



## **AEROMOTIVE Part # 18602 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!**

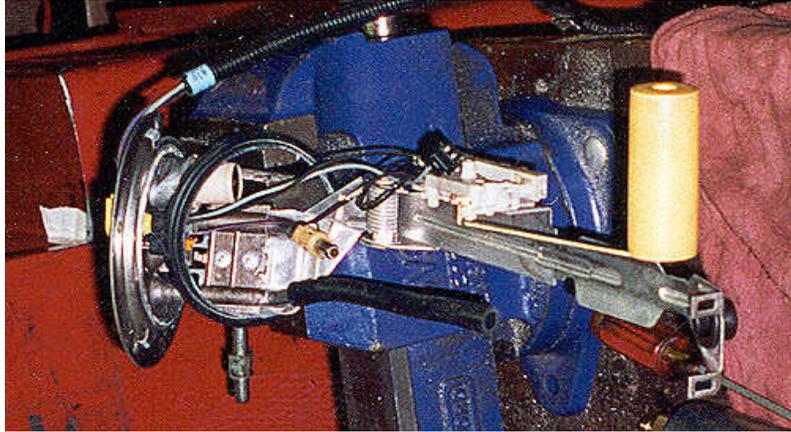
The fuel system is under pressure. Do not open the fuel system until the pressure has been relieved. Refer to the appropriate vehicle service manual for the procedure and precautions for relieving the fuel system pressure.

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

The enclosed Aeromotive fuel pickup modification kit adapts the OEM fuel tank pickup to an AN-10 style outlet for use with Aeromotive fuel system components. The installation of this kit requires the removal of the OEM fuel pump from the fuel tank.

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. Raise the vehicle and support it with jack stands.
3. Referring to the appropriate vehicle service manual for instructions, drain, disconnect any electrical, and fuel component connections and remove the OEM fuel tank. The removal of the vehicles exhaust system may be necessary for fuel tank removal.
4. Remove the OEM fuel pump assembly from the OEM fuel tank by removing the 5 mounting ring nuts from the top of the fuel tank and carefully pulling upwards on the fuel pump assembly.
5. On the OEM fuel pump assembly, disconnect the fuel pump outlet line at the quick disconnect fitting located between the brown transparent ribbed tubing and the metal hard line.
6. Disconnect the fuel return line from the steel hard line, this line is the black rubber line which runs between the steel hard line and the fuel pump canister.
7. Remove the fuel canister vent line from the fuel canister, this is a black rubber line with a 90 degree molded bend on one end of it. Save this line, as it will be used in step 13 as the new return line.
8. Remove the OEM fuel pump canister and fuel pump from the fuel pickup assembly. Figure 1 shows how your pickup should look once this step has been completed.



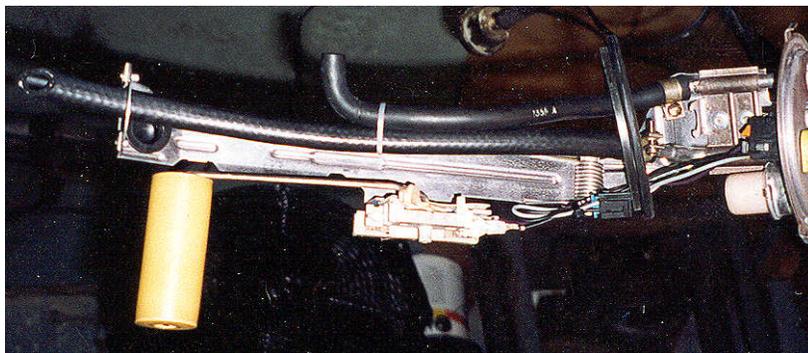
**Figure 1**

9. Remove the plastic retainer from the supply steel line, this was part of the supply line quick disconnect assembly, see figure 2.



**Figure 2**

10. Using a small metal cutting saw, remove approx.  $\frac{1}{4}$ " from the end of the steel supply line pictured in figure 2. Remove any burrs or sharp edges created from cutting the steel supply line. Removing this swaged end will provide a less restrictive fuel pickup.
11. Cut one end of the supplied 13-inch length fuel line at a 45 degree angle.
12. Place the uncut end of the 13-inch length of rubber fuel line on to the steel supply line. Push the rubber fuel line over the beaded area on the steel supply line and clamp in place using one of the supplied hose clamps, see figure 3.
13. Using the old fuel pump canister vent line which was removed earlier, this is the black rubber line with a molded 90 degree bend on one end, slide the straight end of this hose on the steel return line and clamp in place using one of the supplied hose clamps. See figure 3 for details.
14. Using one of the supplied tie wraps secure the two rubber fuel lines together as shown in figure 3.



**Figure 3**

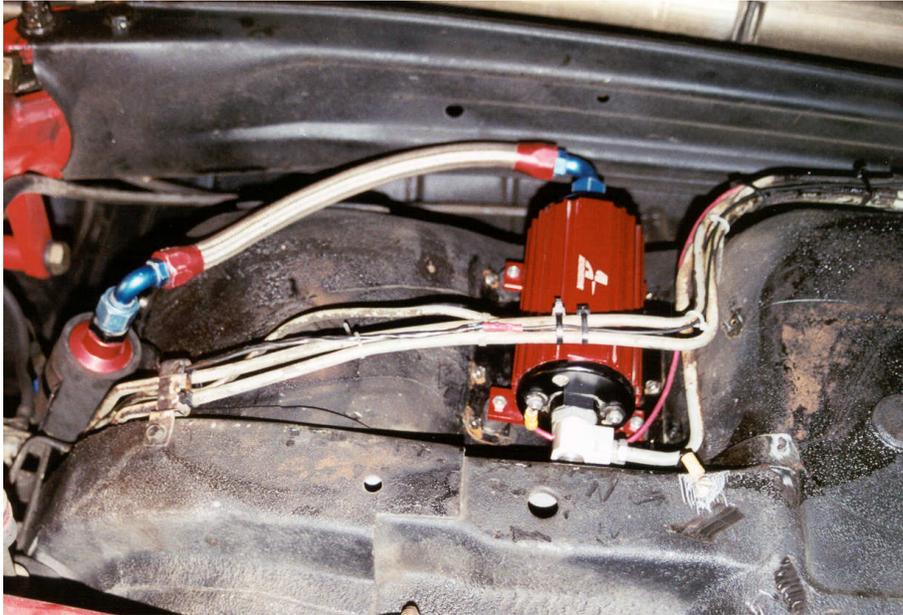
15. The bottom of the pickup will vary from year to year, if the bottom of your pickup has a round approx. 1" diameter hole in it, run the 13-inch length of fuel line through it. If the bottom of your pickup looks like figure 4, using one of the supplied tie wraps, loop the tie wrap through the two square outer holes trapping the bottom of the 13-inch length of fuel line between the tie wrap and the steel pickup.



**Figure 4**

16. Insure that the old fuel pump wiring is secure and does not interfere with any of the fuel pickup moving parts or the fuel level sender.
17. Once the fuel pick up is clean and free from debris trial fit the modified fuel pick up in the tank, making sure the angle cut on the fuel pickup is facing in the upwards direction. Once the fuel pickup is in position insure that the fuel pickup line is not too long and resting on the bottom of the fuel tank. If you fuel pickup line is too long, trim to the desired length.
18. Inspect the rubber gasket that was installed between the fuel tank and the fuel line pickup, replace this gasket if it is cracked, torn or damaged.
19. Place the rubber gasket on the pickup and position the pickup in the fuel tank. Place the round fuel pickup retainer on top of the fuel pickup and tighten down each of the securing nuts.
20. Referring to the appropriate vehicle service manual for instructions, reinstall the fuel tank and all other components that were removed during the fuel tank removal process.
21. Locate the OEM Fuel Filter, it is typically located underneath the vehicle in the area of the drivers seat. Remove the quick disconnect fitting from the filters inlet side. Carefully remove the plastic retainer left on the inlet side of the fuel filter and place the retainer on the supplied adapter fitting. Apply a thin coating of light oil on the adapter fitting and slide the fitting in the fuel line that was removed from the fuel filter.
22. Place the supplied o-ring on the adapter fitting AN-10 side if not already installed.
23. This adapter fitting may now be positioned where needed and attached to an appropriate Filter, Aeromotive p/n 12301 or 12304, and fuel pump, Aeromotive p/n 11101. Figure 5 shows a typical installation of the filter and fuel pump using the Aeromotive p/n 15105 adapter fitting on the pump outlet side.

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



**Figure 5**

24. When connecting the aftermarket fuel pump wiring, typically there are three wires going to the OEM fuel tank. The gray wire is the OEM fuel pump positive wire, the black wire is the ground wire shared with the OEM fuel pump and the fuel level sender and the violet wire is the positive fuel level sender wire.
25. For proper installation of additional aftermarket fuel system components, refer to the manufacturers installation instructions.
26. **Ensure that any spilled fuel and any fuel soaked shop towels are cleaned up and removed from the vicinity of the vehicle!**

***CAUTION: While performing the following steps, if any fuel leaks are detected, immediately turn the ignition to OFF, remove any spilled fuel and repair the leak(s) before proceeding!***

27. Turn the ignition to ON **without starting the engine**, allow the pump to run for several seconds and check the fuel pressure. If there is no pressure, turn the ignition to OFF, wait one minute, then turn the ignition to ON and recheck the pressure. Repeat this ignition OFF and ON procedure until the gauge registers pressure or you detect a fuel leak. If no pressure is registered on the gauge after running the pump for several seconds and you have found no leaks, check all fuel and electrical connections to determine the cause.
28. Once the fuel pressure gauge registers pressure, start the engine. The fuel pressure gauge should register between 40 and 70 psi. If you have installed an adjustable fuel pressure regulator, adjust it to the desired setting. (For maximum fuel system performance, we recommend using an Aeromotive adjustable fuel pressure regulator p/n 131-06-B or 131-07-B; call us for info.)
29. Shut the engine off. Using suitable clips and other mounting hardware, secure the newly installed fuel lines and electrical wires by attaching them to the vehicle chassis.
30. Carefully lower the vehicle to the ground.
31. Test drive the vehicle 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)!**

**AEROMOTIVE, INC.**  
7805 Barton Street, Lenexa, KS 66214  
913-647-7300 fax 913-647-7207  
[www.aeromotiveinc.com](http://www.aeromotiveinc.com)



**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: [www.p65Warnings.ca.gov](http://www.p65Warnings.ca.gov)

### ***AEROMOTIVE, INC. LIMITED WARRANTY***

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.

Aeromotive expressly retains the right to make changes and improvements in any product it manufactures and sells at any time. These changes and improvements may be made without notice at any time and without any obligation to change the catalogs or printed materials.

Aeromotive expressly retains the right to discontinue at any time and without notice any Aeromotive product that it manufactures or sells.

This warranty is limited and expressly limits any implied warranty to one year from the date of the original retail purchase on all Aeromotive products.

No person, party or corporate entity other than Aeromotive shall have the right to: determine whether or not this Limited Warranty is applicable to any Aeromotive product, authorize any action whatsoever under the terms and conditions of this Limited Warranty, assume any obligation or liability of any nature whatsoever on behalf of Aeromotive under the terms and conditions of this Limited Warranty.

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

This Limited Warranty is in lieu of and expressly excludes any and all other warranties, expressed or implied. This Limited Warranty gives you specific legal rights, and you may also have other rights which vary from state to state.