



Mako™ for Bambu Lab Upgrade Kit Installation Instructions

How to Install the Mako™ for Bambu Lab Upgrade Kit

Compatibility

- Bambu Lab P1P
- Bambu Lab P1S
- Bambu Lab X1
- Bambu Lab X1C
- Bambu Lab X1E

What You Need

- 2 mm Hex Key
- Mako For Bambu Lab
 - Mako Hotend
 - Mako Silicone Boot
 - FIN Nozzle
 - Heater
 - Thermistor
 - Heater Adapter
 - Retaining Clip
 - Air Dam
 - Thermal Grease - 1 cc
 - Optional
 - [Torque Wrench](#) or 6 mm Wrench
 - [Plastic Repellent Paint™](#)

Before Starting

1. Unload any filament.

2. Go to the Temperature/Axis settings and make sure your hotend temperature is at 30°C or below, then turn the power OFF
3. Turn off and unplug the printer.



Don't forget to optimize your printing performance! Access our custom material profiles for the Mako Hotend [here](#) to get the best results from your upgraded setup.



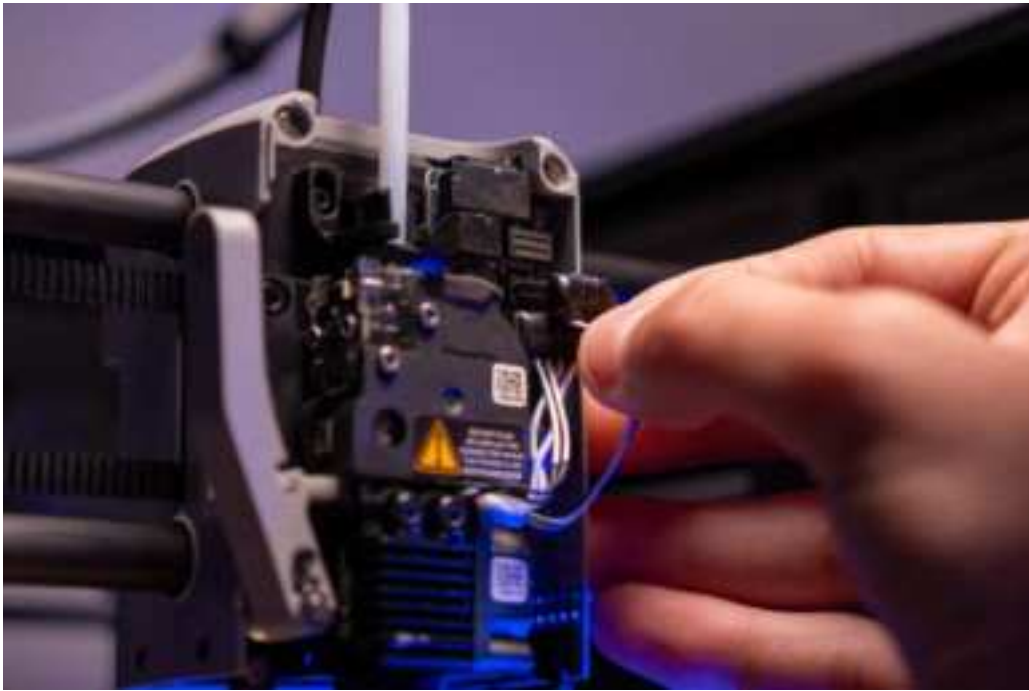
Some users may experience clogs when printing with PLA or other filaments with low melting temperatures. To avoid this, make sure to read [these instructions](#).

Removal

Step 1: Open the magnetic cover and move it aside



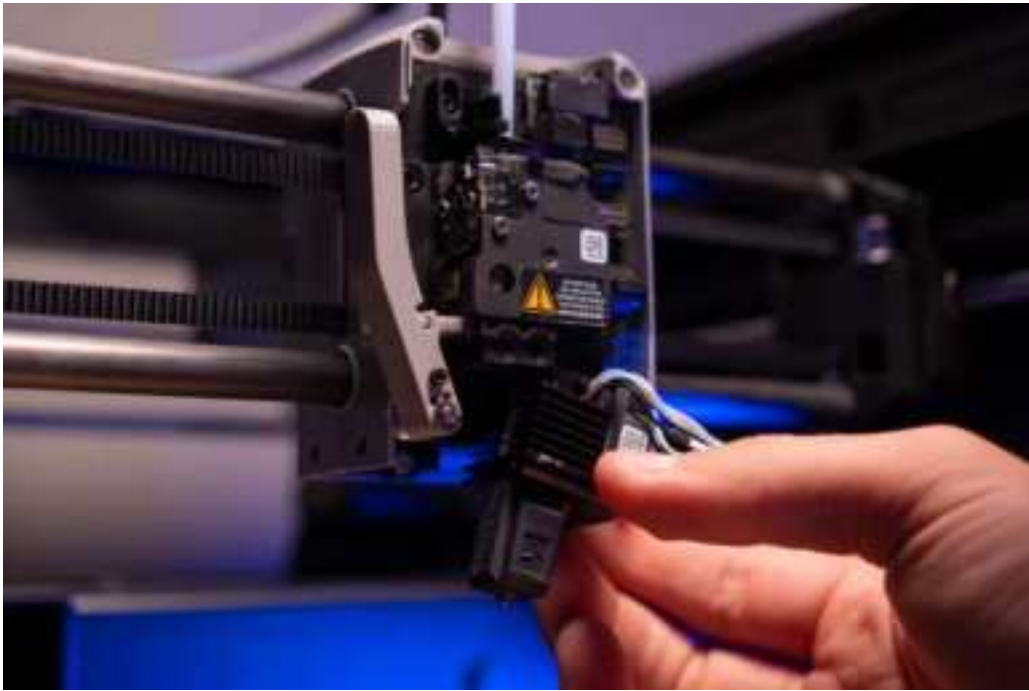
Step 2: Disconnect the hotend fan and the heater connectors from the board, and remove the wires by sliding them out of the clip.



Step 3: Use the 2mm hex key to unscrew the 2 screws that are near the top of the hotend's heatsink



Step 4: Carefully and gently move the wires out of the plastic wire clip and remove the complete hotend assembly.



Prepare hotend

ⓘ This is only if you have the stock electronics version

Step 1: Apply thermal grease provided onto the hotend where the heater will be placed.



Step 2: Insert the heater adapter by sliding the ears of it into the top of the hot block



Step 3: Insert your heater into the heater adapter



Step 4: Slide the retaining clip onto the bottom of the heater to hold it in place while you complete the next step.



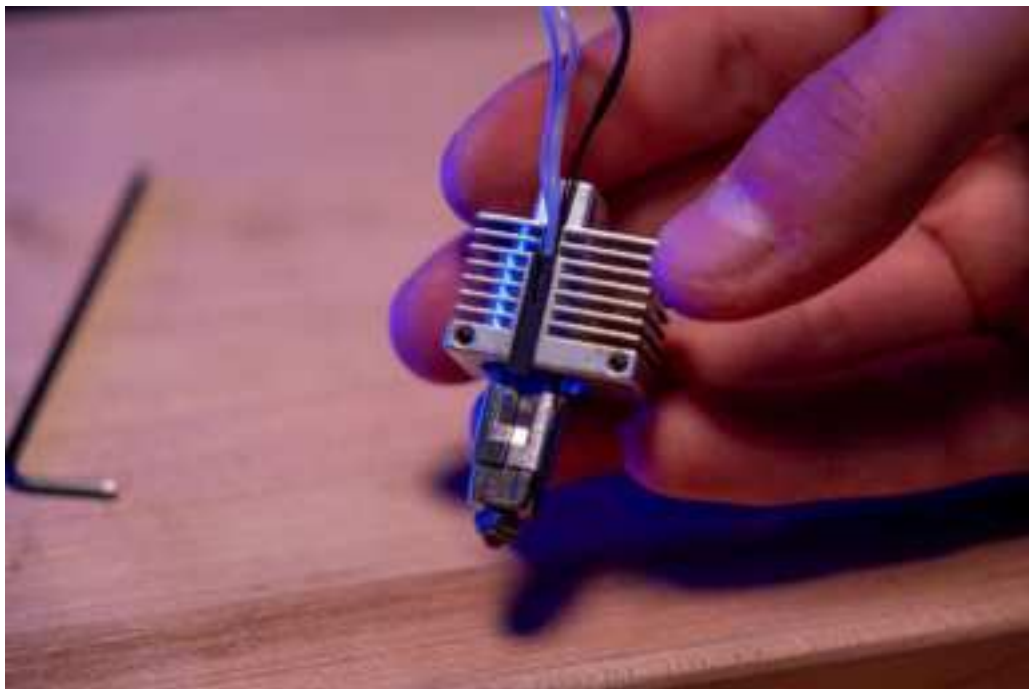
Step 5: Apply grease to the thermistor and the thermistor hole. Then, insert the thermistor into the hole in the side of the hotend and slide the retaining clip over it all the way up.



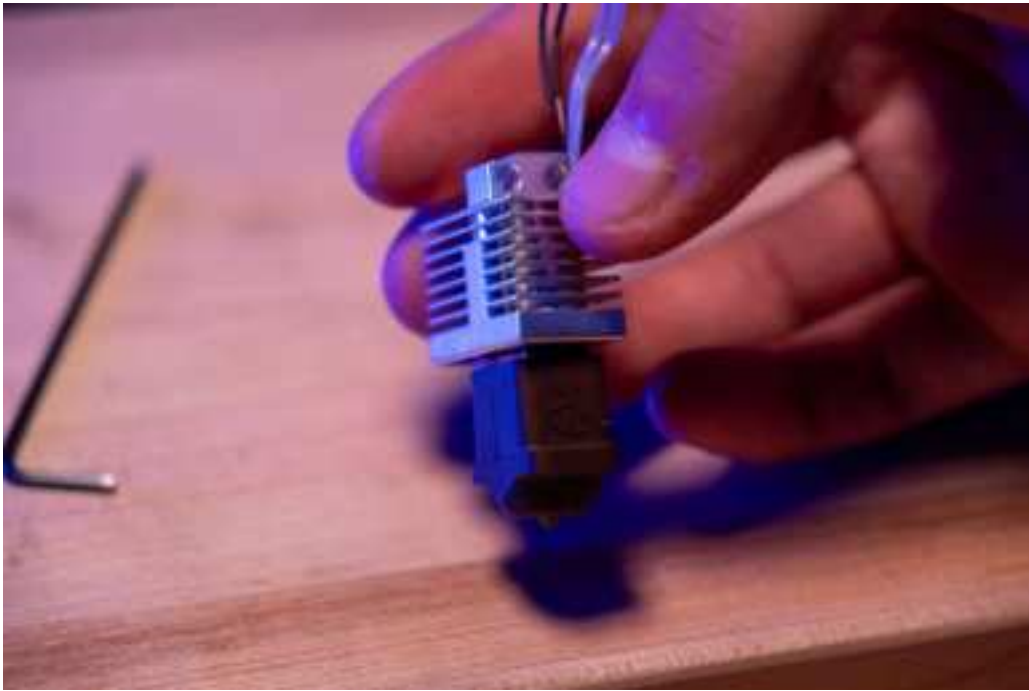


Step 6: Route your wires through the designated slot of the heatsink and be sure to place the thermistor wires behind the heater wires and slide the air dam over the wires.

① Ensure your air-dam is flush with the bottom of the heatsink



Step 7: Slide the Mako boot over your hotblock



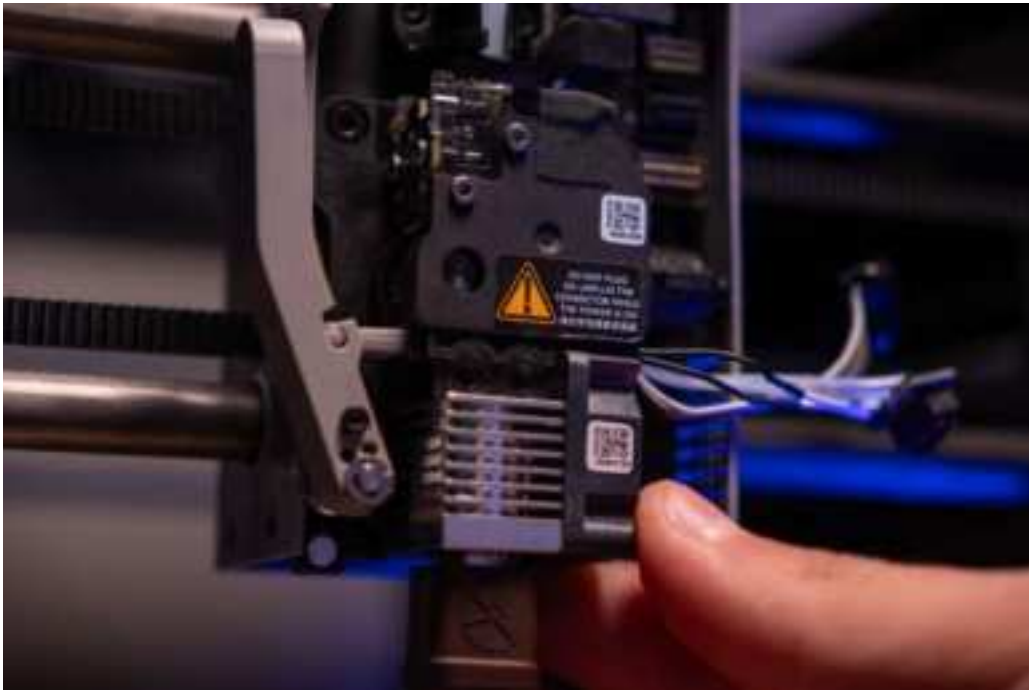
Step 8: Now screw your fan into the heatsink with a 2 mm hex key.



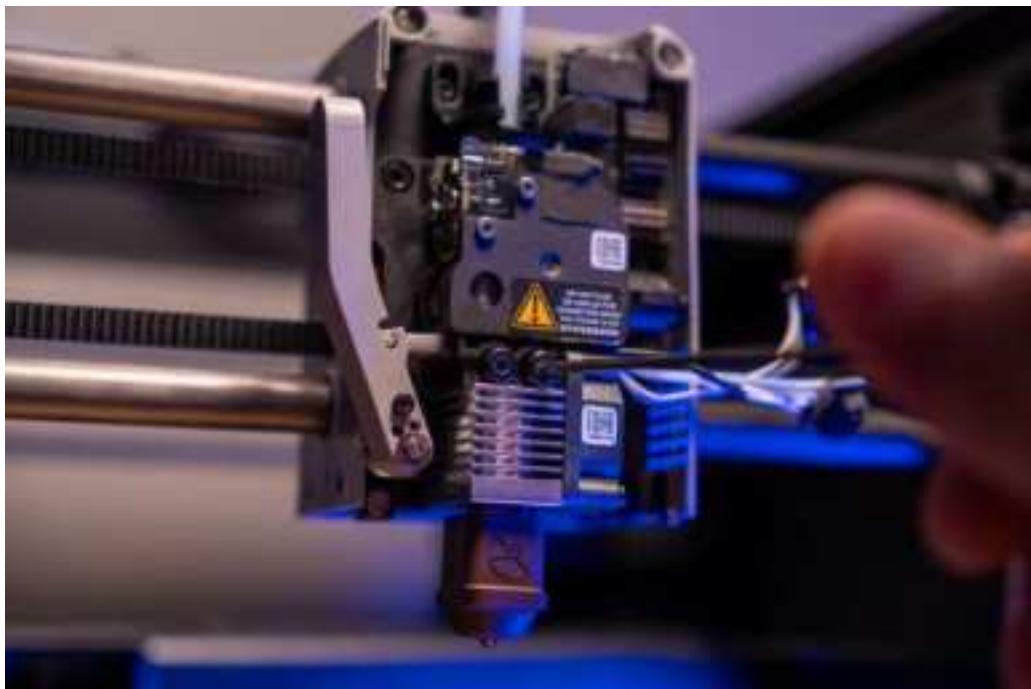
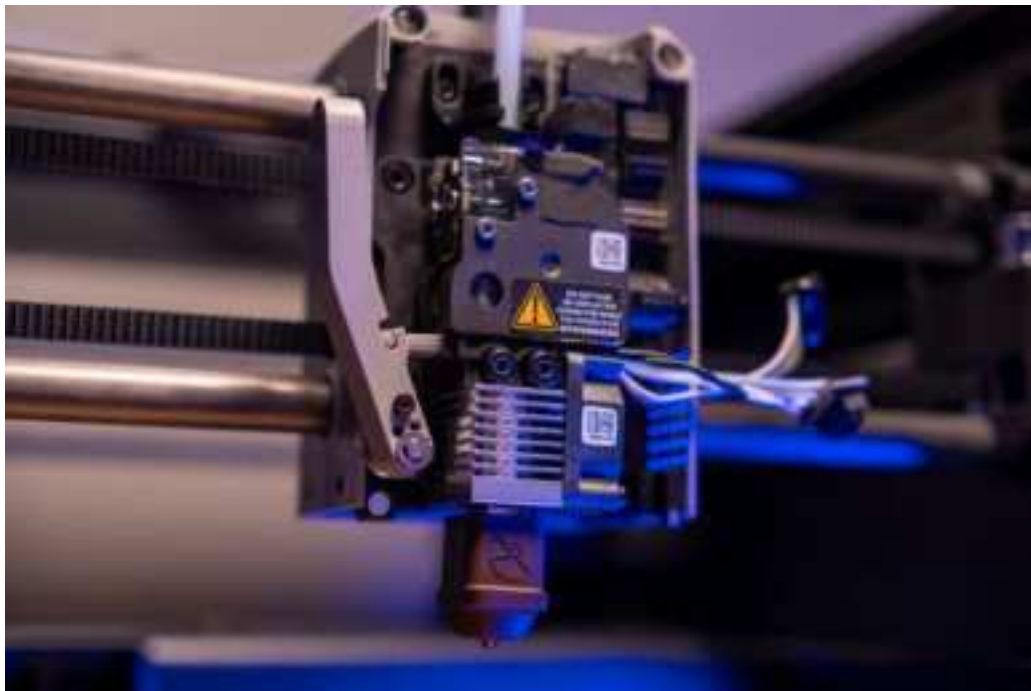
Installation

Now that you have removed the stock hotend, you are ready to install your new Mako hotend.

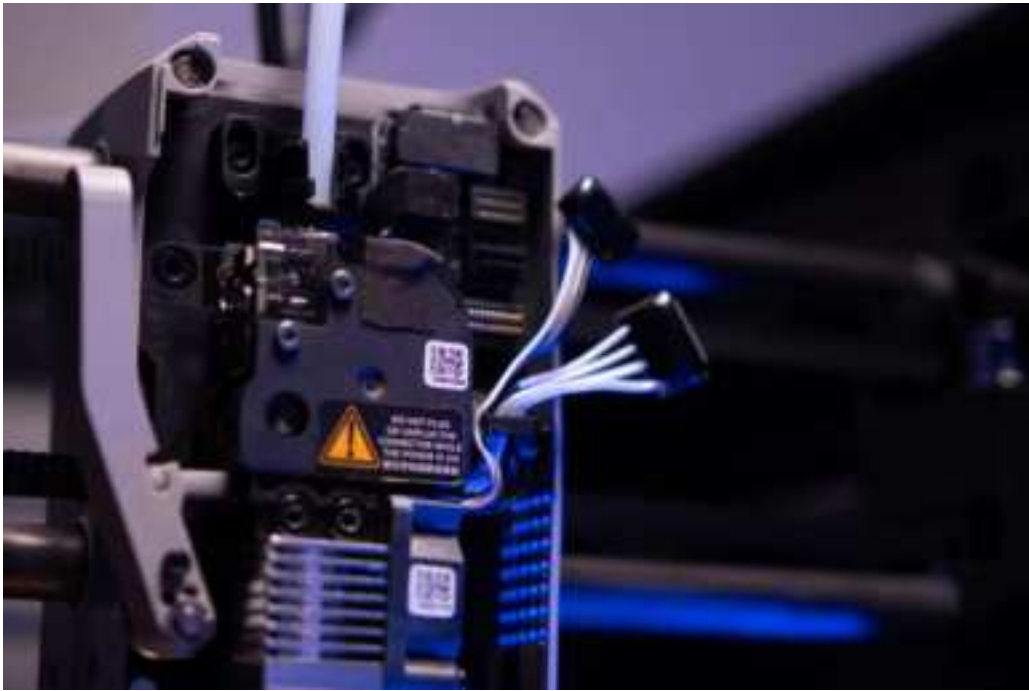
Step 1: Position the complete hotend assembly so that the 2 screw holes will be behind the bracket



Step 2: Gently push the 2 screws in and then tighten them equally, be careful not to over-tighten



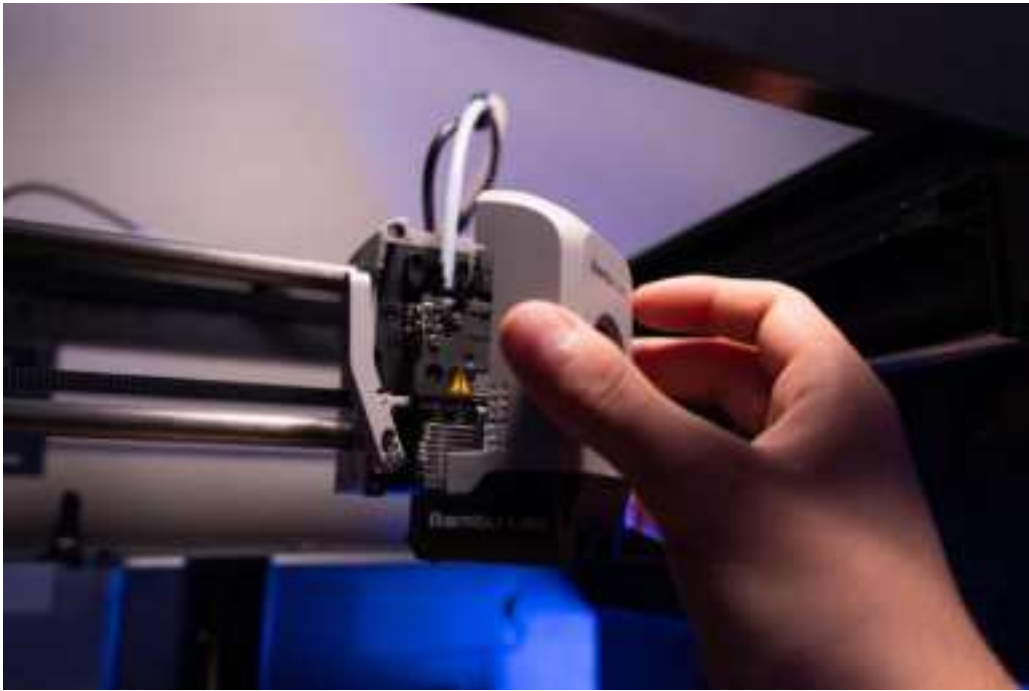
Step 3: Route all the loose cables through the plastic wire clip



Step 4: Plug in the the hotend fan and the heater connectors to the board



Step 5: Reattach your magnetic cover



Step 6: Finally, plug in your printer, turn on the power, and start printing! Optionally, apply a coat of [Plastic Repellent Paint](#) to your hotend to improve the performance!



This is the end of the Mako for Bambu Lab Upgrade Kit Installation Instructions.