

# AEROMOTIVE Part # 11203 Product Description INSTALLATION INSTRUCTIONS

This product is not legal for sale or use on emission-controlled vehicles except when used as a direct replacement part matching OEM specification.

# **WARNING!**



Always be aware of flammable situations. Drilling and grinding can be potential ignition sources. Extinguish all open flames, prohibit smoking and eliminate all sources of ignition in the area of the vehicle and workspace before proceeding with the installation. Ensure you are working in a well ventilated area with an approved fire extinguisher nearby.

# **WARNING!**



Installation of this product requires modification to a fuel tank/ the fuel system, failure to satisfy all safety considerations will result in fire, explosion, injury and/or loss of life to yourself and/or others. All fuel system components MUST be located as far from heat sources as possible, like exhaust, engine block,

etc.

# **WARNING!**



Mechanical and hydraulic lifting devices can tip over or lower accidentally due to incorrect maneuvering or technical errors. A falling object can cause injury and/or loss of life to yourself and/or others. When working under the vehicle, always use stands, and ensure that the ground or floor is stable and level. Never crawl under a vehicle which is only supported by a jack.

# **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.

# **CAUTION!**



When installing this product always wear safety glasses and other appropriate safety appeal. A drilling operation will cause flying metal chips. Flying metal chips can cause eye injury.

# **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. Careless installation of this product can result in damage to the product, injury or loss of life to yourself and/or others.

# **Compatible Fuels:**

Pump Gas Race Gas E85 Alcohol/Ethanol

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.

<u>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!</u>

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.

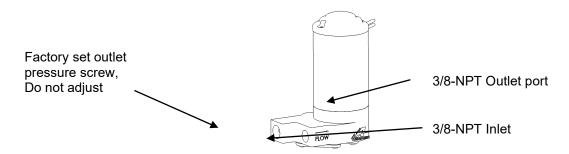
**DO NOT DISASSEMBLE THE PUMP!** Disassembly will throw the pump out of calibration and void all warranties on this product.

**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.

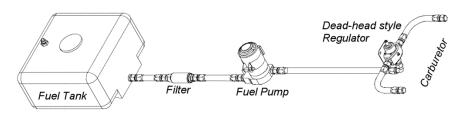
The following steps are typical of most installations:

- 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 1/4" bolts. Mount the pump bracket using two 1/4" 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!**

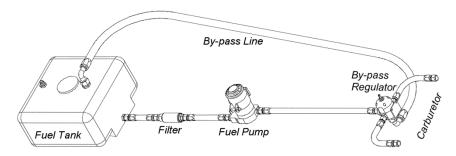
Note: Be sure to route all fuel lines clear of any moving suspension or drivetrain components, and any exhaust components! Protect fuel lines from abrasion and road obstructions or debris.



#### Typical "Dead-head" Style fuel system



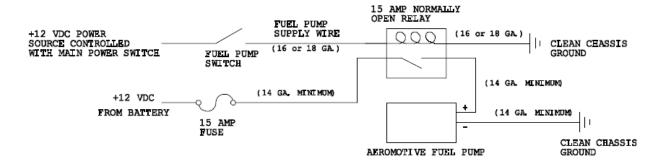
Typical "Bypass" Style fuel system



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.

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)!

# **Contact US**

RGA NUMBER REQUIRED FOR ALL RETURNS TO AEROMOTIVE.

To obtain an RGA number, please call (913) 647–7300 and ask for the Returns and Repairs department.

# • Shipping Address

Aeromotive Inc. 7805 Barton St. Lenexa, KS 66214

#### Sales & Returns

Aeromotive Inc. 11414 W 79th Street. Lenexa, KS 66214

General Inquiries and Tech Line: (913) 647-7300

General Email: <a href="mailto:info@aeromotiveinc.com">info@aeromotiveinc.com</a>
Tech Email: <a href="mailto:tech@aeromotiveinc.com">tech@aeromotiveinc.com</a>

The Aeromotive Tech Lines are open Monday through Friday from 9:30AM to 5:00PM Central Standard Time.



**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

# 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.

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