

Micro Swiss Hotend for Creality CR-6 SE INSTALLATION INSTRUCTIONS

Tools needed

Gather the required tools before starting installation.

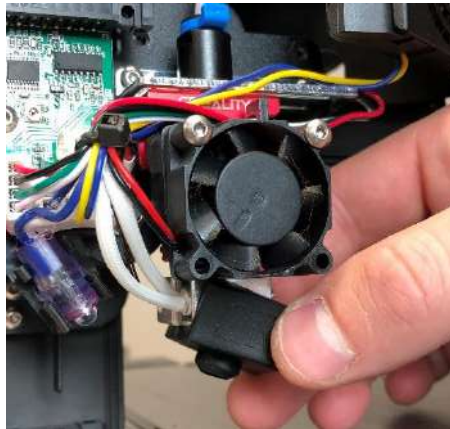
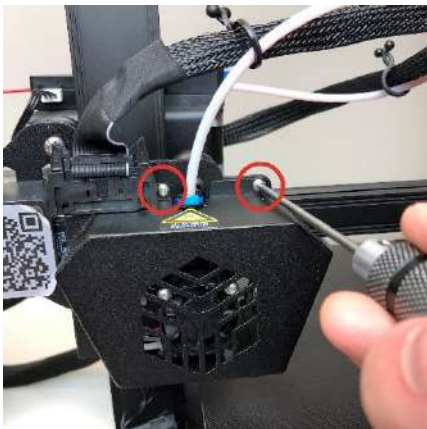
- Adjustable wrench
- 7mm socket wrench
- 6mm socket wrench
- 2mm Allen wrench
- 1.5mm Allen wrench (supplied)
- 7mm spanner wrench (supplied)



Step 1

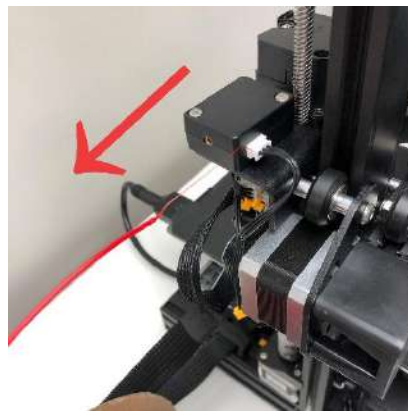
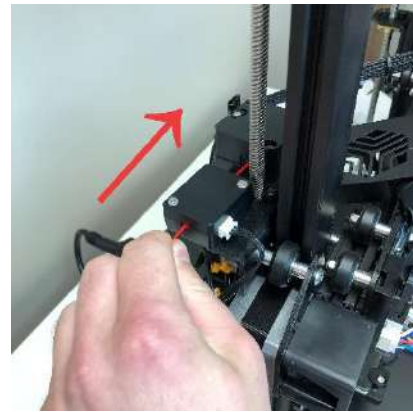
⚠ For your safety, turn off and unplug your printer.

Step 2 - Remove the fan shroud and the silicone sock



- Use the 2mm allen wrench to remove the fan shroud (save the screws to be reused latter during the installation)
- Remove the silicone sock

Step 3 – Purge the nozzle and remove the filament



- Power up the printer
- Preheat the nozzle to 235C (Control > Temp > NozzleTemp > 235)
- Unlock the extruder
- Push the filament in to purge the nozzle
- Pull the filament out of extruder completely

Step 4 – Remove the nozzle



- Use the 6mm wrench to remove the stock nozzle
- Let the hotend cool down (Control > Temp > NozzleTemp > 0)
- After hotend is cooled down, turn off and unplug the machine

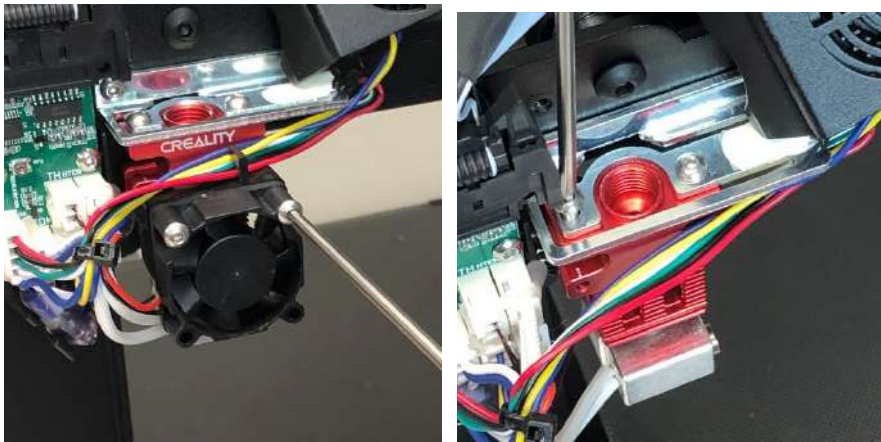
⚠ Make sure the hotend is at room temperature!

Step 5 – Remove the bowden tube



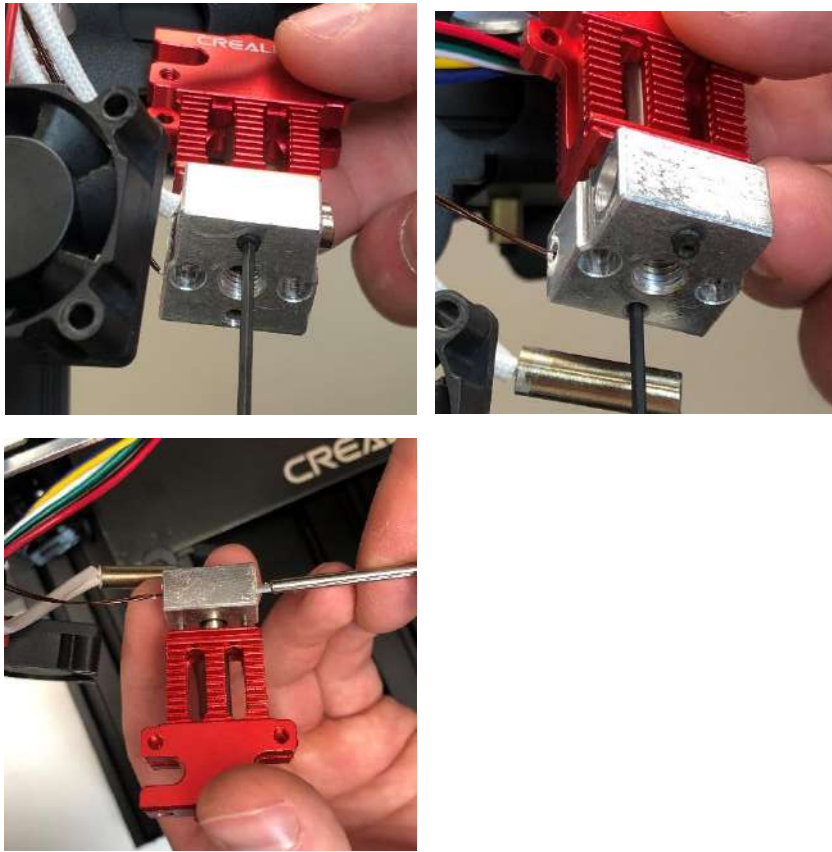
- Remove the collet clip
- Unscrew the bowden tube adapter
- Pull out the tube form the hotend
- Push down on a bowden tube collet and slide it off the tube.

Step 6 – Remove the cooling fan and the hotend



- Using 2mm allen wrench, remove the cooling fan
(save the screws to be reused latter during the installation)
- Remove the hotend using the same 2mm allen wrench
(save the screws to be reused latter during the installation)

Step 7 – Remove the heater cartridge and the thermistor

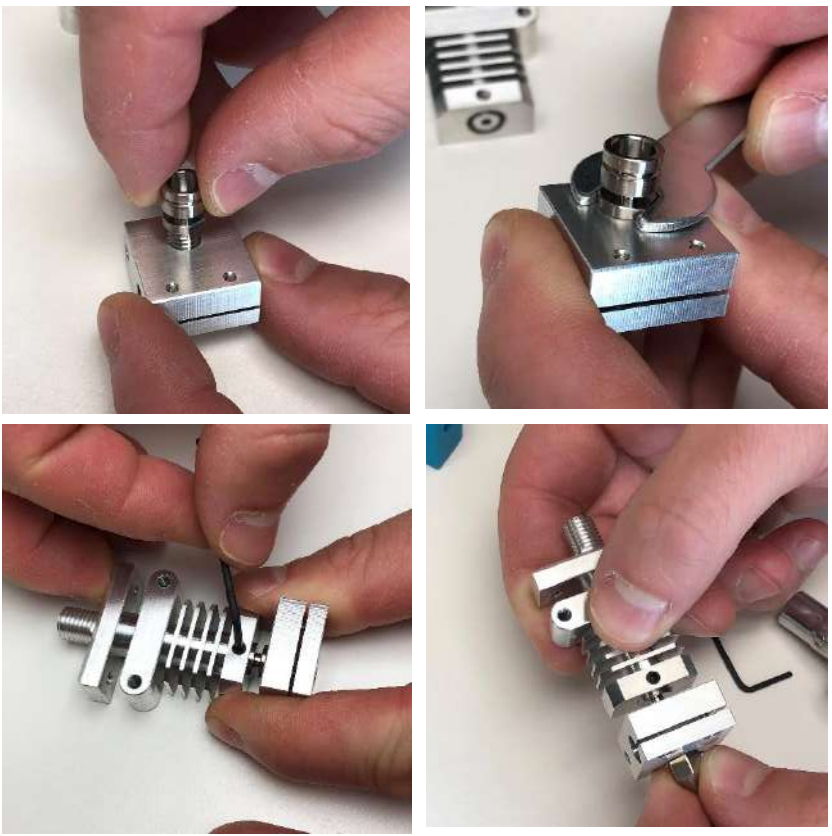


- With provided 1.5mm allen wrench, unscrew both setscrews that hold the heater cartridge and the thermistor

⚠ Be careful not to damage the delicate wires

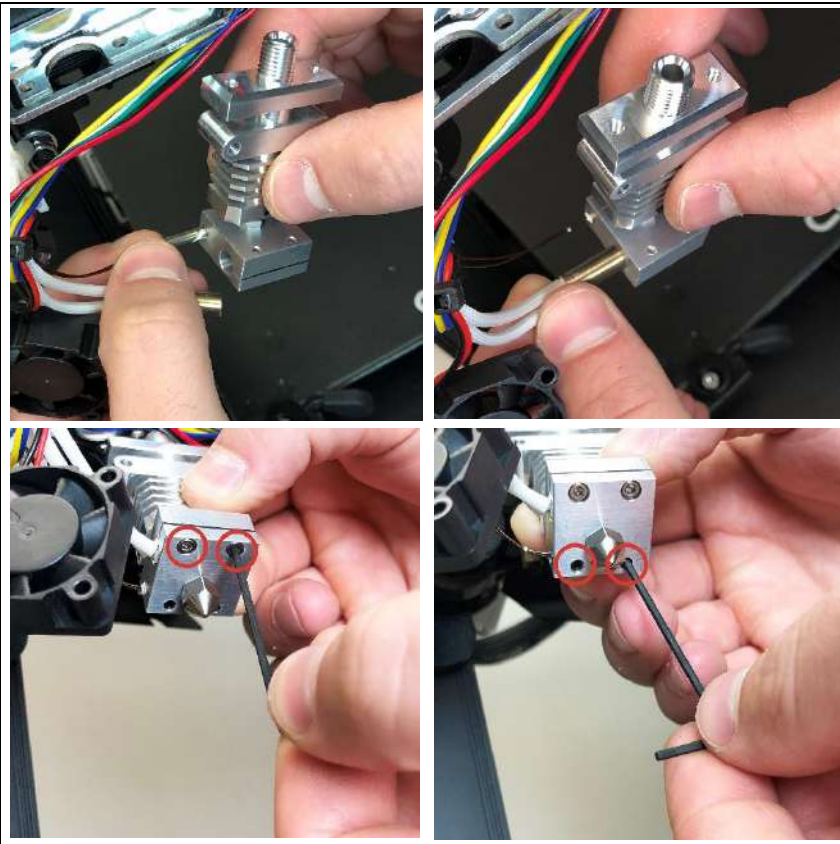
- Thermistor can be stuck inside the heater block, **do not push or pull on the wires**. Instead use 2mm wrench to push the thermistor out

Step 8 – Assembling the hotend



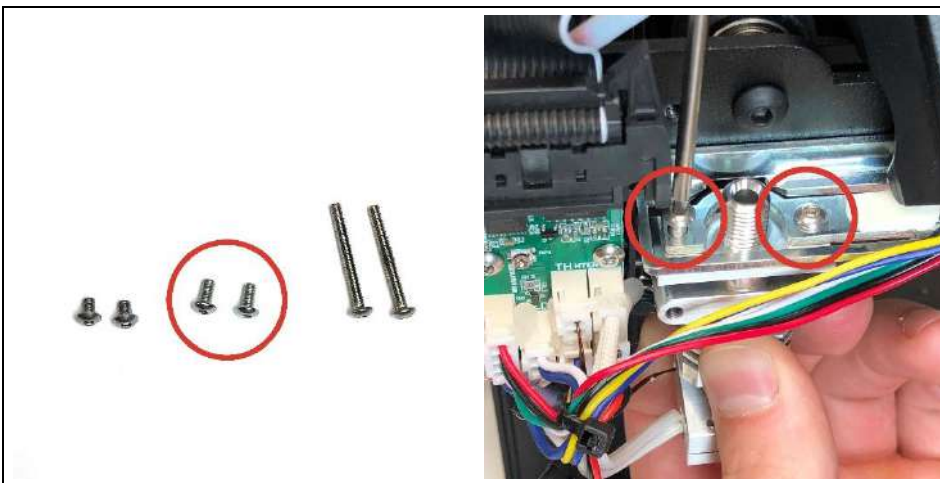
- Start by screwing in and tightening the titanium thermal break. **Make sure it is flush with the heater block**
- Insert the heater block assembly into the cooling block and tighten the grub screw with 1.5mm allen wrench
- Install the nozzle
This step is not the final step to tighten the nozzle. Final nozzle tightening will be done on Step # 11 to prevent the hotend from leaking

Step 9 – Reinstall the heater cartridge and thermistor



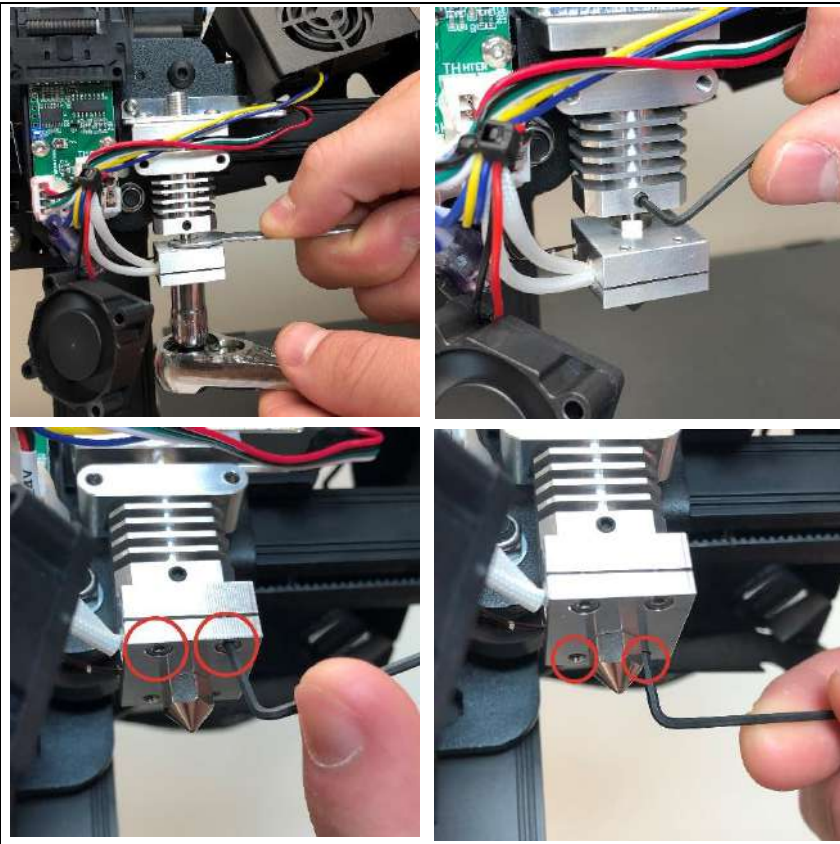
- Reinstall the heater cartridge and thermistor
- Tighten the heater cartridge using the 1.5mm Allen wrench
- Secure the thermistor. **Be careful not to overtighten the screws as this can damage thermistor**

Step 10 – Install the hotend on the carriage plate



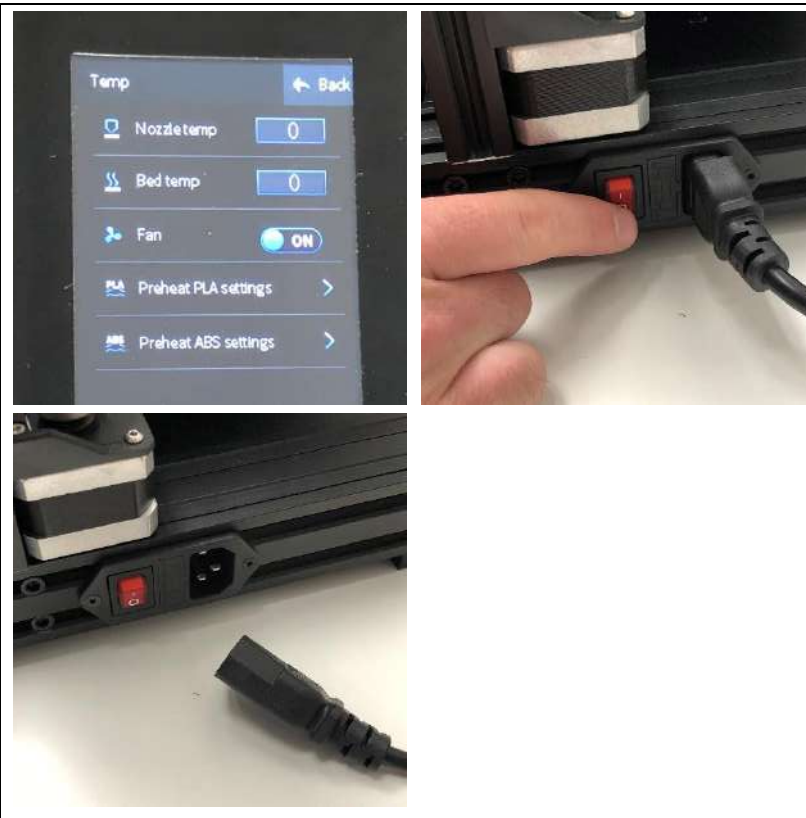
- Install the hotend on the carriage plate by reusing the two 6mm long M3 screws

Step 11 – Fully seat the nozzle **(This is a critical step to avoid filament leaking)**



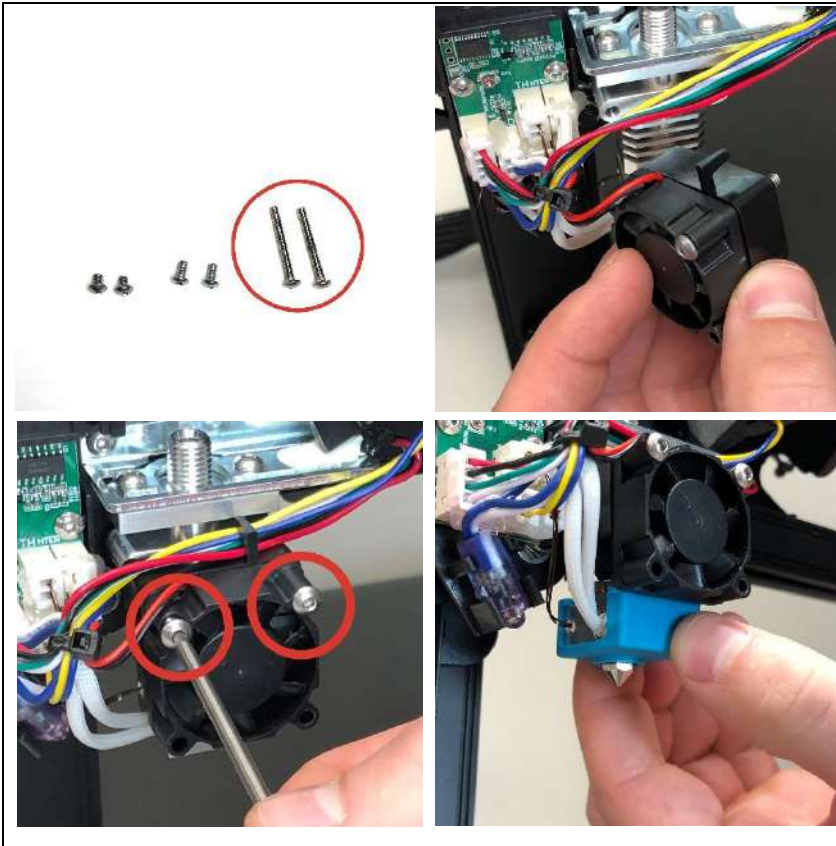
- Turn on the printer and preheat the hotend to 220 degrees Celsius
 - ⚠ The hotend is now at 220 degrees Celsius. Be extremely careful not to burn your fingers when tightening the nozzle and the grub screws
- Hold the heater block with the adjustable wrench and use the 7mm socket wrench to tighten the nozzle. If using torque wrench, set it to 30in-lb setting
- The heater cartridge might become loose after initial heat up. Make sure it is fully tightened. **Be careful not to burn your fingers!**
- Tighten the grub screws on the cooling block. **Again, be careful not to burn your fingers!**

Step 12 – Cool down the machine



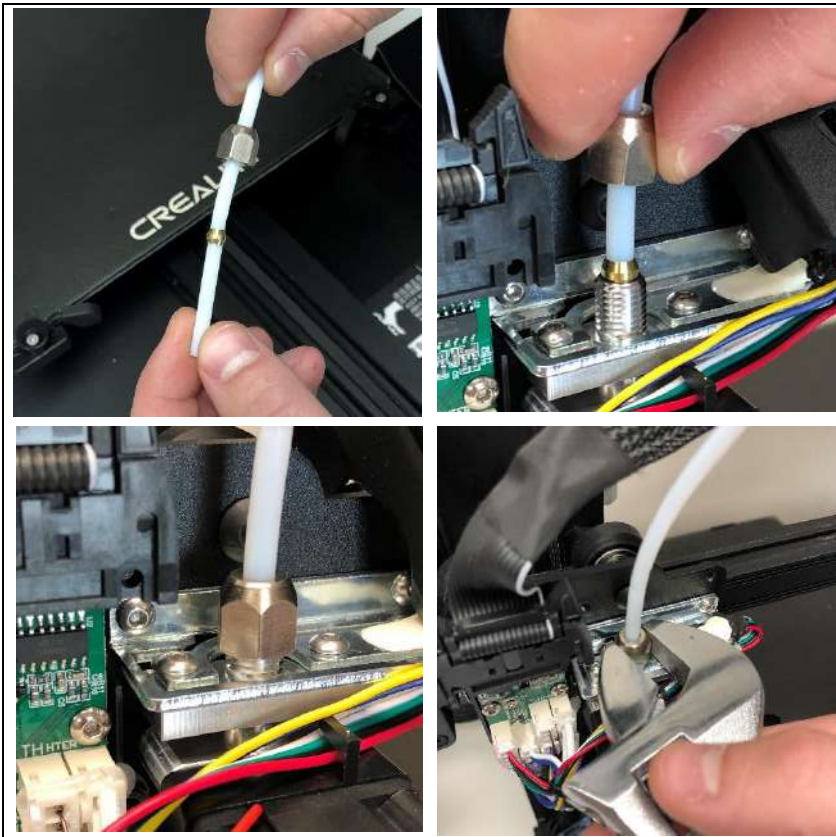
- Let the hotend cool down (Control > Temp > NozzleTemp > 0)
- After hotend is cooled down, turn off and unplug the machine
 - ⚠ Make sure the hotend is at room temperature!

Step 13 – Install the fan shroud, fan and the silicone sock



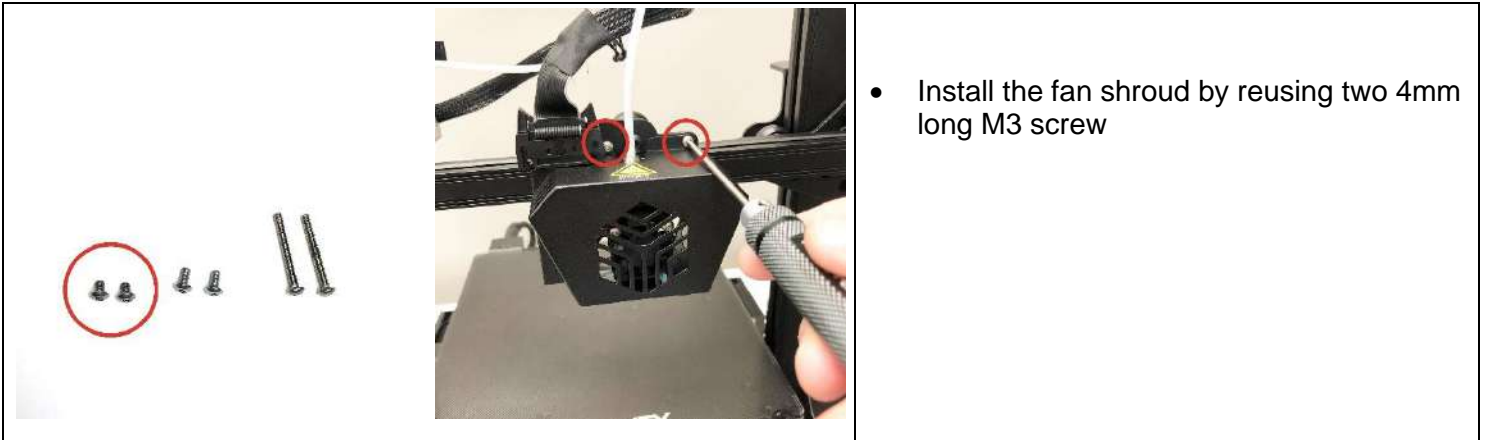
- Reuse the 25mm long M3 screws to reinstall the fan and the fan shroud
- Install the silicone sock

Step 14 – Install the bowden tube



- Slide on the nut first and then the brass sleeve
- Insert the bowden tube into cooling block
Slide the tube all the way in until it bottoms out inside the cooling block and then slide the brass sleeve down
- Screw in the compression nut
Do not overtighten the but, just enough to prevent the tube from moving and sliding out

Step 15 – Install the fan shroud



Step 16 – **Important slicer setting changes**

- Reduce the retraction amount to 3.5mm @ 35mm/sec. (Maximum retraction amount is 4mm)
- With All Metal Hotend, the nozzle temperature might need to be increased by 5-10 °C.