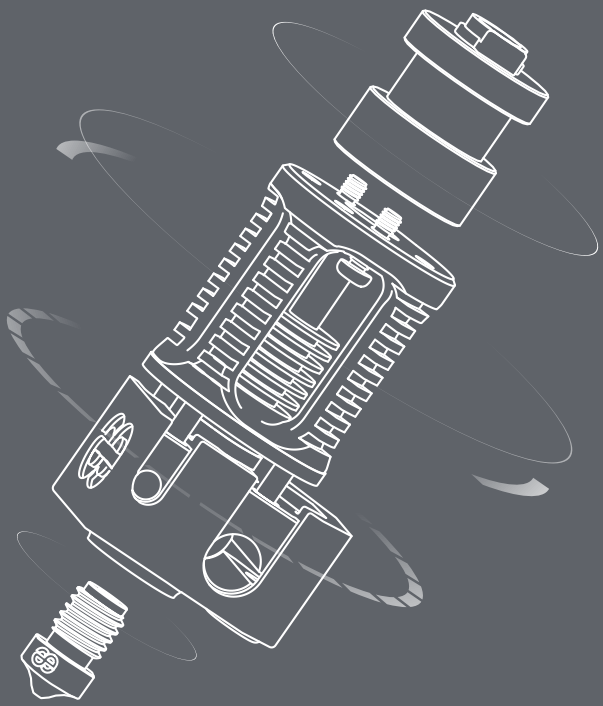
Phaetus®

Dragon Hotend ST Instructions



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

Product Appearance

Born For Enthusiasts

Thank you for buying Phaetus' Dragon ST Hotend.

Product Features

Well-designed compact structure

Superior thermal isolation of heatbreak

Reinforced rigid structure

High temperature resistance

Compatible Filaments

Compatible with all filaments, including: PLA, ABS, PETG, TPU, PP, PC, Nylon, PEEK, PEI.

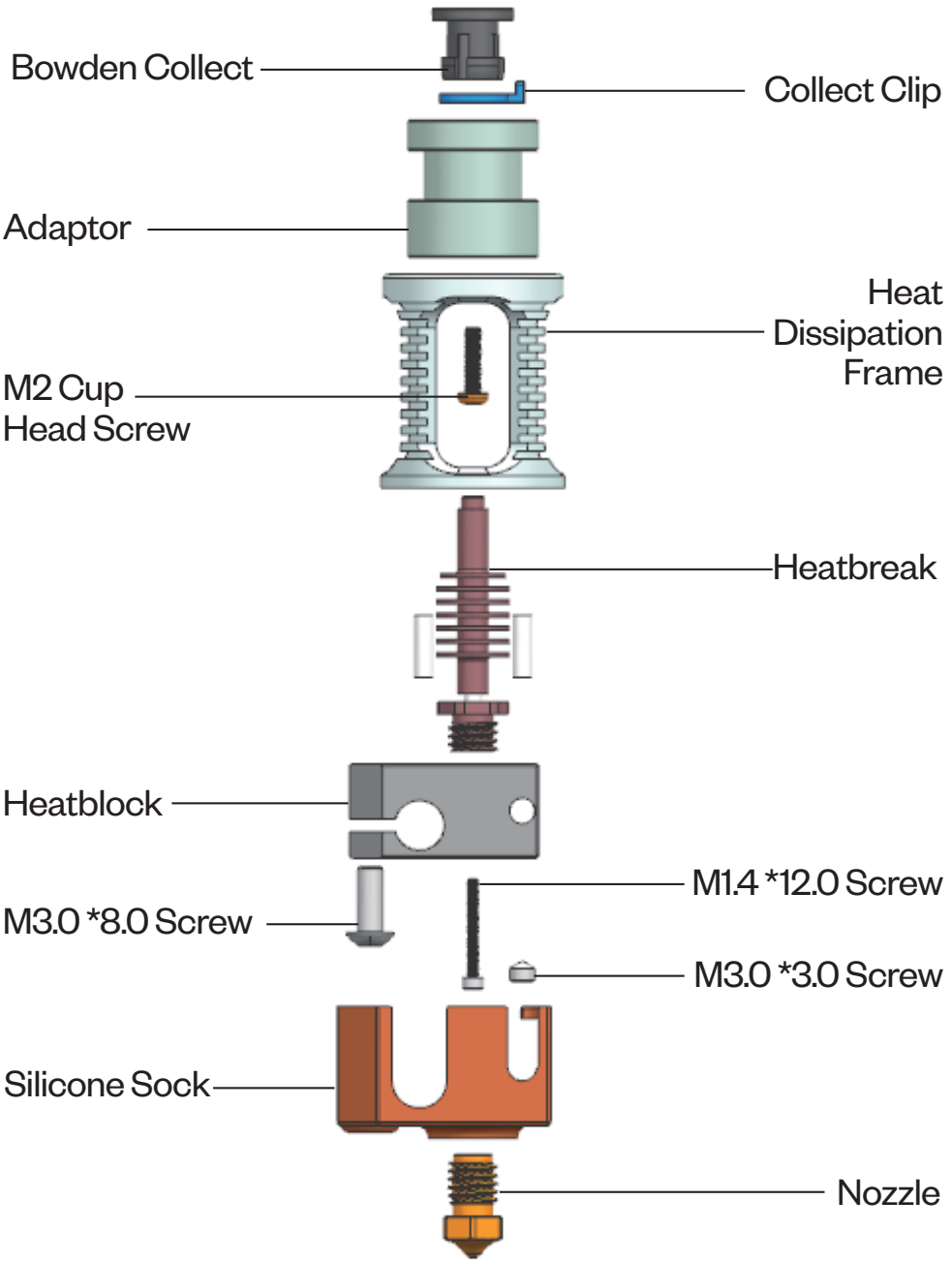
Specifications

Product Name: Dragon ST
Product Size: 62.2mm*26mm*22.3mm
Nozzle Diameter: Can be matched arbitrarily
Color: Blue / Black
Product Net Weight: 50g

Parts & Accessories

M2.5 x 8 Screw *4pcs (for Voron V0)
M2.5 x 12 Screw *4pcs (for Voron V2.4)
M1.4 x 12 Screw *2pcs
H1.27 / H1.5 / H2.0 Hexagon bar *1pcs
H8.0 Open - ended wrench *1pcs
Heat conducting silicone grease *1pcs
Brass sleeve *1pcs
Collect clip *1pcs

Product Exploded View



Product Exploded View

• Heatbreak with an ultra-thin wall thickness as thin as 0.1mm, realizing an excellent thermal insulation.

• Increased rigid support structure guarantee the heatbreak remaining intact under the impact of external force.

• Integral frame rigid structure makes nozzle replacement more convenient without grasping the heatblock

• The inner hole roughness of nozzle and heatbreak Ra0.4, which allow a more smooth movement of filament, resulting a higher resolution prints.

• Standard hotend and high flow hotend have the same overall dimension, which realize a zero barrier for interchangeability.

• The hotend is mainly composed of copper alloy material which has the advantage of faster heating and better heat dissipation.

• Standard all metal kit, with overall high temperature resistance up to 500 ℃.

Copyright

Every effort has been made to ensure that the information in this manual is accurate. Phaetus is not responsible for printing or clerical errors.

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欢迎使用

Welcome

Bienvenu

Willkommen

Bienvenida

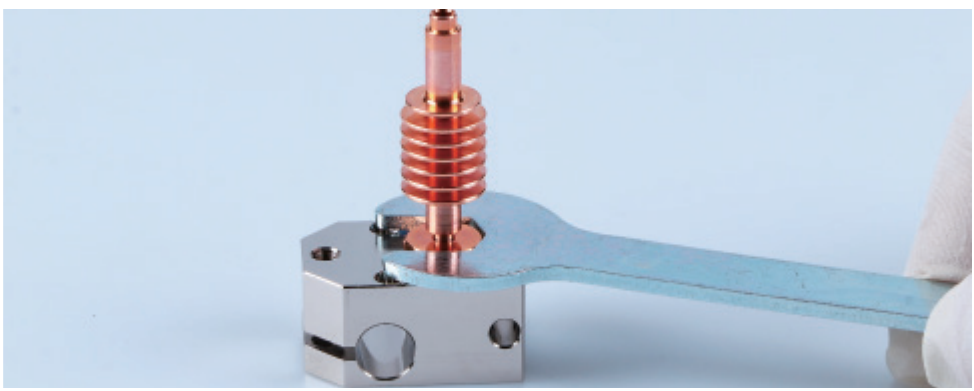
Välkommen

This user guide helps you get started using Dragon Hotend
And discover all the amazing things it can do on a 3D printer

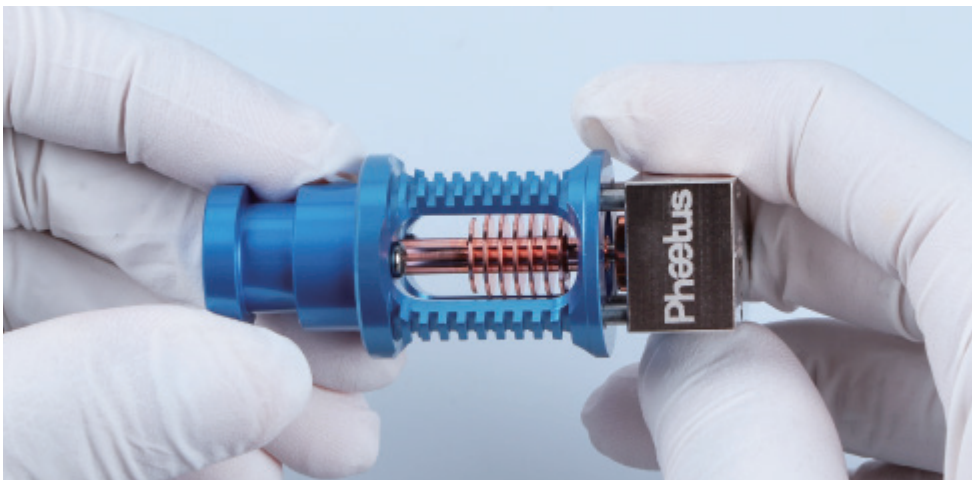
Assembly Steps

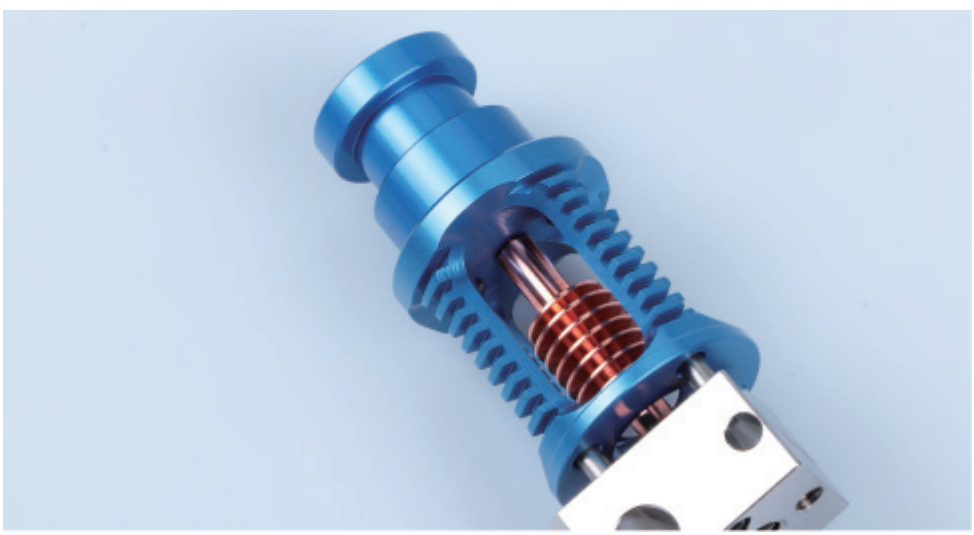
1. Embed the M2.0*6 hex socket screw from the inner 2 holes of the heat dissipation frame, align with the 2 threaded holes of the adaptor, and tighten them with a 2.0 hexgon bar.

2. Screw the heatbreak into side A of the heatblock with the 7.8mm open – ended wrench using strength about 4.5nm.

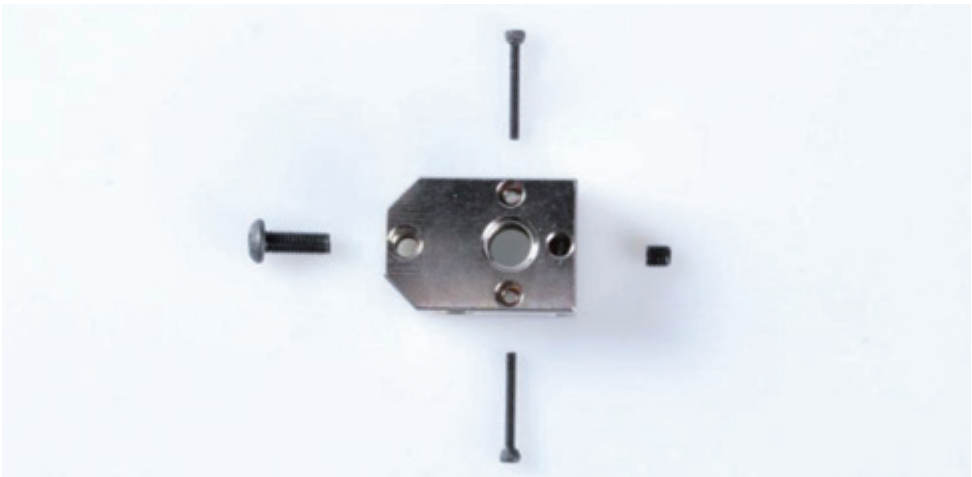


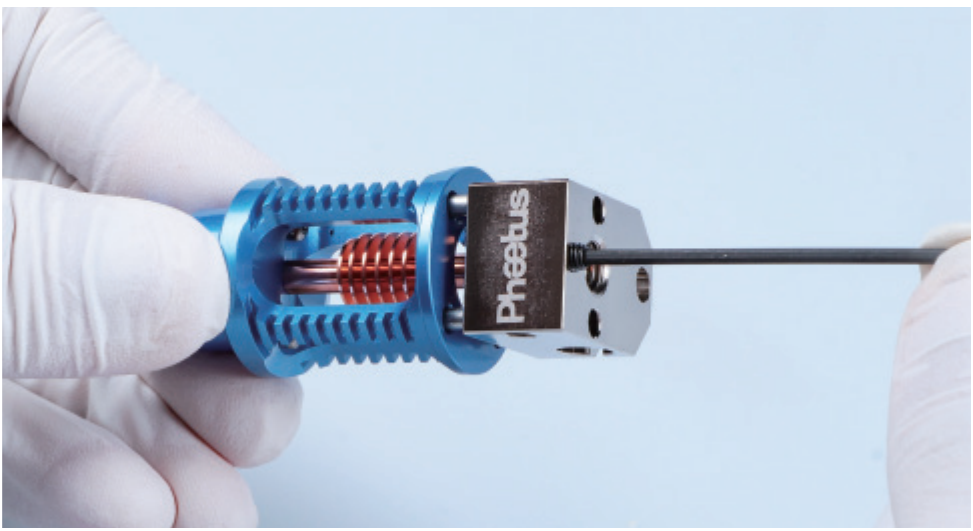
3. Carefully align the 4 supporting tubes of the heatsink with the 4 holes on the side A of the heatblock, press them tightly. Meanwhile, please note that the top of the heatbreak should be completely close to the holes on the top of the heatsink. If not properly aligned, heatbreak could be damaged during hot – tightening.





4. Screw the 3 screws as shown in the figure below into the corresponding screw holes with the appropriate hexagon bar on side B of the heatblock (4 holes).
Attention: Excessive tightening of the M1.4*12 screw may damage the thread, or lead to screw fracture and hex nut sliding teeth, etc.





5. Cover the heatblock with the silicone sock. Insert the bowden collect into the top of the adaptor, then insert the collect clip between the bowden collect and the adaptor to fix the bowden collect.

6. If you are using glass ball type thermocouple, put the thermocouple into the brass sleeve in the attachment first (the brass sleeve is shown in the figure below), and the port should be sealed with the heat conducting silicone grease carried in the attachment, and then put it into the heatblock and lock them with the head screw.

Hot - Tightening

1. Hot - tightening is the last mechanical step before Dragon Hotend is ready! It is essential for the sealing of the nozzle and heatbreak to ensure that molten filaments do not leak out of the hotend during use.

2. Using the printer's control software (or LCD screen) to set the hotend's temperature to 285°C. Wait one minute after its temperature reaches 285°C to equalize the temperature of all components.

3. Gently tighten the nozzle while fixing the heatblock with a wrench, and finally tighten the nozzle with a smaller 7.8mm wrench. This will keep the nozzle close to the heatbreak and ensure that the hotend does not leak.

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

ATTENTION: Do not touch the hotend directly with your hands during heating and within a period of time after heating.

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