



TITANIUM SERIES

T D02 095G or T D02 150G

LIMITED LIFETIME WARRANTY

SERIAL NO.

MANUFACTURED DATE:

MOTOR NO:

WARRANTY STIPULATIONS:

- Copy of sales receipt mailed with this form
- All warranty information, located on back, completely filled out
- FASS products and/or paperwork must not tampered with
- Warranties are non-transferable
- Warranty is only available if purchased through FASS VIP or Authorized Dealers, if not there is "NO Warranty" on FASS Products.
- Warranty Registration must be received by FASS within 30 days of purchase.

SEND CORRESPONDENCE TO:

FASS Fuel Systems
Attn: Warranty
16240 State Hwy O, Suite B
Marthasville, MO. 63357

DPP INC. OFFICE USE ONLY :

Date Received: _____

Purchase Receipt: Yes (Receipt Date: _____)

No

Dealer Purchased From :

Date:

New FASS Owner Name:

Company/Organization:

Phone:

Street:

City, State & Zip:

Vehicle Year/ Make/ Model:

Color:

Vin Number:

Quality Of Product

Excellent

Good

Fair

Poor

How did you hear about us?

Dealer _____ Magazine _____

Show _____ Online _____ Friend

Comments:

INSTALLATION MANUAL

TITANIUM SERIES



APPLICATION:

95 GPH (T D02 095G)
150 GPH (T D02 150G)
Cummins 5.9L 12 Valve
With VE Pump

1989-1993



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 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 – Titanium Series Serial: 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 – Titanium Series Serial: 00125966
Vin Number of Vehicle
Date of purchase



WARNINGS!!

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

This installation manual applies to the T D02 095G or T D02 150G 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 T D02 095G or T D02 150G applies to this application:

Recommendation: T D02 095G – Dodge Ram Cummins 1989 - 1993, with stock to moderate horsepower modifications.

Recommendation: T D02 150G – Dodge Ram Cummins 1989 - 1993, with extreme horsepower modifications.

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.

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.

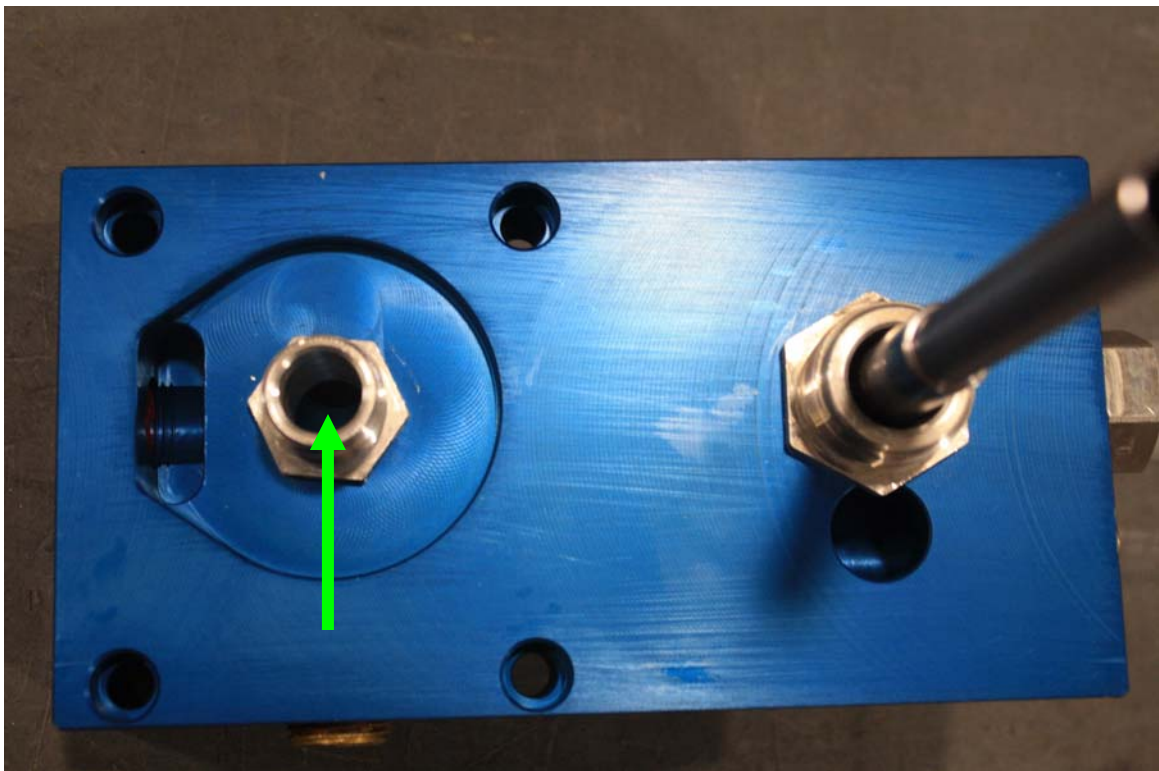
CAUTION: Wear safety glasses when operating power tools such as drills and grinders or when using a punch or chisel.

CAUTION: Properly secure lines to prevent chaffing.

Read all instructions before starting installation of this product!

WARNINGS!!

Use caution when installing the FASS Fuel System, keeping debris from entering the internals of the system. 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. 100% of the FASS Fuel Systems are vigorously tested, which includes (but not limited to) wet testing for pressure, amps, flow, & including total all around performance before being shipped.



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.

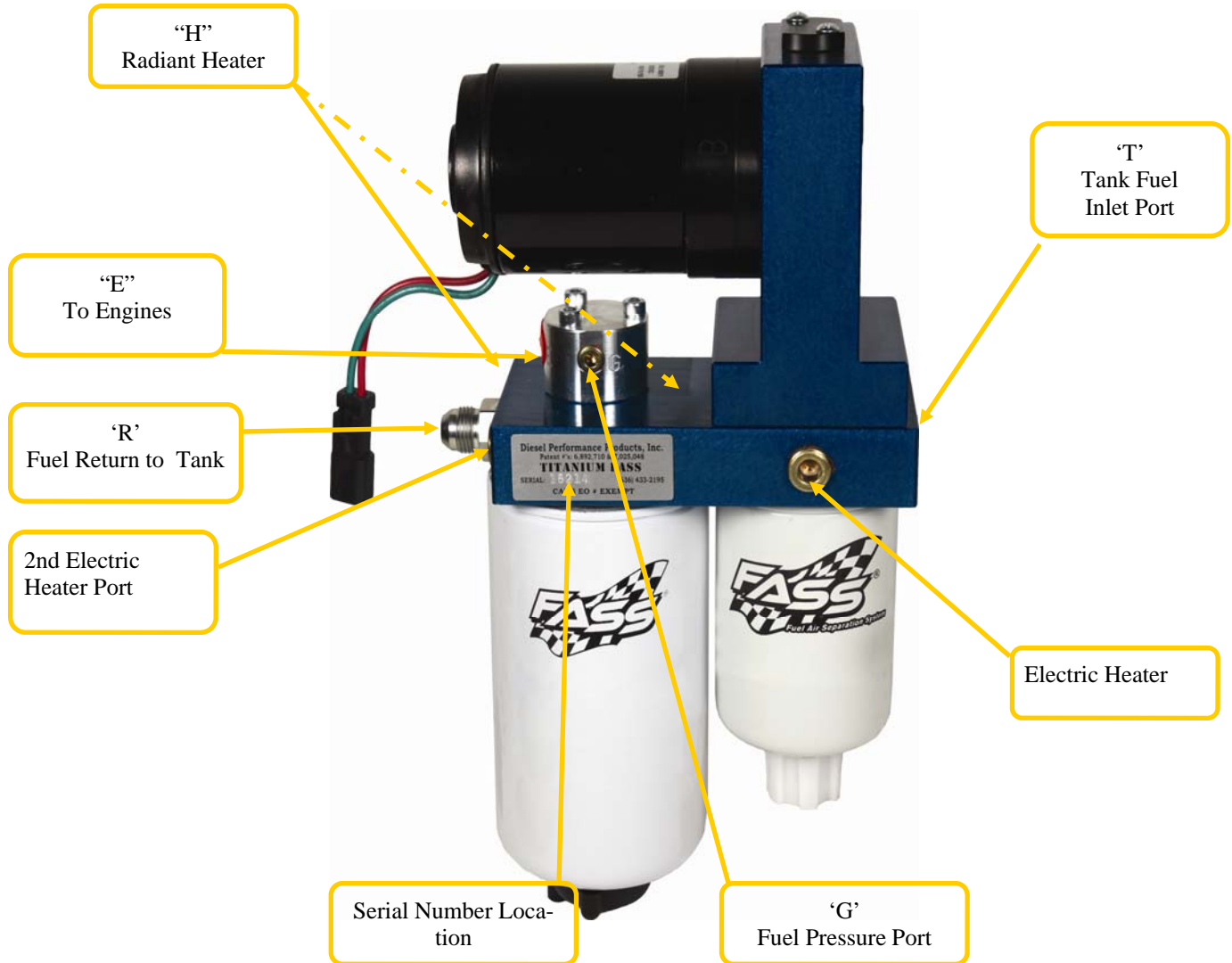
Due to training, communication, and our relationship with our authorized dealers, we recommend an authorized FASS Fuel Systems dealer for the installation. They are prepared to install the FASS fuel pumps with the most efficiency. If a situation/problem arises during the installation, they are the most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

TITANIUM SERIES

95 OR 150 GPH

8 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: Review Installation

CONTENTS:



FL-1001 x 17'



WH-1002



BR-2001

MP-9019



10-298



PL-1002



10-299



DIPF-1001



QD-1001



RS-1001



PL-1003



RM-1003



Flag Terminal



WE-1001



HC-1004



HC-1001



Ring Terminal



Fuse Tap



3/8" Self Threading
Bolts



WA-2001



(1/4)" - 20 x 1.25"



WA-1001D

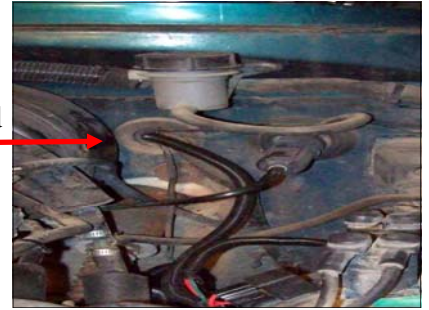


(1/4)" - 20 x 2.25"

STEP 1: Install Electrical Harness

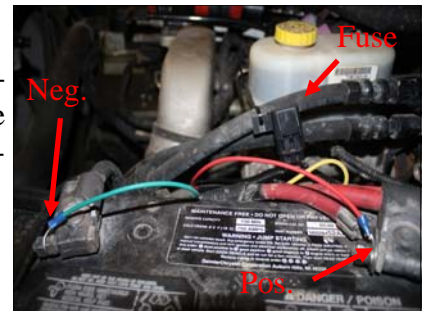
Note: The installation of the electrical harness is done first, allowing power to be applied to the pump for lubrication purposes. See Step 3.

- a. Attach WE-1001 to the WH-1002 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-1002 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.

STEP 2: Prepare Suction and Return Line

Note: The installation of the electrical harness is done first, allowing power to be applied to the pump for lubrication purposes. See Step 3.

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

- a. Prepare FASS return line by cutting rubber junction connecting the two halves of the filler neck. Loosen the factory clamps at the tank. Push the lower half filler neck into the tank enough to insert RM-1003. As seen in the following photo.



Filler neck removed for clarity. Position RM-1003 with the 3/8" junction pipe aiming to outside of bed. Clamp rubber and RM-1003 using both HC-1004's and factory clamps.



- b. Using a HC-1001 connect FL-1001 Fuel Line to the junction of RM-1003.

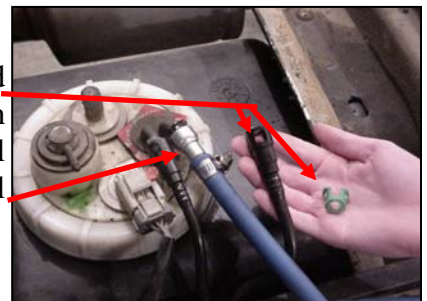


- c. Using a 3/8" hose clamp install the QD-1001 into the opposite end of the fuel line addressed in the previous step. Oil o-rings inside Quick Disconnect.



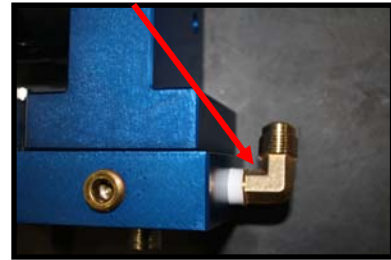
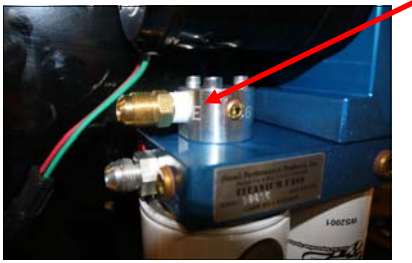
Note: Bed is removed for clarity.

- d. Disconnect factory suction line clip by pressing in on the two tabs located on either side in the connection fitting. Once removed, clean the suction tube and connect the QD-1001 addressed in the previous step. Loop fuel line over frame, will be addressed in step Installing Fuel Line. Plug or seal factory line or remove.



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. Use the Hex Bolt 1/4”-20x2 1/4”+WA-1001D spacers on top of the WA-2001 spacers if you need more space between pump and the frame.



Caution: Make note of wire harness on opposite side of frame rail.

- c. Position system to mounting location, drivers side below the bed in front of the axle. Make sure to mark these drill points at least 1” from radial bend of the frame. The radial bend is both the top and bottom of the frame. Use of the mounting template, located at the rear of this manual, will help insure accuracy and will ease this step.



- d. Drill 4 pilot holes then drill those holes out with a 5/16” bit for the self threading bolts.



Note - Before Mounting in Position: Route wire harness along frame rail to mounting location connecting to FASS. Turn key on, with pump operating liberally spray WD-40 (or equivalent) into “T” port lubricating gear.



- e. Using the 4 - 3/8” Self Threading bolts, attach the pump to the frame making sure to place the rubber isolator between the frame and bracket.

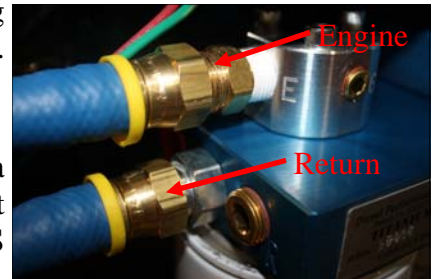
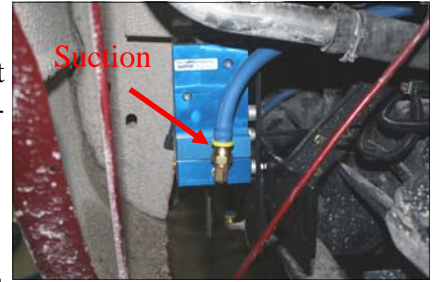


- f. Apply motor oil to o-rings located on filters. Attach to system and hand tighten.

STEP 4: Installing Fuel Line

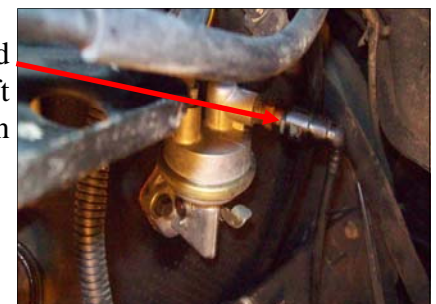
Caution: Do Not use sealant on AN fittings. Only use sealant on threads installed into pump assembly.

- a. Route suction line to port 'T'. Cut FL-1001 to needed length and connect to 10-299 in port 'T' using the PL-1002. Be sure to oil both before attaching.
- 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. Connect remaining fuel line to the 'E' port of the FASS system using a PL-1002. Use oil. route this line up to the VE Injection pump. Do not cut at this time. Connect the WH-1001 Wire Harness to the plug on the FASS system and route with fuel line to the engine bay.
- d. Remove the tension spring. Remove inlet fuel line to VE Pump. Remove the adapter nut below that. If you want to remove this line from the system, remove outlet feed on the factory filter housing, feed the line forward and twist as you pull it through. Make sure to plug the open port on the filter housing.
- e. Install DIPF-1001 Diesel Injection Pump Fitting. Torque to 18 ft/lbs. Measure fuel line to the inlet port. Install PL-1003 90° Push-Lok into fuel line using oil. Attach PL-1003 to the DIPF-1001. Torque to 18 ft/lbs. Reinstall tension spring.



OPTIONAL: REMOVING FACTORY LIFT PUMP

Remove inlet fuel line from the factory filter housing. Pinch in tabs and pull off factory fitting on the inlet side. Unbolt and remove the factory lift pump. Use a Big Block Chevy block off plate to seal engine block. Drain filter, blow out fuel lines and cover or plug any open ends.



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

TEMPLATE

