A

GB3+ BED LEVELING

OVERVIEW

Please follow the steps outlined in this guide to level the bed of your GB3+. Note that the Gigabot® shown in these steps has blue tape as a printing surface (other Gigabots may have Print in Z, Buildtak, or something else). Regardless of what surface is on the bed, the leveling steps will remain the same.

These steps also use a business card as a feeler gauge between the nozzle and the bed. Many business cards are about 0.012” or 0.3mm thick, which allows us to set a good Z home position at the same time that we level the bed. Of course, users may opt to use real feeler gauges as well. It is also acceptable to level the bed with something like a 1-2-3 block or a piece of aluminum extrusion, but users will have to set the Z home position afterward.

If needed, here are some links to other helpful resources:

Gigabot® support: support@re3d.org

Wiki: http://wiki.re3d.org/

Community forum: https://re3d.zendesk.com/hc/en-us/community/topics

YouTube channel: https://www.youtube.com/user/GigaBot3D

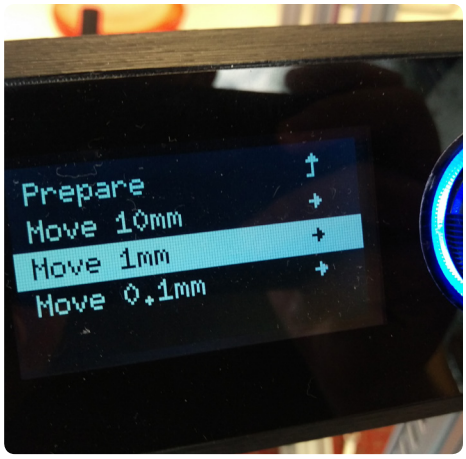
Sketchfab: https://sketchfab.com/re3d/models

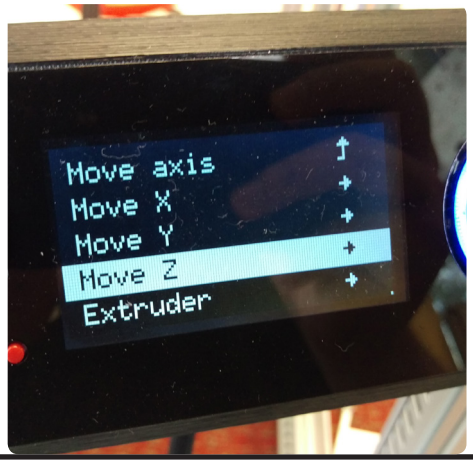
Shop: http://shop.re3d.org/

re:3D main website: https://re3d.org/

A1

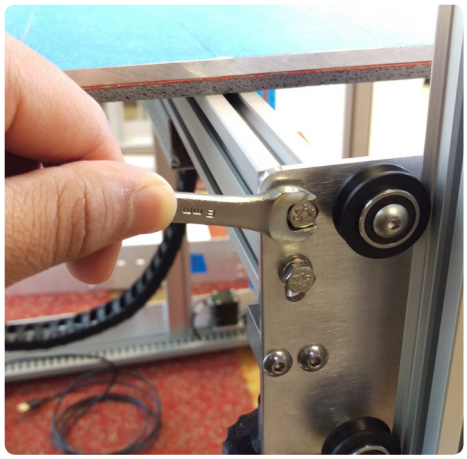
Using the Viki LCD controller, move the bed down 150mm. Press the button to see the main menu, then select “Prepare,” scroll down to “Move Axis,” then “Move 1mm,” then “Move Z,” and finally turn the wheel clockwise until it reaches 150mm.

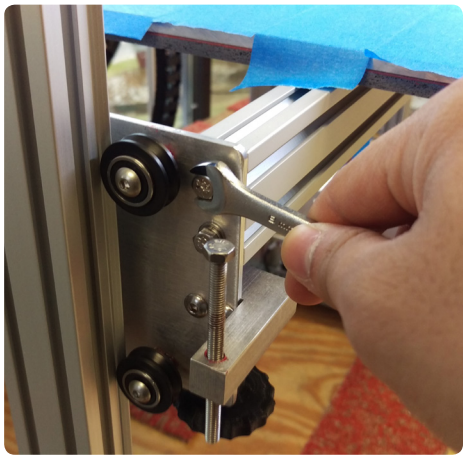


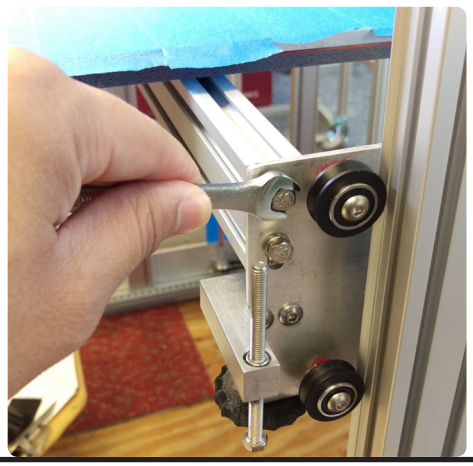


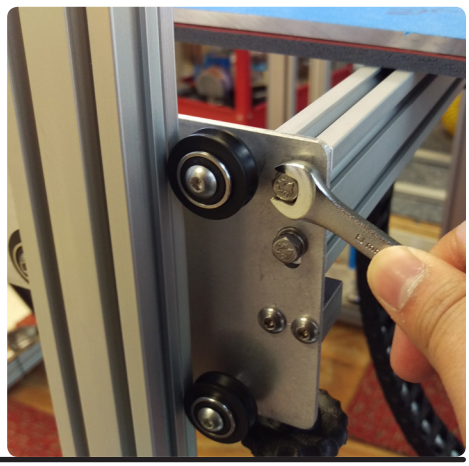
A2

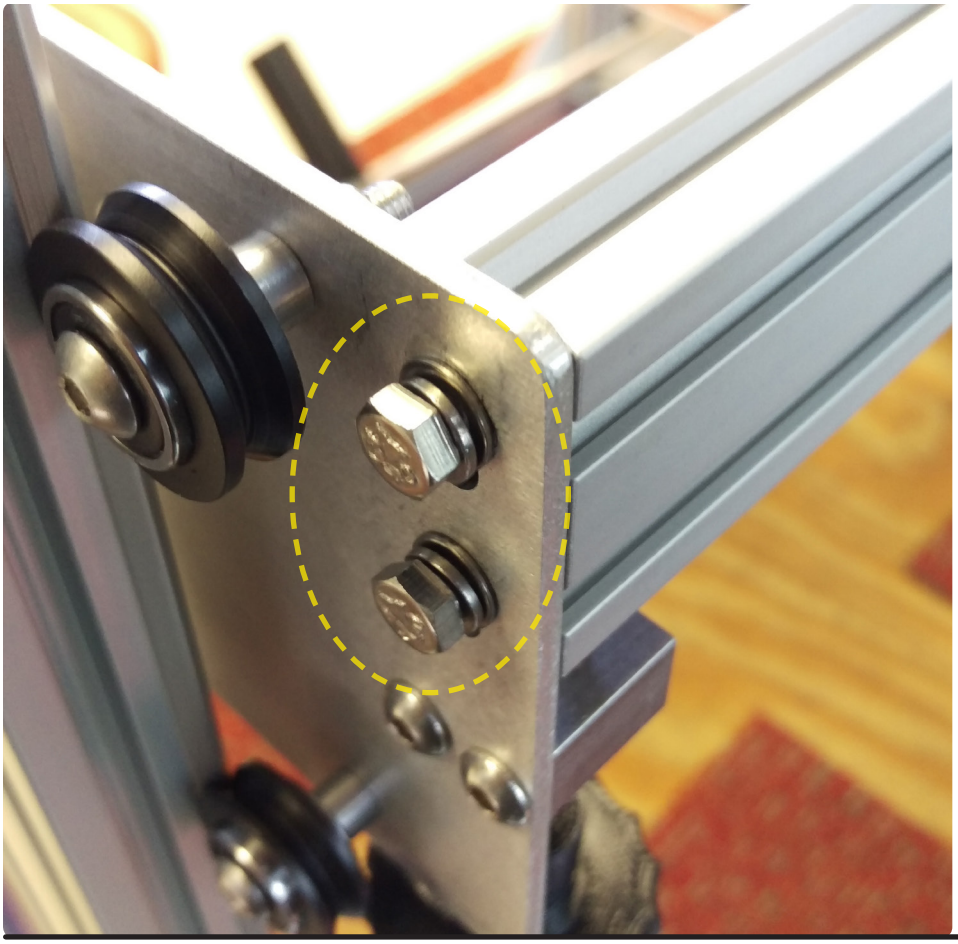
Using the 8mm combination wrench, loosen each of the 2 M5x12 hex head screws that fasten the bed side plate to the bed cross rails. There are 8 in total.





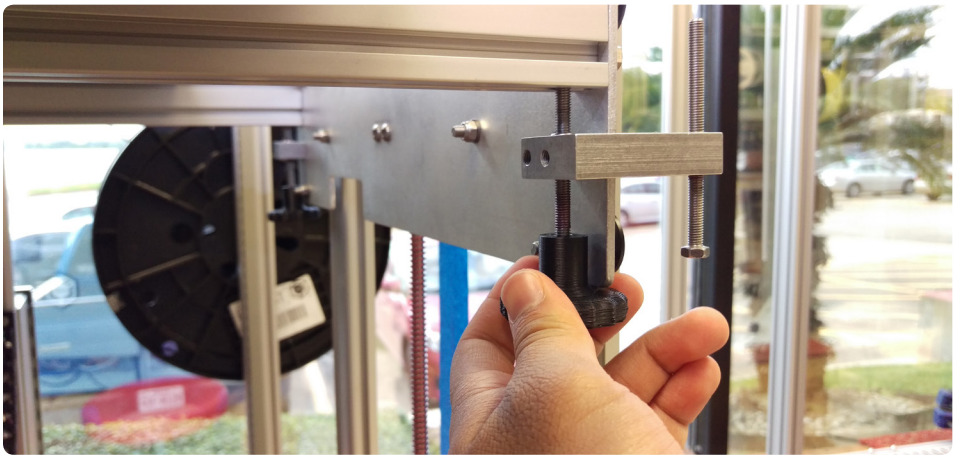






A3

These need to be loose enough so that the ends of the rails can move vertically in the slots of the side plates with little to no resistance.

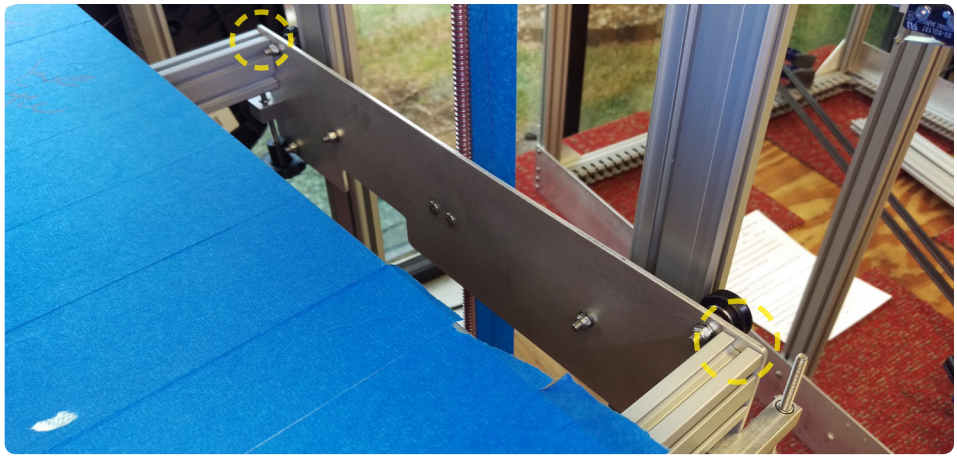


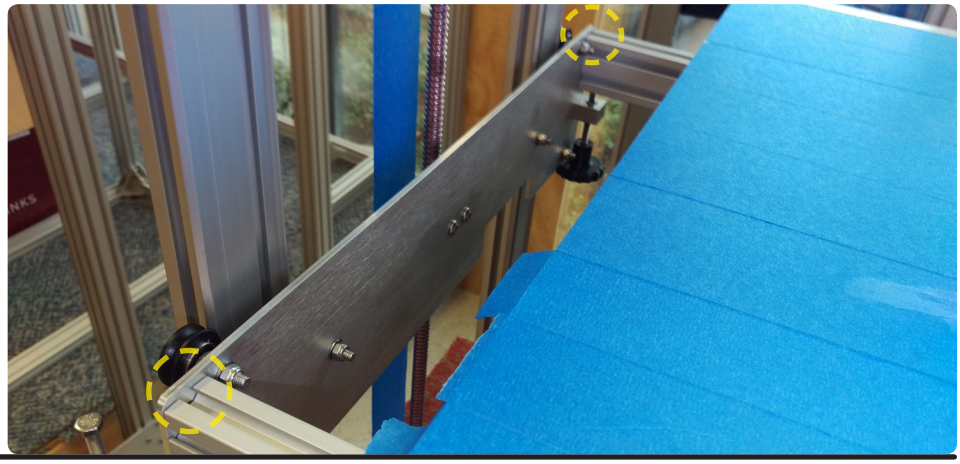
A4

Adjust the leveling knobs until there is about a 1/8” gap (0.125” or 3.175mm) between the top of the rail and the top of the side plate at each corner. A ruler or a shim can be used to measure this distance. Similarly, users can opt to turn the leveling knob to push the rail up until it is flush with the side plate, and then lower it 4 full revolutions.

A5

Repeat this process for all 4 corners of the bed frame.



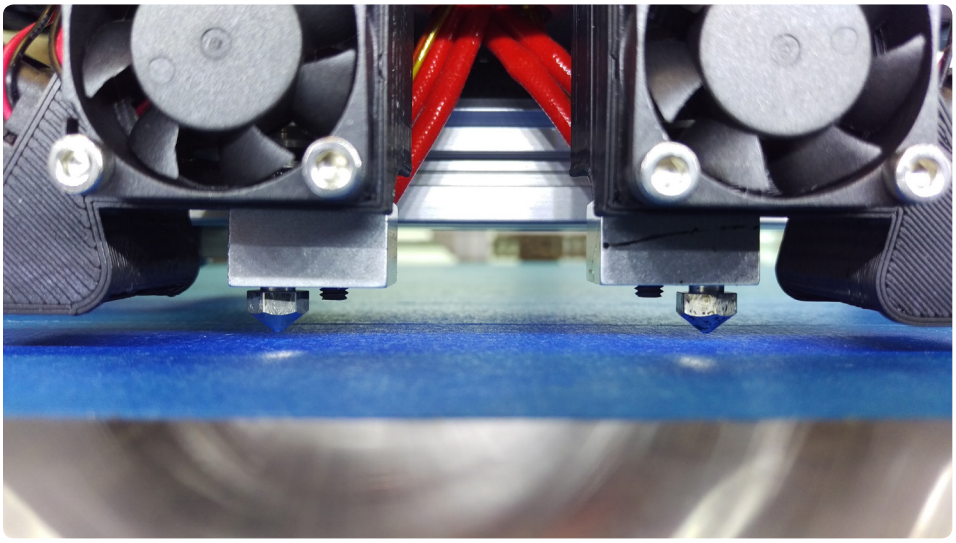


A6

Use the 8mm combination wrench to lower the M5x70 hex head screw on upper Z limit switch leveling block (when looking directly at the Gigabot® name plate, this is the right side leveling block). Turning clockwise when viewed from above will lower the screw. Do 2-4 full revolutions to bring the Z home position closer to the nozzle.

A7

Using the Viki, select “Auto Home Z,” in the “Prepare” menu.

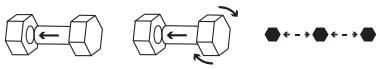


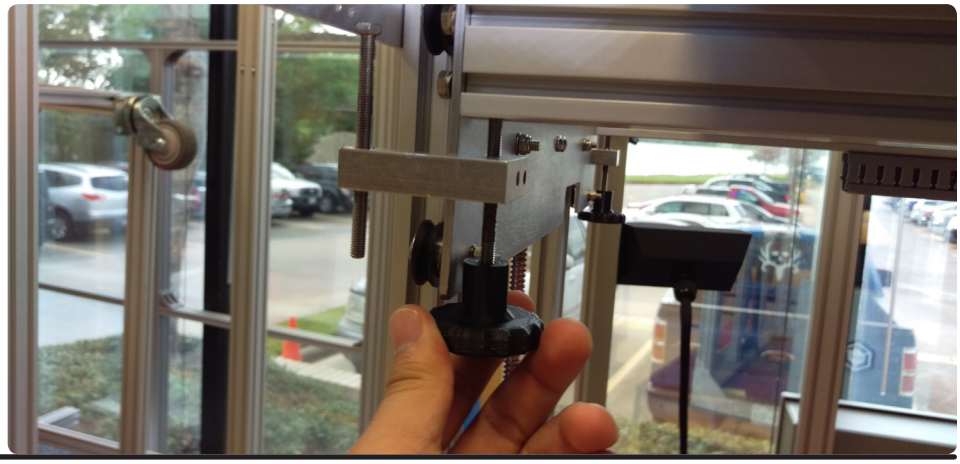
A8

There should now be a widened gap between your nozzle(s) and the surface of the bed. Push the trolley to one corner of the bed, near one of the leveling knobs. If the motors are locked, they can be unlocked by navigating to the “Prepare” menu in the Viki and selecting “Disable steppers.”

A9

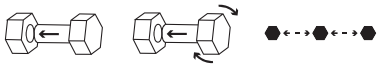
Place a business card between the nozzle and bed. When viewed from below, turning the knob clockwise will raise that corner. Turn the leveling knob to raise the bed until there is friction between the nozzle and the business card.

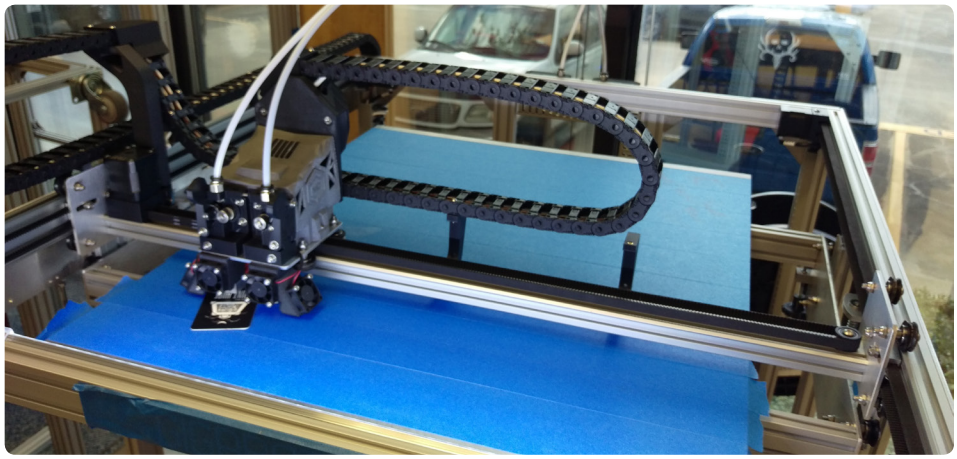


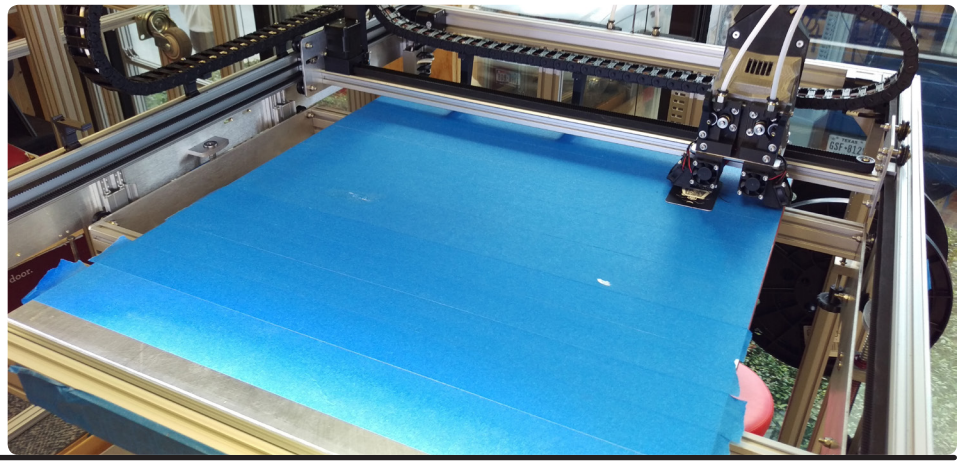


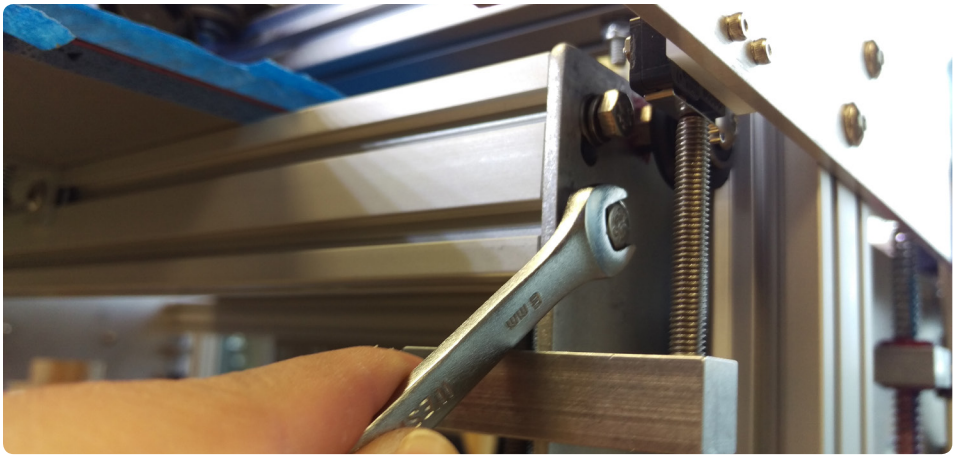
A10

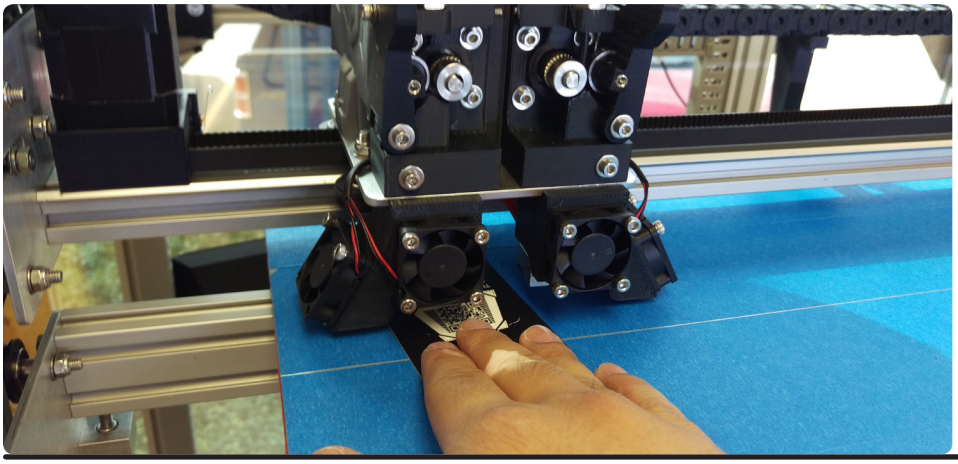
Repeat this process at all corners of the bed. Using the business card as a feeler gauge, there should be the same amount of friction between the card and the nozzle at each corner.





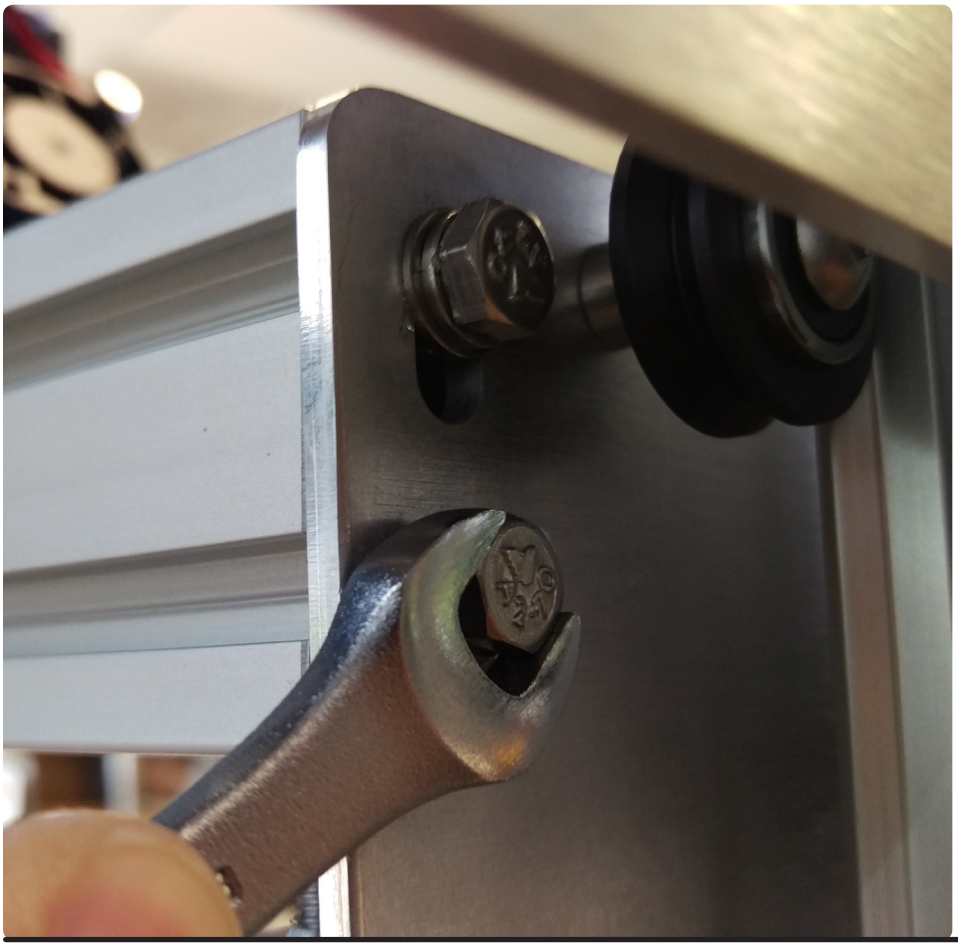






A11

Use the 8mm combination wrench to gradually tighten the M5x12 hex head screws at each corner. Periodically use the business card again to check the level, since tightening the hardware on the rails may have caused them to move slightly. The bed cross rails should be secured and acceptably level to the nozzle after 2-3 total passes.



A12

After the final tightening, the bed will be securely held in position and there will be no need to re-level unless some external factor throws it out of level. If you have any questions or concerns, please do not hesitate to contact our support at support@re3d.org.

NOTES

NOTES

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