

Phæetus®

TaiChi Hotend Assembly Instructions



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

Product Appearance

Infinite into Tai Chi



Thank you for buying Phaetus'
Two-In-One TaiChi Hotend

Product Appearance

Integrated
double feed
port design

one - hand
nozzle changing

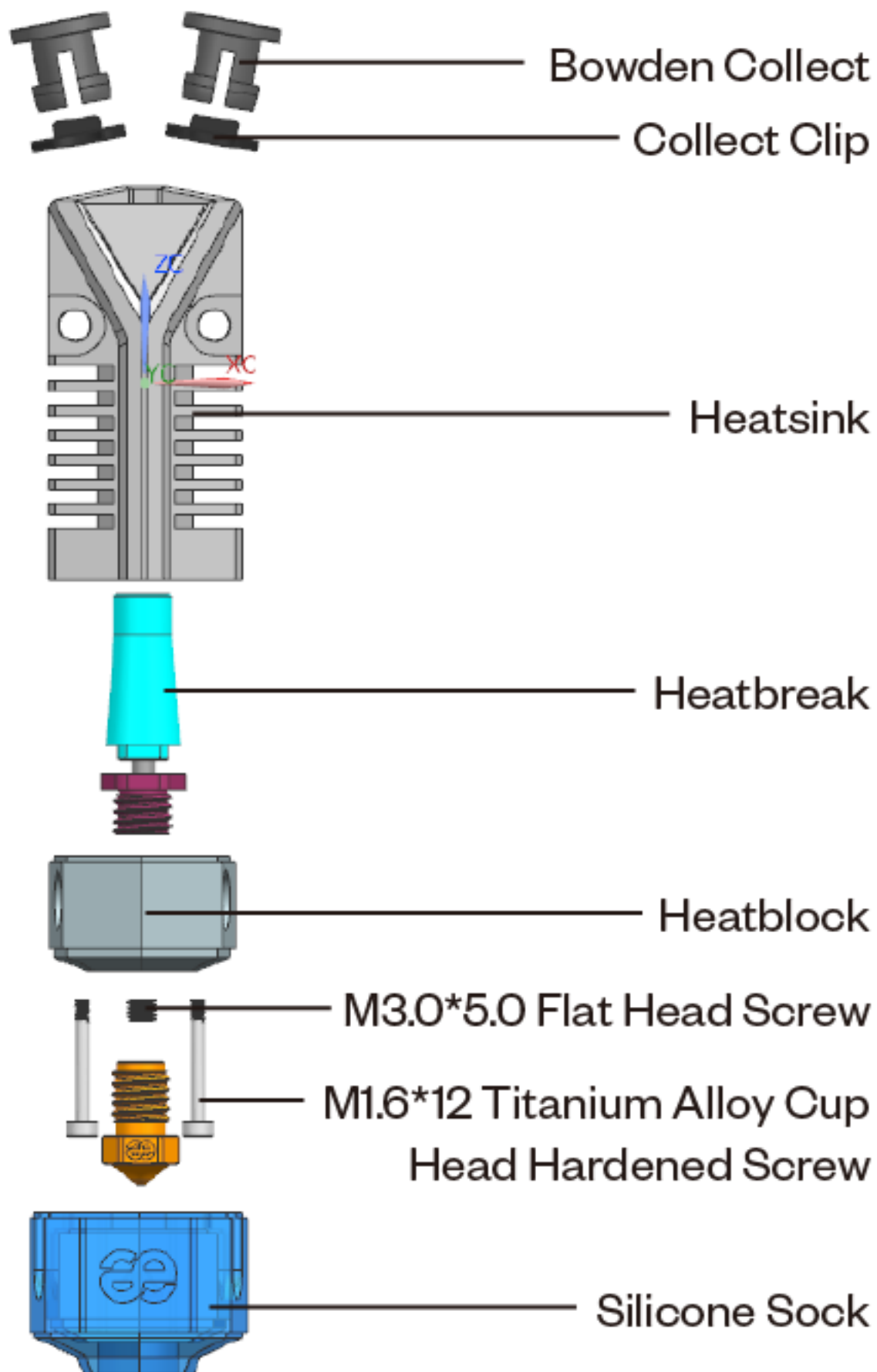
0.25mm
thin-walled
heat break

High temperature
resistance

Product Appearance

Compatible with all thermoplastic filaments, including but not limited to typical composite fiber filaments such as PLA, ABS, PETG, TPU, PP, PC, PA, PEEK, PEI and PLA-CF、ABS-CF、PETG-CF、PA-CF/GF, as well as composite filaments such as steel, wood, boron carbide, tungsten and fluorescence.

Product Exploded View



Specifications

Product Name: TaiChi Hotend

Product Size: 25.0mm*25.0mm*65.0mm

Nozzle Diameter:

Plated copper nozzle 0.4/1.75mm

Color: Blue / Black

Product Net Weight: 48.3g

Parts & Accessories



Collect Clip *2pcs

H8 Open – Ended Wrench *1pcs

H1.5 Hexagon Rod *1pcs

Brass Sleeve *1pcs

Thermal Grease *1pcs

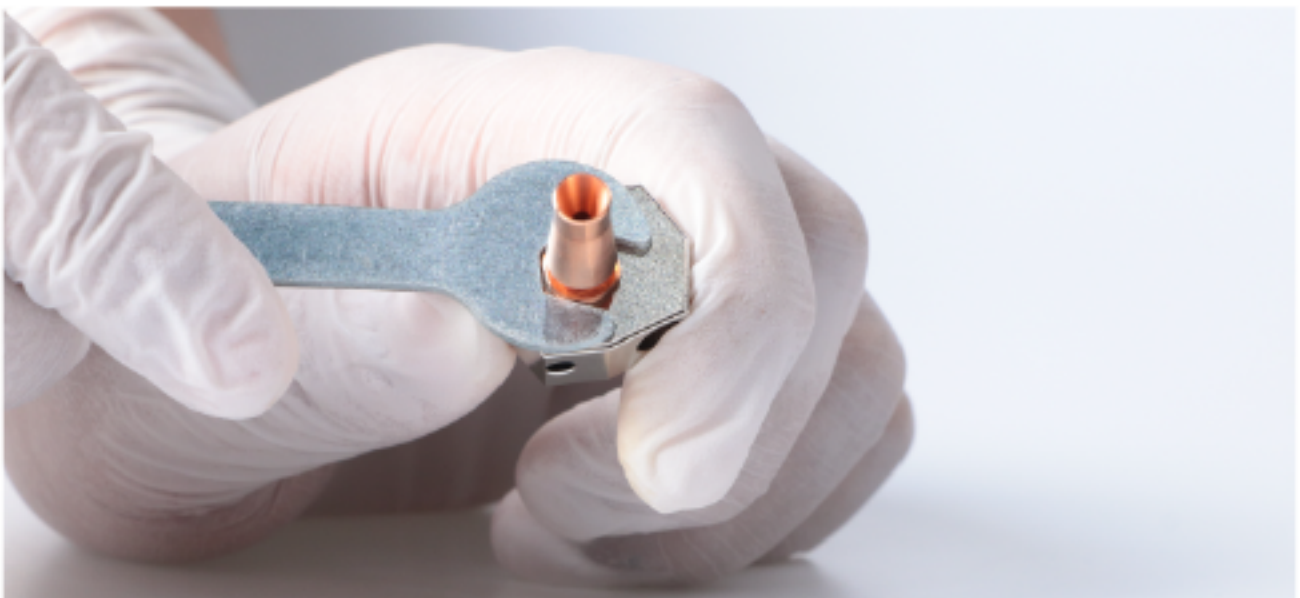
M3*14 Stainless Steel Half Round Head Screw *2pcs

Assembly Steps

1. Insert the bowden collect into the top of the heatsink, insert the collect clip between the bowden collect and the heatsinkr to secure the bowden collect



2. Screw the heatbreak into side A of the heatblock using an H8 open – ended wrench (about 1.4NM torque)



3. Connect the assembled heatblock to the heatsink, and align the two holes on the lower end of the heatsink with the holes on the B side of the heatblock



4. On side A of the heatblock (4 holes), screw the M1.6*12 Titanium alloy screws as shown in the following figure into the corresponding screw holes with the H1.5 hexagon rod, tightening torque: 0.14NM





Warning:

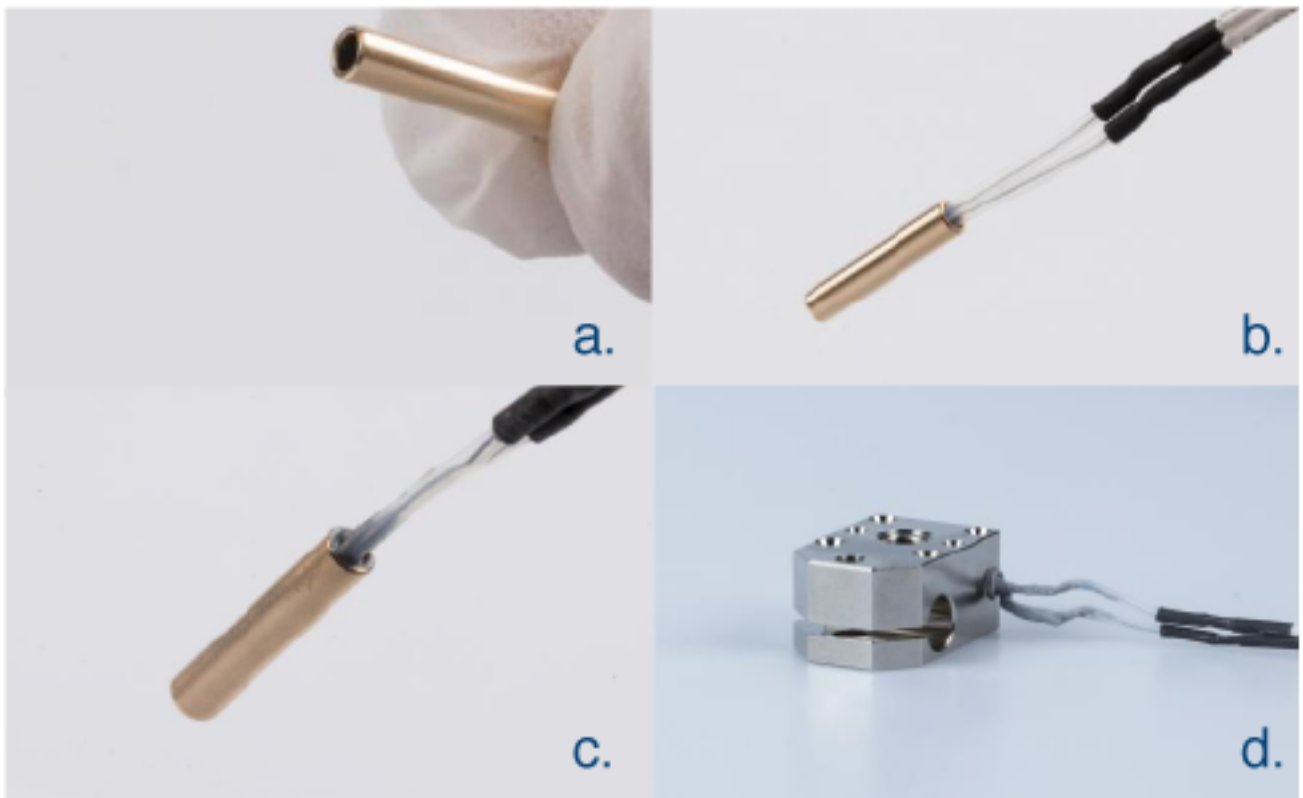
1. Lock the two screws at the same time. Do not lock them separately to avoid leaning of the heatbreak.
2. The locking torque shall be as required, otherwise the thread will be damaged or abnormal deformation of the heatbreak will be caused.
5. Screw the M3 head screw into the corresponding screw holes on side B of the heatblock



6. Put the silicone sock on the heatblock



7. If you are using a glass ball thermocouple, first install the thermocouple into the brass sleeve in the accessories kit (the brass sleeve is shown below), seal the port with the thermal grease carried in the accessories kit, then put it into the heatblock and lock it with the head screw



Hot - Tightening

1. Hot - tightening is the last mechanical step before TaiChi 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 7mm 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.

Product Advantage

- Integrated double feed port design, meet the printing needs of two filaments, eliminate the hidden trouble of inaccurate leveling, and make leveling more convenient than ever.
- Titanium alloy supporting screws with high strength and very low heat conduction, meet the function of one - handed nozzle changing and ensure the low heat conduction.
- Conical designed all metal heatbreak, fit closely with heatsink, heat dissipation more sufficient, meet the requirements of high temperature filaments printing.
- 0.25mm wall thickness heatbreak, excellent performance of heat insulation, no filaments blocking.
- Copper plated / Hardened steel nozzles selection, meet the requirements of high temperature and wear - resistant filaments printing.

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