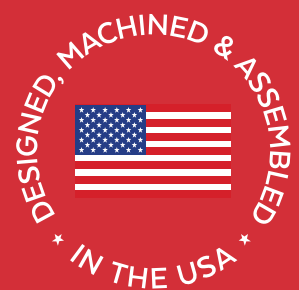




HK-1002 HIGH OUTPUT FUEL HEATER KIT INSTALLATION MANUAL

APPLICATION:

**TITANIUM SIGNATURE
SERIES
OR
TITANIUM SERIES WITH
GRAY FILTER BASE**





www.fassride.com

(866) 769.3747

Thank you for choosing FASS, from Diesel Performance Products, Inc.

FASS specializes in building extremely high-quality fuel products. We have earned an unsurpassed reputation for excellence in our industry by using only the highest-quality American-made components. In order to support our American workers and our American economy, more than 98+ percent of our products are manufactured completely in the United States.

Of course, that dedication to excellence comes at a price, but it is important to remember that price does not dictate quality—quality dictates price! We will never compromise by using cheaper, foreign-made components, like so many of our competitors do.

Customer satisfaction is our top priority and we strive always to provide outstanding customer service. Our Research and Development department, in conjunction with our Dealer Support Department, continually searches for ways to improve quality, expand our product line, and provide superb support. Our exclusive ViP Network ensures that customers receive the proper products and support at the local level. The extended four-year warranty is only available on products purchased from the network. There is no warranty on products not purchased outside the network.

IMPORTANT:

In order to qualify for the Four-year extended warranty, your product registration form and proof of purchase from an authorized dealer must be submitted to FASS Fuel Systems within 30 days of purchase. Failure to comply will void the warranty. We have the right to deny any warranty believed to be false, altered or purchased through an unauthorized or terminated dealer. A current list of authorized dealers can be found on our website, FASSRide.com.

The complete conditions of the Limitation of Warranty can be found in the back of this manual, and FASSRide.com.

The installation of this product indicates that the buyer has read and understands the Warranty agreement and accepts its terms and conditions. In the event that the buyer does not agree with the terms, the product—in new, unused condition—along with the dated receipt should be returned within thirty (30) days of the date of purchase for a full refund less shipping costs.

**For more information,
contact Technical Support:
Diesel Performance Products, Inc.
16234 State Hwy O.
Marthasville, MO 63357
636-433-5410**



WARNING!

This product has NO WARRANTY unless:

1. It has been purchased from an Authorized or ViP FASS Dealer. If in doubt, check www.FASSRide.com. (If your purchase was made on Amazon.com, the warranty is void. Return the FASS product to the seller and get a refund).

2. It is registered within thirty (30) days of purchase.

Other conditions may apply. Please see full warranty information.

ATTENTION!

Before you begin installation

**Register for your Warranty ONLINE at [https://
www.fassride.com/register-a-warranty/](https://www.fassride.com/register-a-warranty/)**

No online access, call our TECH Support at

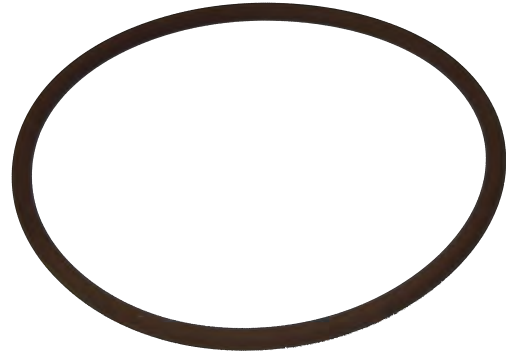
1-866-769-3747

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NOTE: Owner's Manual available for download on our website,
www.FASSride.com



HEATER ELEMENT



OR-230



FHFN-1001



RING TERMINALS



HH-1002



46251



DIELECTRIC GREASE



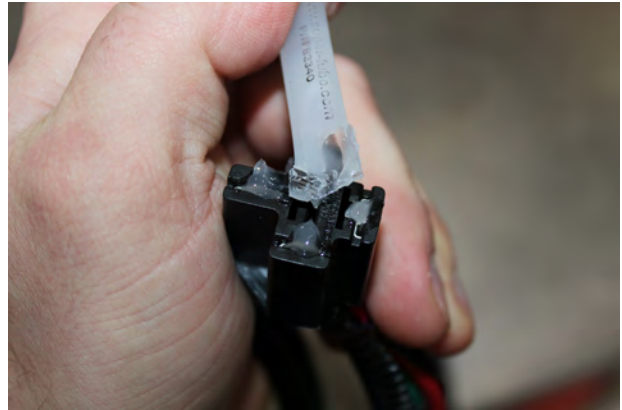
**ADD-A-CIRCUIT
46044**



BLUE THREAD SEALANT

STEP 1:
INSTALL ELECTRICAL HARNESS

**NOTE: USE SUPPLIED DIELECTRIC GREASE
SPARINGLY ON ALL ELECTRICAL
CONNECTIONS! BE SURE TO GREASE RELAY
PIGTAIL!**



STEP 1: **INSTALL ELECTRICAL HARNESS**

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

OPTIONAL WIRING STRATEGY:

Installation of a lighted toggle switch will allow you to power the heater kit on prior to the FASS running. **THIS WILL ALLOW THE FUEL TO "THAW" PRIOR TO STARTUP, REMOVING ANY POTENTIALLY GELLED FUEL FROM THE FUEL FILTERS.** We suggest utilizing a lighted rocker switch in a highly visible location to prevent accidentally leaving the switch in the "on" position after leaving the vehicle and draining the batteries.



STEP 1: **INSTALL ELECTRICAL HARNESS**

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

OPTIONAL WIRING STRATEGY:

Another option for wiring the FASS heater kit is wiring the heater kit trigger wire to the headlamp or running lamp 12v + circuit. If this is the preferred method, the heater kit will run at all times when the headlamps/running lamps are on. The heater elements are thermostatically controlled so there is no need to worry about overheating the fuel.

WIRING THE HEATER KIT TO THE HEADLAMP CIRCUIT WILL ALLOW YOU TO PRE-HEAT THE DIESEL FUEL PRIOR TO STARTING THE ENGINE. This method will prevent accidentally leaving the heater kit on after leaving the vehicle, potentially draining the batteries.

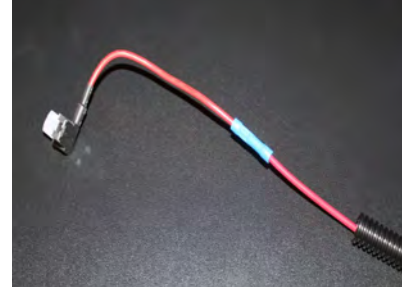
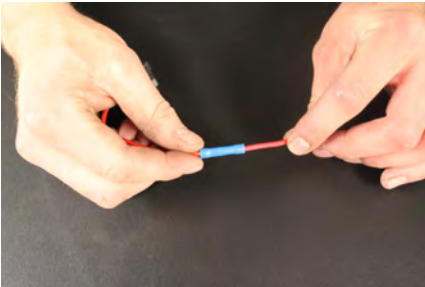


STEP 1: **INSTALL ELECTRICAL HARNESS**

A. Using wire stripping tool remove excess insulation off the ADD-A-CIRCUIT 46044 and the single red wire of HH-1002.



B. Place wire from ADD-A-CIRCUIT 46044 and HH-1002 into butt connector. Using crimping tool connect ADD-A-CIRCUIT 46044 and WE-1001 with butt connector. Install 46251 to ADD-A-CIRCUIT 46044 bottom slot (opening that is near the spade). Route ADD-A-CIRCUIT 46044 lead to the fuse panel.



C. Crimp the ring terminals to the red and green wires of the HH-1002 Wire Harness. Attach red wire to the positive terminal of the battery and the green wire to the negative terminal. Use supplied dielectric grease on all electrical connections.

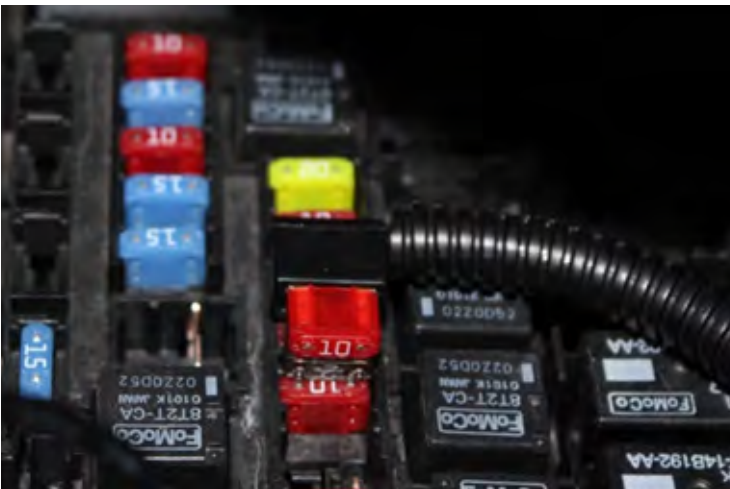


STEP 1: **INSTALL ELECTRICAL HARNESS**

D. Secure relay and fuse in an upright position, as shown, to prevent moisture from entering. Apply dielectric grease to the relay pigtail.



E. Route the 46044 to the fuse panel. Remove a fuse (maximum of 10A) that is “hot” when the key is on, install the 46044 into the open location. Install the pulled fuse into the open space on the fuse tap. Disconnect the vehicles’ battery and continue installation.



F. Route HH-1002 wire harness along frame rail to mounting location of pump. Completion of this step will be addressed in the mounting step.

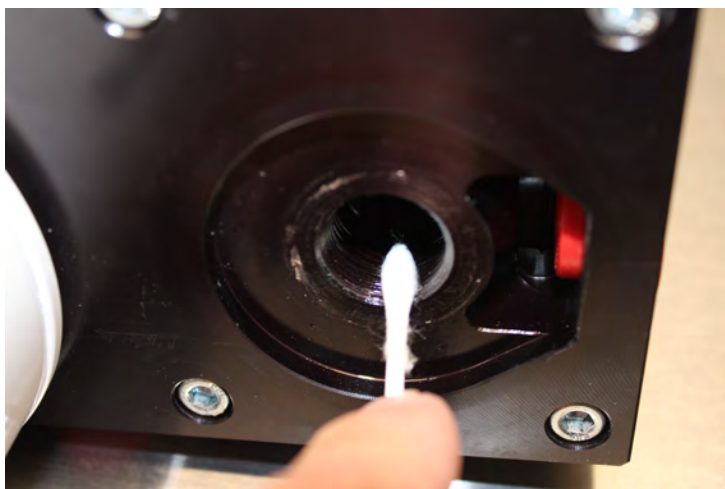
STEP 2: INSTALLING THE FUEL HEATER ELEMENT

FOR INSTALLATION MANUAL VISIBILITY PURPOSES, THE HEATER ELEMENT IS INSTALLED ON A WORK BENCH. THIS CAN BE JUST AS EASILY INSTALLED WITH THE FASS MOUNTED ON THE TRUCK!!

- A.** Using a 1-1/8" socket, remove the filter nipple from the filter base. ***BE SURE YOU REMOVE THE FILTER NIPPLE THAT IS MOUNTED BELOW THE "T" BLOCK.***



- B.** Apply rubbing alcohol or acetone onto a Q-Tip, and clean the filter nipple threads free of diesel fuel or any contaminants. ***BE SURE THE THREADS ARE COMPLETELY DRY BEFORE PROCEEDING TO THE NEXT STEP!!***



STEP 2: INSTALLING THE FUEL HEATER ELEMENT

FOR INSTALLATION MANUAL VISIBILITY PURPOSES, THE HEATER ELEMENT IS INSTALLED ON A WORK BENCH. THIS CAN BE JUST AS EASILY INSTALLED WITH THE FASS MOUNTED ON THE TRUCK!!

C. Install OR-230 into the O-Ring groove of the fuel heater element.



D. Apply the supplied blue thread sealant to the threads which go into the filter base of FHFN-1001. Install FHFN-1001 into the fuel heater element, be sure the O-Ring of the fuel heater is sealing against the filter base.



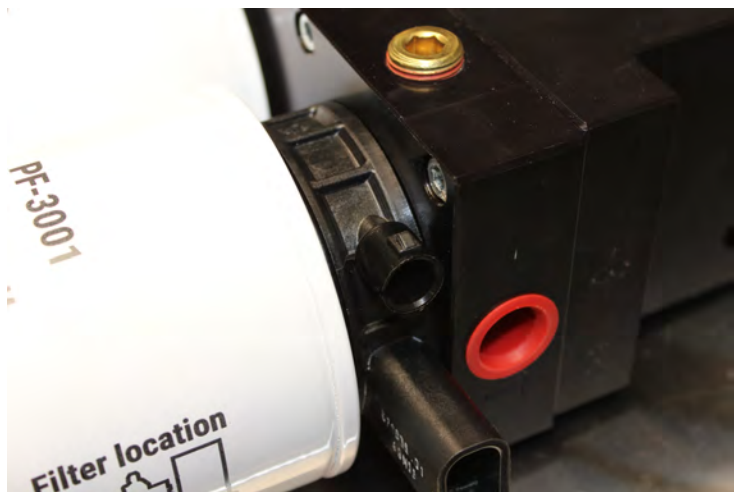
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E. VERY GENTLY, using a 1-3/8" socket tighten the FHFN-1001 until OR-230 is fully compressed. Do not over-tighten as this will damage the fuel heater element.



F. Install the fuel filter nipple O-Ring onto FHFN-1001, install the fuel filter previously removed onto the FHFN-1001.



Note: O-Ring must be put back on suction side of pump. Failure to do so can result in priming issues, cavitation, or pressure losses.

G. Connect HH-1002 to the fuel heater element. Re-prime the FASS and check for leaks.



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LIMITATION OF FOUR-YEAR FASS WARRANTY

DISCLAIMER: To insure that you receive the proper system and customer support at the local level, FASS has established a VIP and Authorized Dealer network to represent FASS products. You must purchase through a network dealer to be eligible for our Four-year Extended Warranty. If you do not, there is no warranty! To make certain your dealer is part of the network, go to www.FASSride.com, click "Find a Dealer," enter the dealer's ZIP code, and select the type of dealer. If the company is part of the network, it will be listed. If it is not, enter their phone number in the field below the ZIP code field to see if they are listed that way. If it still is not listed, check the list of "Terminated Dealers." If the dealer is not listed, or is on the "Terminated..." list, return the product immediately to that dealer and call FASS. We will recommend the nearest authorized dealer so you can be eligible for the 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.

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 with 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 and others. The warranty does not cover seized gears due to lack of filtration. Warranty is voided if used with other than diesel fuel. Returned items must 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, or 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. Returned parts must be complete and in resalable condition. No returns after 30 days.

The following information is required to obtain an RMA number before returning the product:
Your Name, Address & Phone Number(s)
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 complete the proper paperwork will result in \$25.00 per /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 of 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.

The installation of this product indicates that the buyer has read and understands the Warranty agreement and accepts its terms and conditions. In the event that the buyer does not agree with the terms, the product—in new, unused condition—along with the dated receipt should be returned within thirty (30) days of the date of purchase for a full refund less shipping costs.

For more information, contact:
Technical Support:

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