

Rapido Hotend 2 Assembly Instruction



Please read and keep this manual carefully
before using our products properly

Product Appearance



Thank you for buying Phaetus'
Rapido Hotend 2.

Product Features

Specially designed
structure made just
for high-speed
printing

Interchangeable
design for different
types of nozzles

One-handed
nozzle change

Suitable for
all filament types

Specifications

Product Name: Rapido Hotend 2

Product Size: HF: $\varnothing 23\text{mm}$ * 71mm / UHF: $\varnothing 23\text{mm}$ * 79mm

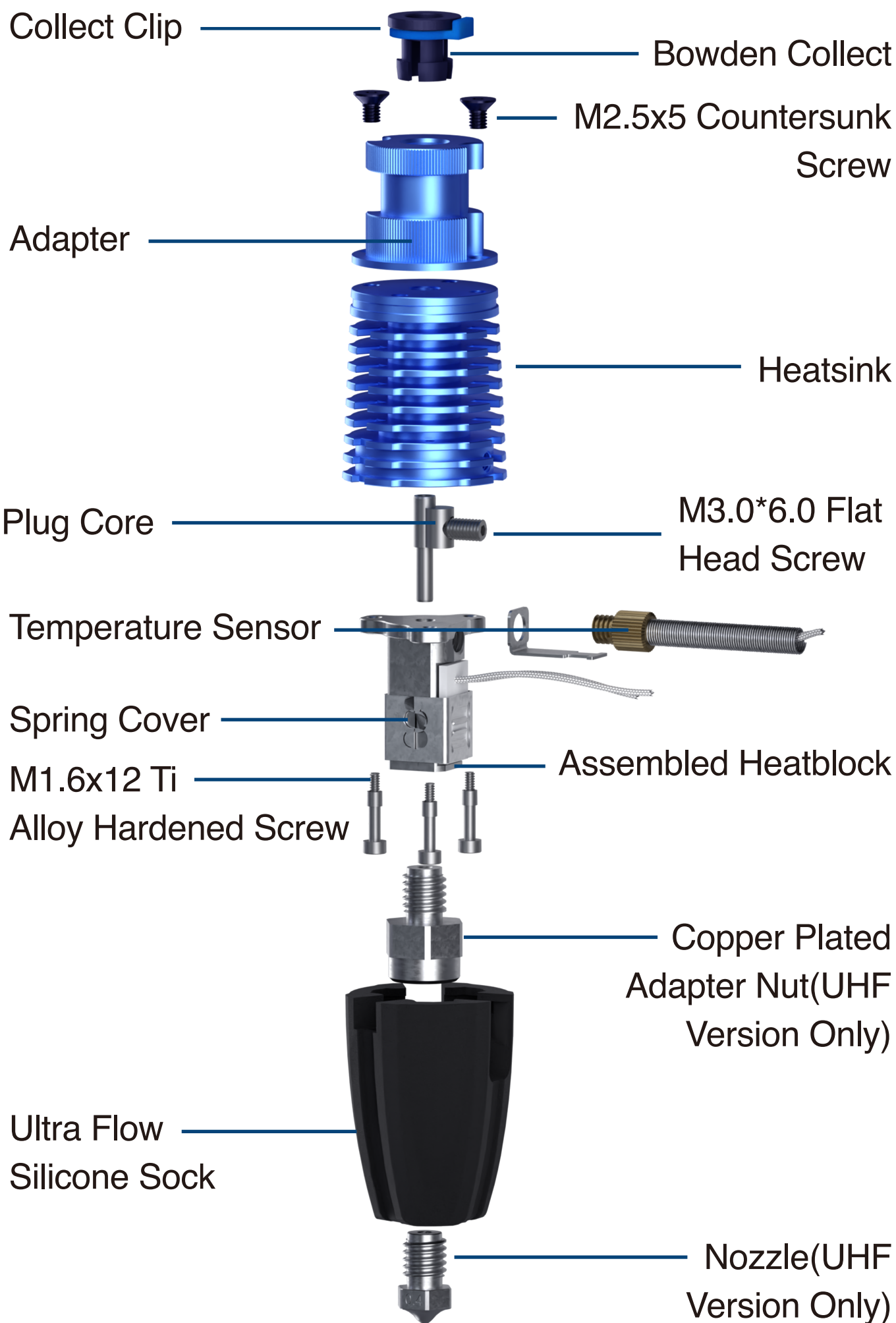
HF Default Nozzle:Plated copper 0.4 / 1.75mm,Hardened
steel 0.4 / 1.75mm

Product Color: Blue / Black

Product Net Weight: HF: 47g / UHF: 55g

UHF Default Nozzle::Plated copper 0.4 / 1.75mm,Hardened
steel 0.6 / 1.75mm

Product Exploded View



Parts & Accessories



Collet Clip*1pcs

Bowden Collet*1pcs

H1.5 Hex Key*1pcs

H2.0 Hex Key*1pcs

M2.5*8.0 Cap Head Screw*4pcs

M2.5*5 Countersunk Screw*2pcs

Heater Extension Cable (1m)*1pcs

White Temperature Sensor Extension Cable (1m)*1pcs

M1.6*9.3 Titanium Cap Head Screw*1pcs

H10.0 Open Spanner*1pc (Only for Rapido Hotend 2 UHF)

Leaf Spring*1pc

Cabletie*3pc

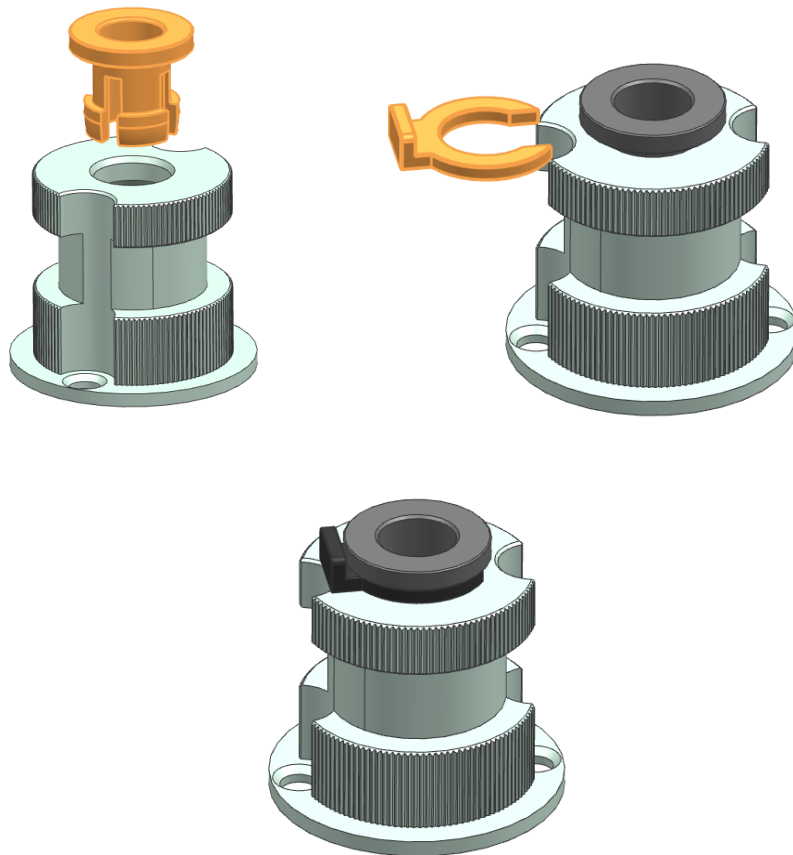
Thermal Grease*1pcs

Product Advantage

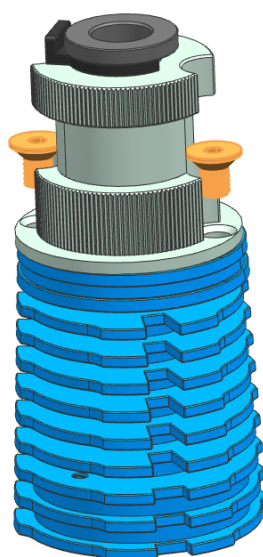
- New design of the longer copper heatblock makes a larger molten area and meets the requirement of the high temperature and high speed printing.
- Cylindrical ceramic heating unit, make sheating more fully and evenly.
- Integral frame rigid structure of titanium alloy screws which has lower heat conductivity and realize the function of nozzle chagement by one hand.
- Thin wall thickness heatbreak, eliminating the heat creep, realizing an excellent thermal insulation and no filament clog.
- The universal structure design realizes the fast switching of large flow and super large flow print heads.
- Interchangeable design of different types of nozzles to meet the requirements of high temperature and fiber filaments printing.

Normal Assembly Steps

1: Insert the Bowden collet into the top of the adapter, insert the collet clip between the Bowden collet and the adapter to secure the Bowden collet.



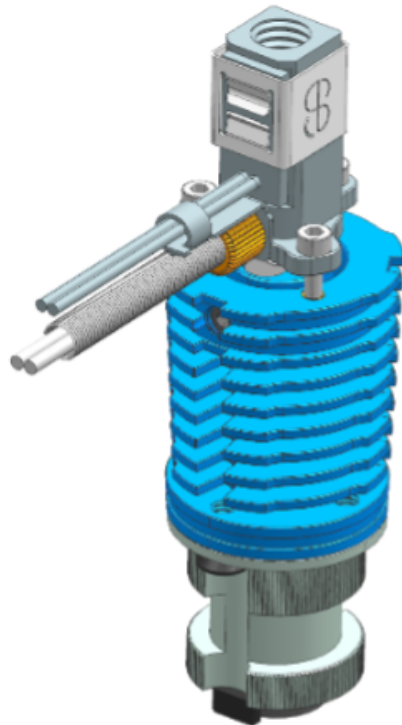
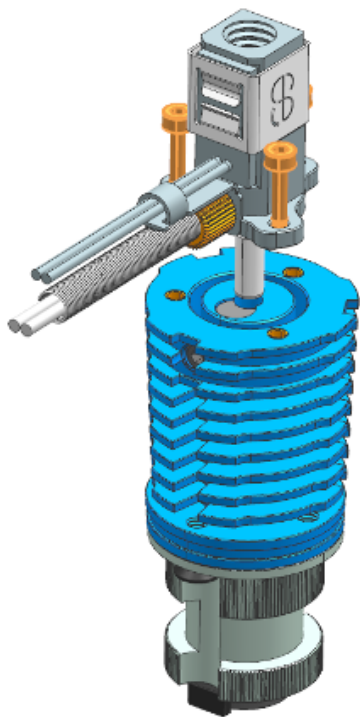
2: Install the adapter on the heatsink using the two M2.5x5 countersunk screws.



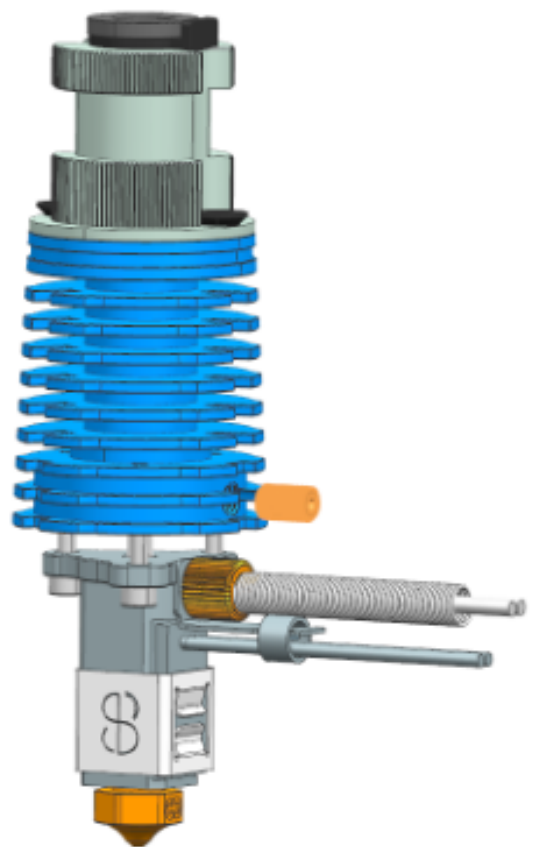
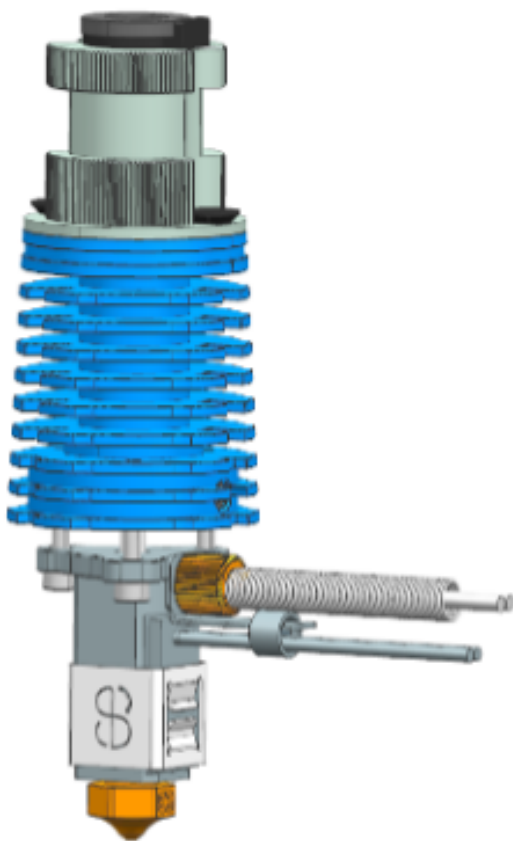
3: Insert the heatbreak fixation into the hole at the bottom of the heatsink, and slightly tighten the heatbreak fixation using the M3x6 grub screw, so that the heatbreak fixation does not fall out on its own.



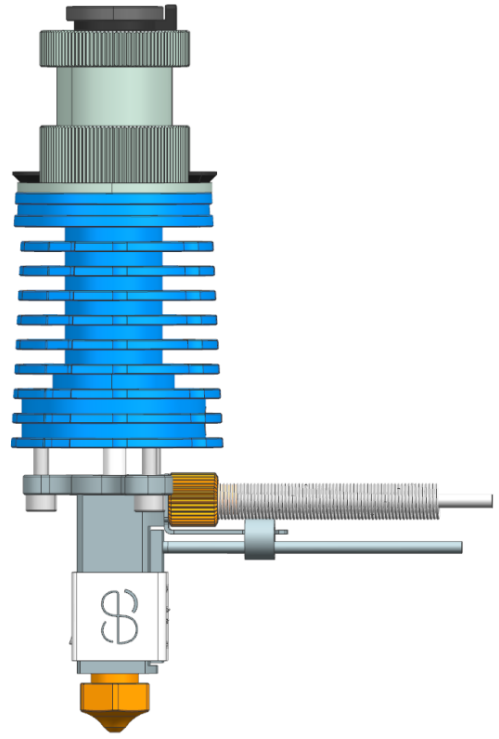
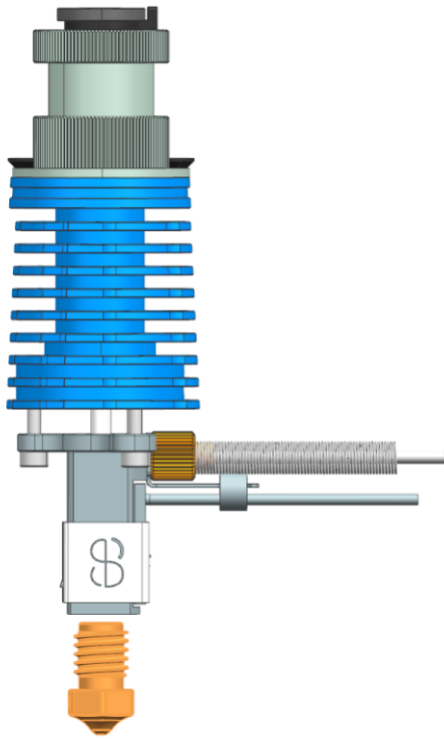
4: Use the three M1.6x9.3 titanium screws to fix the heatblock in place. Please ensure that you tighten the 3 titanium screws evenly so that you do not bend or damage the thin heatbreak. Ideally tighten the three screws with 0.1Nm of torque. The gap between the heatblock and the heatsink should now be about 2.5mm.



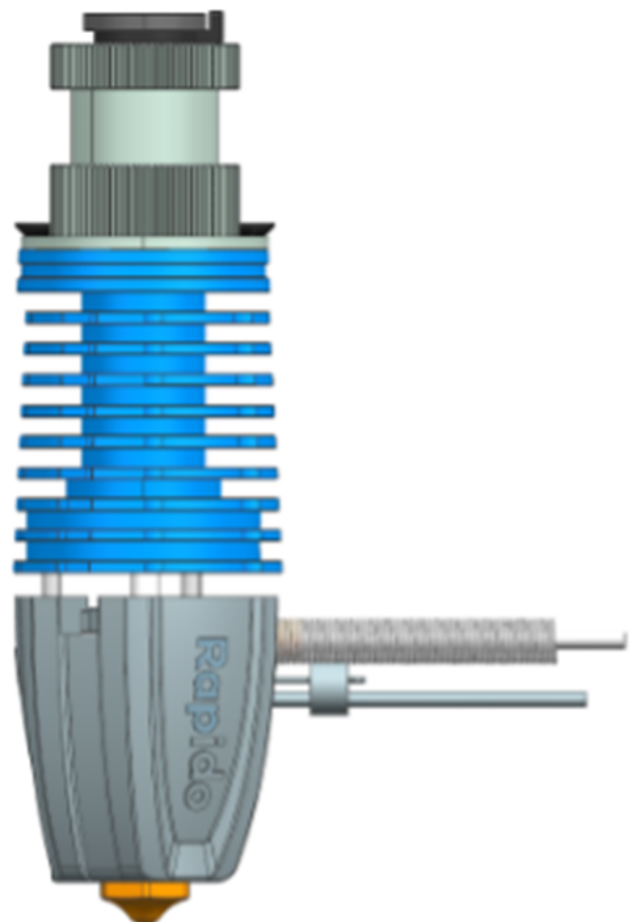
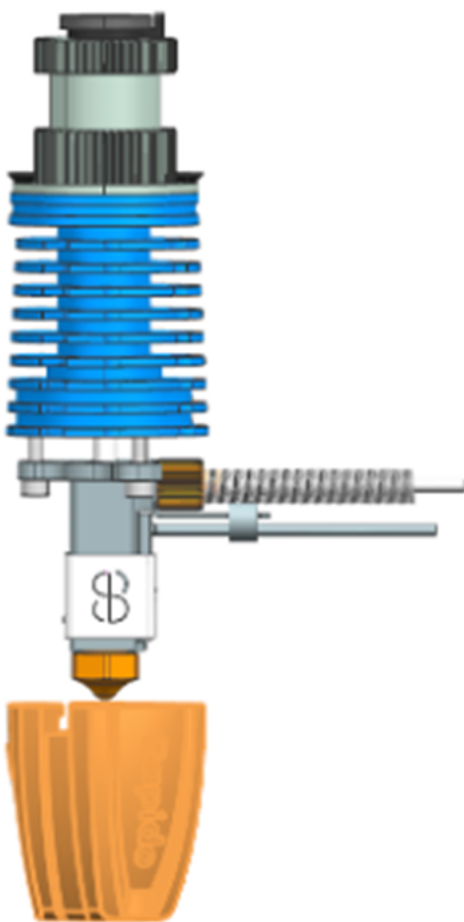
5: Now tighten the M3x6 grub screw on the heatsink to fix the heatbreak fixation in place.



6: Install the nozzle using a hot-tightening method.

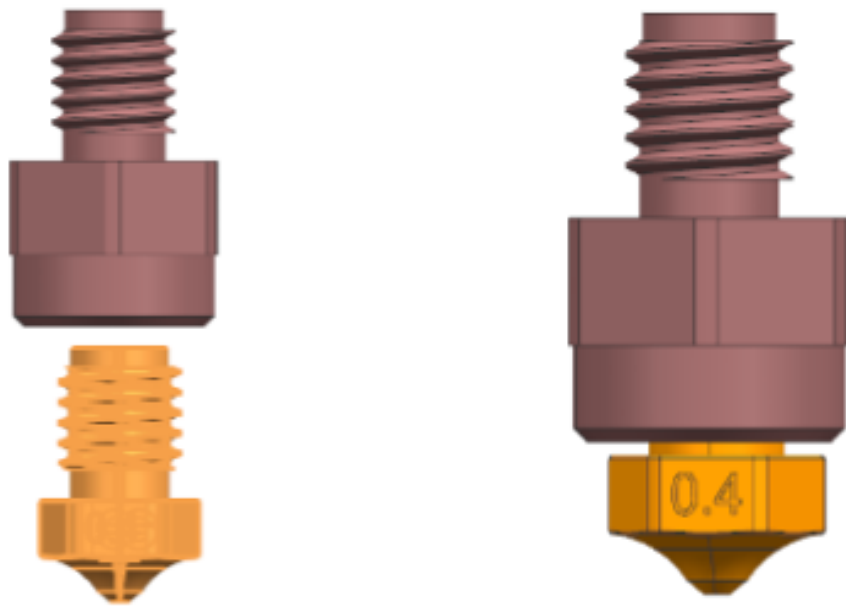


7: The final step is to install the silicone protective cover onto the heating block.

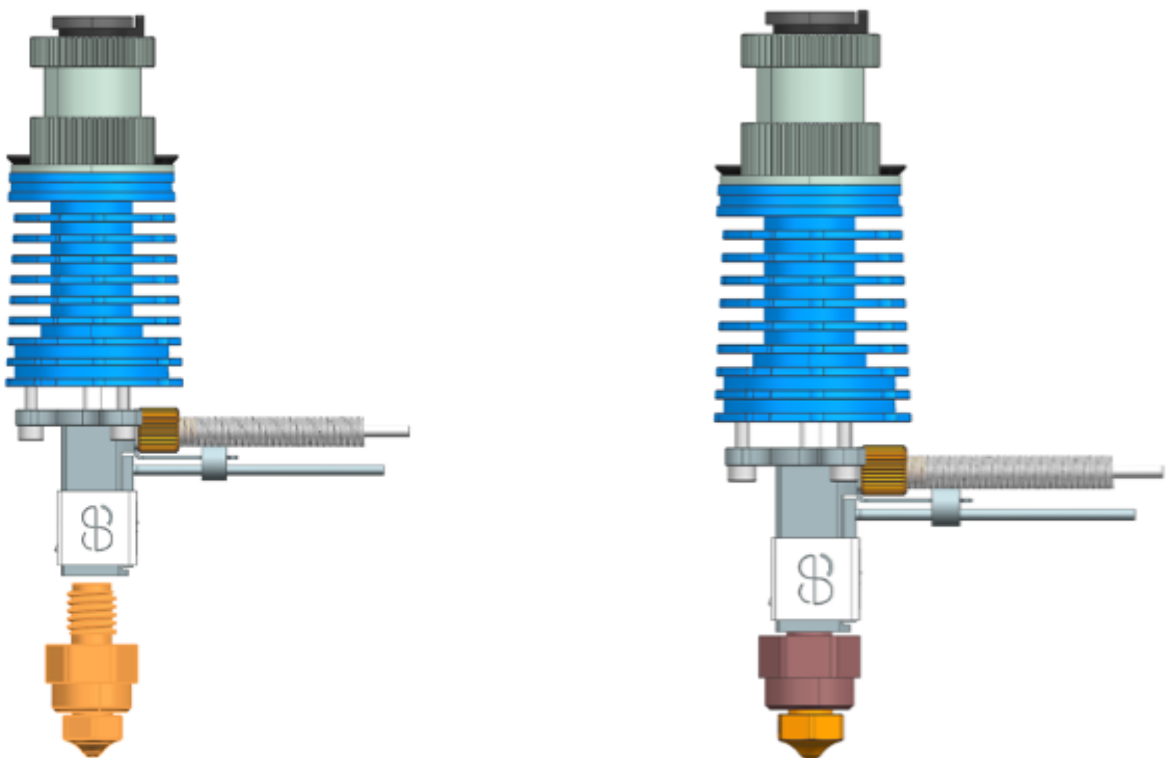


UHF Version Assembly

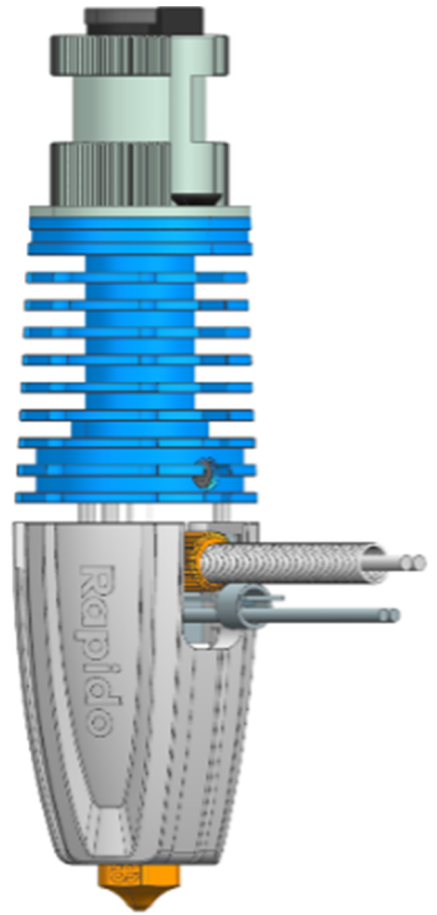
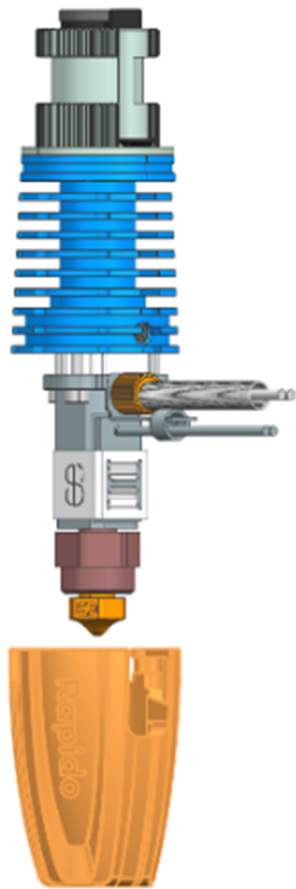
1: Install the copper alloy adapter nut onto the $\phi 0.6$ copper alloy nozzle.



2: Install the nozzle onto the heating block using a hot tightening method (the tightening torque for the hot nozzle is about 2.5 Nm).



3: Put on the silicone protective case.



Hot - Tightening

1: Hot tightening is the last mechanical step before the Rapido Hotend 2 is ready. Hot tightening is essential to seal the nozzle against the heatbreak, this will ensure that the molten filaments does not leak out of the hotend during use.

2: Set the hotend temperature to 285°C. Wait one or two minutes after the hotend reached the temperature so that everything is evenly heated.

3: Gently tighten the nozzle while holding the heatblock in place using a spanner (NEVER touch the hotend with your hands while the hotend is hot). Finally tighten the nozzle with the small 7.0mm spanner. This will ensure that the nozzle is tightly locked against the heatbreak and as such avoid that the hotend leaks.

4: The tightening torque of the hot nozzle is about 2.5Nm, which is about the pressure applied by one finger on the small spanner.

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