

INSTALLATION INSTRUCTIONS

FUEL RAIL FOR HONDA K-SERIES ENGINE

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Document# 19-0129

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. If accessible, refer to the Honda Service Manual for disassembly questions.

To relieve fuel pressure, temporarily remove the fuel pump fuse or disconnect the fuel pump 5-pin connector (shown). Start and idle the vehicle and allow the engine to stall. Turn the ignition OFF, remove the key, and the fuel fill cap.

Before disconnecting the battery's (-) negative terminal, be sure to have the anti-theft code for the OEM radio. Write down the frequencies for the radio's preset buttons.



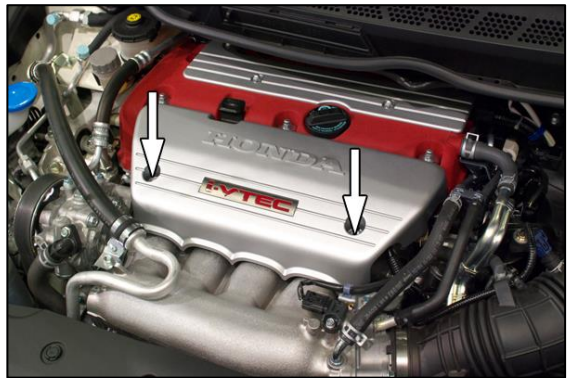
2. Unlatch and prop the hood.

Install fender covers to protect the paint and body.

Allow the engine to cool before proceeding.

Remove the 2 bolts securing the engine cover (shown) and place to the side.

Next, remove the bolts securing the engine cover brackets.



3. Disconnect the 4 fuel injector connectors.

Next, remove the bolt securing the ground strap on the fuel injector wiring harness.

Remove the harness holder from the holding tabs.

Finally remove the wiring from the harness holder.

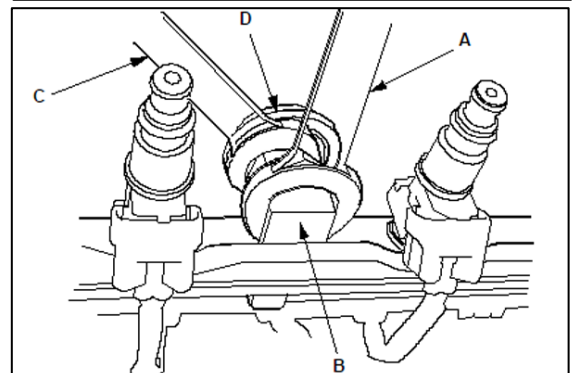
Note: the holding tabs will not be reused.



4. A few of the OEM fuel rails came standard with a fuel pulse damper. If the engine did not come with this fuel rail, skip to the next step.

If the 14-0278 8AN ORB to M12x1mm fitting was purchased to reuse the OEM fuel pulse damper (D), pop off and remove the OEM fuel pulse damper cap cover. Next, place a 22mm (or 7/8") wrench (A) on the fuel rail block (B). Place a 22mm wrench (C) on the fuel pulse damper hex (D). Put shop towels underneath the area and unscrew the fuel pulse damper.

NOTE: It is good practice to use new crush washers when reinstalling (HONDA P/N: 16705-PD1-003)



5. Place shop towels down under the fuel inlet pipe. To remove the OEM fuel feed quick-connect fitting (shown), squeeze the retaining tabs to release them from the locking pawls. Pull the tubing away from the rail and catch any fuel that drips out.

Using a 12mm wrench, remove the two M8x1.25mm nuts that secure the fuel rail to the intake manifold. NOTE: do not lose the 2 black fuel rail insulating spacers (Honda P/N: 16638-PNA-000) as they will be reused.

Remove the fuel rail and injector assembly from the vehicle. Remove the 4 injector clips and uninstall the 4 injectors. Inspect all seals and O-rings. Replace if necessary.



6. Replacement stainless steel M8x1.25mm fuel rail bolts are included in the kit.

To remove the OEM fuel rail mounting studs, install both OEM M8x1.25mm fuel rail nuts onto each stud. Mate the flange sides together, as shown. Next, lock them together with 12mm wrenches. Unscrew the lower nut to loosen and remove each stud from the intake manifold.



7. **Lubricate all adapter fitting O-rings** and secure to the three 8AN ORB ports (Radium fuel pulse damper shown).

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

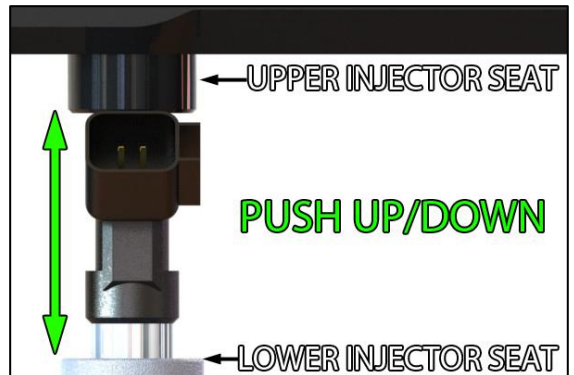
Thoroughly clean out any dirt or debris found in the intake manifold injector seat bores.



8. **Using the OEM insulating spacers (16638-PNA-000)**, position the assembly onto the manifold. Check for clearance issues and grind, if necessary. Torque the included M8 bolts and washers to 10 ft-lbs (13.6Nm) using a 6mm Allen wrench.

As a test, push the fuel injectors downward until they bottom out. Now inspect the injectors' upper O-rings and confirm they are still inserted into the fuel rail injector bores. Do not pressurize the fuel system until the proper height is achieved.

Orientate the fuel injectors such that the electrical connectors do not experience any interference with the surrounding area. Plug in each of the injector connectors.



9. The 20-0230-02 Fuel Rail does not include a plumbing kit (sold separately).

Pre November 2019: 20-0230-00 Fuel Rail Kit / 20-0230-PK Plumbing Kit

As shown, these kits used a compilation of 3 adapter fittings to mate to the OEM SAE quick connect hose. Use a 7/8", 3/4", and 11/16" Wrench. Install the 8AN ORB plugs to the remaining ports using a 5/16" Allen Wrench. Pre-lubricate all O-rings.



10. **Post October 2019: 20-0230-00 Fuel Rail Kit / 20-0230-PK Plumbing Kit**

As shown, these kits use a single adapter fitting to mate to the OEM SAE quick connect hose. Use a 7/8" Wrench. Install the 8AN ORB plugs to the remaining ports using a 5/16" Allen Wrench. Pre-lubricate all O-rings.

After everything is reinstalled in a reverse order, 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 for leaks again while the engine is running. **Installation complete.**

