A couple quick things before we get Started
This is for offroad use only. Products shown are not DOT approved.

Use this information at your own Risk. JBtuned LLC is not responsible for any damage, loss, injury, and or death associated and or resulting from the information provided within this guide.

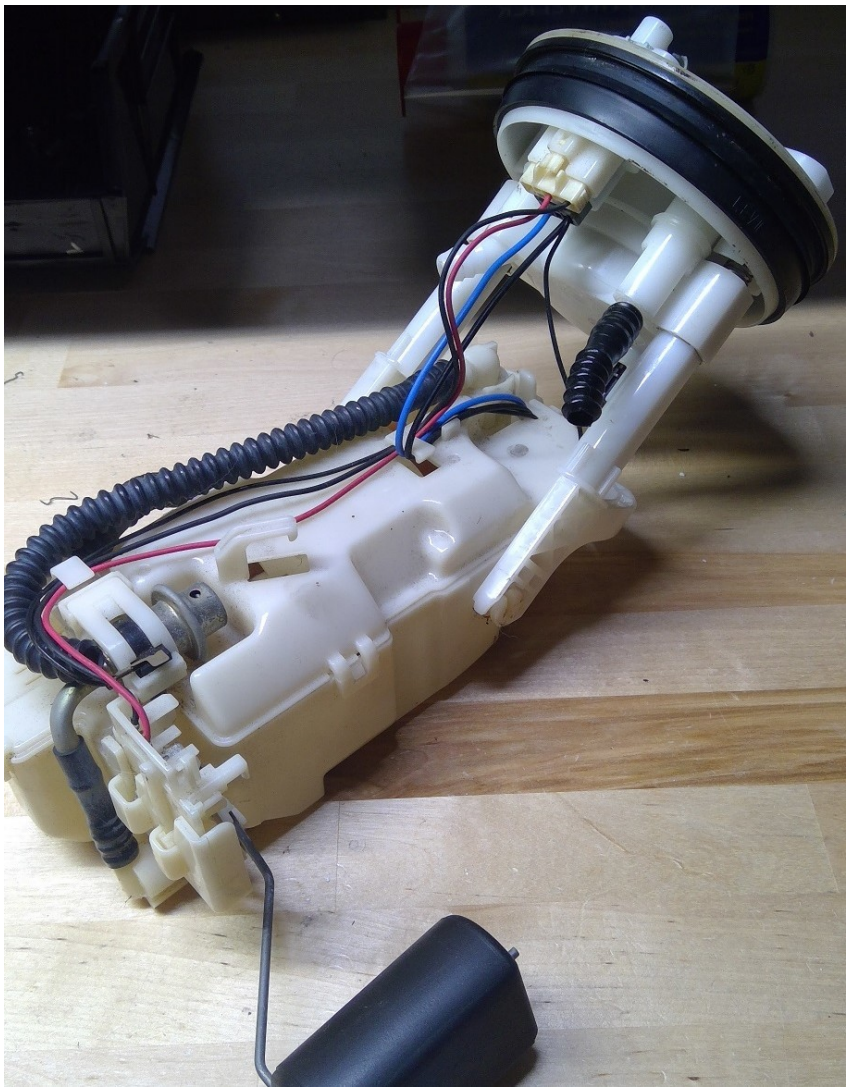
This is more of an art than a science.
This is not an exact “how to” but a guide. If you discover a better way of doing something let us know.
Jbtuned@gmail.com

During the time of this writing 4/3/2020 RSX hangers are going for 80 – 250. New and used. So if you make a mistake that is beyond fixable your not out of luck, just some cash.

This guide assumes you purchased the hanger mod, and a walbro 450 fuel pump together (at the same time/same order) from JBtuned. Otherwise you may not have everything pictured here.

Do not be alarmed if you kit does not match the pictures exactly. We are always looking for ways to makes this better and may have upgraded it from the time of this writing.

Customers NOT using Walbro pumps will not need to make all of these modifications. Use what you need.



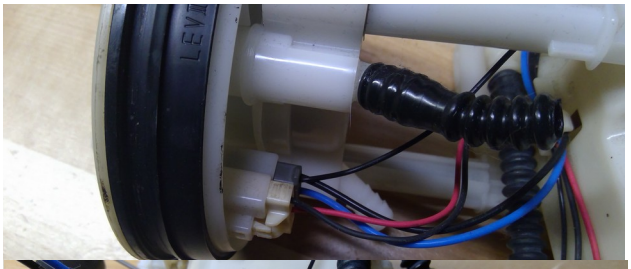
Just some of the tools I used to make this happen.

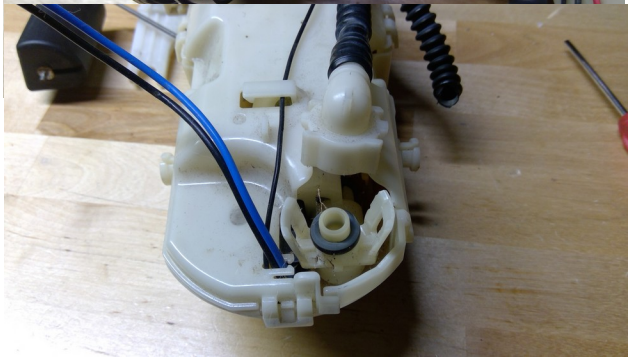
Recommended items with Links:
Small Flat head Screwdriver
Dremel – this is the newer version of the one I have.
Assortment of cutting blades, sand paper, and sanding stones. Something Like This
Dremel carbide cutting bits. Something Like this
Air Die Grinder – One I have.
Mask/Respirator Something Like this
Protective Glasses
Cutters
Unibit

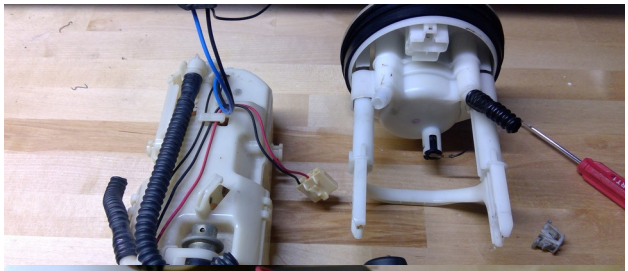
Permatex Fuel Resistant Dressing and Sealant – This stuff is fantastic. I apply it to the threads and washers on the fittings and it prevents them from leaking if the plastic did not turn out smooth and flat.

The RSX Hanger Mod Kit

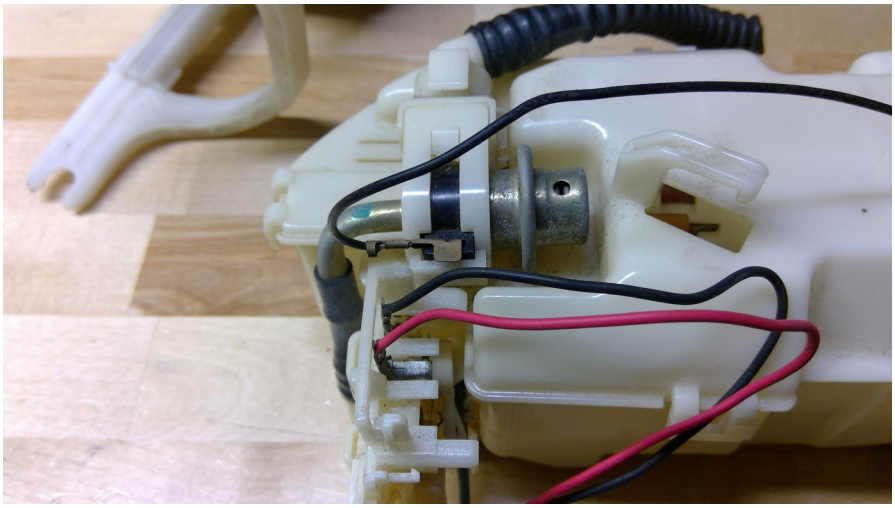
We are going to start by separating the two main part of the hanger.
First is to separate and remove the wiring and hoses.
The two sections just pull apart.
Using a small flat head screw driver you just pry up on tabs to remove items.



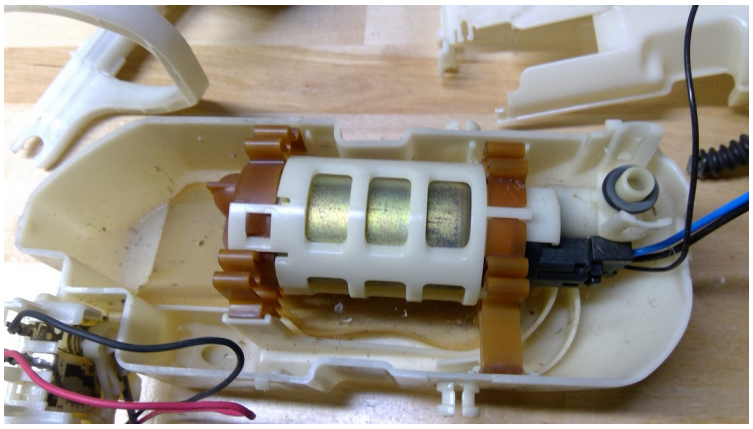


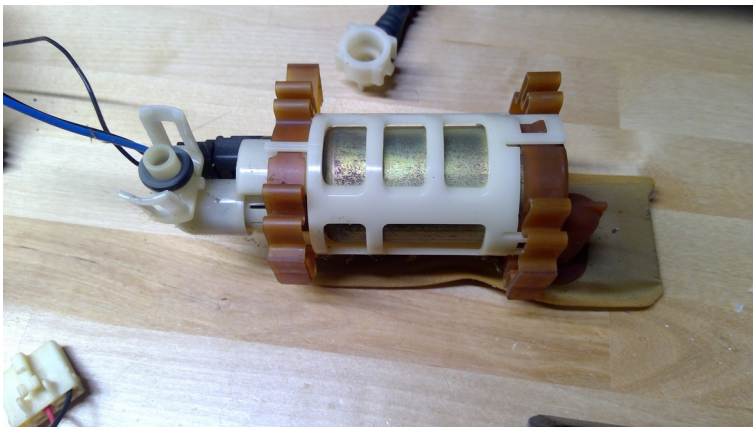


The regulator needs to be removed without damaging anything around it. This part has multiple tabs and a slider section holding it on. It is helpful to remove the lid on this section before you remove this item.
Note: Do not touch the fuel level sensor with the red and black wires. We are going to be using this.

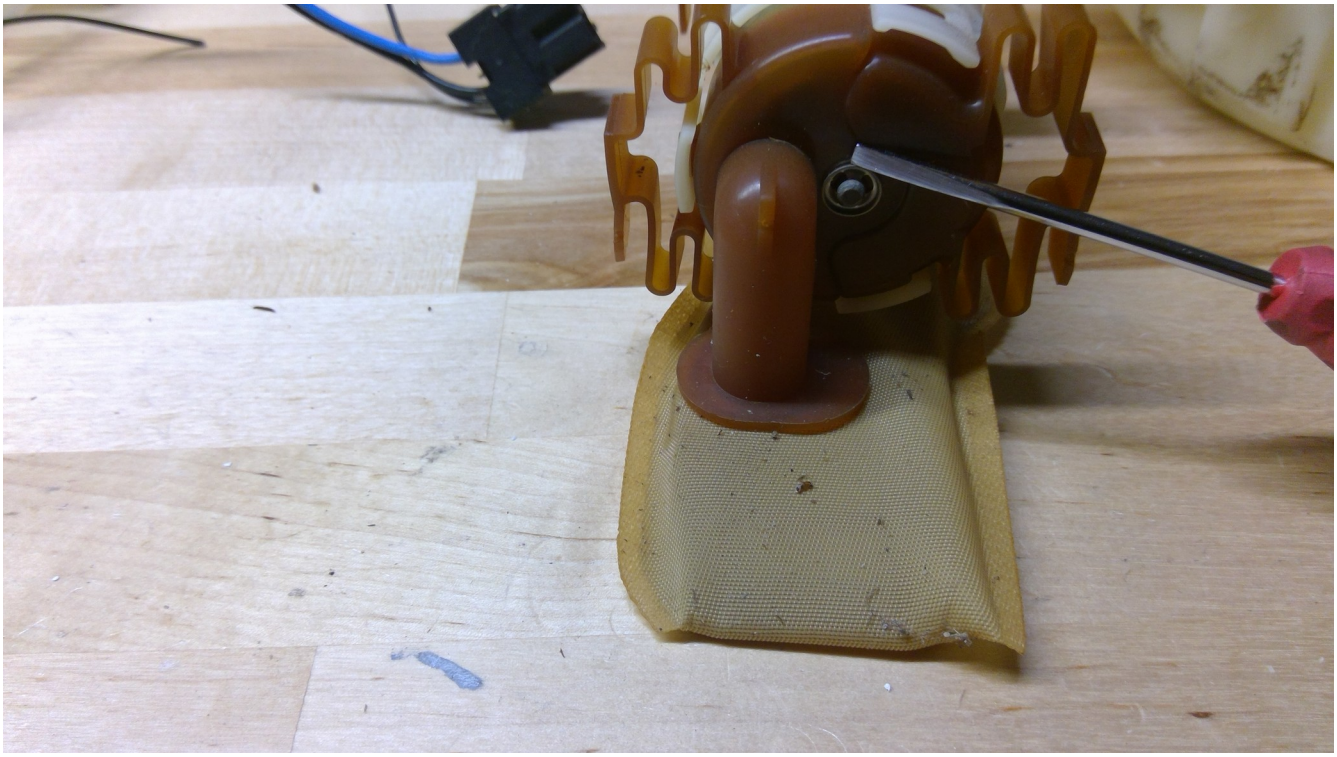


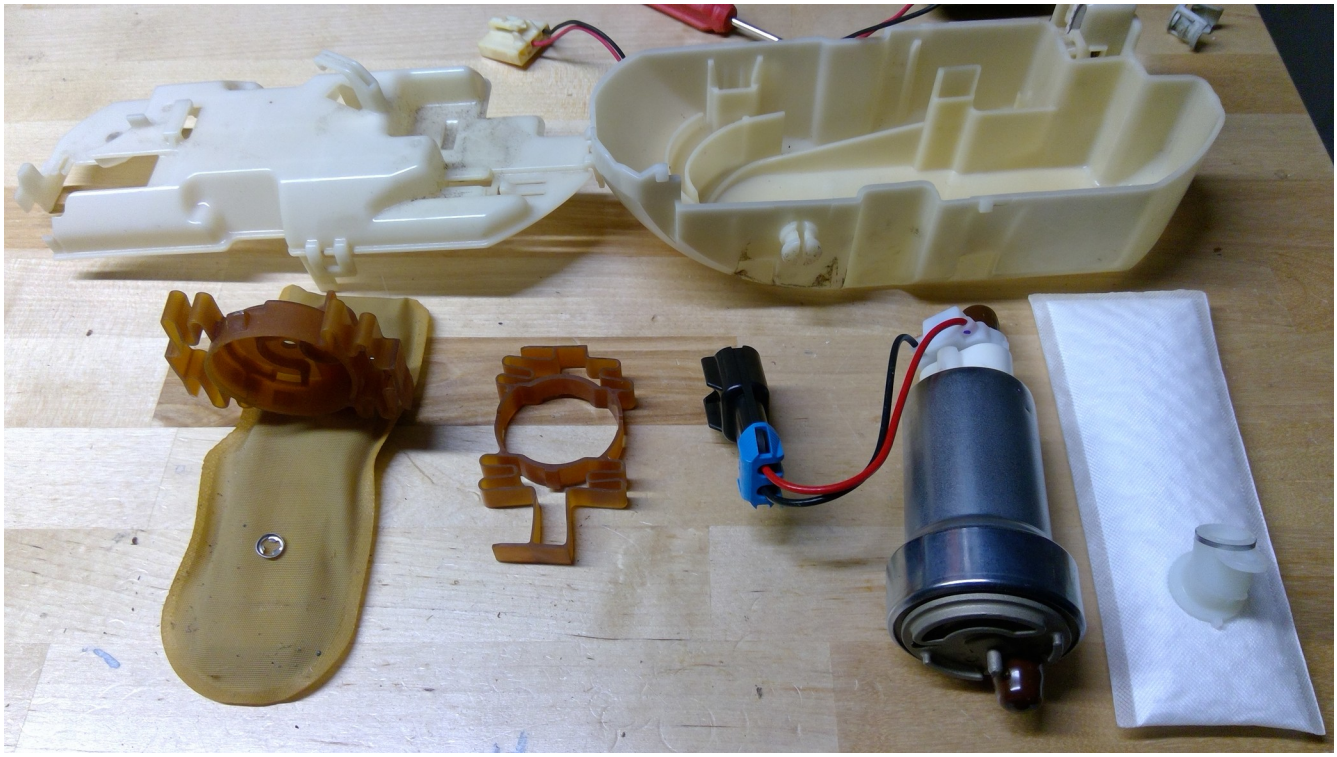
With the Lid off. The pump just slides out (This one was really dirty)



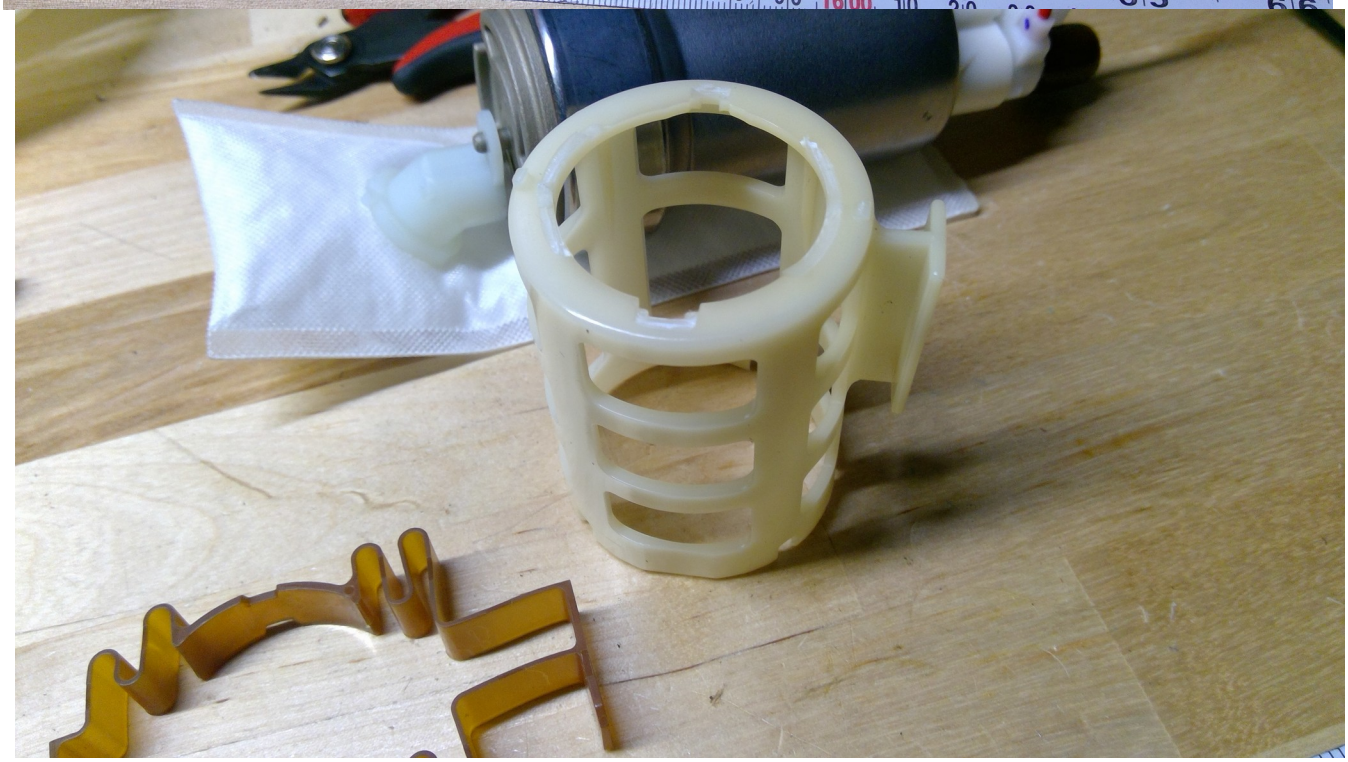


Time to break down the pump because we are going to be saving some parts.
Pry this metal Tab off and save it. Try pry it up evenly to avoid bending it.

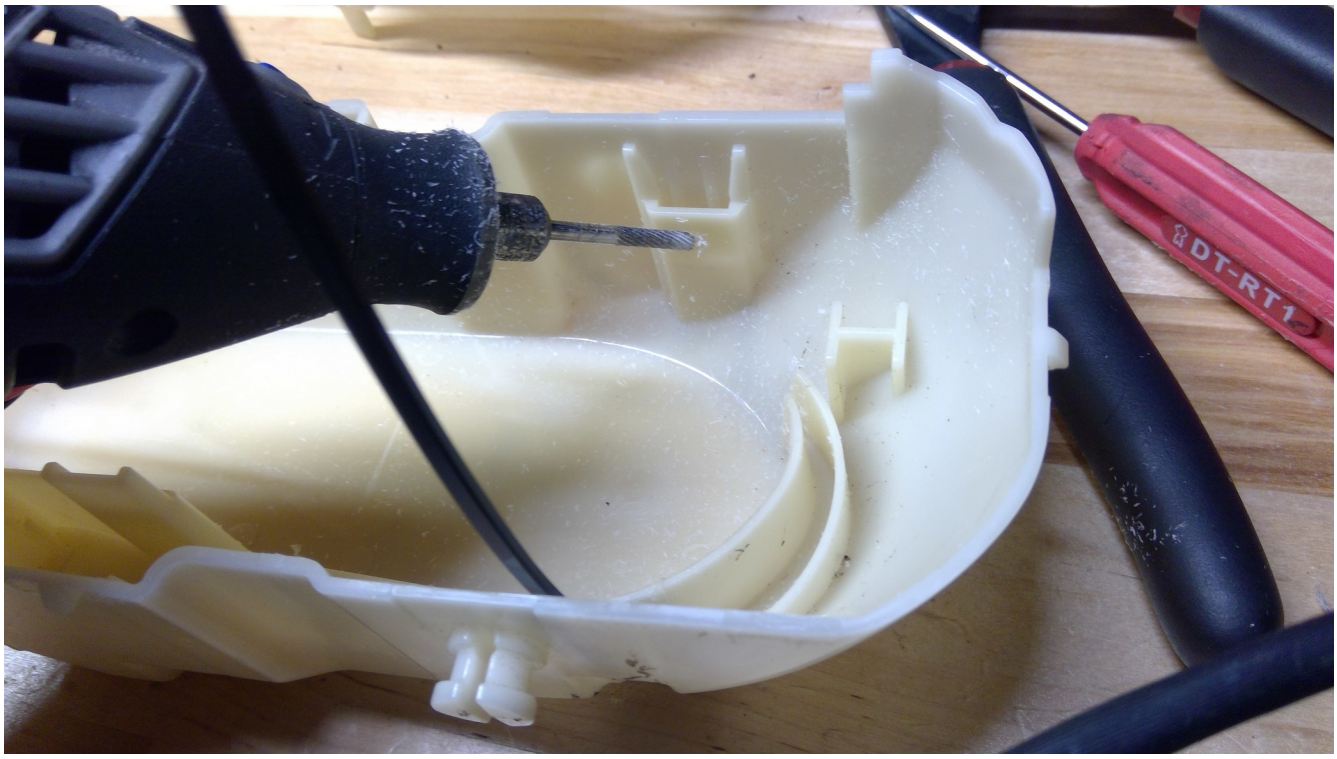




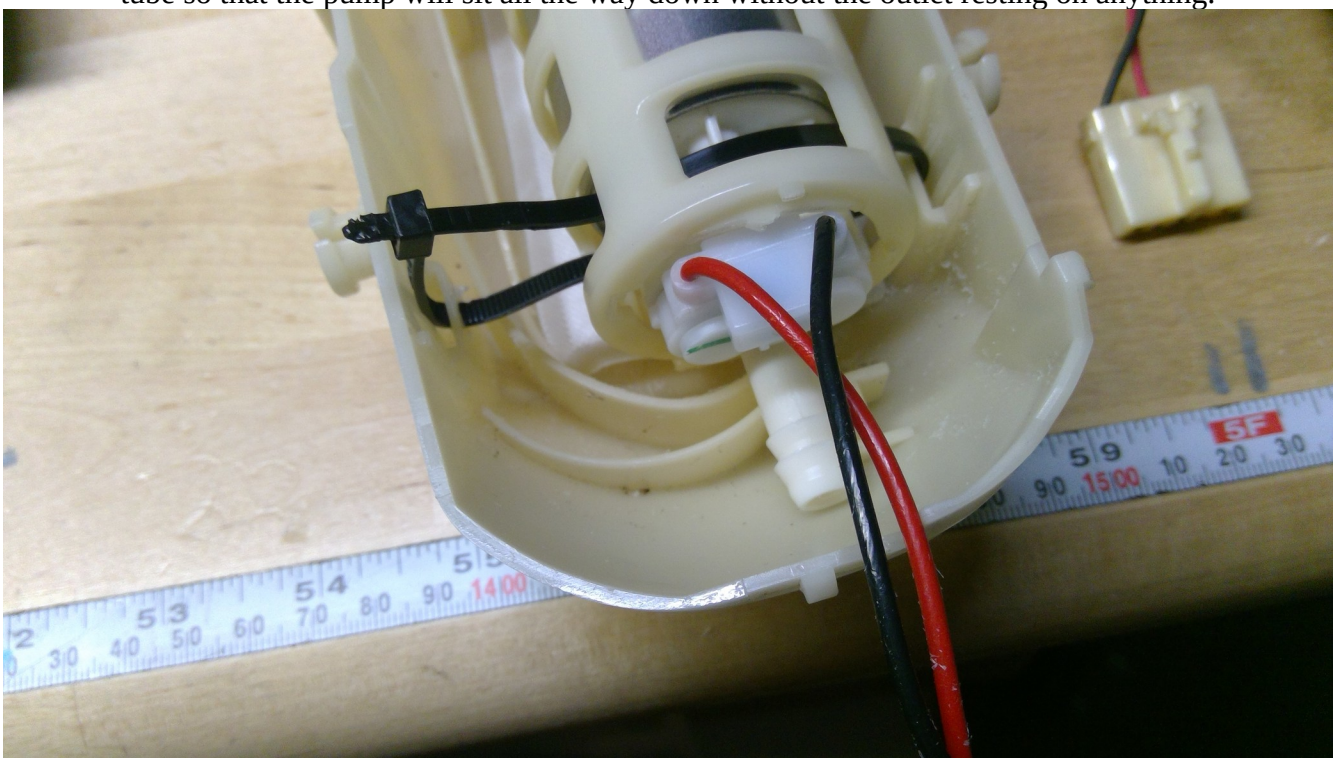
You do not need the orange cage shown in the picture
Here we are trimming the white cage. You want to keep the base of the white cage. (Flat section you see on the bottom in the picture)

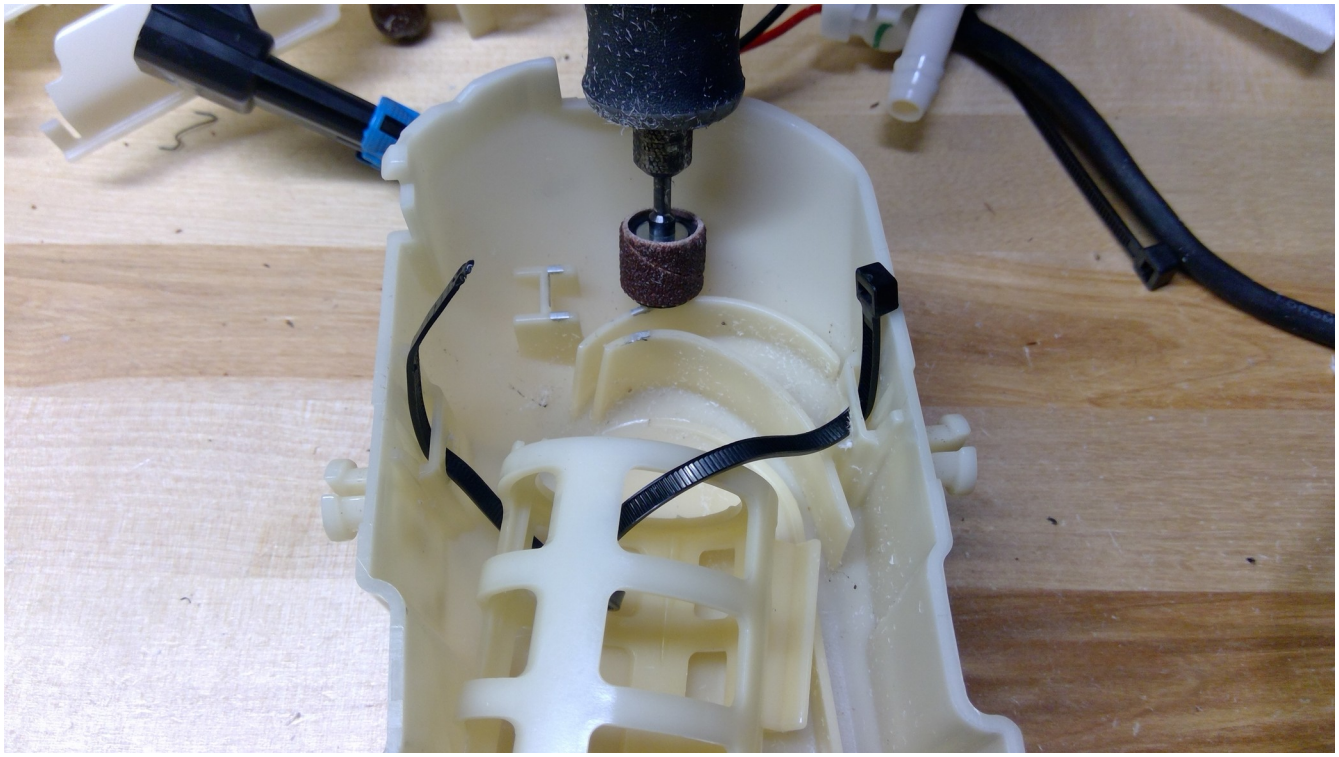


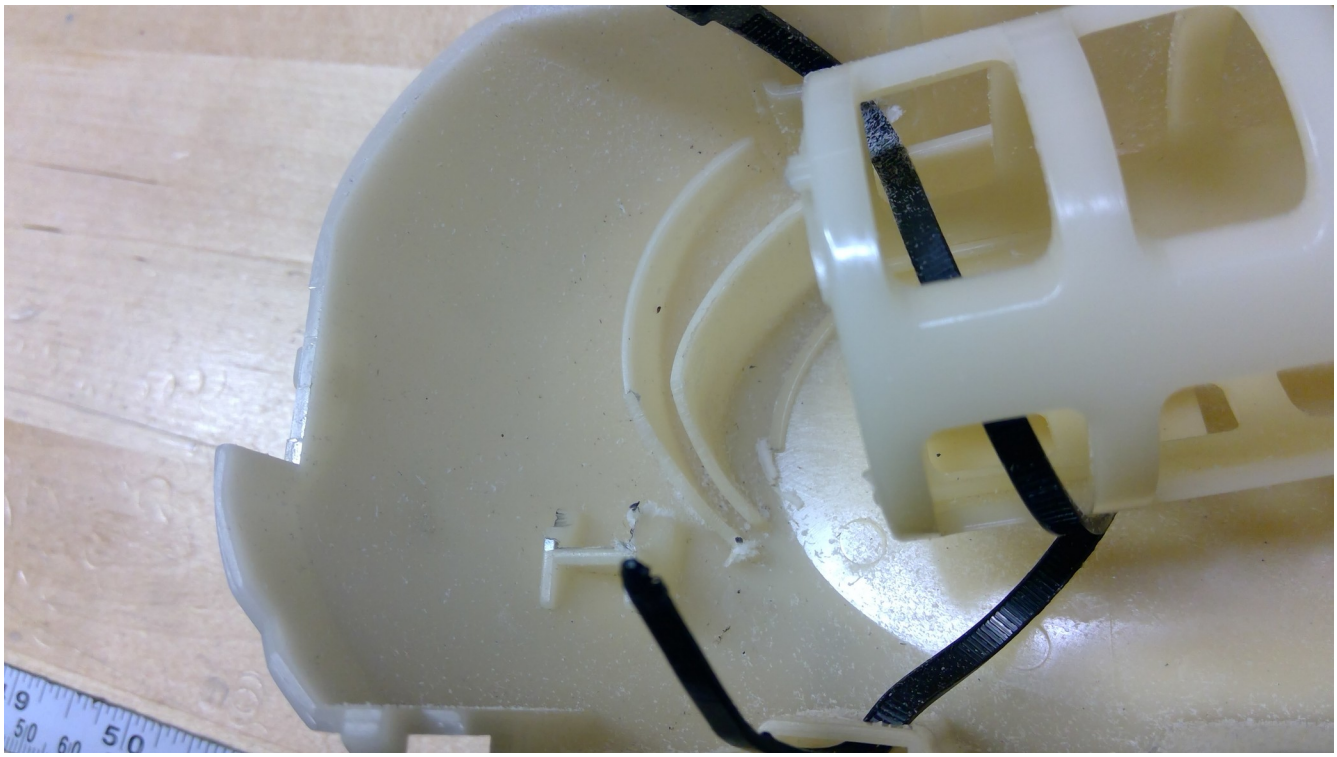
Here we are using our Dremel to cut straight line openings in this small panel just big enough for a zip tie to pass through.



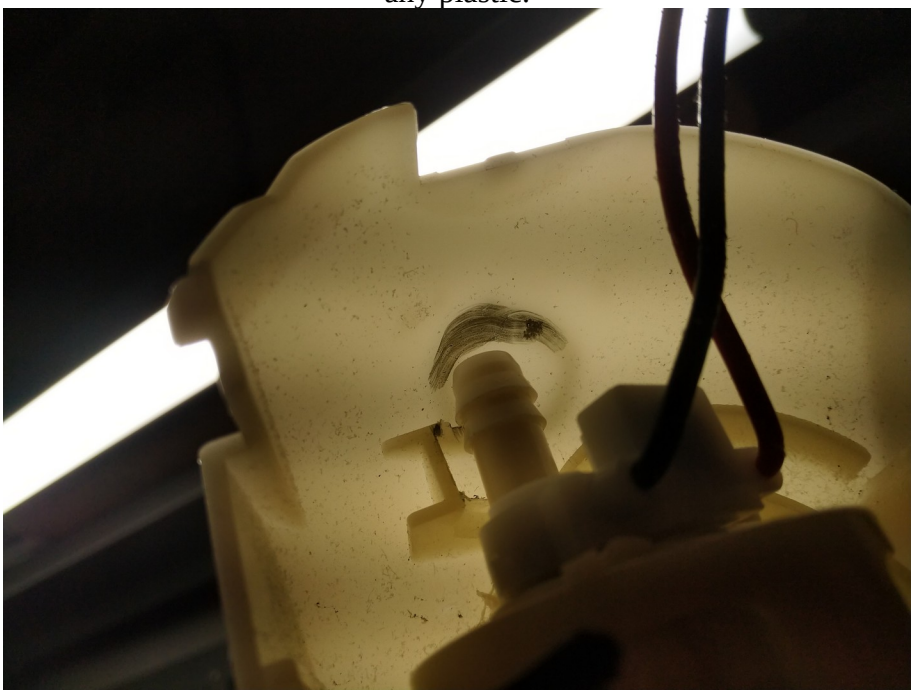
This is just a test fitting. We are going to mark and sand away some of the plastic by the pumps outlet tube so that the pump will sit all the way down without the outlet resting on anything.





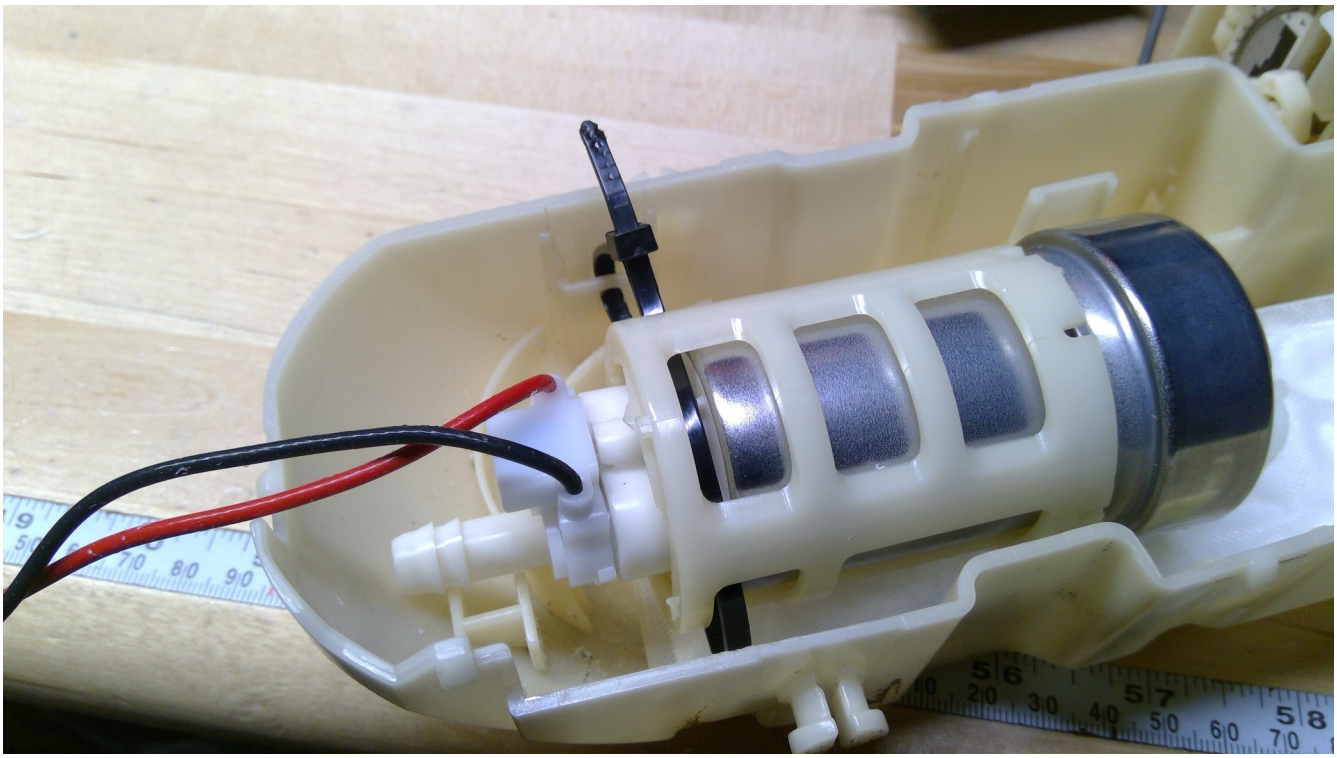


Time to drill a hole so we can get our hose attached to the pump. I am holding it up to a light here to show you that you can kind of see through it to adjust your cutting marks.
Note: You dont just want to cut a big hole here. Cut just enough the get the hose in without rubbing on any plastic.



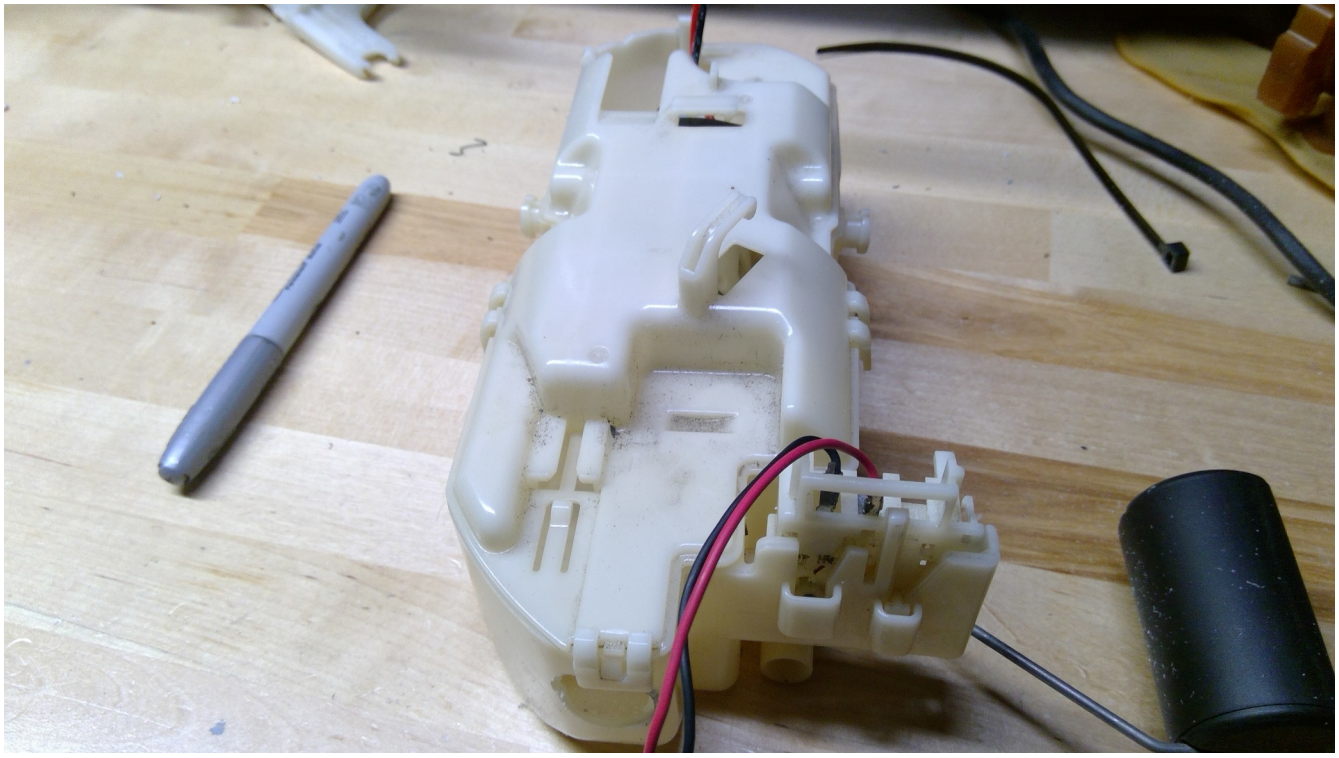
This whole is actually bigger than I wanted but will still work. You should start small and gradually make the hole bigger. The larger the hole the less fuel will stay in the basket.

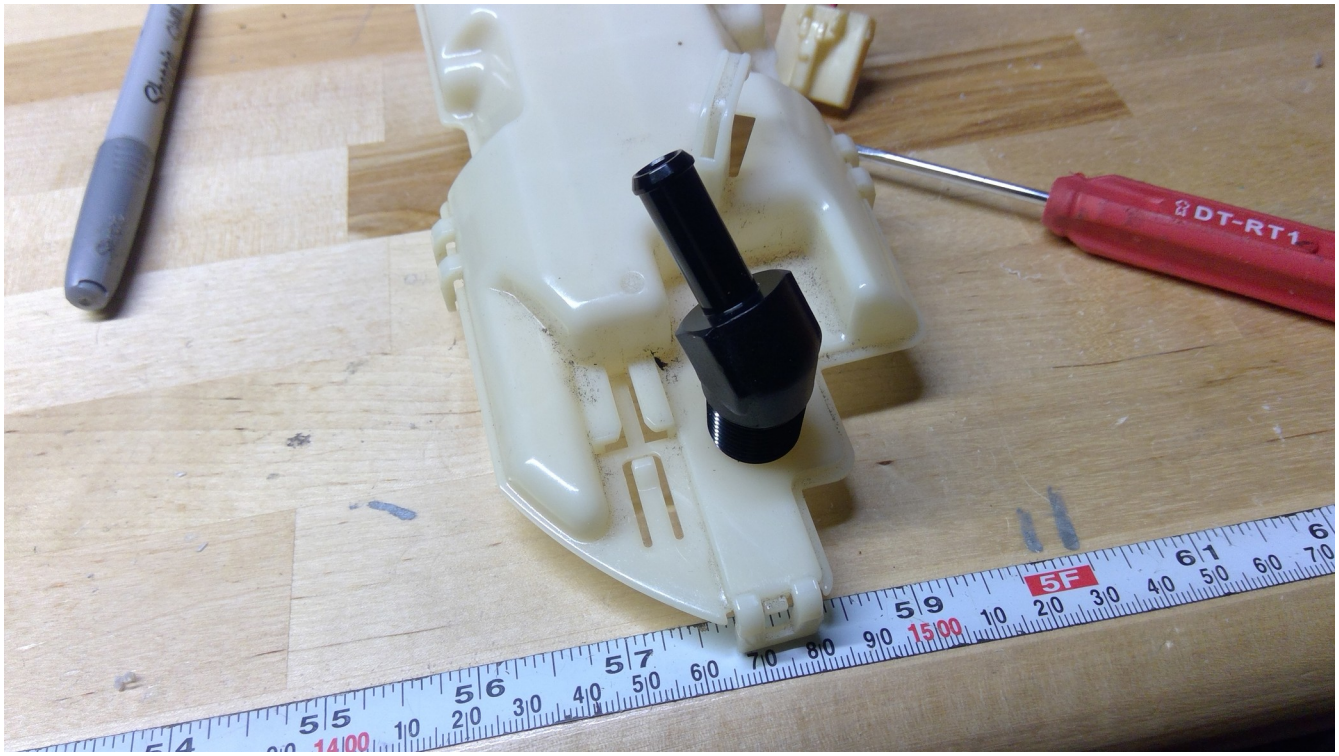
This is how we install the zip tie around the pump and cage. The base of the cage will be sitting on the filter. The filter we use will hold the front of the pump up and keep it level.
Example: We are not ready to install the pump yet. This is just to show you.



Here we are reusing the metal lock tab from the oem pump to hold the filter on.

This flat area next to the fuel level sender is going to be home to our 45 degree barb fitting. The trick here is to drill out a hole so that it is a little smaller than the fitting. We dont want the fitting to drop right in. We want to thread it in and allow the plastic to hold the fitting in place.

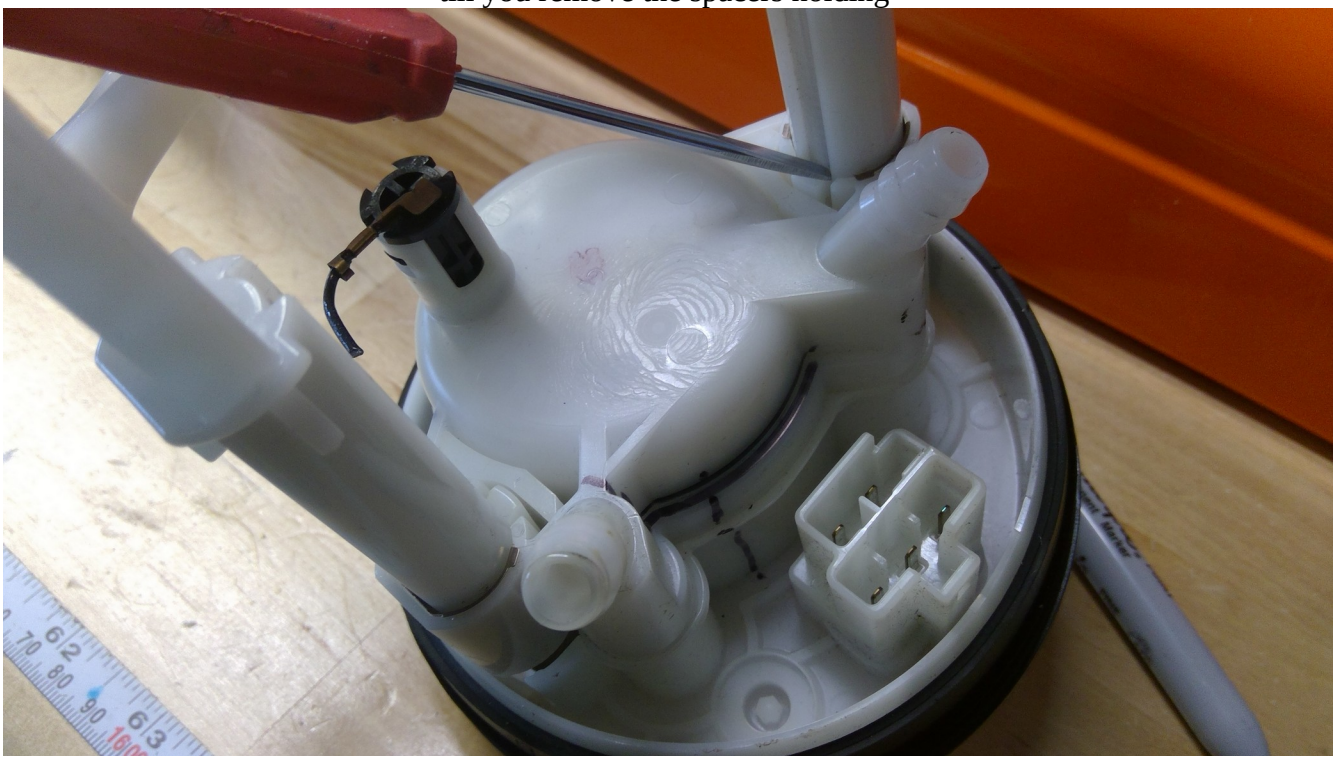




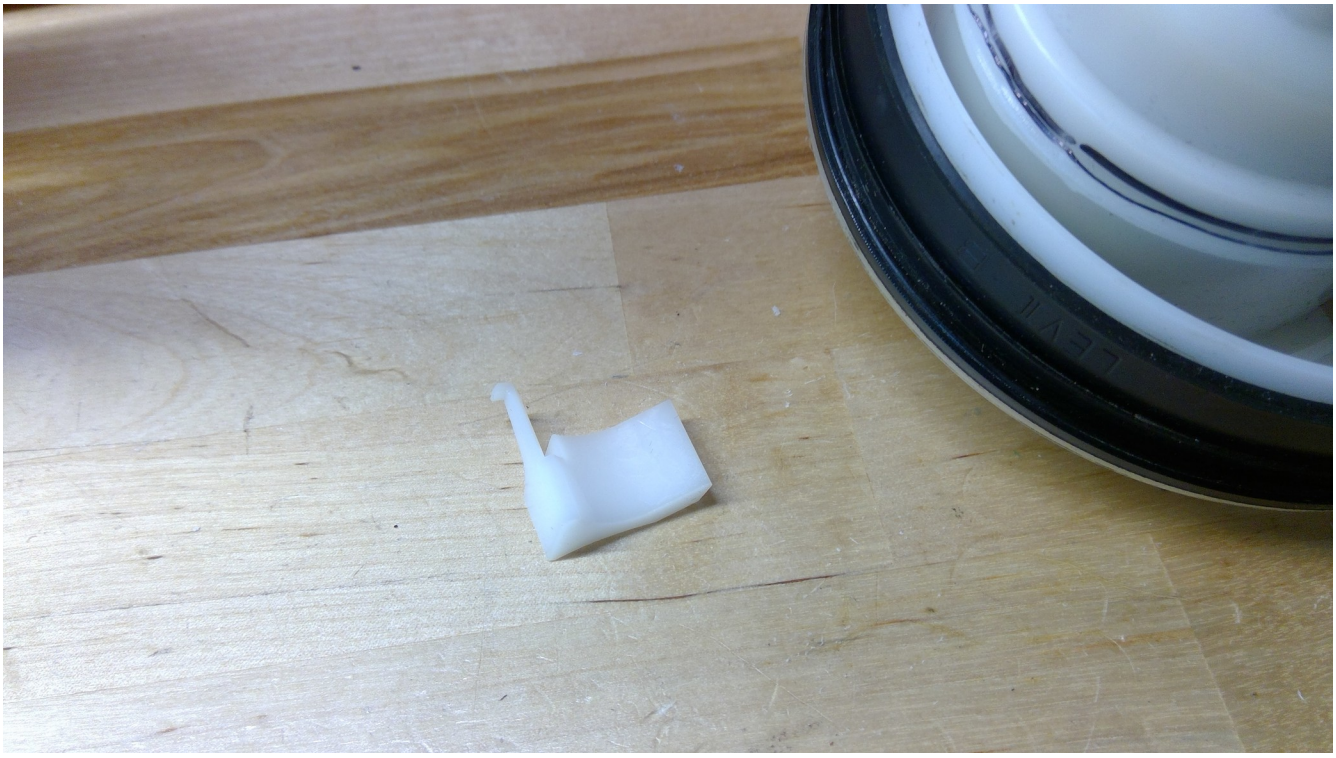
Example. Its not actually time to attach the hoses but this is so you can get and idea of what you are doing.

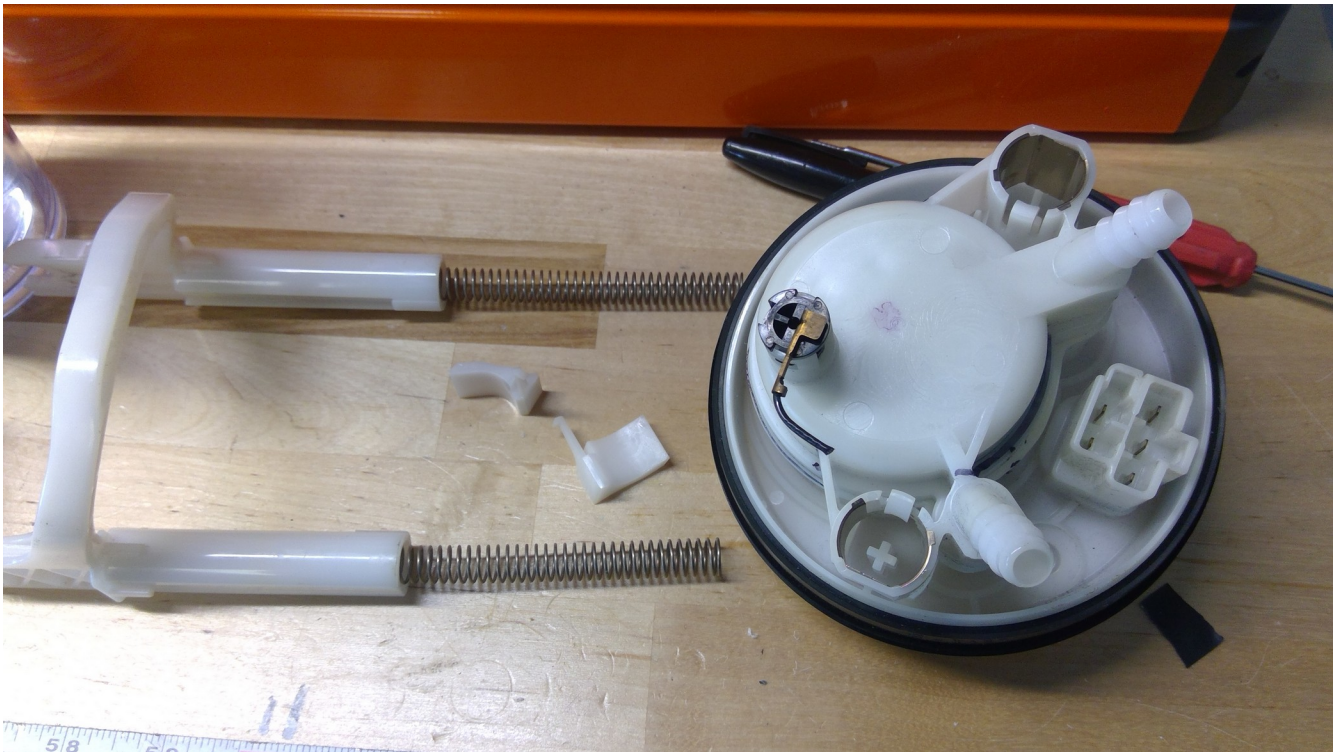
Moving On to the top of the Hanger
We need to separate the spring loaded legs from the top hat section

The screw driver is showing the lock hold in the legs. You cannot get enough space to remove this lock till you remove the spacers holding

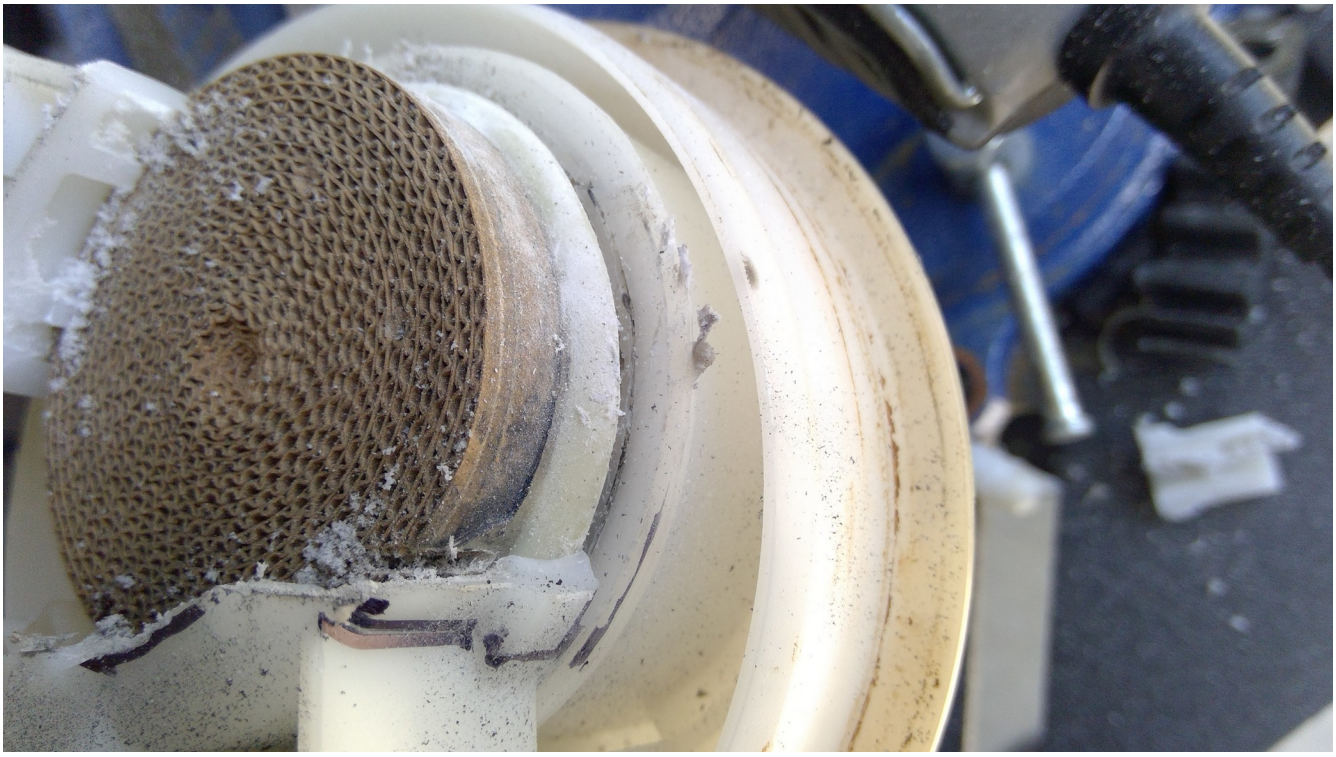


Here is the tab that holds in the spacer





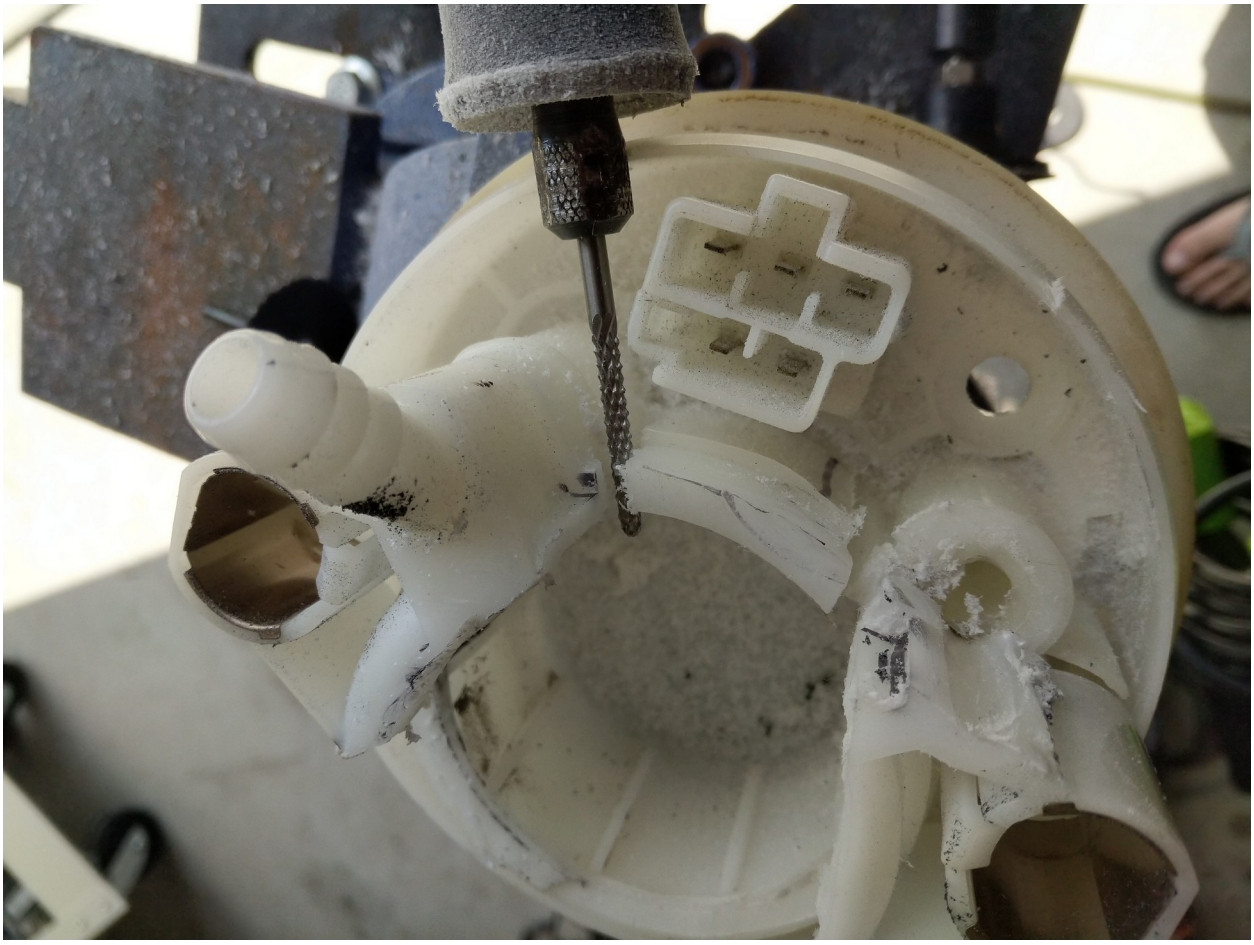
Now we are going to start getting into the major work on the hanger.
I used a black marker to trace out what I wanted to cut.
You want to make sure you leave plenty of material on the legs for strength.
We are reusing the OEM feed as our new return line so we can to make sure we do not mess with that.
Please skip ahead and look at all the pictures from here so you can see what we cut and did not.

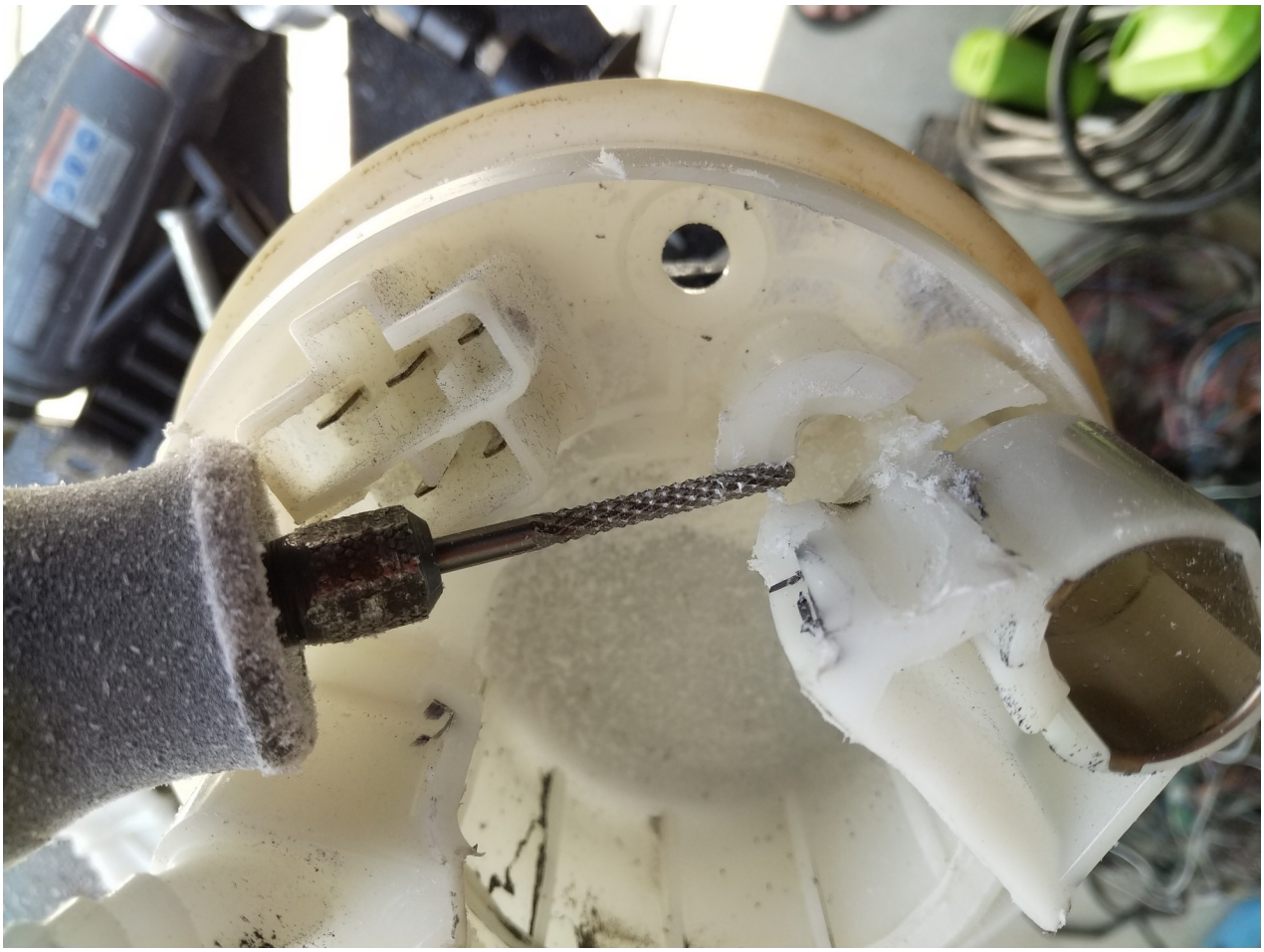


You want to remove the OEM Filter

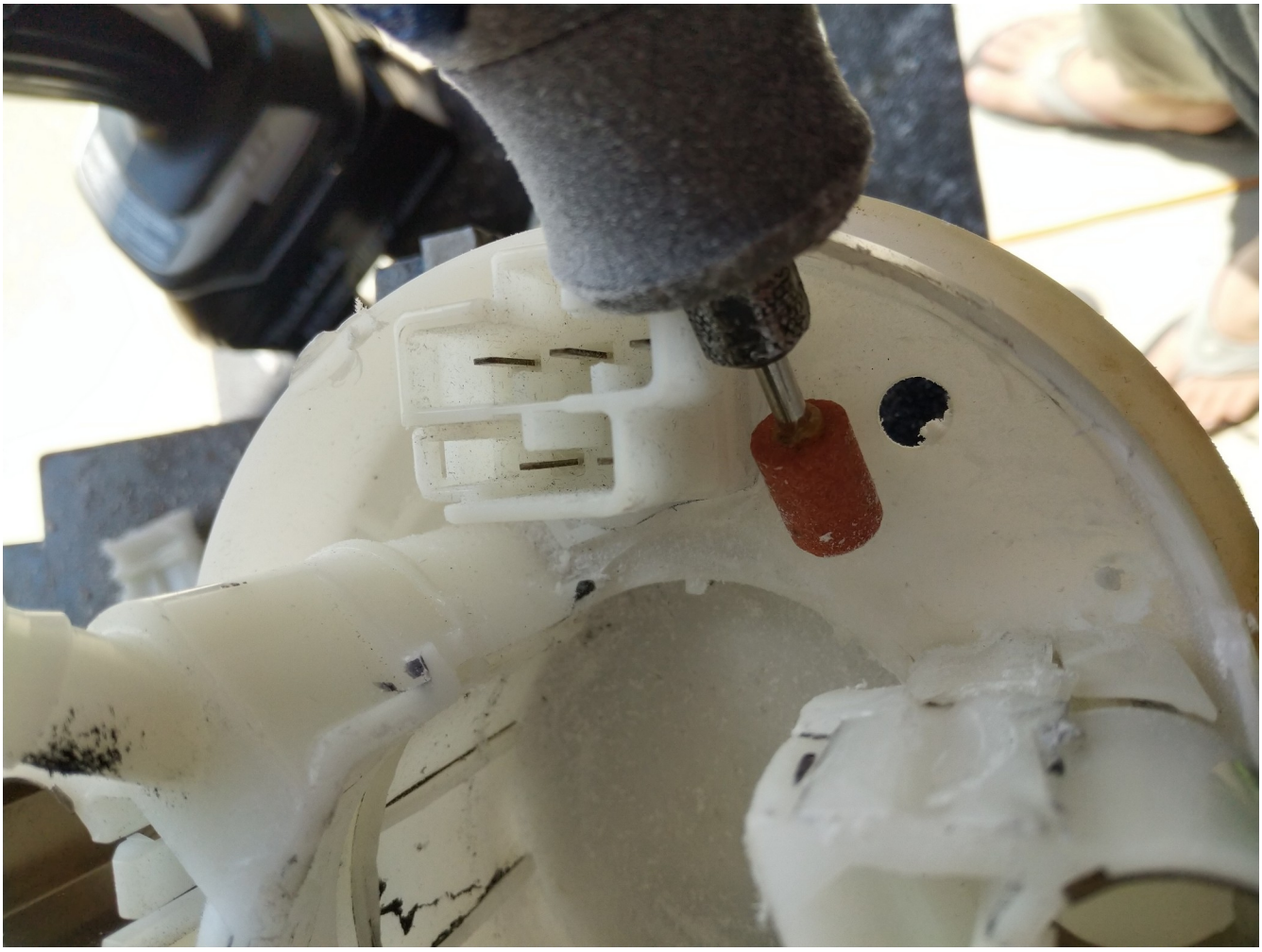
The next few parts are the most difficult because of the lack of space. You have to be creative. I use everything from carbide bur tools, sanding stones to snips to cut off extra plastic.

You need to be very careful when you get close to the base. When this is all over we want the area to be smooth and as flat as possible. Try not to nick/cut/gouge the material. I suggest switching to sand paper when you get close to that area.



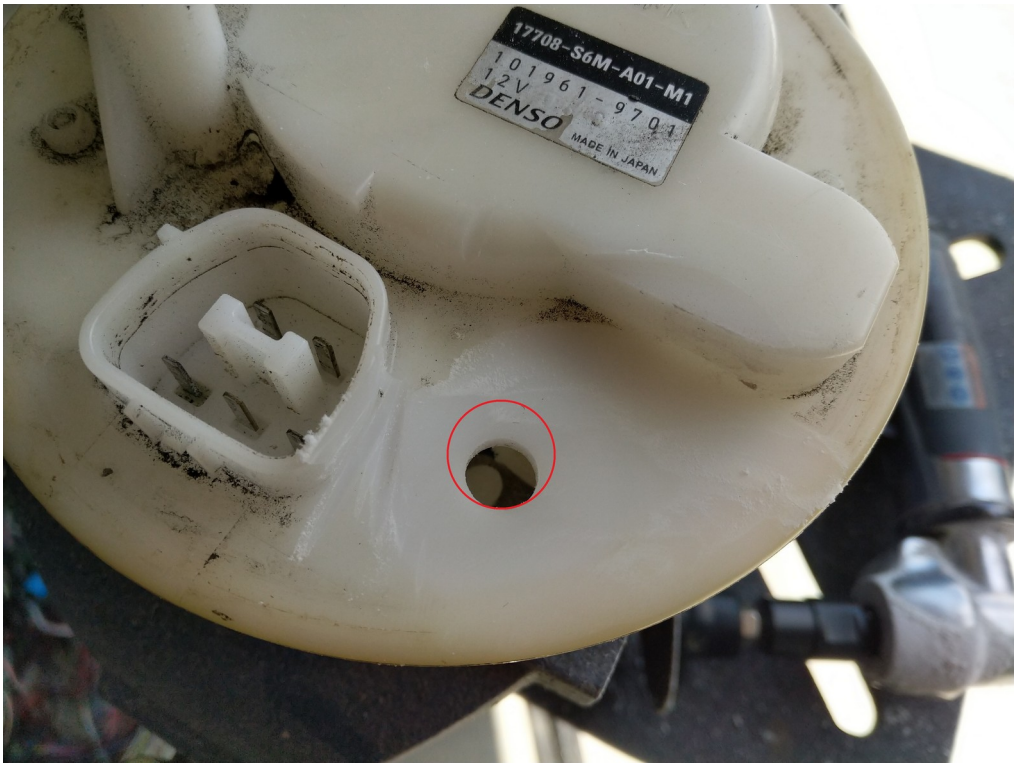


This area I am working on here is what I call the base. You want to be careful here. Because you dont have many options with tools because of the tight area you might want to get some sand paper and do it by hand. Im using a fine grit sanding stone on a low speed and taking my time.

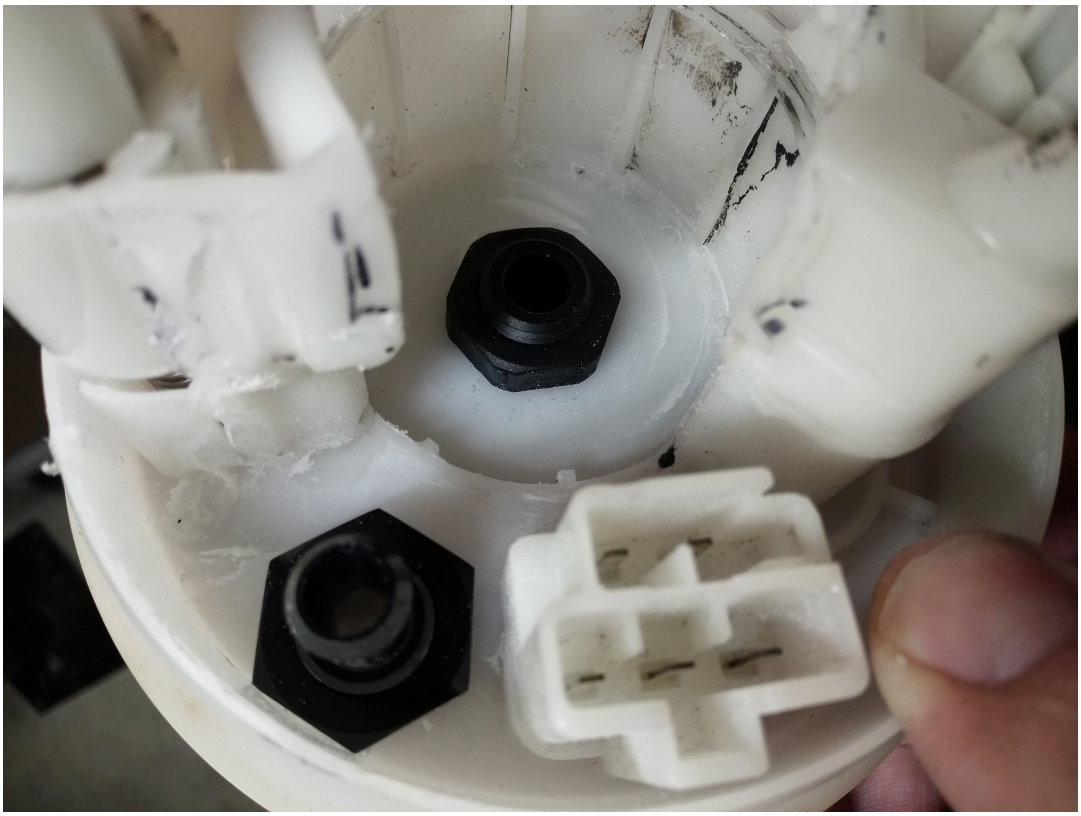


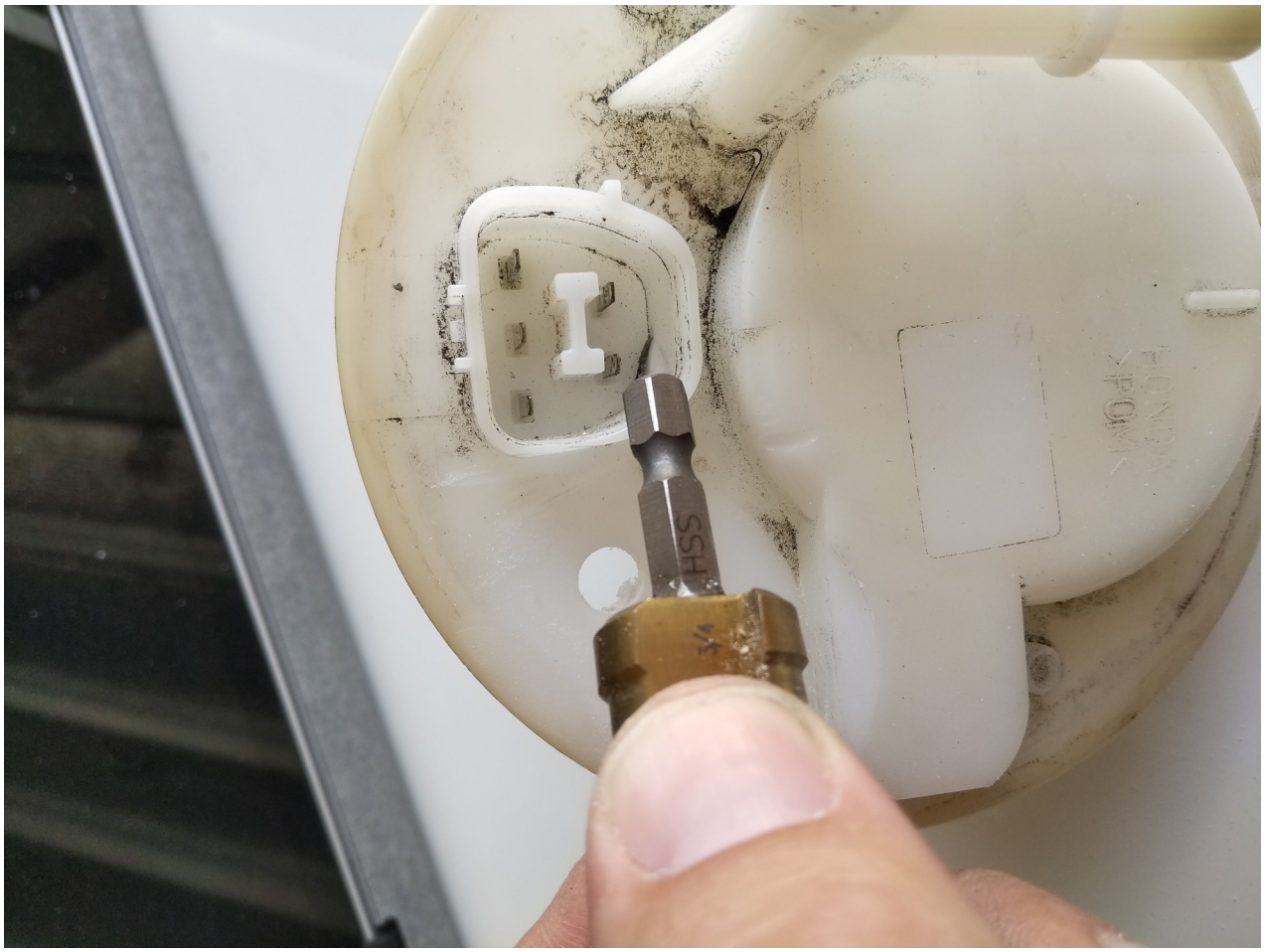
Once these area are smoothed out we can move on to drilling out the hose for out new fittings.

Important::: You do not want to just enlarge this hole. You need to create a new center and enlarge is as we have show below.

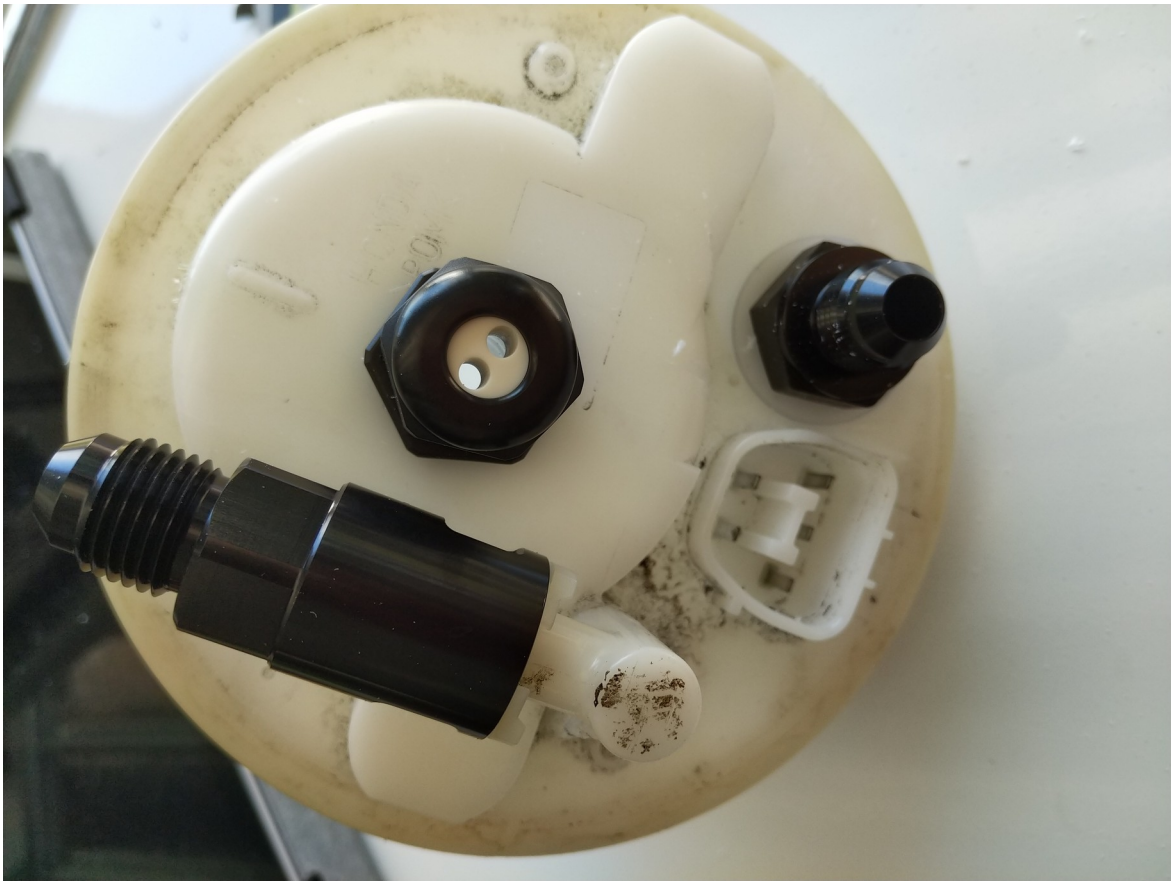


You can see from the image that the bulkhead basically touches the wall. It is not a bad idea to take the nut and set it over the hole and trace the inside.

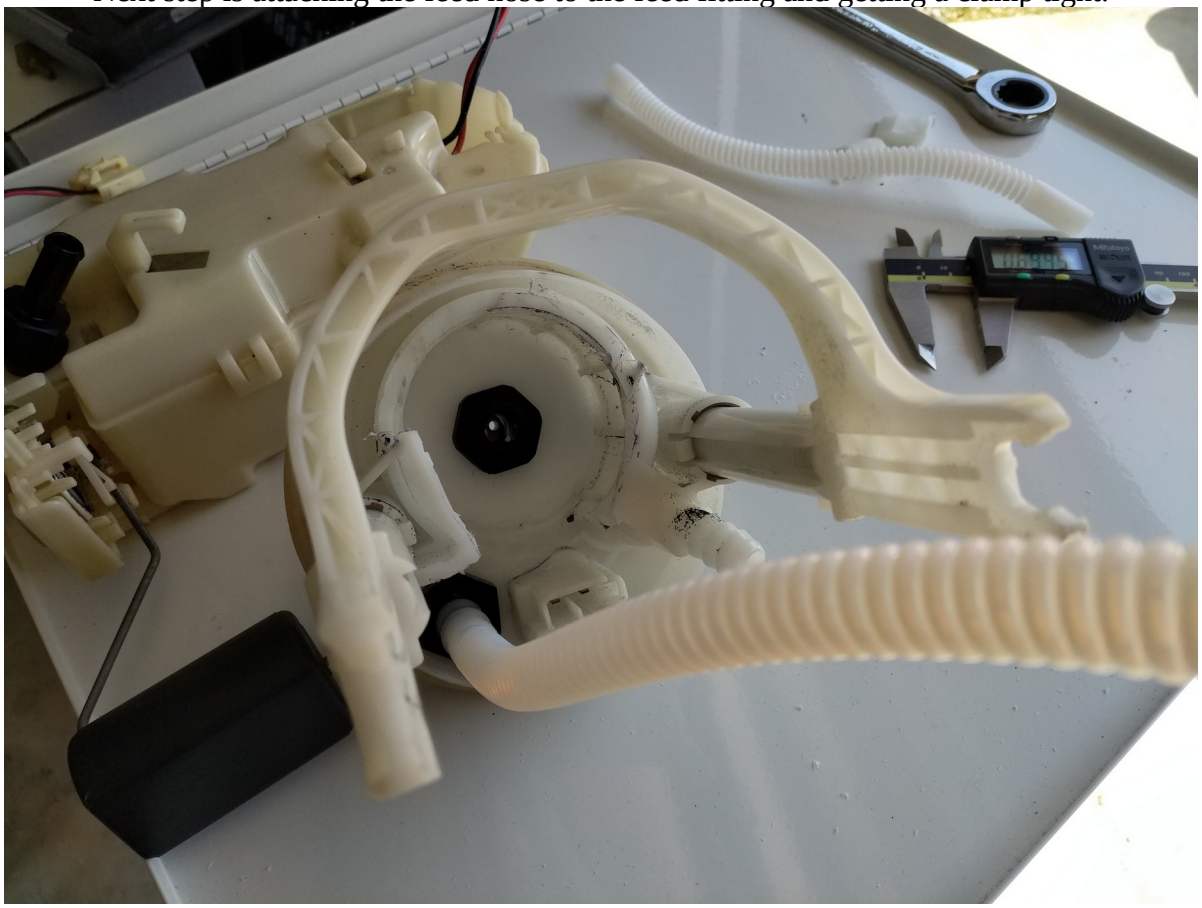




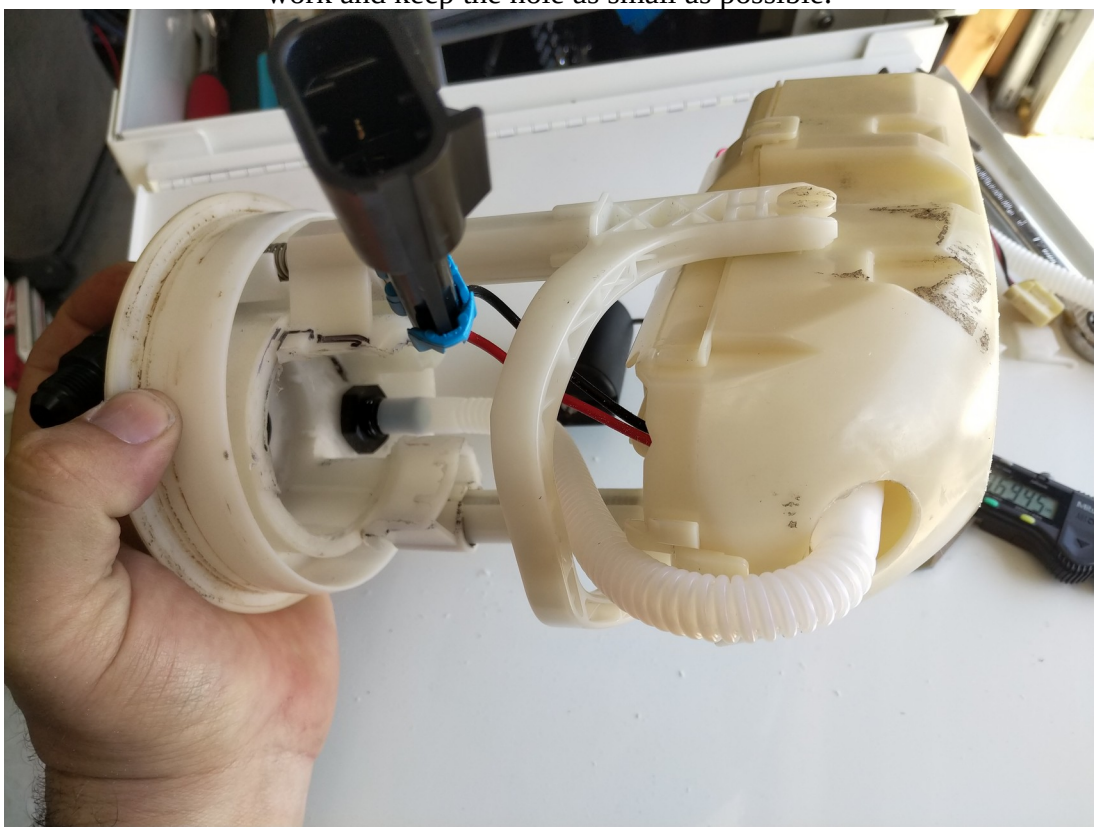
Unibit Size



The wiring bulkhead is much simpler. Just drill in the center and screw in. We used 11/16 on the unibit.
Next step is attaching the feed hose to the feed fitting and getting a clamp tight.



We do this by drilling a hole in the side where the gasket is. Find the smallest screwdriver that will work and keep the hole as small as possible.

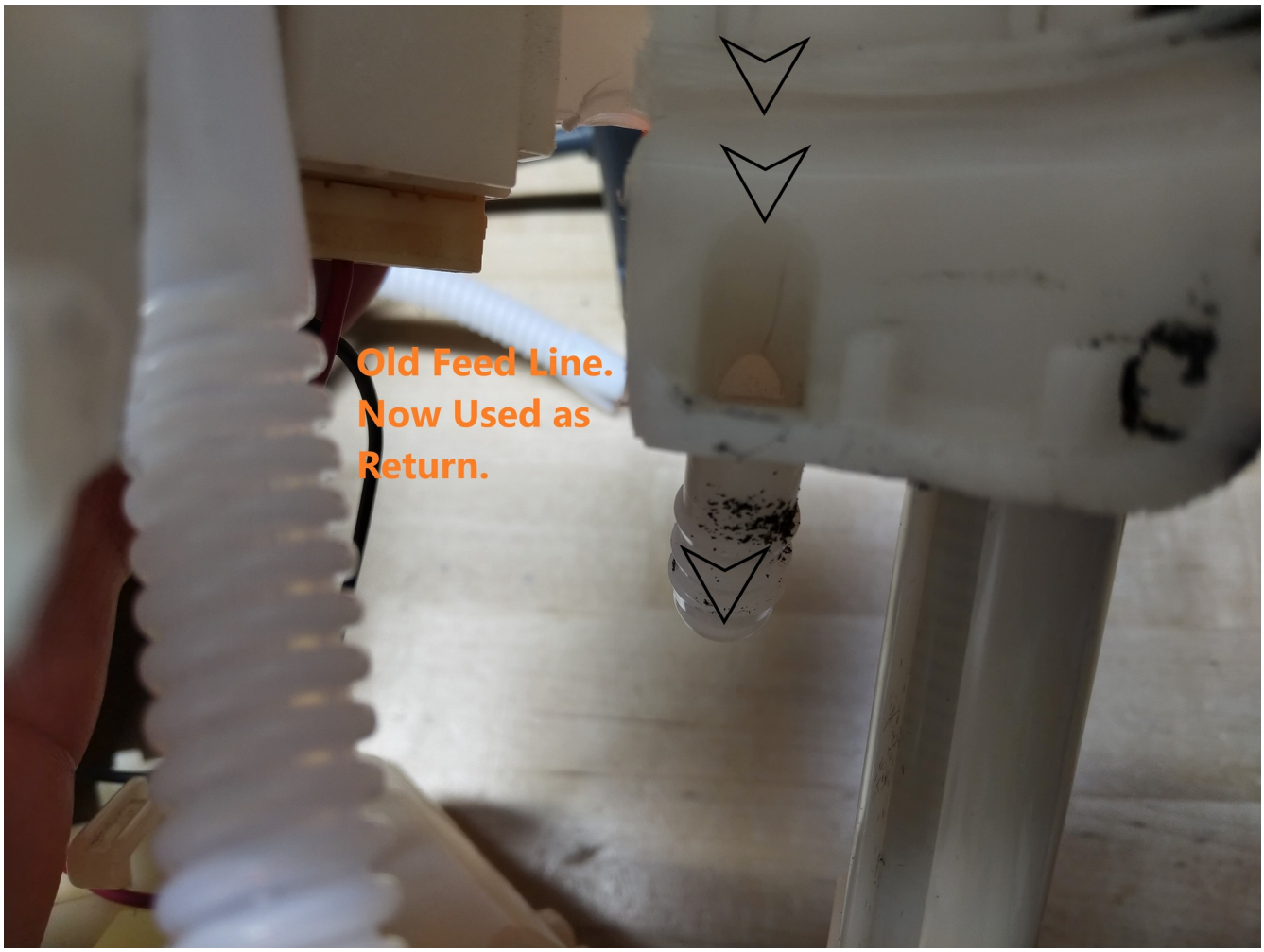


The rest of the install is to reassemble the hanger. Attache the hoses and clamps and wire up your pump. The Fuel level sender just plugs back into the OEM location.

If you find that you still have leaks or your not confident you were able to get those areas smooth and flat enough you should pickup some of this Permatex. Apply to the fittings and retighten.

Something you may have noticed.

We are now using the OEM feed as a return line.
A few customers noticed a small port opening where fuel could leak away from our return path back into the tank.
You will only see this after following this guide once the OEM filter element is removed.



The fuel flows from inside the plastic body and out the barb.
We use this barb to route fuel back into the bucket directly onto the fuel pump sock.
Because of the angle fuel would actually have to flow backwards to go out of this port.

Any lost fuel from this port will just fall into the tank/ and back on the hanger.

This is not a safety or performance concern.