

INSTALLATION INSTRUCTIONS FUEL RAIL FOR NISSAN RB26DETT

Support: info@radiumauto.com
Document# 19-0104

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 (R33/R34 in trunk).



2. Unplug the 3 electrical connectors shown near the rear of the fuel rail.

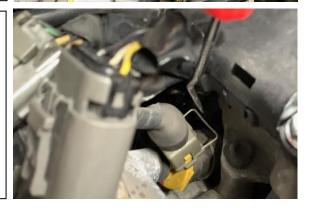


3. Carefully pull the vacuum tubing off the fuel pressure regulator (FPR).

Using a Phillips head screwdriver, loosen and remove the fuel feed and fuel return hoses at the front of the fuel rail. Catch all spilled fuel.



4. Pry the electrical metal locking clips from the six fuel injector connectors.



5. Be careful not to lose the metal fuel injector clips in the engine bay.



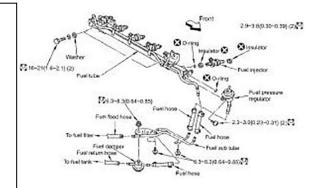
6. Pull the six connectors off the fuel injectors.



7. Use a 12mm socket wrench to remove the two M8x1.25mm mounting bolts and washers.



8. The OEM hardware will not be reused.



9. Gently lift the fuel rail up being careful not to lose anything in the engine bay.



10. Remove the fuel rail from the vehicle. It will contain fuel.

Pull the injectors out and drain the excess fuel into a safe container for disposal.



11. The Radium Engineering fuel rail is compatible with 11mm upper injector Orings. This is a very common size for injectors (Denso).

OEM Nissan RB26DETT injectors (JECS) use 10.45mm upper O-rings. This is a very uncommon size.



12. If the OEM RB26DETT fuel injectors will be reused, replace the upper O-rings with the six O-rings included in the kit. This will effectively convert the stock 10.45mm (JECS) injectors to 11mm (Denso) fitment.

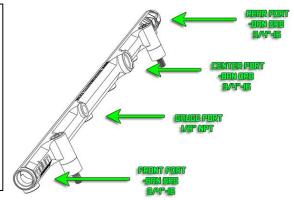


13. Install all fittings into the ports (front, center, rear, gauge port). **Lubricate Orings prior to installing to avoid damage.** Reminder: The basic fuel rail does not include adapter fittings or fuel hoses.

20-0217-PK

If FUEL RAIL PLUMBING KIT, RB26DETT was purchased, install as follows:

-Front Port: FPR Adapter
-Center Port: 8AN ORB Plug
-Gauge Port: 1/8" NPT Plug
-Rear Port: 8AN ORB to 6AN Male



14. When installing a fitting into the small 1/8" NPT port, use a small amount of PTFE paste on the male threads. NOTE: Many fittings feature pre-impregnated sealant on the threads, as shown. In this case, extra PTFE is not required.

Tighten until finger tight. Then, using a wrench, add another 1.5 to 3 turns.



15. If reusing the OEM FPR, unscrew the 2 bolts using a Phillips head screwdriver.

To release, pull the FPR from the fuel rail.



16. If reusing the OEM FPR, first lubricate the O-ring found on the black threaded portion of the adapter. Next, tighten to the front port of the fuel rail.

Slide the green portion onto the adapter. Insert the OEM FPR to the Radium FPR adapter.



17. If reusing the OEM FPR, the Radium FPR adapter (shown) will need to be clocked for best fitment. As shown, mimic the angle of the OEM FPR flange than tighten the OEM Phillips head bolts.

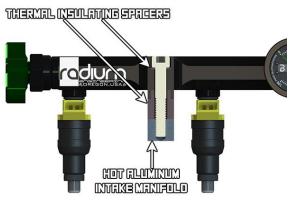


18. Lubricate the 6 upper injector O-rings.

Press the injectors into the fuel rail injector ports.

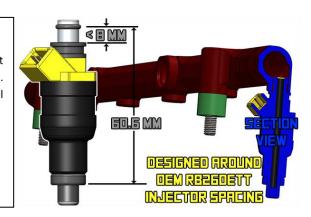


19. For fuel rail mounting, preinstall the 2 bolts, washers, spacers, etc. provided in the kit, as shown.



20. If purchased from Radium Engineering after April 2021, disregard this step.

If purchased from Radium Engineering prior to April 2021 and aftermarket injectors are to be used, be sure the upper O-ring seats inside the injector bore. Washer shims (not included) may be required for proper fitment. The fuel injector must have specific spacing, as shown.



21. Thoroughly clean out any dirt or debris found in the intake manifold injector seat bores. Using oil, lubricate the injector seats and lower injector O-rings.

Carefully, place the fuel rail assembly onto the intake manifold and lineup each injector one by one. Once everything is in position, push the rail towards the intake manifold to fully seat the injectors.

Secure the mounting bolts using a 6mm Allen wrench. Torque the two bolts to 10ftlbs (13.6Nm).



22. **20-0217-PK**

If FUEL RAIL PLUMBING KIT, RB26DETT was purchased, remove the fuel feed and fuel return mounting bracket (shown) underneath the intake manifold.

Next, completely remove all of the OEM rubber fuel lines downstream of the fuel filter. This includes the OEM rubber fuel lines from the FPR to the return hard line on frame rail. Do not remove the rubber fuel line from the frame rail hard line to the fuel filter inlet.



23. **20-0217-PK**

If FUEL RAIL PLUMBING KIT, RB26DETT was purchased, install the provided 5/16" (5AN) fuel line from the frame rail hard line (for the return) to the FPR. This hose will need to be cut to length.

Secure both ends with the small EFI hose clamps (shown) included in the kit.



24. **20-0217-PK**

If FUEL RAIL PLUMBING KIT, RB26DETT is installing into a R32 (ONLY), loosen the fuel filter inlet hose clamp using a Phillips head screwdriver. Next, loosen the fuel filter mounting bracket.

The OEM fuel filter outlet normally points towards the front of the fuel rail. However, the fuel rail inlet will now be at the rear of the fuel rail. Spin the fuel filter so the outlet is pointing towards the rear of the vehicle.



25.**20-0217-PK**

If FUEL RAIL PLUMBING KIT, RB26DETT was purchased, find the 3/8" (6AN) hose and the 6AN PushLok hose end in the kit.

Apply oil lubrication to the PushLok barbs. Fully seat the PushLok hose end into one side of the 3/8" (6AN) hose. NOTE: PushLok hose ends do NOT require clamps.



26.**20-0217-PK**

If FUEL RAIL PLUMBING KIT, RB26DETT was purchased, screw the hose end to the 6AN male fitting on the rear fuel rail port, as shown.

Route the hose to the fuel filter outlet and cut to length. Secure the hose using the large EFI clamp provided in the kit. Be sure to cinch this clamp until it bottoms out.

Tighten the PushLok hose end using an 11/16" wrench. NOTE: An aluminum wrench will help prevent surface finish marring.



27. Plug in all electrical connections. Reconnect the vacuum hose to the FPR.



28. If the OEM Nissan plastic injector wiring harness cover will be reused, it might need to be modified if something is installed into the center port or gauge port other than plugs. Shown is the modification required to directly mount a fuel pressure gauge to the rail.



29. Shown is an alternative "street elbow" option to avoid cover modification.

Radium Engineering P/N: 14-0332

1/8" NPT Male to Female, 90 Degree Fitting



30. 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

