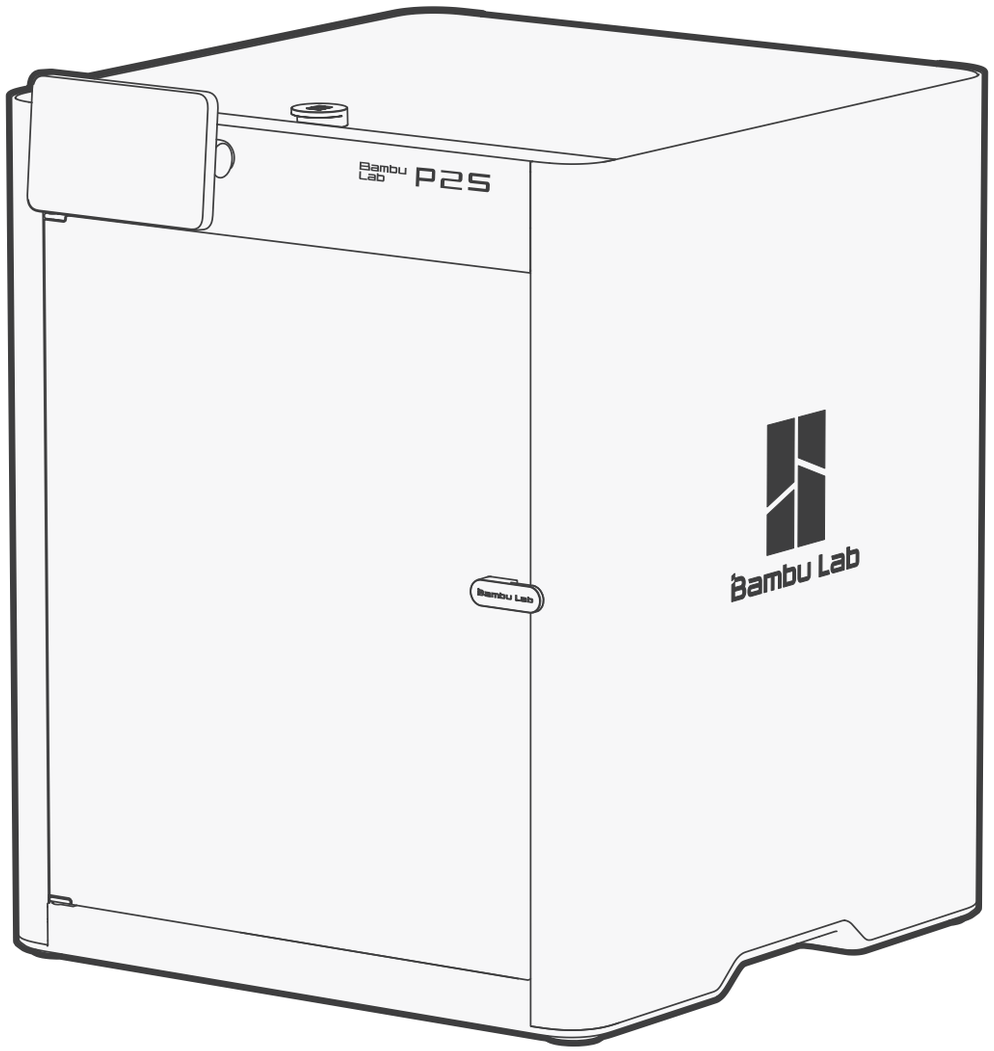
# Bambu Lab P2S

## Quick Start Guide

**Please review the entire guide before using the product.**

Safety notice: Do not connect to power until the assembly is complete.




PF004-U

### Video guide

Scan the QR code to watch a step-by-step video and get started quickly.

bambulab.com/p2s-quick-start

### Download Bambu Handy and Bambu Studio

Scan the QR code to download Bambu Handy, or visit the link below to download Bambu Studio. You can remotely control your printer and monitor your prints in real time on both your phone and computer.

bambulab.com/download

### Explore more cool models

Scan the QR code to visit MakerWorld, our models community, where you can find a variety of free models, and quickly bring your ideas to life using the creativity tools in MakerLab and accessories in Maker's Supply.

makerworld.com

### Learn with Bambu Academy

Scan the QR code to visit Bambu Academy and explore printer and software courses from beginner to advanced levels to enhance your 3D printing skills.

bambulab.com/support/academy

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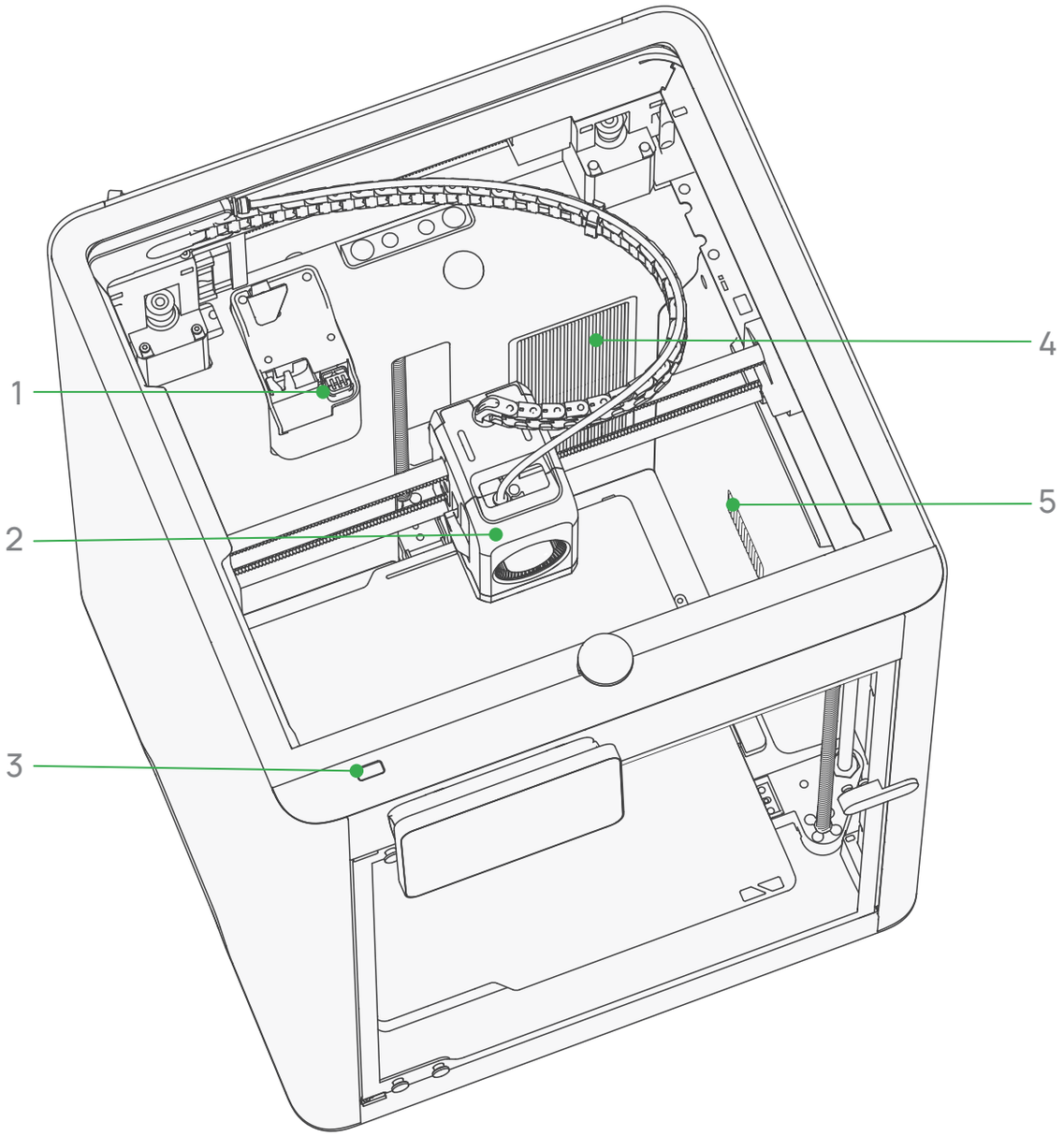
## Read before use

To ensure safety and optimal performance, please follow these guidelines:

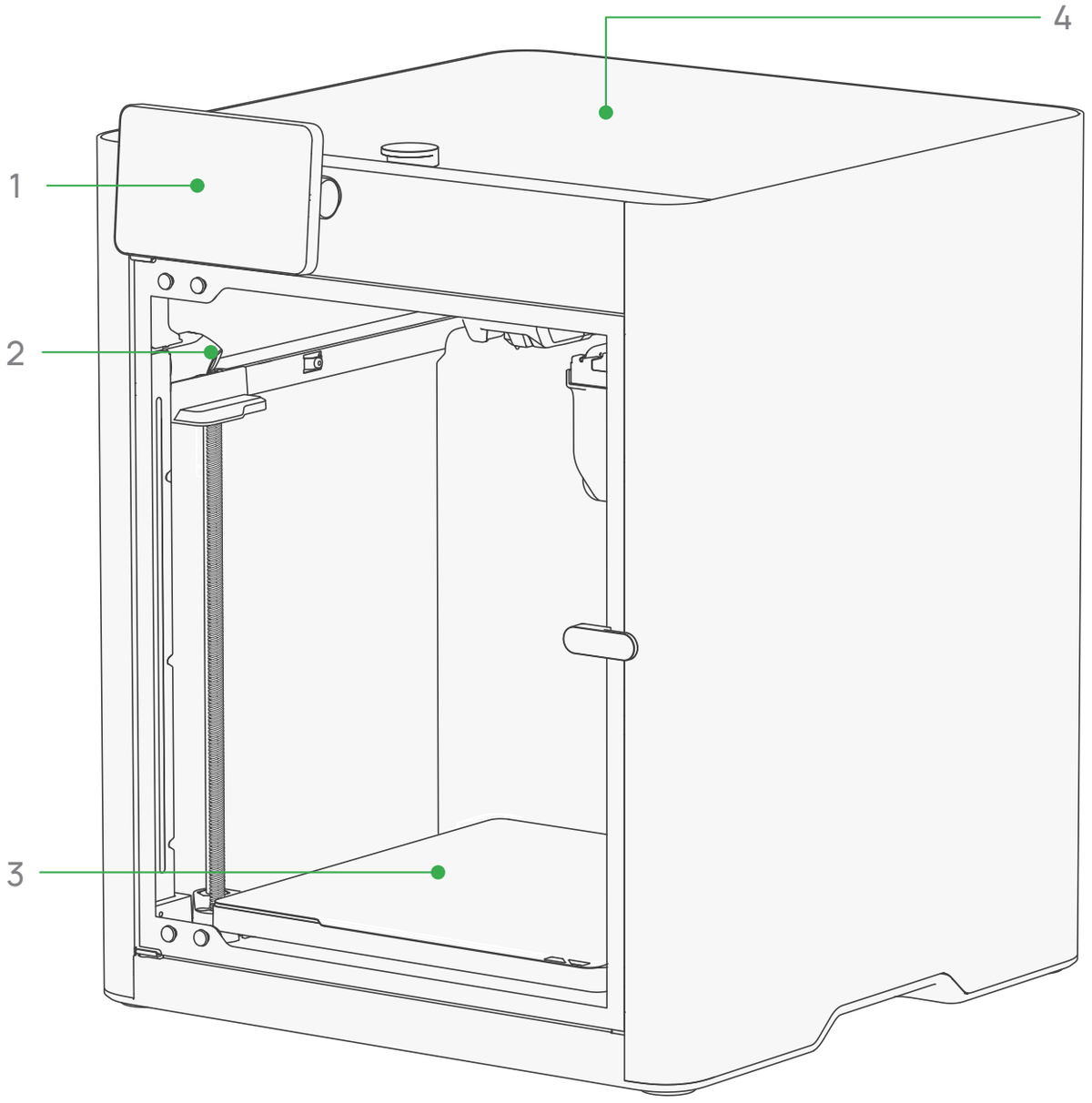
- Verify that the printer's operating voltage matches the specified requirements to avoid damage or safety hazards. This can be checked on the label next to the power socket. Refer to the "Printer specifications" section for details.
- Regular maintenance is essential to keep the printer's complex mechanisms running smoothly. For guidance, see the "Regular Maintenance" section.
- For best results, we recommend using Bambu filaments, which have been rigorously tested for compatibility, safety, and stability with the product.
- When printing with TPU, feed the filament directly into the toolhead and avoid using the PTFE tube coupler on the back of the printer.

# Printer component introduction



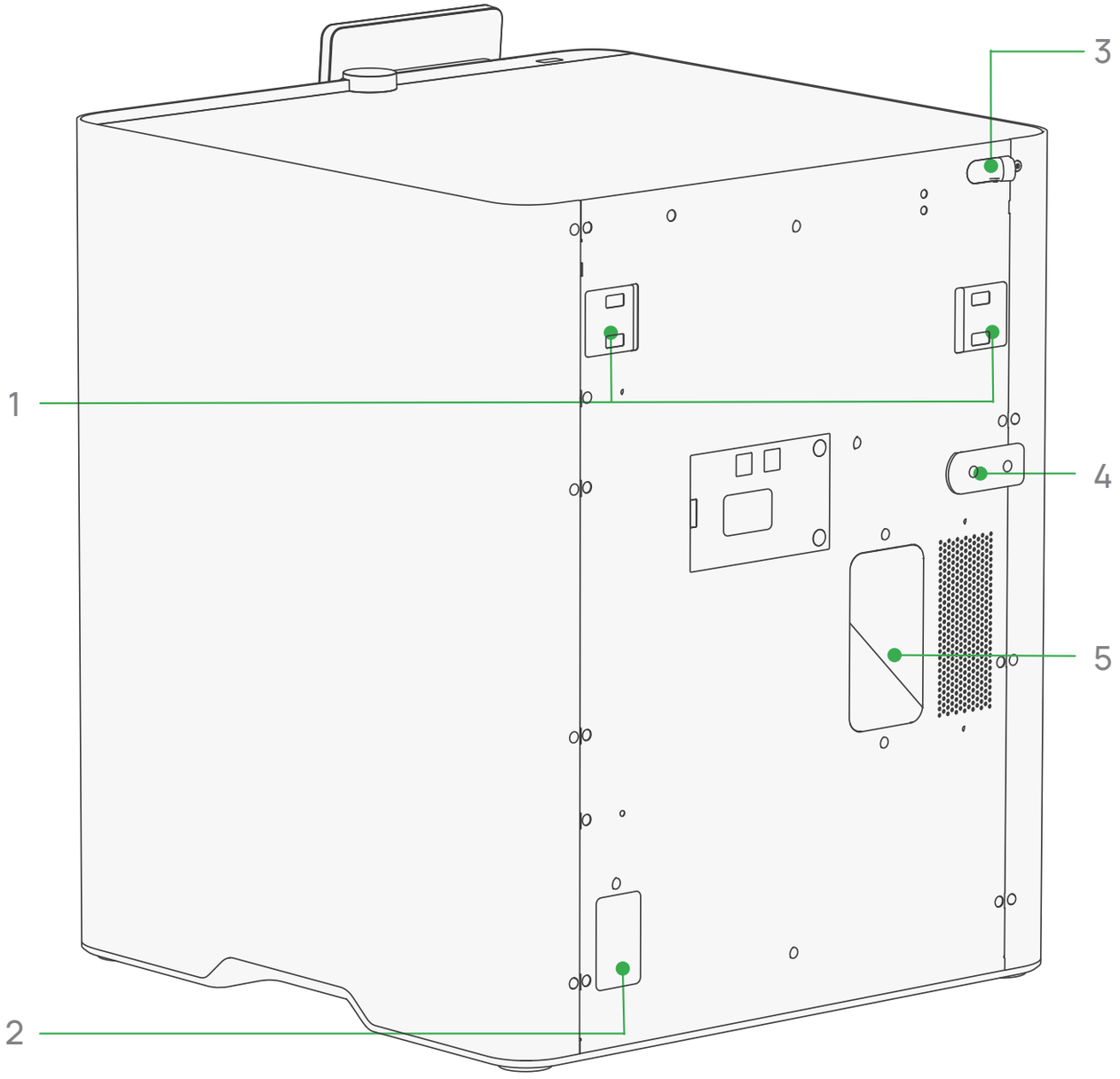

| No. | Name | No. | Name | No. | Name |
|---|---|---|---|---|---|
| 1 | Purge Wiper | 2 | Toolhead | 3 | USB Port |
| 4 | Air Filter | 5 | Adaptive Airflow Switching Unit | / | / |

# Printer component introduction



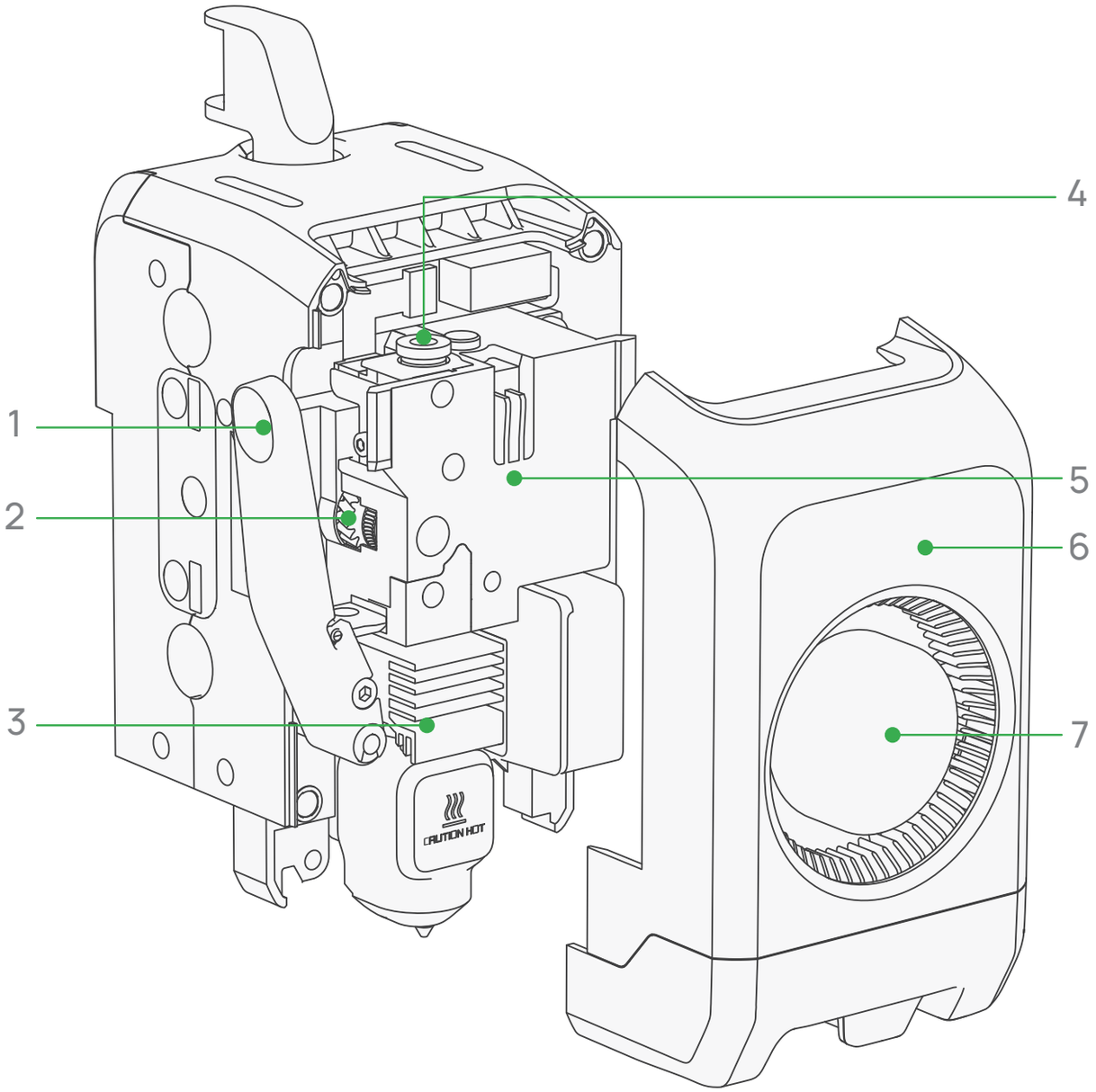

| No. | Name | No. | Name | No. | Name |
|---|---|---|---|---|---|
| 1 | Touchscreen | 2 | Live View Camera | 3 | Heatbed |
| 4 | Top Glass Cover | / | / | / | / |

# Printer component introduction



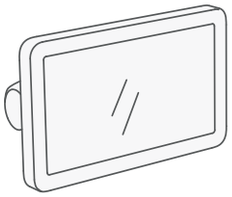

| No. | Name | No. | Name | No. | Name |
|---|---|---|---|---|---|
| 1 | Belt Tensioners | 2 | Power Socket | 3 | PTFE Tube Coupler |
| 4 | Spool Holder Base Plate | 5 | Excess Chute | / | / |

## Toolhead component introduction

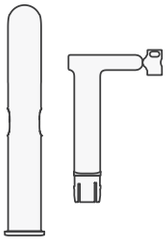



| No. | Name | No. | Name | No. | Name |
|---|---|---|---|---|---|
| 1 | Filament Cutter Lever | 2 | Extruder Gear | 3 | Hotend |
| 4 | Toolhead Filament Inlet | 5 | Extruder | 6 | Toolhead Front Cover |
| 7 | Part Cooling Fan | / | / | / | / |

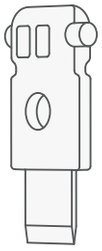
## Included accessories



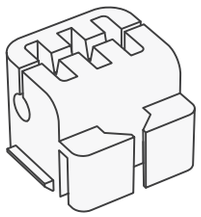
Touchscreen



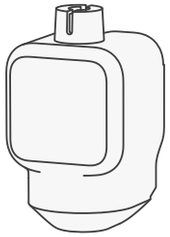
Spool Holder Assembly



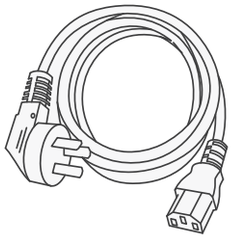
Filament Cutter



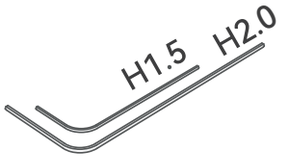
Nozzle Wiping Pad



Hotend Silicone Sock

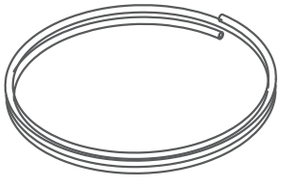


Power Cord

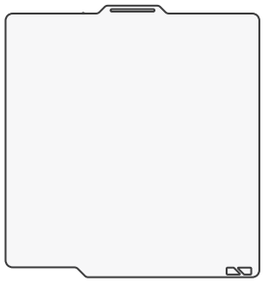



Allen Key H1.5
Allen Key H2.0

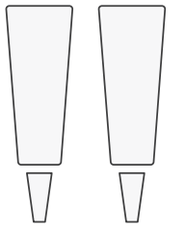
Unclogging Pin



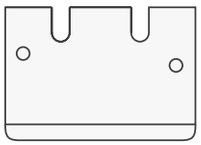
PTFE Tube



Build Plate
(Pre-installed on heatbed)



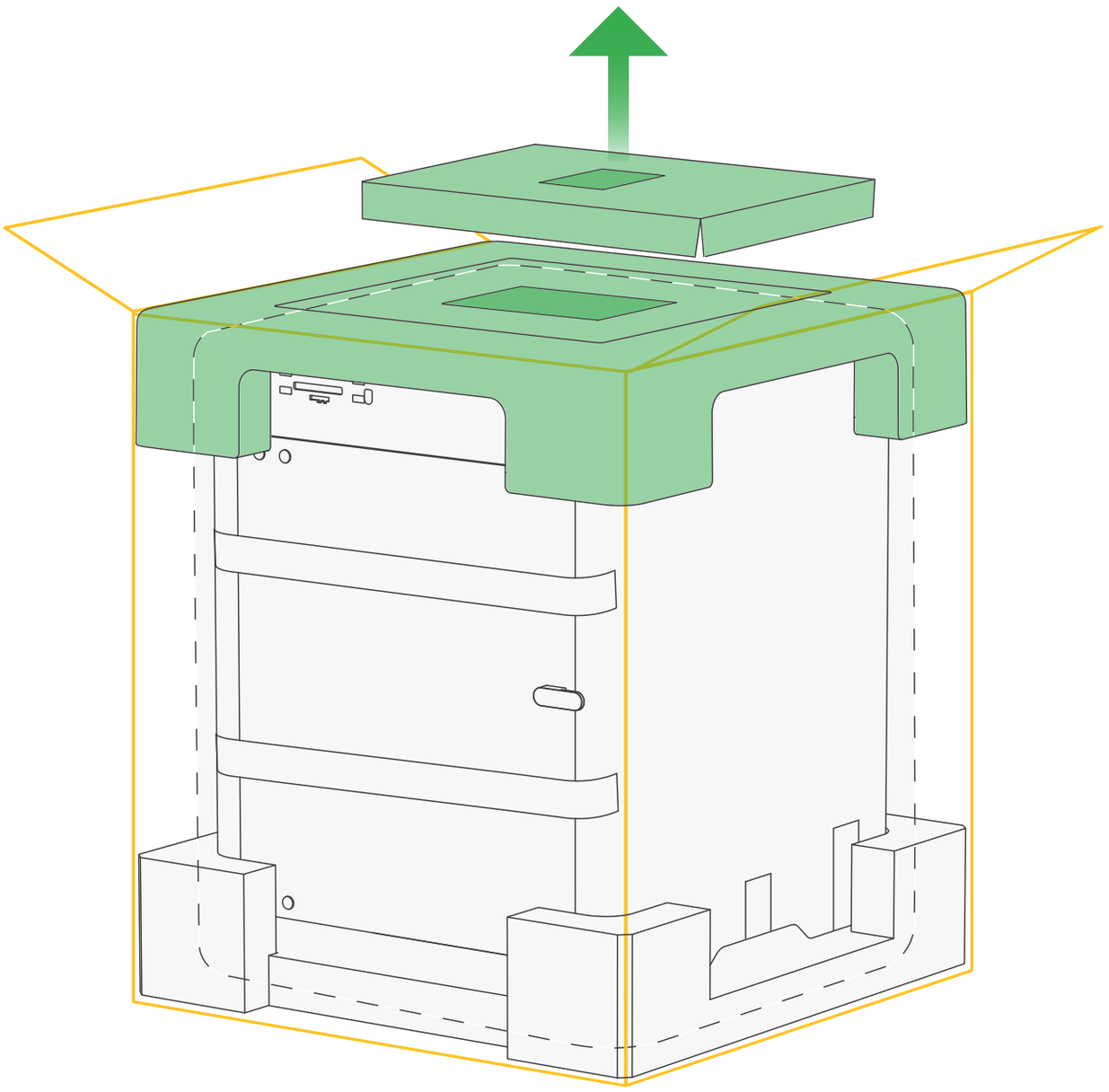
Lubricant Grease & Lubricant Oil



Scraper Blade

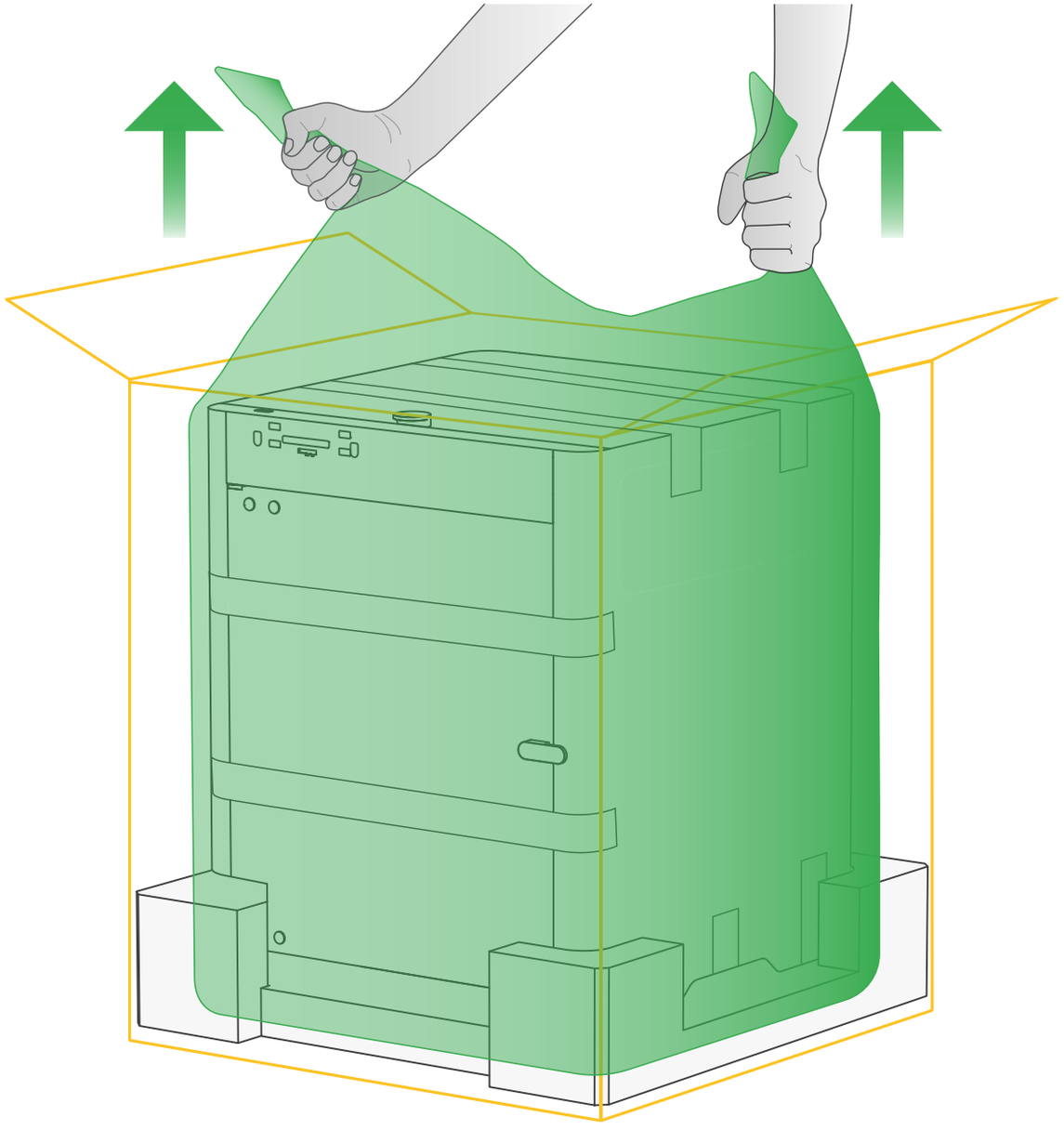
## Remove the package

Keep packaging materials and screws for shipping.



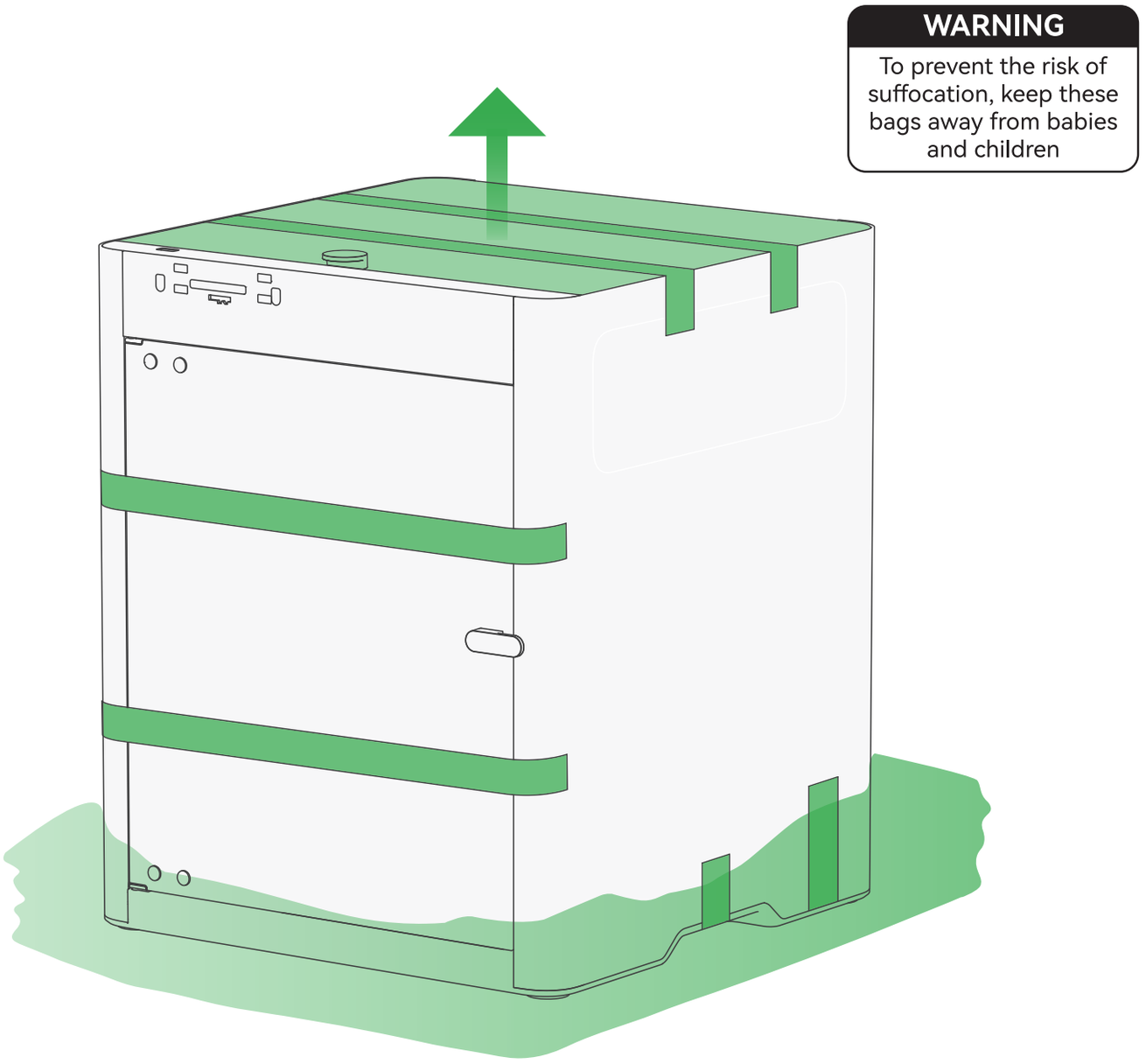
1. Open the packaging box, take out the quick start guide, and remove the surrounding cardboard. Then take out the PTFE tubes and remove the top foam.

## Remove the package



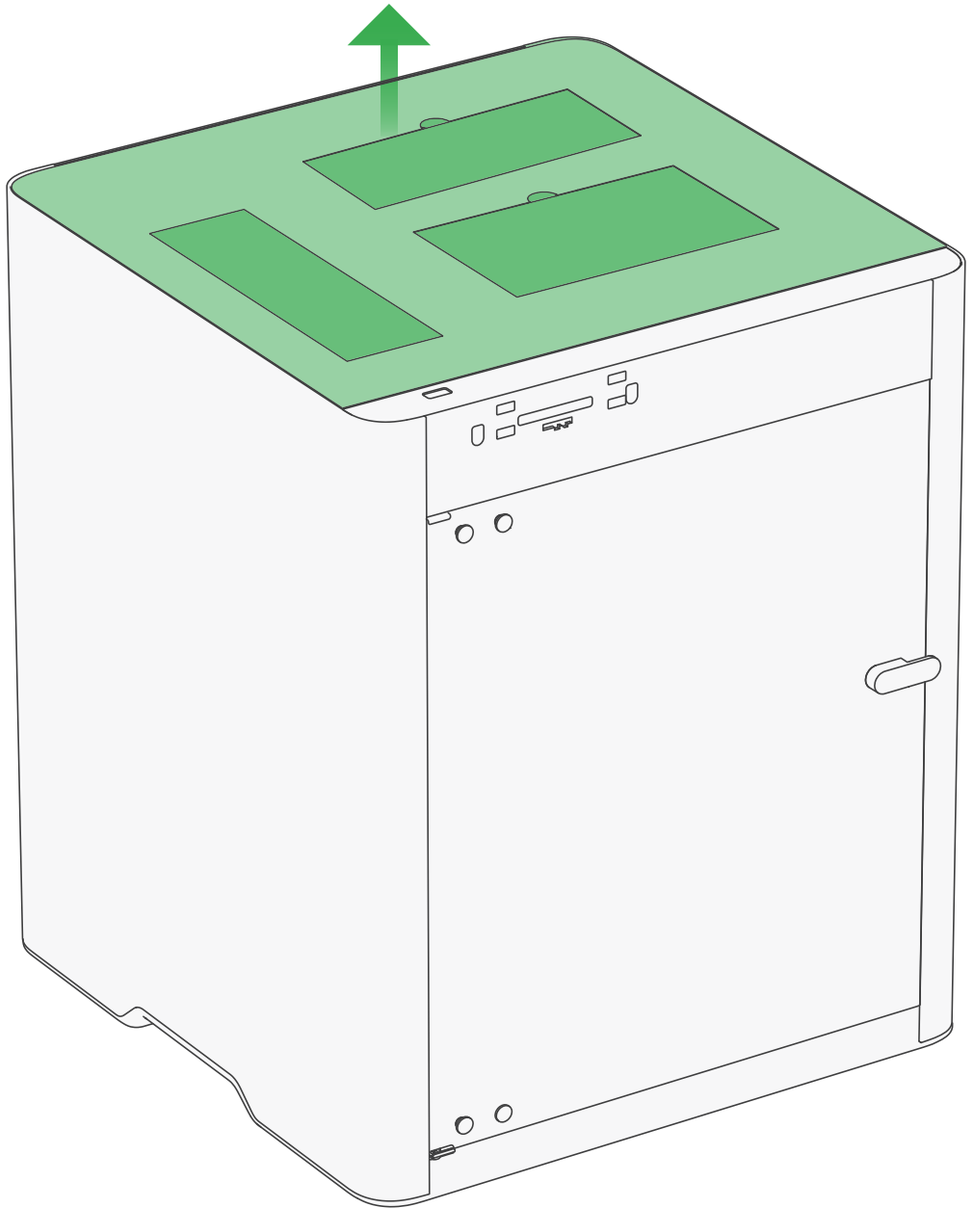
2. Grip the top corners of the moisture-proof bag and lift the printer, placing it on a stable surface.

## Remove the package



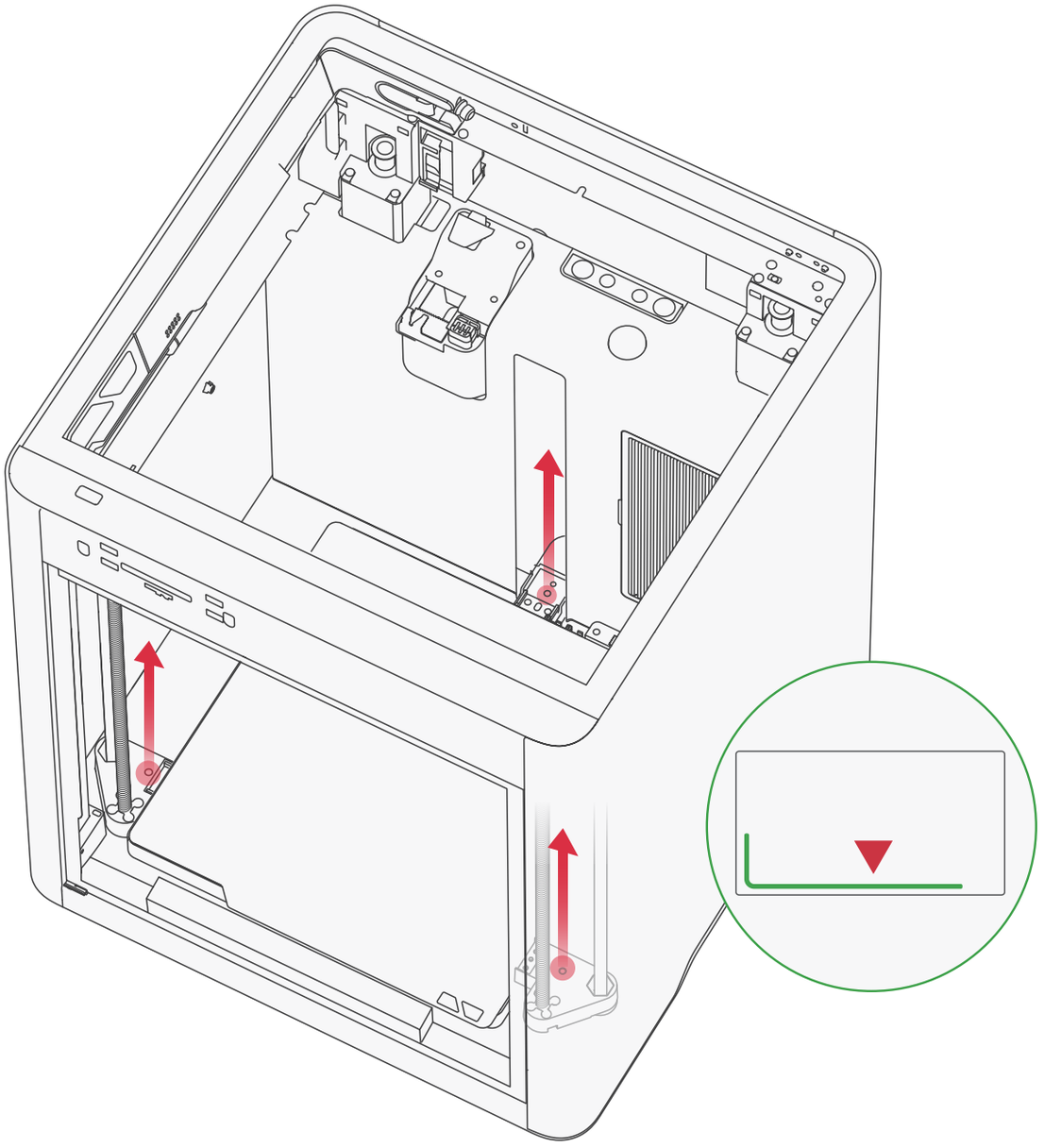

3. Remove the moisture-proof bag and all adhesive tapes from the top, front, and bottom of the printer. Then, carefully lift off the top glass cover and set it aside.

## Remove the package



4. Take out all the accessories, and remove the surrounding cardboard. Open the front door and remove the protective bag from it.

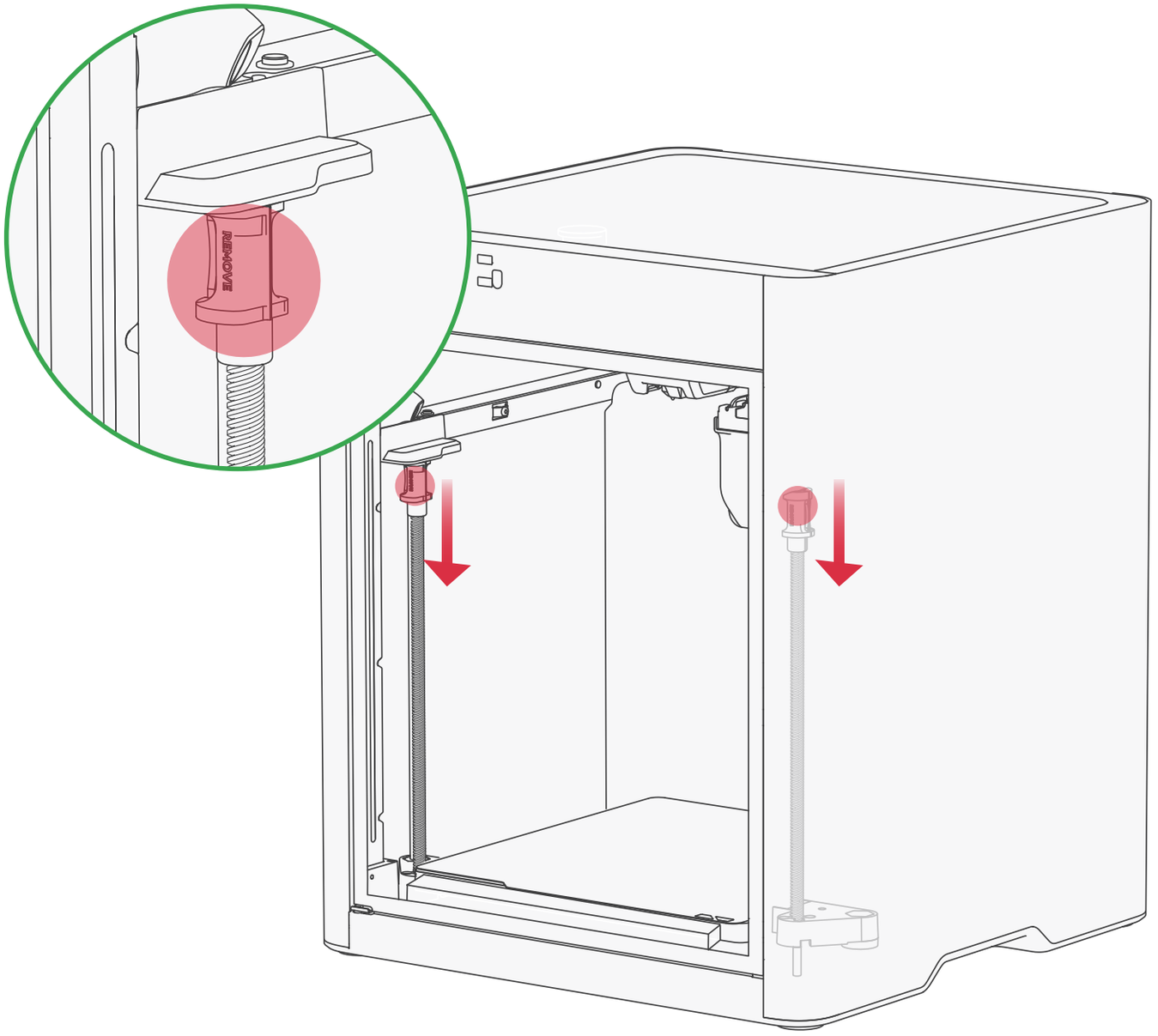
# Unlock the heatbed



Use the longer H2.0 allen key from the toolbox to remove the 3 screws marked in red to unlock the heatbed.

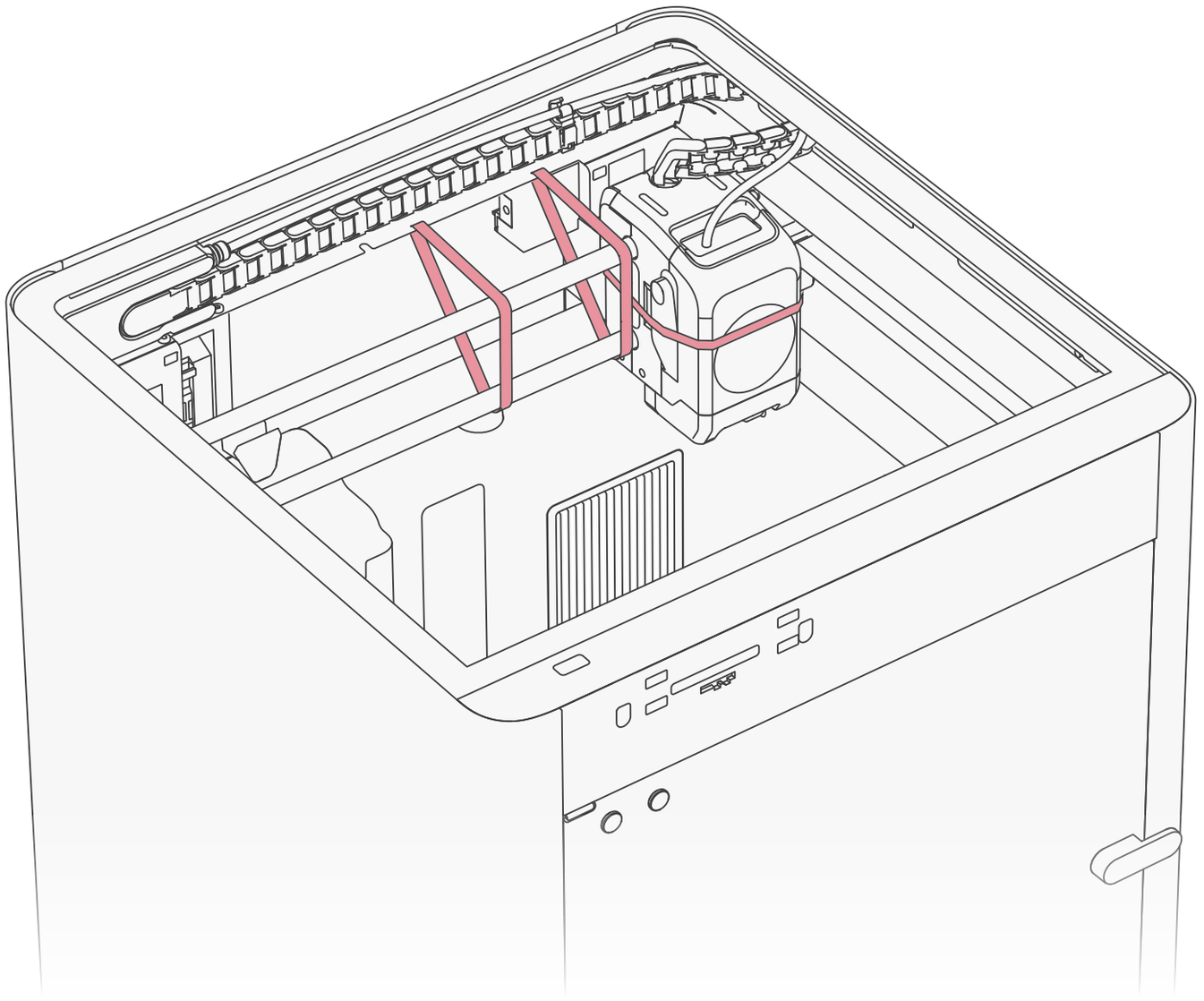
The foam under the heatbed can be removed only after the calibration process is completed.

## Remove the lead screw protectors



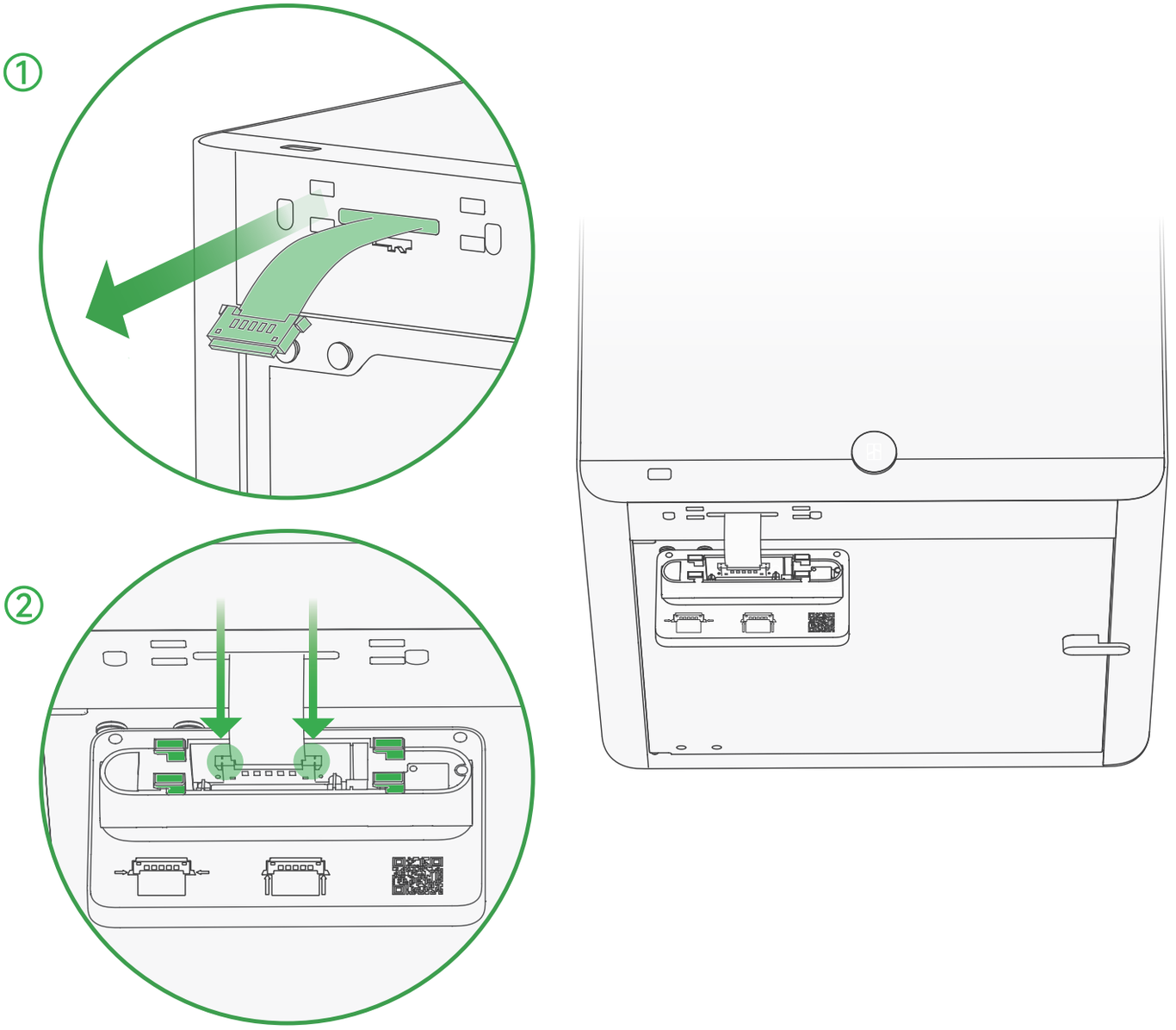

Pull down the red plastic protectors at the top of both left and right Z-axis lead screws, open and remove them.
During this operation, you may notice the Z-axis lead screws moving. This behavior is expected and does not indicate a problem.

## Unlock the toolhead



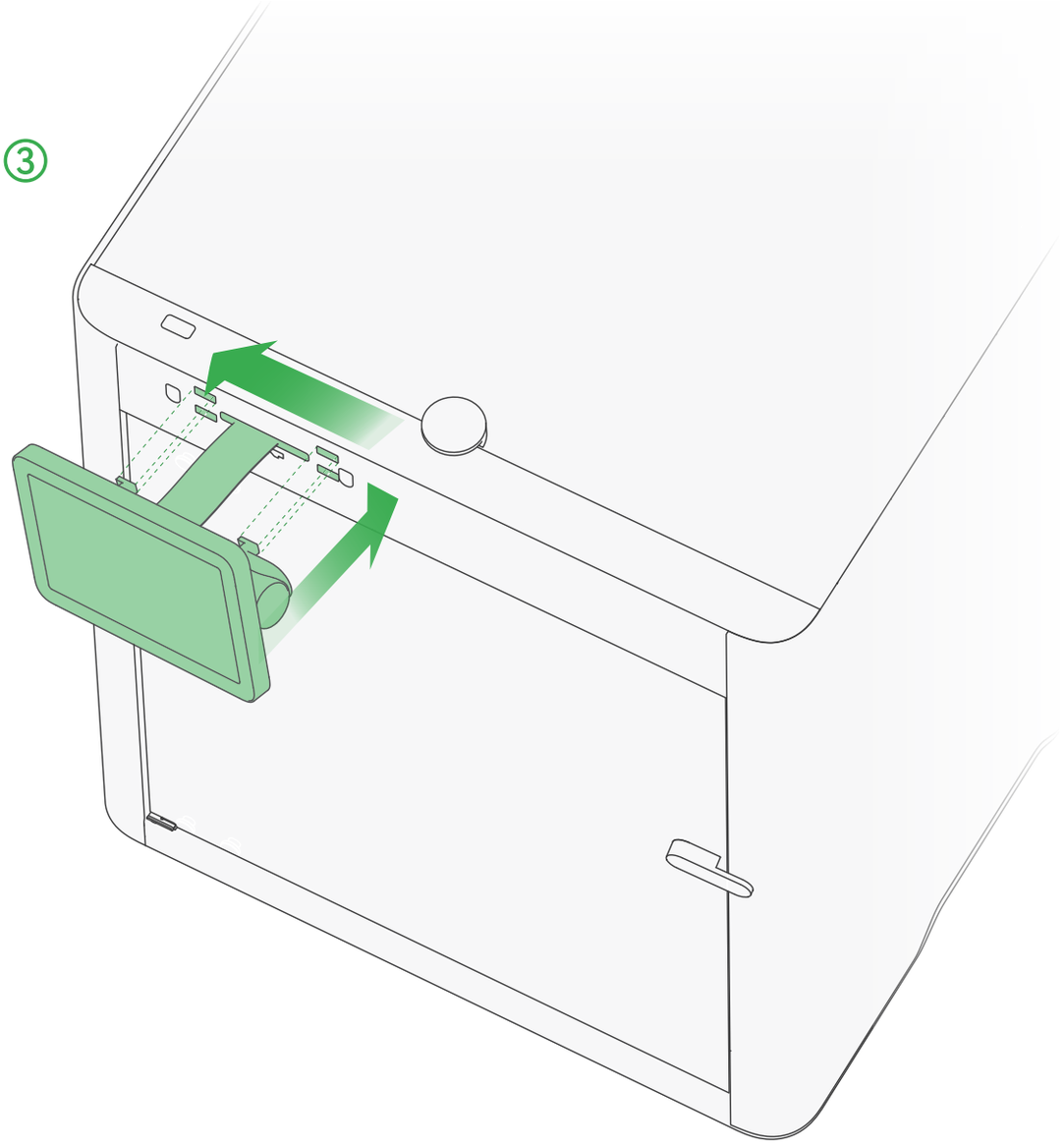
Cut and remove all zip ties, then place the glass top cover onto the printer.

# Install the touchscreen



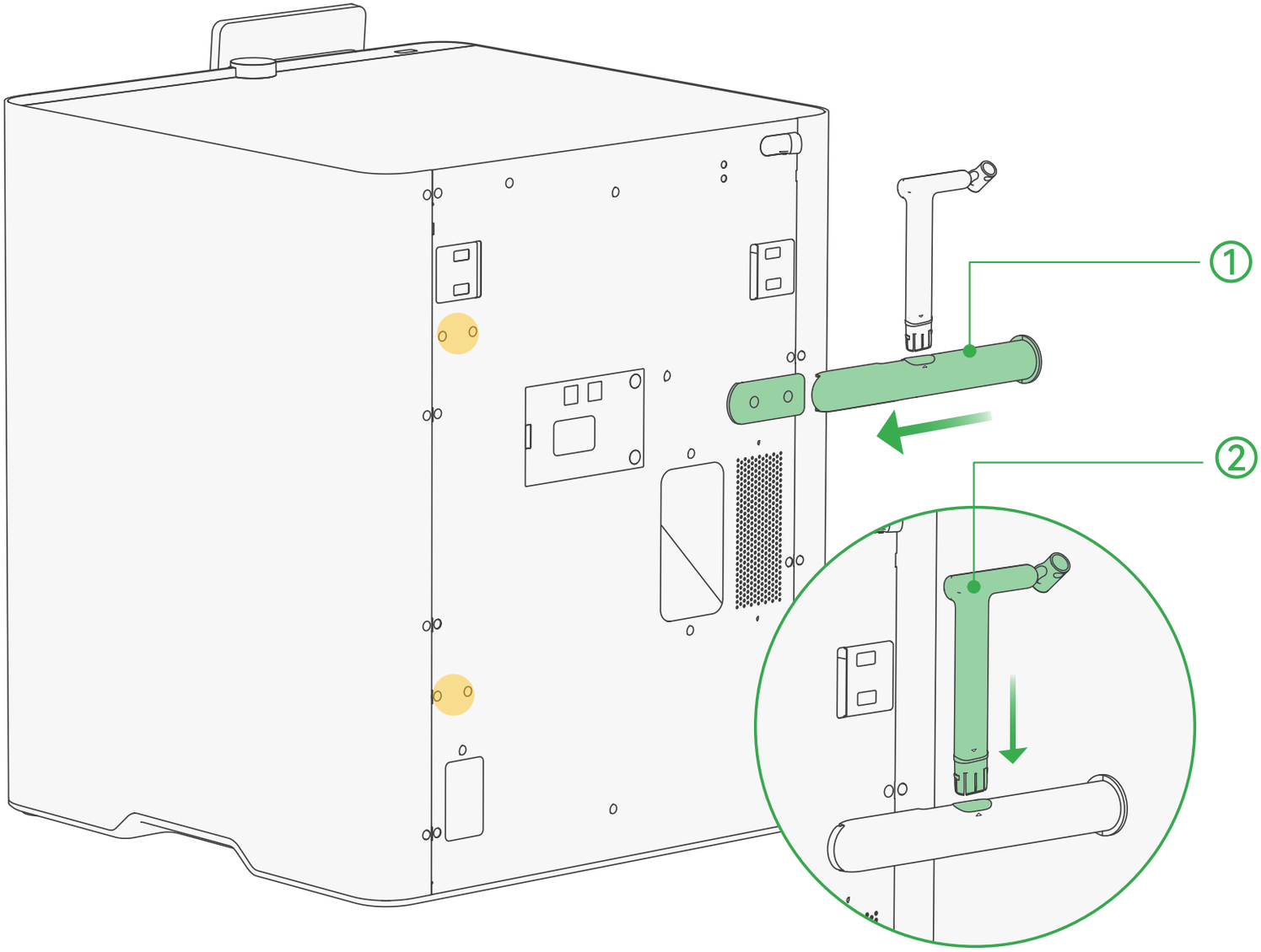

1. Remove the tape and gently pull the flexible cable out about 50 mm.
2. Take the touchscreen and orient it as pictured. Then press the terminals on both sides of the flexible cable and insert it into the screen port.

## Install the touchscreen




3. Push the flexible cable back into the printer slot. Then insert the screen and slide left to lock.

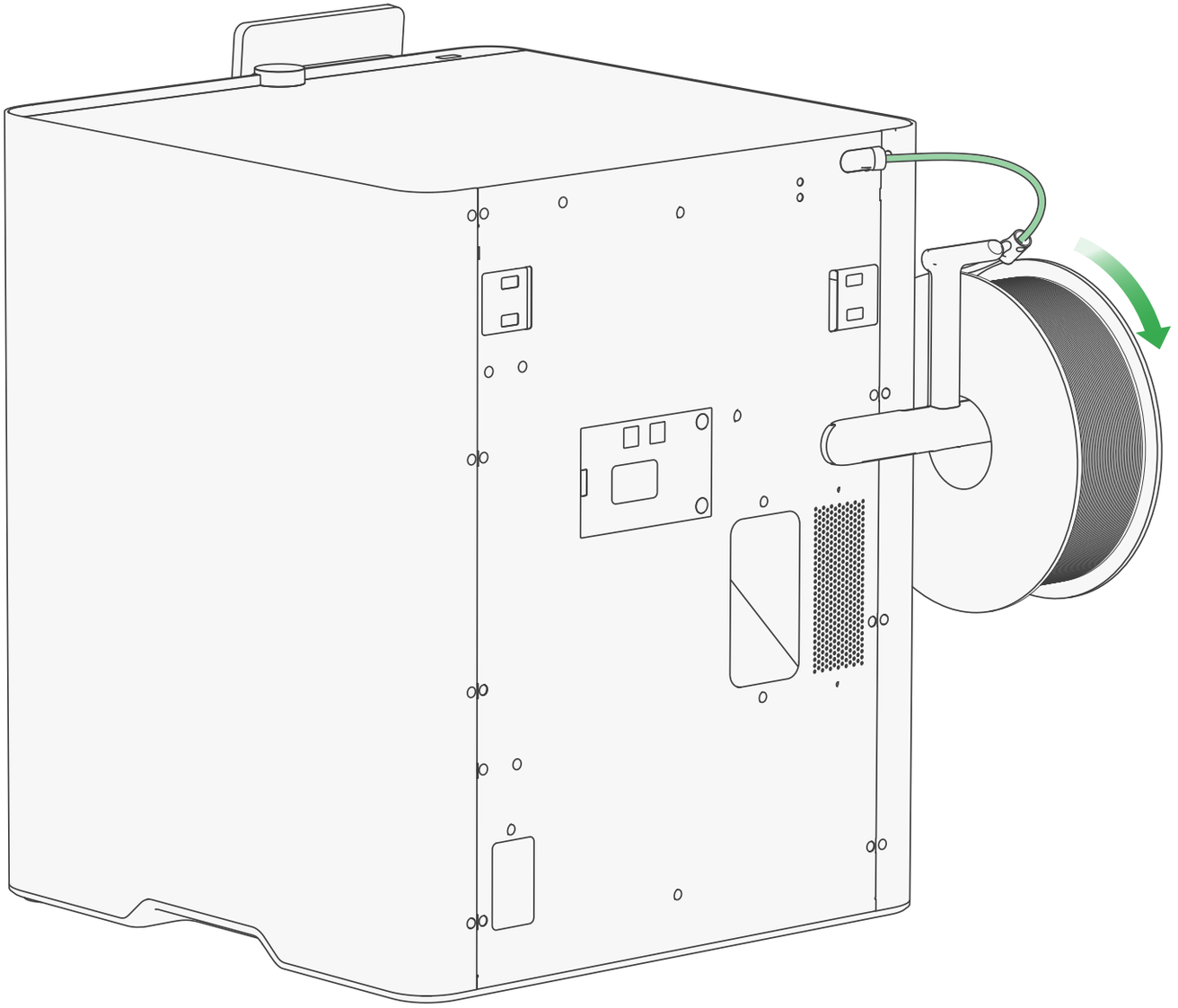
## Install the spool holder assembly




1. Take out the spool holder and PTFE tube holder. Slide the spool holder into the base plate until you hear a click.
2. Align the PTFE tube holder with the slot on the spool holder as pictured, and insert it vertically until you hear a click.

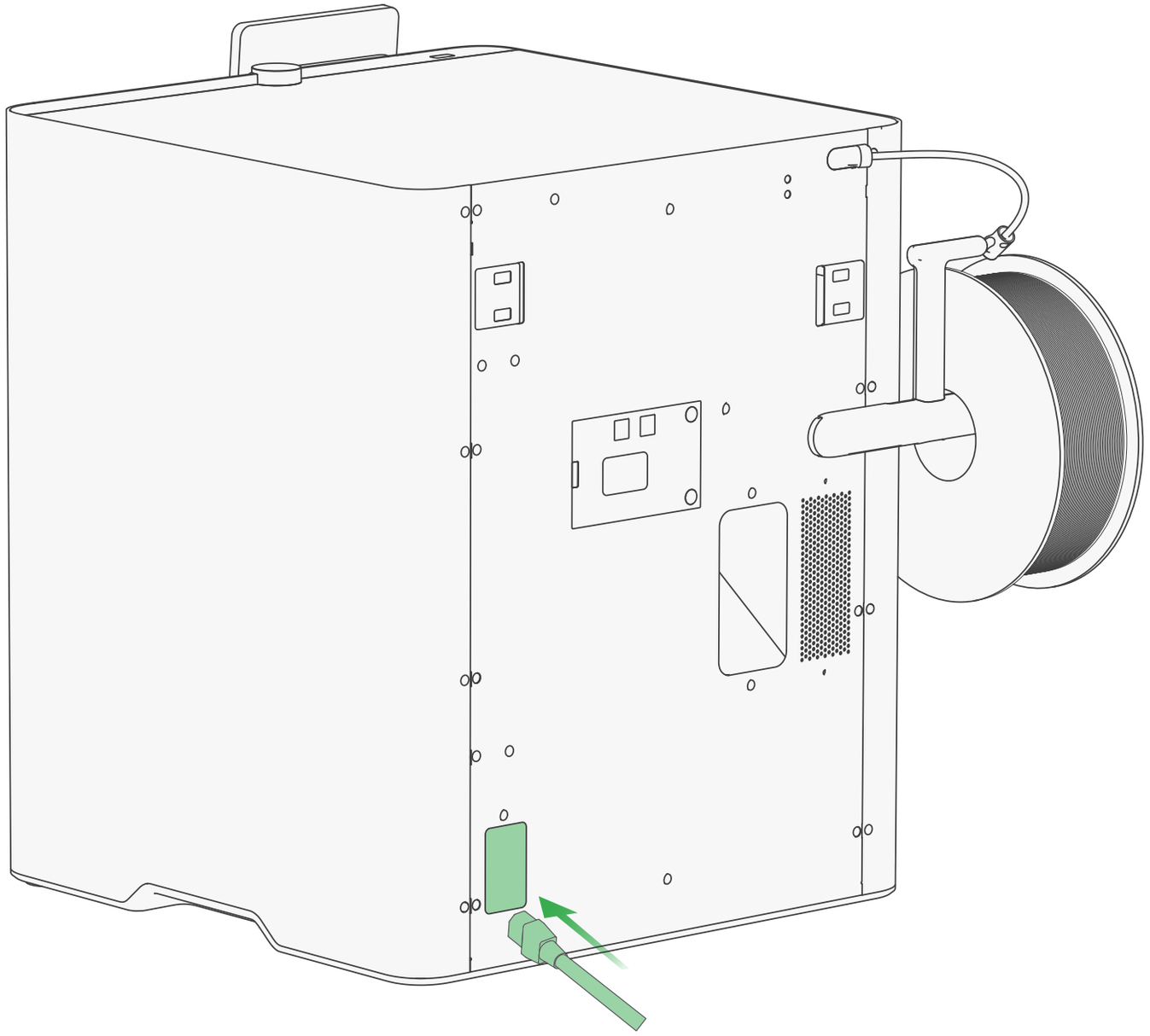
*The spool holder base plate is pre-installed in the recommended position. Two additional positions, marked in yellow in the image, are also available. You can adjust the base plate and PTFE tube length as needed.

## Use the external spool



Take the short PTFE tube, connect one end to the spool holder's connector and the other to the printer's, pushing until secure. Feed the filament through the tube until it reaches the extruder and stops.

## Plug in the power cable and power on

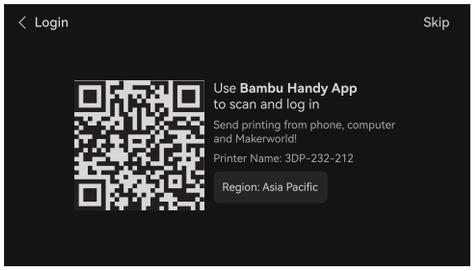


Before powering on, ensure the voltage label near the power socket matches your region. Then, connect the power cord and switch on the power.

# Bind the printer - Bambu Handy

1. Scan the QR code on the right to download Bambu Handy. Register and log in to your Bambu Lab account.

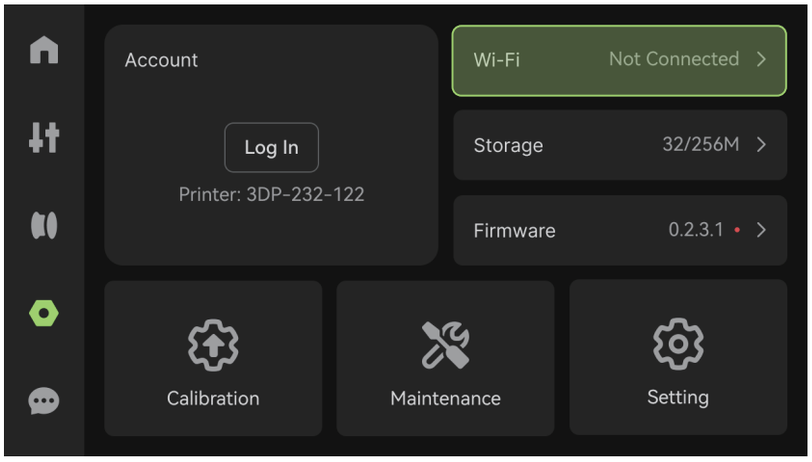
2. Follow the instructions on the screen until a QR code appears.



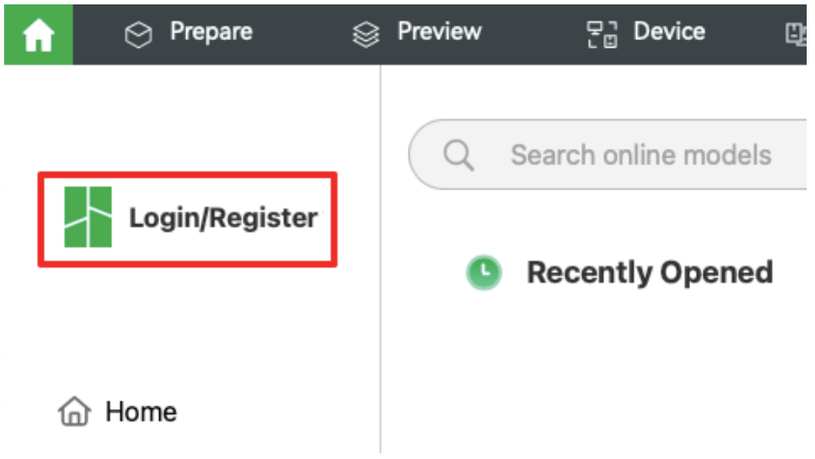

3. Scan the QR code on Bambu Handy to bind the printer to your Bambu Lab account.

4. Follow the instructions on the screen to complete the initial calibration. It is normal to have vibration and noise during the process.
   * DO NOT remove the foam under the heatbed until calibration is complete.

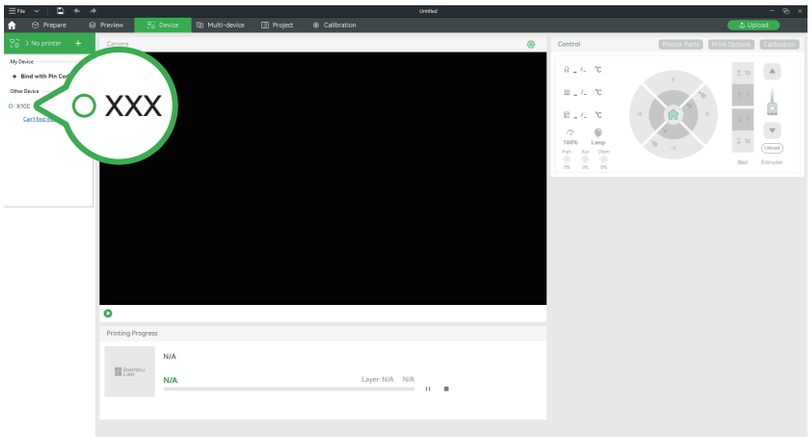
# Bind the printer - Bambu Studio



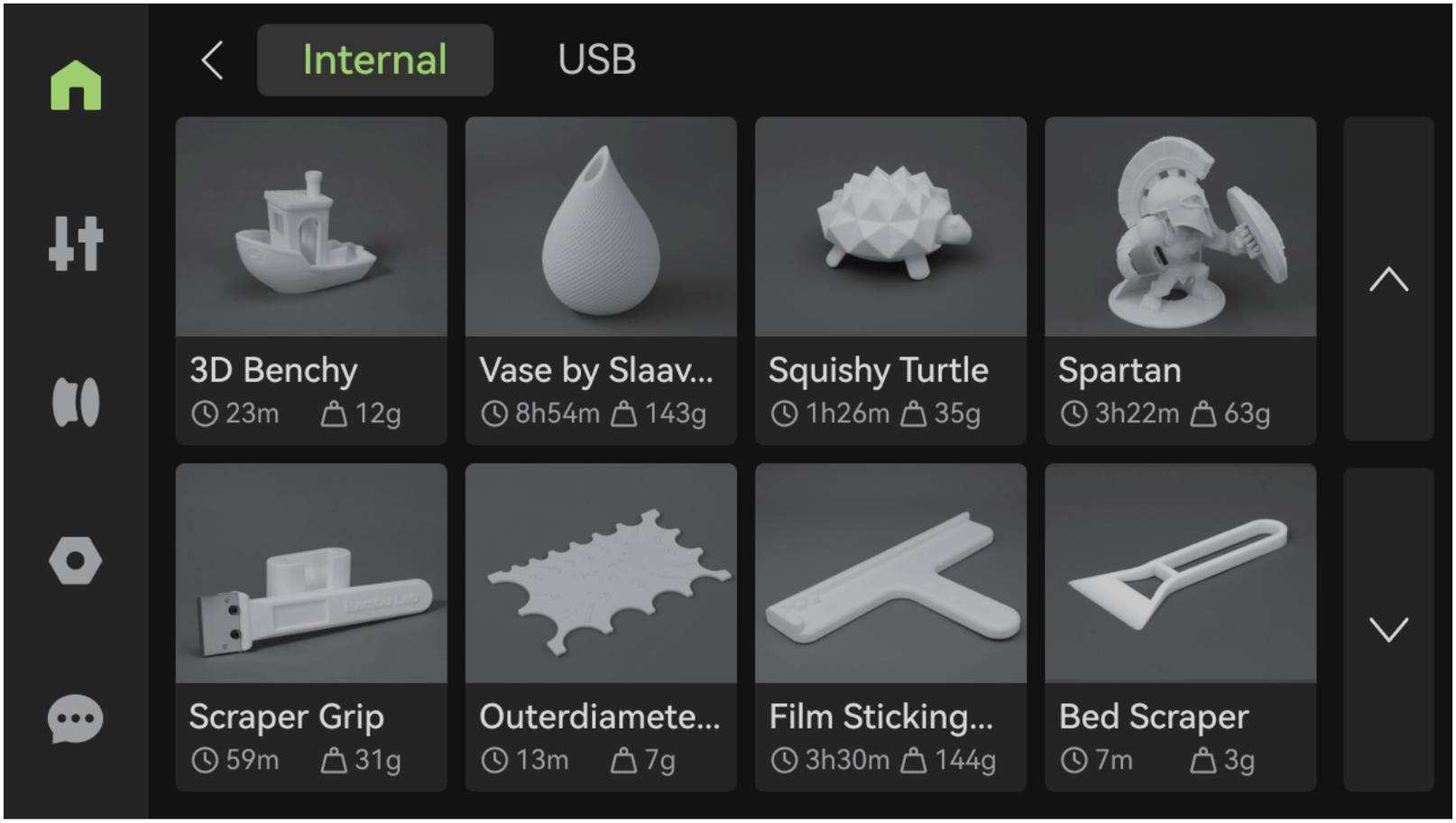

1. Connect both the computer and printer to the **same wireless network**, and do not use a **guest network** that has network device separation enabled.




2. Visit the link below to download and install Bambu Studio. Register and log in to your Bambu Lab account.
bambulab.com/download/studio



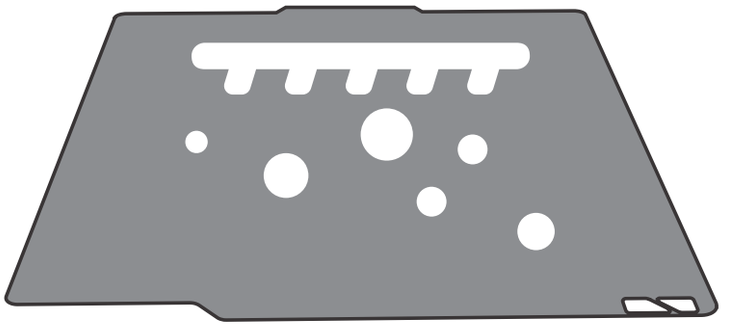

3. Click “+” on the device page, and Bambu Studio automatically discovers printers on the same network. Click the detected printer to bind it to your Bambu Lab account.



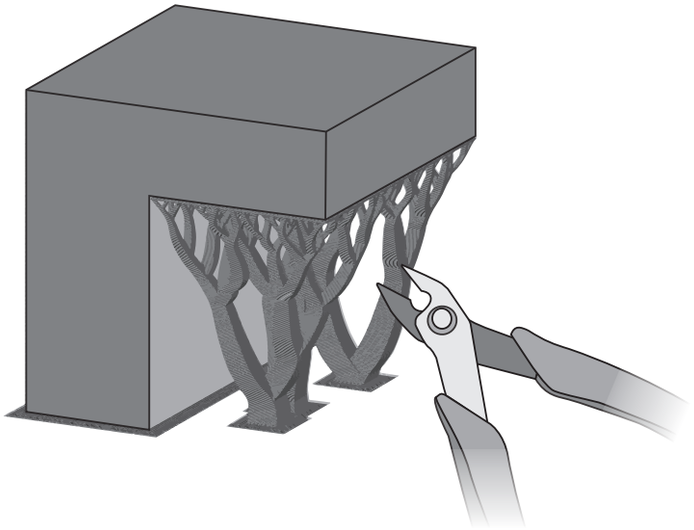

Select - Print Files, then select a model you wish to print and follow the on-screen steps .
* The textured PEI plate that comes with the printer is sensitive to dirt and oil. If you have touched the surface of the plate with your hands, oils from your hands can transfer to the surface and impact the plate's adhesion properties. It is recommended to wash it with hot water and detergent first to ensure the best adhesion.

## After-print notes

Wait until the build plate fully cools down to remove prints.



Wash the build plate regularly with hot water and detergent for best adhesion.



If there is a support structure used, remove it as soon as possible after taking out the print. It will be harder to remove if the filament absorbs moisture.

## Regular maintenance

A 3D printer has a complex mechanical structure and numerous moving parts. Regular maintenance is essential to ensure stable operation and high-quality prints.

**Metal Moving Parts:**

- Lubricate lead screws, linear rods, idler pulleys, and extruder gears regularly to prevent rust.
- Use lubricating oil for linear rods and idler pulleys, and apply lubricating grease to lead screws and extruder gears.

**Consumables:**

- Inspect plastic and rubber parts, such as filament cutters, for signs of wear, deformation, or aging.
- Replace consumable parts as needed, such as nozzle wipers and PTFE tubes, to maintain print quality.

**Other Components:**

- Check camera lenses, fans, and filament sensors for dust or debris.
- Clean fans regularly, and gently clean camera lenses using a microfiber cloth with isopropanol or anhydrous alcohol for optimal clarity.

bambulab.com/support/p2s/maintenance

Please refer to the "Regular Maintenance Recommendations" section on our wiki for more information.

## Printer specifications

| Item | | Specification |
|---|---|---|
| Printing Technology | | Fused Deposition Modeling |
| Body | Build Volume (W*D*H) | 256*256*256 $mm^3$ |
| | Chassis | Plastic and Steel |
| | Outer Frame | Plastic and Glass |
| Physical Dimensions | Physical Dimensions | 392*406*478 $mm^3$ |
| | Net Weight | 14.9 kg |
| Toolhead | Extruder Gear | Hardened Steel |
| | Nozzle | Hardened Steel |
| | Max Nozzle Temperature | 300 °C |
| | Included Nozzle Diameter | 0.4 mm |
| | Supported Nozzle Diameter | 0.2 mm, 0.4 mm, 0.6 mm, 0.8 mm |
| | Filament Cutter | Built-in |
| | Filament Diameter | 1.75 mm |
| | Extruder Motor | Bambu Lab High-precision Permanent Magnet Synchronous Motor |
| Heatbed | Build Plate Material | Flexible Steel Plate |
| | Included Build Plate Type | Textured PEI Plate |
| | Supported Build Plate Type | Textured PEI plate, Smooth PEI Plate, Cool Plate SuperTack |
| | Max Heatbed Temperature | 110 °C |

## Printer specifications

| Item | | Specification |
|---|---|---|
| Speed | Max Speed of Toolhead | 600 mm/s |
| | Max Acceleration of Toolhead | 20,000 $mm/s^2$ |
| | Max Flow for Hotend | 40 $mm^3/s$<br>(Test parameters: 250 mm round model with a single outer wall; Bambu Lab ABS; 280 °C printing temperature) |
| Air Purification | Activated Carbon Filter | Supported |
| | VOC Filtration | Supported |
| | Particulate Matter Filtration | Supported |
| Cooling | Part Cooling Fan | Closed Loop Control |
| | Hotend Cooling Fan | Closed Loop Control |
| | Auxiliary Part Cooling Fan | Closed Loop Control |
| Filament Supported | PLA, PETG, ABS, ASA, TPU, Support for PLA, Support for PLA/PETG, Support for ABS, PET, PA, PC, PVA, PLA-CF, PETG-CF, ABS-GF, ASA-CF, PA6-CF, PA6-GF, PAHT-CF, PPA-CF, PET-CF | |

## Printer specifications

| Item | | Specification |
|---|---|---|
| Sensor | Live View Camera | Built-in; 1920*1080 |
| | Door Sensor | Supported |
| | Filament Run Out Sensor | Supported |
| | Filament Tangle Sensor | Supported |
| | Filament Odometry | Supported with AMS |
| | Power Loss Recovery | Supported |
| Electrical Requirements | Voltage | 100-120 VAC / 200-240 VAC, 50/60 Hz |
| | Max Power* | 1200 W@220 V / 1000 W@110 V |
| | PLA Steady-State Power | 200 W@220 V / 200 W@110 V (PLA printing) |
| Working Temperature | | 10 °C - 30 °C |
| Electronics | Touchscreen | 5-inch 854*480 Touchscreen |
| | Storage | Built-in 8 GB EMMC and USB Port |
| | Control Interface | Touchscreen, mobile App, PC App |
| | Motion Controller | Dual-core Cortex-M4 and Single-core Cortex-M7 |
| | Application Processor | Quad-core ARM with dedicated NPU |
| Software | Slicer | Bambu Studio<br>Supports third-party slicers which export standard G-code, such as Super Slicer, PrusaSlicer and Cura, but certain advanced features may not be supported. |
| | Supported Operating System | MacOS, Windows, Linux |

## Printer specifications

| Item | | Specification |
|---|---|---|
| Network Control | Ethernet | Not Available |
| | Wireless Network | Dual-Band Wi-Fi |
| | Network Kill Switch | Not Available |
| | Removable Network Module | Not Available |
| | 802.1X Network Access Control | Not Available |
| Wi-Fi | Operating Frequency | 2412 - 2472 MHz, 5150 - 5850 MHz (FCC/CE)<br>2400 - 2483.5 MHz, 5150 - 5850 MHz (SRRC) |
| | Wi-Fi Transmitter Power (EIRP) | 2.4 GHz: <23 dBm (FCC); <20 dBm (CE/SRRC/MIC)<br>5 GHz Band1/2: <23 dBm (FCC/CE/SRRC/MIC)<br>5 GHz Band3: <30 dBm (CE); <24 dBm (FCC)<br>5 GHz Band4: <23 dBm (FCC/SRRC); <14 dBm (CE) |
| | Wi-Fi Protocol | IEEE 802.11 a/b/g/n |

* To ensure the heatbed quickly reaches the needed temperature, the printer will maintain maximum power for about 3-5 minutes.

# Technical support

If you need technical support, please follow any of the following methods:

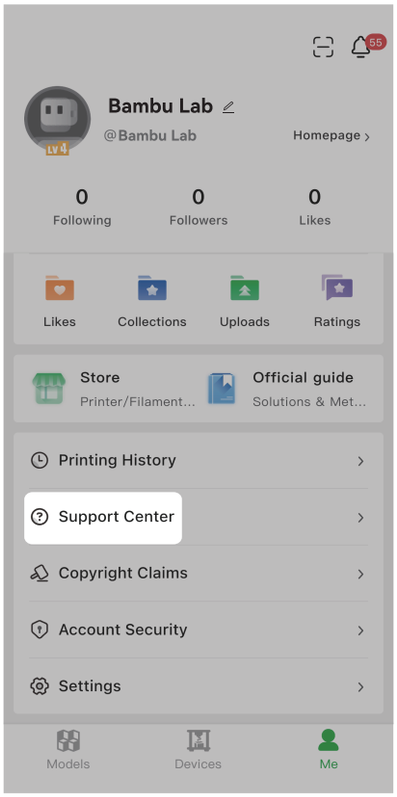
Method 1: Visit the Bambu Lab Wiki for tutorials and maintenance guidance.
wiki.bambulab.com/home

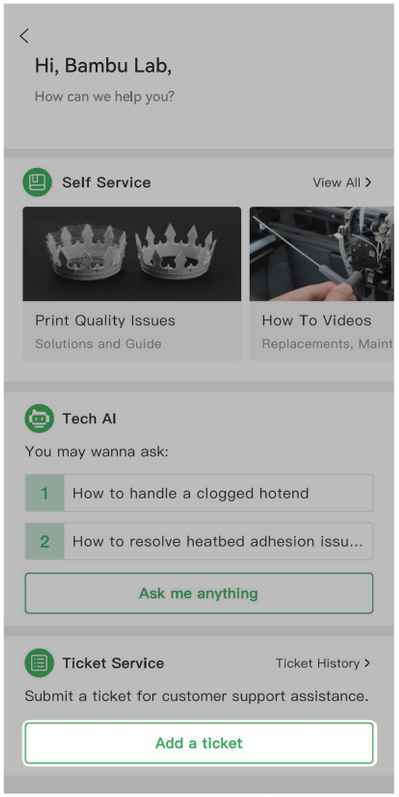
Bambu Lab Wiki

Method 2: Get in touch through one of the options listed in the Contact Us section of our Support Center.
bambulab.com/support

Bambu Lab Support Center

Method 3: Create a support ticket on Bambu Handy, from the Support Center section.



Bambu Lab

Enjoy!

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