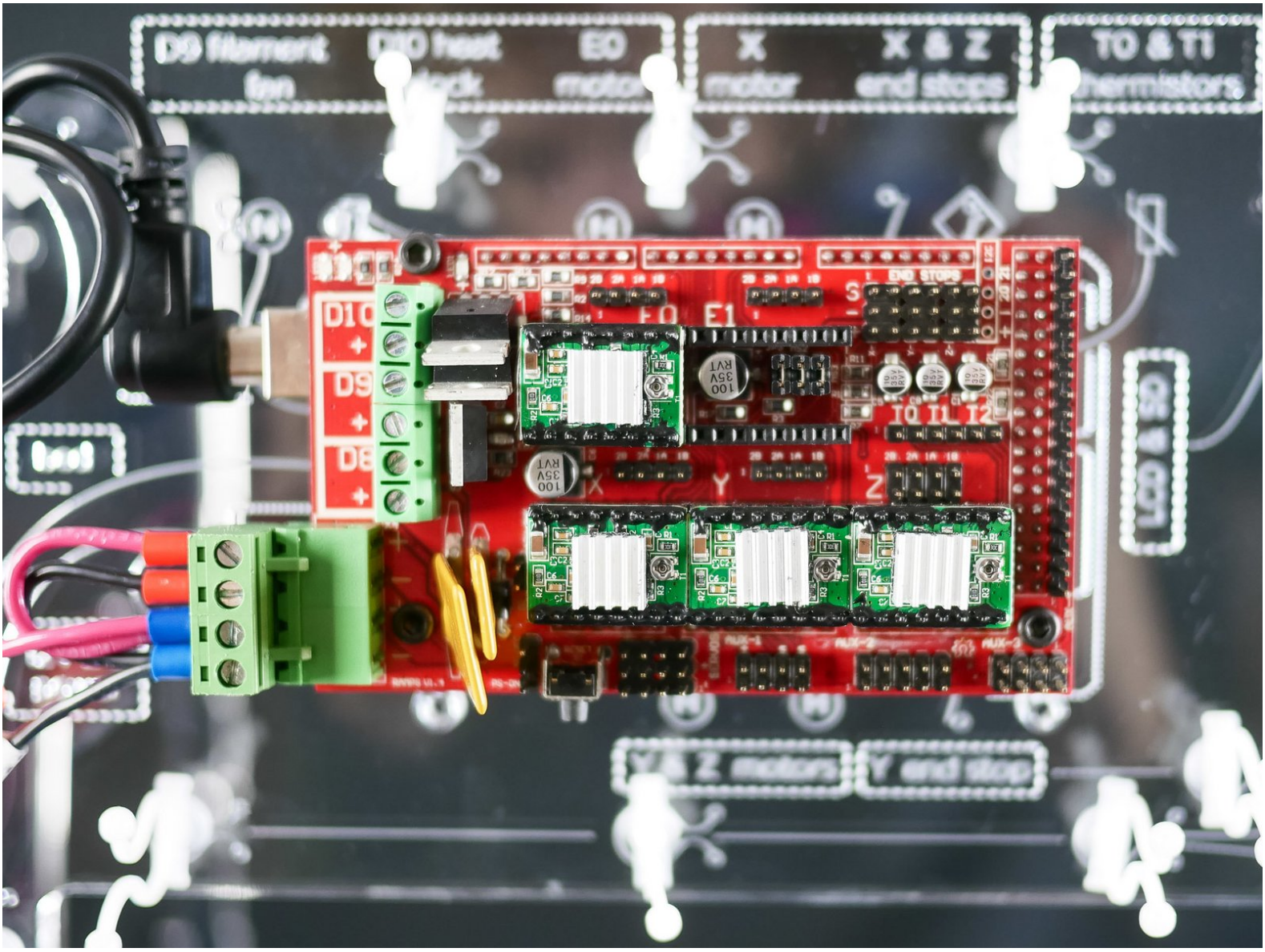
Electronics

Electronics



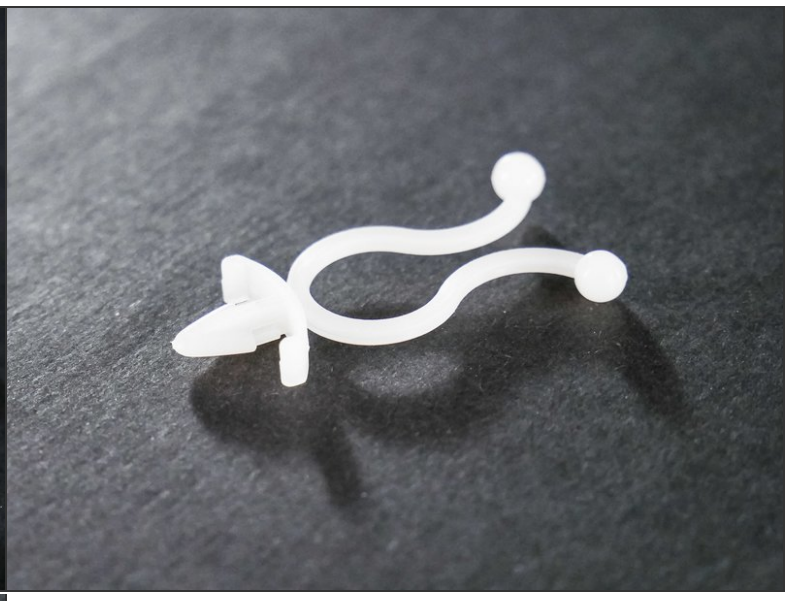
This document was generated on 2021-12-25 12:43:55 AM (MST).

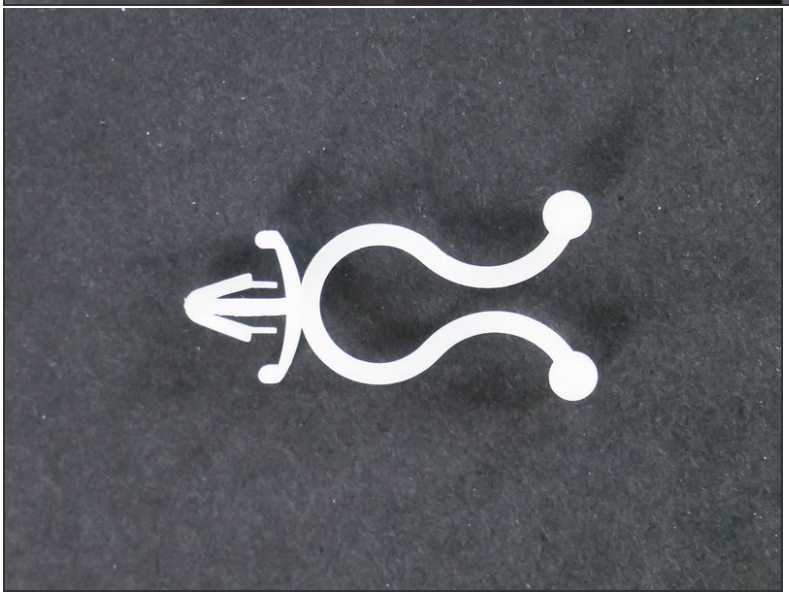
INTRODUCTION

Not the guide you are looking for?

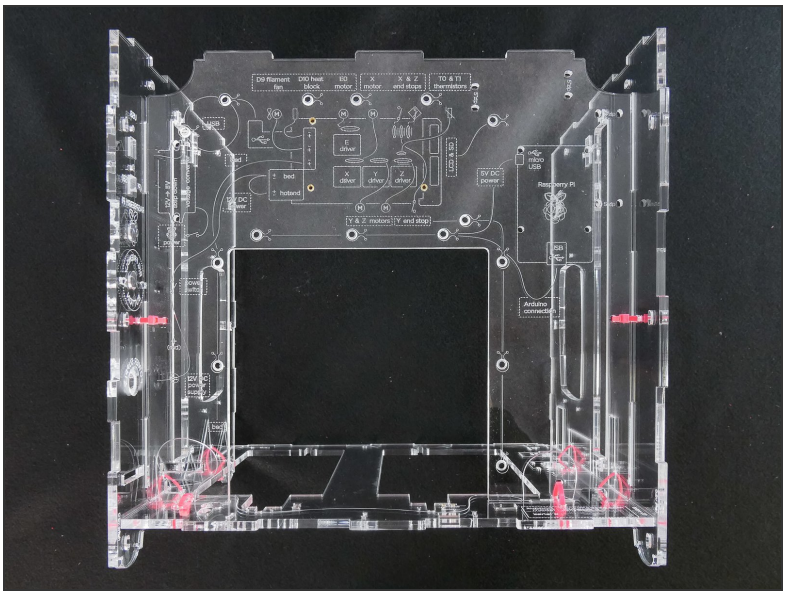
Go back to the **⇤ Easy Kit Build Flow.**

Step 1 — ↳ Twist Locks

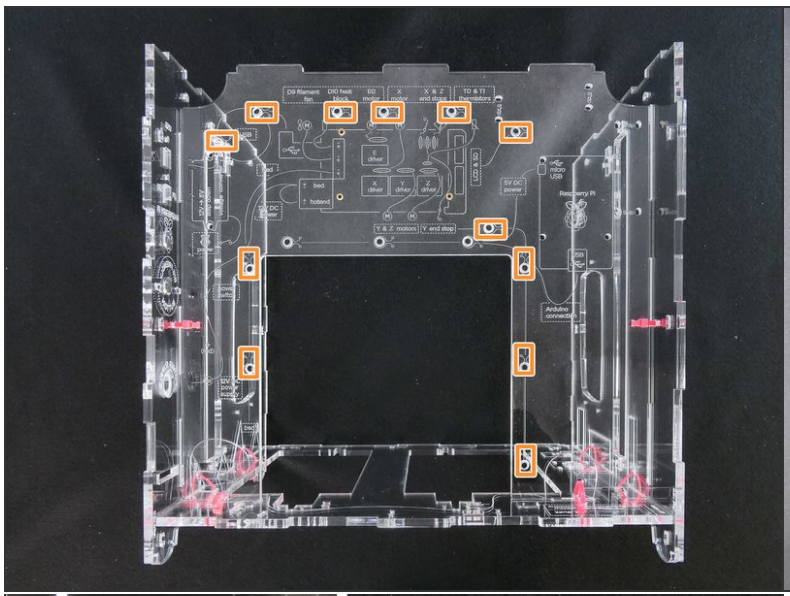


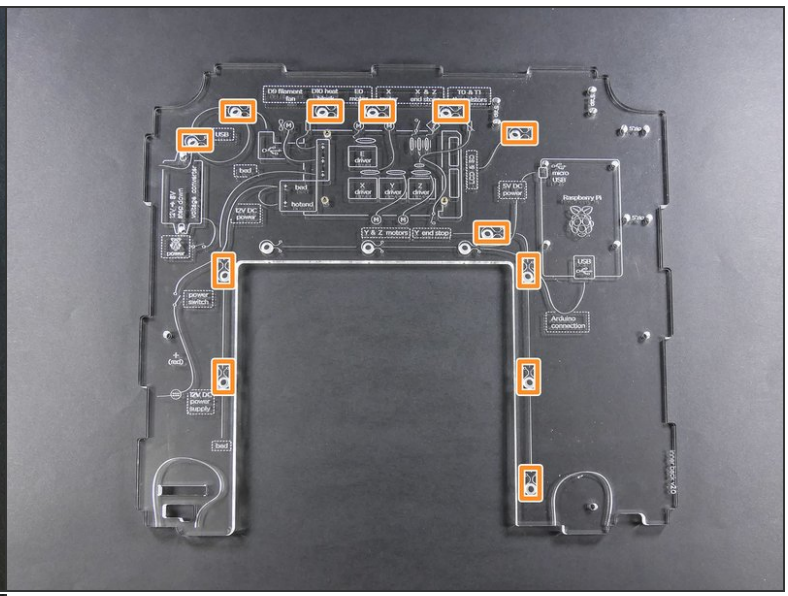


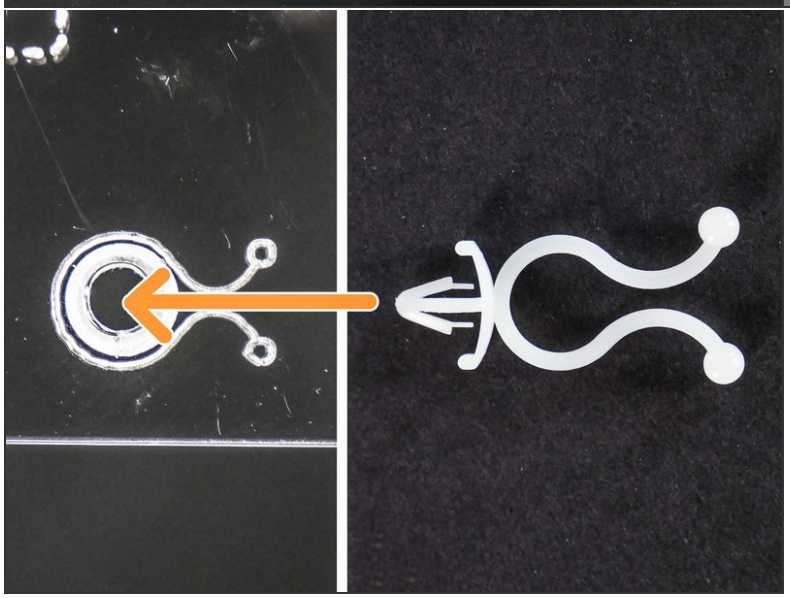
Step 2


D8 filament fan
D10 heat block
E0 motor
X motor
X & Z end stops
T0 & T1 thermistors
E driver
X driver
Y driver
Z driver
bed
hotend
5V DC power
micro SD
USB
Raspberry Pi
Y & Z motors
Y end stop
Arduino connection

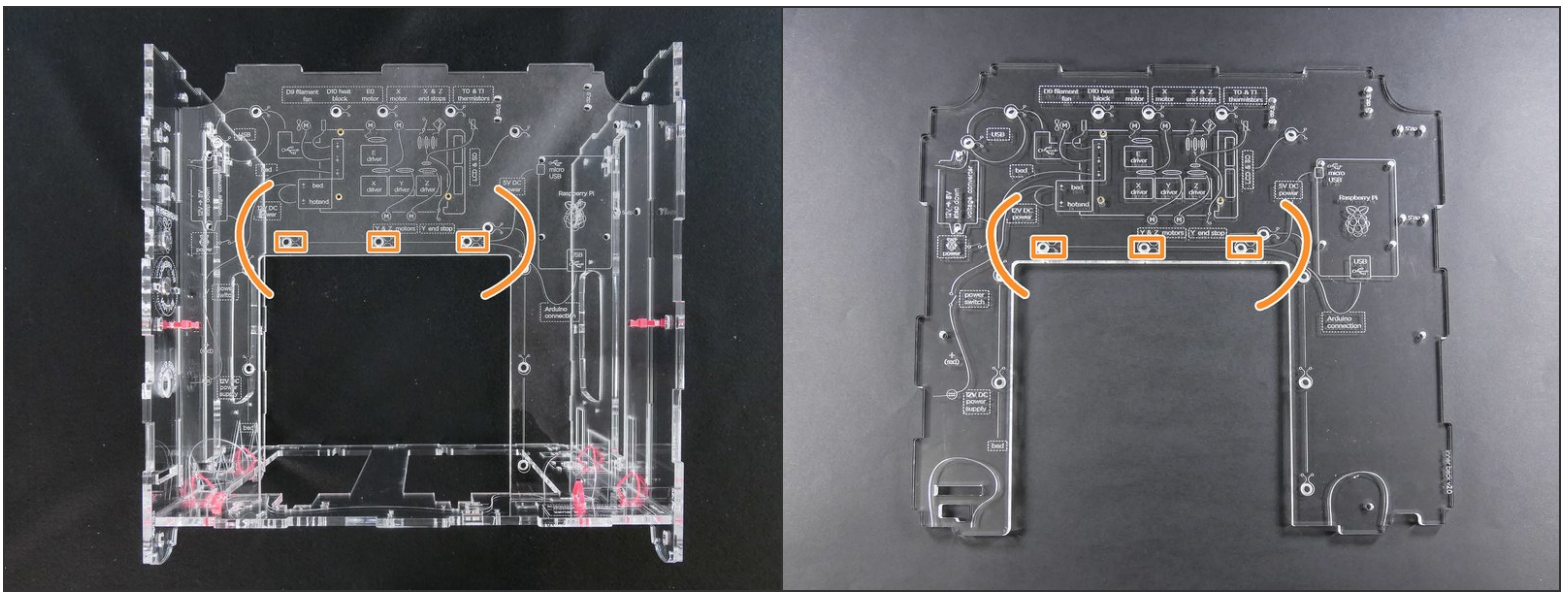
Step 3





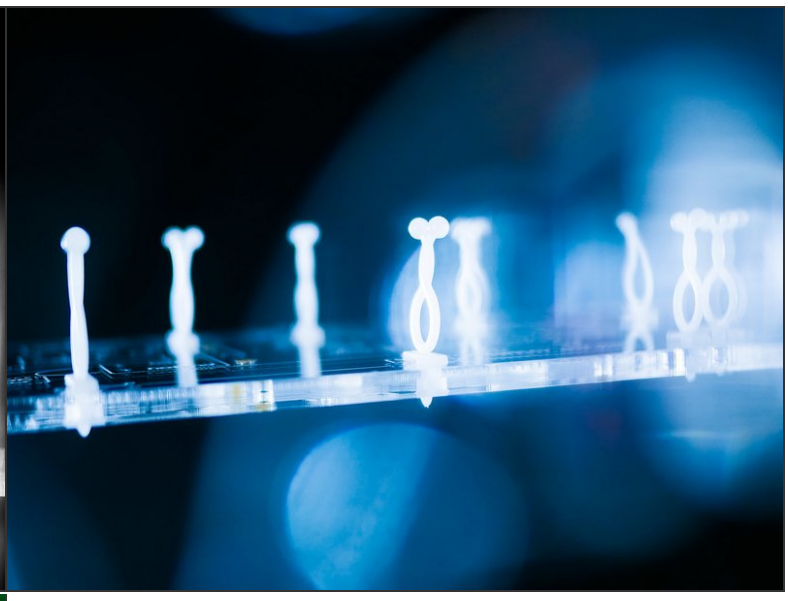


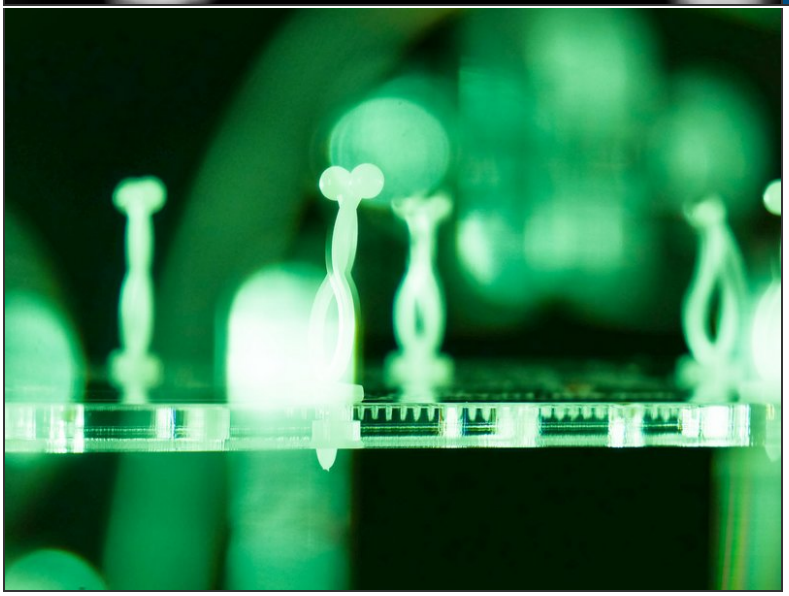
Step 4



PS: **Don't worry** about these three. They are used for the Raspberry Pi upgrade. You may use them later or not.

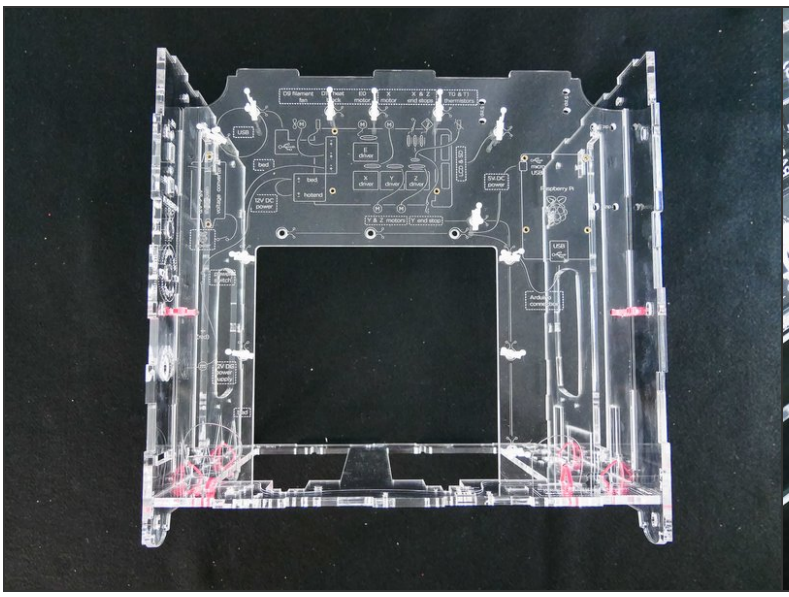
Step 5

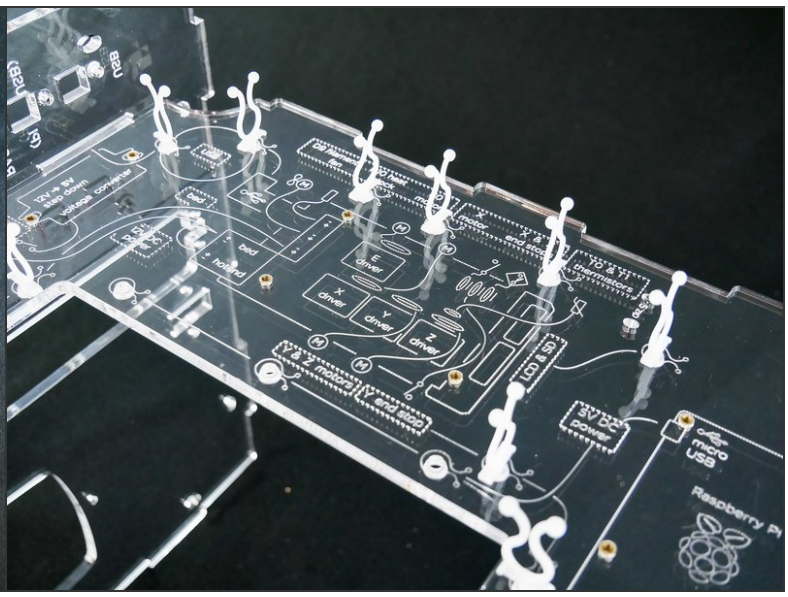




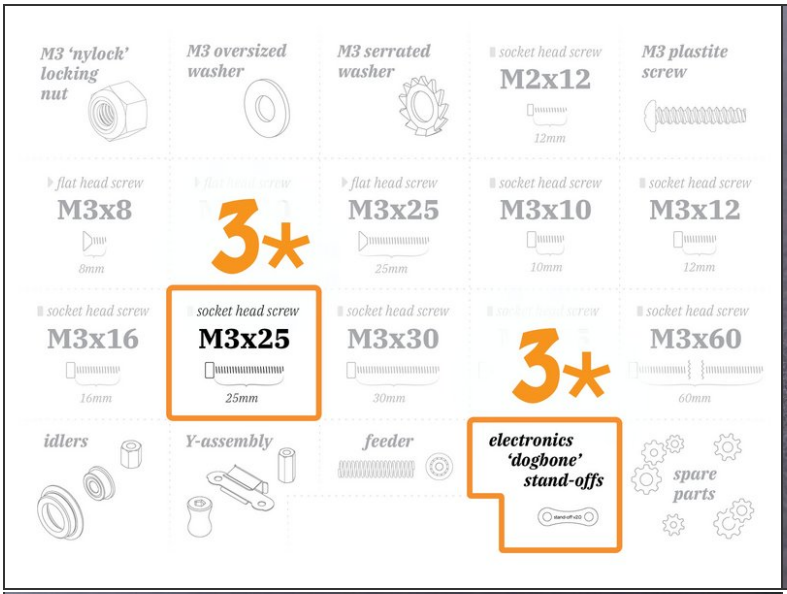
- All this beauty...

Step 6 — Looking good!



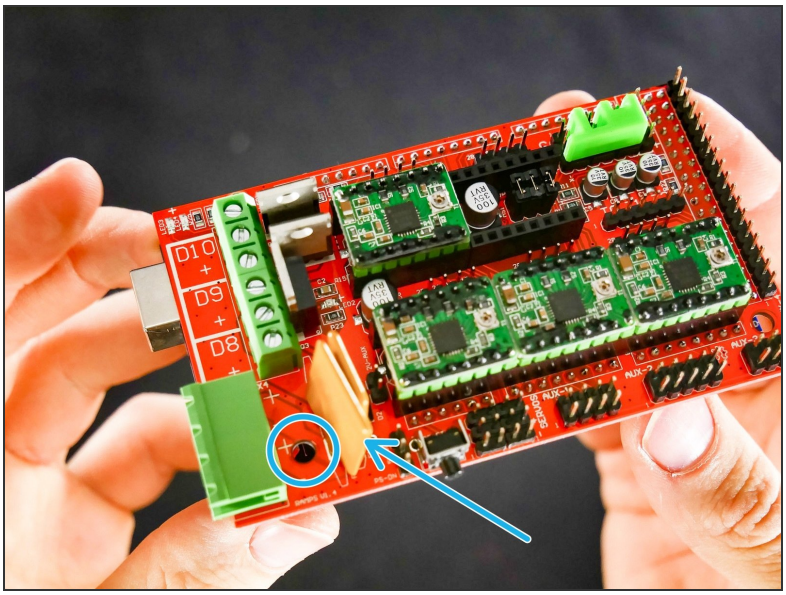


Step 7 — ↳ Arduino + RAMPS



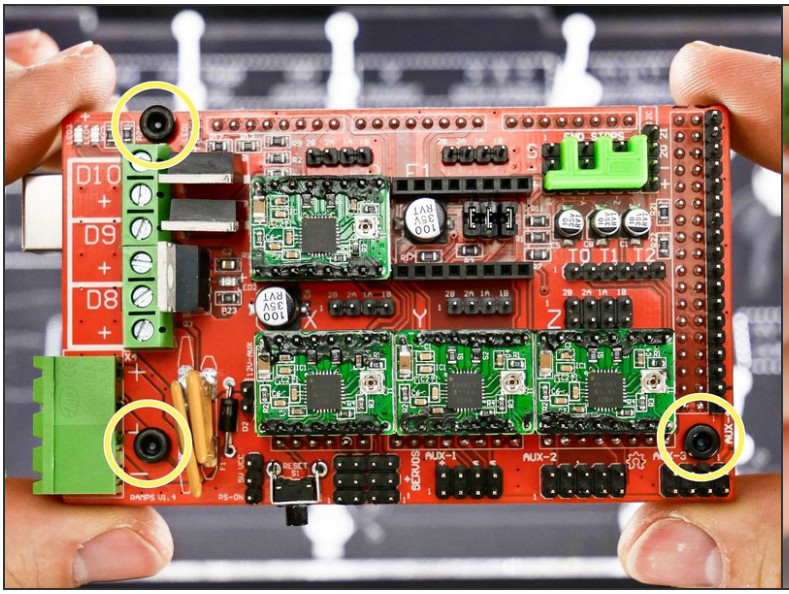
- M3x25

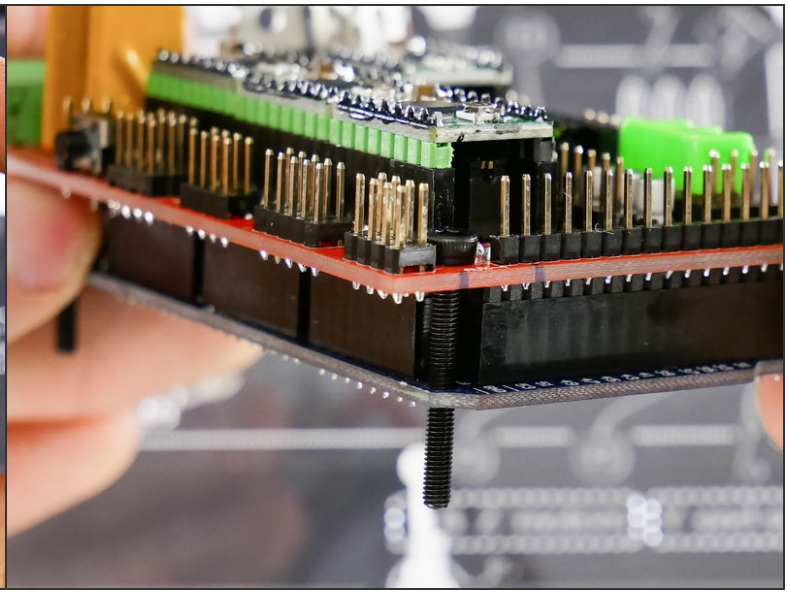
Step 8



- These yellow rectangular fuses may be hiding this hole. Fearlessly but **gently** bend them away.

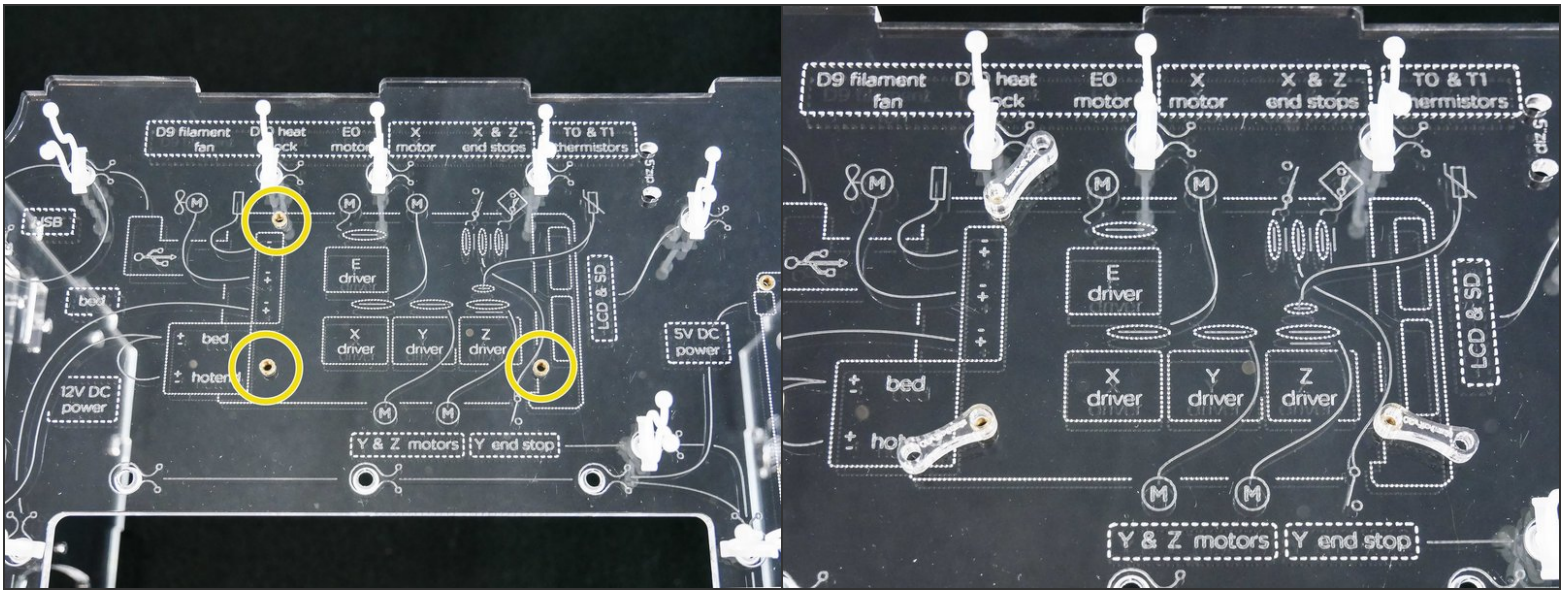
Step 9



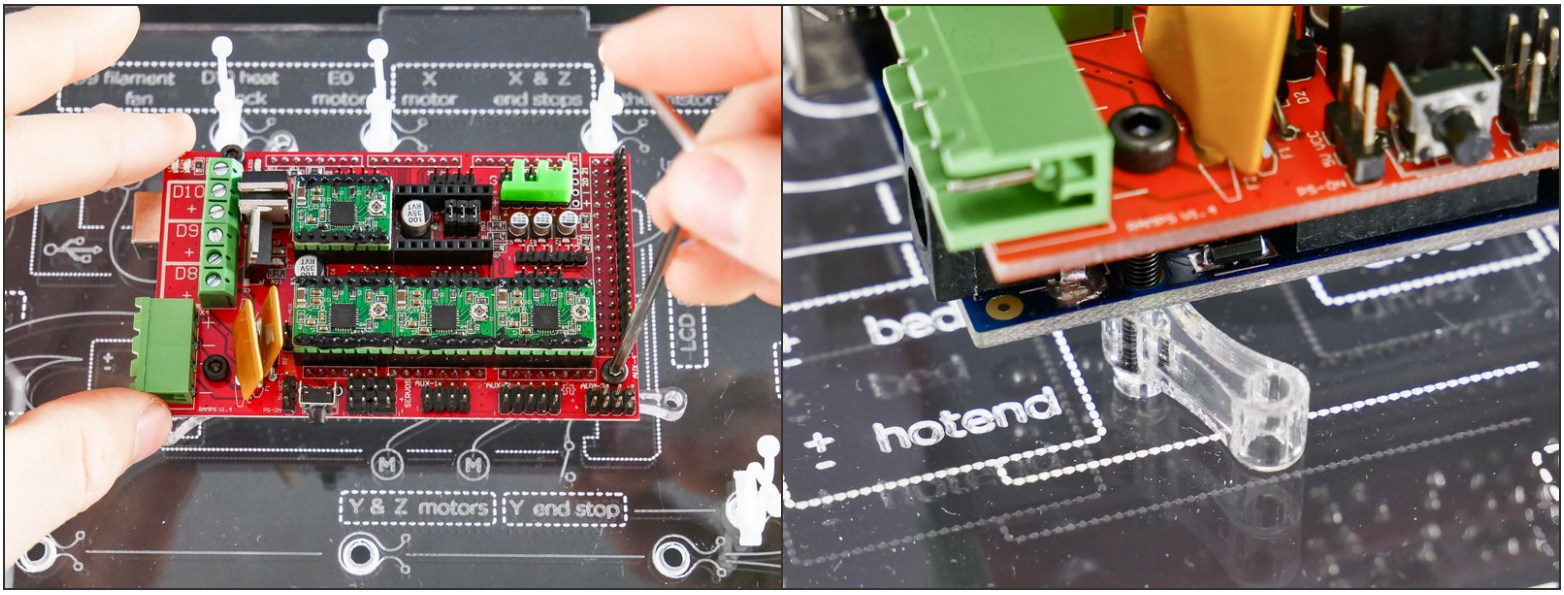


- M3x25

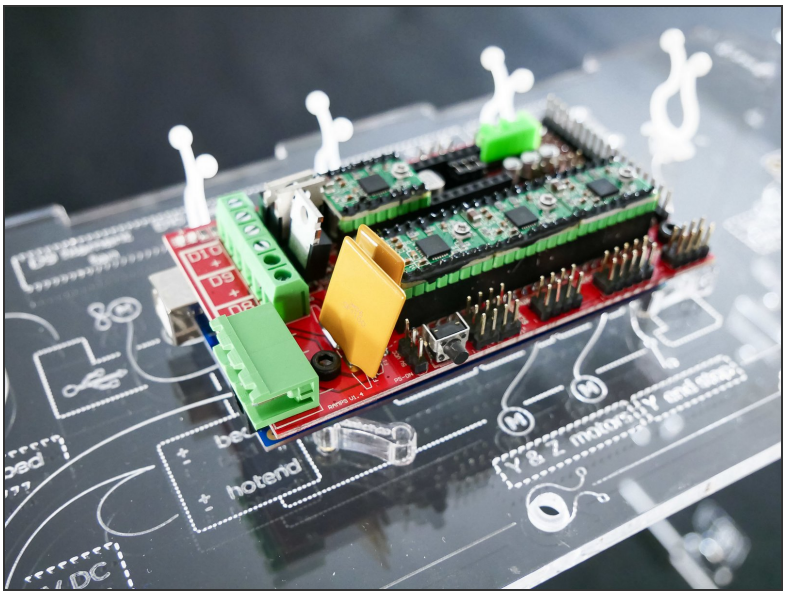
Step 10



Step 11

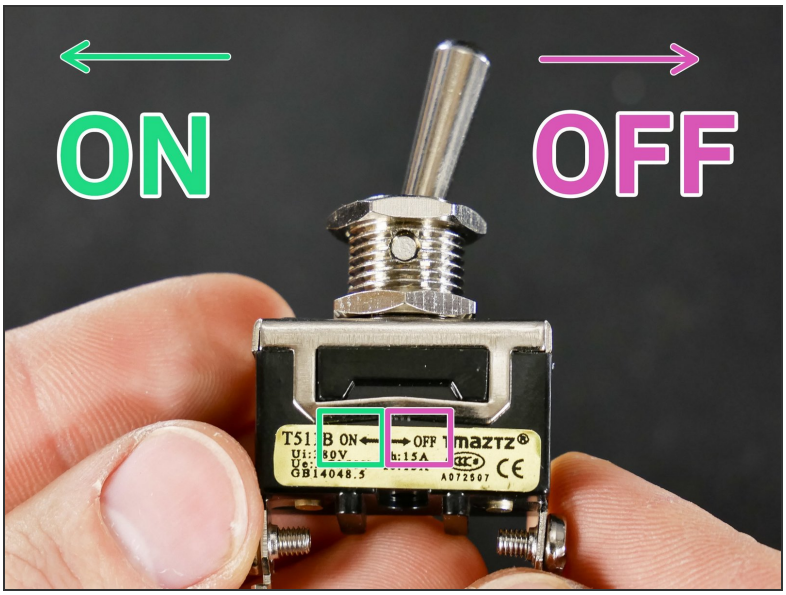


Step 12 — Looking good!

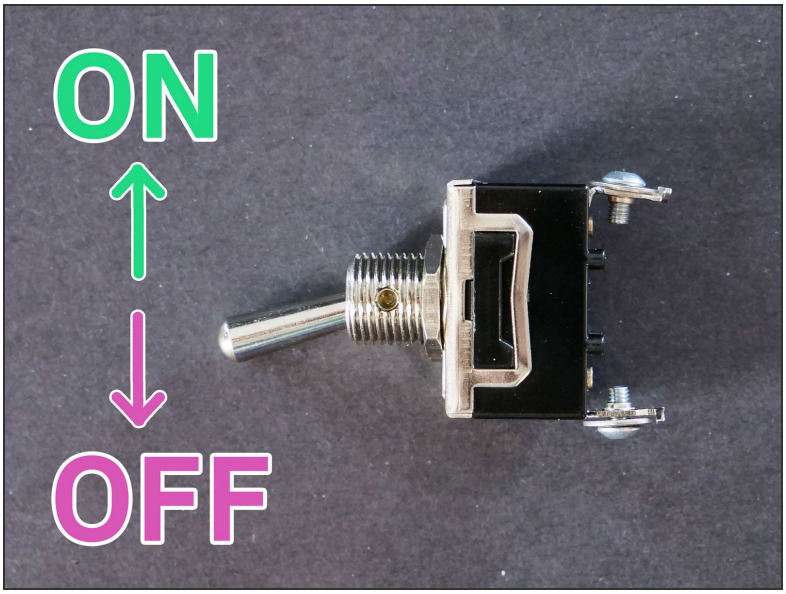


Step 13 — ↳ Power Switch

Step 14

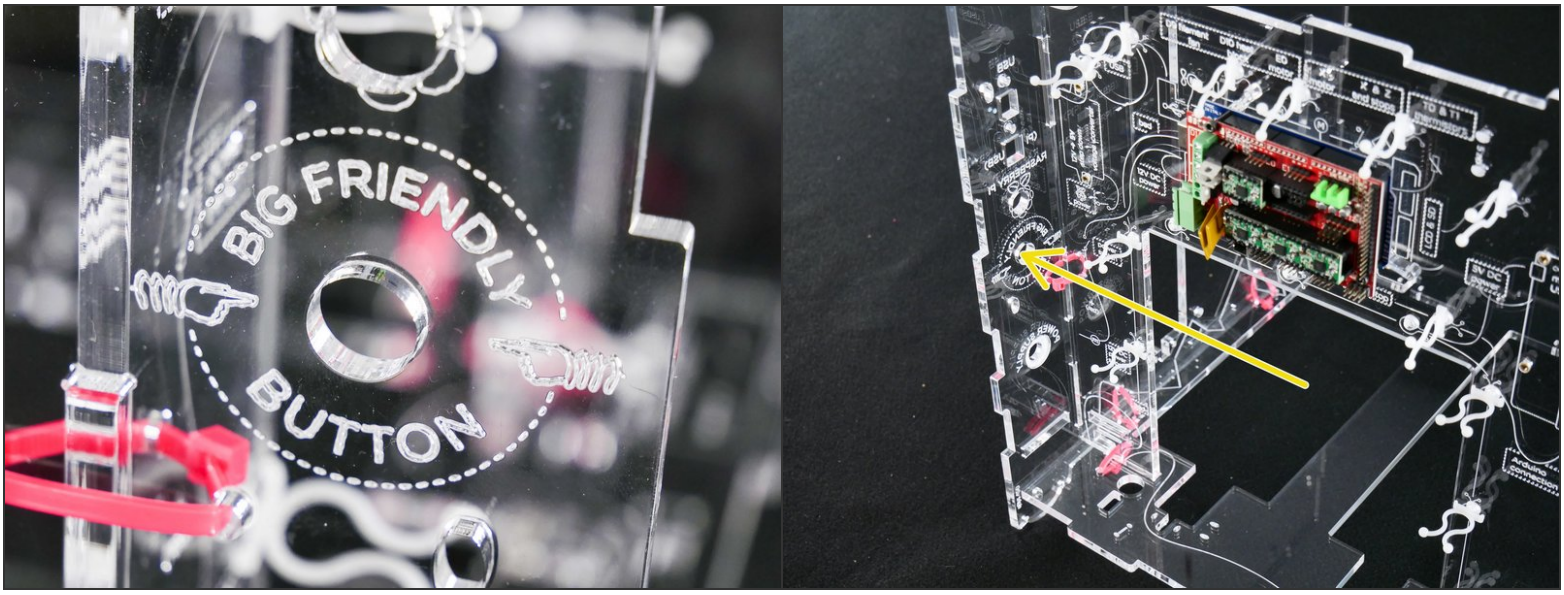


Step 15



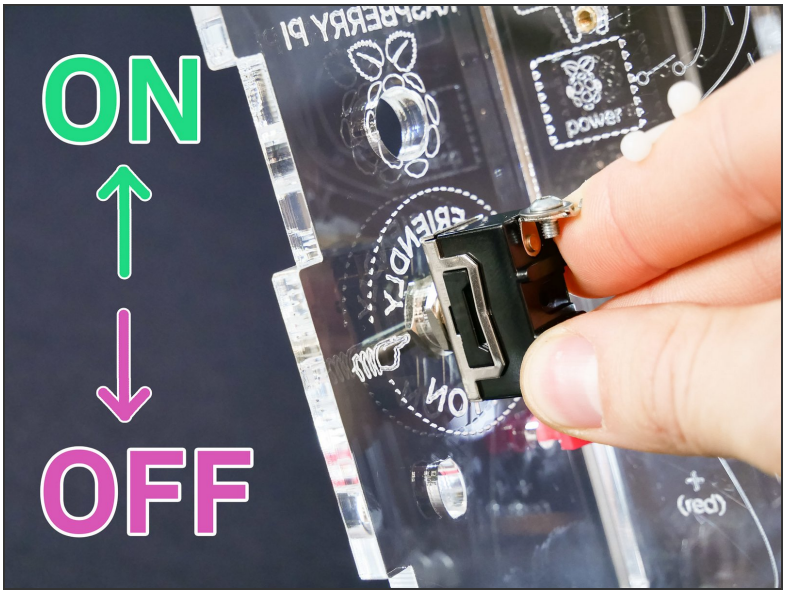
It is customary to install switches with "OFF" pointing down. This way, when you need to turn the machine off fast (emergency), you can just strike down and let the gravity guide you.

Step 16

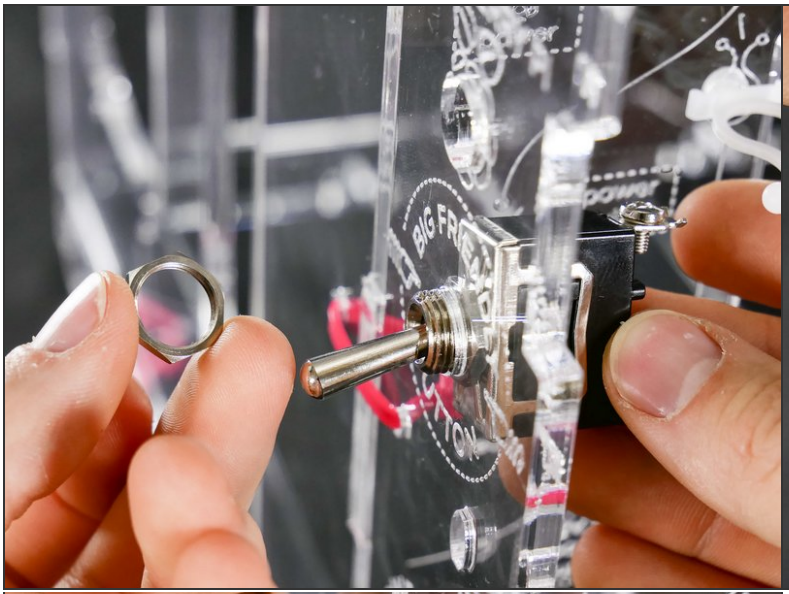


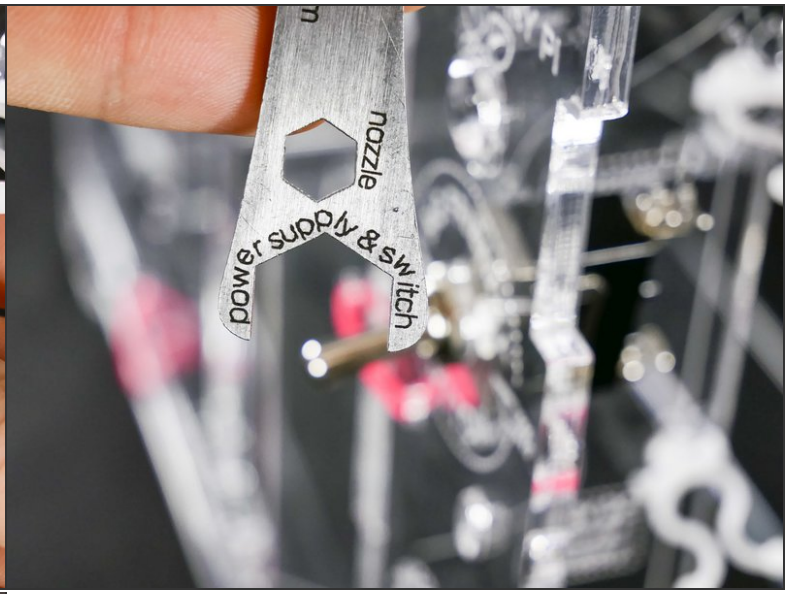
You should know that our BIG FRIENDLY BUTTON is actually a **toggle switch**.

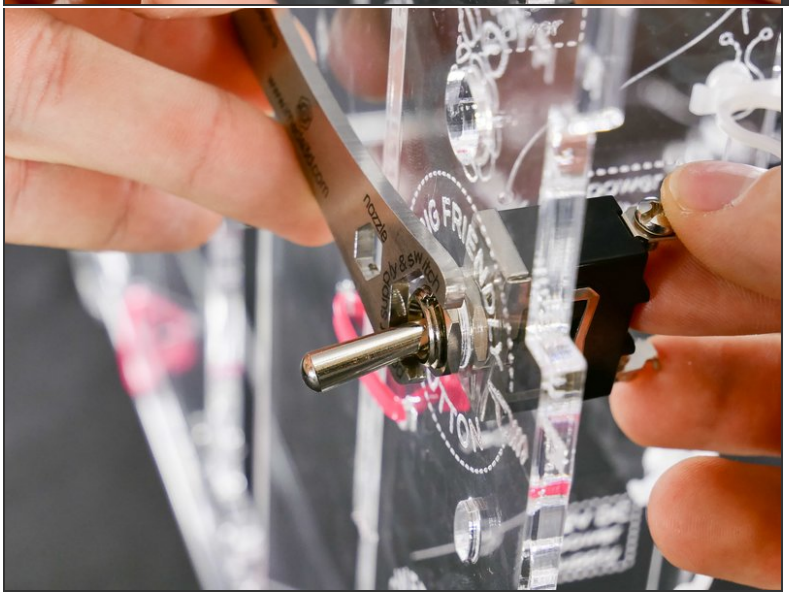
Step 17



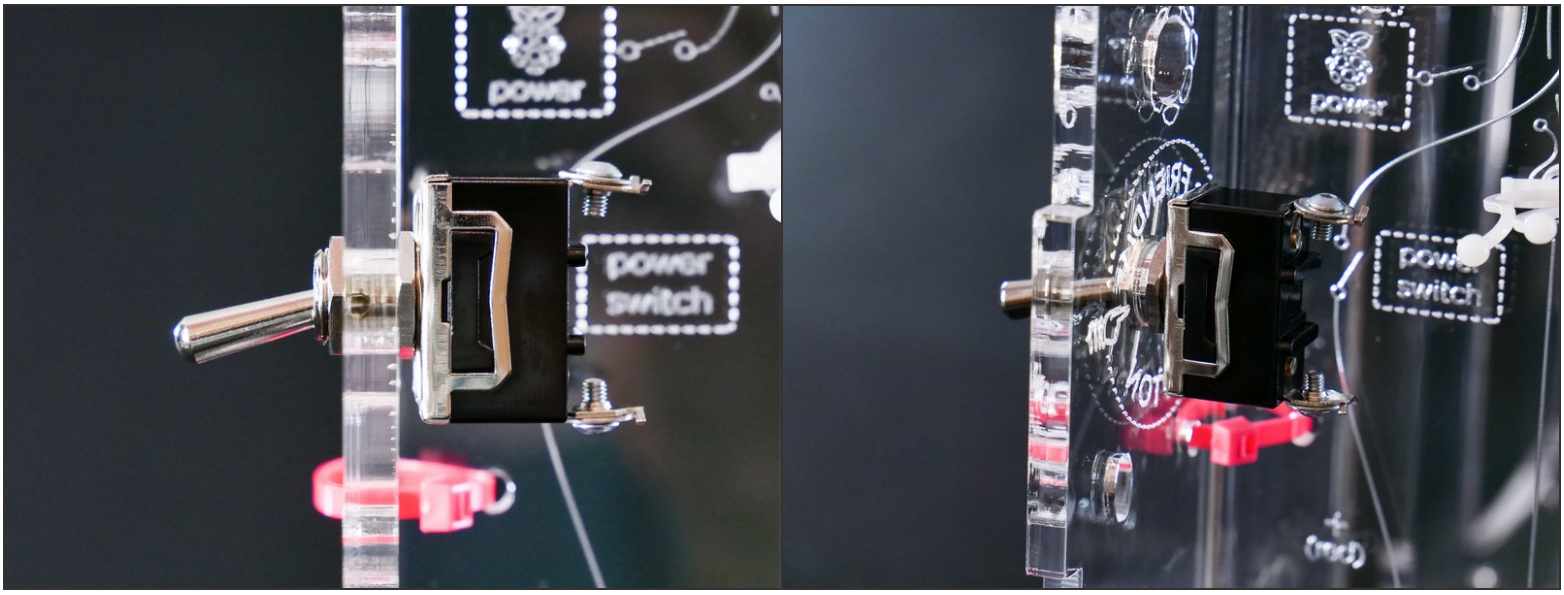
Step 18



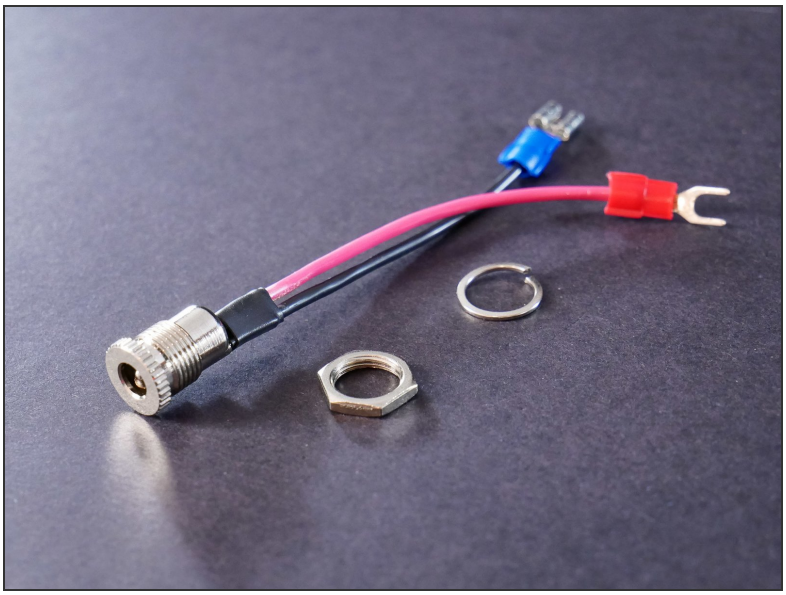




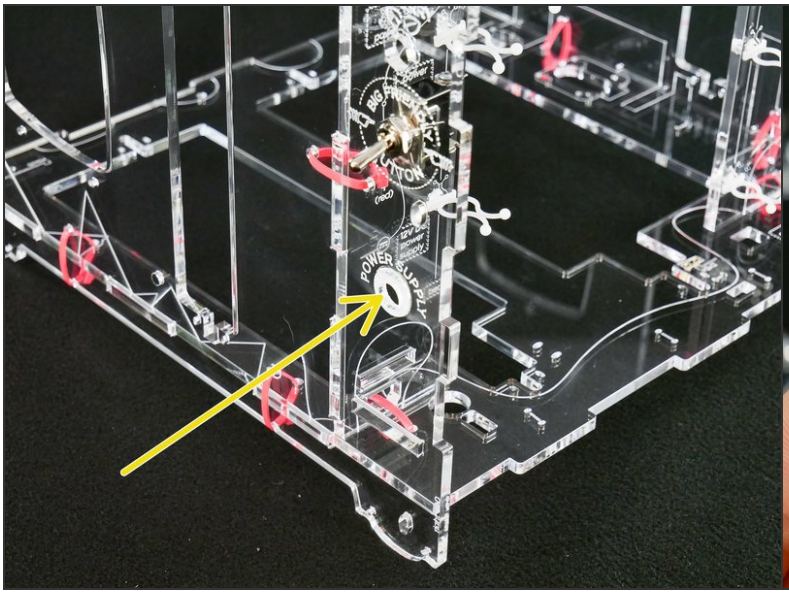
Step 19 — Looking good!

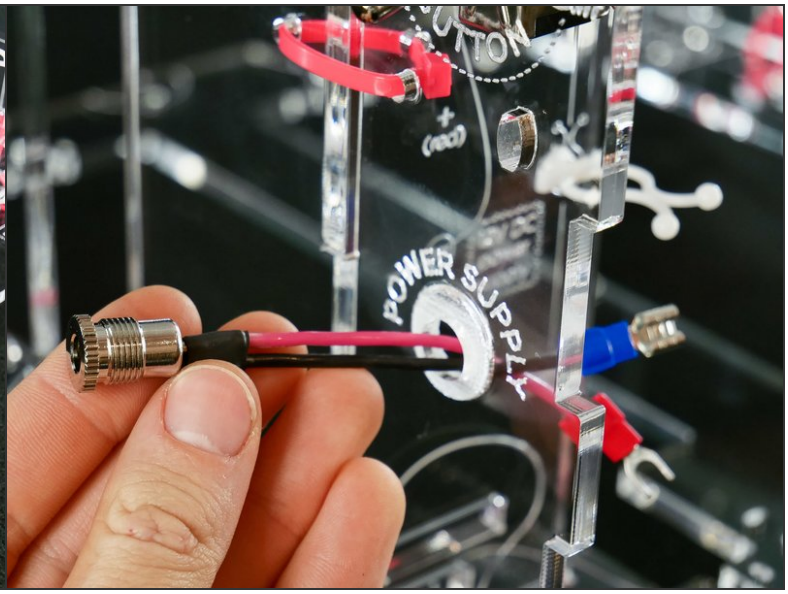


Step 20 — ↳ Power Supply

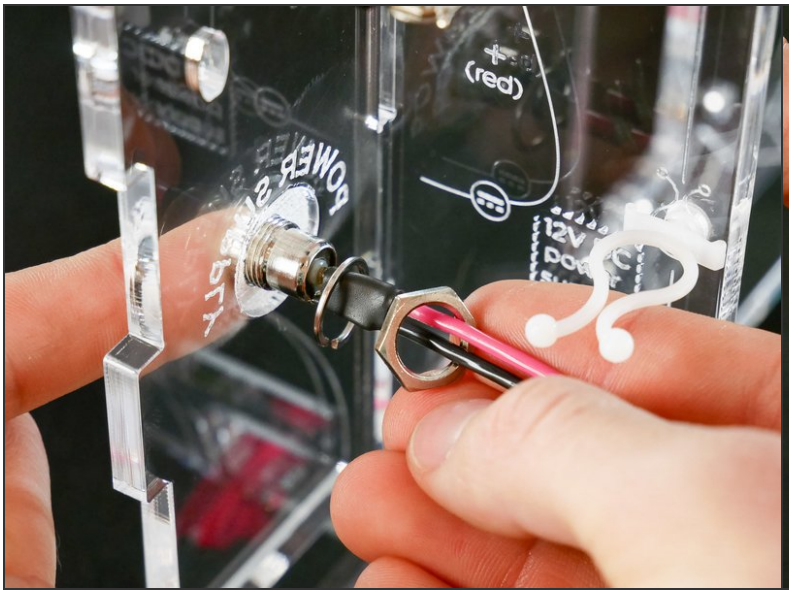


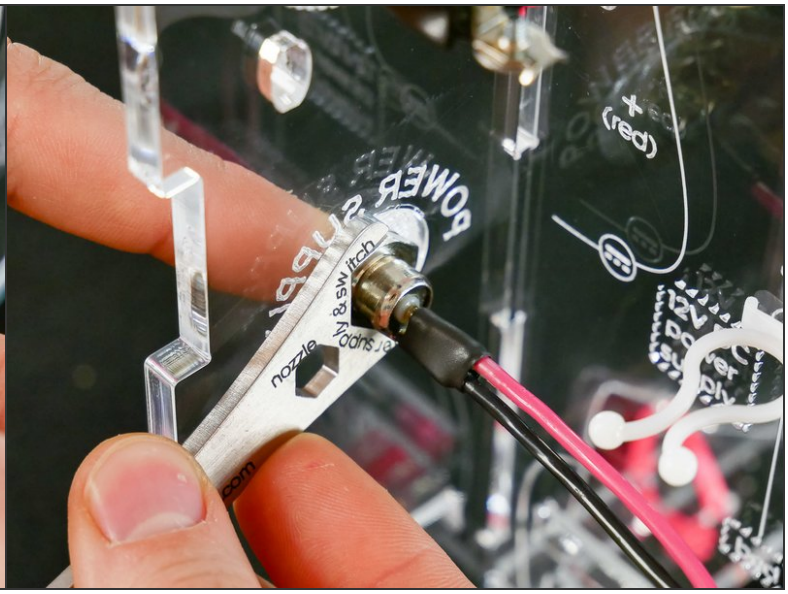
Step 21



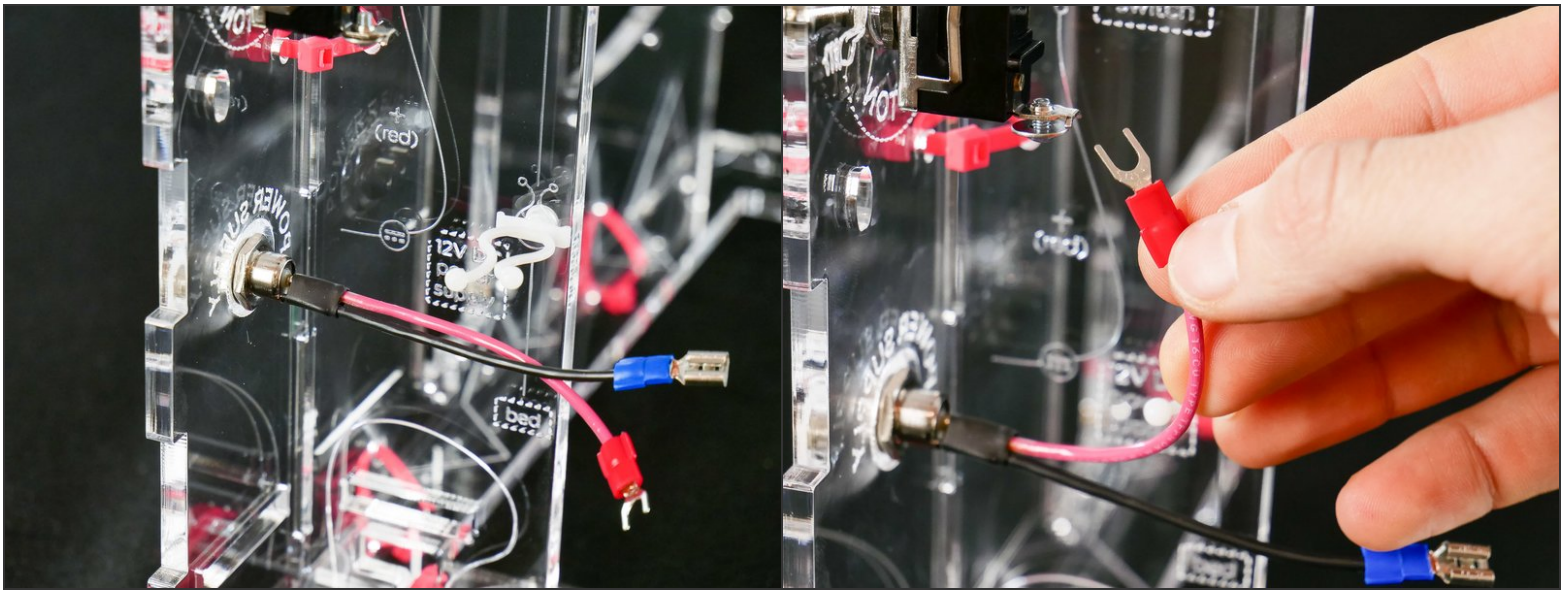


Step 22

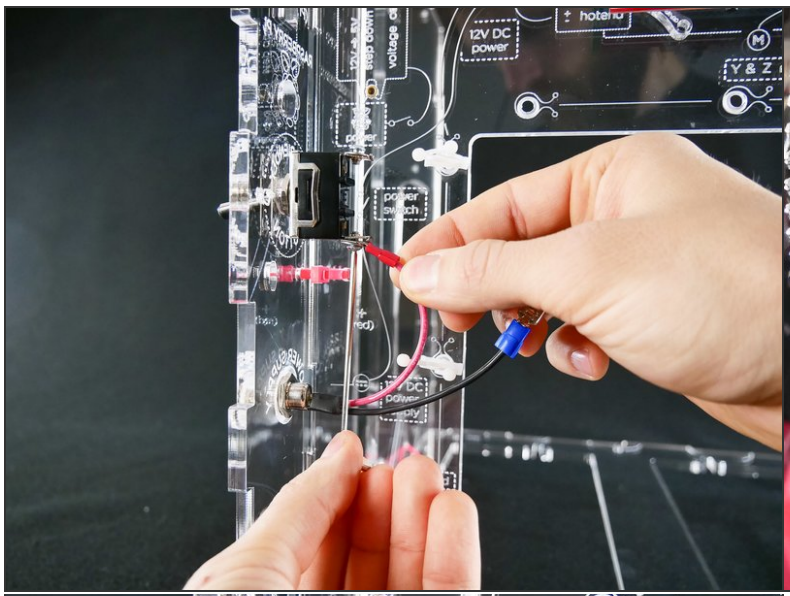


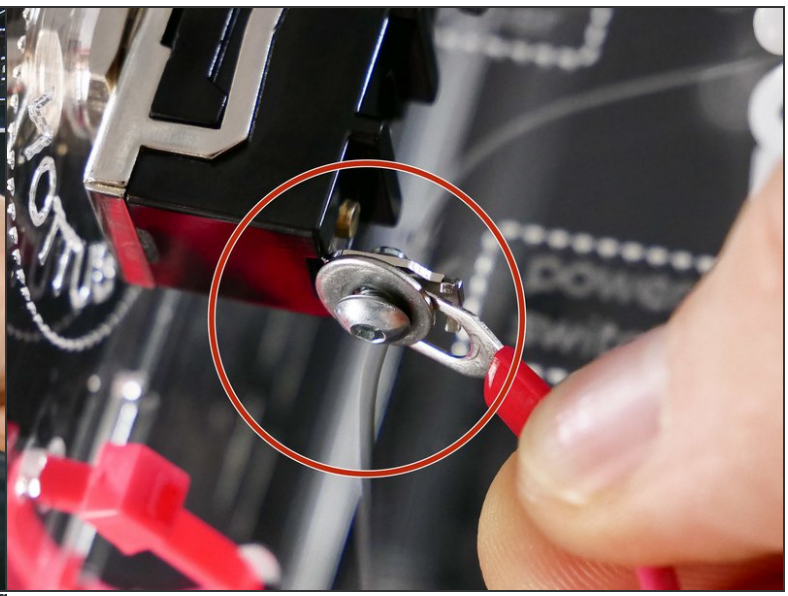


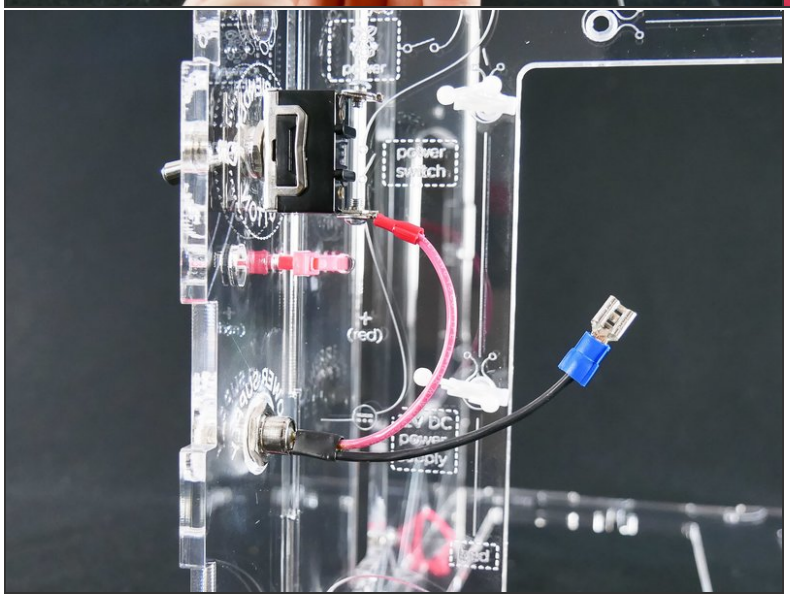
Step 23



Step 24



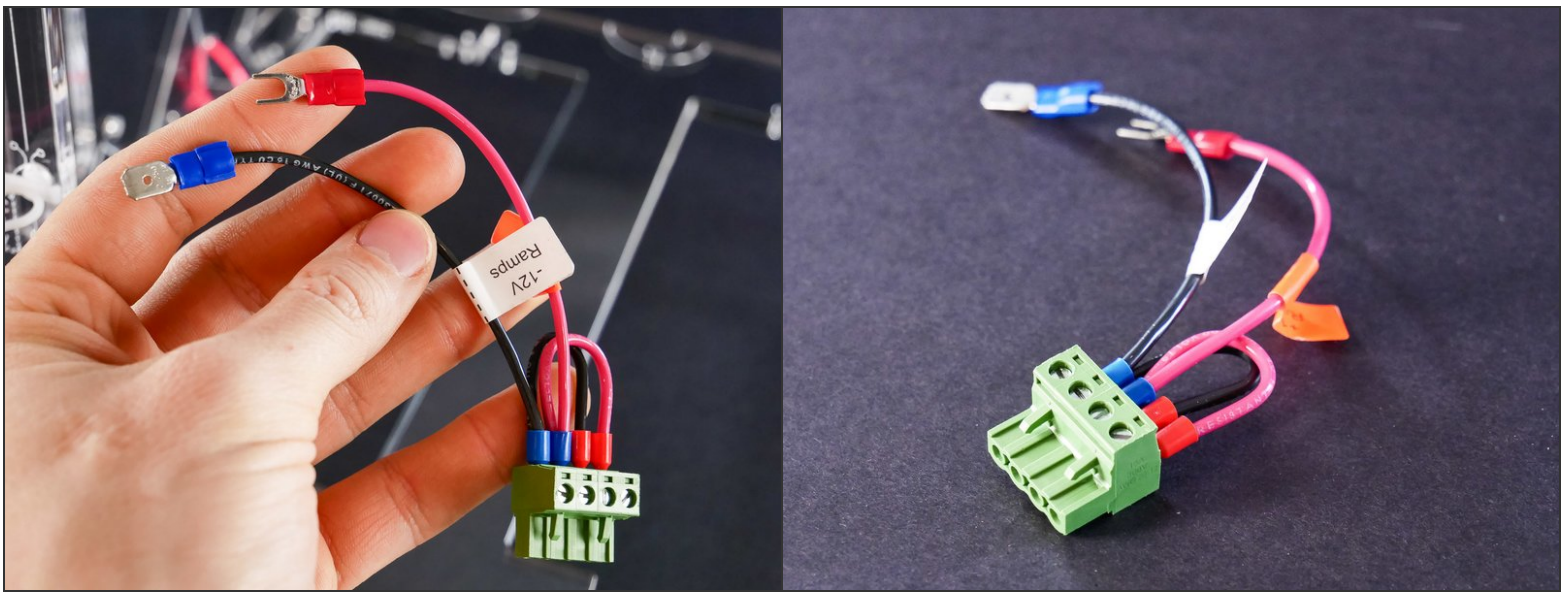




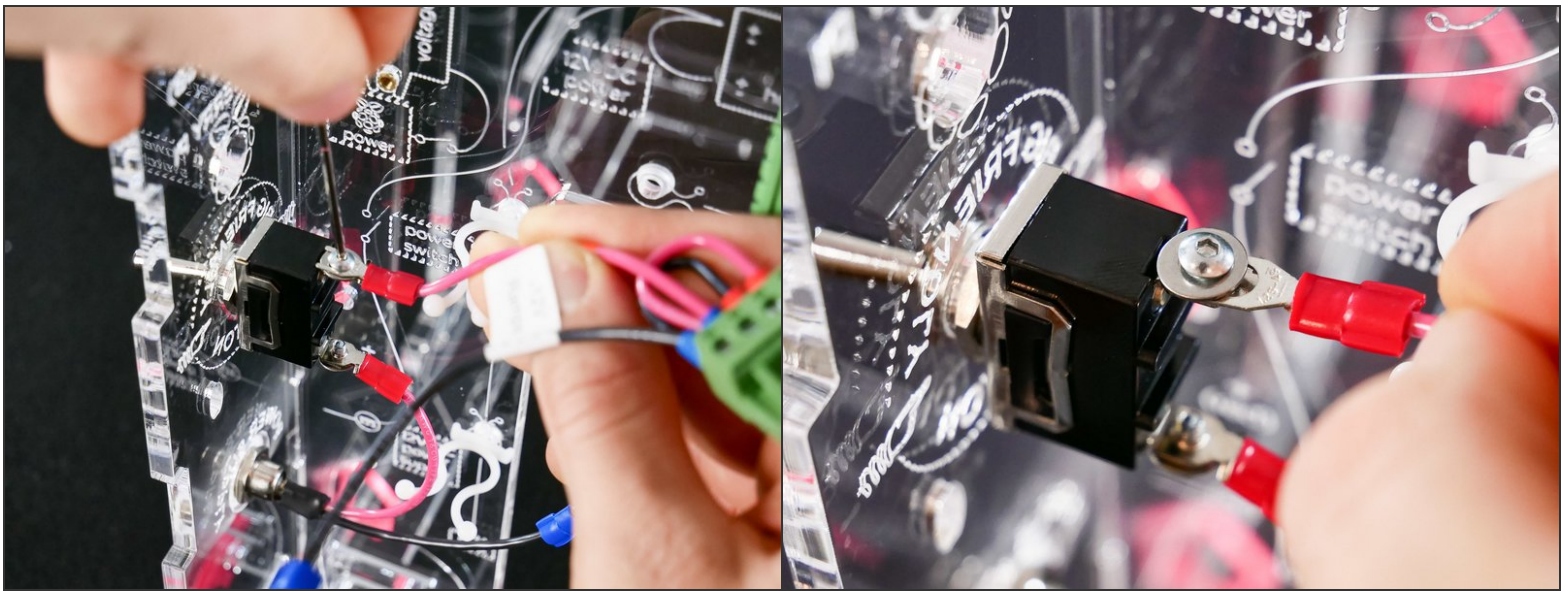
⚠ **Tighten well** else you risk overheating.

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

Step 25



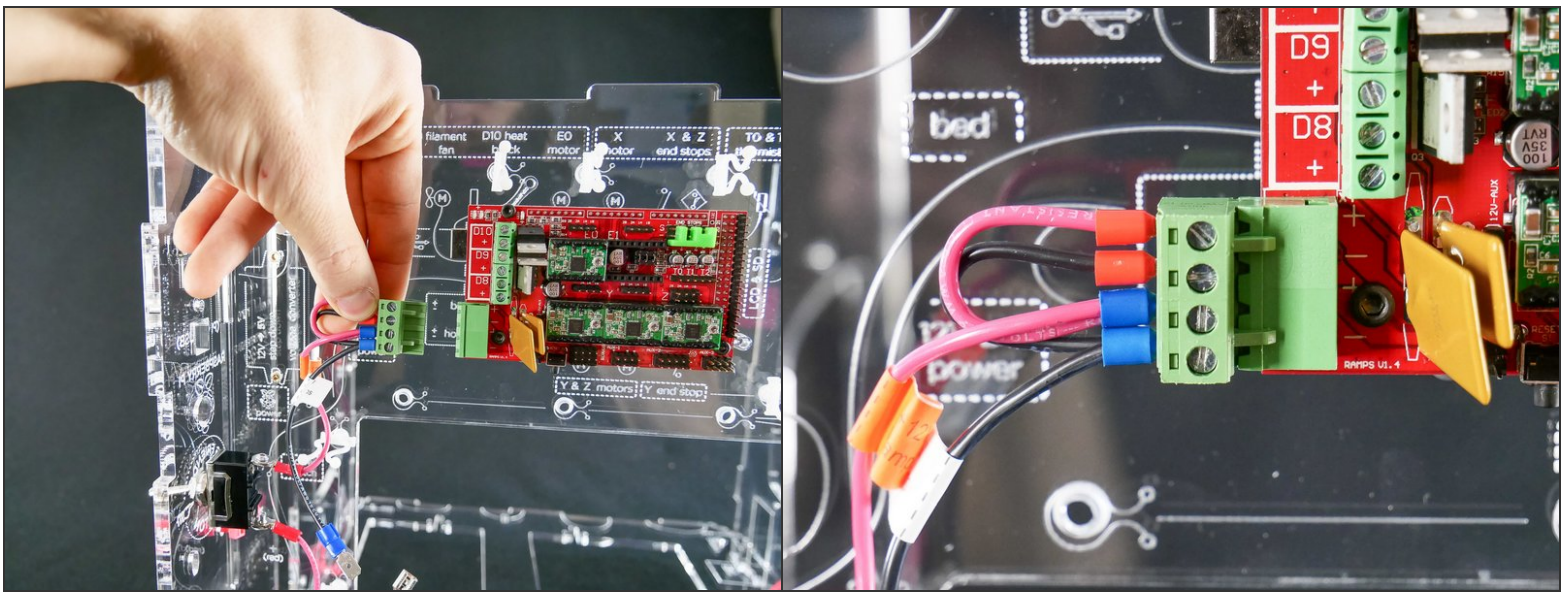
Step 26



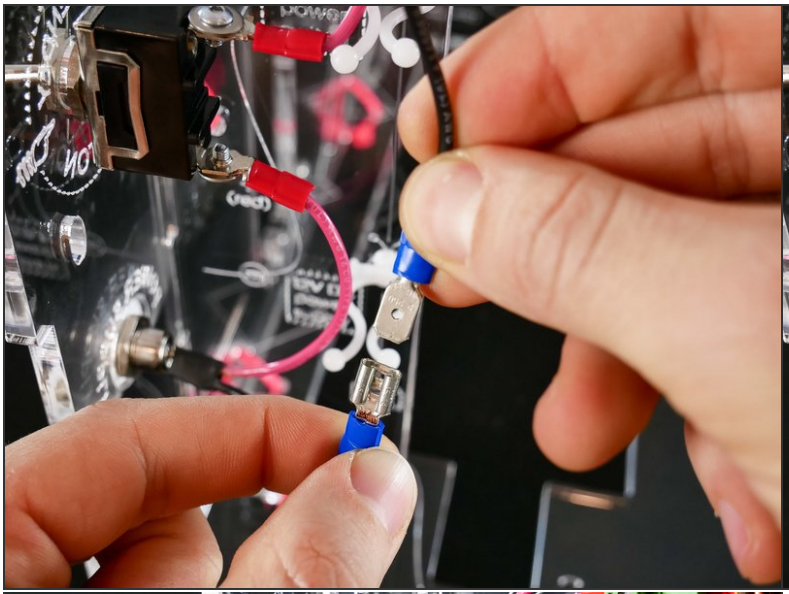
⚠ **Tighten well** else you risk overheating.

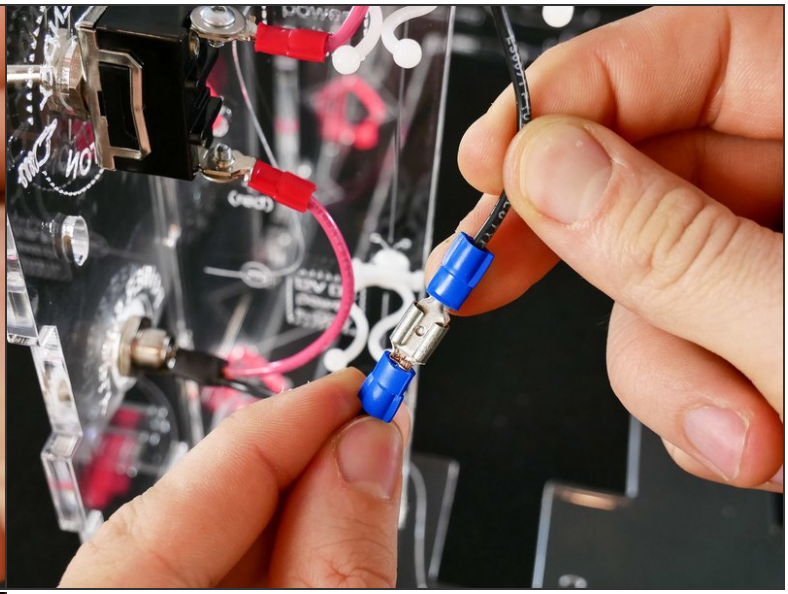
- If the screw is loose, the electricity will not flow as well, which will heat up the involved components, possibly to a fault.

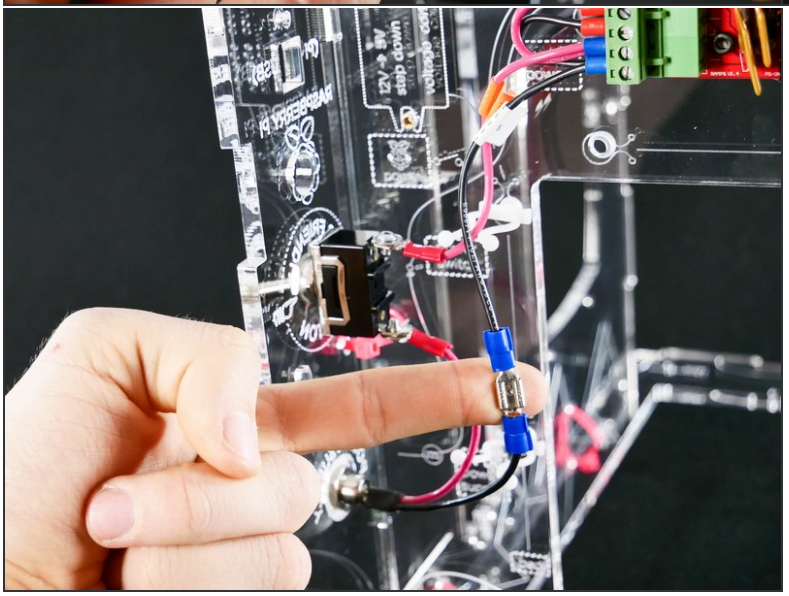
Step 27



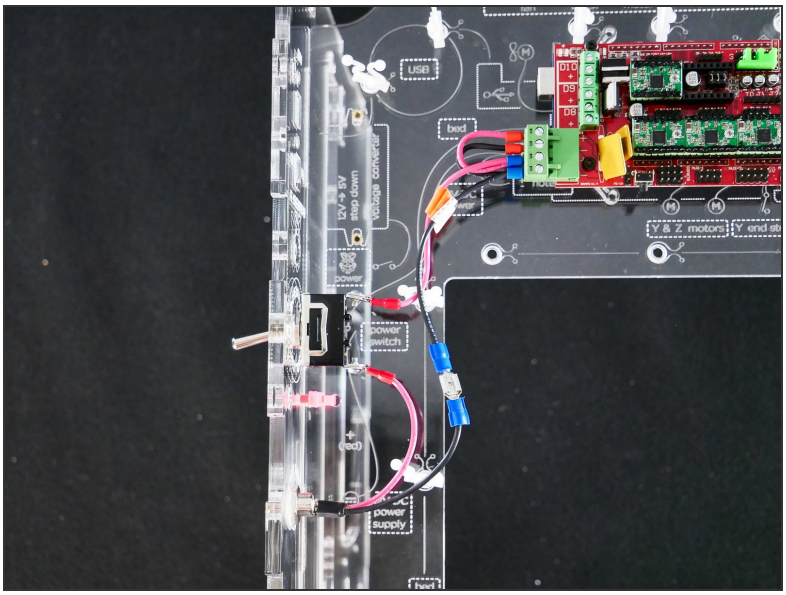
Step 28





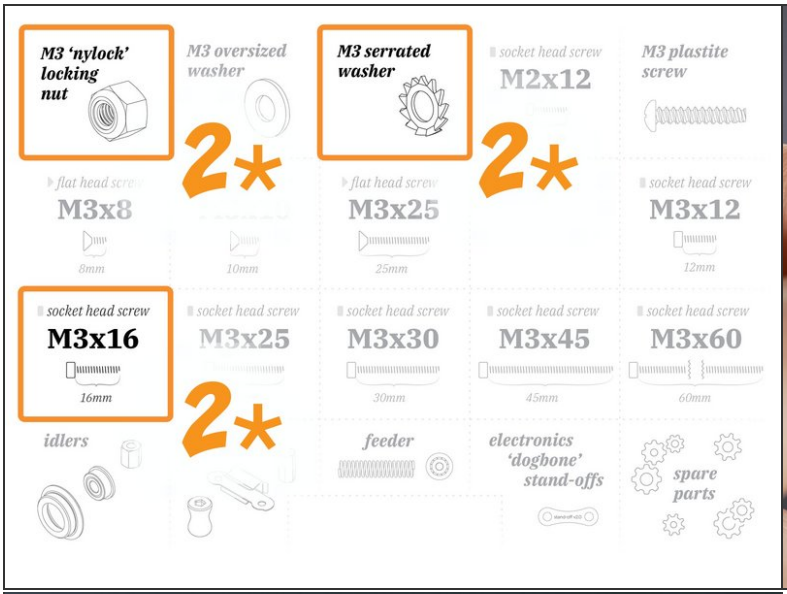


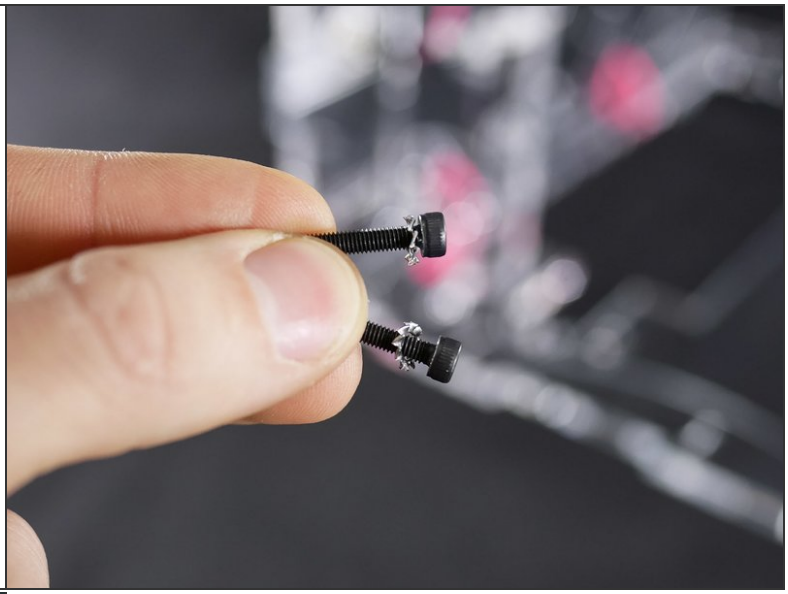
Step 29 — Looking good!

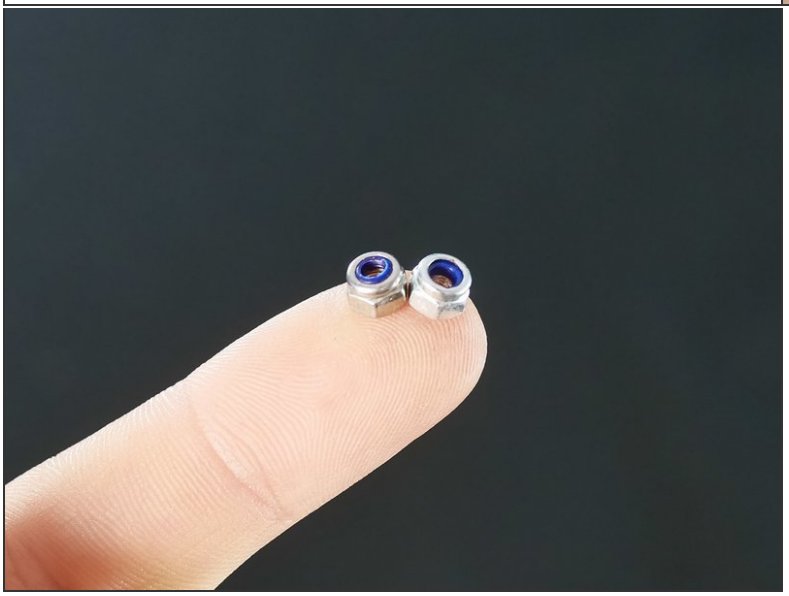


Step 30 — ↳ USB Extension

Step 31

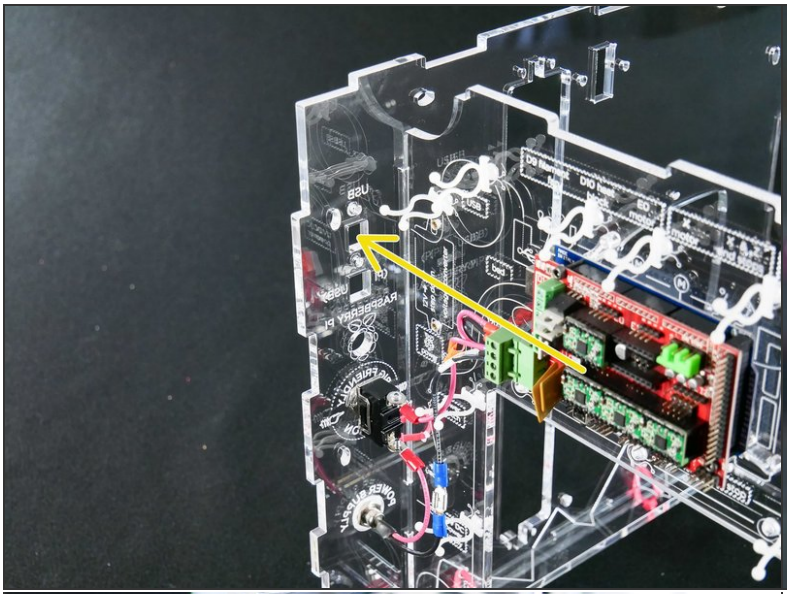


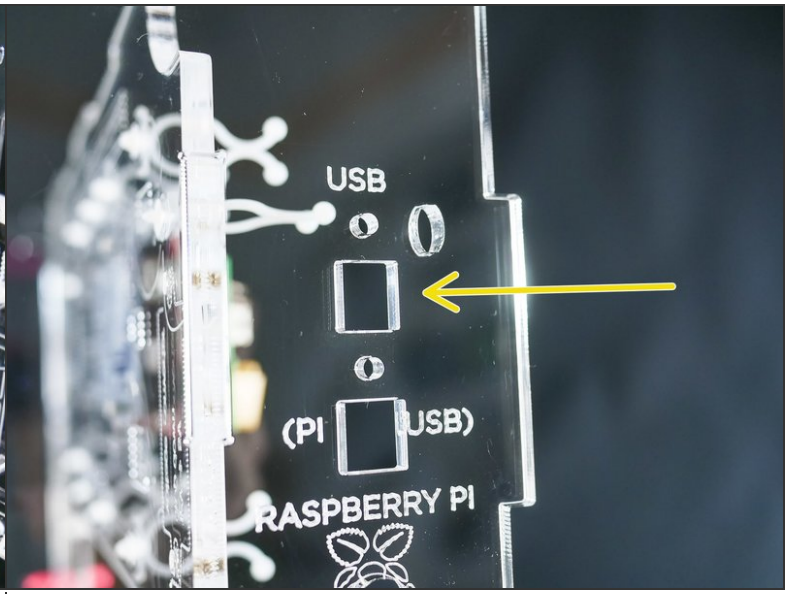


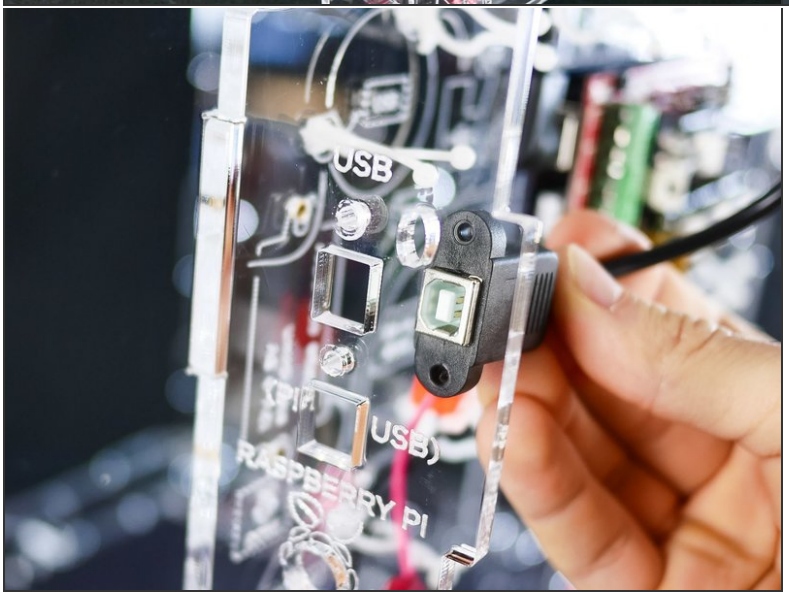


- M3x16

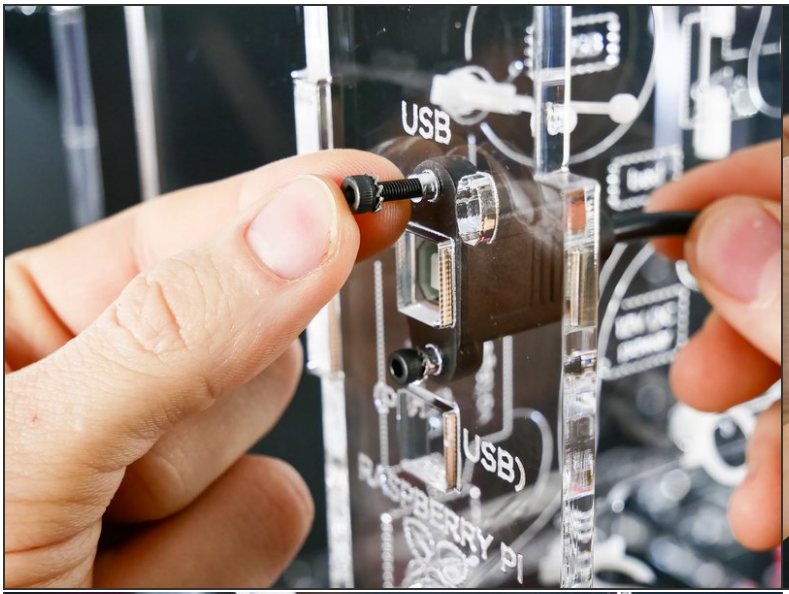
Step 32

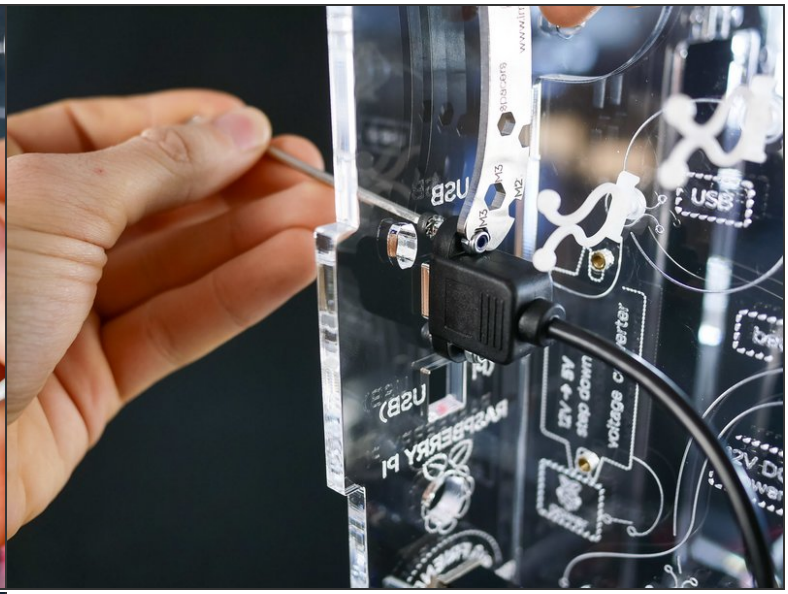


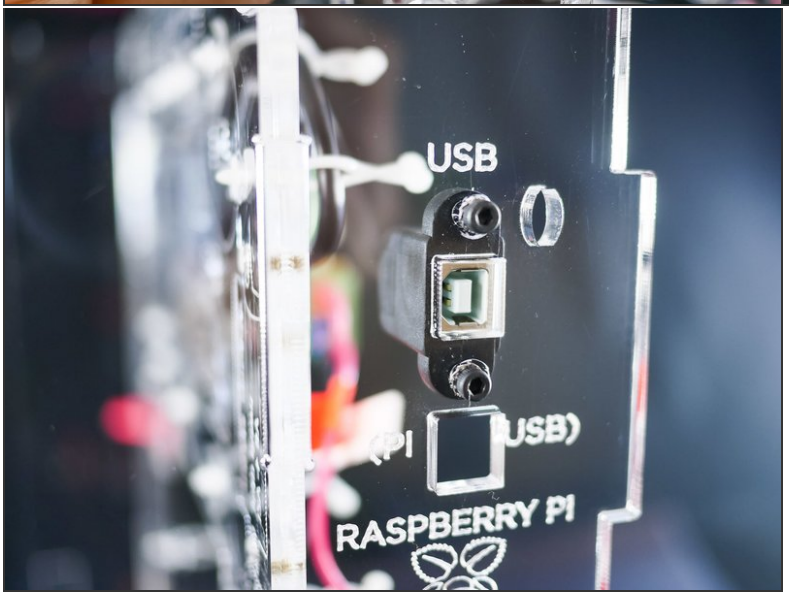




Step 33

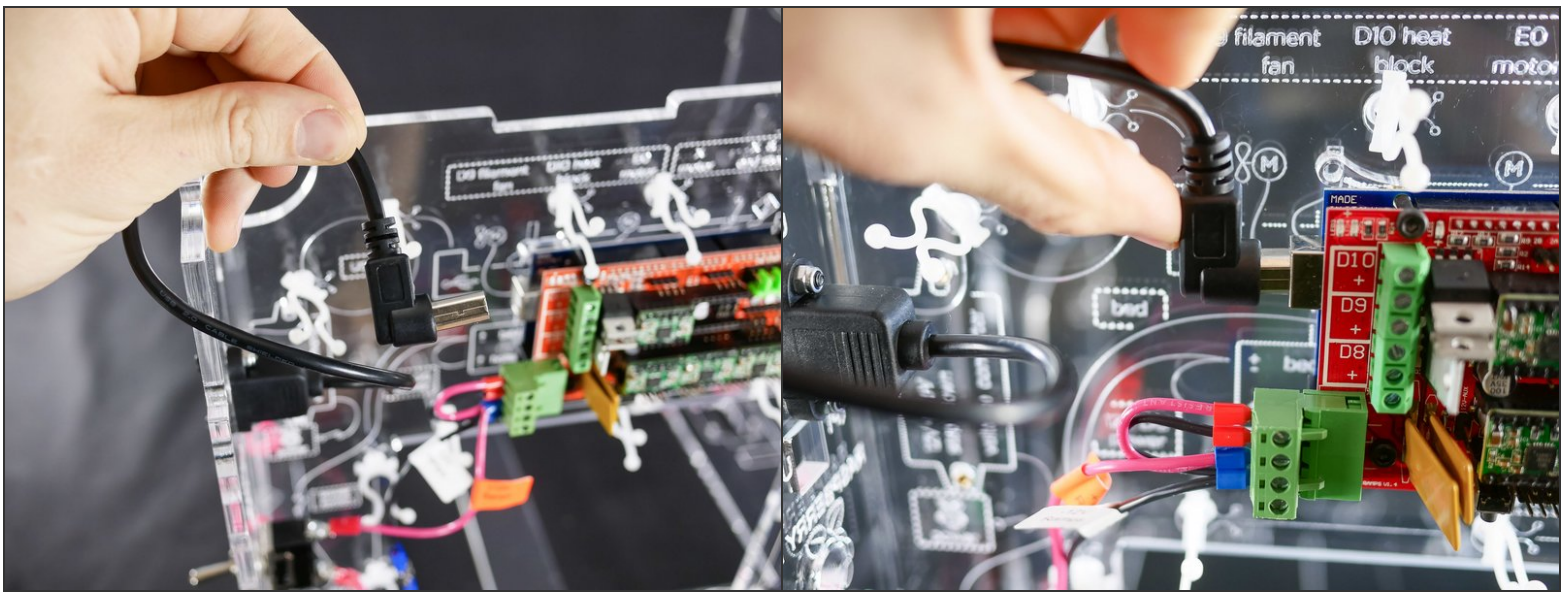




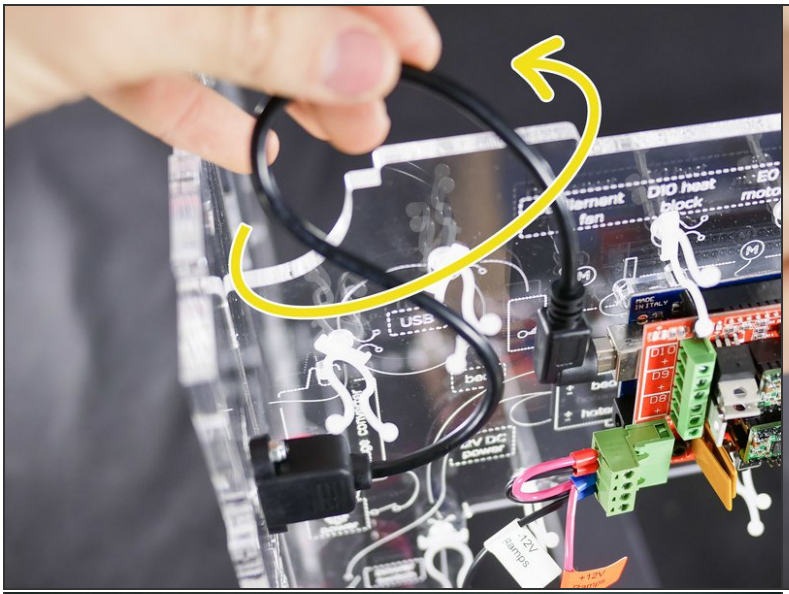


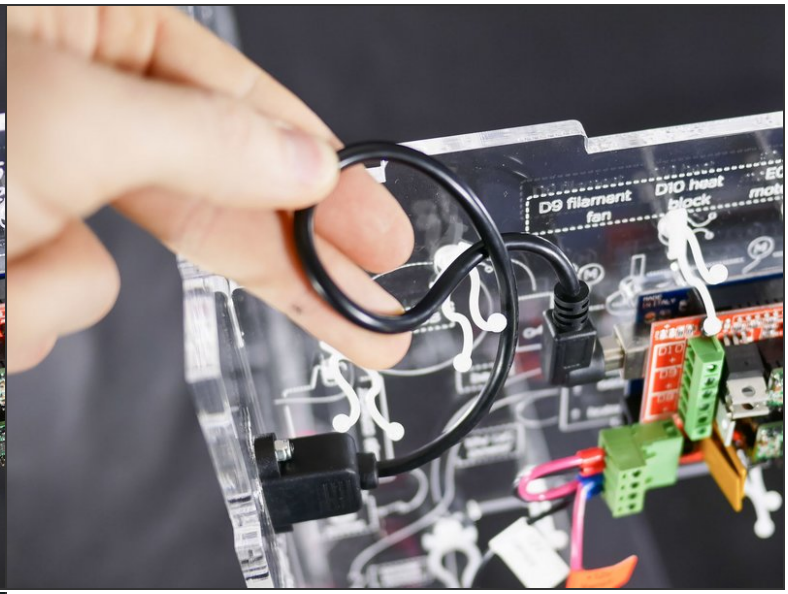
- M3x16

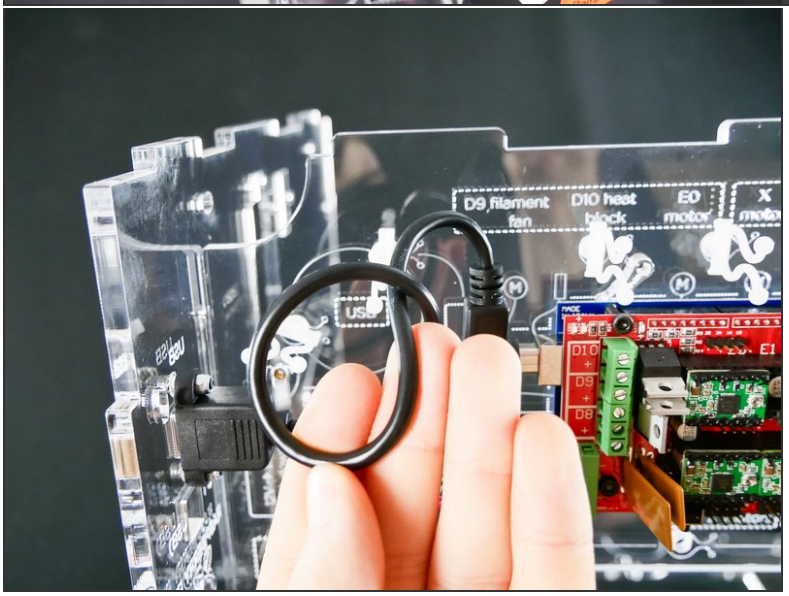
Step 34



Step 35

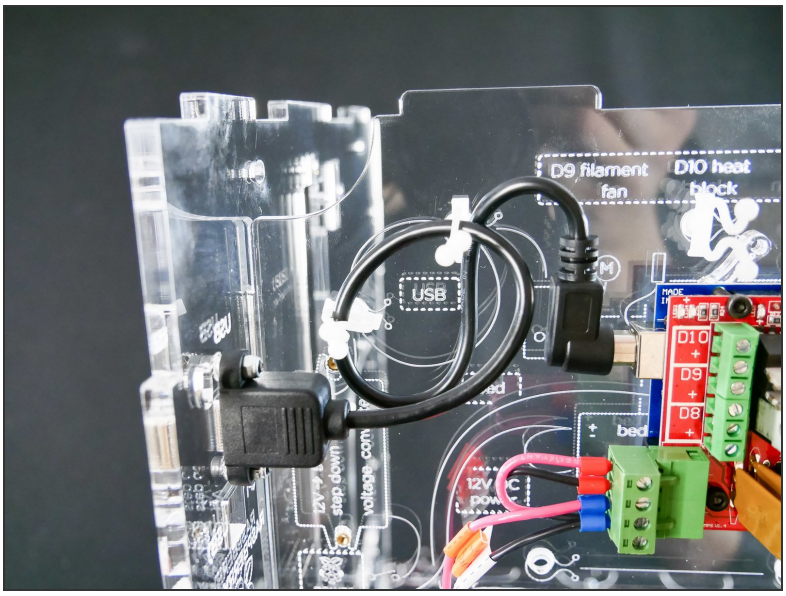






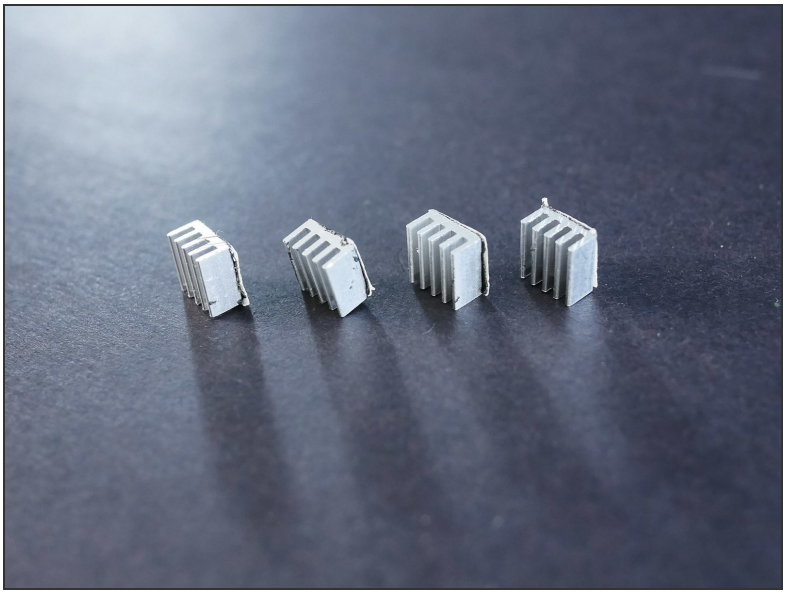
- Twisting a wire can be *art*.

Step 36 — Looking good!

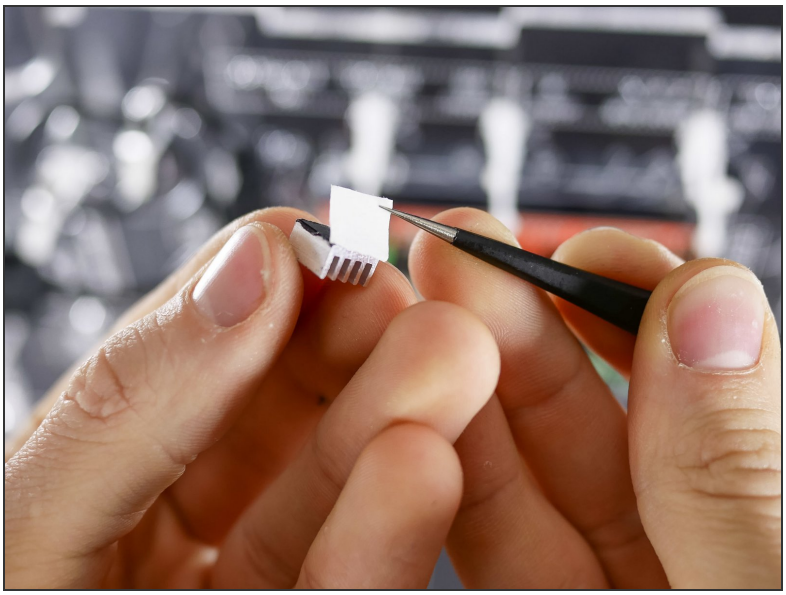


- What an elegant twist.

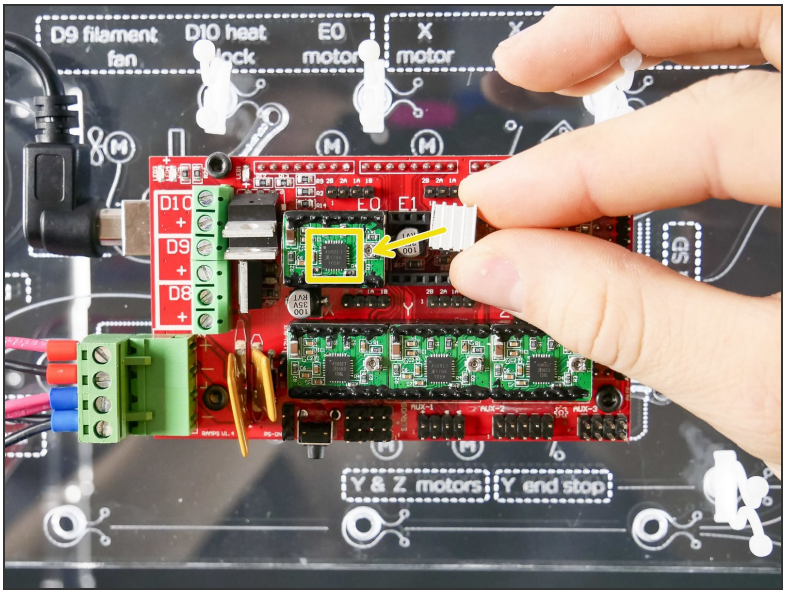
Step 37 — ↳ Driver Heatsinks



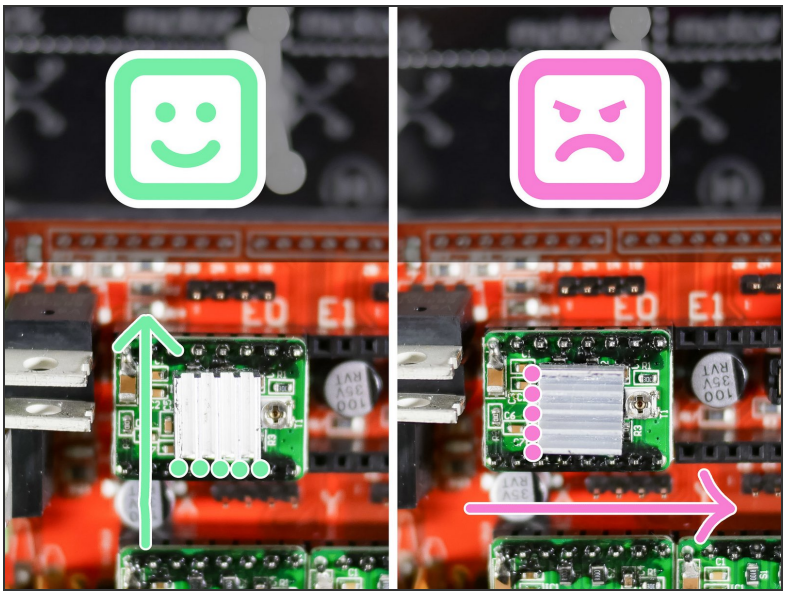
Step 38



Step 39



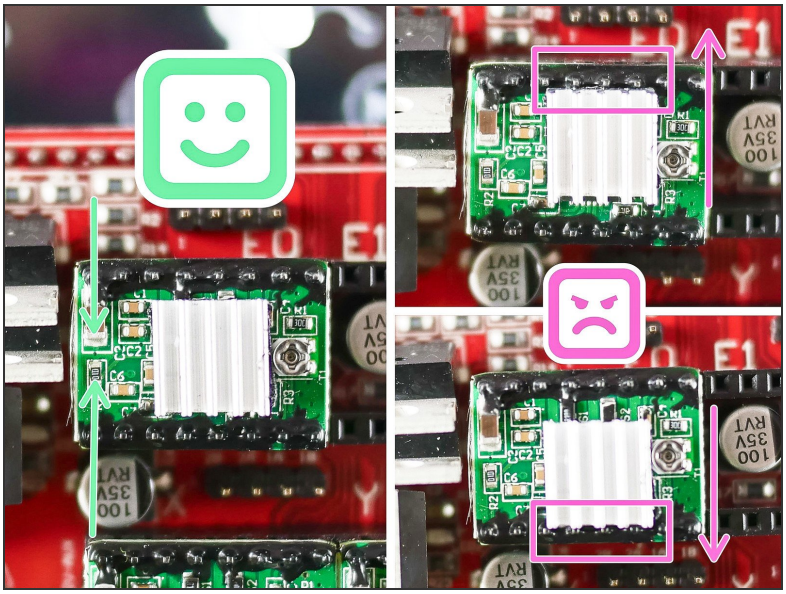
Step 40



⚠ The ridges of the heatsink should be vertical so that the heat fleets faster.

- Heat has a tendency to rise up.

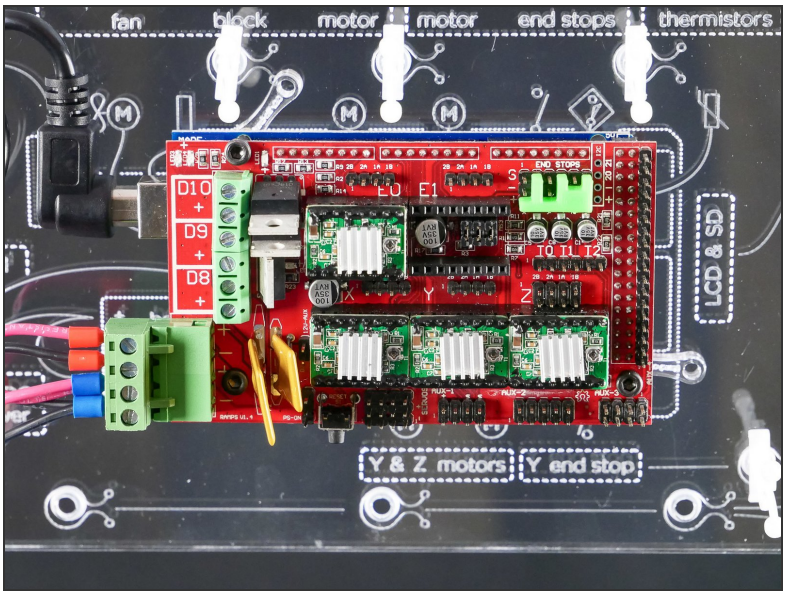
Step 41



⚠ It is important that the heatsinks **do NOT touch** the pins on the drivers.

- The heatsinks could connect the driver pins and *burn out the driver*.
- We actually put a protective isolating liquid over the pins to protect against shortage, but it's better to just leave the pins alone.

Step 42 — Looking good!



What's Next?

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