

## **ProTuner Intank Series**

## MP-4313, 4314 & 4315 Installation Instructions

## **Universal Cut to Length Filter Pickup Assembly**

The accompanying *MagnaFuel* fuel pump is designed for vehicles <u>NOT</u> subject to emission controls.

We recommend installation be carried out by a professional installer. Installation of this product requires handling gasoline. Ensure you are working in a well-ventilated area with an approved fire extinguisher on hand. Prohibit smoking, extinguish all open flames and eliminate all sources of ignition in the area around the vehicle before proceeding with installation. Always wear safety eyewear and other safety apparel when installing this product to protect you from spraying fuel and debris.

The ProTuner Series fuel pump is a continuous run pump and can be used for street driving. ProTuner Series fuel pumps are compatible with all racing gasolines, Pump gas and E85. ProTuner Series pumps **should not be used with Methanol**.

ProTuner Series pumps utilize ORB ports **NOT PIPE THREADS**. No thread sealant is required. You must install ORB fittings with O-rings to seal the fuel pump. We recommend *MagnaFuel* flow radius ORB fittings. Pump outlet is -8 ORB ports.

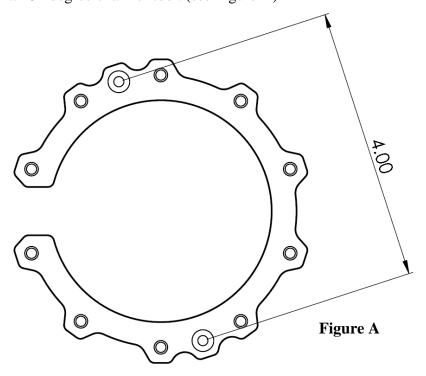
## Kit includes:

- 1 x ProTuner Fuel Pump
- 1 x MP-FL450300 74 Micron Filter Sock
- 1 x MP-3042-KT Adjustable Pickup Assembly
- 1 x Pump Retainer Ring
- 1 x Pump Rubber Gasket
- 10 x Pump Mount Screws
- 10 x Teflon Washers
- 2 x Retainer Ring Mount Screws

This pump assembly is designed to work in tanks with a depth ranging from 9 ½" to 15" allowing for .125" between filter sock bottom and tank bottom. We recommend the filter sock bottom to be no further than .250" from tank bottom. Placing the filter sock in a baffle box arrangement is best for pump performance. Care needs to be taken to make sure return fuel is kept as far away as possible from the filter sock. This helps prevent fuel pump cavitation.

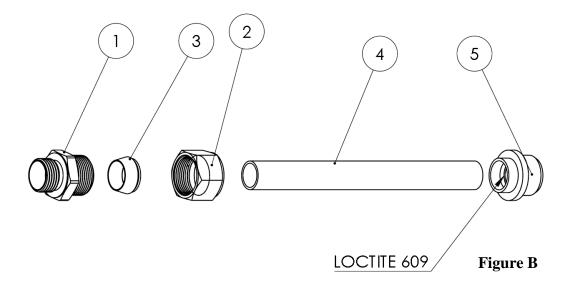
The following steps are typical for most installations.

- 1. Find a spot on top of the tank, preferably towards the rear of the tank that has a 4.5" diameter flat spot to mount the fuel pump. Mark the center. This will be the center of the fuel pump.
- 2. At the marked center, use a 3.5" hole saw and cut out the pump mounting hole. Install the fuel pump into the hole. Use a transfer punch to mark the 10 mounting screw holes. Remove the pump and drill the 10 holes with a #2 or .221" drill bit.
- 3. Drill two more holes 180 degrees apart for the fuel pump retaining ring. Chamfer the holes with an 82-degree chamfer tool. (see Figure A)



- 4. Install the *MagnaFuel* supplied retaining ring inside the tank and secure with 2 countersink screws supplied. Use of thread sealant on screws will prevent leaks.
- 5. Measure the tank depth. Subtract .125" from that number for filter sock clearance to the tank bottom. The filter sock should be .125" from the tank bottom no more than .250". Now cut the supplied length of tubing to achieve the proper overall pump/filter length required for your tank depth.

6. Assemble the pickup tube as seen in Figure B (MP-3042-KT). Deburr the tube inside and slightly chamfer the outside. The tube should press into the extended tank filter adapter (MP-3042-05) along with a couple drops of Loctite. Make sure to fully seat the tube into the pickup pump adapter (MP-3042) before final tightening. Finally, slide the MP-FL450300 Filter Sock onto the fitting. It will bottom out against the fitting step.



7. Now install the pump with gasket into the tank. Align the mounting holes in the pump with those in the retaining ring. Take the supplied screws and Teflon washers and tighten them down. Do not overtighten to avoid damage to the washers.

The ProTuner Series pump should be wired using 10–12-gauge wire. #10 ring tongues are suggested to attach wires to the pump. Relays are recommended, but not required. ProTuner Series pumps require 25–30-amp fuses in addition to the relay.

*MagnaFuel* recommends, for applications over 1000HP use of -10 outlet hose. *MagnaFuel* recommends part #MP-3016 -10an x -8 straight fitting. It is machined so that the ID of the fitting is equal to the ID of the -10 hose. So there is no restriction. Fuel tank venting has to be -8 or  $\frac{1}{2}$ " or larger for ProTuner Series pumps.

The ProTuner Series pumps **<u>DO NOT</u>** bypass internally and must be accompanied by a return style fuel pressure regulator. *MagnaFuel* has a full line of bypass style fuel regulators for EFI and Carb applications. Call for more info.

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