



N O S T R U M
H I G H P E R F O R M A N C E



Ford 5.0L V8 Coyote : PFI Installation Guide

SKU#L071-0510

WARNING! PLEASE FOLLOW ALL WARNINGS AND INSTRUCTIONS FOUND IN YOUR VEHICLE OWNER'S 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.

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Tools Required

- 10mm socket
- 8mm socket
- Pliers

Expendables Needed

- 4-6x Sheets of Pig Mats (47131901) or comparable
 - Dielectric Grease or engine oil
 - Compressed air
1. Park the vehicle in the area you will be doing the full installation and wait for the vehicle and engine bay to cool down before touching anything to avoid burns when installing. 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.

1. Use an 8mm socket wrench to remove the bolt on the ground side of the battery to disconnect it, before continuing with installation.



Figure 1

2. Remove the foam fuel rail covers (highlighted in red in figure 2) by hand on both banks.

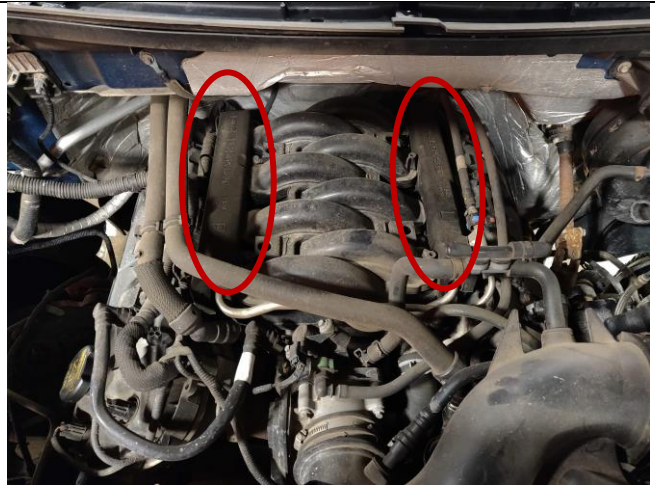





Figure 2



Figure 3

<p>3. Disconnect all 8 injector electrical connectors located underneath the fuel rail on both sides of the intake manifold.</p>	
	<p>Figure 4</p>
<p>4. Push in the clamp and pull to disconnect as shown in figure 5.</p>	
	<p>Figure 5</p>
<p>5. Remove the clamp (highlighted in red in figure 6) from heater core coolant line to make room for the fuel rail.</p>	
	<p>Figure 6</p>


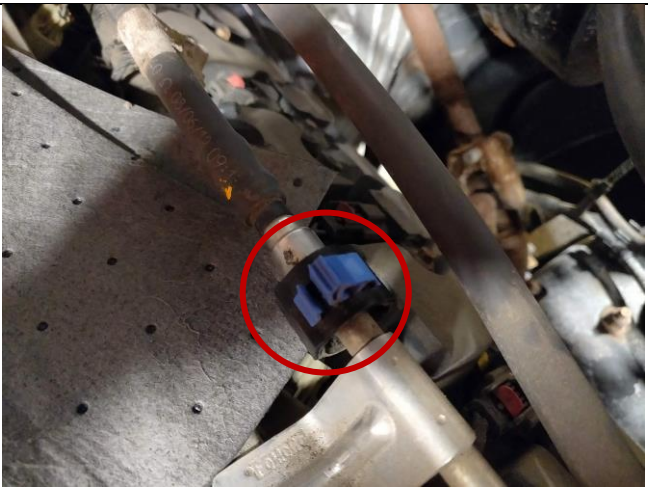

<p>6. Remove the clamp from fuel rail as shown in figure 7.</p>	
	<p>Figure 7</p>
<p>7. Remove fuel line quick connect on the right side of the fuel rail.</p> <ol style="list-style-type: none"> Make sure to place pig mats under the fuel line to capture any fuel that may spill over from the fuel line. The fuel line may still be under pressure depending on how long it has been since the vehicle has been running. Ensure the line is covered the line rags if pressurized. Exercise caution with pressurized fuel at all times. Next, unclip the blue tab of the connector 	
	<p>Figure 8</p>
<p>8. Squeeze both blue tabs then push in to release then pull line out as shown in figures 9 and 10.</p>	
	<p>Figure 9</p>



Figure 10

9. Use a 10mm socket wrench to remove the 4 bolts that hold fuel rail in place, as shown in figures 11 and 12.

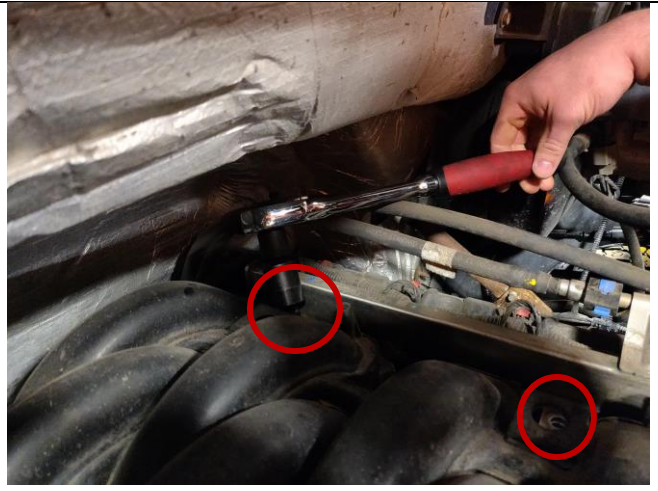
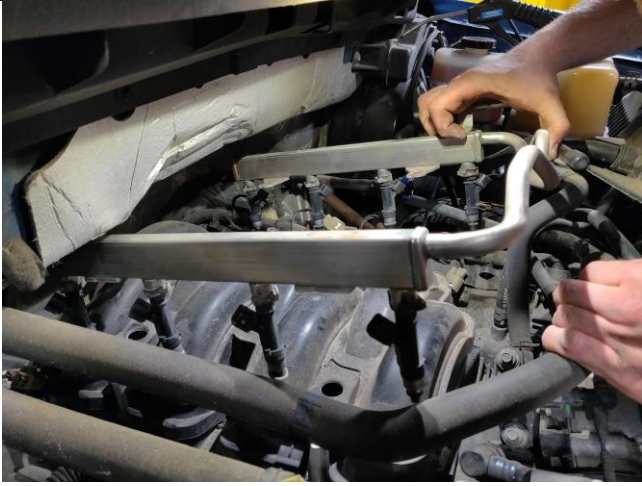
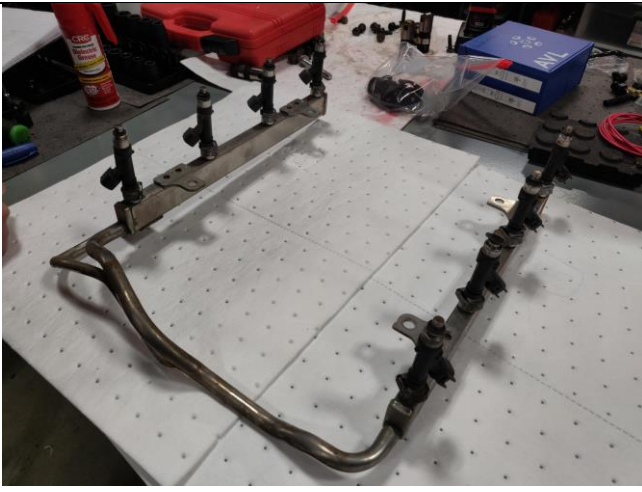



Figure 11



Figure 12

<p>10. Pull the fuel rail away from intake manifold. If the fuel rail is not coming lose you may need to clean area around the injectors to free up the injectors. This can be done with compressed air.</p>	
	<p>Figure 13</p>
<p>11. Make sure none of the injector O-rings were left behind in the injector bores 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.</p>	
	<p>Figure 14</p>
<p>12. If injector holes are dirty make sure to clean them out with pressurize air to ensure a good seal for the new injectors.</p>	
	<p>Figure 15</p>

13. Place fuel rail on clean workspace on pig mats. Begin removing injectors by removing the retainer 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 as shown in figures 16 and 17.



Figure 16



Figure 17

14. To remove the injectors, pull up on the injector body while moving it in a circular motion to keep the O-ring on the injector.



Figure 18

15. Mark the injectors with the corresponding location on the fuel rail in case you would like to reinstall factory injectors.



Figure 19

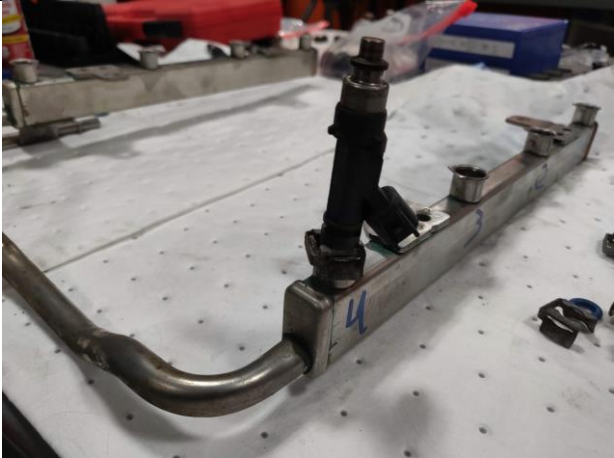

16. Use dielectric grease or engine oil to lubricate the O-rings on both sides of the new injectors. Make sure to lubricate the whole O-ring as shown in figures 20 and 21



Figure 20



Figure 21

<p>17. Place the injector in the fuel rail bore with the connector facing opposite the direction of the flat shoulder of the bore. They should be facing the direction the original injectors were facing when disassembled as shown in figure 22.</p>	
	<p>Figure 22</p>
<p>18. Place the retainer clip over the injector from the flat shoulder of the fuel rail bore, 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.</p>	
	<p>Figure 23</p>

Hardware installation is complete.**First Start-Up**

1. 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 maintenance manual.
2. Key cycle the vehicle into the "Accessory On" position (do not go to Ignition position). The low- pressure fuel pump will activate and the low-pressure side of the pump will pressurize. Check the high-pressure fuel pump and the low-pressure side for leaks. If OK, proceed to step 3.
3. Key cycle to ignition 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. Check the high- pressure lines to the fuel rail, to the pump and the pump itself for leaks. If OK, proceed to step 4.
4. Key cycle one more time all the way to ignition. Engine should start-up and idle. If not, proceed with steps 2-4 again.
5. Let the car idle for a few minutes. Check for leaks on low and high-pressure portions again.
6. Installation is complete! **Time for a Tune!!**

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:

Email: support@nostrumshop.com

Phone: **734-548-8677 (during normal business hours)**