



## INSTALLATION INSTRUCTIONS

# ACCEL/DFI Electric Fuel Pump

500#/HR at 60 PSI, 1000 H/P N/A, 840 Forced Induction

Part No. 75709

**NOTE:** DO NOT RUN THIS PUMP DRY WITHOUT FUEL (EXCEPT FOR BRIEF PERIODS WHILE PRIMING).

### PARTS INCLUDED IN THIS KIT:

- 1 Electric Fuel Pump
- 2 Fittings, 3/4-16 x #8 AN Flare
- 2 O-rings, Nitrile 0.644ID x 0.087THK

### SPECIFICATIONS:

Maximum recommended operating pressure:

60 PSI continuous, 100 PSI intermittent

Fuel pump thread sizes: Inlet/outlet, 3/4-16 (#8AN)

Air bleed system, 1/8" NPT

Recommended fuel line size: 1/2" (or #8AN)

Current draw: 12 AMP Typical

Fuel pump over current protection: 25 AMP fuse

Fuel application: Gasoline

Use Seal/Repair Kit Mallory Part No. 3168 to convert the Electric Fuel Pump to alcohol/methanol.

### GENERAL INFORMATION

The Electric Fuel Pump is a high pressure fuel pump designed for fuel injection applications. In all cases, this fuel pump **must** be used with a return style (bypass) fuel pressure regulator. Using the pump with any other type of regulator (or no regulator) will result in severe fuel pump damage. We recommend the following return style fuel pressure regulators:

30-100 PSI Part No. 74567 (gasoline or alcohol)

As stated earlier, you must use a return style (bypass) regulator with this fuel pump. You must install a fuel return line between the fuel return port of the regulator and the fuel tank. We recommend at minimum a #8 AN (1/2") fuel line.

An air bleed system is located at the bottom of the fuel pump to assist in priming the fuel pump. The air bleed line (1/8" line) is plumbed to the fuel return line. If you are running 10 PSI fuel pressure or less, install a 1/8" NPT plug in the air bleed port. When installing the plug, use a thread sealant compound on the fitting threads (purchase 1/8" NPT fittings or plugs, as well as thread sealant compound, at any hardware store). Do not use teflon tape. Teflon tape can get into the Gerotor and lock the pump. Also, do not overtighten the fitting. This could damage the pump housing.

Be sure to install a suitable fuel filter (max. 100 micron) between the fuel tank and the fuel pump, such as the Mallory COMP FILTER® Series Part Nos. 3140 or 3500. This prevents debris from becoming wedged in the fuel pump's Gerotor and locking it.

An additional fuel filter (maximum 10 micron, such as the COMP FILTER® 160 Series Part No. 3160) must be installed between the fuel pump and the injectors. This prevents debris from clogging the injectors.

### SERVICE PARTS:

**Part No. 3167** Seal/Repair Kit, Gasoline

**Part No. 3168** Seal/Repair Kit, Alcohol/Methanol

## MOUNTING PROCEDURE

### Step 1

Mount the pump as close as possible to the fuel tank (at or below the level of the fuel tank pickup) in a well ventilated area with minimal exposure to road debris. Avoid exposing the pump and fuel lines to moving parts and hot surfaces, such as the exhaust system. **NOTE: Increasing distance between the pump and tank will decrease pump efficiency.**

### Step 2

Using the pump mounting bracket as a template, locate mounting holes on a solid member, such as the vehicle chassis. Drill clearance holes for 5/16" bolts. **NOTE: To ensure against a potential fire hazard from pump flooding, mount the pump in a vertical position with the motor on top.**

See Figure 1.

### Step 3

Connect 1/2" or larger fuel lines as shown in Figure 2. The 1/8" NPT outlet on the bottom of the pump is for an air bleed line to assist pump priming. This air bleed line is not necessary if the regulated pressure of your system is less than 10 PSI.

**NOTE: Use a thread sealant compound on the fitting threads. Don't use teflon tape because it could get into the Gerotor and lock the pump.**

### Step 4

Your system must have a Return Style Fuel Pressure Regulator near the injection system. See the General Information section on page 1 for recommendations. For maximum efficiency, mount the pressure regulator as close as possible to the injection system. See instructions packaged with the regulator. This regulator may be installed just after the fuel injection.

FIGURE 1

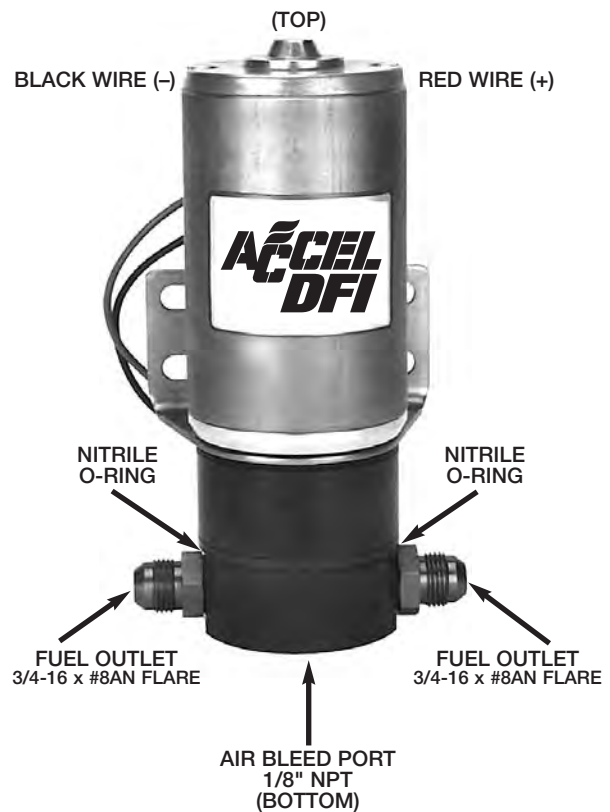
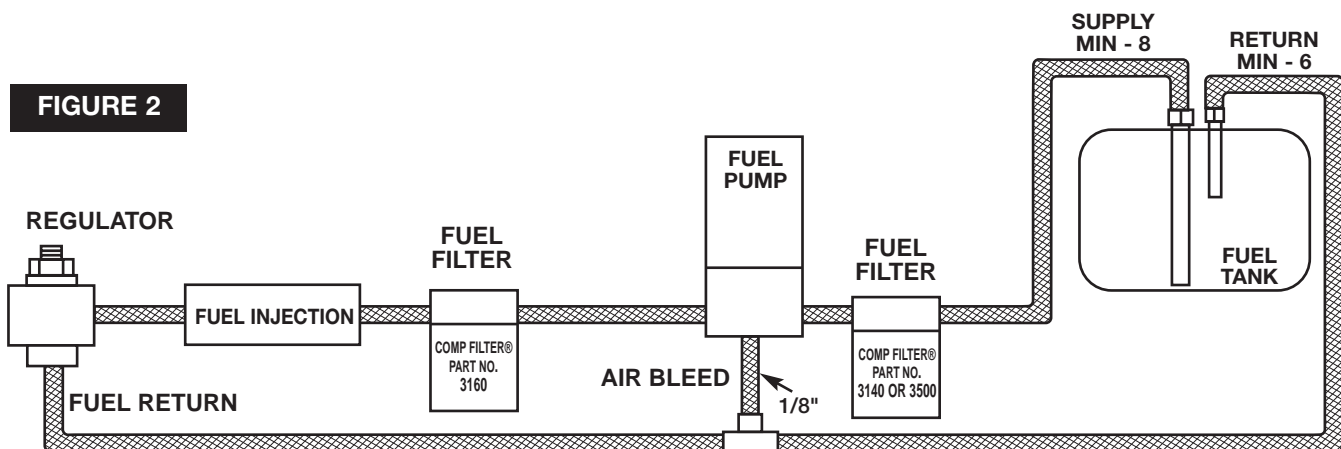


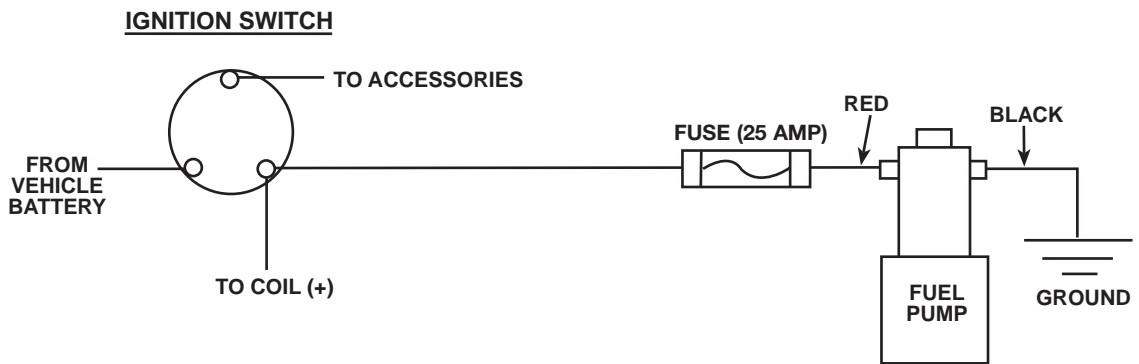
FIGURE 2



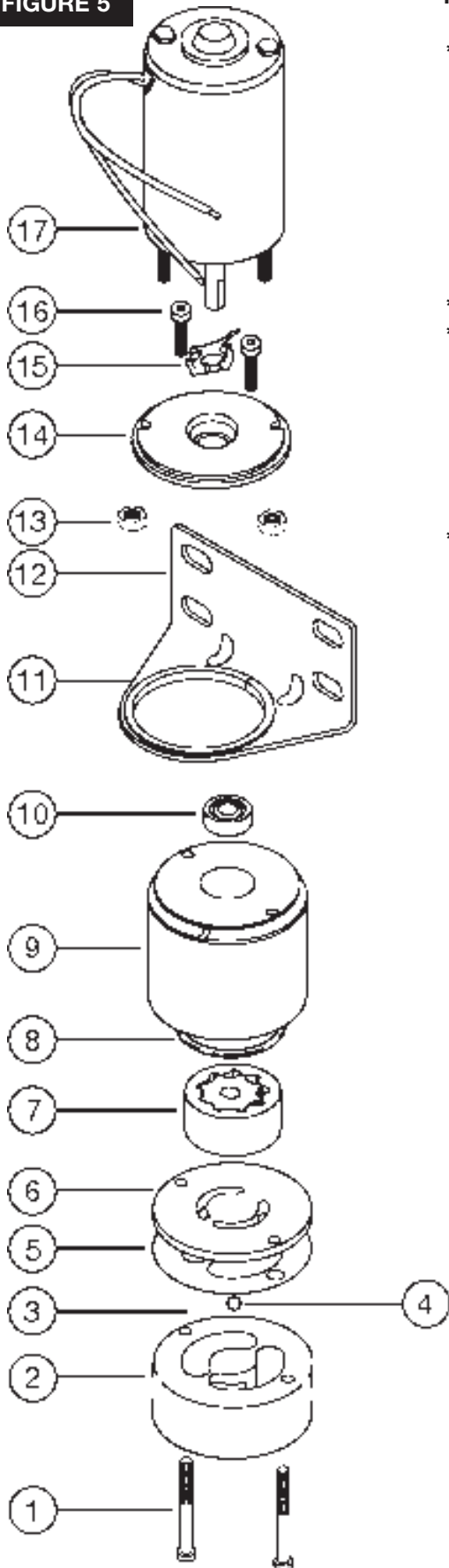
**FIGURE 3**

The pump may be wired directly to the ignition switch “ON” terminal and grounded to the frame or battery. Refer to Figure 3 when connecting the pump to the ignition switch “ON” terminal.

If using ACCEL/DFI GEN 7, connect the red/black wire to the pumps red wire (+).



**FIGURE 5**



**ITEM**

ITEM NO.	DESCRIPTION	SERVICE PARTS	
* 1.	Screw, Fuel Chamber (2)	Seal and Repair Kit	PN 3167
2.	Fuel Chamber	<i>Gasoline</i>	
3.	Spring, Air Bleed		
4.	Ball, Air Bleed	Seal and Repair Kit	PN 3168
*5.	Gasket, Fuel Chamber	<i>Alcohol</i>	
6.	Port Plate		
7.	Gerotor		
*8.	O-Ring		
9.	Pump Housing		
*10.	Seal		
*11.	Gasket, Bracket Vibration		
12.	Bracket		
13.	Nut, Motor Housing (2)		
14.	Adapter, Motor		
15.	Washer, Spring		
16.	Screw, Motor Adapter (2)		
17.	Motor		

**\*Parts included in Seal Kit**

**MAINTENANCE – PUMP DISASSEMBLY**

If your pump fails to produce adequate pressure or volume, it may require cleaning. Follow the steps below to disassemble and clean your Electric Fuel Pump. Refer to Figure 4 while performing the following steps.

**Step 1**

Remove the pump from the vehicle and clean pump exterior. Place the pump on its side on a clean work surface. Scribe or draw a line across the pump housing, port plate and fuel chamber so that you can reassemble the pump correctly.

**Step 2**

Remove the two fuel chamber screws from the bottom of the pump. Remove the fuel chamber and port plate. **NOTE: Do not drop the Gerotor from the pump cavity.**

**Step 3**

Separate the port plate from the fuel chamber. **NOTE: Do not drop the air bleed check ball and spring from the fuel chamber.**

**Step 4**

Place your hand beneath the Gerotor and hold the pump in an upright position. The Gerotor should slide out of the pump and into your hand. **NOTE: Observe the position of the Gerotor and be careful not to reverse it when you reassemble the pump.** Inspect the Gerotor housing and port plate for wear. If the Gerotor has worn through the plating, return pump for repair.

**Step 5**

Inspect the O-ring and gasket. Replace them if necessary. Reinstall the air bleed spring and check ball in the fuel chamber. Place the gasket and port plate on the fuel chamber. Install the fuel chamber assembly on the pump housing. Torque the fuel chamber screws.

**NOTE: DO NOT OPERATE THE PUMP WITHOUT FUEL (Except for brief periods while priming).**

**IMPORTANT: Turn fuel chamber screws by hand until they contact the chamber. Then torque to 24 inch/pounds**



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