

# INSTALLATION INSTRUCTIONS

POLARIS RZR PRO R & SLINGSHOT FUEL RAIL

P/N: 20-1138

Document: 19-0438

Support: info@radiumauto.com

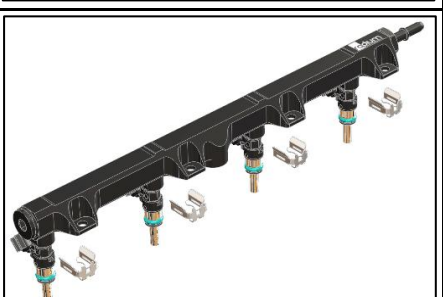
## CAUTION

Only a qualified technician following applicable safety procedures should perform the installation of this product.  
One must have knowledge in repair and modification of fuel systems and general vehicle modifications to install this product.  
**Gasoline and other fuels are flammable and can be explosive.**  
Only install in a well-ventilated location to minimize buildup of fuel vapors.  
No sparks, open flames, smoking or other ignition sources are to be present. Draining and removal of all fuel from the fuel system is recommended.  
Proper eye and personal protection is required at all times during installation.

## WARNING

The fuel system is under pressure! Do not loosen any connections until relieving the fuel system pressure.  
Consult a service manual for instructions on relieving fuel pressure safely. This product is designed for off-highway and racing use only.  
Fuel system components may not be legal for sale or use on emissions controlled motor vehicles. Consult local, state, and federal laws.

| STEP | TOOLS NEEDED | INSTRUCTIONS                                                                                                                                                                                               | PHOTO |
|------|--------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|
| 1    |              | NOTE: The install pictures in these instructions were performed on a Polaris RZR Pro R. The Polaris Slingshot will be similar.                                                                             |       |
|      |              |                                                                                                                                                                                                            |       |
|      |              |                                                                                                                                                                                                            |       |
|      |              | Find the fuel pump module under the seat and the firewall panel.                                                                                                                                           |       |
|      |              | Disconnect the electrical fuel pump connector and turn the vehicle ON. Allow the engine to stall. Turn OFF the ignition.                                                                                   |       |
|      |              |                                                                                                                                                                                                            |       |
| 2    | 10mm Wrench  | Removal of the fuel lines, fuel rail, fuel injectors, etc. will not be covered specifically. It is recommended to have a factory service manual.                                                           |       |
|      |              |                                                                                                                                                                                                            |       |
|      |              | The battery is also located under the front LH (driver) seat.                                                                                                                                              |       |
|      |              | Disconnect the negative battery terminal.                                                                                                                                                                  |       |
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| 3    |              | Remove the engine cover to gain access to the top of the engine.                                                                                                                                           |       |
|      |              |                                                                                                                                                                                                            |       |
|      |              | NOTE: UTVs will typically have dirt and mud everywhere. Prior to opening the fuel system, it is recommended to clean the surrounding area with compressed air.                                             |       |
|      |              |                                                                                                                                                                                                            |       |
|      |              | Unplug the 4 fuel injector electrical connectors. Near the fuel rail mounting screws, dislodge the 4 wire harness retaining clips.                                                                         |       |
|      |              |                                                                                                                                                                                                            |       |
| 4    | Rag          | To remove the SAE quick connect fuel line, first push the connector further onto the fuel rail and hold in place. Now squeeze the 2 opposing locks. Pull the connector away to release from the fuel rail. |       |
|      |              |                                                                                                                                                                                                            |       |
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|      |              | Be ready as fuel will leak from this connection.                                                                                                                                                           |       |
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| 5  | 8mm Socket Wrench  | Remove the 4 OEM mounting screws. These will be reused.                                                                                                                                                                                   |    |
|    | Rag                | Carefully pull the fuel rail and injectors from the throttle body.                                                                                                                                                                        |                                                                                       |
|    |                    | Bring the assembly to a clean work bench. Pry the injector clips off and carefully pull each injector from the fuel rail. Have a rag handy.                                                                                               |                                                                                       |
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| 6  | Oil Lubrication    | Adapter fittings are NOT included with the fuel rail. As shown, the optional 20-1138-PK FUEL RAIL PLUMBING KIT includes all the necessary adapter fittings to reuse the OEM fuel line.                                                    |    |
|    |                    | For custom plumbing installations, the fuel rail has three 3/4"-16 (8AN ORB) end ports. Go to <a href="http://www.radiumauto.com">www.radiumauto.com</a> to find an array of compatible adapter fittings, regulators, pulse dampers, etc. |                                                                                       |
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| 7  | Oil Lubrication    | <b>20-1138-PK FUEL RAIL PLUMBING KIT</b>                                                                                                                                                                                                  |   |
|    | 7/8" Wrench        | Lubricate the O-rings and install the provided adapters in the exact end ports shown.                                                                                                                                                     |                                                                                       |
|    | 5/16" Allen Wrench |                                                                                                                                                                                                                                           |                                                                                       |
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| 8  | Oil Lubrication    | For the most consistent fuel delivery, an optional fuel pulse damper is recommended.                                                                                                                                                      |  |
|    | 7/8" Wrench        | (1x) 20-0776 FPD-R, 8AN ORB                                                                                                                                                                                                               |                                                                                       |
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| 9  |                    | This fuel rail is compatible with factory (or equivalent) fuel injectors.                                                                                                                                                                 |  |
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| 10 | Oil Lubrication    | Lubricate the upper injector O-rings and the 4 fuel rail injector bores and push them together. Properly orient the fuel injector connectors.                                                                                             |  |
|    |                    | As shown, slide the injector clips in place.                                                                                                                                                                                              |                                                                                       |
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| 11 | Oil Lubrication   | <p>Lubricate the lower injector O-rings and the corresponding intake manifold seats.</p> <p>Lineup the fuel rail assembly to the intake manifold and press downward to fully seat. Secure the fuel rail using the factory screws, as shown.</p> <p>Plug in the fuel injector connectors until they click in place.</p>                                |   |
|    | 8mm Socket Wrench |                                                                                                                                                                                                                                                                                                                                                       |                                                                                      |
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| 12 |                   | <p><b><u>20-1138-PK FUEL RAIL PLUMBING KIT</u></b></p> <p>Inspect the condition of the OEM fuel line connector. Clean any debris and replace any parts that may be permanently damaged.</p> <p>Push the OEM fuel line onto the fuel rail inlet port until it clicks in place. Gently give the line a tug to confirm the connection has been made.</p> |   |
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| 13 | 10mm Wrench       | <p>After all the necessary fuel rail plumbing is installed, reconnect the battery. Cycle the keyed ignition switch ON/OFF a few times (without starting the engine). This allows the fuel pump to prime the system. Check for leaks.</p> <p>Start the engine and confirm again while the engine is running.</p> <p><b>INSTALLATION COMPLETE</b></p>   |  |
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