

AEROMOTIVE Fuel Systems



18679 & 18680 INSTALLATION INSTRUCTIONS

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.

This pump assembly is a high performance factory replacement unit. Key features:

- Drops directly into the factory fuel tank (NO CUTTING REQUIRED).
- High flow pre-filter built into inlet of pump.
- Includes fuel level mounting bracket for factory leveling unit.

NOTE: The use of Teflon braided line with machine crimped hose ends is recommended. This eliminates the possibility of fuel vapors permeating through the fuel line. The use of a 16306 speed pump controller is also highly recommended (A must for the 18680), this will keep the fuel cool and reduce noise inside the passenger compartment.

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.

The enclosed Aeromotive fuel pump utilizes AN-08 ORB (O-ring Boss Ports) style outlet port and AN-08 return port; these ports are **NOT PIPE THREAD** and utilize **NO THREAD SEALANT**.

NOTICE TO INSTALLER:

Installation of this fuel pump requires fuel system conversion to a return style fuel system (use of a bypass style regulator). Also note that a check engine light may be present after installation due to the factory returnless system being modified. This can be turned off with tuning software. Not for use on California vehicles.

Compatible Fuels:

Pump/Race Gas, E85, Alcohol/Ethanol

Aeromotive Related Mod Motor Components:

Fuel Filters:

12301 (pump/race gas) 10 micron
12335 (race gas/E85) 40 micron
12305 (filter bracket)

Fuel Pressure Regulators:

13101 (10AN ports)
13109 (6AN ports)

Electrical Components:

16301 (pump wiring kit)
16306 (pump speed controller)

Check Valves:

15106 (6AN)
15107 (10AN)

Fuel Pressure Gauge:

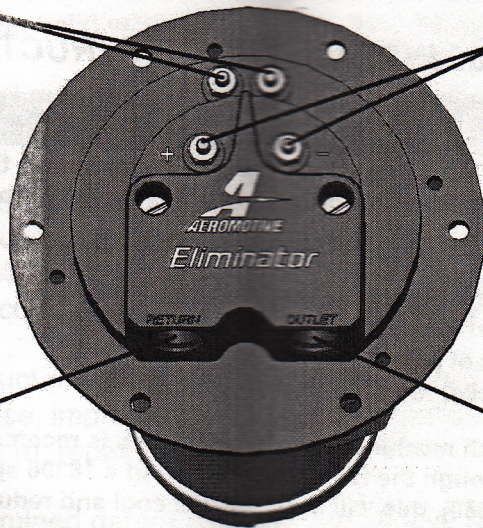
15633 (dry 0-100psi)

Fuel Rails:

14103 (96-04 SOHC)
14104 (96-98.5 DOHC)
14111 (98.5-04 DOHC)

Fuel level sender connections

Fuel pump power connections



8AN return port

8AN outlet port

TOP PLATE LAYOUT

The following steps are typical of most installations:

1. Drain the fuel tank and disconnect the negative battery cable.
2. Raise and support the vehicle.
3. Referring to the appropriate vehicle service manual for instructions, 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. With the tank removed from the vehicle, unbolt the 6 bolts that hold down the fuel pump assembly.
5. Remove the fuel pump assembly from the tank and the fuel level sensor from the bracket. This can be done by removing the three 7mm bolts (two for mounting and one for grounding wire).
6. Transfer the fuel level sensor to the Aeromotive bracket included with the fuel pump. Use the two provided self tapping screws to secure the fuel level sensor to the bracket. Once the screws are tightened down, use a cut-off wheel or saw to trim the excess screw length from the back of the bracket.
7. Now install the bracket with fuel level sensor on to the Aeromotive fuel pump assembly.
8. Now make the fuel level sensor electrical connections. This is done by trimming the wires to length and crimping on the provided ring terminal and butt-connector (ring connector is for the factory ground and the butt-connector is for the factory yellow wire). This is a resistance reading only, wiring polarity does not matter.

9. Before placing the fuel pump assembly in the fuel tank, bend the float arm approx. 30-degrees. This allows the float to clear the internal baffling. Use Figure 1-1 for reference.

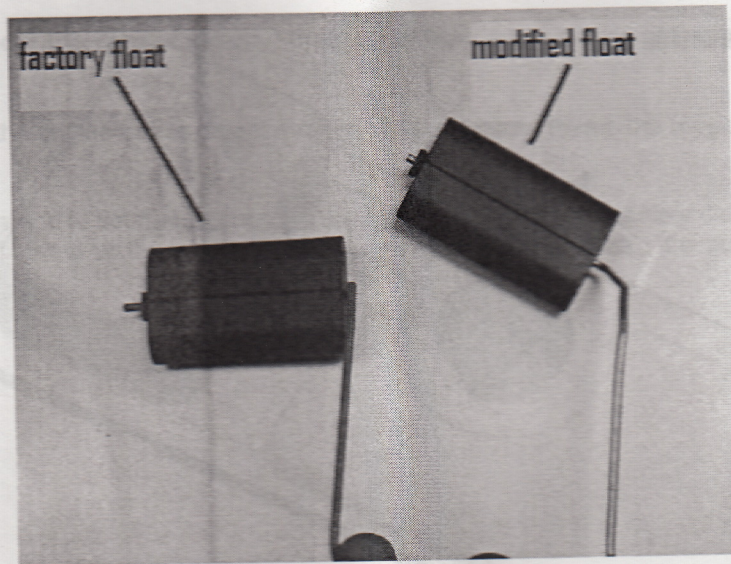


FIGURE 1-1

10. Before placing the new Aeromotive Stealth assembly in the tank, install the new pump-to-tank gasket. It only goes on one way, rotate the gasket till all the bolt holes line up. FIGURE 1-2

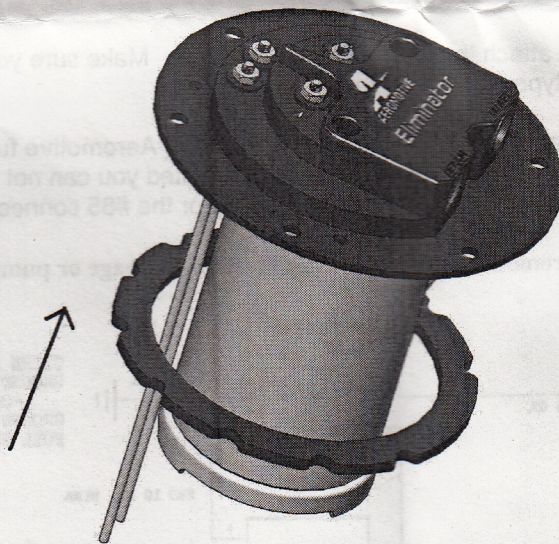


FIGURE 1-2

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11. Now insert the assembled fuel pump into your fuel tank and use the provided mounting bolts to secure it to the tank.
FIGURE 1-3.

Pump outlet faces the front of the vehicle

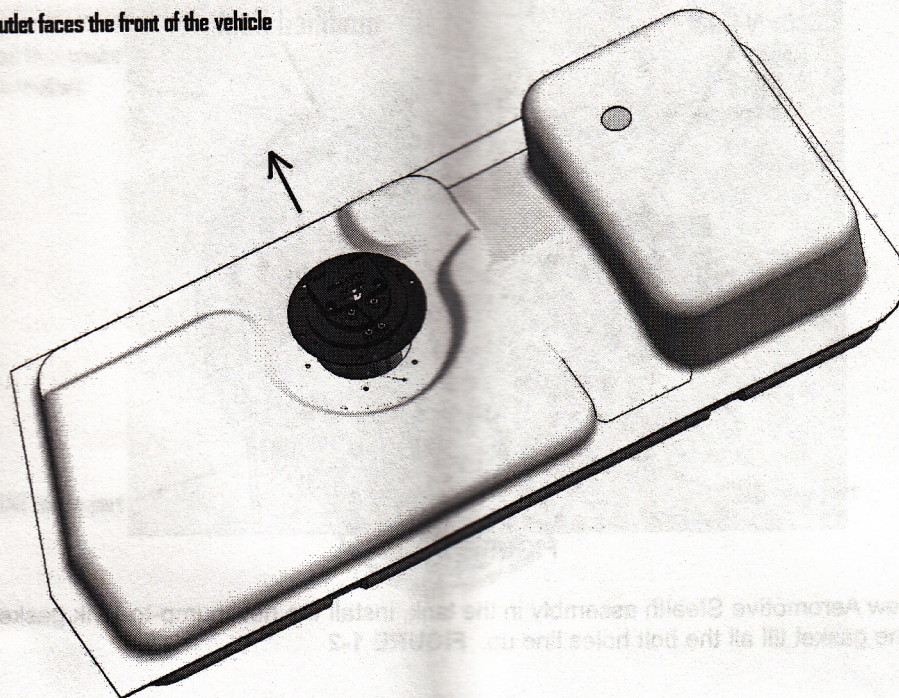
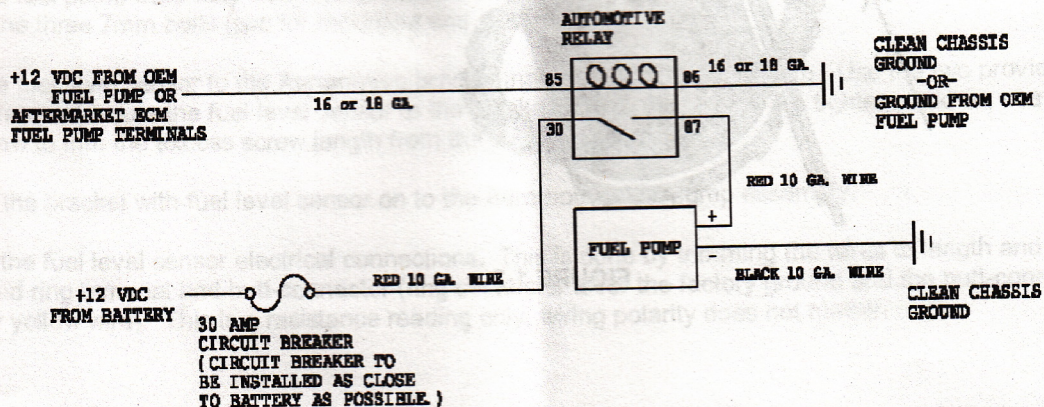


FIGURE 1-3

12. Cut or splice the factory fuel level wires and attach them to the fuel level studs. Make sure you use stranded, insulated copper wire, with matching crimp-type connectors for all connections.
13. The Aeromotive fuel pump needs its own relay and 12V power wire. The use of Aeromotive fuel pump wiring kit (part # 16301) is recommended. Since the factory Ford fuel pump is pulse modulated you can not use the factory fuel pump wires to trigger the relay. Find a suitable 12V key on ignition source for the #85 connection on the relay..

Hooking the factory wiring directly up the Aeromotive unit could result in wiring damage or pump failure.



NOTE: You must install a by-pass style regulator (Aeromotive part # 13101, 13109 or similar) with return line in order for the fuel pump to function correctly. Failure to do so will result in poor performance and fuel pump/system failure.

14. Plumb the feed and return lines in the vehicle, it's recommended to run AN-08 size lines.

Route the fuel lines under the vehicle keeping them away from any sources of heat and moving suspension components.

15. Find a suitable place in the engine bay to mount a return style regulator. Plumb the regulator per the manufactures installation instructions.

16. Key on to check for leaks and to set fuel pressure. If any leaks are found, immediately discontinue use of vehicle and repair the leak(s)! This finishes up the installation of your new Aeromotive Stealth fuel pump.

Thanks for purchasing another quality product designed, engineered and manufactured in Kansas City,
USA!

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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.

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

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