



Ford 5.0L Coyote & 5.2L Voodoo V8 950cc Port Fuel Injectors Installation Guide Rev 1

SKU#: H071-1324-1

WARNING! PLEASE FOLLOW ALL WARNINGS AND INSTRUCTIONS FOUND IN YOUR VEHICLE OWNERS MANUAL. THE FOLLOWING INSTRUCTIONS MUST BE READ AND FULLY UNDERSTOOD BEFORE BEGINNING INSTALLATION. FAILURE TO FOLLOW THESE INSTRUCTIONS MAY RESULT IN VEHICLE DAMAGE, PERSONAL INJURY OR DEATH. IF THESE INSTRUCTIONS ARE NOT FULLY UNDERSTOOD, DO NOT ATTEMPT INSTALLATION.

Tools Required

- Ratchet wrench
- 10mm socket
- 8mm socket
- Needle nose pliers
- Safety glasses
- Shop Vacuum

Expendables Needed

- 4-6x Sheets of PIG Mats (47131901) or comparable
- Dielectric grease or engine oil
- Compressed air
- Rubber gloves

Park the vehicle in the area where you will be doing the full installation and wait for the vehicle to be cool to the touch to avoid burns when installing. This also reduces the risk of fire from any spilled fuel and allows the fuel rail pressure to bleed down. Use safety glasses during installation to prevent gasoline, or coolant from getting in your eyes. Gather the needed tools and expendables needed to complete the install.

Note: Injectors require ECU calibration and should not be driven or run without being calibrated for the correct injector size or risk of fowling spark plugs may occur.

Supported Applications

- 2012-2013 Ford Mustang Boss 302
- 2011-2017 Ford Mustang GT
- 2015-2019 Ford Mustang GT350 & GT350R
- 2011-2017 Ford F-150 (5.0L Only)

1. Use 8mm socket wrench to remove the bolt on the negative terminal of the battery to disconnect it before continuing with installation.



Figure 1

2. Pull the engine cover up by hand and the remove the foam fuel rail covers by hand from fuel rail on both sides.



Figure 2

3. Once the foam covers are removed ensure that the area on top of the cylinder head around the fuel rail is clean. It is important that dirt and debris does not enter the engine through the holes for each injector.



Figure 3

4. Disconnect all 8 electrical connectors for the injectors located underneath the fuel rail on both sides of the intake manifold. Push in the tab to release the connector and pull to disconnect.

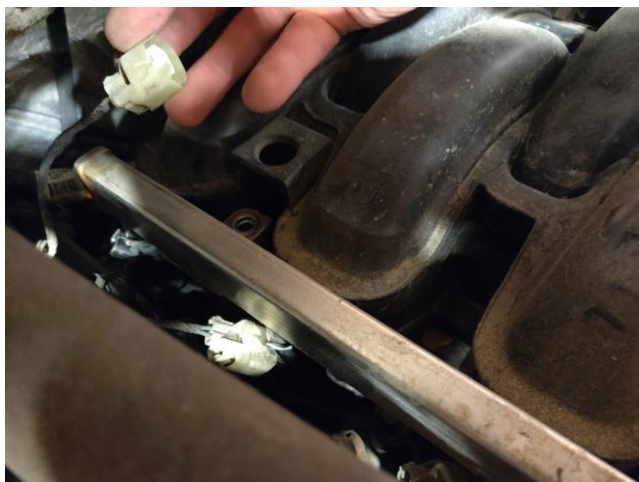


Figure 4



Figure 5

5. Remove the clip from heater core coolant line to make room for the fuel rail to be removed.

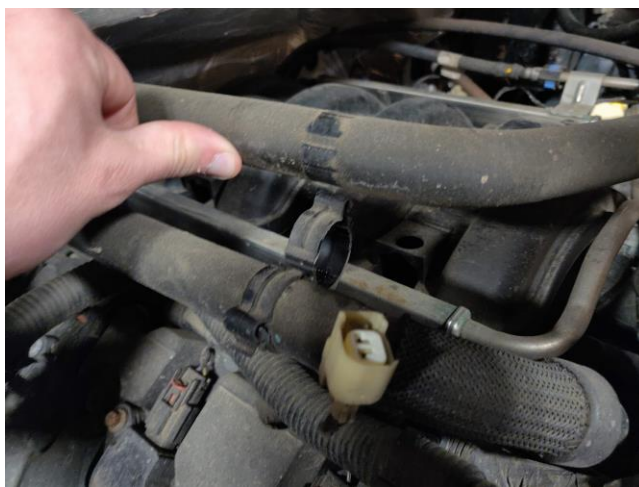


Figure 6

6. Remove the clip from fuel rail.



Figure 7

7. Remove fuel line connector on the right side of the fuel rail. **Warning: Wear safety glasses and rubber gloves for this step. If skin is exposed to gasoline wash with water promptly.**

- a. Make sure to place PIG Mats under the fuel line to capture any excess fuel that will leave the line. The fuel line may still be under pressure depending on how long it has been since the vehicle has been running. Cover the line with the PIG Mats or rags to ensure fuel does not spray in your face or on hot surfaces.



Figure 8

- b. Unclip the blue tab of the connector



Figure 9

- c. Squeeze both blue tabs then push in to release then pull line out.

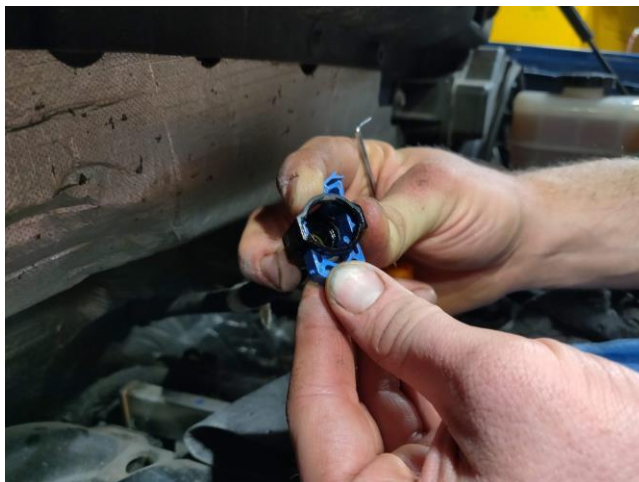


Figure 10

- 8. Use 10mm socket wrench to remove the 4 bolts that hold fuel rail in place. **(For reinstallation use torque specification: 10 Nm or 7.3 lb*ft and a 90-degree turn)**

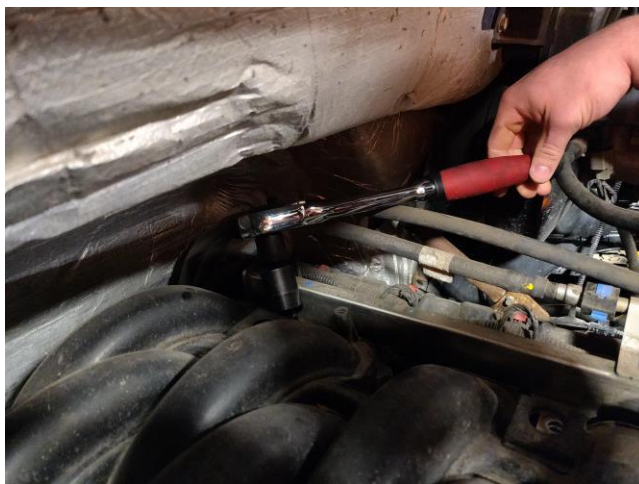


Figure 11



Figure 12

9. Pull fuel rail away from intake manifold. If the fuel rail is not coming loose you may need to clean area around the injectors to free up the injectors. This can be done with compressed air.

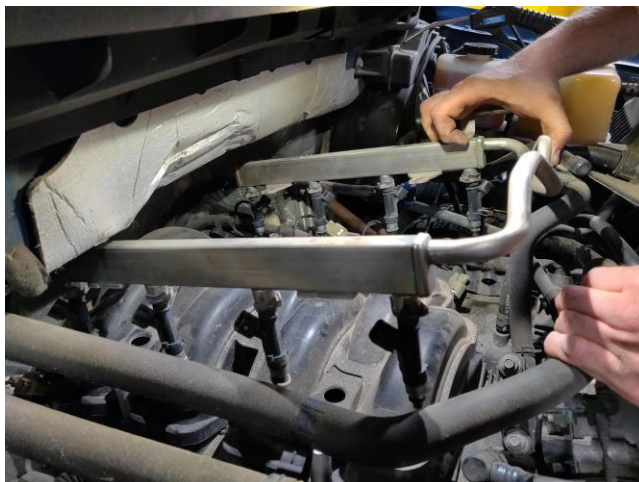


Figure 13

10. Make sure none of the injector O-rings were left behind in the injector holes on the intake manifold when the fuel rail was removed. If so, make sure to remove them before installing new injectors. This can be done with pliers.
11. If injector holes are dirty make sure to clean them out with pressurized air (make sure to wear safety glasses) to ensure a good seal for the new injectors.

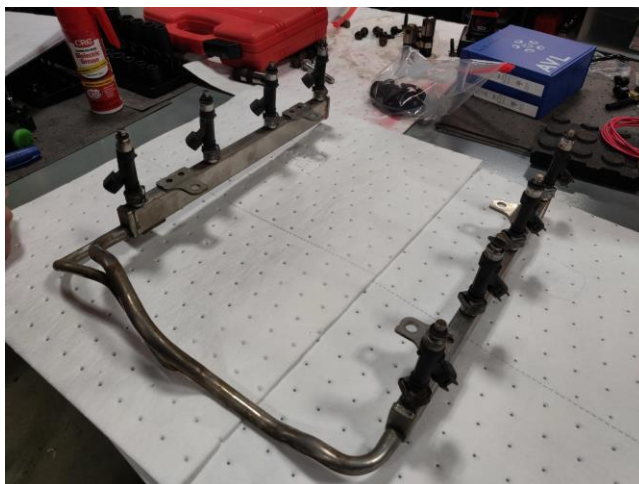


Figure 14

12. Place fuel rail on clean workspace on PIG Mats. Begin removing injectors by removing the retaining clip at the bottom of the injector where the injector meets the fuel rail. Place your pointer fingers at the back of the retainer with your thumbs at the front and pull towards you to remove.



Figure 15



Figure 16

13. To remove the injectors, pull up on the injector while moving it in a circular motion to keep the O-ring on the injector. Make sure to remove any O-rings that may have been left behind in the fuel rail.



Figure 17

14. For potential reuse of the injectors mark the injectors with the corresponding location on the fuel rail so that you will be able to identify its original location if ever reinstalled.



Figure 18

15. Use dielectric grease or engine oil to lubricate the O-rings on both sides of the new injectors. Make sure to lubricate the whole O-ring.

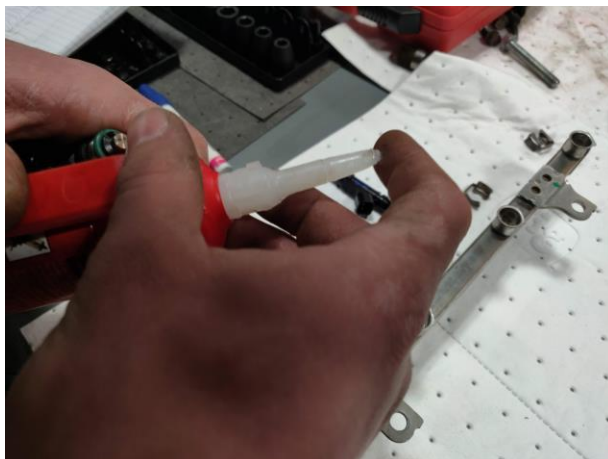


Figure 19



Figure 20

16. Place the injector in the injector hole with the connector facing the opposite direction of the flat side of the injector hole. They should be facing the direction the original injectors were facing when disassembled.

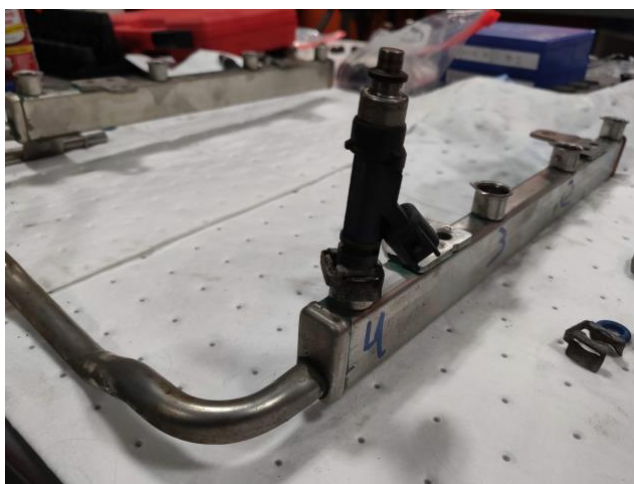


Figure 21

17. Then place retainer clip over the injector from the flat side of the injector hole, where the injector and fuel rail meet. Push in until the retainer clip is over the injector hole and the edges of the hole are visible.



Figure 22

18. Once the injectors have been installed in the fuel rail reassembly of the vehicle can begin. Repeat steps in reverse starting with step 8. Follow all torque specifications that are included in each step where applicable. If the torque specification is not included in a step where it seems applicable assume snug fit with a wrench or socket wrench.

Hardware installation is complete.

First Start-Up

1. ECU needs to be calibrated for the new injector size before you try starting the car or you risk fouling spark plugs, washing bores out etc.
2. Be sure to remove all installation tools and loose items from the engine compartment. Follow good, safe practices when working on your vehicle. Be sure to reassemble all parts and components according to your OE service manual.
3. Key cycle the vehicle into the "Accessory On" position (do not go to Ignition position). The fuel pump will pressurize the rail. Check to ensure there are no leaks.
4. Key cycle to start and let the car attempt several start cycles. Remember that the fuel lines, pump, and part of the fuel rail are filled with air, therefore this step is necessary to evacuate that air and get the system charged. If it starts, OK. If it does not, key off the vehicle.
5. Key cycle one more time all the way to start position. Engine should start-up and idle. If not, proceed with steps 2-4 again.
6. Let the car idle for a few minutes.
7. Installation is complete!

*NOTE: a fault code may appear at the first key cycle due to the long ignition time or the low pressure in the fuel rail, both due to the air in the fuel system.
This code should self-clear after the OEM defined quantity of key cycles.*

NOTE: After driving the car and letting it cool, next day, check for fuel leaks again (from thermal expansion and contraction). Retighten fittings if needed.

For additional technical & software support please contact:

Website: www.sdparts.com

Phone: 806-798-4159 (during normal business hours)



Revision	Notes	Date
Rev 1	Production Release	2/7/22