

HOLLEY ELECTRIC FUEL PUMP, REGULATOR AND OIL SWITCH INSTALLATION INSTRUCTIONS

GENERAL INFORMATION

The Holley electric fuel pump is available in two versions: a low pressure model and a high pressure model. The low pressure pump meets the flow requirements of most passenger vehicles. The high pressure model is used mainly for high performance applications and must be used with the provided fuel pressure regulator.

PUMP MOUNTING LOCATION

The best location for mounting the electric fuel pump is in the rear of vehicle, near the fuel tank and in a position where it is gravity fed. It should not be mounted in a closed area such as the vehicle's trunk. It should be mounted on a solid member, such as the chassis, in a vertical position with the motor on top.

Avoid exposure of pump and line to moving parts and to any hot areas such as the exhaust manifold.

WARNING: The pump must be located so that it is clear throughout the entire range of movement between the vehicle's body and its chassis. The pump and its connecting hoses must not be subjected to low ground clearance where any flying rocks or road debris can cause damage.

To insure pump life and flow efficiency, a fuel filter such as Holley 162-512 must be installed between the fuel tank and the pump.

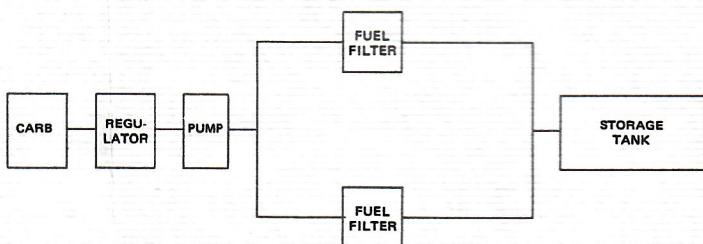
INSTALLATION INSTRUCTIONS

MOUNTING:

- (1) Select mounting site as close as possible to fuel supply and away from possible sources of heat as detailed previously.
- (2) Use mounting bracket (supplied) as template and drill two clearance holes for a 5/16" bolt.
- (3) Place rubber gasket (supplied) between mounting bracket and motor housing and mount the pump in the vertical position (motor on top) using two 5/16" bolts.
- (4) Connect fuel line from the tank to the fuel filter and from the filter to the inlet port of the pump. Connect the carburetor delivery line to the outlet port. Use the same size flexible hose as original equipment. Avoid unnecessary restrictions in fittings and hose due to sharp bends and undersize I.D. Avoid routing fuel lines in areas that would cause chafing. All fuel line connections must be leakproof.

CAUTION: Do not overtighten fittings in fuel pump. Overtightening can cause base to crack.

NOTE: For Performance vehicles 3/8 I.D. hose is recommended. Two filters mounted in parallel should be used. See Diagram #1.



HI-PERFORMANCE FILTER SYSTEM DIAGRAM #1

- (5) IF THE MECHANICAL PUMP IS NOT TO BE USED OR REMOVED, disconnect the fuel lines from the pump and securely plug the inlet and discharge ports with plugs to deactivate the pump.

Connect the original suction line to the outlet line, by-passing the pump from the circuit.

IF THE MECHANICAL PUMP IS REMOVED, seal the opening with a suitable metal cover and gasket.

- (6) IF THE PUMP IS THE HIGH PRESSURE MODEL, A PRESSURE REGULATOR MUST BE INSTALLED IN THE LINE BETWEEN THE PUMP AND THE CARBURETOR. Using the bracket supplied with the regulator, position the regulator as close to the carburetor as possible, taking care to minimize the exposure to heat sources. DO NOT mount the regulator on the exhaust manifold or any extremely hot surface.

The regulator is provided with two discharge ports (out). In dual carb installations one port can feed each carburetor. With single carbs plug one port and feed carburetor from other. Either may be used, installation should determine choice.

The regulator is pre-set to 6 p.s.i. However, for individual requirements, it may be readjusted. The pressure is increased by loosening the regulator locknut and turning adjustment screw clock-wise.

TURNING THE ADJUSTMENT SCREW ALL THE WAY IN WILL RESULT IN EXCESSIVE PRESSURE AND CAUSE CARBURETOR FLOODING. Always use a gauge between regulator and carburetor(s) when resetting the regulator.

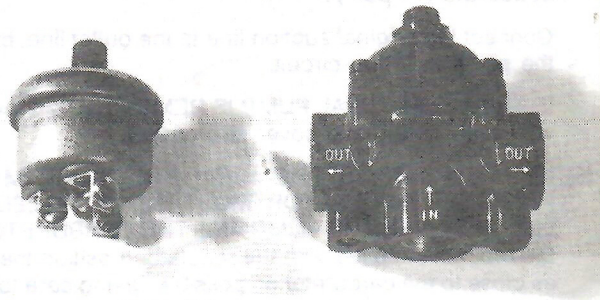
If the pressure switch is to be used, follow installation instructions as outlined below (refer to Diagram 2).

- (1) Disconnect ground cable from battery.
 - (2) Remove original equipment oil pressure switch and retain.
 - (3) Screw a 1/8" pipe nipple into the hose from which the pressure switch was removed. Use any suitable thread sealant on all fittings, taking care to avoid an excess which might contaminate the engine.
 - (4) Screw a 1/8" pipe tee onto the nipple and position it in a manner to facilitate the installation of the original oil pressure switch and the new fuel pump pressure switch in the remaining two holes.
 - (5) Screw in the two switches and reconnect the lead to the original equipment oil pressure switch.
- NOTE:** the pump oil pressure switch will normally have three terminals marked: C(common), NC(normally closed), and NO(Normally open).
- (6) Connect the fuel pump (Orange lead) to the terminal marked "C". In this line, add an in-line fuse holder and a 7.5 amp fuse.
 - (7) Connect the terminal marked "NO" on the ON terminal of ignition switch.
 - (8) Connect the terminal marked "NC" to the starter motor circuit.
 - (9) To complete the installation, connect the ground cable to the battery.

USE A MINIMUM OF 14 GAUGE WIRE. BE SURE TO CRIMP SECURELY ALL ELECTRICAL CONNECTORS AND CLEAN ANY AREA WHERE GROUND LEADS WILL BE FASTENED.

WIRING

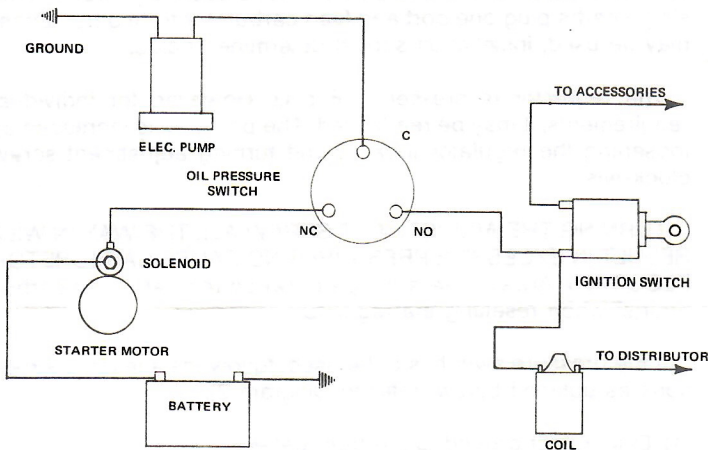
One method is to wire the pump to a switched 12-volt source (providing power only when engine is running) located at the vehicle's electric panel. To assure this condition, the installation of a Holley 12-810 oil pressure switch is recommended for installation into the wiring circuit. This will assure that the pump will not continue to operate when the engine is not running (stalled condition) and the key is switched "on." See Fig. 1.



OIL PRESSURE SWITCH
Part No. 12-810

FUEL PRESSURE REGULATOR
FOR HIGH PERFORMANCE PUMP

Fig. 1



TYPICAL WIRING DIAGRAM #2

MAINTENANCE & CLEANING INSTRUCTIONS FOR ELECTRIC FUEL PUMP

Due to the current poor quality gasoline now available, it is recommended that periodically a can of dry gas is to be used to absorb the water out of the fuel delivery system. The fuel filter element should be blown clean with compressed air every 6,000 miles and replaced every 12,000 miles to assure maximum protection.

If your fuel pump fails to pump or fails to maintain adequate pressure, check the following:

- Check the voltage at the pump to assure 12 volt supply.
- Check the fuel line (especially the fuel filter) for any obstruction. Use compressed air to blow line free.

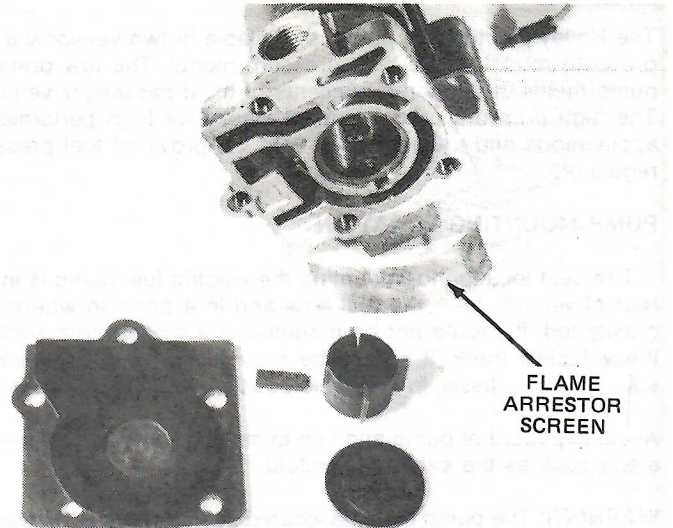
If this doesn't solve the problem, turn pump on and listen for hum from the top of the pump. If there is no hum, pump electrical system should be checked by a competent repairman. If the pump hums, it probably only needs cleaning.

CLEANING THE PUMP:

The following is a step by step procedure for cleaning the Holley electric fuel pump. Do all disassembling on a clean bench. Read all instructions thoroughly and completely before starting.

- Remove pump from car.

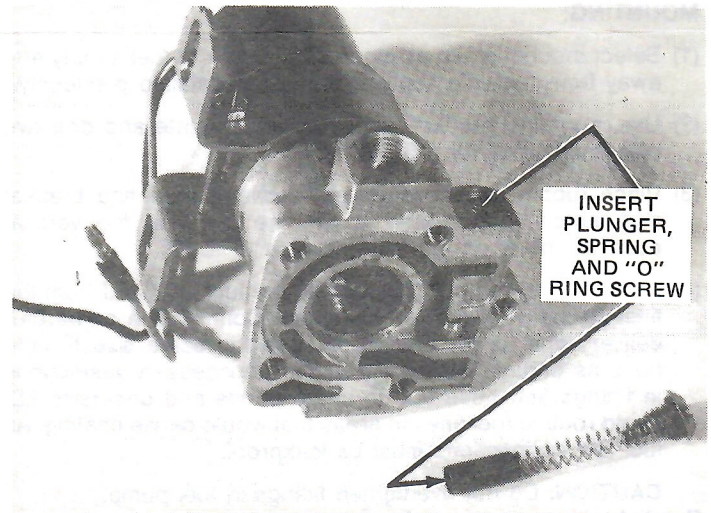
- Remove 5 screws from bottom of pump.
- Holding pump in position, remove bottom plate. Remove upper plate gasket and rotor stop plate. Note position of rotor, rotor vanes, flame arrestor (screen) and relief valve arrangement for re-installation.



FLAME
ARRESTOR
SCREEN

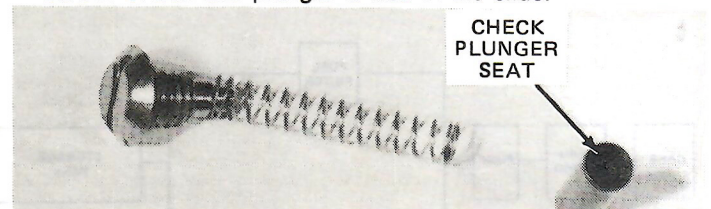
Remove flame arrestor (note the position of screen). Remove rotor vanes and rotor by inverting pump. Lay all pieces on a flat clean surface.

- Remove pressure relief screw. Screw is spring loaded. Remove spring and relief plunger.
- Clean base housing with any good quality carburetor cleaner (spray type only). **CAUTION:** Do *not* immerse entire unit in any liquid. Immersion could damage the electrical circuitry. Blow entire base dry with compressed air. Clean any loose teflon tape, etc. from inlet and outlet.



INSERT
PLUNGER,
SPRING
AND "O"
RING SCREW

- If relief plunger is rusty, clean up with emery paper. Plunger must slide freely in base. Check plunger seat for any particles embedded in it. Re-assemble plunger, spring, and "O" ringed screw. Check that plunger is free in the slide.



CHECK
PLUNGER
SEAT

- Clean up rotor vanes with emery paper. Vanes must slide freely in rotor slot. Check that vanes move freely. Replace rotor stop plate. Install flame arrestor making sure screen is behind the screen stop. Replace upper plate gasket and upper plate. Fasten with five screws.
- Replace pump in car.