



INSTALLATION INSTRUCTIONS

FUEL RAIL FOR NISSAN SR20DET S13

Customer Support: info@radiumauto.com

Document# 19-0085

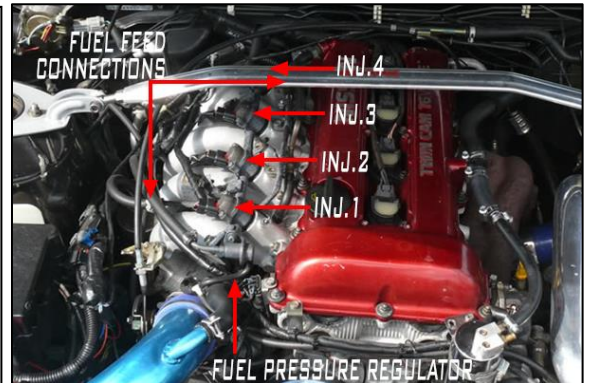
WARNING: DO NOT EXPOSE WORK AREA TO ANY SPARKS OR FIRE. DO NOT SMOKE WHILE OPERATING ON THE FUEL SYSTEM. CLEAN UP ALL FUEL SPILLS IMMEDIATELY. WORK IN A WELL VENTILATED AREA.

1. Remove fuel pump fuse and start engine. Allow engine to stall. This relieves fuel pressure in lines. Replace fuel pump fuse. Disconnect battery.

Unplug all injectors and disconnect injector harness from fuel rail.

Carefully pull vacuum tubing off fuel pressure regulator (FPR).

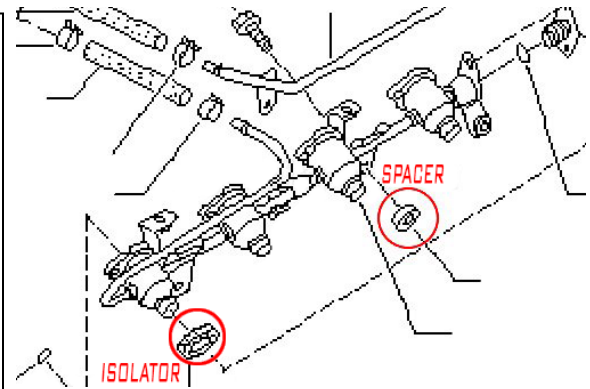
Release and pull back clamps on FPR return hose and fuel feed hose. There are 2 hard pipe feed line connections, as shown. Gently disconnect fuel hoses and catch all spilled fuel.



2. Use a 12mm socket wrench to remove the four primary M8 mounting bolts.

Next, gently lift fuel rail up just enough to expose the 4 rubber fuel injector isolator cushions. They will either be stuck around the lower portion of the injector or still in the intake manifold injector ports. They will NOT be reused. Find the 4 black plastic spacers underneath each fuel rail tab (3 will be reused).

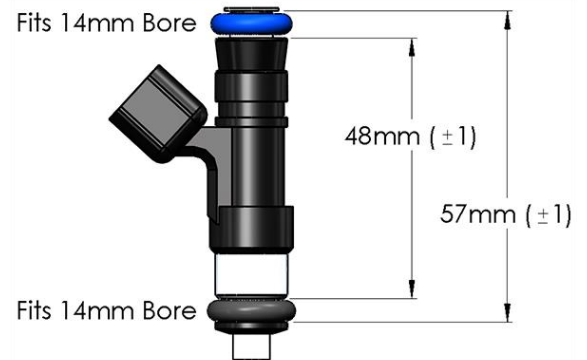
Remove the fuel rail from the vehicle. It will contain fuel. Drain excess fuel into a safe container for disposal.



3. The fuel rail kit includes 2 sets of three mounting brackets. The proper set used will be determined by the height of the fuel injectors. Reference the fuel rail product page or contact info@radiumauto.com for more information.

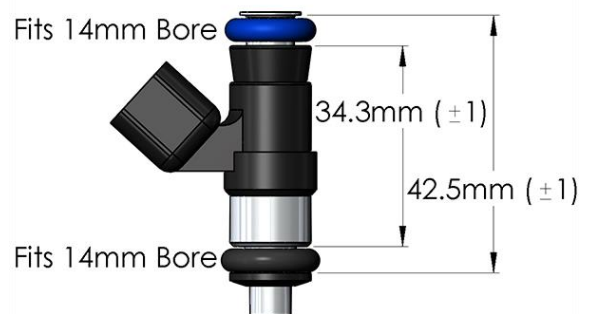
If using the tall set of mounting brackets, the top feed fuel injectors must match the dimensions, as shown.

NOTE: Check hood clearance when using the tall set of mounting brackets.



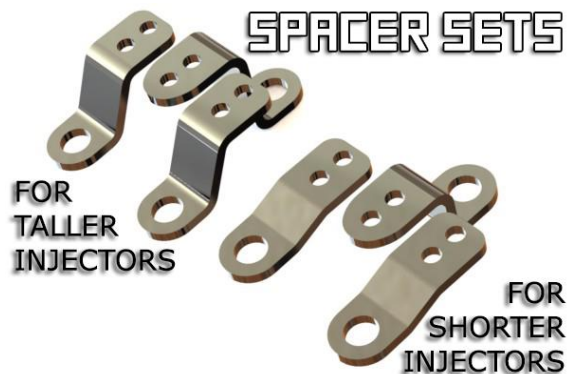
4. If using the short set of mounting brackets, the top feed fuel injectors must match the dimensions, as shown.

NOTE: Check bottom port fitting clearance when using the short set of mounting brackets.



5. Referencing the picture to the right, install the 3 proper brackets to the fuel rail using the included lock washers and bolts (Torque=11Nm).

If applicable, transfer the OEM fuel pressure regulator to the Radium FPR adapter and bushing fitting. Note: Depending on the vehicle, the FPR might need to be installed onto the rear port for hood clearance.



6. Thoroughly clean out any dirt or debris found in the intake manifold injector seat bores.

Next, **lubricate the Radium injector seat O-rings with engine oil.**

Press the Radium injector seats down firmly into the 4 intake manifold injector ports until fully seated. If necessary, use a small rubber mallet.

Lubricate each fuel injector's top and bottom O-rings with engine oil. Fully insert the injectors into the Radium fuel rail bores.



7. Position the fuel rail in place making sure all injectors are lined up properly in the Radium injector seats. Next, press firmly on the fuel rail to seat the injectors' lower O-rings.

Once everything is positioned correctly, place the black OEM spacers under the 3 mounting tabs. Next, install 3 of the OEM Nissan M8 bolts and tighten using a 12mm socket wrench.

CHECK HOOD CLEARANCE BEFORE FINALIZING THE PLUMBING AND INSTALLATION.



8. If Nissan wiring harness adapters were included with the purchase of the top feed fuel injectors, install them now per the instructions provided by the manufacturer.

Note: wiring polarity on each injector does not matter.



9. Reminder: The Radium fuel rail kit does not include a feed supply hose as most applications require custom fuel hoses.

After everything is reinstalled, cycle the key a few times (without starting engine). This allows the fuel pump to prime the system. **CHECK FOR LEAKS!** If no leaks are found, start the engine and check again while the engine is running.

Installation complete.

