

INSTALLATION MANUAL

TITANIUM SERIES



APPLICATION:

95 GPH (T C10 095G)
150 GPH (T C10 150G)

Duramax 2500 & 3500
2001-2010



PICKUP



Dear Valued Customer,

“Made in the USA” is not just a slogan at FASS; it’s what we live by! FASS is not only assembled in the USA but 98%+ of the FASS product is manufactured in the USA, helping to employ Americans and strengthen America. At FASS, we scrutinize our suppliers and demand the highest quality American-made components. However, this does come at a price, which is one of the main reasons FASS products are more expensive than the competition. Remember price does not dictate quality but quality does dictate price! Here at FASS, we believe it’s worth the commitment and will continue this practice to support America! Our competition is doing exactly the opposite by using foreign-made components.

Building extremely “High-Quality” fuel products is our business. We concentrate all of our efforts in this arena. No one else is as specialized as FASS in what we do! This is one of the ingredients to insure you are running with the “Highest-Quality” fuel system in the world! We have implemented very rigorous testing procedures to provide the “Highest Quality” we have become known for. Not only is our product superior, but customer satisfaction is #1 at FASS. It is our goal to provide the best service possible. Our confidence is evident in the products we make as each product is backed by an industry leading warranty!

Our R & D department, in conjunction with our Dealer Support department, is continually searching for ways to improve quality, expand our product line, and provide superb support to our network of dealers so our customers’ needs and expectations will be exceeded.

To help insure you receive the proper system and customer support at the local level, FASS has a VIP and Authorized Dealer network representing FASS products. This is one reason you must purchase through a dealer to comply with our warranty policies. **If you do not, there is no warranty!** We recommend you go to www.FASSride.com, click “Find A Dealer”, put in their ZIP code, select the type of dealer, and see if the company you purchased from is listed. If they are not, put their phone number in the field below the ZIP code field to see if they are listed. Below these two fields is a list of “Terminated/Unauthorized” dealers. You may want to review this list. If the company is not listed or is on the “Terminated/Unauthorized” list, we suggest you return the product immediately to that dealer and call FASS. We’ll recommend you to the nearest dealer.

VERY IMPORTANT: Make sure to fill out your product registration form and return the original form to FASS Fuel Systems within 30 days of purchase accompanied with a copy of the purchase receipt. Complying with these guidelines will qualify you for the Extended Warranty!

See the Owner’s Manual for full Limitation of Warranty. In the event that the buyer does not agree with this agreement: the buyer may promptly return this product, in a new and unused condition, with a dated receipt, to the place of purchase within thirty (30) days from date of purchase for a full refund less shipping.

The installation of this product indicates that the buyer has read and understands the Limitation of Warranty agreement and accepts its terms and conditions.

STEPS TO CUSTOMER SATISFACTION

We expect every FASS System to exceed your expectation. Customer satisfaction, your satisfaction, is the all-important ingredient for success to our business, as it is in any other.

Normally, technical issues can be resolved by your dealer's service department, as they can usually inspect the situation physically. If you're not satisfied with the dealership's response you can either email or call FASS.

Email techsupport@FASSride.com with the following information:

Your Name, address and daytime phone number

Model and Serial Number (Not Motor Number)

Example: Model – Titanium Series Serial: 00125966

Vin Number of Vehicle

Date of purchase

Nature of Problem



Call customer service; to better assist you please gather the following information before calling:

Model and Serial Number (Not Motor Number)

Example: Model – Titanium Series Serial: 00125966

Vin Number of Vehicle

Date of purchase



WARNINGS!!

Installing the improper FASS Fuel Pump can cause severe engine damage.

This installation manual applies to the T C10 095G or T C10 150G contained in the same package. The serial number on the installation/owners manual package should match the serial number on the outside of the box. If it doesn't, call your dealer.

This T C10 095G or T C10 150G applies to this application:

Recommendation: T C10 095G – GM Duramax 2001-2010, with stock to moderate horsepower modifications.

Recommendation: T C10 150G – GM Duramax 2001-2010, with moderate to extreme horsepower modifications.

Because of the higher fuel flow these systems have to offer, you may encounter problems with the stock fuel module. FASS can solve this issue with a Suction Tube Kit.

SAFETY GUIDELINES AND WARNINGS!

TIP! Flush and clean all brass fittings and fuel line free from debris.

WARNING! **SECURE VEHICLE FROM ROLLING!**

WARNING! Use care not to drill into any electrical wires, air lines or other damageable components when drilling.

WARNING! Consult vehicle manufacturer's instructions concerning the electrical system before attempting any electrical connections.

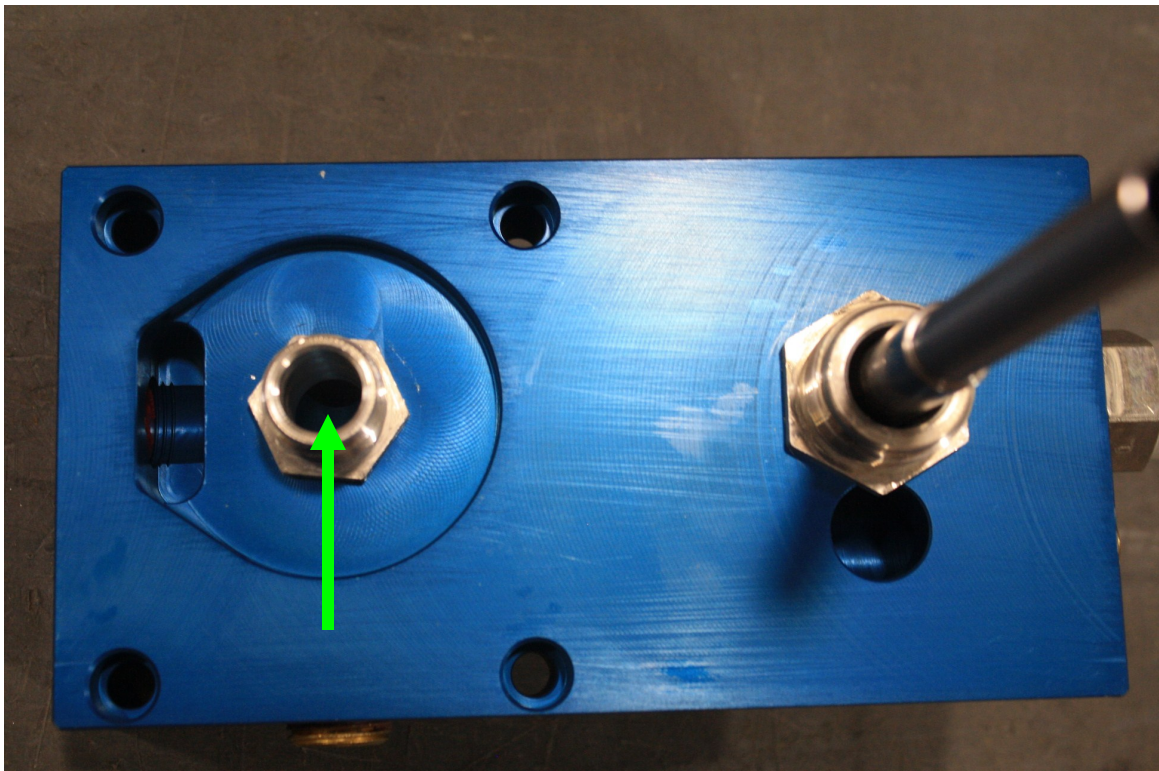
CAUTION: Wear safety glasses when operating power tools such as drills and grinders or when using a punch or chisel.

CAUTION: Properly secure lines to prevent chaffing.

Read all instructions before starting installation of this product!

WARNINGS!!

Use caution when installing the FASS Fuel System keeping debris from entering the internals of the system. Getting debris in the water separator nipple can lock up the motor. If the motor does lock up from debris call FASS for technical assistance. 100% of the FASS Fuel Systems are vigorously tested, which includes (but not limited to) wet testing for pressure, amps, flow, & including total all around performance before being shipped.



INSTALLATION MANUAL

The installation of the FASS HIGH PERFORMANCE FUEL PUMP can be relatively simple when the following steps are followed.

1. Inventory the package components completely. Notify the place of purchase immediately of any parts missing or damaged.
2. We have invested many hours into the development of the installation manual to simplify the installation of the **FASS Fuel Pumps**. Please read the installation manual completely before attempting installation. Understand how the system operates and installation recommendations before beginning installation. Most of the questions that you will have will be answered in the manual. If you have a question please review the installation manual.
3. The installation recommendations contained herein are suggested installation guidelines only. Each installation can and may vary considerably because of the many options and accessories available to the truck market.

Installation personnel should use good judgment and common sense when installing the FASS High Performance Fuel Pump.

If any installation procedure is uncertain, contact FASS technical support.

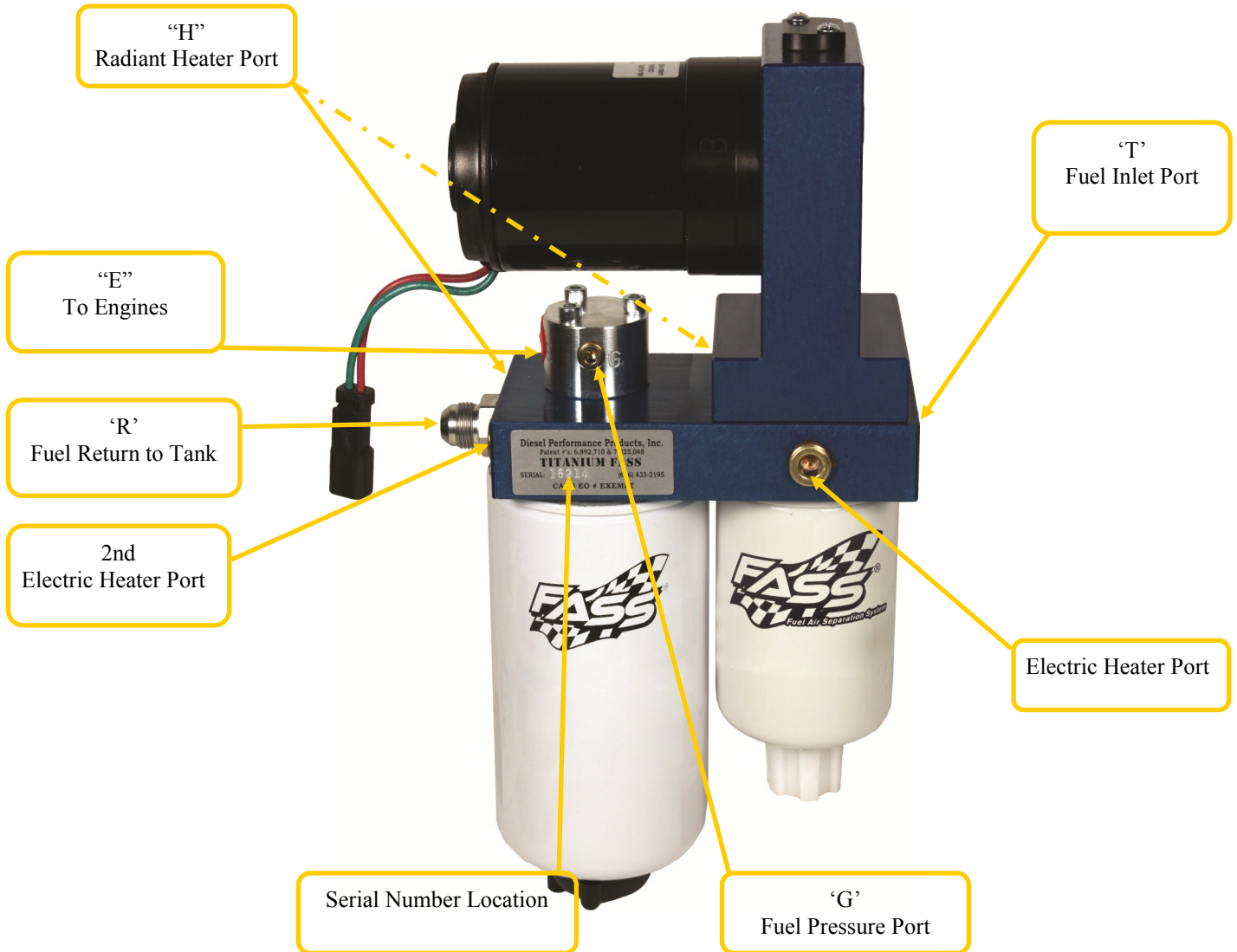
Due to training, communication, and our relationship with our authorized dealers, we recommend an authorized FASS Fuel Systems dealer for the installation. They are prepared to install the FASS fuel pumps with the most efficiency. If a situation/problem arises during the installation, they are the most prepared for that situation/problem. It may take more time for an unauthorized shop to address the situation/problem. We are not responsible for any installation mistakes.

TITANIUM SERIES

95 OR 150 GPH

8 PSI APPROXIMATELY

A fuel pressure gauge is highly recommended to identify fuel filter life and to prevent engine damage!



INSTALLATION

- Step 1: Install Electrical Harness
- Step 2: Prepare Suction and Return Lines
- Step 3: Mount Fuel System
- Step 4: Install Fuel Line
- Step 5: Check Installation

CONTENTS:



FL-1002 x 11'



WH-1001



BR-2001



FB-1001



FB-1006



FB-1007

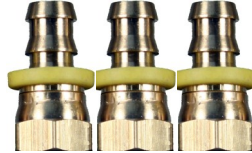
MP-9025



10-298



10-299



PL-1005



QD-1002



HC-1001



RM-1001



RS-1001



Flag Terminal



Fuse Tap



Ring Terminal



HC-1003



WA-2001



(1/4)" - 20 x 1.25"



3/8-16 Hex Bolt

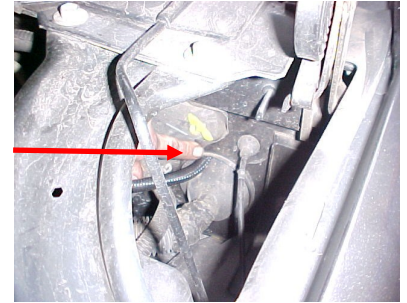


3/8 Lock Nut

STEP 1: INSTALL ELECTRICAL HARNESS

Note: The installation of the electrical harness is done first, allowing power to be applied to the pump for lubrication purposes later in the installation.

- a. The red wire of the WH-1001 wire harness will travel thru the rubber grommet in the firewall or into the fuse panel in the engine compartment.

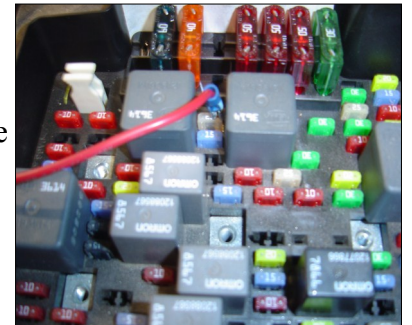


Note: Connect the fuse tap to the hot side of the fuse

Use a test probe to locate the “hot side” of the circuit in the fuse block.

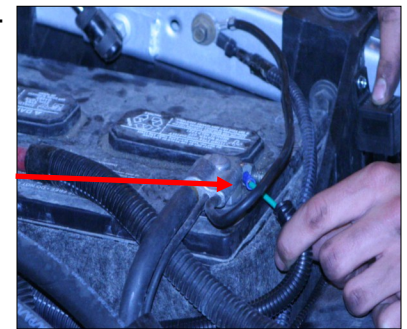


- c. Using the fuse tap & flag terminal, connect the red lead to a terminal on the circuit board that is “hot” when the key is on.



Note: The use of a corrosion preventative on electrical connections is recommended.

- d. Green wire must be connected to a clean ground without being exposed to any corrosion, preferably the negative battery terminal. Secure fuse block in a location protected from outside elements.



Note: Completion of this step will be addressed in the Mounting Step 3.

- e. Route wire harness along frame rail to mounting location of pump.

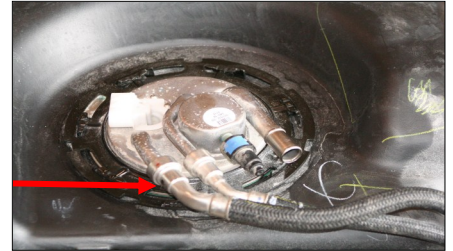
STEP 2: PREPARING SUCTION AND RETURN LINE

Note: If necessary to gain access to the top of the fuel tank, carefully bend the sheet metal down that is covering the side.

- a. Remove the drive shaft to gain access to the top of the fuel tank.

Note: Bed is removed for clarity.

- b. Using a 1/2" fuel line disconnect tool, remove the factory suction line on the fuel tank. Place the disconnect tool around the fuel tank tube and slide the tool under the fuel line connection to release the fuel line.

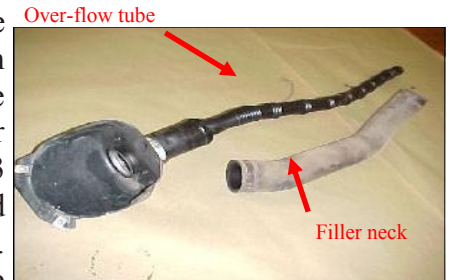


- c. With the factory suction line removed, install the QD-1002 Quick Disconnect and a supplied 1/2" clamp onto one end of the 1/2" fuel line and tighten. Oil the O-rings inside the QD-1002 and slide onto the suction port on the fuel tank.



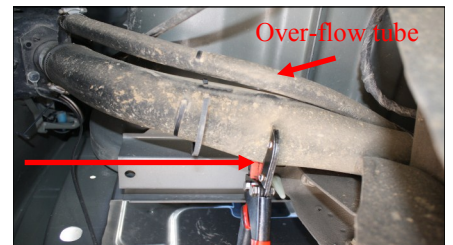
WARNING! Some models have an integrated over-flow tube inside the filler neck. If your filler neck does not have a separate over-flow tube, you have an integrated filler neck.

- d. Some filler necks have the over-flow tube inside. Mark location for the Return manifold on the rubber filler neck. Loosen the clamps on both ends of the filler neck and remove screws from fuel receptacle. Remove filler neck assembly. Slide rubber outer hose down exposing breather tube. At mark, cut hose. Slide top half over-flow tube with HC-1003 clamp. Slide RM-1001 Return Manifold over the over-flow tube and into filler hose with the small junction pipe pointing toward the fender. Slide another HC-1003 clamp and bottom hose over tube and secure. Re

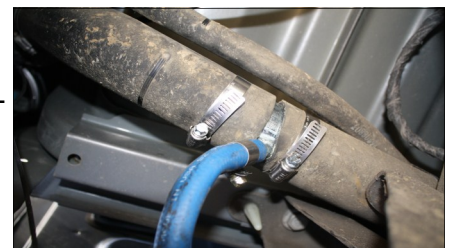


OR

Prepare FASS return line by cutting rubber junction connecting the two halves of the filler neck. Position RM-1001 with the 1/2" junction pipe aiming to outside of bed. Clamp rubber and RM-1001 using both HC-1003's.

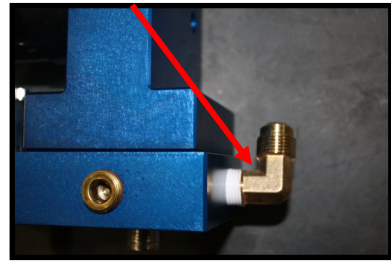
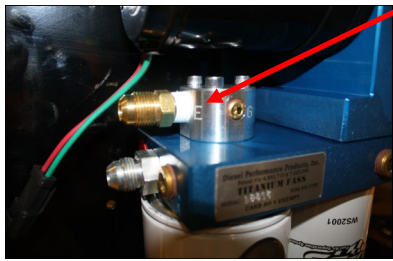


- e. Position RM-1001 with the junction pipe aiming to outside of bed. Connect rubber and RM-1001 using both HC-1003's.

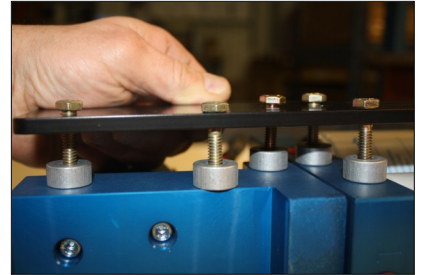


STEP 3: MOUNT FUEL SYSTEM

- a. Using thread tape, install the 10-298 into “E” and the 10-299 into the “T” port (on opposite end).

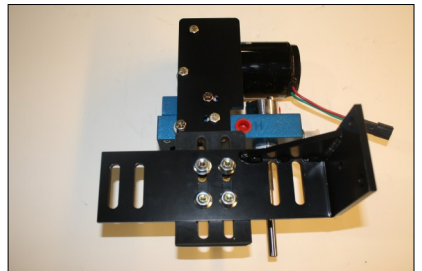


- b. Attach BR-2001 to back of system using 5 1 1/4” Hex bolts and WA-2001 spacers. Torque to 110in/lbs.



Note: Review Step C & D to complete properly.

- c. Assemble the FASS pump brackets using the RS-1001 spacer between. Hold pump up to the mounting location for rough fitting. Once location is established, use template on back of manual to accurately mark drill points.



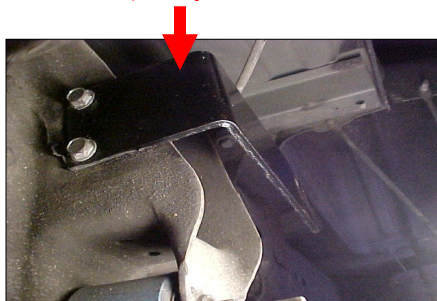
- d. Position the pump assembly at the mounting location and check for fit. **Review mounting to bed support, then if necessary review mount to leaf spring support as seen in the photo's. The combination of Frame Brackets gives options as to mounting location.**



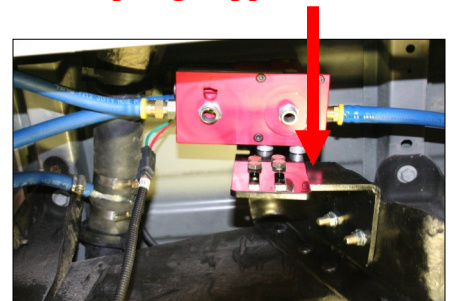
Examples: FB-1007 (not mentioned) may also be used for rear of Leaf Spring Support.



FB-1001 to Bed Support



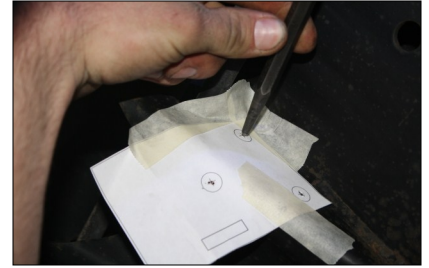
FB-1001 to Leaf Spring Support



FB-1006 to Leaf Spring Support

STEP 3: MOUNT FUEL SYSTEM, CONTINUED

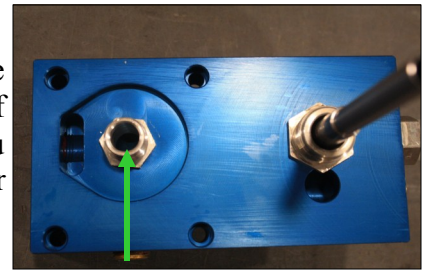
- e. Once location is established, use template from back of manual to mark drill points.



- f. Pre-drill holes. Final drill with 3/8" bit.



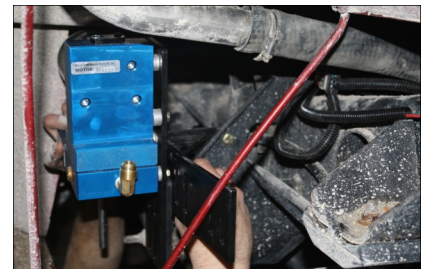
- g. Connect factory plug into the FASS harness. Plug FASS harness into the fuel module in tank. Make sure to lock red slide tab. Plug female plug of the FASS harness into pump. Turn key to "on". With pump operating (you may have to bump the starter), turn pump over, liberally spray WD-40 (or equivalent) into water separator nipple lubricating Gerotor.



- h. Using the 3/8" bolts secure FASS with brackets to previously drilled mounting holes.



- i. Apply motor oil to gasket located on filters. Attach to system and hand tighten.



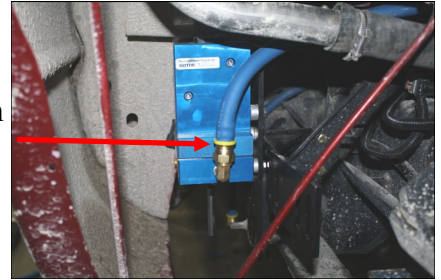
STEP 4: INSTALL FUEL LINE

Caution: Do Not use sealant on AN fittings. Only use sealant on threads installed into pump assembly.

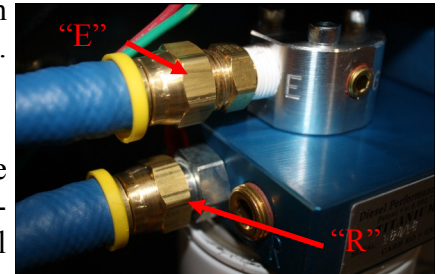
Note: If necessary, to gain access to the top of the fuel tank, carefully bend the sheet metal down that is covering the side.

a. Remove the drive shaft to gain access to the top of the fuel tank.

b. Route suction line to 'T' port . Cut FL-1002 to length. Insert PL-1005 in line using oil. Attach to 10-299. Torque to 18 ft./lbs.



c. Route fuel line from the RM-1001 to the 'R' port on the FASS system with a gentle bend. Cut and insert the PL-1005 fitting to the hose. Use oil. Attach fitting to the 'R' port. Torque to 18 ft./lbs.

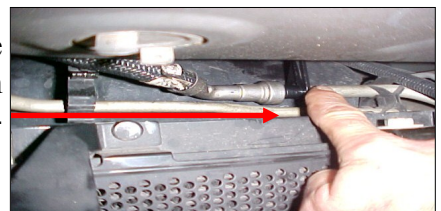


d. Insert PL-1005 in remaining fuel line. Connect to the 'E' port of the FASS system. Use oil. Torque to 18 ft./lbs. Route this fuel line to the factory fuel line feeding the engine. This fuel line is located behind the fuel cooler, discussed in the next step.

e. Remove the 3 bolts holding the fuel cooler to the mounting bracket. The fuel cooler is located in front of the fuel tank.



f. Disconnect the fuel line directly behind the fuel cooler. Disconnect the fuel fitting using the same method used to remove the factory line from the fuel tank.. Once this is completed correctly, there is about an 18" section of flexible fuel line that can be discarded.



g. Route the fuel line from the "E" port of the FASS to the feed line disconnected in prior step. Cut to length and install QD-1002 using a HC-1001. Oil O-rings inside QD-1002 and slide onto steel line until you hear a click.



Re-bend sheet metal that allowed access to fuel tank?

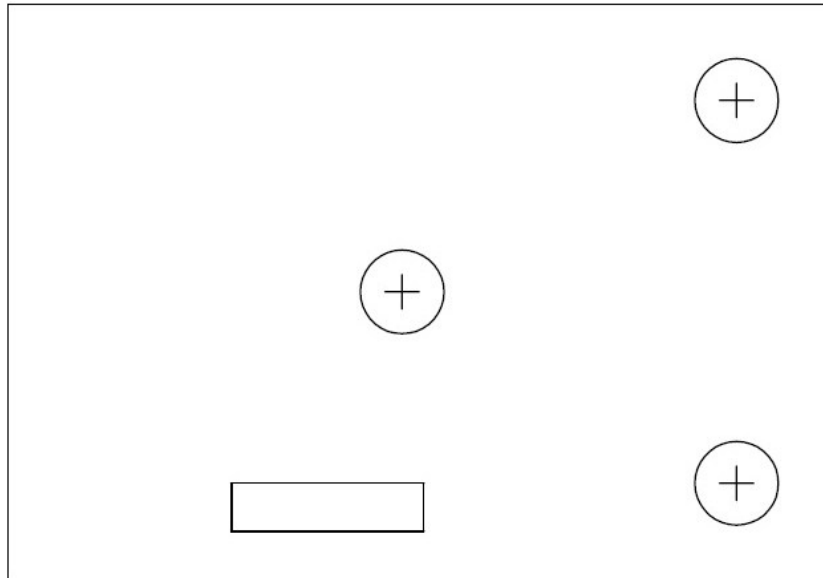
h. Re-install drive shaft.

STEP 5: REVIEW INSTALLATION

- Blow out any open lines/cover any open ports
- Bolts and fasteners properly tightened?
- Electrical harness and fuel lines secured and properly tightened?
- Has the system been primed?
 1. Turn key to the ignition position, turning on the FASS pump.
 2. While the pump is running, loosen the fuel filter just enough to break the gasket seal. Once the tone of the pump changes, quickly retighten filter.
- Check for leaks.
- Start the engine (you will hear the system running)
- Recheck all fluid and filter connections for leaks
- Fill out product registration, attach receipt of purchase and mail to:

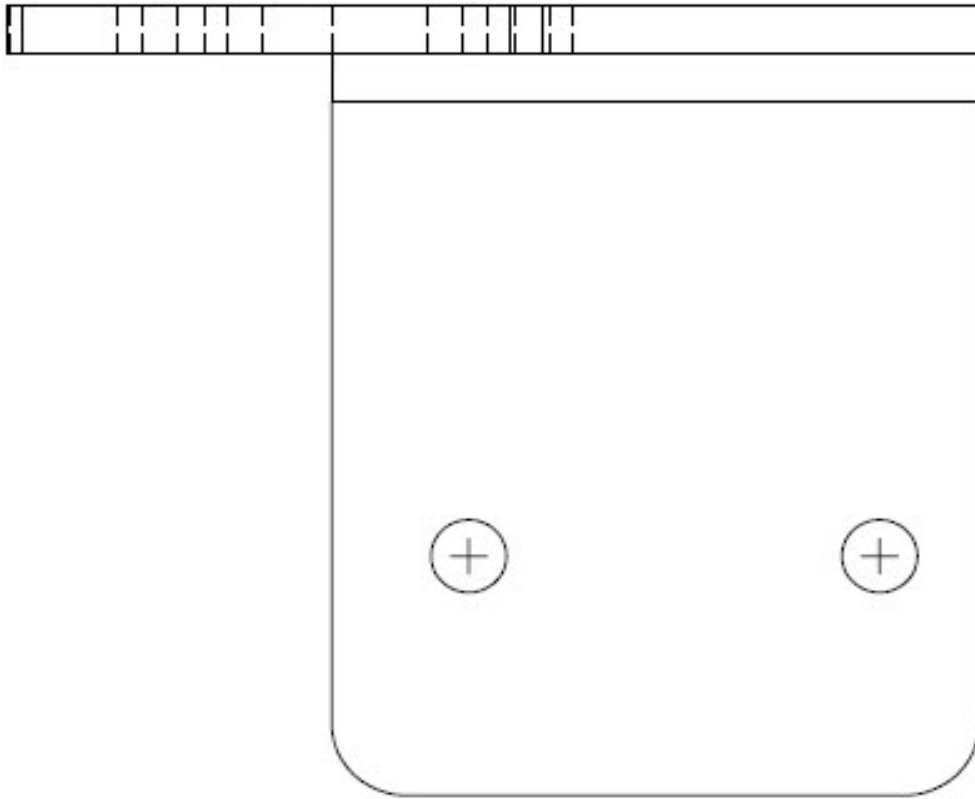
FASS Fuel Systems
16240 State Hwy O, Suite B
Marthasville, MO 63357

TEMPLATES

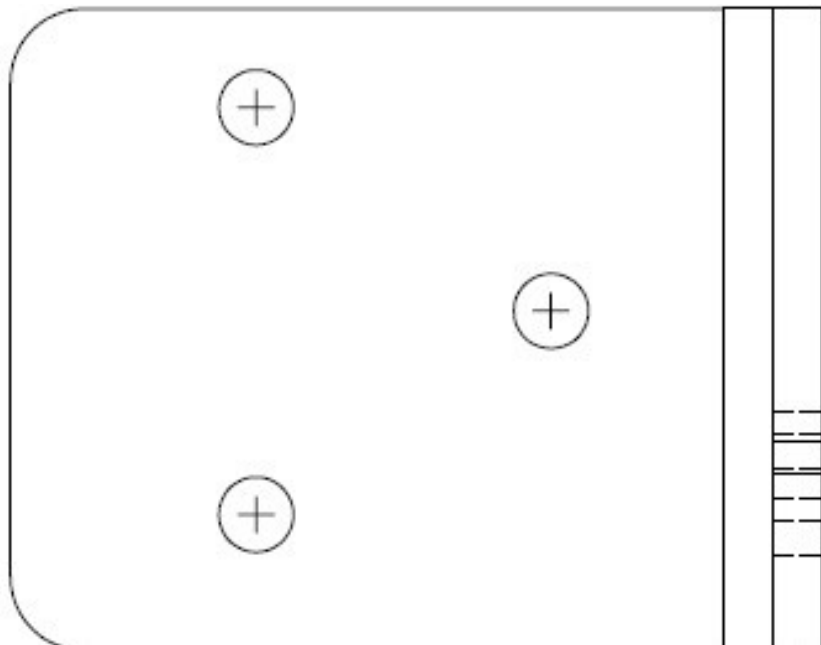


FB-1001

TEMPLATES - CONTINUED



FB-1006



FB-1007