



# Titanium Series

## **Owners Manual**

Lt Truck, Heavy Equipment & Semi

## GENERAL INFORMATION

The FASS Fuel System is a positive flow, fuel delivery system for diesel engines. It has been designed to remove all types of fuel contaminants such as air/vapor, water, dirt and particulate from diesel fuel to provide test cell performance in real world conditions.

The FASS Fuel System has its own pump. This pump carries the fuel from the tank into the FASS System through a spin-on water separator. The fuel is then pumped into the main fuel filter where the dirt & air/vapor are removed. At that point, the fuel is under pressure to the engine. The small portion of air & vapor that remains is sent back to the fuel tank through the return line.

In class 8 set ups, the FASS series is equipped with a by-pass port that allows the engine to continue running in the event that a problem occurs and the situation calls for the unit to be by-passed. At which point only water and dirt are being separated.

# TABLE OF CONTENTS

## **COMPONENT IDENTIFICATION**

**4**

*System Flow Diagram*

## **OPERATION & MAINTENANCE**

**5-9**

*Starting the engine*

*Filter Maintenance*

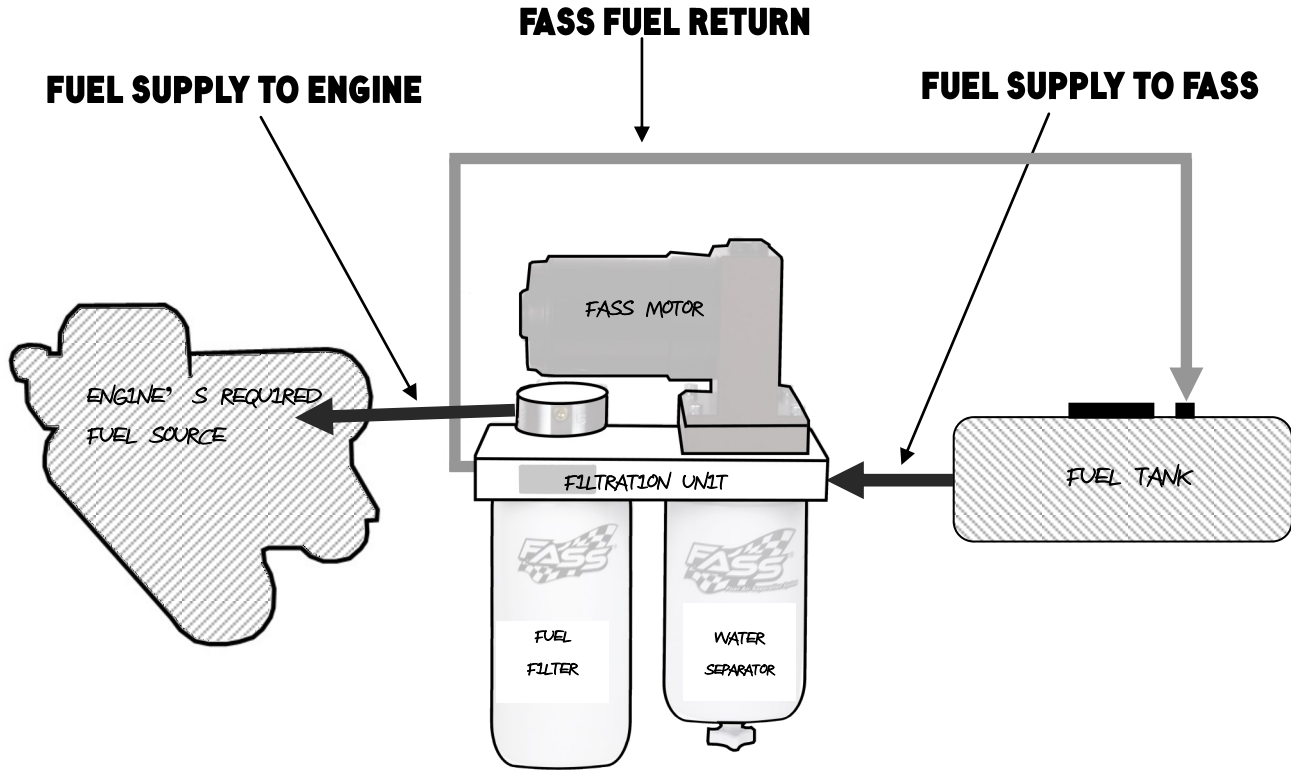
## **TECHNICAL ASSISTANCE & DIAGNOSIS**

**10-12**

## **WARRANTY**

**13-14**

# SYSTEM FLOW DIAGRAM



## **STARTING THE ENGINE**

- 1. Turn the key to the on position.**
- 2. Wait a couple of seconds, operating fuel pressure has been reached from the FASS System.**
- 3. Start the engine**
- 4. Note: Fuel pressure will not be developed until the engine is being started for any unit injected mechanical engine application**

# TITANIUM FUEL FILTER CROSS REFERENCES

Manufacturer	Part #	Description
<b>FASS</b>	<b>FWS-3003</b>	<b>FUEL FILTER 3 MICRON (OEM)</b>

**NOTE:** Cross reference filters are for your information. For optimal FASS performance use FASS filters. When researching these alternate filters, be sure to use 1" - 14 thread size. Hydraulic filters will provide greater durability.

Wix	33433	Fuel Filter/Water Separator
Fram	PS6831	Fuel Filter/Water Separator
Donaldson	P553203	Fuel Filter/Water Separator
Donaldson	P169096	Fuel Filter/Water Separator
Donaldson	P551311	Fuel Filter
Donaldson	P551313	Fuel Filter
Fleetguard	FF9013	Fuel Filter/Water Separator

# CHANGING THE FUEL FILTER

Estimated Filter Life	
Class 8 Trucks	18-30K / Miles
Light Duty Trucks	30-60K / Miles

1. With engine off, **PLACE** a suitable container below the fuel filter to catch any spilled fuel
2. **REMOVE** the fuel filter by turning it counter clock-wise
3. **CLEAN** the area around the filter head.
4. **LUBRICATE** the seal with oil or grease (DO NOT use diesel fuel).
5. **INSTALL** a new filter on the filter head (It is not necessary to pre-fill the filter. Turn clock-wise until filter contacts the seal. Then turn filter 1/2 turn more.
6. **PRIME** the filter by turning the ignition switch to the ON position allowing the transfer pump on the FASS to run
7. **LOOSEN** the filter slowly until there is a small gap between the filter and filter base. You will notice a change in the tone of the pump (this means that there is fuel in the gear)
8. **QUICKLY** tighten the fuel filter.

# TITANIUM WATER SEPARATOR CROSS REFERENCES

Manufacturer

Part #

Description

**FASS**

**FS-1001**

**FUEL FILTER/WATER SEPARATOR  
(OEM)**

**NOTE:** Cross reference filters are for your information. For optimal FASS performance use FASS filters. When researching these alternate filters, be sure to use 1” - 14 thread size.

NAPA	3406	Fuel Filter/Water Separator
Wix	33406	Fuel Filter/Water Separator
Luber-Finer	LFF8000	Fuel Filter/Water Separator
Baldwin	BF1212	Fuel Filter/Water Separator
Baldwin	BF1258	Fuel Filter/Water Separator
Donaldson	P551001	Fuel Filter/Water Separator
Donaldson	P558000	Fuel Filter/Water Separator
Fleetguard	FS1212	Fuel Filter/Water Separator
Fleetguard	FS1000	Fuel Filter/Water Separator
Fleetguard	FS1009	Fuel Filter/Water Separator



# REPLACING THE WATER SEPARATOR

Estimated Filter Life	
Class 8 Trucks	18-30K / Miles
Light Duty Trucks	30-60K / Miles

1. With engine off, **PLACE** a suitable container below the water separator to catch any spilled fuel
2. **OPEN** valve at the bottom of the water separator
3. **REMOVE** the water separator by turning it counter clock-wise
4. **CLEAN** the area around the filter head.
5. **LUBRICATE** the seal with oil or grease (DO NOT use diesel fuel).
6. **INSTALL** a new filter on the filter head (It is not necessary to pre-fill the filter. Turn clock-wise until filter contacts the seal. Then turn filter 1/2 turn more.
7. **PRIME** the filter by turning the ignition switch to the ON position allowing the transfer pump on the FASS to run
8. **TIGHTEN** the fuel filter.

# CLEANING A SERVICEABLE WATER SEPARATOR

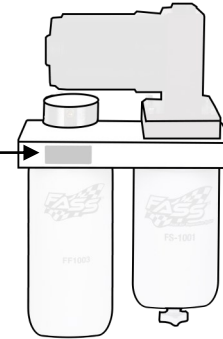
Estimated Filter Life on a Serviceable Stainless Steel/Wire Mesh	
Class 8 Trucks	30-50K / Miles
Light Duty Trucks	50-100K / Miles

1. With engine off, **PLACE** a suitable container below the serviceable water separator (stainless steel/wire mesh only) to catch any spilled fuel
2. **OPEN** valve at the bottom of the serviceable water separator
3. **REMOVE** the serviceable water separator by turning it counter clock-wise
4. **CLEAN** the serviceable water separator by partially filling it with diesel fuel (Gasoline & Alcohol work great) then violently shaking it.
5. **DRAIN** into a suitable container.
6. **LUBRICATE** the seal with oil or grease (DO NOT use diesel fuel).
7. **INSTALL** filter on the filter head (It is not necessary to pre-fill the filter. Turn clock-wise until filter contacts the seal. Then turn filter 1/2 turn more.
8. **PRIME** the filter by turning the ignition switch to the ON position allowing the transfer pump on the FASS to run

## TECHNICAL ASSISTANCE

1. Discuss the issue with the dealership that installed/sold the unit.
2. If the dealership is unable to resolve the issue, they (or you) have the choice to contact us directly. If they (or you) choose to contact FASS @ 636-433-5410 please be sure to have the following information ready:

- Model number e.g. (T D07 150G)
- Serial Number
- Dealer name and phone number
- Date of purchase
- Nature of the problem

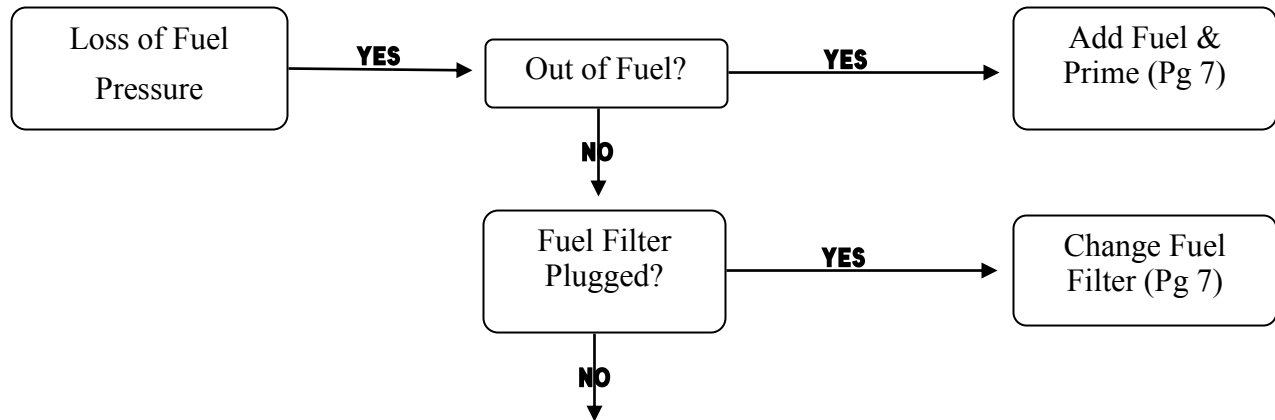


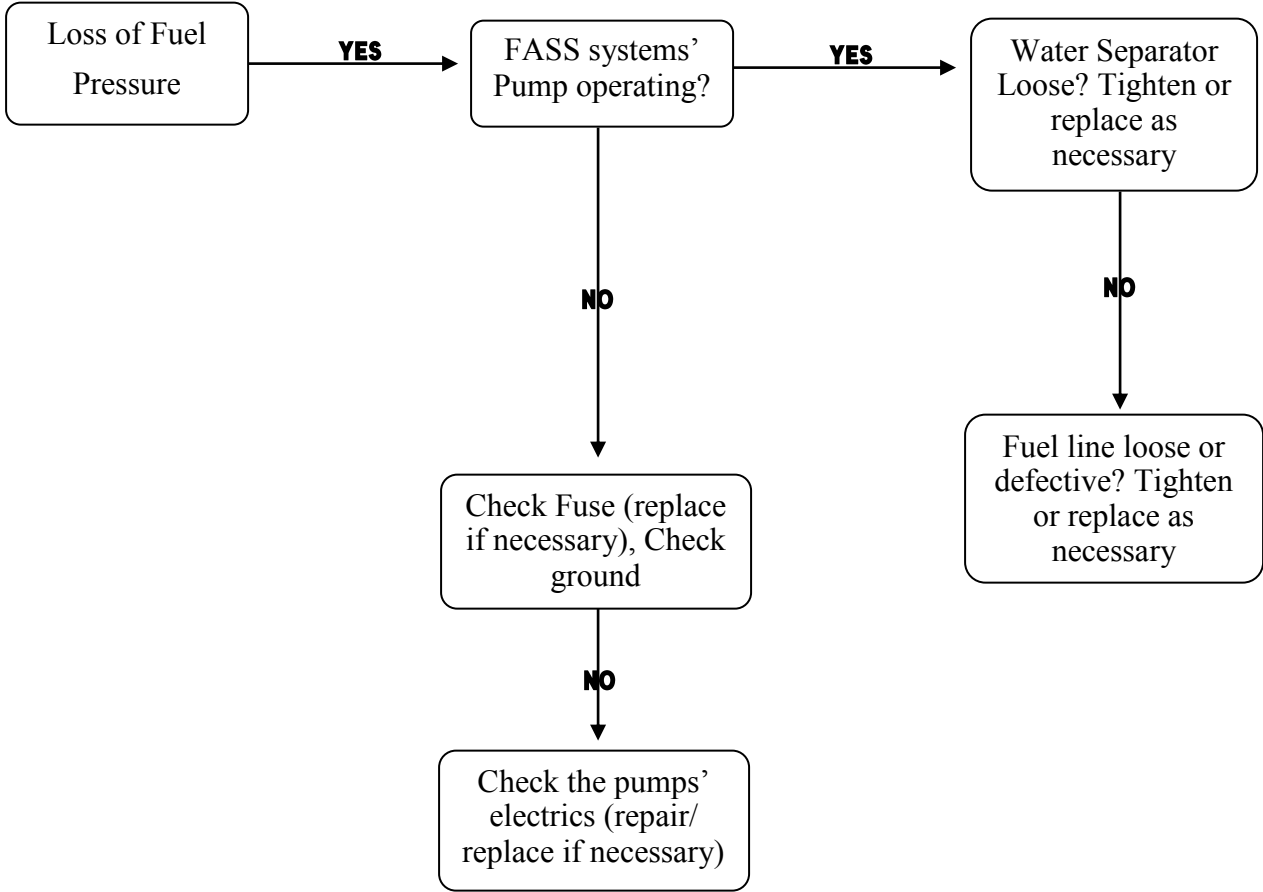
Your satisfaction is important to us! We continuously strive to educate your dealers in order to assist you in the best, most educated and efficient manner. Your dealer has a direct line to us should they need to use it. The key to successful troubleshooting is a thorough understanding of the issue combined with complete familiarization of the FASS fuel system and its' operation. Following the tips and techniques we've laid out of the most common issues and their solutions will help you troubleshoot with more accuracy.

# TECHNICAL DIAGNOSIS

The following charts are of the most common problems that could occur. Their solutions are laid out in the most logical path to ensure successful troubleshooting. Before you begin:

- Study the problem thoroughly
- Learn all the facts
- Look for a common denominator, such as recent service work on vehicle
- Service notes can give clues as to which area may need to be looked at first
- Perform simple checks first
- Do it right the first time





## LIMITATION OF 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](http://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
- 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 incurred 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

# NOTES