

AEROMOTIVE Part # 11203 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 <u>the fuel system</u> 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 the use of pipe thread sealant.

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

Utilize AN style 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.

We recommend Aeromotive, replaceable element fuel 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.



Filter

Fuel Tank

Fuel Pump

5. Using the above typical fuel system diagrams as a guide line, connect the fuel tank or cell to the high capacity 100 micron filter, using AN-06, AN-08 or equivalently sized fuel line. Connect the filter outlet to the fuel pump inlet (see Flow arrow on pump). These sections of fuel line should be as large a diameter and short as possible to reduce the tendencies for vapor lock, cavitation, and premature wear of your Aeromotive fuel pump. Finally connect the outlet side of the fuel pump to your fuel pressure regulator, using AN-06 or equivalently sized fuel line. We recommend using a Aeromotive fuel pressure regulator, Call us for details.

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.

6. 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:



- 7. Attach a suitable fuel pressure gauge to the fuel system pressure regulator.
- 8. 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!

- 9. 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 pressure regulator 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.
- 10. Once the fuel pressure gauge registers pressure, turn the pump on and start the engine. The gauge on the fuel pressure regulator should register between 3 and 12 psi. If you have installed an adjustable fuel pressure regulator, adjust it to the desired setting.
- 11. 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.
- 12. 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)!