350 gph P/N 12-708 / 15762NOS and 500 gph P/N 12-709 / 15766NOS FUEL PUMPS
Installation Instructions

INTRODUCTION:

Congratulations on your purchase of a Holley Fuel Pump! This instruction sheet contains all the information needed to install this fuel system. Please read all the **WARNINGS** and **NOTES**, as they contain valuable information that can save you time and money. Holley Performance Products cannot and will not be responsible for any alleged or actual engine or other damage, or other conditions resulting from misapplication of the fuel pumps described herein. However, it is our intent to provide the best possible products for our customer; products that perform properly and satisfy your expectations. Should you need information or parts assistance, please contact our Technical Service Department at 1-270-781-9741, Monday through Friday, 7 a.m. to 5 p.m. Central Time. Please have the part number of the product you purchased when you call.

WARNING! **THESE INSTRUCTIONS MUST BE READ AND FULLY UNDERSTOOD BEFORE BEGINNING INSTALLATION. FAILURE TO FOLLOW THESE INSTRUCTIONS MAY RESULT IN POOR PERFORMANCE, VEHICLE DAMAGE, PERSONAL INJURY, OR DEATH. IF THESE INSTRUCTIONS ARE NOT FULLY UNDERSTOOD, INSTALLATION SHOULD NOT BE ATTEMPTED. PLEASE CONSULT HOLLEY TECH SERVICE OR A QUALIFIED MECHANIC.**

NOTE: A fuel pressure regulator, high-flow inline fuel filter at 70 micron or less, fuel hose and clamps, 12, 14 and 16 gauge wire, fuel fittings, assorted terminals, and an optional safety shut-off switch is required to complete the installation of the fuel pump.

WARNING! **These high flow fuel pumps are intended for race only applications and not for continuous running on the street. Use on street-driven vehicles is strictly prohibited.**

PUMP MOUNTING:

The best location for mounting any electric fuel pump is the rear of the vehicle, near the fuel cell and in a position that will allow the fuel to be gravity fed to the pump. The pump should be mounted on a solid member, such as the chassis, in a vertical position with the pump motor on top. The fuel pump inlet should be level or below the fuel pickup, if at all possible. Avoid exposure of the pump and fuel lines to moving parts and to any hot areas, such as the exhaust manifold.

WARNING! **The pump should never be mounted in the driver's compartment or near any hot engine components.**

WARNING! **The pump must be located, so that interference between the vehicle's body and its chassis movement is avoided. The pump and its connecting hoses must not be subjected to low ground clearance where any debris can cause damage. Failure to avoid these hazards will lead to pump damage, which could result in fire, property damage, serious injury, and/or death.**

NOTE: Avoid unnecessary restrictions, such as sharp bends and undersized fuel fittings and hoses. Avoid routing fuel lines in areas that would cause chafing. All fuel line connections must be leak proof.

FUEL LINE INSTALLATION:

Inlet:
A single #12 or equivalent fuel line is required to feed the fuel pump. The inlet fitting size is 10AN on the 350 gph and 12AN on the 500 gph fuel pump. An inline fuel filter must be installed before the pump. The filter will prolong the life of the fuel pump. Holley has a high-flow inline fuel filter, P/N 162-517. See Figures 1 and 2 for typical fuel system installations.

Outlet:
The outlet side of the pump will go to the regulator and must be a single #10 fuel line with the 500 gph pump and a single #8 fuel line with the 350 gph pump. The outlet fitting size is 8AN on the 350 gph pump and 10AN on the 500 gph pump. See Figures 1 and 2 for typical fuel system installations.

Bypass/Return Line:
A #8 or 1/2" return line must be installed between the bypass valve and the fuel cell. The return fitting on the fuel pump is 8AN. To prevent aeration of the fuel, ensure the return line inside the fuel cell expels the returned fuel into the liquid and not into the air space of the fuel cell. Install fuel cell foam to prevent fuel slosh.

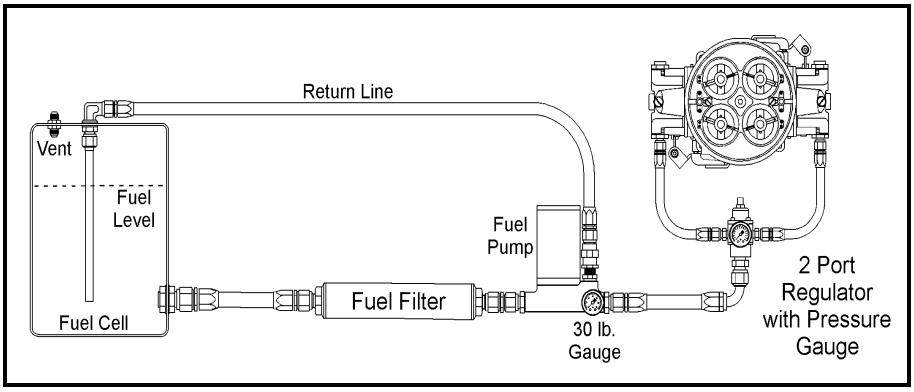

Figure 1

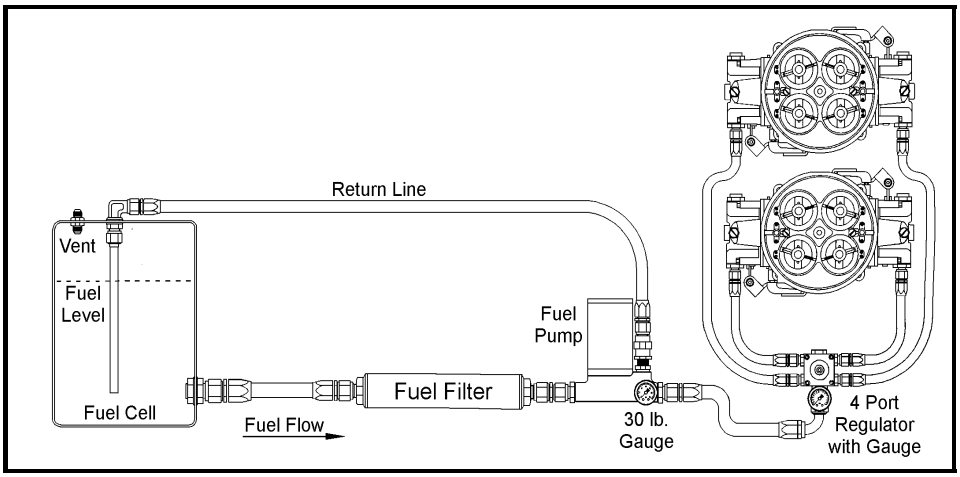

Figure 2

WIRING:

<u>WARNING!</u> Disconnect the positive terminal from the battery before making any electrical connections. Failure to do so may result in a spark, which could cause a fire or explosion resulting in serious injury, property damage, and/or death.

<u>WARNING!</u> All circuits should be fused. Failure to fuse the circuits could create a fire or explosion hazard should the pump ever malfunction.

The 350 gph and 500 gph pumps are designed to work with 12 volt or 16 volt systems. Connect the black pump wire (-) to the vehicle ground. Connect the remaining wire (+) to a switched 12V or 16V source. Installing a relay will ensure a lower draw from the battery and will give the best performance. Use Holley P/N 534-26. Use 12 gauge wire between the battery to relay connection, the relay to fuel pump connection and for the grounding wires. Use 16 or 14 gauge wire for the switch to activate the relay. Try to keep the wire runs as short as possible. See Figure 3 for a basic wiring diagram.

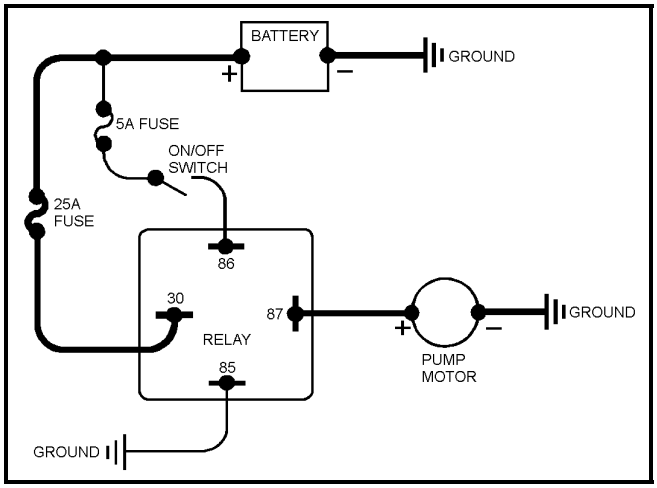

Figure 3

FUEL PRESSURE ADJUSTMENT:

Turn the switch on to activate the pump. If the pump does not pickup fuel with in 30 seconds, it will be required to prime the pump. DO NOT operate the pump dry for extended periods of time. The bypass valve on the fuel pump controls the pressure to the regulator. To adjust the pressure, loosen the lock nut on the bypass valve and turn the barrel clockwise to increase the pressure or counter-clockwise to decrease the pressure. After adjusting the pressure, make sure to tighten the lock nut and check for leaks. Pressure can be checked at the pump by installing a fuel pressure gauge into the 1/8" NPT tapped hole in the pump body. A good pressure to start with is around 12 to 18 psi.

WARNING! The pressure adjustment barrel on the fuel pump can only be turned out 4 1/2 turns from the seated position. Turning the barrel out any further will result in fuel leakage.

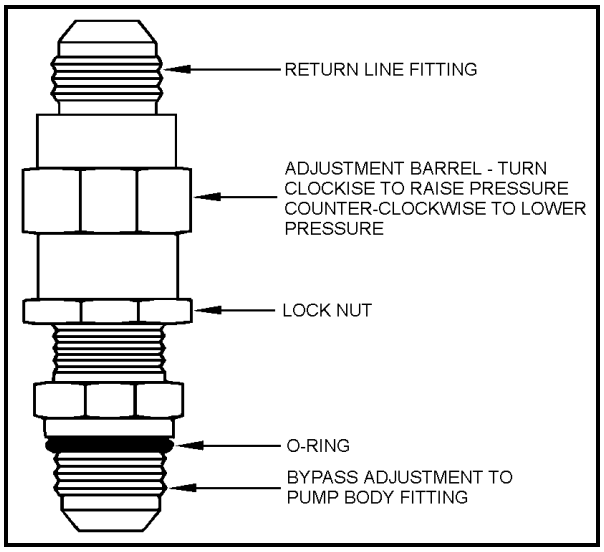

Figure 4

FUEL SYSTEM CALIBRATION:

Anytime the fuel pressure is changed, it will require the float levels on your carburetor to be reset to give best performance. Also these high volume pumps will be providing more fuel to your carburetors, which may require a change in your jetting. Try re-jetting the carburetor one size richer or one size leaner, until the car shows a performance change. Proceed in the direction which shows the most improvement, until the performance starts to fall off, then return to the jet size giving you the best ET and MPH.

MAINTENANCE AND STORAGE INSTRUCTIONS:

1. Check the fuel pressure to the regulator and between the regulator and carburetor before and after each racing event to ensure the pump is working properly.

2. Replace the inline filter at the end of each race season or if you suspect the fuel system has been contaminated. Continue replacing filters until the contamination has been removed.

Holley
Performance Products Inc

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