

INSTALLATION MANUAL

TITANIUM SERIES



APPLICATION:

T F14 125G (125gph @ 55psi)

Powerstroke 7.3L
Bypassing the Factory Lift Pump
1999-2003

Powerstroke 6.0L
Bypassing the Factory Lift Pump
2003-2004



PICKUP

FASS[®]
Fuel Systems

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.

!WARNINGS!

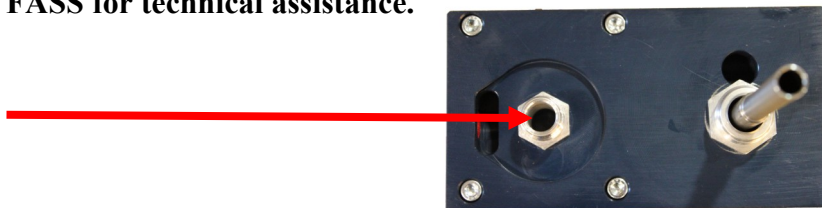
- Read all instructions before starting installation of this product!
- Installing the improper FASS Pump can cause *severe* engine damage.

FASS	Recommended Application
T F14 125G	Powerstroke 1999-2004 with stock - extreme 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!**
- Use caution when drilling. Steer clear of any electrical wires , air lines or other damageable components.
- 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.

INSTALLATION MANUAL

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

1. Inventory the package components completely. Notify the place of purchase immediately of any parts missing or damaged.
2. *Read the installation manual completely before attempting installation. Understand how the system operates and read installation recommendations before beginning installation.*
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 with the following information:

- Your Name, address and daytime phone number
- Model **(T F14 125G)**
- 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 F14 125G)**
- Serial Number
- Last 6 of vehicles' VIN
- Date of purchase

TITANIUM SERIES

125 GPH

55 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



Cable Ties



FB-2001



BR-2001



WE-1001

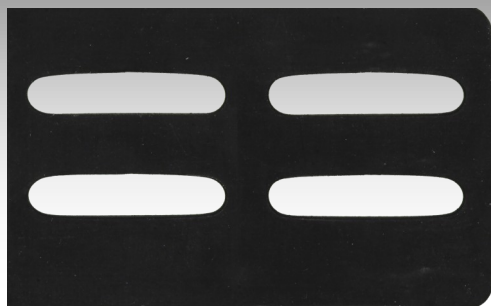


FL-1001 x15'



WH-1005

MOUNTING PACKAGE CONTENTS



RS-1001



RM-1002



PLB-3838



PL-1002



PLB-38516



10-299



10-298



Ring Terminal



QD-1001



HC-1004



HC-1001



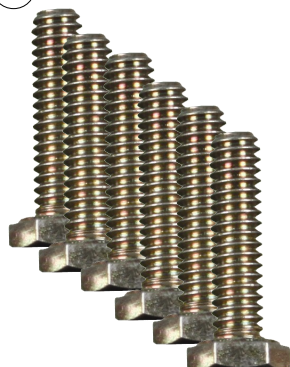
⑤ Hex Bolt 1/4"-20x1.25"



Butt Splice



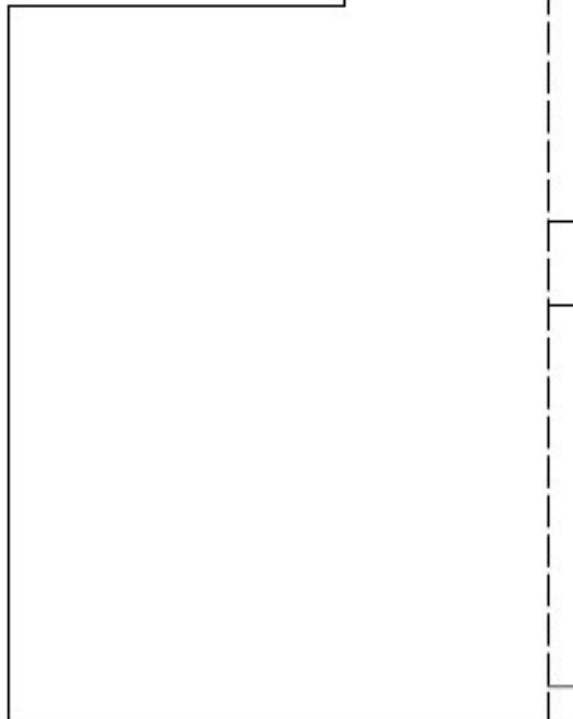
⑤ WA-2001



⑥ Hex Bolt 3/8" -16x 1 1/2"



⑥ Locking Nut 3/8"

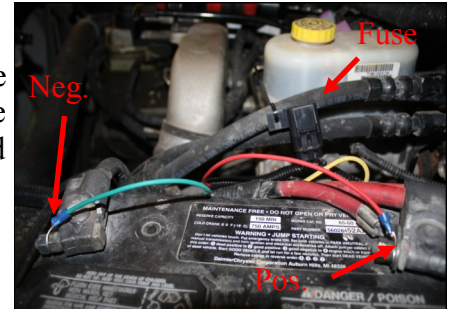


STEP 1: INSTALL ELECTRICAL HARNESS

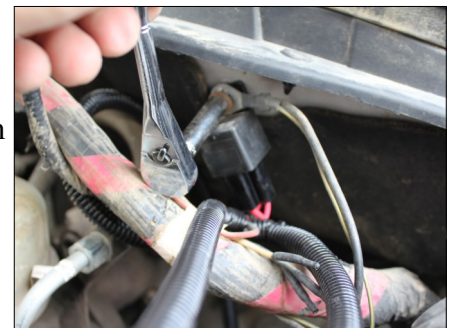
Note: The installation of the electrical harness is done first, allowing power to be applied to the pump for lubrication purposes.

Note: Use of corrosion preventative spray is recommended.

- A. Using ring terminals, attach red wire of the WH-1005 to the positive battery terminal. Attach green wire to a clean ground, preferably the negative battery terminal. Secure fuse block in a location protected from outside elements.

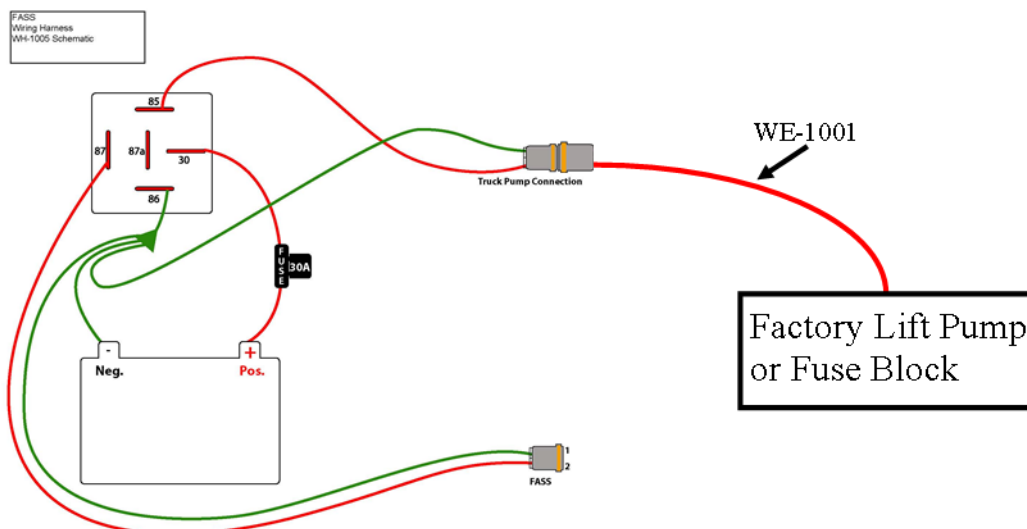


- B. Secure Relay in an upright position, as shown, to prevent moisture from entering. Di-electric grease may be applied to prevent corrosion.



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

- C. Attach WE-1001 to the WH-1005 Wiring Harness. Route WE-1001 red lead and the WH-1005 along the frame to the factory lift pump.



STEP 2: PREPARE SUCTION AND RETURN LINE

Caution: make sure there is enough tube on each side of the cut to insert the RM-1002 and to place the hose clamps.

- A. Mark location on the filler tube that allows you to install RM-1002. Cut tube.



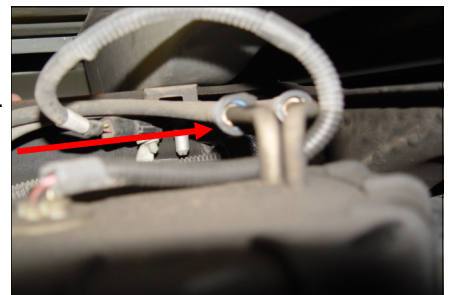
- B. Position RM-1002 with the junction pipe aiming to outside of bed. Connect rubber hose and RM-1002 using both HC-1004's but do not tighten.



- C. Using a HC-1001 connect FL-1001 to the junction of RM-1002.



- D. Disconnect factory suction line by pinching in on the blue tabs. Thoroughly clean this suction port .

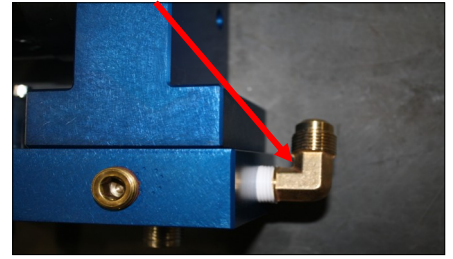
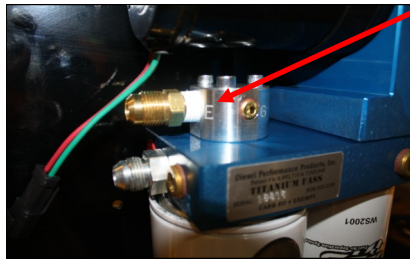


- E. Insert QD-1001 and clamp into opposite end of fuel line. Oil O-rings inside QD-1001 and slide onto factory suction port until you hear a click. Loop fuel line over the frame. Do not cut at this time.

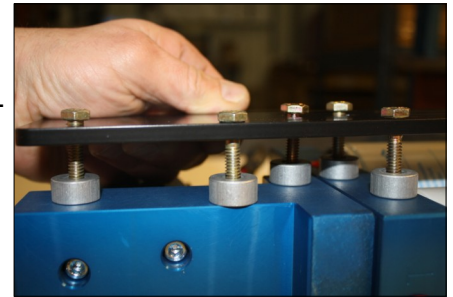


STEP 3: MOUNT FUEL SYSTEM

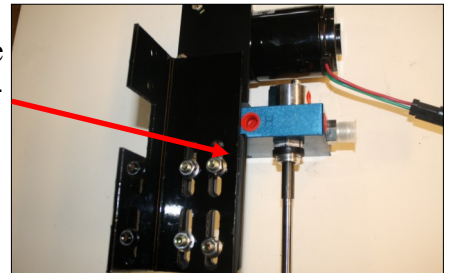
- A. Using thread tape, install the 10-298 into “E” and the 10-299 into the “T” port (on opposite end).



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



- C. Placing the RS-1001 between the FB-2001 & the BR-2001, assemble the FASS pump brackets together. Hold pump up to the mounting location for rough fitting.



- D. Position the pump assembly at the mounting location (emergency brake cable bracket) check for fit. Once location is established, use template to mark drill points.



- E. Pre-drill holes. Final drill with 3/8” bit. Mount bracket, check for fit and bolt hole alignment.



STEP 3: MOUNT FUEL SYSTEM

Note: Before mounting into position, finish connecting wire harness.

- F. Connect FASS wire harness extension to factory lift pump power sup-

1999-2003 with 7.3L Powerstroke

- F.1 Route wire harness/wire extension along the frame rail to factory lift pump. Remove the power lead from the factory lift pump.

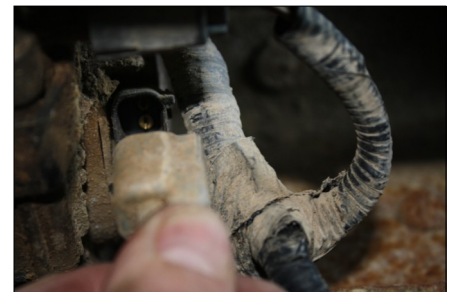
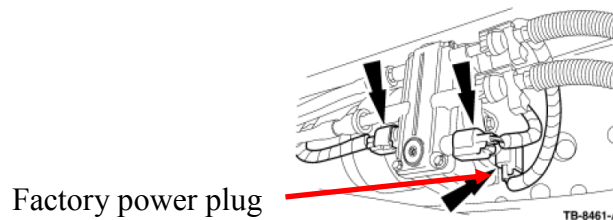


- F.2 Cut off the power lead terminal. Using appropriate tools, crimp the Butt Splice to the factory power lead and the WE-1001. Shrink blue cover with an appropriate heat source.



2003-2004 with 6.0L Powerstroke

- F.1 Route FASS wire harness/wire extension along the frame rail to factory lift pump. Remove the power plug from the factory lift pump.

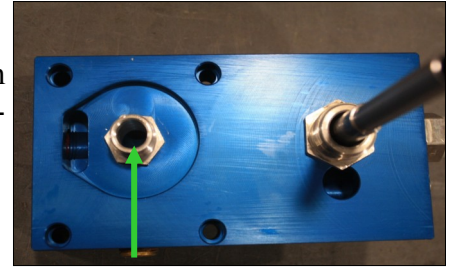


- F.2 Cut off the power lead from the factory plug. Using appropriate tools, crimp the Butt Splice to the factory power lead and the WE-1001. Shrink blue cover with an appropriate heat source.



STEP 3: MOUNT FUEL SYSTEM

- G. Plug female plug of the FASS harness into pump. Turn key on. With pump operating, liberally spray WD-40 (or equivalent) into water separator nipple, lubricating gear.



Note: If necessary, use the WA-1001C spacers between the hanger and the bracket to adjust angle of bracket.

- 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: INSTALLING FUEL LINE

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

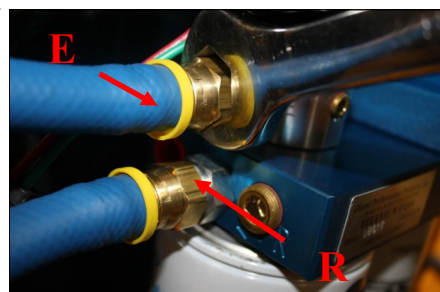
Note: Hose clamps are not recommended for push lock fittings. They will hold up to 300psi!

Note: Use oil on fittings and inside fuel line when installing Push-Lok fittings.

A. Route suction line to 'T' port . Cut FL-1001 to needed length and insert PL-1002 using oil. Connect to 10-299 in 'T' port . Torque to 18



B. Route fuel line from the Return Manifold in the filler neck to the 'R' port on the FASS system with a *gentle bend*. Cut and attach the PL-1002 fitting to the hose. Use oil. Attach fitting to the 'R' port. Do not use any sealant. Torque to 18 ft./lbs.



C. Insert PL-1002 into remaining fuel line using oil. Connect fuel line to 'E' port. Torque to 18 ft./lbs. Route this line up to factory lift pump.

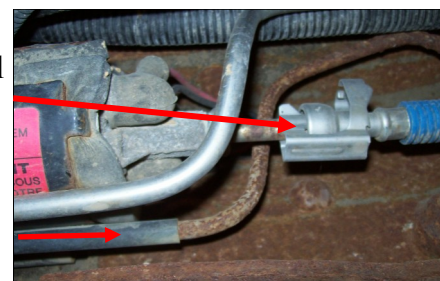
Note: The factory return line on the 7.3L does not require any modification.

D. Bypass factory fuel pump.

1999-2003 with 7.3L Powerstroke

D.1 Using a quick disconnect tool, remove outlet side of the factory fuel pump.

Factory return line



D.2 Route the fuel line from the "E" port of the FASS to the factory lift pump's quick disconnect and cut to length. Insert the PLB-38516 into FASS fuel line using oil. Slide the PLB-38516 into the factory quick disconnect until you hear a click. Lock down factory retainer clip.



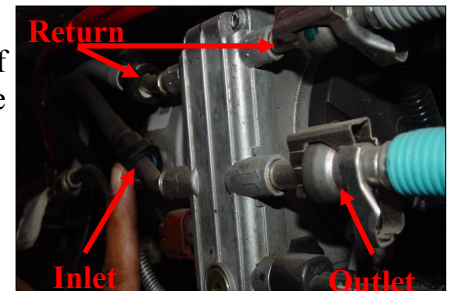
STEP 4: INSTALLING FUEL LINE

2003-2004 with 6.0L Powerstroke

- D.1 Drain fuel from factory pump/filter using a 6mm hex drive, turning it counterclockwise.



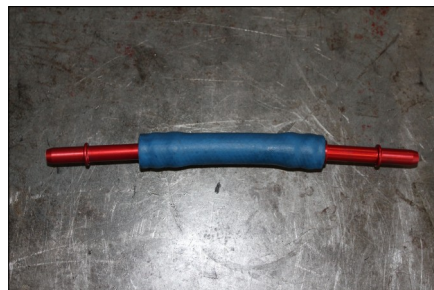
- D.2 Using quick disconnect tools, remove the fuel lines from the front of the factory fuel pump. Remove the fuel lines attached to the rear of the factory fuel pump by pressing in on the blue tabs.



- D.3 Route the fuel line from the “E” port of the FASS to the engines fuel feed line quick disconnect and cut to length. Insert the PLB-3838 into FASS fuel line using oil. Slide the PLB-3838 into the factory quick disconnect until you hear a click. Discard factory retainer clip.



- D.4 Measure between the two factory return fittings and cut remaining FL-1001. Insert two PLB-38516 fittings into the FL-1001 using oil. Insert this assembly into factory return lines until you hear a click. Secure fuel line.



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