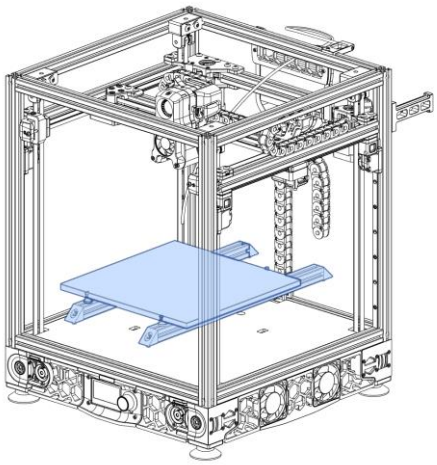
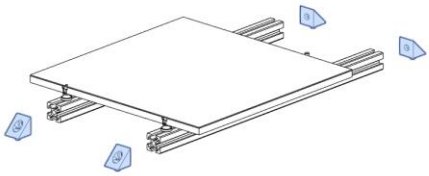
# Heatbed Hood Mod Assembly Guide

1. Upgrade to V2.4. If you cannot upgrade everything, upgrade the Z drives and skirts to V2.4. THIS MOD WON'T WORK ON 2.2 OR EARLIER.

2. Print needed parts and get everything listed in BOM

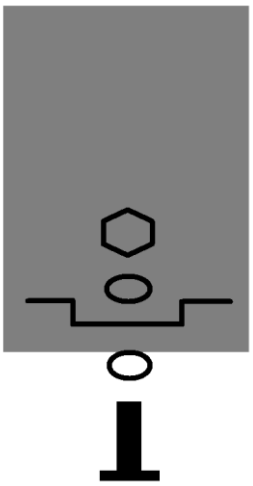
3. Remove the heatbed extrusions, remove the OpenBuilds Corner brackets.



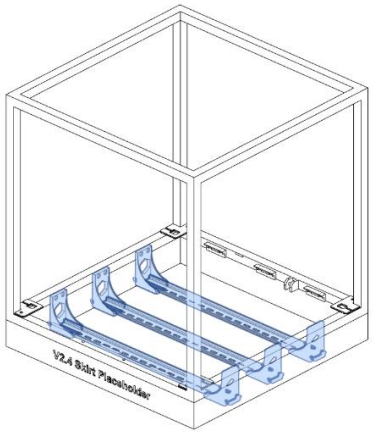


4. Remove the deck panel. Disassemble electronics. If upgrading from V2.2 or earlier, mount everything to DIN rail brackets included with V2.4 STL files.

5. Cut your DIN rails to the same size as the front extrusions (470mm for 350, 420mm for 300, 370mm for 250). Using M5*10mm screws, 2x washers, and a M5 nut, mount the DIN rails to the new DIN rail brackets. (And gaze at my amazing paint skills, it's clear enough hopefully)

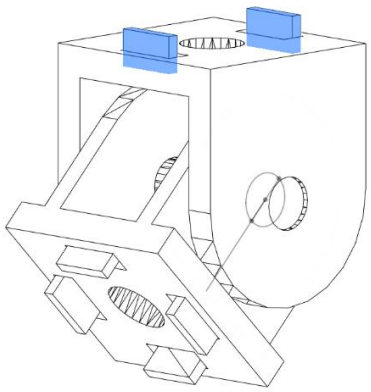


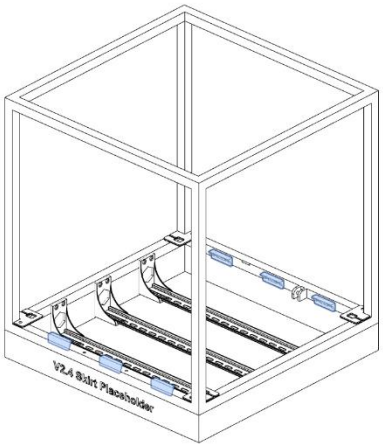
6. **Mount the DIN rails to the printer. Use 12x M5*10mm screws and 12x M5 T-nuts (of any type).**




7. **Mount the electronics to DIN rails. You can do some wiring now if you wish.**

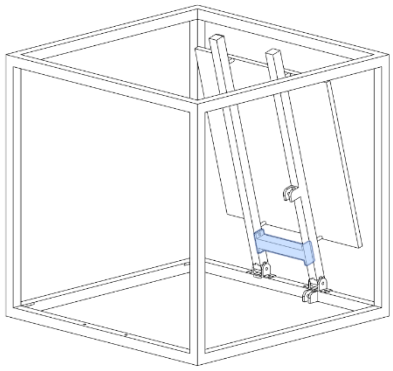
8. **Mount the Panel Holders with 2x M5*8mm screws and T-nuts (of any type).**





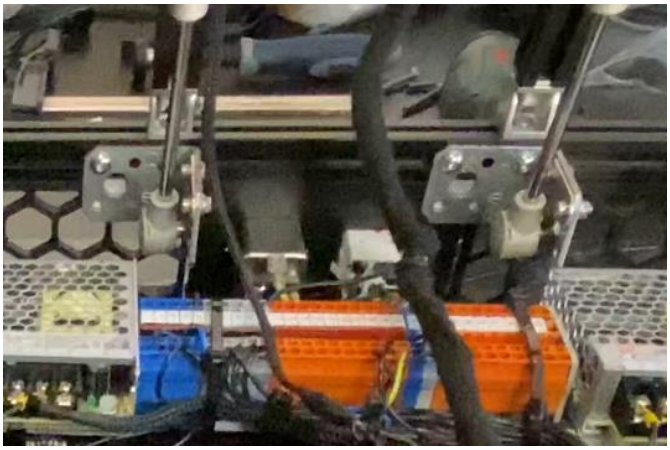

9. **Prepare the hinges by removing the highlighted 2 tabs with pliers. Leave the side with 4 tabs as is. Also remove the screw holding the two pieces together.**

10. **Mount the modified pieces of the hinges to the rear extrusion using 2x M5*8mm screws and 2x M5 t-nuts. Mount the other 2 pieces to the bed support extrusions using 2x M5*12 screws. Put the 2 hinge pieces together with the screw removed in the previous step. Tighten until the play in the hinge is minimal but hinge still functions.**



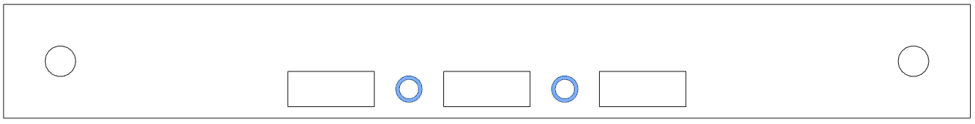
11. **Mount the printed “Extrusion Spacer” part using 4x M5*8mm screws and 4x M5 t-nuts. This part is necessary to make sure the bed stays relatively square when the “hood” is open.**

12. **Mount the gas springs to the rear extrusion. You have to get creative with metal corner brackets for mounting, as most (or all) gas struts don’t have a suitable mount for our setup, and 3D printed parts break too easily, so I can’t create a printed part.**

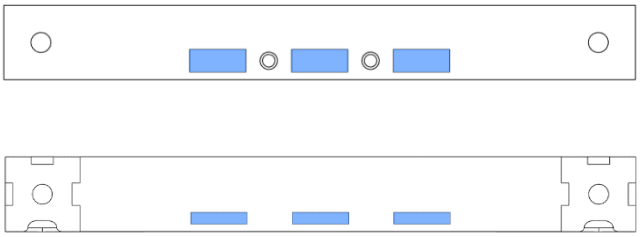


13. **Open the bed as far as you want it to open, and hold it there. Secure the gas struts to the bed extrusions using 4x 8mm screws and 4x t-nuts. Size will depend on your mounting brackets. Make sure the screws are relatively tight before releasing the bed. Now test the gas struts.**

14. **Insert 2x M3 threaded inserts to the bottom side of the “Front” piece.**



15. Insert 6x 15*6*3 magnets to the slots on “Handle” and “Front” 3d printed pieces. Pay attention to polarities.

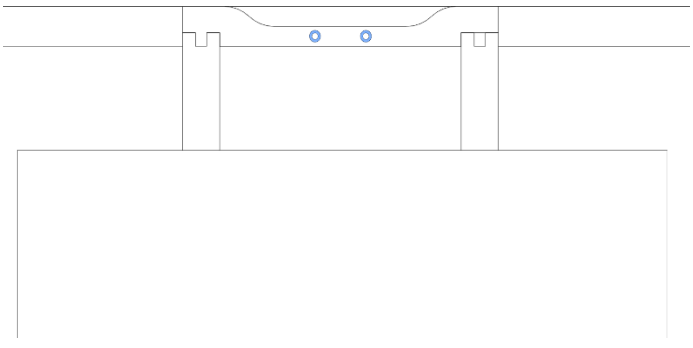


16. Mount the “Front” to the front extrusions using 2x M5*8mm screws and 2x M5 t-nuts. Leave them loose so it slides around.

17. Mount the “Handle” to the front of the bed extrusions using 2x M5*12mm screws.

18. Lower the bed while aligning the “Front” with the “Handle”. When bed is closed, make sure everything is sitting in its natural position and everything is square. Hold “Front” in place while raising the bed. Tighten the screws on “Front”.

19. Cut the deck panel and fit them in place. If you are using rigid panels, Z belt covers may prevent the installation. If so, remove them, and VHB tape them on the deck panels.



20. Close the bed. Optionally (if you don’t trust the magnets) install 2x M3*16mm screws to secure the bed in place.

21. Calibrate your Z Nozzle height. You only need to do this once after installing the mod, but you have to run QGL every time you open the bed.