

Quick Start Guide

SETTING UP YOUR TAZ 3D PRINTER

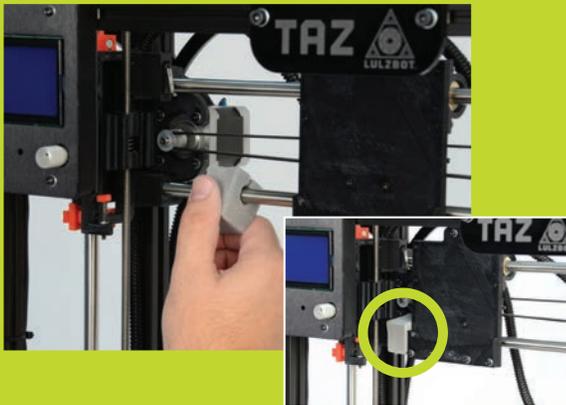


View a video of the
Quick Start Guide
lulzbot.com/support/taz-setup



READ THE ENCLOSED USER MANUAL COMPLETELY BEFORE POWERING UP YOUR TAZ 3D PRINTER.

Remove Protective Pieces!



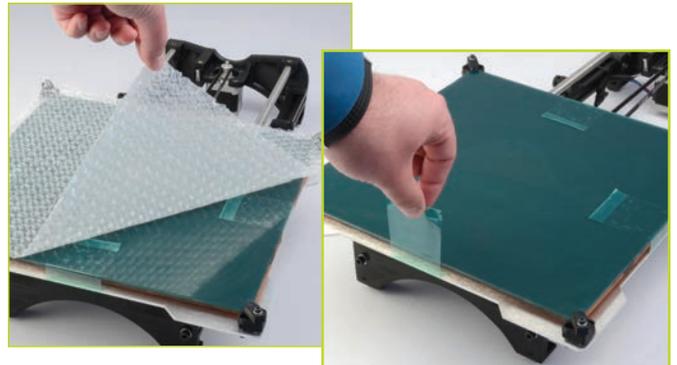
Locate and remove the gray foam block used to hold the X axis carriage in place during shipping.



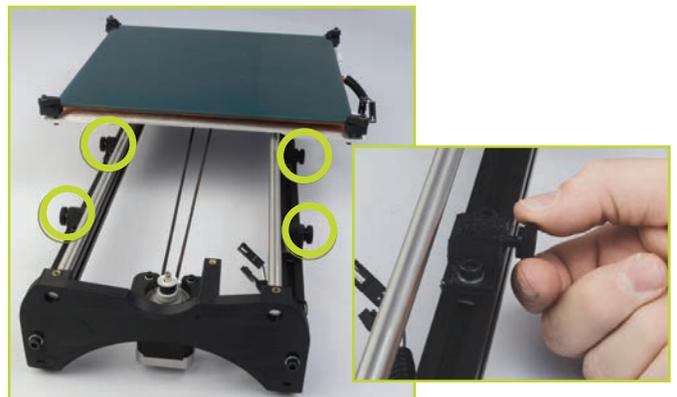
Remove red protective packing clips.

Mounting Printer Bed (Y Axis) to Printer Frame

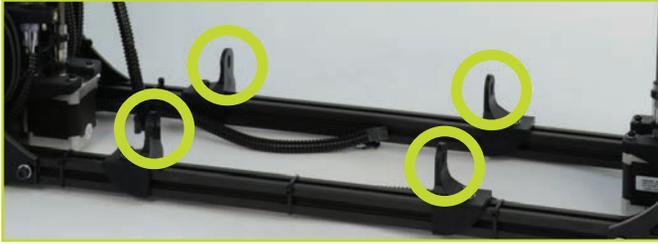
1 Place the TAZ frame and Y axis assembly on a flat and level surface. Remove the protective bubble wrap from printing bed. Remove four pieces of tape from print bed.



2 Locate the four Y axis bolts (see green circles below). Turning counter clockwise, remove each Y axis bolt and set aside.



3 Locate the four Y axis mount brackets on the TAZ frame.



4 With the print surface facing up and the stepper motor end of the Y axis facing back, slide the Y axis assembly in between the Y axis mount brackets, aligning the holes on the brackets with the bolt holes on the Y axis assembly.

Thread the four Y axis bolts through the brackets, into the Y axis assembly.



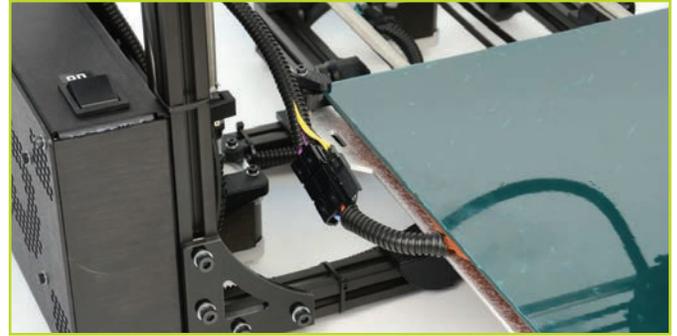
Note:

Before completely tightening the Y axis bolts, push down the Y axis aluminum bars against the TAZ frame lower bars by slightly tilting the printer on the side edge, enough to lift the feet of the Y axis off of the table. The weight of the Y axis will seat it against the TAZ frame. While the printer is slightly tilted, tighten the four Y axis bolts.

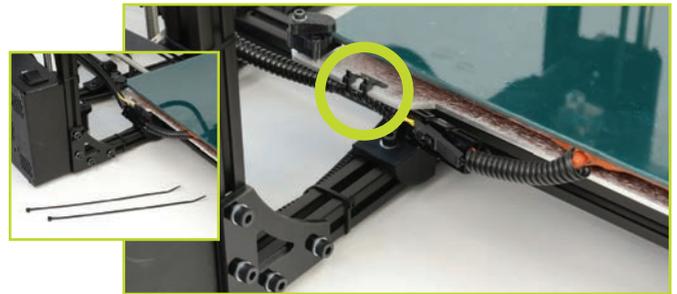
5 Pull the print bed completely to the front of the printer to access the Y axis connectors. You will find matching male and female 4-pin stepper motor connectors and 2-pin end stop connectors. Connect the print surface connectors and Y axis connectors by matching the male and female connectors. The connector will click to ensure it is locked. Locate one of the three small black zip ties that are included in the documents bag. Wrap and tighten the zip tie around the Y axis wiring and the black Y axis frame extrusion.



6 Locate the two connectors to the left of the print bed. Connect the matching female and male large 2-pin heat bed connectors and the small 2-pin connectors.



7 Locate the two small black zip ties that are included in the documents bag. Wrap the two zip ties through the slot, located on the left rear of the aluminum bed plate, and around the print bed wires. Tighten the zip ties so the wire cannot move freely. Cut off the excess end of the zip ties with the needle-nose pliers included in the tool bag.

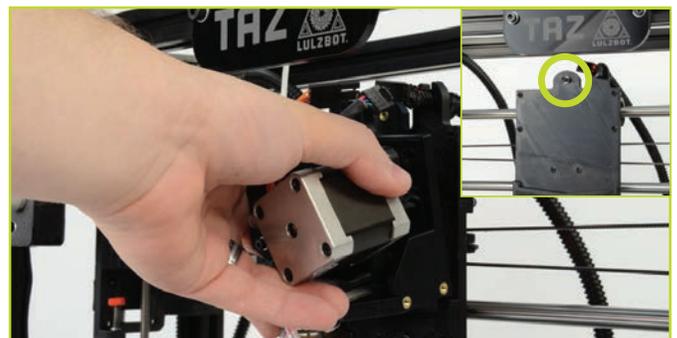


Note:

Make sure your printer work space is clear of anything that could obstruct the movement of the printer, and that there are no flammable fabrics or liquids near the printer space. Avoid placing your printer near a drafty window or air conditioner vent.

8 Locate and remove, with the included 2.5mm hex driver, the tool head 3mm screw in top center of the X axis carriage. Remove the extruder head from the Accessory Tray foam insert.

Place the extruder tool head mount onto the X axis carriage bottom first. The extruder mount will slide into the bottom portion of the carriage and self center. Replace the 3mm screw to secure the extruder tool head onto the X axis carriage.



Connect the extruder assemblies' 4-pin connectors: match the orange/red wire connector pair for the hot end and the mixed color wired connector pair for the extruder motor. Connect the matching pairs together so they lock and click.



Attaching Power Supply

9 Locate and unwrap the power supply, USB cables, and AC power cable. **Make sure the power supply is completely unplugged before moving on to the next step.**



10 Locate the power supply, USB connectors and DC power receptacle on the back of the electronics enclosure.



11 Connect the DC locking plug into the DC connector on the TAZ electronics enclosure. The plug is keyed, which may require rotating the plug until the keys line up and the plug can be pushed in. Once the plug is pushed in, turn the locking sleeve clockwise until it is tight against the electronics enclosure.

12 Plug in the USB cable, square B plug end, into the USB receptacle on the electronics enclosure. Plug the A end of the USB cable into your computer.



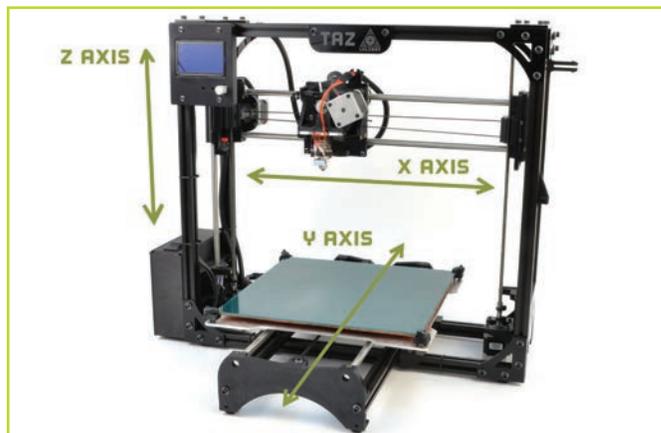
Attaching Filament Guide

13 Locate the filament guide with attached PTFE tube. The filament guide easily attaches to the filament guide mount on the top right side of the printer frame.

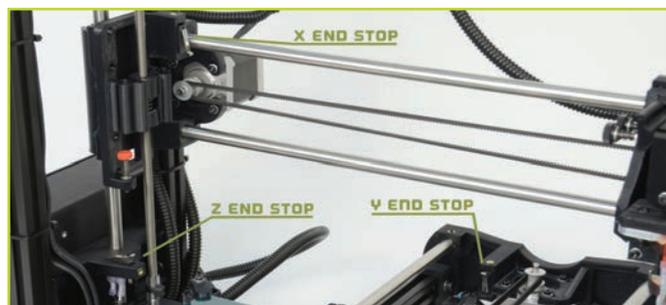


Before printing, familiarize yourself with the TAZ cartesian type system

14 The printer moves in three axes: X, Y, and Z. These three axes allow the tool head to move to any point within the print area. Note the location of the mechanical end stops, which are small switches at the home point of each axis. Each end stop switch allows the printer to find the home, or starting point, of each axis.



B The mechanical endstops should never be blocked during the initial homing function or during a print.



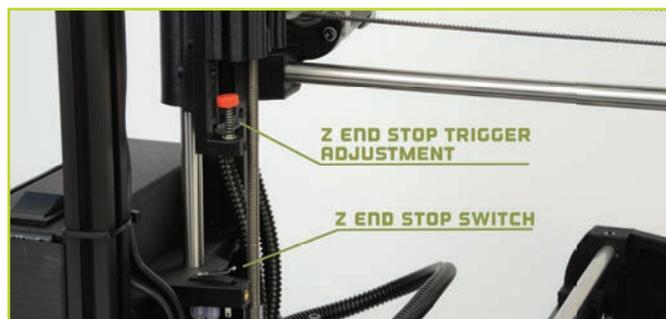
Adjustment of the Z axis

15 **A** Take the time to go through the leveling procedure to help ensure that your prints are consistent and trouble free. Connect to the printer as described in the Printron software section in the complete TAZ 3D printer manual. Use the homing buttons to home the X and Y axis.

Do not use the Home Z button until after the Z axis end stop has been adjusted. Remove the red shipping clamps on the Z axis smooth rods.

B Adjust the Z axis end stop trigger on the far left of the printer, mounted on the X-axis motor mount. Once connected to the printer in Pronterface, rotate the Z axis end stop trigger clockwise to lower the bottom of the screw approximately 1cm toward the Z axis end stop.

C Press the **Home Z** button to home the Z axis. The hot end will lower to about a centimeter above the heated bed. If there's a grinding sound, stop, turn the printer off and check that the Z axis is level in relation to the body of the printer. Manually rotate one of the Z axis linear threaded rods by hand if needed.



Raising the Z Axis

16 **A** Use the **+Z 10** button to move the Z axis up in 10mm increments. Raise the Z axis until the hot end nozzle is approximately 40-50mm away from the print bed.

B With the Z axis above the bed, use the included 150mm ruler to measure the distance from the bottom of the X axis smooth rod and the top surface of the Y axis aluminum bed plate on the left side. The distance measurement should be the same on left and right. If not, in Pronterface, turn off the stepper motors by pressing the **Motors Off** button. Turn the threaded rod on one side of the printer to raise or lower that side to match the measurement on the other side.



Fine Adjustment of the Z Axis End Stop

17 Rotate the screw counter-clockwise to raise the tip of the screw by roughly the same amount as the distance between the nozzle tip and the print surface. Press the **Home Z** button to home the Z axis. The tip of the nozzle should now be very close to the surface of the bed.

Leveling the Print Bed

18 **A** Slide a piece of paper underneath the nozzle and adjust the Z axis end stop and home the Z axis until the tip of the nozzle applies firm pressure on the paper. You should be able to slowly pull out the sheet of paper with only slight resistance.

B Move the hot end nozzle tip over to the far side of the X axis by using the **+X 100** button. As the X axis carriage approaches the end of the X axis, use the **+X 10** button and the **+X 1** button until the tip of the nozzle is near the front right corner of the bed.

C Slide the same piece of paper under the nozzle and home the Z axis. Adjust the corner's bed leveling screws so that the tension felt when moving the paper under the nozzle matches the tension felt previously. To raise or lower the front right corner of the bed, adjust only the screw with the spring. Turn the screw clockwise to lower the bed, decreasing the tension felt when moving the paper. Turn the screw counter-clockwise to increase the tension felt when moving the piece of paper under the nozzle. Once adjusted, press the **+Z 10** button to raise the Z axis.

D Repeat the same process, first raising the Z axis, then using the **+Y** button to move the heated bed to place the nozzle on the rear right corner of the bed. Adjust the height of the bed using the same procedure as outlined above. Finally, raise the Z axis and move the X axis carriage over to the rear left corner of the bed and perform the same leveling procedure to adjust the last corner.

NEXT UP: Create your first 3D print.