



# **HP and Ultra HP Billet Mechanical Fuel Pump**

## **HP Billet Mechanical Pumps**

**P/N 12-327-25 Small Block Chevy 170 GPH**

**P/N 12-454-25 Big Block Chevy 170 GPH**

**P/N 12-289-25 Small Block Ford 170 GPH**

## **Ultra HP Gasoline Billet Mechanical Pumps (regulator required)**

**P/N 12-327-30 Small Block Chevy 200 GPH**

**P/N 12-454-30 Big Block Chevy 200 GPH**

**P/N 12-289-30 Small Block Ford 200 GPH**

**P/N 12-454-40 Big Block Chevy Marine 200 GPH**

## **Ultra HP Gas/Alcohol Billet Mechanical Pumps (regulator required)**

**P/N 12-327-35 Small Block Chevy 225 GPH**

**P/N 12-454-35 Big Block Chevy 225 GPH**

**P/N 12-289-35 Small Block Ford 225 GPH**

# **INSTALLATION, TUNING, AND ADJUSTMENT MANUAL**

**199R10418-1**

**NOTE:** These instructions must be read and fully understood before beginning installation. If this manual is not fully understood, installation should not be attempted. Failure to follow these instructions, including the pictures may result in subsequent system failure.

# INTRODUCTION:

**CONGRATULATIONS** on your Holley Fuel Pump purchase! We feel that you have purchased the finest performance Fuel Pump manufactured today. 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. CST. Please have the part number of the product you purchased on hand when you call.

**To preserve the warranty, these instructions must be read and followed thoroughly before and during installation.**

Holley Performance Products highly recommends the utilization of -8AN inlet and outlet fuel lines for the HP series and -10 inlet and -8 outlets for the -30 and -35 series pumps along with a high quality 85-100 micron fuel filter between the tank and fuel pump and a 40 micron fuel filter after the fuel pump.

**WARNING!** Failure to follow these recommendations may result in fuel leakage, poor vehicle performance, and decreased fuel pump life.

**NOTE:** The -30 and -40 fuel pumps have a preset shutoff pressure of 10-11 PSI while the -35 fuel pumps have a preset shutoff pressure of 15.5-17 PSI and will require the use of a fuel pressure regulator such as Holley part #12-704. The Holley 12-704 regulator has a .437" diameter seat that will not limit the flow of the pump. Using a regulator with a smaller than .400" diameter seat, will severely limit the flow of the pump. If a regulator is not used, potential flooding of the carburetor could result.

# REMOVAL:

**WARNING:** The fuel system may be under pressure. Do not remove any fuel lines until any pressure has been relieved. Refer to your vehicle service manual for procedures to relieve the fuel system.

1. Make sure the engine is cool, disconnect the negative battery cable then relieve any fuel pressure.
2. Disconnect the inlet and outlet fuel lines

**WARNING:** Carefully protect the open end of the fuel lines, so that no foreign particles can enter. Wrap the end of the fuel line with a clean lint-free cloth.

3. Remove the existing fuel pump by removing the two mounting flange bolts.
4. Carefully clean the fuel pump mounting surface making sure to not get any debris into the engine.



12-327-25

# INSTALLATION:

Your new Holley HP and Ultra HP fuel pumps inlet and outlet ports can be oriented in 30° increments in relation to the mounting flange.

**NOTE:** The inlet and outlet ports will not rotate separately from each other. They can only be rotated together in relation to the pump mounting flange.

1. To orient the inlet and outlet, you must remove the six 10-32 bell-to-valve body mounting screws.

**WARNING!** Use caution as the housing is under pressure from the diaphragm spring.

2. Rotate the valve body to the desired position. Apply a small amount of blue Loctite to the six 10-32 mounting screws. Reattach the valve body to the bell using the six 10-32 mounting screws and torque to 50-60 in./lbs., making sure the diaphragm is lined up correctly with the bolt holes.

**WARNING!** Be careful to not over tighten the six screws.



3. Install the fuel pump to the block using the supplied gasket and bolts by reversing the removal procedure, as outlined above in step 3.

**NOTE:** Holley does not recommend the use of RTV sealant on the gasket.

**WARNING:** During the fuel line installation, DO NOT allow any foreign particles to enter the fuel lines. This could then cause flooding and may result in a fire.

4. Reconnect the inlet and outlet fuel lines.
5. Start engine and check the fuel lines and fittings for possible leaks.
6. Test drive vehicle to ensure proper fuel pump operation, and then recheck for fuel leaks.

## Maintenance Schedule (Ultra HP pumps):

Your new Ultra HP fuel pumps are intended for off-road race use only and require being rebuilt based on the schedule below or pump failure can occur.

### Ultra HP Pumps

- Replace the diaphragm assembly every 750 to 1000 hours for the -30 or -40 and every 50 hours for the -35.
- Replace all gaskets with kit part number 12-757 during every rebuild.
- Inspect the fuel pump lever arm for excess wear. Replace if necessary.
- Inspect valves in valve body for damage to the rubber diaphragms. Replace if necessary

# SERVICE REPLACEMENT PARTS:

NOTE: HP FUEL PUMPS ARE NOT REBUILDABLE. ALL PARTS BELOW ARE FOR ULTRA HP PUMPS ONLY.

## Kit type and Contents:

## Part Number:

### Hardware Kit (Stainless Steel)

12-760

- 4 Socket head cap screw (8-32 x 3/8")
- 6 Socket head cap screw (10-32 x 5/8")
- 2 Socket head cap screw (1/4"-20 x 1")
- 1 Set screw (5/16"-24 x 1/4")
- 1 Set screw (8-32 x 1/8")

### Arm Replacement Kit

12-763 for SBC

- 1 Fuel pump lever arm
- 1 Spring (fuel pump lever arm return)
- 1 Fulcrum pin

12-764 for BBC

12-765 for SBF

### Valve Body Replacement Kit

12-762

- 1 New Valve Body

### Diaphragm Assembly (Low Pressure) -30 and -40 pumps

12-755

- 1 Low pressure diaphragm assembly

### Diaphragm Assembly (High Pressure) -35 pumps

12-756

- 1 High pressure diaphragm assembly

### Gasket Replacement Kit

12-757

- 1 Valve body to bottom gasket
- 1 Rubber pulsator
- 1 Engine mounting gasket
- 1 Sintered bronze breather vent
- 1 Brass hose barb

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**For online help, please refer to our website: [www.holley.com](http://www.holley.com)**