

## AEROMOTIVE Part # 11209 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.

The enclosed Aeromotive fuel pump utilizes 3/8 NPT style inlet and outlet ports; these ports require pipe thread sealant.

To use this pump in your vehicle's fuel system, we strongly recommend the following:

Utilize AN-6 size high pressure fuel lines, fittings and o-rings for all connections (Call Aeromotive for availability.)

Mount the pump lower than and as close as possible to the fuel tank.

A high capacity, 100 micron fuel filter should be installed between the fuel tank or cell and the pump inlet.

A high capacity 10 micron fuel filter should be installed between the pump outlet and fuel pressure regulator

We recommend Aeromotive replaceable element filters. Call us for info.

Failure to follow the above recommendations may result in fuel leakage, bursting of the fuel lines, poor vehicle performance and/or decreased fuel pump life! Improper installation will void all warranties for this product!

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

**DO NOT RUN THE PUMP DRY!** Excessive wear will result if the pump runs dry.

**DO NOT DISASSEMBLE THE PUMP!** Disassembly will throw the pump out of calibration and void all warranties on this product.

**DO NOT ATTEMPT TO ADJUST THE OUTLET PRESSURE SCREW!** The maximum outlet pressure has been preset at the factory and locked in its current position. Adjusting it will void all warranties on this product.

The following steps are typical of most installations:

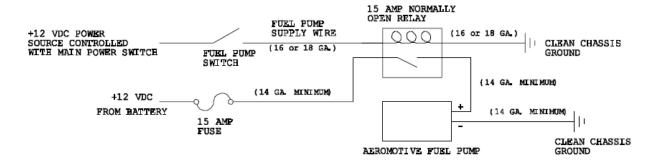
- 1. Once the engine has been allowed to cool, disconnect the negative battery cable and relieve the fuel system pressure.
- 2. Disconnect the existing pump fuel lines. Plug the open fuel line ends and remove the existing pump.
- 3. Find a suitable place on the vehicle chassis to mount the Aeromotive fuel pump. Make sure the location will accommodate the pump mounting bolts, will position the pump lower than the fuel tank, is clear of the exhaust, is clear of any moving suspension or drivetrain components and will keep the pump clear of road obstructions or debris.
- 4. Making sure to mount the pump in the upright position and using the pump mounting bracket as a template, mark and drill two mounting holes to accept ¼" bolts. Mount the pump bracket using two ¼" bolts, nuts and lock washers. Slide the pump into the bracket and tighten the clamping bolt. **Do not over-tighten the clamping bolt. Doing so can permanently damage the pump motor!**

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.

- Connect the fuel tank or cell to the high capacity 100 micron filter. Connect the filter outlet to the 3/8
  NPT fuel pump inlet(see Flow arrow on pump). These sections of fuel line should be as short as
  possible to reduce the tendencies for vapor lock, cavitation, and premature wear of your Aeromotive
  fuel pump.
- 6. Connect the 3/8 NPT fuel pump outlet to the inlet of your 10 micron fuel filter and the fuel filter outlet to your fuel line. Connect the other end of the fuel line to the carberetor in the vehicle's engine compartment.

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

7. Connect electrical power (12 VDC) to the pump. Make sure you use stranded, insulated copper wire, in the sizes shown, with matching crimp-type connectors for all connections. CAUTION: The pump must not be connected directly to the battery. Connect the green wire from the fuel pump to a switched +12 volt source and the black wire to a clean ground as shown in the following diagram:



- 8. Attach a suitable fuel pressure gauge to the fuel system.
- 9. 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 fuel pump OFF, remove any spilled fuel and repair the leak(s) before proceeding!

- 10. Turn the fuel pump 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 fuel pump OFF, wait one minute, then turn the fuel pump ON and recheck the pressure. Repeat this fuel pump OFF and ON procedure until the gauge registers pressure or you detect a fuel leak. It may be necessary to loosen the fuel line fitting at the carberetor to bleed off excessive air in the system. 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. Tighten any fuel line fittings which where loosened and ensure that any spilled fuel is cleaned up and removed from the vicinity of the vehicle.
- 11. Once the fuel pressure gauge registers pressure, turn the pump on and start the engine. The fuel pressure gauge should register between 6 and 8 psi.
- 12. 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.
- 13. 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)!