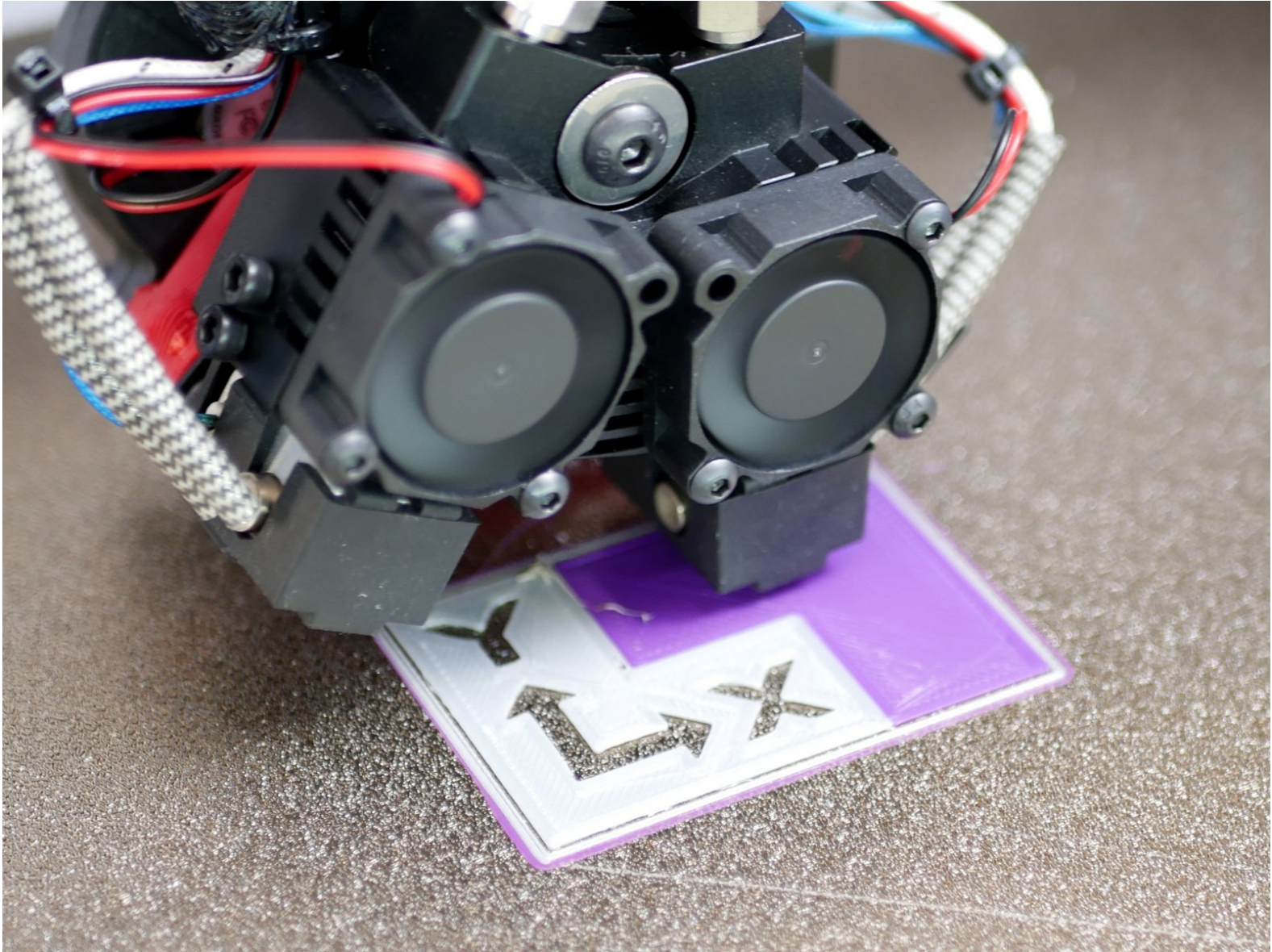


Makertech


Getting Started

Written By: Makertech



Step 1 — Unboxing



 Carefully open the box from the top, as indicated by the "This Way Up" labels.

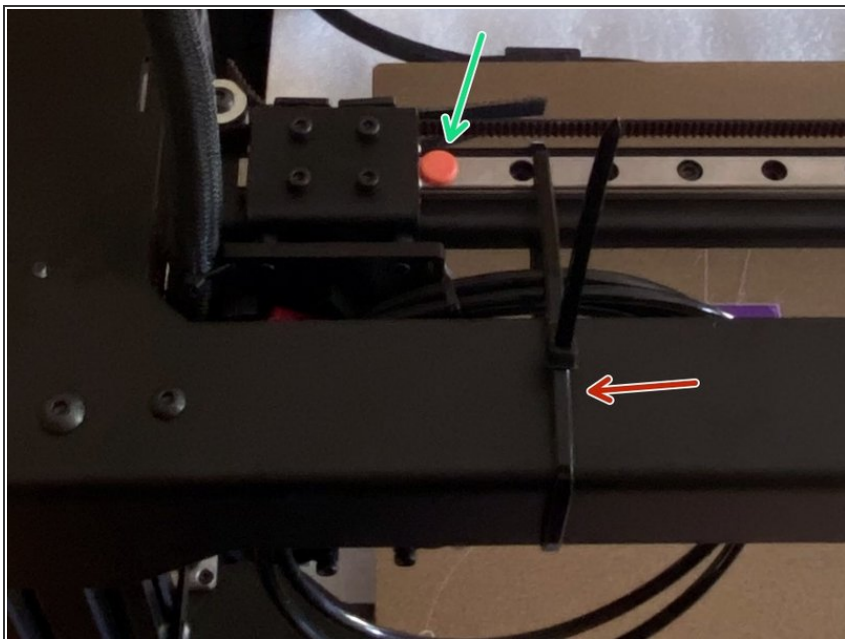
- Remove the top layer of packaging.
- Remove the enclosure panels.
- Remove the foam from the sides of the box.
- Picking it from the sides, pull the printer out of the box.

Step 2 — What's in the Box



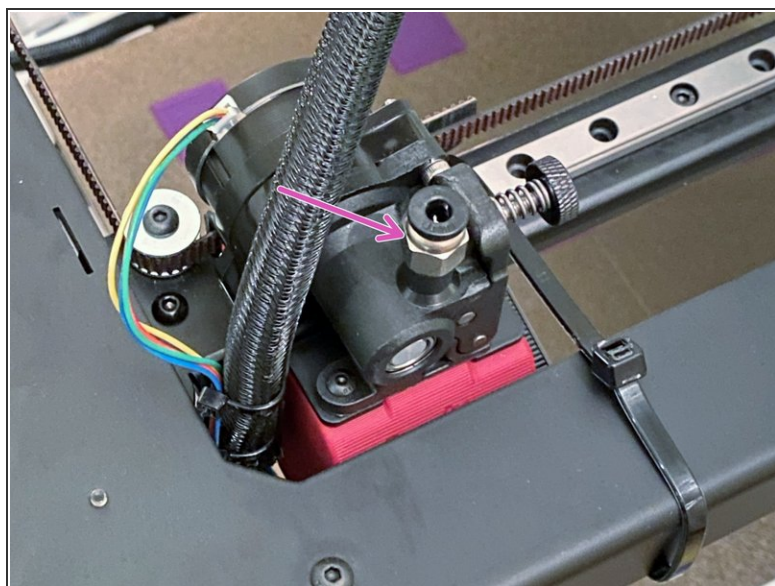
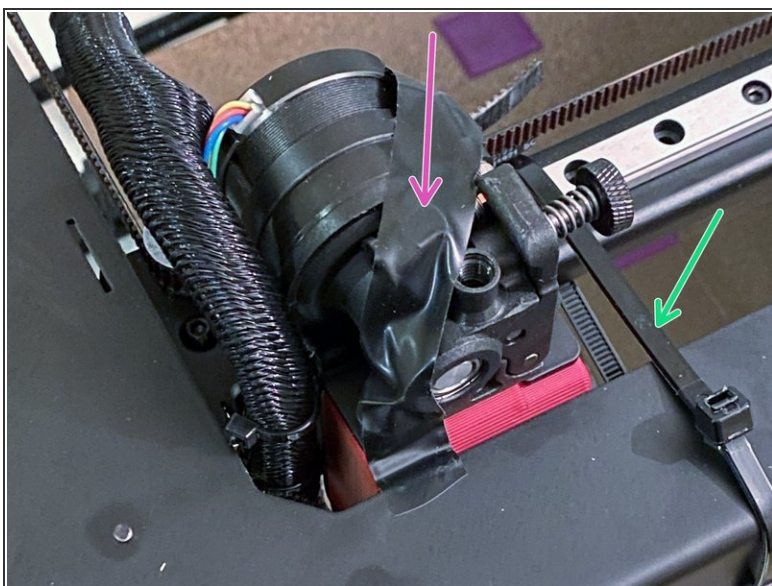
- Depending on your configuration, you should have the following:
- Proforge 3D Printer
- Lead Screws and Couplings. (These are disassembled in recent assemblies to prevent damage to them)
- A box containing the following: Touch Screen, SD Card, Spool Holder, Power Cable, Hotend Cover.
- Dual Switching Hotend Config: Two Extruders, Direct Drive Assembly, Direct Drive Accessories Bag.
- Enclosure: Enclosure Panels, Enclosure Roof, Fume Filter, Fasteners.
- OctoPi: 4GB SD card, Blue USB Cable, White USB Cable

Step 3 — Releasing the Gantry and Bed (DSH)



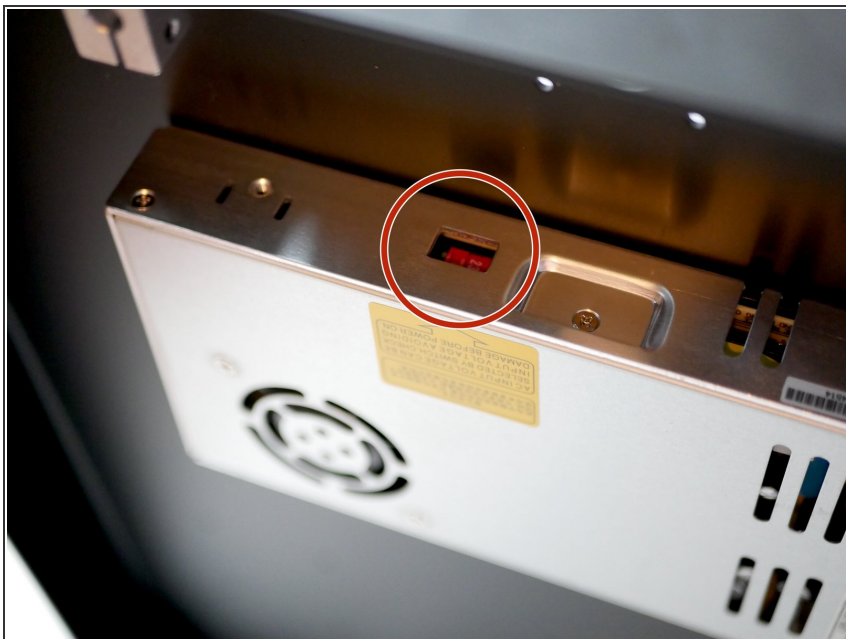
- Cut the cable tie holding the gantry.
- Also remove the orange stopper.
- ① Cut the cable ties holding the bed down also.

Step 4 — Releasing the Gantry and Bed (Direct Drive)



- Cut the cable tie and remove the orange stopper from the rail.
- Remove the tape from the print head and fix the coupling onto the extruder.

Step 5 — PSU Check



- Place the printer onto its side and check that the power supply is set to your mains voltage.

⚠ Incorrectly setting this and powering on could damage your PSU.

Step 6 — General Wiring Check

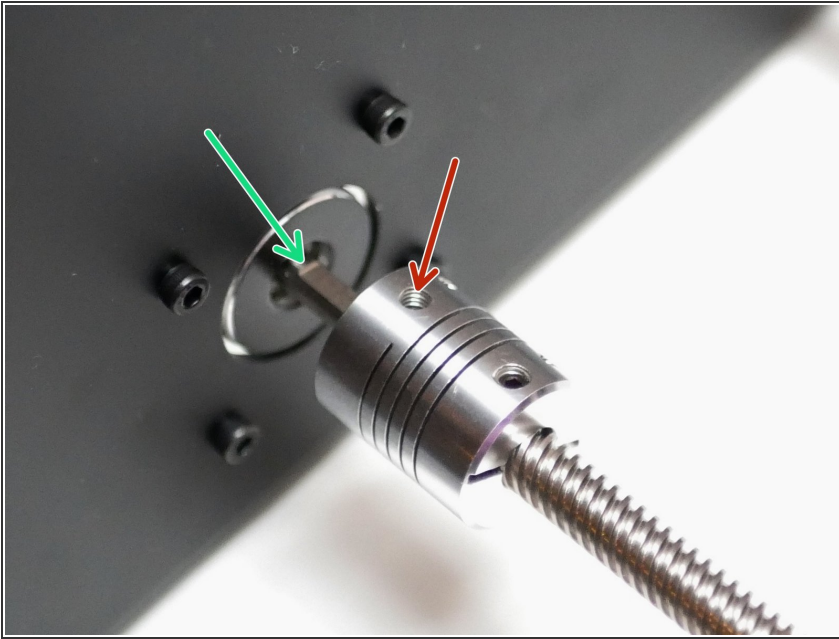


- ⓘ Double-check the wiring in general in case anything has come loose during shipping.

⚠ Especially double-check the terminals on the power supply. They should all be firmly tightened down.

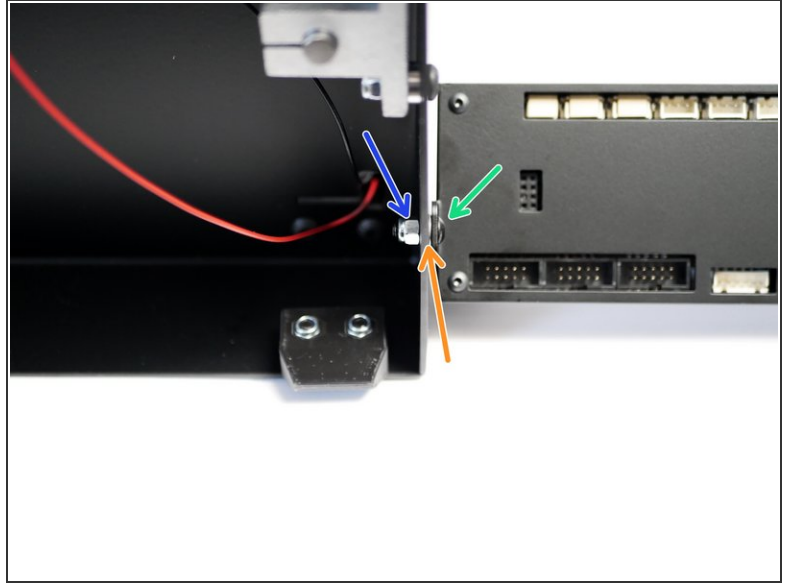
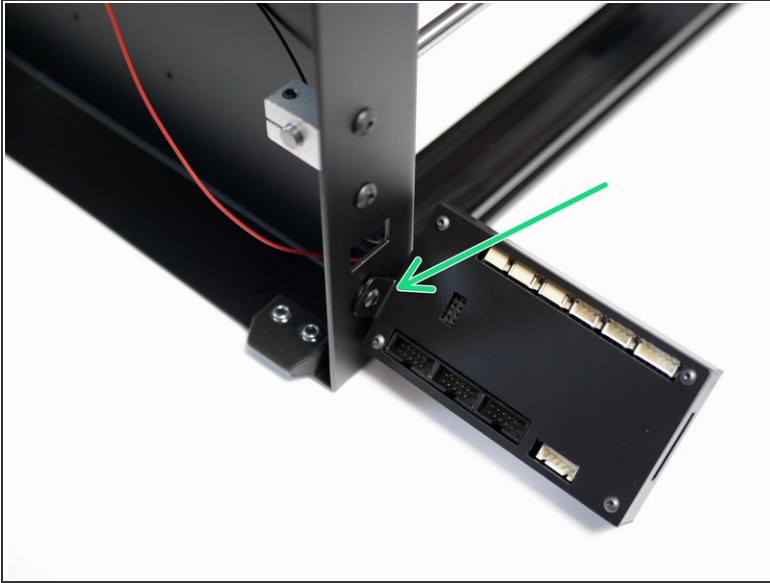
★ Wiring Diagram

Step 7 — Lead Screws and Couplings



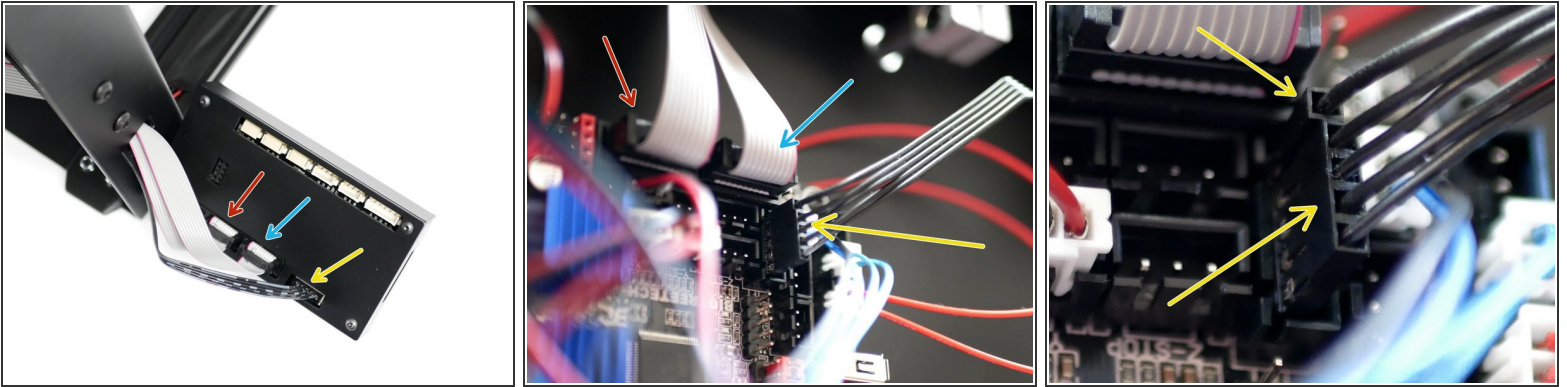
- ① In later shipments of the pre-assembled kit, these were detached to prevent damage in transit. If you have had your couplings damaged we apologise for this, please use this [form](#) to request new ones.
- ① Reattach the lead screws as show in steps 8 and 9 [here](#).

Step 8 — Touch Screen Display



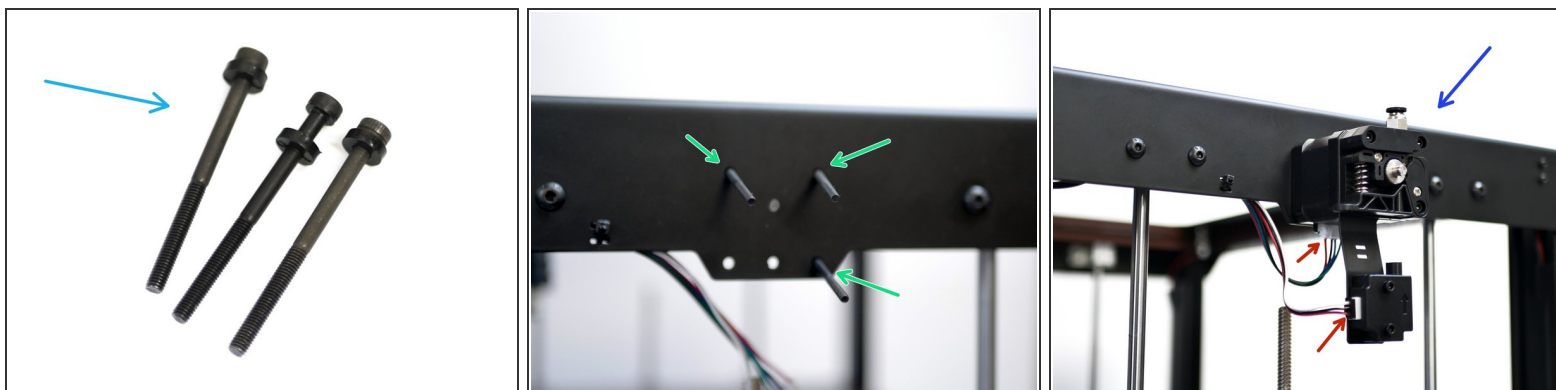
- Attach the touch screen case assembly to the bottom left of the base of the printer as shown.
 - M4 x 10mm bolt
 - M4 Washer
 - M4 Nyloc

Step 9 — Touch Screen Wiring



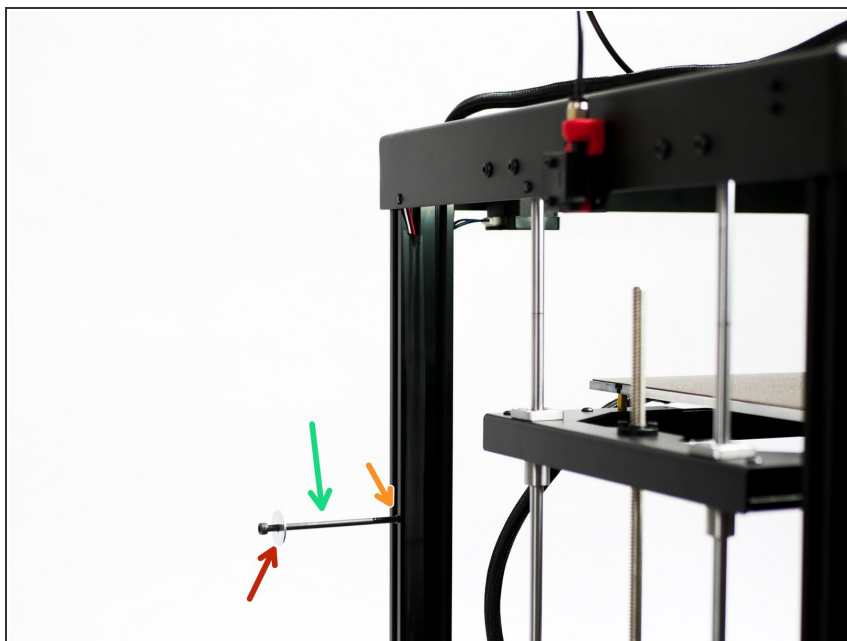
- Black cable: This is for controlling the printer through the touch screen interface via serial.
 - ⓘ The two white cables are for controlling the printer directly via marlin's interface through *emulation mode*.
 - EXP 1
 - EXP 2
 - Black cable - board side.
- ⚠ Note the orientation of the loose connector and the 4-pin connector, match as shown in the third image.

Step 10 — Mounting Extruders (DSH)



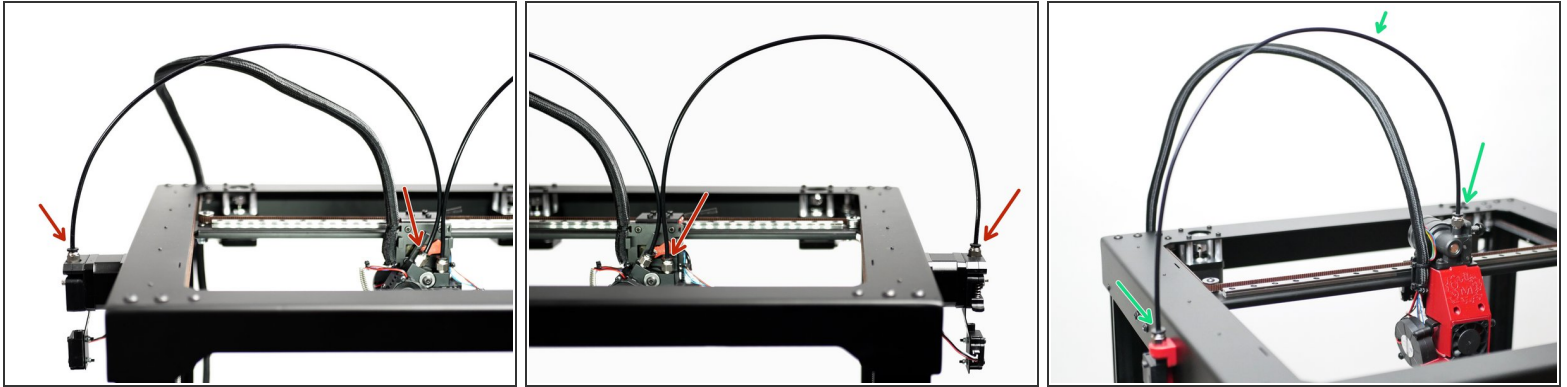
- Take these three bolts and remove them from the back of the extruder.
 - Feed them into holes on the top panel, from the inside.
 - Secure the extruder onto the top panel.
 - Fix the cables into the motor and filament sensor as shown.
- ⓘ Repeat the same on the other side of the top panel also.

Step 11 — Spool Holders



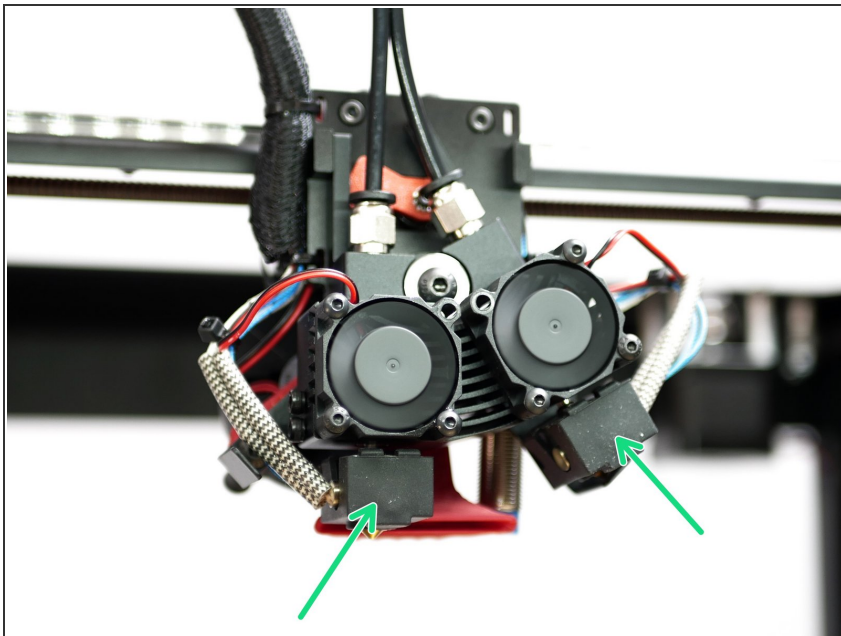
- ⓘ Fix the spool holder assembly to the side of the printer:
- M5 x 100mm Bolt
 - M5 Penny Washer
 - M5 T-Nut
- ⓘ With the Dual Switching Hotend setup this needs to be done on both sides of the printer.

Step 12 — PTFE Tubing



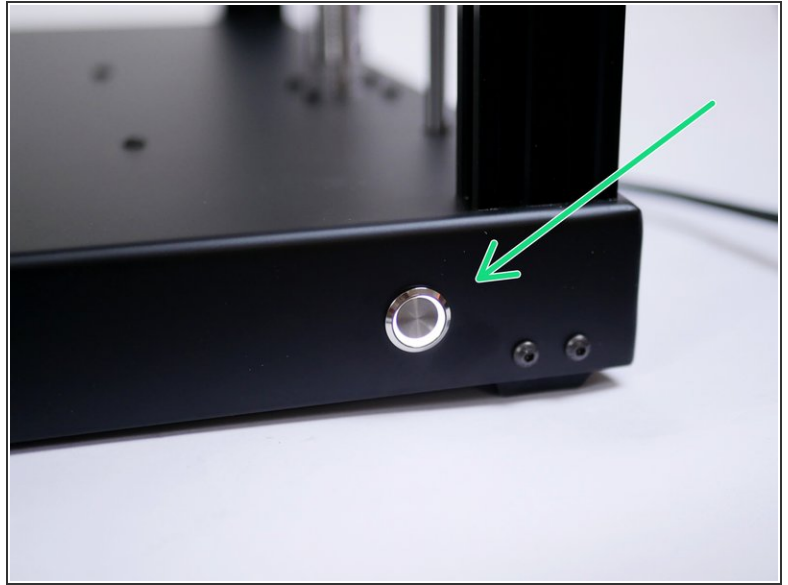
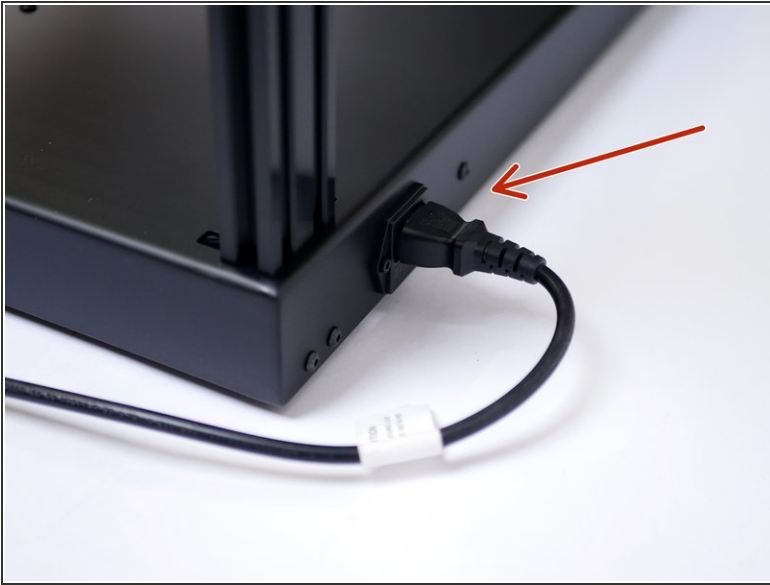
- **DSH:** Fix the PTFE tubing from the hotend to the extruders. The left side of the hotend goes to the left extruder and vice versa.
- **Direct Drive:** Fix the PTFE tubing from the orbiter extruder to the feeder on the left side of the printer.

Step 13 — Hotend Covers



- Add the silicone covers to the hotends as shown.

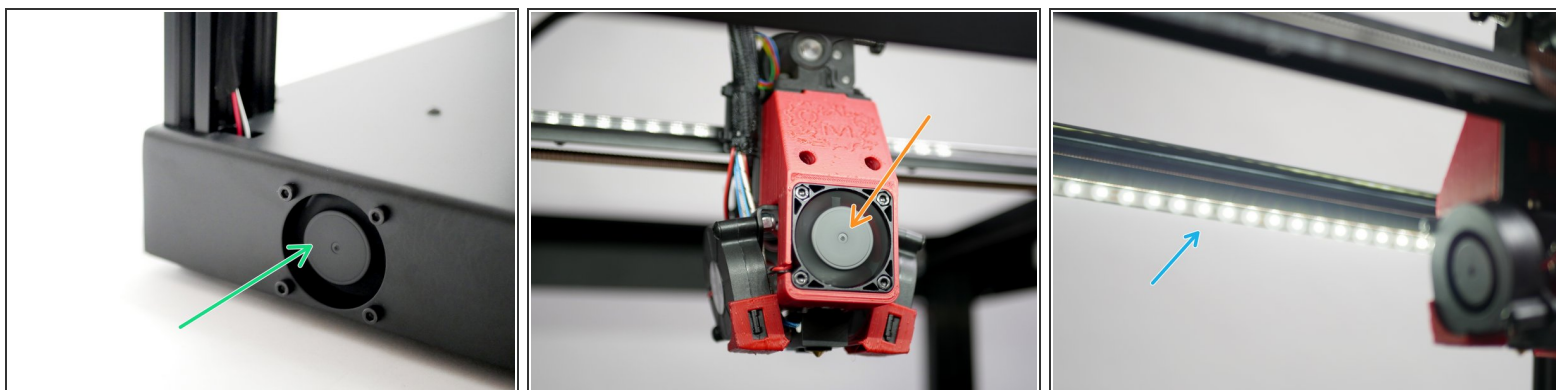
Step 14 — Powering On



- Plug the power cable into the back of the printer.
- Power on with the switch on the front of the base.

⚠ If you find your power switch getting stuck 'ON', it is likely secured on too tightly. Loosen the nut holding it to the base.

Step 15 — Powering On Continued



i Powering on for the first time should result in the following:

- Electronics Fan should spin.
- Hotend Cooling Fan/s should spin
- LED's should light up.

Step 16 — Pre-Flight Checks




i Everything should already be set-up, but to be safe we recommend running through all of the pre-flight steps here:

- [Direct Drive Setup](#)
- [Dual Switching Hotend Setup](#)

Step 17 — First Print




 Follow the steps here for your first print:

- [Direct Drive Setup](#)
- [Dual Switching Hotend Setup](#)

Step 18 — Enclosure



 Follow the guide [here](#) for installing the Enclosure. Some steps have already been done for you.

Step 19 — OctoPi



- Follow the guide [here](#) for Configuring OctoPrint.