

AEROMOTIVE Part # 13106 AND Part # 13107 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 is under pressure. Do not open <u>the fuel system</u> until the pressure has been relieved. Refer to the appropriate vehicle service manual for the procedure and precautions for relieving the fuel system pressure.

NOTE: Testing the enclosed regulator by applying air pressure or vacuum to the vacuum port 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.

NOTE: A fuel pressure gauge will be required to set the regulated pressure once you new Aeromotive regulator is installed. It is recommended that you check the base fuel pressure, as set by the factory regulator, BEFORE you remove it. To determine base fuel pressure, connect the appropriate gauge to the factory fuel pressure test port, disconnect the vacuum line at the regulator and plug it, start the engine and observe the gauge. Note the gauge reading for future reference.

Aeromotive system components are 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, disconnect the negative battery cable and relieve the fuel system pressure.
- Remove any cosmetic covers necessary to allow access to the fuel pressure regulator. On most models, the regulator is located on the fuel crossover tube between the fuel rails or on the passenger side fuel rail. Some models require removal of the fuel rail(s) to install this product. If your vehicle requires removal of the fuel rail(s), refer to the appropriate vehicle service manual for the procedure for doing so.
- 3. Remove the vacuum line from top of OEM regulator.

- 4. Place shop towels around the regulator to catch any gasoline that is spilled during this step of the installation. Remove the regulator mounting bolt and carefully remove the regulator from the fuel rail.
- 5. Remove the clip at the base of the regulator holding the return line in place and remove the regulator from the car. If your application utilizes AN style braided return line, the fitting in the base of the fuel pressure regulator may be replaced with Aeromotive p/n 15606 for AN-06 return lines.
- 6. Apply light oil to the o-rings supplied in the Aeromotive package. Replace the o-ring on the fuel return line with the Aeromotive supplied o-ring.
- 7. Install the new Aeromotive regulator using the reverse of the foregoing removal procedure.
- 8. Due to OEM manufacturing tolerances some installations may require use of the provided shims to be placed between the OEM mounting bracket and the Aeromotive regulator mounting bracket to achieve proper fit.



9. In some installations it may be necessary to relocate the return line mounting clamp. Using the enclosed cushioned line clamp as a pattern, mark the OEM line bracket and drill a hole using a #18 drill bit (.170 Diameter).

OEM Return Line No longer aligns with the OEM bracket





Mark and drill #18 hole.

10. Using the enclosed self-threading screw and cushioned line clamp mount the OEM return line in its new location



11. It also may be necessary to extend the OEM vacuum/ boost reference line using the enclosed barb union and section of vacuum hose to achieve the desired line routing.



- 12. Once the regulator is installed, attach a suitable fuel pressure gauge to either the fuel system schrader valve or the 1/8-NPT gauge port.
- 13. Ensure that any spilled gasoline and any gasoline soaked shop towels are cleaned up and removed from the vicinity of the vehicle!
- 14. 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.
- 15. 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 ignition key to the OFF position, remove any spilled fuel and repair the leak before proceeding!

- 16. 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 regulators are typically set at approximately 43 psi, without the vacuum line attached. The fuel pressure adjustment range for this regulator is 35-80 psi.
- 17. Once the desired fuel pressure is achieved, tighten the regulator adjustment jam nut and attach the vacuum line.
- 18. Remove the fuel pressure gauge and replace the cover on the schrader valve.
- **19.** Test drive the car to insure proper operation and re-check the fuel system for leaks. **If any leaks are found, immediately discontinue use of the vehicle and repair the leak(s)!**