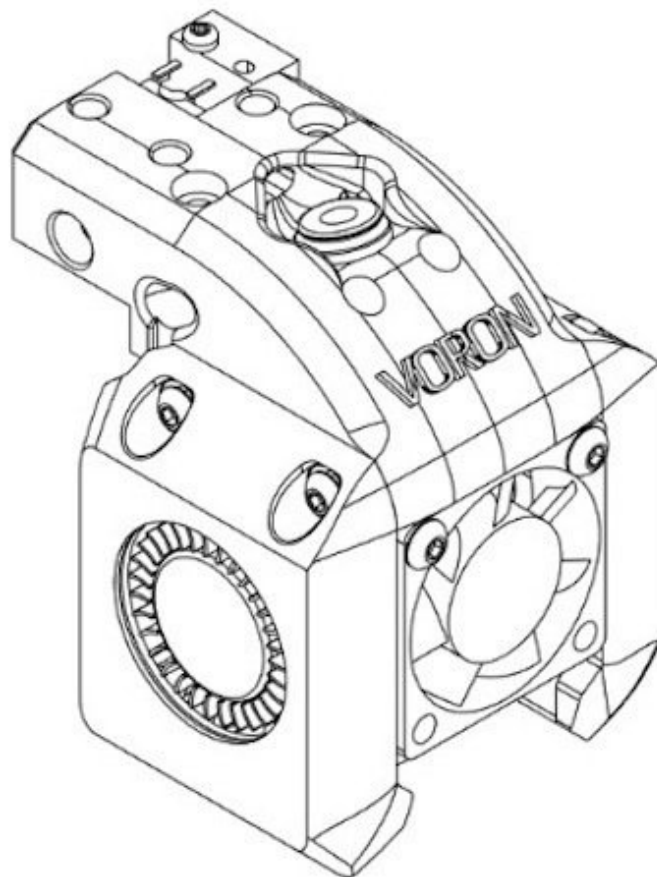


Voron Design

Voron 0 Assembly Guide: Dragon Toolhead Assembly

Written By: John Gilbert



 **TOOLS:**

- [Hex Key Set ot Drivers](#) (1)

 **PARTS:**

- [M2.5 x 12mm](#) (4)

SHCS

- [ECAS04 Collet](#) (1)

- [M3x25mm](#) (1)

BHCS

- [M3 Nut](#) (3)

- [3010 Radial Fan](#) (2)

- [M3x40mm](#) (2)

BHCS

- [M3x14mm](#) (2)

BHCS

- [3010 Axial Fan](#) (1)

- [Micro Switch](#) (1)

- [M2x10 Self Tapping](#) (1)

- [Dragon Hotend](#) (1)

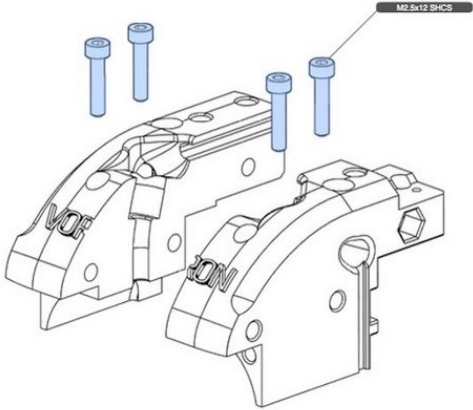
- [M2x8mm](#) (4)

SHCS

- [M3x35mm](#) (2)

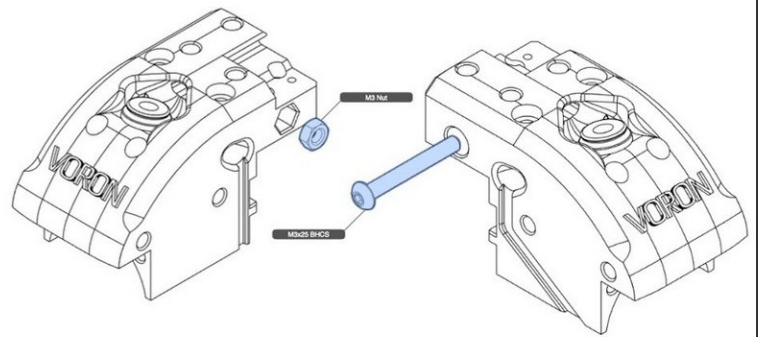
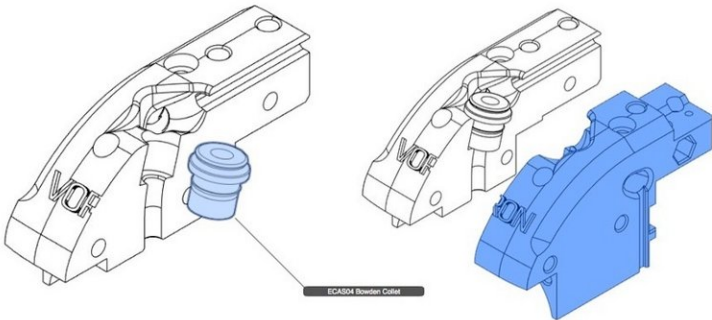
BHCS

Step 1 — Insert Dragon Mounting Bolts



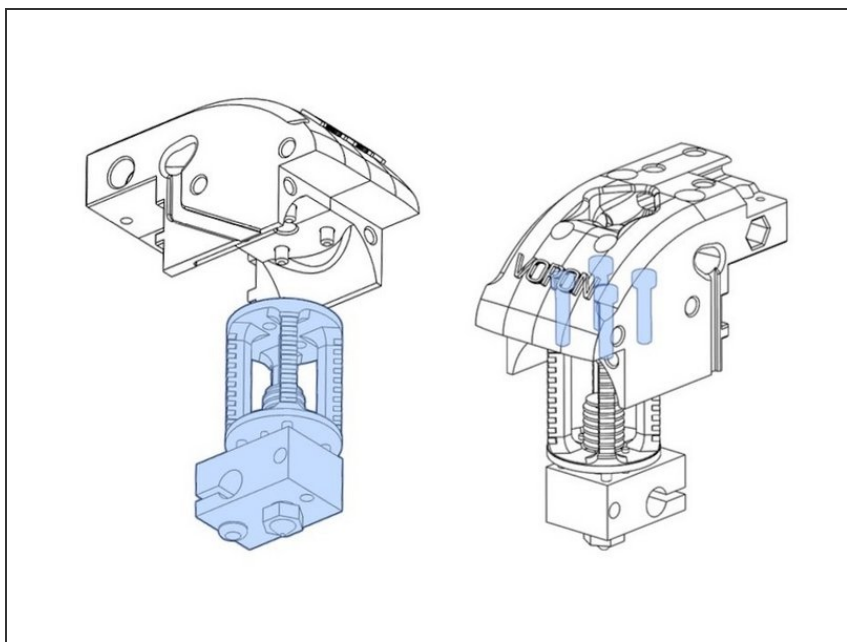
- The four bolts shown fit into the two halves of the toolhead body. These will be the mounting bolts for the Dragon Hotend, later in this guide.

Step 2 — Install Bowden Collet & Close Body



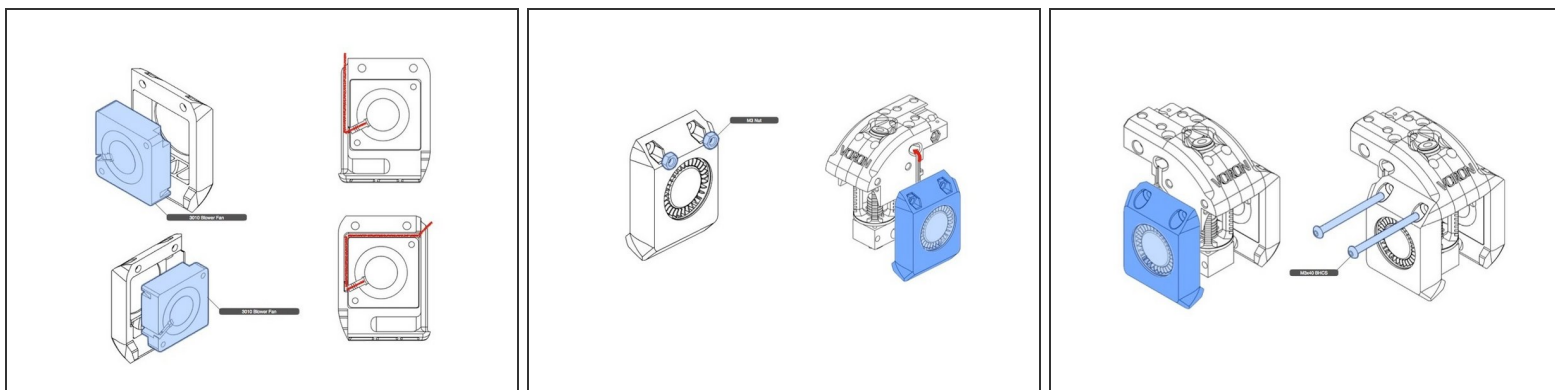
- Insert collet into one half of the body.
- Close the two body halves around the collet. Secure with nut and bolt, as shown.

Step 3 — Install Dragon Hotend



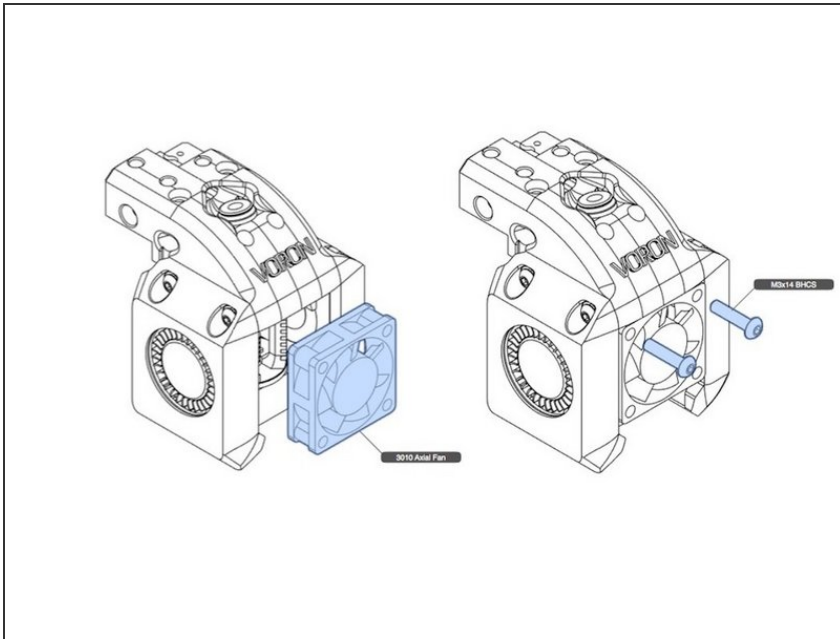
- Bolt in the Dragon Hotend with the previously installed screws. Orient the heater block as shown for proper fit.

Step 4 — Install Part Cooling Fans



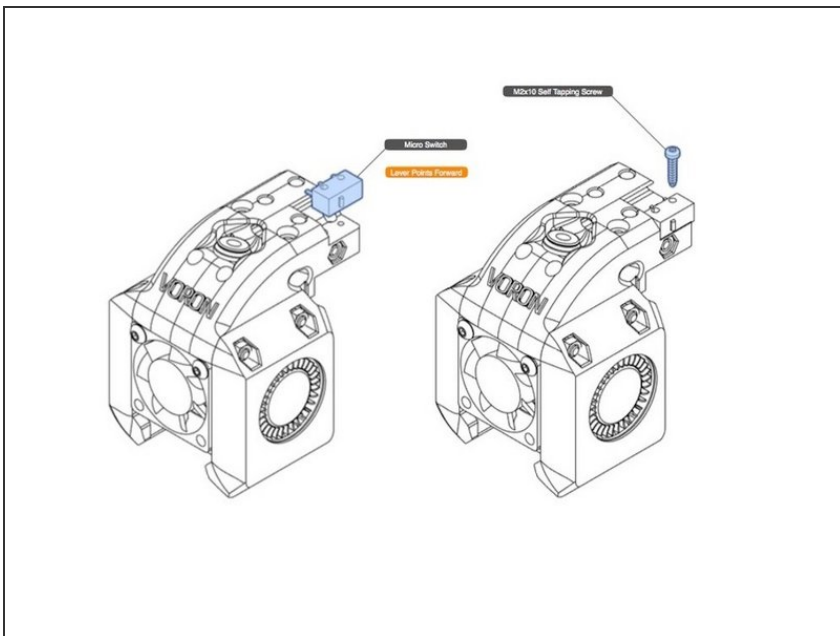
- Ensure that the fan shroud openings are clear and smooth. Since the parts are printed without supports, there may be strands of filament in the air path. Use a knife to clear and smooth the airways.
- Slide part cooling fans into their housings. Note the wire routing for each fan.
- Secure the fans with the long bolts with nuts, across the toolhead body.

Step 5 — Install Dragon Heatsink Fan



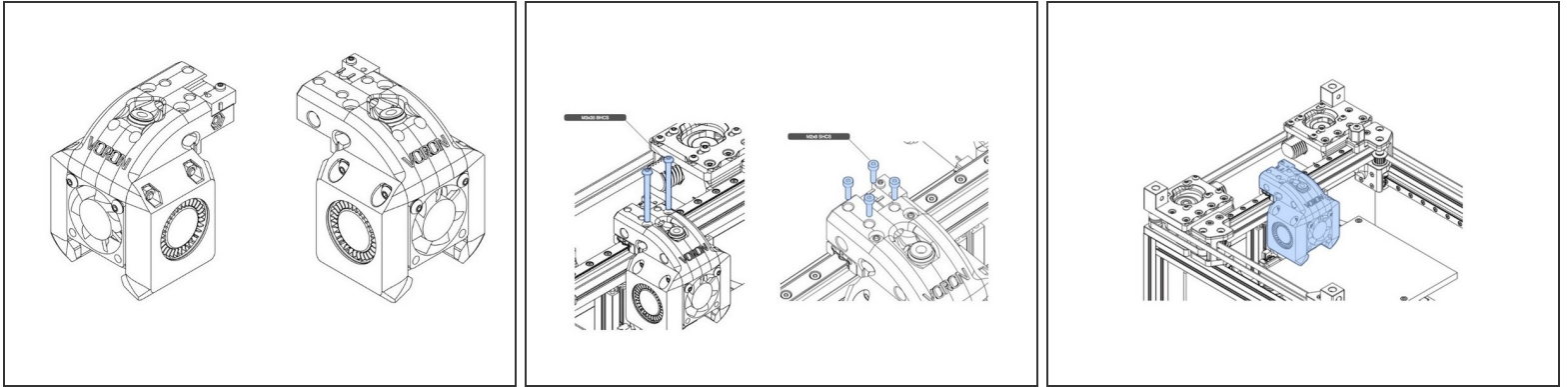
- Install hotend heatsink fan, as shown. The bolts screw into plastic. Avoid over tightening.

Step 6 — Install X-Axis Endstop



- Install the micro switch. Just one self-tapper screw is used, as shown.
- If your micro switch comes with a level over the switch, it should be removed.

Step 7 — Install Toolhead on X-Axis



- The two long screws attach the toolhead to the belt retention block, and the four shorts screws to the linear rail cart.
- With those screws installed, Congratulations!, you have built and installed the Dragon toolhead.