

“HIGH PERFORMANCE FUEL PUMP”



A MUST READ

FROM: Diesel Performance Products, Inc.
SUBJECT: Welcome/Thank You
TO: Valued Customer

We at Diesel Performance Products, Inc. (DPP) would like to thank you very much for your confidence in purchasing the FASS Fuel System or the FASS Fuel Pump. Building a quality product and providing excellent customer service is # 1 at DPP. Behind each fuel system/fuel pump are many years of design experience. We have implemented very rigorous testing procedures before bringing any item to the market along with very strict manufacturing procedures to provide a superb product. Our confidence is evident in the products we make as each product is backed by an industry leading warranty.

We, Diesel Performance Products, promote “ALL” retail business through our dealer network to provide better customer service! We are confident that everyone involved is best serviced in this manner. DPP feels as though we have given our dealer’s proper knowledge and support to promote and service our line of fuel pumps.

Dealers receive appropriate troubleshooting guides to refer to. These have proven to be excellent references for those who choose to use them. We offer excellent assistance to our dealers so they in turn can assist their customers. DPP has decided to place this information on our website to accommodate all of our customers needs.

We believe that our dealers are more than well educated to problem-solve. It is our position that this is the most logical way to provide good customer service. We are always trying to improve quality, expand our product line, and provide support to our network of dealers so they can support their customers in a satisfactory way for all involved.

Please make sure to fill out your product registration form and return the original form to Diesel Performance Products, Inc. within 30 days of purchase accompanied with a copy of the purchase receipt. Doing so will qualify you for the warranty!

Again, thank you very much for your business and have a great day!

Diesel Performance Products, Inc.

WARNING!!

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

This installation manual applies to the *FASS-HPFP-180-1011@50psi* 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 FASS-HPFP-180-1011@50psi) applies to this application:

Recommendation: FASS-HPFP-180-1011@50psi - Dodge Cummins Truck 1994-1998 (12 valve engine), 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.

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.














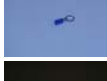




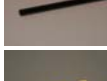

Installation personnel should use good judgment and common sense when installing the FASS High Performance Fuel Pump.

If any installation procedure is uncertain, contact the place of purchase

Due to training, communication and our relationship we have with our authorized dealers we recommend an authorized Diesel Performance Products, Inc. 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 most prepared for that situation/problem. It may take more time for an unauthorized shop to address the situation/problem. We will not be responsible.

For the 6 year warranty please fill out the “PRODUCT REGISTRATION FORM” and attach a copy of the sales receipt. We must receive the original product registration form and sales receipt within 30 days of the purchase or the 6 year warranty will not be valid.

Contents Include:

	Description					Quantity	Part #	
1.	Pump/Filtration Unit	--	--	--	--	1	FASS-HPFP	
2.	Fuel Pump Bracket	--	--	--	--	1	THB-1001 BHB-1001	
3.	Electrical Harness w/relay	--	--	--	--	1	WH-1001	
4.	3/8" Fuel Line	--	--	--	--	14'	FL-1001	
5.	1/4" – 20 x 1 3/4" bolt	--	--	--	--	4	--	
6.	1/4" – 20 x 3 1/4" bolt	--	--	--	--	2	--	
7.	1/4" - nut and lock washer	--	--	--	--	2 ea.	--	
8.	3/8" x 1/2" (Push Lock x MPT)	--	--	--	--	2	PL-1001	
9.	3/8" Line Hose Clamp	--	--	--	--	3	HC-1001	
10.	Injection Pump Fuel Line Fitting (O-ring)	--	--	--	--	1	DIPF-1002	
11.	3/8" x 3/8" (Push Lock x 90° Female Flare)	--	--	--	--	1	PL-1003	
12.	Fuse Tap	--	--	--	--	1	MBFT	
13.	Flag Terminal	--	--	--	--	1	187F1AG	
14.	Ring Terminal	--	--	--	--	1	NRB516-K	
15.	Fuel Filter	--	--	--	--	1	FF5079	
16.	3/8" x 1/2" (mpt x flared 90°)	--	--	--	--	1	10-299	
17.	Bulkhead (3/8 x 3/8)	--	--	--	--	1	BHF-1001	
18.	Grommet	--	--	--	--	1	RS2770	
19.	3/8"mpt Suction Tube (11 1/2" length)	--	--	--	--	1	ST-1002	
20.	3/8" x 1/2" (Push Lock x Female Flare)	--	--	--	--	1	PL-1002	

BEGIN INSTALLATION

STEP 1: **Removing & Preparing Fuel Tank:** Use the following photo's to complete this step.

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



Photo 1A



Photo 1B



Photo 1C



Photo 1D



Photo 1E

1. Remove the filler neck tube from the truck by loosening the clamps at both ends.
2. Disconnect overflow tube from the fuel tank.
3. Disconnect the factory suction and return line. The factory lines are removed by pressing in on the two tabs located in the connecting harness. These tabs are opposite of each other.

STEP 1: Removing & Preparing Fuel Tank: Continued

4. Disconnect the factory electrical harness located between the suction and return lines on top of the fuel tank.
5. With the fuel tank empty of fuel now remove it from the vehicle.
6. As seen in photo 1A remove the lock ring on the top of the fuel tank.
7. Once the lock ring is removed, remove pick up module from fuel tank.
8. Reviewing photo's 1B and 1C, place the lock ring back into place for measurement reasons. Lay the grommet into proper location and use a punch to mark the center. Drill a 1 ¼" hole, catch all debris, example cup.
9. Using photo 1D assembly the pick up assembly. Use pipe tape on the pipe threads.
10. Insert the grommet into the 1 ¼" hole. Place the pick up assembly into grommet, 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.
11. Before cutting the suction tube triple check the measurements, it is much more efficient to cut the tube to long and then correct to proper length than it would be to cut to short.
12. With proper length being obtained with the suction tube kit, debur and flush assembly. Place the assembly into the grommet as seen in photo 1E.
13. Reinstall install pick up module.
14. Reinstall fuel tank. Remember to connect both factory fuel lines, wire harness and torque tank hanger bolts to proper specifications.
15. Reassembly filler neck and vent tubes. Torque to proper specifications.

STEP 2: Mounting FASS Fuel Pump: Use the following photo's to complete this step:



Photo 2A



Photo 2B

1. Drill 2 - 1/4" holes, as seen in photo 2A. Note: the mounting bracket may be mounting on either side of the bed rail.
2. Now install the 2 - 1/4"x 3 1/4" bolts, nuts and lock washers and torque proper torque specifications.

*Note: Before mounting the fuel pump assemble 3/8" x 1/2" (push lock x mpt) fittings into ports label with the letters "T" and "E" **using tread tape**. Torque to proper specifications.*

3. As seen in photo 2B using the bottom portion of the mounting bracket and the 4 - 1/4" - 20 x 1 3/4" bolts mount the fuel pump so the port labeled "T" is facing the rear of the truck. **VERY IMPORTANT: REMEMBERING THE POSITION OF THE "T" PORT THERE IS A SMALL 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.** Torque the 4 - 1/4 - 20x 1 3/4" bolts to 110 inch pounds.

STEP 3: Installing Fuel Line: Use the following photo's to complete this step:



Photo 3A



Photo 3B



Photo 3C

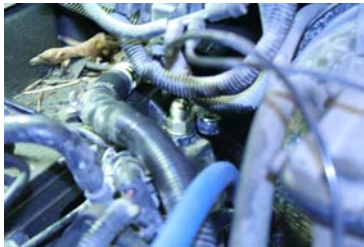


Photo 3D



Photo 3E

1. Insert the 3/8" x 1/2" (push lock x female flare) fitting into the fuel line. Remember to oil the fitting and fuel line as seen in photo 3A and torque to proper specifications.
2. Route fuel line from the suction port of the fuel tank to the separator, using the 3/8" clamps to attach the fuel line to the separator, as seen in photo 3B. Then to the port of the FASS Fuel Pump labeled with the letter "T".
3. Cut and attach to the push lock fitting. Remember to oil the fitting and fuel line before connecting.
4. Connect the remaining fuel line to the push lock fitting located in the port on the FASS Fuel Pump labeled "E". Remember to use oil.
5. Disconnect factory fuel line from inlet side of the factory fuel filter and install the DIPF-1001. As seen in photo 3C and 3D. This will require the injector return line to also be removed. Torque to 18 inch lbs.
6. Route the fuel line from the "E" port of the FASS Fuel Pump to the DIPF-1001 and cut to length. Now install the PL-1003 (3/8" x 3/8" Push Lock x 90° Female Flare). Remember to use oil.
7. Attach the PL-1003 as seen in photo 3E to the DIPF-1001. Torque to 18 inch lbs.
8. Remove banjo bolt connecting the outlet line of the factory fuel filter. This is the line in front of the inlet line removed in step 5.
9. Install the banjo bolt that was removed in step 5 and install it in the outlet line of the factory fuel filter. Torque to 18 inch lbs.
10. Install injector return line to the new location. Light bending will be required, be very careful not to kink or crack this fuel line. Torque to 14 inch lbs.

STEP 4: **Installing Electrical Harness:** Use the following photo to complete this step.



1. Connect the male end of the wire harness to the female electrical connector on the FASS System.
2. Route the wire harness along the frame rail and into the cab.
3. The wire harness can travel thru the rubber grommet located in the fire wall.
4. Using the fuse tap & flag terminal connect the “Red” lead from the wiring harness (Part # WH-1001) to a terminal on the circuit breaker board that is “hot” when the key is on. (NOTE: The fuel pump of the FASS System usually draws about 18 - 20 amps and can possibly surge to 25 amps when turned on.) **Note:**
Connect the fuse tap to the hot side of the fuse.
5. Green wire must be connected to a clean ground without being exposed to any corrosion.
6. Properly secure the wire harness and fuel lines with wire ties.

STEP 5: FINAL CHECK:

1. Bolts and fasteners properly tightened?
2. Electrical Harness and Fuel Lines secured or properly tightened?
3. Prime the fuel system!
 - a. Turn the key to the on position, the FASS Fuel Pump should be running.
 - b. While the pump is running loosen the 3/8" x 3/8" (Push Lock x Female Flare) fitting at the mechanical fuel pump until fuel is present and then retighten.
4. Check for leaks.
5. Start the engine!
6. Recheck all fluid connections and filters for leaks.

NOTE: The electric fuel pump runs continuously while the engine is running. The fuel pump on the FASS System will feel warm or hot to the touch.

For the 6 year warranty please fill out the "PRODUCT REGISTRATION FORM" and attach a copy of the sales receipt. We must receive the original product registration form and sales receipt within 30 days of the purchase or the 6 year warranty will not be valid.

LIMITATION OF WARRANTY

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.

The Warranty is Limited to six (6) years from the date of sale or for recommended service life and limited solely to the parts contained within the product's kit. This warranty does not cover normal wear on consumable items such as filters. All products that are in question of Warranty must be routed through place of purchase. 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.

Under no circumstances shall the SELLER 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 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: Contact the place of purchase; please provide the model number along with the serial number ready prior to calling.

Revised 1-1-07

