

AEROMOTIVE Part # 11217 A3000 Regulator Assembly 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 the fuel system until the pressure has been relieved. Refer to the appropriate vehicle service manual for the procedure and precautions for relieving the fuel system pressure.

The enclosed Aeromotive regulator utilizes two o-ring sealed ORB-10 style ports, and one o-ring sealed ORB-08 style bypass port; These ports are <u>NOT PIPE THREAD</u> and utilize <u>NO THREAD SEALANT</u>. ORB port fittings with the proper o-ring installed are required.

The enclosed Aeromotive fuel pressure regulator is intended to be installed on the outlet side of an unmodified Aeromotive A3000 Fuel pump, Aeromotive p/n 11216 or 11222. It must be installed with a return line from the regulator to the top of the fuel tank. It is designed for the purpose of creating and maintaining stable line pressure in a range between 14-24 PSI, for carbureted engine applications where a dead-head or static style regulator is installed at the carburetor(s).

The regulator is not preset from the factory and must be adjusted to 18 psi.

This kit contains the following parts:

1ea 11217 By-Pass Style, HP (High Pressure) Regulator 2ea 1/4-28x 2-1/4" mounting screws 2ea Fuel pump mounting O-Rings (1 required, 1 spare)

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

Aeromotive Commonly used part numbers for your reference:

15608 ORB-10/AN-10 Port Fitting. (Outlet Fitting) 15607 ORB-08/AN-08 Port Fitting. (By-Pass Fitting) The following steps are typical of most installations:

- 1. Once the engine has been allowed to cool, disconnect the negative battery cable and relieve fuel system pressure, referring to the appropriate vehicle service manual for the procedure on doing so.
- 2. Place clean shop towels around the fuel pump to catch any gasoline that may be spilled during its removal. Using caution, remove the fuel pump form the system.

Failure to satisfy all safety considerations will result in fire, explosion, injury and/or loss of life to yourself and/or others.

3. The included High Pressure (HP) Regulator with bypass (return line) must be located on the outlet side of the A3000 fuel pump. If using a "dead head" (non-return) style regulator at the carburetor (Aeromotive P/N 13208 or 13210 for example), the HP Regulator is typically mounted directly to the fuel pump outlet port. The HP Regulator assembly may be clocked relative to the pump in 45-deg increments for optimum clearance of the adjusting stud and bypass line. It may also be rotated 180 degrees (flipping inlet and outlet ports) to orient the bypass port on either side. Once the HP Regulator orientation is established, connect it to the pump using the provided o-ring and socket-head cap screws. (FIGURE 1-1)

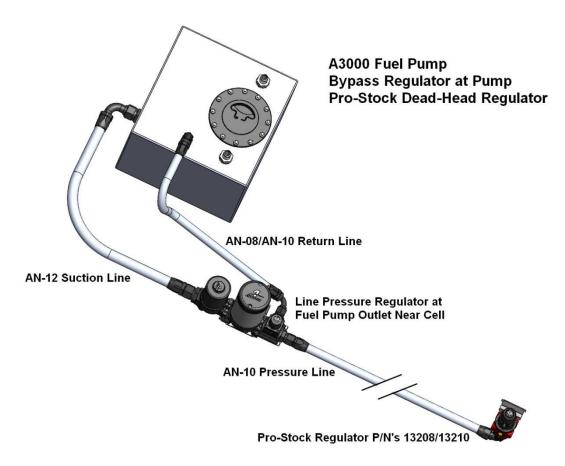


FIGURE 1-1

When installing o-rings it is important to place a small amount of light oil on both the oring and the mating surface to ease installation and prevent damaging the o-ring.

- 5. Thread the o-ring side of an ORB-08/AN-08 port fitting, such as P/N 15607, into the HP regulator bypass port and connect an AN-08 return line from the regulator up to the return fitting in the top of the fuel cell. The return flow must enter the tank in a manner that does NOT upset the fuel pump pickup or disturb the outgoing flow to the fuel pump. Avoid an intank drop-tube for the return that extends deeper than 1/3 down from the top of the fuel cell.
- 6. Thread the o-ring side of an ORB-10 to AN-10 port fitting, such as P/N 15608, into the HP regulator outlet port and connect an AN-10, high pressure fuel line with AN hose-ends to the regulator outlet port and up to the dead-head regulator mounted at the carburetor.
- Attach a suitable 0-30 PSI fuel pressure gauge to the HP regulator test port if desired.
 Note: The HP Regulator is adjustable from 14-24 PSI line pressure and has been preset for 18 PSI from the factory, ample to feed most dead-head style regulators.

Plumbing Diagram for Engines using Dead-Head Style regulator at the Carburetor such as Aeromotive Pro-Stock 4-Port P/N 13208 and 2-Port P/N 13210.



8. For engine applications with multiple carburetors, and/or multiple stages of nitrous, the need for separate, adjustable pressures means multiple dead-head regulators are often installed. In these applications, it may be advantageous to move the HP bypass regulator off the pump and into the engine compartment to better facilitate a full flow, dynamic fuel system. The A3000 HP Regulator is designed to "stack" onto the end of multiple, Aeromotive stackable regulators (Aeromotive part # 13217). (FIGURE 1-2)



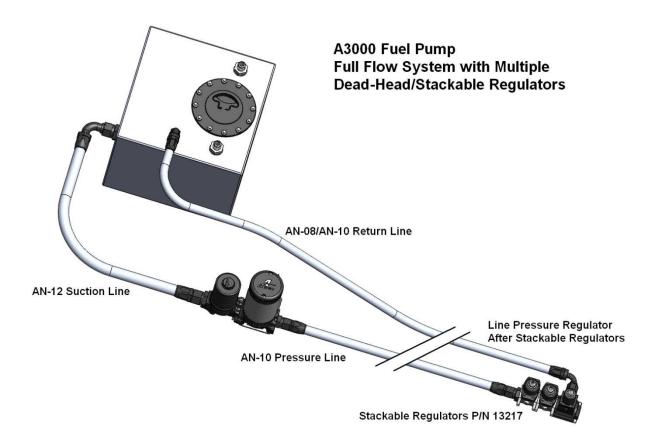
FIGURE 1-2

9. The "stackable" 13217 regulators are ideal for multiple carbs, with up to one regulator per float bowl, and/or per stage of nitrous systems. There is no limit to the number of 13217 Stackable Regulators that may be combined, with future expansion or contraction of the system taking only minutes to accomplish. The A3000 HP bypass regulator is frequently installed as the last regulator in-line with stackable regulators, creating a full flow, dynamic fuel system, at the desired line pressure for best fuel system performance. (FIGURE 1-3)



FIGURE 1-3

A3000 Pump with HP Bypass Regulator at the End of Stackable Regulators:



- 10. The HP Bypass Regulator may be coupled directly to the last Stackable Regulator using the included o-ring and fasteners. Thread the o-ring side of an ORB-08/AN-08 port fitting into the regulator return port and block the opposite (outlet) end with an ORB-10 port plug such as Aeromotive P/N 15617.
- 11. Plan the routing of and Install the AN-08 by-pass fuel line from the fuel HP Bypass Regulator return port back to the top of the fuel cell.

Note: Be sure to route all fuel lines clear of any moving suspension or drivetrain components, and any exhaust components! Protect fuel lines from abrasion and road obstructions or debris.

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 (fuel Pump) 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.
- 10. With the fuel pressure gauge registering fuel system pressure, check for fuel leaks from and around all the fuel system components and all fuel lines and connections! If any fuel leaks are found, turn the ignition key to the OFF position, remove any spilled fuel and repair the leak before proceeding!
- 11. Once the fuel pressure gauge registers fuel system pressure and there are no fuel leaks, start the engine and <u>adjust the fuel pressure regulator to 18 psi</u>.
- 12. Turn off the engine and allow it to cool.
- 13. Test drive the car to insure proper operation and re-check the fuel system for leaks. If any leaks are found, immediately shutoff the engine and repair the leak(s)!

AEROMOTIVE, INC.

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WARNING: This product can expose you to chemicals, including chromium, which is known to the State of California to cause cancer or birth defects or other reproductive harm. For more information, visit: <u>www.p65Warnings.ca.gov</u>

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This Aeromotive Product, with proof of purchase dated on or after January 1, 2003, is warranted to be free from defects in materials and workmanship for a period of one year from the original date of purchase. No warranty claim will be valid without authentic, dated proof of purchase.

This warranty is to the original retail purchaser and none other and is available directly from Aeromotive and not through any point of distribution or purchase.

If a defect is suspected, the retail purchaser must contact Aeromotive directly to discuss the problem, possible solutions and obtain a Return Goods Authorization (RGA), if deemed necessary by the company. Please call 913-647-7300 and dial option 3 for the technical service dept. All returns must be shipped freight pre-paid to the company and with valid RGA before they will be processed.

Aeromotive will examine any product returned with the proper authorization to determine if the failure resulted from a defect or from abuse, improper installation, misapplication or alteration. Aeromotive will then, at it's sole discretion, return, repair or replace the product.

If any Aeromotive product is determined defective, buyer's exclusive remedy is limited in value to the sale price of the good. In no event shall Aeromotive be liable for incidental or consequential damages.

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This Limited Warranty covers only the product itself and not the cost of installation or removal.

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