

# Adjustable EFI Fuel Pressure Regulator - SUM-220066

**Warning**: This installation requires an experienced understanding of fuel delivery components and systems. Only authorized Automotive Techs or builders are recommended to perform this work. If there is any aspect of this installation you do not understand, DO NOT attempt to complete the installation, and seek the assistance of an experienced technician.

## Preparations:

- 1. Make sure the work area is well ventilated and fire suppression equipment is readily available.
- 2. Wear appropriate eye protection and any other safety apparel for handling Gasoline or Fuels.
- 3. Vehicle should be parked or immovable, and the engine area should be cold and accessible.
- 4. Remove any flame or spark potential from the area. Do not allow any smoking in the area.
- 5. <u>Disconnect the Negative battery cable</u> <u>completely.</u> Wrap or insulate cable end to prevent accidental sparking with battery terminals.
- 6. <u>Relieve existing fuel circuit pressure</u> at the fuel rail or by other vehicle manufacturer designated valve or procedure.
- 7. Remove any vacuum hose or line (if any) from regulator to be replaced.
- 8. Cover up the regulator area with towels or wipes to absorb any fuel that will be spilled from removing the regulator.
- Disconnect fuel lines from regulator and remove the old regulator. Allow excess fuel to drain into towels or wipes, and cap ends of open lines. Remove all fuel lines not going to be used in your new set up.
- 10. Attach the desired -6AN port fittings to your Summit Regulator. Please note all the ports in your regulator are -6AN ORB style, and do not require thread sealant or excessive torque to seal o-rings.

- Mount the regulator in the appropriate location per your new fuel system design. We recommend using #10 machine screws with lock washers and hex nuts or threaded into tapped holes with lock washers.
- 12. This regulator has 2 side ports and 1 fuel tank return line port on the bottom of the regulator. Either side port can be used as the fuel line supply port or fuel Rail supply line port. Attach these fuel lines as needed, and plumb the return to tank line from the bottom port.
- Never run or place fuel lines through the interior or passenger area of the vehicle. All fuel lines must be routed away from this area and should be secured with clamps or ties every 18" - 24".
- 14. Check and tighten ALL connections. Re-attach a vacuum line to the brass boost reference fitting. If no vacuum line is to be connected to the intake, leave boost fitting on regulator without a hose. Do not block off this fitting port even if not used.
- Mount a 0-100 PSI pressure gauge into the front 1/8" FNPT tapped hole. Use a thread sealant on gauge thread - Do not use Teflon tape.
- 16. Clean away all spilled gasoline and remove and discard all towels or wipes away from the engine area.
- 17. Carefully reconnect the Negative battery cable and inspect the connection for a secure fit.

- 18. Re-pressurize fuel lines by turning vehicle ignition to "ON" without turning over the engine. This will energize the fuel pump and pump fuel to the regulator and fuel rails. Verify fuel pressure by reading pressure gage. Some vehicles will require you to switch off ignition and switch it back on more than once.
- 19. Once you have verified fuel pressure at the regulator, inspect all connections for any fuel leaking or sweating. <u>Switch off ignition and clean any fuel leakage immediately.</u> Verify the leak area and re-connect to eliminate leak. If you have had a leak, wait a few minutes while cleaning up spilled fuel before you turn on fuel pump with on ignition. <u>DO NOT Start engine until leak free connections are verified.</u>
- 20. Once you have regulator fuel pressure and have no leaks, start the engine and monitor your pressure gage. You will want to set the fuel pressure to 43 PSI (on standard vehicles).The adjustment range for this regulator is 30-65 PSI. Loosen the top hex nut and turn the adjusting screw to achieve the pressure setting you need. Lock the adjusting screw with the hex nut, once you have finished setting you regulator pressure.
- 21. <u>While the engine is switched off and not</u> <u>running</u>, remove the pressure gauge from the regulator if you do not want it attached for vehicle operation. Replace the gauge with the male pipe plug with some thread sealant.
- 22. Test drive the vehicle to assure that your new fuel system upgrade is leak free and functioning properly. If any leaks are still occurring, shut down engine immediately and troubleshoot the potential problem and repeat the steps above.

### Brass Boost Reference Fitting

-6AN ORB Inlet Port (Can be used for Inlet or Outlet)

# -6AN ORB Return Port

### Limited One-Year Warranty

This Limited One-Year Warranty is given to the original purchaser (the "Buyer") of this new Summit or Summit Performance Branded Product. Summit Racing Equipment warrants that the product will be free from defects in workmanship and materials under normal use and service for one year from the date of purchase.

### Your responsibilities:

-6AN ORB Inlet Port

(Can be used for Inlet or Outlet)

Keep a sales receipt, canceled check, or payment record to verify your purchase date. Operate and maintain the product in accordance with the specifications provided to you with the product. Arrange for or pay items and costs that are not covered by this Limited Warranty.

#### What is not covered:

1. Damages caused by shipping, product misuse, misapplication, improper installation or maintenance, or damages resulting from accidents, contact with on-road or off-road hazards, or racing engine use.

- Labor costs to remove and install the products or component parts.
- 3. The costs of shipping the product to and from Summit Racing Equipment.
- Claims Procedure:

The duration of this warranty is limited to claims made in writing to Summit Racing Equipment within one year after the Purchase Date. The Buyer should call the telephone number below to report a possible warranty claim. The Buyer must also allow Summit Racing Equipment to inspect the product, and the Buyer must reasonably cooperate with Summit Racing Equipment with respect to verifying the warranty claim of the Buyer. In the event that a warranted defect is discovered, Summit Racing Equipment will repair or replace the product, or return the purchase price to the Buyer, at the option of Summit Racing Equipment.

All shipping costs are paid by the Buyer. Merchandise returned to Summit Racing Equipment without prior authorization will not be accepted.

This warranty extends only to the Buyer and is not transferable.

Implied warranties applicable to this transaction extend only to one year. Some states do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you.

Summit Racing Equipment shall not be responsible for any incidental or consequential damages of the Buyer. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation may not apply to you.

This warranty gives you very specific legal rights, and you may also have other rights which vary from state to state.