

Fusion3

EDGE 3D Printer

REPAIR:

REPLACE BED PROBE END EFFECTOR

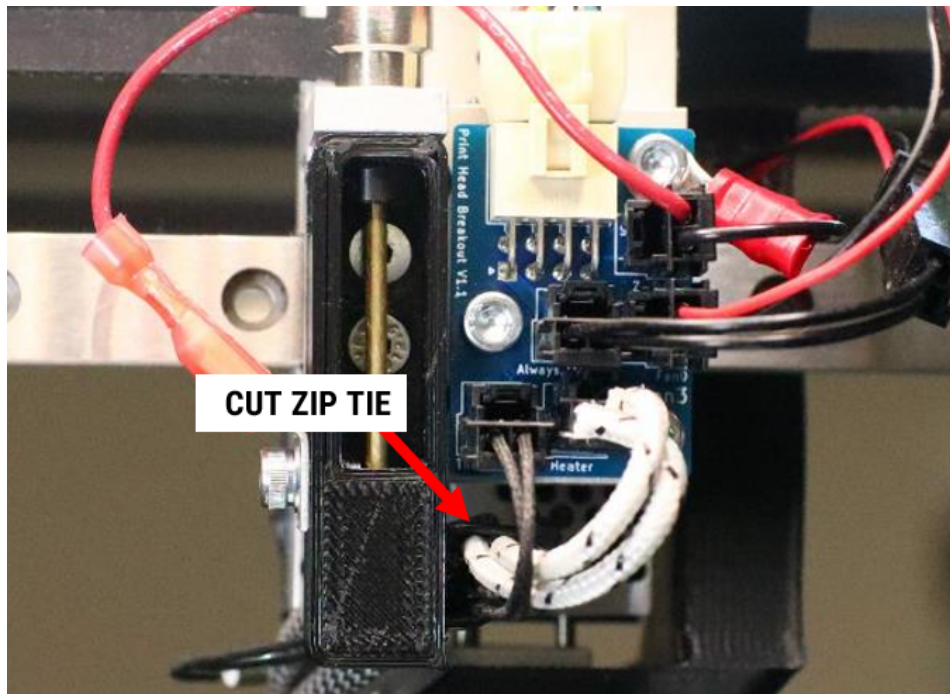
Revision 01/10/2023

HOW TO REPLACE THE BED PROBE END EFFECTOR

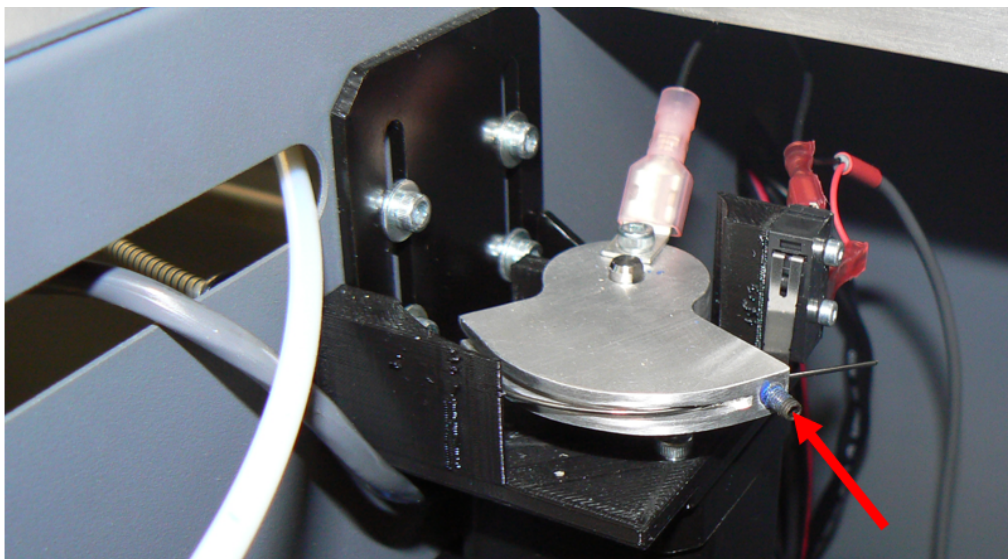
Follow these instructions to replace the bed probe end effector assembly on the print head (bed probe body, pin, drive cable).

REMOVE THE CURRENT BED PROBE ASSEMBLY

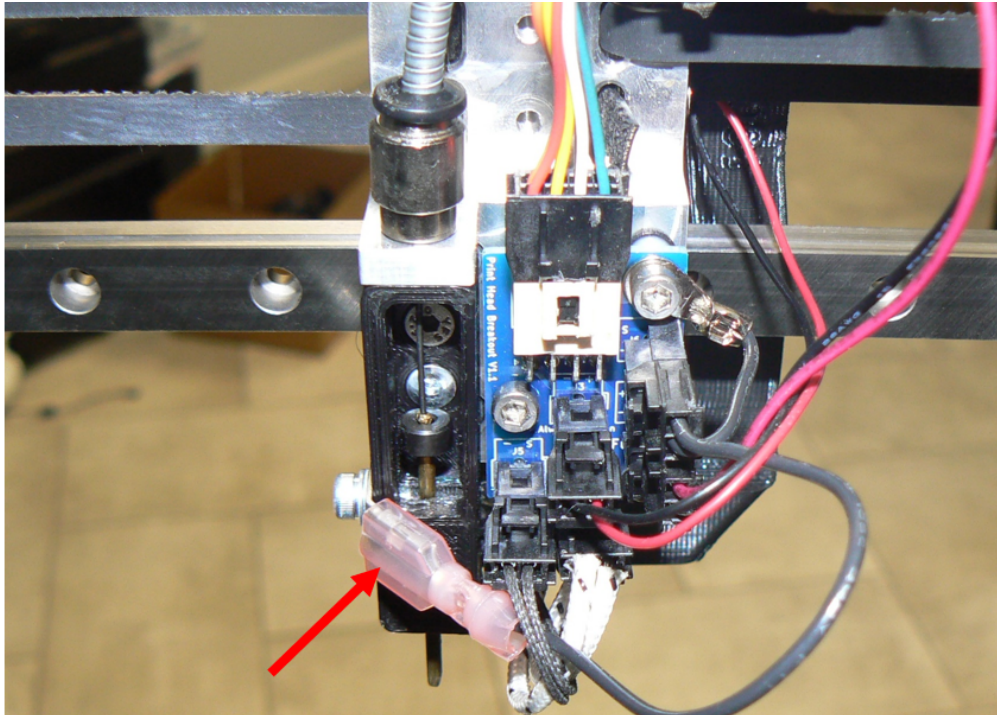
1. Cut the zip tie holding the print head heater/sensor wires to the side of the bed probe body. **BE VERY CAREFUL NOT TO CUT THE WIRES.**



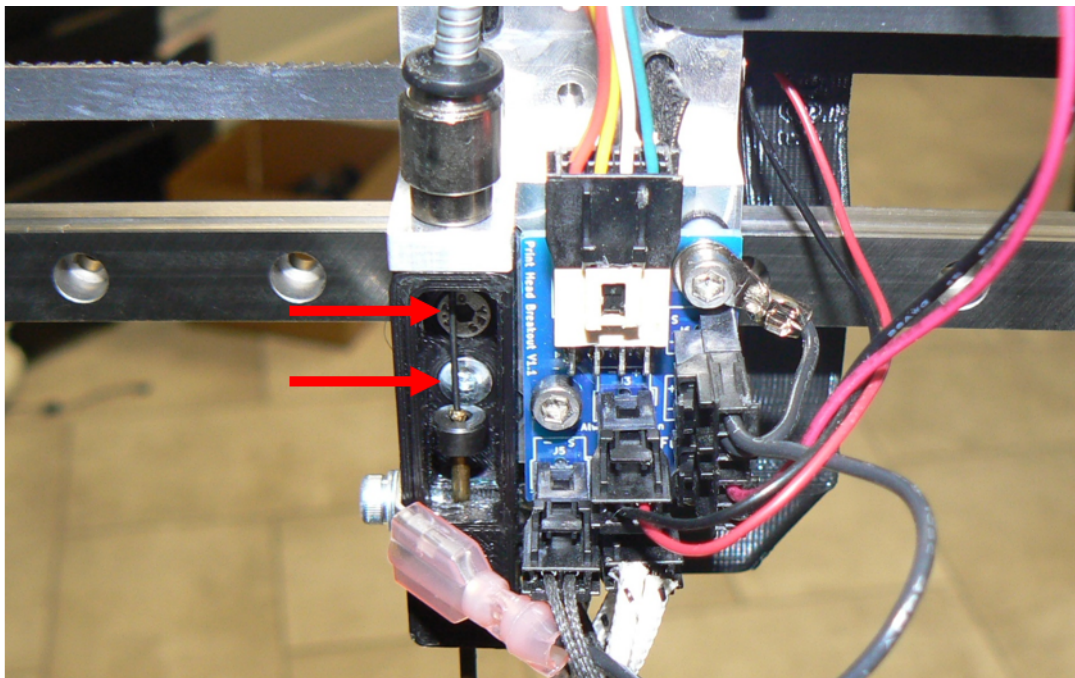
2. Loosen the set screw on the bed probe rotor that holds the wire.



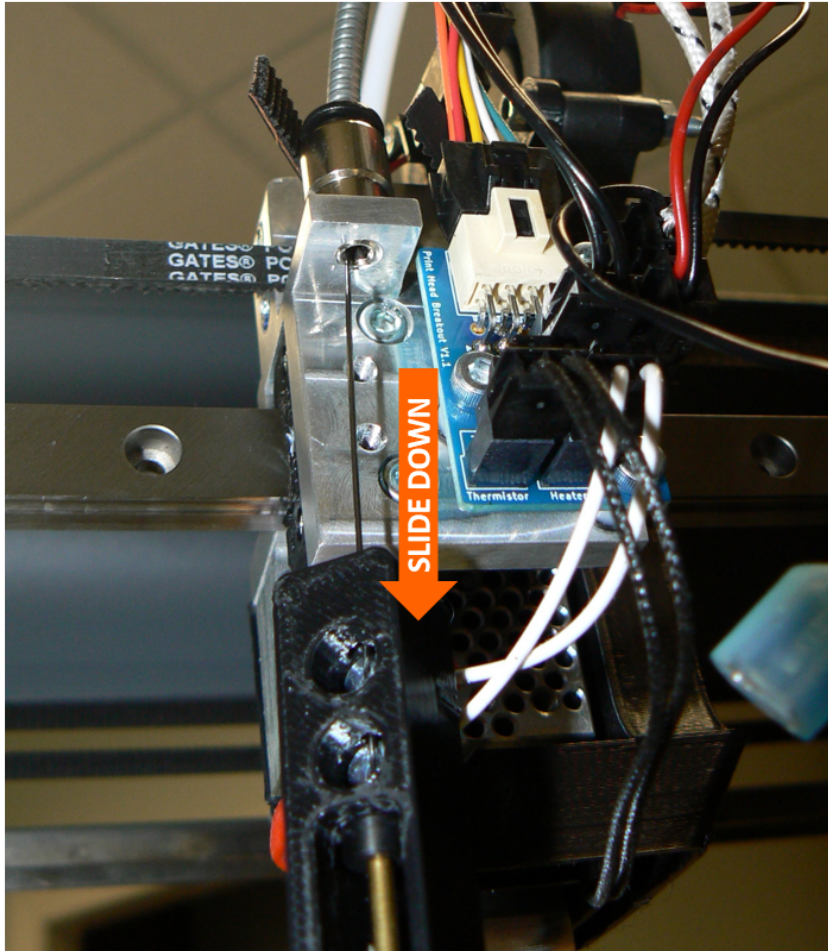
3. On the bed probe body, remove the wire running to the spade lug on the side.



4. On the bed probe body, loosen the 2 M3 FHCS behind the wire, to remove the bed probe body from the print head assy.

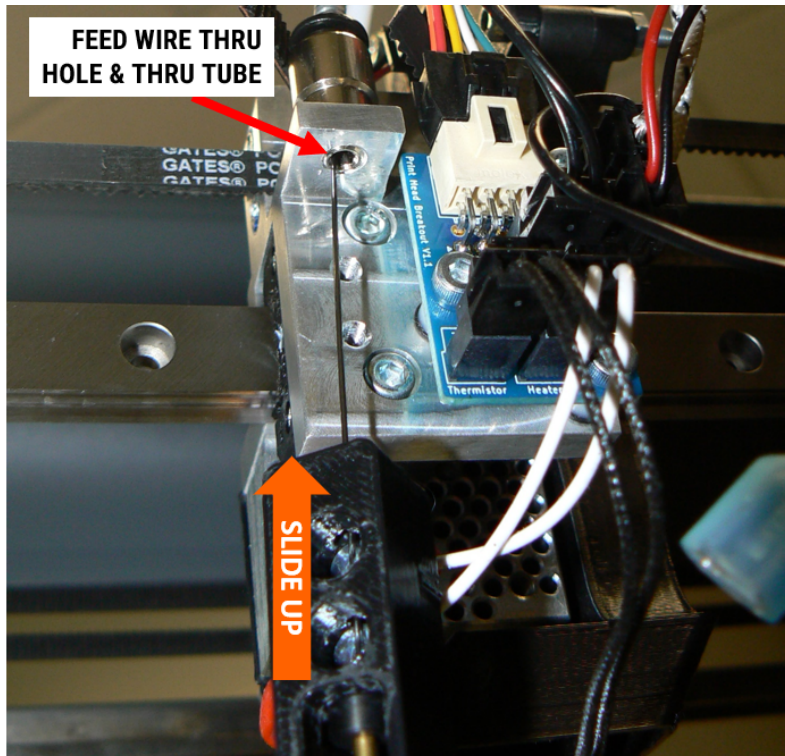


5. Slide the bed probe down to extract the wire from the spiral tube. CAUTION: the end of the wire is very sharp. Maintain control over it and wear eye protection.

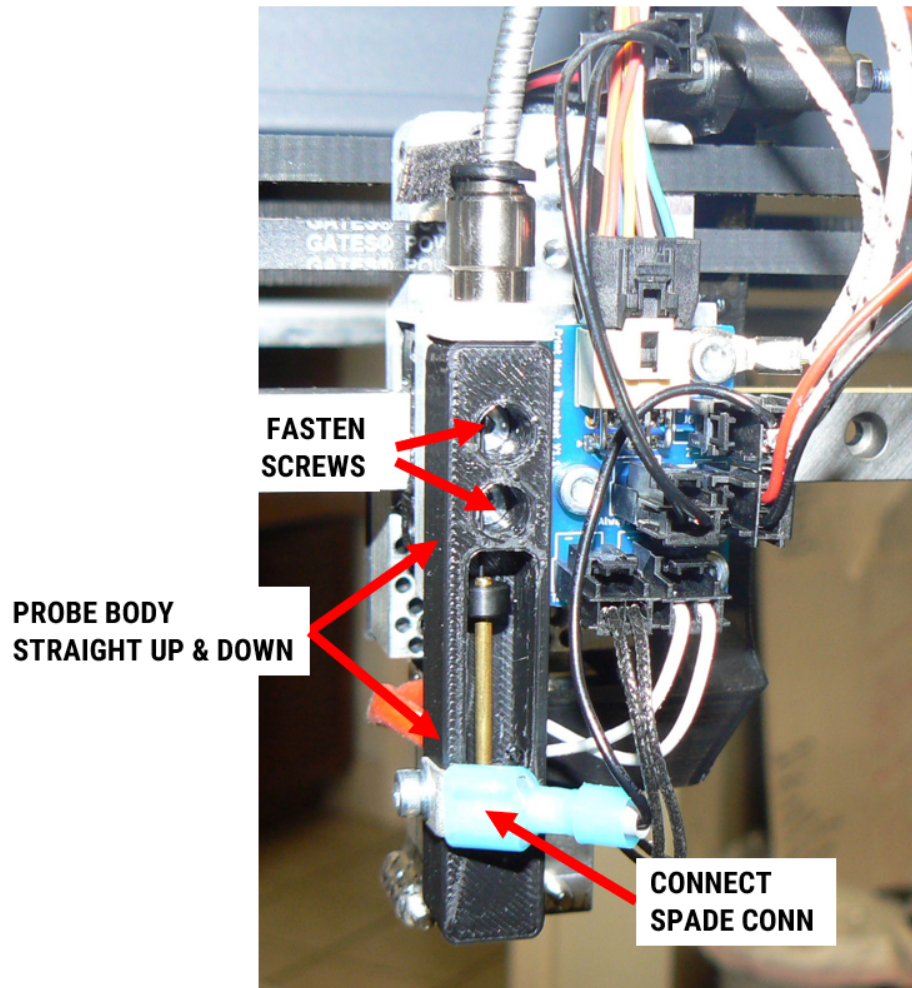


INSTALL NEW PARTS

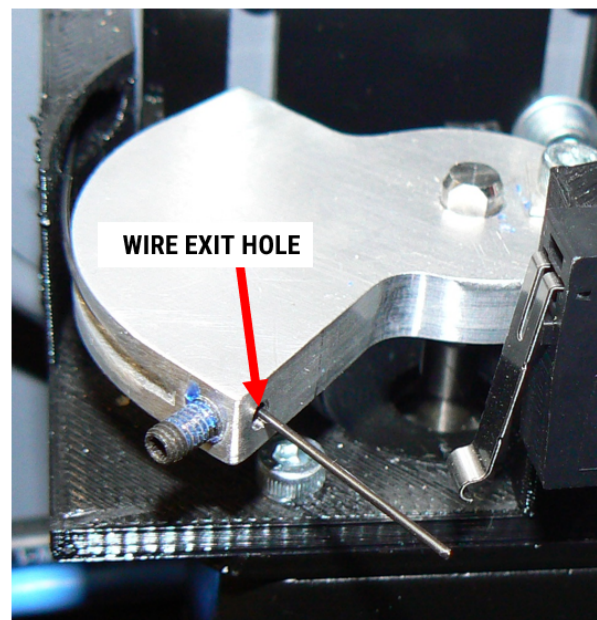
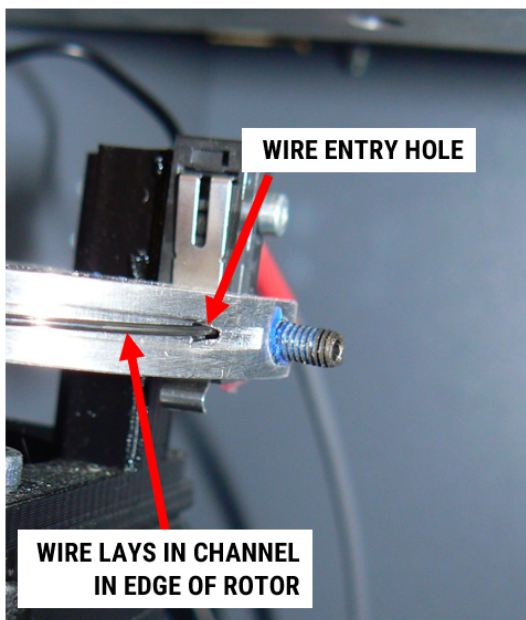
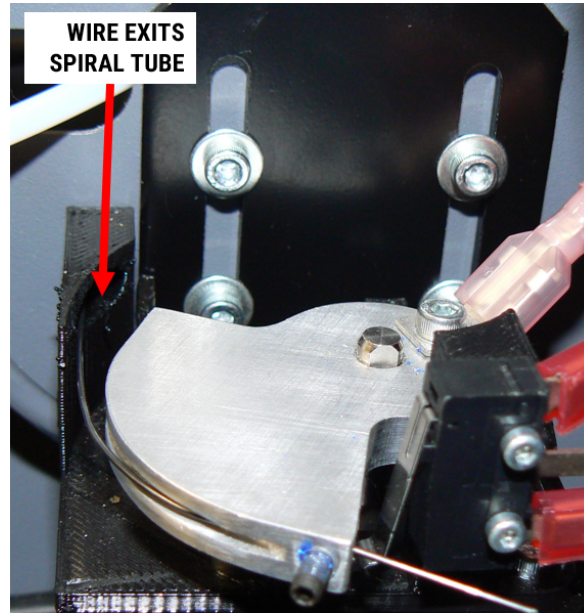
1. Feed the free end of the bed probe wire into the spiral tube, from the print head side, from the bottom.



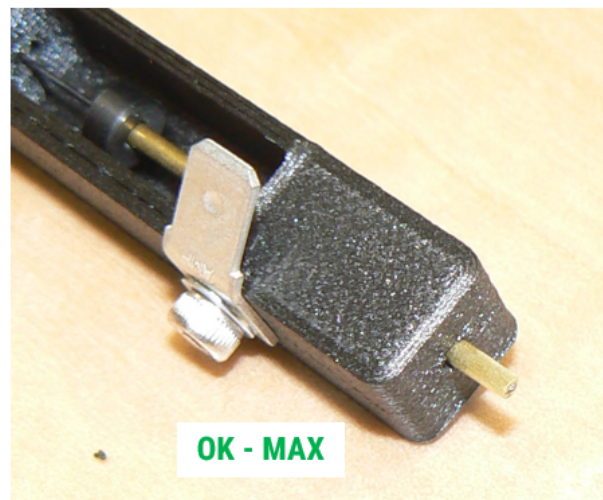
2. Continue to feed the wire in and raise the bed probe body, until it's positioned correctly on the x car assy. The end of the wire may catch when it reaches the other end of the tube. Gently manipulate it until it comes through the hole next to the bed probe rotor.



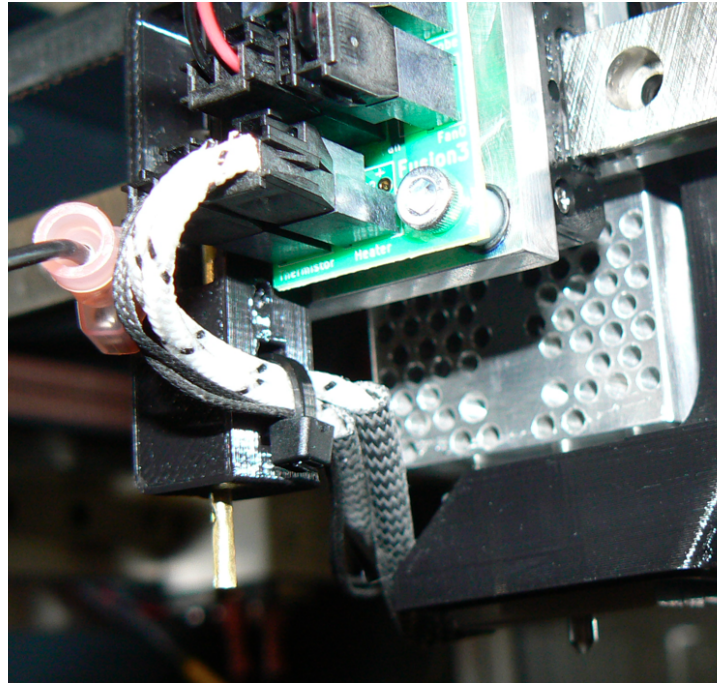
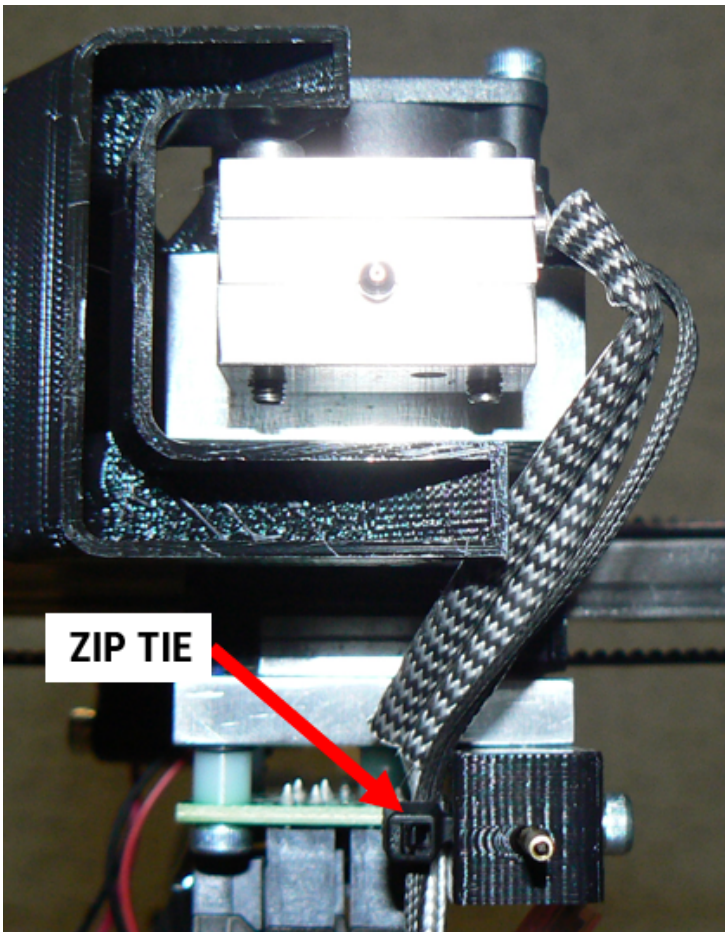
3. Bolt the bed probe body onto the x car assy using the 2 screws that are pre-installed in the body. Make sure it's straight up and down.
4. Reconnect the spade connector to the lug on the side of the bed probe body.
5. Feed the end of the wire through the hole in the rotor at the end of the channel.



6. Rotate the rotor to the back position so it's against the endstop. Pull the wire through the rotor until the tip of the pin extends about 2-3mm from the bottom of the bed probe body. Tighten the wire set screw finger tight.



7. Cycle the bed probe rotor back and forth and make sure the pin is at the right height in the up position; the rotor and pin deploy and retract smoothly with no catches or resistance.
8. Firmly tighten the wire set screw.
9. Route the print head heater/sensor wires through the zip tie on the side of the bed probe body and tighten the zip tie. Trim the excess off. Wire routing should look like the pictures below.



FUNCTION CHECK

1. Power the printer on
2. Go to the *Control* screen.
3. Press the "deploy" and "retract" buttons and make sure the probe smoothly deploys and retracts without error messages or mechanical issues.
4. Run *Utilities > Bed Leveling > Run Nozzle Offset* and make sure it completes without issues.