

VORON X Phœtus®

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 x Voron
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, and composite materials containing abrasive additives such as carbon fiber, steel, wood, boron carbide, tungsten and phosphorescent pigment.

Specifications

Product Name: Dragon ST Hotend Voron Edition

Product Size: 26.3mm*19.0mm*45.5mm

Nozzle Diameter: Can Be Matched Arbitrarily

Color: Voron Red

Product Net Weight: 44.17g

Parts & Accessories



M2.5x8 screws *4pcs

M2.5x12 screws *4pcs

M1.4x12 screws *2pcs

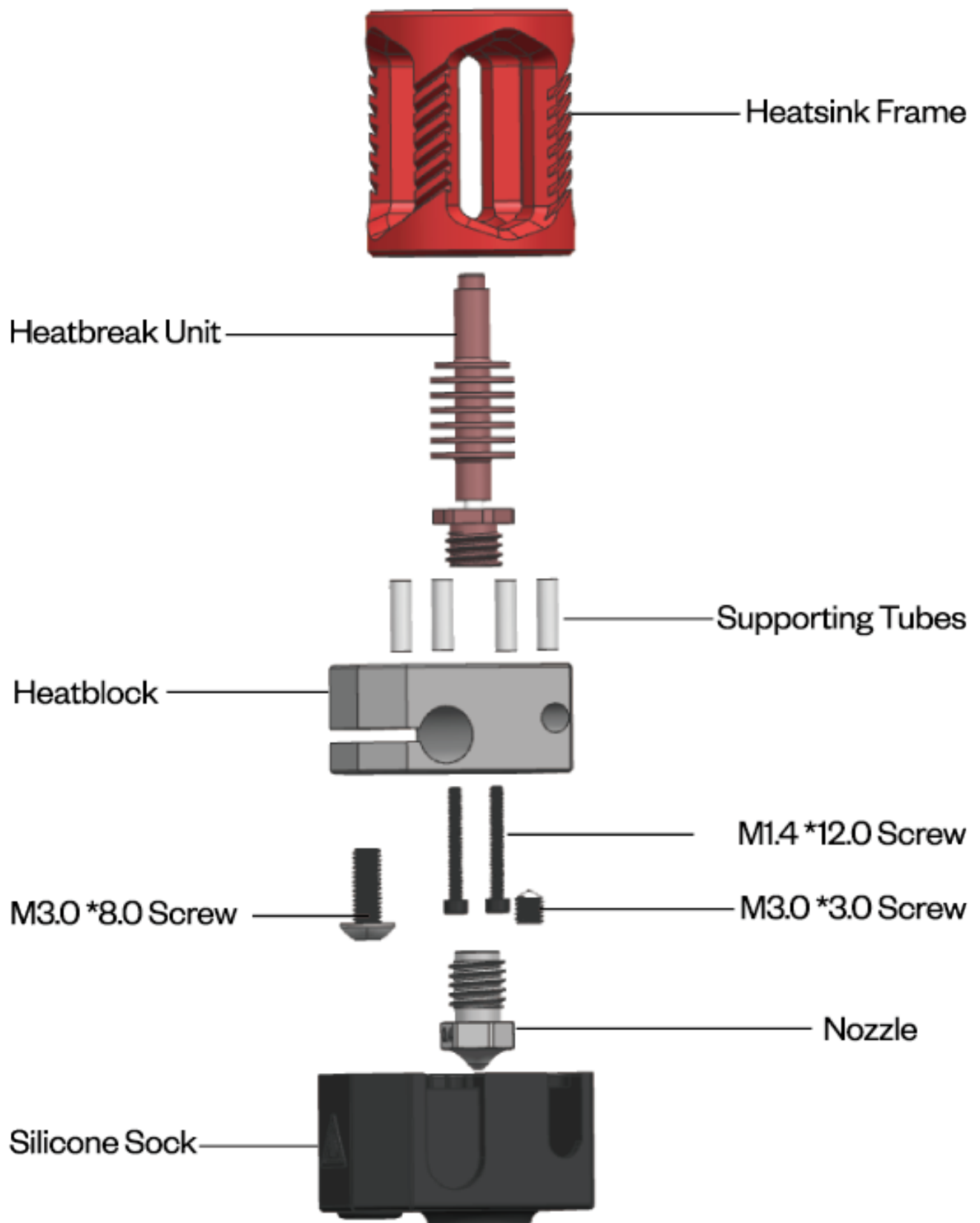
H1.27 / H1.5 / H2.0 hexagon bar *1pcs,

H8.0 open wrench *1pcs

Heat conducting silicone grease

Brass sleeve

Product Exploded View



Product Advantage

- 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 smoother 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 °C.

Supported 3D Printer Models

Dragon Hotend is compatible with the following models (including but not limited to) :

HF	Compatible with all V6 hotend interfaces Prusa I3 MK3/MK3S Titan extruders BMG extruders
ST	Compatible with all V6 hotend interfaces Prusa I3 MK3/MK3S Titan extruders BMG extruders

To view the version of this Dragon Hotend product , see the information on the packaging.

Phæetus®

欢迎使用

Welcome

Bienvenu

Willkommen

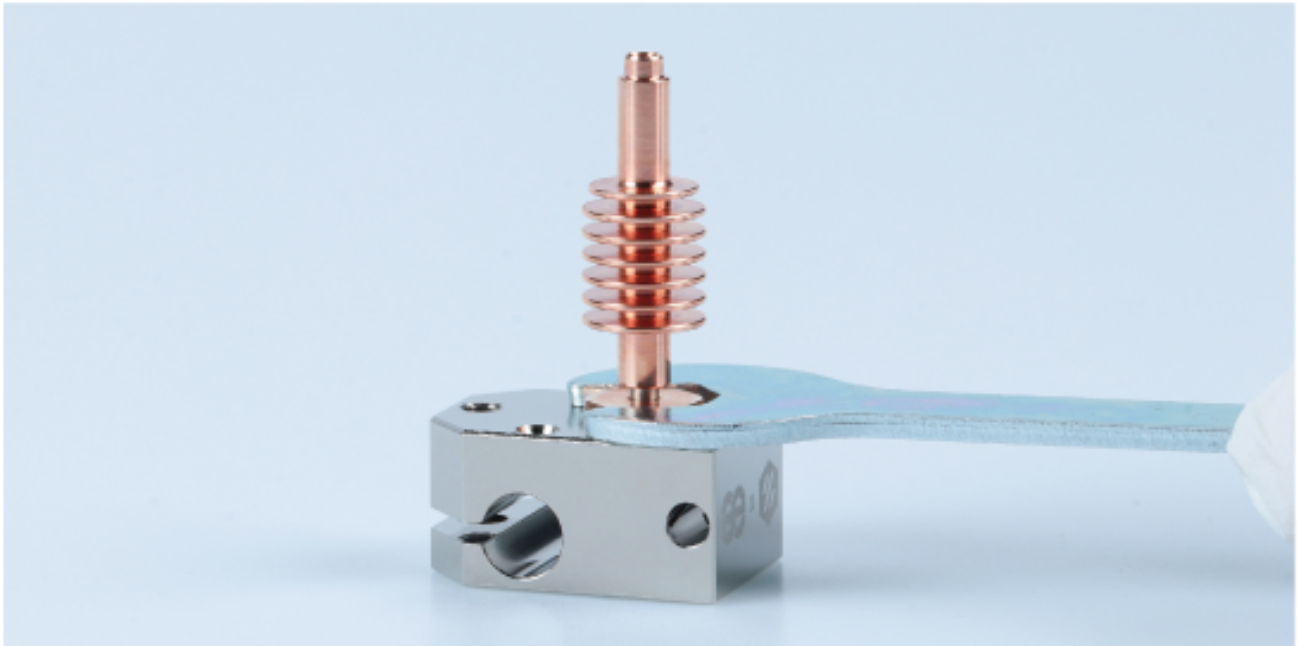
Bienvenida

Välkommen

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

Assembly Steps

1. Use H8.0 open - ended wrench to screw the heatbreak into surface A of the heatblock. The torque is about 4.5nm.

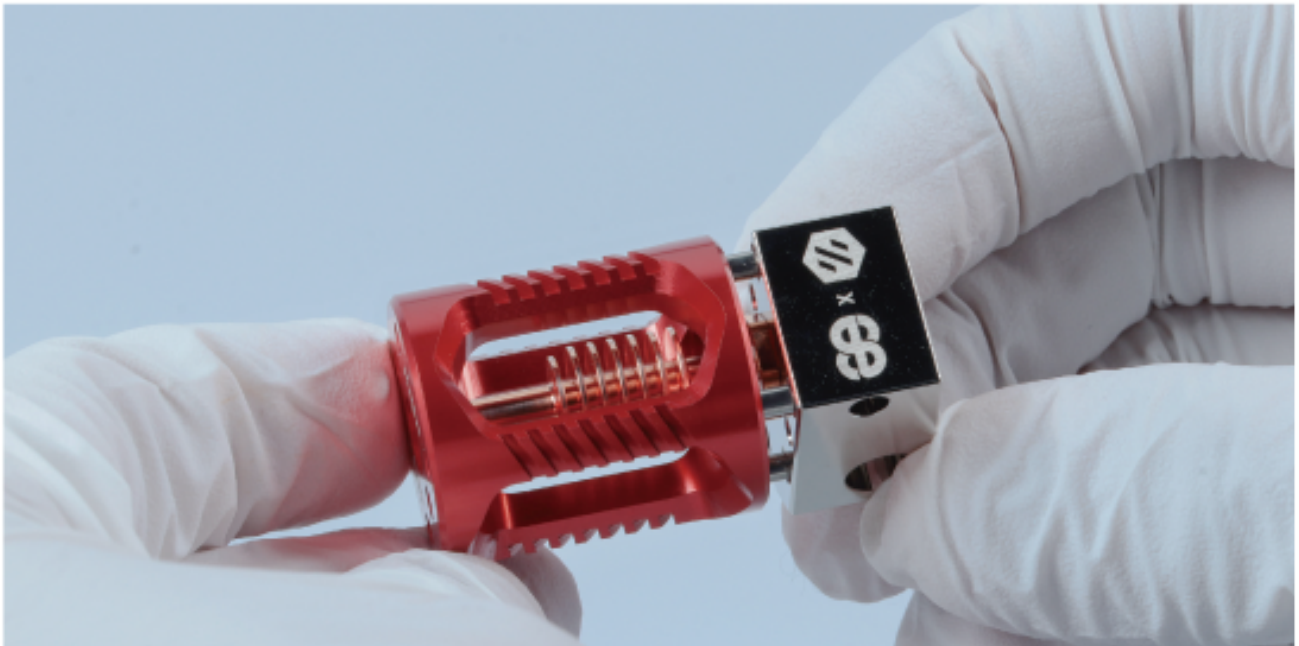


2. Install the 4 supporting tubes into the 4 holes at the bottom of the heatsink.



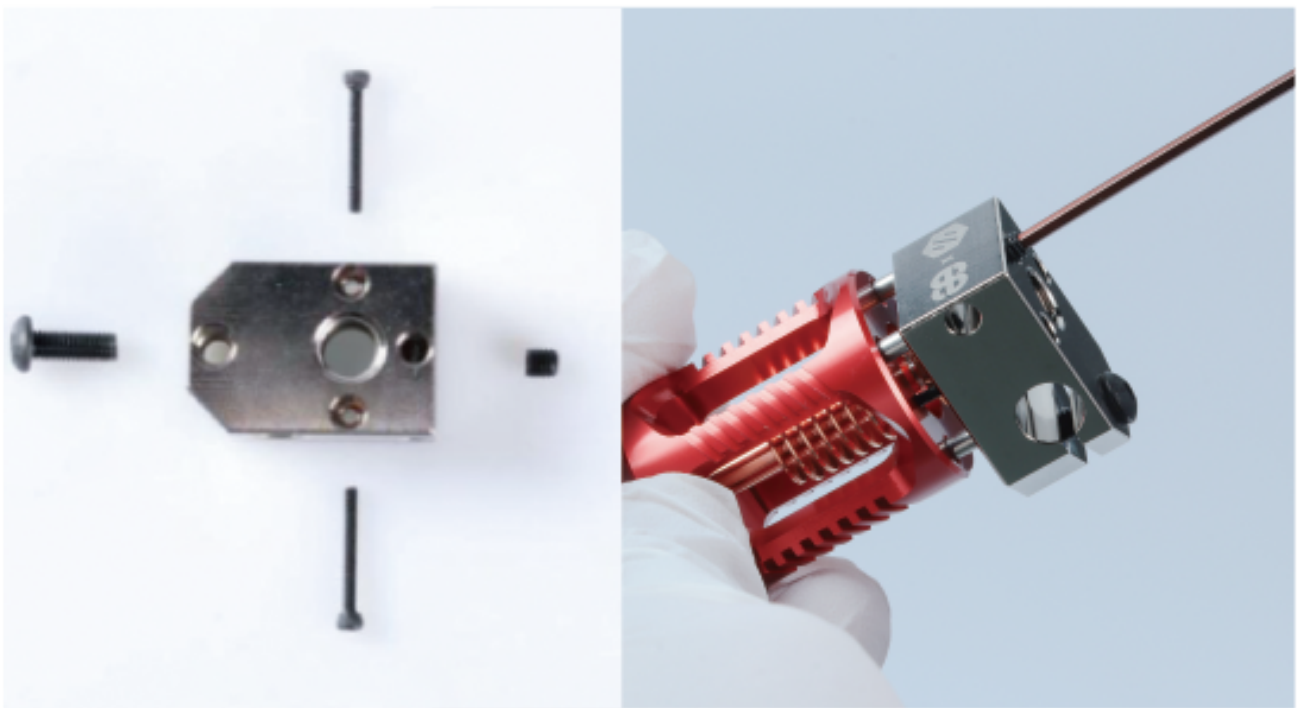
3. Carefully align the 4 supporting tubes of the heatsink with the 4 holes on the A side of heatblock, press them completely. Meanwhile, please note that the top of the heatbreak should be completely close to the holes on the top of the heatsink. If not properly aligned, heatbreak would be damaged during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

Note: Heatblock should be properly oriented so that the 2 threaded holes at the bottom of the heatsink are oriented the same as the 2 holes on the A side of the heatblock.



4. In side B of the heatblock (4 holes), screw the 3 screws as shown in the figure below into the corresponding screw holes with the appropriate hexagon bar.

Attention: Over - tightening of the M1.4*12 screw may damage the thread, or lead to screw fracture and hex nut slip, etc.



5. Cover the heatblock with the silicone sock.



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 Voron Edition 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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