INSTALLATION MANUAL

FUEL PUMP

ADJ

LIFETIME WARRANTY AVAILABLE

PICKUP

APPLICATION:

200 GPH @ 60PSI (FA F15 200G)

Ford Powerstroke 7.3L/6.0L
Bypassing the factory Lift Pump

1999-2007

DODGE

FASS®

REVISED 4/05/11

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 – Fuel Pump (Adjustable) S e r i a l :
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 – Fuel Pump (Adjustable) S e r i a l :
00125966
Vin Number of Vehicle
Date of purchase

WARNING!!

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

*This installation manual applies to the **FA F15 200G** 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 FA F15 200G applies to this application:

Recommendation: FA F15 200G – Ford Powerstroke 7.3L/6.0L 1999-2007, with extreme horsepower modifications.

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 preparing or installing items in fluid connectivity with the “T” port, as debris can lock up the motor. This also includes applying thread tape over the threads “ONLY”, not blocking or obstructing any path that fuel travels. If the motor does lock up from debris, call FASS for technical assistance. 100% of the FASS Fuel Pumps are vigorously tested, which includes (but not limited to) wet testing for pressure, amps, flow, & including total all around performance before being shipped.

For the same reason as mentioned above, the FASS Pump must be protected by a fuel filter as debris is present in diesel fuel and fuel systems. Use the inline fuel filter, or equivalent, which accompanied your FASS Fuel Pump.

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.

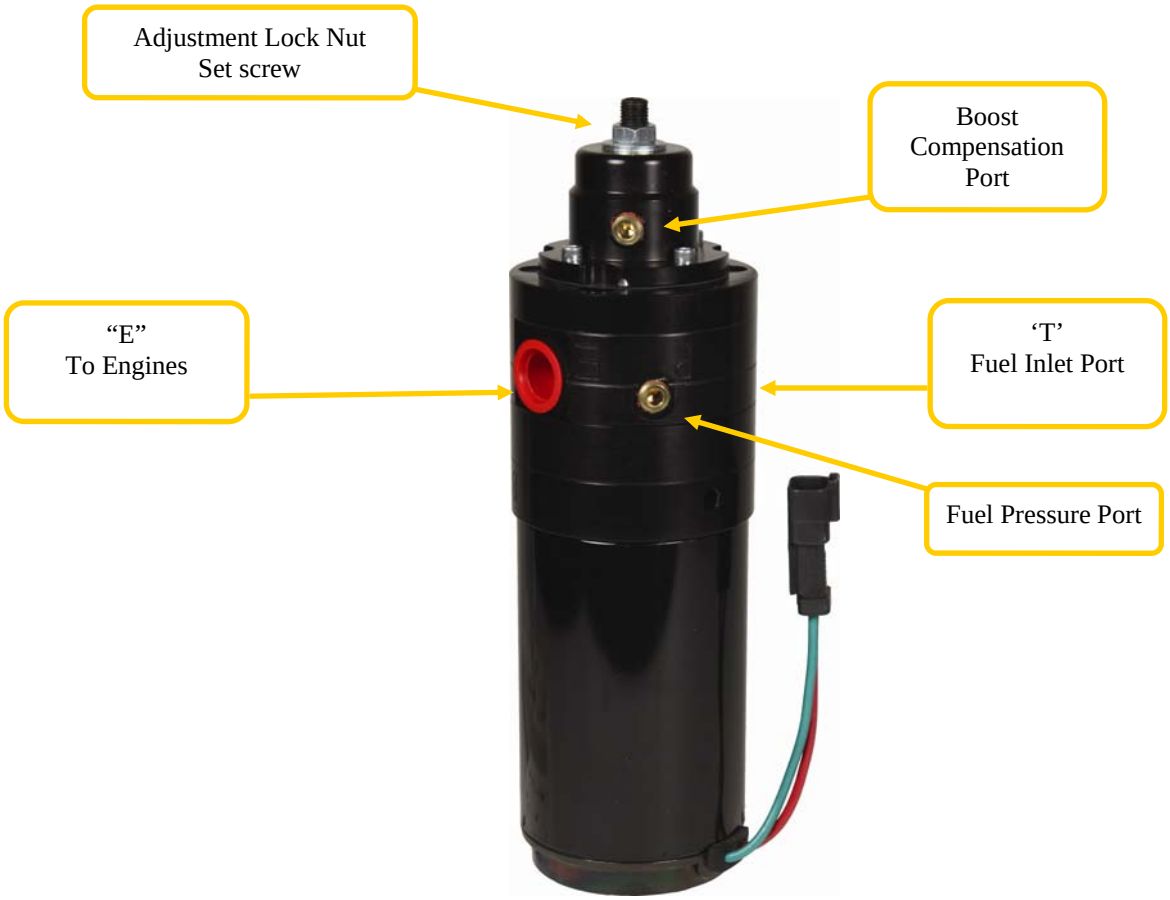
Due to training, communication, and our relationship with our authorized dealers, we recommend an authorized FASS Fuel Systems dealer for the installation. They are prepared to install the FASS fuel pumps with the most efficiency. If a situation/problem arises during the installation, they are the most 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.

ADJUSTABLE FUEL PUMP SERIES

200 GPH

60 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 Line
Step 3:	Mount Fuel System
Step 3:	Install Fuel Line
Step 4:	Check/Setting Pressure
Step 5:	Review Installation

CONTENTS:

THB-1001 &
BHB-1001

FL-1002 x 11’

FF 3248

WH-1005

MP-9049

10-300

PL-1004

PL-1005

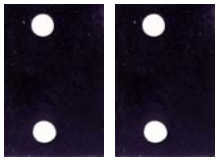
CP-1001

PL-1009

HC-1001

WE-1001

Ring Terminal



RS-1002

NP-1001

Flag Terminal

Fuse Tap

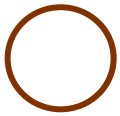
BHF-1002

BHN-1001

LW-1001

ST-1005P

1/2” Plug



OR-223

(1/4)” - 20 x 1.75”

(1/4)” - 20 x 3.5”

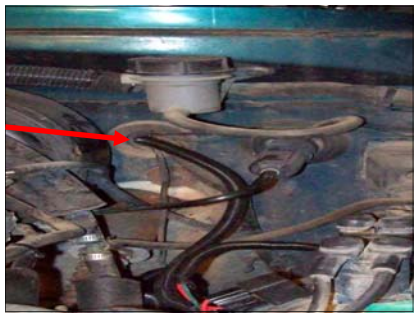
.25 Nuts

.25 Lock Washers

STEP 1: INSTALL ELECTRICAL HARNESS

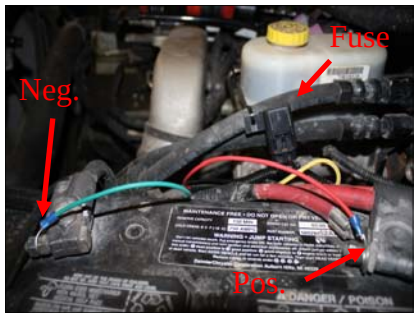
Note: The installation of the electrical harness is done first, allowing power to be applied to the pump for lubrication purposes.

a. a. Attach WE-1001 to the WH-1005 Wiring Harness. Route WE-1001 red lead through the fire wall using existing grommet.



Note: Use of corrosion preventative spray is recommended.

b. 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.



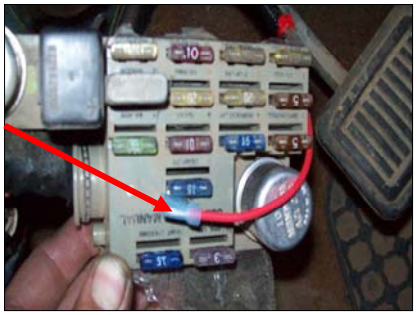
c. Secure Relay in an upright position, as shown, to prevent moisture from entering. Di-electric grease may be applied to prevent corrosion.

d. Connect the fuse tap to the hot leg of the fuse.

e. Using the flag terminal and fuse tap, connect the “Red” lead, of the WE-1001, to the “hot side” of a terminal in the fuse box which is “hot” when the key is in the on position.

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

f. Route wire harness along frame to the approximate mounting location near the fuel tank.



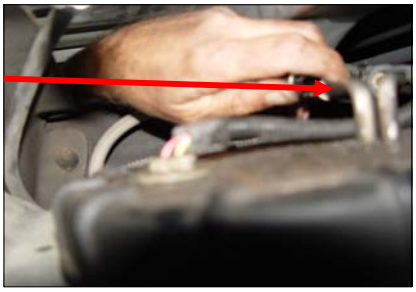
STEP 2: PREPARE SUCTION LINE

Very Important: Before removing the fuel tank identify "ALL" areas of clearance between the tank and bed to install the draw tube assembly. The closer the suction tube is placed to the center of the fuel tank, front to back and left to right, the more usable fuel there will be!

Helpful Hints: If more space is required to access the top of the fuel tank, loosen the strap nuts to the end of the stud. This will gain you about 3" more working room.

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

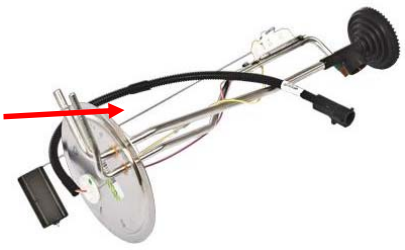
a. Remove the filler neck and overflow tubes from the truck by loosening the clamps at both ends.



b. Disconnect factory suction and return lines with the use of a quick disconnect tools.

c. With the fuel tank empty of fuel, remove it from the vehicle.

d. Clean the fuel module area then remove the lock ring on the top of the fuel tank.



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

f. Assemble the BHF-1002 with the PL-1004 in port "S" using thread tape, the 1/2" plug in port "R" along with pushing the ST-1005P onto the barb portion of the BHF-1002,.Insert O-ring into groove. Torque to 40ft/lbs.

STEP 2: PREPARE SUCTION LINE

g. Before drilling marked location, clean area of debris. Double check area selected for any interference including the fuel level arm.

h. Drill a 1 1/2" hole, catching all debris. De-bur hole and remove any missed debris in the fuel tank.

i. ***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!

j. Place the bulk head assembly into the drilled hole, take measurements so the bottom of the suction tube is only 1/8" (no more than 2 quarters stacked) from the bottom of the fuel tank. Using a razor knife make multiple cuts to insure proper length, it is easy to shave the suction tube with the razor.

It is more efficient to cut the tube too long and then correct to proper length than it would be to cut too short.

k. With proper length being obtained, place the assembly into the drilled hole securing the assembly using the lock washer & nut. Loctite may be applied to the threads of the BHF-1002 for added insurance.

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

l. Carefully reinstall install pick up module making sure the leveling arm is not obstructed by the suction tube. Reinstall factory lock ring. Push one end of fuel line onto 'S' port of suction tube assy. Route fuel line over frame. Do not cut at this time. Reinstall fuel tank making sure to reconnect factory return and electrical connections. Torque hanger bolts to factory specifications.

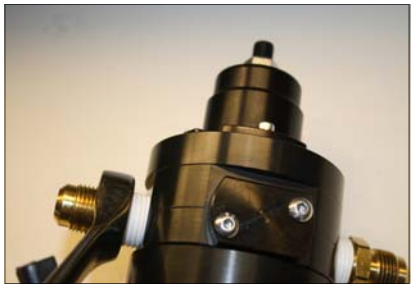
STEP 3: MOUNT FASS FUEL PUMP

Note: the mounting bracket may be mounted on either side.

a. Position system to mounting location, drivers side bed rail in front of the axle. Use the mounting template, located at the rear of this manual, to help mark the mounting location. Drill two ¼" holes.

Note: Place a rubber spacer between the hanger bracket and bed rail and the other rubber spacer on the opposite side between the bed rail and NP-1001 nut plate.

b. Install the two ¼"-20 x 3 1/4" bolts, nuts and lock washers and THB-1001.



c. Using thread tape, install the two 10-300 into the "T" & "E" ports. Torque to 40 ft./lbs.

d. Connect the male end of the wire harness to the female electrical connector on the FASS pump. Turn key to the "On" position. With the FASS pump on, squirt a liberal amount of WD-40 or other lubricant into the "T" port. This procedure will "wet" the Gerotor and allow for better suction during initial priming.

Note: Use of Anti-seize compound is highly recommended.

e. Using the bottom portion of the mounting bracket and the four ¼" – 20 x 1 ¾" bolts, mount the fuel pump mount the pump so the port labeled "T" is facing the rear of the truck. Torque the 4 ¼ - 20x 1 ¾" bolts to 110 inch pounds.

VERY IMPORTANT: REMEMBERING THE POSITION OF THE "T" PORT, THERE IS A SMALL WEEP HOLE IN THE BASE DIRECTLY NEXT TO THE ELECTRIC MOTOR, THIS HOLE MUST AIM DIRECTLY TO THE GROUND!! IM-PROPER INSTALLATION OF THE PUMP CAN CAUSE PREMATURE WEAR AND VOID MANUFACTURES WARRANTY.

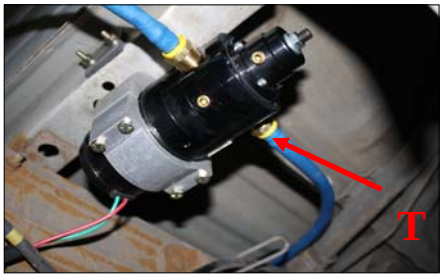
STEP 4: INSTALLING FUEL LINE

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!

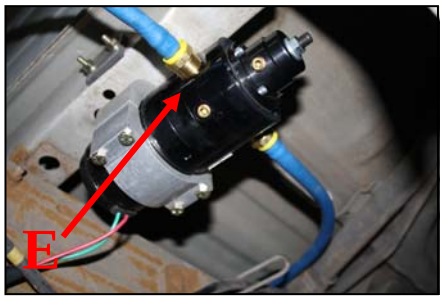
Note: Use oil on fittings and inside fuel line when installing Push-Lok fittings.

a. Route fuel line from the suction tube assy. to the suction port on the FASS pump labeled "T". Cut the fuel line. Insert PL-1005 into fuel line using oil. Attach to 10-300 in 'T' port. Torque to 18 ft./lbs.



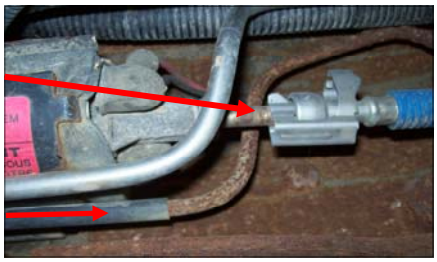
b. Install in-line fuel filter in an accessible location in the suction line using the HC-1001's. Make sure the fuel flows in the direction of the arrow on the canister.

c. Insert PL-1005 into fuel line using oil. Attach to 10-300 located in the port labeled "E".. Torque to 18 ft./lbs. Route this line to the factory lift pump.



For 1999-2004

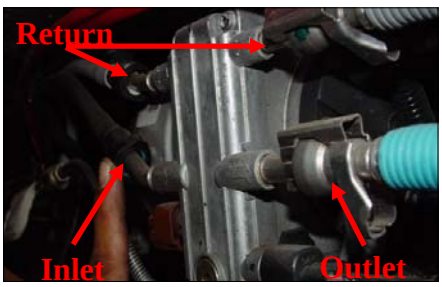
d. Using a 3/8" quick disconnect tool, remove outlet side of the factory lift pump.



Factory return line

For 2005-2007

Using a quick disconnect tool, 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 tabs.



STEP 4: INSTALLING FUEL LINE, CONTINUED

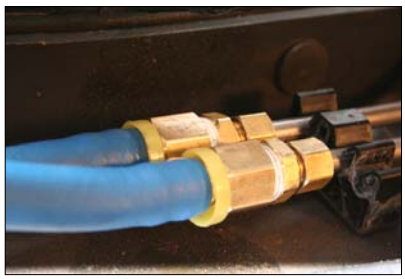
e. Using a pipe cutter, cut the disconnected factory fuel line just beyond the flexible tubing. Only the return lines and the outlet fuel line will need this procedure performed.

f. Assembly the PL-1009 and CP-1001 using pipe tape.

g. Secure the compression fitting by sliding the nut, ferrule and then the compression fitting onto the un-burred steel fuel line. Repeat 3 times.

h. Route the fuel line from the “E” port of the FASS to the PL-1009 attached to the engines fuel feed line. Push on using oil.

i. Connect the remaining open PL-1009’s on the return lines with the remaining fuel line. Be sure to oil both before attaching.



STEP 5: Checking/Setting Pressure

Warning: **Exceeding factory fuel pressure may result in severe engine damage. Consult with engine manufacture before adjusting pressure!**

The preset pressure is approximately 60 psi. Proceed to the following step to check or reset the fuel pressure.

The port with 1/8" Allen plug marked with the letter "P" is a gauge port.

To adjust the pressure follow these procedures:

With the pump running –

- Loosen the lock nut
- Turn the adjustment screw clock wise to increase pressure and counter clock wise to decrease pressure.
- Once desired fuel pressure is obtained, tighten lock nut.

STEP 6: 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 90 degree fitting on the filter housing until fuel is present and then retighten.
- Check for leaks.
- Start the engine
- 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

TEMPLATE