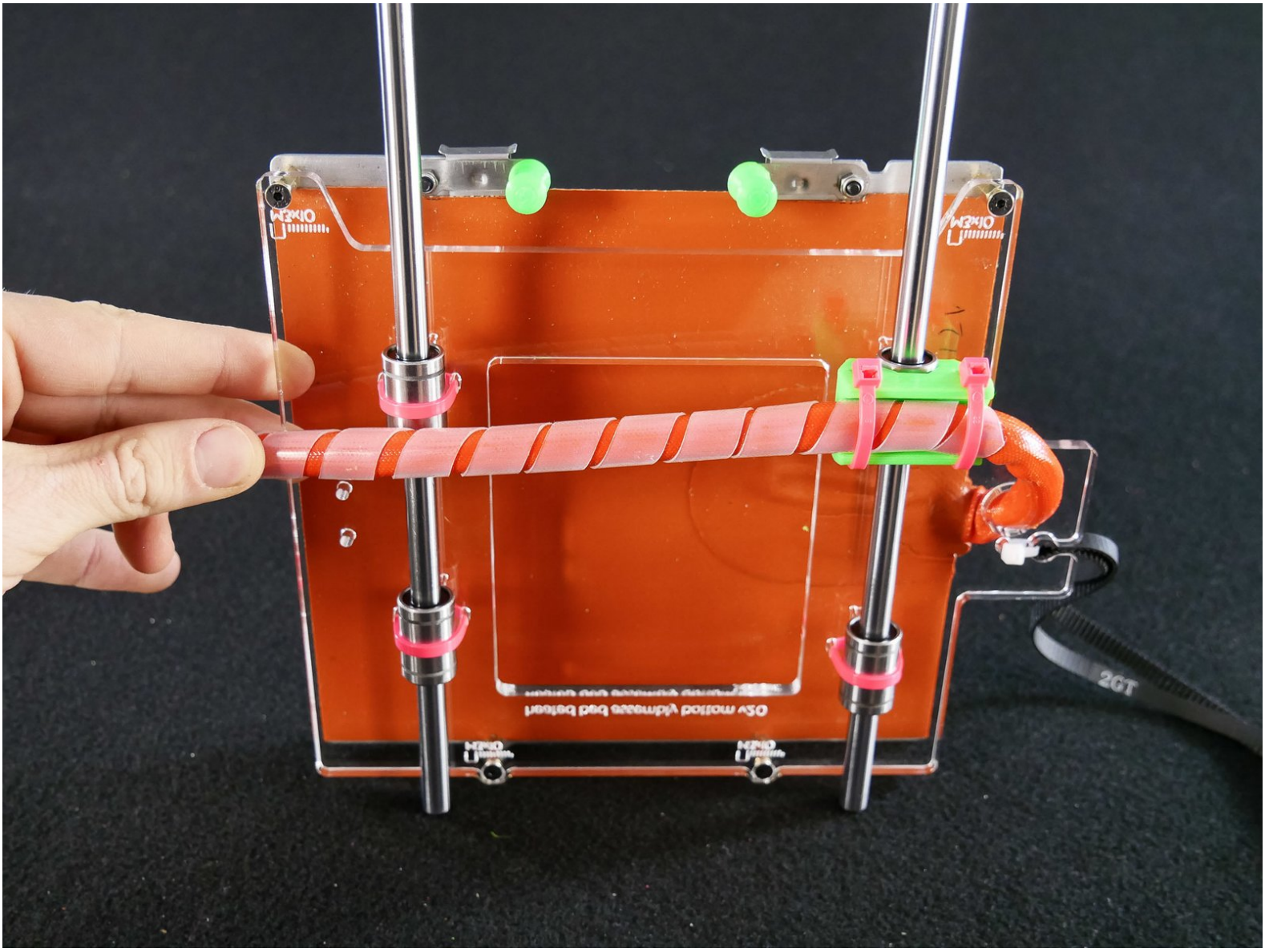
Install the Heated Y Assembly

Install the Heated Y Assembly

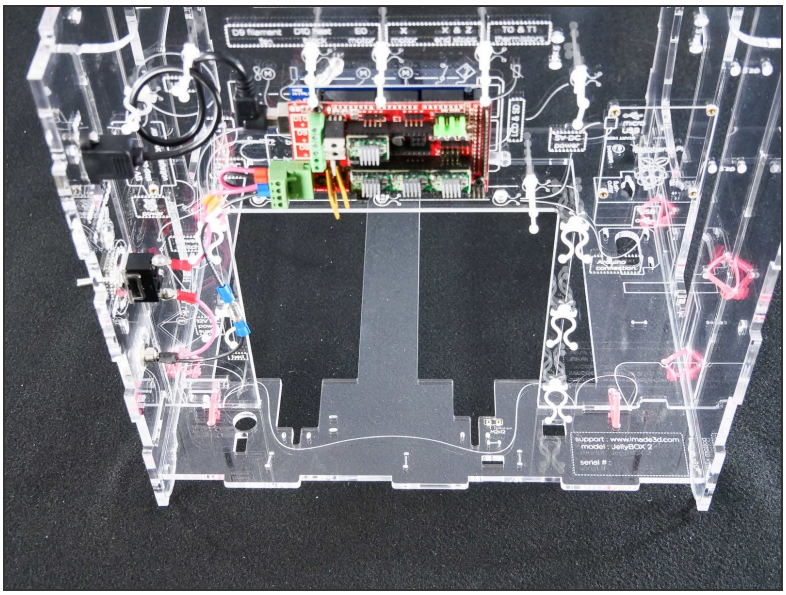


INTRODUCTION

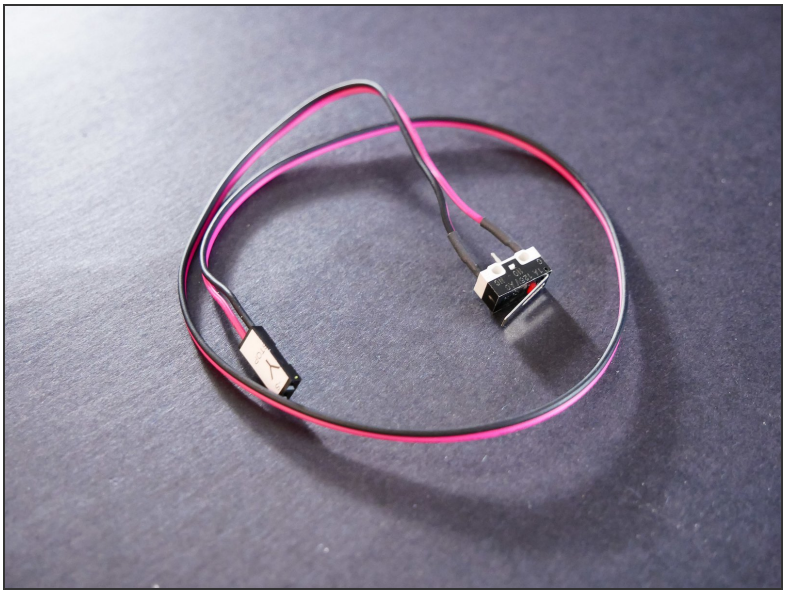
Not the guide you are looking for?

Go back to the **⇤ Easy Kit Build Flow.**

Step 1 — ↳ Y Endstop



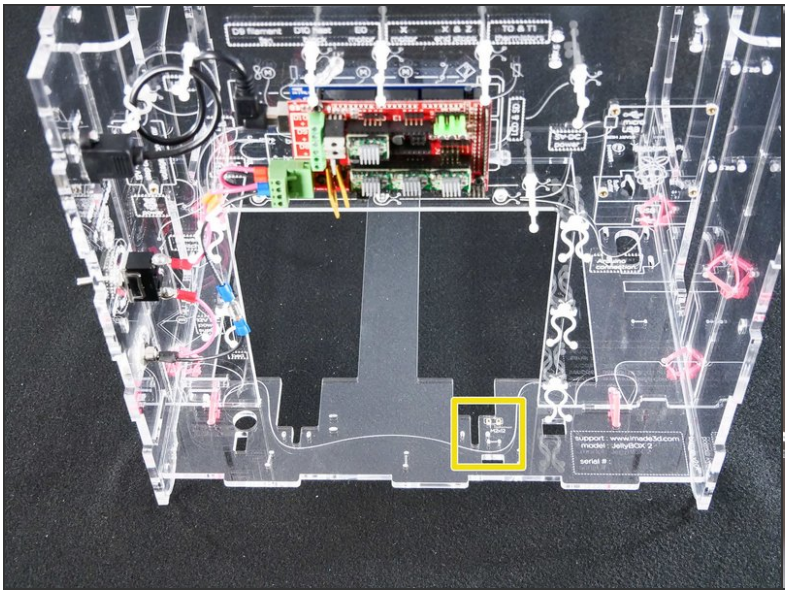
Step 2

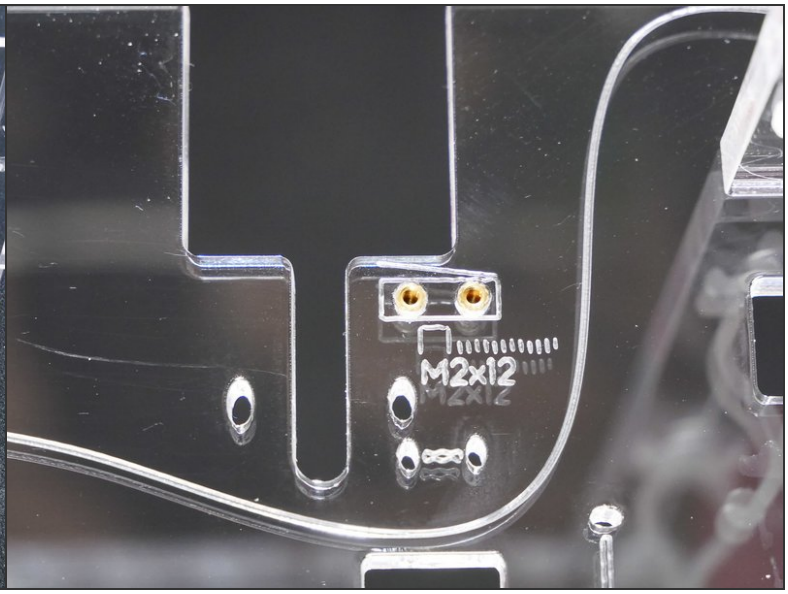


Step 3

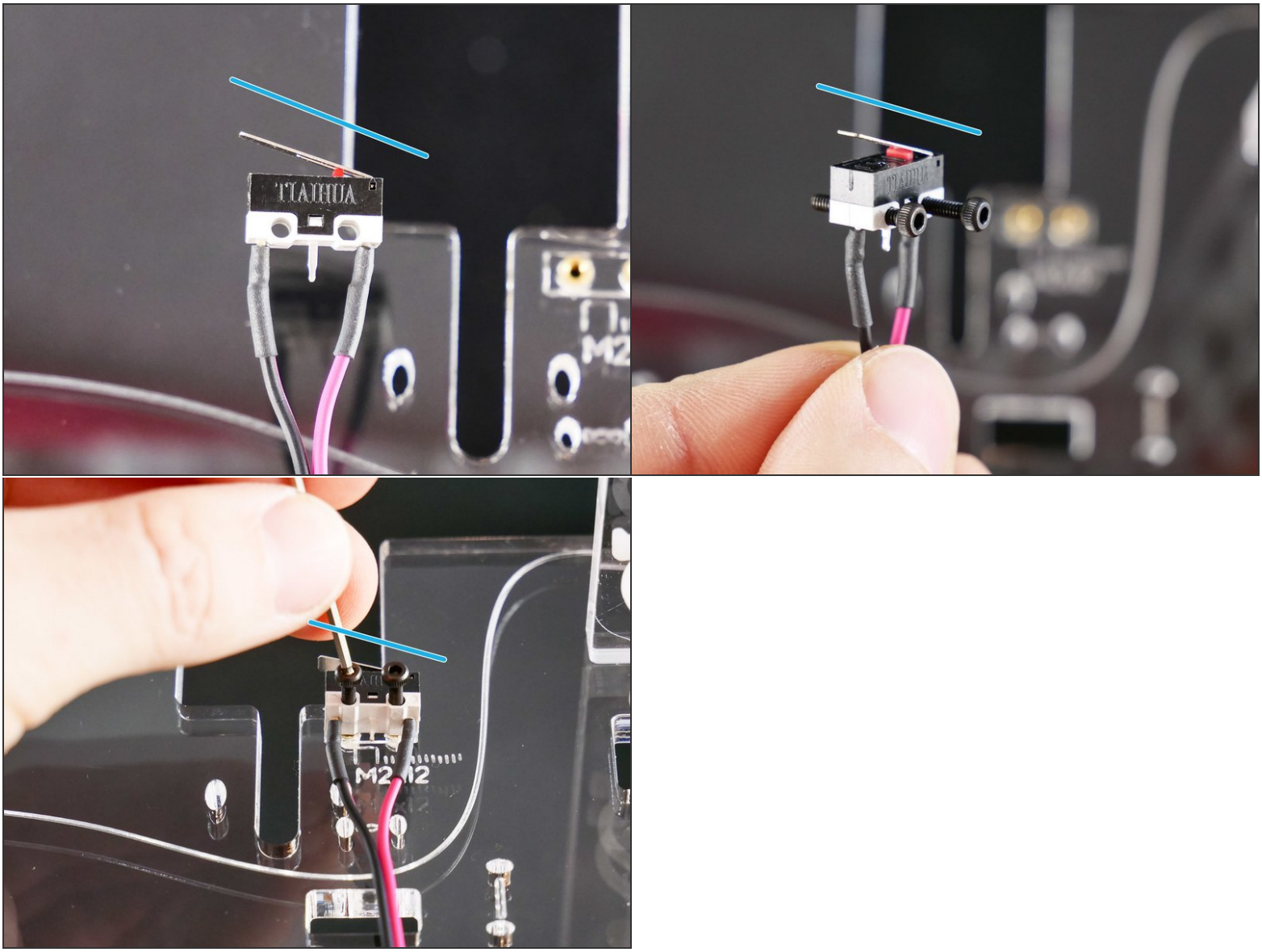
- M2x12 (these are the tiniest)

Step 4



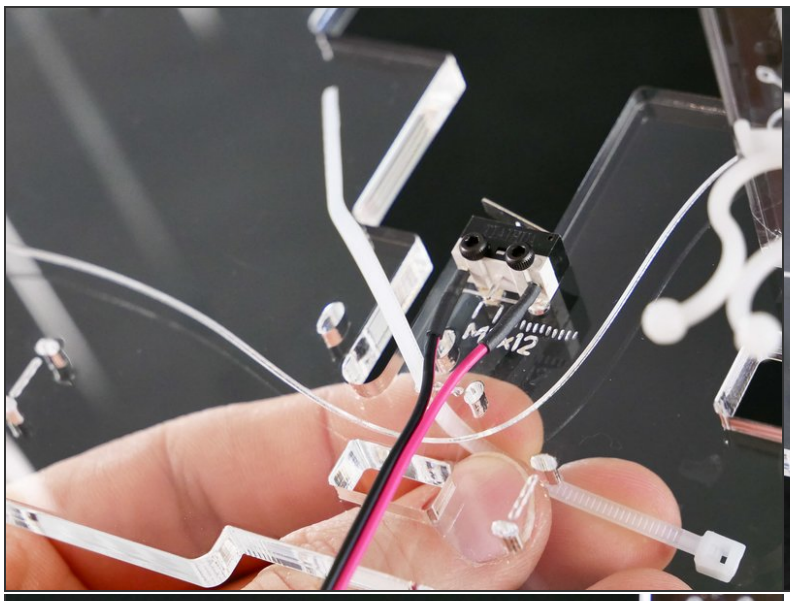
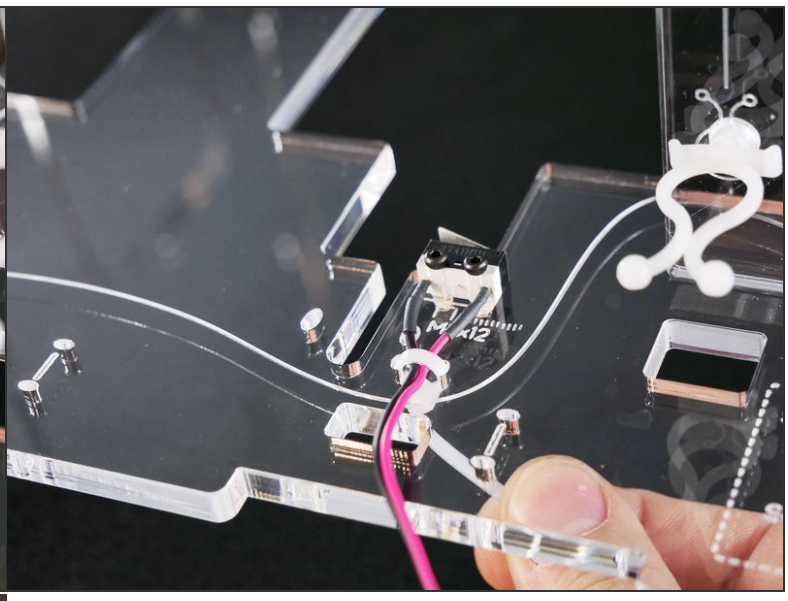
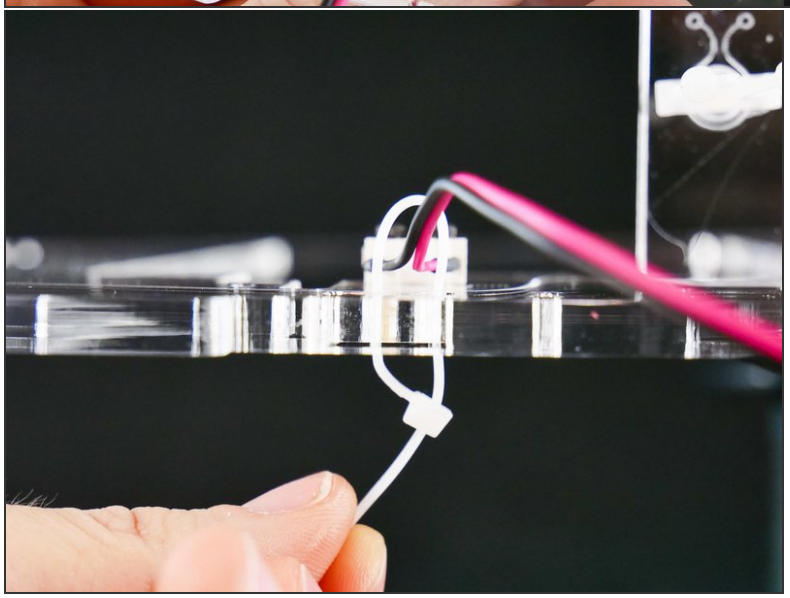


Step 5



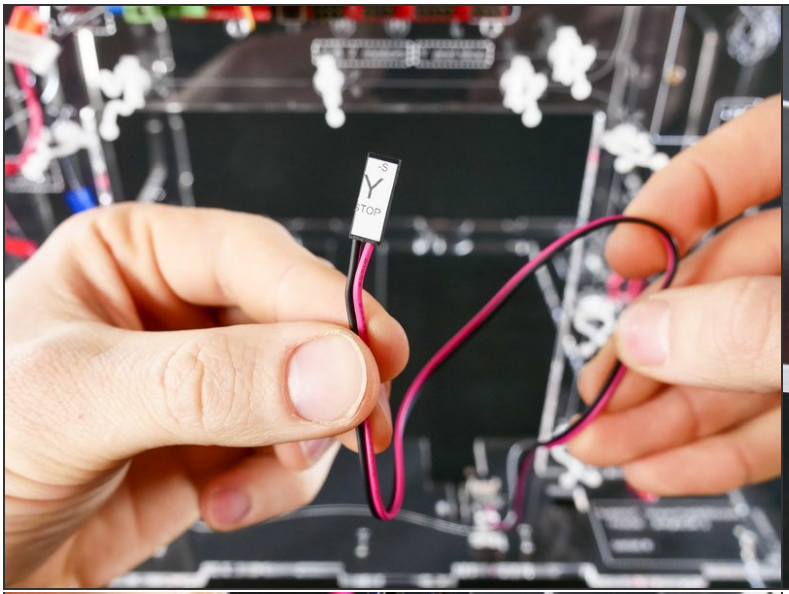
- The switch **reed** needs to point towards left.

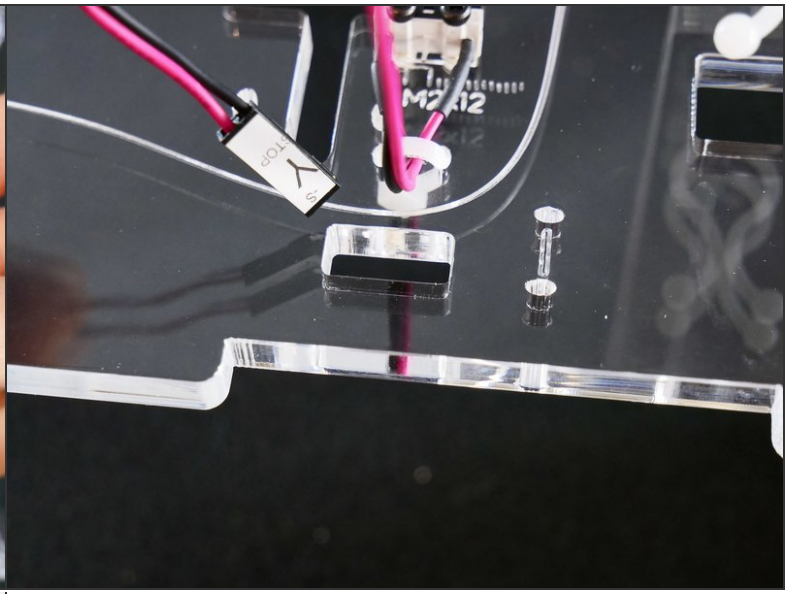
Step 6

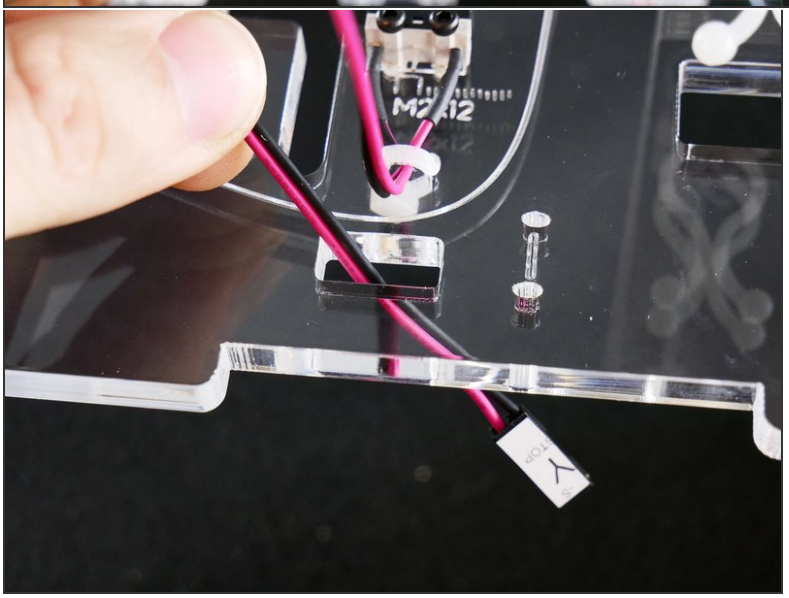




⚠ [Update] This zip tie (and the holes in the Bottom) was removed in early 2018 to speed up the build. Simply **skip it.**

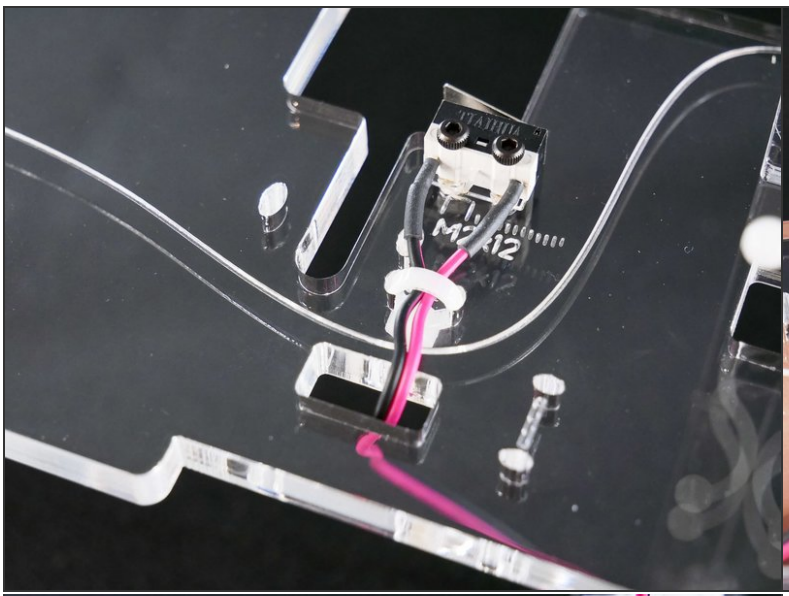
Step 7

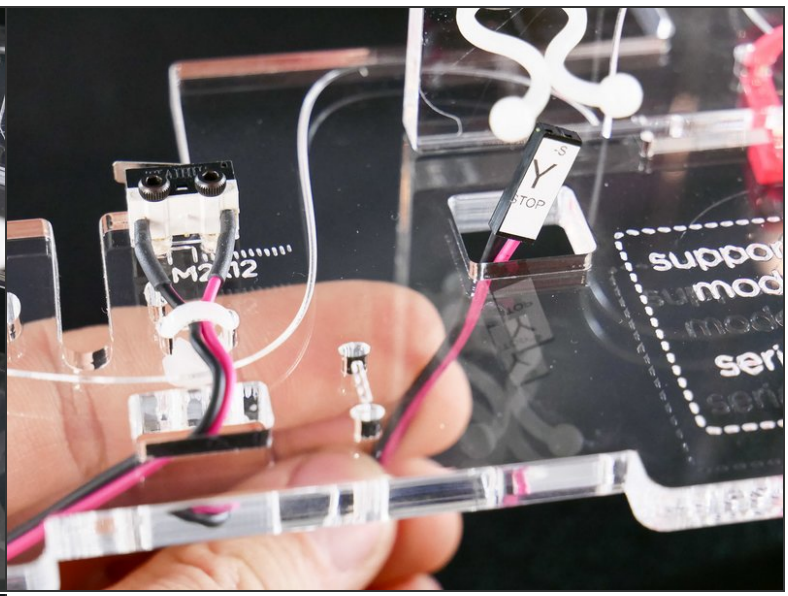


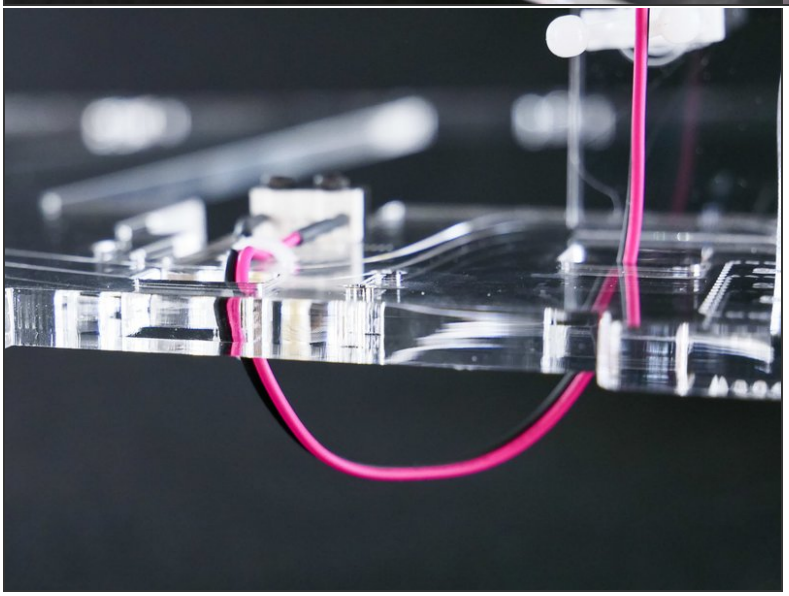




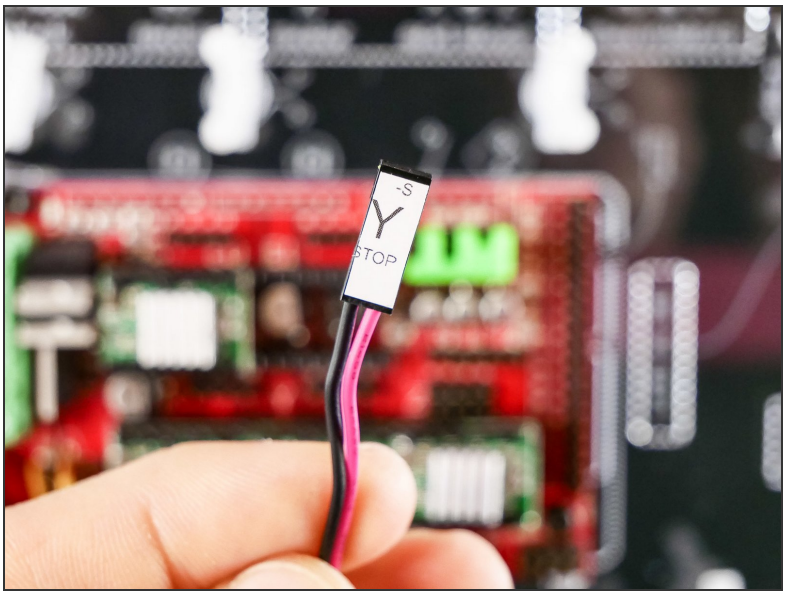
Step 8



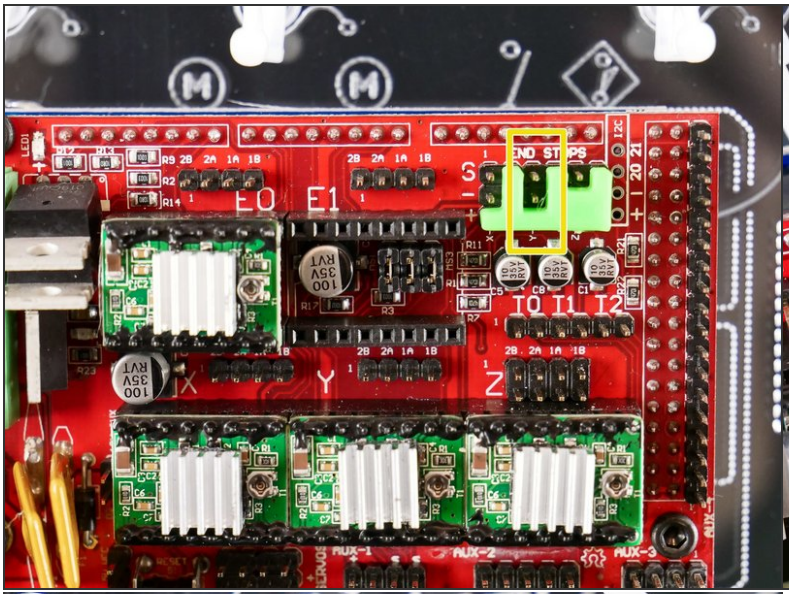


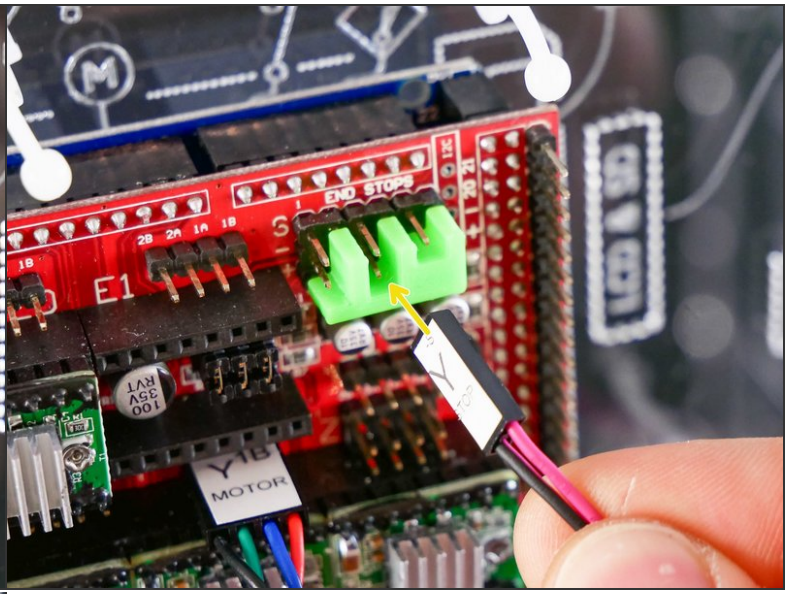


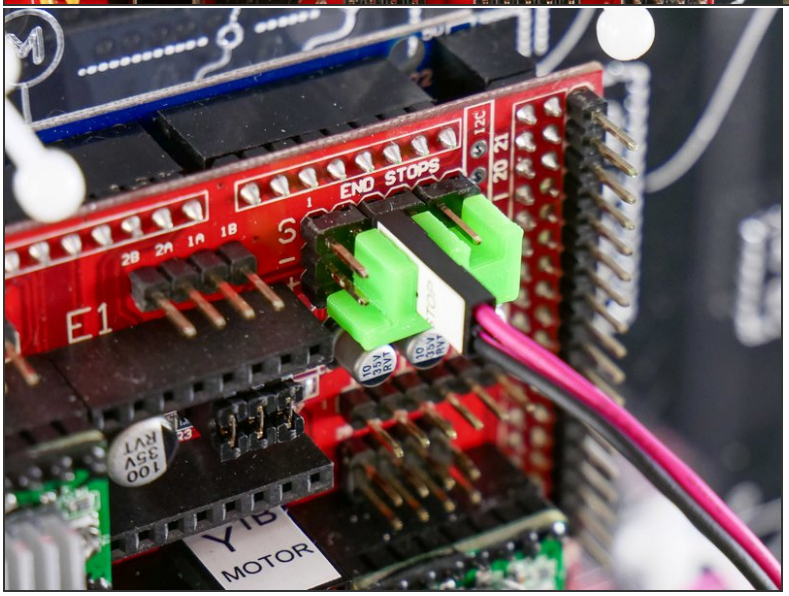
Step 9



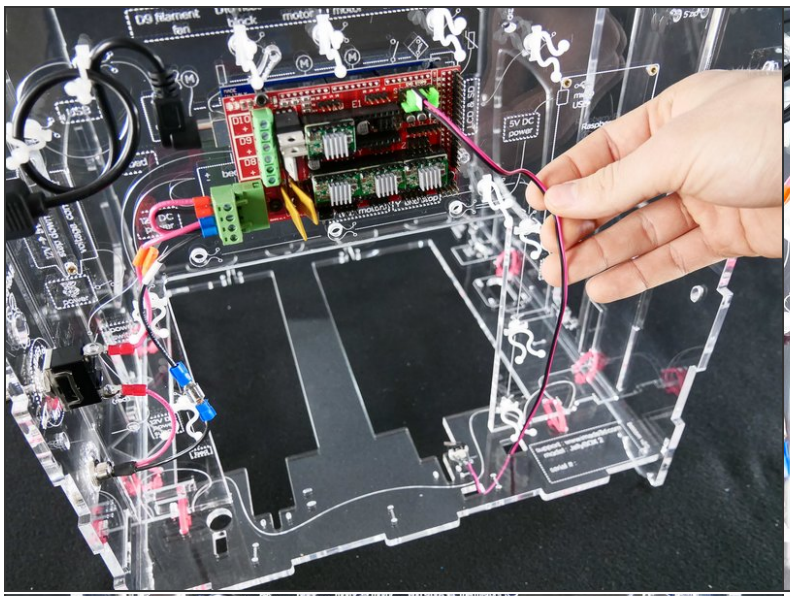
Step 10

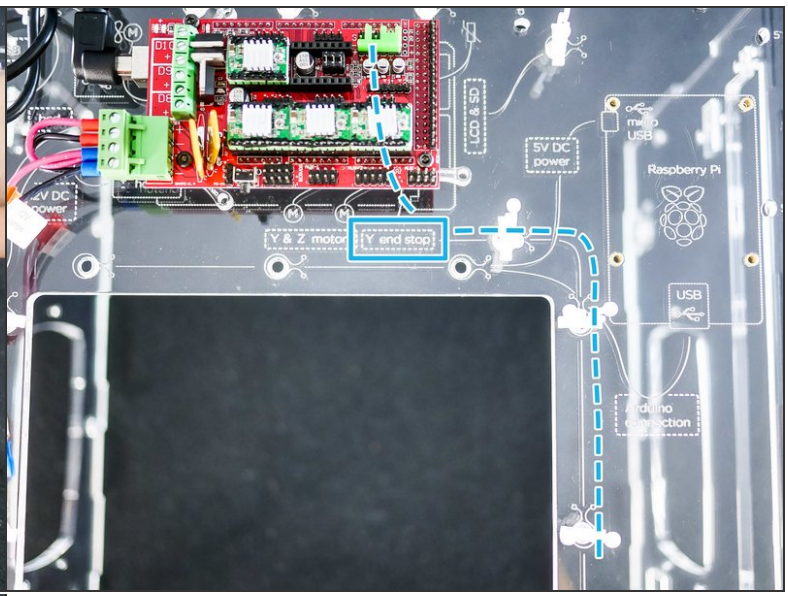

END STOPS
E0
E1
I0 I1 I2
X
Y
Z
AUX-1
AUX-2
AUX-3

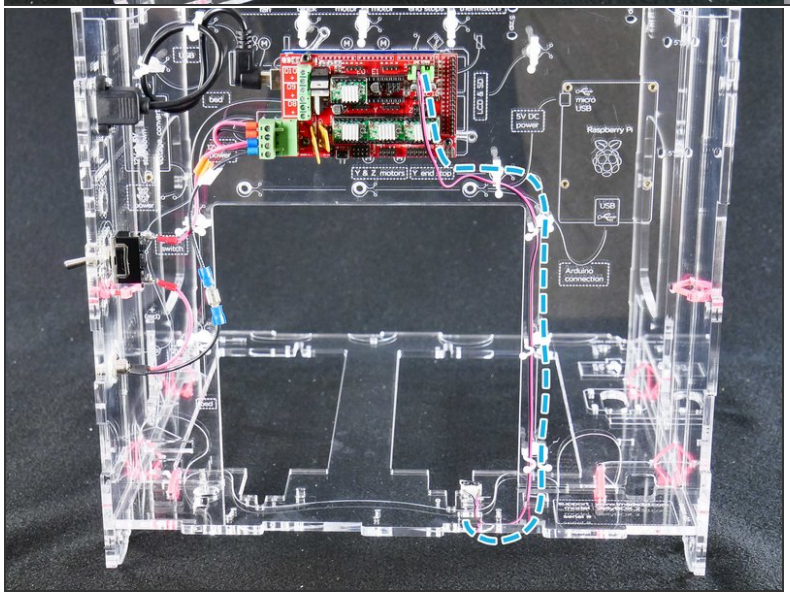

END STOPS
E1
Y
MOTOR


END STOPS
E1
MOTOR

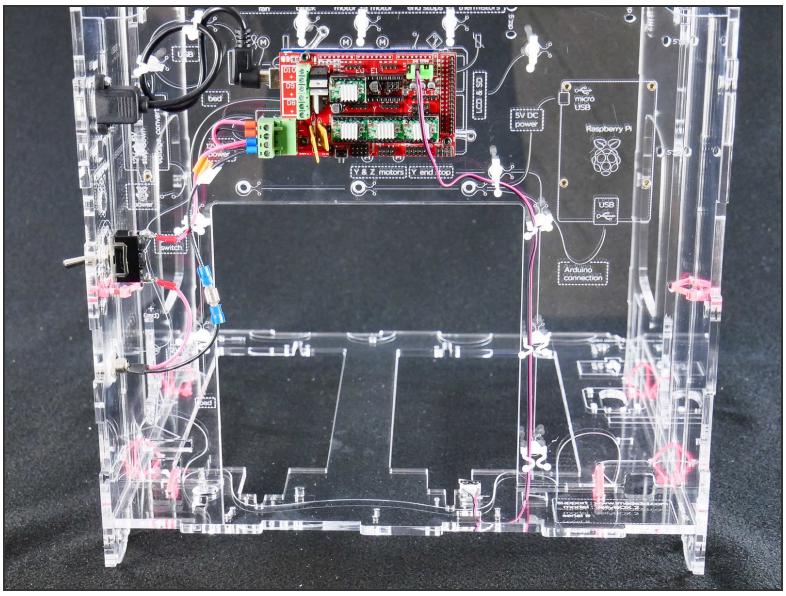
Step 11



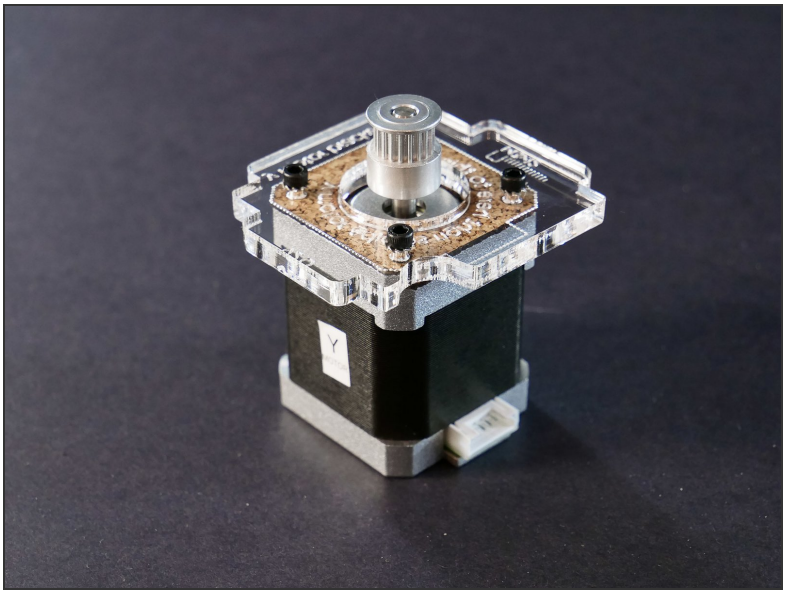

5V DC power
Raspberry Pi
USB
Y & Z motors
Y end stop


5V DC power
Raspberry Pi
USB
Arduino connection

Step 12 — Looking good!

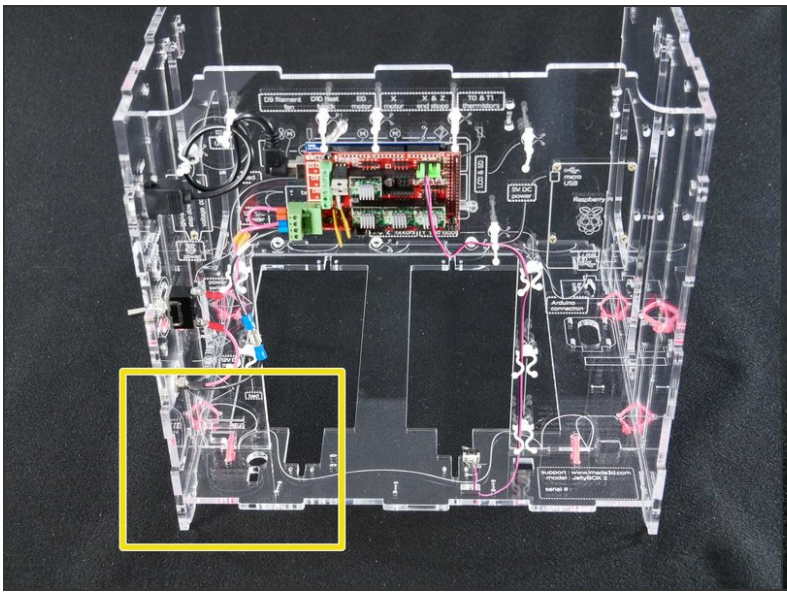


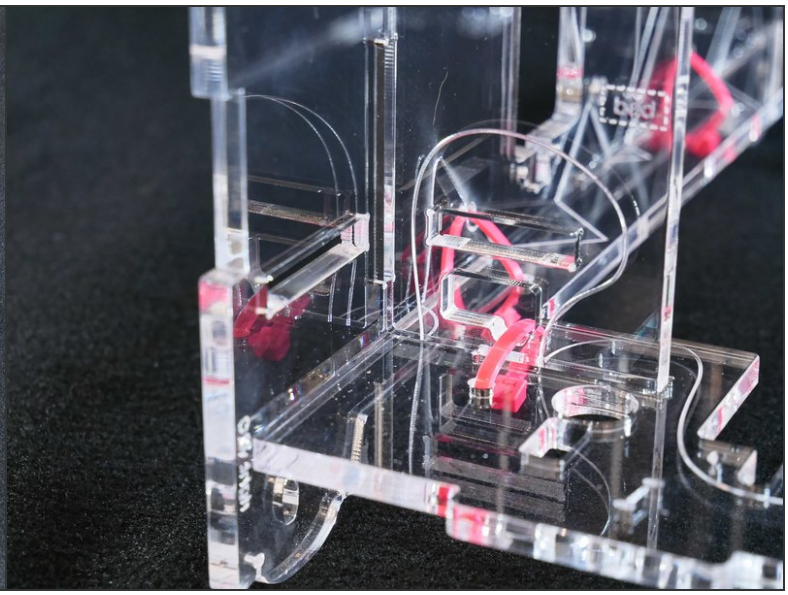
Step 13 — ↳ Insert the Y Motor Bracket



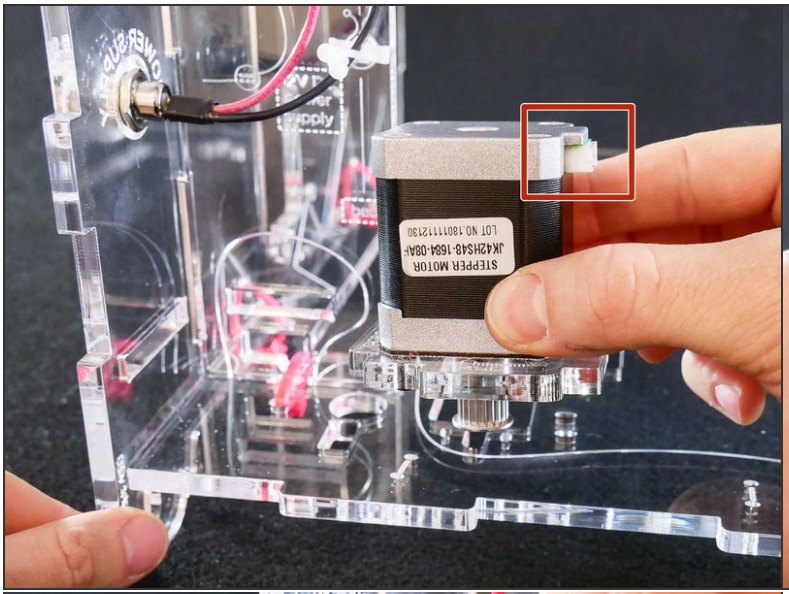
Step 14

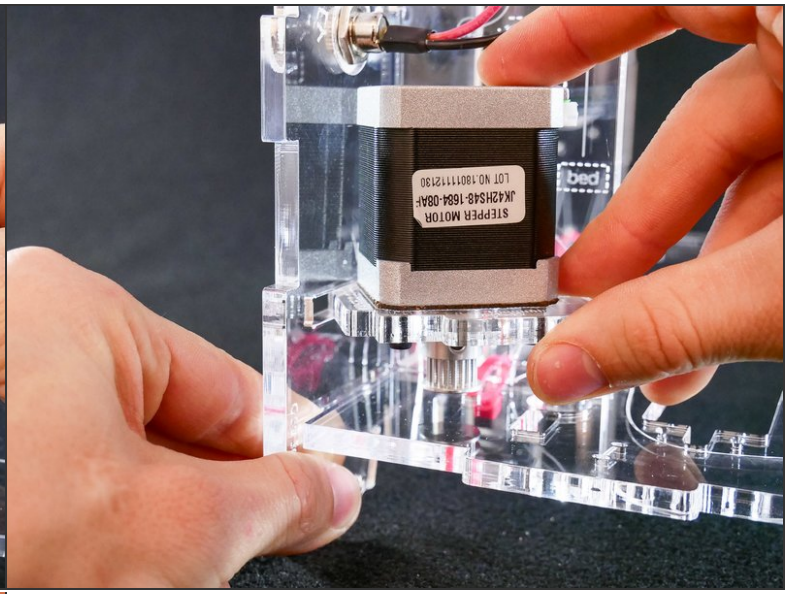
Step 15

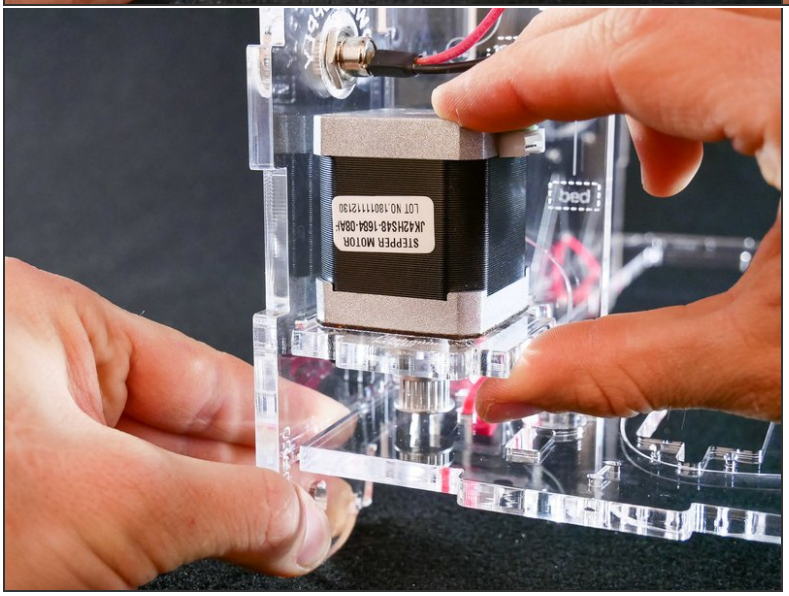




Step 16

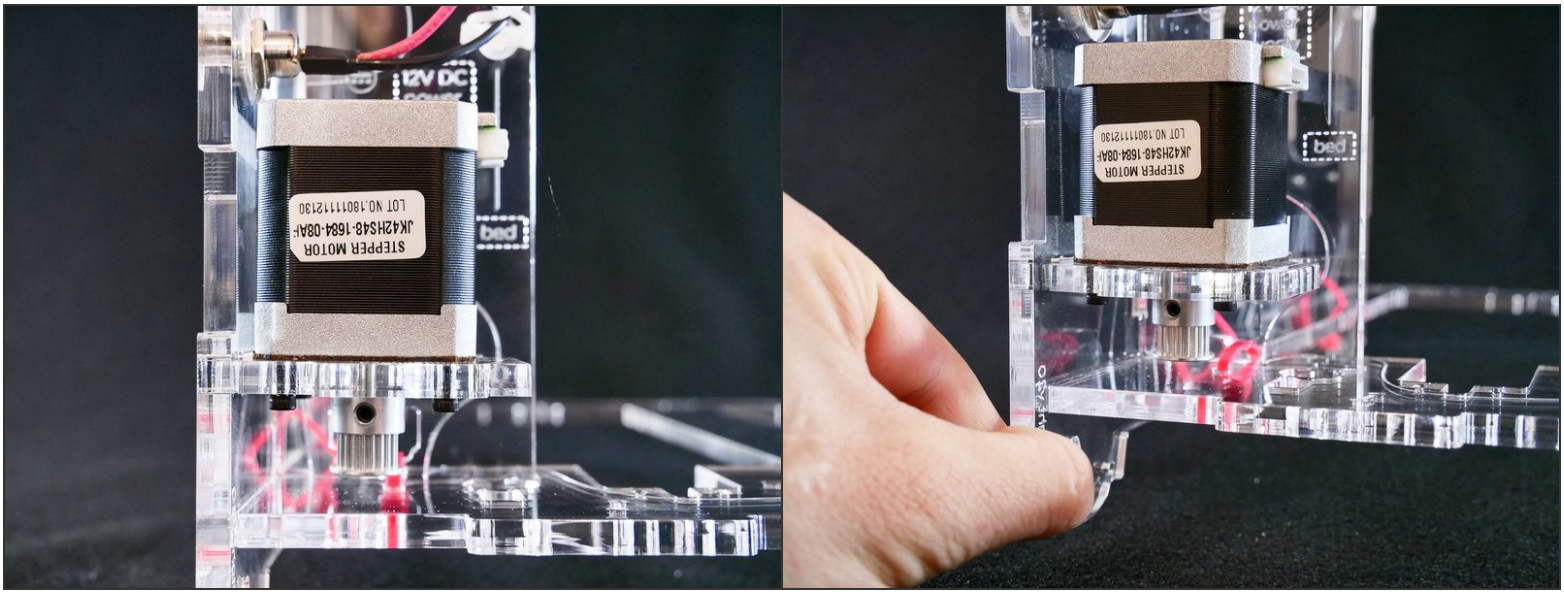






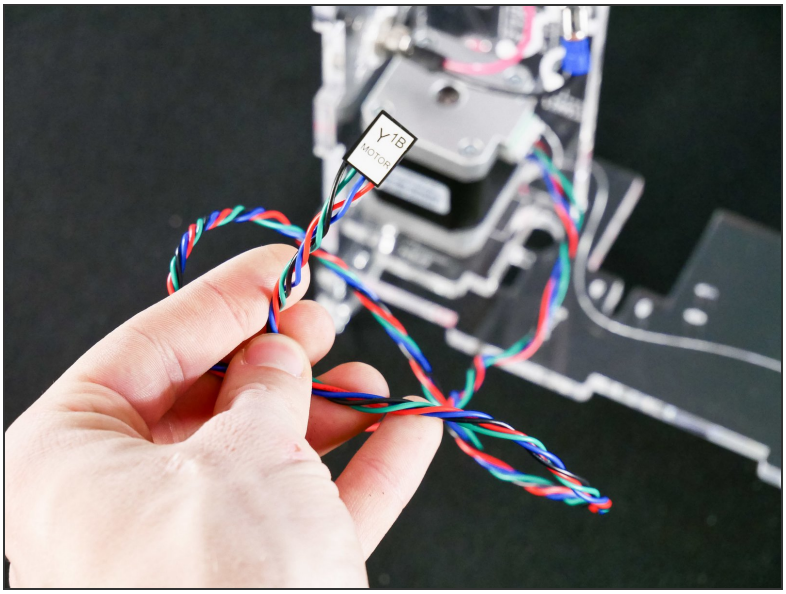
⚠ Point the motor connector towards **right**.

Step 17

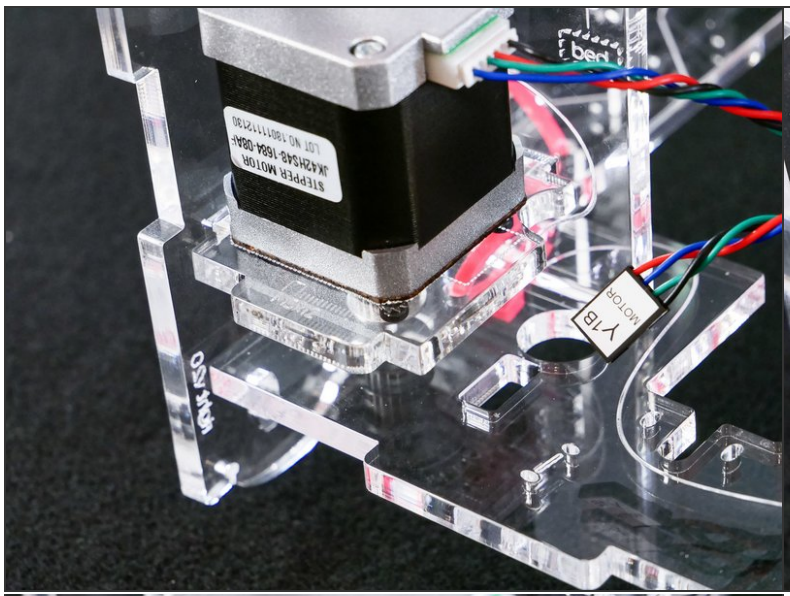


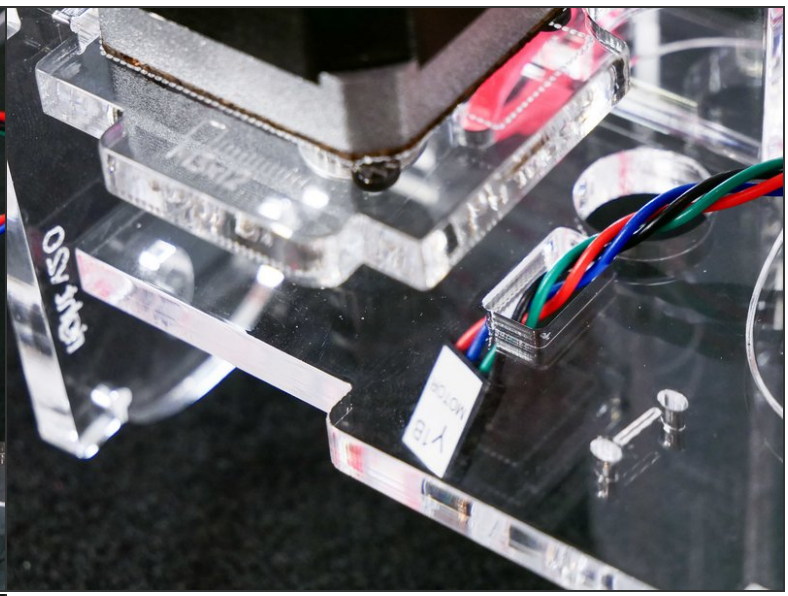
- Check ✓

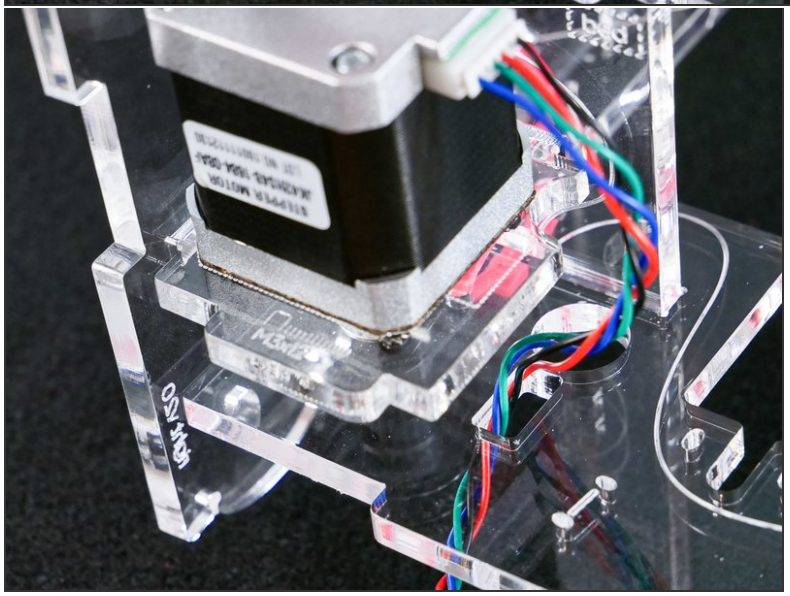
Step 18



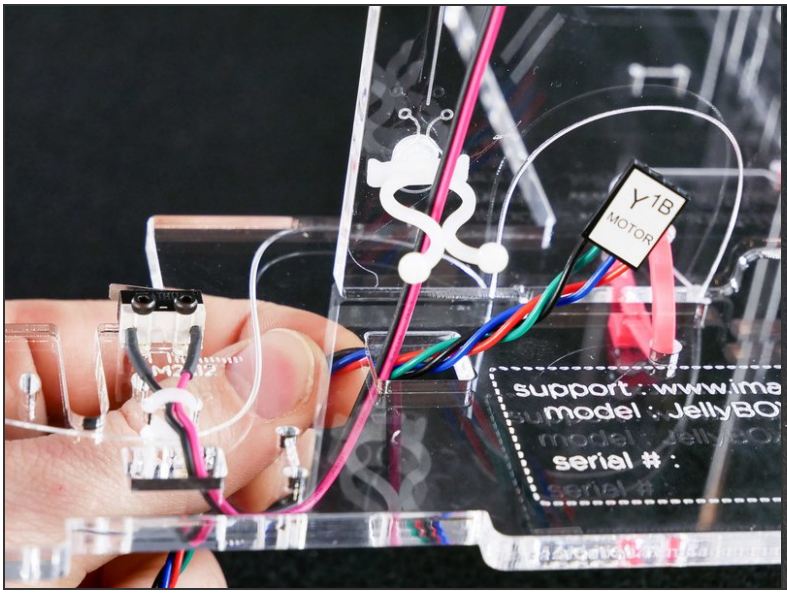
Step 19

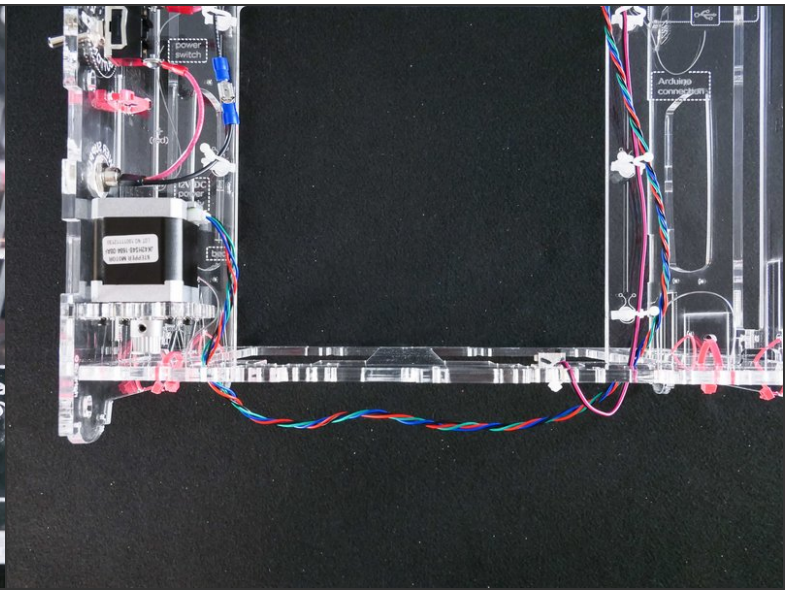




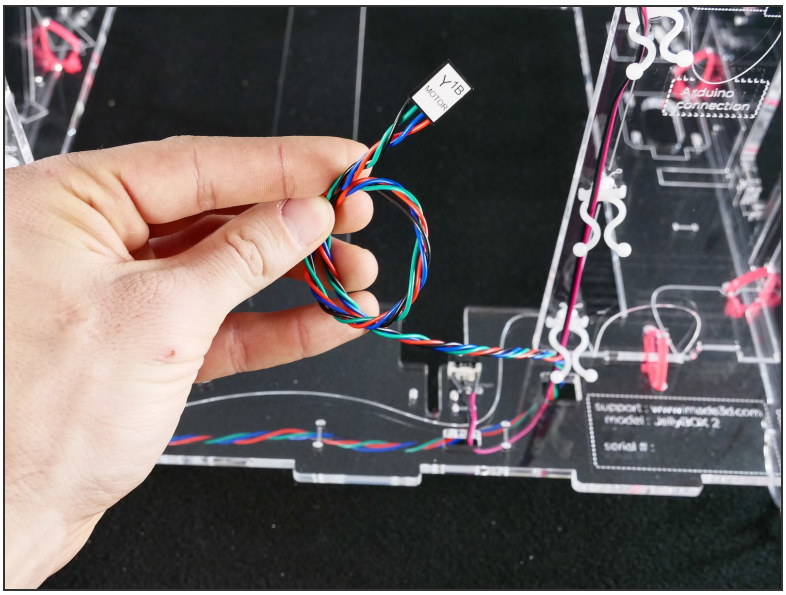


Step 20

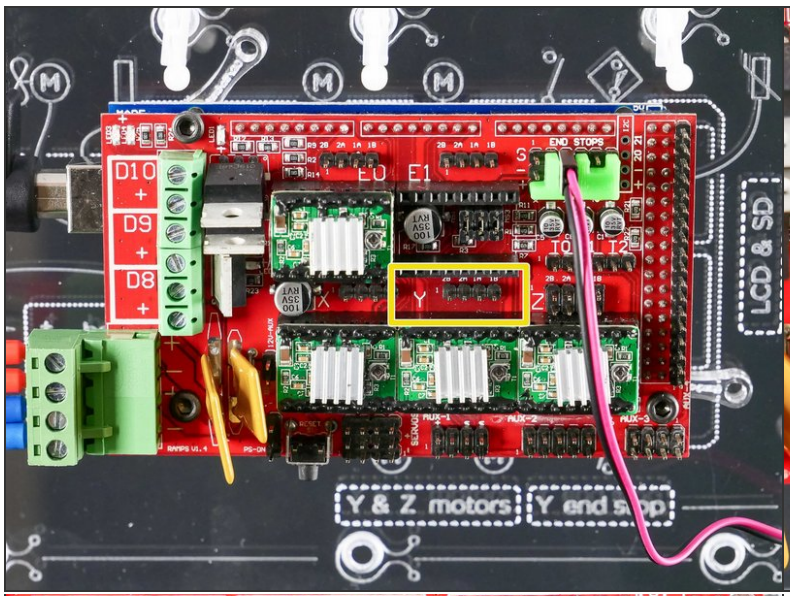


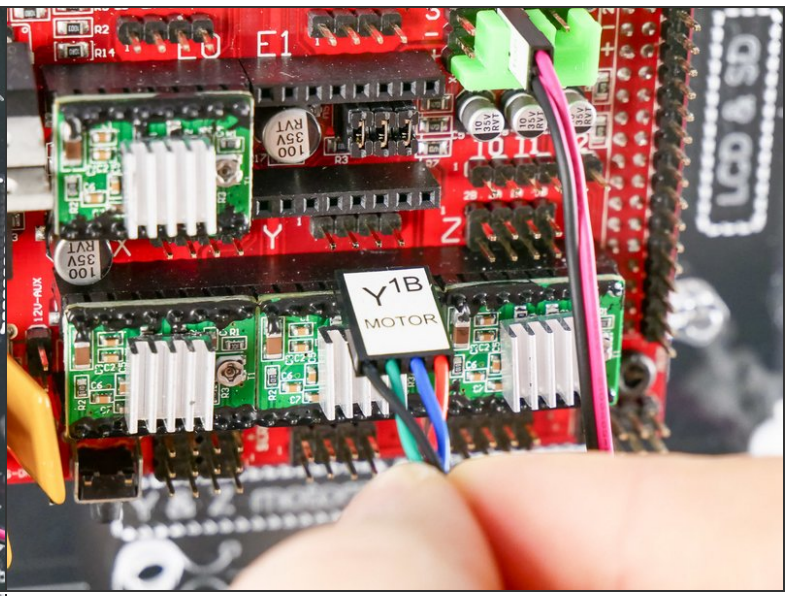


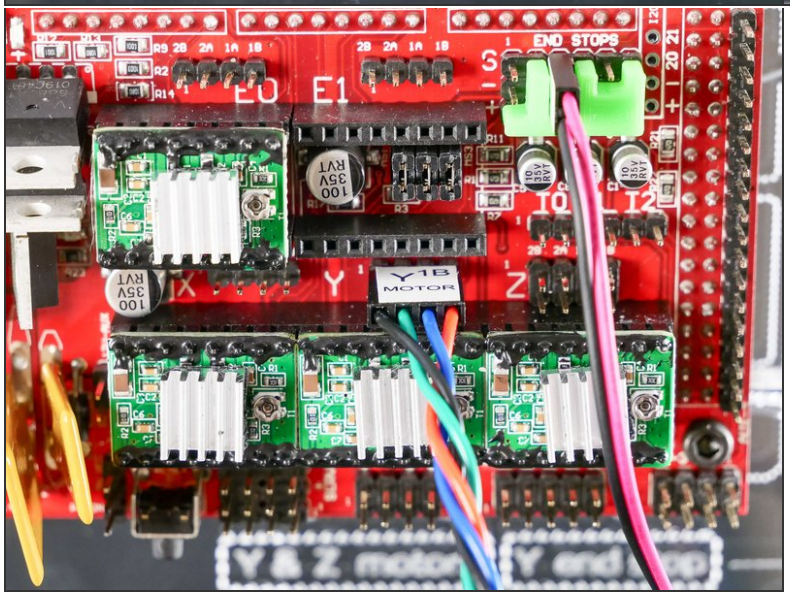
Step 21



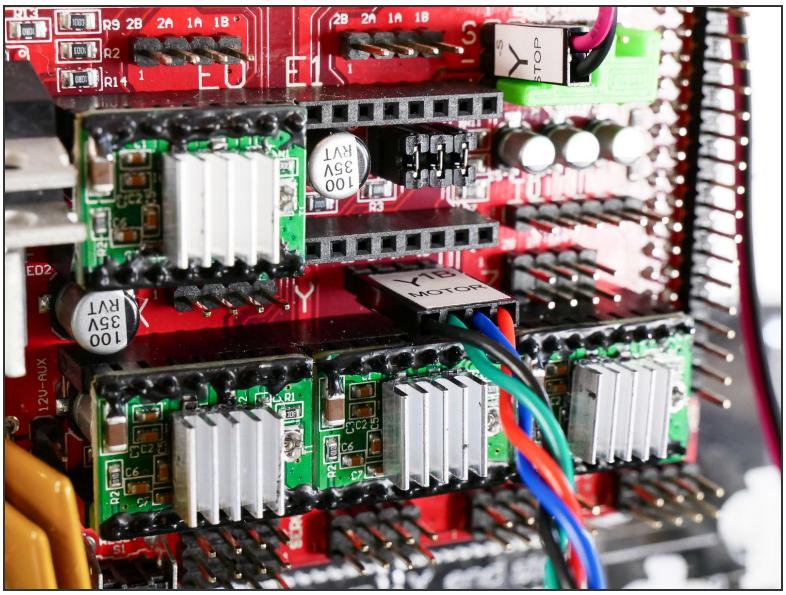
Step 22


D10
D9
D8
END STOPS
E0
E1
LCD & SD
Y & Z motors


Y1B
MOTOR

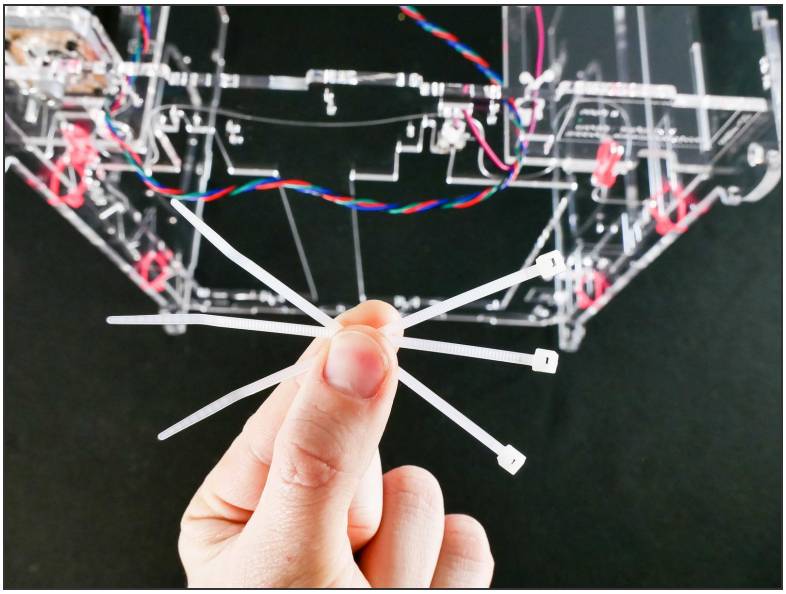

END STOPS
E0
E1
Y1B
MOTOR

Step 23

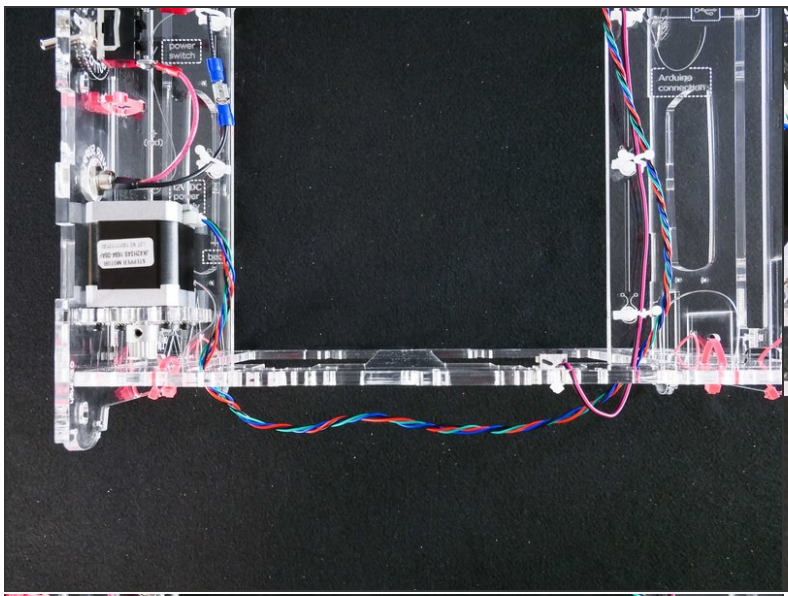


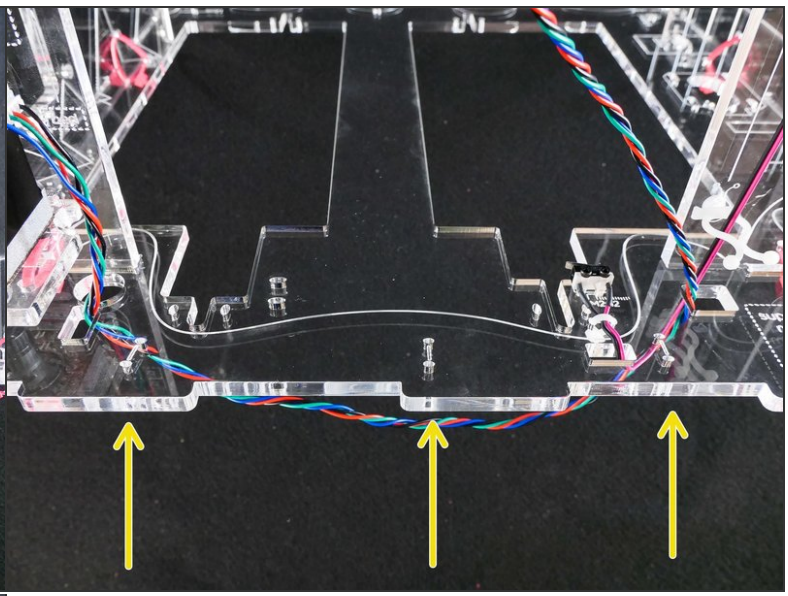
- Check ✓

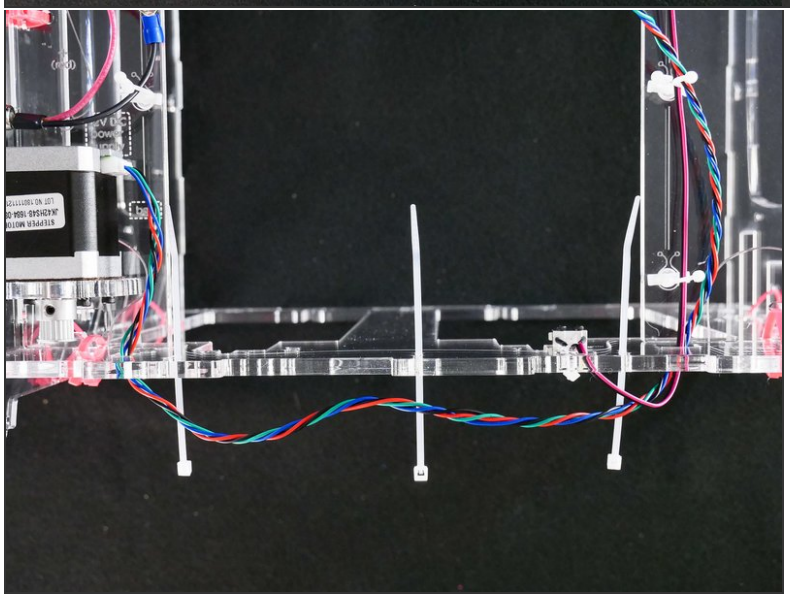
Step 24



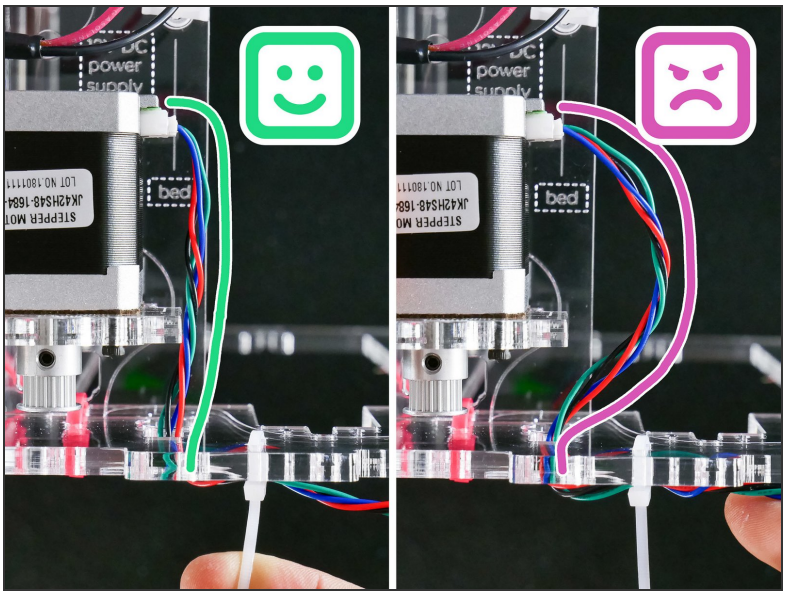
Step 25



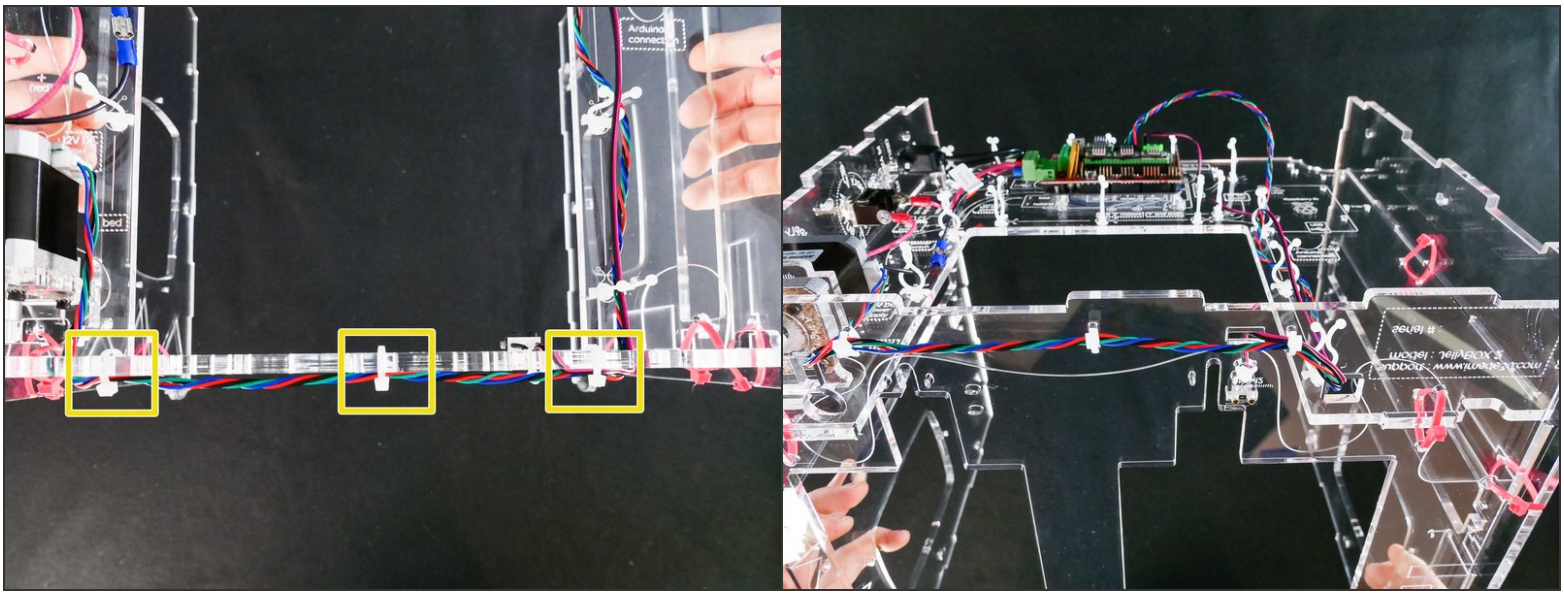




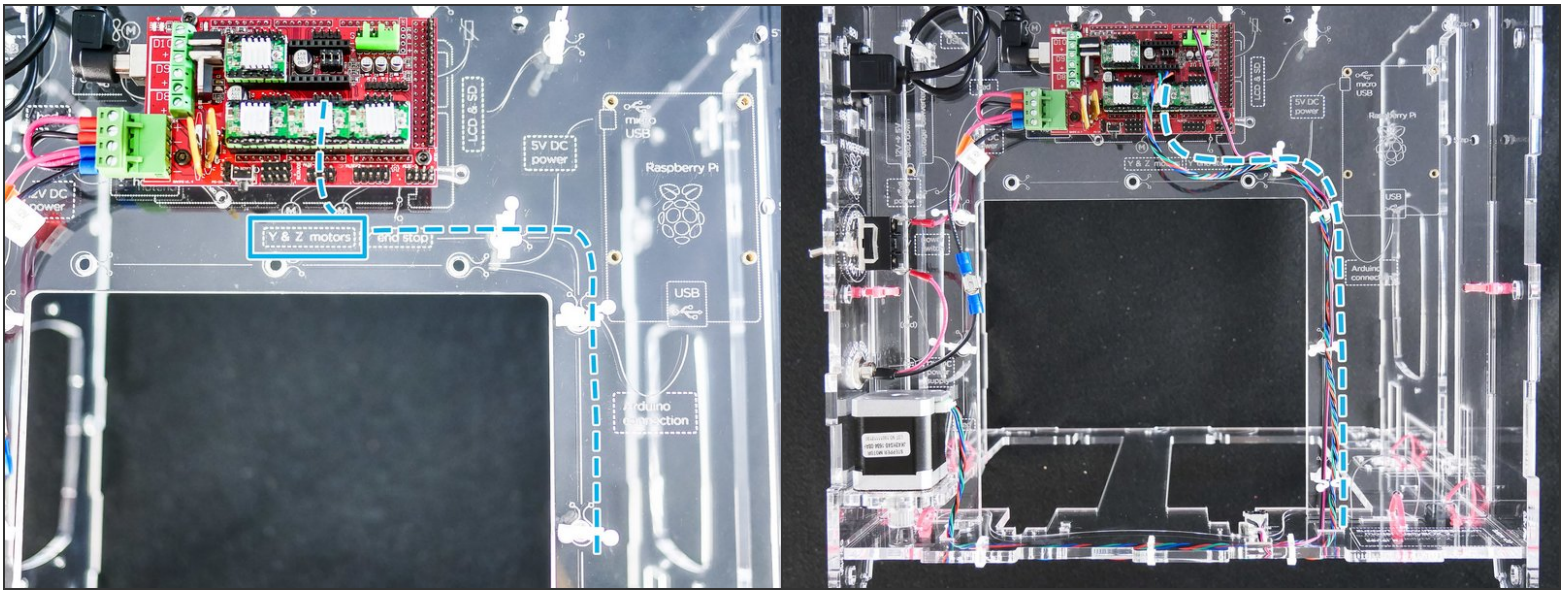
Step 26



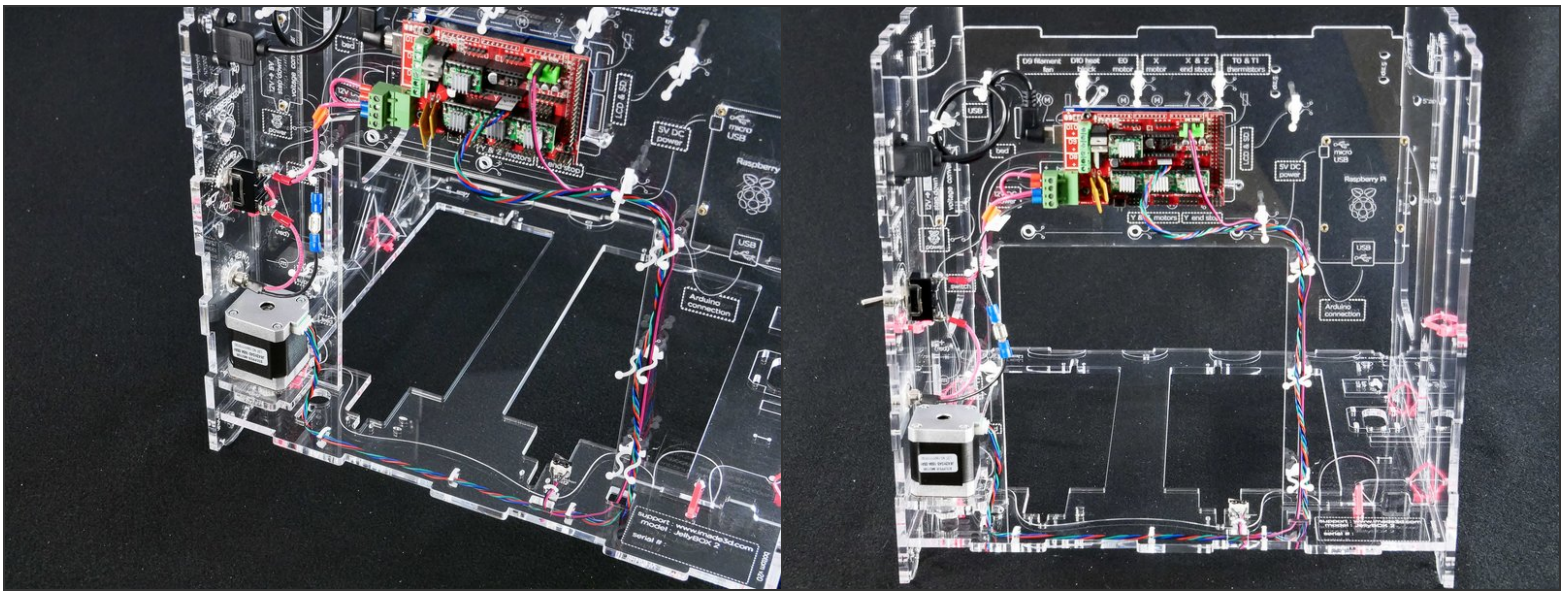
Step 27



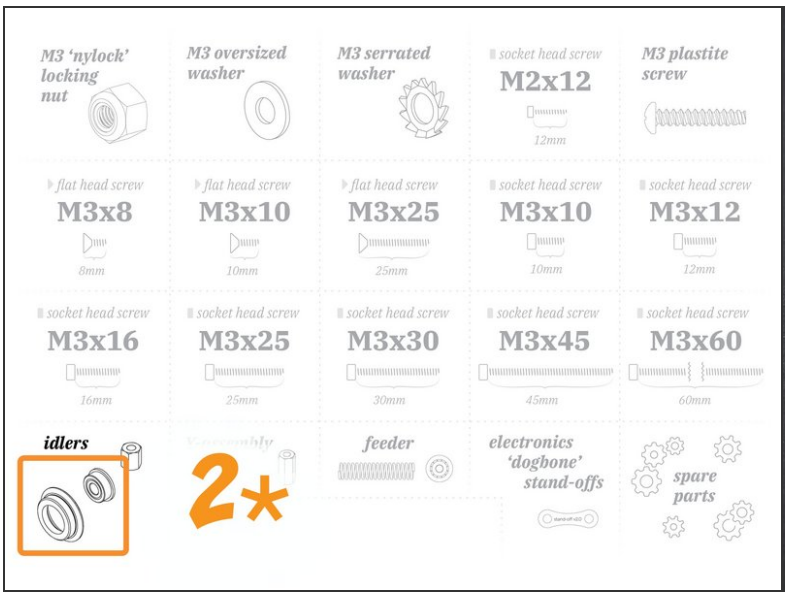
Step 28

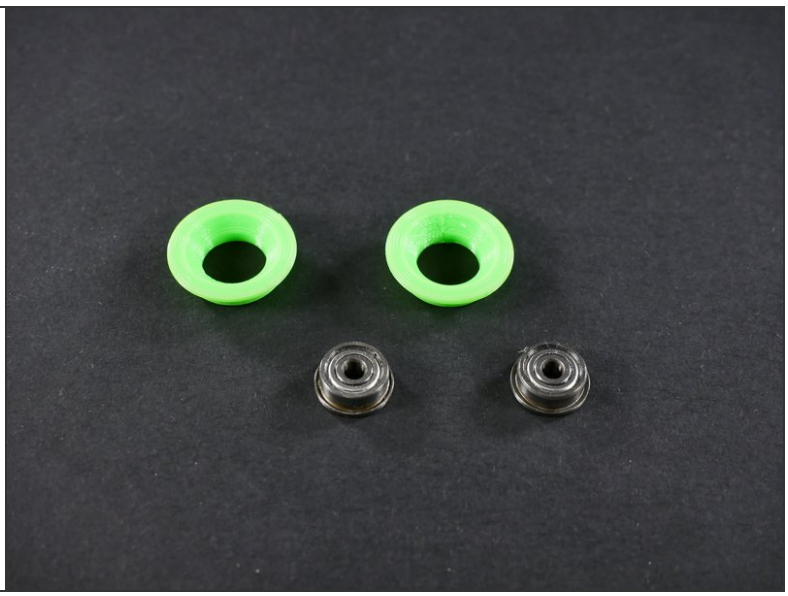


Step 29 — Looking good!

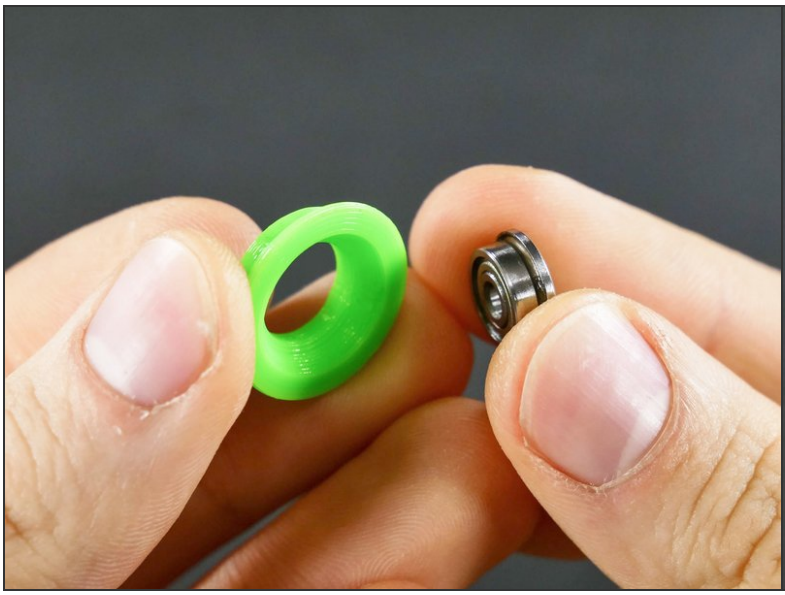


Step 30 — ↳ Prep an Idler



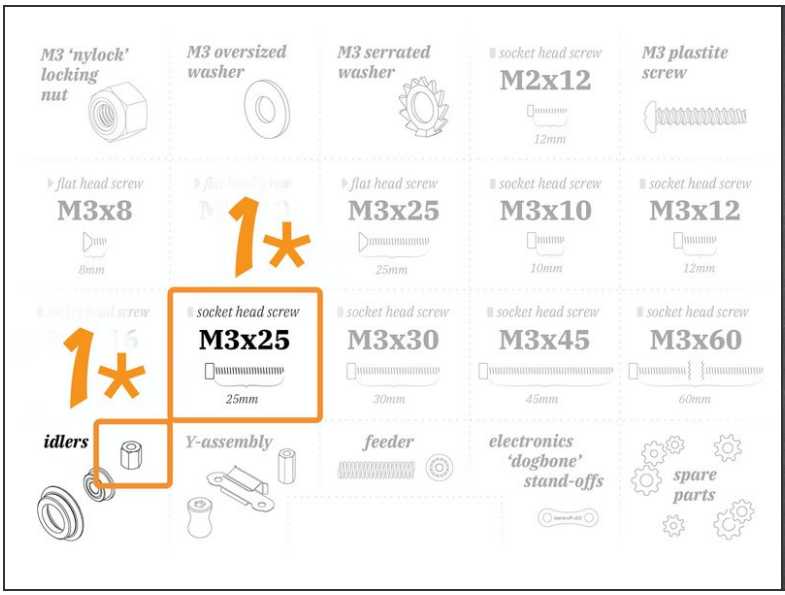


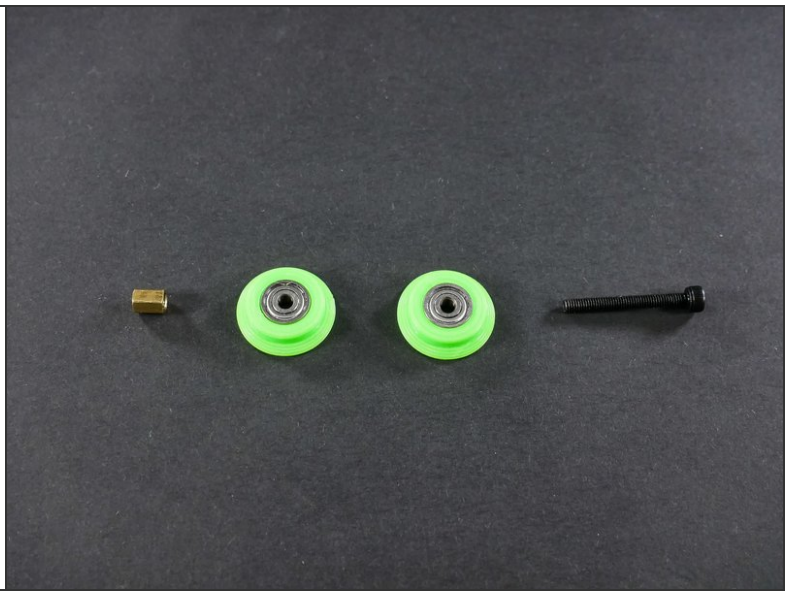
Step 31



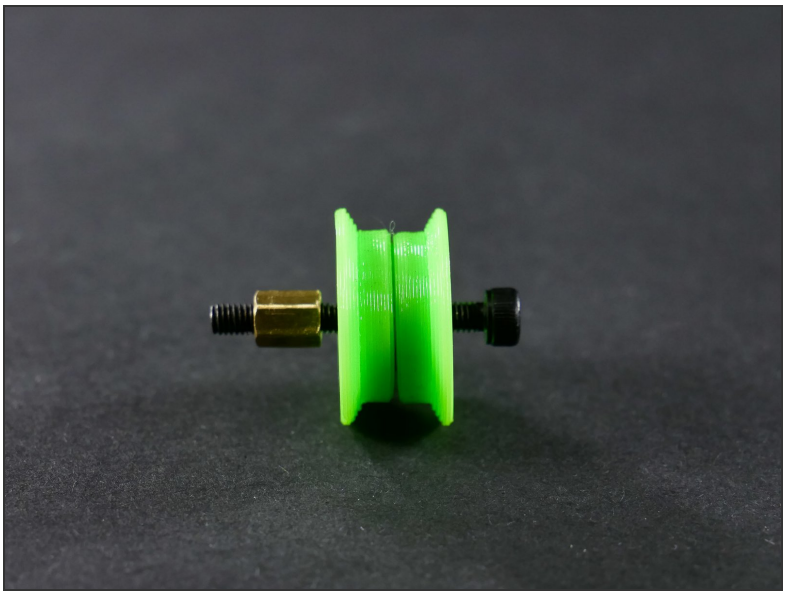
Step 32

Step 33

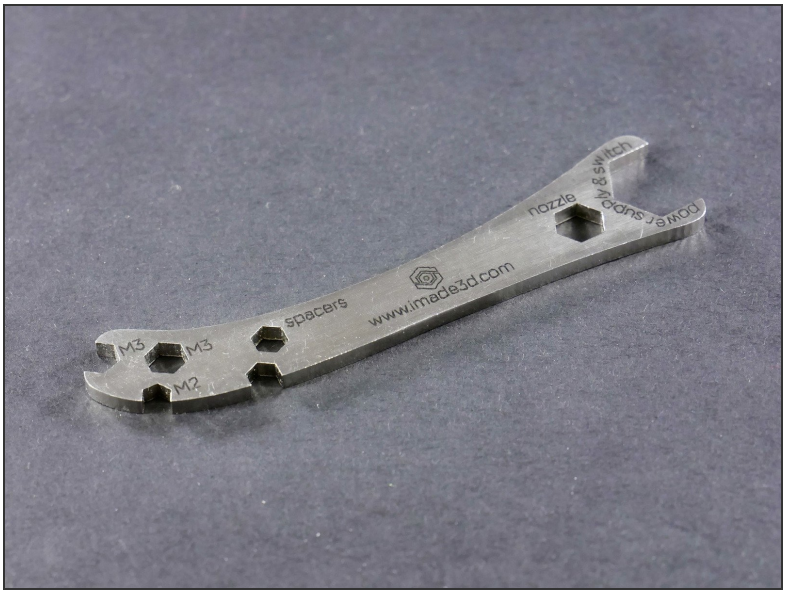




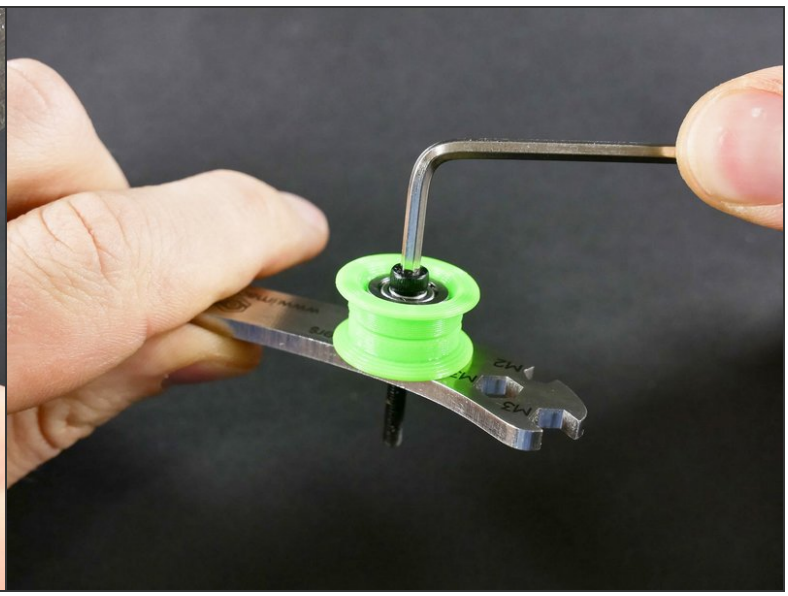
Step 34



Step 35



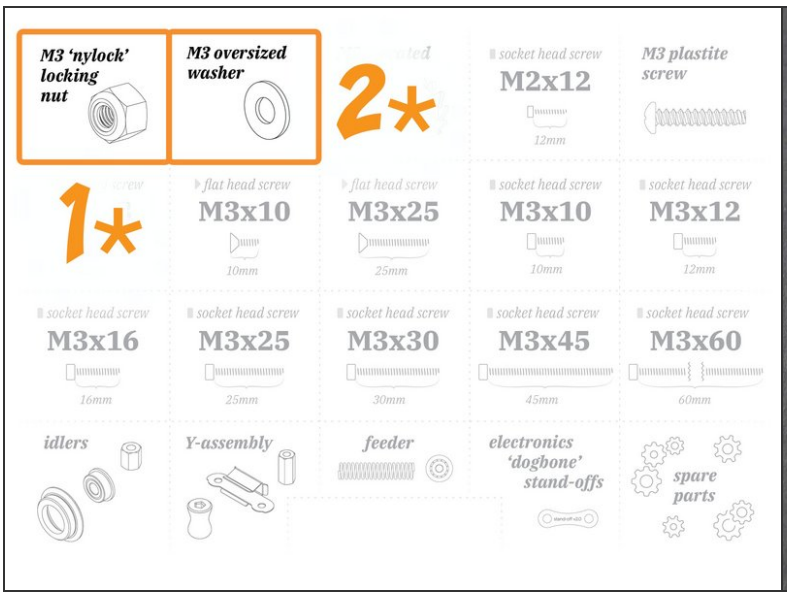
Step 36

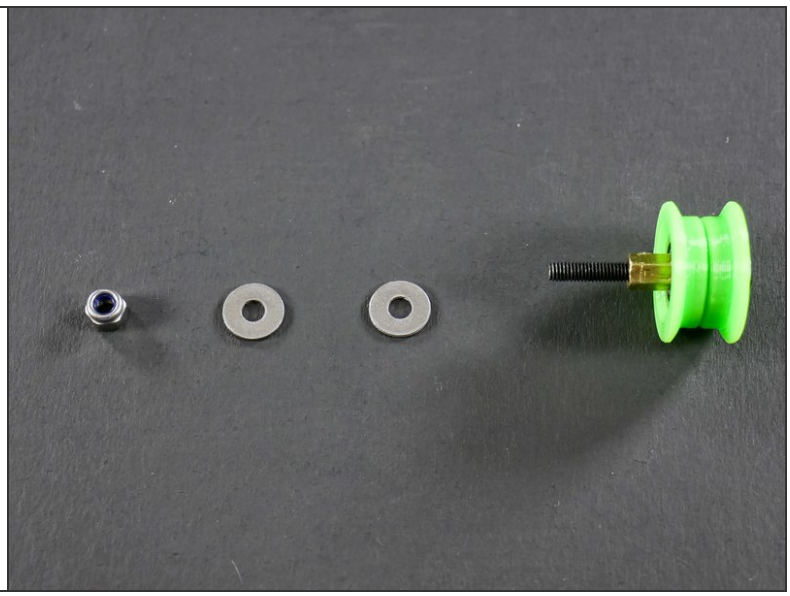


- Tighten well.
  - This is metal-on-metal tightening, so you do not have to be as gentle as usual.

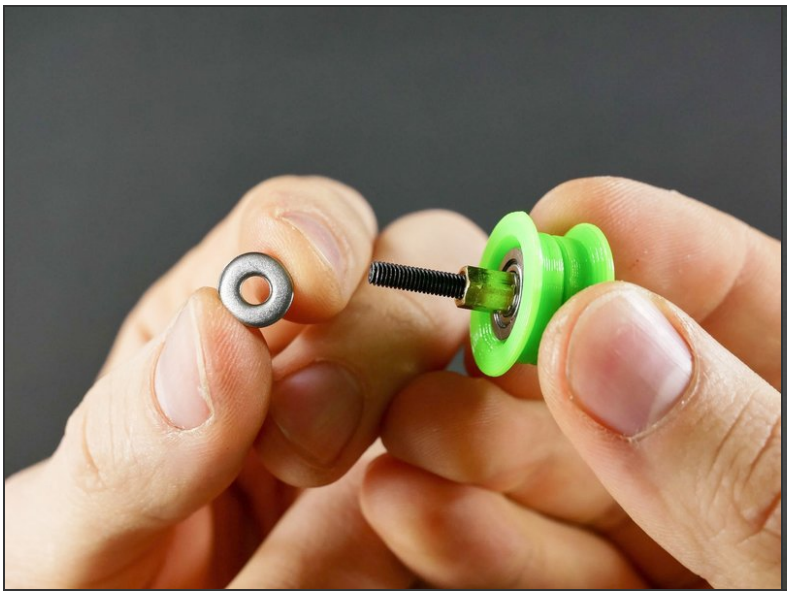
Step 37 — Looking good!

Step 38 — ↳ Install the Y Idler

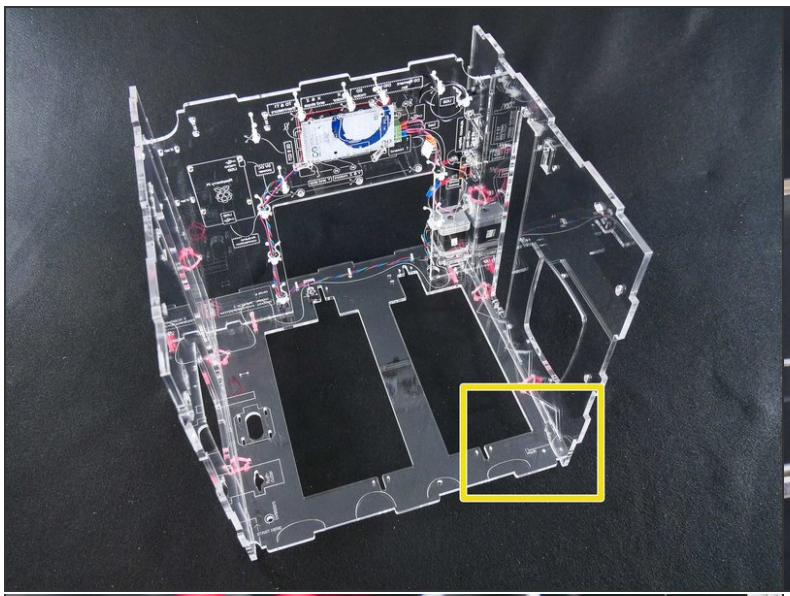


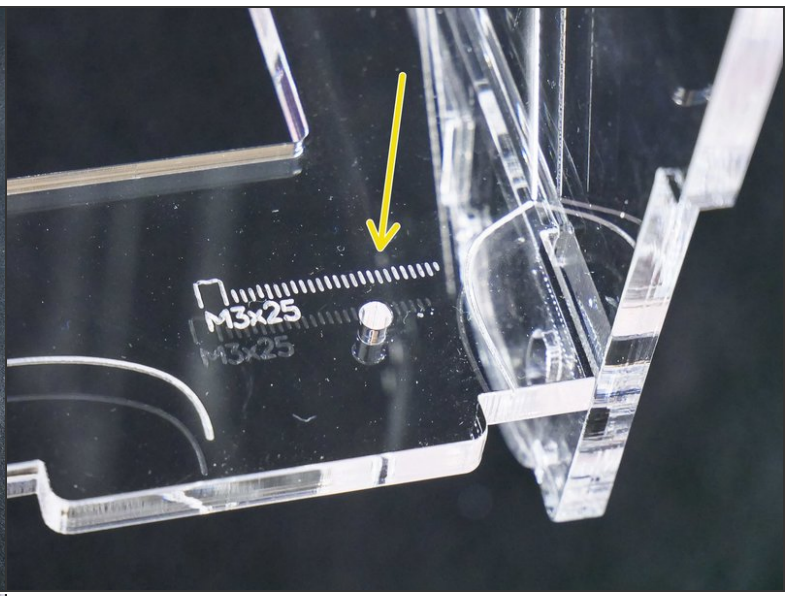


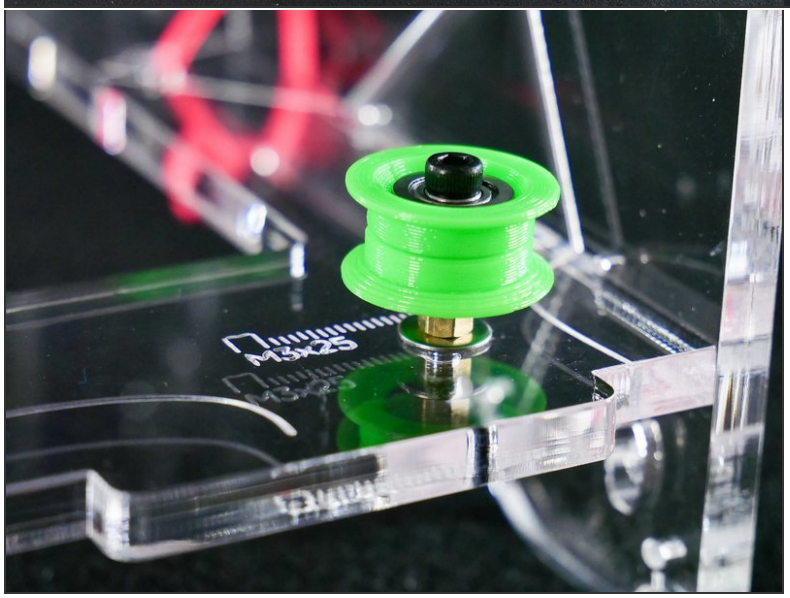
Step 39



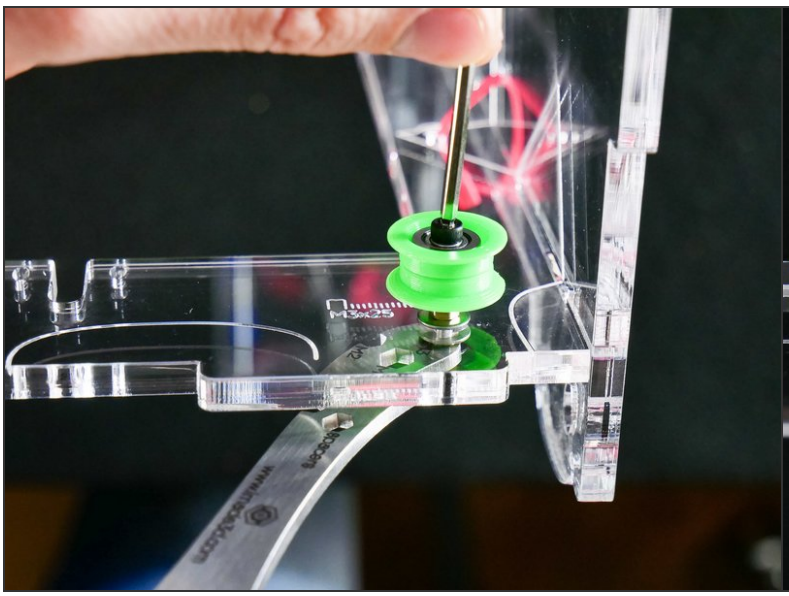
Step 40

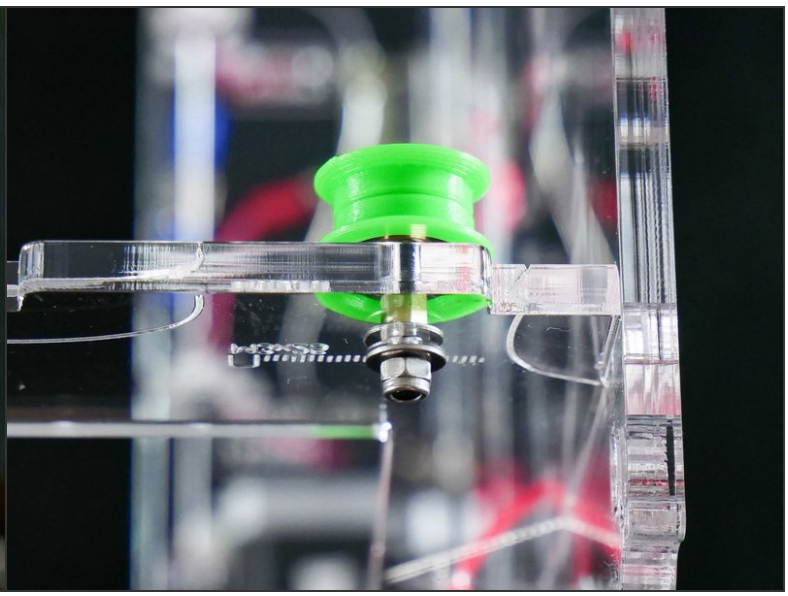




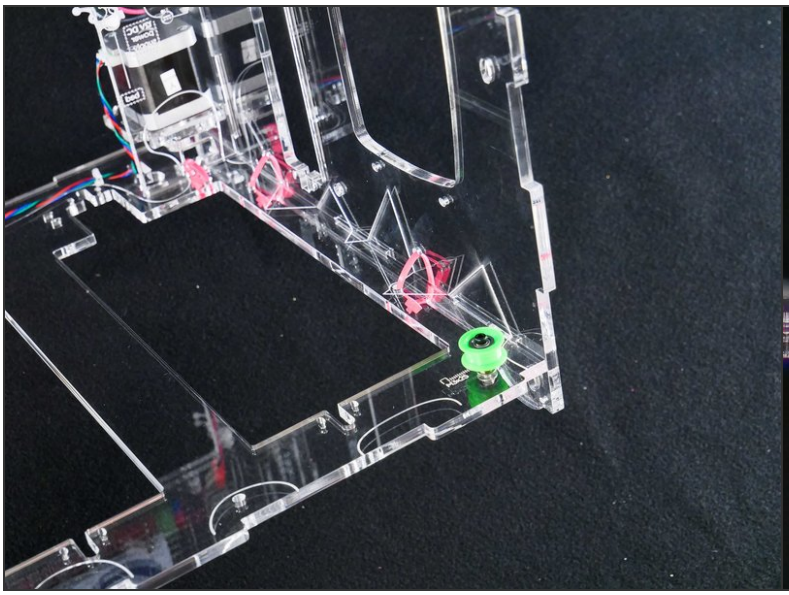


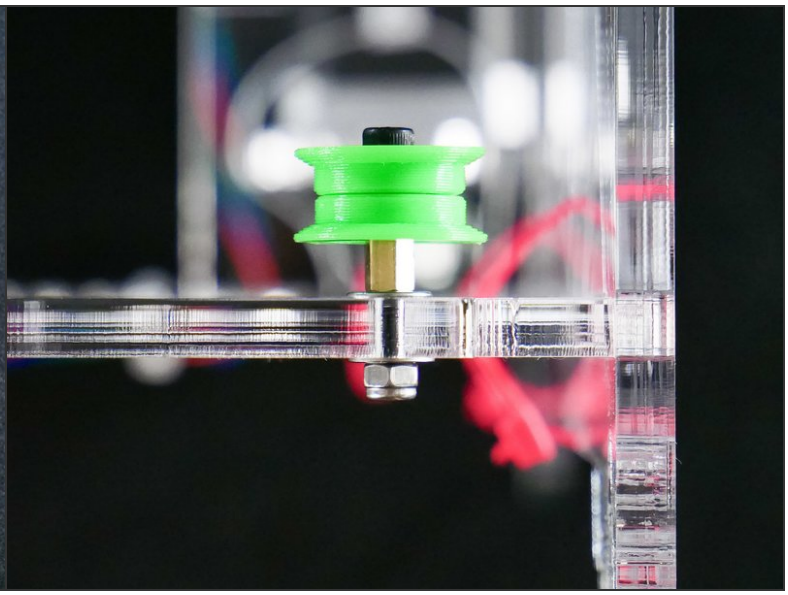
Step 41





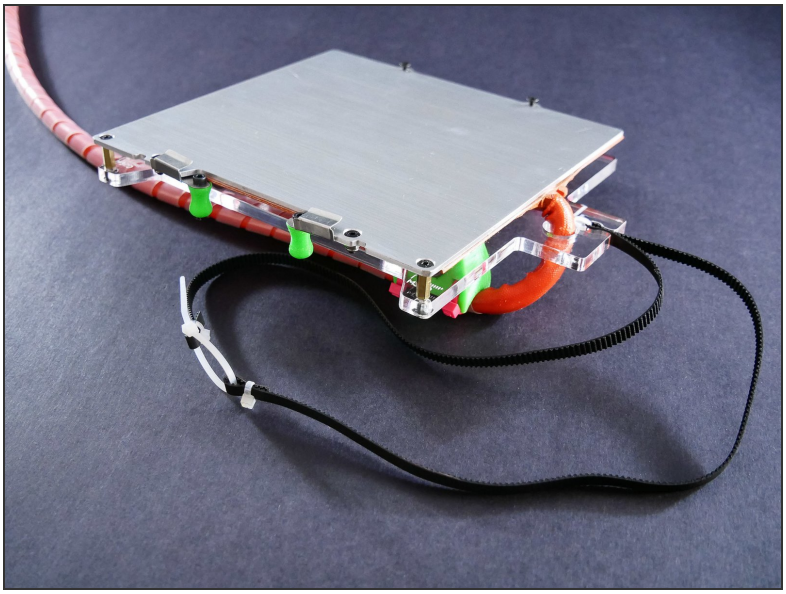
Step 42 — Looking good!



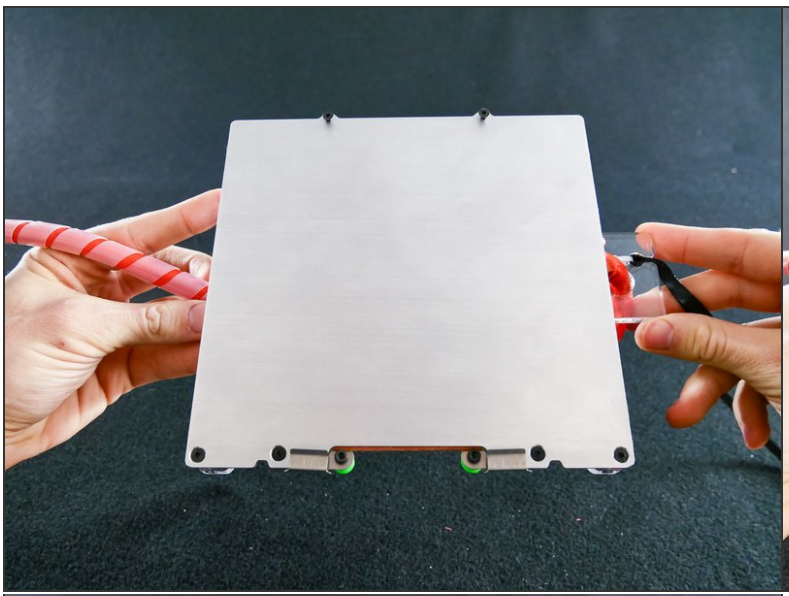


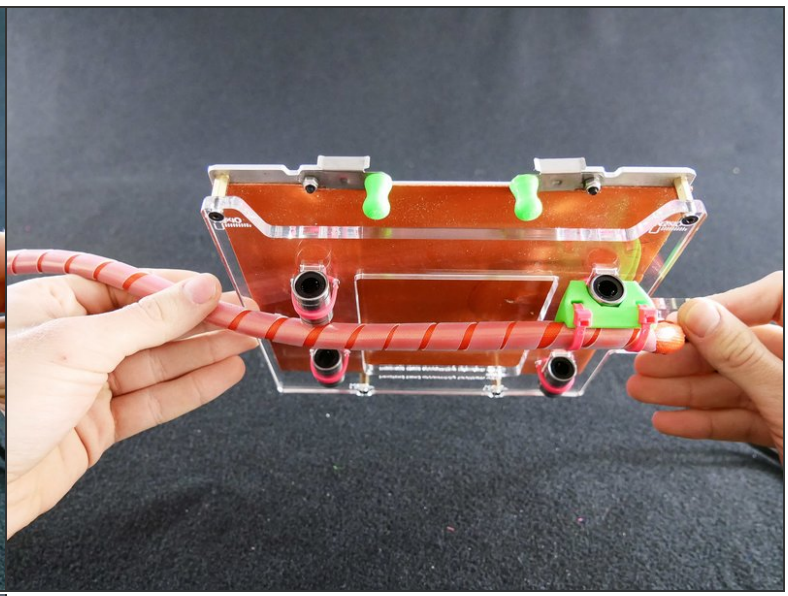
Step 43 — ↳ Insert the Heated Y Assembly

Step 44

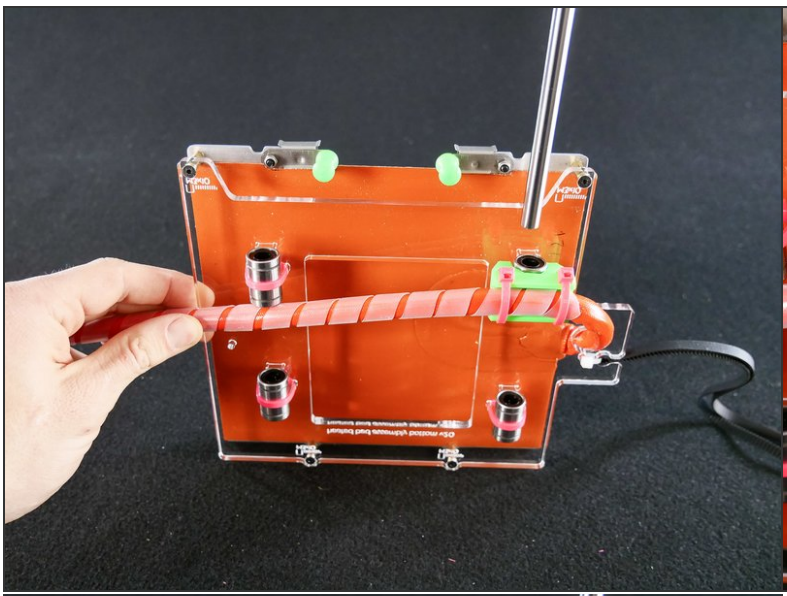


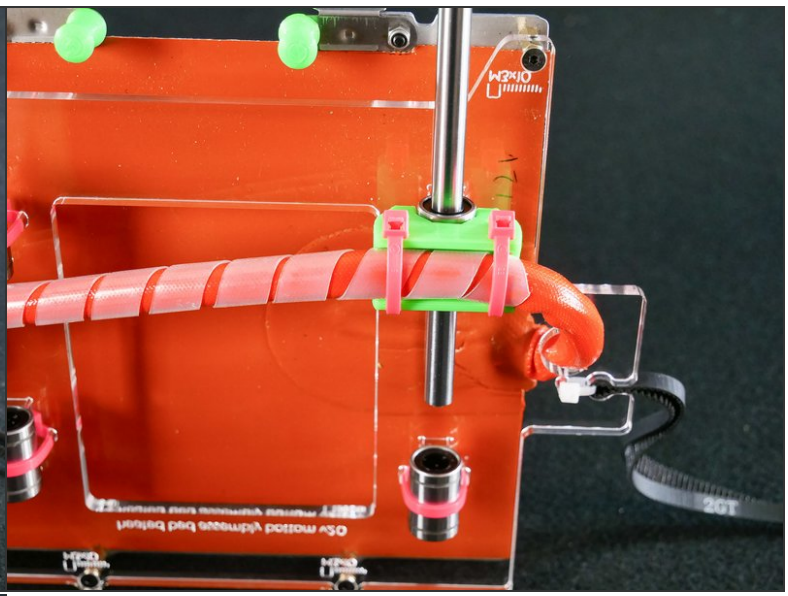
Step 45

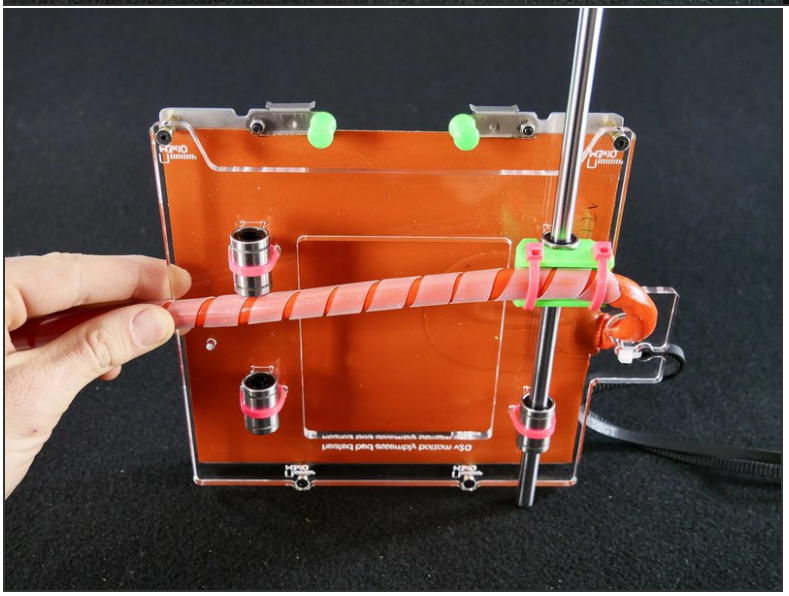




Step 46

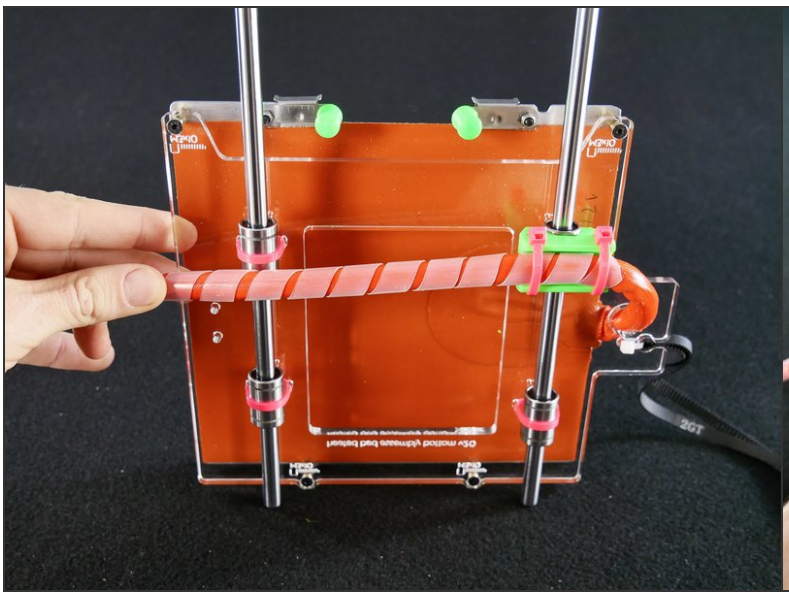


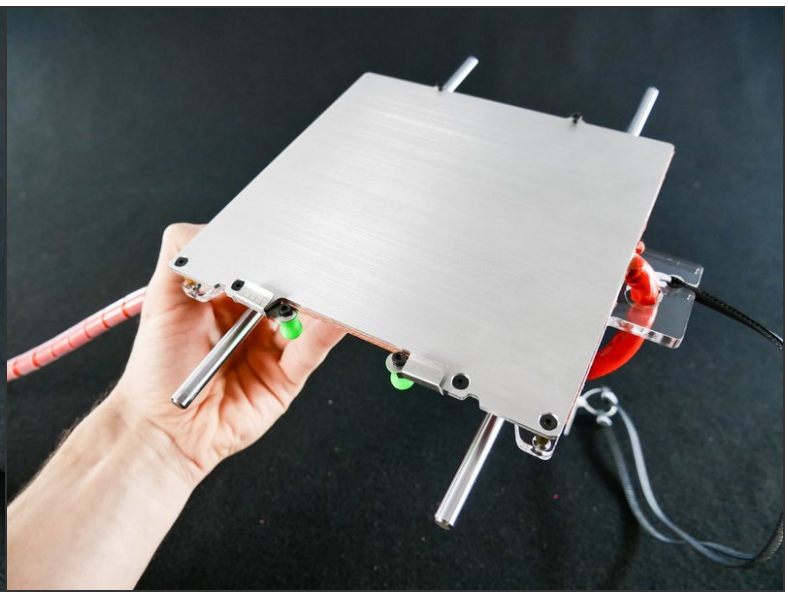




⚠ Be **gentle**. Do no force the rods and keep them straight or*you may damage the ball bearing by knocking some balls out.*

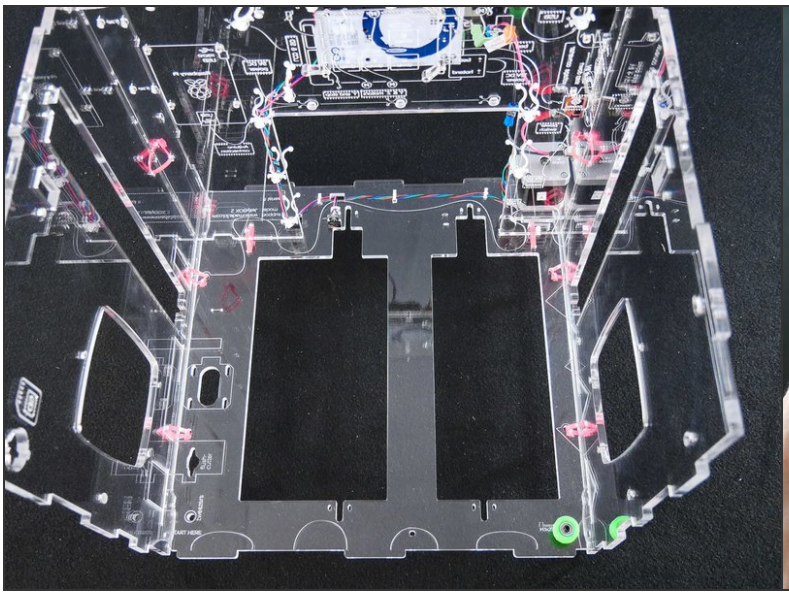
Step 47

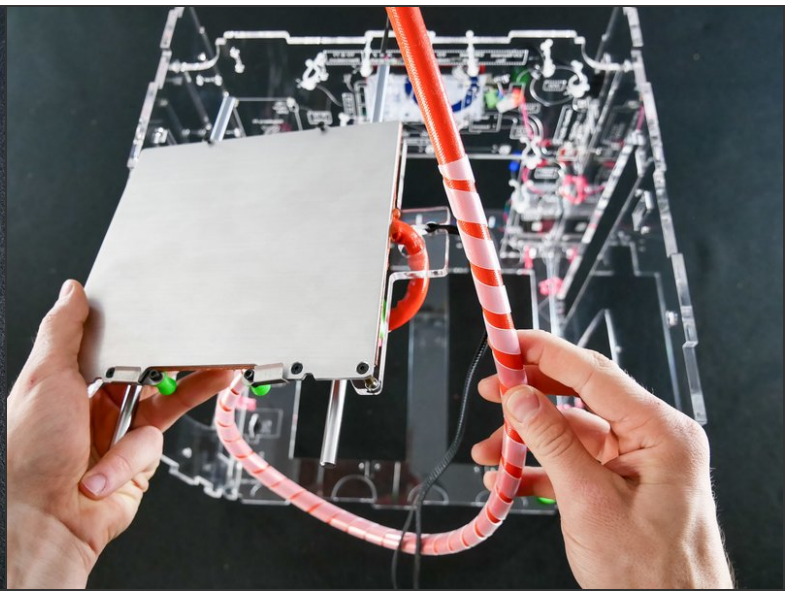




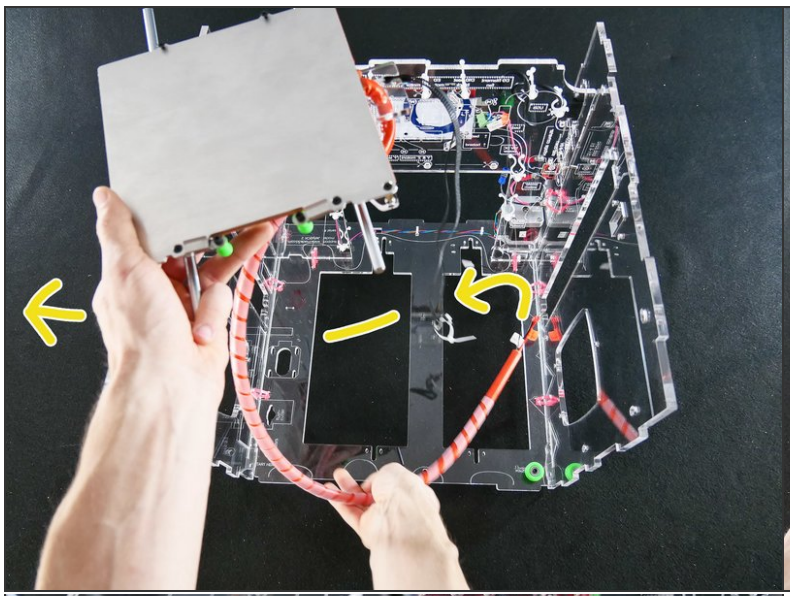
- Check ✓

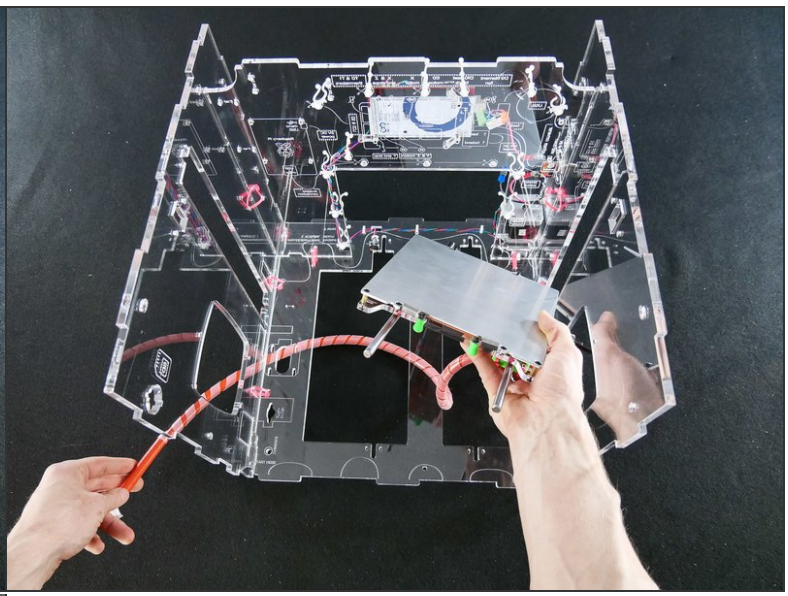
Step 48

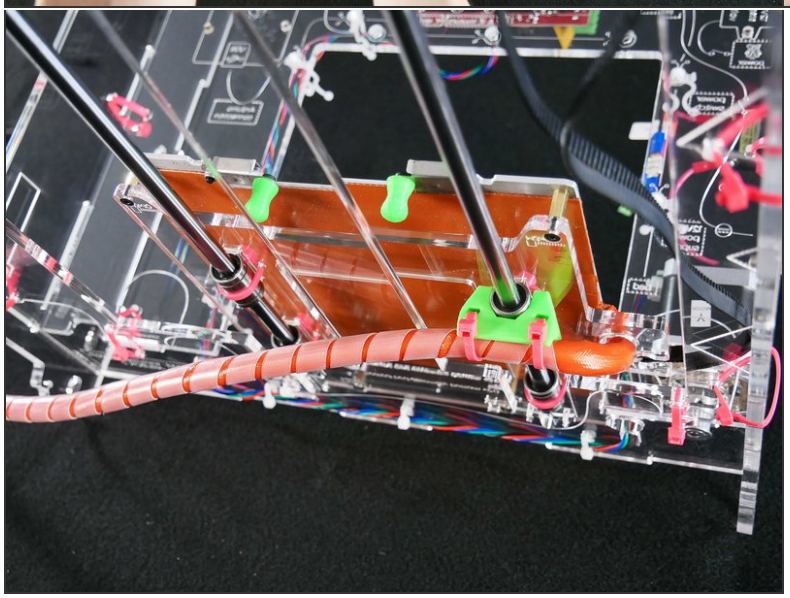




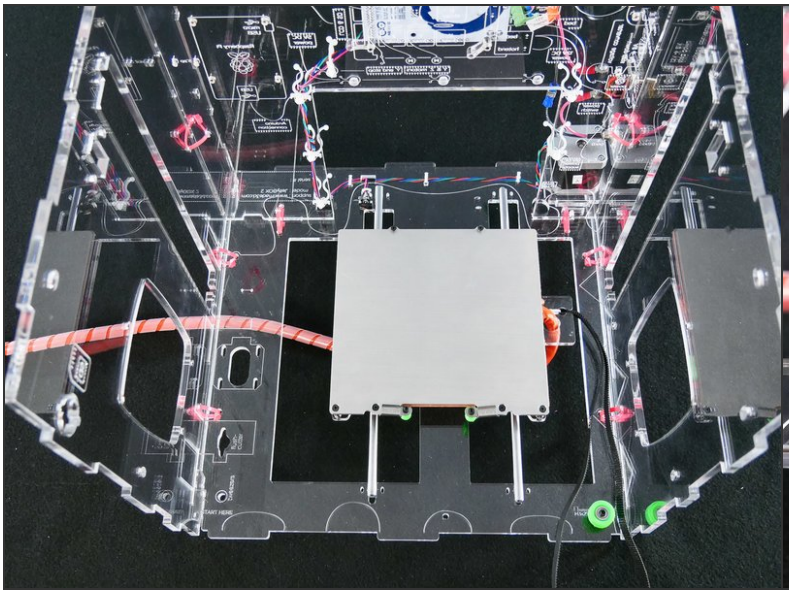
Step 49

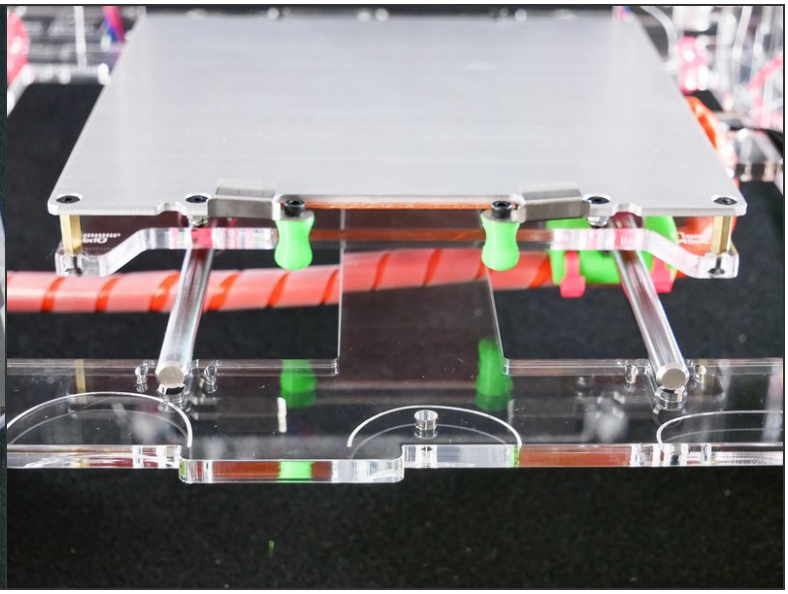




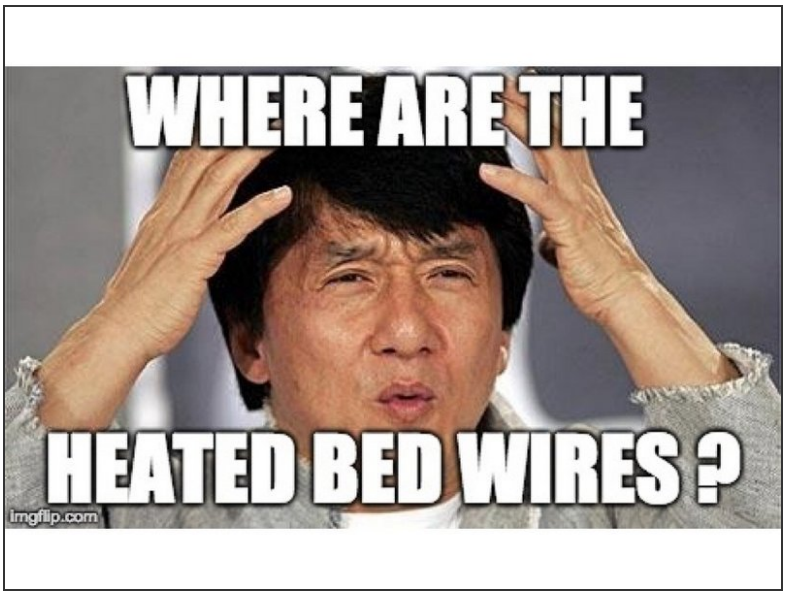


Step 50



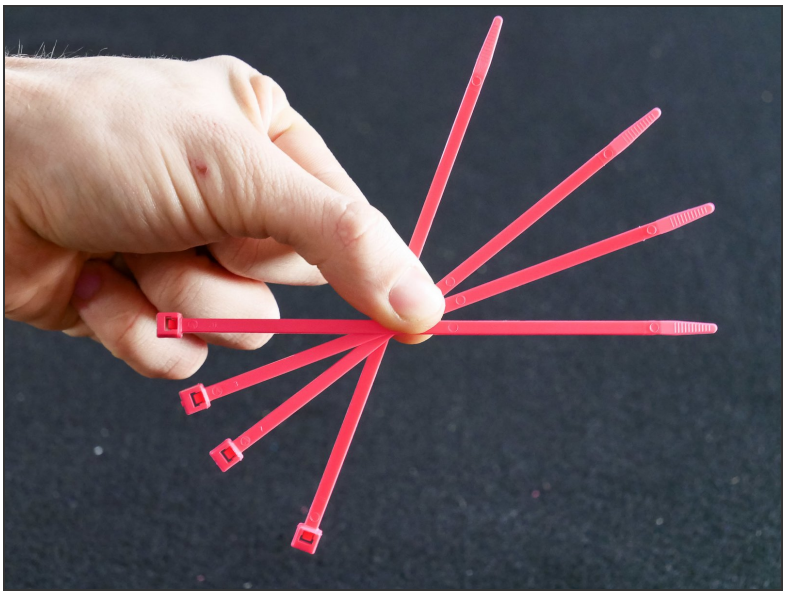


Step 51

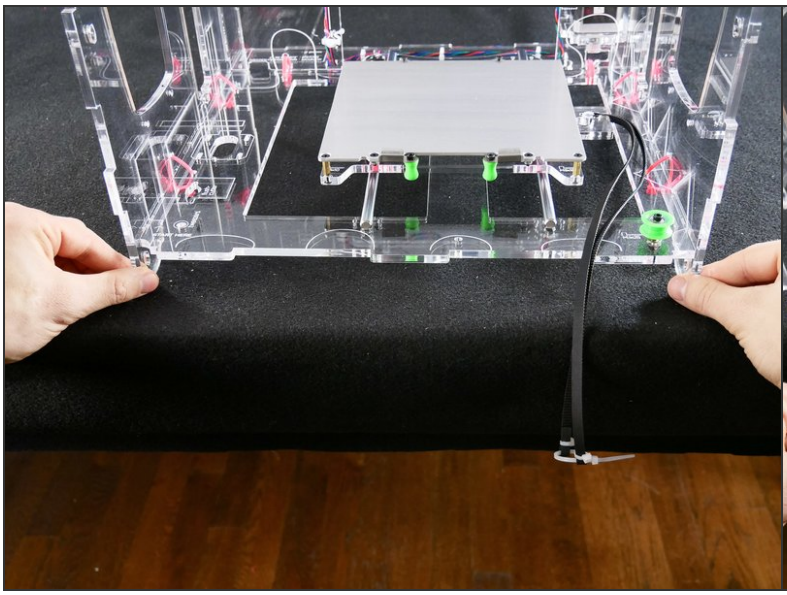


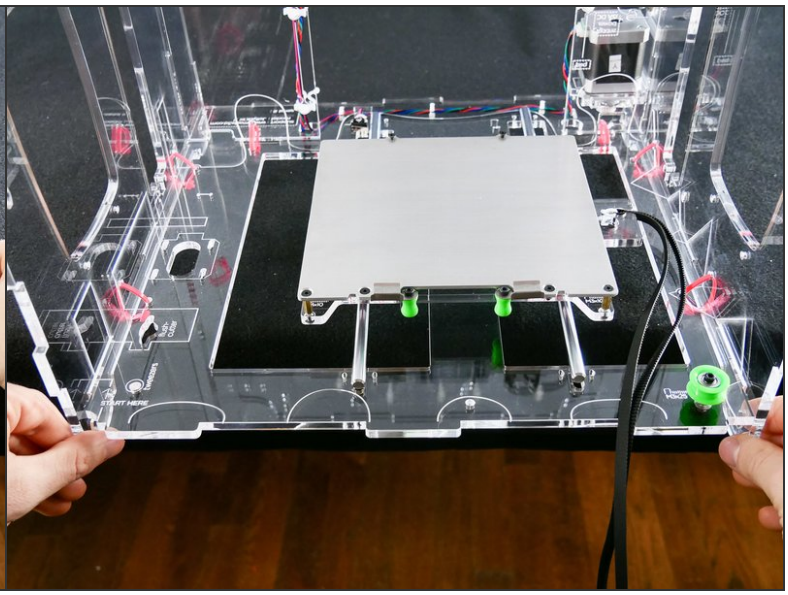
⚠ The photos until the end of the guide mostly feature *cold bed*. This means you will often not see the bed wires. Don't worry. Any time the **heated bed** instructions differ, it will be noted.

Step 52



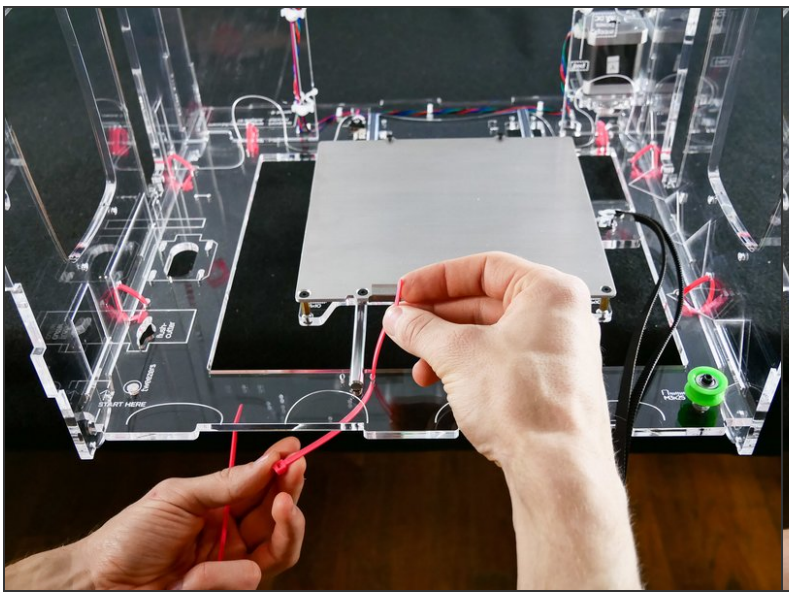
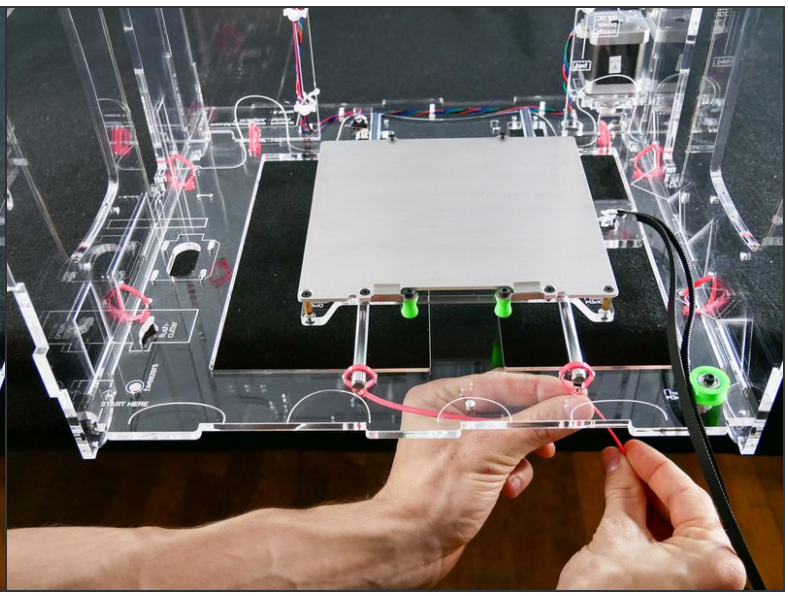
Step 53



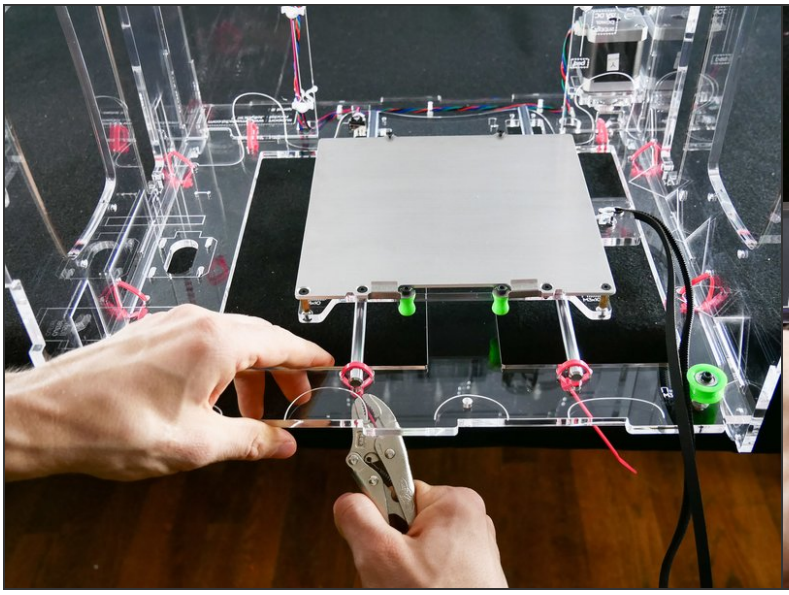
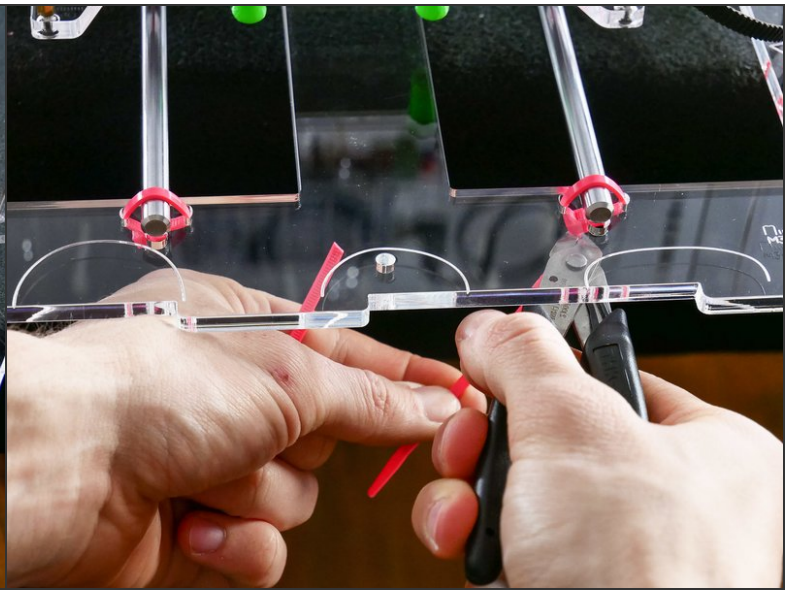


- Place your JellyBOX over the edge of a table.

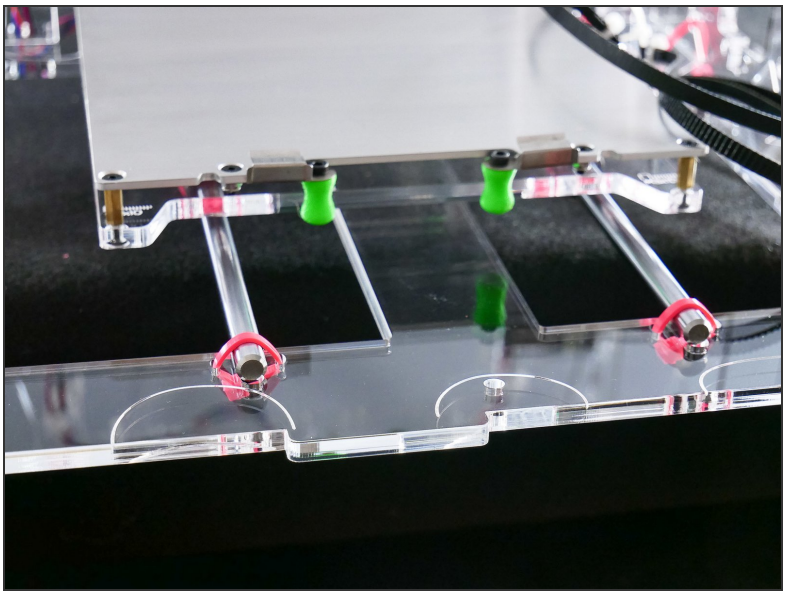
Step 54

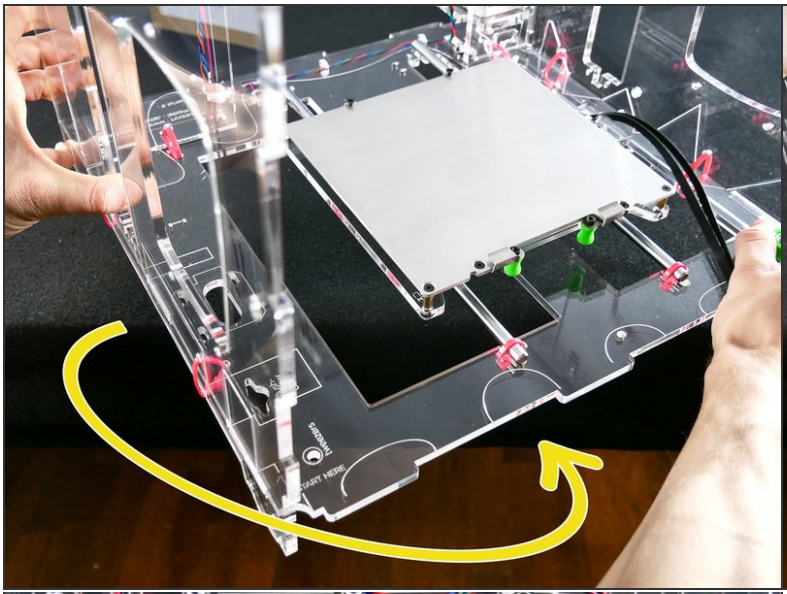
Step 55

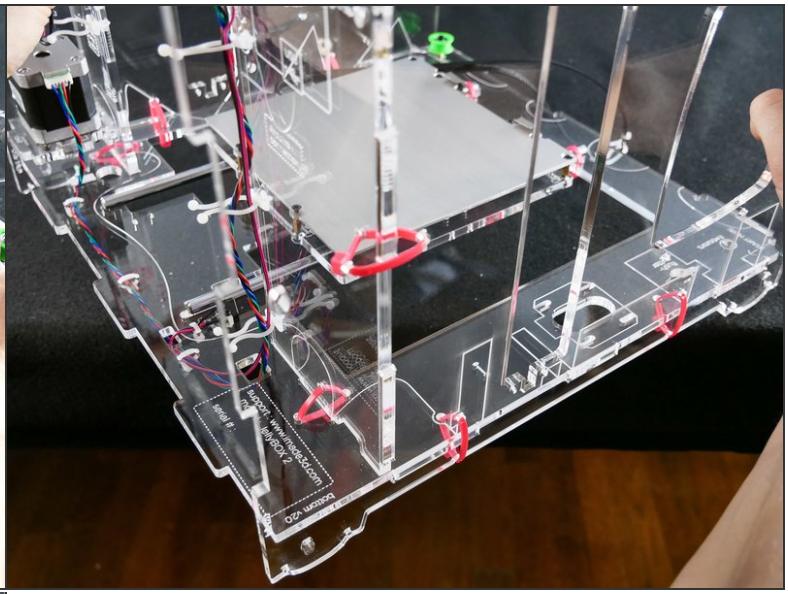



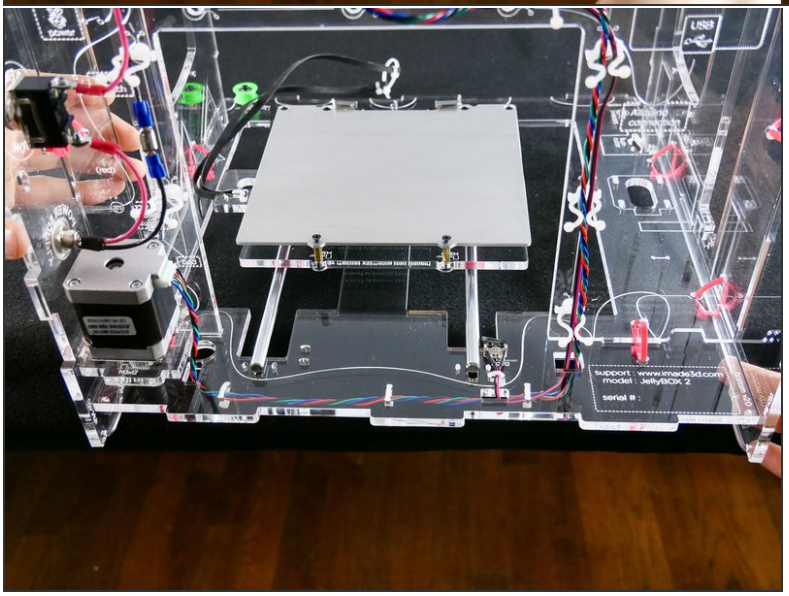
Step 56



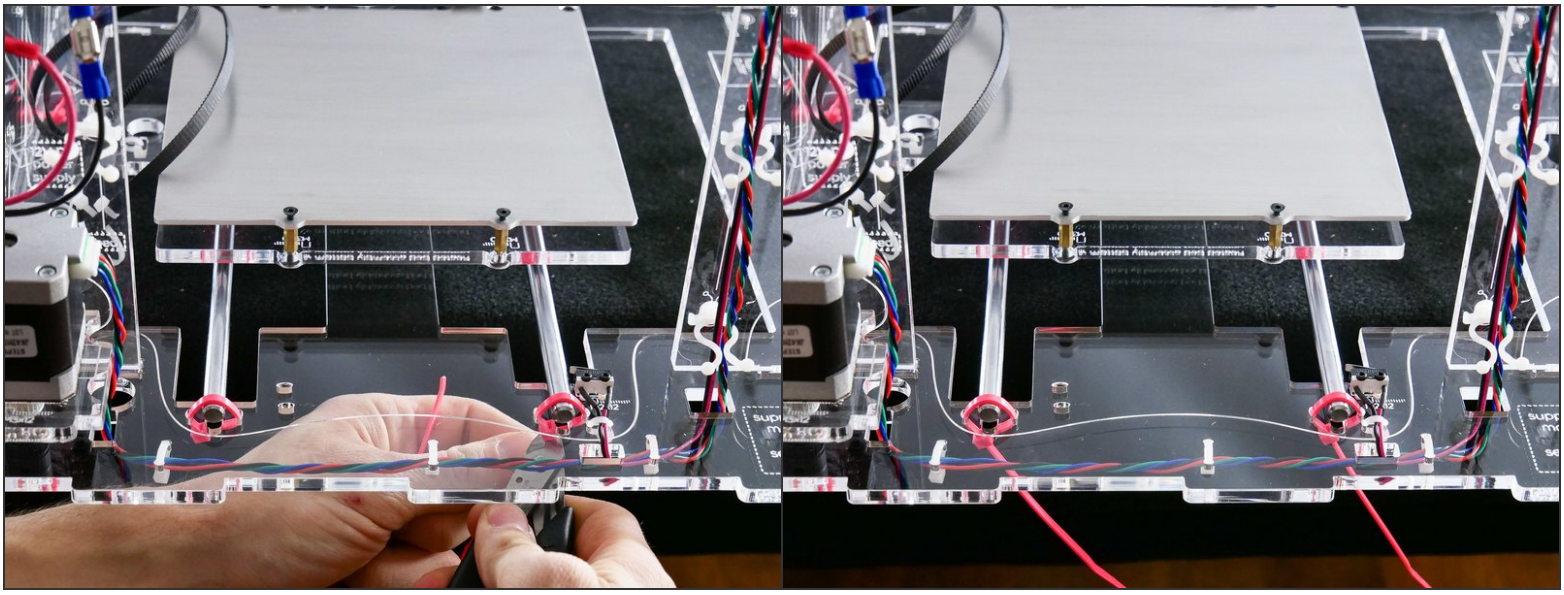
Step 57



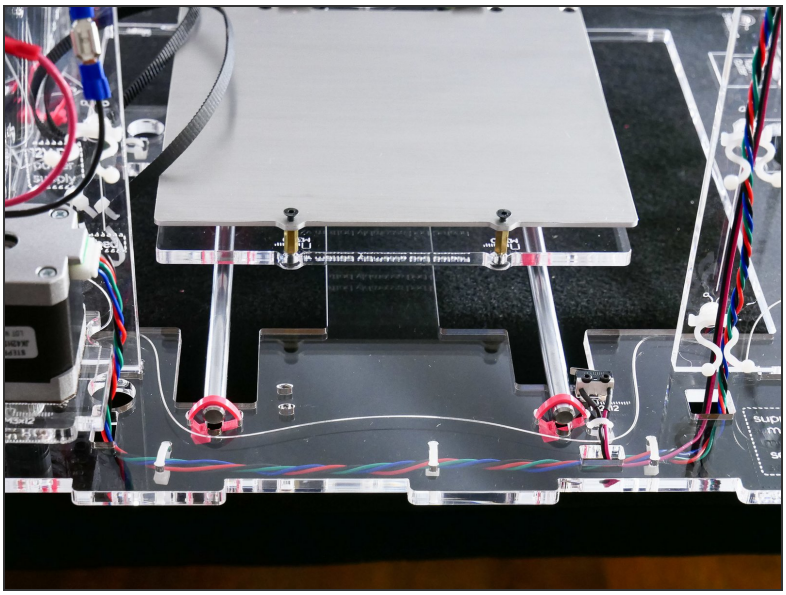




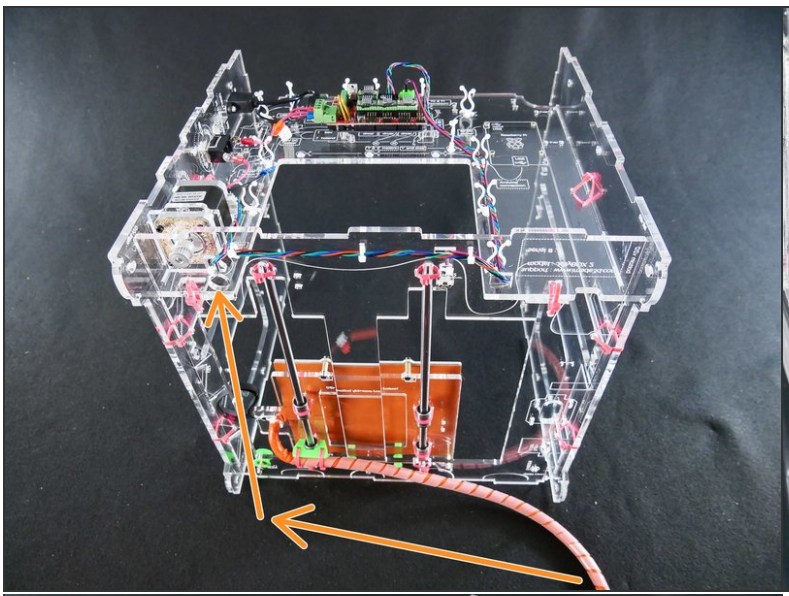
Step 58

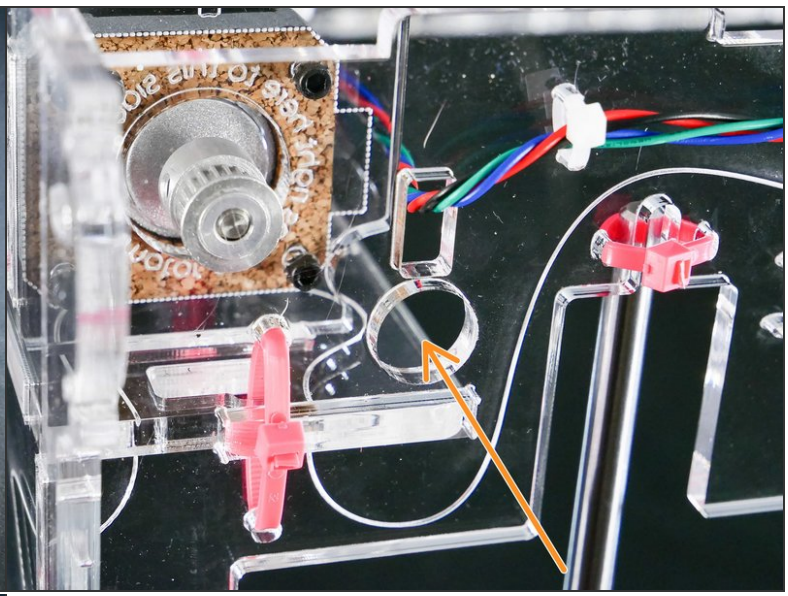


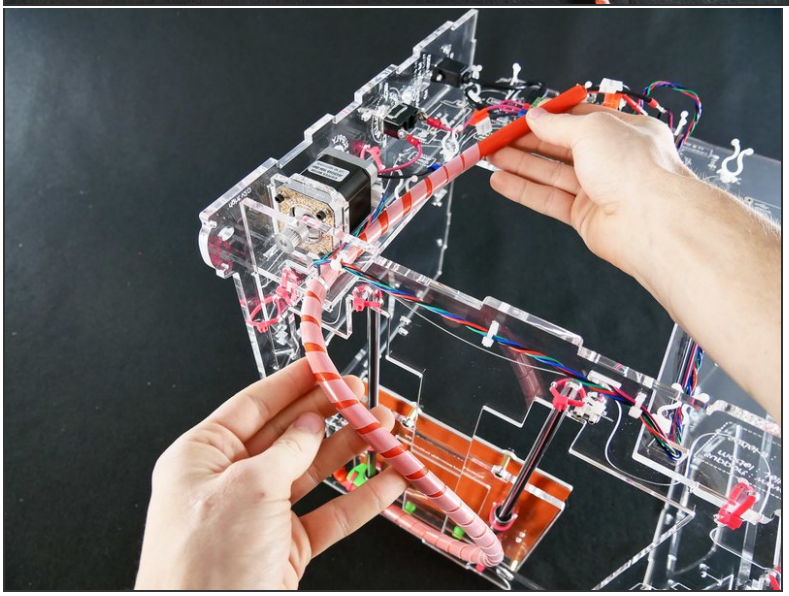
Step 59 — Looking good!



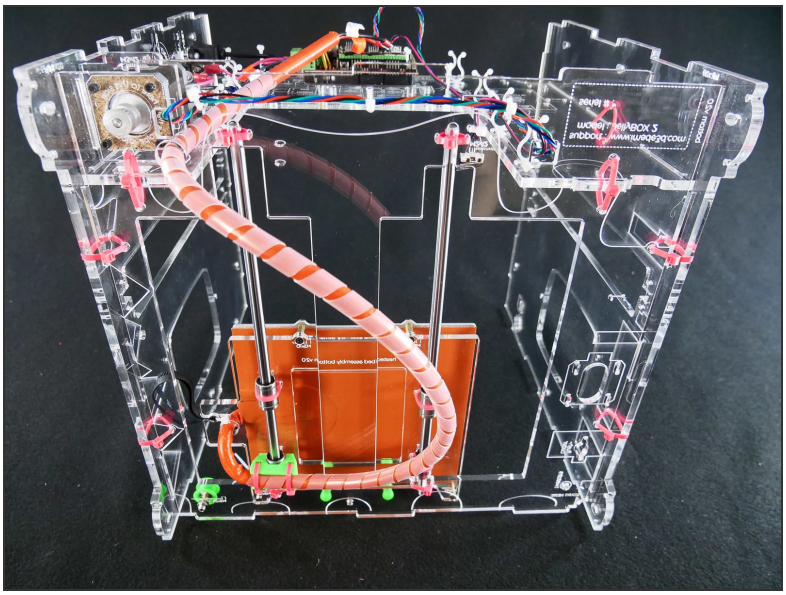
Step 60 — ↳ Wire up the Heated Y Assembly





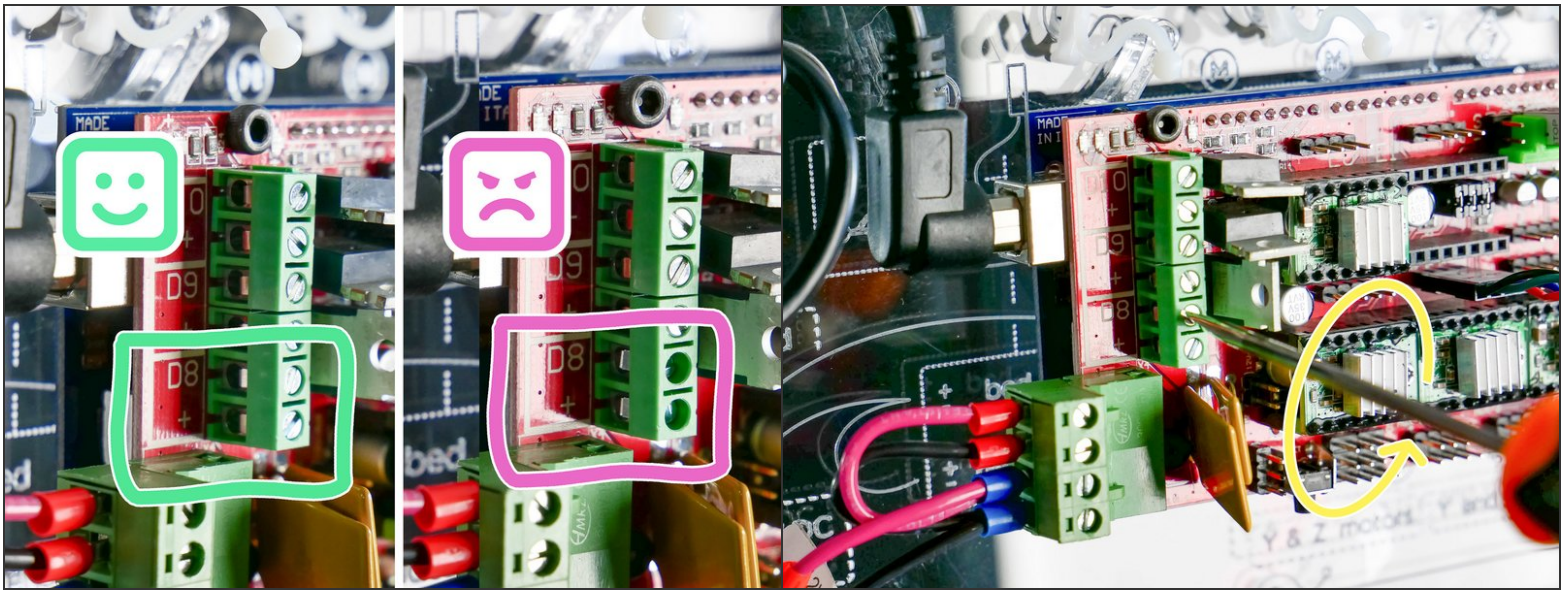


Step 61



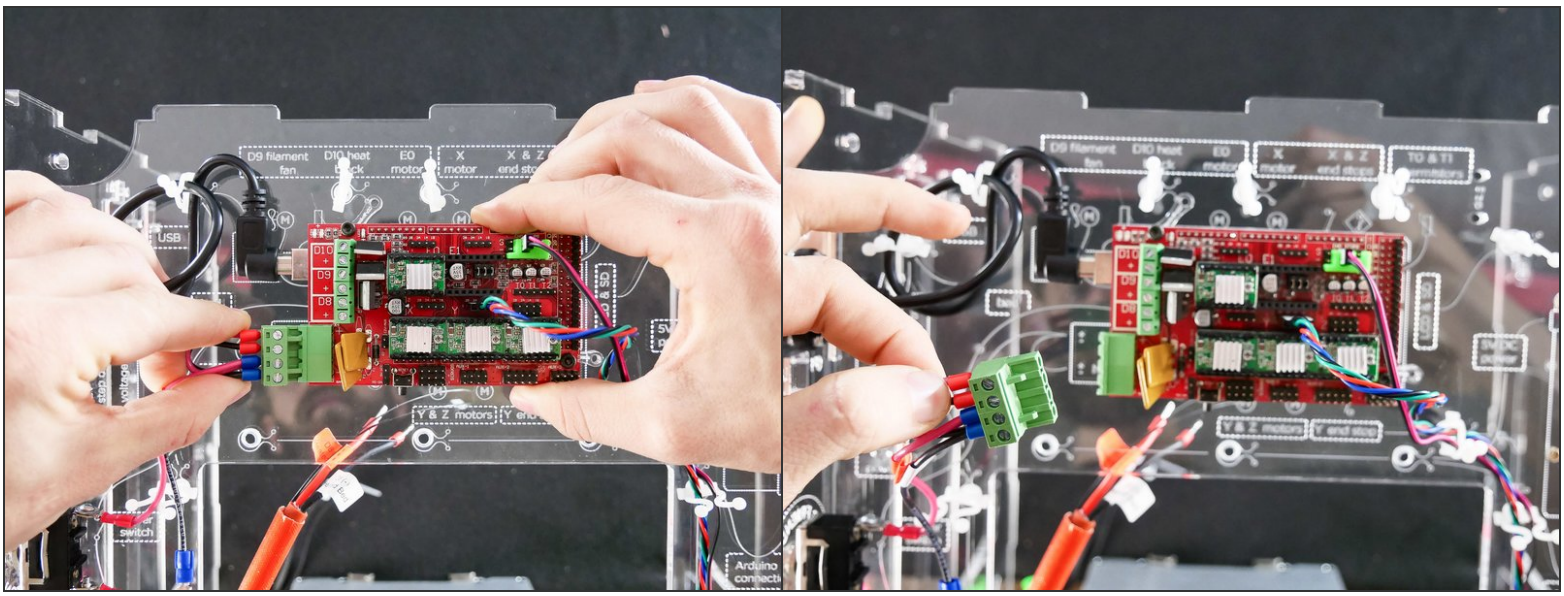
- Check ✓

Step 62



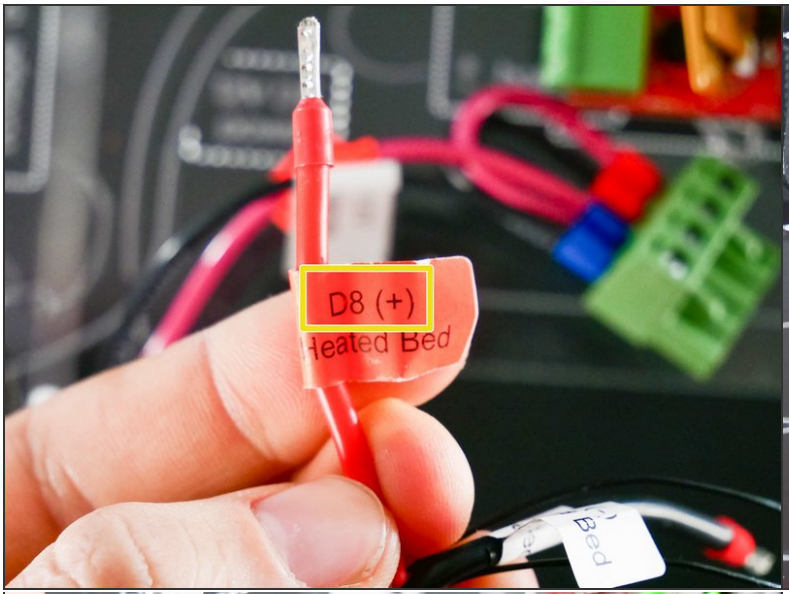
⚠ Fully loosen up the D8 screws.

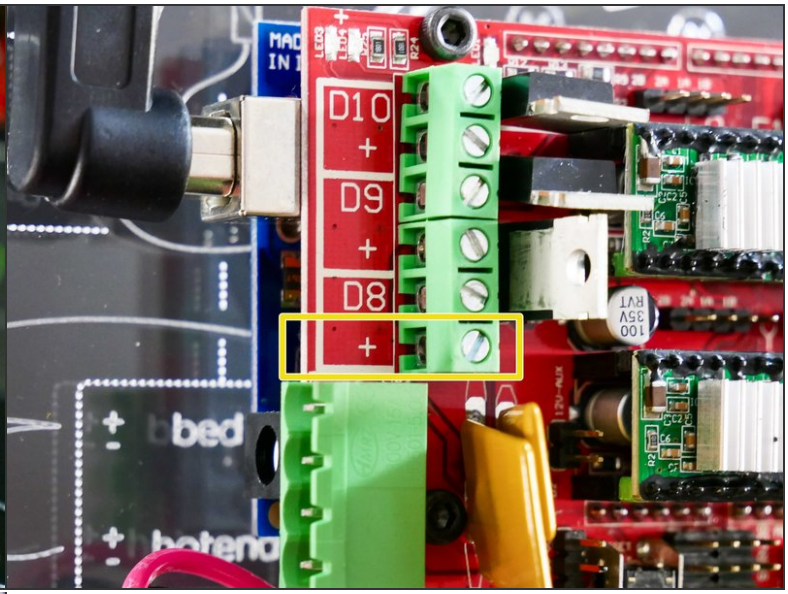
Step 63

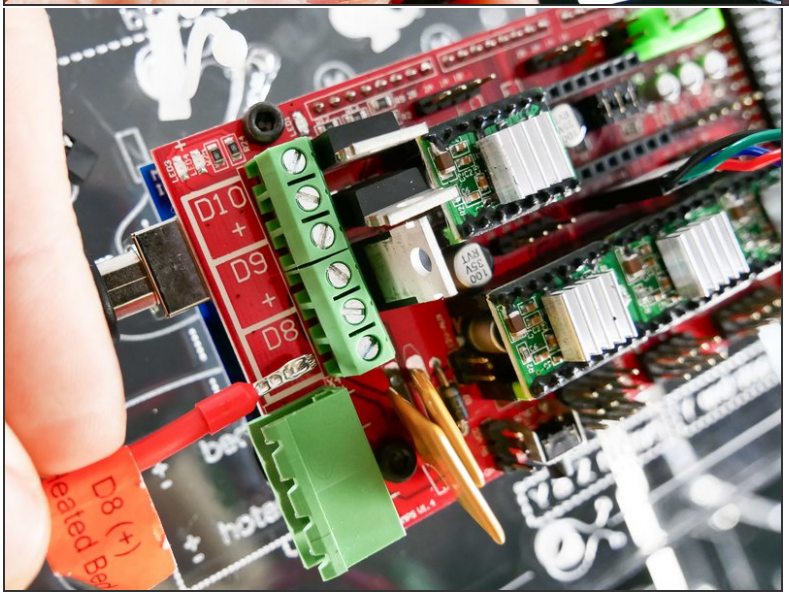


- Disconnect the power wires.

Step 64

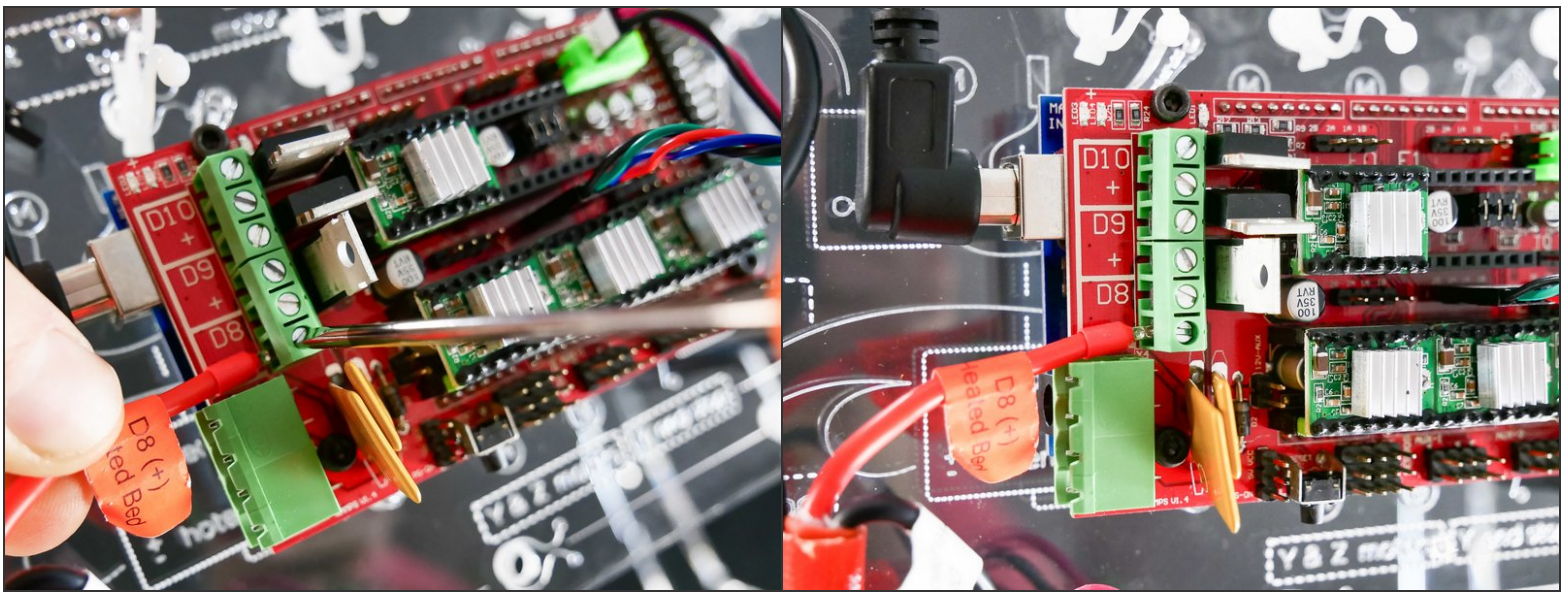






⚠ Plus goes to plus!

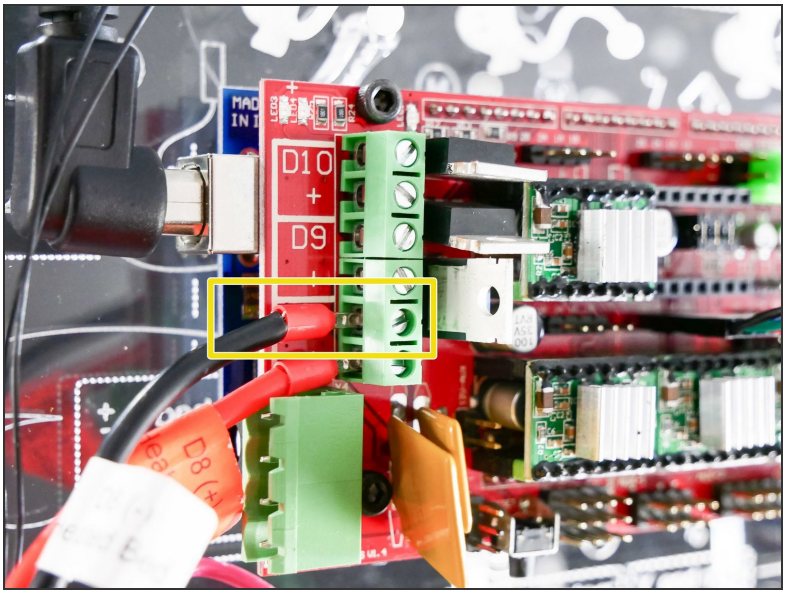
Step 65



⚠ Tighten well.

- If the screw is loose, the electricity will not flow as well, which will heat up the involved components, possibly to a fault.

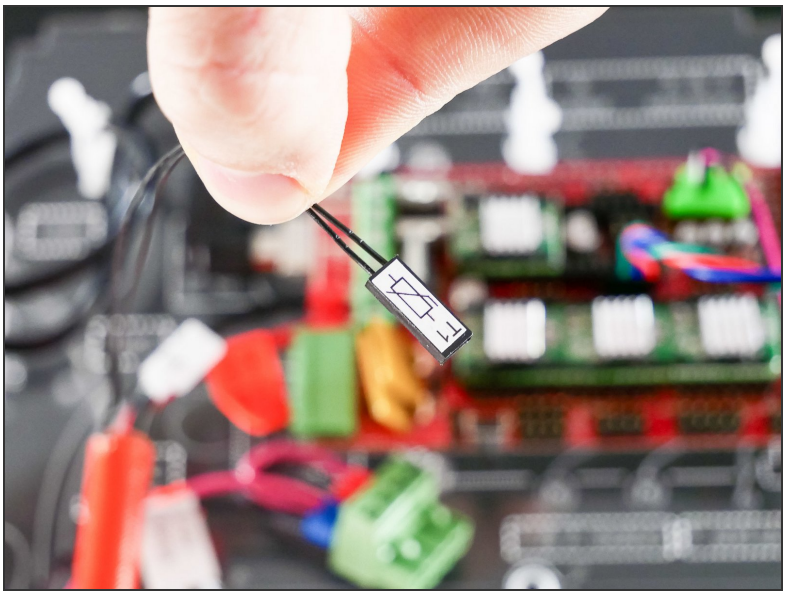
Step 66



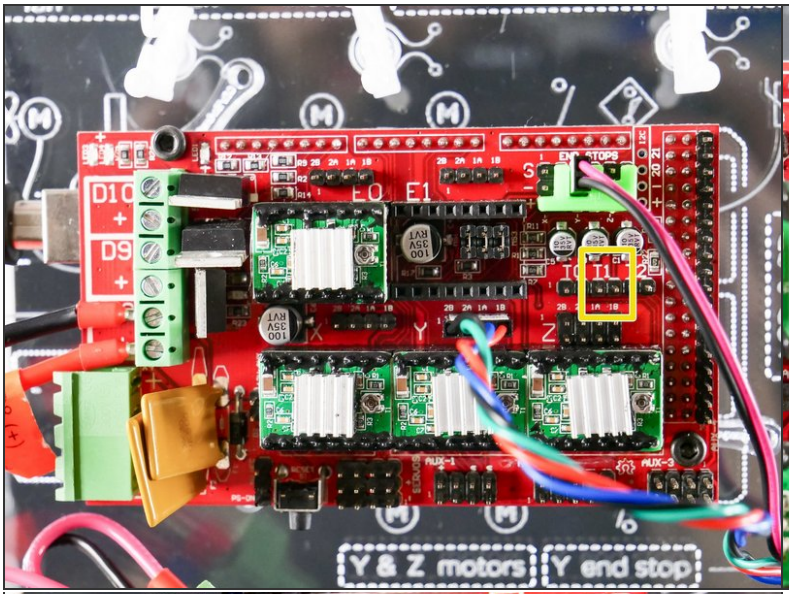
- D8 minus to minus.

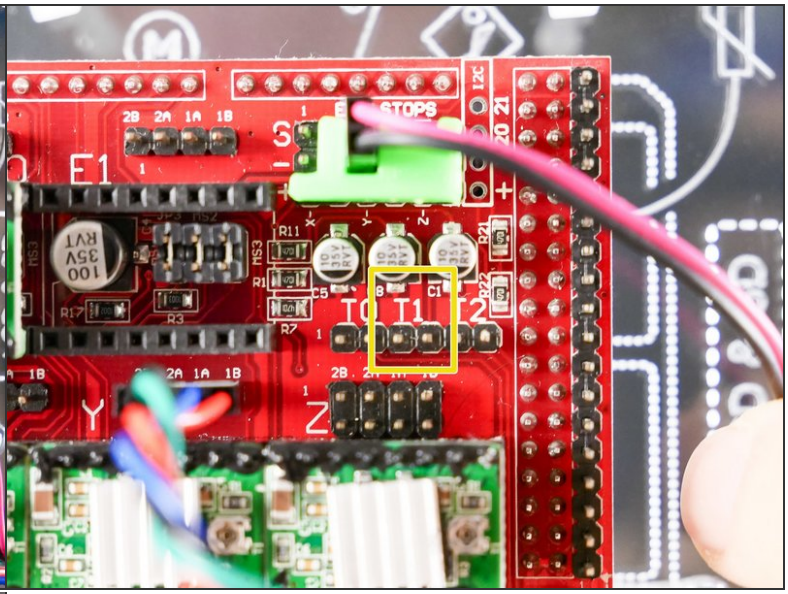
⚠ Tighten well.

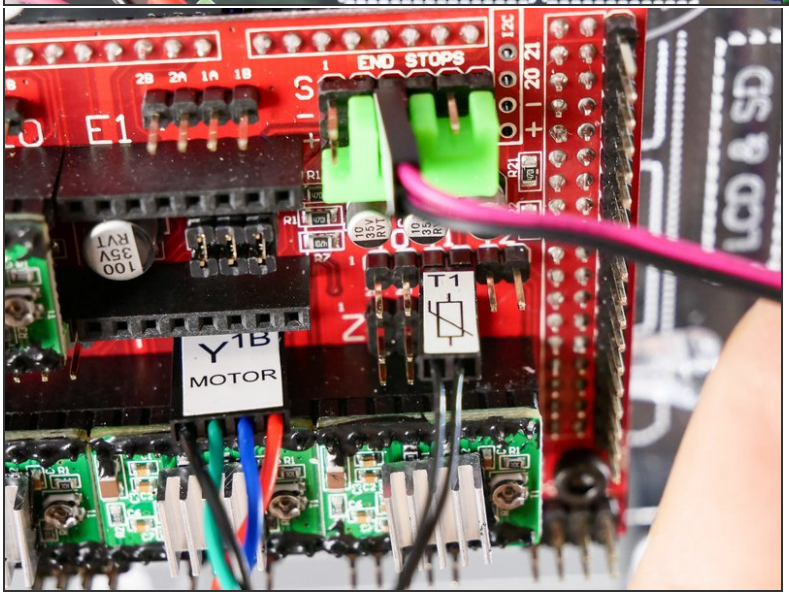
Step 67



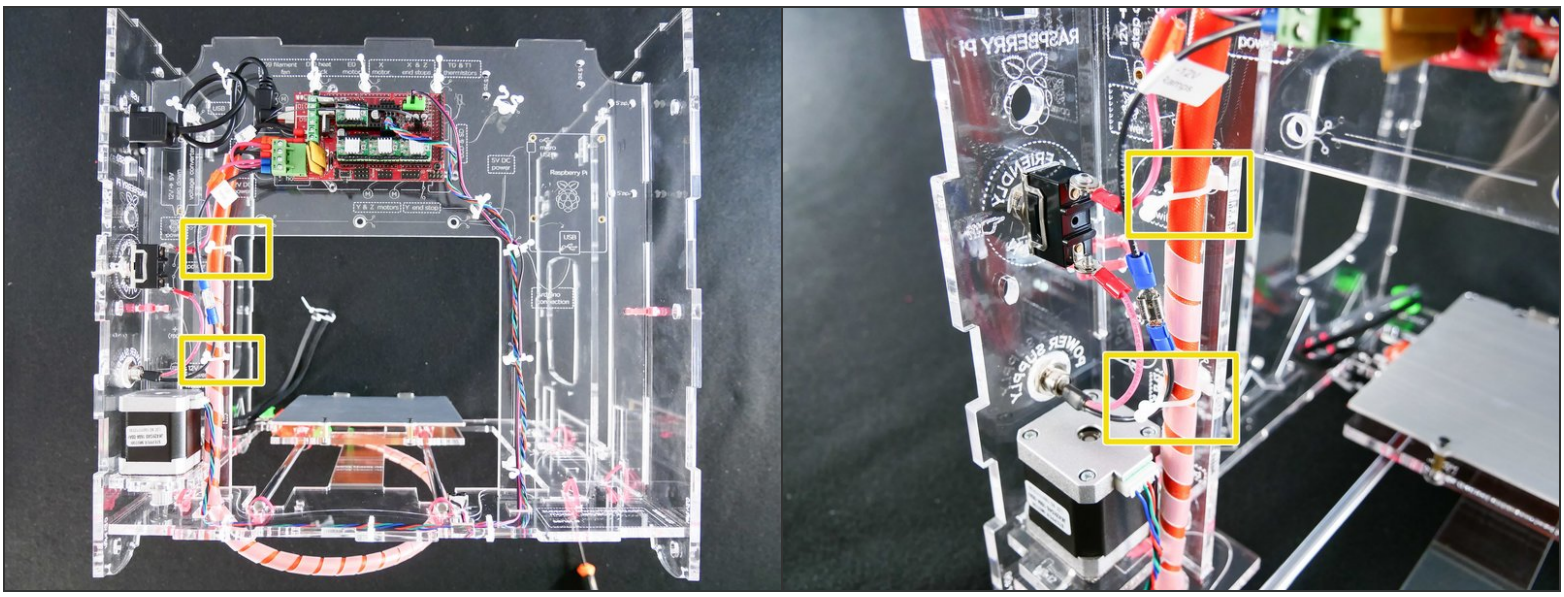
Step 68



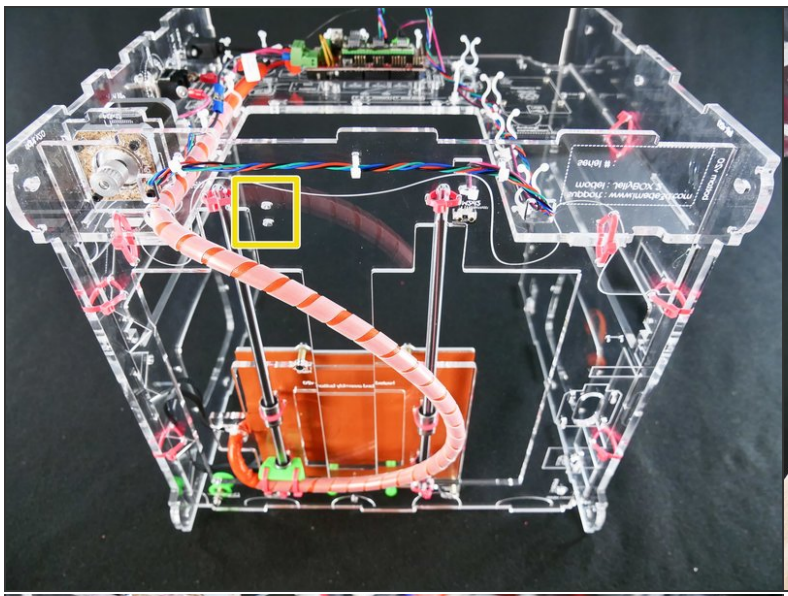


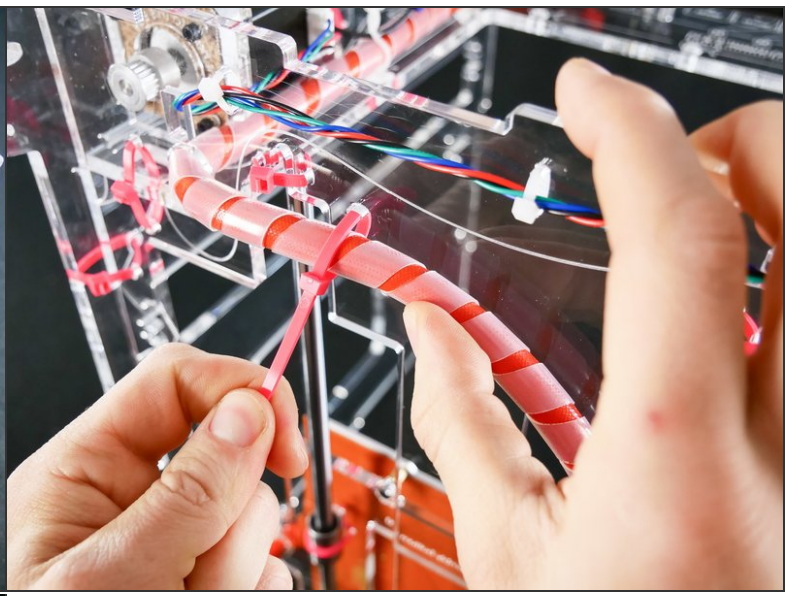


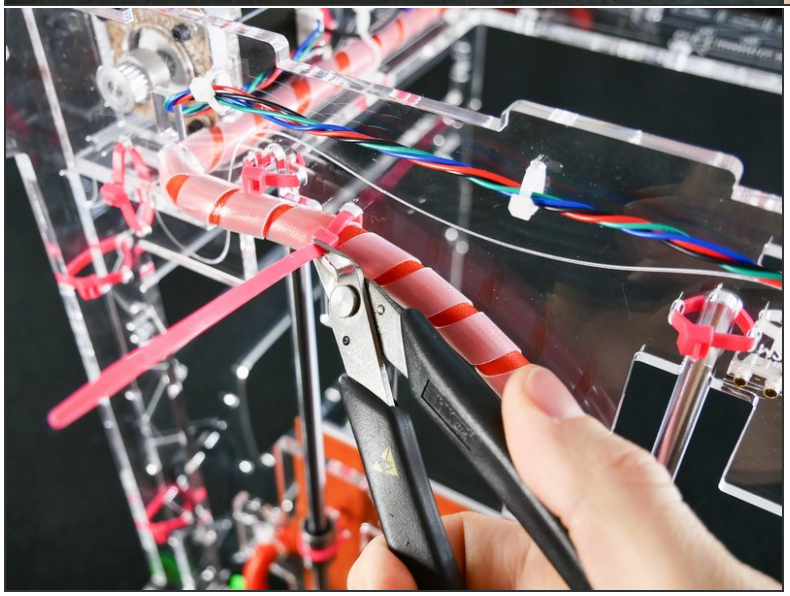
Step 69



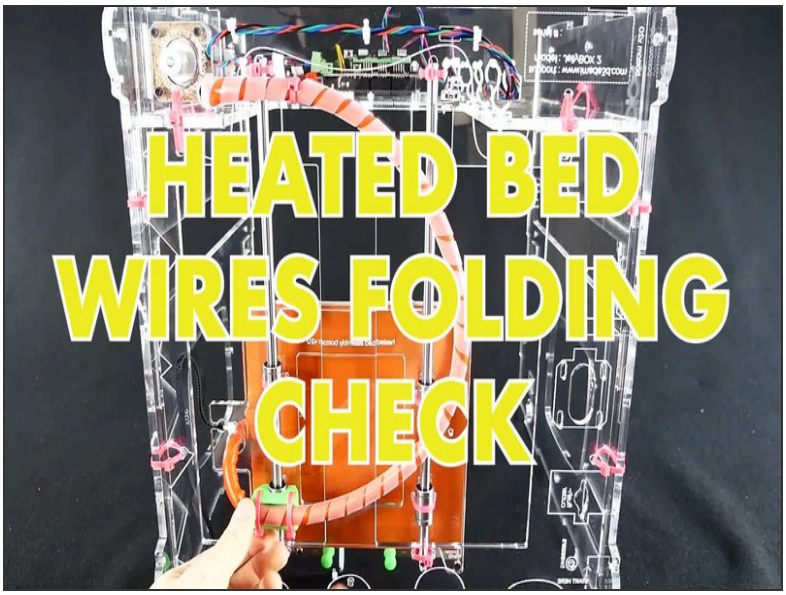
Step 70







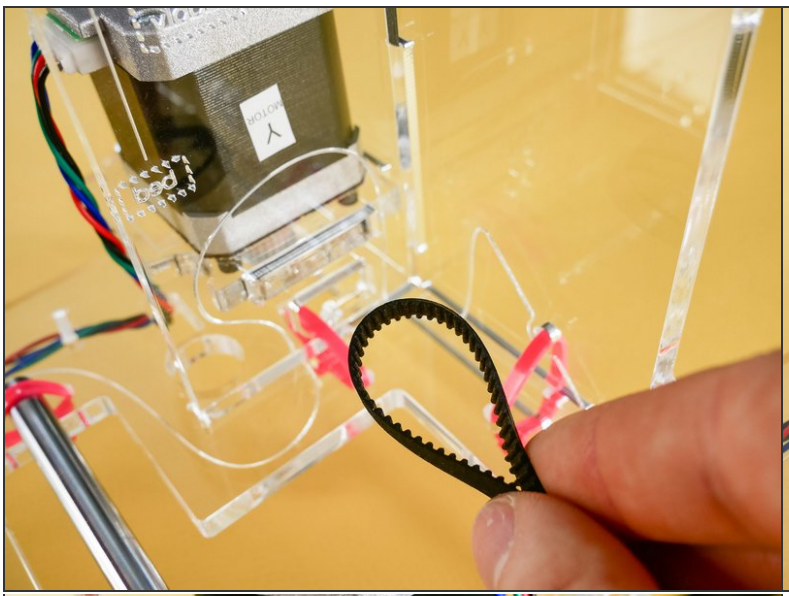
Step 71 — ▶ Video: Heated Y Assembly Wires Folding Check

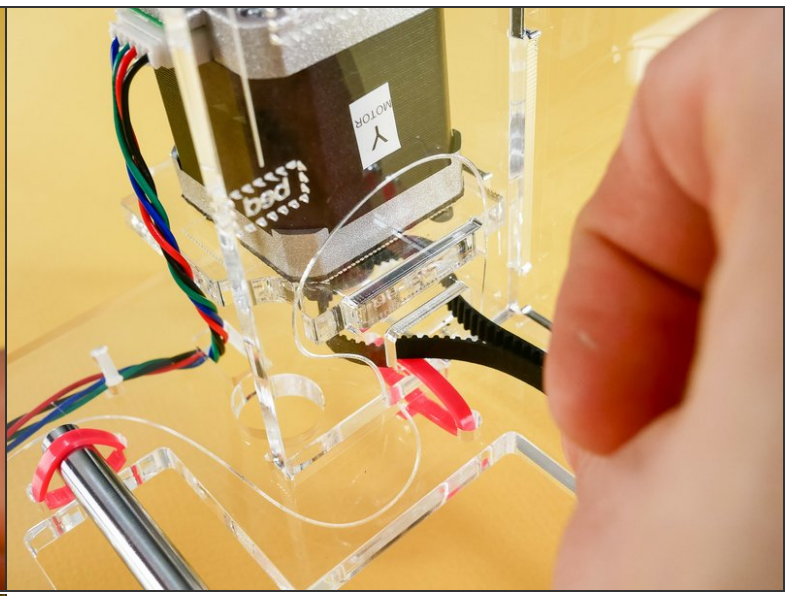


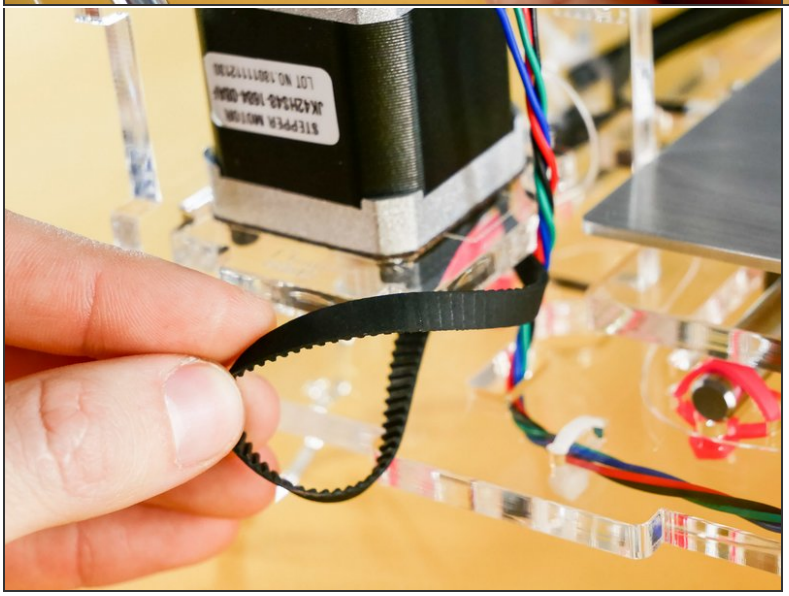
- ▶ Video: Heated Y Assembly Wires Folding Check
- Verify that the wires are folding nicely and smoothly.
- Also, one of the bearings should be hitting the Y endstop.

Step 72 — ↳ Install the Y Belt

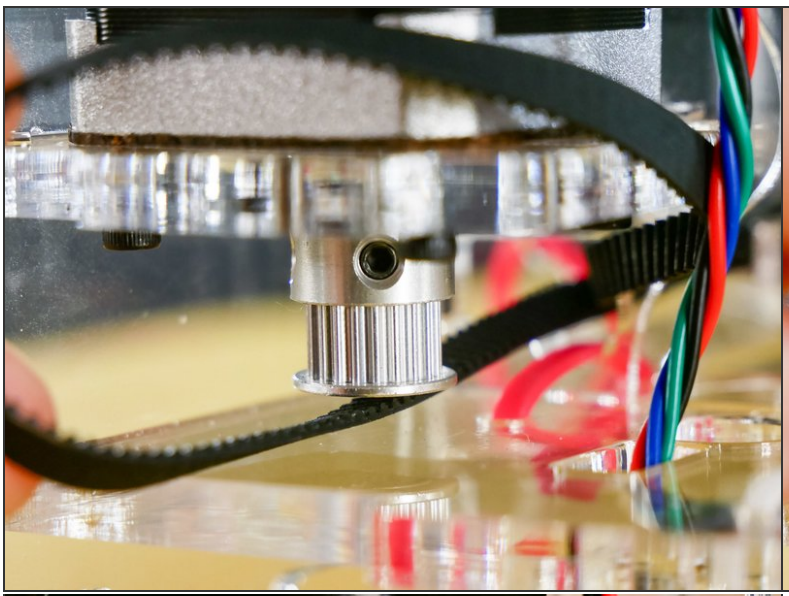
Step 73

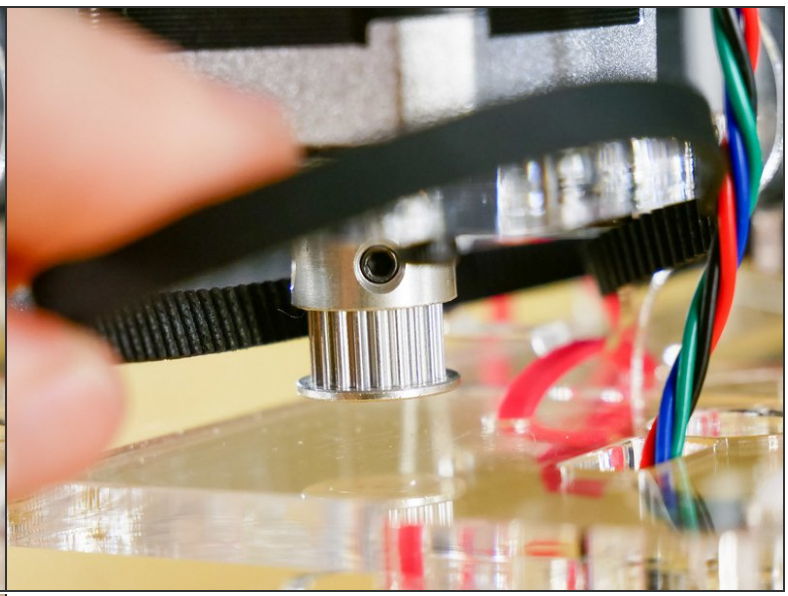


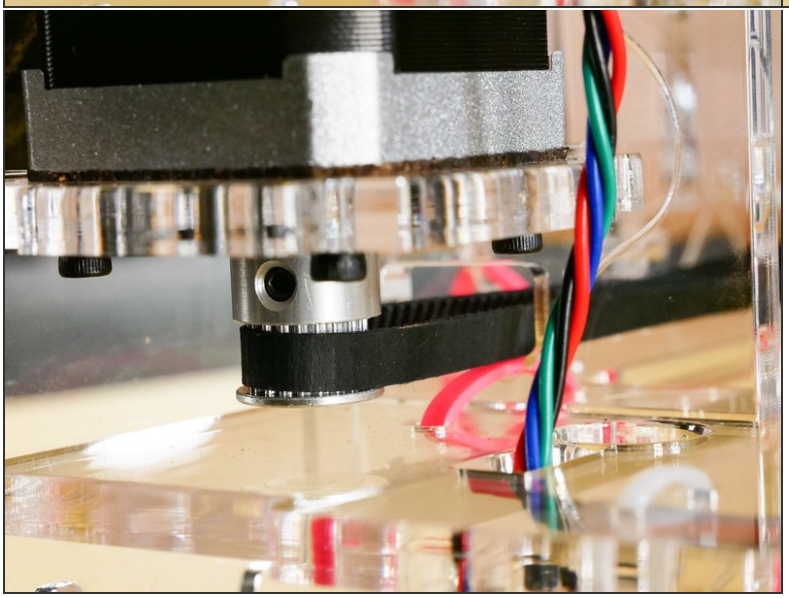




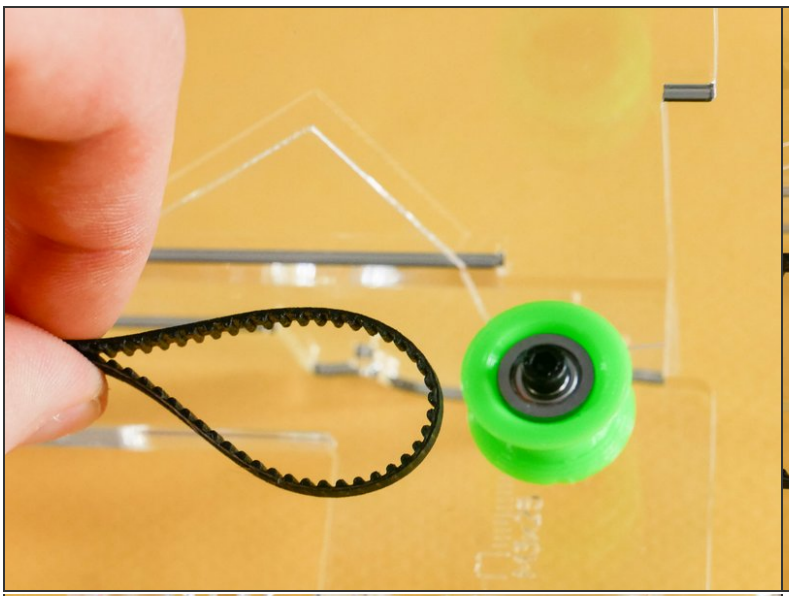
Step 74

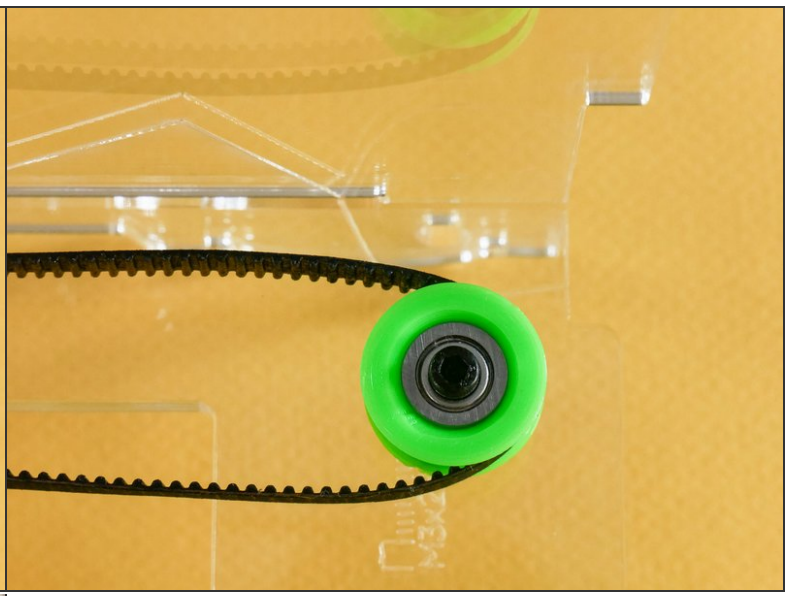


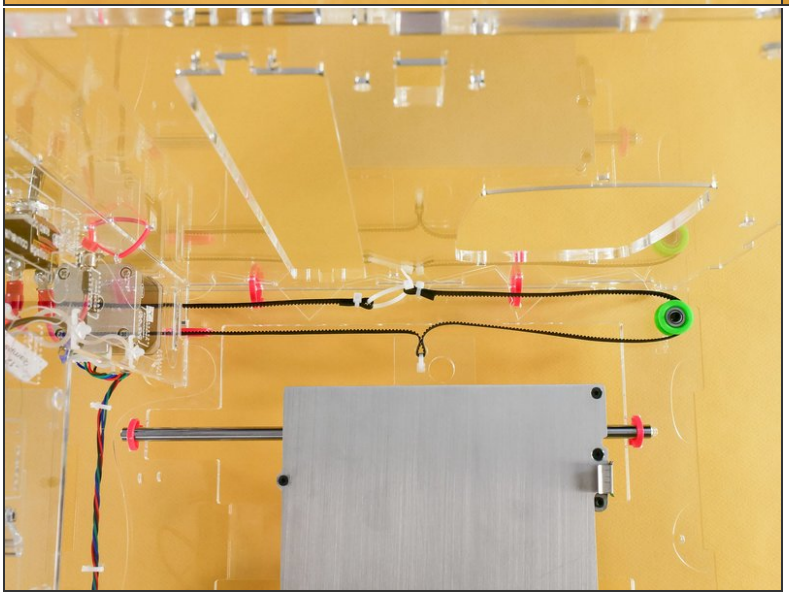




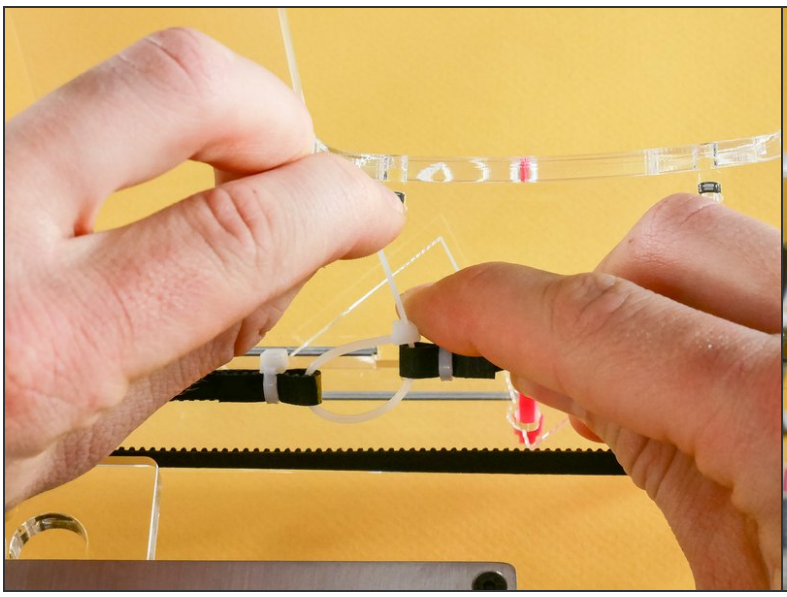
Step 75

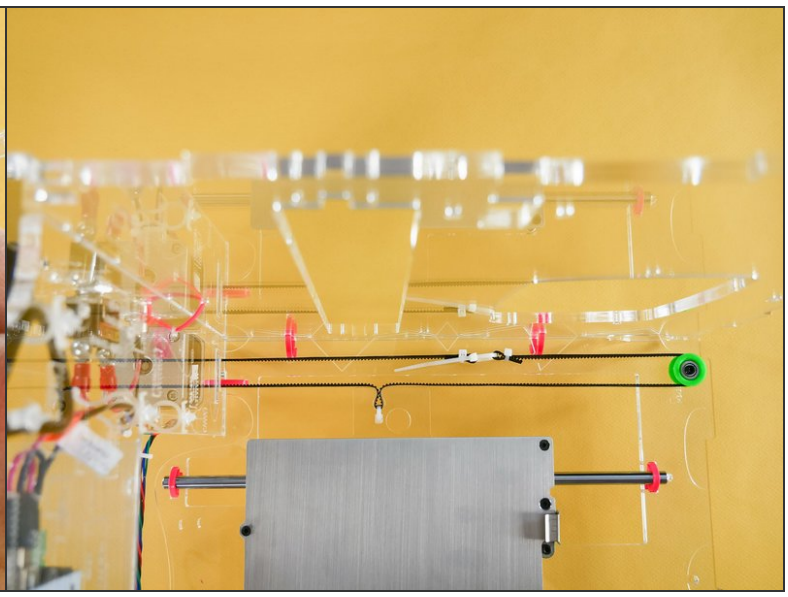






Step 76

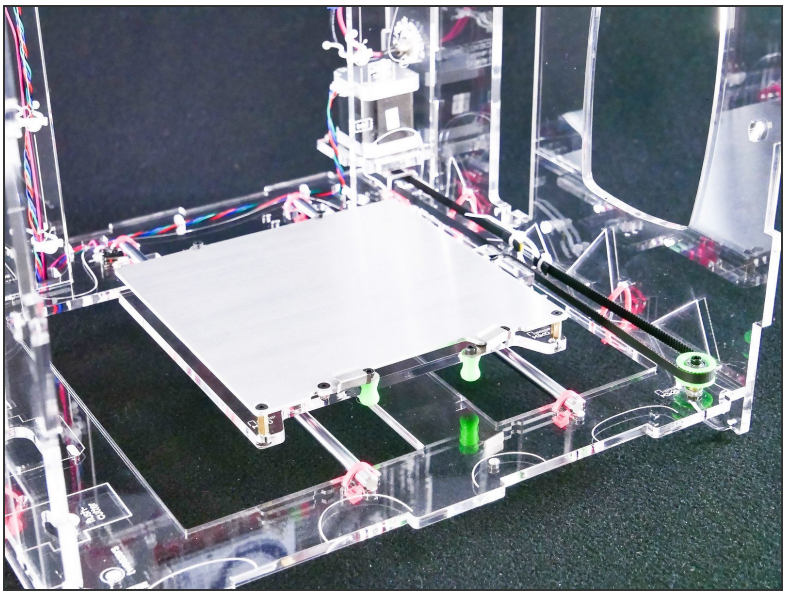




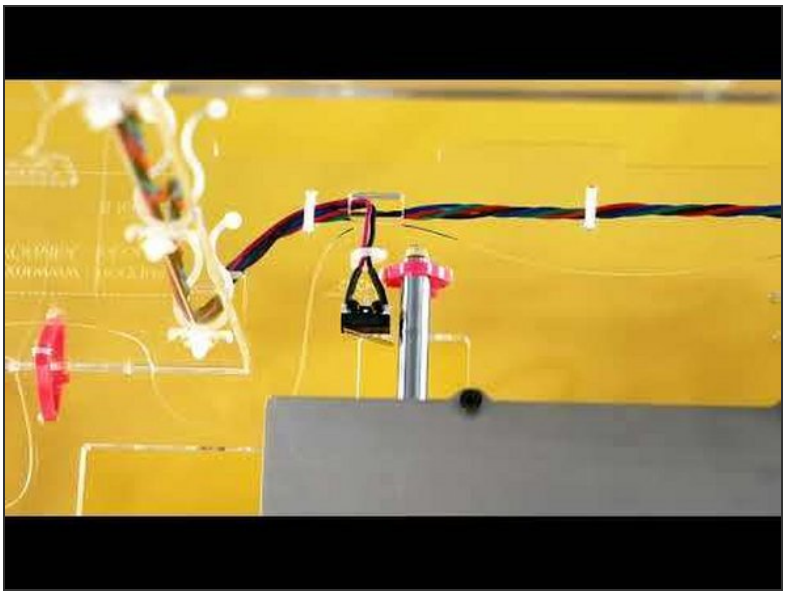
- Lightly tension the belt.

⚠ We'll dial in the belt tension later, when the whole frame is finished.

Step 77 — Looking good!



Step 78 — ▶ Video: Y Mechanical Checkpoint (25s)



- ▶ Video: Y Mechanical Checkpoint (25s)

⚠ Do not move too fast. You are generating current by forcing the motor to rotate. If you generate too much current, you could damage your electronics; namely the drivers.

⚠ Make sure that the Y EndStop gets engaged by one of a Y Assembly bearings. There's an audible **click.**

- Make sure the Y assembly is moving smoothly.

What's Next?

Get back to the **⇤ Easy Kit Build Flow** and continue with the next guide.