

IAG Adjustable Fuel Pressure Regulator FPR [v.01]

Fits: Universal

Part# IAG-AFD-2401

Thank you for choosing the IAG Adjustable Fuel Pressure Regulator. IAG recommends professional installation for this product. If you do the installation yourself, please reference the OE Service Manual for steps not listed in these instructions.

Tools Required – 11mm Wrench, 3/16 Allen Wrench, 3mm Allen Wrench



| Parts List | | |
|-----------------------------------|----------|------------------------------|
| Part Name | Quantity | Notes |
| IAG Fuel Pressure Regulator | 1 | Pre-assembled |
| IAG FPR Mounting Bracket | 1 | |
| IAG FPR Mounting Bracket Hardware | 2 | M4x8mm Socket Head Cap Screw |
| NPT Gauge Port | 1 | Pre-assembled |
| Barbed Vacuum Fitting | 1 | Pre-assembled |

IAG Performance Adjustable Fuel Pressure Regulator is not legal for sale or use on emission controlled motor vehicles.

The following steps are typical of most installations:

1. Allow the engine to cool completely. Once cool, disconnect the negative battery cable and relieve the fuel system pressure. On some vehicles, this can be done by removing the fuel pump fuse or relay and cranking the vehicle until it will not start.

2. Remove any cosmetic covers necessary to allow access to the OEM fuel pressure regulator.

3. Remove the vacuum line from the regulator (some vehicles do not have vacuum-operated regulators).

4. Place shop towels around the OEM regulator to catch any gasoline that is spilled during this step of the installation. Remove any regulator mounting hardware and connecting fuel lines, then carefully remove the regulator.

5. Find a suitable place in the vehicle's engine compartment to mount the IAG Fuel Pressure regulator. Using the supplied mounting bracket as a template, mark the bracket mounting holes and drill to accept a #10 screw. IAG offers custom mounting brackets (sold separately) for some Subaru applications.

6. Remove the bracket from the regulator and mount it to the vehicle using two #10 screws, nuts, and lock washers. Once the bracket is mounted, reattach the regulator to the bracket with the supplied socket head cap screws and lock washers.

7. Refer to the diagrams below to attach the fuel line(s) from the fuel rail outlet port(s) to the regulator side ports using ORB-style fittings and o-rings (Sold Separately). Thread sealant should not be used on these fittings.



8. The diagrams below illustrate typical installation, including the use of a Flex Fuel Sensor. IAG fuel line kits are designed to accommodate the regulator in these configurations. Some vehicles may require an adapter to remove the OEM fuel pressure regulator (Sold separately).

9. Referring to the diagram, attach the fuel return line to the regulator return port located on the bottom of the regulator using an ORB-06 style fitting and o-ring (Sold separately). Tighten all connections.

10. Once the regulator is installed, attach a suitable fuel pressure gauge to the 1/8 NPT port on the fuel pressure regulator (0-100psi 1.5" IAG fuel pressure gauge, part# IAG-AFD-2050). Make sure to use thread sealant on the NPT fitting of the gauge.

11. Ensure that any spilled gasoline and any gasoline-soaked shop towels are cleaned up and removed from the vicinity of the vehicle!

12. Reconnect the battery and turn the ignition to the ON position WITHOUT starting the car. After several seconds, check the fuel pressure. If there is no fuel pressure, turn the ignition key to the OFF position, wait one minute, return the ignition to the ON position, and recheck the fuel pressure. Repeat this ignition OFF and ON procedure until the fuel pressure gauge registers fuel pressure.

13. With the fuel pressure gauge registering fuel system pressure, check for fuel leaks from and around the IAG Fuel Pressure regulator. If any fuel leaks are found, turn the ignition key to the OFF position, remove any spilled fuel and repair the leak before proceeding!

14. Once the fuel pressure gauge registers fuel system pressure and there are no fuel leaks, disconnect and temporarily plug the vacuum/boost line, start the engine and adjust the regulator to the desired fuel pressure. Turning the adjustment screw clockwise will increase fuel pressure. OEM EFI return style engines run at approximately 43 psi vacuum off. The base pressure adjustment range is from 35-75 psi. The boost reference pressure is over and above base pressure at a 1:1 ratio.

15. Once the desired fuel pressure is achieved, tighten the regulator adjustment jam nut and attach the vacuum line if one is being used. If the vehicle is not equipped with a vacuum line, leave the vacuum port open to the atmosphere. (Blocking the vacuum port will yield poor regulator performance.)

16. If you do not want to keep the fuel pressure gauge on the vehicle, relieve the fuel system pressure as instructed in the appropriate vehicle service manual and remove the fuel pressure gauge.

17. Test drive the car to ensure proper operation and re-check the fuel system for leaks. If any leaks are found, immediately shut off the engine and repair the leak(s)!



