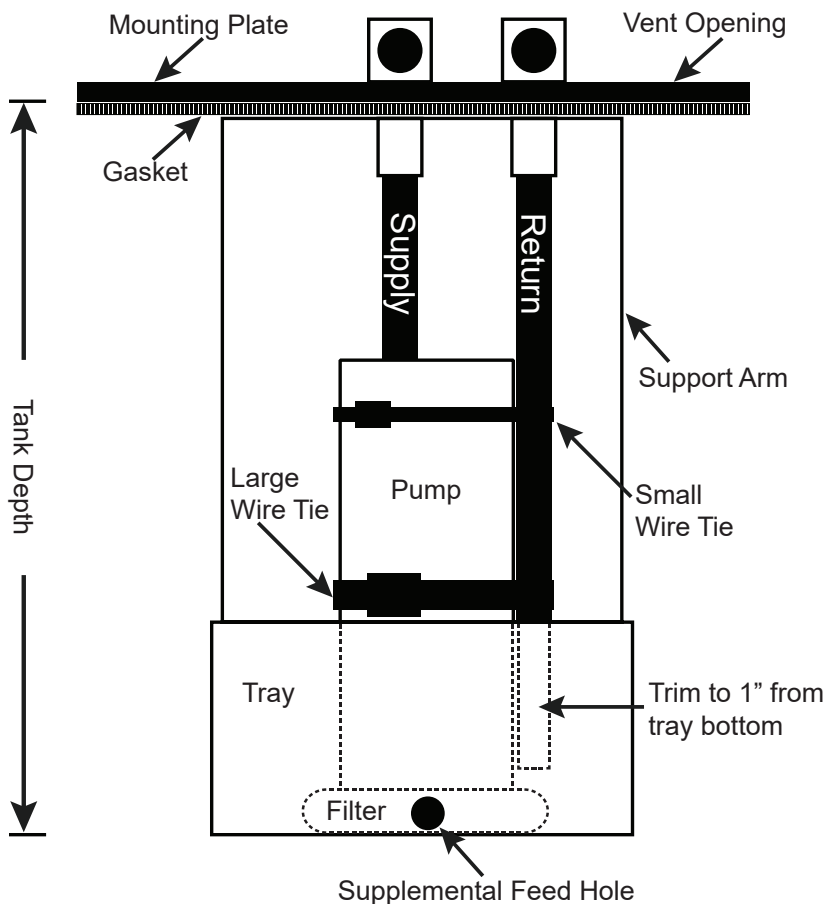
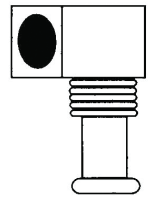


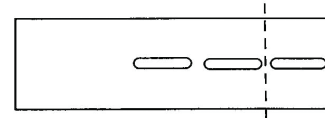


PA Series Pump Instructions

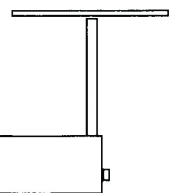
1. Install pipe tape on the threads of the two 90 degree elbows with hose barbs. Add a small dab of fuel-resistant gasket cement to act as a lubricant and screw into the mounting plate. **CAUTION!** Determine the desired position of the fittings ahead of time as these are tapered threads and you may not get another turn to line them up.



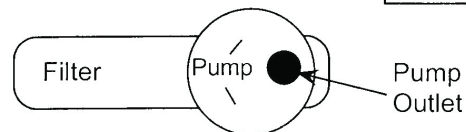
2. Measure the depth of your tank and trim the support arm to the required length.



3. Attach the support arm to the reservoir tray using the stainless steel #10-32 nut/washer-bolt provided.

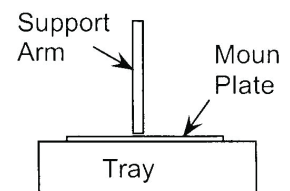


4. Install the foam sleeve and the filter on your fuel pump. Note that the pump outlet is towards the rear and the fuel filter faces forward in the tray.



5. Set the pump/filter in the reservoir tray with the filter resting on the bottom of the tray and the pump outlet directly under the center barbed fitting. Carefully measure the length of the required "Supply" hose. Also, measure the length needed for the "Return" line. It should end 1 inch above the bottom of the tray.

6. Remove the tray from the support arm and set it on your worktable. Turn it upside down and place it across the tray. This will protect the fittings while you work on the "Supply" and "Return" lines.



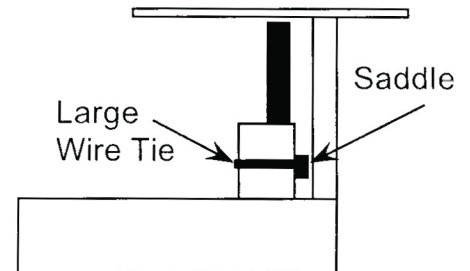
7. Trim the black fuel-injection rated hose to the required length and slip it over the center barbed fitting and fasten securely with a hose clamp. Trim the white nylon return tube so it ends approximately 1 inch from the bottom of the tray and slip it over the remaining barbed fitting. (This may require warming the end of the tube with a heat gun.)

8. Slide a second hose clamp over the supply hose...slip it over the outlet of the pump and tighten the hose clamp.

9. Connect the in-tank wiring to your fuel pump, making sure that the connections are secure. Route through the wire pass through fitting being sure to leave a little slack to prevent strain or chaffing. Use a 9mm wrench to tighten the upper jam nut on the wire pass through in 1/4 turn increments until the wire no longer moves up and down.

BE CAREFULL NOT TO OVER TIGHTEN DOING SO COULD BREAK THE FITTING OR CAUSE A LEAK.

10. Thread a #10-32 x 1" screw through the black nylon wire-tie saddle and lightly fasten it in the appropriate mounting slot in the support arm with the 310-32 flanged nut. Position the saddle to rest approximately half way up the foam sleeve on the pump and tighten. Feed the large wire tie through the saddle and around the pump...tighten the wire tie and trim the excess. Use a small wire tie to secure the pump to the return line.



11. Your tank must be vented in order to relieve pressure and vacuum. There is an additional threaded vent opening on the mounting plate for your vent or rollover valve (not supplied). If you do not need this opening, plug it with a 1/4" NPT pipe plug.

NOTES:

- Plan your final installation to leave adequate room above the pump module to prevent the top-mounted wire terminals from shorting out against the floor, frame or any other part of your vehicle.
- Use Never-Seez or a similar anti-galling compound on all mounting screws.
- Never run your pump dry, even during wiring checks. This can damage the pump.
- Your pump was tested at the factory prior to shipping. It passed all tests for pressure, fuel volume, noise, amp draw and vibration.

Installation Instructions

In-Tank Fuel Pump Modules

Read this instruction sheet carefully and understand its contents fully before beginning work. Purchaser and/or his agent assumes all responsibility for the installation and subsequent use or mis-use of this product.

See our website www.tanksinc.com for a series of photos of a typical installation.

HOW TO INSTALL THE PUMP MODULE INTO AN EXISTING METAL TANK THAT HAS NEVER HAD FUEL IN IT, OR INTO A TANK NOT PREVIOUSLY SET UP FOR IN-TANK FUEL PUMP MODULES:

1. Prior to any cutting, drilling or welding on any fuel tank that has ever had fuel in it, the tank **MUST** be emptied and removed from the vehicle and all traces of fuel vapors purged from the tank. Failure to do so may cause injury or death. One option is to have the tank boiled out at a qualified radiator shop. Keep the flammability and explosive nature of gasoline in mind and work safely at all times.

2. Carefully plan your installation around existing baffles and sender units. You will need a 6-inch diameter flat spot on the top of your tank for the mounting plate. If your tank has stamped ribs, it will be necessary to flatten the portion of the ribs that extend into the gasket area around the hole.

Keep in mind that the pressure of the pump is what keeps your injectors spraying fuel. It is important to keep the inlet of the pump under fuel at all times. If the pump sucks air. . . your injectors will snap shut and your engine will stumble. For best results, your pump should be mounted towards the rear of your tank. Doing so will tend to keep the pump flooded with fuel during acceleration. The reservoir tray will serve to maintain fuel around the pump when cornering.

3. The reservoir tray should be installed so it faces the right or left end of the tank.

4. Using the slotted mounting ring as a template, mark the location of the 4 1/2" diameter mounting hole you will need to insert the pump module, and cut out with a hole saw or snips.

5. Center the slotted retainer ring over the hole and mark the 16 mounting-screw locations and bore the holes with a 3/16" drill bit. Make sure that the orientation of the mounting holes will position the reservoir tray from side to side in your tank.

Thoroughly clean the tank of all traces of metal shavings and debris before continuing your installation.

6. Slip the slotted mounting ring into the tank by using the slot in the ring. If you are going to tack weld the ring in place, install 4 # 10-32 x 5/8" screws and draw the ring into place...being careful to line up all the threaded openings. Tack weld the ring on the inside of the 4 1/2" opening.

If you are not going to weld the ring in place, you need to attach the 16-hole mounting gasket to the underside of the mounting plate on the pump module.

- Liberally coat one side of the gasket with fuel-resistant gasket cement such as Arrowhead, or Permatex Aviation gasket cement and stick it on the plate.

- Insert 15 #10-32 x 5/8" screws through the plate and the gasket; taking care not to tear the gasket. Insert the 2" screw in the remaining hole.

- Liberally coat the underside of the gasket with gasket cement.

7. Insert the slotted ring into the tank and hold in place with a couple of strips of masking tape.

8. In the manner of tipping a couch through a doorway, insert the end of the tray into the tank opening, and rotate the rest of the module downward and through the opening. Start the 2" screw into the slotted mounting ring.

9. Line up the mounting holes by inserting a phillips screwdriver into the hole opposite the 2" screw. Draw the ring into place with the 2" screw and start the other 15 mounting screws. Replace the 2" screw with the remaining 5/8" screw and tighten all screws from side to side, being careful not to over tighten. The pump module should fit snug against the bottom of the tank.

- The threaded openings are 1/4" NPT, which gives you an opening in excess of 3/8"

- Venting is critical. This module was designed to be used with the stock-style vented cap your street rod had as standard equipment. If you have changed to a non-vented cap, you will need to vent your tank or your filler tube.

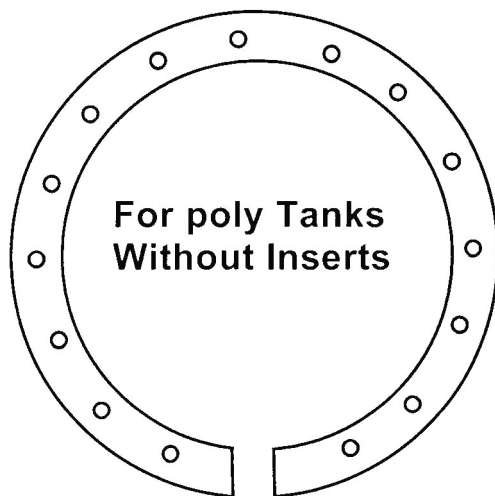
- Cold fuel from underground tanks will expand as it warms up. Never fill your tank 100% full. Always leave room for expansion.

IN-TANK PUMP INSTRUCTIONS FOR POLYETHYLENE TANKS

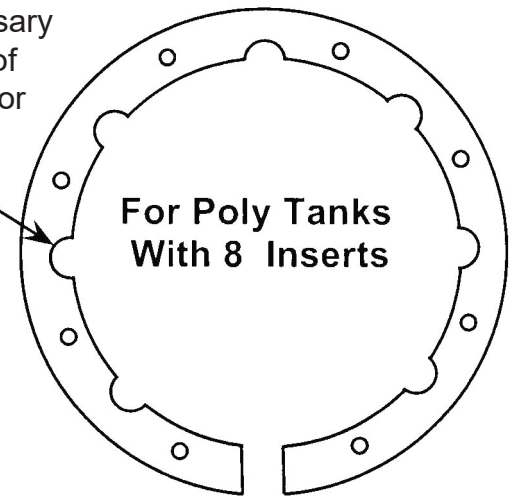
PRIOR TO CUTTING OR DRILLING ON ANY TANK THAT HAS EVER HAD FUEL IN IT, ALL TRACES OF FUEL AND VAPORS MUST BE REMOVED. FAILURE TO DO SO MAY CAUSE INJURY OR DEATH. THINK "SAFETY" AT ALL TIMES.

Polyethylene Tanks With Pump Recess and 8 Threaded Inserts

- 1.)** Locate the center of the pump recess and drill or cut out a 4.5" diameter mounting hole.
We have marked this location on most models.
- 2.)** Drill (8) 1/4" holes equally spaced between the inserts.
- 3.)** Flush the tank thoroughly to remove all shavings.
- 4.)** Insert the threaded mounting ring into your tank by using the slot in the ring...line up the curved notches with the threaded inserts...snap the ring into place.
- 5.)** Liberally coat both sides of the gasket with a fuel-resistant gasket cement, such as Indianhead or Permatex Aviation Gasket Cement and place around the 4.5" hole.
- 6.)** Insert the assembled pump module through the 4.5" mounting hole. The tray should be oriented in a side-to-side direction and the supplemental feed-hole in the tray should face the side of the tank away from the baffle-tunnel, if possible.
- 7.)** Coat the threads on all mounting screws with Never Seez, or a similar product.
- 8.)** Start the 8 #10-32 x 5/8" screws into the inserts... snug the pump module to the tank and install the (8) 1 "screws into the mounting ring. You can use an awl or a similar tool to help line up the holes. Tighten all bolts in a criss-cross pattern. (The 2" long screw can be used as a starter bolt to get things lined up, if needed.)



NOTE: It may be necessary to grind out some, or all of the notches in your ring for a custom fit around the inserts in your tank.



Poly Tanks Without Threaded Inserts 35M, 37M, UT, F-100

These tanks require the 16-hole mounting ring pictured above. Follow the instructions that came with your pump module.

#UT-Tank Note: The 16 drill points marked in the pump recess are for illustrative purposes only! They simply indicate the proper orientation of the holes and their general location. Use the threaded mounting ring as a template to mark the exact location of the 16 mounting holes.

Fuel Injection Instructions

Do Not run your pump dry, even during initial electrical checks.
You could damage your pump.

- The fittings on your module are threaded 1/4" NPT (National Pipe Thread). This gives you an opening in excess of 3/8".
- 3/8" is a common size for fuel supply lines, and 5/16 is a common size for return lines.
- Your module also has an additional vent fitting. This can be connected to your carbon canister, if you are running one, or Tanks part# VV
- We highly recommend that you install an oil-pressure failure switch on all injection systems. This will prevent the pump from spraying fuel in case of a broken line.
- You should also install an access panel or door in the trunk or floor area above your module. This will make final installation and troubleshooting much easier.

VENTING

- Fuel tanks must to be vented for pressure relief and for vacuum relief. Most pre-1948 vehicles were vented through the cap. If you change to a non-vented cap, you must vent the filler-neck or the tank.
- Never vent your tank into the passenger area or cargo area of your vehicle.