

INSTALLATION MANUAL

ADJ FUEL PUMP SERIES



APPLICATION:

FA C09 095G (95gph @ 10psi)
FA C09 150G (150gph @ 10psi)

Duramax 2500 & 3500

2001-2012



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 back of Install manual for full Limitations 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.

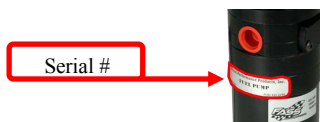
!WARNINGS!

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

FASS	Recommended Application
FA C09 095	GM Duramax 2001-2012 with stock - moderate horsepower modifications
FA C09 150G	GM Duramax 2001-2012 with moderate - extreme horsepower modifications

Note: Due to the increase of fuel flow you may encounter a problem with the stock fuel module. Adding a FASS suction tube kit will solve that issue.

- 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 "T" port can lock up the motor. If the motor does lock up from debris call FASS for technical assistance.



- Be sure to utilize the inline fuel filter included in this kit, or the equivalent, to prevent a motor lock up.
- 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 ADJUSTABLE FUEL PUMP

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. Use good judgment and take into 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 an Authorized or ViP 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. DPPI is not responsible for any installation mistakes.
5. If you have any questions or concerns that can not be addressed with your dealer, 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 (**FA C09 095G or FA C09 150G**)
- Serial Number
- Last 6 of vehicles' VIN
- Date of purchase
- Nature of Your Concern

Serial # Found



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

- Model (**FA C09 095G or FA C09 150G**)
- Serial Number
- Last 6 of vehicles' VIN
- Date of purchase

ADJUSTABLE FUEL PUMP SERIES

**95 OR 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 & Return Lines
- Step 3: Mount Fuel System
- Step 4: Install Fuel Line
- Step 5: Check/Set Pressure
- Step 5: Check Installation

CONTENTS



FF-3248



THB-1001

BHB-1001



Cable Ties



MP-9012



FL-1002 x11'

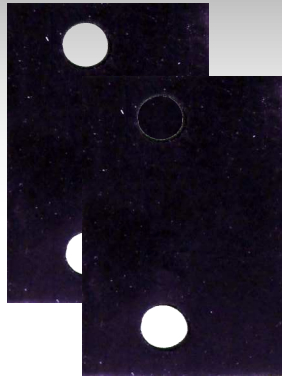


WH-1006

MOUNTING PACKAGE CONTENTS



2 1/4 -20x3.5"



RS-1002



NP-1001



PLB-1212



PL-1005



QD-1002



Fuse Tap



Flag Terminal



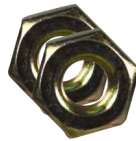
Ring Terminal



10-300



4 1/4 - 20x1.75"



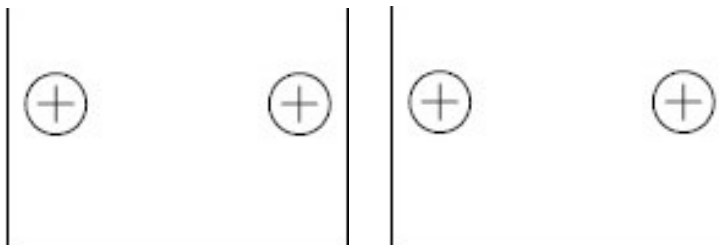
1/4" Nut



1/4" Lock Washer



HC-1001



STEP 1: INSTALL ELECTRICAL HARNESS

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



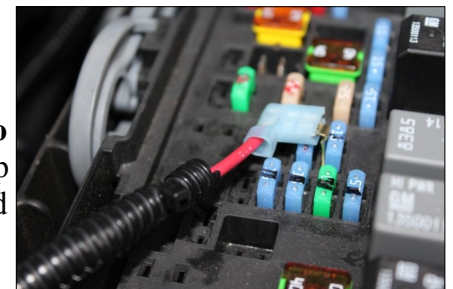
- b. Secure relay and fuse in an upright position, as shown, to prevent moisture from entering. Di-electric grease may be applied to prevent corrosion.



- c. Guide the single red wire from the relay through the fire wall grommet to the fuse panel.



- d. **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. Using the fuse tap & flag terminal, connect the red lead to a terminal on the circuit board**



- e. Route WH-1006 wire harness along frame rail to mounting location of pump. **Completion of this step will be addressed in the Mounting Step 3.**

STEP 2: PREPARE SUCTION & RETURN LINE

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

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!

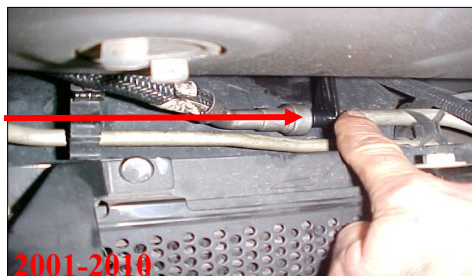


- a. Remove the drive shaft to gain access to the top of the fuel tank, if necessary, carefully bend the sheet metal down that is covering the side.

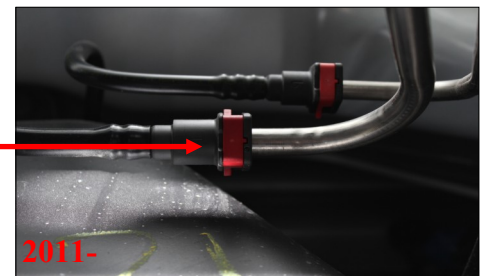
Helpful Hints: If more space is required to access the top of the fuel tank, loosen the strap nuts to the end of the stud. This will gain you about 3" more working room.



- b. This step can be omitted on 2011- models. Remove the 3 bolts holding the fuel cooler to the mounting bracket. The fuel cooler is located in front of the fuel tank.
- c. Using a fuel line disconnect tool, disconnect the factory suction line located above the fuel cooler. Place the disconnect tool around the fuel tube and slide the tool under the fuel line connection to release the fuel line. Pinch in tabs on 2011- models.



Tabs



- d. Using oil, insert PLB-1212 into one end of the provided FL-1002 fuel line. Feed line over frame to the stock fuel connection.



STEP 2: PREPARE SUCTION & RETURN LINE

- e. Push the PLB-1212 into the factory suction line until you hear a click and the tabs are locked in place.



- f. Using an HC-1001 hose clamp, insert the QD-1002 into the other end of the provided FL-1002 fuel line and secure. Loop this end over the frame to the factory steel fuel line disconnected in Step 2b. Oil the rings inside the QD-1002 and slide over the line until you hear a click. **Do not cut the line at this time.**



STEP 3: MOUNT FUEL PUMP

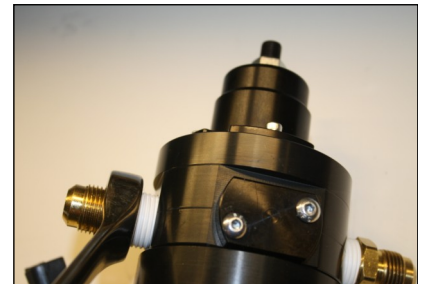
- a. Position system to mounting location, drivers side bed rail in front of the axle. **The mounting bracket may be mounted on either side.** Using the mounting template, located on the contents page, to help mark the mounting location. Drill two 1/4" holes.



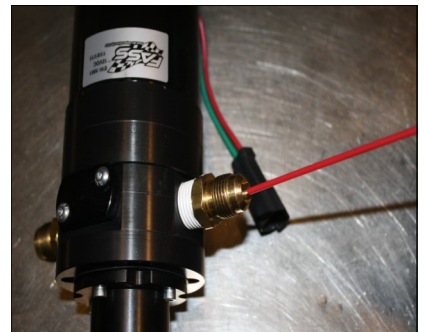
- b. **Place a rubber spacer between the hanger bracket and bed rail and the other rubber spacer on the opposite side between the bed rail and NP-1001 nut plate.** Install the two 1/4"-20 x 3 1/4" bolts, nuts and lock washers and THB-1001.



- c. Using thread tape, install the 2 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. Reconnect the battery. 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 1/4" - 20 x 1 3/4" bolts, mount the fuel pump so the port labeled "T" is facing to the right. Torque the 4 1/4 - 20x 1 3/4" bolts to 110 inch pounds.



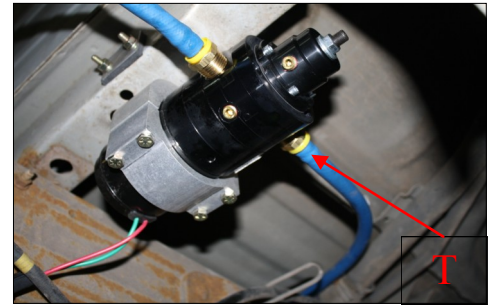
VERY IMPORTANT: REMEMBERING THE POSITION OF THE "T" PORT, THERE IS A SMALL WEEP HOLE IN THE BASE DIRECTLY NEXT TO THE ELECTRIC MOTOR, THIS HOLE MUST AIM DIRECTLY TO THE GROUND!! IMPROPER INSTALLATION OF THE PUMP CAN CAUSE PREMATURE WEAR AND VOID MANUFACTURES WARRANTY.



STEP 4: INSTALL FUEL LINES

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

- a. Route suction line from Step 2e to port 'T'. Cut FL-1002 to needed length. Using oil, insert PL-1005 and connect to 10-300 in port 'T'. Torque to 18 ft./lbs.

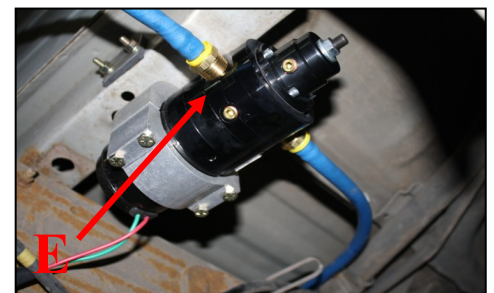


Note: When installing Push-Lok fittings into fuel line, use oil on fittings and in the line.

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



- c. Measure from the factory feed connection from Step 2d to the 'E' port of the FASS system. Cut and insert PL-1005. Connect to the 10-300 in the 'E' port of the FASS system. Torque to 18 ft./lbs.



- d. Reassemble fuel cooler on 2001-2010 models.
- e. Carefully re-bend sheet metal back to original shape to protect fuel tank, if needed.
- f. Re-install driveshaft



Note: Secure all fuel lines with cable ties. Cable ties are an economical way to prevent the possibility of problems occurring!

STEP 5: CHECK/SETTING PRESSURE

The preset pressure is approximately 10 psi. Follow these steps to check or reset the fuel pressure. The port with 1/8" Allen plug marked with the letter "P" is your fuel pressure port. **Exceeding factory fuel pressure may result in severe engine damage. Consult with engine manufacture before adjusting pressure!**

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? 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

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, 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 or fatty acid build up on the gears. 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