



# Ultra HP Billet Mechanical Fuel Pump Rebuild Instructions

**Hardware Kit (Stainless Steel);** P/N 12-760 All UHP Pumps  
**Arm Replacement Kit;** P/N 12-763 for SBC, P/N 12-764 for BBC, P/N 12-765 for SBF  
**Valve Body Replacement Kit;** P/N 12-762 All UHP Pumps  
**Diaphragm Assembly;** P/N 12-755 (Low Pressure -30 and -40 Pumps), P/N 12-756  
(High Pressure -35 Pumps)  
**Gasket Replacement Kit;** P/N 12-757 All UHP Pumps

## REBUILD INSTRUCTIONS

**199R10478**

**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 Rebuild Kit purchase! We feel that you have purchased the finest performance Rebuild parts 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.**

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

## 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.

## REBUILDING:

The following instructions take you thru the rebuilding the entire pump. All or some of this may be needed dependant upon the parts you are replacing.

**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. Remove the valve body assembly from the bell (top) by removing the six 10-32 mounting screws. Use caution as the valve body will be under pressure due to the diaphragm spring.
2. Remove the two allen bolts in the center of the valve body to remove the bottom (inlet) (Fig 1)

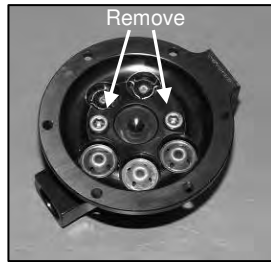


Fig 1

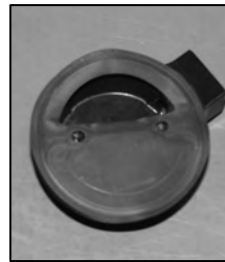


Fig 2

**NOTE: During reassembly, the opening on the valve body to bottom gasket must match the opening on the inlet. Installing this gasket incorrectly can result in no incoming fuel to the pump (Fig 2)**

3. To remove the diaphragm and pump arm, compress the diaphragm with a 6" soft jaw quick clamp (Fig 3)
4. Remove the fuel pump arm pivot 5/64 allen screw (Figure 4)
5. Remove the fuel pump arm pivot 5/32 allen screw (Figure 5)
6. Push out the fuel pump arm pivot pin. Note that the diaphragm assembly must be compressed with the soft jaw clamp before removing or installing the pin.



Fig 3

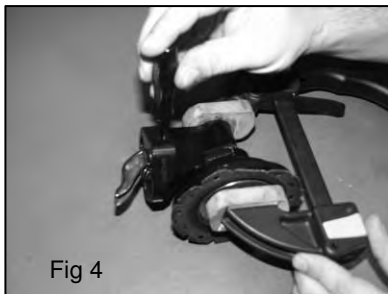


Fig 4

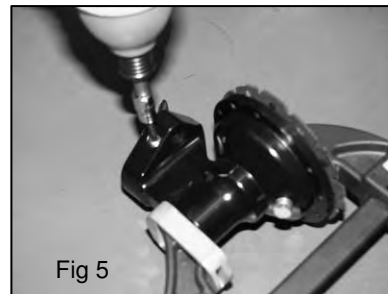


Fig 5

7. Slide the fuel pump arm away from the housing and the diaphragm assy can now be removed from the bell housing.
8. Replace the diaphragm assembly every 750 to 1000 hours for the -30 or -40 pumps and every 50 hours for the -35 pumps.
9. Replace all gaskets during rebuild.
10. Inspect the fuel pump lever arm for excess wear. Replace if necessary.
11. Inspect valves in valve body for damage to the rubber diaphragms. Replace if necessary
12. Re-assemble the pump by reversing steps 1 thru 7.

**NOTE: Applying grease to the diaphragm assembly tower. This is for break in service (Fig 6). Make sure to apply blue lock-tite to all of the bolts to prevent any bolts backing out.**

13. Reinstall pump on the engine.
14. Reconnect the inlet and outlet fuel lines.
15. Start engine and check the fuel lines and fittings for possible leaks.
16. Test drive vehicle to ensure proper fuel pump operation, and then recheck for fuel



Fig 6