LULZBOT®

TAZ 8

START HERE

RELIABILITY.
REPEATABILITY.
PERFORMANCE.

LULZBOT TAZ 8

Welcome to the LulzBot Community

Thank you for choosing the LulzBot® TAZ 8 Desktop 3D Printer. This Quick Start Guide will familiarize you with the proper use and operation of your LulzBot TAZ 8. By the time you finish, you will have completed a calibration test on your new desktop 3D printer.

*Complete documentation is available online at **gitlab.com/lulzbot3d**. If you have questions while setting up your LulzBot TAZ 8, please contact our technical support team by emailing **Support@LulzBot.com** or by calling **1 (701) 809-0800 ext. 2**. Learn more at **LulzBot.com/Support**.*

Read the included User Safety Sheet completely before beginning the Quick Start Guide.

1 LulzBot TAZ 8 Key Components

Extruder 1 Filament Guide Tube

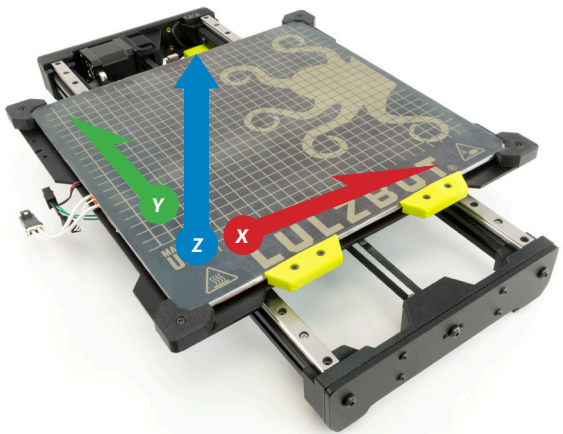
Extruder 2 Filament Guide Tube

Filament Run Out and Stripping Sensor

Extruder 1 Filament Holder

Extruder 2 Filament Holder

Modular Print Bed



Cartesian Coordinate System

*The LulzBot TAZ 8 can move on three linear axes: **X**, **Y**, and **Z**.*

Tool Head Key Components

Magnetic Tool Head Cover

Extruder 1 Filament Tension Lever

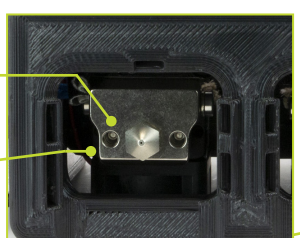
Extruder 1 PTFE Guide Tube Collar

Extruder 1 Gear Window

Extruder 1 Heat Sink Fan

Extruder 1 Heater Block

Extruder 1 Nozzle

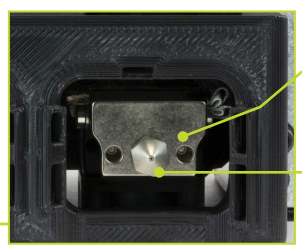


Extruder 2 Filament Tension Lever

Extruder 2 PTFE Guide Tube Collar

Extruder 2 Gear Window

Extruder 2 Heat Sink Fan



Extruder 2 Heater Block

Extruder 2 Nozzle

Your LulzBot TAZ 8 may be equipped with a different style Tool Head. The Twin Nebula is an actuating dual extruder, refer to only side to help identify the anatamy of your extruder.

To remove the PTFE tube from a TAZ 8 3D printer, press down on the collar (push-to-connect fitting) at the extruder while gently pulling the PTFE tube out. If it resists, ensure there is no filament inside and try twisting slightly while pulling.

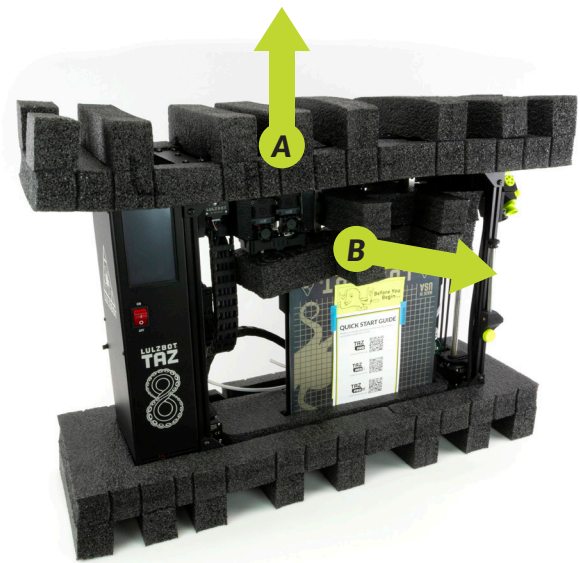
Do not use metal to clean the nozzle on your Tool Head. Metal can blow an internal fuse or damage your printer.

2 Unpack your LulzBot TAZ 8 Desktop 3D Printer

2.1 Place printer box on its side carefully. Use the two black straps wrapped around the printer to remove it from the box. Once it has been removed, open the straps by cutting with a scissors.

2.2 After removing the protective cardboard from the printer, remove all additional contents.

2.3 A Stand the printer up and carefully remove the packaging foam from the top of the printer. B Remove the central foam by peeling it away starting at the side closest to the Tool Head. Confirm all items on the included Packing List have been removed from the box.



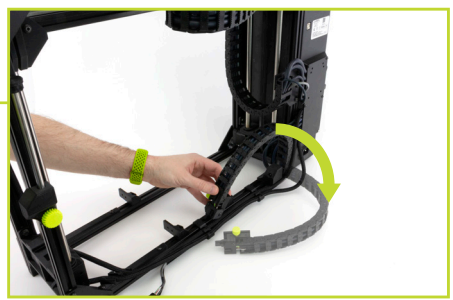
*Save **all** of the provided packaging materials and box! In the case that warranty service is needed, the 3D printer **must** be shipped in its original packaging.*

2.4 Slide the modular print bed up out of the lower foam as you tilt the Y-axis assembly away from the Tool Head. Lift the Y-axis assembly out of the lower foam, then lower the bed and remove it from the printer frame. Once the modular print bed is clear, lift the printer from the final piece of packaging foam.

3 Assemble your LulzBot TAZ 8 Desktop 3D Printer

3.1 The operating area for your LulzBot TAZ 8 is 32.76 inches by 28 inches (83.2 cm by 72 cm). Place your printer in an area with enough space to function without encountering any obstructions.

3.2 Move the Y-axis cable chain into place by grasping the base of the cable chain and rotating it back and downward 90° away from the machine until it snaps into place.

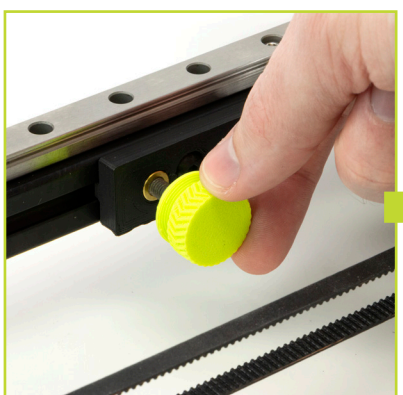


If the Y-axis cable chain does not rotate back and downward easily, loosen the screw at the base of the cable chain to allow for easier adjustment.

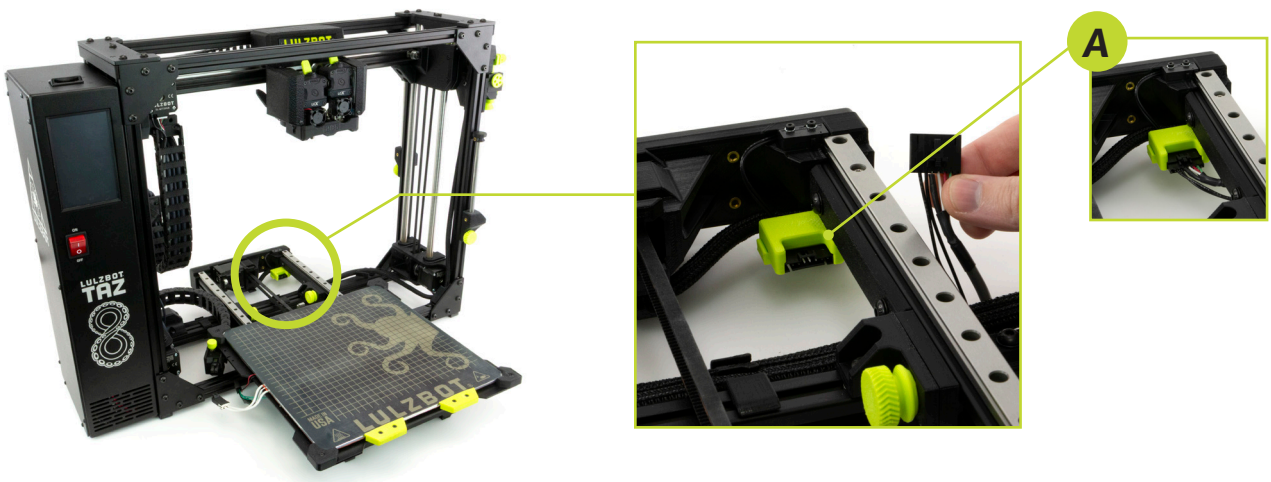
3.3 Unscrew the four (4) thumbscrews from the mounting brackets.

3.4 Place the Y-axis assembly on the frame with the motor towards the back of the printer. Line up the four mounting brackets.

3.5 Slide the modular print bed to the back and screw in the front two thumbscrews until they are finger tight. Slide the modular print bed to the front and screw in the back two thumbscrews until they are finger tight.

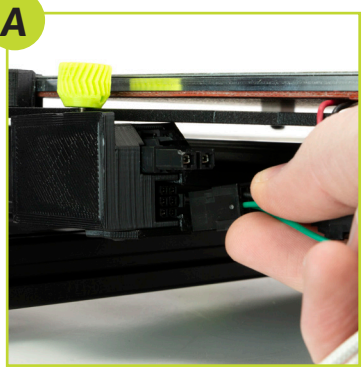


3.b A Connect the Y-axis stepper motor to the wiring harness by first joining the black connectors,

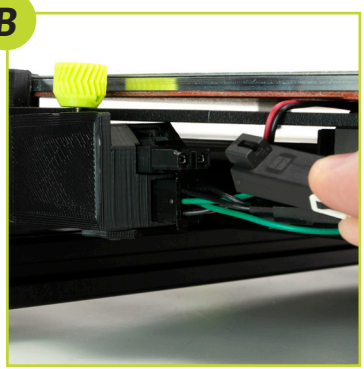


3.7 A Connect the two sets of wire connectors underneath the bed as shown below, starting with the small connector with green and black wires, B then the larger connector with white wires. C The bed is now connected.

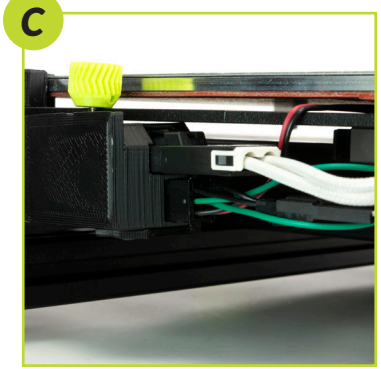
A



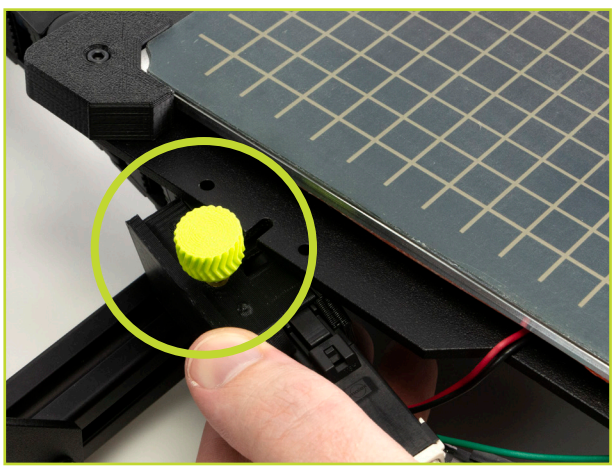
B

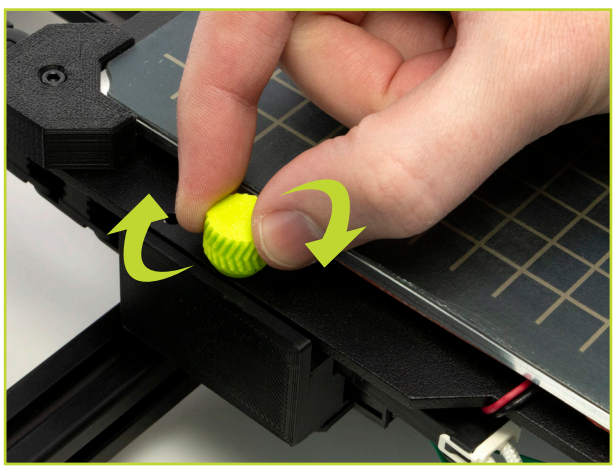


C



3.9 Align the end of the Y-axis cable chain under the modular print bed as shown. Once in place, secure the cable chain to the bed using the **thumb screw** until finger tight.



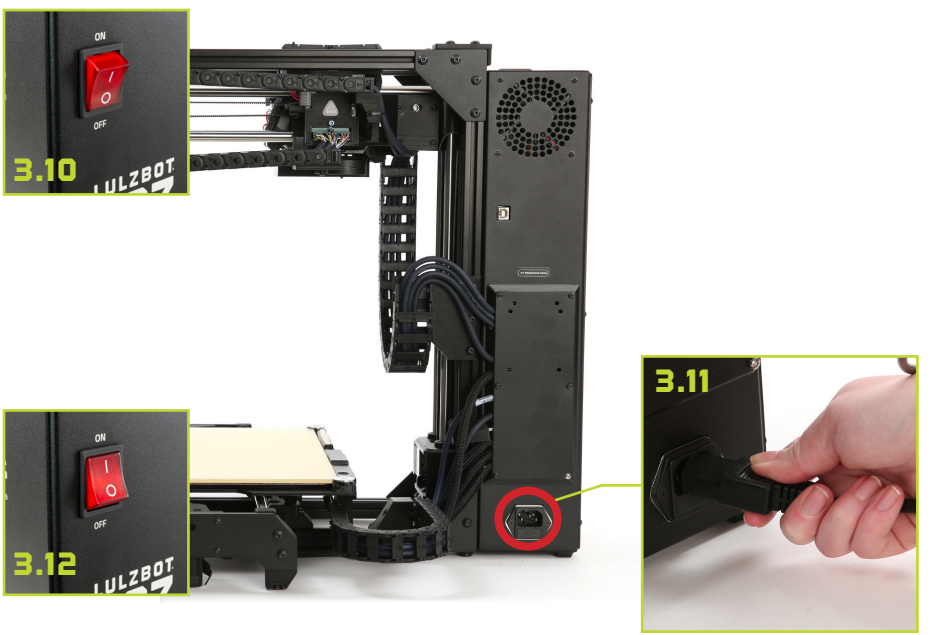


During the printers initial start up procedure, the X-axis will raise to the top of the printer frame in order to level itself. Make sure the print area is free of obstructions. This process also completes before each print.

3.10 Verify that the power switch on the front of the TAZ 8 is in the **OFF** position.

3.11 Plug in the AC power connection.

3.12 Flip the power switch to the **ON** position to turn on the TAZ 8.



4 Setting up Cura LulzBot Edition

4.1 Cura LulzBot Edition is the recommended software to control your LulzBot TAZ 8. It includes built-in support for compatible materials optimized for use with the TAZ 8. Find installation instructions, troubleshooting information, and more at **LulzBot.com/Cura**.

Already have Cura LulzBot Edition? Update to get additional support and new slicing profiles. Expert help and advice is available at **LulzBot.com/Support**.

*The LulzBot TAZ 8 is compatible with Cura LulzBot Edition version 4.13.10 and newer. If you have an older version of Cura LulzBot Edition installed, you will need to download the latest version at **LulzBot.com/Cura** in order to use your LulzBot TAZ 8.*

There may be later versions of Cura LulzBot Edition available with added features and functionality. We recommend checking for updates regularly.

4.2 Launch Cura LulzBot Edition. The **Add Printer** menu will automatically appear. Select **LulzBot TAZ 8** and **Twin Nebula 285 Extruder**, then click **Next**. Existing users should select the **Printer** drop-down menu, then **Add Printer**. On the next menu that appears, click **Finish** to complete the printer setup. Cura LulzBot Edition is now ready for use with your LulzBot TAZ 8 .

4.3 New firmware is continuously being developed to add new functionality and ensure your LulzBot TAZ 8 is creating the best quality prints. With the USB cable connected to your printer and a computer with Cura LulzBot Edition installed, update the printer firmware by clicking the **Settings** drop-down menu and selecting **Printer,** then **Manage Printers**. With your **current printer configuration** highlighted, click **Upgrade Firmware** and follow the prompts to install the latest firmware.

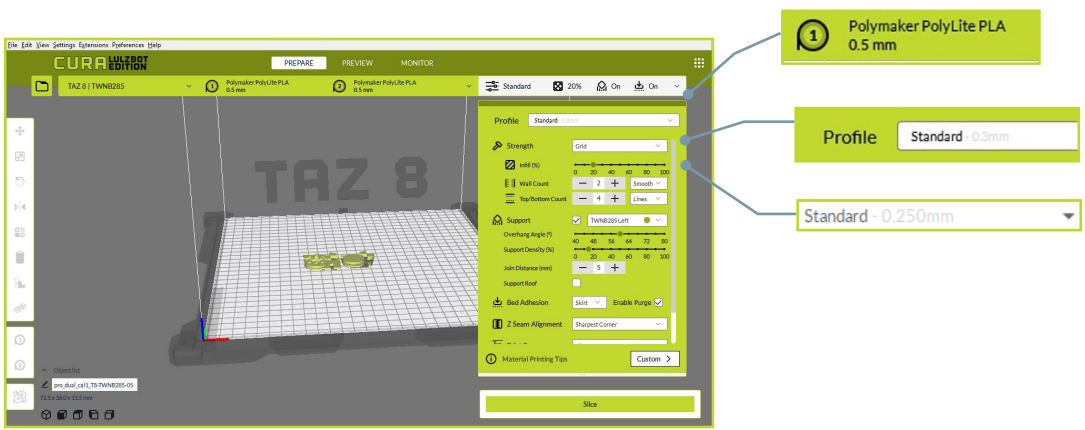
4.4 The first print model, **pro_dual_cal1.stl and pro_dual_cal2.stl**, will automatically load onto Cura LulzBot Edition's virtual print bed the first time you run Cura LulzBot Edition with your LulzBot TAZ 8.

*If the first print model is not present in the virtual print bed, you can download it from **https://gitlab.com/lulzbot3d/cura-le/cura-lulzbot/-/tree/main/resources/meshes?ref_type=heads** or from the included SD card, then load it onto the virtual print bed using the **Open File** button in the main Cura interface.*

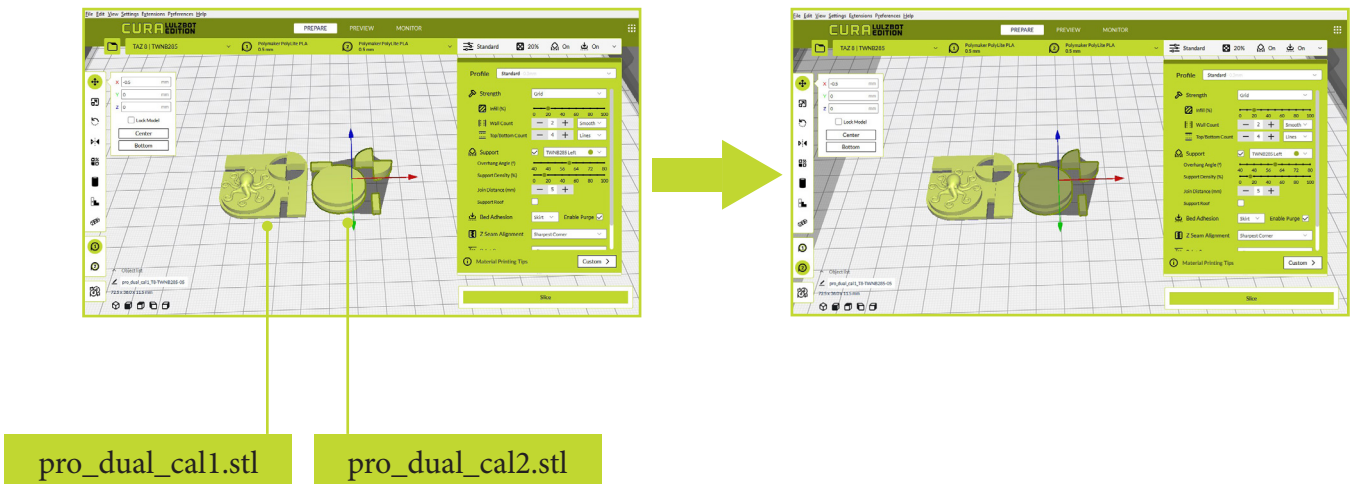
4.5 Locate the included sample of PLA filament. We strongly recommend using the included PLA filament for your first print.

*Filament is the term for the materials your LulzBot TAZ 8 uses to 3D print objects. The included sample filament, PLA, is made from natural renewable resources. PLA and other types of filament can be purchased at **https://buy.lulzbot.com/collections/filament.***

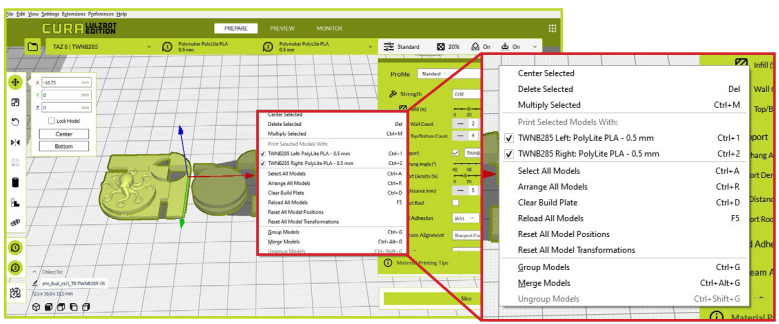
4.b In the **Filament Drop Down** in the center of the ribbon menu towards the top of the screen, confirm that **Standard PLA** is selected for **Material** and **Standard** is selected for the **Profile** to be used for printing on **Extruder 1**. Click on the **Extruder 2** button and confirm that **Standard PLA** and **Standard** are selected for **Extruder 2.**



4.7 Click on the **pro_dual_cal2.stl** model on the virtual print bed, then click on the **2** on the left side of the print area. This designates **pro_dual_cal2.stl** as the piece to be printed with the **Extruder 2**. The model with change color based on the filiment selected for **Extruder 2** to reflect the change.



4.8 With **pro_dual_cal2.stl** model selected, hold shift and click on **pro_dual_cal1.stl** to select both models. Right click on the **pro_dual_cal1.stl** and select **Merge Models** from the dropdown menu to combine the models into a single print.



*When printing a single model with soluble support in future prints, check the **Generate Support** box and select **Hot End 2** as the support extruder rather than assigning an object to **Extruder 2.***

5 Preparing your LulzBot TAZ 8 to Print

Your LulzBot TAZ 8 was tested for quality assurance before being packaged. You will need to remove the remaining filament left in the tool head from this process before loading new filament for your next print. Follow these steps below to remove or change the filament.

5.1 P On the main menu, Press the **Change Filament** button

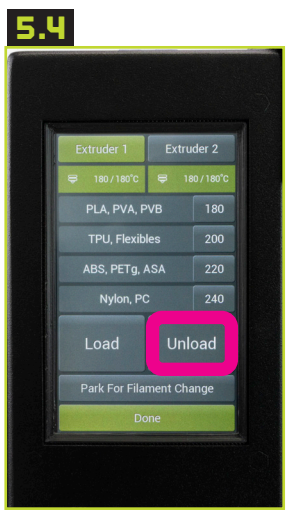
5.2 Make sure Extruder 1 is highlighted. Press the **PLA, PVA, PVB (180 ° C)** button to heat the hot end to the appropriate filament removal temperature.

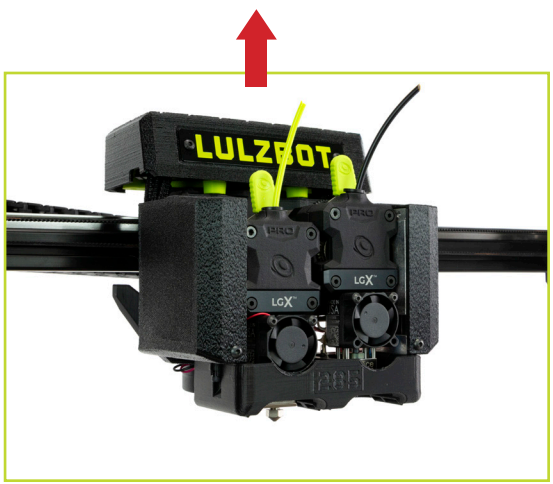
5.3 Repeat this same process for Extruder 2.

HOT SURFACE BURN HAZARD. CONTACT MAY CAUSE BURN. DO NOT TOUCH THE HOT END.

The hot end on the extruder is now heating up to 180°C (356°F) and can burn your skin if touched.

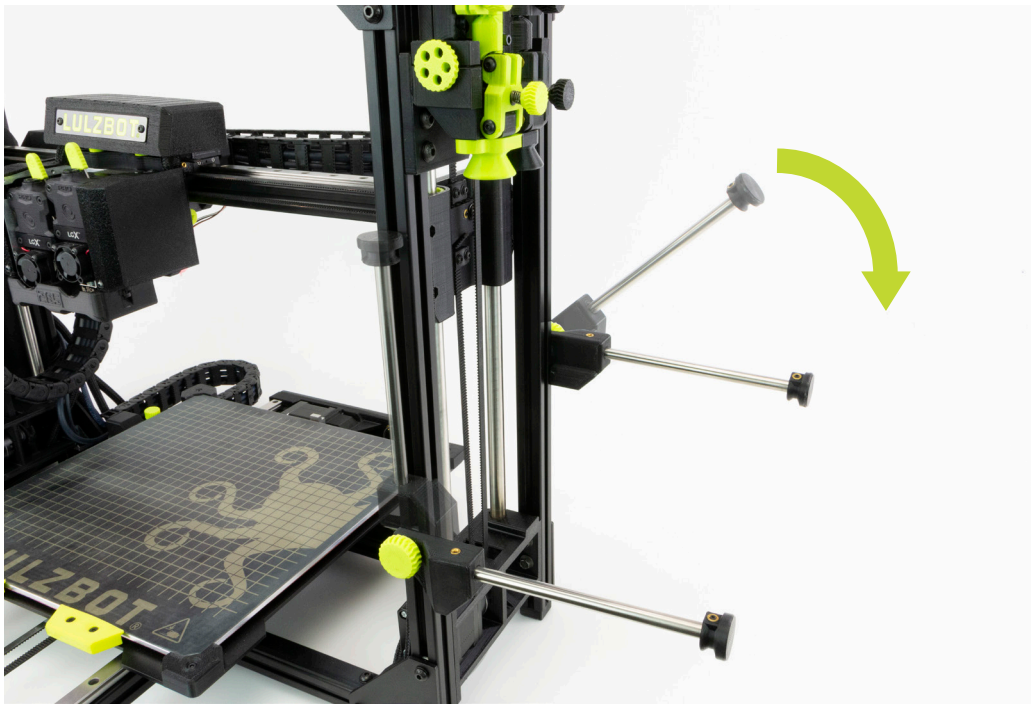
5.4 Once the Tool Head reaches the appropriate filament removal temperature, push the filament tension lever all the way left . Firmly grasp the tail of filament, pulling it out of the idler. Repeat this process for the second extruder.





The hot end is heated to 180°C (356°F) and can burn your skin.

5.5 Locate the filament holders along the right side of the printer. Move both filament holders from their vertical position to a horizontal position. Once in position, place the included PLA filament on the filament holders.

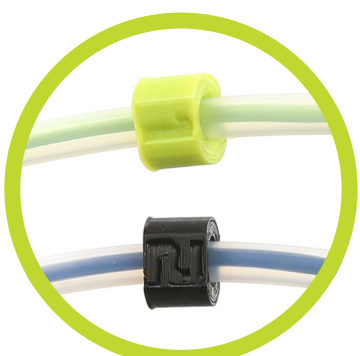


The filament holders may need to be adjusted to accommodate larger spools of filament. Loosen the green thumbscrew, move the filament holder to the appropriate position, and re-tighten the green thumbscrew.

5.b Obtain the clear filament feed guide tubes from the additional contents you removed from the box earlier. Insert one end of the feed guide into the top of the LulzBot Green filament sensor marked E1. Do the same with the black filament sensor marked E2.

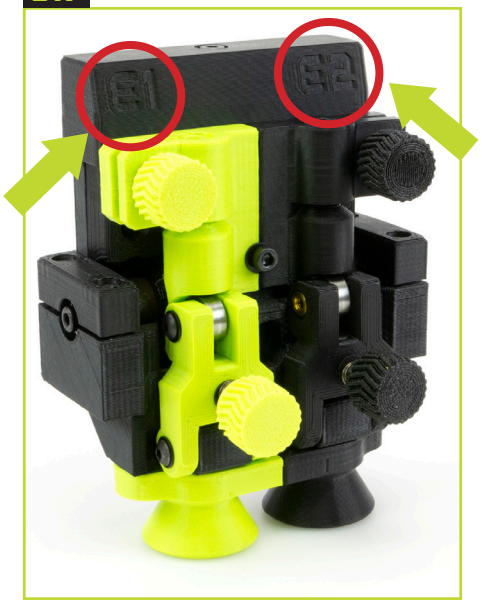
*Additional Guide Tube(s) may be required for Tool Heads with 1.75mm filament compatibility.

You must use both provided filament guide tubes with the Twin Nebula.



5.7 Feed the PLA filament into and through the bottom of the LulzBot Green filament sensor marked E1. Next feed the PLA filament into and through the bottom of the Black filament sensor marked E2.

5.7



Note that the filament sensors E1 and E2 correspond to Extruder 1 and Extruder 2 and must go to the correct extruder in order for your TAZ 8 to function properly.

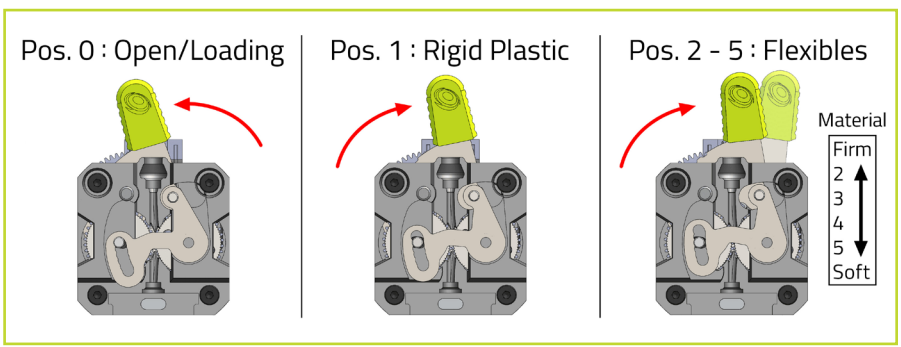
5.9 Locate the filament ratchet lever and filament feed path where the loaded filament was removed during step 5.4. Filament feeds down this path and into the hot end for printing.

The hot end is still heated to 180°C (356°F) and can burn your skin.

SETTING FILAMENT TENSION

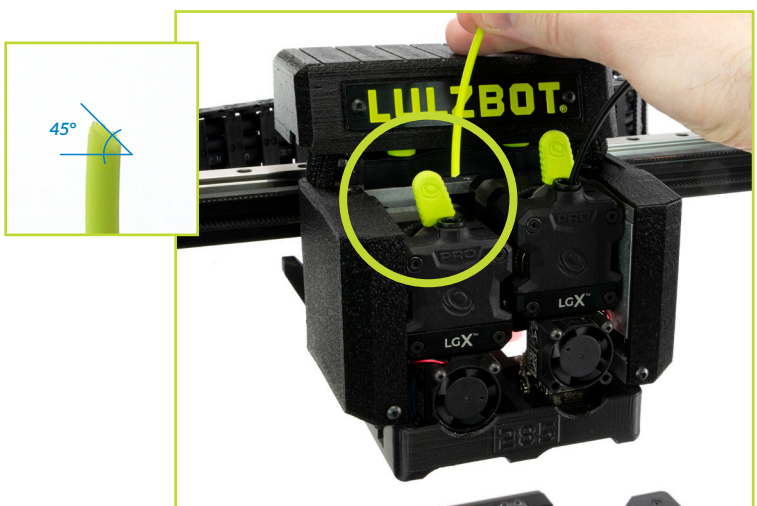
The Galaxy Tool Heads have a ratcheting filament tensioner. This new style of tensioner will make an audible click when moved to the varying degrees of tension. When pushed all the way left, the tension is completely open, allowing for filament to feed easily. When pushed right, this tightens the tension. In total there are five stages of tension, displayed below.

Having the idler tension too loose or too tight will cause issues with print quality and potentially cause jamming in the extruder.



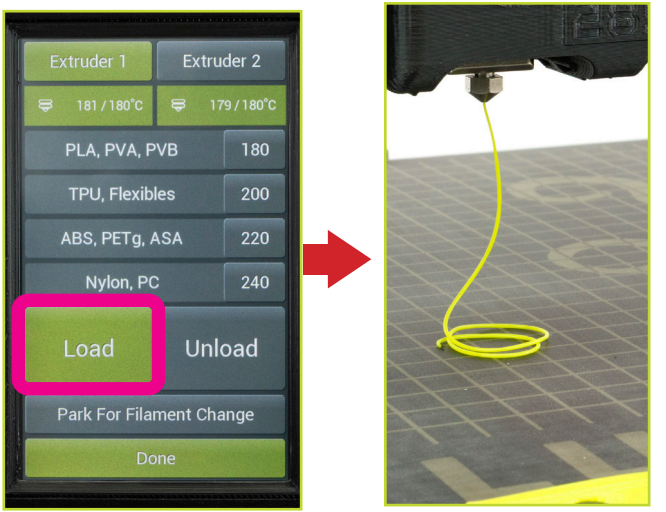
5.9 Push the filament by hand completely through the feed tube until it exits near the filament guide tube holder on the top of the extruder. Straighten the filament slightly with your fingers. Feed the PLA filament into the extruder.

The filament must be inserted fully to extrude properly. If it is difficult to feed filament into the filament feed path, trimming the filament at a 45° angle may help.



5.11 Select **Extruder 1** and press the **Load** button and let filament advance until it extrudes smoothly and consistently as shown. Press the **Load** button again to stop extruding.

5.12 Once filament is extruding, insert the filament guide tube into the quick connect PTFE guide tube collar on the top of the extruder. Repeat this process with **Extruder 2**.



After removing filament, a small residual amount remains in the hot end that needs to be cleared out through the process of purging as detailed above. This purging process helps to remove any residual material left in the hot end.

Starting Your First Prints

*If you need to make changes to your model, use the **Prepare** sidebar at the top left corner of Cura. Once changes are made, click the **Slice** button.*

The X-Axis gantry may shift after your 3D printer is powered off. Verify that the X-axis and print bed are clear before turning your machine on. Failure to do so could result in damage to the printer or other equipment.

*Your LulzBot TAZ 8 can be operated without a USB tether to a computer by using the touchscreen LCD and included SD card. Once models are sliced and a **.gcode** file is saved they may also be saved to the included flash drive by clicking **Save to File** in the lower right corner of Cura. Once saved, models may be printed directly from the SD card by plugging it into the **slot located on the top of the TAZ 8**, pressing the **Print** button, and selecting the model you would like to print.*

6.1 Your 3D printer is now ready to print! Press **Print** on the main menu screen, next locate the file you intend to print. Press the file so it becomes highlighted, press **Print** once more to begin printing.

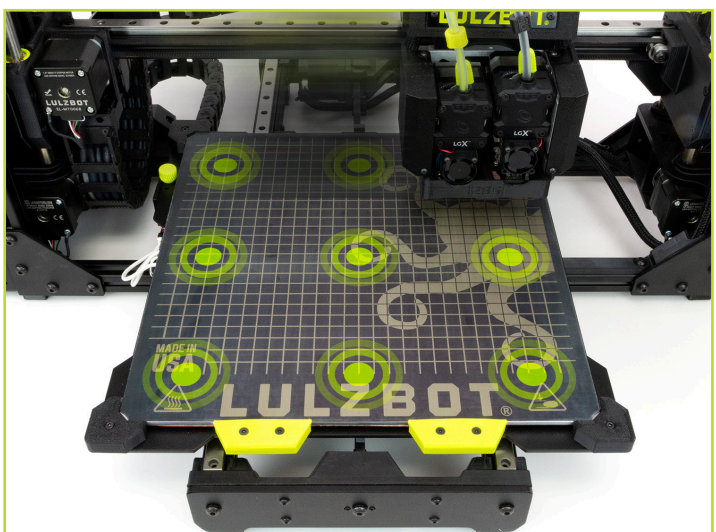
Before starting a print, check that your printer is ready. The hot end is still hot, use caution:

- *Confirm that all packaging has been removed from your LulzBot TAZ 8.*
- *Verify that the 3D printer is in a well-ventilated area, on a flat and level surface, and has 30cm (12in) clearance in all directions.*

6.5 Your 3D printer will first move the Tool Head to the top left corner of the build area and allow the hot end to reach wiping temperature. Depending on ambient temperature, this can take one to three minutes.

Always watch your LulzBot TAZ 8 start the printing process to visually ensure proper functionality. Ensure the first layer is adhering to the print bed and the printer is functioning normally before leaving the printer unattended.

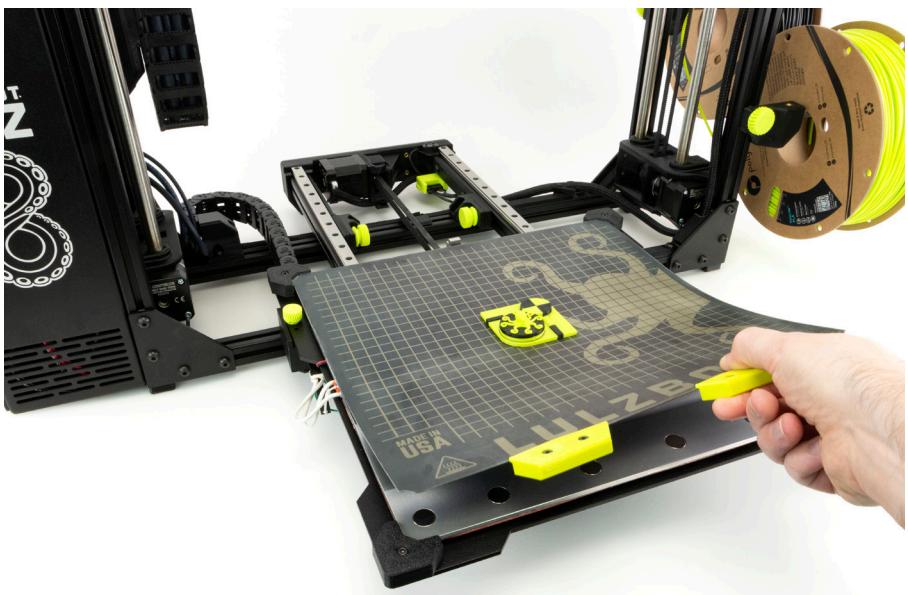
6.6 Once each hot end reaches its probing temperature, the Tool Head will move and conduct an automated self-leveling sequence by deploying the pin on its BLTouch. When the leveling process is complete, the printing process will commence.



6.7 After your LulzBot TAZ 8 is finished 3D printing, the Tool Head and print bed will automatically move into the cooling position with the Tool Head in the top left of the build area and the print bed fully in the back position.

Your print bed is now cooling. Do not attempt to remove your 3D printed object before the print bed moves forward. Attempting to do so could either burn your skin on the hot end or print bed, damage your printer or print bed surface, or damage your 3D printed object.

Using any kind of bed scrapper is not recommended with flex bed systems. The blade can cut, gouge, or cause other damage to the print surface. Caution must also be exercised to avoid causing personal injury.



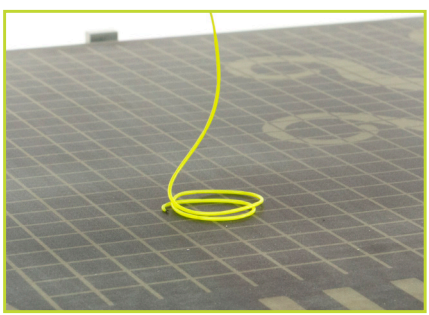
6.9 Now that your first print is complete, your TAZ 8 is ready to go to work! Use the steps in sections 4, 5, and 6 in order to set up dissolvable support filament just like standard filament in **Extruder 2**. For more projects, ideas, and ready-to-print models, visit **download.lulzbot.com/3D_Models/**.

When a print that utilizes soluble support is complete, let the print soak in warm water, agitating the print and changing the water as needed until the support material has dissolved. Check with your local wastewater authority prior to disposing of the PVA solution.

7 Maintenance and Care

There is a small length of PLA filament remaining in the hot end after your first sample print. You can remove the remaining filament by following the steps in Section 5. Use this process whenever changing the filament to ensure a clean switch between different filaments and to avoid extrusion issues due to print temperature differences.

When using a filament other than PLA for future prints, there may be a difference in the temperature required for purging the residual filament in the hot end and printing with the new filament. When changing filament, choose a temperature that splits the difference between the two required printing temperatures. The chart on the next page lists printing temperatures for some of the most popular filament available for your LulzBot TAZ 8.



Printing, Part Removal, and Bed Preparation

Filament	Purging Temperature (°C)	Part Removal Temperature (°C)	Print Bed Preparation (See maintenance section for more information)
ABS	220	50	Isopropyl alcohol wipe
PLA	180	45	Isopropyl alcohol wipe
PETg	220	50	PVA glue stick
Nylon, PA-6, PA-12, PA-CF	220	50	PVA glue stick
TPU, Ninjaflex, PolyFlex	200	Fully Cooled	Plain Glass or PVA glue stick
HIPS	220	50	Isopropyl alcohol wipe
PVB, PolyCast, Polysmooth	180	45	Isopropyl alcohol wipe

Your LulzBot TAZ 8 Desktop 3D Printer is capable of printing a wide variety of materials including: PLA, ABS, TPU, PC-ABS, Polycarbonate, PVA, and more. In addition, new materials are frequently being added to our catalog, each thoroughly tested to develop the profiles included in Cura LulzBot Edition. Shop our full range of materials at **https://buy.lulzbot.com/collections/filament.**

Important Information About Your 3D Printer

Extended warranties of one, two, and three years may be purchased, **within 30 days of purchase**, to further protect your investment. Email **Sales@LulzBot.com** or call **1 (701) 809-0800 ext 1** for more information.

Warranty and Support
Your machine comes with a limited one-year warranty and customer support period including USA-based technical support available via email at **Support@LulzBot.com** or by phone at **1 (701) 809-0800 ext 2**. For more information, please visit **LulzBot.com/Support**.

Warranty and customer support cover electrical, mechanical, and motion systems on the printer. Material issues are not covered by LulzBot customer support. Material questions and concerns should be directed to the material manufacturer. For more information about the warranty on your LulzBot 3D Printer, visit **www.LulzBot.com/content/shipping-standard-warranty-and-return-policies**

Source Files
This product runs with free software because we support your right to see how it works, make modifications, and share your modifications with others. Find the source files online at **gitlab.LulzBot.com**.

LCD Controller and SD Card Printing
Your LulzBot TAZ 8 can be operated without a USB connection to a computer by using the LCD Controller and included SD card. Once a .gcode file is saved to the included SD card, plug it into the port located on the top of the electrical box, press the **Print** from the **Main Menu,** and select the file you want to print.

Maintaining Your LulzBot TAZ 8 Desktop 3D Printer

Make sure that the hot end and print bed are at room temperature before beginning any cleaning or maintenance unless otherwise noted.

Print Bed
Adhesion to your LulzBot TAZ 8 modular heated print bed is the foundation of a great 3D print.
Additional print beds and configurations can be purchased from the LulzBot online store.

Depending on the filament chosen, check for the Adhesion Info section in Cura. Here you can find the correct configuration for the specific filament. If no adhesion information is present, it is safe to assume that you can print directly onto the default PEI print surface.

Your LulzBot TAZ 8 ships with the smooth PEI surface which is the most commonly used print surface. Refer to the chart at the beginning of Section 7 of this guide for bed preparation for specific materials.

Lack of print bed adhesion
Your print bed may start to get dirty or lose some of its adhesive properties due to extended use. With the provided scuff pad that came with your printer, you can revitalize the PEI surface of your build plate and bring back some of that lost adhesion.

PEI Surface Cleaning/Prepping OHAI

Electronics Box Cleaning: ⚠ ***Unplug the power cord before beginning any maintenance on the LulzBot TAZ 8 control box.***

Remove filament from the filament holder and unscrew the ten screws holding the control box panel in place. Then remove the panel to gain access to the control box. Using compressed air, clear the fans, power supply, and area around the control board of any dust or debris that may have collected inside.

Never use metal to clean your nozzle.

Linear Rail Cleaning: Wipe down the linear rails on the X, Y, and Z axes using a clean, dry lint free cloth.

Never apply lubricant to the smooth rods.

Print Area Cleaning: With regular use, dust and debris can collect underneath the printer and may cause interference with the Y-axis motion. Periodically clean and dust the area underneath and surrounding the printer to prevent this. Make sure that the hot end and print bed are at room temperature before beginning any cleaning or maintenance unless otherwise noted.

WARNING -
Electric shock can kill.

ALWAYS *disconnect the printer by unplugging the power cord before attempting to enter the electronics box enclosure.*

Failure to follow warnings could result in personal injury, death, or property damage.

Maintaining Your LulzBot TAZ 8 Desktop 3D Printer

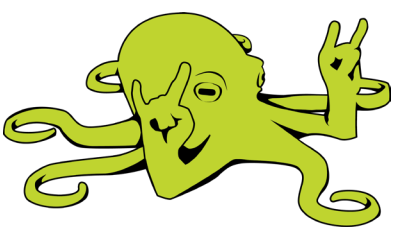
HOT SURFACE BURN HAZARD. CONTACT MAY CAUSE BURN. DO NOT TOUCH THE HOT END.
The hot end on the extruder can quickly heat up beyond 180°C (356°F) and can burn your skin if you touch it.

Tool Head Cleaning: Use compressed air to clear any residual filament from the Tool Head.

Check all fans on the Tool Head to ensure that they are functioning properly during printing. Note that the extrusion cooling fan on the front of the Tool Head may not turn on while printing the first few layers on the print bed depending on the filament used. While the printer is off, blow out all fans with compressed air to clear any build up of dust or debris.

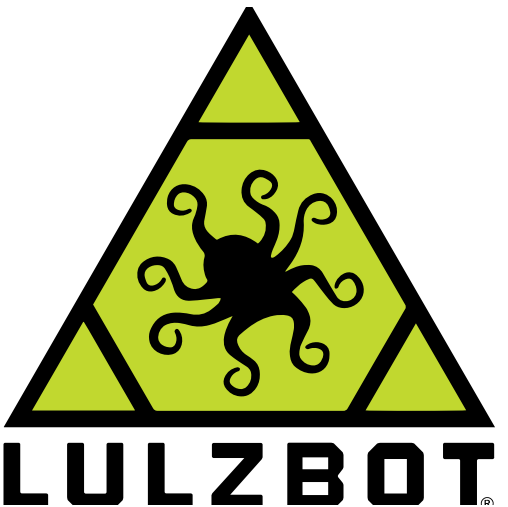
The nozzle and heater block are coated to reduce the accumulation of filament. However, if you notice an accumulation of filament on the nozzle and heater block, it can be cleaned by heating the hot end up to 205°C (401°F) and then carefully wiping the affected areas using the maroon Scotch-Brite™ scrubbing pad from your TAZ 8 tool kit.

Do not use metal to clean the nozzle on your tool head. Metal will short the self leveling function and can blow an internal fuse or damage your printer.



LULZBOT® TAZ 8

LulzBot® TAZ 8 Quick Start Guide v.1.2 (03/12/2025)
CC BY-SA 4.0 International LulzBot 2025
LulzBot® is a Registered Trademark of FAME 3D, LLC.


LULZBOT