INSTALLATION MANUAL

STK-1003B & STK-1003

ACCESSORY:

Suction Tube Kit
Dodge Cummins 1989 - 2002
Dodge Cummins 2005 - 2012
Ford Powerstroke 2011 - 2012
GM Duramax 2001 - 2012
*****Kit will not work on 03-04 Dodge applications*****

FASS® Diesel Fuel Systems

ENGINEERED EXCELLENCE

DODGE

Ford

CHEVROLET

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. 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.

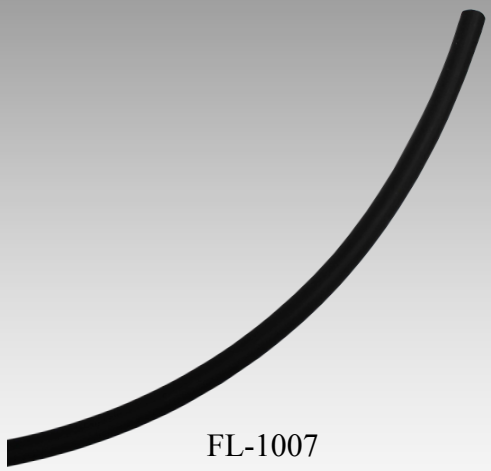
INSTALLATION MANUAL

Follow these steps to ensure a simple installation of your new FASS ACCESSORY

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, i.e. empty fuel tank before beginning installation of this product.
4. For best results in accuracy and efficiency (due to training, communication, and our relationship with our dealer network), we recommend a 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 or call customer service; 636-433-5410

STK-1003B CONTENTS



FL-1007

DT-1002

Template

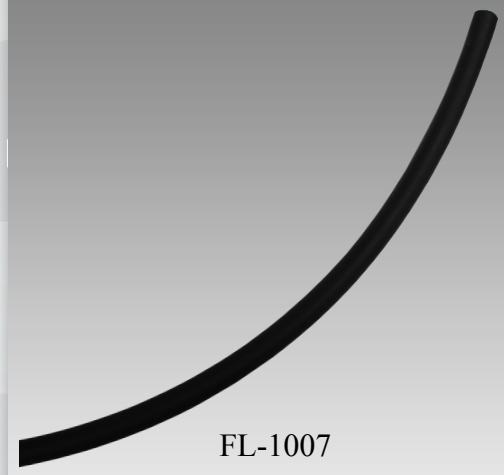
TC-1001

HC-1001

Button Head Screw

Set Screw

STK-1003 CONTENTS



FL-1007

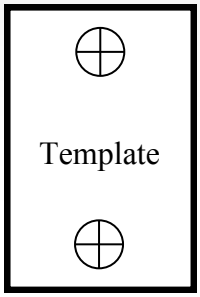
DT-1002

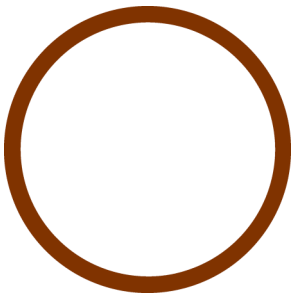
BHF-1002

TC-1001

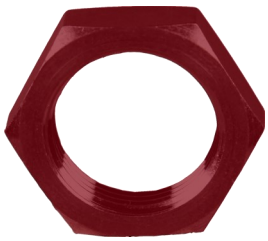
PL-1001

PL-1004





OR-223



BHN-1001

LW-1001

HC-1001

Button Head Screw

Set Screw

1/2” Plug

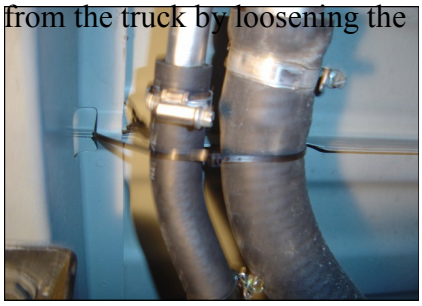
Before starting installation please review contents page to insure all necessary parts are included. Please call Diesel Performance Products for any missing or incorrect items. 636-433-5410

STEP 1: REMOVING THE FUEL SENDING UNIT

Some of the photo's are of a different application, refer to the photos that resemble your application.

A. Disconnect the vehicles battery. Remove the filler neck and overflow tubes from the truck by loosening the clamps.

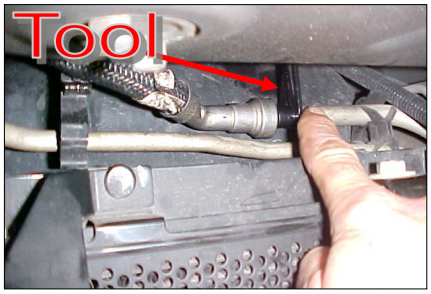
Possible Variations
Clamps will be located at both ends
Clamps will be located at the tank. Some applications have an integrated overflow/inner tube assembly. If so, then make sure the inner tube does not hang-up in the tank.

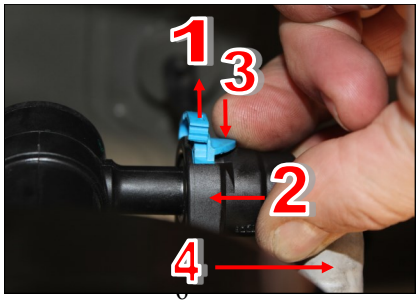


B. Before tank is removed or moved, identify ALL areas of clearance between the tank and the truck's bed for the best location to install the BHF assembly. With proper clearance, you want to install it as close to the Fuel sending unit as possible.

C. Disconnect the factory suction and return line. If more space is required to access the top of the fuel tank, loosen the strap nuts to the end of the stud. This will gain you about 3" more working room.

Possible Variations
Press in on the 2 blue tabs and pull off the black fuel connector. The blue tabs will stay on the factory ports.
1. Pull up on the locking tab (either blue or yellow), 2. Push in slightly on the connector, 3. Press down on the release tab, 4. Pull the connector straight off,
Pinch in red tabs, pull out locking collar. You may have use a Fuel Line Disconnect tool and lower the Fuel Cooler to access the Suction line.





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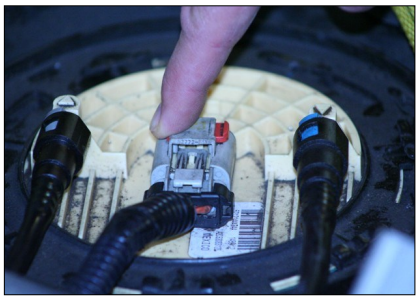
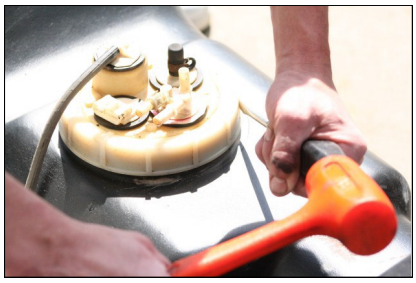
STEP 1: REMOVING THE FUEL SENDING UNIT

D. Disconnect the factory electrical harness.

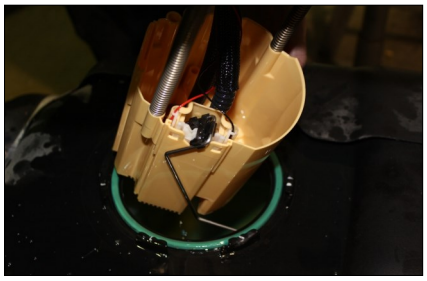


E. Unbolt the tank and remove it from vehicle. Clean all fittings and save for reinstallation.

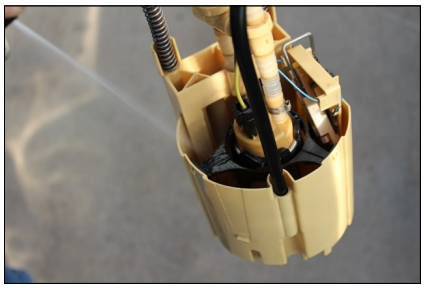
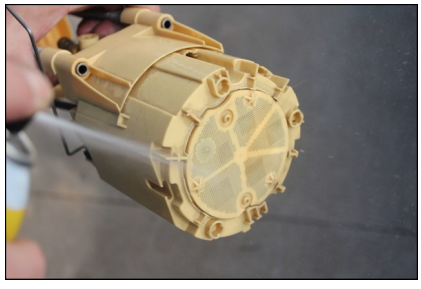
F. Clean the fuel module area then remove the lock ring/nut. Note/Mark the location of the fuel sending unit in relation the top of the fuel tank fro re-installation. FORD applications will be spring loaded, hold the unit down while removing ring to prevent it from popping up and possibly causing damage.



G. Carefully remove fuel sending unit from tank making note of the fuel level arm. Do not bend the arm.


H. Clean the inside and outside of the basket with an appropriate cleaner paying attention to the screen (inside and bottom). Make sure the rubber valve discs located on the inside bottom of the basket are functioning properly.

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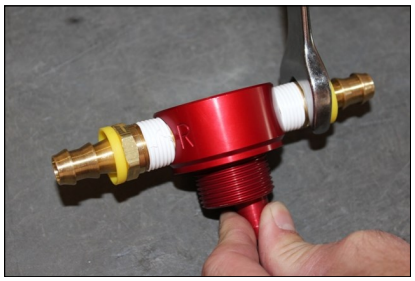
STEP 2: PREPARING THE BHF ASSEMBLY

This step applies on ly to the STK-1003

A. Installation of the STK-1003B may go directly to step 3. Using thread tape, assemble the appropriate PL fittings (PL-1004's for 1/2" fuel line or PL-1001's for 3/8" fuel line) into the BHF-1002 ports labeled "S" and "R". Torque to 40lbs/ft



Maintaining 'FASS Return Fuel' to Filler Neck	Insert the 1/2" plug into the "R" port of the BHF-1001
Re-Routing the 'FASS Return Fuel' from the Filler Neck	Reroute this line to the "R" port of the BHF-1002 (bulk head fitting) by removing the manifold & by plugging the angled tube of the return manifold located in your filler neck

B. Place the lock ring/nut back on the tank and position the BHF-1002 as close to the fuel sending unit as possible. Keep in mind the appropriate clearances for the Viton tube (FL-1007) & its' length, fuel line, fittings, and the bottom of the bed support. You may need to trim the fiberglass / plastic shell of the tank for a proper fit. Mark location

C. Double check selected area for any interferences with tank straps, bed rails, fuel level arm, etc. Make sure area is clean of all debris.

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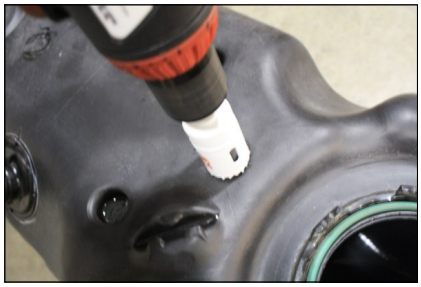
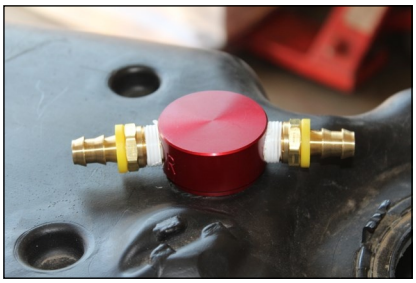
STEP 2: PREPARING THE BHF ASSEMBLY

D. Drill a 1 3/8" hole where marked, catching all debris by holding a cup under the drilling site. Take any necessary steps to limit tank contamination with debris.



E. De-burr hole and check for fit.

F. Place the OR-223 over the BHF assembly. Then place the assembly into drilled hole. Remember to place the BHF assembly so that the fuel line (to be connected to the PL fitting) will not be pinched or interfere with the fuel sending unit.



G. Secure the assembly by placing the washer (LW-1001) onto the assembly then screwing the nut (BHN-1001) on from inside of the tank.

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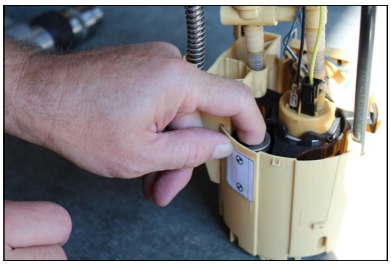
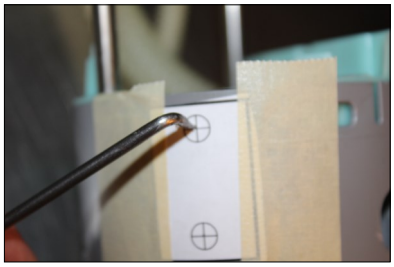
STEP 3: PREPARING THE FUEL SENDING UNIT

Some of the photo's are of a different application, refer to the photos that resemble your application.

A. Using the tube collar (TC-1001) as a guide, find the best location inside the fuel basket for the Draw Tube assembly (DT-1002 + TC-1001). Use the template located on the contents page to mark the 2 holes on the outside of the basket.

Possible Variations
Flat side Opposite side of fuel arm lever
Dual basket fuel module

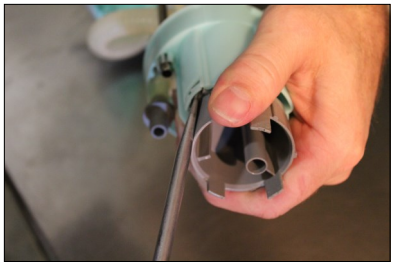




A1. If working with dual basket fuel module (some Duramax applications) follow these subsection steps. Using a flat tipped screw driver, carefully remove the outer basket.

A2. The factory return line nipple must be pulled or pried off the outer basket without breaking it. The nipple will be reinstalled.

A3. Using a flat tipped screw driver, remove the suction tube footing.



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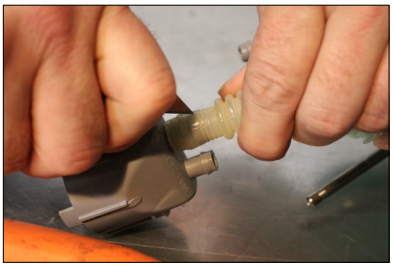
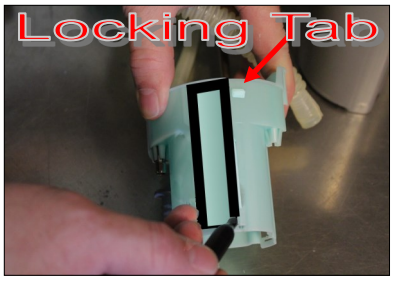
STEP 3: PREPARING THE FUEL SENDING UNIT

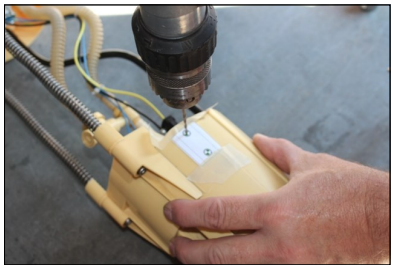
A4. Use a sharp blade to cut the suction tube collar and remove the plastic footing. Discard the footing.



A5. Using tool of your choice, remove the marked area on the green inner cup to make room for the TC-1001. Do not cut off the locking tab! Measure twice and cut once. When cutting plastic use sharp tools and take your time!



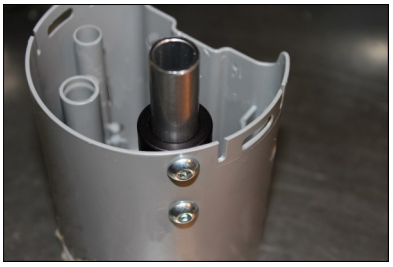
B. Drill pilot holes for the draw tube assembly with a 1/16” bit. Use a 1/4” bit for the final hole size.



C. De-burr and clean holes as necessary.

D. Install the tube collar using the Button Head Screws.

E. Insert the draw tube (DT-1002) into the tube collar. Allow the draw tube to bottom out.



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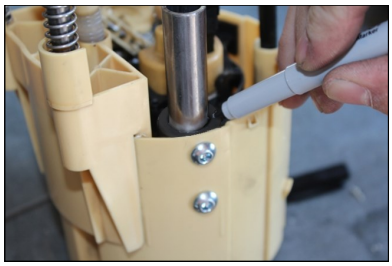
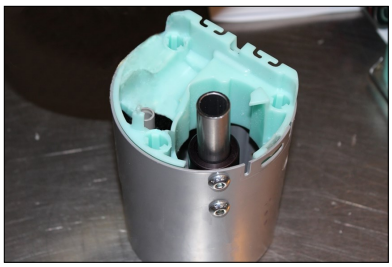
STEP 3: PREPARING THE FUEL SENDING UNIT

F. Mark the draw tube along the collar. Remove the draw tube assembly from the basket.

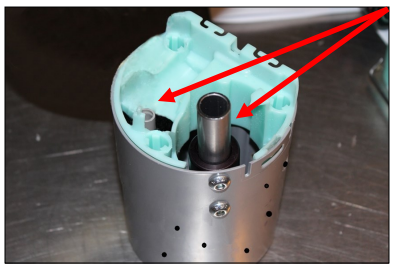


G. Mark an install line 1/8" - 3/16" below your 1st mark. Using the set screws and your install line as a guide, install the draw tube into the tube collar. This will allow for the tube to sit above the bottom of the basket and draw fuel.

H. Using the button head screws, install the draw tube assembly into the basket If working with the inner basket, must first reinstall the outer basket of the fuel sending unit. Make sure the basket locks onto the tabs of the inner basket.



I. Using a Sharpie, mark staggered holes starting 1" from the bottom of the basket. Avoid marking holes where the factory return stacks and posts guides are located as well as where the draw tube assembly is installed. Check to make sure you have proper clearance inside the basket when you mark drill points. You may remove the draw tube only. Leave the tube collar assembled onto the basket.



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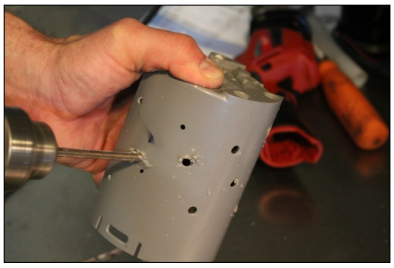
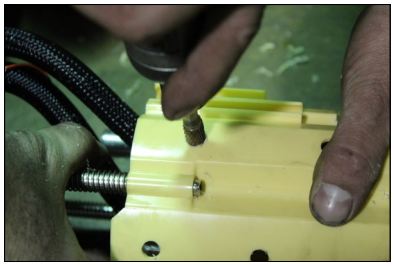
STEP 3: PREPARING THE FUEL SENDING UNIT

J. When drilling through plastic use a gentle touch and let the tool do the work. Do not press hard! Drill pilot holes with a 1/8" bit. Enlarge holes to 3/8" using a larger bit or high speed rotary grinder. Check for shavings and clean up holes.



K. De-burr and clean holes as necessary.



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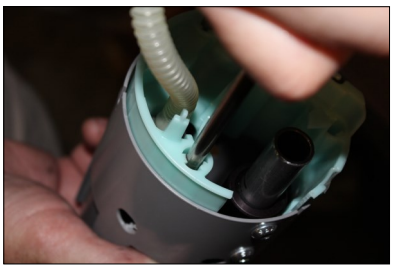
STEP 4: RE-INSTALLING THE FUEL SENDING UNIT

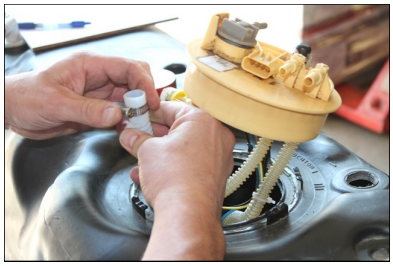
Some of the photo's are of a different application, refer to the photos that resemble your application.

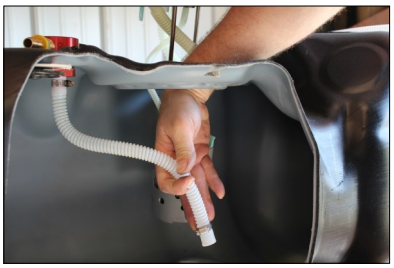
A. Attach the FL-1007 to the BHF assembly using the hose clamp (HC-1001). Allow the tube to hang down for now. You will be grabbing it later during the installation. If installing the STK-1003B, remove the old suction tube from the BHF assembly first.

A1. Working with a dual basket fuel module you will need to guide the factory return through the inner cup. Insert nipple into factory stack.



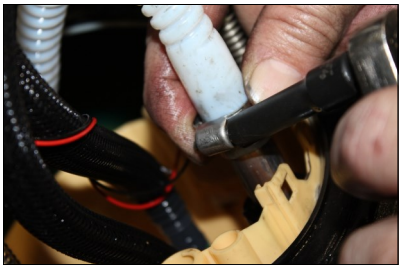
B. Carefully begin to install the fuel sending unit keeping in mind the original orientation. Do not bend the fuel sending arm. Reach in the tank and grab the bottom of the FL-1007 and place the remaining hose clamp (HC-1001) onto the end





C. Install the suction tube onto the draw tube assembly

D. Tighten hose clamp



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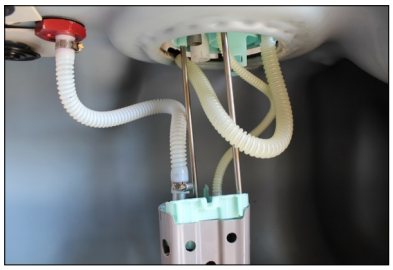
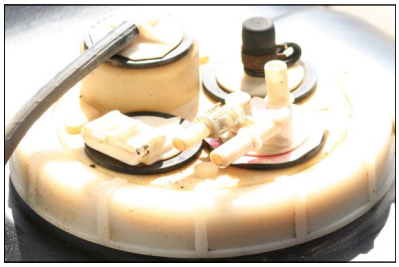
STEP 4: RE-INSTALLING THE FUEL SENDING UNIT

E. Make sure there are no restrictions in the FL-1007

F. Compress the fuel sending unit into the tank. Align any marks. Be sure that the fuel level arm and the newly installed suction tube are not obstructed or pinched.

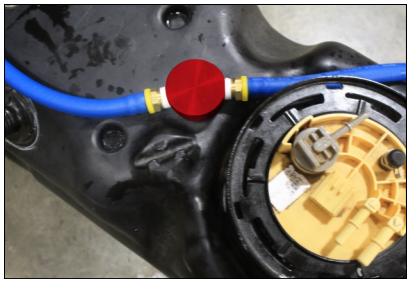


G. Reinstall the factory lock ring/nut



H. Using oil, push fuel line onto the push lock located at the "S" port of the BHF assembly. If returning fuel to the BHF assembly attach the FASS fuel return line to the "R" port of the BHF assembly.

NOTE: Hose clamps are not recommended for push lock fittings. They will hold up to 300psi! Use oil on fittings and inside fuel line when installing Push-Lok fittings



I. Reconnect the factory suction line or plug it to prevent debris from infiltrating the tank.

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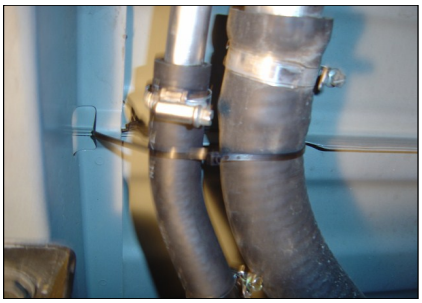
STEP 4: RE-INSTALLING THE FUEL SENDING UNIT

J. Reconnect the factory electrical harness.

K. Reconnect the filler neck and overflow tubes from the truck by tightening the clamps

Possible Variations
Clamps will be located at both ends
Clamps will be located at the tank.
Some applications have an integrated overflow/inner tube assembly. If so, then make sure the inner tube does not hang-up in the tank.



L. Reinstall fuel tank. Torque hanger bolts to factory specifications. If need be, cover the return line with spare tubing or similar to protect fuel line from rubbing on the trimmed fiberglass shell. Route FASS fuel line to prevent pinching.

M. Reconnect the vehicles battery. Prime the FASS fuel system. according to owners manual.

Note: Secure all fuel lines with cable ties. Cable ties are an economical way to prevent the possibility of problems occurring!