

**BEAN MACHINE**

## Fuel Sump Installation Instructions

### What is included in the sump kit:

Sump with O-ring  
Mounting Bolt with sealing washer  
3" Hole Saw for Installation  
1 - 8 ORB Plug  
2 - 8 ORB to 1/2 Barb/Quick Disconnect Fitting  
Crescent Shaped Mounting Piece  
1/4" NPT Stainless Steel Drain Plug Fitting

### Tools needed for install:

Electric Drill  
7/32 Allen Socket  
7/8 Wrench  
Torque Wrench (ft-lbs)  
Bucket to Drain Fuel Tank

- The first part of installation is to find a nice clean, flat spot on the bottom of your fuel tank where the sump will mount. For most applications, **we mount them directly underneath the stock fuel pickup assembly**. Please make sure that there are no ridges, letters, or anything that would cause the O-ring not to seal to the tank. **If you choose to mount directly under the pickup assembly it might be necessary to drill a hole through the bottom of the basket for the center bolt of the sump to protrude through so the sump bolt doesn't push up on the basket of the stock fuel pickup assembly. BE CAREFUL NOT TO DRILL INTO ANY TANK LEVEL FLOATS!**
- Next clean the surface of the fuel tank where the sump will be mounted. The total area that needs to be flat is a 4" circle minimum.
- Install the included 3" hole saw onto an electric drill and drill a hole in the bottom of the tank with the pilot bit of the hole saw for the fuel to drain. It is best to try and have as low as a fuel level possible before install. Having a lot of fuel in your tank will need lots of containers to catch the fuel and will make drainage extremely time consuming.
- Once all of the fuel is drained from the tank, position the pilot bit of the hole saw into the same hole you drilled in the step above and drill a 3" hole with the included hole saw.
- Clean out the inside of the tank to remove any plastic shavings that may have been introduced into the tank when you cut the 3" hole. You may even pour a gallon of fuel back into the tank and let it drain from the 3" hole to help clear any contaminants.
- Slide the crescent shaped piece of the sump into the tank via the 3" hole you just made. This can be done without removing the tank.
- Once the crescent shaped piece is in position, install the mounting bolt through the sump and thread the bolt into the crescent shaped piece that you installed in the steps above. Remember to have the O-ring positioned in the groove of the sump to ensure no leaks. (The crescent shaped piece can sit in any direction, but for best results, install the open part of the crescent over the sediment bowl/pocket.)
- Recommended Torque of the mounting bolt is 22 ft-lbs. If the sump is installed on a smooth, flat surface, this is plenty of torque. If the tank is scratched or has other issues that the O-ring has trouble conforming to, more torque might be necessary. **If there happens to be a leak at the O-ring the bolt can be tightened more, just use common sense, the bolt won't break but the allen head may strip out.** If the crescent shaped piece spins, remove the drain plug and place a screwdriver into the drain hole far enough to stop the crescent shaped piece from moving while you tighten the mounting bolt. Then replace the drain plug. Pulling down on the sump as you tighten the bolt will help aid in keeping the inner ring from spinning also.
- The 2 supplied barb/quick disconnect fittings can either be used as push-loc fittings (just push hose onto fitting) or quick disconnect fittings.
- Install one O-ring on each fitting. Lubricate the O-ring so as to not damage it when sliding it on to the fitting.
- **Coat fittings with a light coat of lubricant (before installing)** and torque to 25 ft-lbs. Or, hand-tighten and then tighten about 1/2 turn with a wrench. Since the fittings are aluminum and being installed into aluminum, this can cause galling, or slight welding together, this is why they should be lubricated with grease or anti-seize.
- Connect the supply line, or suction side of your pump, to the supplied dual purpose fitting protruding from the right side of the sump (bean shaped pocket). Connect your return line to the supplied dual purpose fitting on the left side of the sump (smaller, round hole inside sump). If your supply line is not 1/2" you will need to purchase the proper fitting for your system. We offer fittings on our website. Included is a plug to block the return hole, if you do not wish to use our return option.
- If you have disconnected a factory fuel line on top of your tank or at your engine, you will need to block it off. We offer plugs on our website.
- Refill your tank with fuel and inspect the sump and fuel line for any leaks.

We also have a full installation video on our website and our YouTube page that you can review as a visual aid. The video link is: <http://www.youtube.com/watch?v=RfFM51j5rJU&feature=youtu.be>