



## High Flow Fuel Module Upgrade Kit! Converts Your Stock Fuel Module into a High Flow System!

Large -8 JIC  
Bulkhead Fitting  
For Fuel Supply!  
Line!

Return Line  
Connects to Original  
Fuel Module Suction  
Tube!

Large 1/2" ID OE  
Style Flex Tube!

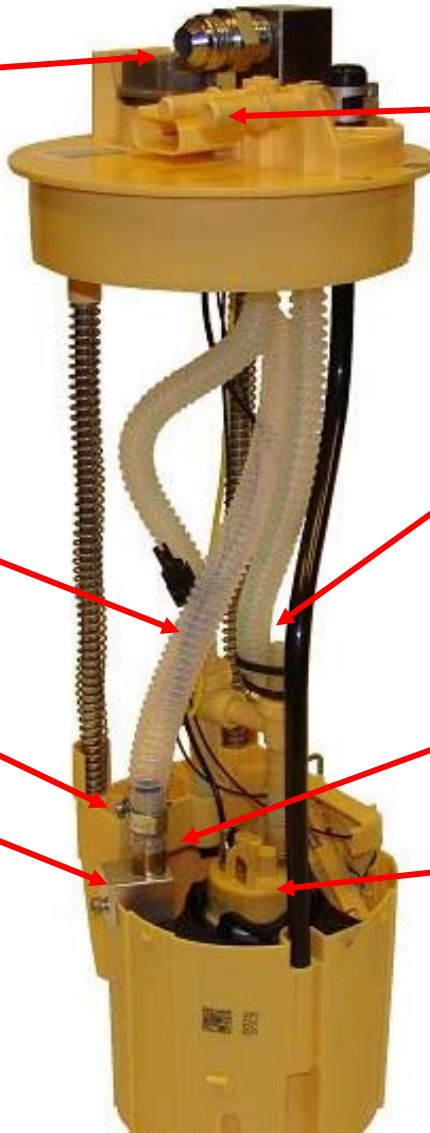
Fuel Returns Directly Into  
the Collection Basket

Stainless Steel  
Clamps!

Stainless Steel  
Suction Tube!

Suction Tube Mounting  
Block w/Set Screw!

By passes In-Tank  
Fuel Pump!



**NO MORE Quarter Tank Fuel Problems!**

**NO More Drilling Holes in Your Fuel Tank to Install an  
Aftermarket Draw Straw!**



1412 CREEK TRAIL DRIVE  
JEFFERSON CITY, MO 65109

[www.pureflowtechnologies.com](http://www.pureflowtechnologies.com)

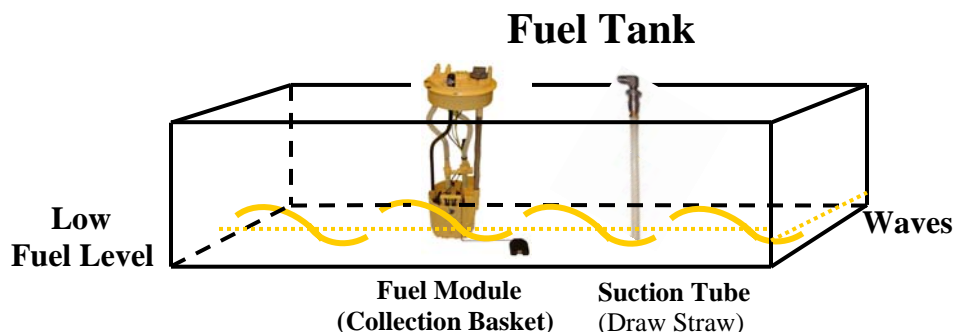
573 635-0555 VOICE  
573 635-0778 FAX

## Overview

### The High Flow Fuel Module Upgrade!

The stock OE fuel tank location in pickup trucks is generally along the inside of the driver's side frame rail. With space between the frame rail and drive shaft limited, the fuel tank must be narrow to fit and have clearance away from the drive shaft. Consequently, to contain the volume of fuel required, the fuel tank must be quite long.

With vehicle acceleration and/or deceleration waves develop which, with a low fuel level, can cause a fuel suction tube to 'suck air'. To overcome this problem, the vehicle manufacturers incorporate the use of a fuel module with a collection basket.



When the fuel level is low, the collection basket catches fuel as it flows back and forth. Containing fuel in the basket ensures that the engine always has a fuel supply. However, once the fuel level drops below the top of the collection basket the high flow of a **High Performance Fuel System** will drain fuel more quickly than it enters. This will eventually empty the basket and starve the engine of fuel. Additionally, the suction lines of the stock collection basket are too small to handle the higher flows without cavitating. To make matters even worse, some pickup truck manufacturers have chosen to locate the lift pump in the fuel tank which would block the flow and prohibit the use of the stock suction tube as it is.

### The PureFlow® Technologies Fuel Module Upgrade

PureFlow® Technologies has developed an upgrade kit for the stock OE fuel module that overcomes the issues above. With this fuel module modification, a high flow after market fuel system can draw directly from the fuel module without problems. The Fuel Module Upgrade Kit has all of the components necessary to convert the stock fuel module into a high flow system.

## The Fuel Module Upgrade Parts List!

1 set. Bulkhead Fitting, Sealing Washers, & Lock Nut



1 ea. -8 JIC Flare x 3/8" NPT



1 ea. OE Style Flexible Fuel Line with 1/2" ID



2 ea. Line Clamps



1 ea. Stainless Steel Suction Tube 1/2" ID



1 tube Loctite<sup>®</sup> Sealer



1 ea. Mounting Block & Stainless Steel Set Screw



3 ea. Tie Straps



## INSTALLING THE PUREFLOW<sup>®</sup> FUEL MODULE UPGRADE!

To access the fuel tank to install the Up Grade Kit it is necessary to either drop the fuel tank or to lift the truck bed.

Should you choose to pull the pickup bed to access the tank. Be sure to disconnect the tail light wires, fuel tank filler tube, and any other accessories or components that may be secured to the frame and bed.

**CAUTION:** If you are unsure of the proper procedure for removing the fuel tank or truck bed from the vehicle, consult your vehicle manufacturer's service manuals for detailed instructions.

### When Dropping the Tank, Always Remember Safety First!



Figure 1



Figure 2



Figure 3

**If you choose to remove the bed, properly support the truck bed to prevent serious injury or death!**



Figure 4



Figure 5

## INSTALLING THE FUEL MODULE UPGRADE KIT, cont'd!

**NOTE:** The fuel tank used for the pictures is an example only and may not be exactly the same as your tank.

**After the fuel tank has been accessed:**

Step 1. Thoroughly clean the area at the top of the fuel tank around the fuel tank module, the lock nut and lock nut threads. Disconnect the electrical connector, the fuel supply and return lines. Remove the fuel module.



Figure 6



Figure 7

Step 2. Drill 1 - 9/16<sup>th</sup> inch hole in the top of the fuel module.



Figure 8



Figure 9

Step 3. Install the -8 x 3/8" NPT fitting into the bulkhead fitting.



Figure 10

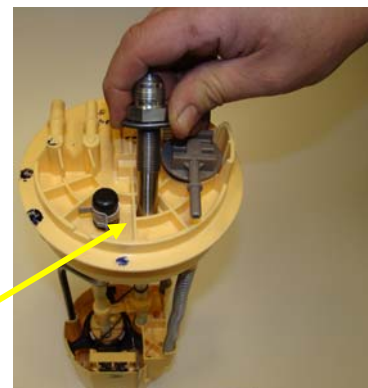


Figure 11

Step 4. Insert the bulkhead fitting with the washer, gasket side down, into the 9/16" hole.

## INSTALLING THE FUEL MODULE UPGRADE KIT, cont'd!

Step 5. Install the sealing washer and lock nut on the bulkhead fitting and tighten.

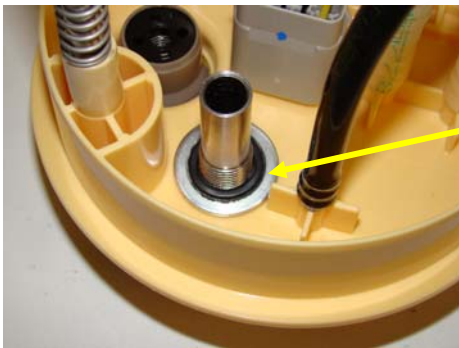


Figure 12

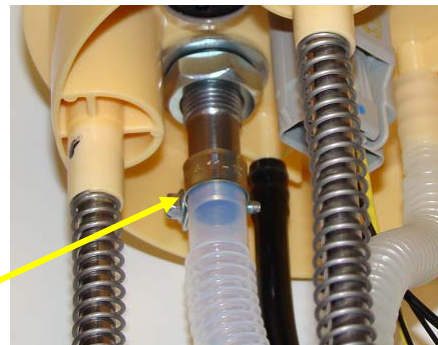


Figure 13

Step 6. Apply sealer to the 1/2" flex tube and bulkhead fitting.



Figure 14

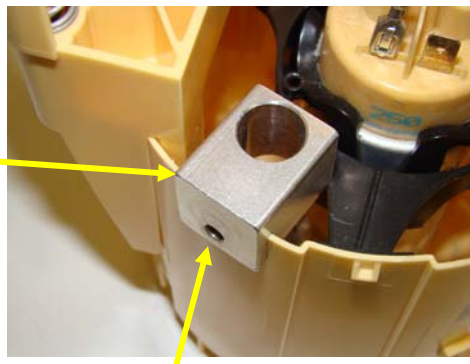


Step 7. Install the flex tube and clamp on the bulkhead fitting. Properly tighten the clamp.

Step 8. Place the 'Suction Tube Block' on the basket and mark the hole location for the set screw.



Figure 15



Step 9. Remove the 'Suction Tube Block' and drill a 3/16" hole in the marked location for the set screw.

## INSTALLING THE FUEL MODULE UPGRADE KIT! CONTINUED

Step 10. Place the 'Suction Tube Block' back on the fuel module basket and insert the suction tube into the block.



Figure 16

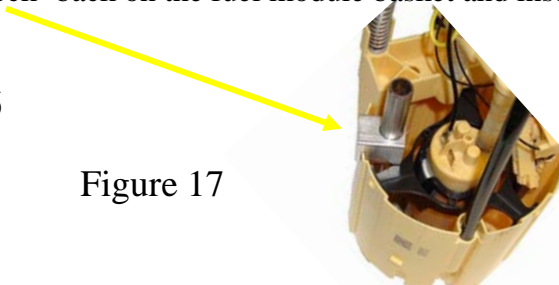


Figure 17

Step 11. Be careful to rotate the suction tube so the tab on the end is positioned to hold the pickup tube off the bottom to prevent blockage. Install the set screw to secure the block and pickup tube.



Figure 18



Figure 19

Step 12. Apply Loctite sealer to the suction tube, and install the flex tube and clamp.



Figure 20

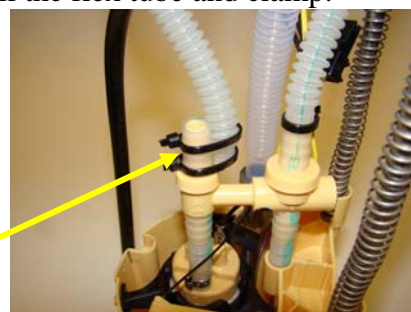


Figure 21

Step 13. Cut the original suction tube off just above the connector and secure as shown with the two tie straps. The original suction tube is now ready to be used for the air/vapor return line.

Step 14. Reinstall the modified fuel module in the fuel tank. Be careful to not bend the sending unit float arm when reinstalling the fuel module.

Step 15. Reinstall the fuel tank in the truck. Do not completely "button up" the tank straps until all of the new fuel lines as well as the original engine return line and electrical connector have been re-connected to their respective fittings on the fuel module.

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