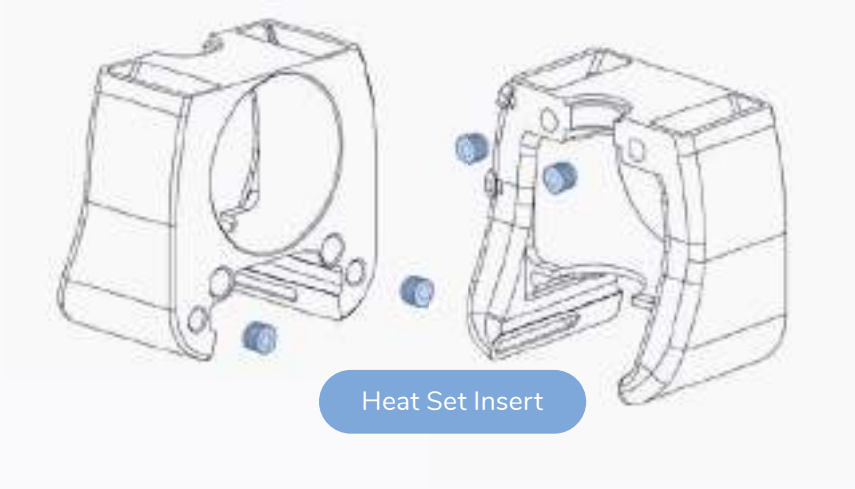
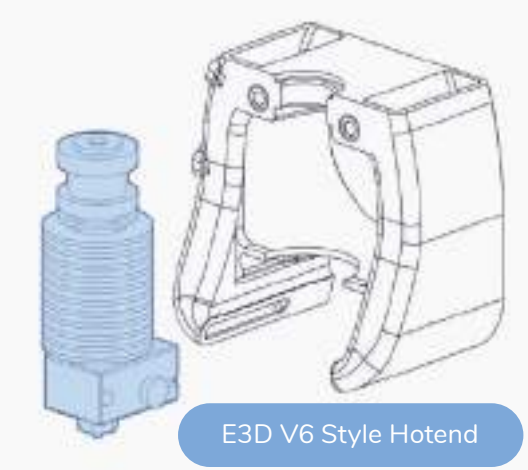
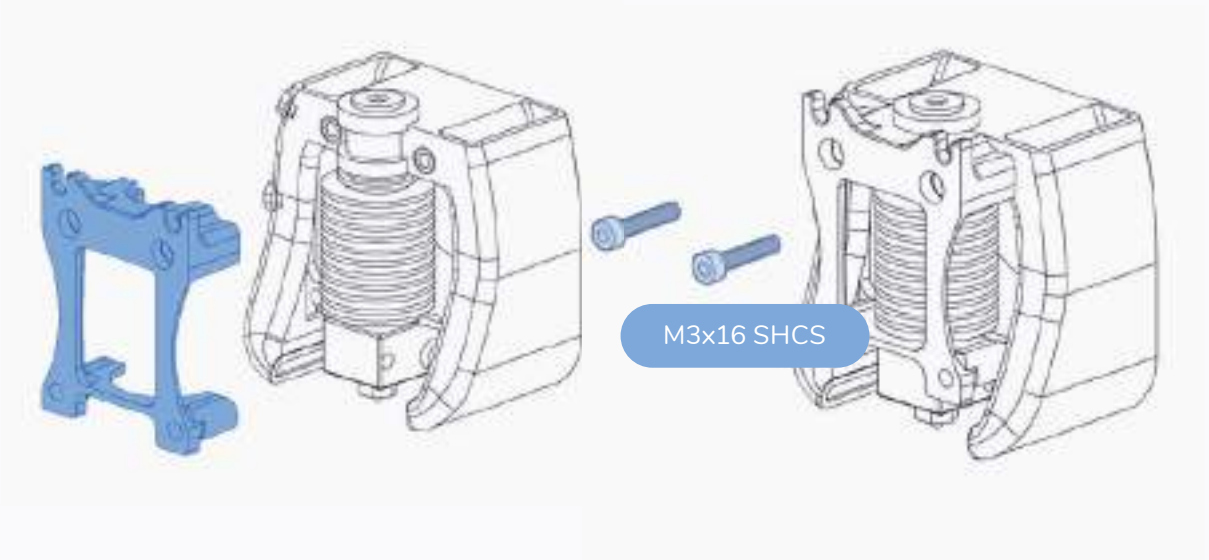
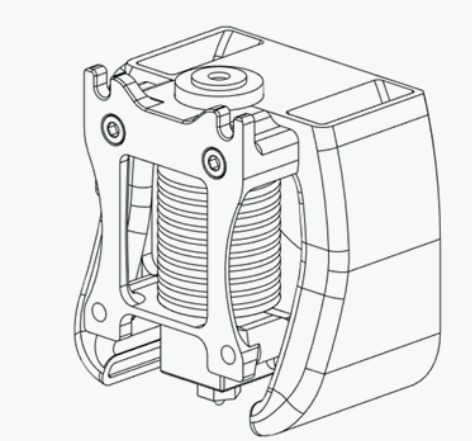
AVAILABLE MOUNTS

We also provide mounts for the Slice Engineering Mosquito and TriangleLab/Phaetus Dragon Hotend.
They are assembled in a similar manner.









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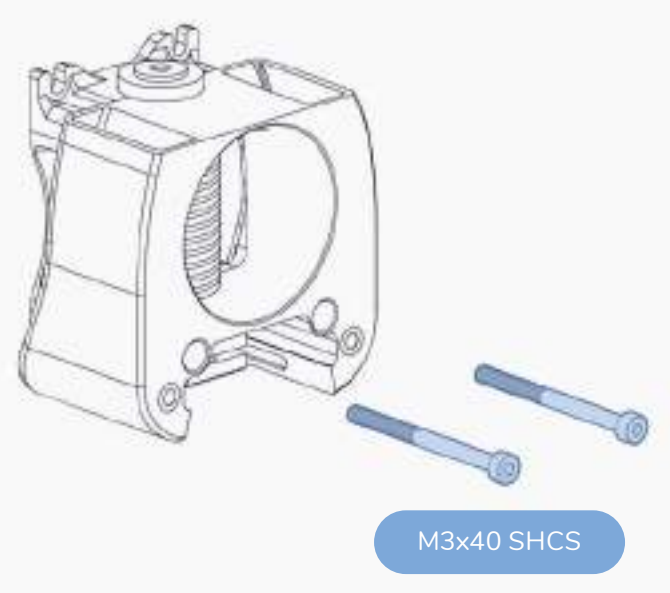

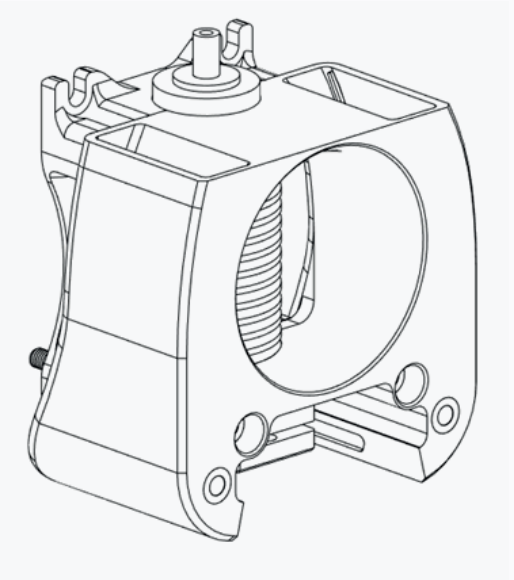

PTFE STICKOUT

The PTFE tube should end 10mm above the surface of the printed part.

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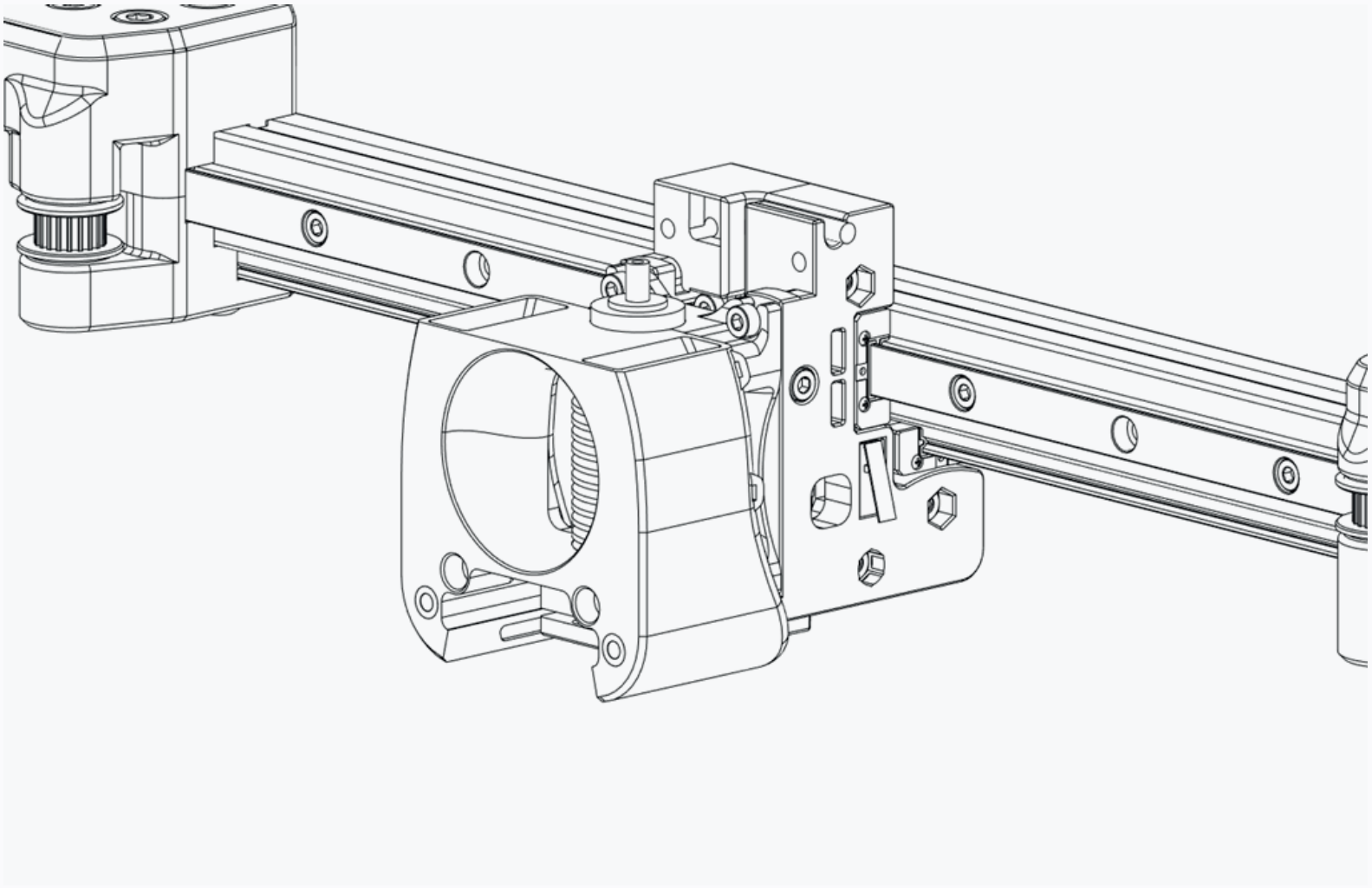

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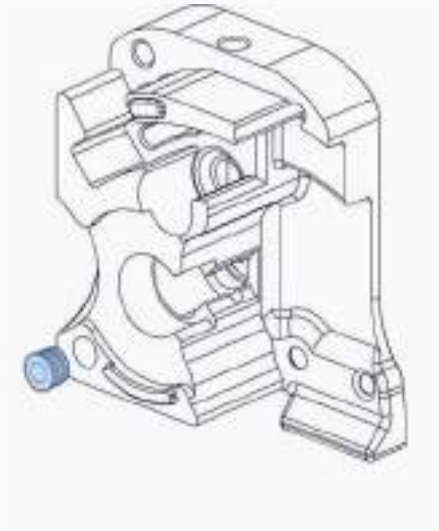

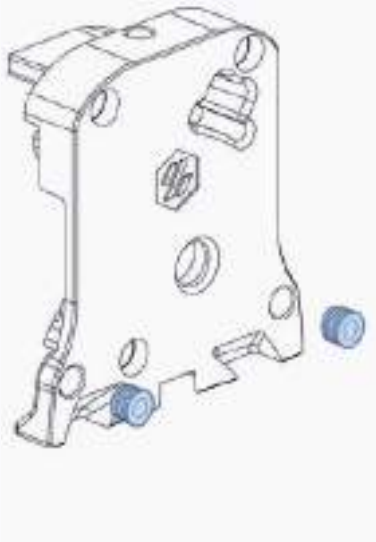

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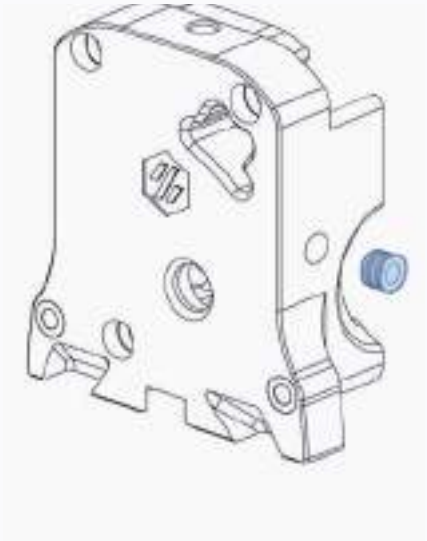

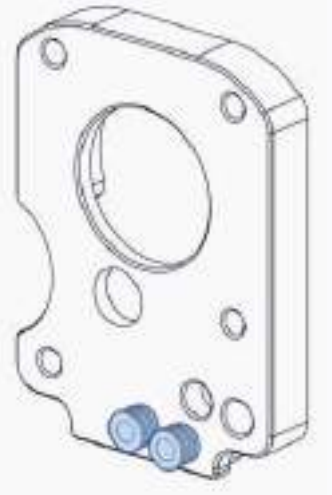

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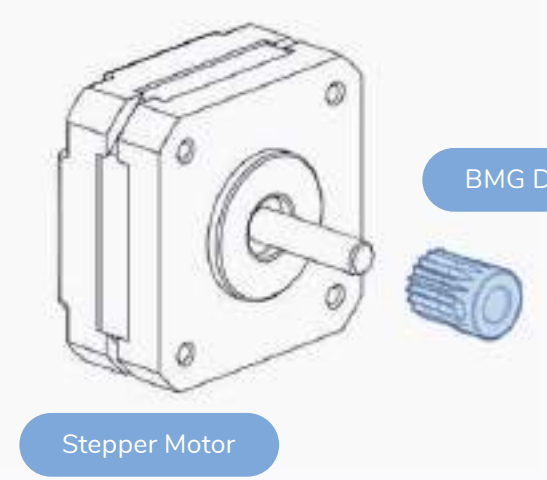
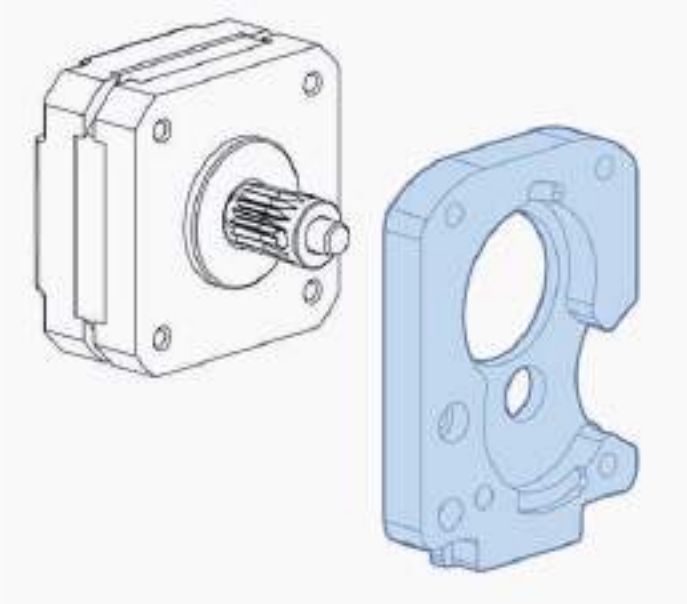
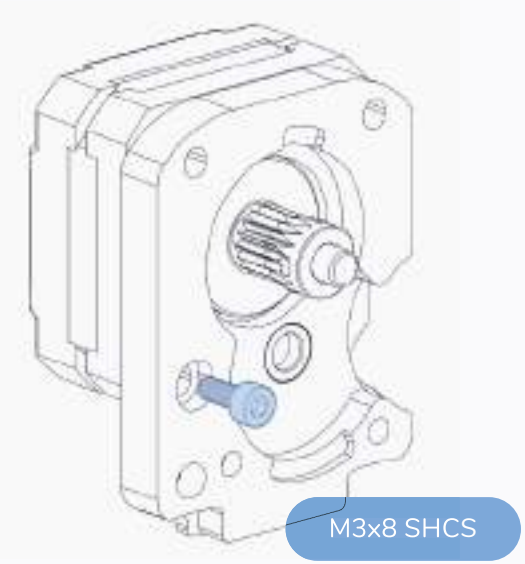


STEPPER WIRES

If the steppers has wires cut them to approximately 150mm. Wires/connector to the right hand side.





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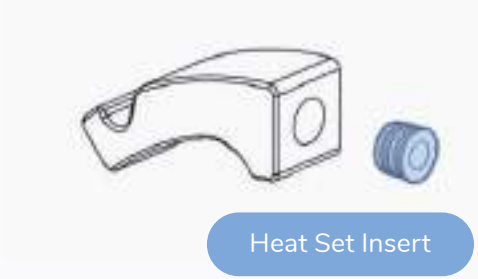

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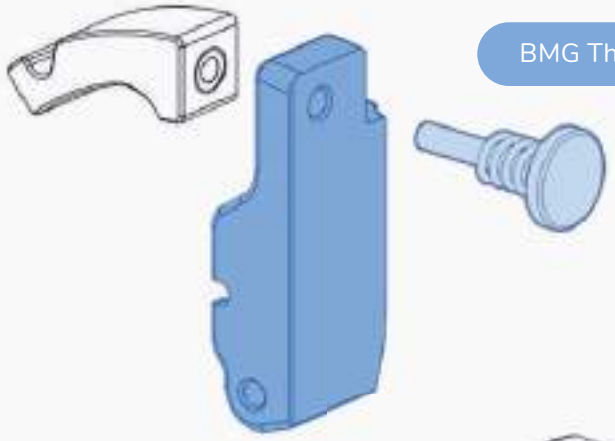
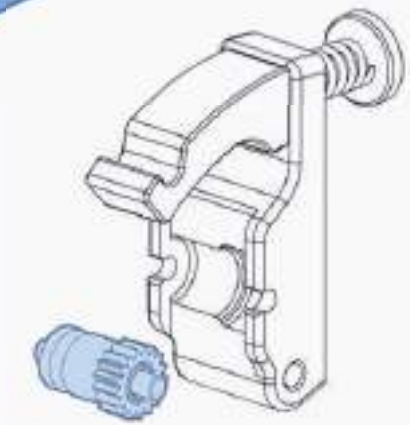


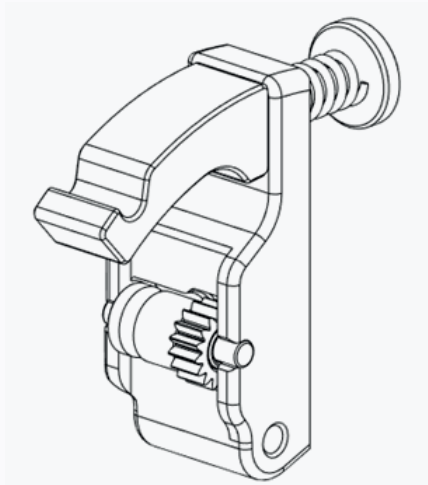
BMG Thumb Screw

BMG Idler Assembly

LUBRICATE BEARINGS

A light lubrication film will help with smooth operation and longevity.





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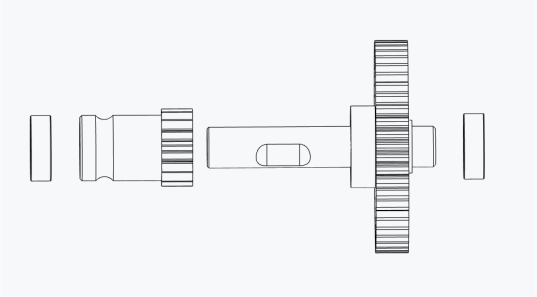
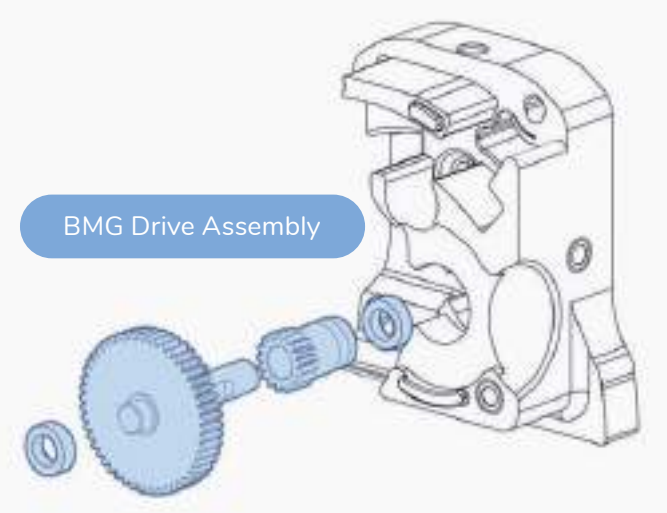
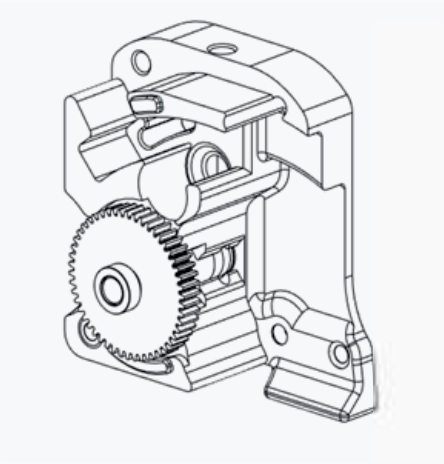
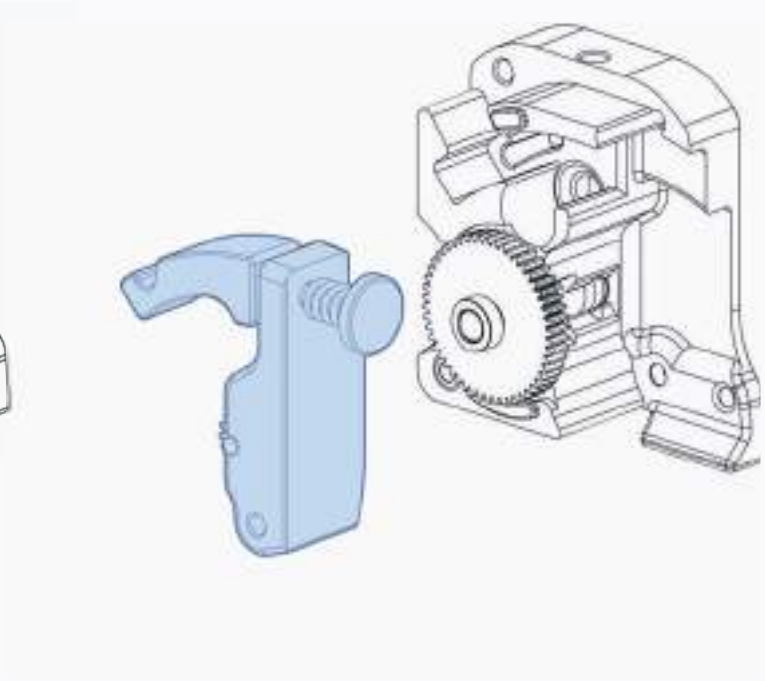




BMG Drive Assembly





CHECK BEARING FIT

The bearings must slip on and off the shaft easily. Pressing the bearings on the shaft will damage them. Lightly sand the shaft if required.

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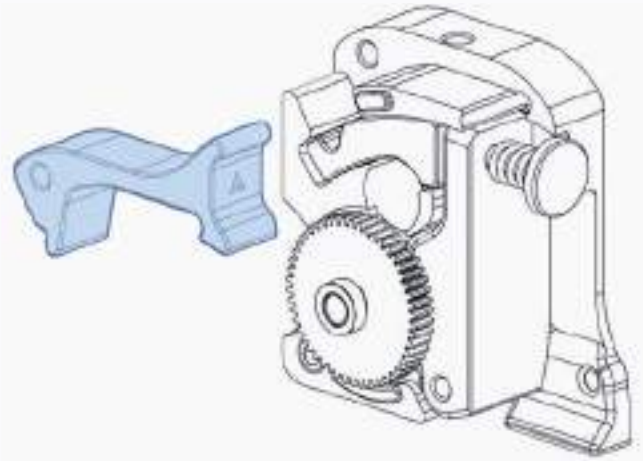

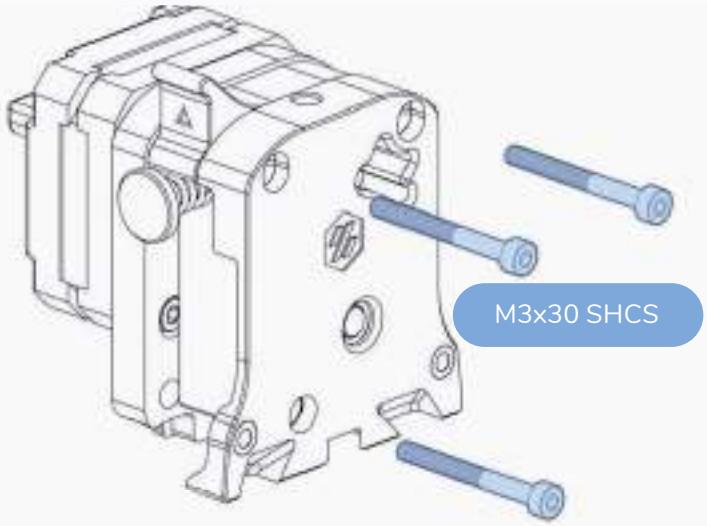

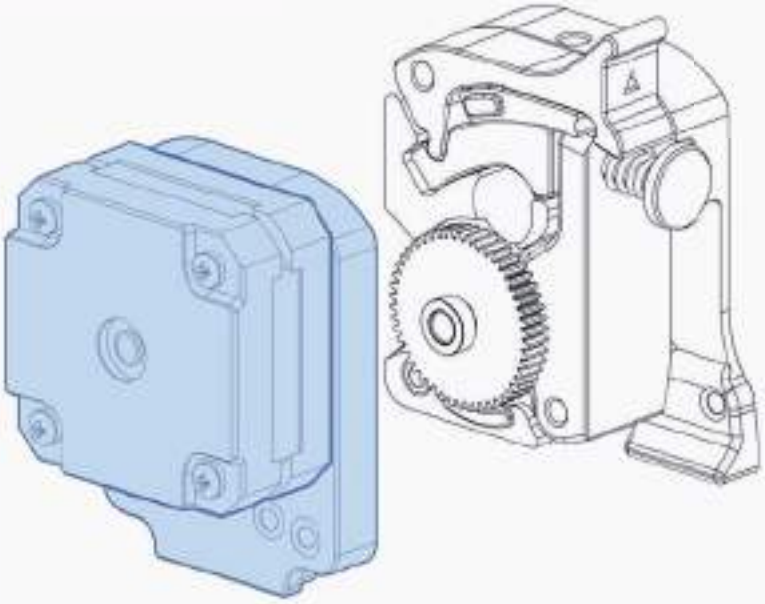

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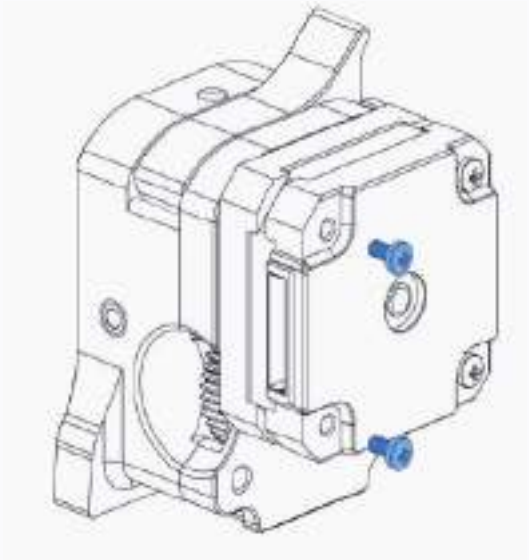

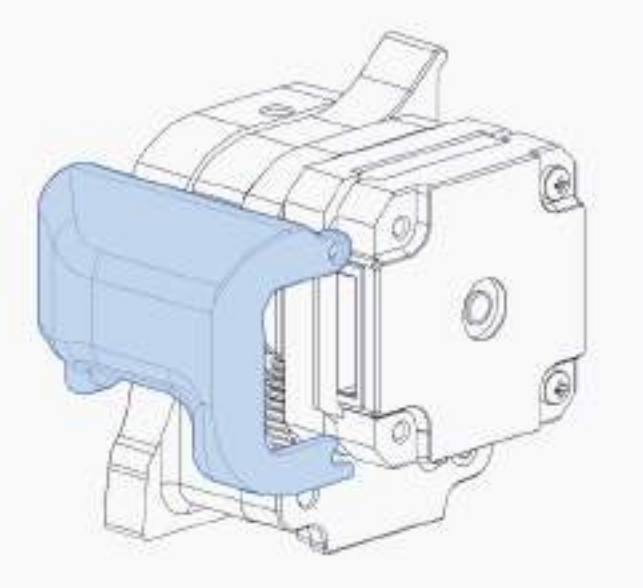

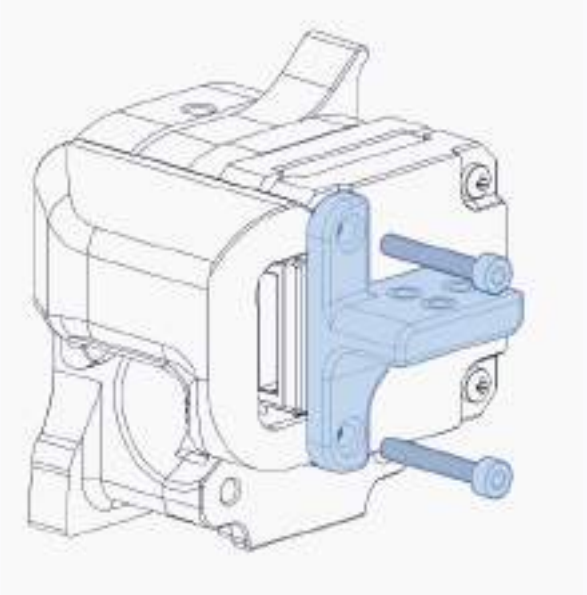

M3x20 SHCS

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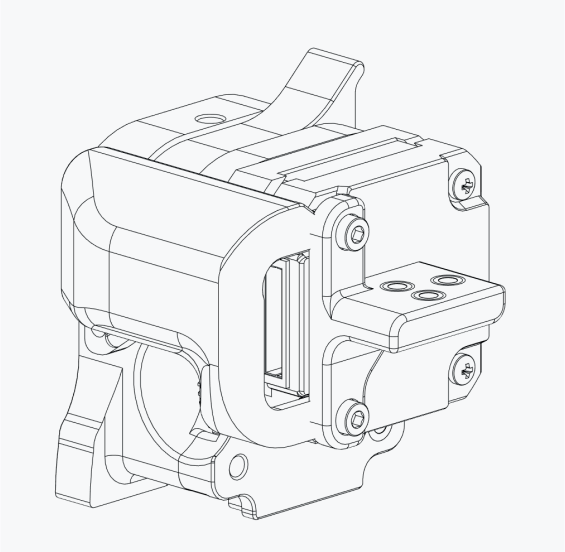

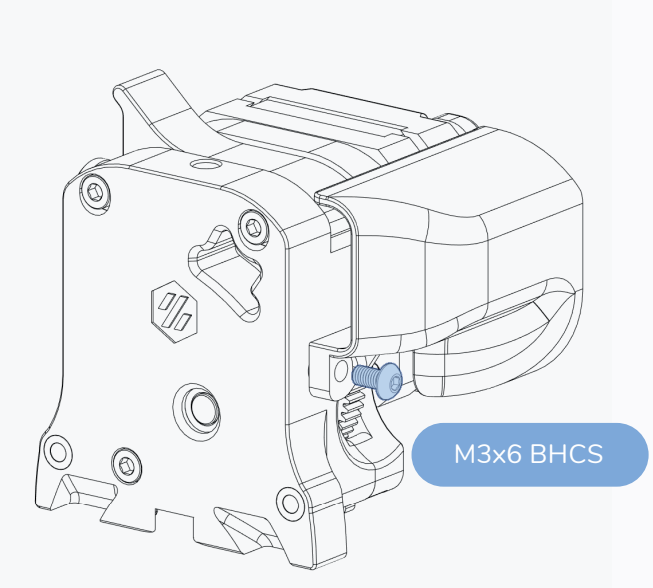

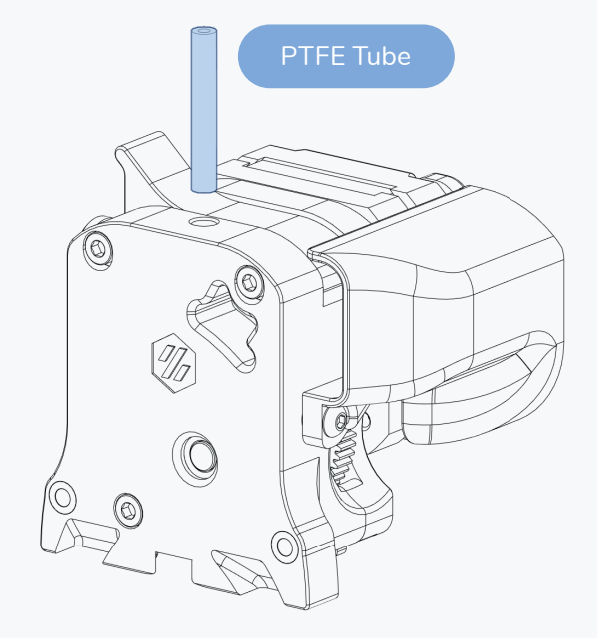

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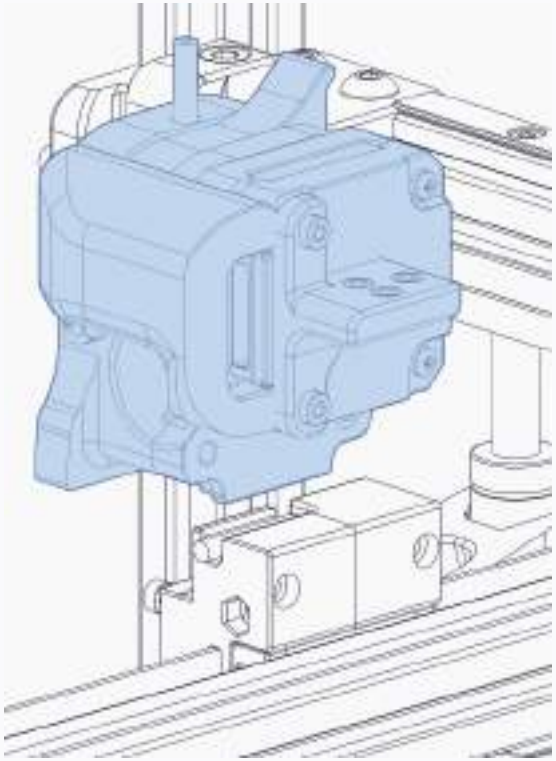
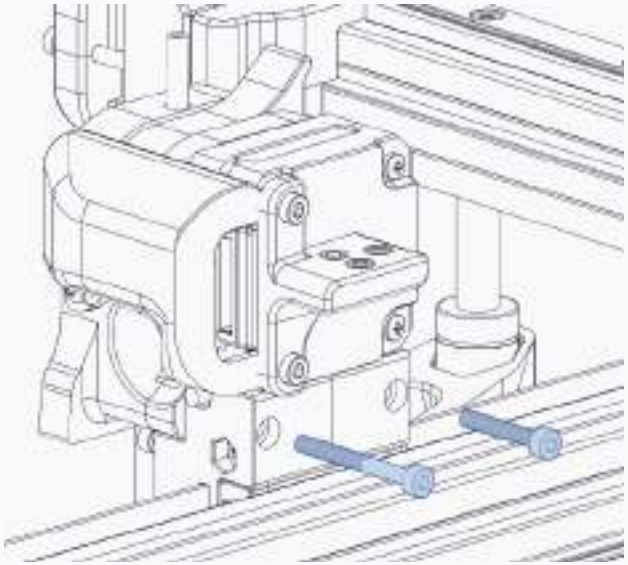
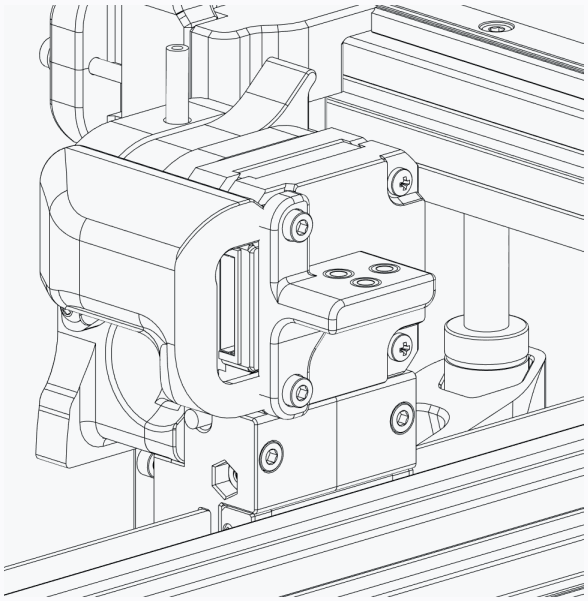




M3x30 SHCS

M3x20 SHCS



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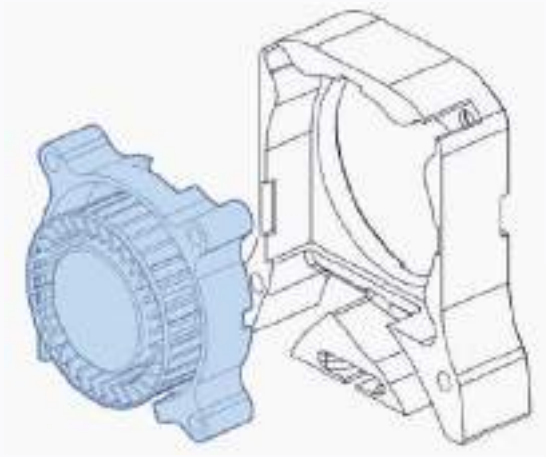
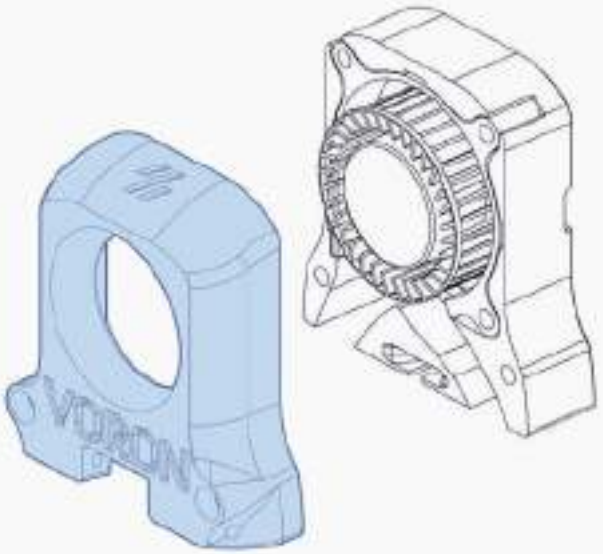


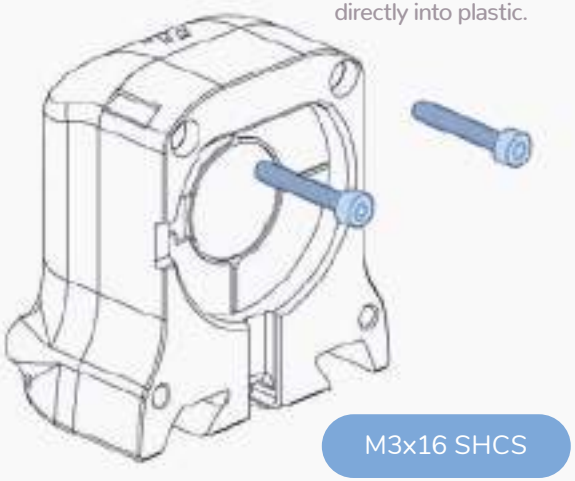
REMOVE TOP COVER

Split the fan open by bending the taps on the side.



DON'T OVER TIGHTEN

The screws are screwd directly into plastic.



M3x16 SHCS

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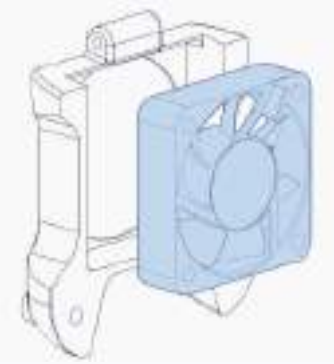

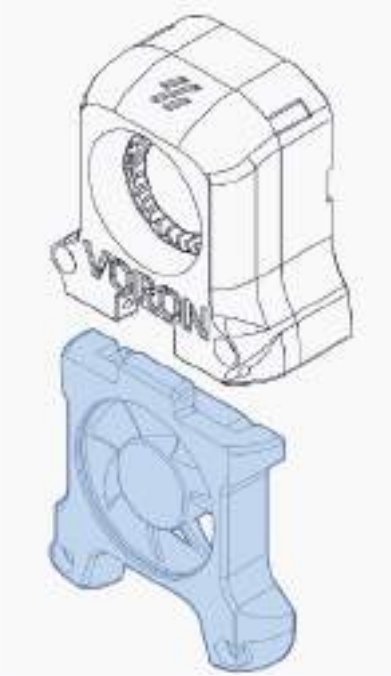

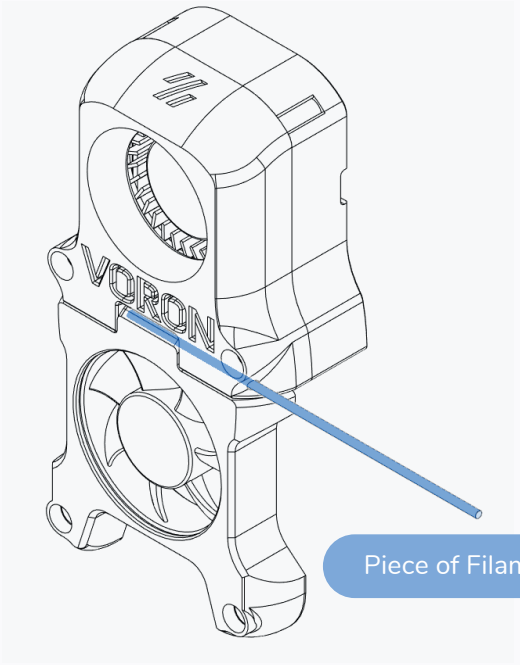

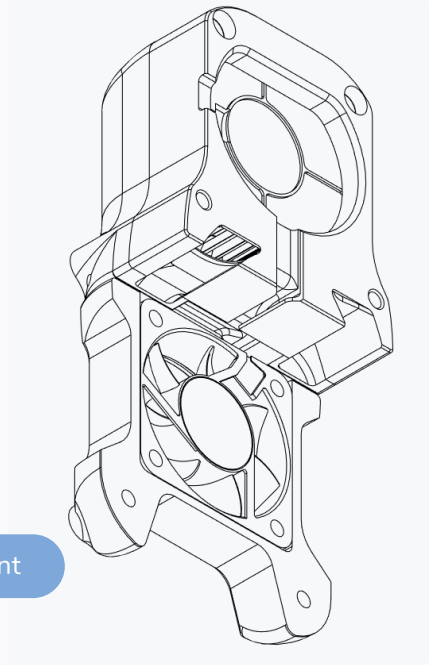

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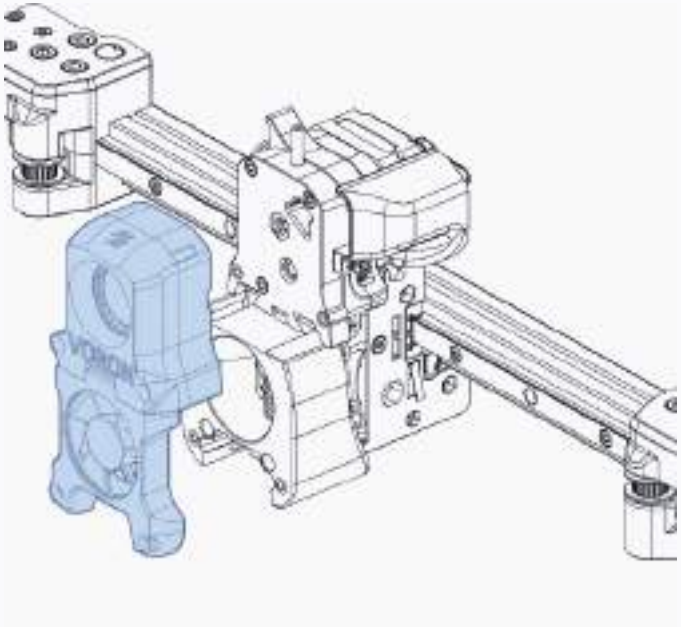

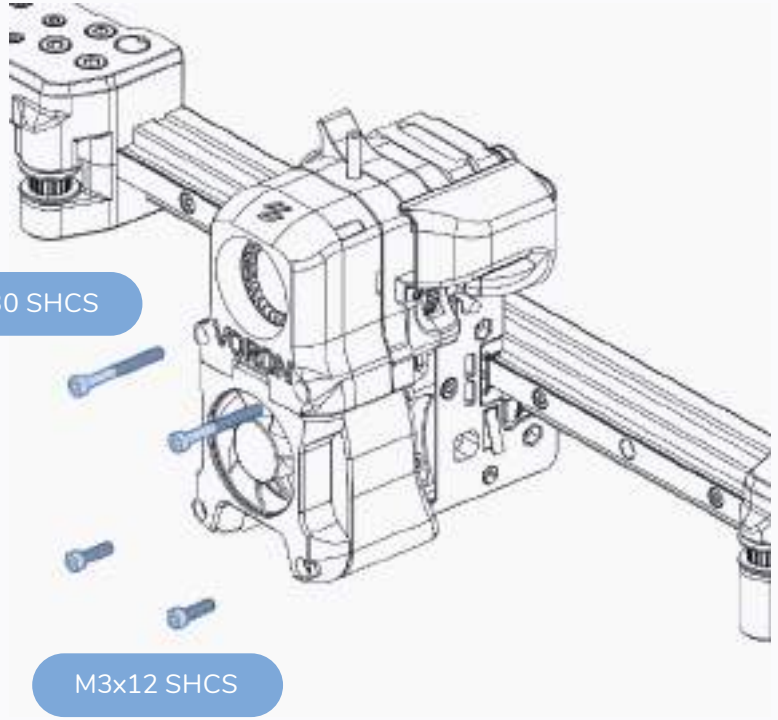

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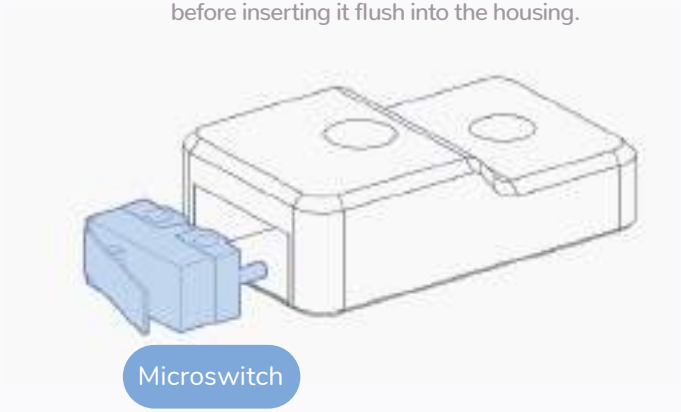
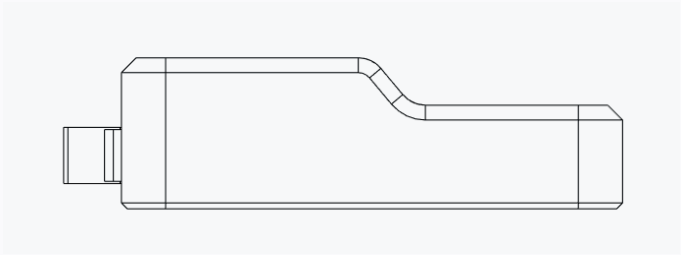
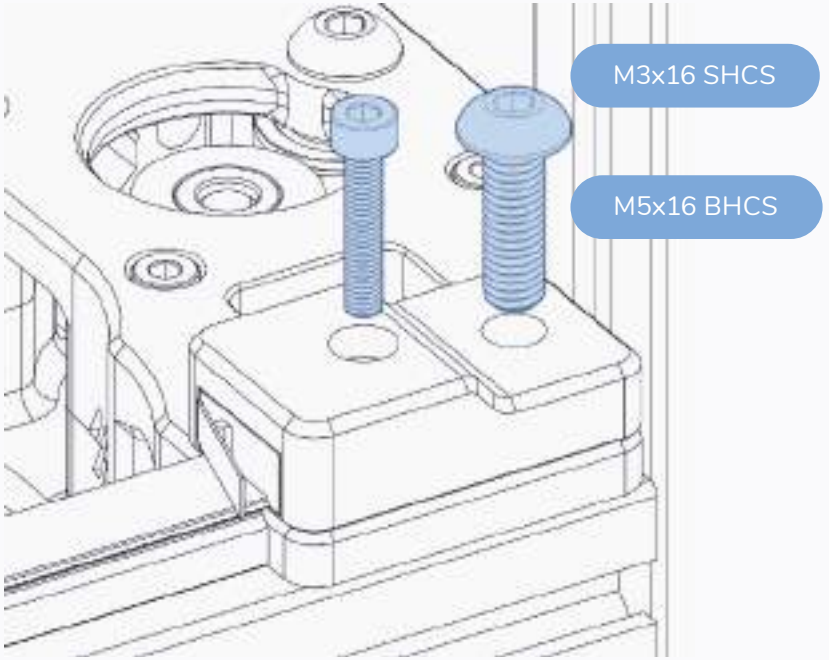
SOLDER WIRES

Solder 500mm of wire to the microswitch before inserting it flush into the housing.







PRELOADED NUTS

The nuts have been installed several chapters before.

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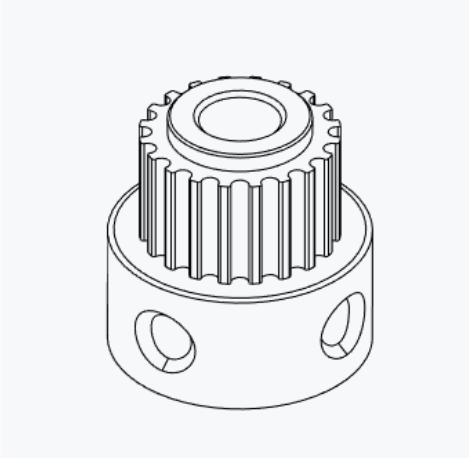
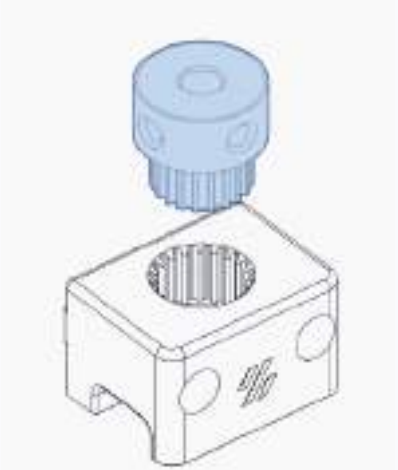
GT2 Pulley



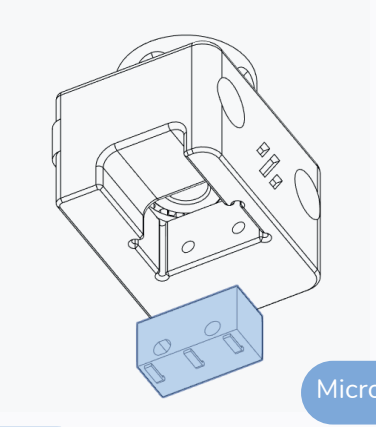
REMOVE FLANGE & GRUB SCREWS

Use a bottle opener or some pliers to remove the top flange.
Remove the grub screws from the pulley.



PRESS FIT

Apply the required force to fully seat the pulley in the printed part.

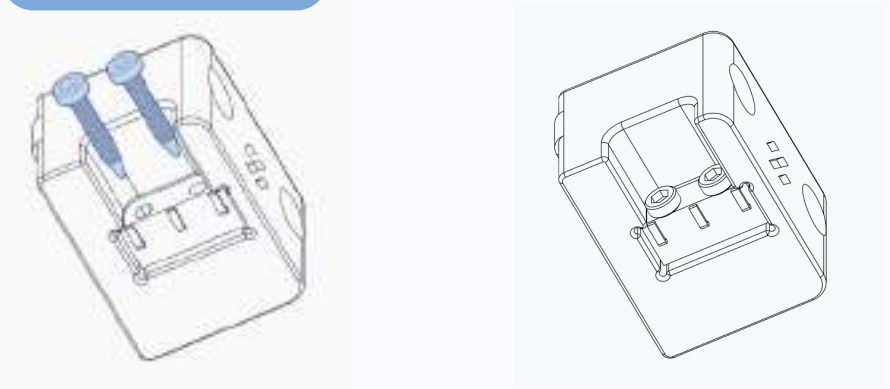


SOLDER WIRES

Solder 100mm of wire to the microswitch before inserting it into the housing.

Microswitch

M2x10 Self Tapping



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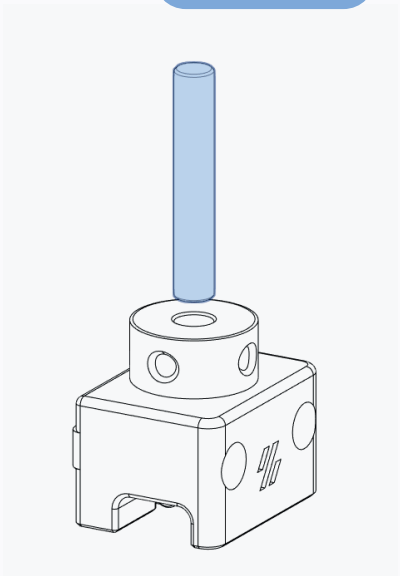
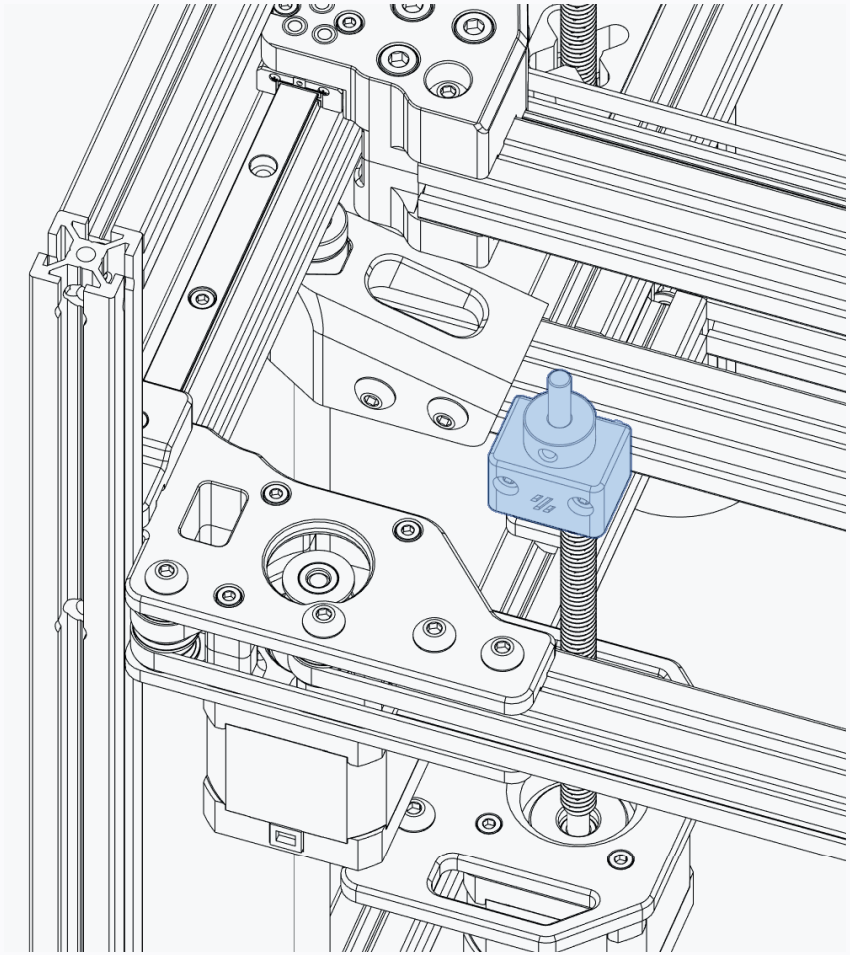
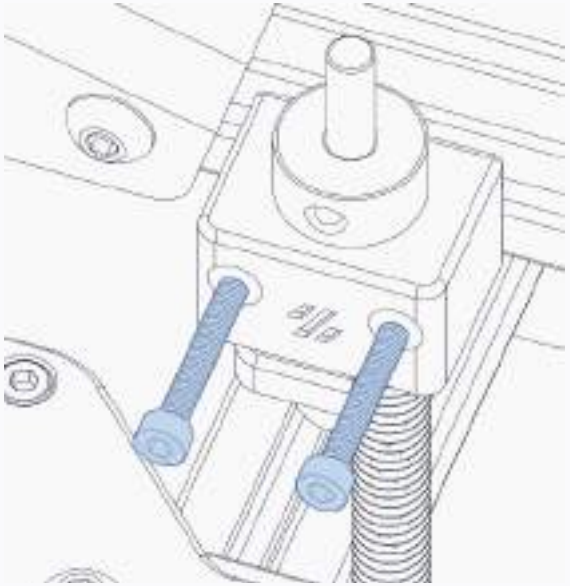
5mm Shaft







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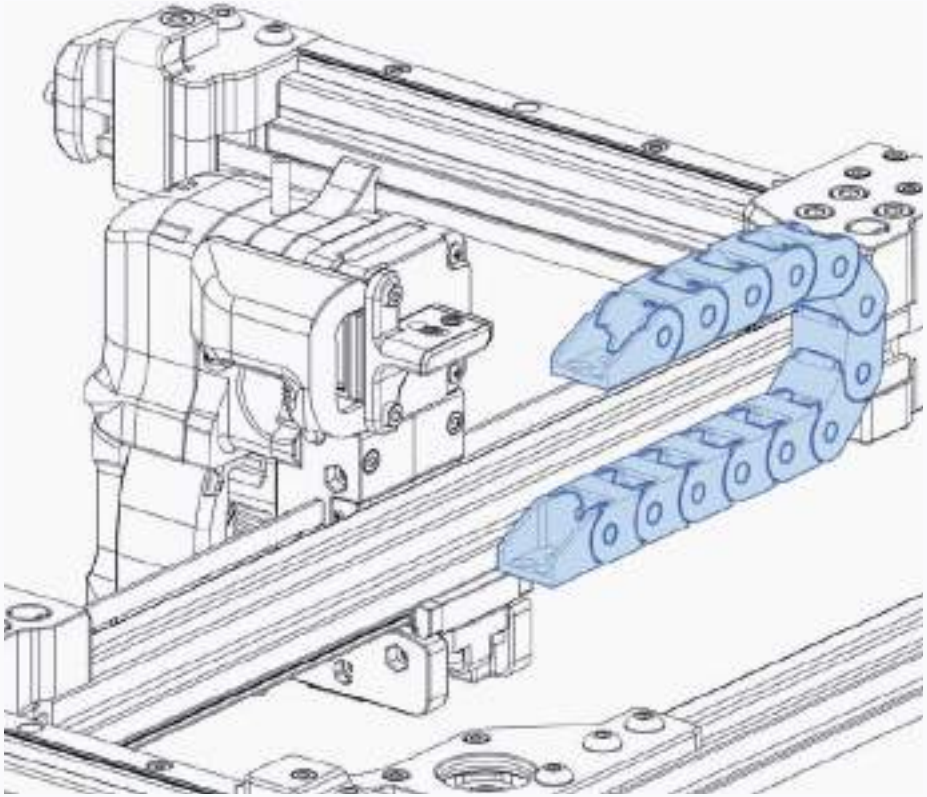
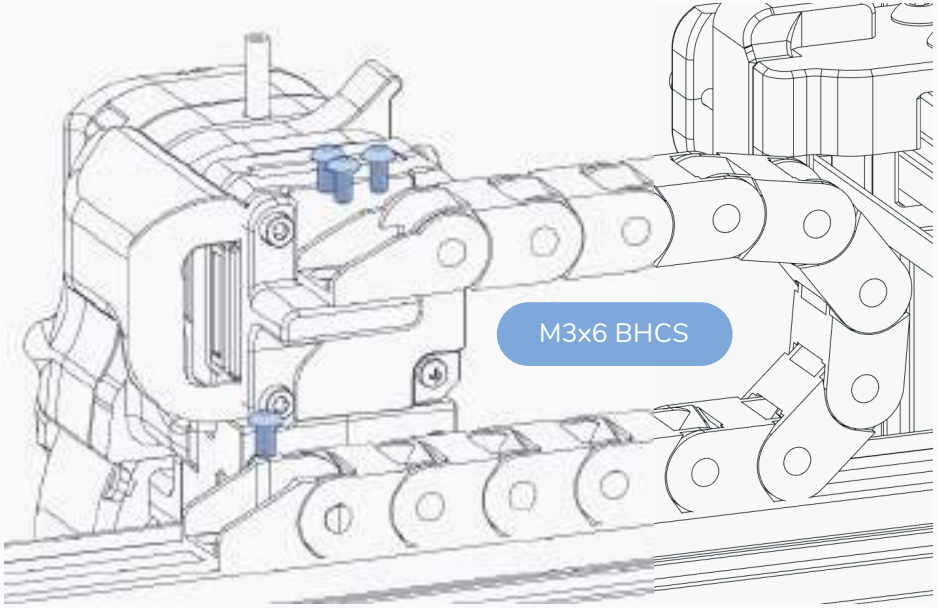


FIXED END VS. FREE END

Some cable chains only have one end that is able to swing freely. Use this end on the back of the Afterburner.



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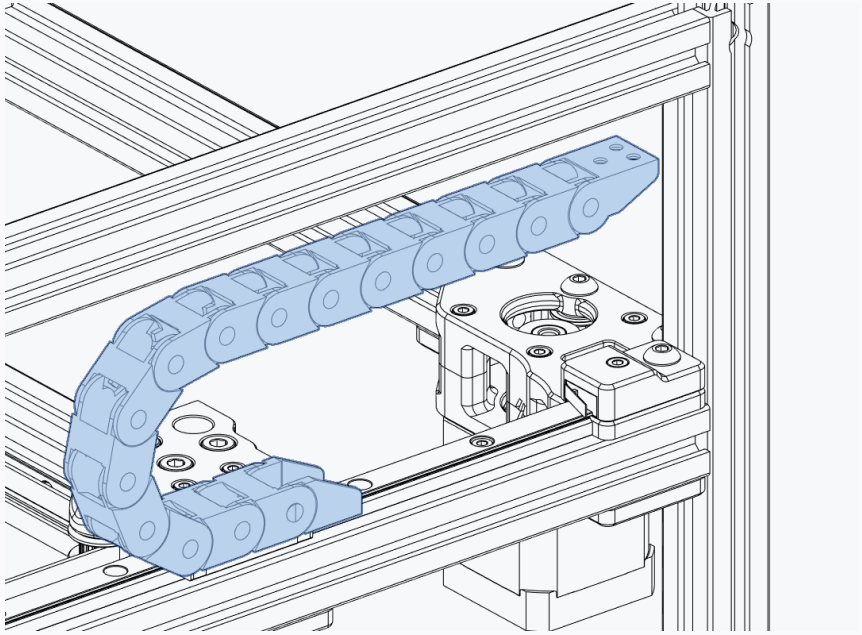
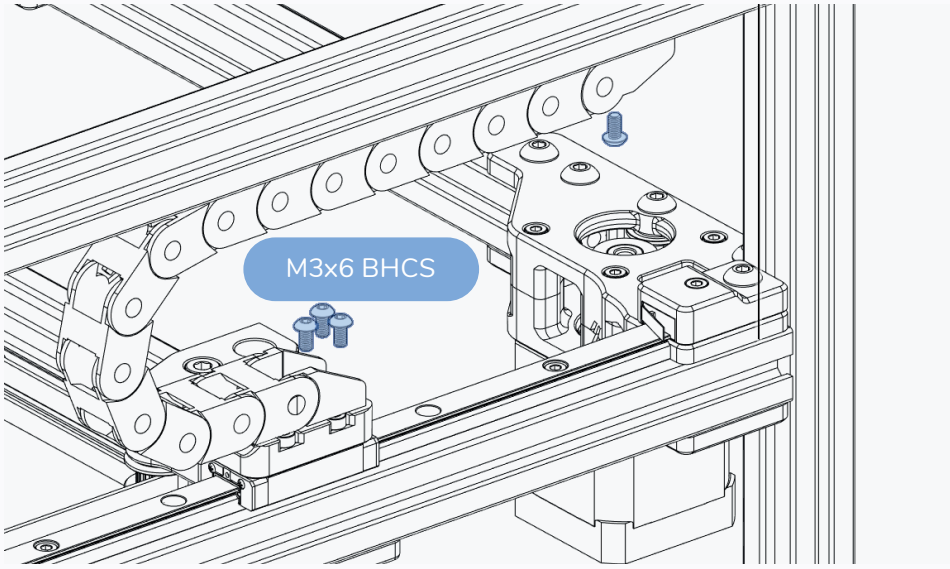


FIXED END VS. FREE END

If you cable chain as a fixed and use this end on the XY joint.



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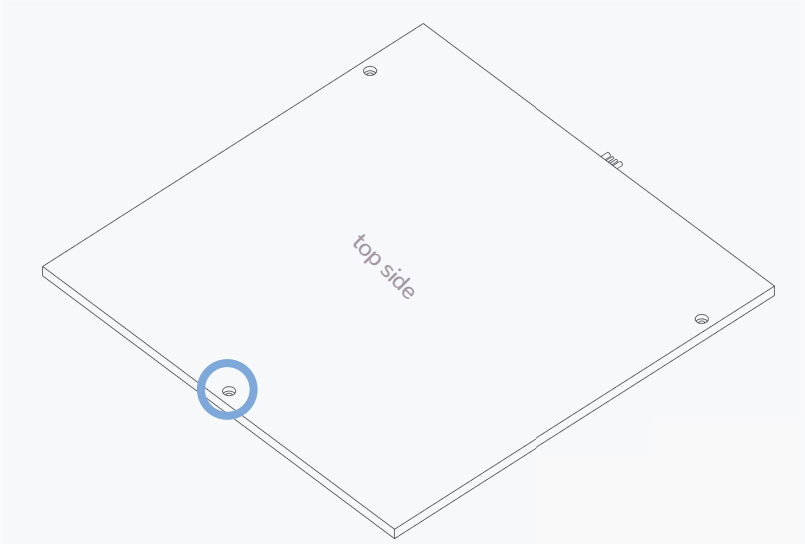
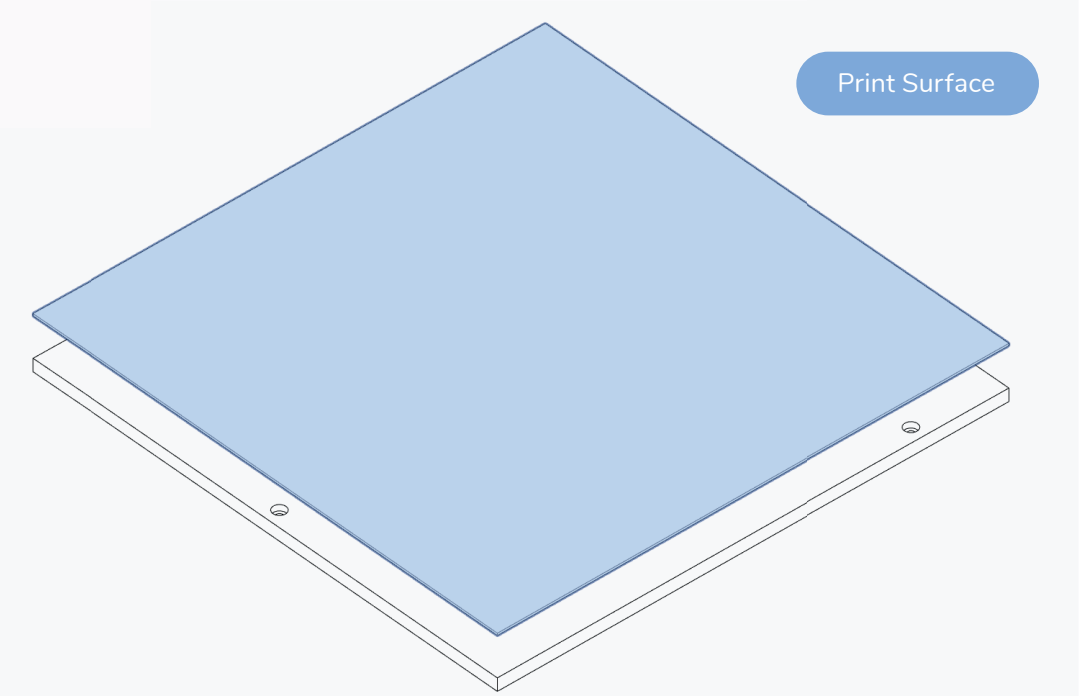




PRINT SURFACE

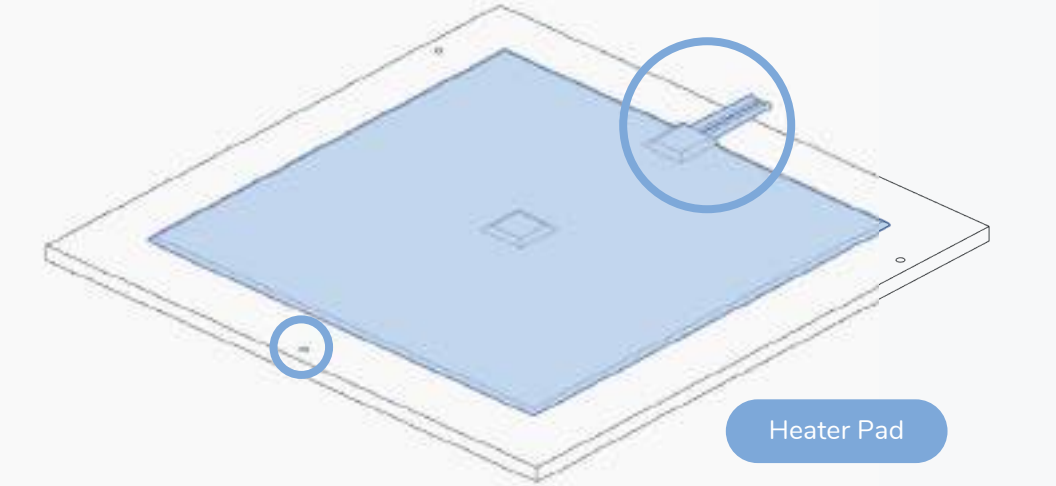
The print surface can be applied directly to the print bed or alternatively a magnet based removable system can be used.

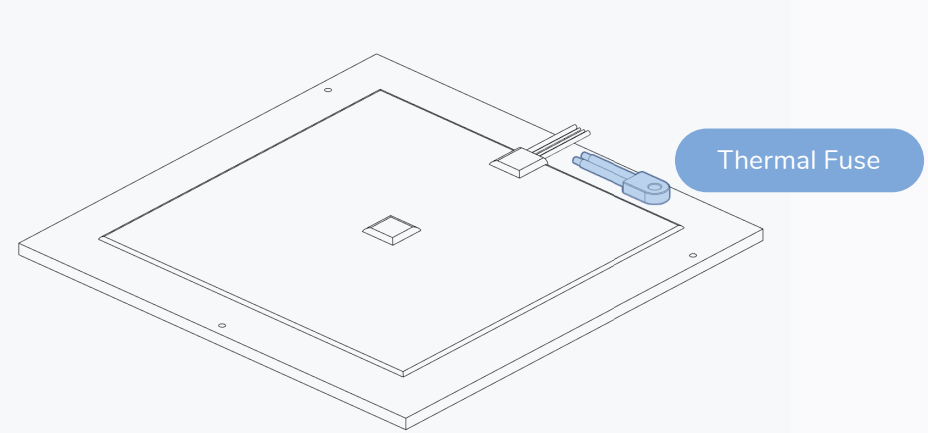
A removable surface is recommended. Preinstalling the screws is possible but not recommended as those will interfere with the heater application.

Read/watch a guide about the proper application if you are unsure.

HEATER APPLICATION

Attach the heater to the bottom of the plate with wires facing away from the center hole.
Read/watch a guide on heater installation if you are unsure about the procedure.





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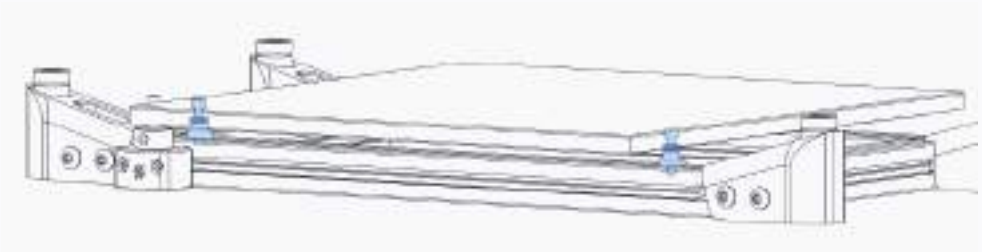
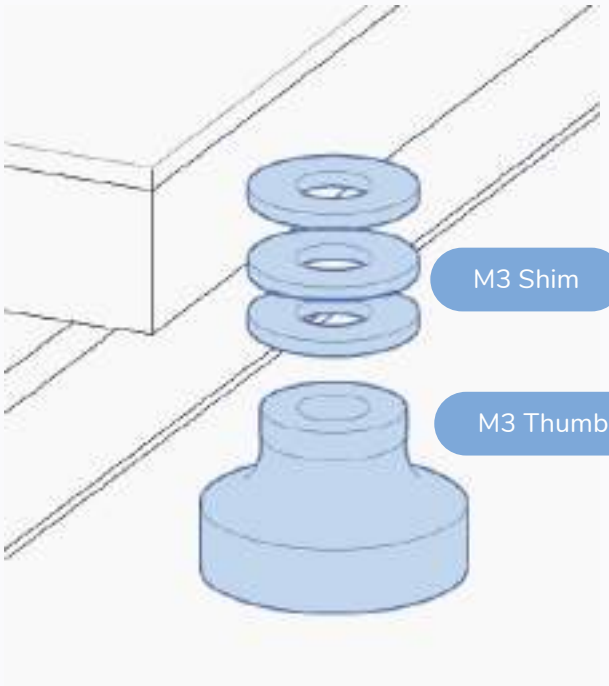
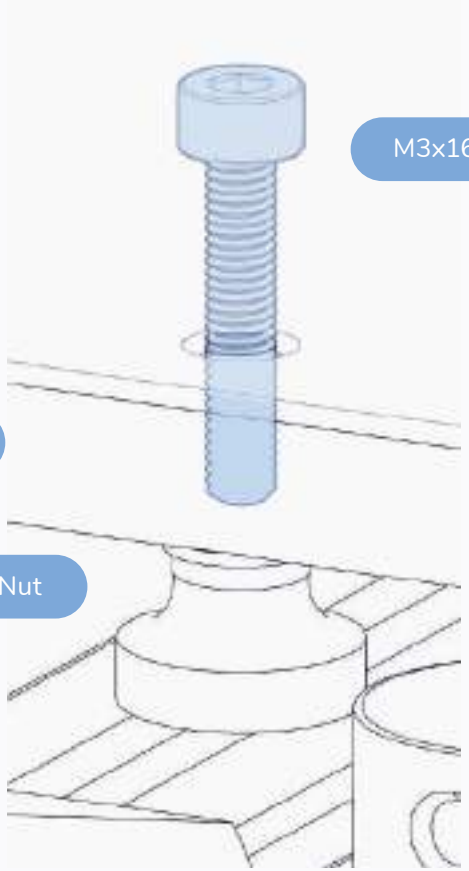


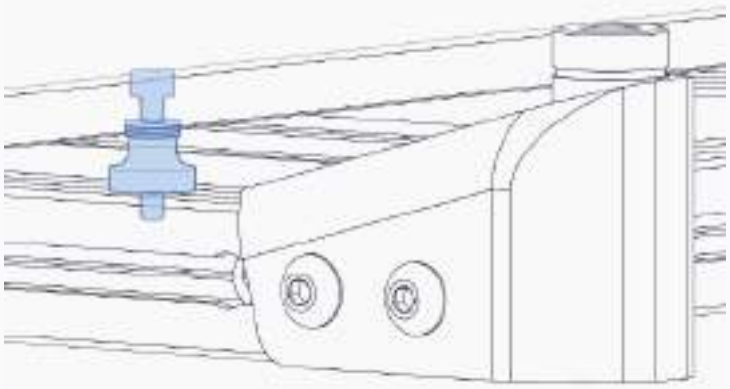
SCREW ACCESS HOLES

Cut holes for the screws.





REPEAT FOR SECOND MOUNT



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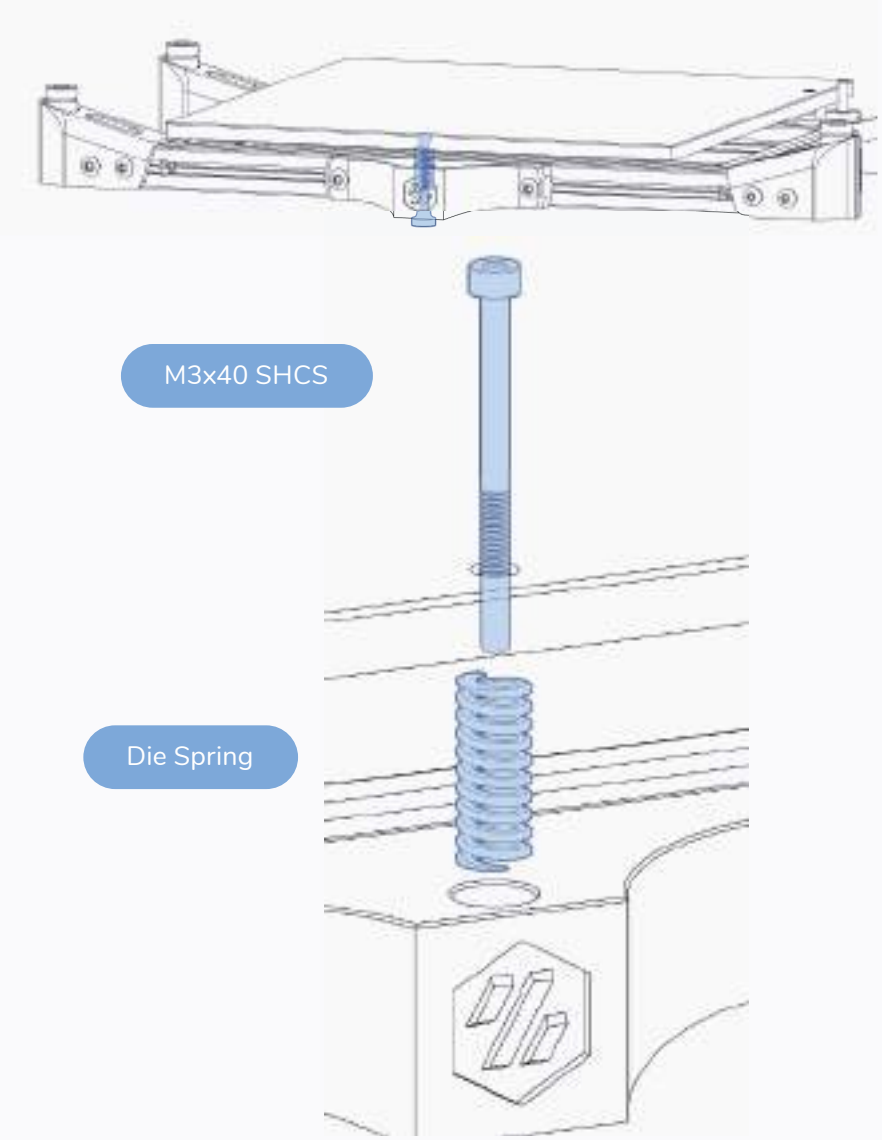

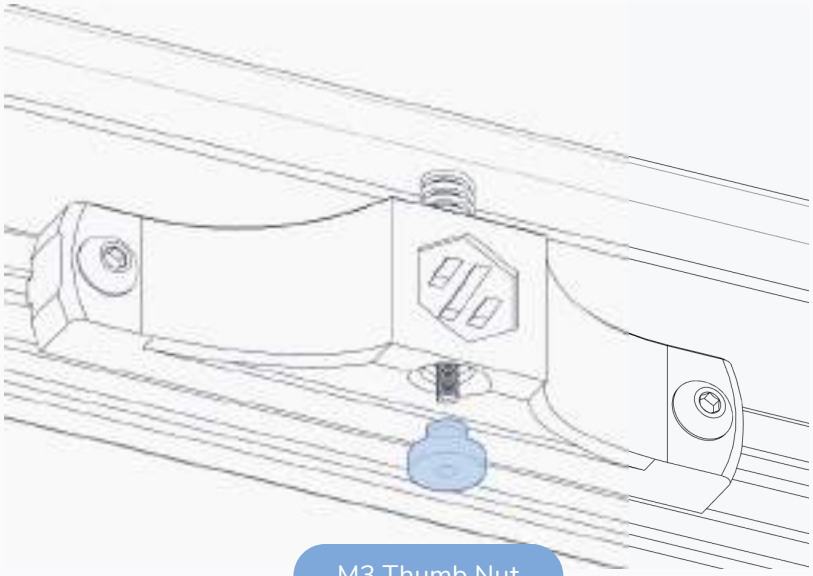

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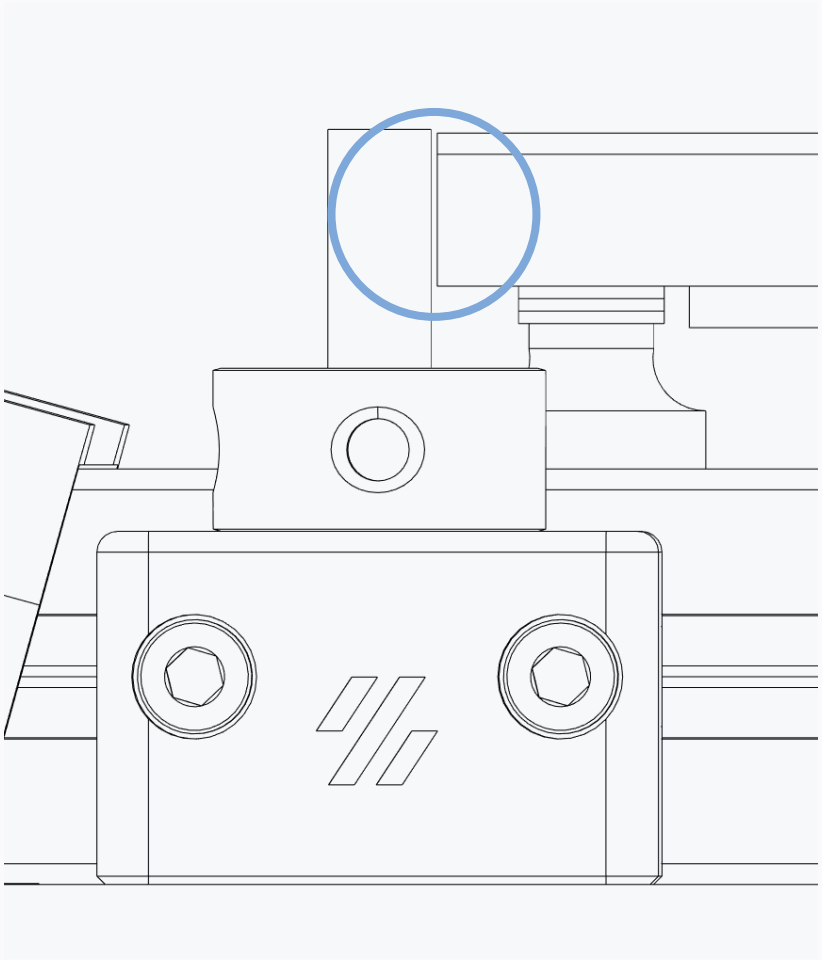

ADJUST Z ENDSTOP POSITION

The shaft of the Z Endstop must not touch the print bed.
Adjust the position if required.

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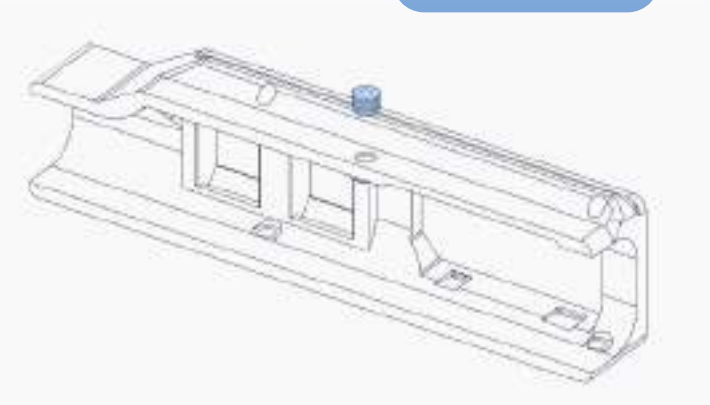
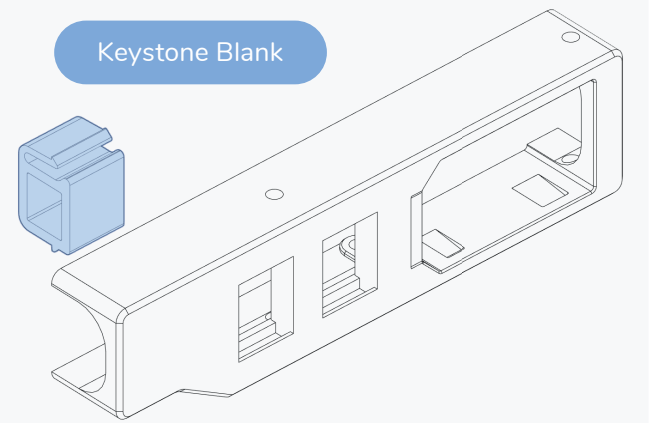
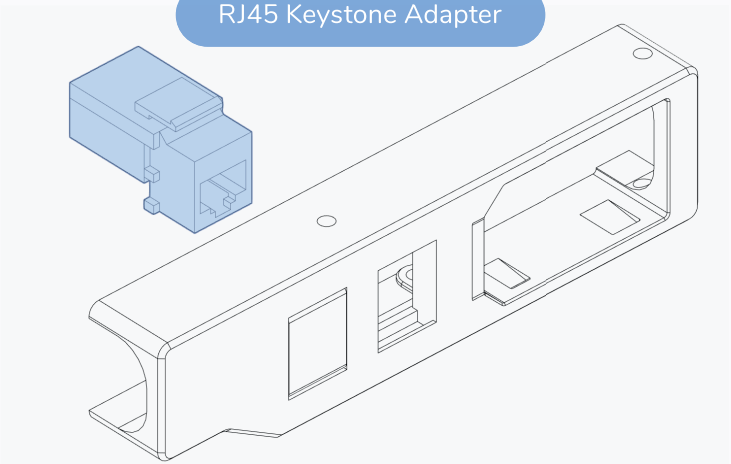
Heat Set Insert

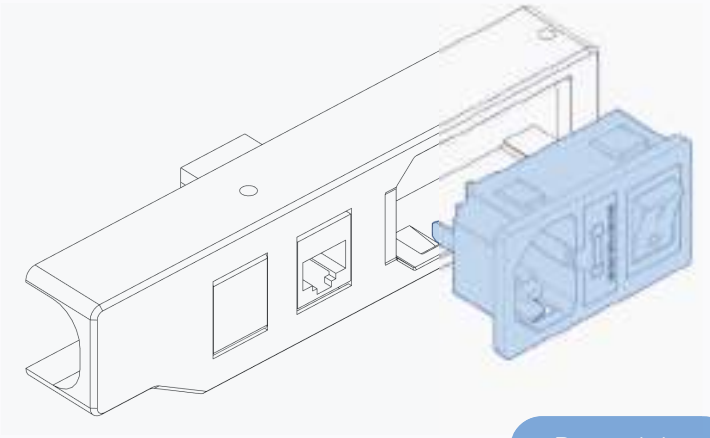


Keystone Blank



RJ45 Keystone Adapter





Power Inlet

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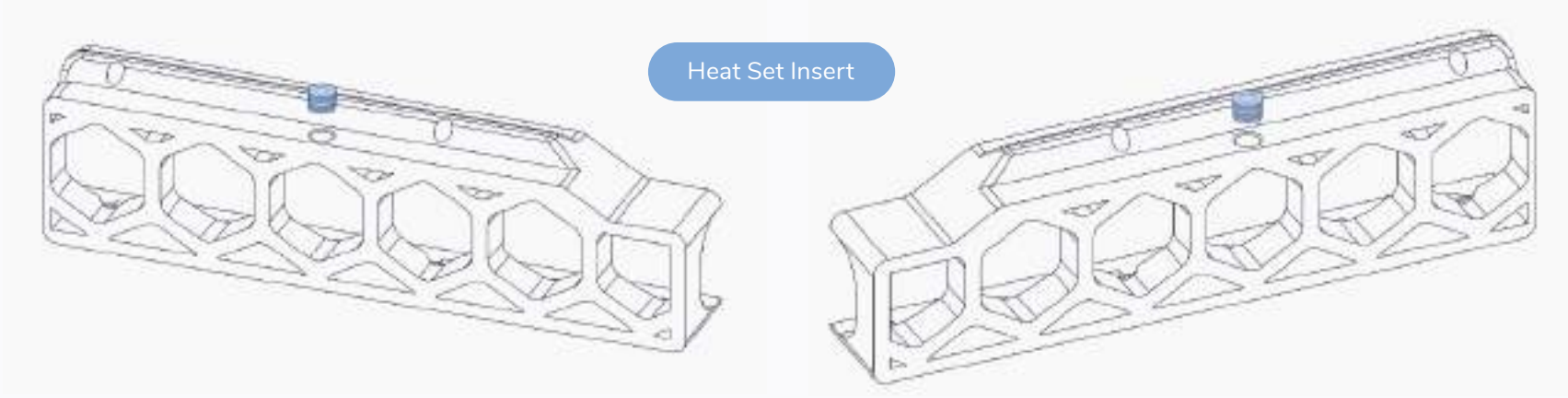

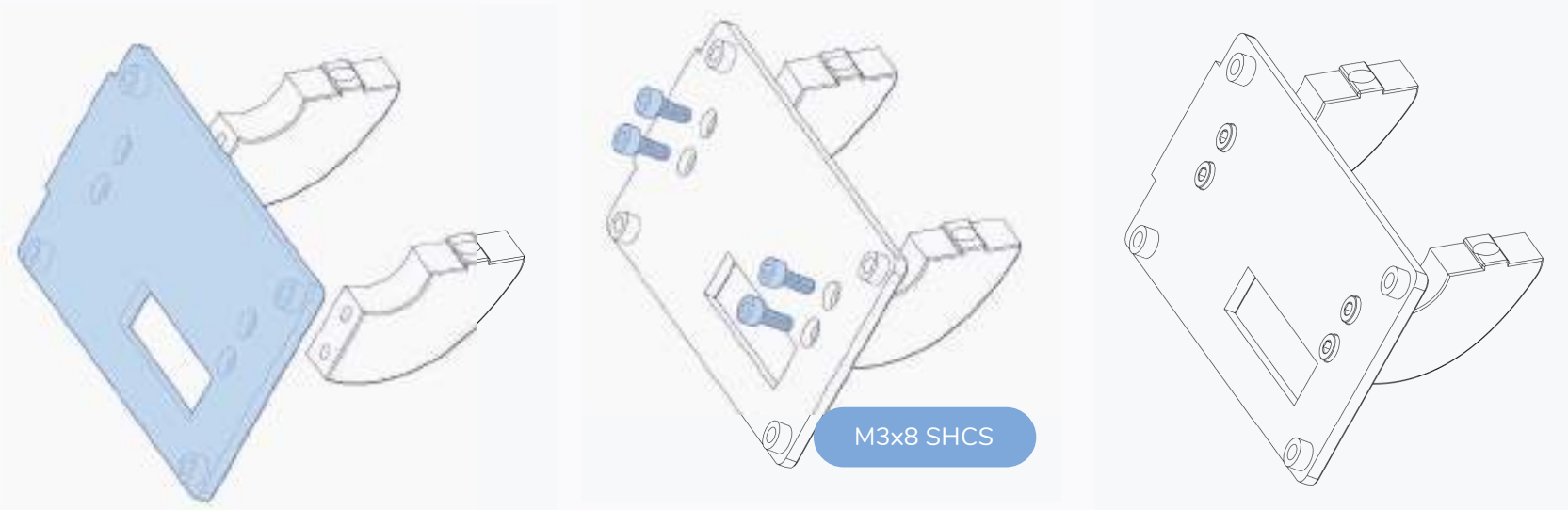

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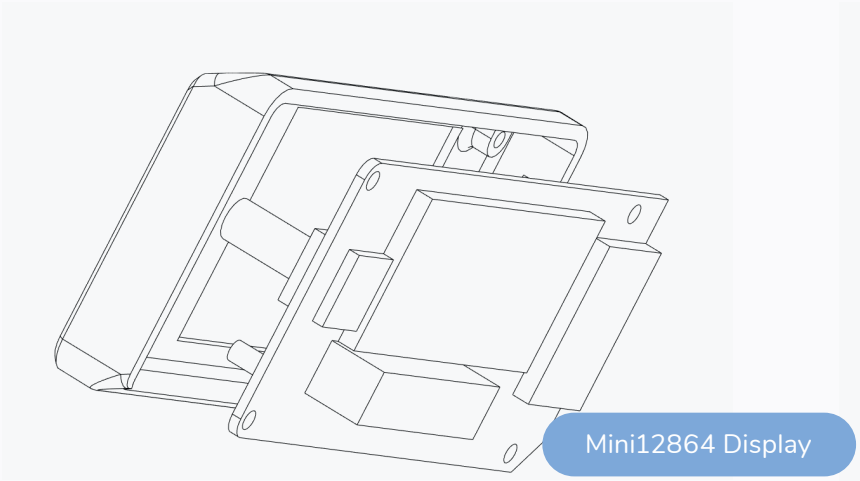
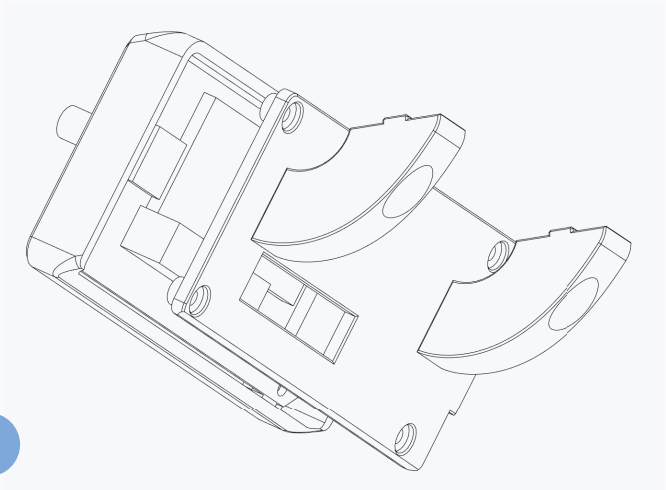
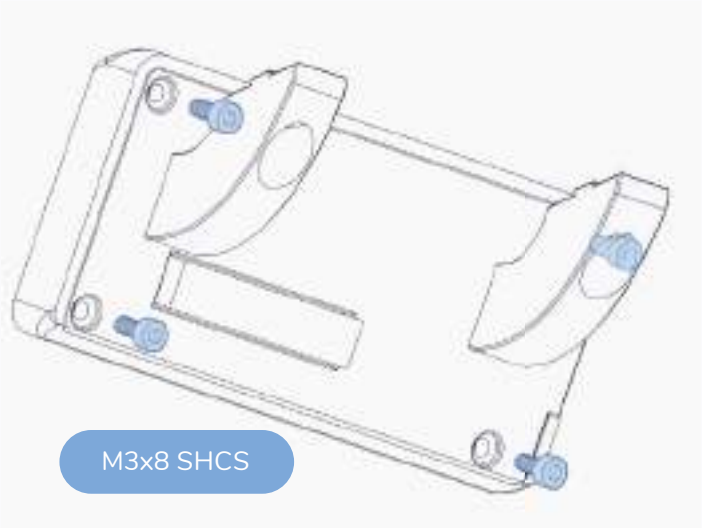


Mini12864 Display





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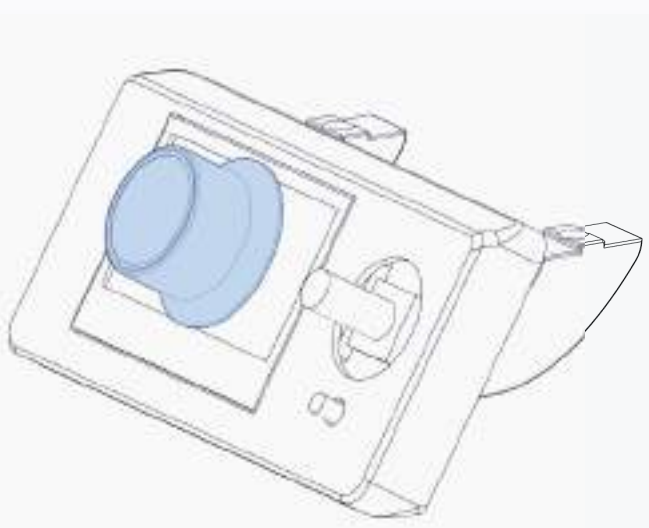

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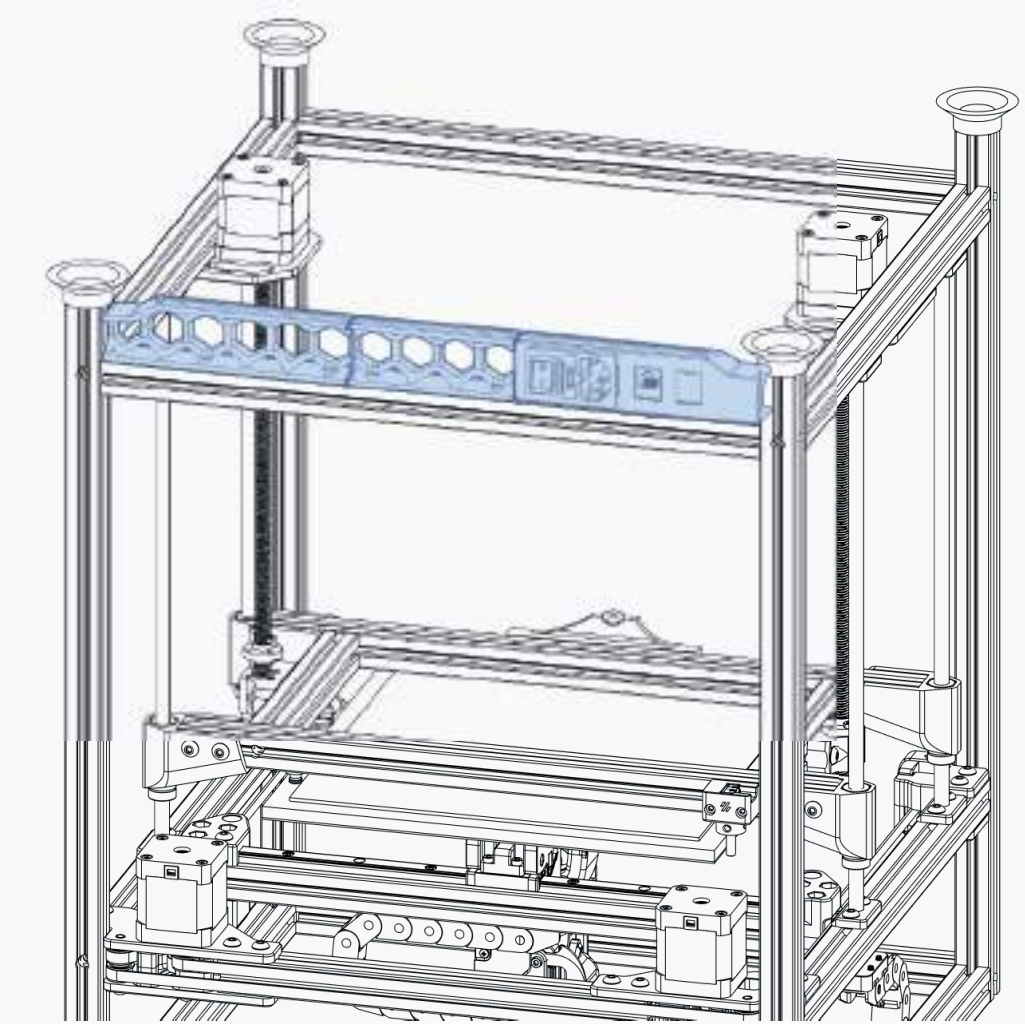

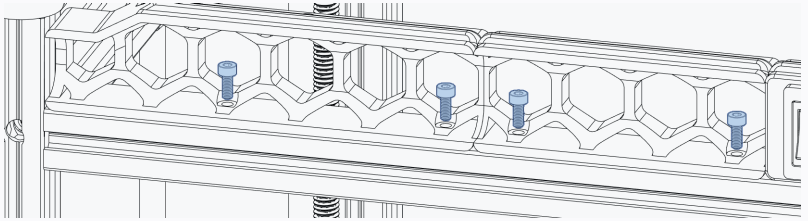

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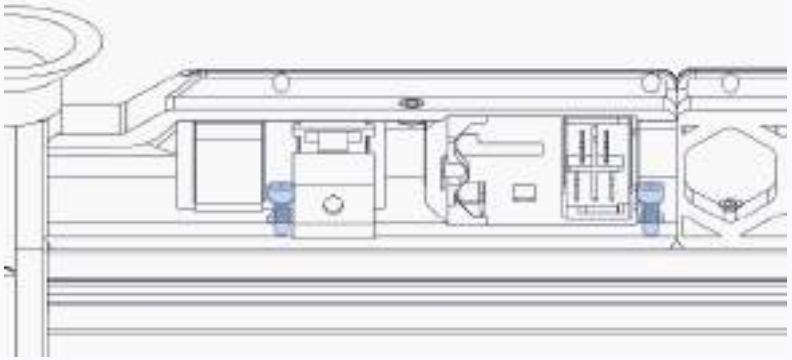

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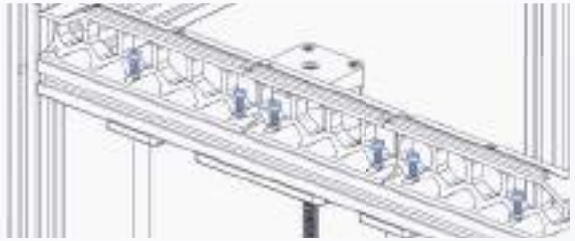

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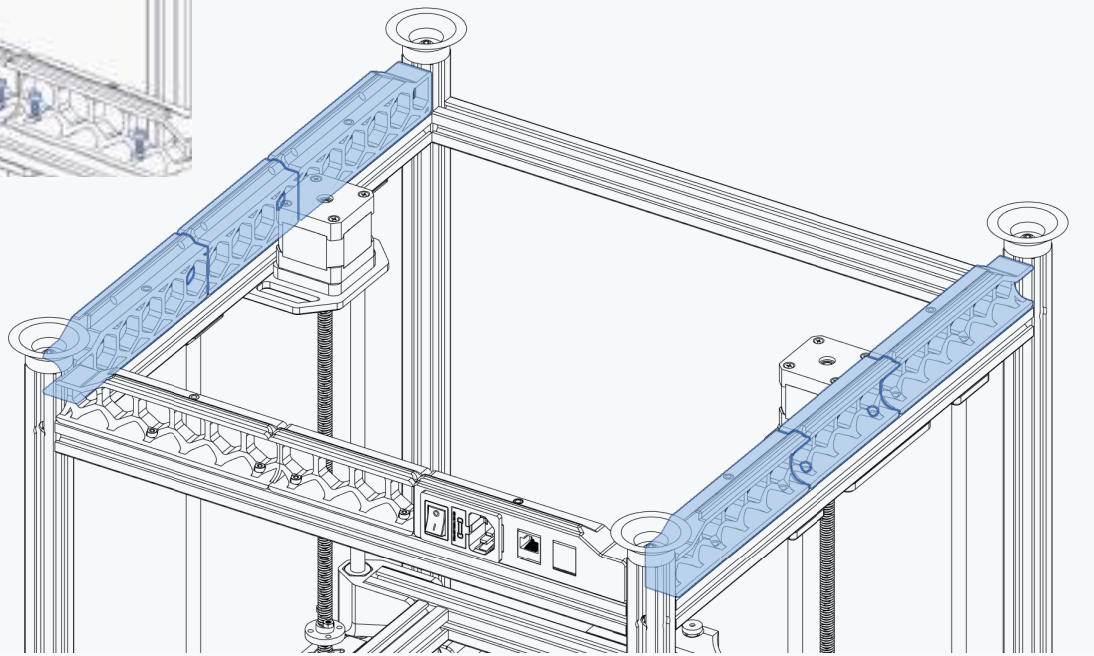

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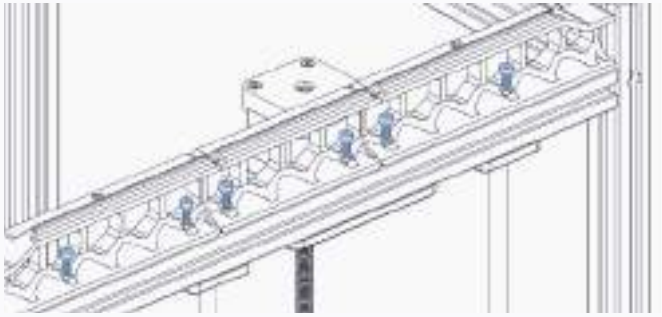

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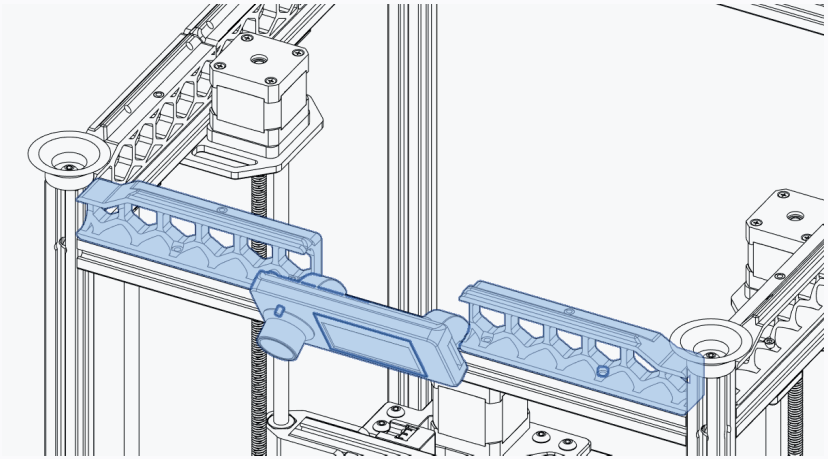

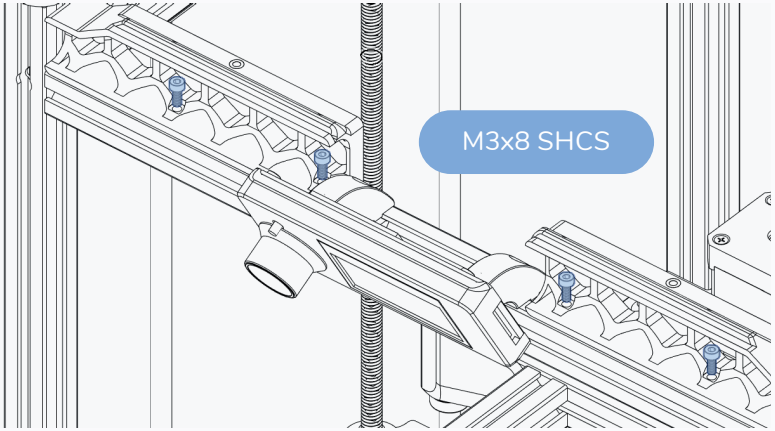

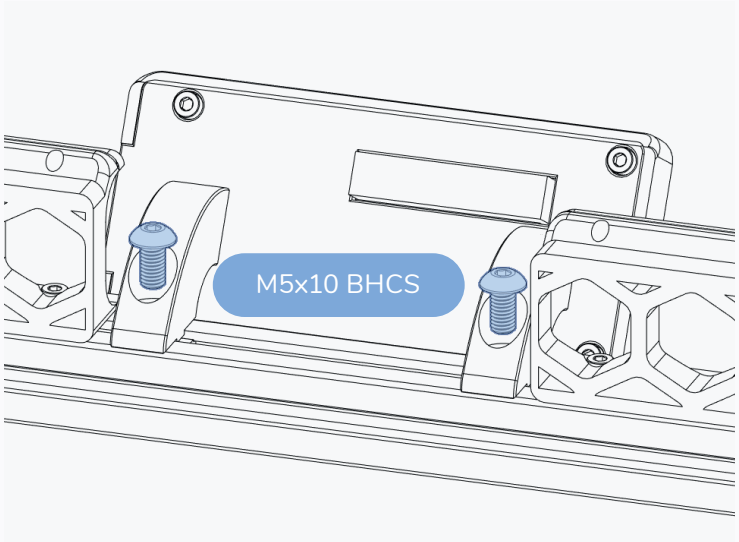

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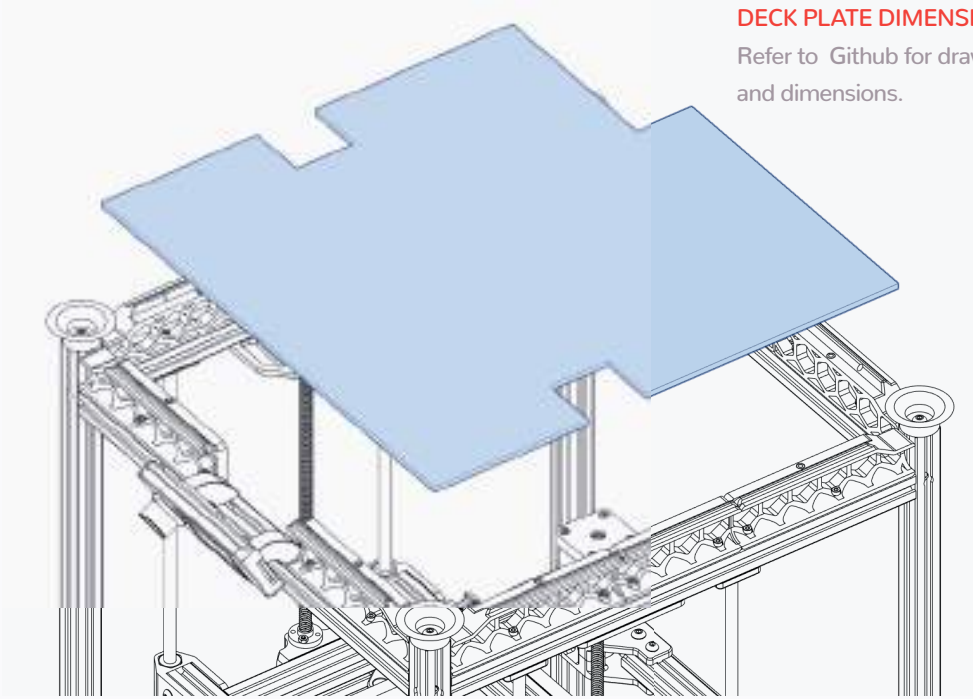

DECK PLATE DIMENSIONS

Refer to Github for drawings and dimensions.

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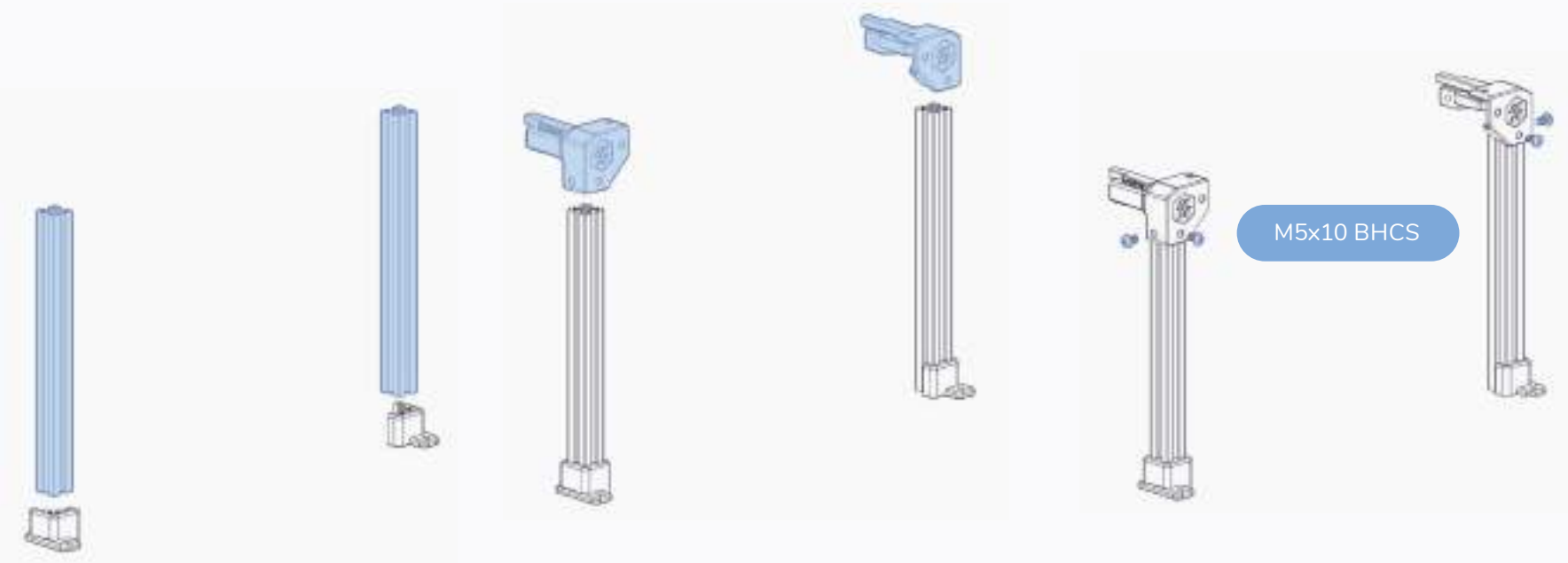

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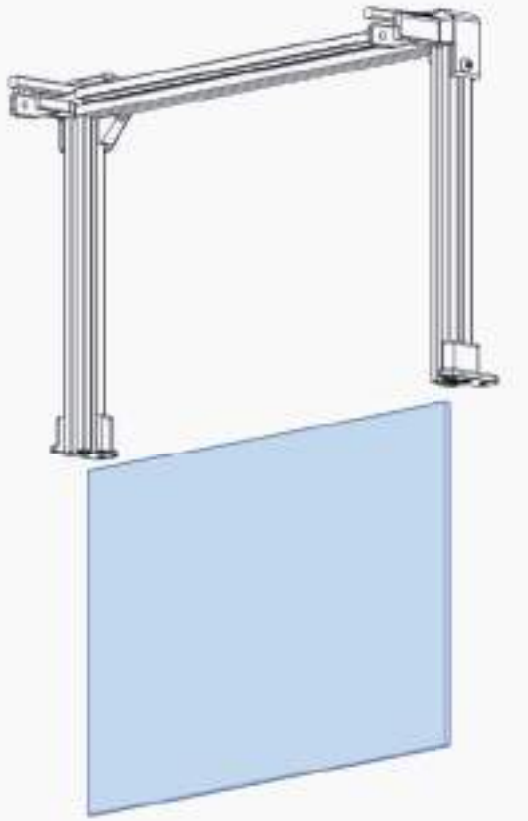

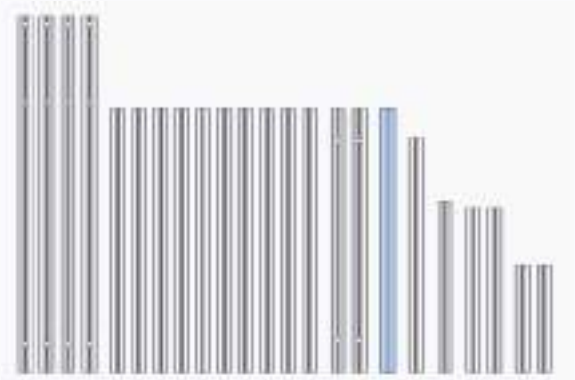

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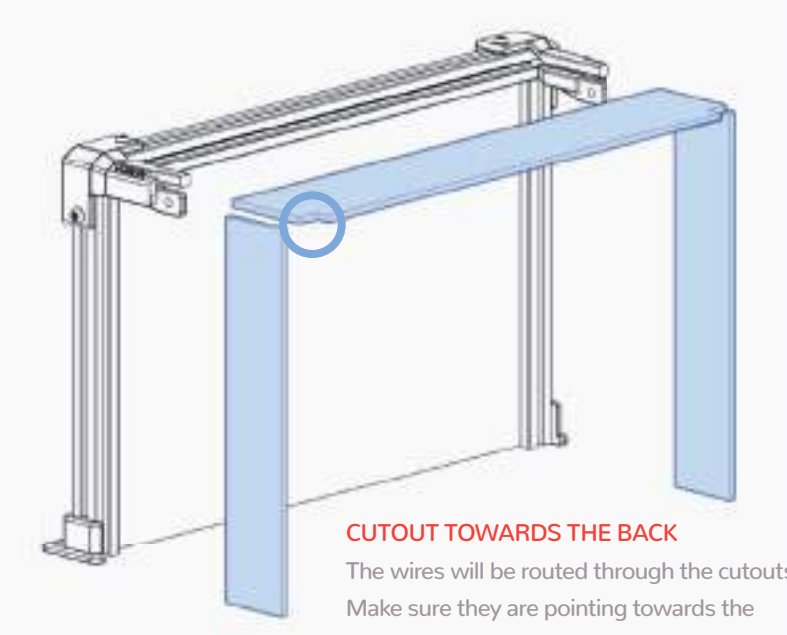
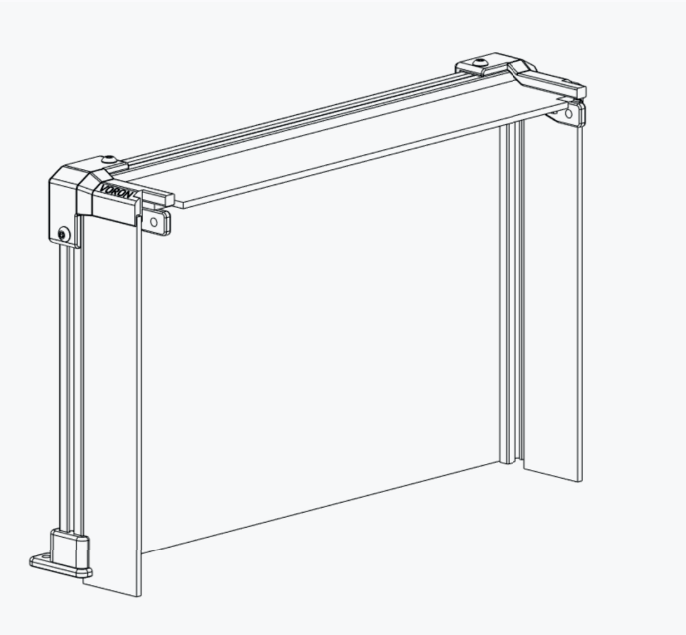


CUTOUT TOWARDS THE BACK

The wires will be routed through the cutouts. Make sure they are pointing towards the back of the printer.



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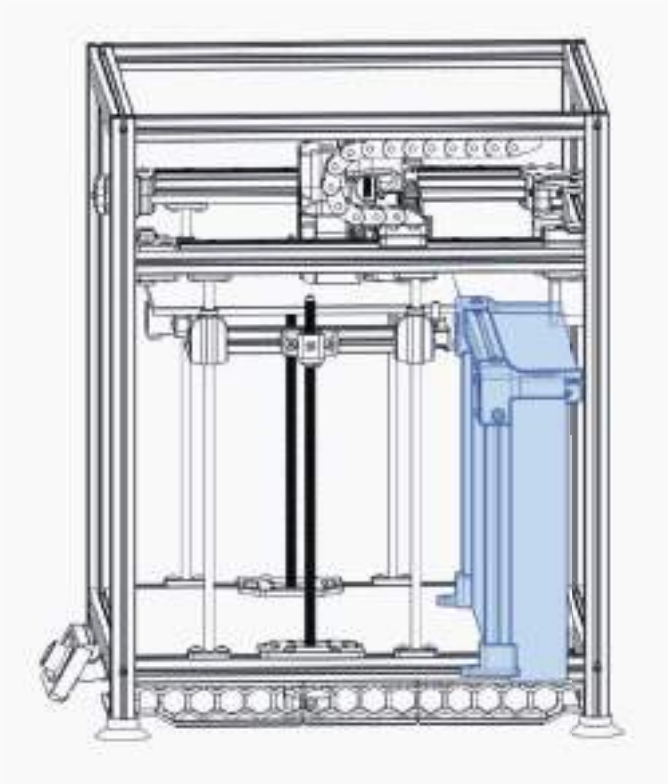

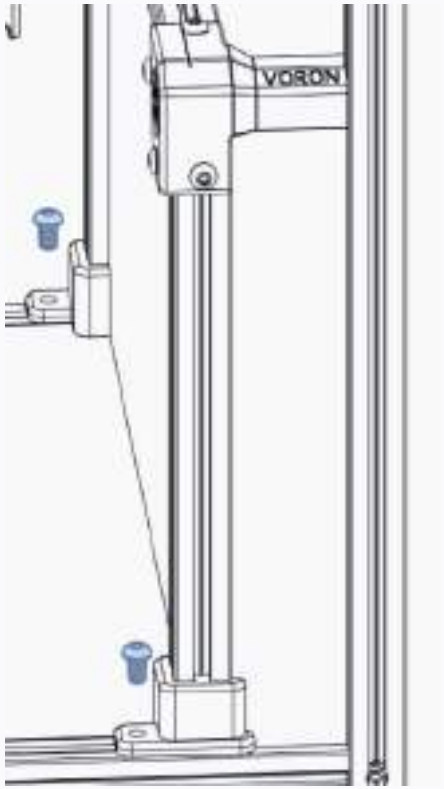

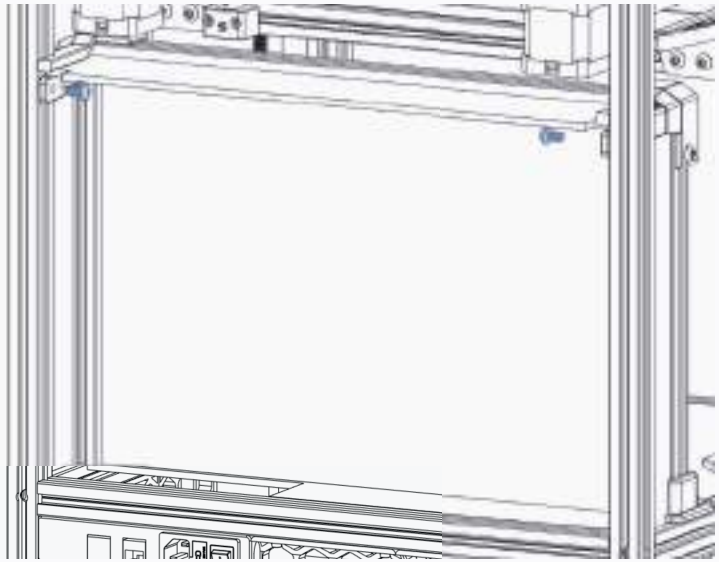

M5x10 BHCS

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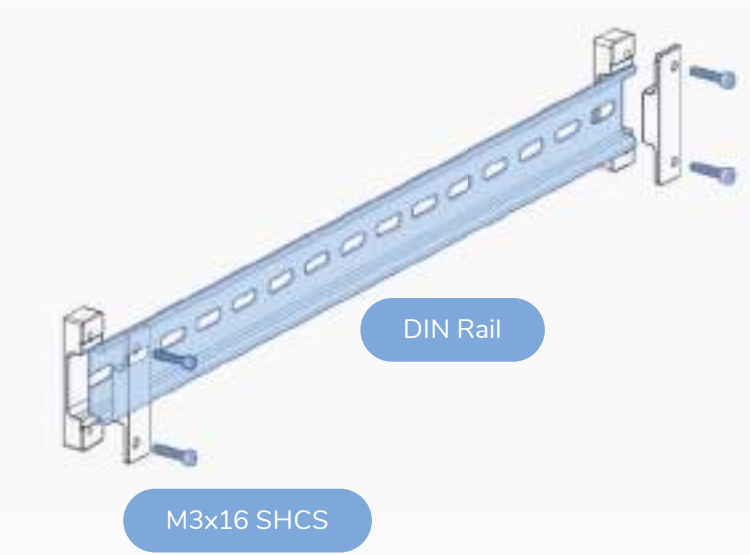

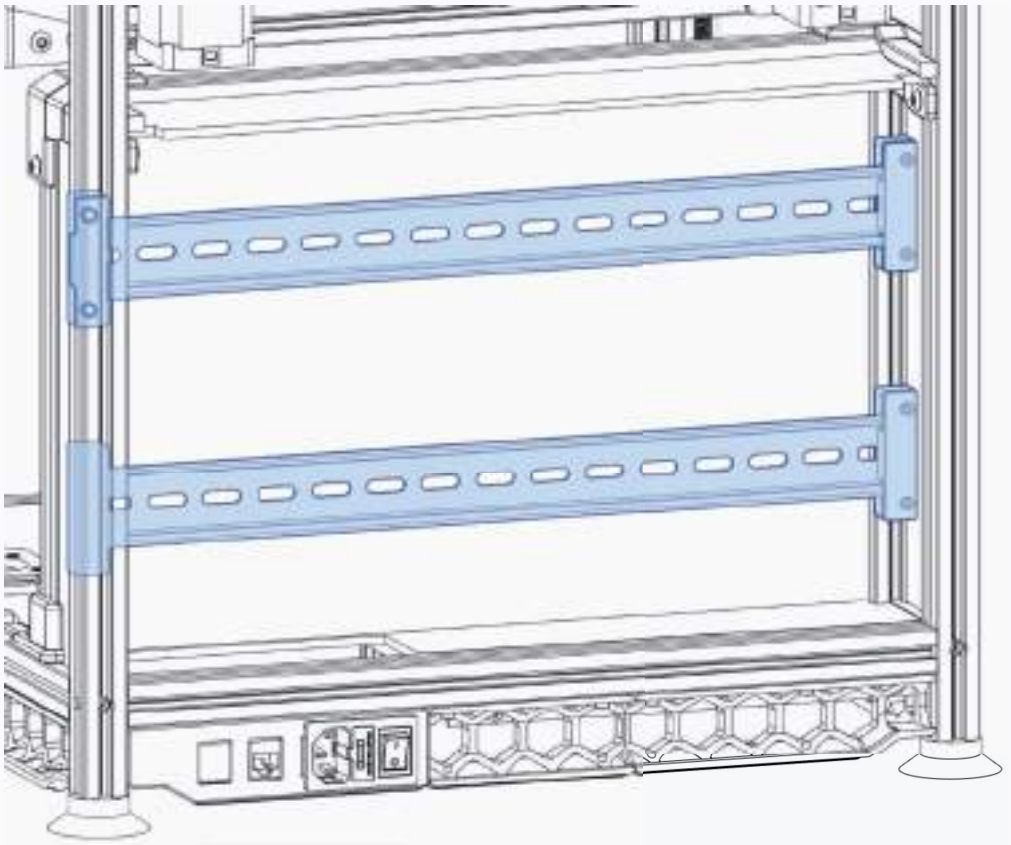

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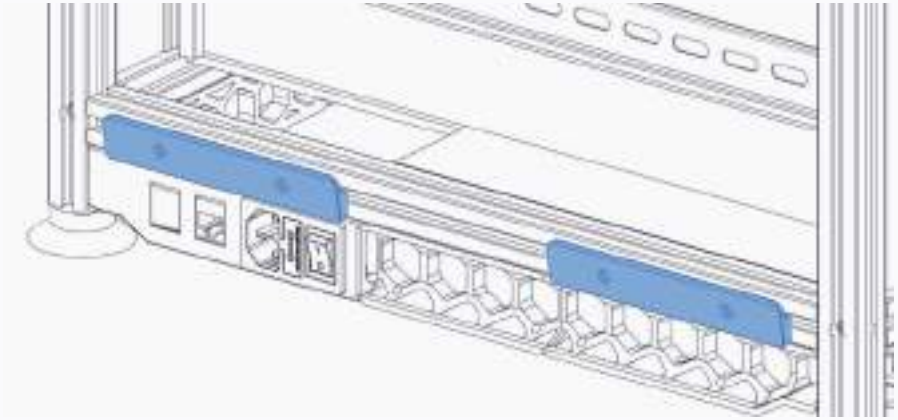

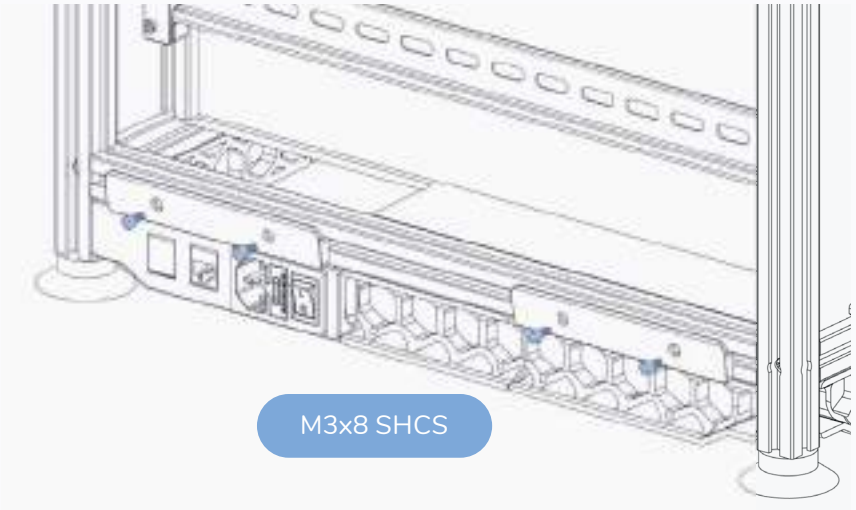

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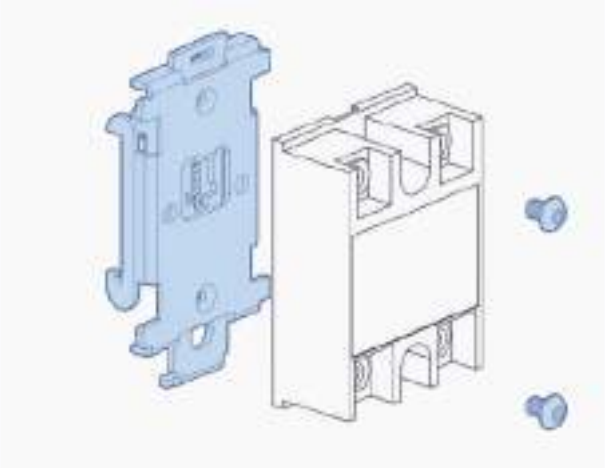
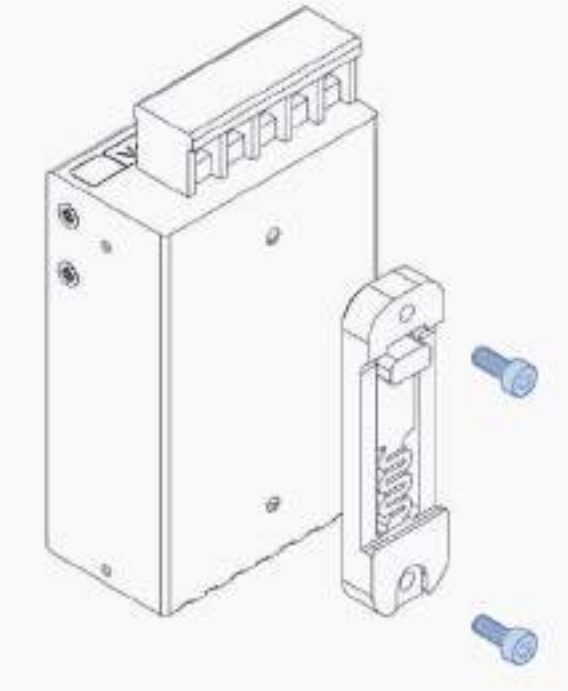
SSR Din Mount



M4x6 BHCS



M3x8 SHCS

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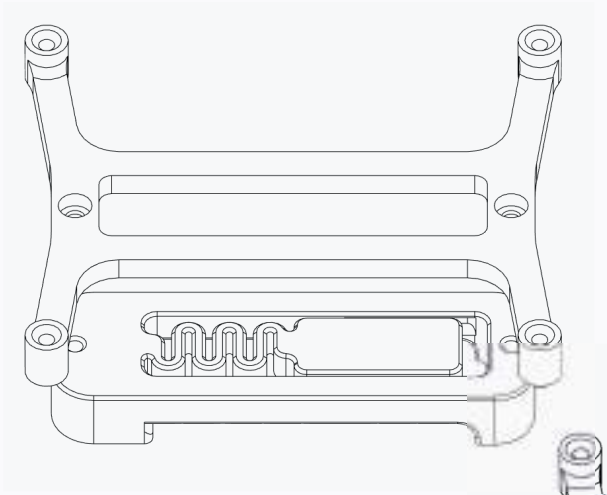

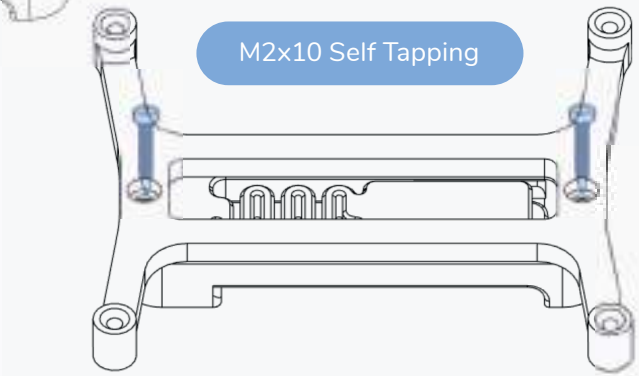

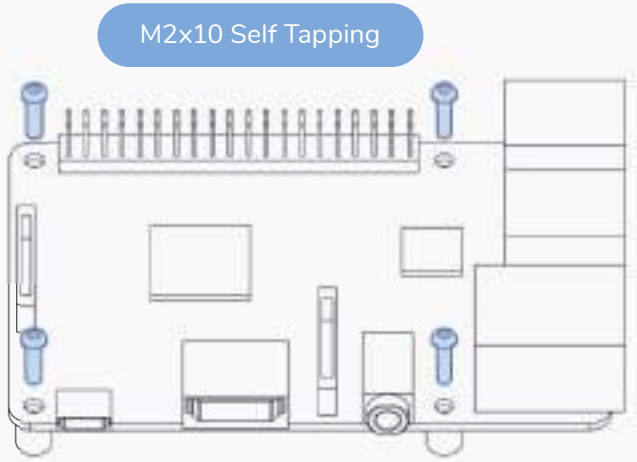

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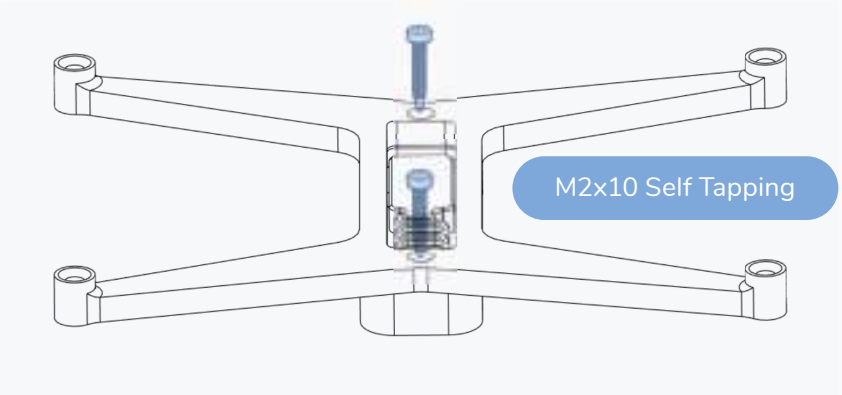

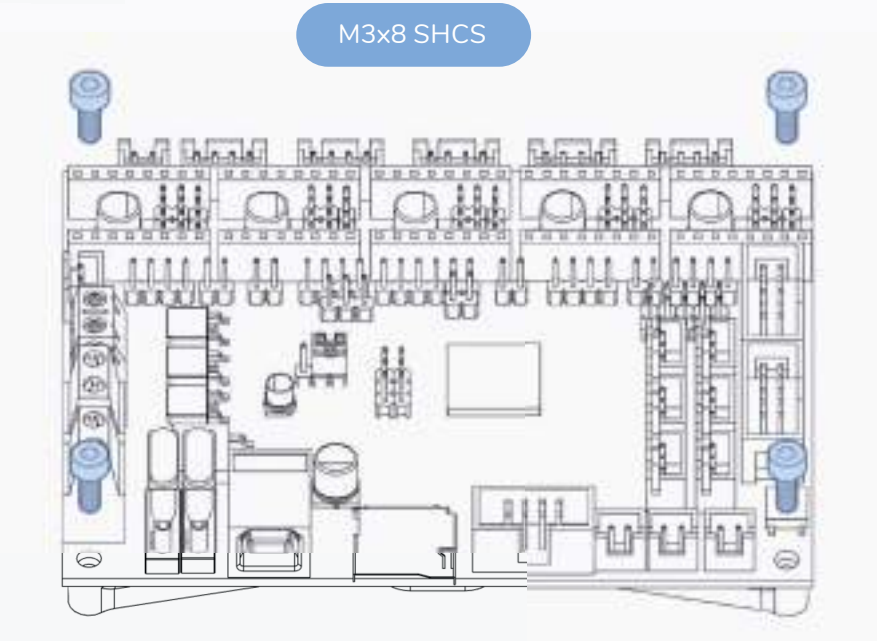

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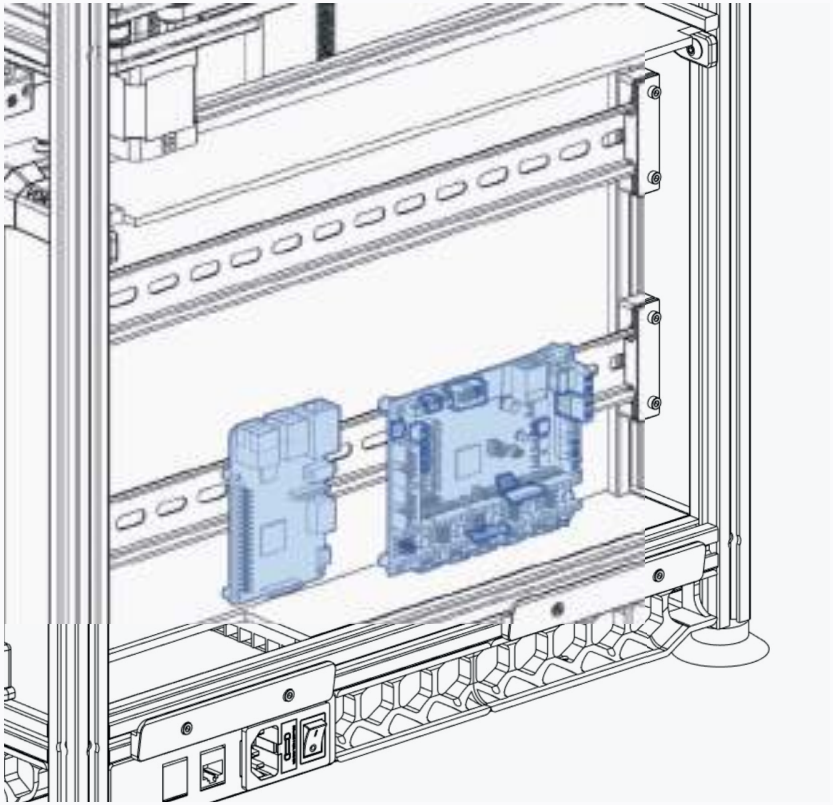

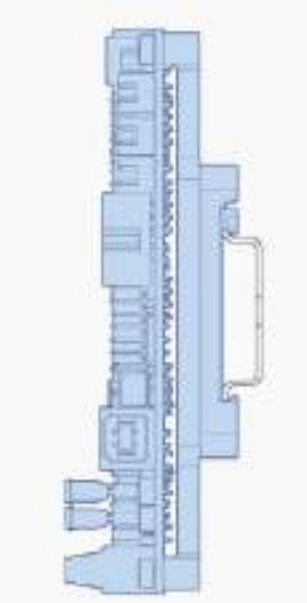

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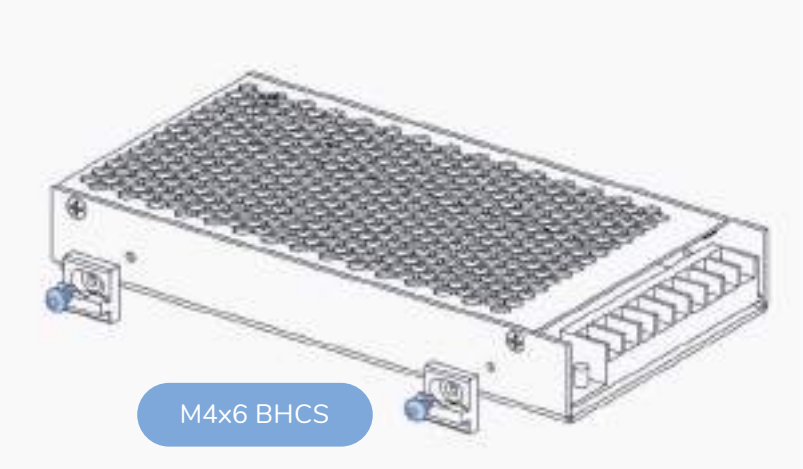

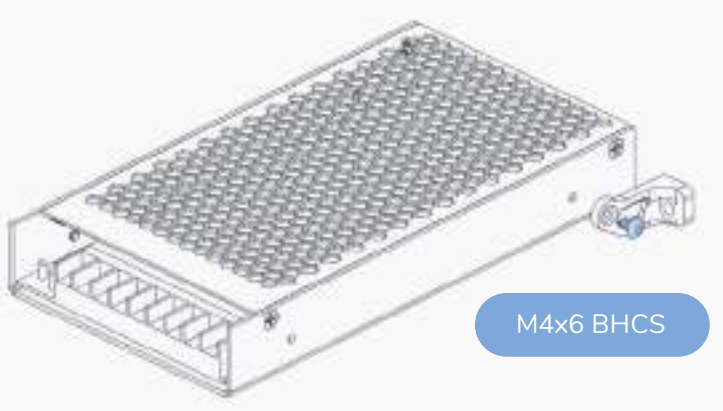

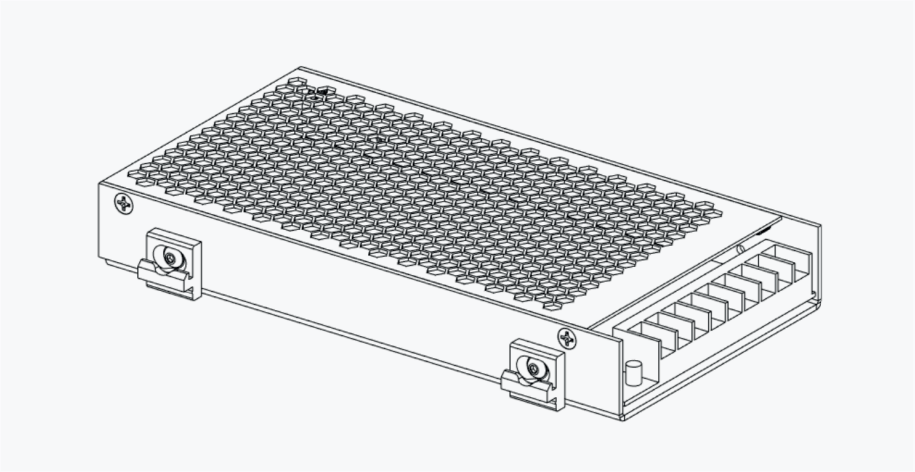

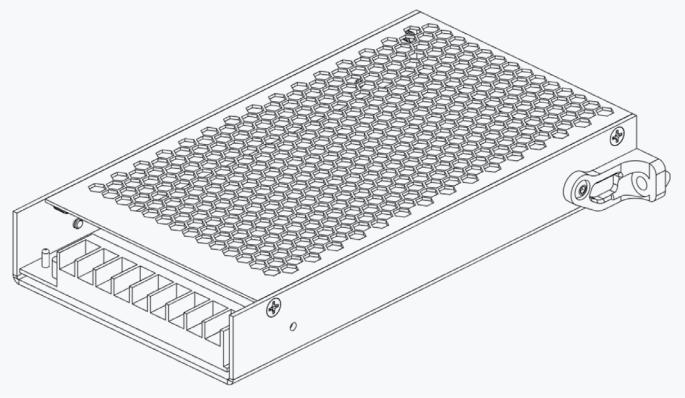

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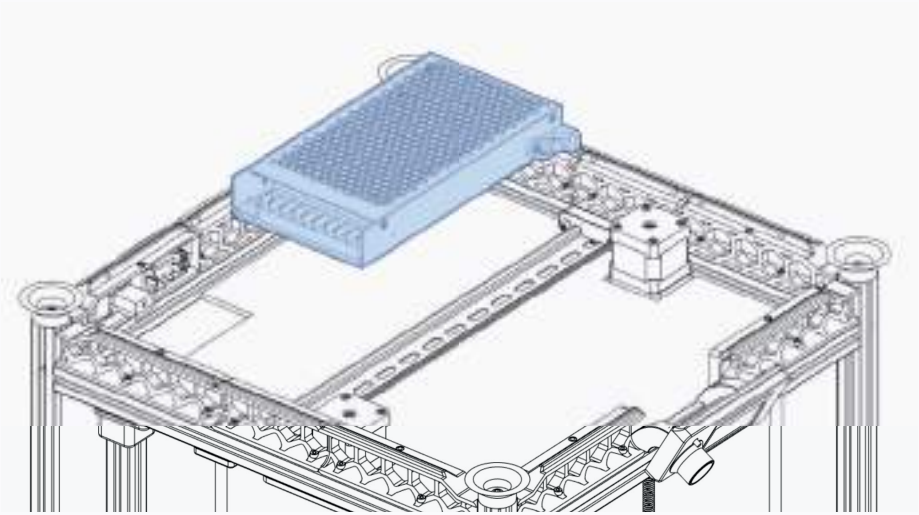

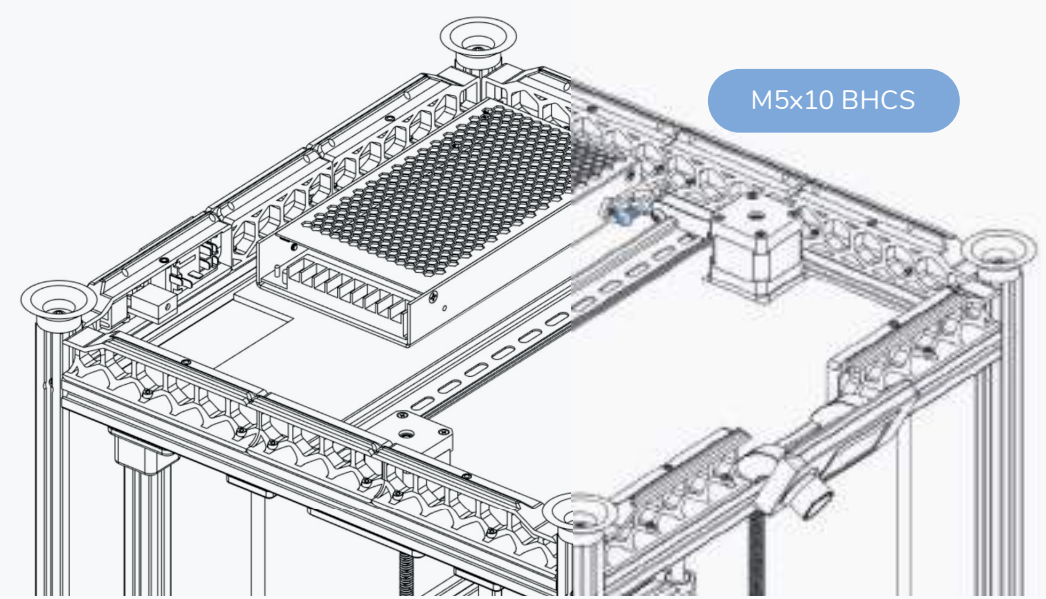

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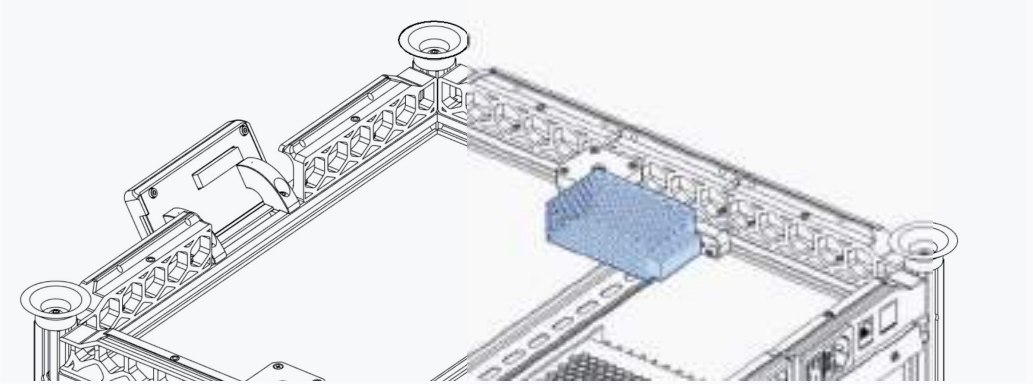
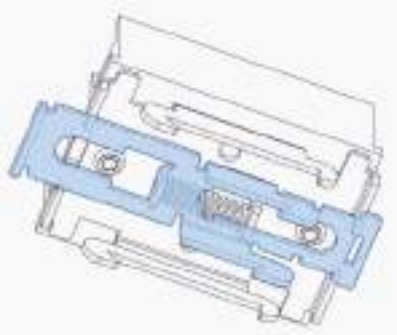
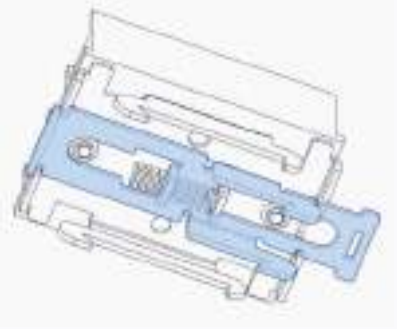


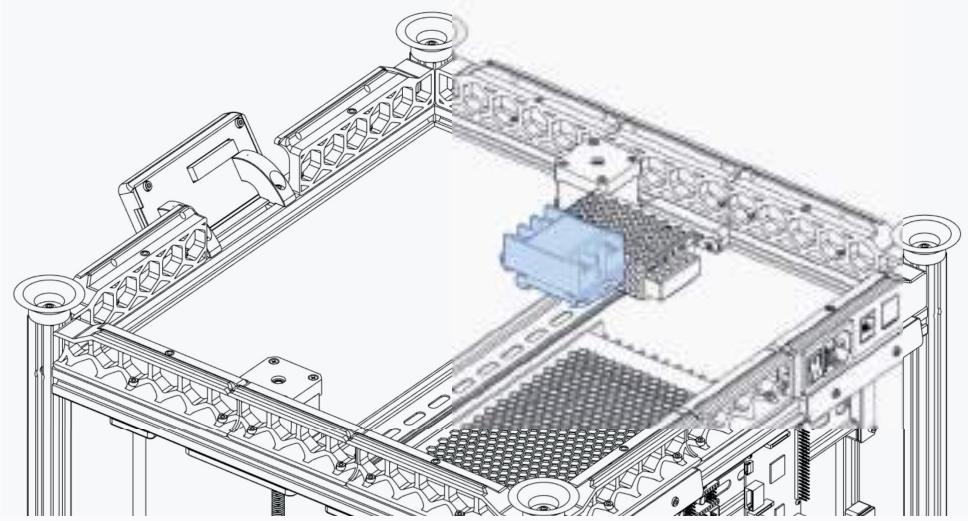




SPRING LOADED

Use a flat head screw driver to pull the latch open. It will lock open.

Be careful when releasing the latch, it will snap back into place. Mind your fingers.



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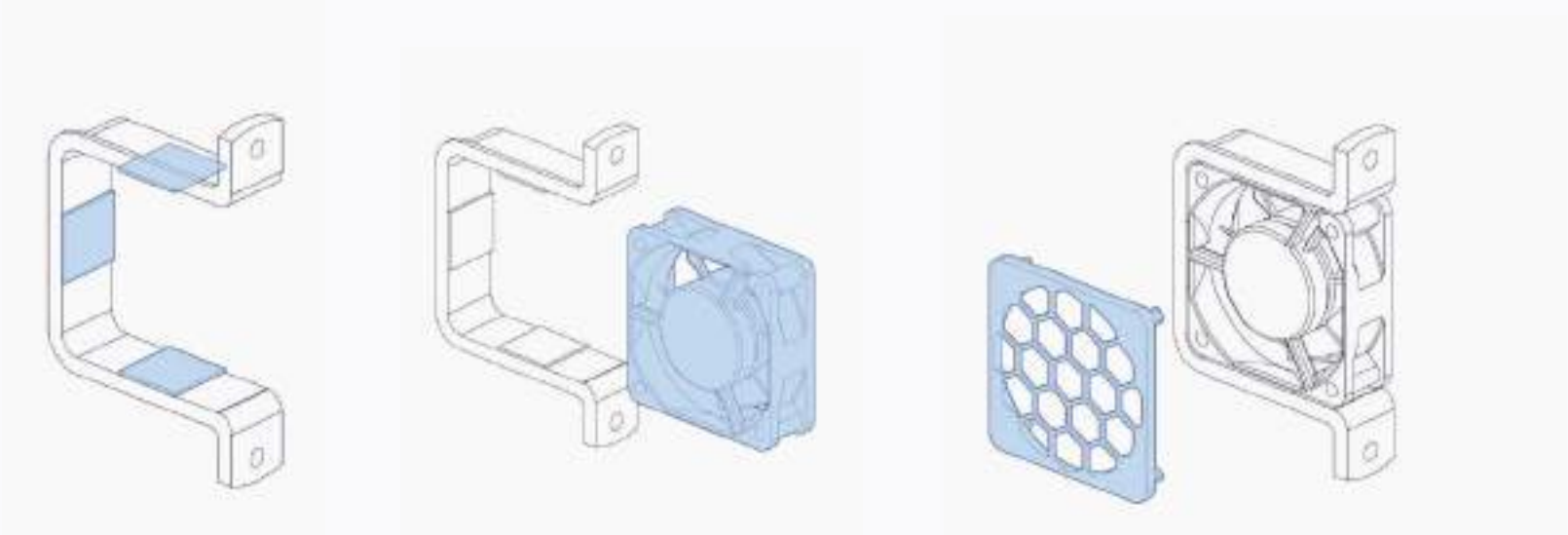
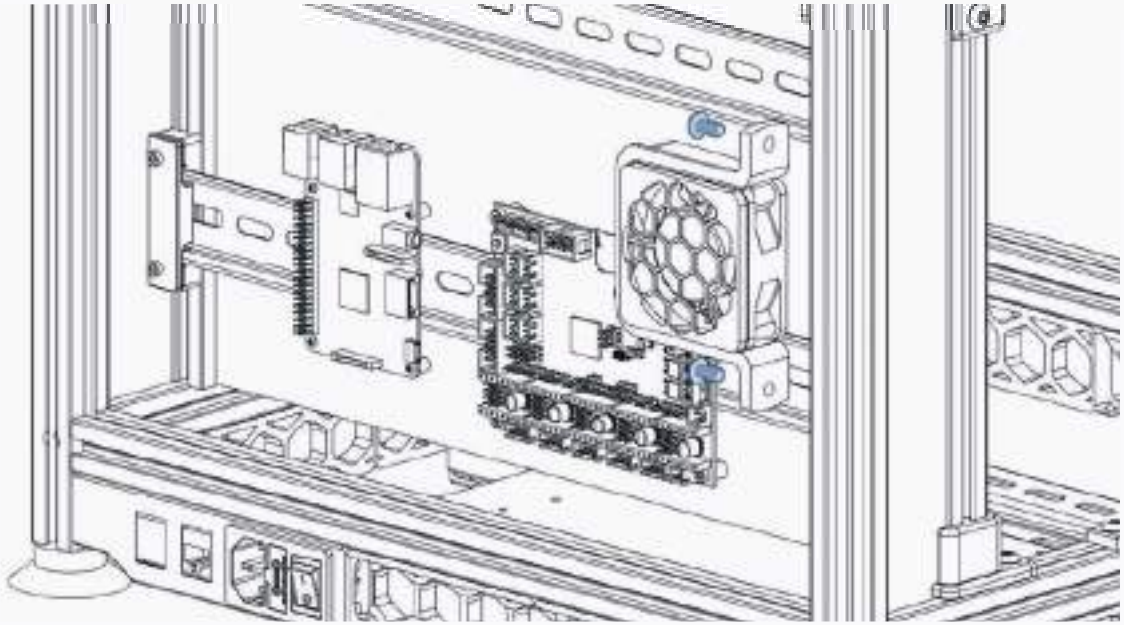


APPLY VHB TAPE

3M VHB tape is a double sided adhesive tape. Other vendors have similar products that you can use as a substitute.



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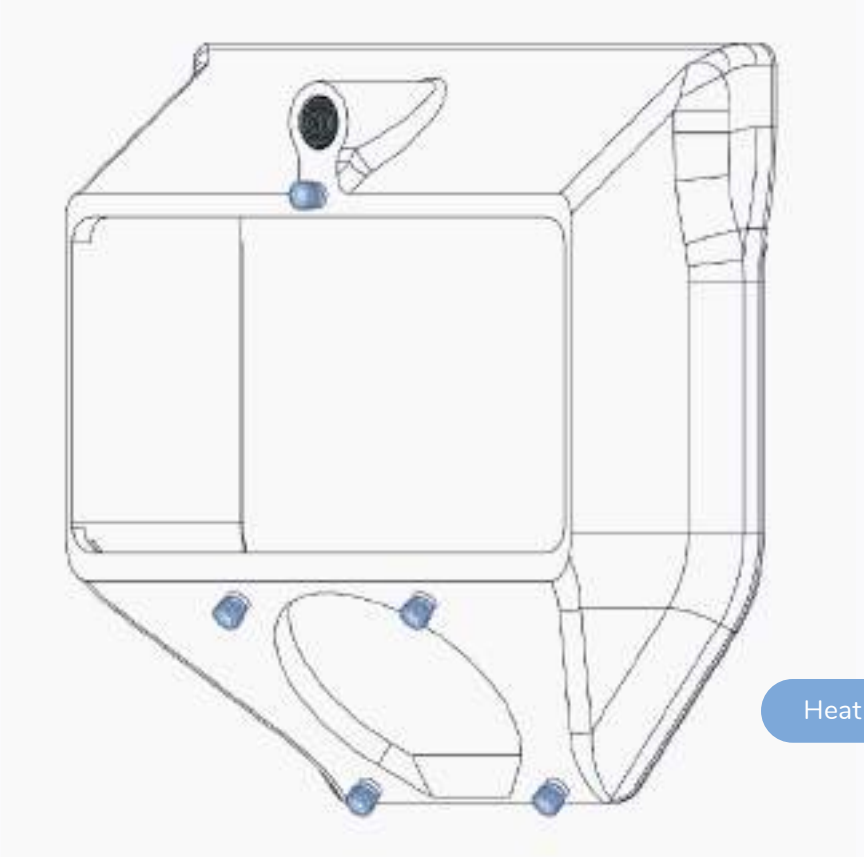
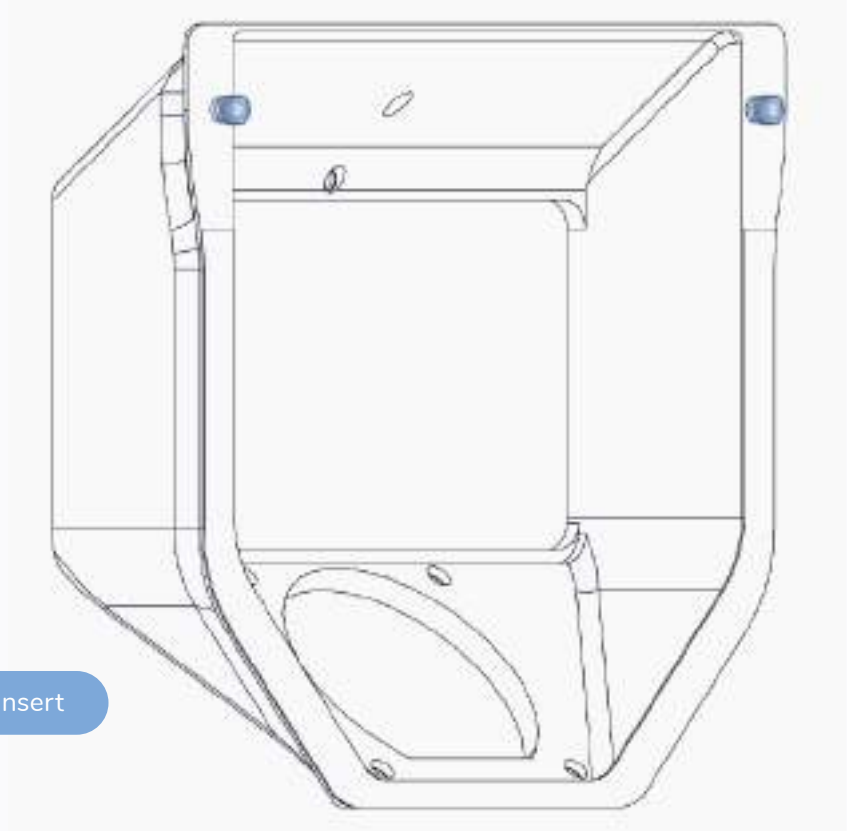


Heat Set Insert



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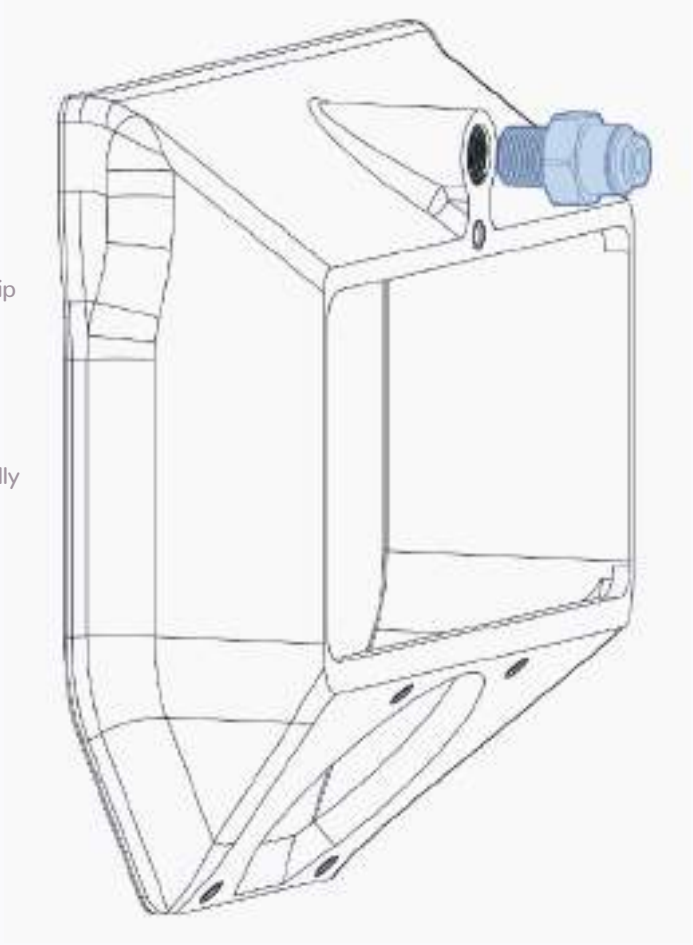
BSPP ADAPTER

Some adapters have a small lip that prevents the PTFE tube from passing through.

Inspect the adapter and if necessary use a drill to carefully remove the lip.



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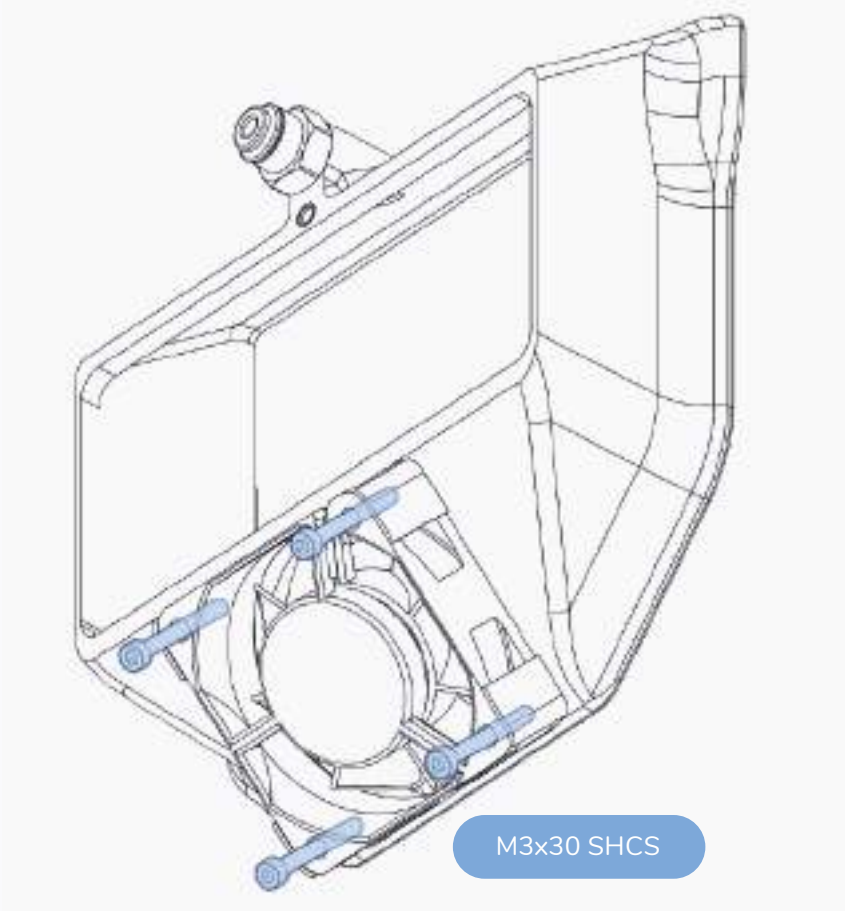

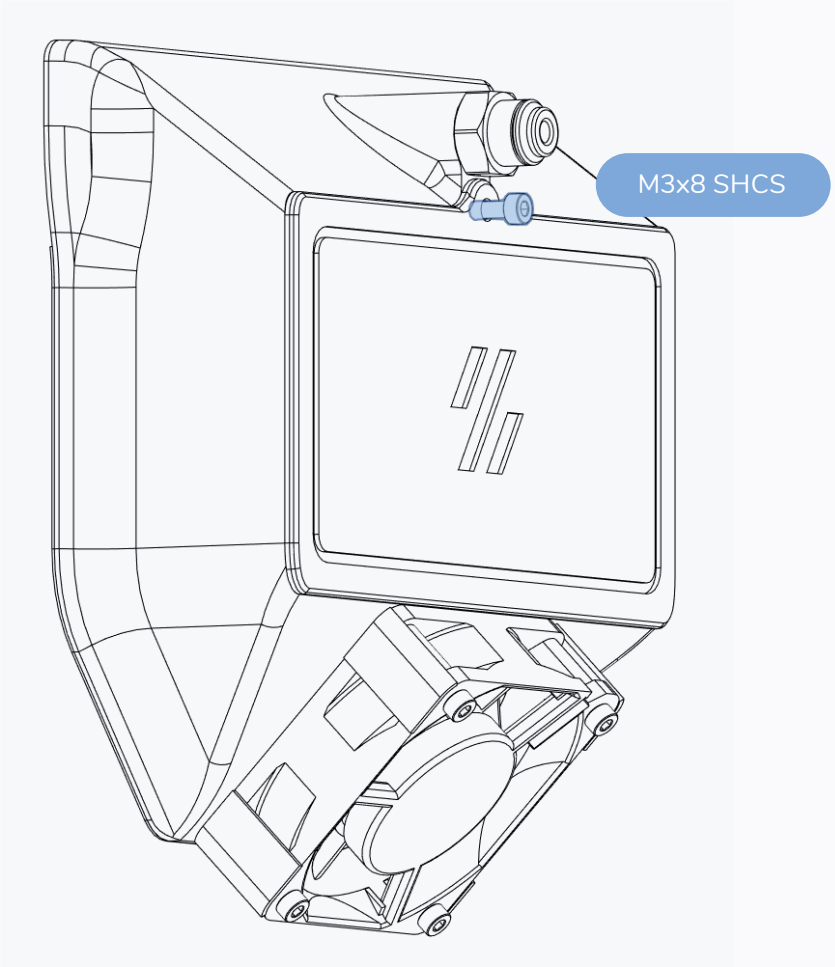

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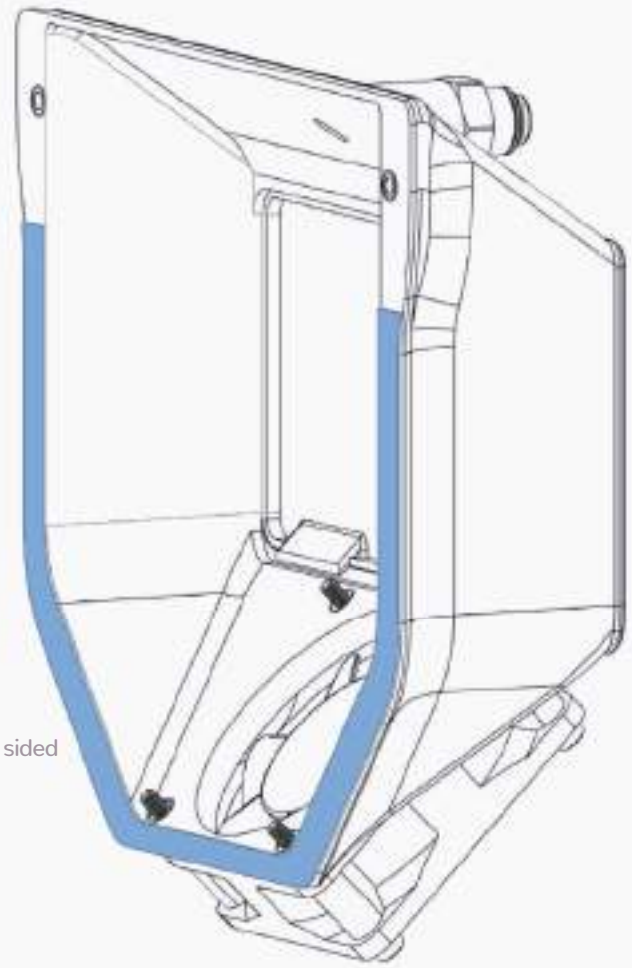
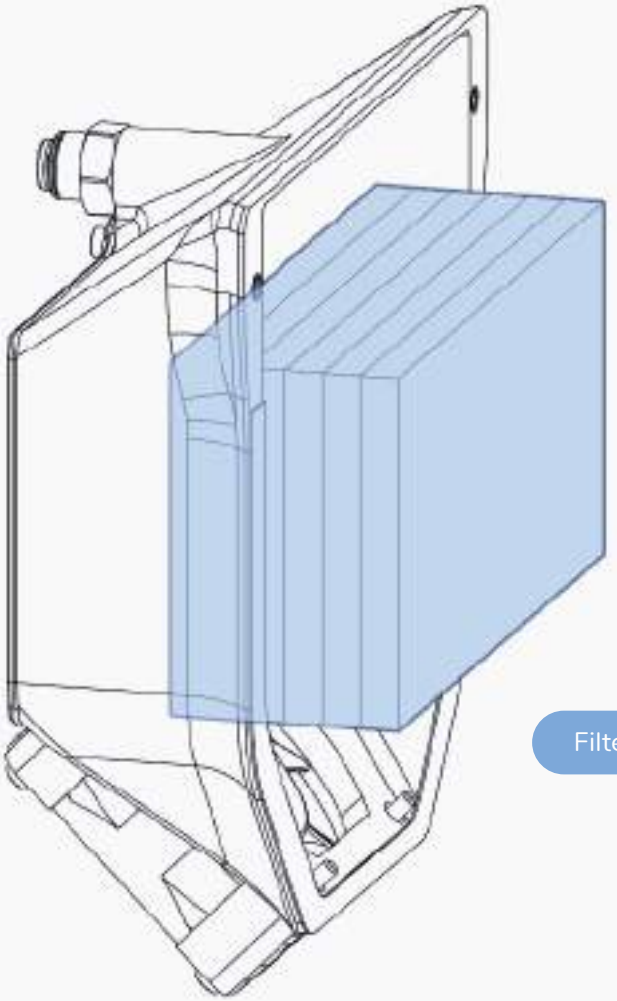


APPLY VHB TAPE

VHB Tape is a double sided adhesive tape.



Filter Material

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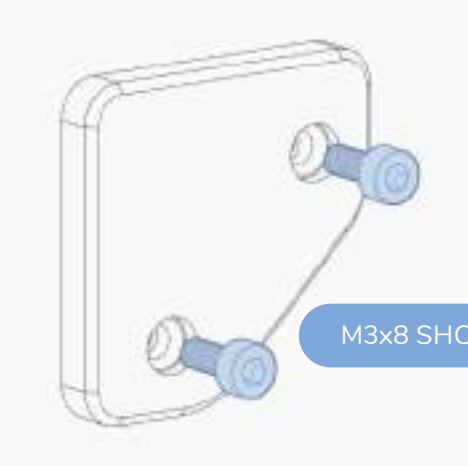
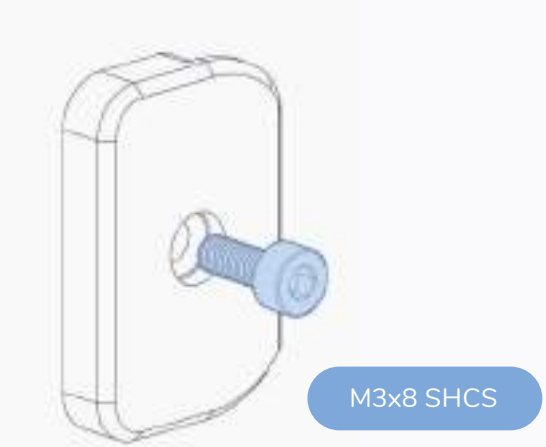
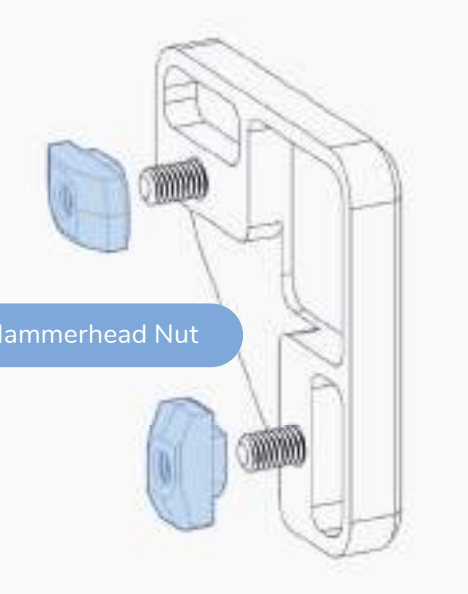
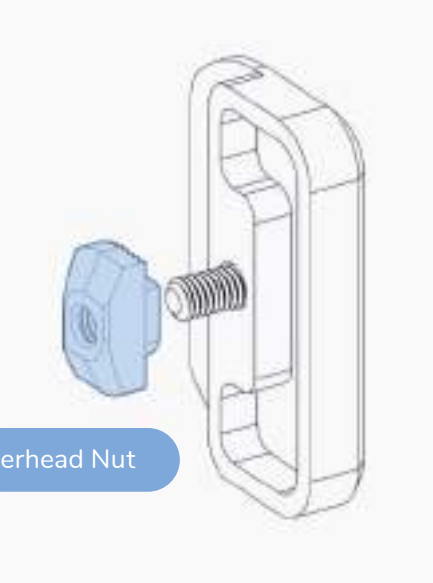


HAMMERHEAD NUTS?

A drop of thread locker will turn the hammerhead nuts into a 1/4 turn quick release for the panels. Best done once the assembly is finished.







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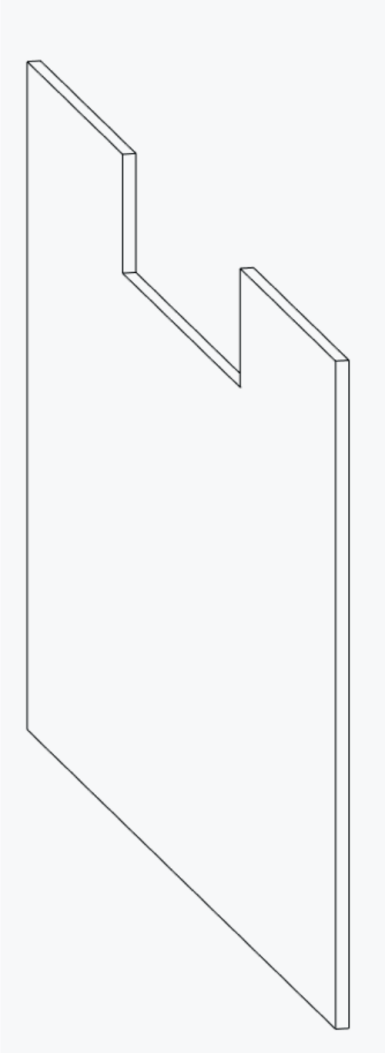
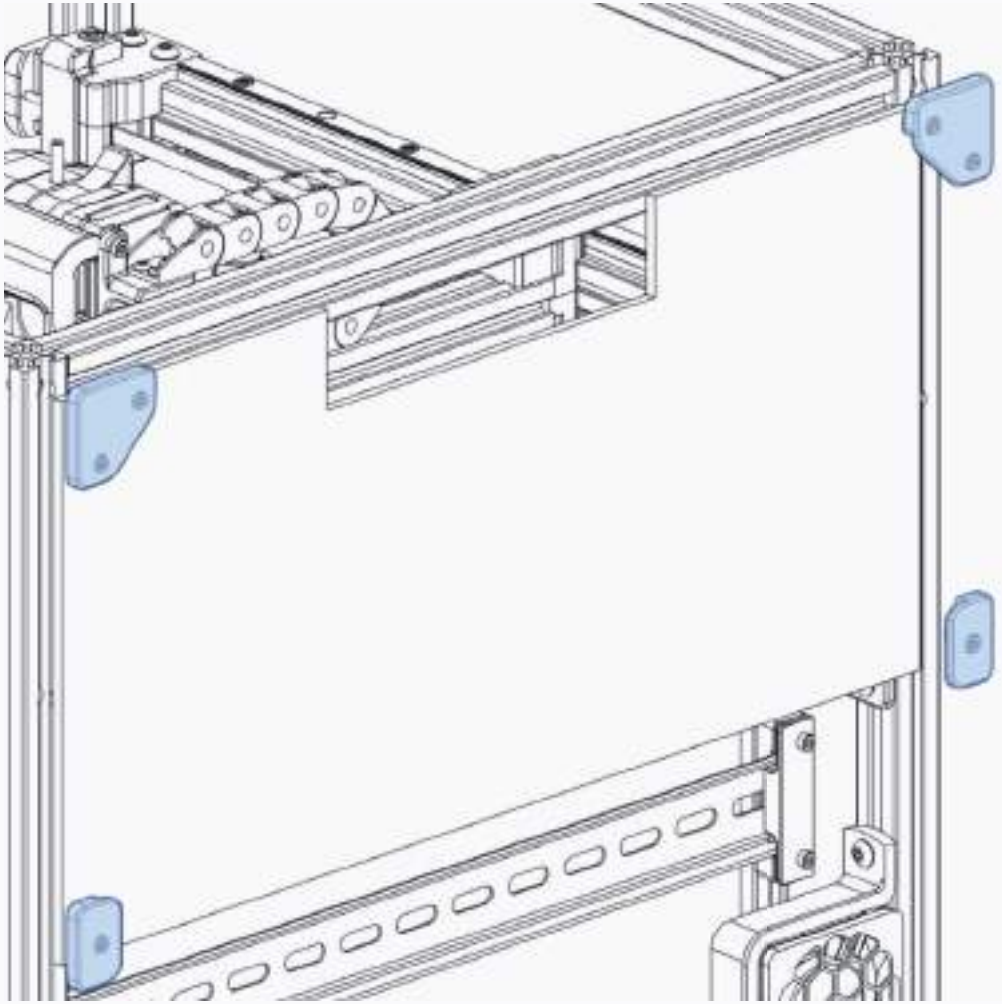


APPLY FOAM TAPE

Use foam tape on the contact areas between the panels and the frame to mitigate noise from vibrations.



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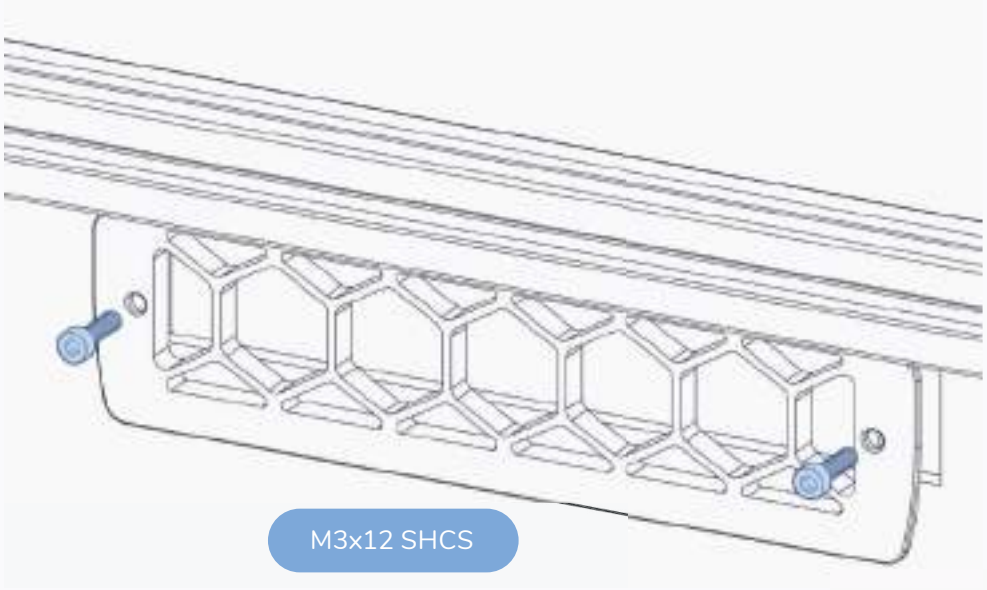

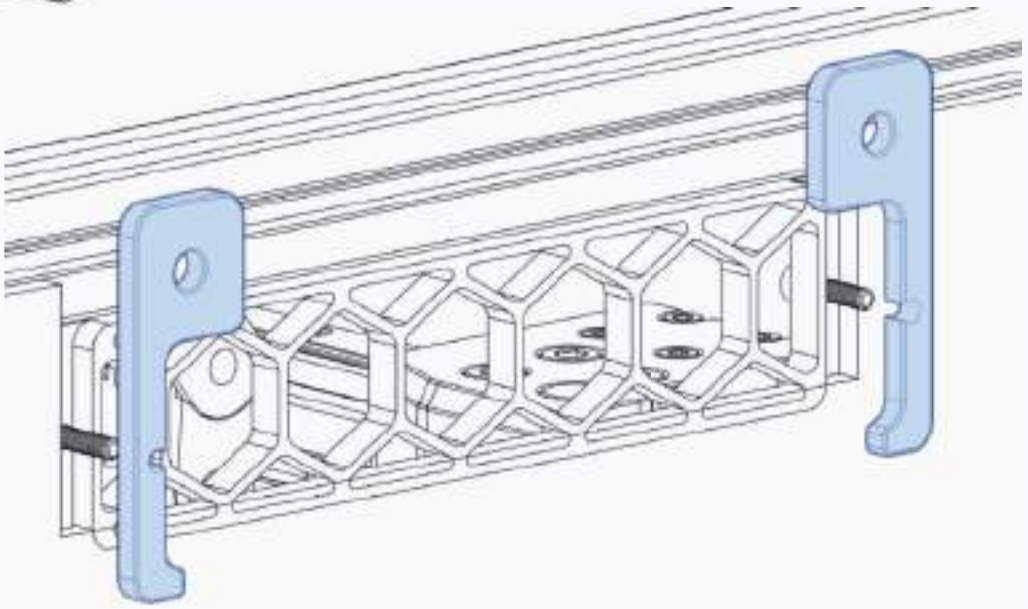

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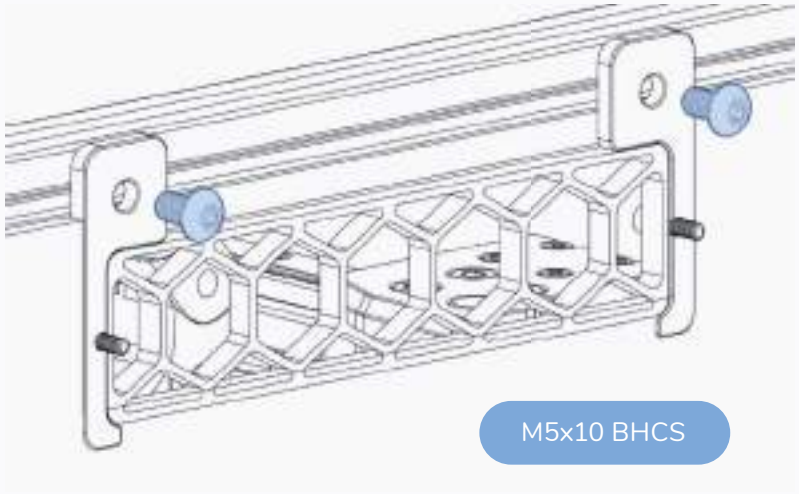
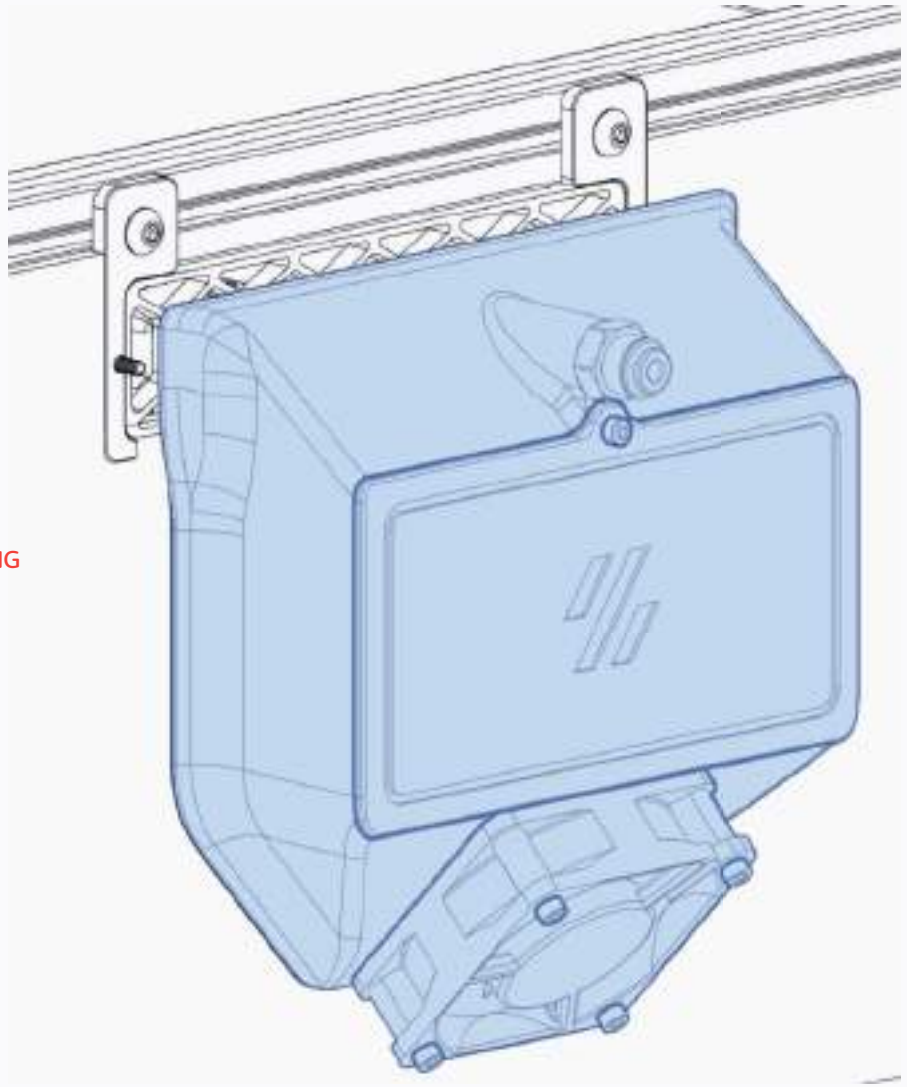


REMOVE TAPE BACKING



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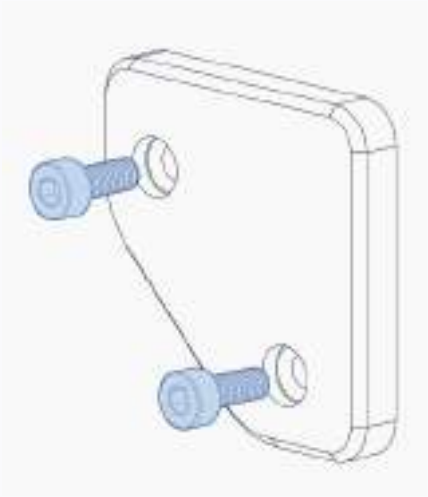

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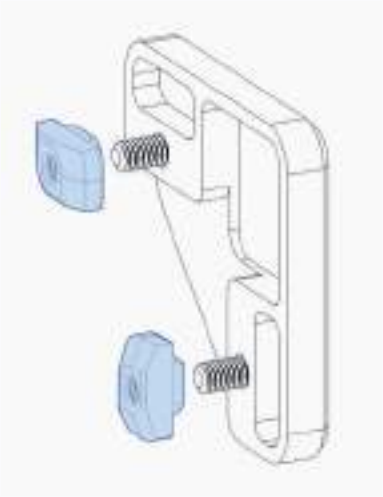
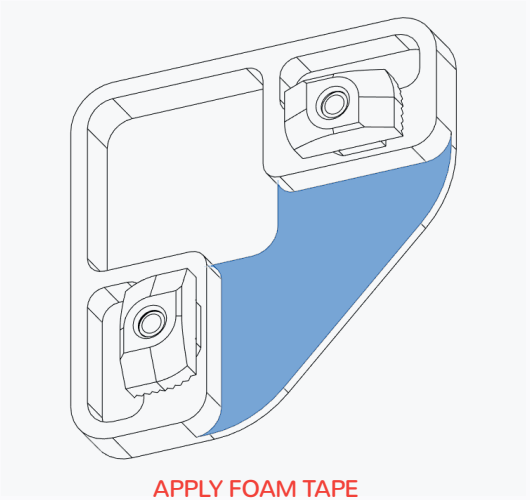
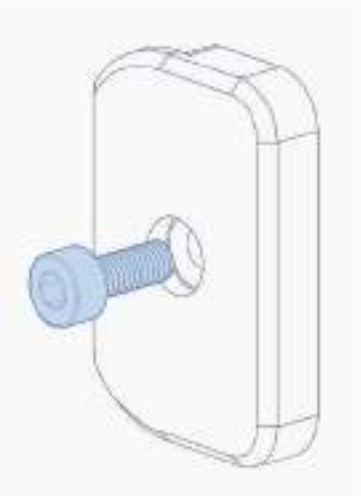


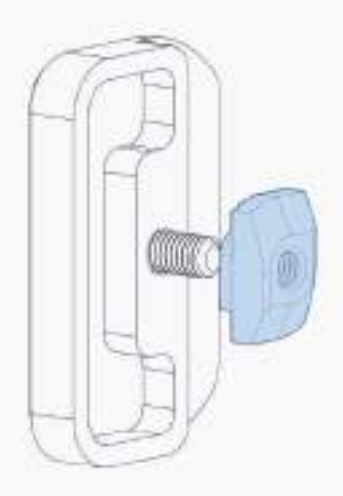
M3 Hammerhead Nut

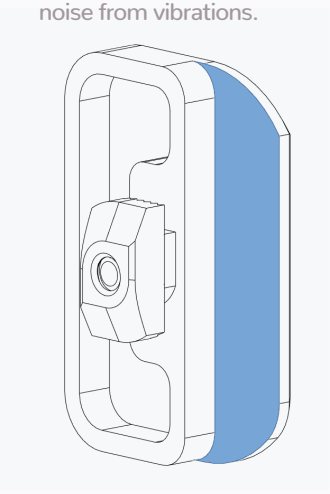


APPLY FOAM TAPE

Use foam tape on the highlighted areas to mitigate noise from vibrations.







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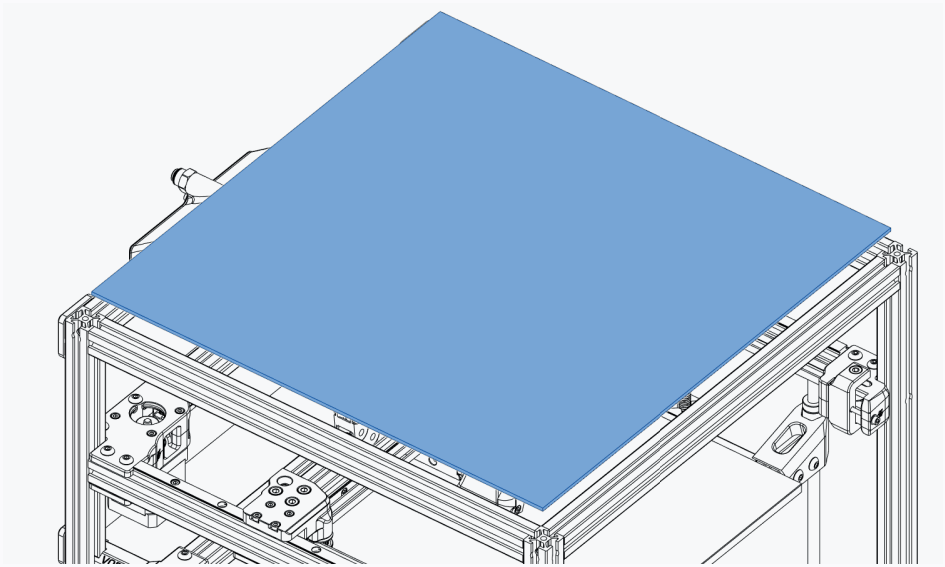

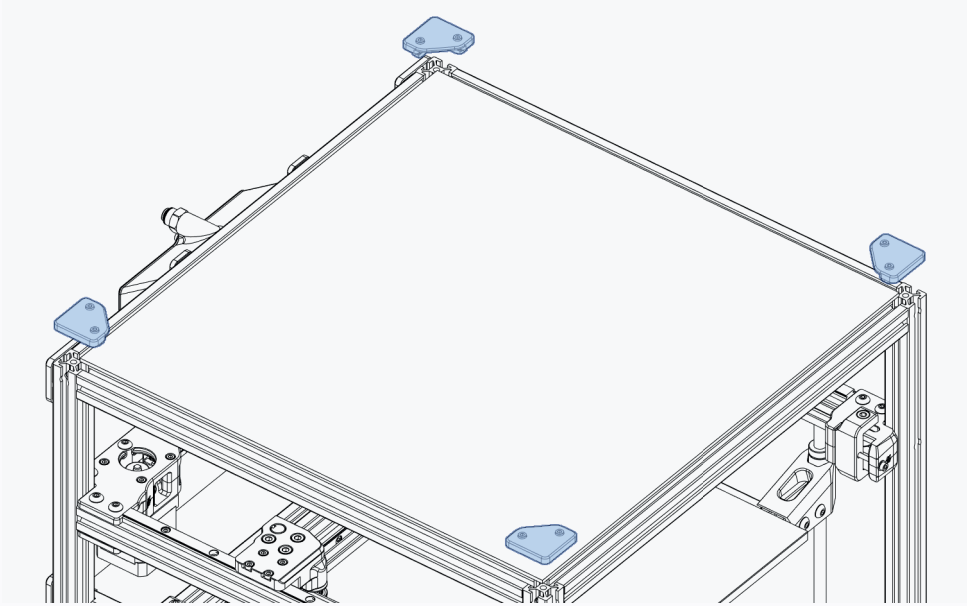

APPLY FOAM TAPE

Use foam tape on the contact areas between the panels and the frame to mitigate noise from vibrations.

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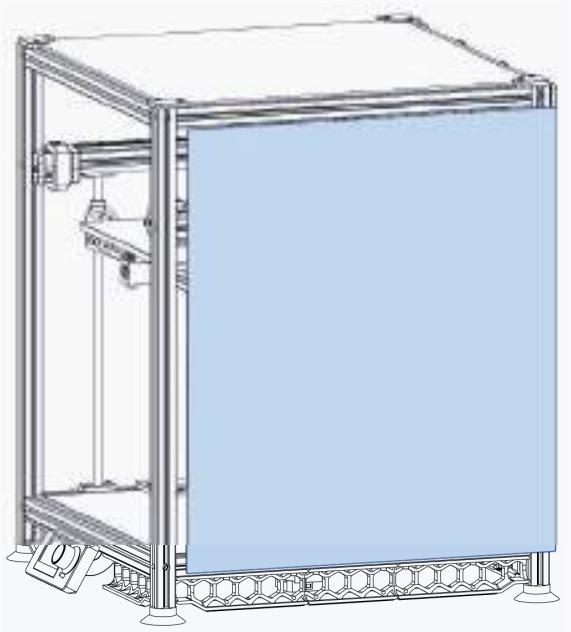

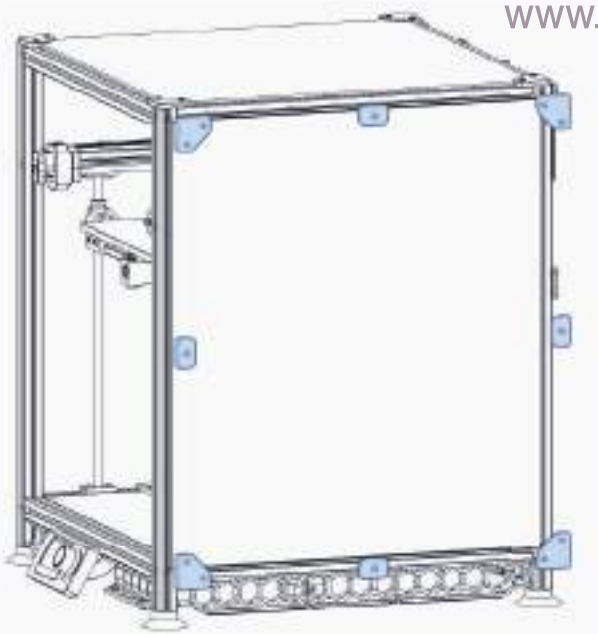

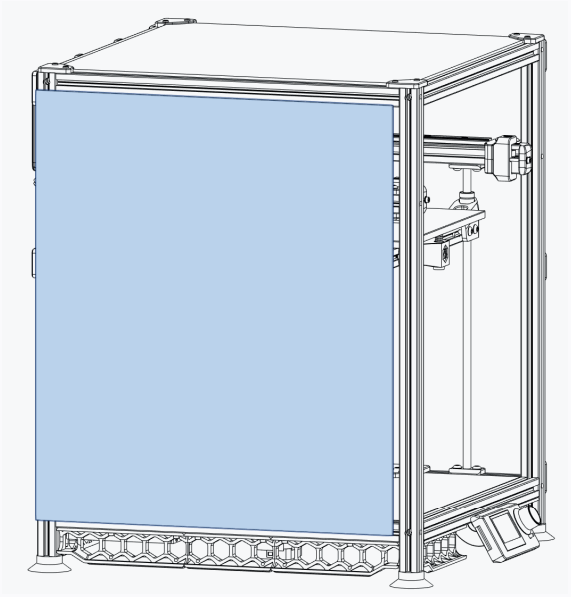

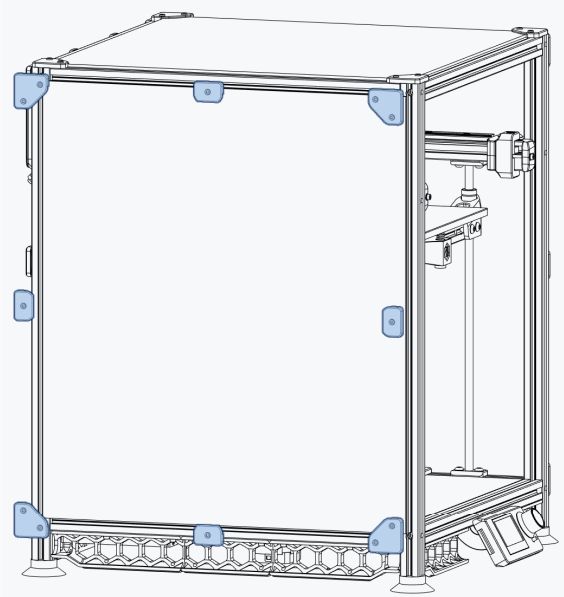

APPLY FOAM TAPE

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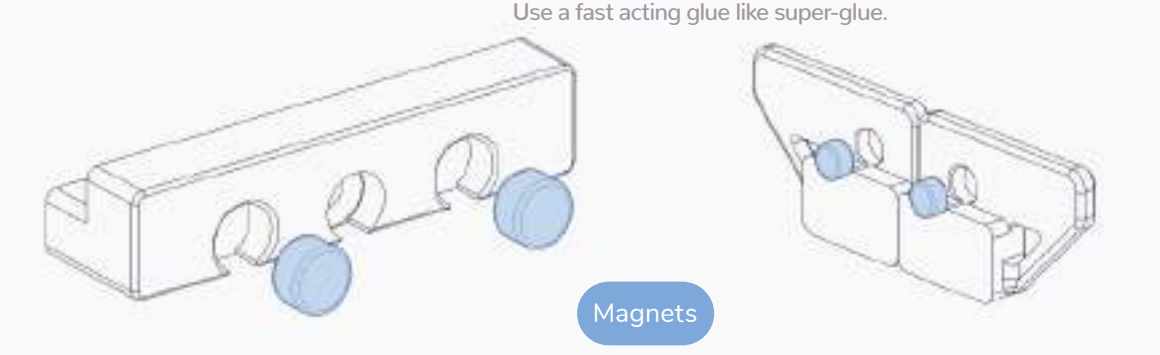
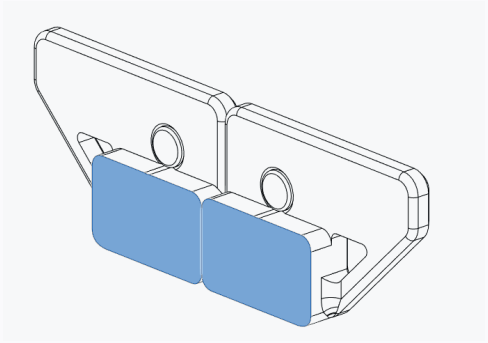
GLUE INTO PLACE

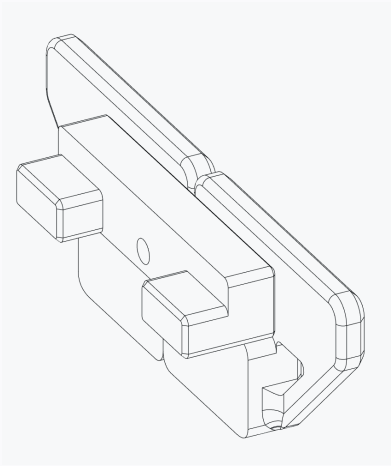
Use a fast acting glue like super-glue.





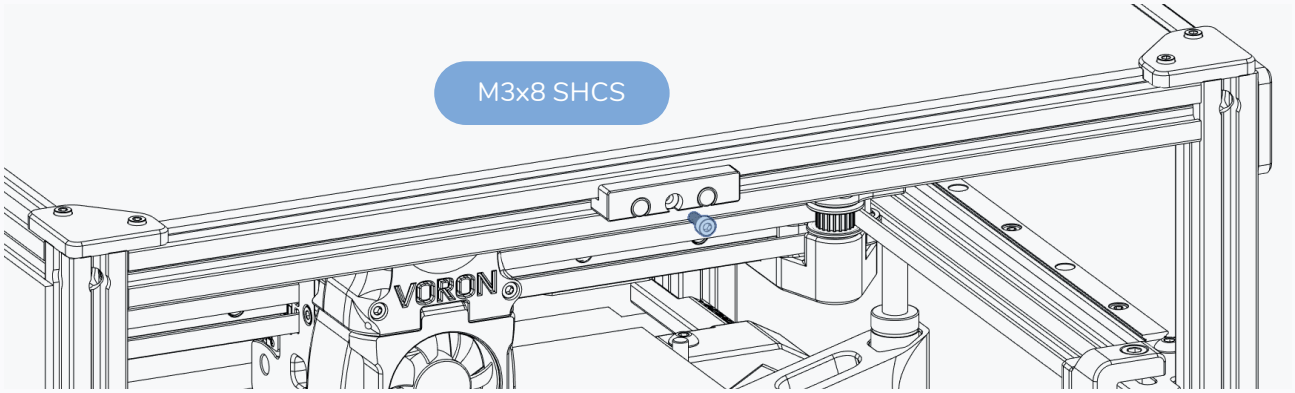
APPLY VHB TAPE

The parts will be bonded to the panels using double-sided adhesive tape.



MIND THE MAGNET POLARITY

Ensure that the magnets are facing in the right direction prior to glueing them into place.



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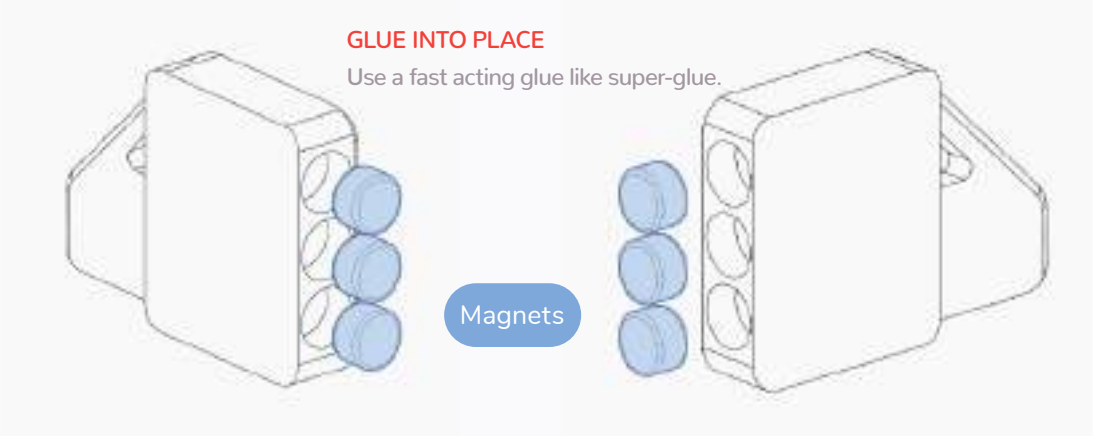

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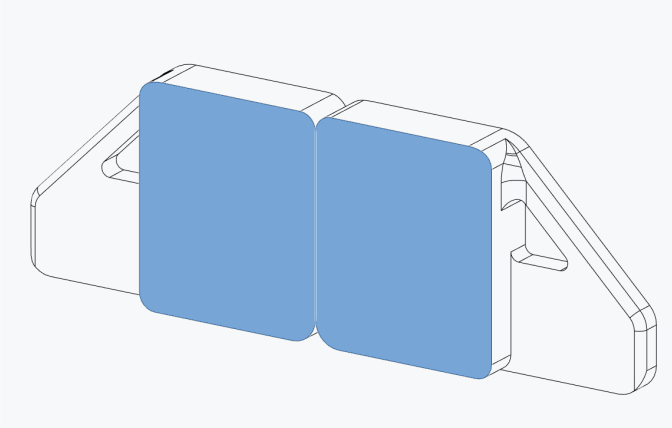

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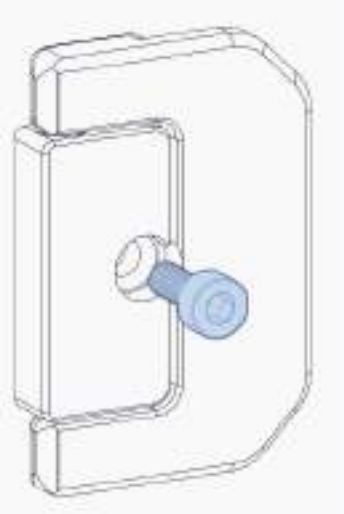

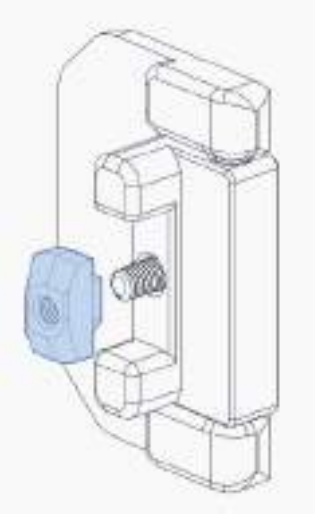

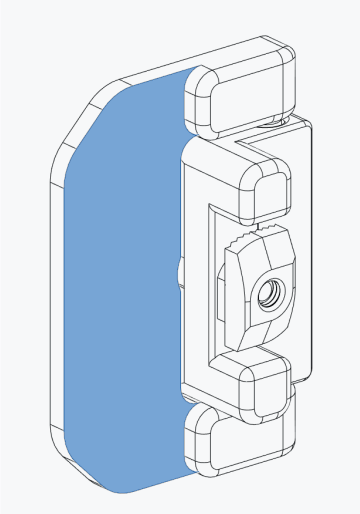

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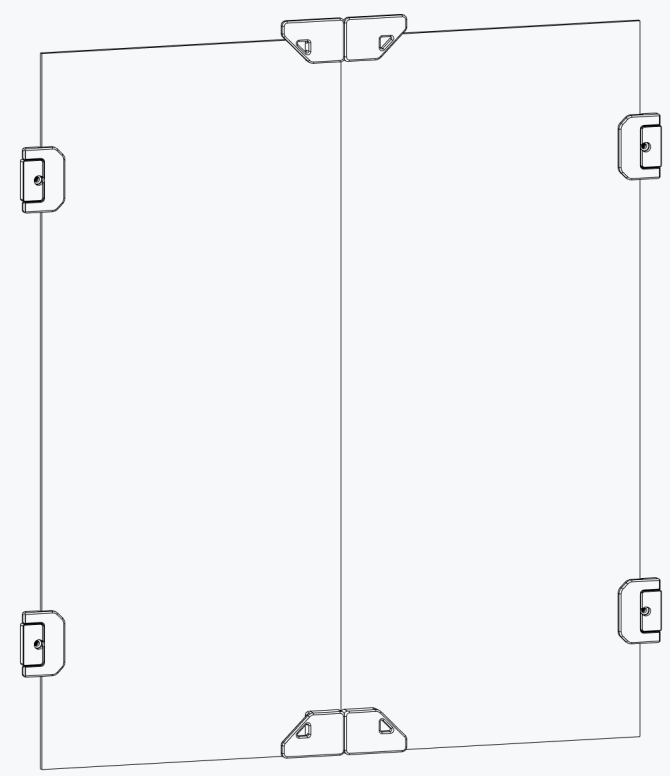

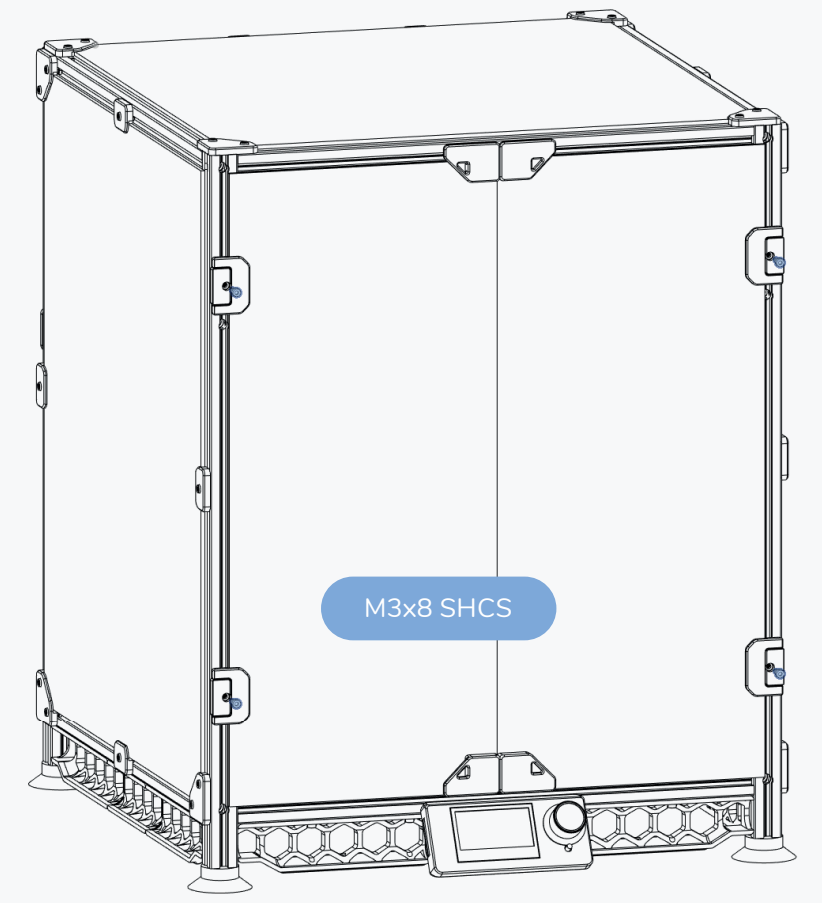

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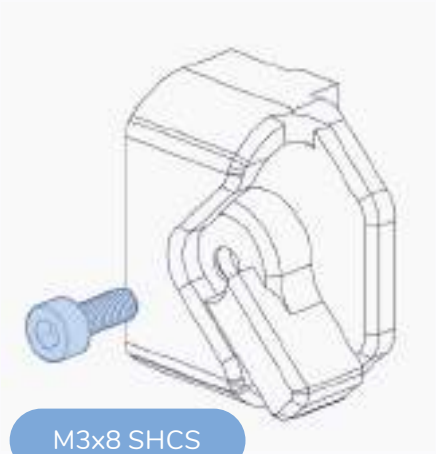
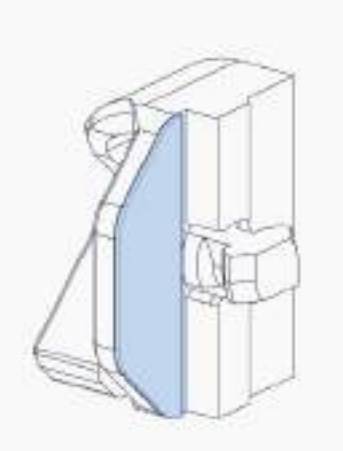
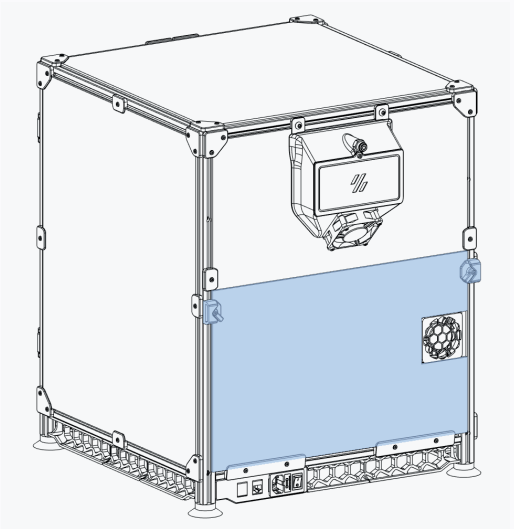


M3x8 SHCS





ROTATE LEVERS TO LOCK

Use the levers to lock and unlock the panel for the electronics

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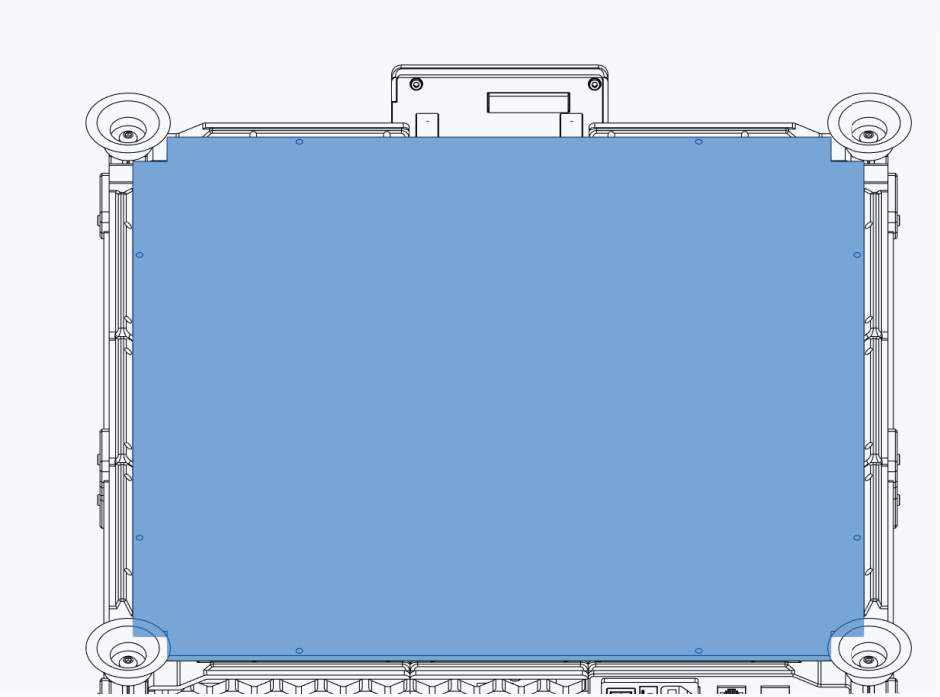

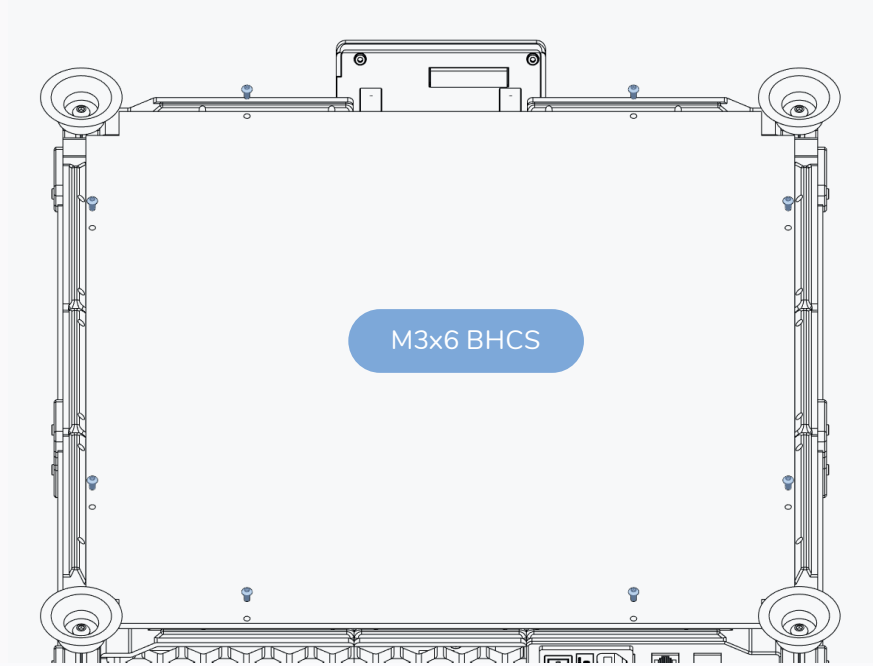

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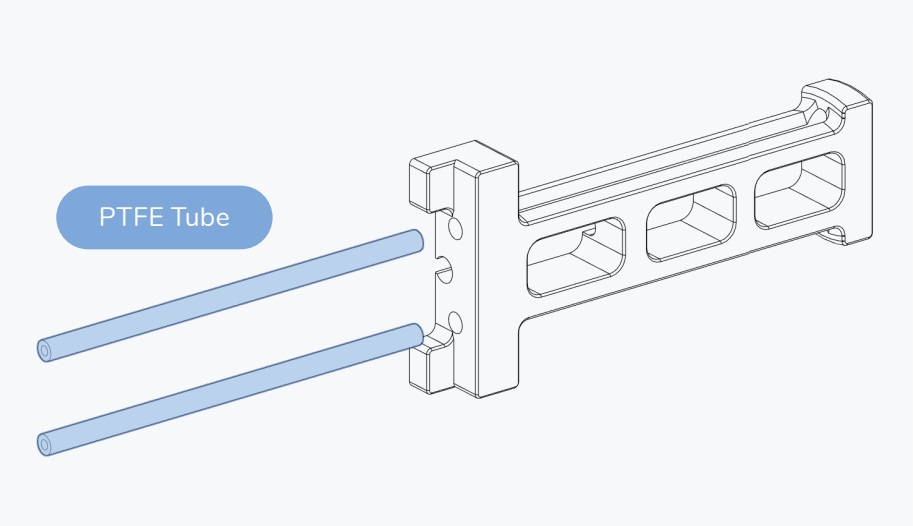

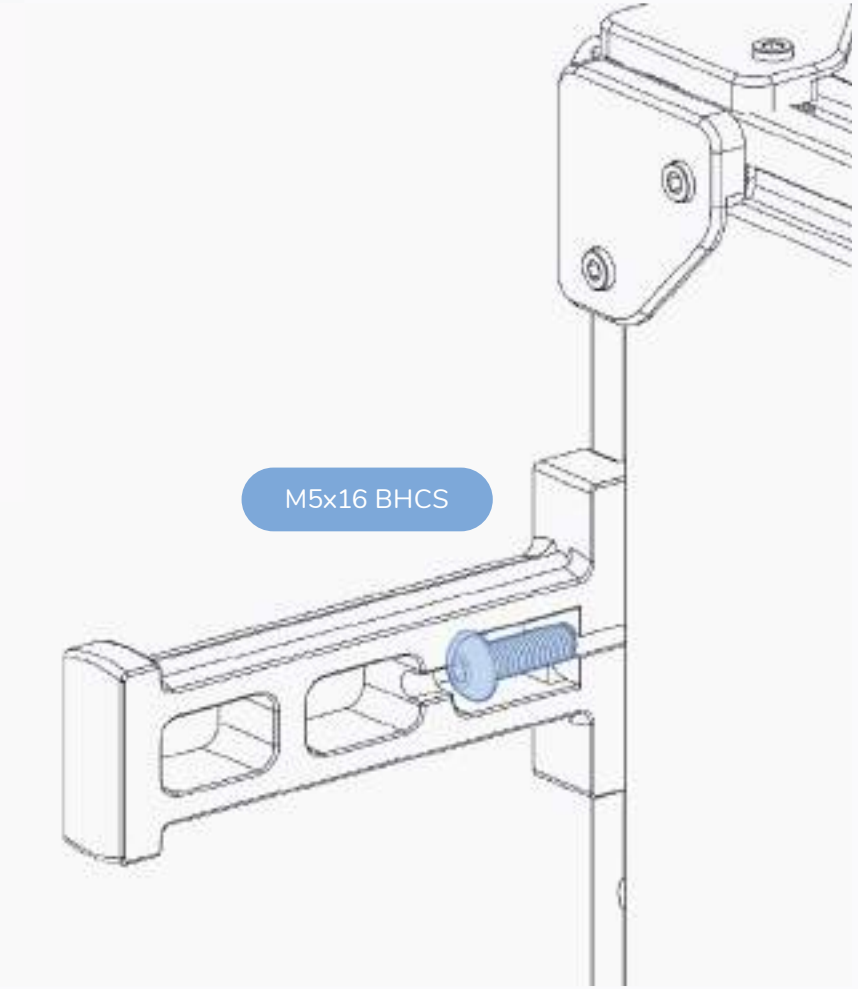

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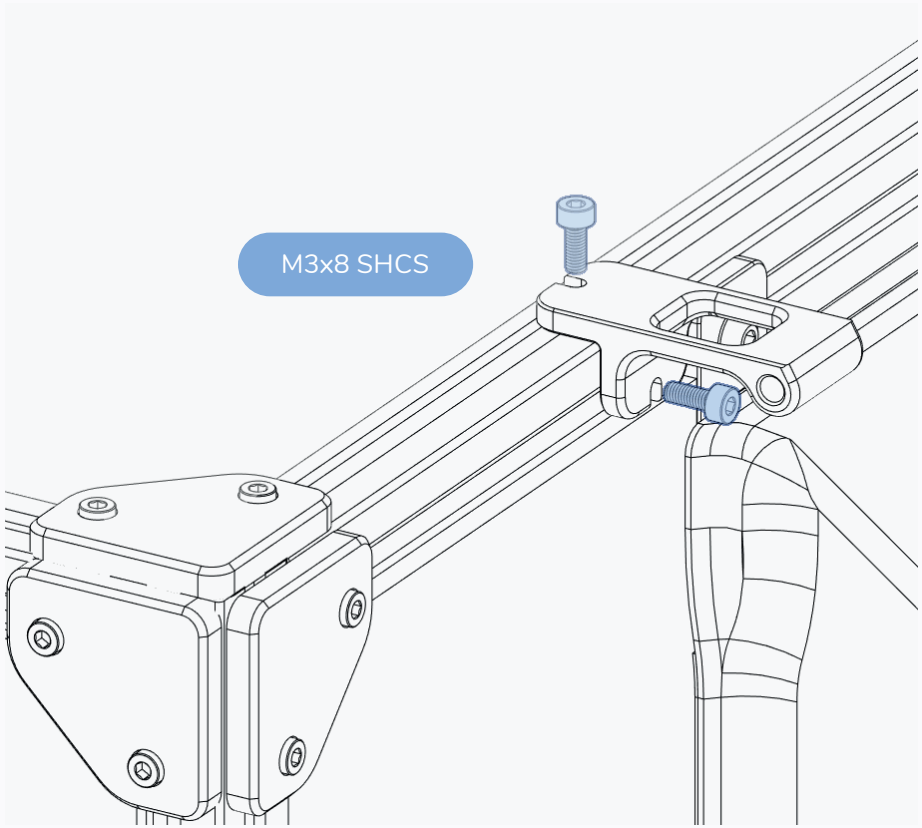

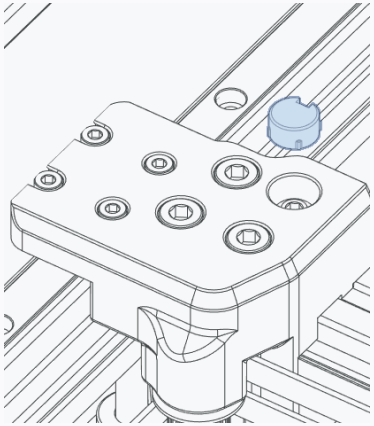

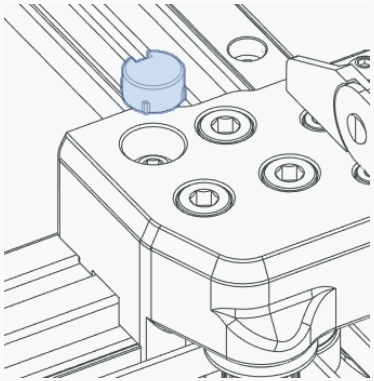

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MECHANICAL ASSEMBLY COMPLETED ... NEXT STEP WIRING & ELECTRICAL

This manual is designed to be a simple reference manual for the build process. Wiring and the initial setup of your printer is not included.
For details on wiring, setup of the electronics and other initial steps of your new printer please visit our documentation available on github.

GitHub https://github.com/vorondesign/voron-1

HOW TO GET HELP

If you need assistance with your build, we're here to help. Head on over to our Discord group and post your questions. This is our primary medium to help VORON Users and we have a great community that can help you out if you get stuck.

DISCORD https://discord.gg/voron

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