

2022 CHEVROLET CORVETTE SERVICE MANUAL

- **SEARCH**

1. **Engine/Propulsion**

2. **Engine Mechanical - 6.2L (LT2)**

3. **Repair Instructions**

- 4.

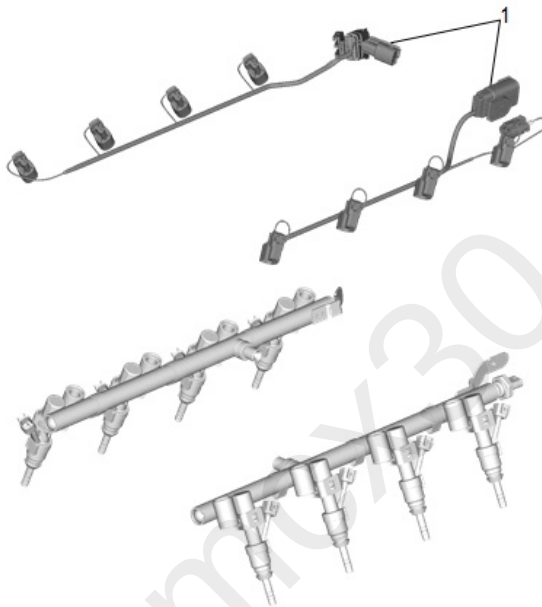
Fuel Rail and Injectors Cleaning and Inspection (except Europe)

Special Tools

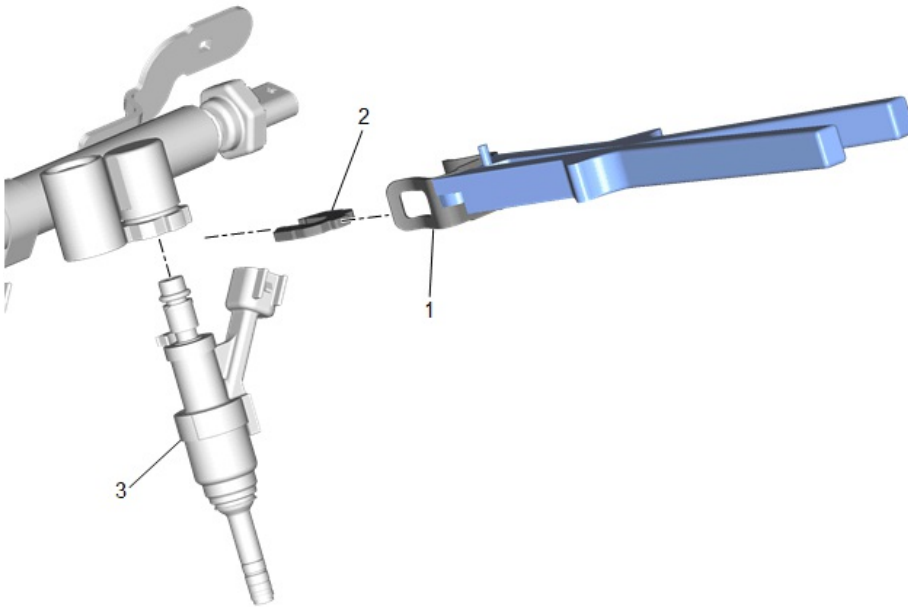
- EN-51955, Fuel Injector Seal Install/Sizer
- EN-51097, Injector Retaining Clip Installer and Sizer

Equivalent regional tools: Special Tools

Cleaning and Inspection Procedure



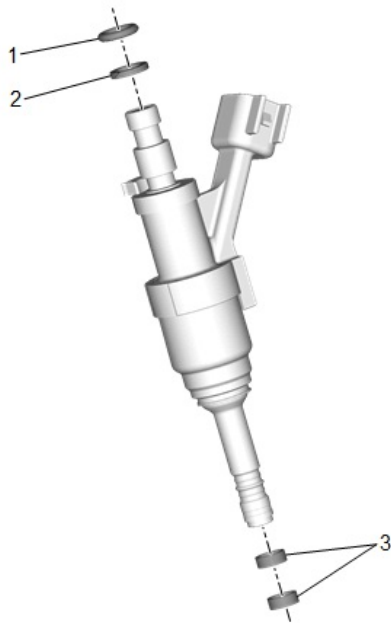
1. [Click here for full size](#)
2. Disconnect and remove the fuel rail wiring harnesses (1).



3. [Click here for full size](#)
4. Remove and DISCARD the fuel injector retainer clips (1) by installing *EN-51097* Injector Retaining Clip Installer and Sizer and spreading both sides of the clip evenly.
5. Remove the fuel injector collars (2).



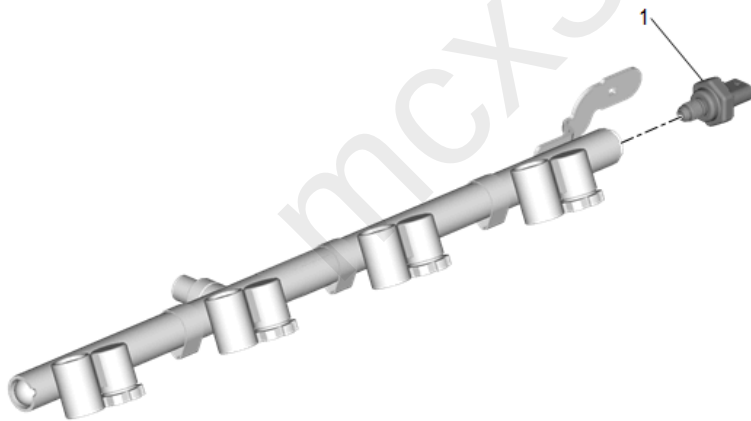
6. [Click here for full size](#)
7. Remove and DISCARD the fuel injector dust seal (1).



8. [Click here for full size](#)
9. **Caution:**

Do not use a metal tool to remove O-rings, spacers or injector seals. Care must be taken not to scratch or damage the tubes of the injector.

10. Remove and DISCARD the fuel injector O-ring (1) and plastic spacer (2).
11. Remove and DISCARD the fuel injector seals (3).



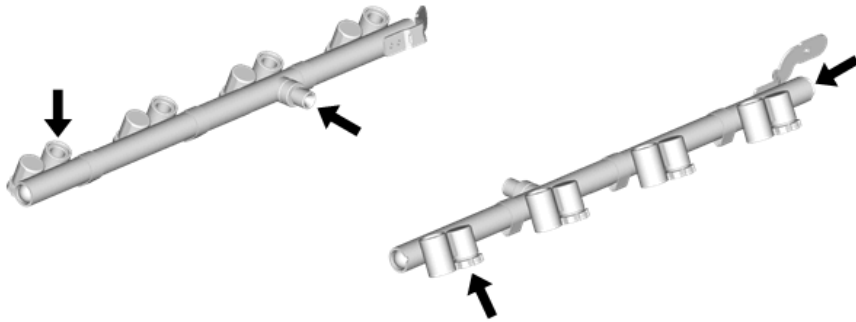
12. [Click here for full size](#)
13. **Note:**

Applying force to the plastic housing of the sensor will destroy the sensor. To tighten or loosen, only apply force to the attached hexagon.

14. Remove the fuel pressure sensor (1) from the fuel rail.
15. **Note:**

Do not soak or submerge the fuel rail or injectors in solvent.

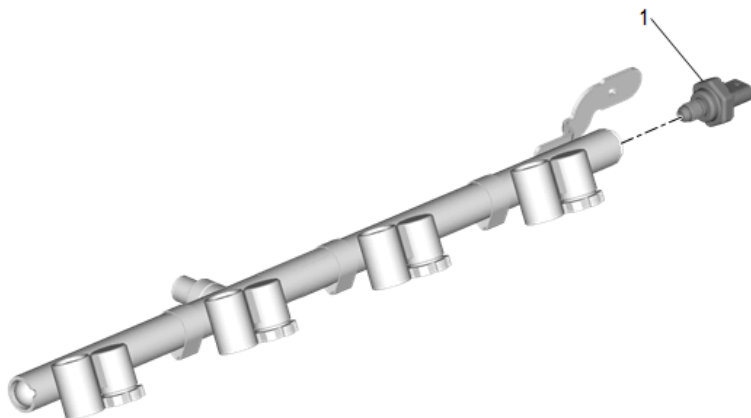
16. Clean the exterior of the fuel rail and injectors with solvent.



17.
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18. Inspect the fuel rail and components for the following conditions:

- 19.
- Damage, debris or restrictions to the fuel rail
 - Damage, debris or restrictions to the fuel ports in the fuel rail
 - Damage to the mounting area for the fuel rail
 - Damage to the fuel rail mounting bolts or mounting bolt grommets/isolators
 - Damage to the threads on the fuel rail feed fitting
 - Damage to the threads in the fuel pressure sensor bore
 - Damage to the fuel pressure sensor connector, threads, or sealing face



20.
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21. Note:

Applying force to the plastic housing of the sensor will destroy the sensor. To tighten or loosen, only apply force to the attached hexagon.

22. Install the fuel pressure sensor (1).

23. Note:

Ensure that the fuel rail threads have been cleaned of any excess fuel or the fuel pressure sensor will NOT seal properly.

24. Lubricate the threads and the sealing area in the fuel rail with silicon free engine oil. Adhesives, Fluids, Lubricants, and Sealers

25. Lubricate the threads and the sealing area on the fuel pressure sensor with silicon free engine oil. Adhesives, Fluids, Lubricants, and Sealers

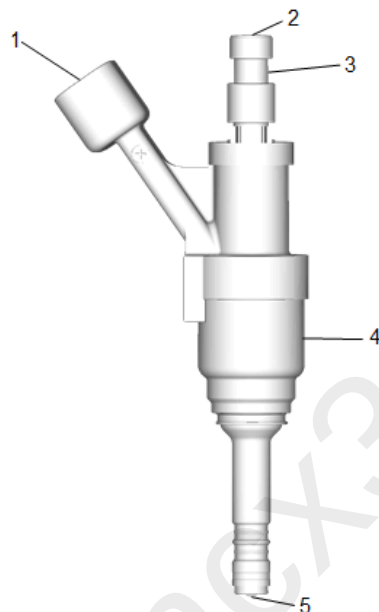
26. Install the fuel pressure sensor hand tight.

27. Remove the fuel pressure sensor and re-lubricate.

28. Caution:

Refer to Fastener Caution.

29. Install and tighten the fuel pressure sensor (1) to 33 N-m (24 lb ft).



30.
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31. Inspect the fuel injectors for the following conditions:

32.

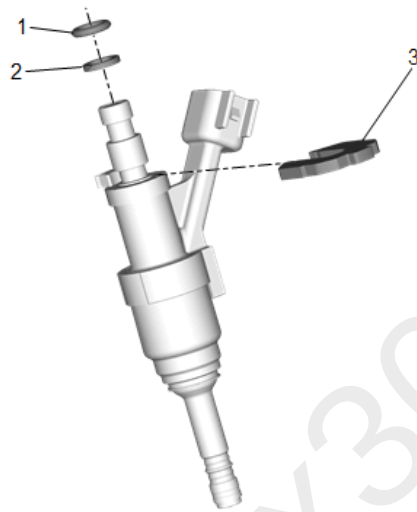
- Damage to the fuel injector connector (1)
- Damage to the fuel inlet cone (2)
- Damage to the O-ring (cracking, splitting, tearing) and the O-ring sealing surface (3)
- Damaged O-rings can result in fuel odor, fuel leaks, and other symptoms. Symptoms - Engine Controls
- Damage to the fuel injector body (4)
- Damage to the fuel injector tip (5)

33. Replace the fuel rail or injector if any damage is found. Do not attempt to repair a fuel rail or injector.



34.
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35. Install a NEW fuel injector dust seal (1).

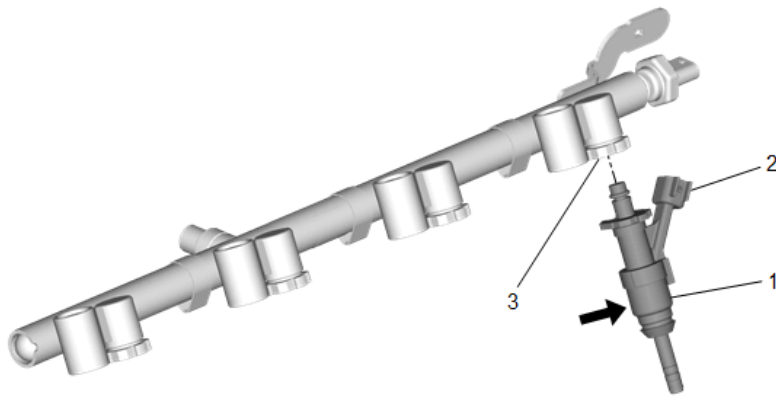


36.
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37. Install a NEW spacer (2) on the fuel injector.

38. Lubricate the NEW O-ring (1) with a drop of clean engine oil and install on injector. Adhesives, Fluids, Lubricants, and Sealers

39. Install injector collar (3) on fuel injector.

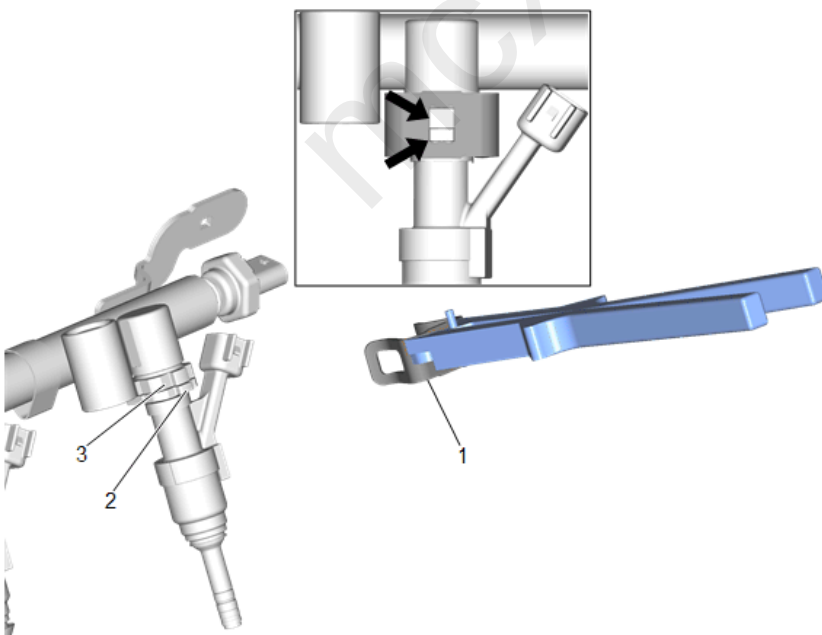


40.
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41. Note:

Do NOT install the injector tip/bore seals until AFTER the injectors are installed on the fuel rail.

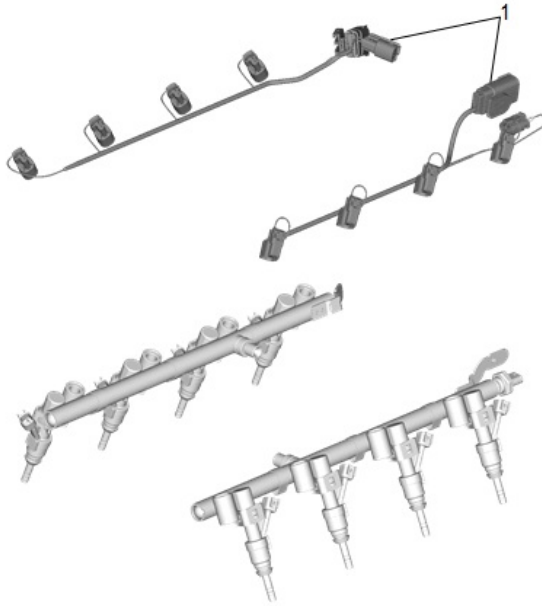
42. Lubricate the socket (3) of the fuel rail with clean engine oil. *Adhesives, Fluids, Lubricants, and Sealers*
43. Holding the largest diameter/body of the injector only, indicated by arrow in graphic, insert the injector assembly (1) into the fuel rail. Ensure correct orientation of the electrical connector (2).
- 44.
- Left Side Rail: Electrical connectors face the front of the engine.
 - Right Side Rail: Electrical connectors face the rear of the engine.



45.
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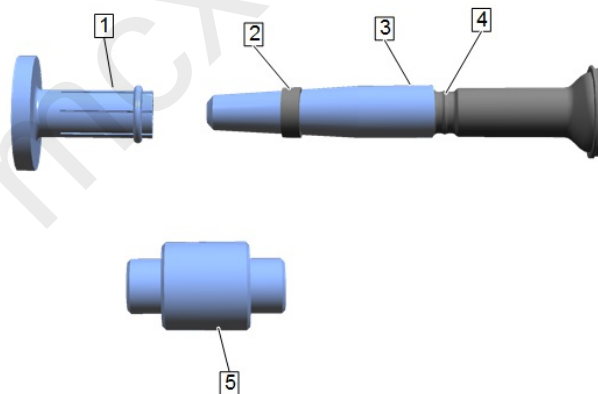
46. Install the NEW fuel injector clip onto the *EN-51097* Injector Retaining Clip Installer and Sizer.
47. Using *EN-51097* Injector Retaining Clip Installer and Sizer spread the retainer clip (1) and install onto the fuel rail. Inspect the front and side windows of the retainer clip to ensure that the flange on the rail (3) and the tab on the injector collar (2) are completely captured and firmly seated in the retainer clip (1) as shown.

48. Repeat for remaining injectors until all are installed and retained in fuel rail.



49.
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50. Install the fuel rail wiring harnesses (1).



51.
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52. Note:

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

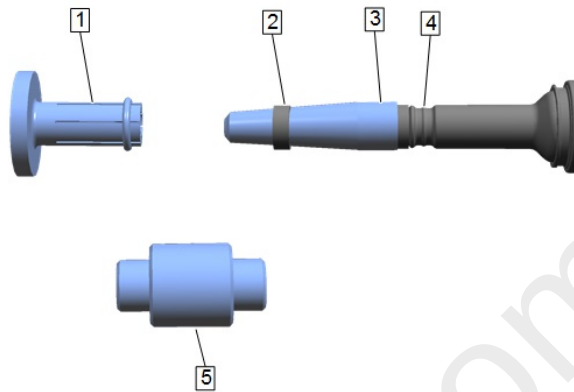
53. Install *EN-51955-1* Long Protector (3) onto the fuel injector tip. Place a NEW seal (2) on *EN-51955-1* Long Protector.

54.
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).



55.

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56. Note:

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

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

58.

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).

4. Inspect the NEW fuel injector nozzle housing seals on ALL injectors, ensuring the seals are seated correctly. All seals must be fixed tight, and accurately to the fuel injector nozzle, with no overlap, buckling, or corrugation present. Replace any seal that is incorrectly seated on the fuel injector nozzle with a NEW seal.