



INSTALLATION INSTRUCTIONS

FUEL RAIL FOR NISSAN KA24DE

Customer Support: info@radiumauto.com

Document# 19-0084

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.

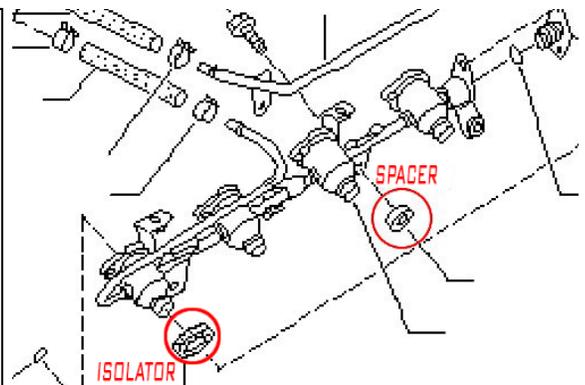
1. Remove fuel pump fuse and start engine. Allow engine to stall. This relieves pressure in lines. Replace fuel pump fuse. Disconnect battery. Unplug injectors and disconnect harness from fuel rail. Carefully pull vacuum tubing off fuel pressure regulator (FPR).

Release and pull back clamps on FPR return hose and fuel feed hose located between intake runners 2 and 3, as depicted. Gently disconnect both fuel hoses and catch all spilled fuel.



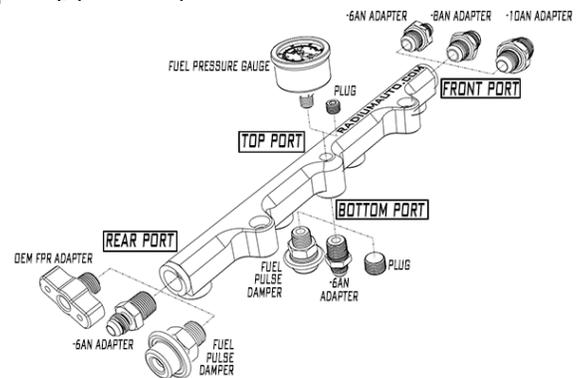
2. Use a 12mm socket wrench to remove the two primary M8 mounting bolts. Next, gently lift fuel rail up just enough to expose the 4 rubber fuel injector isolator cushions. They will either be stuck around the lower portion of the injector or still in the intake manifold injector ports. Also, find the 2 black plastic spacers found underneath each fuel rail tab. These pieces will not be reused.

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



3. Install all fittings into the 4 ports (front, top, bottom, rear) of the Radium fuel rail. Use Teflon paste on all NPT fittings. Tighten by hand, then torque using a wrench. NPT threads will show even when tight. If reusing the OEM FPR, the Radium FPR adapter may need to be clocked to mimic the OEM FPR position once installed. Transfer the OEM FPR from the OEM rail to the Radium adapter.

Note: Some OEM FPRs use M5 screws. Use a 1/4" bit to drill out the 2 OEM FPR flange holes. Secure FPR using the included M6 bolts.



4. 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.

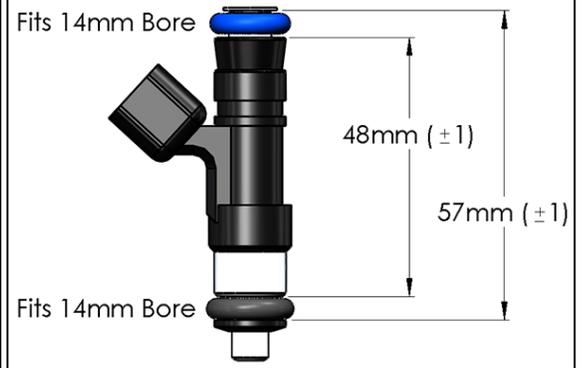
Press the Radium injector seats down firmly into the 4 intake manifold injector ports until fully seated. If necessary, use a small rubber mallet.



5. For proper fitment, the top feed fuel injectors that will be used must match the dimensions, as shown.

Reference the fuel rail product page at info@radiumauto.com for more information.

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



6. Hold the included aluminum spacers onto the intake manifold mounting bosses while positioning the fuel rail in place. Make sure all injectors are lined up properly in the Radium injector seats, then press firmly on the fuel rail to seat the injectors' lower O-rings.

Once everything is positioned correctly, install the included M8 bolts and tighten using a 6mm Allen wrench.



7. 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.



8. 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.

