

Microswiss FlowTech™ Hotend for Bambu Lab X1-Carbon

INSTALLATION INSTRUCTIONS

Tools Required:

2.0mm Allen wrench

What's in the box:

Heatsink
Titanium Mounting Screws (2x)
Heater Core

0.4mm Plated Brass Nozzle
Silicone Sock
3D Printed Torque Wrench (4in-lb)

Fan Mounting Screws (2x)

STEP 1



SAFETY / PREPARATION

- Allow the hotend to cool down to room temperature.
- Power off the printer.
- Disconnect the power cable.
- Press the Filament Cutter Lever on the left side of the print head.

STEP 2



REMOVE THE FAN SHROUD

- Pull the magnetic fan shroud off of the print head.
- Set the fan shroud on top of the print head.
[Leave the connector attached to the breakout board.](#)

STEP 3



UNFASTEN THE ORIGINAL HOTEND

- Remove the two screws located near the top of the heatsink.
(2.0mm Allen wrench)
- Pull the original hotend down to detach it from the carriage.

STEP 4



DISCONNECT THE CABLES

- Disconnect the original hotend's thermistor, heater, and fan cables from the breakout board.

STEP 5



TRANSFER THE FAN

- Remove the two screws securing the cooling fan to the original hotend's heatsink.
(2.0mm Allen wrench)
- Attach the cooling fan to the FlowTech heatsink using the two new screws provided with the kit.
(2.0mm Allen wrench)

STEP 6



FASTEN THE FLOWTECH HOTEND

- Secure the FlowTech hotend to the carriage using the original mounting screws. (2.0mm Allen wrench)

STEP 7



CONNECT THE FLOWTECH HOTEND

- Connect the fan, heater, and thermistor cables to the matching ports on the breakout board.

STEP 8



INSTALL THE FAN SHROUD

- Tuck the cables in so that they do not get in the way of the fan shroud.
- Reinstall the magnetic fan shroud.

[Installation Complete!](#)

SERVICE NOTE



NOZZLE REPLACEMENT PROCEDURE

[The FlowTech nozzles can be swapped while the hotend is at room temperature.](#)

- Press the Filament Cutter Lever on the left side of the print head.
- Detach the magnetic fan shroud and set it on top of the print head.
- Pull the silicone sock off of the heater core.
- Use the provided 3D printed torque wrench to unscrew the nozzle.
- Install and finger tighten the new nozzle until snug.
- Torque the nozzle using the included 3D-printed torque wrench until you feel it click once. [The 3D printed torque wrench is designed to click at 4 inch-pounds of torque.](#)
Be careful to not over tighten the nozzle if using a regular socket wrench.
- Replace the silicone sock.
- Reinstall the magnetic fan shroud.

[Click here for replacement nozzles](#)

FLOWTECH NOZZLE OPTIONS



M3001
Brass Plated Nozzle

Sizes available:
0.25mm, 0.3mm,
0.4mm, 0.6mm,
0.8mm, 1.0mm



M2904
CM2 Nozzle
[Hardened Steel Tip](#)

Sizes available:
0.4mm, 0.6mm,
0.8mm, 1.0mm



M2905
CHT Nozzle
[High-Flow](#)

Sizes available:
0.4mm, 0.6mm,
0.8mm, 1.0mm



M2907
CHT CM2 Nozzle
[High-Flow
Hardened Steel Tip](#)

Sizes available:
0.4mm, 0.6mm,
0.8mm, 1.0mm



DBFT-175-04
DiamondBack Nozzle
[Diamond Tip](#)

Sizes available:
0.25mm, 0.4mm,
0.6mm, 0.8mm,
1.0mm