



## PRE/POST FILTER KIT w/HUTCH MOD

RELOCATES OEM FUEL PUMP – **FOR USE WITH FUEL BOWL DELETE**

Fits 1999-2003 7.3L Powerstroke Diesel Pickup, Excursion & Van



## INSTALLATION GUIDE



**INSPECT CONTENTS OF THIS KIT  
THOROUGHLY **BEFORE** STARTING  
THE INSTALLATION PROCESS!**

**IF YOU FIND A PROBLEM WITH YOUR PACKAGE:**

- **KEEP ALL OF THE PARTS & PACKAGING TOGETHER**
- **DO NOT ATTEMPT INSTALLATION OF THE PRODUCT**
- **PROMPTLY NOTIFY YOUR SELLING DEALER**
- **PROVIDE DEALER WITH PHOTOGRAPHS IF REQ'D\***
- **WAIT FOR FURTHER INSTRUCTIONS FROM DEALER**

**\*WE RESERVE THE RIGHT TO REQUEST  
PHOTOGRAPHS OF PACKAGING OR PARTS  
IN ORDER TO PROPERLY ADDRESS ANY  
SITUATION INVOLVING EITHER DAMAGED  
OR MISSING ITEMS.**

**THANK YOU FOR YOUR COOPERATION!**

## Kit Contents

To familiarize yourself with the different fittings and assemblies that make up the kit, make sure that the following parts are present:

Qty	Part Number	Description
1	HW-Pack	Pre/Post Kit Hardware Pack
1	Pump/Filter Bracket	S.S. Pump/Filter Mounting Bracket Assembly
1	"L" Bracket	Black "L" Mounting Bracket Assembly
30'	-6 Hose	-6 (3/8") 30R7 Fuel Hose ( <b>not shown on front</b> )
2	DD-BFFH	Driven Diesel Billet Fuel Filter Head with Allen Plugs
1	BF1212	Baldwin BF1212 Pre-Pump Fuel Filter/Water Separator
1	BF7633	Baldwin BF7633 Post-Pump 2 Micron Fuel Filter
1	Strainer	Replacement Fuel Tank Strainer ( <b>not shown on front</b> )
1	Pump Clamp Kit	(2) Rubber Isolated Fuel Pump Clamps
1	TK-05-290-12-HBUS	5/16" Pre-Formed Stainless Steel Return Line Assembly
1	Electrical Pack	Wire, Heat Shrink Splices & Loom ( <b>not shown on front</b> )
Qty	Part Number	<b>HARDWARE PACK Parts Description</b>
1	TK-06-03-HBUS	3/8" Suction Adapter Assembly
4	06NC-06FJX90	3/8" Push-Lok 90° Hose Ends
2	06NC-06FJX45	3/8" Push-Lok 45° Hose Ends
4	10MB-06MJ	#10 Male O-Ring to 3/8" Male JIC Fittings
1	DD-10MM-06MJ	Driven Diesel Fuel Pump Outlet Adapter w/Copper Washer
5	1/4-20x1.25 Bolt	1/4-20 x 1.25" Bolt
12	1/4 Washer	1/4" SAE Flat Washer
7	1/4-20 Nylok	1/4-20 Nylok Nut
4	5/16 Washer	5/16" Grade 8 Flat Washer
4	5/16-18 Nylok Nut	5/16" Grade 8 Nylok Nut
3	3/8-16x1 Bolt	3/8-16x1" Grade 8 Bolt
6	3/8 Washer	3/8" Grade 8 Flat Washer
3	3/8 Nylok Nut	3/8" Grade 8 Nylok Nut
4	WGN06SS	Stainless Steel Hose Clamps ( <b>not all shown on front</b> )
1	WGN02SS	Stainless Steel Hose Clamp ( <b>not shown on front</b> )
	Paperwork	Installation Instructions, etc.

**T**hank you for purchasing the Driven Diesel Pre/Post Fuel Filter Kit. Your kit should have the above-mentioned items for your installation. Please read and familiarize yourself with this manual fully before proceeding with the installation of the kit. Also, always work safely. Make sure there is plenty of light and adequate ventilation available, and allow yourself several hours to complete the installation. Finally, the installation of this kit requires exposing the fuel system. Diesel fuel is flammable, and its vapor is explosive; therefore common sense dictates that there be no smoking or open flame within 50 feet of the workspace. If any fuel spills, contain it and clean it up immediately. Do not let any fuel stand on painted surfaces of your vehicle, or damage to the finish may result.

Installation of this kit also requires accessing the top of the fuel tank. This can be accomplished by either lowering the fuel tank from the bottom, or if installing it on a truck, removing the pick-up bed. Both options require working with heavy objects in awkward positions. Make sure you have adequate help before attempting this part of the installation.

**We highly recommend running your fuel level down to around 1/4 tank or less if you are removing the tank for this installation.**

These instructions assume that you are installing this product with an Aftermarket Fuel Bowl Delete Regulated Return that has a #6 Male AN inlet fitting (like our Driven Diesel 7.3L Fuel Bowl Delete Regulated Return Kit). If you are attempting to use this kit with an otherwise stock fuel system, or an aftermarket fuel system with a different inlet configuration, whatever adapters are needed will be up to you to determine and source.

We strongly recommend that you look over these instructions completely, and if you feel that the installation is beyond your capability, we suggest having a qualified mechanic complete the install.

## **REGULATED RETURN FUEL SYSTEM INSTALLATION**

It is recommended (but not required) that you have the Regulated Return Fuel System already installed on the engine before installing this Pre/Post kit. Installation of the Pre/Post kit will require cutting and assembling hoses "to fit", which is much easier to do when the components the hoses need to connect to are already installed.

## **INSTALLATION**

**BEFORE BEGINNING THE INSTALLATION** – Crawl under the truck with the large mounting bracket included in this kit and determine where it is going to fit. Generally speaking, you want to locate the bracket on the drivers side, INSIDE the frame, forward of the fuel tank. Different truck configurations have different space available in this area, and some trucks will need the bracket to be located on the outside of the frame. The assembled bracket will require 13-14" of width along the frame. Once you have figured out if the bracket will be inside or outside the frame, take a measurement (relative to the front of the fuel tank) of where the bracket will be positioned along the frame. You will need this information later, **WRITE IT DOWN!** Something like "INSIDE FRAME, 12" FORWARD OF TANK".

### **TYPICAL PUMP/FILTER Installation Location by Cab/Bed Length:**

<b>TRUCK CONFIGURATION</b>	<b>FITS INSIDE THE FRAME</b>	<b>FITS OUTSIDE THE FRAME</b>
Regular Cab / Long Bed	Typically 2WD Only!*	Yes / Multiple Locations
Extended Cab / Short Bed	Typically 2WD Only!*	Yes / Multiple Locations
Extended Cab / Long Bed	Yes*	Yes / Multiple Locations
Crew Cab / Short Bed	Yes*	Yes / Multiple Locations
Crew Cab / Long Bed	Yes*	Yes / Multiple Locations
Excursion	Yes / Multiple Locations	Should Not Be Necessary

\*Assumes presence of OEM fuel tank. Trucks using a larger aftermarket tank may not have any available room inside the frame.

**DO NOT use a floor jack by itself in the middle of the fuel tank, you will damage the sending unit. Use plywood or a 2x4 that is wide enough to reach out to the edges of the tank!**

If you are removing the fuel tank, we HIGHLY RECOMMEND that you set the fuel tank on a pair of 2x4s while working on the sending unit assembly. Locate the 2x4s under the areas where the fuel tank mounting straps would normally be. This will allow the fuel tank to sag in the middle in the same manner it will when installed in the truck. This will ensure that the sending unit fits the tank the same as it will when reinstalled.

1. To install this kit, you will need access to the top of the fuel tank. There are two ways to accomplish this. One is to remove the tank from the bottom of the vehicle. The other is to remove the bed of the truck. These directions assume that you are **REMOVING THE FUEL TANK**, if you remove the bed, you will need to adapt the steps to fit.
2. Depending on the year of your truck you may need to use a set of fuel line removal tools (3/8" blue and 5/16" gray – available at your local auto parts store) to disconnect the lines from the pickup assembly. (see Fig. 1) There are versions of these tools that work just as well, but look different, you don't need these specific tools.
3. Don't forget to disconnect the wiring to the level sender before trying to remove the tank from underneath the truck.
4. Depending on your specific truck, it may be necessary to jack up one end of the truck in order to slide the fuel tank out.

**THE NEXT STEPS ASSUME THAT YOU HAVE REMOVED THE TANK OR BED AND HAVE ACCESS TO THE TOP OF THE TANK AT THIS POINT.**

5. Using a wooden block and a hammer, gently tap the plastic ring holding the fuel pickup assembly to the top of the tank. Tap the ring so it rotates in a counter-clockwise direction (see Fig. 2). A large rubber "strap wrench" will also work well for this. **TIP: Place the retainer ring in the sun and the tank in the shade; this will help with reassembly.**
6. Carefully remove the fuel pickup assembly from the tank. Be sure the plastic strainer comes out with the assembly. It may be broken or fall off of the assembly, requiring retrieval from the bottom of the tank.

**NOTE: You must be careful with the float-sender assembly. It is fragile; the element is ceramic and can break very easily. It is helpful to find a way to clamp the pickup assembly in a vise or other device to hold the assembly while working on it.**

7. Before starting any modifications, carefully measure the distance between the bottom of the fuel pickup screen and the metal cap on the pickup assembly. Take note of this dimension, as it will be used to adjust the pickup strainer later (see Fig. 3).  
If your pickup screen was broken off and floating around in the tank, remove any remaining parts of the original screen from the white "mixing chamber", push the new strainer onto the mixing chamber in its place, then measure according to the instructions above.
8. Remove the strainer by sliding it off of the mixing chamber. It may or may not have a clamp on it. Carefully cut the hose clamp on the return hose from the mixing chamber, and remove the hose from the steel line (see Fig. 4).
9. Now slide the mixing chamber off of the fuel pick-up line (see Fig. 5).

10. You are now ready to begin assembling the components of the kit. Begin by locating the new fuel return line (part # TK-05-290-12-HBUS). Slide the pre-installed compression fitting over the end of the return elbow on the pick-up assembly, orient the line to clear the float assembly, and carefully tighten the fitting until the fitting no longer rotates freely around the tube. Now tighten the fitting 1 to 1-1/4 turns past this point, or until the nut bottoms out on the fitting (see Fig. 6).

**E-SERIES VANS: Due to the baffle in the bottom of E-Series fuel tanks, the extended return line will not fit as provided. You can simply skip the above step.**

11. Refer to Fig. 7 and remove the strainer screen from the bottom of the new plastic strainer. You need to modify the pickup assembly to prevent air from leaking past the secondary suction on the side of the pickup. Using a 3/8" drill bit, carefully ream the plastic tube until it is clear. You may be able to accomplish this step without using a drill motor (see Fig. 8).
12. Locate the small hose clamp (WGN02SS) and slide it over the top of the pickup strainer. Now locate the 3/8" Suction Adapter Assembly (Part # TK-06-03-HBUS), which is a 3" stainless steel tube in a 3/8" steel compression fitting. Insert the tube end into the top of the Pickup Strainer, and push the metal adapter down into the Pickup until the nut on the fitting rests against the plastic tube. Tighten the hose clamp until snug. The end of the metal tube should be even with the bottom of the plastic tube (see Fig. 9).
13. Slide the compression end of the pickup tube over the steel line on the factory unit, and **HAND TIGHTEN** just enough to hold the assembly in place. Refer to the measurement you took in step # 6, measure the new assembly.
14. If the new dimension is too long, you may need to cut the stock steel suction line in order to make the measurement match the original dimension. A tubing cutter, a hacksaw, or a rotary tool can be used. Try the assembly first! You may not need to cut the line at all. If the measurement is too short, loosen the hose clamp and slide the Pickup Assembly down to the correct dimension. Don't slide the Pickup down too far! The steel tube on the adaptor seals off the Secondary Suction port. If the Pickup is slid down too far, the tube will no be able to seal the port, and you will again have air intrusion into the fuel system. Make sure to snap the bottom screen back onto the strainer when finished.
15. Once the adjustments are complete, tighten the fitting until the tube no longer rotates freely, and tighten 1 to 1-1/4 turns past that point (or until the nut bottoms out on the fitting). Recheck all fittings & measurements and make sure the final assembly looks like Fig. 10.

NOTE: If you have not done so already, this is a great time to modify your fuel tank to allow for easier and faster filling. This step is OPTIONAL but HIGHLY recommended, it will save you time at the pump. The easiest and cleanest tool for this is a PVC pipe cutter with a good sharp blade.

Locate the large fuel tank fill hose and accompanying vent hose. If you feel inside the tank where they enter, you will find that they extend several inches down into the tank. While filling the tank, these will become covered in fuel before the tank is full, making the fuel foam up the fill neck quicker and shutting off the pump nozzle. Using the PVC pipe cutter, shorten both of these to as close to the top of the tank as possible. Don't forget to retrieve the cut off pieces from the tank.

16. Carefully install the fuel pickup assembly back into the tank, making sure that the locating tab is in the notch in the tank and the rubber seal is positioned correctly.

**IMPORTANT NOTE:** When you reinstall the sending unit, the pickup screen should contact the floor of the fuel tank BEFORE the mounting surface of the sending unit contacts the gasket. You should have to push the sender down about 1/16-1/8" to reach the gasket. This puts the necessary tension in the pickup screen to ensure that it is ALWAYS touching the bottom of the tank, even when the tank is full of fuel and the center is sagging lower than it is right now.

17. Reinstall the black plastic retention ring on top of the tank. If you left the ring in the sun (so it is hot) and the tank in the shade (so it is cool), it should start fairly easily. Tighten in a clockwise direction, just enough to secure and seal the pickup assembly to the tank. You can snug it up using the same block and hammer or strap wrench technique that you did to remove it, just remember that these plastic parts may break if you are too aggressive.

## PREPARING THE FUEL PUMP AND FILTER BRACKET ASSEMBLY FOR INSTALLATION

Your stock fuel pump is mounted to the inside of the drivers side frame, next to the transmission bell housing. Follow the wiring from the pump and unplug the connector on the frame.

If you **PURCHASED A NEW PUMP**, remove the nuts securing the wiring pigtail to your stock pump, unclip the pigtail and set the pigtail and nuts aside for use later.

If you are **REUSING YOUR STOCK FUEL PUMP**, remove it from the frame. It has quick disconnect fittings at the inlet (pull clip to remove) and outlet (release tool req'd). On the outside of the frame, locate & remove the 3 nuts in a triangle pattern to remove the pump/bracket assembly. Once removed, locate the "pinch bolt" that tightens the bracket around the pump, remove the bolt and spread the bracket open so the pump can be removed from the factory bracket and insulator.

**Using Figures 11-14 as a guide**, assemble the pump/filter bracket per the following steps.

**NOTE:** these steps (and the associated images) assume the bracket will be mounted INSIDE the frame rail, forward of the fuel tank. If you will be mounting this bracket OUTSIDE the frame, you will need to reverse the orientation of the fuel pump and filters and pay close attention to the IN/OUT flow markings on the filter heads to make sure fuel is flowing through the filters properly.

18. Install the DD-10MM-06MJ Driven Diesel Fuel Pump Outlet Adapter with Copper washer in the outlet of the fuel pump. If you are reusing your stock pump, you will need to remove the long OEM quick disconnect fitting first.
19. LOOSELY Install the fuel pump onto the **TOP MOUNTING STUDS** of the mounting bracket using the (2) rubber isolated clamps, (2)  $\frac{1}{4}$ " Flat Washers and (2)  $\frac{1}{4}$ -20 Nylok Nuts (finger tight for now). Make sure you pay attention to the orientation of the pump, the inlet nipple will point to the left (inside the frame location) or right (outside the frame location) when viewing the bracket from the pump side, depending on your installation needs.
20. Install the (2) DD-BFFH Filter Heads to the bracket using the (5)  $\frac{1}{4}$ -20 x  $1\frac{1}{4}$ " bolts, (10) Flat Washers and (5)  $\frac{1}{4}$ -20 Nylok Nuts.
21. Install the (4) 10MB-06MJ adapter fittings (each filter gets one IN and one OUT fitting) and the (10) allen style plugs into the filter heads. It's a good idea to lightly lubricate the o-rings with some diesel fuel so they don't tear during installation.
22. Using a ruler or straight-edge, adjust the position of the fuel pump so that the end of the DD-10MM-06MJ outlet adapter is aligned with the end of the 10MB-06MJ fitting in the IN port of the filter head.

23. Rotate the fuel pump so that the (+) & (-) terminals are approximately horizontal when installed in the vehicle. You can now tighten the 1/4-20 Nylok Nuts that secure the insulated pump brackets.

**IMPORTANT PUSH-LOK HOSE ASSEMBLY NOTES:** Make sure that all hose ends are cut with a clean, square end. In the following steps, it is very helpful to put the hose ends in the freezer for 10-15 mins before assembly (remove one at a time when ready to assemble) and the end of the hose being assembled into a cup of **VERY HOT** water (microwave water for 3-4 mins, reheat the water for each hose end – DO NOT microwave the hose!) for a few minutes before attempting to install the hose end. The supplied hose is rated for 300psi and has a very strong internal braid, warming the hose softens the rubber and causes a bit of thermal expansion, both of which make installing it a bit easier. Shake the excess water out of the hose before assembly.

The easiest way to install the 45° & 90° fittings is to put them in a bench vice with the barbed nipple pointing up. Firmly push the end of the hose down onto the fitting in the vice. The hose should be pushed all the way up to the yellow disc, so that it has fully engaged all of the barbs on the fitting. DO NOT WORRY about the orientation of the fittings when you are pushing the hose onto them, you can simply rotate the fitting in the hose to get the correct position once you have it fully seated onto the fitting.

24. You can build the PUMP OUTLET to POST FILTER INLET two different ways, STRAIGHT (like in our pictures in this manual), or CURVED (like in the photo on the cover of this manual). If you think you might want to **UPGRADE TO A DUAL PUMP CONFIGURATION** at a later time, cut the hose to 4" and assemble it "curved" like the cover.

If you don't feel like you will need to upgrade to a dual pump configuration later, install both 06NC-06FJX90 90° fittings and point them at each other, then measure from the OUTSIDE of the first yellow disc to the OUTSIDE of the second yellow disc, then ADD 1/8-1/4". You are better off with this hose being slightly long than slightly short! Once assembled, install the hose and tighten the hose ends on the fittings, if your hose is slightly long, it will have a little curve, rather than being straight like our pictures, this is NOT a problem.

25. Install another 06NC-06FJX90 90° hose end into the end of the remaining 3/8" hose and loosely connect to the PRE FILTER OUTLET fitting. Route the hose to the PUMP INLET NIPPLE and determine where to cut it off. Install the (2) WGN-06SS hose clamps over the hose and then firmly push the hose onto the pump nipple, all the way up against the body of the pump. Tighten one worm gear clamp on either side of the "ridge" in the pump nipple, then tighten the 90° hose end at the fuel filter fitting.

## YOUR ASSEMBLY SHOULD LOOK LIKE FIGURES 11 & 12.

**BEFORE WE PROCEED, it is best to CONFIRM that the system will fit in your chosen installation location (now that it is assembled).**

**IMPORTANT NOTES: The "L" Bracket has slots where the mounting bolts go, so it can be positioned on either side of the frame, and moved in and out from the face of the frame to achieve the best fit in each vehicle. The Pump/Filter Bracket is also slotted where it attaches to the "L" Bracket, so that it can be raised or lowered to achieve the best fit/clearance to the floor.**

**Outside the frame mounting will require disconnecting and routing the e-brake cable either through the filter bracket or behind the "L" bracket. Sleeving the e-brake cable with some split hose so it doesn't rub on the fuel system components is advised.**

**SEE PICTURES AND NOTES ON PAGE 22 FOR BRACKET MOUNTING OPTIONS**

26. Take the assembled Pump/Filter Bracket & the black "L" Bracket under the truck. Using a large C-Clamp, secure the "L" Bracket to the bottom of the frame in your chosen location. You can now install the Pump/Filter Bracket over the (4) mounting studs on the "L" Bracket and check for clearance all the way around the assembly. Adjust the position of the "L" Bracket on the frame, as well as the position of the Pump/Filter Bracket on the "L" Bracket until you are happy with the chosen mounting location. This process allows you to easily move the assembly around on the frame by simply loosening and retightening the the C-Clamp. **MAKE SURE YOU ACCOUNT FOR THE FUEL TANK NOT BEING INSTALLED YET WHEN DETERMINING IF YOU ARE HAPPY WITH THE MOUNTING LOCATION!**

This step is a "double check" to make sure that the measurement you took at the very beginning of the installation is still valid, adjust your previous measurement as needed if you feel that you have moved the assembly forward or rearward on the frame.

27. Before you remove the C-Clamp, using the (3) slots on the bottom of the "L" bracket, mark the location for the (3) 3/8" holes that need to be drilled, ideally as close to the middle of the bottom of the frame as possible. Then, remove the C-Clamp and Bracket.
28. You now need to determine the length of the fuel supply line from the tank to the filter, as it is much easier to assemble this hose before the fuel tank is reinstalled. Using the measurement you took BEFORE STEP 1 (and confirmed in step 26), position the fuel tank and the just completed fuel pump bracket assembly on the driveway as they will be positioned in the truck. If you noted 12" between the front of the tank and the pump bracket, position them 12" apart.
29. Using the remaining 3/8" fuel line, install one of the 45° hose ends using the same method as previous hoses. Twist the hose so that the natural curve of the hose aligns with the curve of the 45° hose end.
30. Loosely connect the 45° hose end to the inlet fitting of the filter assembly and route the hose along the side of the fuel tank as if you were tucking it into the channel of the frame rail, until the hose reaches the pickup tube on top of the fuel tank sending unit. You need the hose, when installed, to be long enough to reach about 1" beyond the "raised rib" on the pickup tube, and you want the hose to have some slack along the frame (so it isn't pulled tight and allows for some adjustment in the position of the bracket if needed). "A little too long" is better than "a little too short"! Once you have determined the length needed, cut the hose and set the extra aside for later use.

**NOTE: THE NEXT STEP WILL BE MORE DIFFICULT THAN THE REGULAR PUSH-LOK FITTINGS!** The rib on the pickup tube is larger than the one on the pump, you will want to make sure your water is **VERY HOT** and you will want to put a little lubricant on the rib. While you are soaking the hose in the hot water, you can open up the end of the hose a bit by using a 1/4"-Drive x (6mm or 1/4") DEEP socket. The O.D. of both of these tapers out about half way down the length of the socket, use that taper to gently stretch the opening of the hose while heating it.

31. Remove the 45° hose end from the inlet fitting of the filter. This step involves installing the other end of this hose onto the pickup tube on the fuel tank sending unit. Like the inlet of the fuel pump, you need to install (2) worm gear clamps over the hose, and push the hose far enough over the “raised rib” to be able to clamp both sides. (see Fig. 15) When ready, pull the socket out of the heated hose end and quickly push the hose over the raised rib before it cools and shrinks...you are still going to have to push pretty hard. Once installed, you may need to rotate the hose to make sure the other end aligns properly with the filter inlet fitting. Install and tighten the (2) worm gear clamps.
32. Slide the fuel tank under the truck. Reconnect the sending unit wiring harness and factory return line quick disconnect. It would be a good idea to cover the end of the stock feed hose (larger hose on frame that is no longer being used) with a plastic bag and zip tie.
33. Lift the fuel tank part way back into position and reconnect the front and rear vent hoses. Locate the fuel fill and vent hoses in such a way that they will slide over the frame as the tank is lifted the rest of the way into position.
34. Make sure that the new 3/8" fuel line, as well as the factory return line, are routed carefully to avoid being pinched between the frame and tank. Complete the reinstallation of the fuel tank, making sure the mounting straps are secure, fill and vent hose reconnected and clamps tightened, etc. The 45° end of your new supply hose should be in the frame channel, ready to be connected to your new fuel filter assembly.
35. Center punch the 3 bracket holes, then drill them in several steps. We have found that a good “Step Bit” works the best. Just be mindful of any wiring harnesses or tubing that may be on the other side while drilling. It is possible to drill the holes with the “L” Bracket clamped in place (using it as a guide), just keep in mind that the drill bit may damage the powdercoat and the bracket may start to rust as a result.
36. Once the holes are drilled, install the “L” Bracket to the frame using the (3) 3/8-16 Grade 8 Bolts, (6) 3/8" Grade 8 Flat Washers and (3) 3/8-16 Grade 8 Nylok Nuts. We prefer to install the bolts pointing up from the bottom and have the nuts on the top for a better look, but you MUST make sure that the bolts are not sticking up into anything they could damage over time (wiring harness, brake line, etc). Installing the bolts pointing down may be safer in some locations.
37. Install the Pump/Filter Bracket to the “L” Bracket using the (4) 5/16 Grade 8 Flat Washers and (4) 5/16-18 Grade 8 Nylok Nuts.
38. Connect the 45° end of the previously installed fuel supply hose to the fuel filter inlet fitting. Tighten the fitting and, if needed, secure the hose along the frame with cable ties.
39. Using the same procedures from previous hoses, install the 45° hose end on the remaining piece of 3/8" fuel hose. Connect the 45° hose end to the outlet fitting of the post pump filter and route the hose along the frame and up to the inlet fitting of your engine fuel system (presumably to a “fuel bowl delete block”).  
The final included 90° hose end is for use at the engine. Determine where you need to trim the hose and install and connect this final fitting.
40. Secure the new hose with cable ties in several places along the frame to prevent rubbing.

**In the next step you will be modifying the fuel pump wiring pigtail. If you are installing a new fuel pump, you were previously instructed to remove this pigtail and set it and the nuts for it aside. If you are reusing your stock fuel pump, this pigtail should still be attached. In either case, make sure that the red wire is installed on the (+) terminal of the pump, and the black wire is on the (-) terminal of the pump, the nuts are installed and tightened and the rubber boots are pushed back into place.**

41. Using the provided wire and heat shrink crimp connectors, you need to extend the fuel pump wiring to reach the new location. We recommend cutting the stock pump pigtail in the middle (offset where you cut each wire by a few inches so the 2 butt connectors are not right next to each other, they will fit inside the loom better this way). Using the supplied butt connectors and wire, extend the fuel pump end of the pigtail with the included wire. Plug the other end of the stock pigtail back into the connector on the frame.
42. Route the new wire from the new pump location up to the front part of the pigtail, cut to length (offset again, leaving a little slack in the wire) and connect using the remaining butt connectors. Make sure to heat all of the terminals so the heat shrink seals the connections, and cover the new wire with the included loom.
43. **Always pre-fill both fuel filters before installing them onto the filter heads.**
44. For the pre-filter (BF1212), install the small rubber o-ring from the filter package onto the filter head nipple (closest to the fuel tank), then install the filter onto the filter head. The post-filter (BF7633) does not include/need the smaller o-ring, simply install it on the filter head closest to the engine. It is a good idea to lubricate the rubber seal on the filters.
45. Once you have finished, test the system by turning the ignition key to the “ON” position, but do not start the engine yet. While the fuel pump is running, check the lines for any signs of leakage. Resolve any leaks before continuing. Cycle the key from “off” to “on” several times, waiting about 20 seconds each time. This will allow the pump to purge any air in the system and completely fill the filters and the rest of the system with fuel.
46. If you have a regulated return with an adjustable regulator, check and adjust (if needed) the pressure at the regulator per the regulated return instructions before proceeding.
47. Once you have confirmed that the system is leak free, go ahead and start the engine.

**You have completed the install of the Driven Diesel Pre/Post Fuel Filter Kit!**

For your convenience, we've included a cross-reference guide for replacement filters. Driven Diesel keeps the Baldwin filters in stock and would appreciate the opportunity to provide you with replacements. You can use the following list to get replacement filters elsewhere if desired.

#### **PRE-FILTER / WATER SEPARATOR:**

Baldwin BF1212	Fram PS3712*
Caterpillar 198-6378*	Luberfiner LFF8020*
Donaldson P55-8020*	NAPA 3415 or 3451*
Fleetguard FS1212*	WIX 3340*

#### **PRE-FILTER SPECS (BALDWIN BF1212):**

Flow Capability: 210gph @ 1psid / >300gph @ 3psid  
Filtration: 86% Efficient @ 4 micron / 99% Efficient @ 20 micron  
Water Removal: 93% @ 60gph / 87% @ 120gph (based on 2500ppm free water injection)  
(emulsified water removal will be approximately 3-5% less)  
Burst Pressure: 150psi  
Collapse Pressure: 100psid

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#### **POST-FILTER / WATER SEPARATOR:**

Baldwin BF7633	Fram P8334*
Caterpillar 1R-0750*	Luberfiner LFF3347*
Donaldson P55-1313*	NAPA 3528*
Fleetguard FF5320*	WIX 33528*

#### **POST-FILTER SPECS (BALDWIN BF7633):**

Flow Capability: 120gph @ 1psid  
Filtration: 99% Efficient @ 4 micron  
Max. Operating Pressure: 150psi  
Burst Pressure: 300psi  
Collapse Pressure: 100psid

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**\* NOTE:** Cross Reference filter specs may not be identical to the Baldwin specs listed above. The specs above are specific to the Baldwin filters we supply. The cross reference filters are the "direct replacement" according to each brand, but actual specifications may vary slightly.

**FUEL FILTER CHANGE INTERVALS:** We recommend that ALL diesel fuel filters be replaced every 15,000 miles, or every 12 months, whichever comes first. This applies to the filters included with this kit AND the OEM filters already installed in your truck. It's just good for the pump and injectors!



Figure 1- Line Release Tool



Figure 2 - Removing The Sending Unit Retention Ring

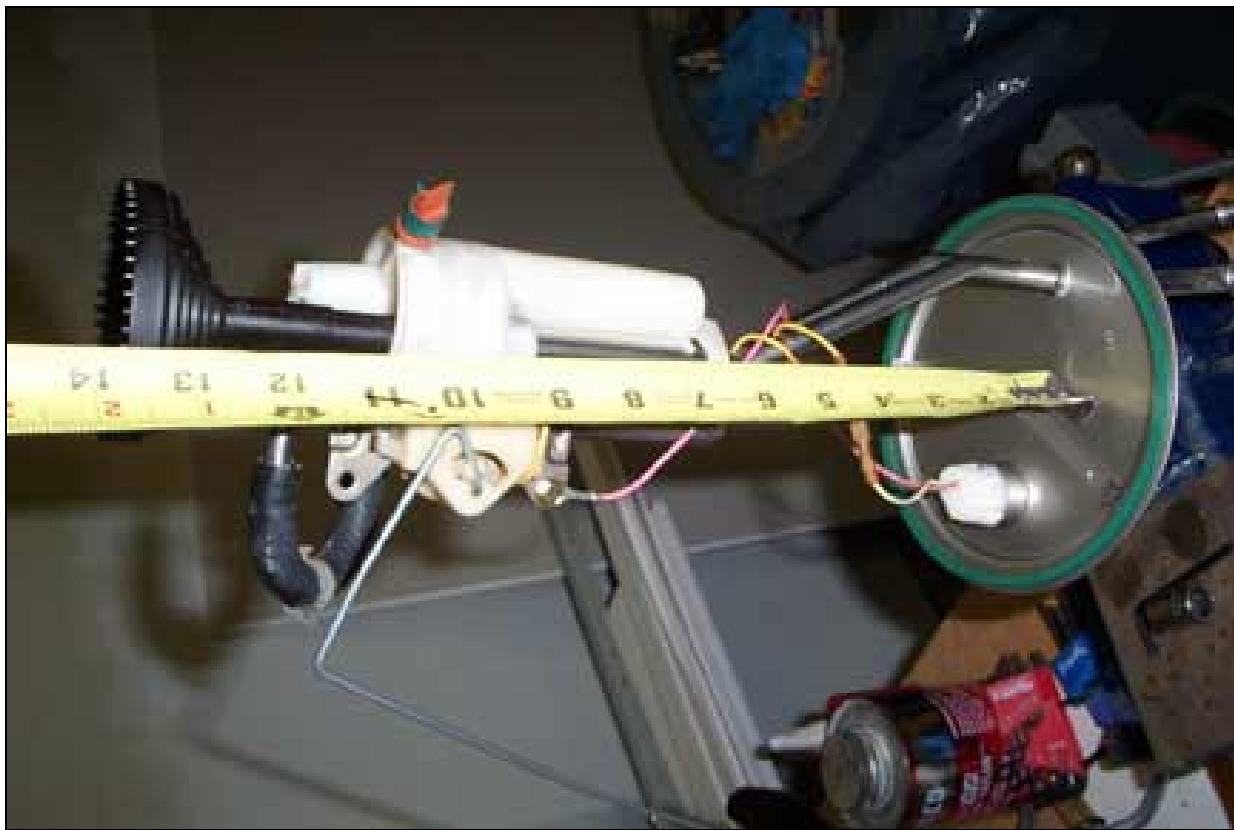


Figure 3 - Measuring The Factory Strainer Depth

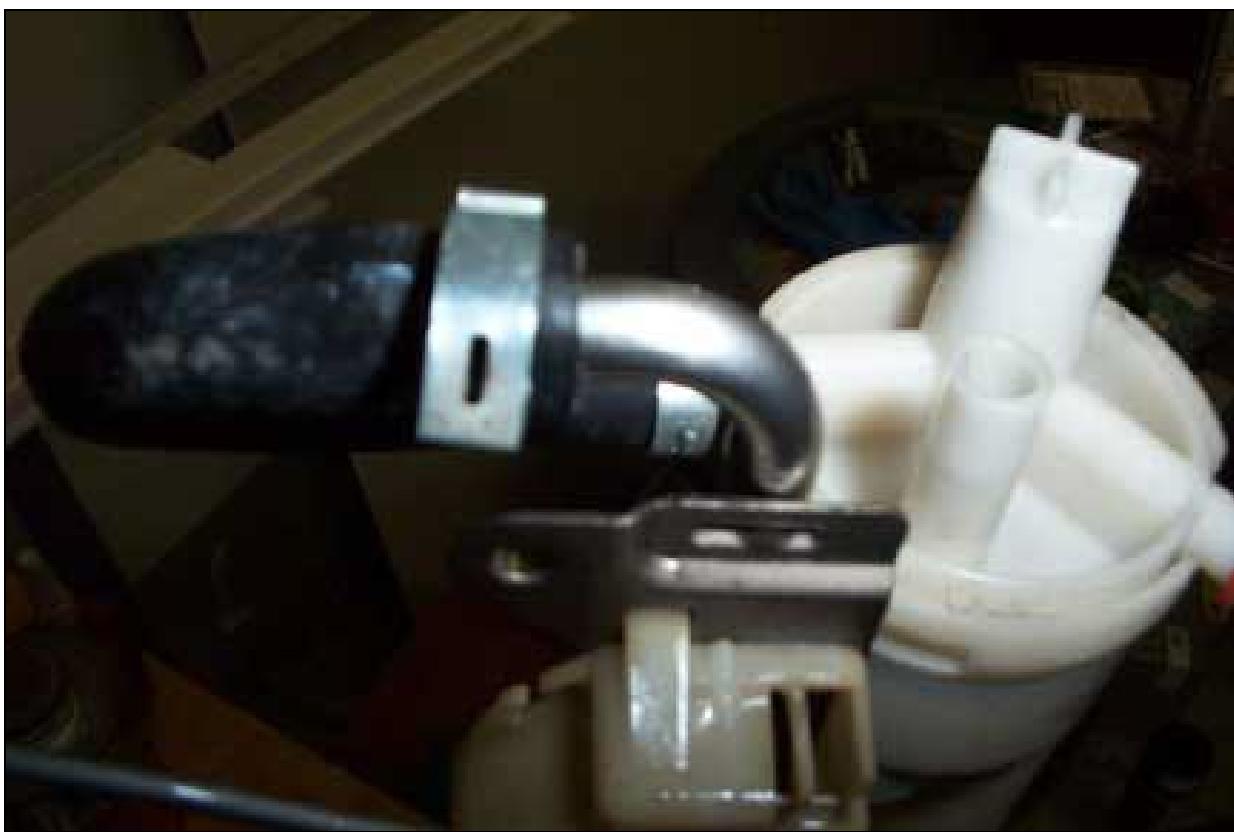


Figure 4 - Cutting The Factory Return Line Hose Clamp



Figure 5 - Removing The Mixing Chamber

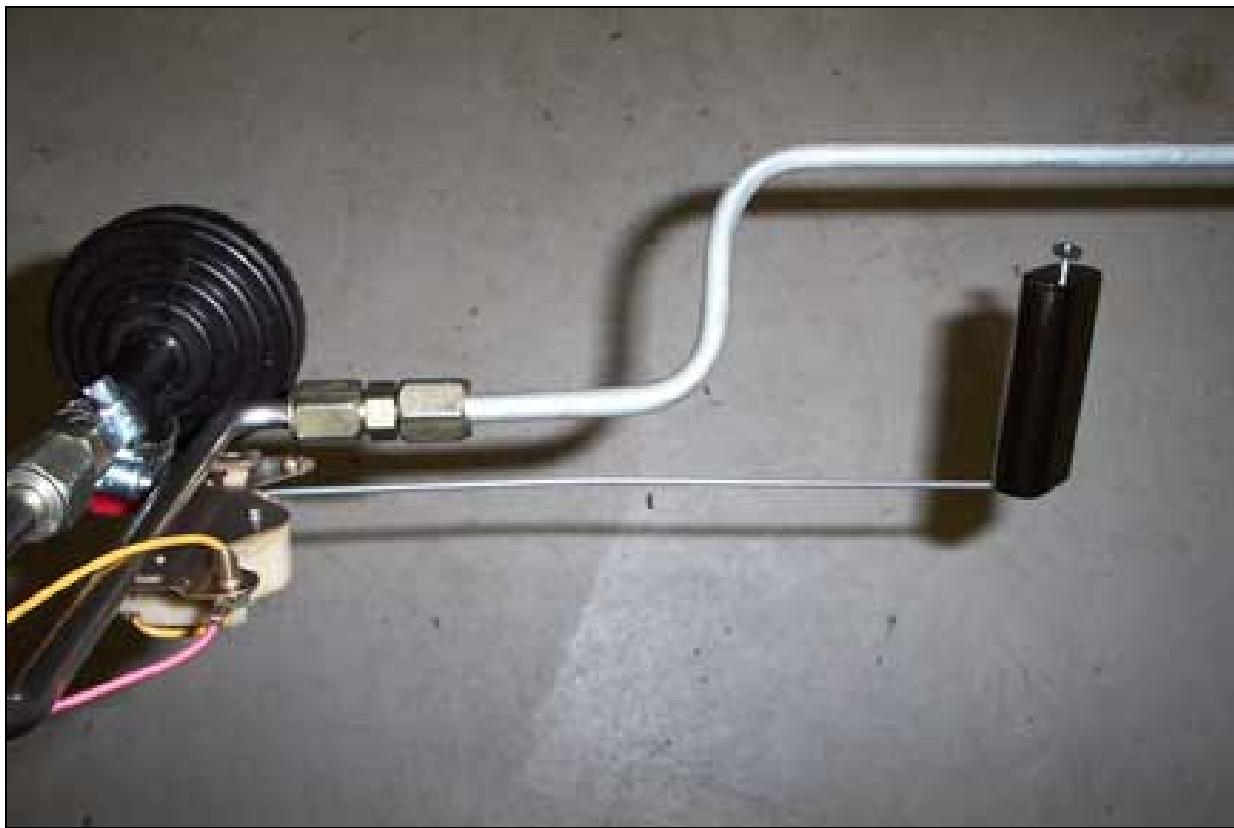


Figure 6 – Return Tube Assembly Installed (Pickup and Excursion ONLY)



Figure 7 – Removing Filter Screen From Strainer



Figure 8 – Clearancing Pickup Strainer for Pickup Tube



Figure 9 – Pickup Tube Installed in Strainer



Figure 10 – Sending Unit Assembly Ready for installation

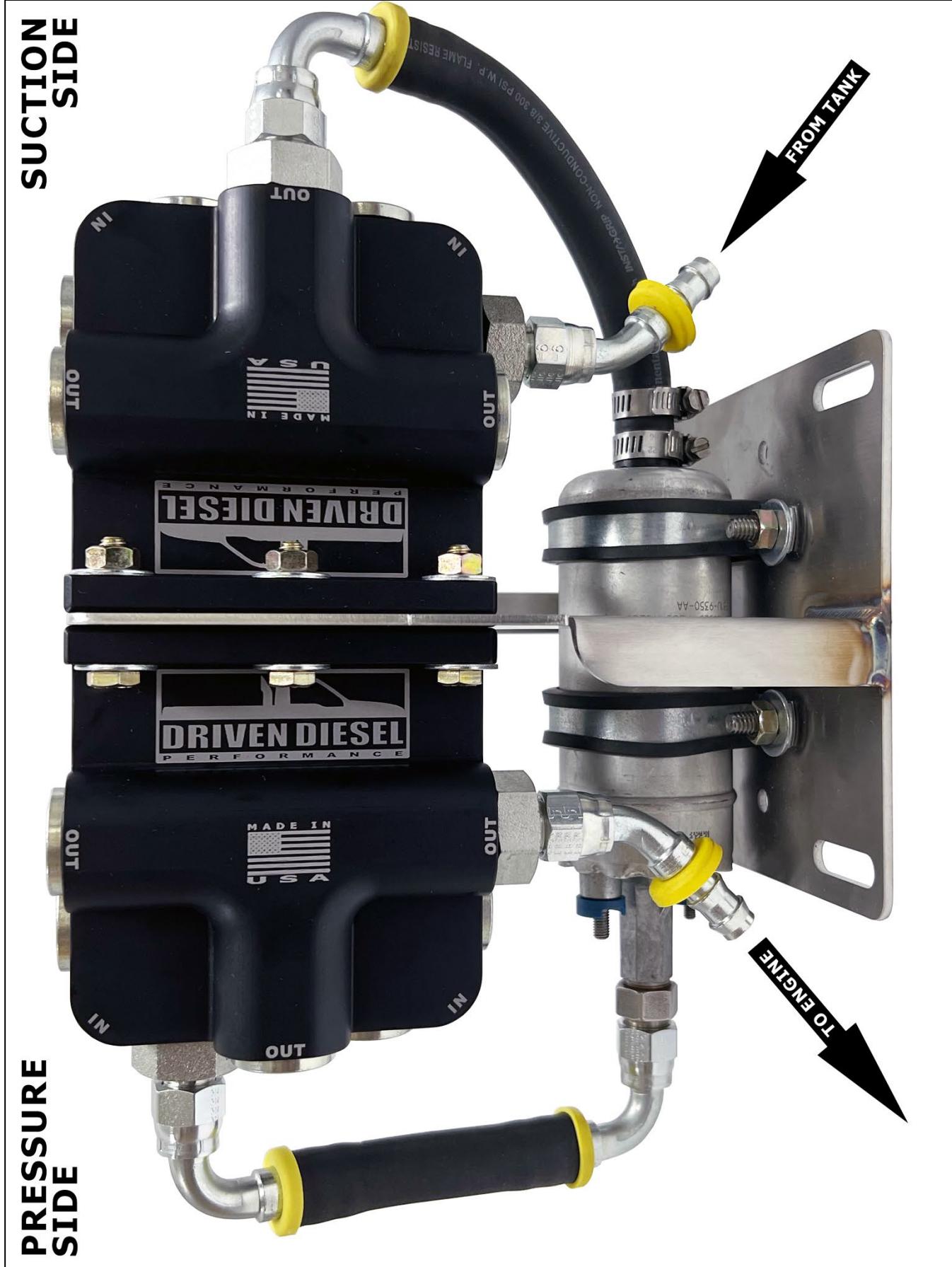


Figure 11 – Top View Of Pump/Filter Assembly – “Inside the Frame” Orientation

PRESSURE  
SIDE

SUCTION  
SIDE

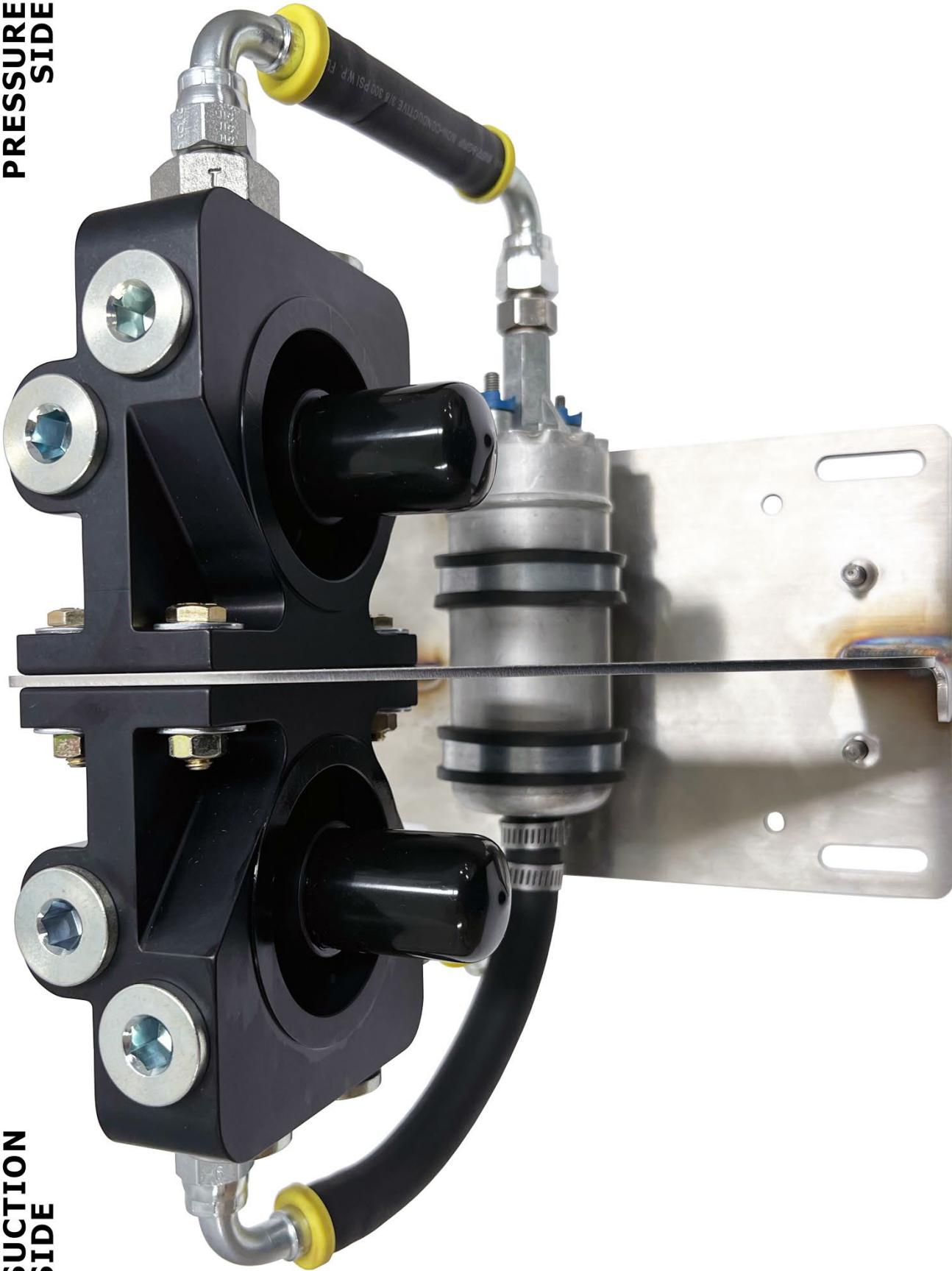


Figure 12 – Pump Inlet on Left – Pump Outlet on Right – “Inside the Frame” Orientation



Figure 13 – Pump Inlet View – “Inside the Frame” Orientation

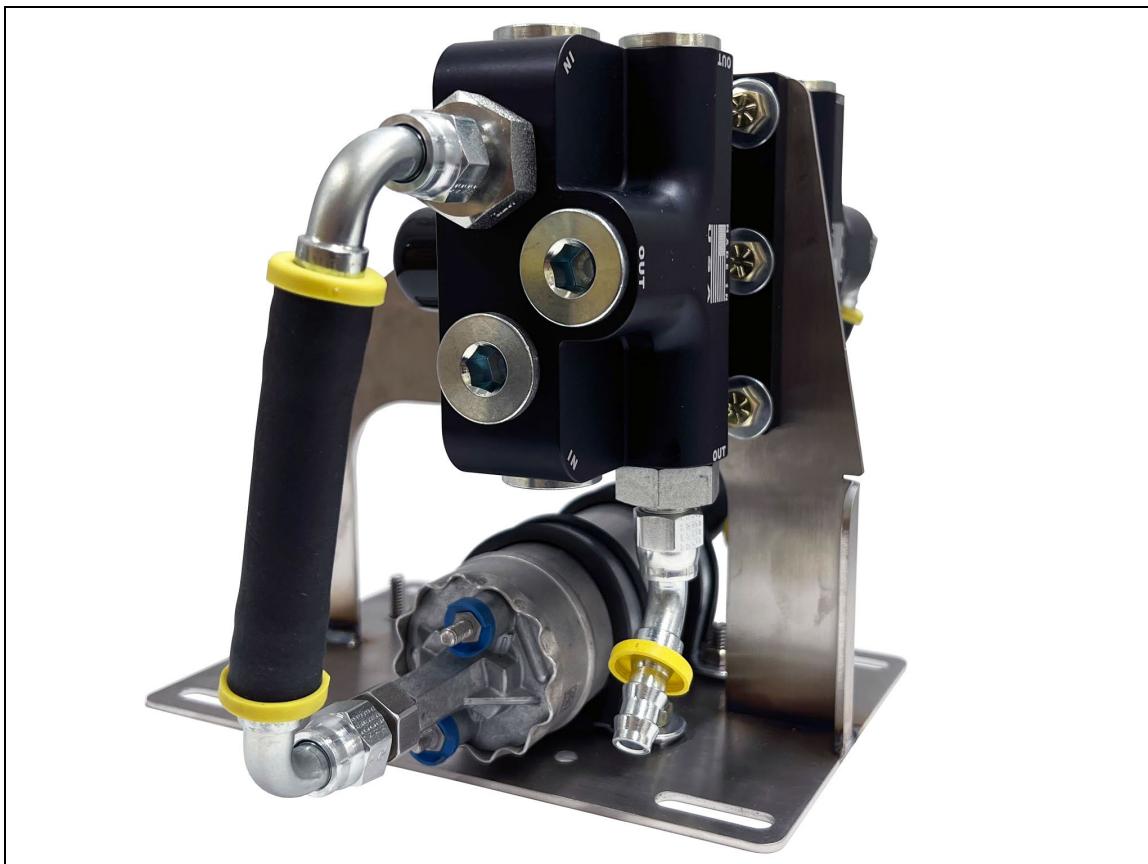
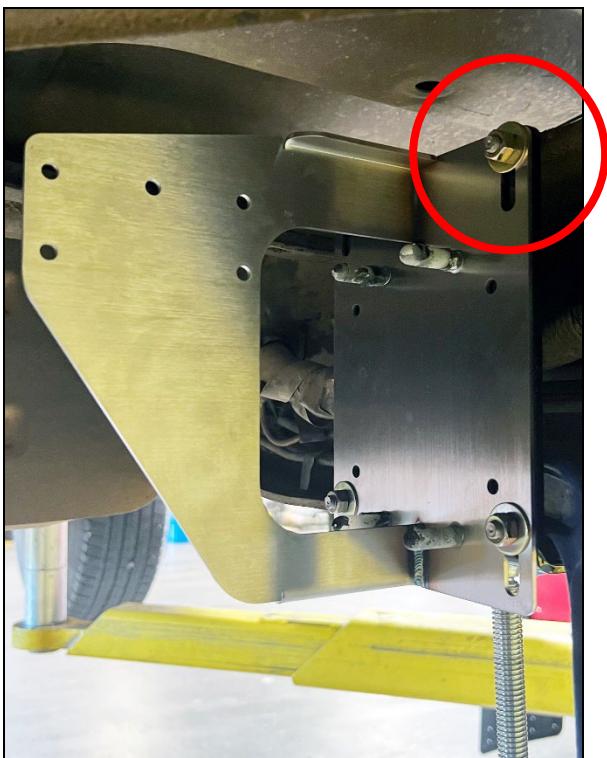


Figure 14 – Pump Outlet View – “Inside the Frame” Orientation



Figure 15 – New Fuel Line Double Clamped on Pickup Tube (Excursion Shown)

The pictures below show the different ways the mounting bracket can be configured. Use these images to find the best overall install location and configuration for your truck before drilling the mounting holes. You can test fit the "L" bracket with a C-Clamp (as shown) in a number of positions inside and outside the frame. You can also use the slots in the bottom of the "L" bracket to adjust how close it fits to the frame.



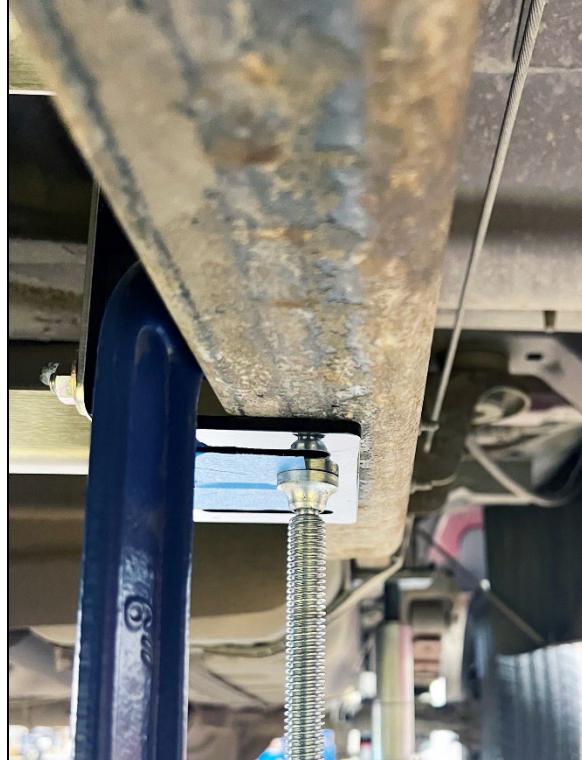
INSIDE / TIGHT TO FRAME / LOW POSITION



INSIDE / TIGHT TO FRAME / HIGH POSITION



OUTSIDE / TIGHT TO FRAME / LOW POSITION



INSIDE / BRACKET EXTENDED AWAY FROM FRAME

**NOTE: E-Brake cable should run through a split hose or sleeve, and not be pinched, if behind bracket.**

MOST OF THE PRODUCTS SOLD BY S DIESEL, LLC, ARE DESIGNED TO INCREASE VEHICLE PERFORMANCE...USE AT YOUR OWN RISK!

Do not install or use any product(s) purchased from S DIESEL, LLC ("S DIESEL") until you have carefully read the following Warranty and Liability Policy (the "Warranty").

#### PRODUCT WARRANTY POLICY

Subject to the limitations, exclusions, and qualifications set forth below, the product or the products made and sold by S DIESEL (the "S Diesel Product" or "S Diesel Products") are warranted to Buyer as set forth in this Warranty. The installation of the S Diesel Products indicates that Buyer has read, understands and agrees to the terms and conditions of this Warranty. Any warranty on products that are made by another manufacturer which are resold by S DIESEL to Buyer is made to Buyer by the manufacturer of such products in accordance with and subject to all conditions and limitations of the manufacturer's warranty in effect on the date of the purchase by Buyer. S DIESEL makes no warranties to Buyer, express or implied, with respect to such products that are made by another manufacturer.

#### LIMITED WARRANTY

The S Diesel Products (except S Diesel Products specified to have different warranty terms) are warranted to be free from defects in material and workmanship, under normal use and service for a period (the "Product Warranty Period") of one (1) year from date of delivery to Buyer, unless S DIESEL performs the work installing the S Diesel Products, in which case the Product Warranty Period shall be extended to equal the Service Warranty Period (as defined below under "SERVICE WARRANTY POLICY"). S DIESEL's liability under this Warranty is limited to repair or replacement at its option, subject to the provisions set forth herein, of any S Diesel Products which upon examination S DIESEL are found to be defective. Buyer shall prepay cost of transportation of defective S Diesel Products to S DIESEL for inspection.

S DIESEL shall not have any responsibility under this Warranty unless (1) the defect in an S Diesel Product results in a claim arising within the Product Warranty Period, measured from the date of delivery to Buyer, (2) the S Diesel Product, if installed by an installer other than S DIESEL, was properly installed, (3) the S Diesel Product was normally maintained and not subject to misuse, negligence or accident, and (4) the S Diesel Product, system components and/or accessories were not repaired or altered in such a way that in the judgment of S DIESEL the S Diesel Product's performance or reliability was adversely affected.

#### EXCLUSIONS

Any of the above warranties by S DIESEL shall not apply if Buyer's vehicle is in an accident, misused, neglected, altered from the S Diesel Product's manufacturer original designs or specifications or serviced in connection with a warranty claim hereunder without prior written approval of S DIESEL.

#### REMEDIES EXCLUSIVE

Repair or replacement of defective S Diesel Products in accordance with the Limited Warranty above shall be Buyer's exclusive remedy for and shall constitute satisfaction of any and all liabilities of S DIESEL with respect to any defect in any S Diesel Product whether based in warranty, contract, tort, negligence, strict liability or otherwise.

#### DISCLAIMERS AND LIMITATIONS

**THE EXPRESS WARRANTIES SET FORTH ABOVE ARE EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES, CONDITIONS AND TERMS AS TO QUALITY OR FITNESS OF ALL PRODUCTS SUPPLIED BY S DIESEL TO BUYER, WHETHER WRITTEN, ORAL OR IMPLIED, STATUTORY OR OTHERWISE, INCLUDING WITHOUT LIMITATION, ANY WARRANTIES OR CONDITIONS OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, AND ALL SUCH OTHER WARRANTIES, CONDITIONS AND TERMS ARE HEREBY DISCLAIMED AND EXCLUDED BY S DIESEL. IN NO EVENT SHALL S DIESEL BE LIABLE FOR ANY LOSS OF ACTUAL OR ANTICIPATED PROFITS, LOSS OF ANTICIPATED BUSINESS, COST OF SUBSTITUTE PRODUCTS, LOSS OF USE OR DOWNTIME COSTS OR DELAY CLAIMS (WHETHER DIRECT OR INDIRECT) NOR FOR ANY OTHER SPECIAL, INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF OR RELATING TO THIS WARRANTY OR THE SUPPLY OF S DIESEL PRODUCTS TO BUYER, WHETHER BASED IN WARRANTY, CONTRACT, TORT, NEGLIGENCE, STRICT LIABILITY OR OTHERWISE. BUYER ACKNOWLEDGES THAT (A) THE PRODUCTS PURCHASED FROM S DIESEL WILL BE USED IN CONNECTION WITH ACTIVITIES, UNDER EXTREME CONDITIONS AND/OR SUBJECT TO MODIFICATIONS REQUESTED BY BUYER FOR WHICH THE PRODUCTS MAY OR MAY NOT BE SUITABLE; (B) THE WARRANTY OF SUCH PRODUCTS FOR PERFORMANCE IN CONNECTION WITH SUCH ACTIVITIES, UNDER SUCH EXTREME CONDITIONS AND/OR SUBJECT TO SUCH MODIFICATIONS REQUESTED BY BUYER IS NOT POSSIBLE; AND (C) ANY MANUFACTURER'S WARRANTY MAY BE VOIDED BY USE OF THE PRODUCTS IN CONNECTION WITH SUCH ACTIVITIES, UNDER SUCH EXTREME CONDITIONS AND/OR SUBJECT TO SUCH MODIFICATIONS REQUESTED BY BUYER. BUYER ACKNOWLEDGES THAT THE INSTALLATION OF ANY S DIESEL PRODUCTS THAT ARE NOT LEGAL FOR USE ON POLLUTION CONTROLLED MOTOR VEHICLES IS DONE SOLELY AT THE REQUEST OF BUYER AND ALL RESPONSIBILITY FOR ANY EFFECTS ON THE ORIGINAL VEHICLE MANUFACTURER'S WARRANTY, ABILITY TO PASS ANY EMISSIONS INSPECTIONS OR FOR ANY FINES THAT MAY OCCUR DUE TO THE REMOVAL OF FEDERALLY MANDATED EMISSION CONTROL EQUIPMENT IS ON BUYER.** No employee or representative of S Diesel has the authority to make any representation, promise or agreement which in any way varies from the terms and conditions of this Warranty. No suit or claim based on any cause of action, regardless of form, arising out of or relating to this Warranty or any of the S Diesel Products supplied by S DIESEL may be brought by Buyer or anyone claiming by, through or under Buyer against S DIESEL more than one year after the date that such cause of action arose.

**IN THE EVENT BUYER DOES NOT AGREE WITH THE TERMS AND CONDITIONS OF THIS WARRANTY, BUYER MAY PROMPTLY RETURN THE PRODUCT TO S DIESEL FOR A FULL REFUND. THE PRODUCT MUST BE IN NEW, UNUSED AND RESELLABLE CONDITION, BE RECEIVED WITHIN FIFTEEN (15) DAYS OF THE ORIGINAL PURCHASE AND BE ACCOMPANIED BY A DATED PROOF OF PURCHASE (RECEIPT). PRODUCTS RETURNED IN NEW, UNUSED AND RESELLABLE CONDITION MAY STILL BE SUBJECT TO RESTOCKING/REPACKAGING FEES.**

**THE INSTALLATION OR USE OF ANY PRODUCT PURCHASED FROM S DIESEL INDICATES THAT BUYER HAS READ, UNDERSTANDS AND AGREES TO THE TERMS AND CONDITIONS OF THIS WARRANTY.**

#### ASSIGNABILITY OF WARRANTY

This Warranty is for the exclusive benefit of Buyer and is not assignable.

#### WARRANTY CLAIMS PROCEDURE

Warranty claim forms can be printed from the company websites (<http://www.drivendiesel.com>) (Products) and <http://www.strictlydiesel.com> (Services)). A properly completed warranty claim form and a copy of the invoice for any defective Product or Service must be received by the Seller within the earlier of 30 days after the expiration of the Warranty Period or the incident giving rise to the claim. To qualify for an adjustment under this Warranty a defective Product must be returned prepaid to the Seller for inspection and must be accompanied by a dated proof of purchase receipt. In addition, the serial number of the defective Product, if any, must match the serial number on Buyer's invoice. All Warranty claims are subject to approval by the Seller and/or the Product's manufacturer. Buyer must pay all applicable service charges and taxes. Defective Products accepted for warranty compensation become the property of the Seller. To qualify for an adjustment under this Warranty a vehicle upon which S Diesel Services have been performed must be delivered to the Seller during Seller's hours of operation for inspection and must be accompanied by a dated proof of purchase receipt.

#### WAIVER

Any failure of the part of S Diesel to insist on strict compliance with the Warranty Provisions shall no way constitute a waiver of such right. No claim or rights arising out of a breach of the Warranty Provisions by Buyer may be discharged in whole or in part by a waiver of the claim or right, unless the waiver is in writing signed by an authorized representative of S Diesel. S Diesel's waiver or acceptance of any breach by Buyer of any provisions of the Warranty Provisions shall not constitute a waiver of or an excuse for nonperformance as to any other provision of the Warranty Provisions nor as to any prior or subsequent breach of the same provision.

#### APPLICABLE LAW

The Warranty shall be governed by the laws of the State of Arizona (excluding Arizona law with respect to conflicts of law).

\* Driven Diesel was formerly known as ITP Diesel, LLC and Sinister Diesel, LLC.