

# iWire FPC Hardwire Kit - Stud Kit Installation Instructions

Thank you for purchasing the iWire Plug and Play Fuel Pump Hardwire Kit! These instructions are designed to make the installation process as easy as possible. Please read and follow them carefully. We suggest reading the entire guide all the way through before beginning installation of this product.

This manual was created using a metal fuel pump hanger from a 2005 WRX. If using a plastic hanger, please look at the end of the guide for extra tips for install.

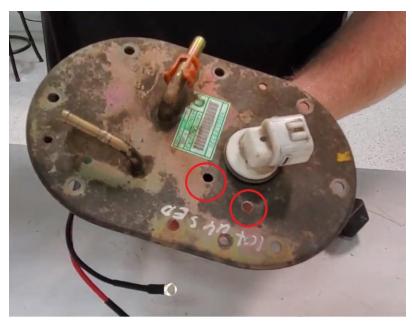
This kit is designed to modify the electrical and fuel systems in your Subaru. Working around electricity and fuel vapors can be dangerous and even deadly if proper care is not taken. While iWire takes pride in making our products as simple as possible to use, we still recommend that a professional, qualified technician perform the installation. Any modification to a vehicle that exceeds the original manufacturer specifications (which includes OEM fuel tank connections) carries an inherent risk of mechanical failure that could result in damage to life or property. iWire is not responsible for any damages that may occur. By purchasing this product, you agree to these terms of sale.

# METAL FUEL PUMP HANGER INSTALL

### (Plastic Hanger Install Tips at the End of the Guide)

### Step 1: Drill holes into the hanger for the stud kit.

Drill a small pilot hole. Then use a 15/64<sup>th</sup> drill bit to make the holes for the stud kit. We recommend measuring 1/2 inch or so from the OEM connector on the hanger. Just need to keep the holes/stud kit away from the factory connector. Make sure the holes stay inside the line where the tank edge is underneath.

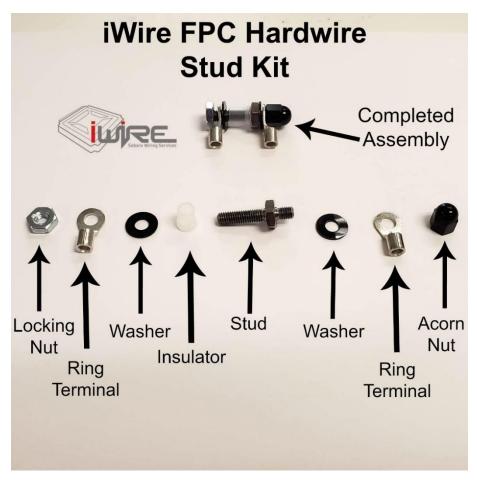






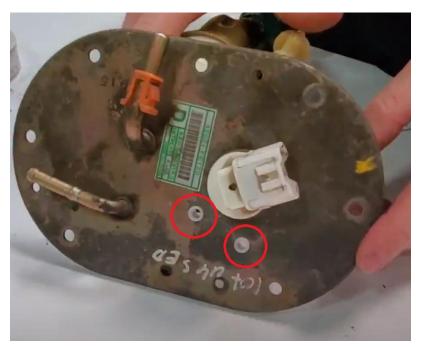
#### **Step 2: Install Stud Kit Through Hanger**

Here is an overview of how the pieces will go together. It is VERY IMPORTANT that these pieces be installed in this order. You can damage the wiring kit and your car if this is not done properly.





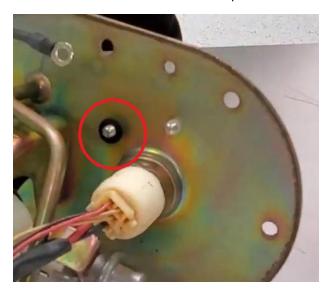
First, install the clear plastic insulator pieces into the holes we've drilled into the hanger.



Next insert the metal stud into the insulator. You want to make sure the that the washer is in between the metal stud and insulator. YOU DO NOT WANT THE METAL OF THE HANGER TOUCHING THE METAL OF THE STUD!



Once inserted into the insulator in the hanger, place the second washer on the back side so that the two washers sandwich the insulator into place.



Next, you'll put the locking nut on the underside of the hanger (side of hanger that goes into the gas tank) and tighten it into place. This is done to make sure the insulator is compressed properly. Tighten it into place with a 10 mm socket. This might seem a little redundant since we will take the locking nut back off but trust us, this is worth it!

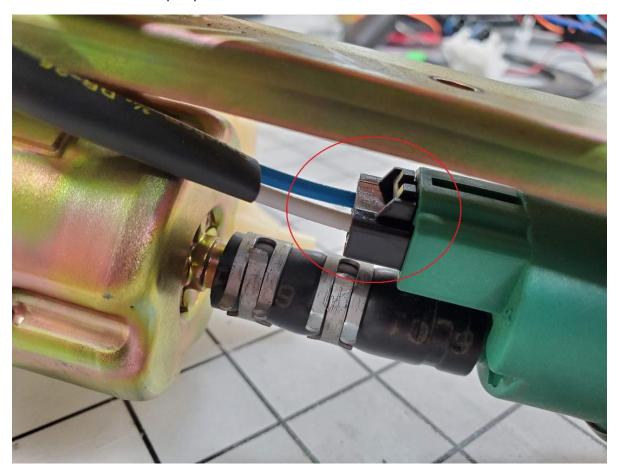




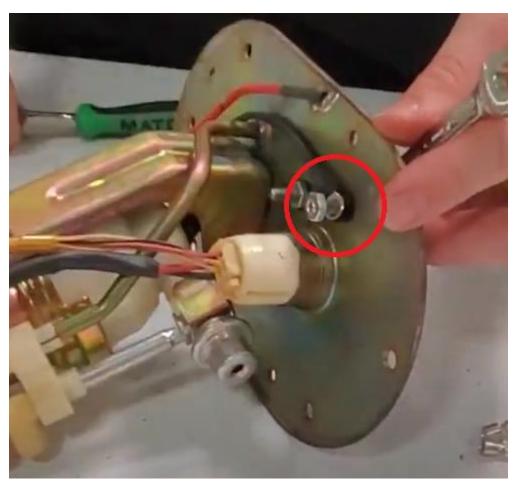
# Step 3: Hooking Up Wiring to Stud Kit

Once the locking nut has been fully tightened, go ahead and untighten it to remove the locking nut. Make sure to leave the washer in place.

Unplug the original harness to the fuel pump and plug in the 2 pin black connector from the iWire FPC Hardwire Kit into the fuel pump.

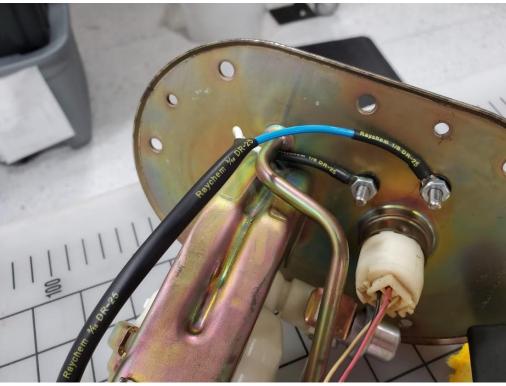


Place the ring terminal from the iWire FPC Hardwire Kit (with the Black OEM Fuel Pump Connector on the other end) one on each stud on top of the washer. Color order doesn't matter here. You'll just make sure that Blue and Blue touches and White touches White on the same stud when you install the other half on the top hanger. Put the locking nut back onto the stud and tighten, making sure the ring terminal is in place.



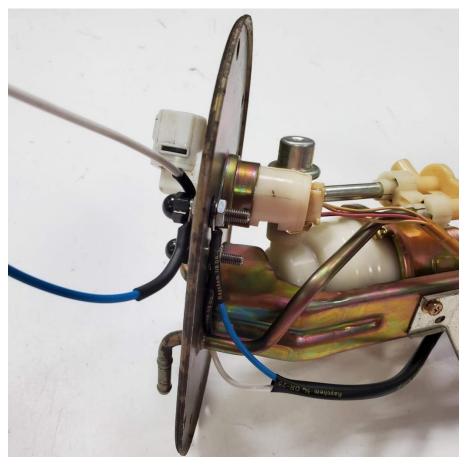
Make sure to route the wire so that it stays within the line of the fuel pump hanger so it goes into the tank once you put the hanger back in and does not get pinched.

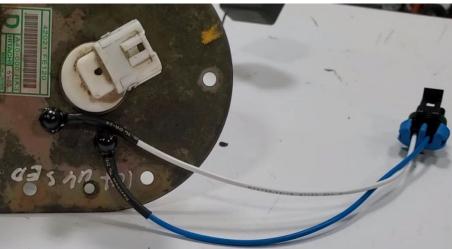




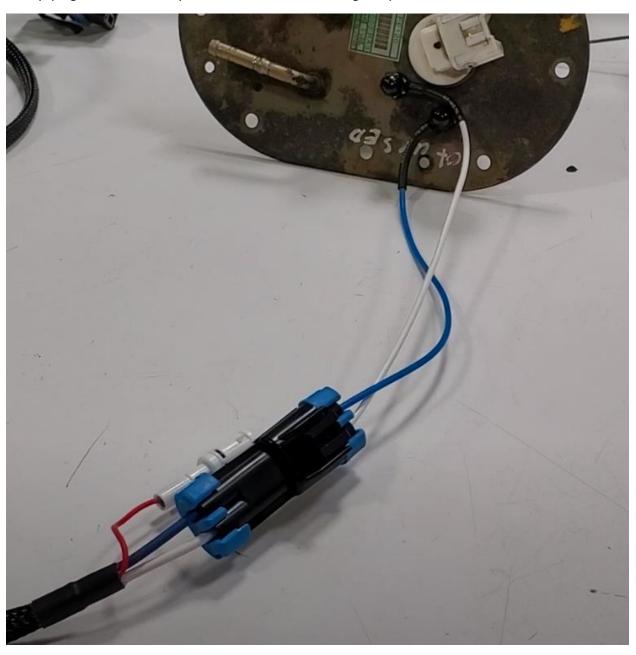
Once the underside of the hanger is complete, flip over the assembly. You'll install the two ring terminals from the main jumper of the iWire FPC Hardwire Kit. Make sure that the Blue wire is connected to the stud with the Blue wire on it underneath, and make sure White matches up to White.

Use the provided Black acorn nut to secure the top ring terminal into place. The acorn nuts are insulated and non conductive which is VERY IMPORTANT to make sure this kit works properly. Be careful to not overtighten these.





Finally, plug in the black two pin connector to the matching receptacle on the main harness.

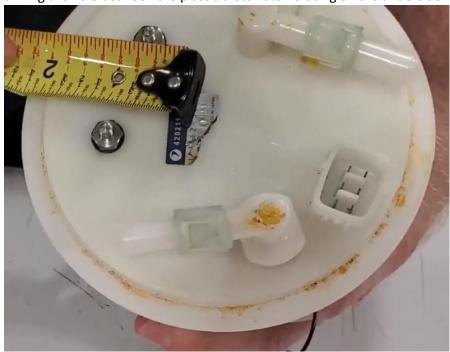


# **PLASTIC FUEL PUMP HANGER NOTES:**

The process for the newer plastic fuel pump hanger is almost the same as the metal hanger but with a few notes.

# Step 1: Drill holes into the hanger for the stud kit.

Drill a small pilot hole. Then use a 15/64<sup>th</sup> drill bit to make the holes for the stud kit. We recommend drilling the hole between the plastic cross hatch bracing on the underside.





### **Step 2: Install Stud Kit Through Hanger**

This step will be exactly the same as the metal hanger installation instructions above.

### **Step 3: Hooking Up Wiring to Stud Kit**

This step will be exactly the same as the metal hanger installation instructions above except for one difference.

When putting the ring terminals on the underside of the hanger, you'll want to loop the wires. This will give enough slack in the wiring for when the hanger is extended.



### **Step 4: Hooking Up Ground Wire**

With each kit comes a small metal crimp and piece of shrink tube. You'll use these pieces to connect the black wire from the iWire FPC Hardwire Kit to the Black ground wire on the fuel pump hanger.

First cut the wire to length. You'll want a little slack so give yourself a little extra length then you think you need.



Strip about 6-7mm on each side of the loose wires that will go into the crimp. This wire will be 20 GA.



Insert shrink tube onto one of the wires. **(Do this before crimping!)** Then slide one of the stripped wires into one end of the metal crimp. Crimp tightly using a ratchet tool.



Repeat this step with the second wire and put it into the empty slot of the metal crimp. Crimp tightly. We suggest doing a light pull test to make sure the connection it secure.



Slide the shrink tube over this metal crimp once complete and shrink into place using a heat gun.



Once the ground wire is complete you'll install the Blue and White wires onto the top side of the hanger following the instructions from Step 3 of the metal hanger install.

If you have any questions during installation, please email <a href="mailto:sales@iwireservices.com">sales@iwireservices.com</a> so we can help.