

“HIGH PERFORMANCE FUEL PUMP”

BY:



WARNING!!

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

This installation manual applies to the *FASS-HPFP-95-1001 & FASS-HPFP-150-1001* 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 the factory.

This FASS-HPFP-95-1001 (95gph) or FASS-HPFP-150-1001 (150gph) applies to this application:

Recommendation: FASS-HPFP-95-1001 - Dodge Cummins Truck 1994-1998 (12 valve engine), with stock to moderate horsepower modifications.

Recommendation: FASS-HPFP-150-1001 – Dodge Cummins Truck 1994-1998 (12 valve engine), with extreme horsepower modifications. Note: in most cases this model works very well with the stock pick up module. Due to the high flow of this model (150gph) we have discovered some pick up modules will not work properly, (example: excessive noise & emptying the pick up module of fuel). If this is the case we suggest installing a 3/8" or bigger draw tube into the fuel tank.

SAFETY GUIDELINES AND WARNINGS!

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 *Diesel Performance Products, Inc.* Immediately of any parts missing or damaged.
2. 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, first contact your authorized Diesel Performance Products, Inc. dealer. If your dealer cannot help you, contact Diesel Performance Products, Inc.

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 4 year warranty please fill out the “PRODUCT REGISTRATION FORM” and attach a copy of the sales receipt. This must be done within 30 days of the purchase or the 4 year warranty will not be valid.

Contents Include:

Description		Quantity		Part #		
1.	Pump/Filtration Unit	--	--	1	FASS-HPFP	
2.	Fuel Pump Bracket	--	--	1	BR-1004	
3.	Electrical Harness w/relay	--	--	1	WH-1001	
4.	3/8" Fuel Line	--	--	14'	FL-1001	
5.	1/4" - 20 x 3/4" bolt	--	--	2	--	
6.	1/4" - 20 x 3" bolt	--	--	1	--	
7.	1/4" - nut and lock washer	--	--	7 ea.	--	
8.	3/8" x 1/2" (Push Lock x MPT)	--	--	2	PL-1001	
9.	3/8" Quick Disconnect	--	--	1	QD-1001	
10.	3/8" x 3/8" (Push Lock x 90° Female Flare)	--	--	1	PL-1003	
11.	3/8" Line Hose Clamp	--	--	1	HC-1001	
12.	3/8" x 1/2" (Push Lock x Female Flare)	--	--	1	PL-1002	
13.	Fuse Tap	--	--	1	--	
14.	Flag Terminal	--	--	1	--	
15.	Motor Support	--	--	1	MS-1001	
16.	Motor Support Clamp	--	--	1	301920-7	
17.	Fuel Filter	--	--	1	FF5079	

BEGIN INSTALLATION

STEP 1: **Preparing Suction Line:** Use the following photo's to complete this step.



Photo 1A



Photo 1B

NOTE: **IT IS NOT NECESSARY TO REMOVE THE BED OF THE TRUCK. REMOVED TRUCK BED FOR PHOTO.**

1. Disconnect the factory suction line and clip as seen in photo 1B. The factory line is removed by pressing in on the two tabs located in the connecting harness. These tabs are opposite of each other.
2. Attach fuel line to quick disconnect fitting and separator using the 3/8" hose clamps as seen in photo 1A. Torque to proper specifications.
3. Connect the quick disconnect fitting to the suction port on the fuel tank. As seen in photo 1B. Pull back on the black plastic in the quick disconnect as you slide it onto the fuel supply line. It will lock into place. Completion of the fuel line will be addressed in step 3.

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



Photo 2A



Photo 2B



Photo 2C



Photo 2D



Photo 2E



Photo 2F

STEP 2: Mounting FASS Fuel Pump: Continued

1. Remove the bed bolt and put into place the fuel pump bracket. Reinstall the bed bolt, but only snug the bolt. Refer to photo 2A.

2. Drill a ¼” hole as seen in photo 2B (Note: It may be necessary to bend the fuel pump bracket to mount flush against the cross-member rail of the truck).

3. Now install the ¼”x 3” bolt, nut and lock washer as seen in photo 2C. Torque both this and the bed bolt to proper torque specifications.

4. Attach the motor support bracket as seen in photo 2D using the 2 - ¾” bolts, lock washers and nuts. ***VERY IMPORTANT: Tighten these bolts to the point that the support does not flop around but will still slip up and down for adjustment. Also place the motor support on the same side of the frame bracket as seen in photo 2D.***

*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.*

5. When mounting the fuel pump mount the pump so the port labeled “T” is facing the rear of the truck. Attach the fuel pump to the frame bracket as seen in photo 2E using the ¼” nuts and lock washers. Torque to proper specifications.

Note: It is very important to follow step 6 and 7 in order!!

6. As seen in photo 2F, place the motor support clamp around the motor and **motor support**. Torque to proper specifications (150 inch pounds or 13 foot pounds).

7. Now torque to proper specifications the 2 motor support bolts (mentioned in step 4).

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



Photo 3

1. Route fuel line from the suction port of the fuel tank to the port of the FASS Fuel Pump labeled with the letter "T". Cut and attach to the push lock fitting. Remember to oil the fitting and fuel line before connecting.
2. 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.
3. Disconnect factory fuel line from inlet side of the factory fuel pump and install the 3/8" x 3/8" (Push Lock x 90° Female Flare) fitting into this inlet port. Torque to proper specifications.
4. Route this fuel line to the 3/8" x 3/8" fitting mention in step 3. Insert the 3/8" x 1/2" (Push Lock x Female Flare) fitting into the fuel line. Remember to use oil.
5. Attach the 3/8" x 1/2" (Push Lock x Female Flare) fitting to the 3/8" x 3/8" (Push Lock x 90° Female Flare) fitting. Torque to proper specifications.

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



STEP 4: Installing Electrical Harness: Continued

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 5 – 8 amps and can possibly surge to 12 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 1/2” (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.

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