

AEROMOTIVE Part # 13113 INSTALLATION INSTRUCTIONS

CAUTION:

Installation of this product requires detailed knowledge of automotive systems and repair procedures. We recommend that this installation be carried out by a qualified automotive technician.

Installation of this product requires handling of gasoline. Ensure you are working in a well ventilated area with an approved fire extinguisher nearby. Extinguish all open flames, prohibit smoking and eliminate all sources of ignition in the area of the vehicle before proceeding with the installation.

When installing this product, wear eye goggles and other safety apparel as needed to protect yourself from debris and sprayed gasoline.

WARNING!

The fuel system may be under pressure. Do not open the fuel system until any pressure has been relieved. Refer to the appropriate vehicle service manual for the procedure and precautions for relieving the fuel system pressure.

NOTE: <u>Testing the enclosed regulator by applying air pressure or vacuum to the vacuum port</u> with a handheld pump will yield poor results, due to the slight air leakage through the adjustment screw threads. This minute leakage, which is typical of all adjustable fuel pressure regulators, does not, in any way, affect the performance of the regulator.

Aeromotive fuel system components are not legal for sale or use on emission-controlled motor vehicles.

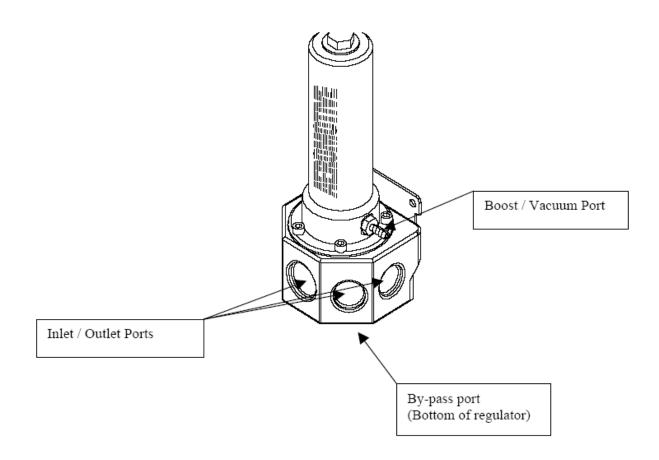
The enclose Aeromotive regulator utilizes one o-ring sealed AN-10 style inlet/outlet port, four o-ring sealed AN-08 inlet/outlet ports and one o-ring sealed AN-10 style bypass port (This port requires a cutoff AN-10 style fitting, Aeromotive P/N 15608 for a AN-10 return line, or P/N15642 for a AN-12 return line); these regulator ports are NOT PIPE THREAD and utilize NO THREAD SEALANT.

The enclosed Aeromotive regulator is designed to be used with high flow (300 gph minimum), fuel pumps similar to Aeromotive P/N's; 11105 Belt Drive, 11107 Hex Drive, 11115 Atomic Belt Drive, and 11117 Atomic Hex Drive fuel pumps. Performance may be degraded if a similar pump is not used.

The following steps are typical of most installations:

1. Once the engine has been allowed to cool, disconnect the negative battery cable and relieve any fuel system pressure.

- 2. Place shop towels around the 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.
- 3. Find a suitable place in the vehicle's engine compartment to mount the Aeromotive regulator. Using the supplied mounting bracket as a template, mark the bracket mounting holes and drill to accept a #10 screw.
- 4. With the bracket attached to the regulator, mount the bracket and regulator to the vehicle using two #10 screws, nuts and lock washers.
- 5. Route the fuel supply line from the pump to the fuel rail(s) first, and then to the regulator. It is recommended that a Y-Block(s) be used to divide the supply line from the pump in order to connect to each fuel rail inlet port individually. You may use AN-08 or AN-10 fuel line from the Y-block(s) to the fuel rails. On the opposite end of each fuel rail, configure a line of the same size used to feed the fuel rail and plan a route to the regulator inlet port(s).
- 6. Determine the number of inlet ports required to be used in the regulator (will support up to 5 separate fuel rails). Determine the proper port fittings and install them, then plug any remaining, unused ports. The typical Aeromotive fittings for AN-08 Ports are as follows; 15605 (AN-08 Port to AN-06 flare), 15607 (AN-08 Port to AN-08 flare), 15641 (AN-08 Port to AN-10 flare), 15626 (AN-08 Port plug) and 15637 (AN-08port plug w/ 1/8-NPT gauge or transducer port). The typical fittings for AN-10 Ports are as follows; 15609 (AN-10 Port to AN-06 flare), 15610 (AN-10 Port to AN-08 flare), 15608 (AN-10 Port to AN-10 flare), and 15617 (AN-10 Port plug).



- 7. Attach the fuel return line to the AN-10 bypass port located at the bottom of the regulator using a cutoff AN-10 style fitting and o-ring. The typical fittings used are as follows; Aeromotive P/N 15608 (AN-10 Port to AN-10 flare) or P/N 15642 (AN-10 Port to AN-12 flare).
- 8. Tighten all connections.
- 9. Once the regulator is installed, attach a suitable fuel pressure gauge in the fuel system.
- 10. Ensure that any spilled gasoline and any gasoline soaked shop towels are cleaned up and removed from the vicinity of the vehicle!
- 11. Aeromotive regulators are NOT preset for a specific pressure. Loosen the jam nut on the regulator adjusting stud (on the top of the carp) and unwind the adjusting stud to the lowest pressure setting.
- 12. Reconnect the battery and, if the fuel pump is electric, turn the fuel pump ON **WITHOUT** starting the car. If the fuel pump is mechanical (belt or hex drive), run the pump for 10-15 seconds with a drill or some other suitable drive apparatus. After several seconds, check the fuel pressure. If there is no fuel pressure, turn the fuel pump or drill-drive OFF, wait one minute, return the fuel pump ON, and recheck the fuel pressure. Repeat this OFF and ON procedure until the fuel pressure gauge registers fuel pressure.
- 13. With belt drive fuel pumps, when initially priming the system with a drill after it has been initially installed, or after the system has been disassembled for maintenance, it may be necessary to crack the fuel line connection from the fuel rail to the regulator, at the regulator, to purge air in the fuel rails. Be certain this is carefully monitored and that all lines are tightened securely BEFORE starting/running the engine.
- 14. With the fuel pressure gauge registering fuel system pressure, check for fuel leaks from and around the Aeromotive regulator and all fuel lines and connections near the regulator! If any fuel leaks are found, turn the fuel pump OFF, remove any spilled fuel and repair the leak before proceeding!
- 15. 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 (Regulator is adjustable from 40-90 psi). Turning the adjustment screw clockwise will increase fuel pressure.
- 16. Once the desired fuel pressure is achieved, tighten the regulator adjustment jam nut.
- 17. 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. Remove the fuel pressure gauge and reinstall the a pipe plug into the gauge port, using thread sealant.
- 18. 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(s)!