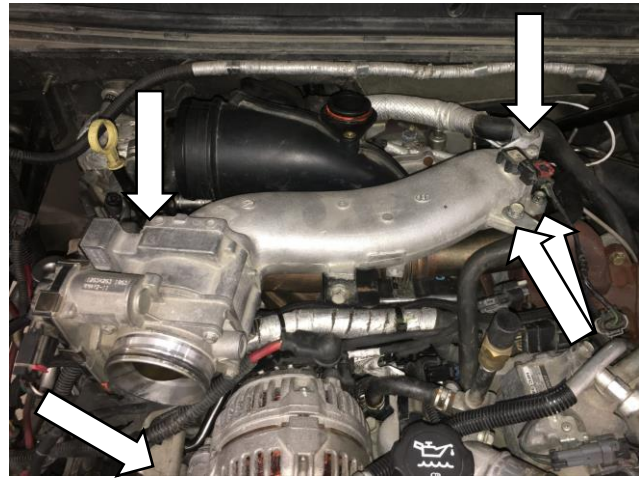




Install aluminum intake with throttle body and support bracket.

Torque **2x** intake, **2x** fuel filter support, and **2x** support bracket to alternator mount bolts to **25 Nm (18 ft-lb)**.

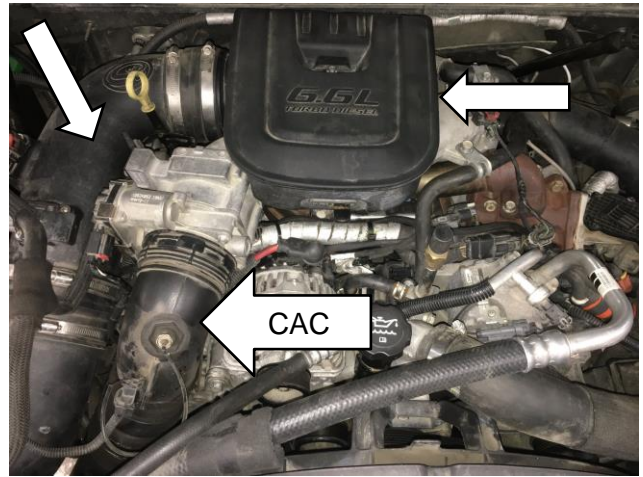
Install the PCV hose and turbo cooler feed hose; torque the bracket bolts to **25 Nm (18 ft-lb)**.



Install CAC pipe between throttle body and CAC, air filter tube, and plastic intake manifold cover.

Torque **2x** plastic intake manifold cover bolts to **6 Nm (53 in-lb)**.

**IMPORTANT:** CAC pipe connection should audibly latch.



Install both fender liners and the wheels.

Turn the key to the 'ON' position and check for fuel leaks. If no leaks, attempt to start the vehicle. If vehicle does not start, use the purging process below.

### ***Fuel Feed and Return Pipe Purging***

1. Pump the primer on top of the fuel filter 30 times or until stiff.
2. Attempt to start and run engine. Repeat Step 1 if engine does not start.
3. Run for 5 minutes at idle.
4. Check for fuel leaks
5. Clear all engine diagnostic trouble codes.

