INSTALLATION INSTRUCTIONS

COMP PUMP SERIES 110FI IN-LINE ELECTRIC FUEL PUMP PART NO. 11106M

Parts included in this kit:
1 - Comp Pump 100FI Series electric in-line fuel pump
2 - Mounting brackets

Please read these instructions completely before installing your new fuel pump. Installation of this pump requires detailed knowledge of repair and modifications to a high performance fuel system. We recommend that a qualified automotive technician perform the installation procedure.

NOTE: DO NOT RUN THIS PUMP WITHOUT FUEL (EXCEPT FOR A BRIEF PERIOD WHILE PRIMING)

CAUTION: Please make sure to wear appropriate safety apparel. Work in a well ventilated area. Extinguish any open flames and eliminate any source of ignition or sparks in the area.

WARNING: The fuel system operates under pressure. Do not open the fuel system until the pressure has been relieved. Please refer to your appropriate service manual for the correct procedure to relieve the fuel system pressure. Fuel leakage will occur when loosening any fuel system connections. Be sure to be ready to safely contain any fuel leakage.

PERFORMANCE SPECIFICATIONS

Outlet Pressure/Flow:
87 gph free flow with 12.5 volts
61 gph @ 45 PSI with 12.5 volts
50 gph @ 65 PSI with 12.5 volts

Maximum recommended operating pressure: 65 PSI continuous, 90 PSI intermittent

Mallory part no. 11106M fuel pump is rated for both gasoline and gasoline/ethanol blends up to E85.

Mallory part no. 11106M fuel pump utilizes AN port style O-ring fittings; -8 AN inlet and -6 AN outlet. DO NOT use thread sealant with these fittings.

A high capacity fuel pre-filter with a 40 micron to no greater than 100 micron rated element must be installed in the fuel line between the tank and the fuel pump inlet.

PERFORMANCE SPECIFICATIONS

A by-pass or return style fuel pressure regulator **MUST** be used with this fuel pump. We recommend PN 29389 (Mallory part no. 4305M) for systems running from 30 to 90 PSI.

Gravity feed this pump by mounting it as low and as close as possible to the fuel tank. The installation of either a rear mount reservoir style sump or a high flow capacity fuel tank pickup in your stock tank is highly recommended. These will insure that the fuel pump is able to self-prime and avoid pump starvation and cavitation. Failure to follow these recommendations will result in poor fuel system performance and drastically shorten the fuel pumps life.

Improper fuel pump installation will void all product warranties.

INSTALLATION

1. Wait for the engine to cool. Make sure the ignition system is off or disconnect the negative battery cable. Relieve the fuel system pressure.

2. Raise and secure the vehicle to allow working access under the vehicle. Following the appropriate service manual procedure to; disconnect the existing fuel pump lines, plug all open fuel lines to keep fuel from draining and debris from entering, remove the existing fuel pump.

3. Install either the after-market fuel tank rear mount sump or high flow capacity fuel tank pickup per the manufacturer's instructions.

4. Assemble the mounting brackets onto the fuel pump. Determine the new fuel pump mounting location. Remember it needs to be as low and as close to the fuel tanks as possible.

5. Make sure that the fuel pump location will accommodate the mounting brackets. Also make sure that the fuel pump, lines and pre-filter locations will be free from any interference with the exhaust system as well as clear of any moving suspension system or drive train components. Keep the fuel pump clear of any road obstacles or debris that can be kicked up by the tires. Make sure you have access to the pre-filter so that the element can be periodically cleaned and/or changed.

6. Use the mount brackets as a template, mark and drill the four mounting holes.

7. Install the fuel pump making sure the fuel pump is facing the correct direction. The outlet side is the same side as the fuel pump's electrical connections.

8. Install the inlet and outlet fittings. Connect the fuel tank pickup line to the pre-filter and the fuel pre-filter to the fuel pump inlet. The pre-filter can be directly mounted to the fuel pump inlet or via a short section of fuel line if necessary. Make sure that if you must use angled fittings, that they are of a sweep design to minimize any flow restrictions. Most fuel system problems are due to flow restrictions on the inlet side of the fuel pump. If at all possible, do NOT use forged hard angled fittings.

9. Make sure you are using a correctly rated high pressure fuel line from the fuel pump forward. Make sure that you are using a high flow 10 micron fuel filter between the fuel pump and the fuel pressure regulator. We recommend PN 29249 or 29248 (Mallory part no. 3160 or 3501M, respectively) fuel filter. Make sure you are using a return style fuel pressure regulator.

10. Fuel pump wiring – We recommend that you use a 30 amp universal electric fuel pump relay and harness installation kit. Please follow the wiring kit's installation instructions. If you are not using a relay harnesses kit, connect a 12ga BLACK wire to the negative (-) terminal on the fuel pump and to a quality ground location such as an engine ground or the negative battery terminal to chassis ground location. Connect a RED 12ga wire from a 12v key-on switched connection, such as a 30 amp relay to the positive (+) terminal on the fuel pump. Use a 30amp inline fuse. Double check to make sure the power to the pump is only on when the ignition key is in the "Start" and "Run" position.

11. Check for leaks – Turn the ignition key to the "Run" position without starting the engine. This will power up the fuel pump. Check for any fuel leaks at all the connections. Fix and repair any leaks immediately before operating the vehicle.

When installing the pump, do not over tighten the nuts on the electrical posts. These need to be a ***snug fit only.*** *Over tightening these connections can result in damaging internal connections and create a no run condition. This is considered damage at installation and not warrantied.*