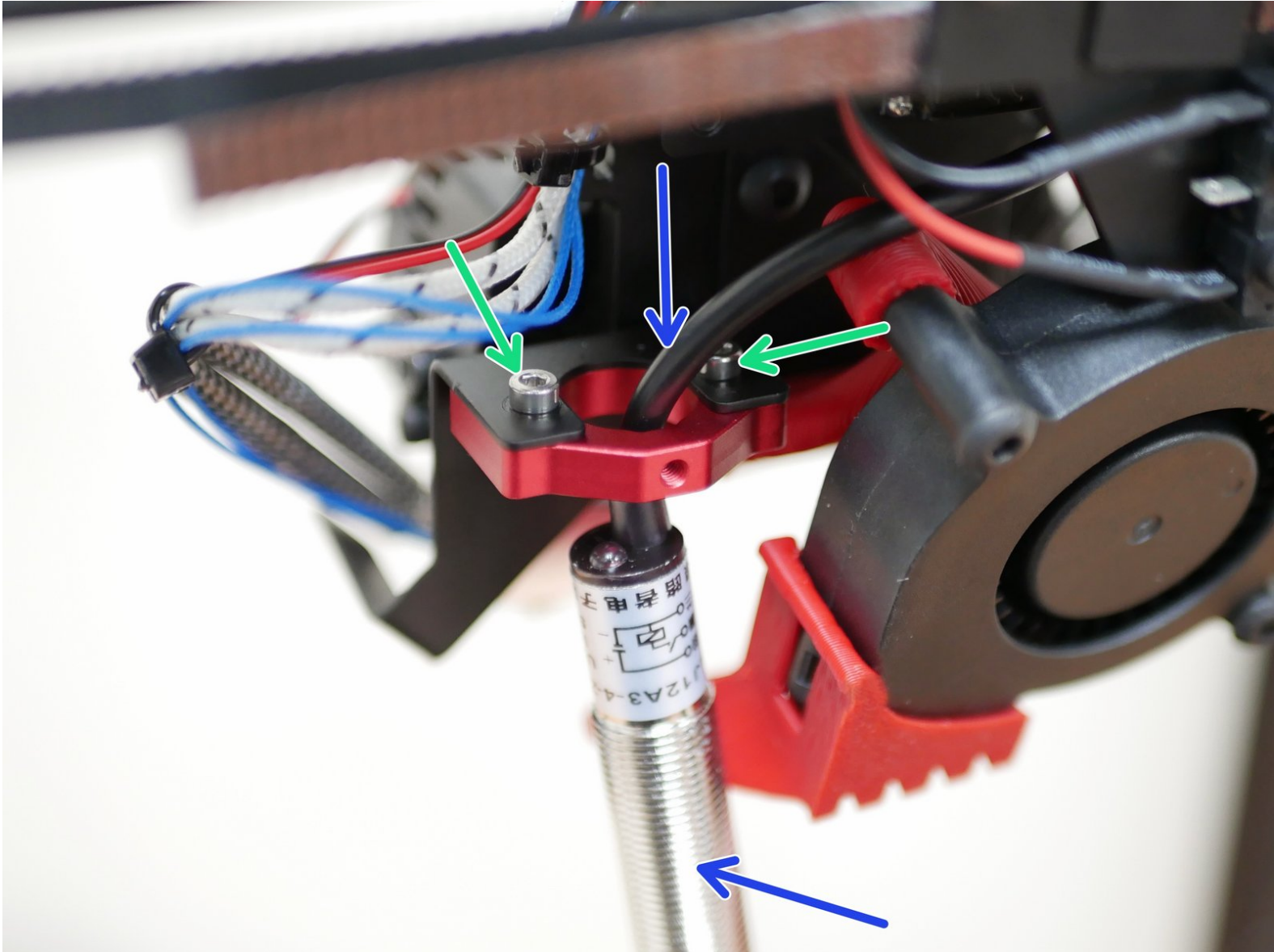


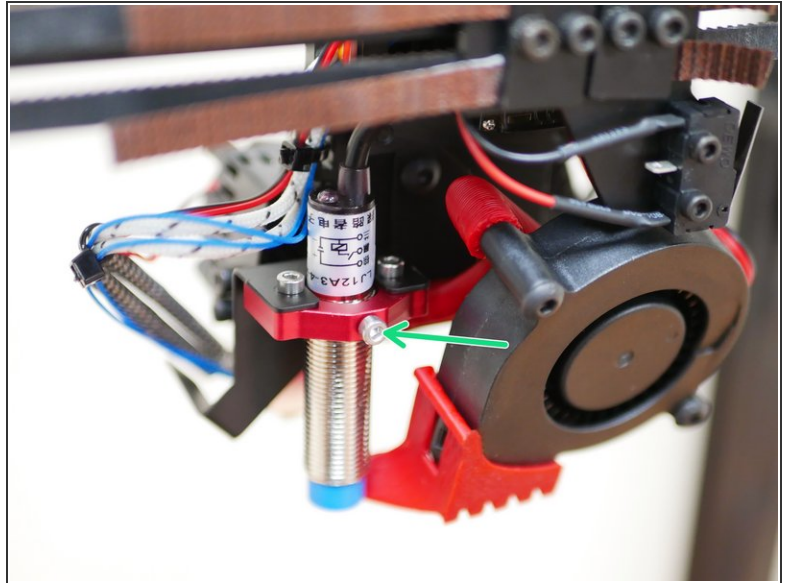
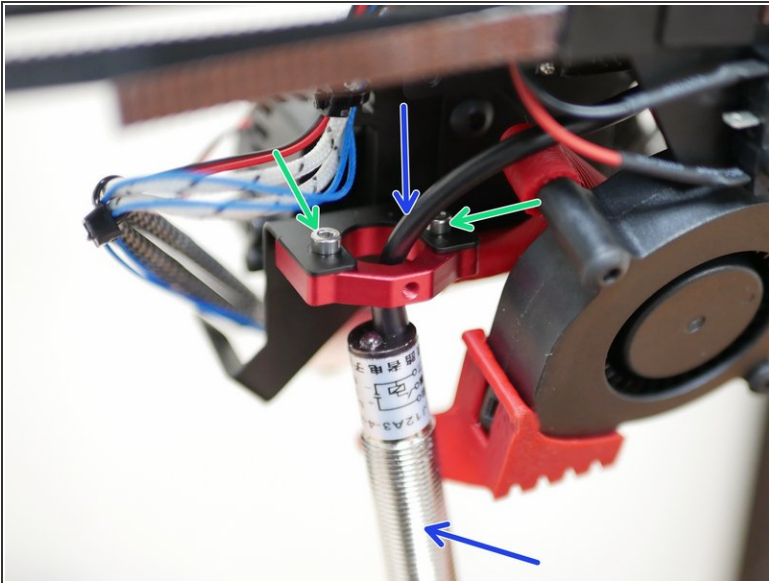
Makertech

Stage 02: Dual Switching Hotend Upgrades

Written By: Makertech 3D



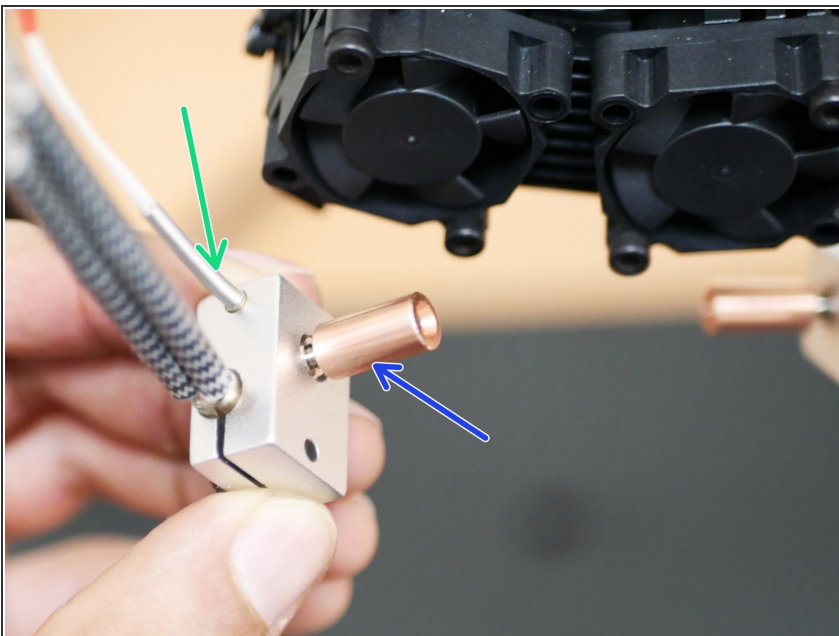
Step 1 — Aluminium Probe Mount



i Replace the 3D printed probe mount with the aluminium one.

- Start by pushing the probe through the new mount and then secure it in place.
- M2.5 x 6mm bolt






Step 2 — Copper/Titanium Heatbreak and New Thermistor



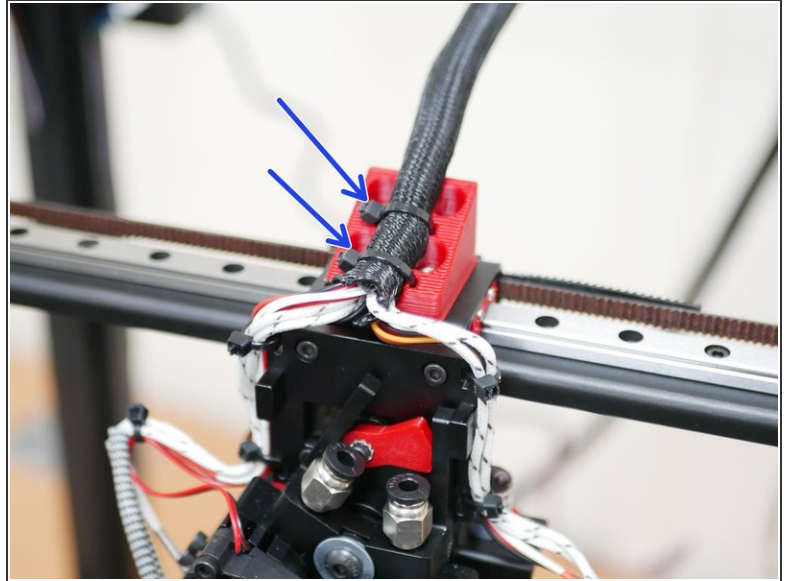
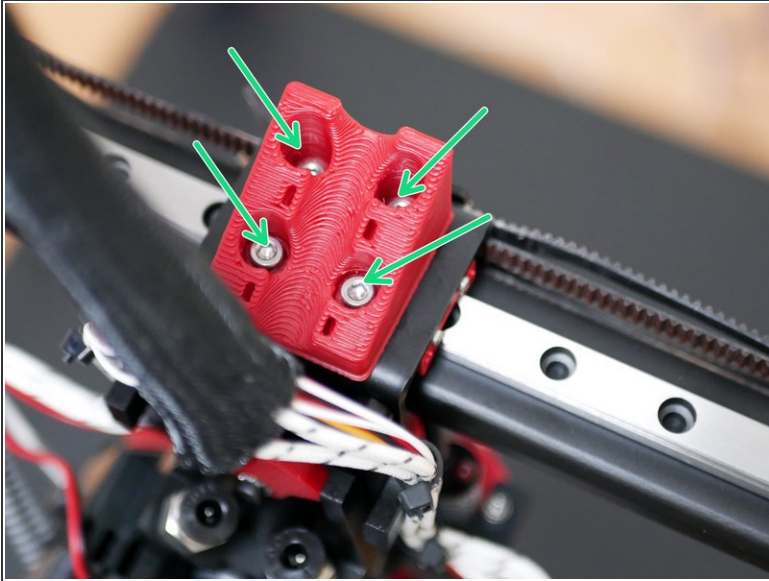
- Replace the steel heatbreaks with the new Copper/Titanium ones.
- ✦ You may need to heat the heat block to free the old heatbreak, if this is the case you can use either a lighter or wait until you have completed the build and heat the hotend via a gcode command.
- Replace the thermistor with the new one.
- Connect them to the control board.

Step 3 — Installing the Servo Arm



-  The servo arm design has been updated to incorporate the small arm included with the servo.
-  The 3D printed part of the arm can be found [here](#), we recommend printing it in ABS.
-  If the injection moulded arm does not fit, there is a large version of the arm that can be found [here](#).
-  Drop the injection moulded arm that comes with the servo into the 3D printed arm.
-  Attach it to the servo shaft as shown with an M2.5 x 6mm bolt.

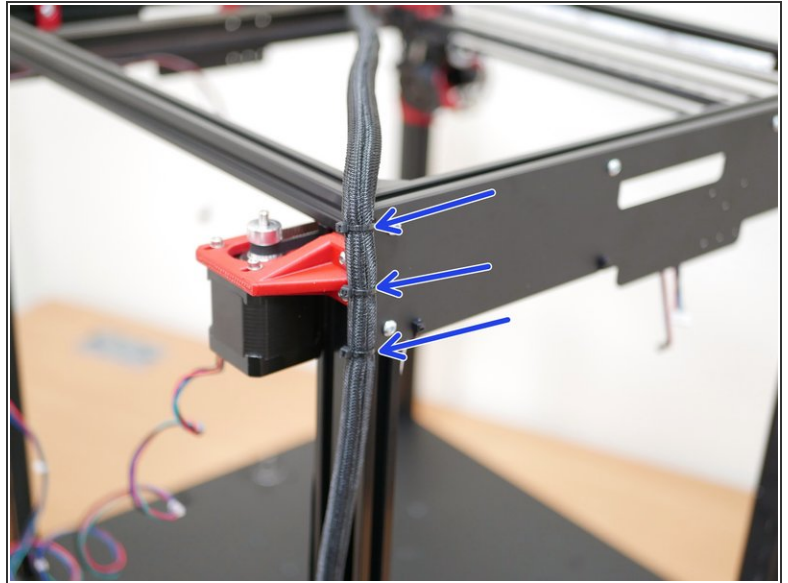
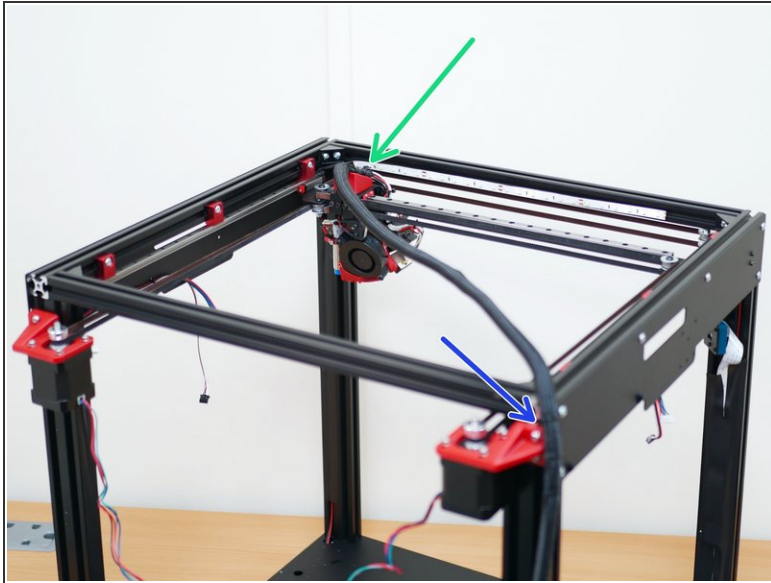
Step 4 — Cable Relief



i Fix to the tool carriage the 3d printed cable relief bracket.

- M3 x 10
- Use cable ties to secure the cable loom to the bracket.

Step 5 — Cable Relief



- Move the print head to the near right of the print area.
- Use cable ties to secure the loom to the side panel.