



# Instruction Manual #50015 Go Fuel In-Tank Retrofit Kit

**NOTE:** This In-Tank Fuel Pump Kit can be used with any EFI or carbureted application when the proper bypass regulator is used.

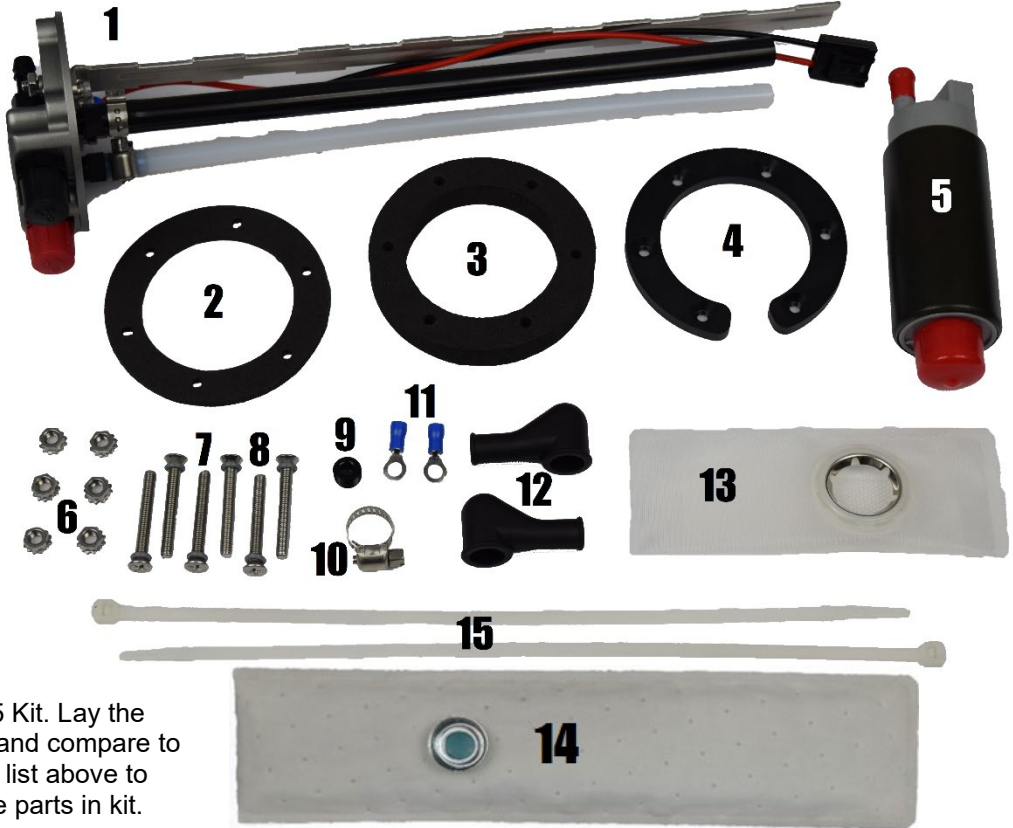
**Warning:** Caution must be observed when installing any product involving fuel system parts or gas tank modifications. Work in a well-ventilated area with an approved fire extinguisher readily available. Eye protection and other safety apparel should be worn to protect against debris and sprayed gasoline. We recommend having this installation performed by an experienced, qualified, and FiTech approved automotive technician. The finished installation must be thoroughly checked for any fuel system leaks. The fuel system is under pressure, so be sure to relieve the pressure before opening the fuel tank. All safety precautions must be observed when working with fuel.

**Caution:** Before starting this installation be sure the negative terminal is disconnected from the battery, you have proper eye protection, a fire extinguisher handy, and that you are working with a clean and free of combustible fumes fuel tank. The installation of fuel related components should be done in a well-ventilated area free of any possible fire hazards. Gasoline fumes are toxic and highly flammable. Drilling and grinding can be a potential ignition source. Smoking is prohibited and extinguish any open flames. Start with a new fuel tank or have the fuel tank professionally cleaned for the safest install. Failure to comply with these warnings could result in injury or death.

This instruction manual is designed to get you up and running with your FiTech Go Fuel In-Tank Fuel Pump Kit. Please read the full instruction manual before beginning your installation. For technical assistance with your FiTech Go Fuel In-Tank Kit, call 951-340-2624 or email [techmail@fitechefi.com](mailto:techmail@fitechefi.com)

### Kit Contents

- 1. Pump Main Assembly
- 2. Thin Foam Gasket
- 3. Thick Foam Gasket
- 4. C-Ring
- 5. 340 LPH Fuel Pump
- 6. M5 Keps Nuts
- 7. (6) M5x35mm Countersunk Screws
- 8. (6) O-Ring Seals
- 9. 1/8 NPT Plug
- 10. Fuel Hose Clamp
- 11. (2) Electrical connectors
- 12. (2) Rubber Boots
- 13. Filter Sock V1
- 14. Filter Sock V2
- 15. (2) Tie Wraps



### Unpack the kit

Carefully unpack the components of your #50015 Kit. Lay the components out on a table and compare to image to right and the parts list above to confirm that you have all the parts in kit.

## Recommended Tools

- **Slow speed Drill Motor**
- **2-1/8" diameter hole saw**
- **Round fine file**
- **Shop vacuum**
- **Screwdriver: Phillips**
- **Screwdriver: Flat Head**
- **3/8" Socket and 1/4" ratchet**
- **5/16" Diameter Drill Bit (Optional)**

## IMPORTANT Special Instructions

- For extended fuel pump life never let car go below 1/8th tank of gas.
- If using hard fuel lines make sure to use high pressure EFI rated lines and flared fittings.
- Make sure that you remove ALL low-pressure flex joints on factory fuel lines and replace them with EFI rated fuel hose and use proper flared connections and clamps. Be careful not to mix 45° SAE fitting and 37° AN fittings, they look similar but will not work together. 45° SAE fittings usually come from a hardware store or auto parts store while 37° AN fittings are the ones supplied by FiTech and most speed shops.
- Use at least a 3/8" ID hose for a return line.
- FiTech does not recommend aluminum fuel lines EVER! Use EFI high pressure fuel hose on any plumbing in your system where high pressure is present.
- If using Push-Lok style hose and fittings in your fuel system, make sure all parts come from the same manufacturer. Mixing brands of hose ends and hose could cause leaks.
- FiTech's EFI systems are designed for use with unleaded pump gasoline. Leaded gasoline is not recommended for safe operation.
- Relieve the pressure from within the system before opening the fuel system.
- **Very important note: Your fuel tank must have a vent or use a vented cap to prevent pressure building up inside the tank!**

### **Features**

The FiTech Go-Fuel In-Tank Retrofit Kit is designed for almost any fuel tank depending on depth. By mounting the fuel pump in the appropriate position on the return tube, it can be installed in tanks ranging from 6 to 15 inches in depth. Note that these instructions and this kit address installation in stock fuel tanks (Version #1) as well as Tanks Inc. Fuel Injection fuel tanks (Version #2). The FiTech In-tank module top has a low-profile design that allows for maximum clearance from the floorpan of the vehicle. The system comes with a high quality 340 LPH fuel pump. It also comes with a 35 square inch OEM style sock filter (Version #1) to ensure clean fuel, extended fuel pump life, and a steady pickup to the pump. If necessary, replacement parts are available from: [www.FiTechEFI.com](http://www.FiTechEFI.com)

# **Version #1 (Stock Tank) Caution: Wear eye protection and ensure tank is free of combustible fumes!! Have a radiator shop boil out the tank.**

## **Drilling the hole:**

1. The In-Tank assembly must be installed into the top side of the fuel tank.
2. Before beginning to cut the 2-1/8" diameter hole, determine a location to drill the hole in a central position on the fuel tank. Use the C-ring to help choose the location. Try to find a flat area of the tank. If this is not possible due to ribs in the tank, the supplied thick foam gasket will be required for the installation.
3. In selecting your hole location, be sure to avoid the stock fuel level sending unit assembly and stock fuel pump pickup.
4. With the C-ring in position, mark a spot in the center of the ring. Using a scribe, you can scribe a circle around the inside of the C-ring and then measure from the scribed line to find the center point.
5. Now, you are ready to begin your cut, drill a 1/4" pilot hole in the center of the X spot. (Figure 1)
6. Then using a slow speed drill with a 2-1/8" hole saw, cut a hole in the tank. (Figure 2) **Caution edges will be sharp once hole is cut through the fuel tank.**
7. Remove the cut piece and use a file to deburr the sharp edges.

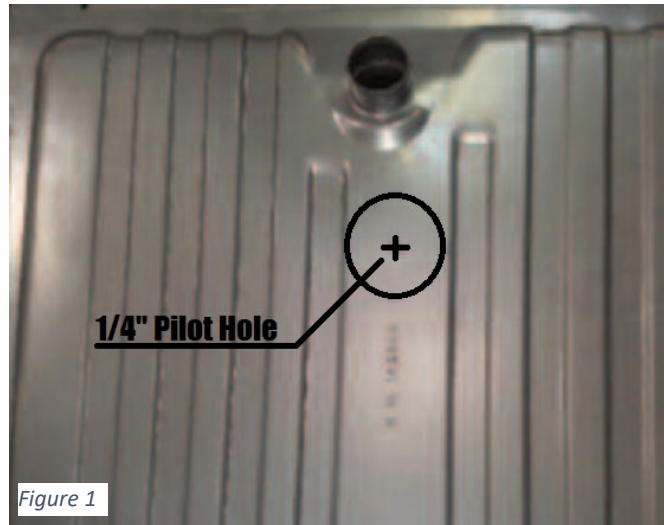


Figure 1



Figure 2

## Installing C Ring

1. Place and center C-Ring on top of recently cut hole. Use the C-ring as a template, to mark the (6) 1/4" holes in the tank. Set C-ring aside, drill and deburr the holes. (Figure 3)
2. Thoroughly clean the tank to remove all of the metal chips and debris inside and outside of the tank. Prior to final installation, it is important that the inside of the tank is totally clean.
3. Screw the M5 Flat Head machine screws into the C-Ring and tighten. A small amount of thread locker (Blue Loctite) may be used to secure screws in place.
4. Slide the C-Ring into the 2-1/8" diameter hole (Figure 4 & 5) inserting the screws back up through the (6) drilled holes. Then install the Foam Gasket (Item 3) as shown in Figure 6. See Figure 20 on page 9 for proper assembly of these parts.



5. Snap the Filter Sock (Item #14) onto the end of the Fuel Pump.

6. Measure depth of tank and determine where pump needs to be positioned vertically (Figure 7.) Once you have determined proper pump location so that filter sock will be within an 1/8" of the bottom of the tank when installed, cut the opaque hose and metal support rod to the desired length (Figure 8 & 9.) Using a heat gun, heat the end of the hose that will go onto the fuel pump (Figure 14). Push the heated hose onto the outlet nipple of the pump. **Note: Be sure to push straight and evenly. Do not force as pump nipple can break. If hose is not fully on pump nipple, reheat hose prior to pushing further.** (Figure 17) Secure with a hose clamp. (Item 10)
7. Determine the correct length of the black return hose. It should be long enough to be about 1/4" off the bottom of the tank. Cut hose at a 45-degree angle.
8. Locate the pump against the support bracket and secure into position with two Tie Wraps (Items 15). Make sure Tie Wraps are pulled tight. See Figure 16. Plug the electrical connector onto the fuel pump.

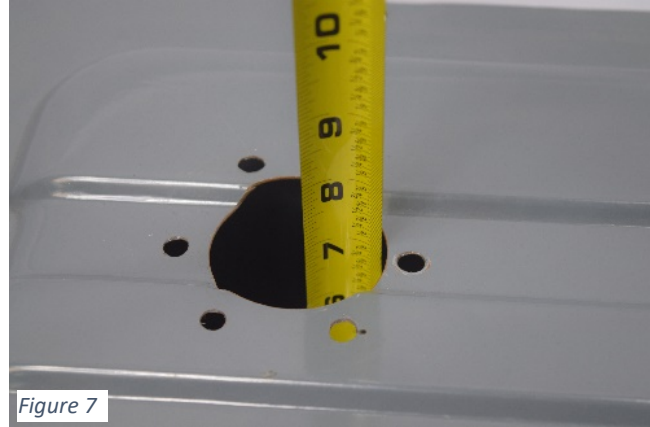


Figure 7



Figure 8

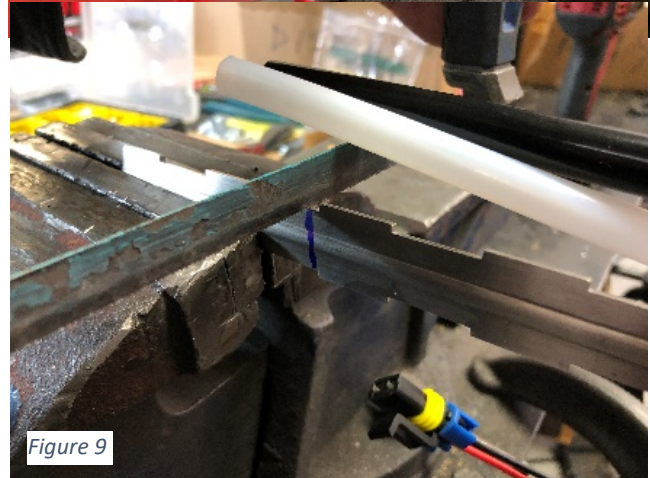


Figure 9

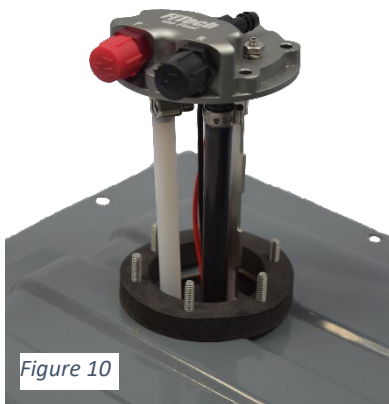


Figure 10

9. Insert Pump Assembly into tank. Lower down over extended M5 machine screws. (Figure 10)
10. Install O-Rings on bolts and thread the (6) Nuts (Item 6) onto the exposed bolts and tighten securely using a crisscross pattern to tighten module down evenly.

# Installation Version #2 (Tanks Inc./UNIVERSAL EFI Fuel Tank)

Because you are installing the FiTech Go Fuel In-Tank Fuel Pump assembly into a fuel tank that already has an access hole with tapped holes to thread into, no cutting or drilling is required.

1. Snap the Filter Sock (Item #13) onto the end of the Fuel Pump.
2. Measure depth of tank and determine where pump needs to be positioned vertically. Once you have determined proper pump location so that filter sock will be within an 1/8" of the bottom of the tank when installed, cut the opaque hose and metal support rod to the desired length. Using a heat gun, heat the end of the hose that will go onto the fuel pump. (Figure 14.) Push the heated hose onto the outlet nipple of the pump. (Figure 17) Secure with a hose clamp.
3. Determine the correct length of the black return hose. It should be long enough to be about 1/4" off the bottom of the tank. Cut hose at a 45-degree angle.

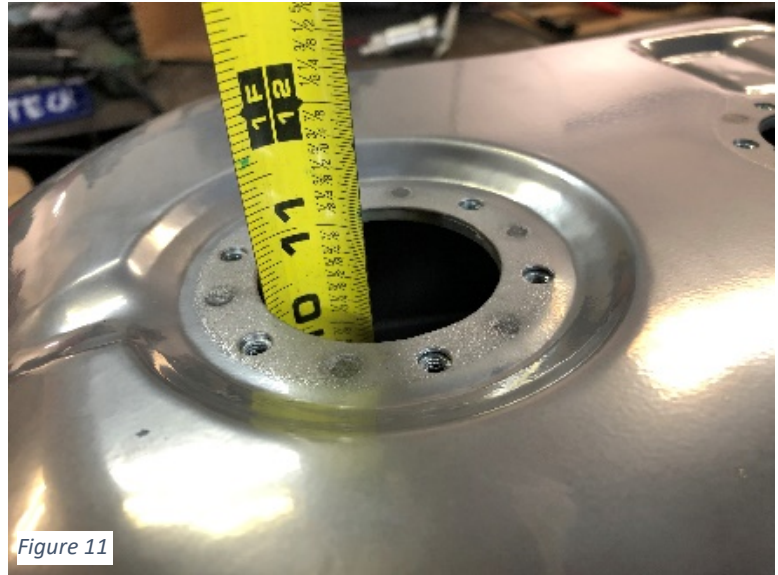


Figure 11

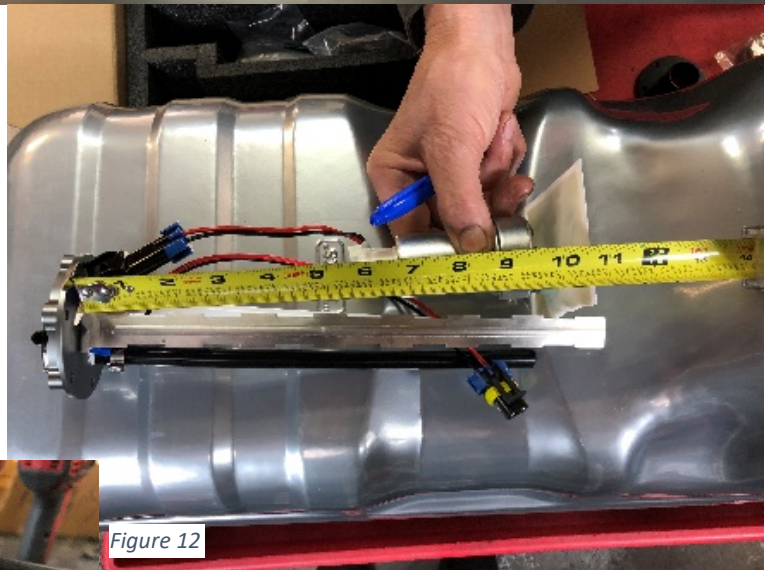


Figure 12



Figure 13

4. Locate the pump against the metal support bracket and secure into position with two Tie Wraps (Items 15). Make sure Tie Wraps are pulled tight. (Figure 16) Plug the electrical connector onto the fuel pump.
5. Place the Foam Gasket (Item 2) over the (6) holes in the Tanks Inc. fuel tank. Align the holes.
6. Insert Pump Assembly into tank. Align holes in the top cap of the main assembly with the holes in the gasket and tank. Carefully install O-Rings into the (6) machine screws (Item 7) and thread them through the main assembly, gasket, and into the threaded holes in the tank. Tighten securely using a crisscross pattern to assure they are tightened evenly. See Figure 21 on page 9 on proper assembly of parts.

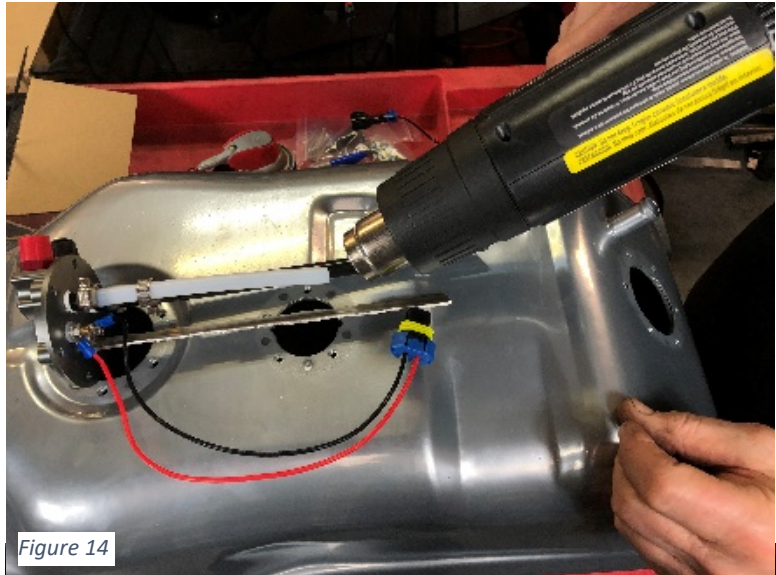


Figure 14

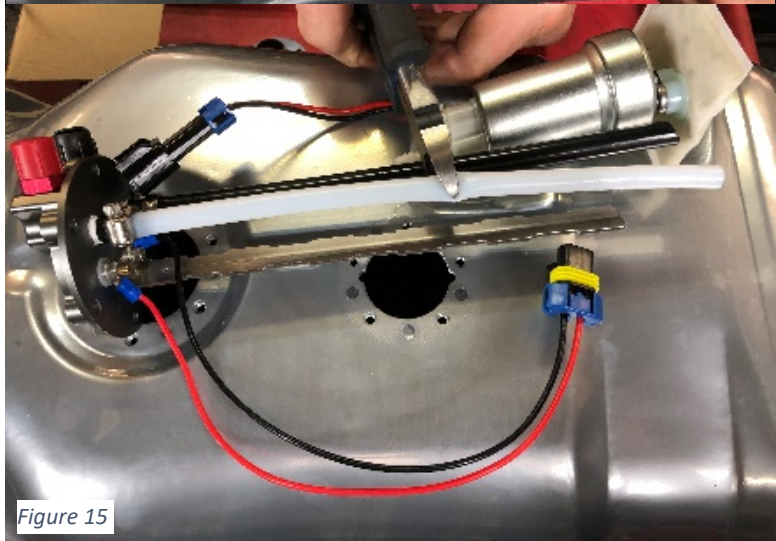


Figure 15

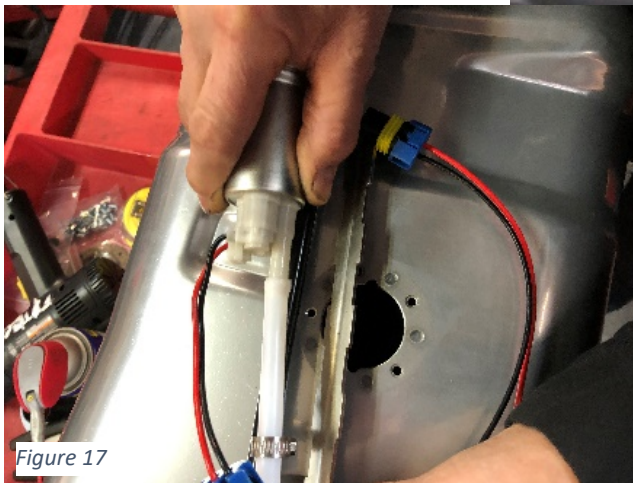


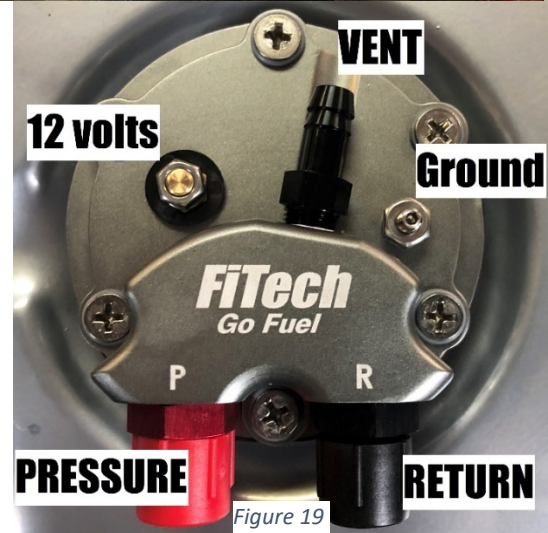
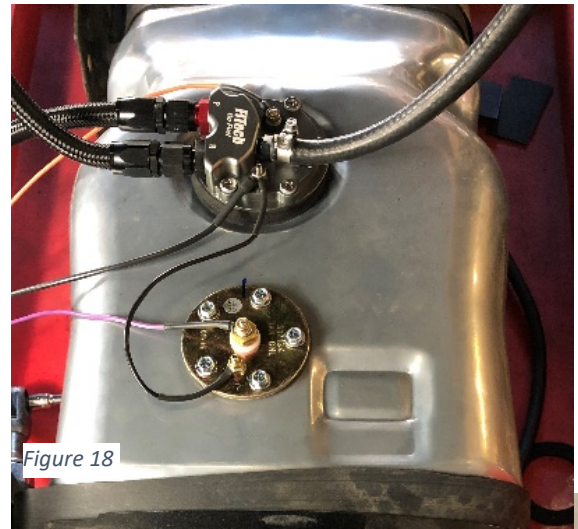
Figure 17



Figure 16

## Installing the Fuel Tank back in Vehicle

1. Install the fuel tank into the vehicle and attach the fuel lines.
2. Attach the fuel pump power wire to the positive terminal and cover the terminal with the provided insulation boot. See Figure 19
3. Next attach one side of a ground wire to the negative terminal and the other end to a good ground on the chassis. See Figure 19. Make sure the positive terminal has clearance and/or insulation to avoid the possibility of hitting the bottom of the car floorpan. One option is to lay a piece of foam over the top of the pump to insure the pump will not short out against any metal. The foam can be purchased from any home improvement store.
4. Run a return line from the return fitting on the throttle body to the return port on the Go Fuel unit if applicable. See Figure 18. See below for more complete information on plumbing the system.
5. Make sure there is gas in the tank.
6. Reconnect your battery.
7. Turn your key to the "On" position, don't crank.
8. Thoroughly check for any leaks.
9. If no leaks are present then you are ready to start your vehicle



### Plumbing for a Return Style System

The Go-Fuel In-tank kit must be run with a return fuel line. Note that the red -6 ORB fitting (marked P) is always the pressure out port. The 1/4" barbed nipple is always the vent port and can be plugged with the 1/8" NPT plug if a vent is already in the tank. The Port marked "R" in is always the Return Port. Do not attempt to use the Vent port for the Return line. When using a FiTech throttle body injection system, they contain an internal fuel pressure regulator inside the throttle body. If you are using this Go Fuel In-Tank Fuel Pump with any other EFI system, an external fuel pressure regulator will be required as the supplied pump in the Go Fuel system will exceed 60 PSI. In a case where the pump and fuel tank are mounted inside the car, we recommend routing a vent hose from the vent port on the FiTech Go Fuel Kit routed to the outside the vehicle.



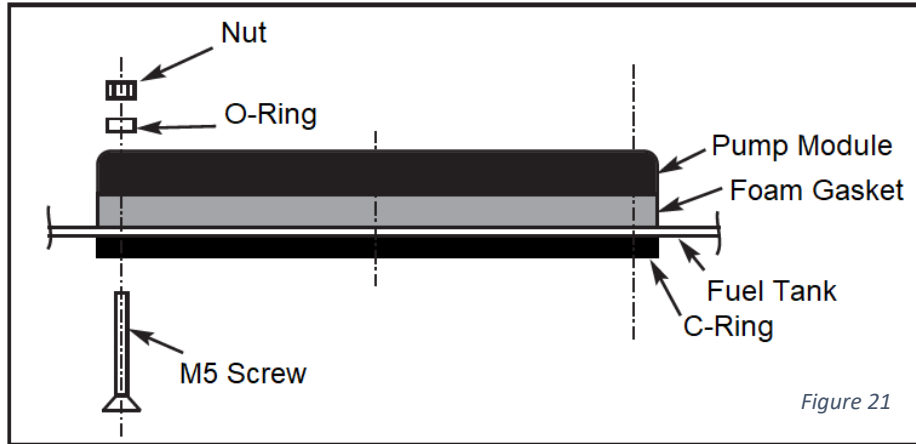


Figure 21

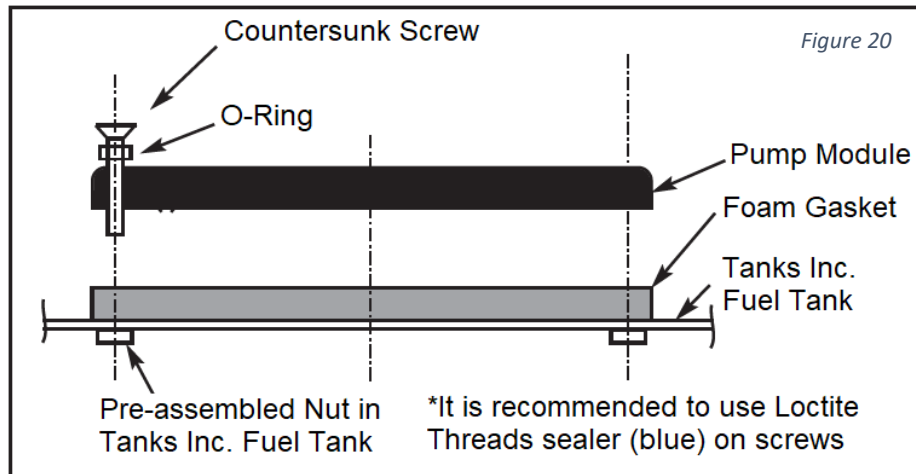


Figure 20

## **One Year Limited Warranty on FiTech EFI Systems**

FiTech extends the following limited warranty to the original purchaser of a FiTech EFI system. FiTech warrants its products against defects in materials and workmanship for one year from the date of original purchase. This applies only to the original purchaser and the parts must remain installed on the original vehicle for which they were purchased. This warranty is void if the product was improperly installed, was installed on a vehicle for which it was not designed, if it was modified in any manner, or was removed from the original vehicle and reinstalled on another vehicle. This warranty shall not apply to any product installed on a racing vehicle, installed improperly, or contrary to FiTech's instructions, altered, misused, or repaired or damaged from an accident, collision, or willful or negligent act. To make a claim under the terms of this Warranty, the original purchaser must return the product to FiTech along with proof of original purchase. Purchaser must call FiTech (951-340-2624) or email to: [Warranty@fitechefi.com](mailto:Warranty@fitechefi.com), to obtain a Returned Material Authorization (RMA). Proof of purchase must clearly show the place of purchase, purchase price, product purchased and date of purchase. If, upon inspection, FiTech determines a defect in materials or workmanship, FiTech will refund the returned goods shipping expense, and replace the defective part or parts with a new part or parts. FiTech's liability is expressly limited to the payment of shipping costs and replacing the defective part or parts. FiTech will have no liability for the cost of installation or removal of the defective product or for the cost of labor or any additional parts required to complete the installation of the replacement product. In no event will FiTech be liable for any indirect, special, incidental, or consequential losses or damages (including but not limited to interruption of business or loss of business or profit) resulting from the use or inability to use the product, any breach of warranty, or any defect in the product, even if FiTech shall have been advised of the possibility of such potential damages or losses. Some states do not allow the exclusion or limitations of incidental or consequential damages, so the above limitation or exclusion may not apply to you. This warranty gives you specific legal rights. You may also have other rights which vary from state to state.

**California Proposition 65 Warning:** This product may contain one or more substances or chemicals known to the state of California to cause cancer, birth defects, or other reproductive harm.

**FiTech Fuel Injection • 12370 Doherty Street • Suite A • Riverside, CA 92503**  
**Phone: 951-340-2624 • Email: [techmail@FiTechEFI.com](mailto:techmail@FiTechEFI.com) • Website:**  
**[www.FiTechEFI.com](http://www.FiTechEFI.com)**