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AEROFLOW PERFORMANCE

CARBURETTOR & EFI FUEL REGULATOR

WARNING!

THIS PRODUCT REQUIRES DETAILED KNOWLEDGE OF AUTOMOTIVE SYSTEMS. WE RECOMMEND THAT THIS INSTALLATION BE CARRIED OUT BY A QUALIFIED AUTOMOTIVE TECHNICIAN.

THE INSTALLATION OF THIS PRODUCT REQUIRES THE HANDLING OF FUEL. WE RECOMMEND TO WORK IN A WELL VENTILATED AND WEAR APPROPRIATE SAFETY WEAR FOR PROTECTION.

KEEP ALL IGNITION SOURCES AND OPEN FLAMES AWAY FROM VEHICLE AT ALL TIMES WHILE INSTALLING THIS PRODUCT.

THESE FUEL RAILS UTILIZE O-RING SEALED AN STYLE PORTS AND DO NOT REQUIRE THREAD SEALANT ONLY AN APPROPRIATE LUBRICATE SHOULD BE USED

INTRODUCTION

Congratulations on your purchase of Aeroflow Performance universal carburettor and EFI fuel pressure regulator. Aeroflow Performance products cannot and will not be responsible for any damage, or other conditions resulting from misapplication of the parts described herein. However, it is our intention to provide the best possible products for our customer, products that perform properly and satisfy your expectations. Should you have any questions? Please call technical support at +61 2 8825 1900 and have the product part number on hand when calling.

This unique design regulator allows you to use it for both carburettor and efi applications by a simple change of internal spring. The installed spring out of the box is perfect for use with carburettor applications where an adjusting fuel pressure of 3-20 psi is needed. When switching over to efi applications the optional spring that comes with this regulator will allow you to adjust fuel pressure from 20-60 psi. The instructions for switching over this spring are included below.

This regulator features a vacuum/boost port and fitting in the cap which, if connected to your intake manifold, will reference fuel pressure to manifold pressure. It works on a ratio of 1:1 with PSI, raising fuel pressure with boost and reducing it with vacuum. If unused, please do not block off.

Dimensions of this fuel regulator are 115mm (4.52") height and 52.50mm (2.06") diameter. It features two female -8ORB ports for the inlet and one female -8 ORB port for return. On the front of the regulator is a 1/8" NPT is designed for either a fuel pressure gauge, nitrous line or fuel pressure sensor.

The fuel regulator has attached a billet mounting plate that can be unscrewed and rotated 180 degrees for universal fitment to various locations, with centre to centre of mounting holes being 64.50mm. When mounting this fuel regulator ensure it is correctly mounted and secured to vehicle using appropriate methods. Make sure both mounting holes are used to secure the regulator. Ensure to mount and plumb up the fuel system away from moving components or extreme heat sources to avoid any damages or accidents. If necessary, use heat sleeves or fabricate a heat shield to protect lines and catch can from heat sources.

This fuel regulator is alcohol and ethanol compatible. It is recommended if installing this product with these fuels that all other components are also rated to handle this type of fuel. Ensure the fuel filter is high flow and fuel lines are correct size for the application and are designed to handle the fuel being used. Also recommended due to the alcohol fuels breaking down rubber hoses and absorbing water too more frequently monitor, maintain and service all fuel components including fuel filters.

This fuel regulator is only one component of your vehicles complete fuel system. Please ensure the vehicles complete fuel system is up to the task of supplying the right amount of fuel to your engine. Failure to do so may result in severe engine damage and damage to other related components.

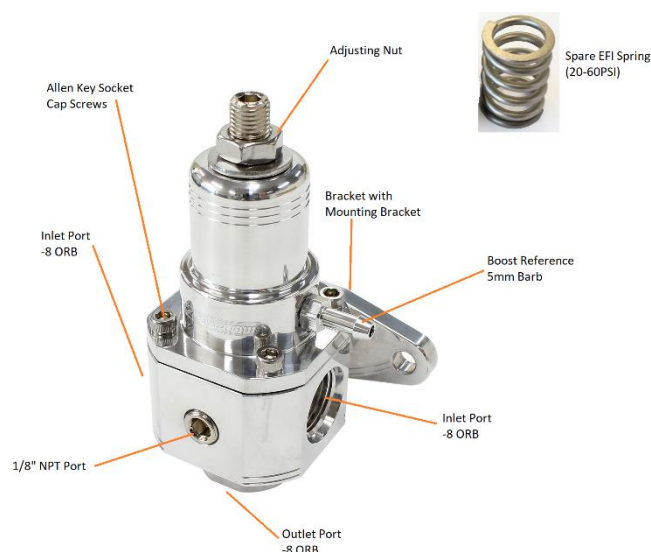
The following steps are typical of most installations:

1. Once the engine has been allowed to cool, disconnect the negative battery cable and relieve the fuel system pressure.
2. Place shop towels around the regulator to catch any petrol that may spill out during this step of the installation. Remove any regulator mounting hardware and connecting fuel lines, then carefully remove the regulator.
3. Find a suitable place in the vehicle's engine compartment to mount the regulator and with the bracket attached to the regulator, mount the bracket and regulator to the vehicle.
4. Using the appropriate fittings on the inlet and outlet of the fuel regulators plumb up the fuel lines to and from the fuel pressure regulator.
5. Once the regulator is installed, attach a suitable fuel pressure gauge to the 1/8" NPT port on the fuel pressure regulator (**Note** we recommend the use of our aero paste thread sealant).
6. 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.
7. With the fuel pressure gauge registering fuel system pressure, check for fuel leaks from and around the regulator and all fuel lines and connections near the 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!
8. Once the fuel pressure gauge registers fuel system pressure and there are no fuel leaks, start the engine and adjust the regulator to the desired fuel pressure. Turning the adjustment screw clockwise will increase fuel pressure. OEM EFI regulators are typically set at approximately 43 psi, without the vacuum line attached and carburettor applications are approximately 7 psi. The fuel pressure adjustment range for the enclosed regulator with the carburettor spring installed is 3-20 psi and with the efi spring installed is 20-60 psi.
9. Once the desired fuel pressure is achieved, tighten the regulator adjustment jam nut and attach the vacuum line if the vehicle has one.
10. Test drive the car to insure proper operation and re-check the fuel system for leaks. If any leaks are found, immediately shut off the engine and repair the leak.

Failure to follow any of the above may result in fuel leakage, bursting of fuel lines, poor vehicle performance and/or decreased fuel pump life.

SPRING CHANGE INSTRUCTIONS

1. Remove fuel pressure regulator from vehicle if installed. Be sure to drain as much fuel from the fuel system and depressurize before removing from vehicle.
2. Find a safe working area and mount the fuel pressure regulator to a vice or similar.
3. Using a 9/64 allen key remove all 4 socket cap screws on top of regulator.
4. Once the top hat is removed from the regulator. Remove the spring and reinstall the new designed spring in the same position.
5. Reinstall top hat with the 4 socket cap screws torque down to 6-7Nm.
6. Reinstall fuel pressure regulator into vehicle and follow steps above starting from step 5 to step 10.



For more information or technical enquires

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