

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](http://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 online at [www.FASSride.com](http://www.FASSride.com) 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.**

# !WARNINGS!

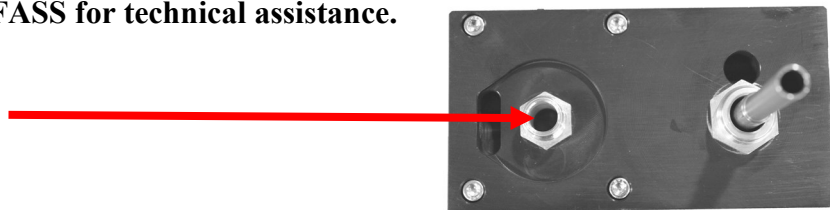
- Read all instructions before starting installation of this product!
- Installing the improper FASS Pump can cause *severe* engine damage.

FASS	Recommended Application
<b>T F17 150G</b>	Powerstroke (6.7L) 2011-2016 with stock - moderate horsepower modifications
Note: 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.	

- Secure vehicle from **ROLLING!**
- Cab and Chassis may require modifications
- Consult vehicle's manufacturers' instructions concerning the electrical system before attempting any electrical connections.
- Be sure that the serial # on this installation manual matches that of the outside of the box.



- Flush and clean all brass fittings and fuel line from debris
- Keep debris from entering the internals of the system during installation. 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.



- Wear safety glasses when operating power tools such as drills and grinders or when using a punch or chisel.
- Properly secure lines to prevent chaffing.

**BEFORE STARTING THE INSTALLATION PROCESS LUBRICATE THE BED BOLT WITH WD-40 TO HELP WITH INSTALLATION**

# INSTALLATION MANUAL

## Follow these steps to ensure a simple installation of your new FASS TITANIUM FUEL SYSTEM

1. *Read the installation manual completely before attempting installation. The installation of this product indicates that the buyer has read and understands the limitations of the FASS manufacturers warranty agreement and accepts the responsibility of its terms and conditions.*
2. Inventory the package components. Notify the place of purchase immediately of any parts missing or damaged.
3. The installation recommendations contained herein are guidelines. Its important to understand your vehicles accessories and limitations. Use good judgment and take in to consideration your vehicles' accessories.
4. For best results in accuracy and efficiency (due to training, communication, and our relationship with our dealer network), we recommend a ViP FASS 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. We are not responsible for any installation mistakes.
5. Normally, technical issues can be resolved by your dealer's service department, as they can usually inspect the situation physically. If you have any questions or concerns email or call FASS.
6. If any installation procedure is uncertain, contact FASS technical support.

Email [techsupport@FASSride.com](mailto:techsupport@FASSride.com) with the following information:

- Your Name, address and daytime phone number
- Model **(T F17 150G)**
- Serial Number
- Last 6 of vehicles' VIN
- Date of purchase
- Nature of Your Concern

Serial # Found Here....

Call customer service; [636-433-5410](tel:636-433-5410) with the following information:

- Model **(T F17 150G)**
- Serial Number
- Last 6 of vehicles' VIN
- Date of purchase

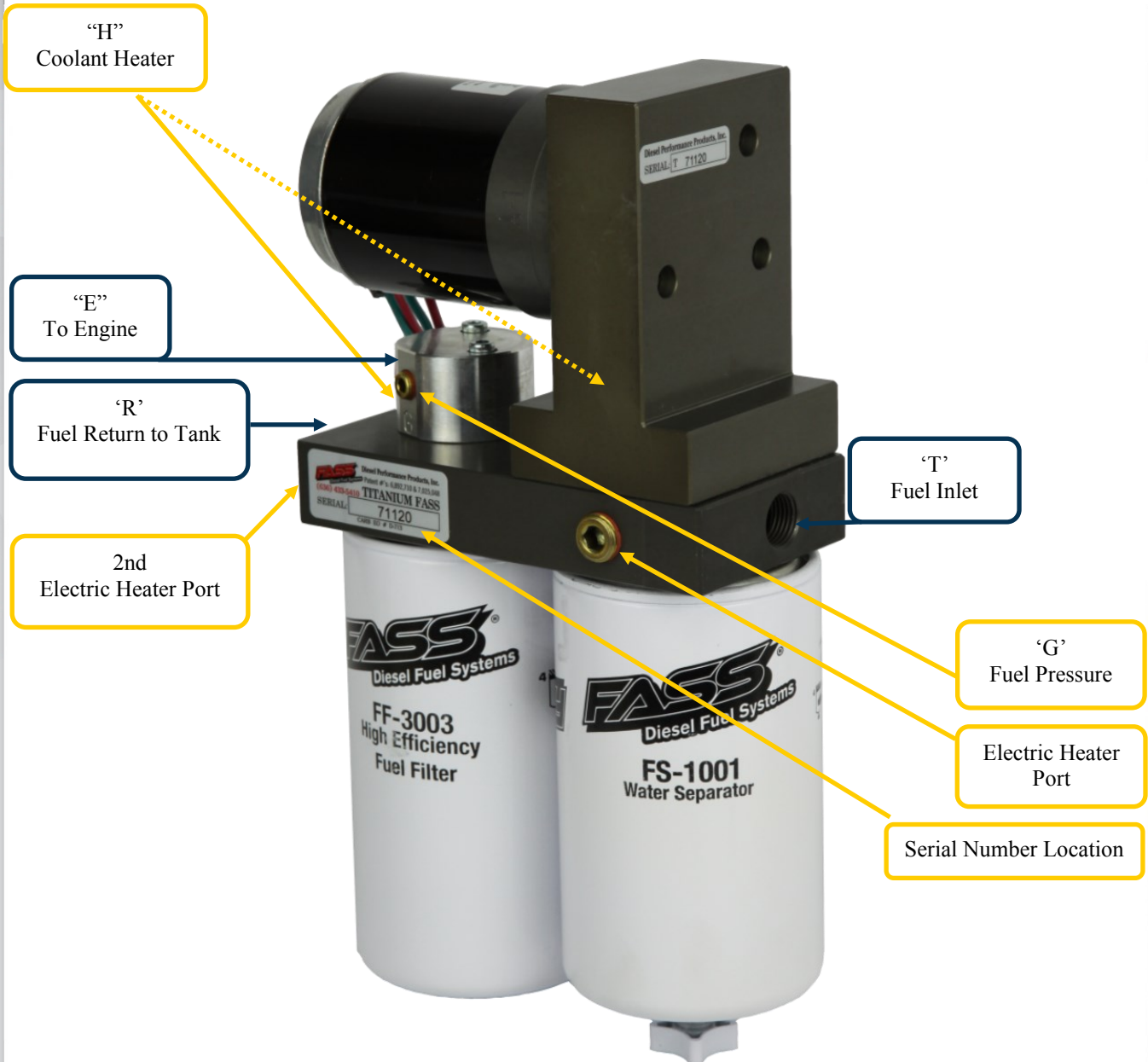


# TITANIUM SERIES

**150 GPH**

**10 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

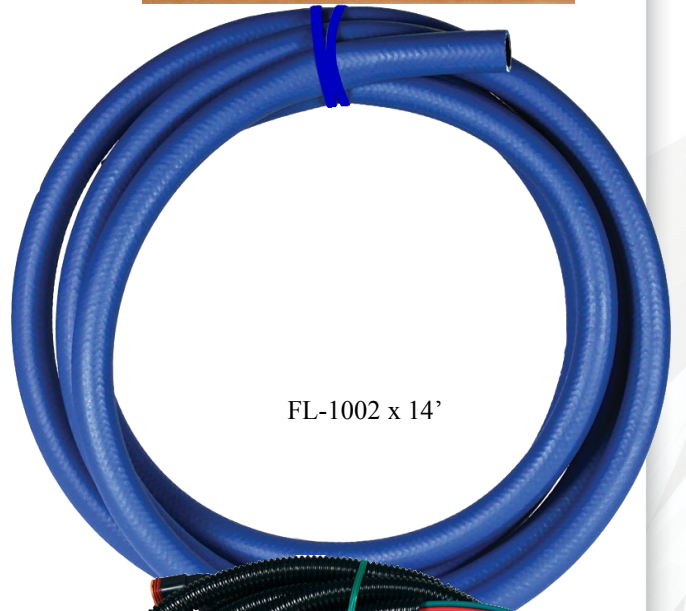


# CONTENTS



Owners Manual Available  
for Download at  
[www.FASSride.com](http://www.FASSride.com)

MP-9075



FL-1002 x 14'



PBR-2001

PFB-2002



PFB-2001C



WH-1006

# MOUNTING PACKAGE CONTENTS



BHF-1002



(3) PL-1005



1/2" Plug



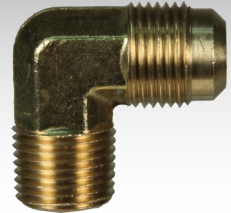
PL-1004



(4) HC-1001



Ring Termi-



10-301



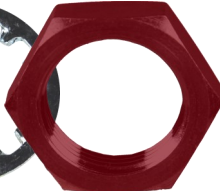
10-300



OR-223



LW-1001



BHN-1001



DT-1002



(1) 1/2" Washer



(1) Hex Bolt 1/2" -20 x 1 3/4"



(2) TC-1001 Screw



(2) Set Screw



ST-1006P



(2) A624C56-55-05



TC-1001



(4) Hex Bolt 3/8" -16x 1 1/2"



(3) Hex Bolt 1/4"-20x1 3/4"



(4) Locking Nut 3/8"



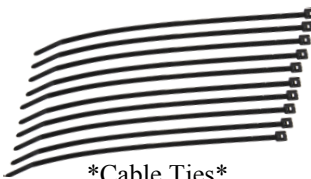
46260



(3) WA-1001D



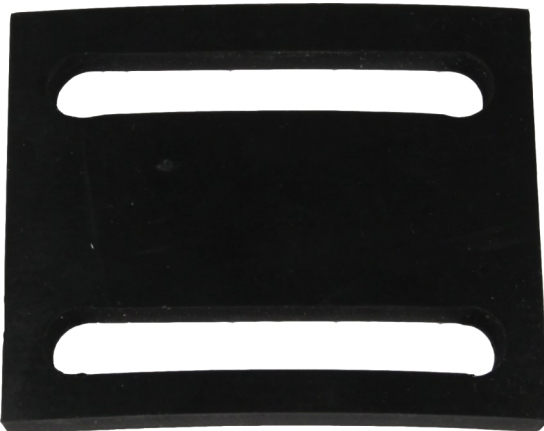
(4) 3/8" Washers



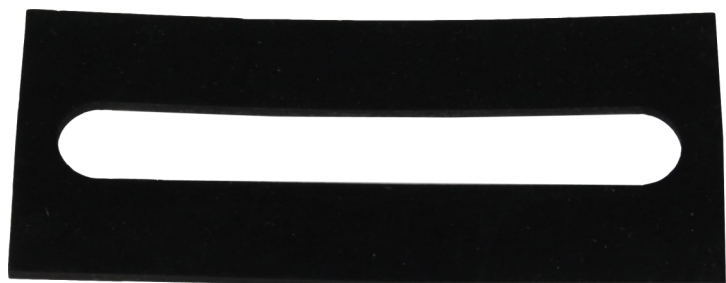
\*Cable Ties\*



RS-2001C



RS-2002



RS-2001



Before starting installation please review contents page to insure all necessary parts are included. Please call Diesel Performance Products for any missing or incorrect items. 636-433-5410

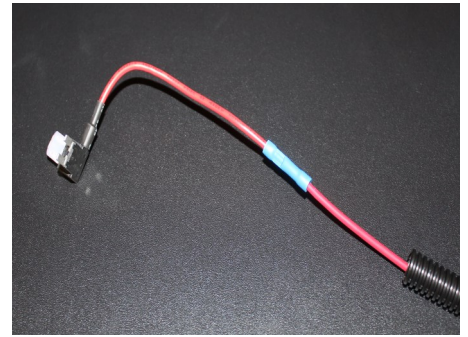
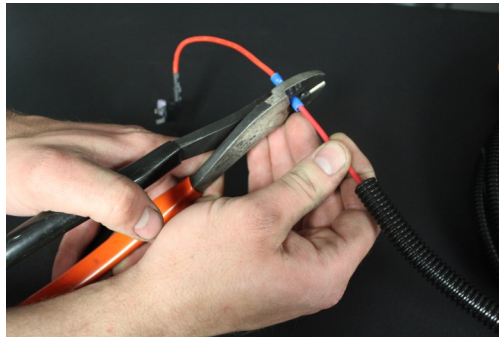
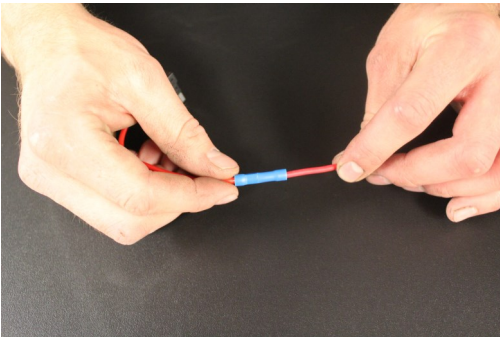
## STEP 1: INSTALL ELECTRICAL HARNESS

The installation of the electrical harness is done first, allowing power to be applied to the pump for

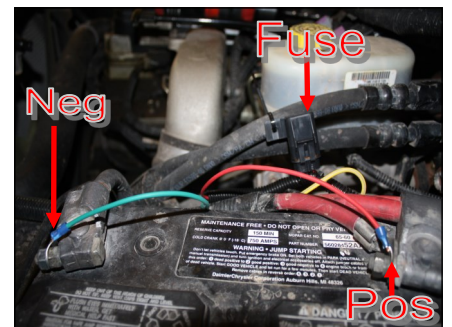
- A. Using wire stripping tool remove excess insulation off the 46044 and the WH-1006.



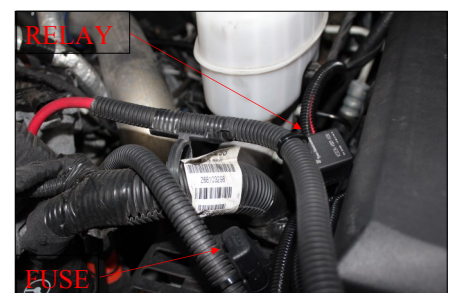
- B. Place wire from 46044 and WH-1006 into butt connector. Using crimping tool connect 46044 and WH-1006 with butt connector. Install 46260 to 46044 bottom slot (opening that is near the spade).



- C. Crimp the ring terminals to the red and green wires of the WH-1006 Wire Harness. Attach red wire to the positive terminal of the battery and the green terminal to the negative terminal. **The use of a corrosion preventative on electrical connections is recommended.**



- D. Secure relay and fuse in an upright position, as shown, to prevent moisture from entering. Di-electric grease may be applied to prevent corrosion.

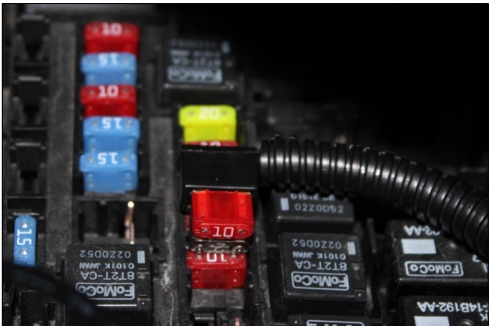
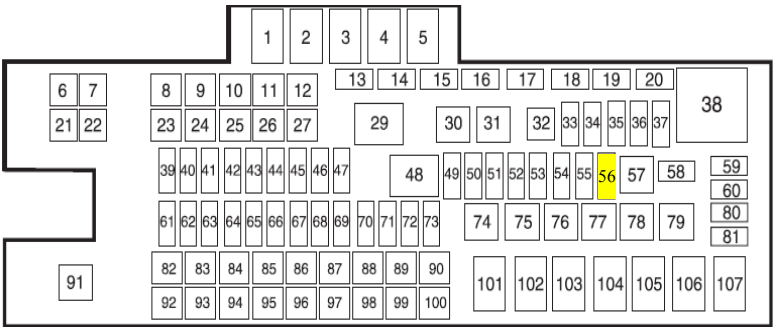


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# STEP 1: INSTALL ELECTRICAL HARNESS

The installation of the electrical harness is done first, allowing power to be applied to the pump for

- E. Route the extension to the engine bay fuse panel. Remove a fuse (maximum of 10A) that is “hot” when the key is on. Example: #54 or #55. Use a test probe to locate the “hot side” of the circuit in the fuse block. Install the fuse tap into the open location. Install the pulled fuse into the open space on the fuse tap. Disconnect the vehicles’ battery and continue installation.



- F. Route WH-1006 wire harness along frame rail to mounting location of pump. Completion of this step will be addressed in the mounting step.



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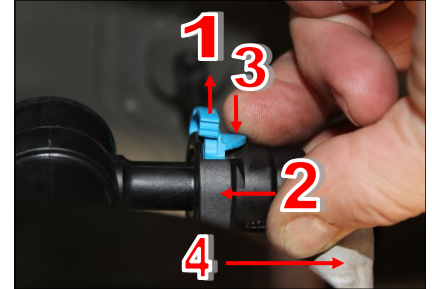
## STEP 2: PREPARE SUCTION & RETURN LINES

Some of the photo's are of a different application, procedures are the same.

**NOTE: Before installing fittings make sure to inspect for burrs or flare imperfections. When cutting fuel line make sure to blow out line to keep debris from moving forward.**

**Helpful Hint: Directions for removing factory lines.**

1. Pull up on the locking tab (blue),
2. Push in slightly on the connector,
3. Press down on the release tab,
4. Pull the connector straight off,



- A. Before tank is removed, identify ALL areas of clearance between the tank and the truck's bed for the best location to install the BHF assembly. With proper clearance, you want to install it as close to the Fuel sending unit as possible.



- B. Remove the filler neck and overflow tubes from the truck by loosening the clamps at both ends.



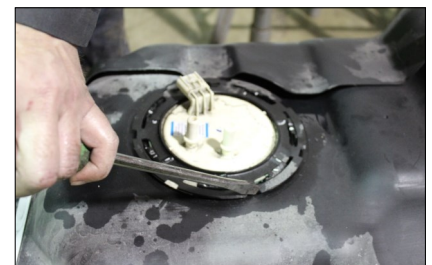
- C. Disconnect factory suction and return lines (refer to diagram at the beginning of step 2).



- D. With the fuel tank empty of fuel, unbolt the tank straps and remove it from the vehicle.



- E. Clean the fuel module area then remove the lock ring on the top of the fuel tank. **This is spring loaded, so, holding it down while removing the ring will prevent the sending unit from popping up and possibly causing damage.**



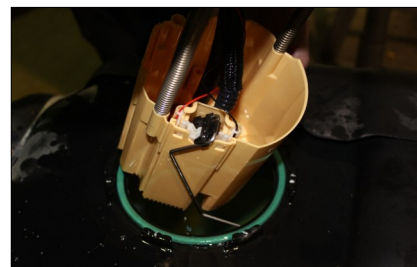
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## STEP 2: PREPARE SUCTION & RETURN LINES

- F. Note the location of the tab and arrow. Re-install the sending unit in the same location to prevent the fuel level arm from binding.



- G. Once the lock ring is removed, carefully remove pick up module from fuel tank without bending fuel level arm.



- H. **VERY IMPORTANT:** Support fuel tank on both ends allowing the natural formation of the tank to take place. Failure to perform this step can and will create an issue with less usable fuel!



- I. Push the ST-1006P onto the barb portion of the BHF-1002. Slide HC-1001 onto the ST-1006P down to barb portion of BHF-1002, and tighten accordingly. Insert O-ring OR-223 into groove on the bottom side of BHF-1002. Install 1/2" plug into the "R" port of BHF-1002.



- J. Place the BHF-1002 bulkhead fitting on the tank with enough clearance for the fuel line and fittings. **Keep in mind the bulkhead must also clear the bottom of the bed support structure.**

***Note: Fuel tank left in vehicle for visual representation.***



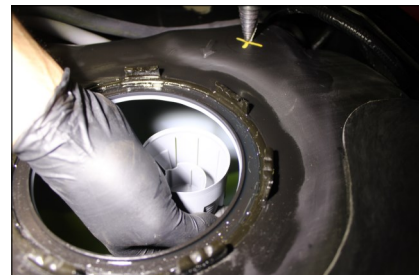
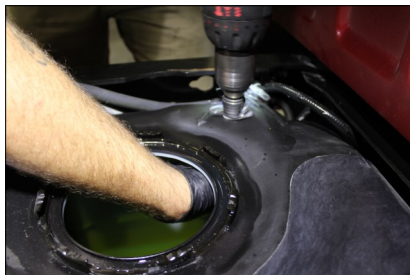
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## STEP 2: PREPARE SUCTION & RETURN LINES

- K. Once location has been established, **double check!** Mark location and drill 1 3/8" hole with hole saw. Hold a cup or catch can inside the tank while drilling to catch any debris. Place a rag over the opening to prevent tank contamination. Double check for debris around the ring and inside tank.



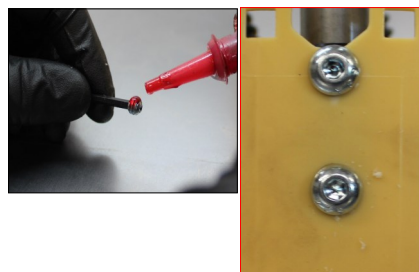
- L. De-burr hole and check for fit.



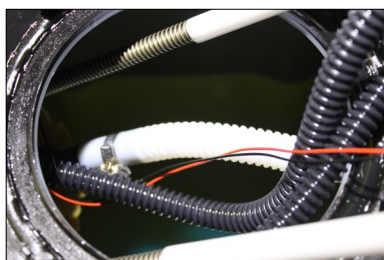
- M. Place fuel tank module on a suitable work area, utilizing provided template mark mounting holes for TC-1001. Drill pilot holes for the draw tube assembly with a 1/16" bit. Use a 1/4" bit for the final hole



- N. Install TC-1001 onto fuel tank module, **be sure to apply red Loctite onto mounting screws and set screws.** Install DT-1002 into TC-1001 using supplied set screws, and adjust 1" - 1 1/2" from bottom of tank module.



- O. Install BHF-1002 into fuel tank hole previously drilled, slide LW-1001/BHN-1001 onto BHF-1002 and tighten accordingly. Carefully install tank module into fuel tank while guiding float arm. Attach ST-1006P onto DT-1002 using hose clamp HC-1001. Reinstall tank module locking ring. Install PL-1004 into BHF-1002 using thread tape and torque to 20 ft./lbs. Install one end of FASS hose onto BHF-1002, and the other end onto the factory tank module supply using fitting A624C56-55-05 and HC-1001. Reinstall fuel tank by reversing steps taken for removal. Be sure FASS lines are free from obstructions and will not be pinched by body/frame mounting points.

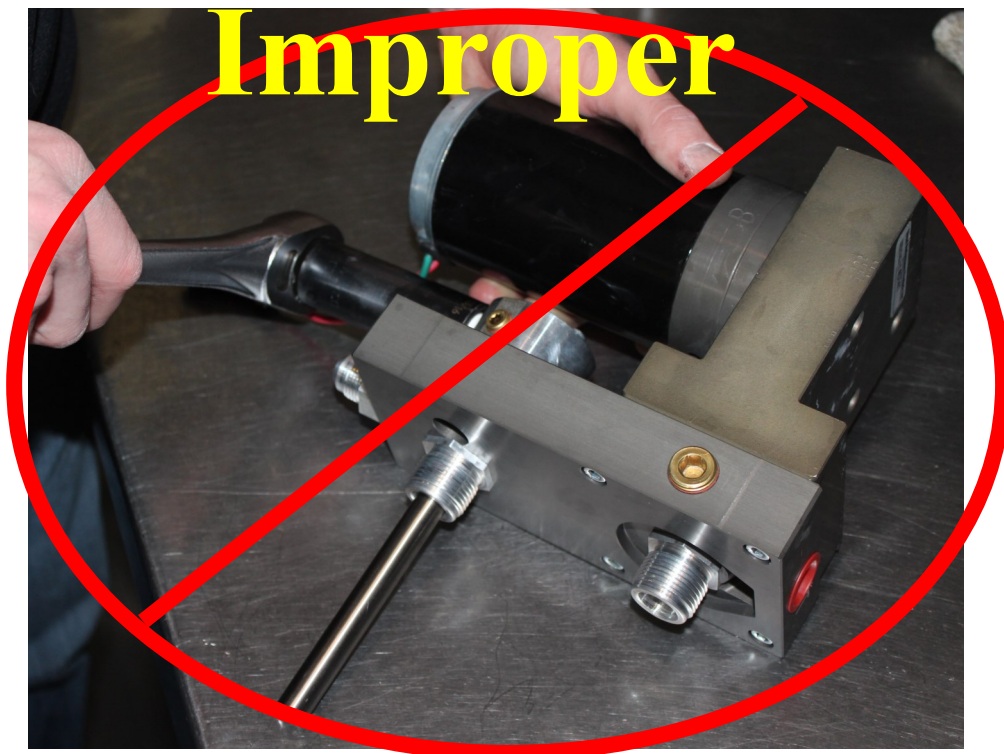
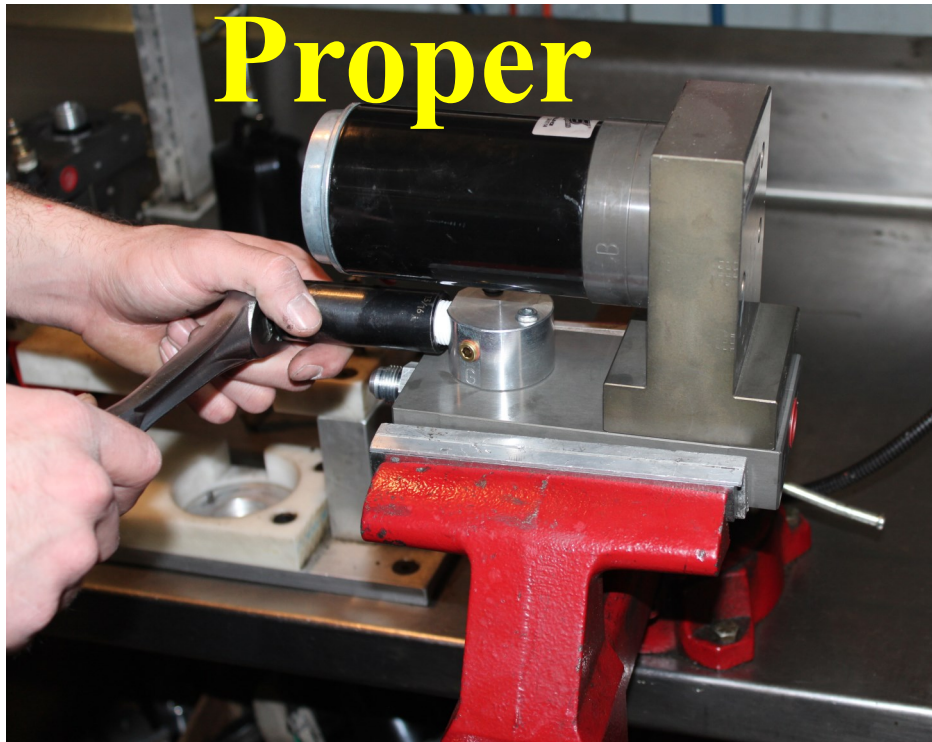




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## **NOTE**

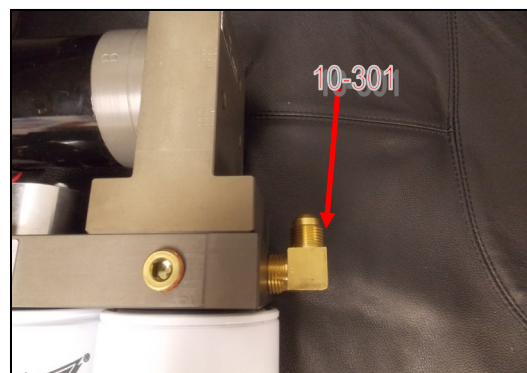
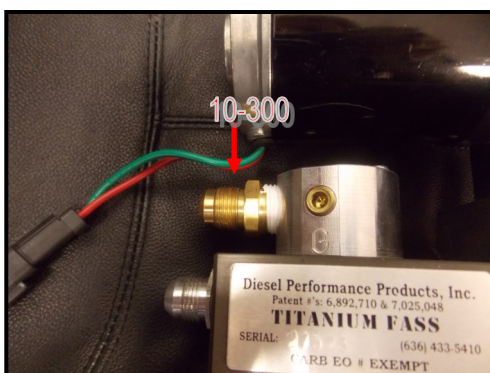
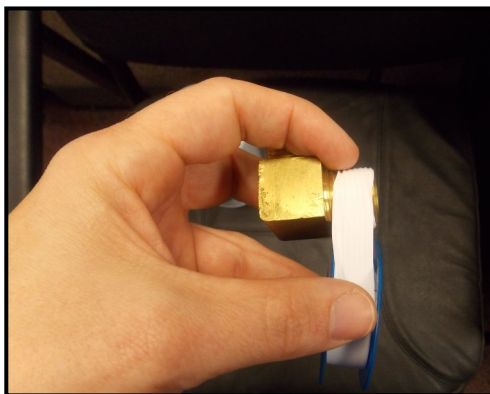
**ATTENTION:** While installing fittings into Titanium pump  
**DO NOT** Apply side pressure to draw  
tube of pump



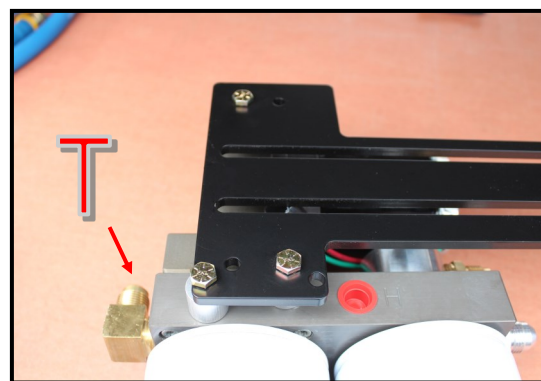
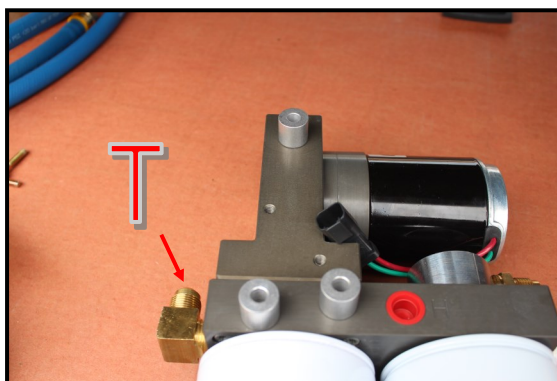
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## STEP 3: MOUNT FUEL SYSTEM

- A. Using thread tape, install the 10-300 into “E” and the 10-301 into the “T” port (on opposite end). Tighten 2-3 turns from finger tight. **Note: Do Not Put Thread Tape on Flare of Fitting \*\*\*The use of thread sealant is not recommended\*\*\***



- B. For fitting purposes. Secure PBR-2001 to pump assembly lightly with (3) 1/4"-20x1 3/4 bolts and (3) WA-1001D. Assembly will be used in future steps for correct fitting of brackets. **(Note: Bracket may be flipped to accommodate your application.)**

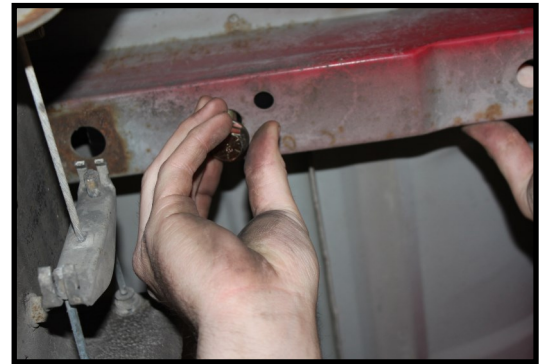




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## STEP 3: MOUNT FUEL SYSTEM

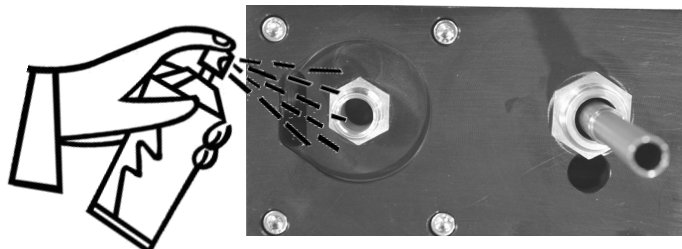
- C. Assemble PFB-2002C and RS-2001C RS will make contact with bed channel when assembled correctly. Insert the PFB-2002C assembly in to bed channel align the nut with the opening on the channel.



- D. Secure PFB-2002 and RS-2001 with (1) hex bolt 1/2" -20 x 1 1/2" and (1) 1/2" washer to PFB-2002C



- E. Plug female plug of the WH-1006 harness into the FASS pump. Reconnect the vehicles battery. Turn key on. With pump operating, liberally spray WD-40 (or equivalent) into Water Separator nipple. This process helps lubricate the gear for easier initial priming.





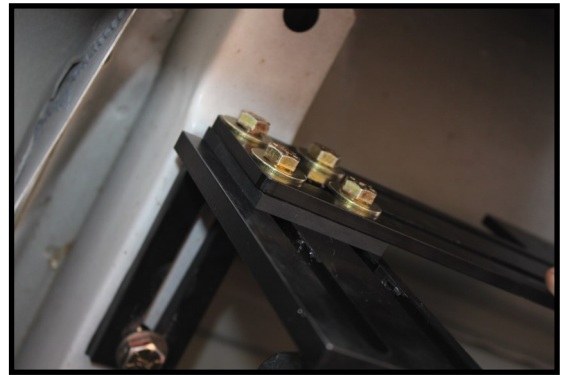
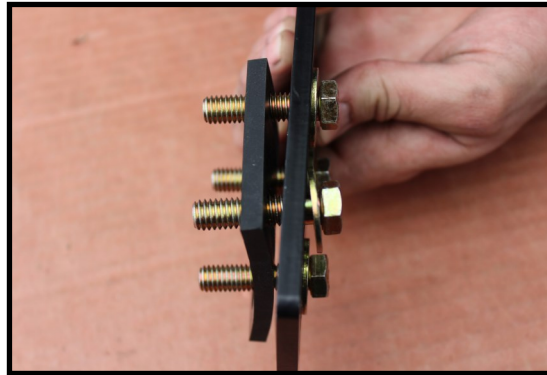
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## STEP 3: MOUNT FUEL SYSTEM

- F. Position the PBR-2001 to the PFB-2002 pump assembly at the mounting location and check for fit. Once location is established mark location for mounting in next step.



- G. Assemble the FASS pump bracket PBR-2001 using the RS-2002 spacer between PFB-2002 and PBR-2001 bracket with 4-3/8 bolts, nuts, and washers. **Note: Torque bolts not flange nut.**



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## STEP 3: MOUNT FUEL SYSTEM

- H. Once secure use 3-1 3/4 bolts and 3-WA-1001D spacers to mount the pump to the bracket.



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



**Fuel Filter –Install FF-3003 on side of pump with draw tube in the middle of the filter nipple.**



**Water Separator Filter –Install FS-1001 on water separator nipple without the draw tube. Make sure to insert O-Ring provided on nipple.**

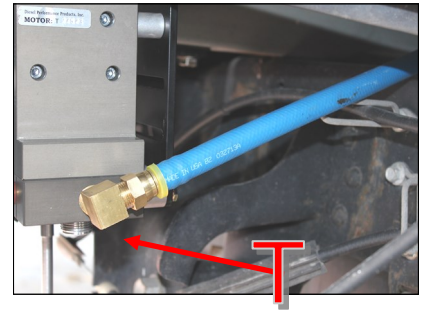
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## STEP 4: INSTALL FUEL LINE

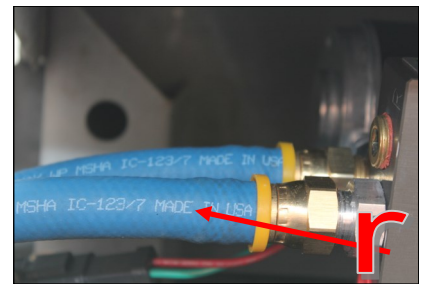
**Do Not use sealant on AN (male flare) fittings. Only use sealant on threads installed into pump assembly.**

- A. Route suction line from the suction tube assy. to port 'T' on the FASS system. Cut FL-1002 to needed length. Insert PL-1005 using oil. Connect to 10-301 in port 'T'. Torque to 18 ft./lbs.

**NOTE: Hose clamps are not recommended for push lock fittings. They will hold up to 300psi! Use oil on fittings and inside fuel line when installing Push-Lok fittings**



- B. Route fuel line from the 'S' port of the suction tube assy. to the 'R' port on the FASS system with a gentle bend. Cut and insert PL-1005 using oil. Attach fitting to the 'R' port. Do not use any sealant. Torque to 18 ft./lbs.



- C. Insert PL-1005 into remaining fuel line using oil. Attach fuel line to the 'E' port of the FASS system. Torque to 18 ft./lbs. Route this line to the engine side of the factory lift pump. Do not cut at this time.



- D. Disconnect factory fuel supply line on rear of factory Ford lift pump, and connect FASS hose using fitting A624C56-55-05 and HC-1001.



**Note: Secure all fuel lines with cable ties. Cable ties are an economical way to prevent the possibility of problems occurring! The factory suction line can be capped off or removed from the truck. The openings on the filter and tank will need to be capped off to keep debris from getting into lines or canister.**



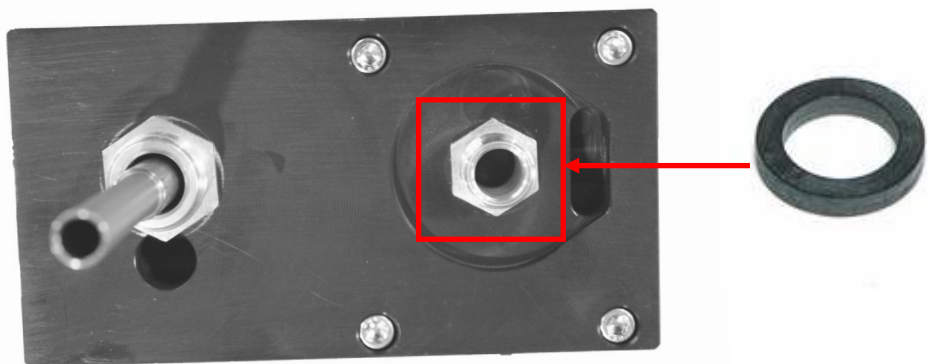
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## **STEP 5: REVIEW INSTALLATION**

- Blow out any open lines/cover any open ports
- Bolts and fasteners properly tightened?
- Electrical harness and fuel lines secured and properly tightened? Reconnect the battery.
- Has the system been primed?
  1. Turn key to the ignition position, turning on the FASS pump for 15 sec..
  2. Crank engine and allow to run for at least 1 minute.
- Check for leaks.
- Start the engine
- Recheck all fluid and filter connections for leaks
- This pump comes with a 1 Year Manufacturer's Warranty based on the date it has been manufactured. To receive your extended Lifetime Warranty, you have 30 days from date of purchase to send the completed warranty information along with a copy of the purchase receipt in to Diesel Performance Products, Inc. Att: Warranty 16240 Hwy O Suite B Marthasville, MO 63357

Before starting installation please review contents page to insure all necessary parts are included. Please call Diesel Performance Products for any missing or incorrect items. 636-433-5410

## STEP 5: REVIEW INSTALLATION



**Note: O-Ring must be put back on suction side of pump. Failure to do so can result in priming issues, cavitation, or pressure losses.**

To assist with priming your FASS pump crack the FF-3003. Put power to the FASS pump to activate the pump. When the tone of the pump changes you can tighten up the fuel filter. If you need a video of the priming process go to [www.FASSride.com](http://www.FASSride.com).



**Note: The Red Plastic Plugs located in the “H” ports can stay in place fuel will not flow through these ports. Coolant can be plumbed into these ports to heat the fuel in the Winter months.**

## **LIMITATION OF LIFETIME WARRANTY**

**Disclaimer:** 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](http://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.

Diesel Performance Products, Inc. (hereafter "SELLER") gives Limited Warranty as to description, quality, merchantability, fitness for any product's purpose, productiveness, or any other matter of SELLER'S product sold herewith. The SELLER shall be in no way responsible for the product's open use and service and the BUYER hereby waives all rights other than those expressly written herein. This Warranty shall not be extended or varied except by a written instrument signed by SELLER and BUYER.

**When MANUFACTURER receives the "ORIGINAL" PRODUCT REGISTRATION form with a copy of the "BILL OF SALE/SALES RECEIPT" within 30 days of the sale, then the following applies!** The Warranty will then and only then be validated to that of which typically accompanies your unit for your specific application from the date of sale or for recommended service life and limited solely to the original purchaser and/or vehicle and parts contained within the product's kit. This warranty does not cover normal wear on consumable items such as but not limited to filters, fuel line, wire harness & etc. The warranty does not cover seized gears due to lack of filtration. Warranty is voided if used with other than diesel fuel. Returned items will arrive prepaid to the place of purchase. Diesel Performance Products, Inc. will repair, without cost, any product found to be defective during the warranty period; parts only, or at its option, will replace such products in exchange for the product. Repair or replacements are warranted for the remainder of the original warranty period. All Warranty claims are subject to approval by Diesel Performance Products, Inc.

**A Return Material Authorization (RMA) number must be obtained before any product is to be returned to Diesel Performance Products, Inc. for warranty consideration, repair or product return.** Requests for product returns must be offset by an equal value order. Return parts must be completed and in resalable condition. No returns after 30 days.

The following information is required to obtain a RMA number before returning product:

Your Name, Address, and Phone Number's  
Model and Serial Number (Not Motor Number) Example: Model HD Series, Serial: 00125966  
VIN Number of Vehicle  
Date of Purchase  
Nature of Problem

RMA and Product Serial Number must be on all paperwork and correspondence. Failure to obtain the required information or paperwork will result in \$25.00/item penalty and delay or denial of any warranty claim.

Under no circumstances shall the SELLER and/or MANUFACTURER be liable for any labor charged or travel time incurred in diagnosis for defects, removal, or reinstallation of this product, or any other contingent expenses.

Under no circumstances shall the SELLER and/or MANUFACTURER be liable for any damage or expenses insured by reason of the use or sale of any such equipment. This warranty does not apply to products which Diesel Performance Products, Inc. has determined to have been misused or abused, improperly maintained by the user, or where the malfunction or defect can be attributed to the use of non-genuine Diesel Performance Products, Inc. parts.

**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 PROOF OF PURCHASE, 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 THIS AGREEMENT AND ACCEPTS ITS TERMS AND CONDITIONS.**

Technical Support:

Diesel Performance Products, Inc.  
16240 State Hwy O Suite B  
Marthasville, MO 63357  
636-433-5410



# NOTES