INSTALLATION MANUAL

TITANIUM SERIES

APPLICATION:

T C11 095G (95gph @ 10psi)
T C11 150G (150gph @ 10psi)

Duramax 2500 & 3500

2011-2012

LIFETIME WARRANTY AVAILABLE

PICKUP

FASS® Fuel Air Separation System

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.

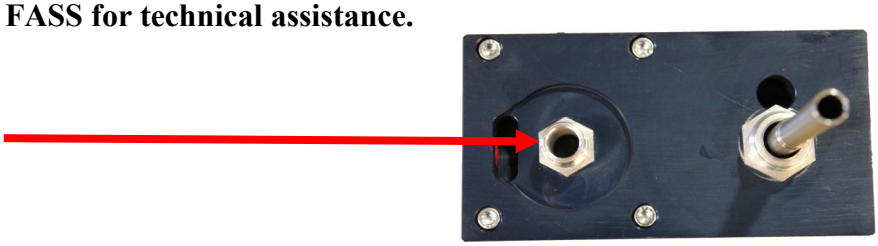
¡WARNINGS!

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

FASS	Recommended Application
T C11 095G	Duramax 2011-2012 with stock - moderate horse power modifications
T C11 150G	Duramax 2011-2012 with moderate - extreme horsepower modifications
Note: Because of the higher fuel flow these systems have to offer, you may encounter problems with the stock fuel module. FASS can solve this with a Suction Tube Kit.	

- **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 at-tempting 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 water separator nipple can lock up the motor. If the motor does lock up from debris call FASS for technical assistance.**



- **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 TITANIUM FUEL SYSTEM

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 **(T C11 095G or T C11 150G)**
- Serial Number
- Vin Number of Vehicle
- Date of purchase
- Nature of Your Concern

Call customer service; 636-433-5410 with the following information:

- Model **(T C11 095G or T C11 150G)**
- Serial Number
- Vin Number of Vehicle
- Date of purchase

TITANIUM 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

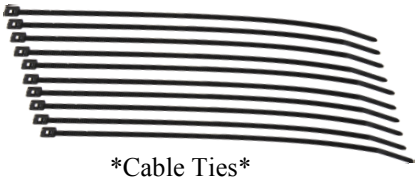
Step 1: Install Electrical Harness
Step 2: Prepare Suction and Return Lines
Step 3: Mount Fuel System
Step 4: Install Fuel Line
Step 5: Check Installation

CONTENTS

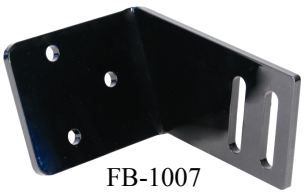
Owner's Manual
Titanium
Lt Truck

MP-9017

WH-1006

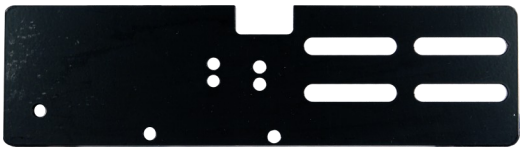


Cable Ties



FB-1007

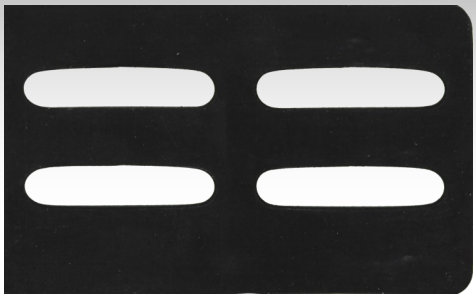
FB-1006



BR-2001

FL-1002 x14'

MOUNTING PACKAGE CONTENTS



RS-1001

RM-1004

PL-1005

10-299

10-298

PLB-1212

QD-1002

Fuse Tap

Flag Terminal

Ring Terminal

HC-1001

HC-1004

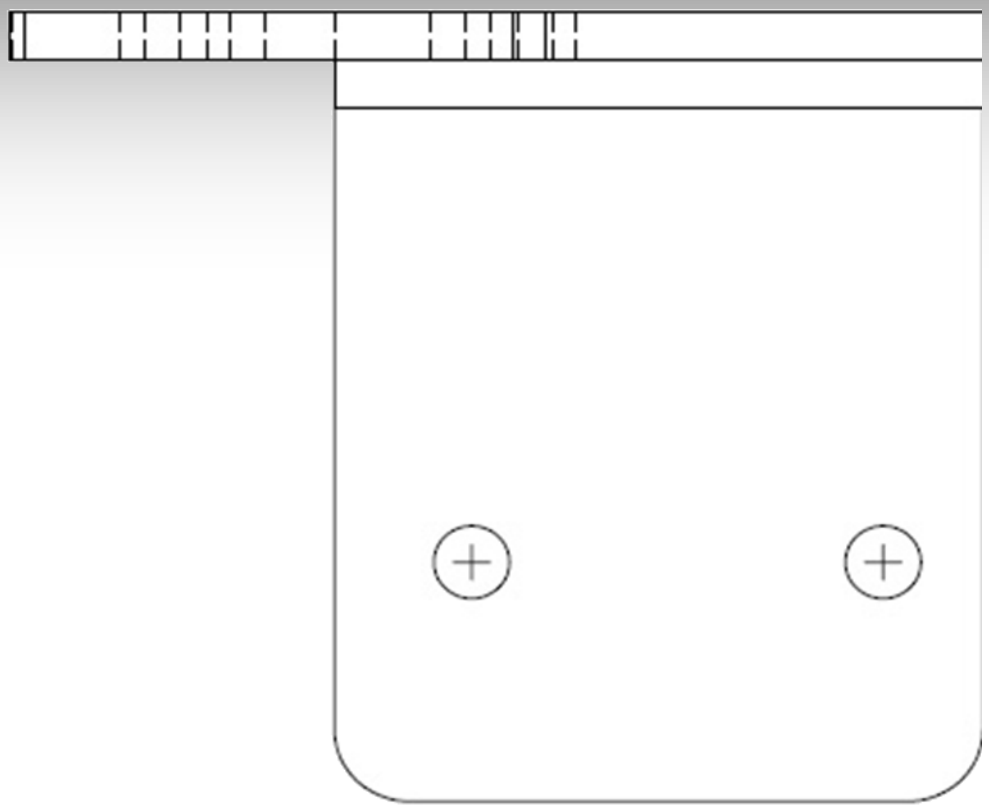
(7) Hex Bolt 3/8” -16x 1 1/4”

(7) Locking Nut 3/8”

(5) Hex Bolt 1/4”-20x1.25”

WA-2001

MOUNTING TEMPLATES



FB-1006

FB-1007

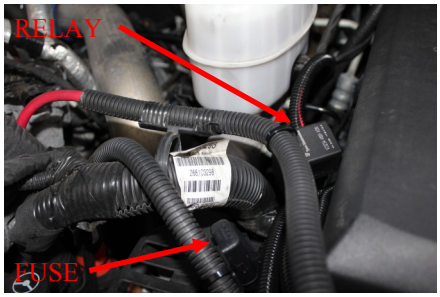
STEP 1: INSTALL ELECTRICAL HARNESS

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

Note: The use of a corrosion preventative on electrical connections is recommended.

a. Crimp the ring terminals to the red and green wires of the WH-1006 Wire Harness. Attach red wire to the positive terminal of the battery and the green terminal to the negative terminal.

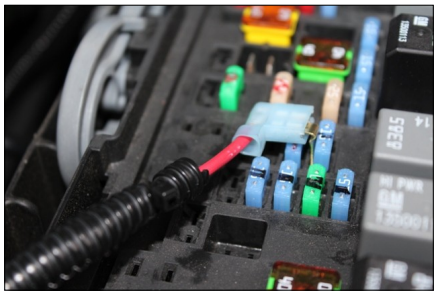
b. Secure relay and fuse in an upright position, as shown, to prevent moisture from entering. Di-electric grease may be applied to prevent corrosion.



c. Guide the single red wire extension through the fire wall grommet to the fuse panel.

Note: 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.

d. Using the fuse tap & flag terminal, connect the red lead to a terminal on the circuit board that is "hot" when the key is on.



Note: Completion of this step will be addressed in the Mounting Step 3.

e. Route WH-1006 wire harness along frame rail to mounting location of pump.

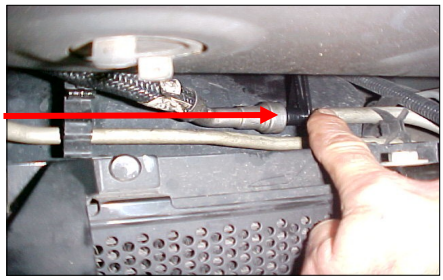
STEP 2: PREPARE SUCTION & RETURN LINES

Note: Hose clamps are not recommended for push lock fittings. They will hold up to 300 psi!

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

a. Remove the 3 bolts holding the fuel cooler to the mounting bracket. The fuel cooler is located in front of the fuel tank.

b. Using a fuel line disconnect tool, disconnect the factory suction 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.



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

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

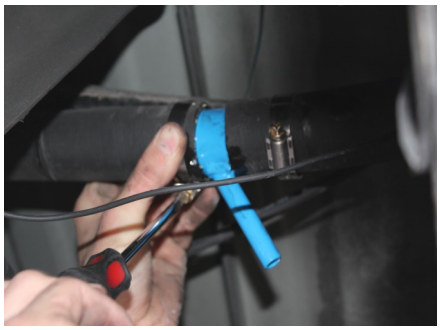
e. Using an HC-1001 hose clamp, insert the QD-1002 into the other end of the provided FL-1002 fuel line and secure. Loop this end over the frame to the factory steel fuel line disconnected in Step 2b. Oil the rings inside the QD-1002 and slide over the line until you hear a click. **Do not cut the line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

STEP 2: PREPARE SUCTION & RETURN LINES, CONT.

Caution: make sure there is enough tube on each side of the cut to insert the RM-1004 and to place the hose clamps.

e. Mark location for the FASS Return Manifold on the factory filler neck. Cut marked location and position RM-1004 with the 1/2" junction pipe aiming to outside of bed. Clamp rubber and RM-1004 using both HC-1004's.

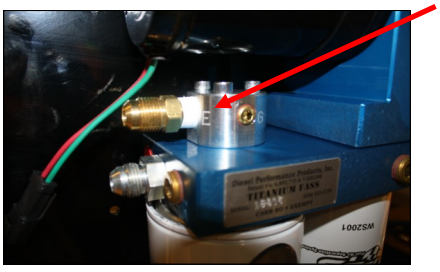
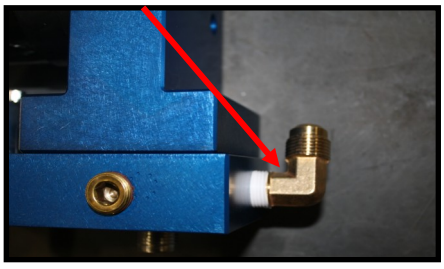




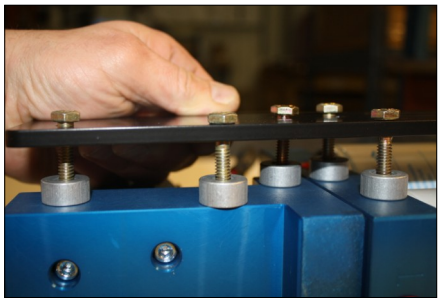
STEP 3: MOUNT FUEL SYSTEM

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

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 five 1 1/4" Hex bolts and WA-2001 spacers. Torque to 110in/lbs.



STEP 3: MOUNT FUEL SYSTEM, CONTINUED

Note: Choose a bracket that best fits your application.

FB-1006

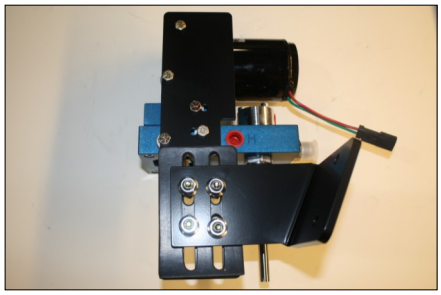
Typically used for Short-bed applications, conforms to the front side of the leaf spring mount.

FB-1007

Typically used for Long-bed applications, conforms to the inside of the leaf spring mount.

Note: Review Step C & D to complete properly.

c. Assemble the FASS pump brackets using the RS-1001 spacer between. Hold pump up to the mounting location for rough fitting. Once location is established, use template to accurately mark drill points. FB-1006 shown.



d. Position the pump assembly at the mounting location and check for fit.

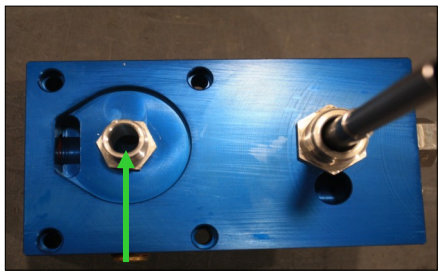
e. Once location is established, use template from back of manual to mark drill points.

f. Pre-drill holes. Final drill with 3/8” bit.

STEP 3: MOUNT FUEL SYSTEM, CONTINUED

g. Using the 3/8” bolts and nuts, secure the bracket to the previously drilled location.

Note: Before mounting into position, finish connecting wire harness.



h. Plug female connector of the FASS harness into pump. Turn key to “on”. With pump operating liberally spray WD-40 (or equivalent) into water separator nipple lubricating Gerotor.

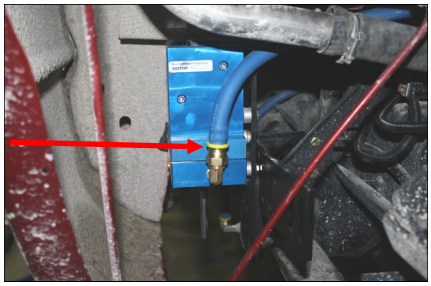
i. Mount pump assembly to the chosen bracket and secure with 3/8” bolts. Make sure the RS-1001 spacer is used between the brackets.

j. Apply motor oil to gasket located on filters. Attach to system and hand tighten.

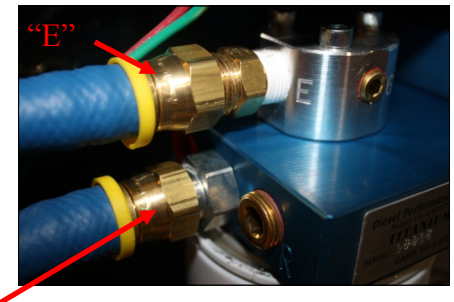
STEP 4: INSTALL FUEL LINE

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

a. Route suction line from Step 2c to the 'T' port . Cut FL-1002 to length. Insert PL-1005 in line using oil. Attach to 10-299. Torque to 18 ft./lbs.

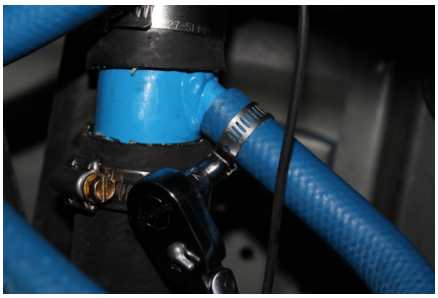


b. Measure from the factory feed connection from Step 2d to the E port of the FASS system. Cut and insert PL-1005. Connect to the 10-298 in the E port of the FASS system. Torque to 18 ft./lbs.



"R"

c. Using oil, insert a PL-1005 into the remaining fuel line. Connect to the 'R' port fitting on the FASS system. Torque to 18 ft./lbs. Route this line in a ***gentle bend*** to the Return Manifold. Slide over return tube and secure with HC-1001 clamp.



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