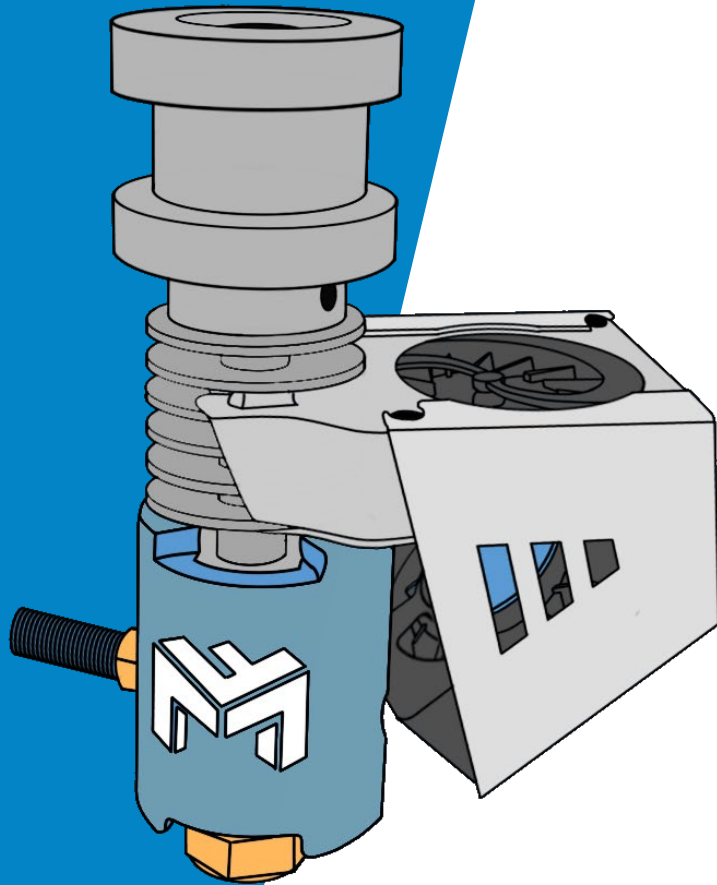




PICO HYBRID

USER MANUAL



Part List and Assembly Instructions

Including:

1.75mm Direct Drive Setup

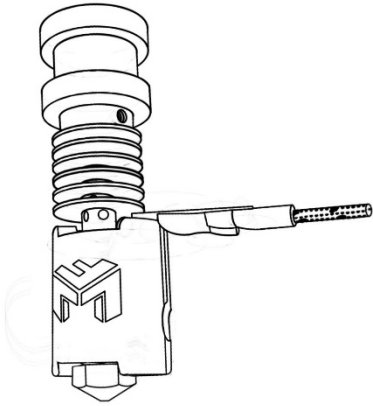
Bowden Setup

Direct Drive Setup

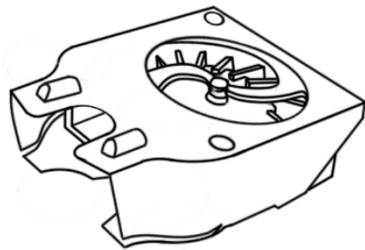
Additional Part Fan

Nozzle Changing

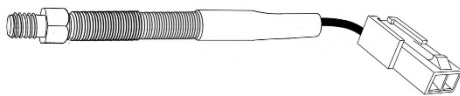
WHATS IN THE BOX



Pico Hybrid Assembly



Heat Break Cooling Fan

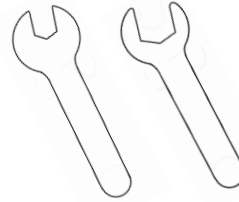


Thermistor

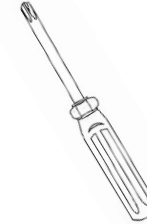
Tools



Allen Wrenches
0.9mm and 2mm



Flat Wrenches
7mm and 11mm



Small Phillips Screwdriver

Small Parts



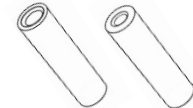
Bowden Coupler
1.75mm and 3.00mm



Bowden Clip

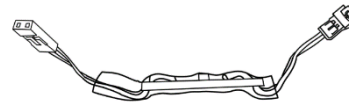


Direct Drive Plug



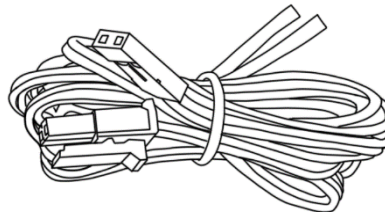
PTFE Tubing
2x4mm and 3x4mm

Fan Voltage Regulator



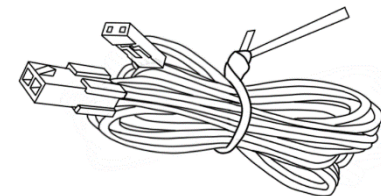
Voltage Regulator

Wiring Harnesses




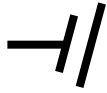

Thermistor Harness

Blue and Yellow

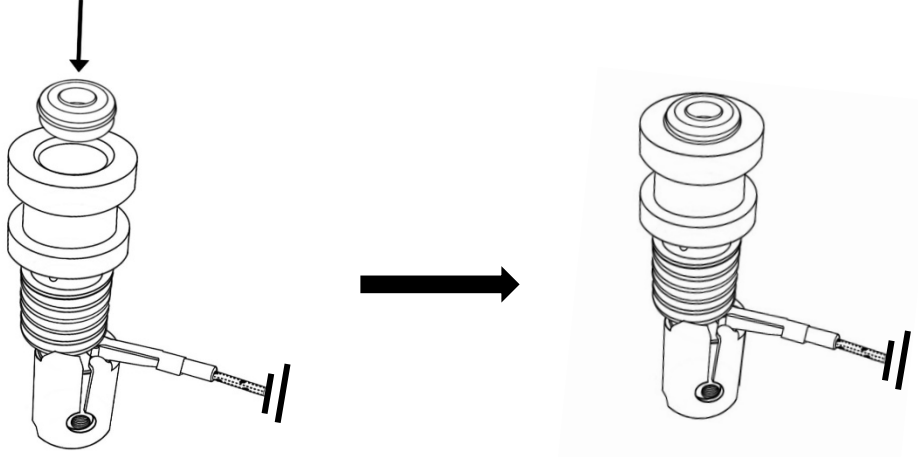


Heater Harness

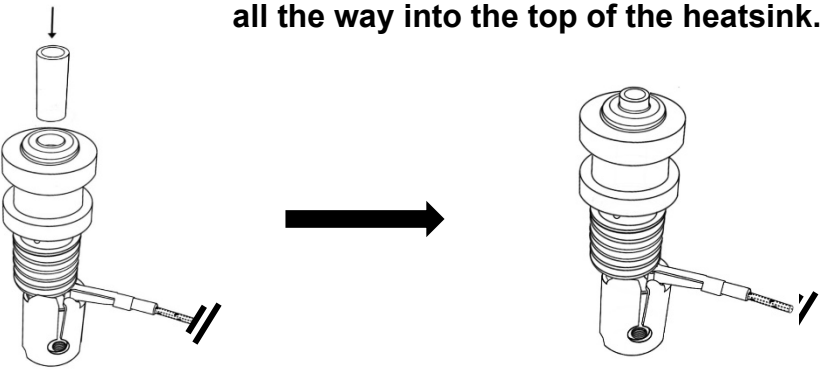
Black and Red

IMPORTANT NOTES	Wire Length Shortened	Wire Length Cutoff	Connected Terminals
<ul style="list-style-type: none"> - Sizing of parts may vary across illustrations to enhance relevant details. - Wiring length is not reflective of the actual wire length and is shortened for simplicity. - Previous assembly steps may not be visible for each stage of setup. 			

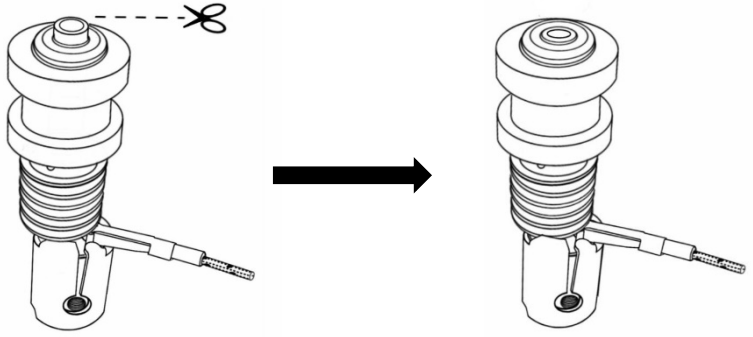
Step 1 Oriented with the small diameter opening facing up, push the Direct drive plug into the top of the groove mount. Once inserted correctly, the top of the plug should be flush with the top of the groove mount.



Step 2 Insert the 1.75mm x 4mm PTFE tube into the top of the groove mount through the direct drive plug. Push the PTFE tube until it bottoms out. It should be inserted all the way into the top of the heatsink.



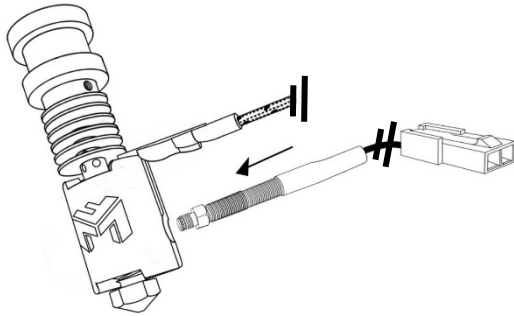
Step 3 Trim the PTFE tube to the desired length.



NOTE: Some direct drive extruders require longer PTFE tubing than what is provided with the Pico Hybrid. In this case, you can purchase any 1.75mm x 4mm PTFE tubing for use with your extruder.

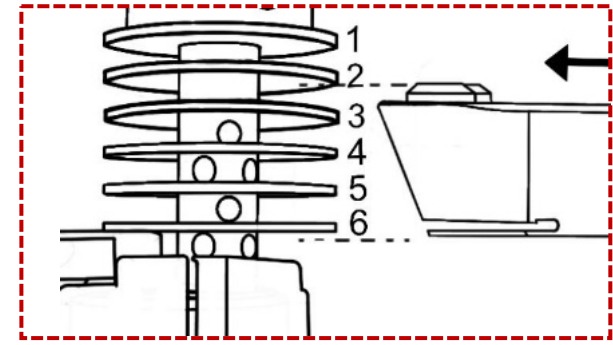
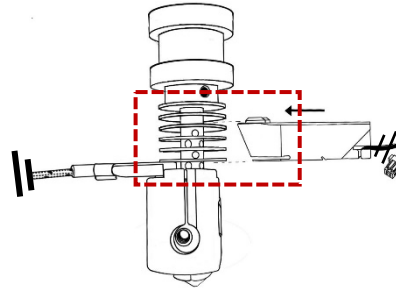
Step 4

Thread the thermistor into either the left or right side of the heater block



Step 5

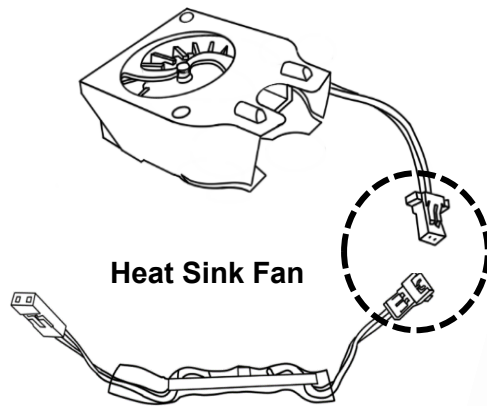
Push the heat break cooling fan into the heatsink, with the nubs between the 2nd and 3rd fin from the top.



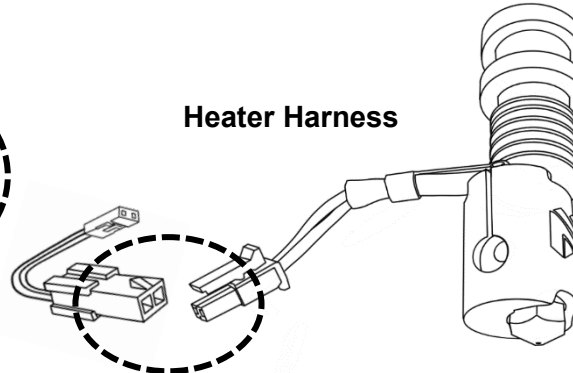
Users with the part cooling fan should refer to that manual during this step.

Step 6

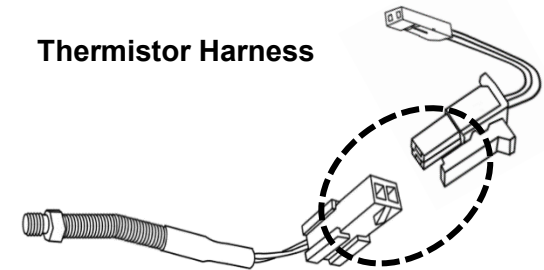
Mount the hot end to the printer and connect all the wiring. Refer to the wiring schematics on our website for connecting cables to the motherboard.



Heater Harness



Thermistor Harness



WARNING

Wiring reverse polarity can damage Voltage Regulator. Ensure the correct polarity by matching the coloring of wires between each plug.

Please refer to the wiring diagrams on the User Guides page of the Metaform website for wiring the hotend to the printer.