

2022 CHEVROLET CORVETTE SERVICE MANUAL

- SEARCH

1. Engine/Propulsion

2. Engine Controls and Fuel - 6.2L (LT2)

3. Repair Instructions

- 4.

Fuel Injection Fuel Rail Assembly Replacement - Bank 1 (except Europe)

Single Use Fasteners and Components

- Fuel Injector Nozzle Housing Seal [8x]
- Fuel Injector Seal [4x]

Special Tools

- *EN-51955*, Fuel Injector Seal Install/Sizer
- *EN-49248*, Injector Rail Assembly Remover

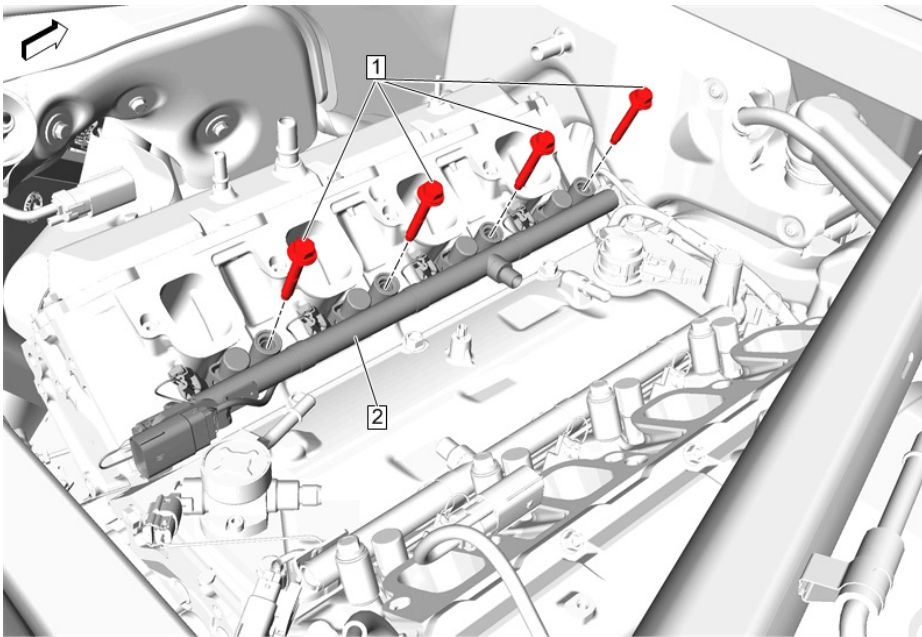
Equivalent regional tools: Special Tools

Removal Procedure

1. Danger:

The noise cancelling foam component MUST be replaced if it has been exposed to engine fluids. Failure to replace the noise cancelling foam component that has been exposed to engine fluids may result in an engine fire resulting in catastrophic engine damage, and possible injury or death.

2. Remove the fuel pump insulator. Fuel Pump Insulator Replacement
3. Remove the fuel feed pipe. Fuel Feed Pipe Replacement
4. Remove the fuel injector intermediate pipe position 1. Fuel Feed Intermediate Pipe Replacement - Position 1
5. Clean the cylinder head pocket around the injectors of any dirt or buildup.
6. Disconnect the electrical wiring harness connectors from the fuel rail.
7. If replacing the fuel injection fuel rail assembly, remove the fuel injection fuel rail pressure sensor. Fuel Rail Pressure Sensor Replacement

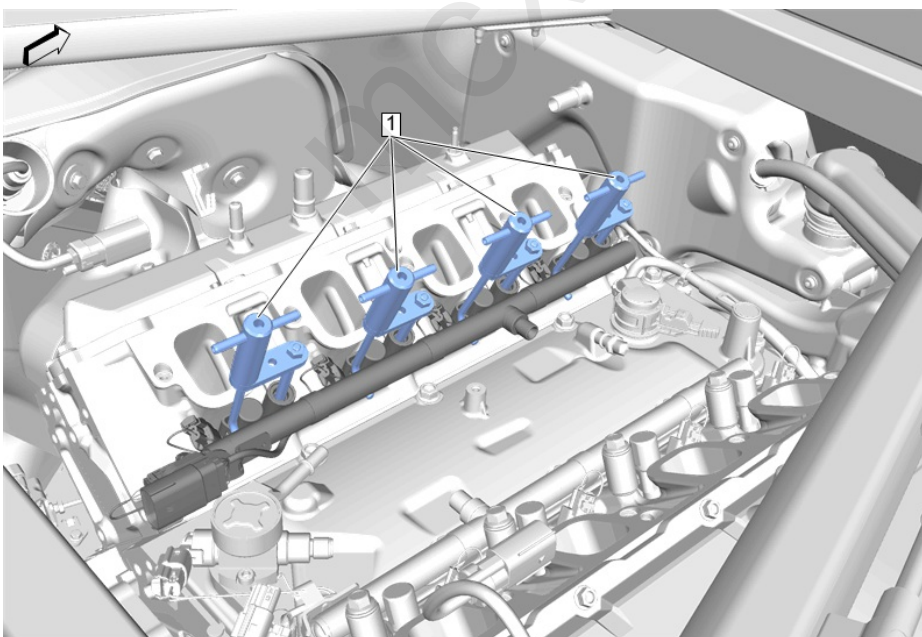


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9. Note:

The fuel rail fasteners are retained in the fuel rail by keepers and may be difficult to remove.

10. Remove the 4 fuel injection fuel rail bolts (1) securing the injector rail (2).



11. [Click here for full size](#)

12. Note:

- In some cases, the fuel injectors may be difficult to remove because of heavy carbon build-up or other factors. ⚠ Excessive force

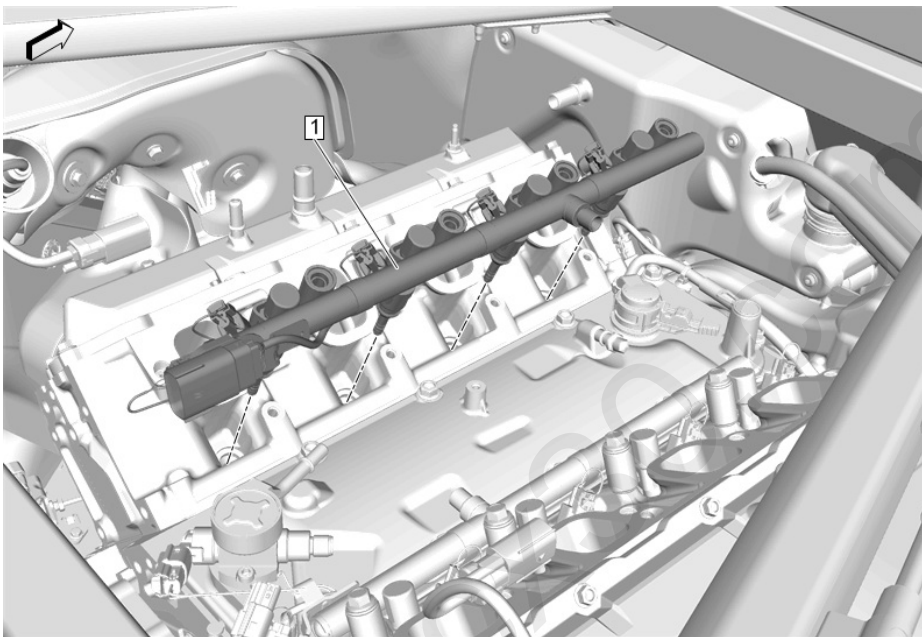
with the removal tool can damage the fuel rail, injectors or both. ⚠️ If injectors are difficult to remove, apply solvent to the base of the injector bores, and allow adequate soaking time, to loosen the fuel injectors.

- Pull the fuel rail and injectors as an assembly.
- To prevent material from entering the combustions chambers make sure the area around each injector is clean and free of debris before the injectors are removed from the injector bores.

13. Install two sets of EN-49248 Injector Rail Assembly Remover (1).

14.

1. Install one remover in each of the fuel rail fastener bores.
2. Remove by turning each section of the EN-49248 Injector Rail Assembly Remover an even amount to pull the fuel rail and injectors out evenly.

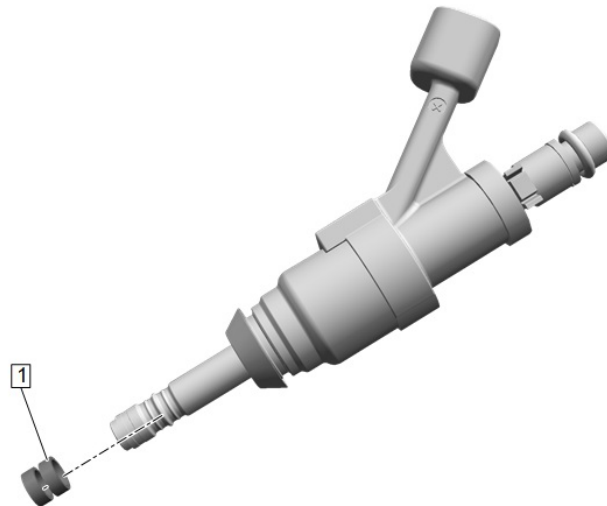


15.
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16. Caution:

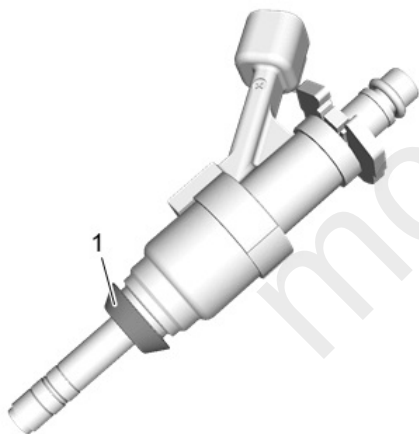
- Remove the fuel rail assembly carefully in order to prevent damage to the injector electrical connector terminals and the injector spray tips. Support the fuel rail after the fuel rail is removed in order to avoid damaging the fuel rail components.
- Cap the fittings and plug the holes when servicing the fuel system in order to prevent dirt and other contaminants from entering open pipes and passages.

17. Simultaneously lift both ends of the fuel rail (1) and remove the fuel rail assembly from the cylinder head.



18.
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19. Fuel Injector Nozzle Housing Seal (1) >> Remove and DISCARD [8x]



20.
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21. Note:

Some vehicles were not originally equipped with fuel injector seals. A NEW seal must be installed when the injectors are removed.

22. If equipped Fuel Injector Seal (1) >> Remove and DISCARD [4x]

23. If replacing the fuel injection fuel rail, remove the fuel injectors. Fuel Injector Replacement

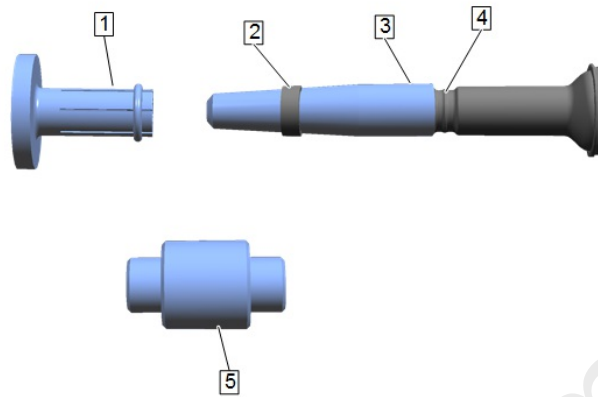
Installation Procedure

1. Note:

The injector seals should be clean and free of debris prior to installation. Fuel Rail and Injectors Cleaning and Inspection

2. Inspect the fuel injection fuel rail insulators and replace if necessary.

3. If replacing the fuel injection fuel rail, install the fuel injectors. Fuel Injector Replacement



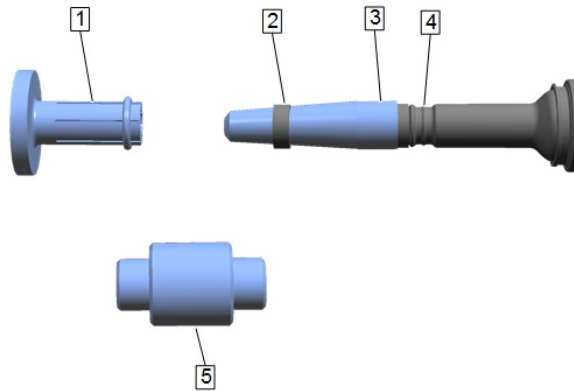
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5. Note:

Do NOT use any type of lubricant when installing NEW seals (2) on the injector.

6. Install *EN-51955-1* Long Protector (3) onto the fuel injector tip. Place a NEW seal (2) on *EN-51955-1* Long Protector.

- 7.
1. Using *EN-51955-4* Pusher (1), install the seal onto the first recessed area (4) of the fuel injector and remove *EN-51955-4* Pusher.
 2. Note:
The *EN-51955-5* Sizer is two sided, and either direction will size the seal correctly.
 3. Compress the seal with your fingers, then resize the seal using the *EN-51955-5* Sizer (5).

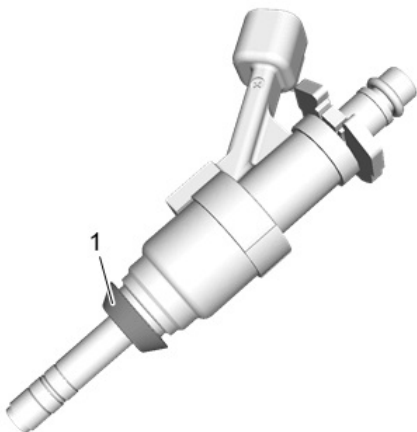


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9. Note:

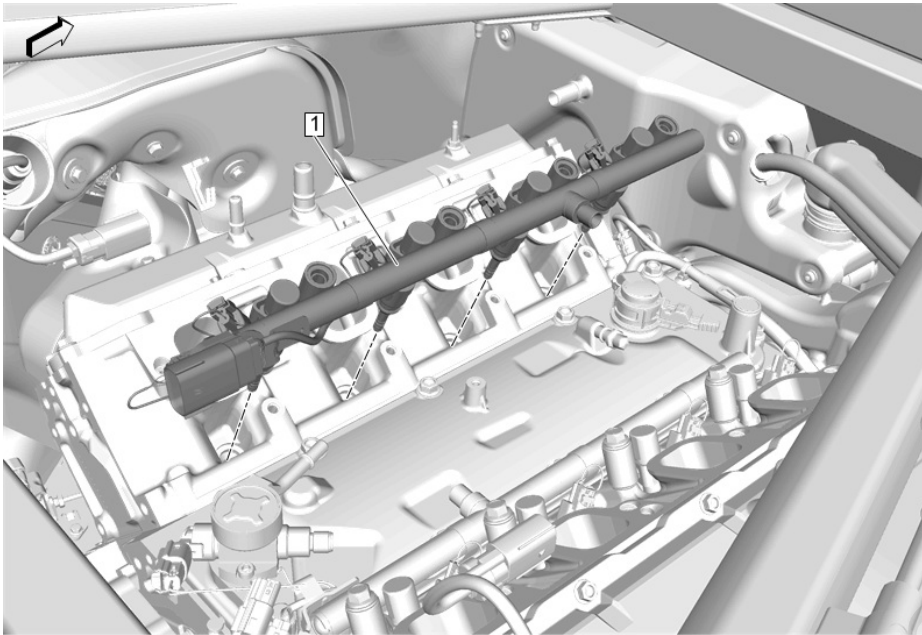
Do NOT use any type of lubricant when installing NEW seals (2) on the injector.

10. Install *EN-51955-2* Short Protector (3) onto the fuel injector tip. Place a NEW seal (2) on *EN-51955-2* Short Protector.
- 11.

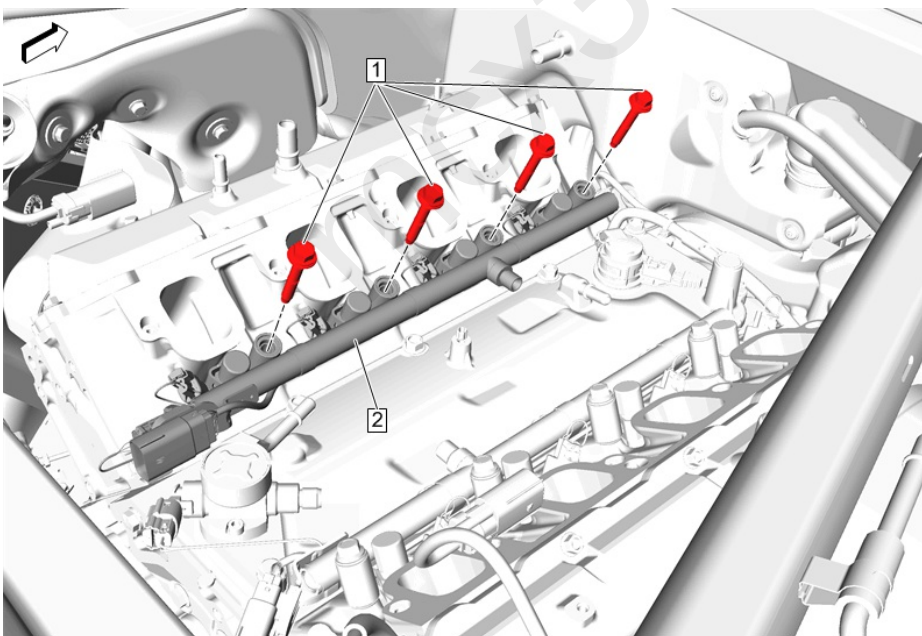
1. Using *EN-51955-4* Pusher (1), install the seal onto the second recessed area (4) of the fuel injector.
2. Note:
The *EN-51955-5* Sizer is two sided, and either direction will size the seal correctly.
3. Compress the seal with your fingers, then resize the seal using the *EN-51955-5* Sizer (5).



12. [Click here for full size](#)
13. Fuel Injector Seal (1) >> Install NEW [4x]



14. [Click here for full size](#)
15. Install the fuel rail assembly (1) into the cylinder head.



16. [Click here for full size](#)
17. Note:

The fuel rail fasteners are retained into the rails using keepers. Care should be taken to ensure that the threadlock is installed after the fasteners are installed in their bore.

18. Install the 4 fuel injection fuel rail bolts (1) into the fuel rail (2).

19.

1. Apply a 0.5 mm (0.02 in) band of threadlock to the threads of the fuel rail fasteners (1). Adhesives, Fluids, Lubricants, and Sealers

2. Note:

Start the fuel rail fasteners by hand then draw the injector rail down evenly prior to tightening.

3. Install the fuel injection fuel rail assembly (2) to the cylinder head.

4. Caution:

Refer to Fastener Caution.

5. Tighten the 4 fuel injection fuel rail bolts to 25 N-m (18 lb ft).

20. If removed, install the fuel injection fuel rail pressure sensor. Fuel Rail Pressure Sensor Replacement

21. Connect the electrical wiring harness connectors to the fuel rail.

22. Install the NEW fuel injector intermediate pipe position 1. Fuel Feed Intermediate Pipe Replacement - Position 1

23. Install the fuel feed pipe. Fuel Feed Pipe Replacement

24. Install the fuel pump insulator. Fuel Pump Insulator Replacement

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