

A/B BELTS



THE VORON BELT PATH

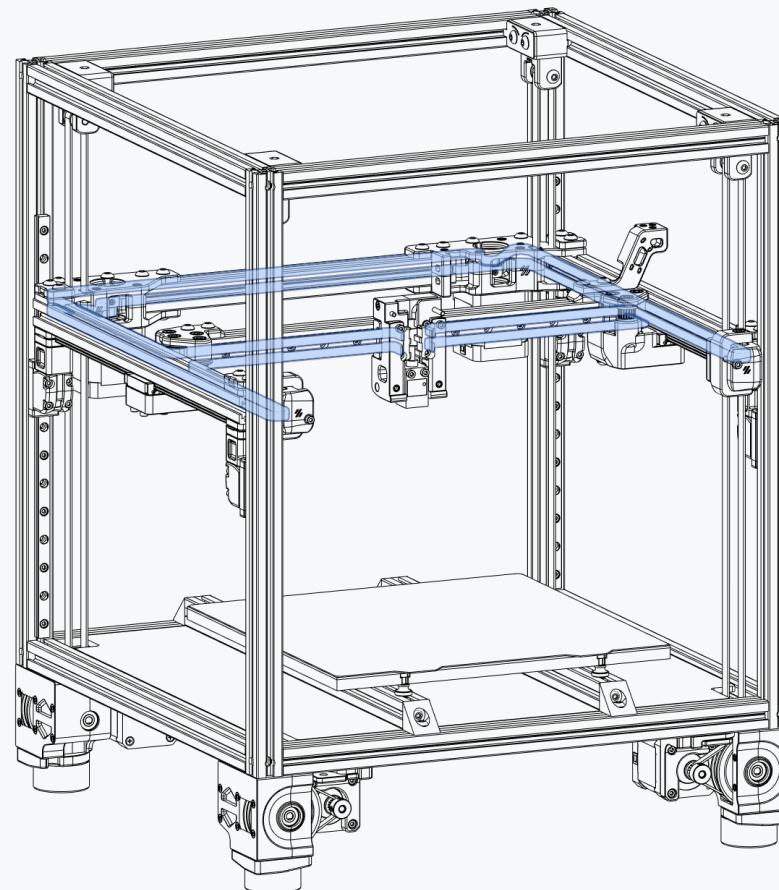
Voron printers use a belt path based on the popular CoreXY pattern.

The individual belt paths are stacked on top of each other and the crossing often found in CoreXY designs is omitted. Compared to many other implementations, the motors are moved to a less intrusive position. To learn more about the principles behind CoreXY visit <https://voron.link/ef72dd6>.

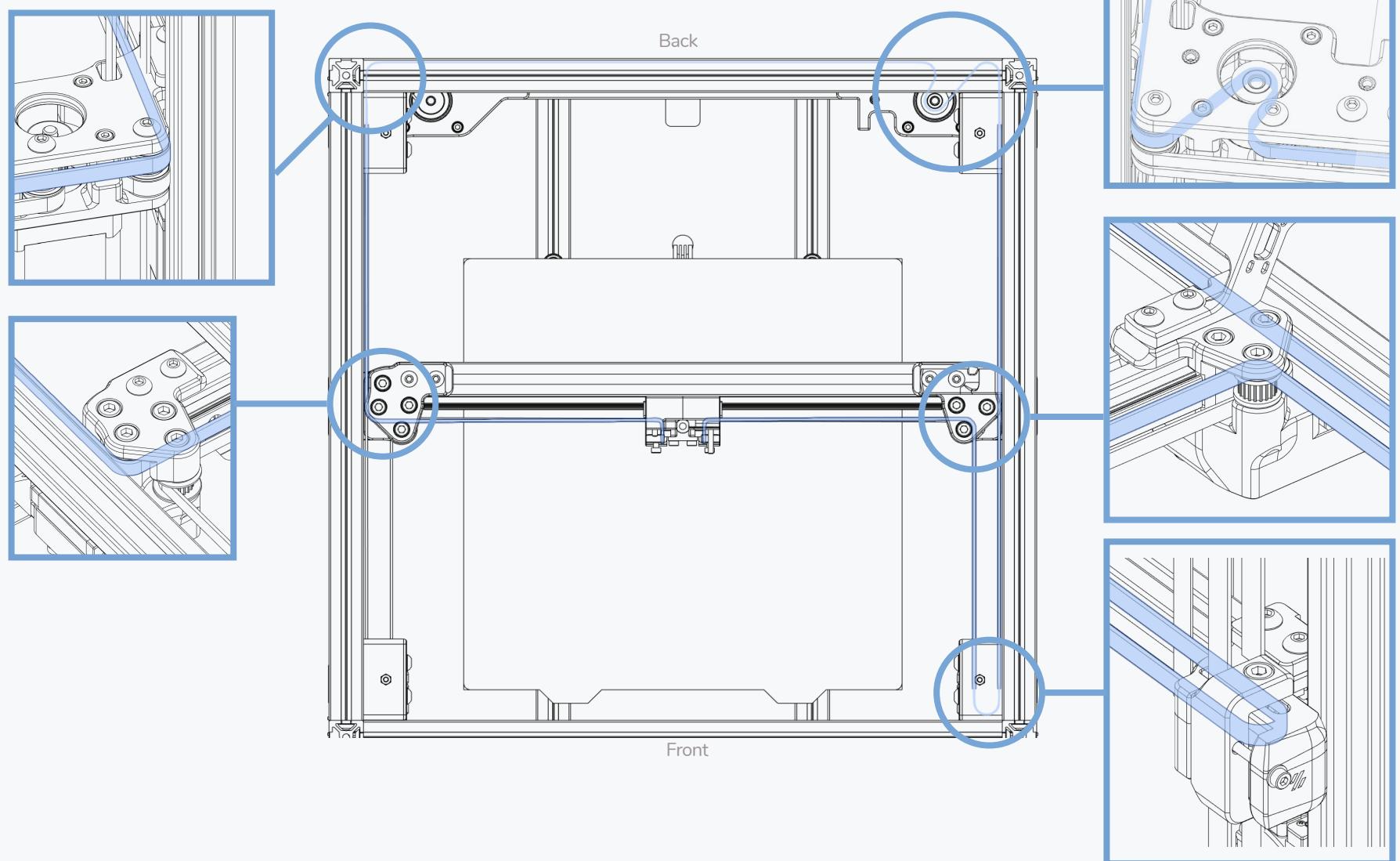
Equal belt tension is important to the proper function of a CoreXY motion system.

We recommend to run one belt to get the required length, remove the belt from the printer and cut the second belt to the exact same length.

As both belt paths have the same length this is an easy way of getting a consistent tension.

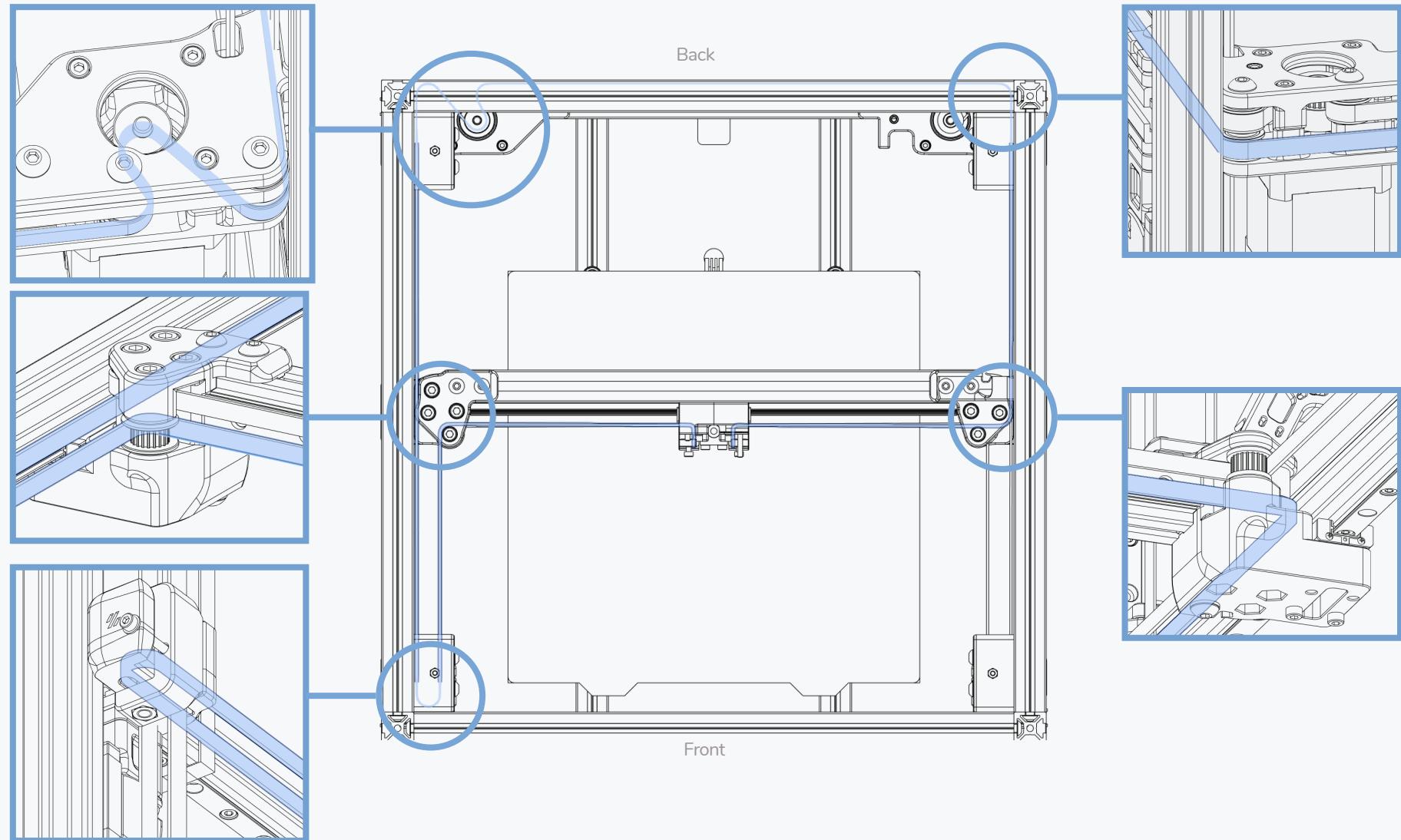


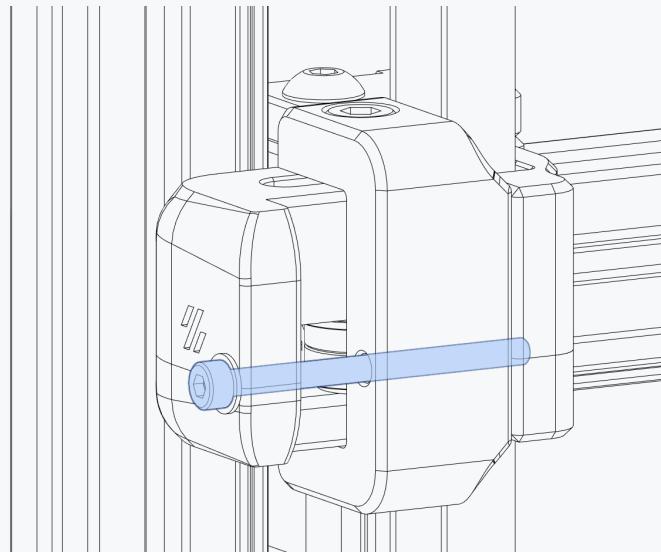
OVERVIEW - A BELT



OVERVIEW - B BELT

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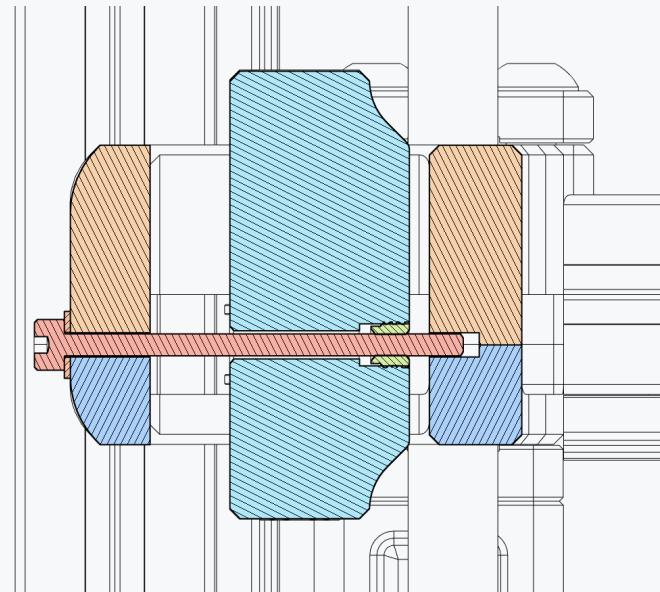




EXTEND IDLER

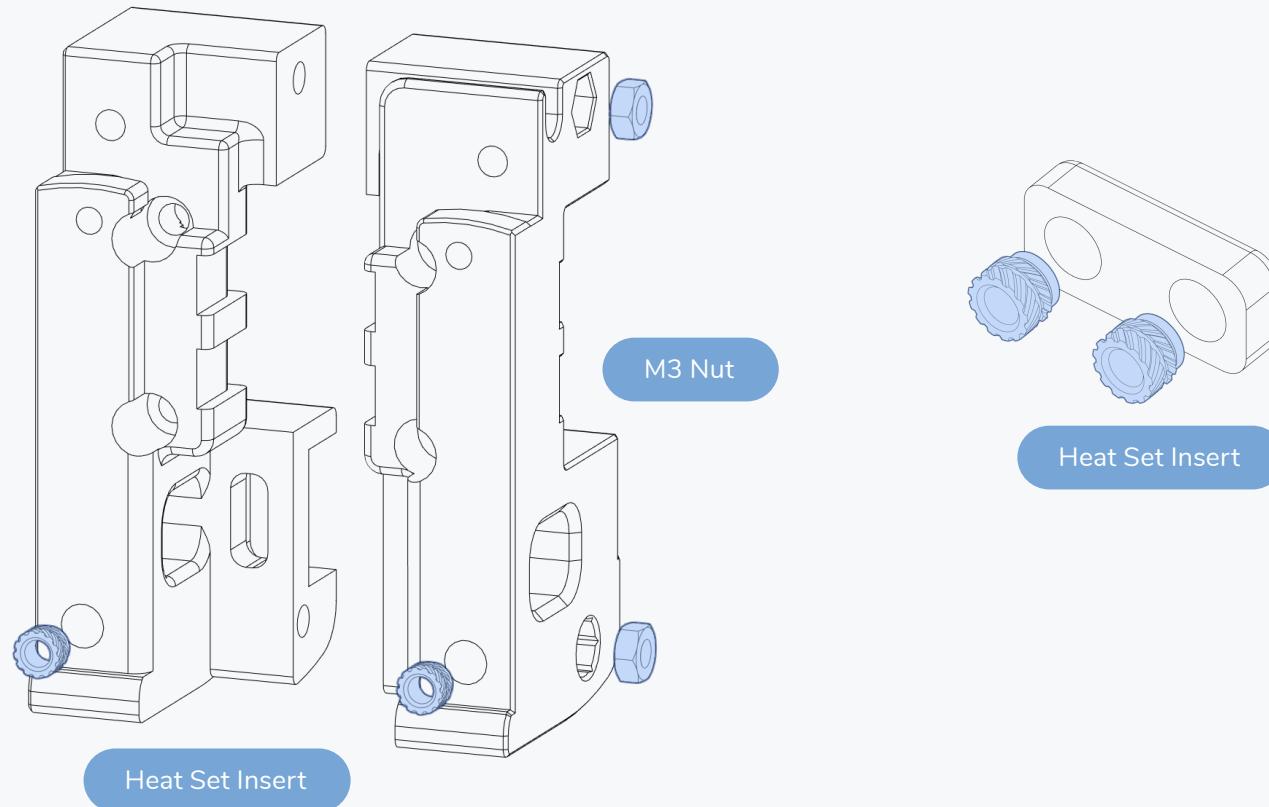
Loosen the idler bolt to extend the idler. Once extended to the maximum tighten 4 turns.

Repeat for the second idler.



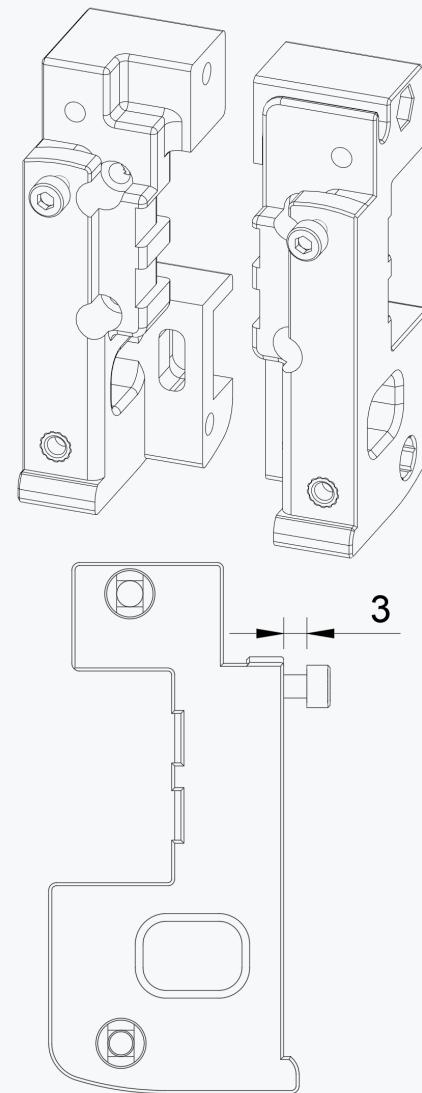
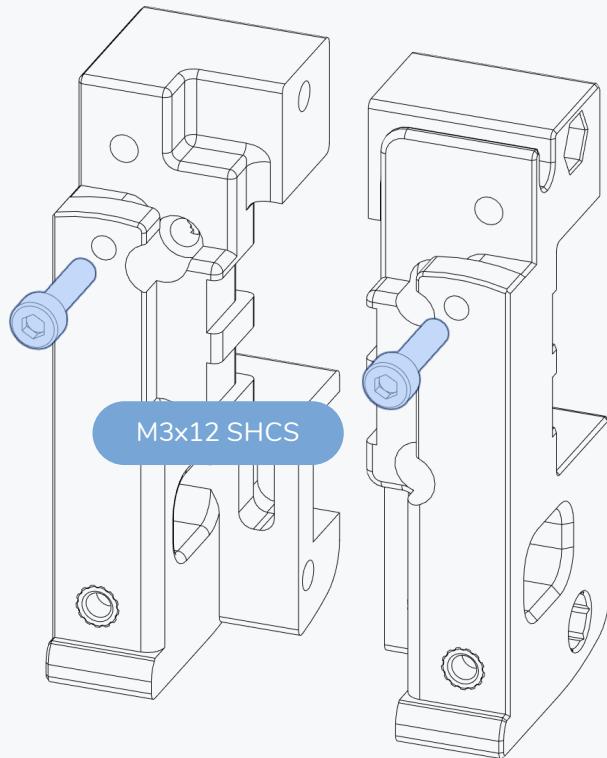
PREPARATION

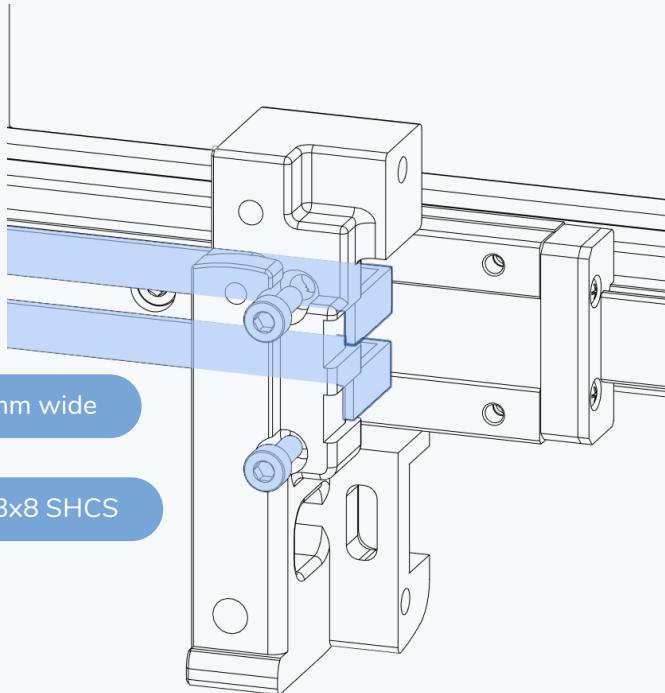
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X CARRIAGE

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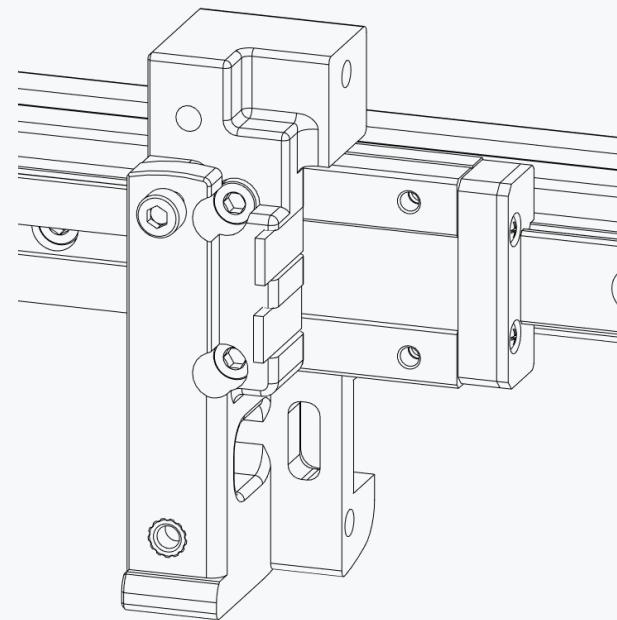
GT2 Belt 6mm wide

M3x8 SHCS

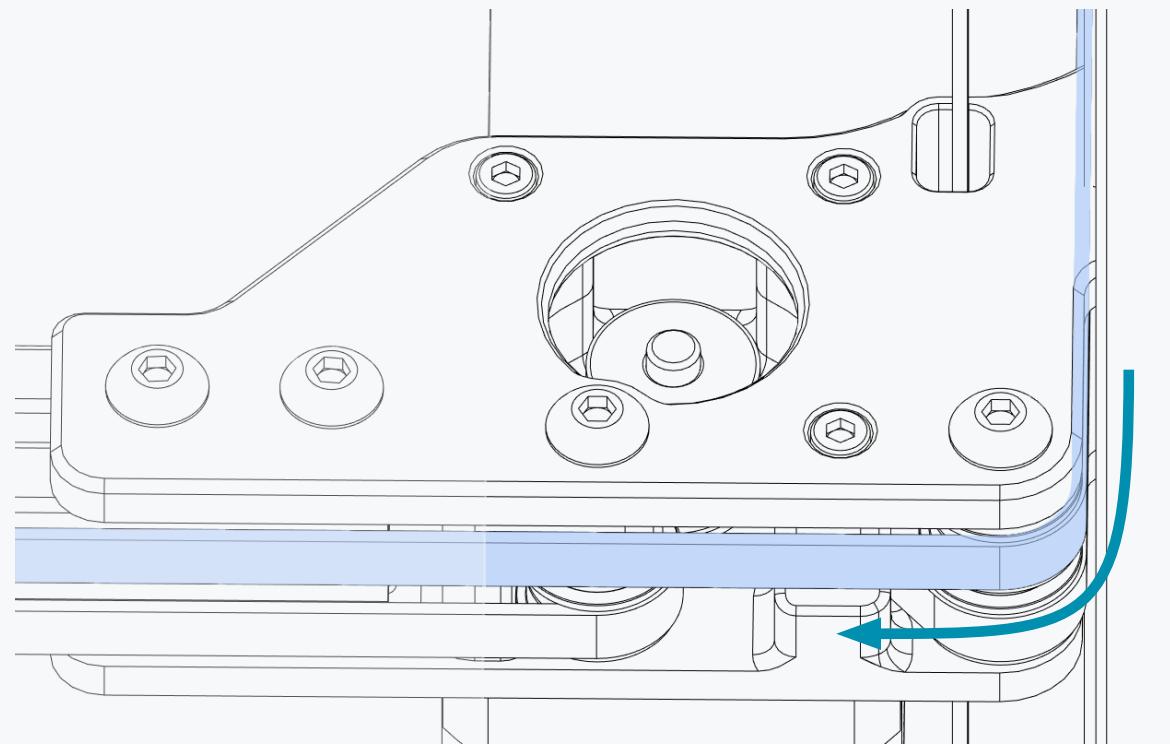
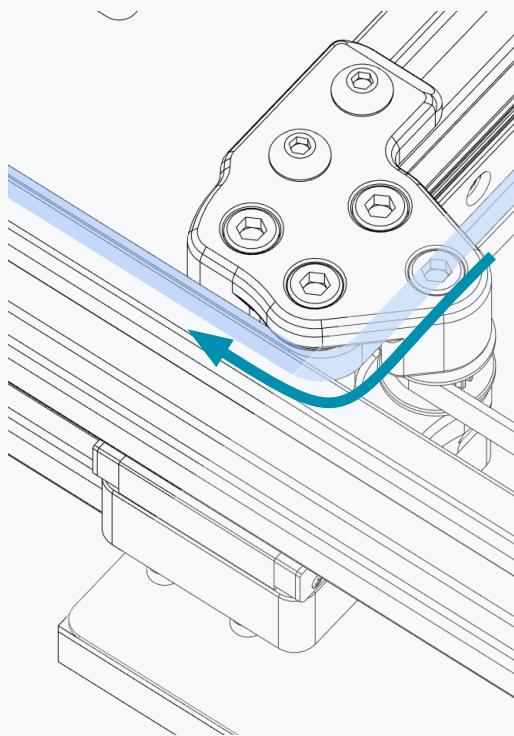
CLAMP BELTS

Clamp both A and B belts in place by installing the left X carriage part.

The belt teeth face away from the extrusion.



A BELT

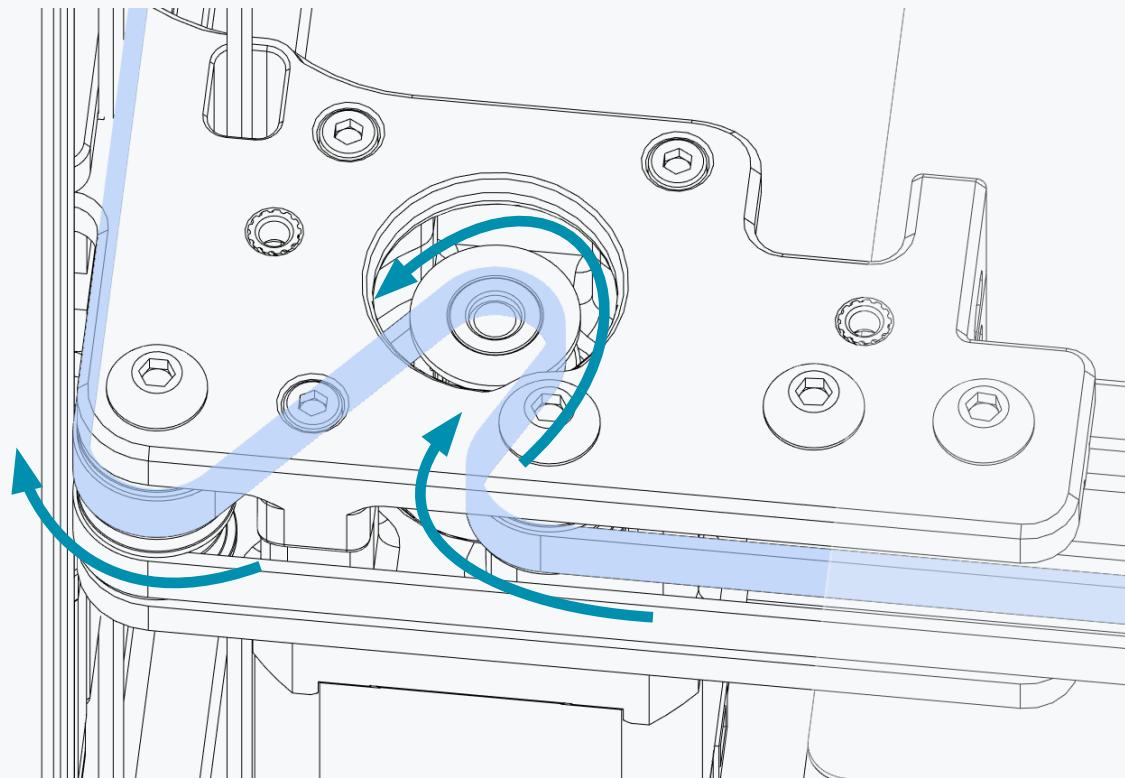


A BELT ROUTING

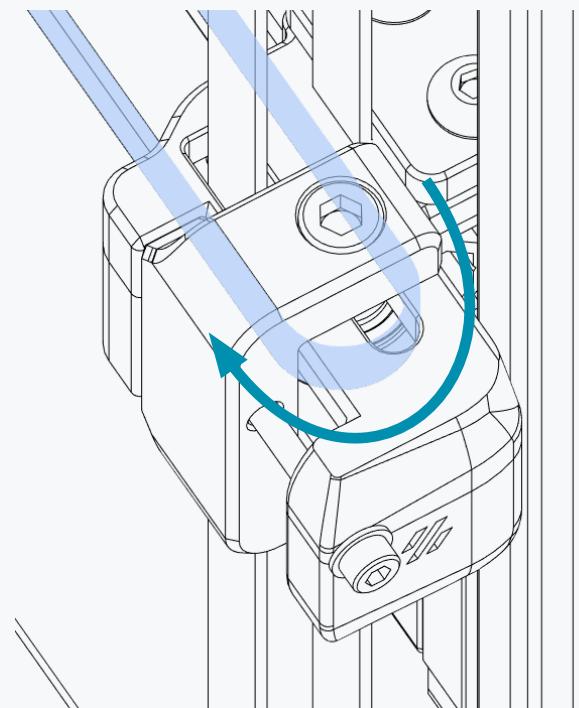
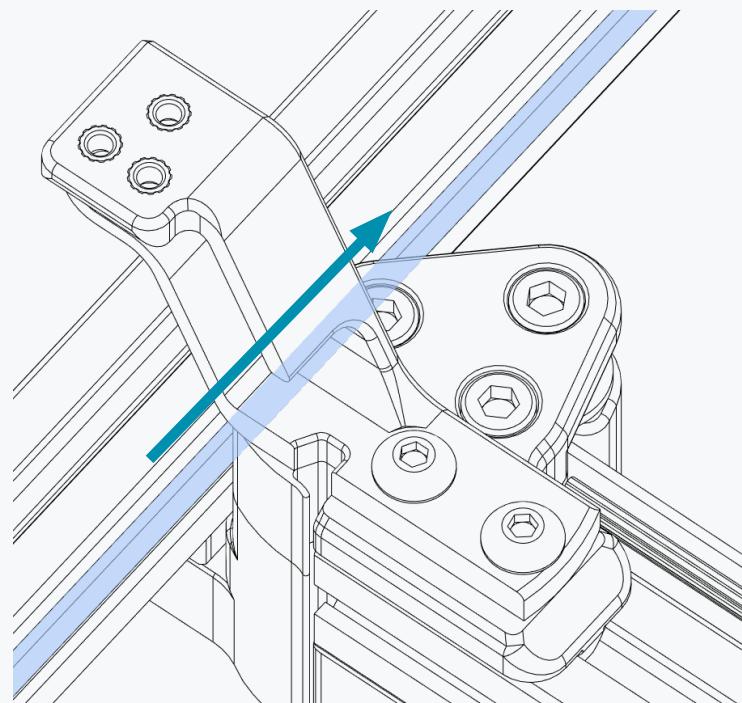
Follow the path pointed out by the arrows.
Needle nose pliers, tweezers or similar tools
can help in this step.

A BELT

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A BELT

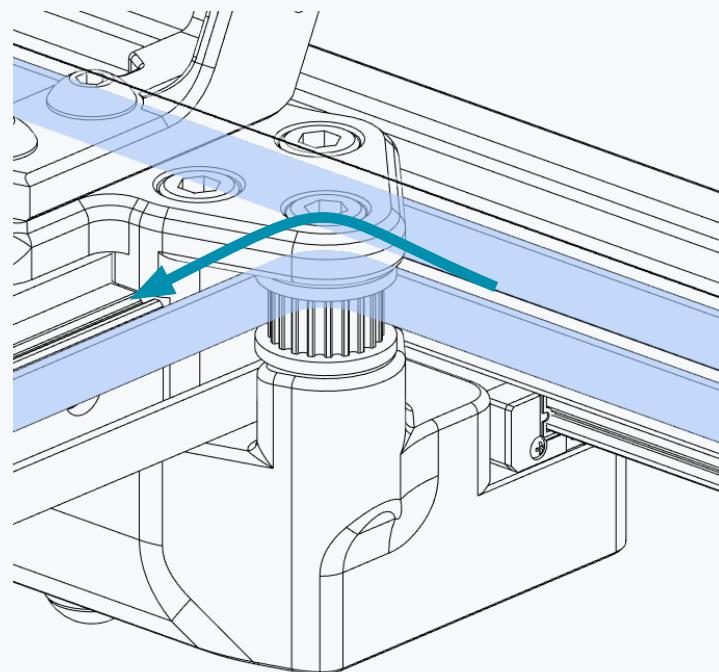


BELTING IDLERS

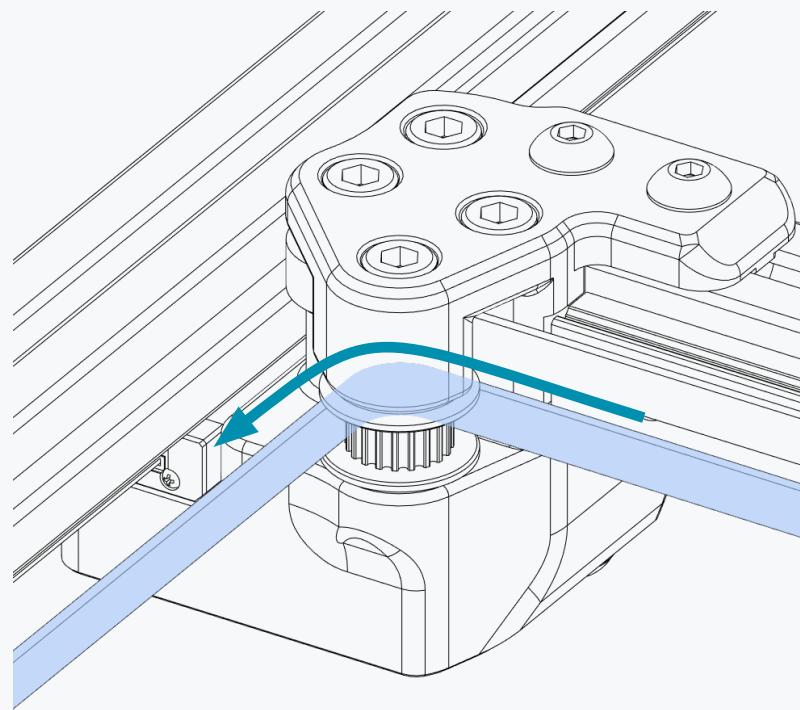
If you're having trouble guiding the belts around the bearing stack temporarily remove the M3x40 SHCS to get better access.

A BELT

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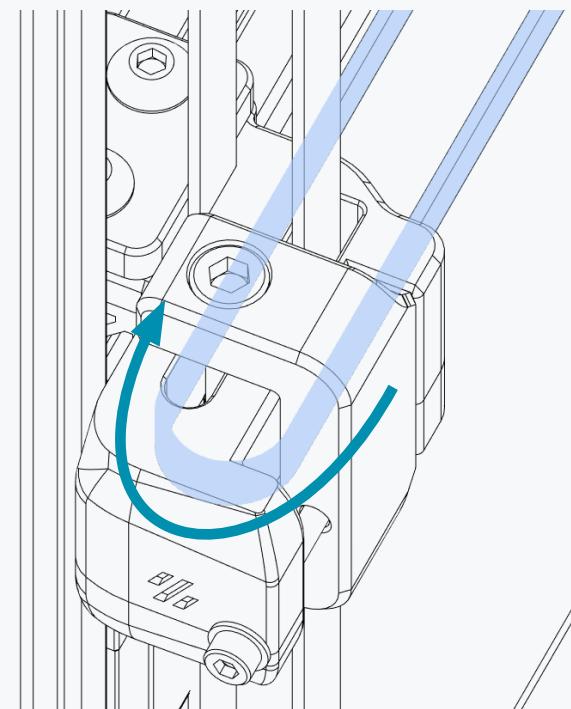


B BELT



B BELT ROUTING

Follow the path pointed out by the arrows.
Needle nose pliers, tweezers or similar tools
can help in this step.

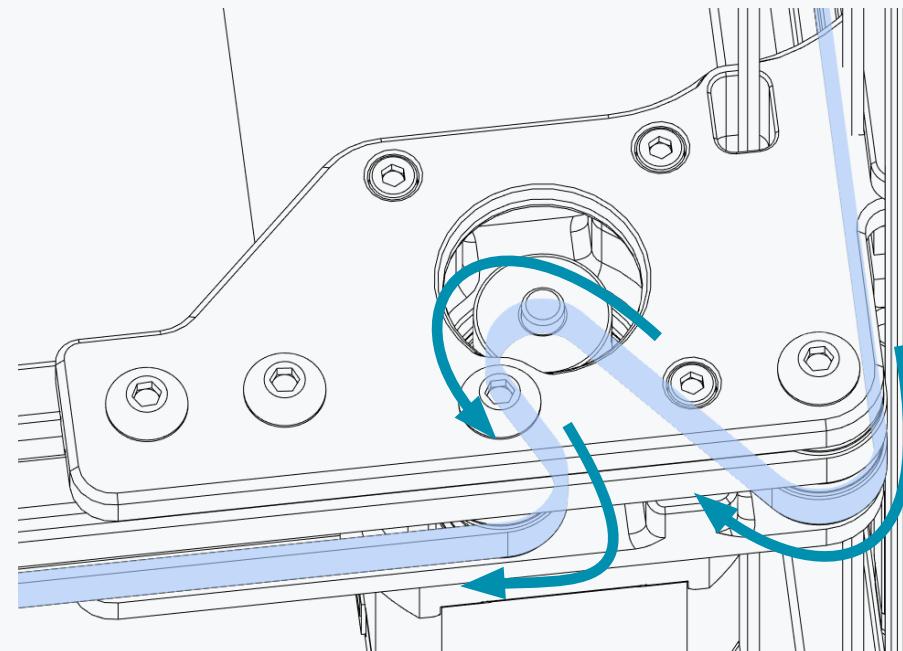
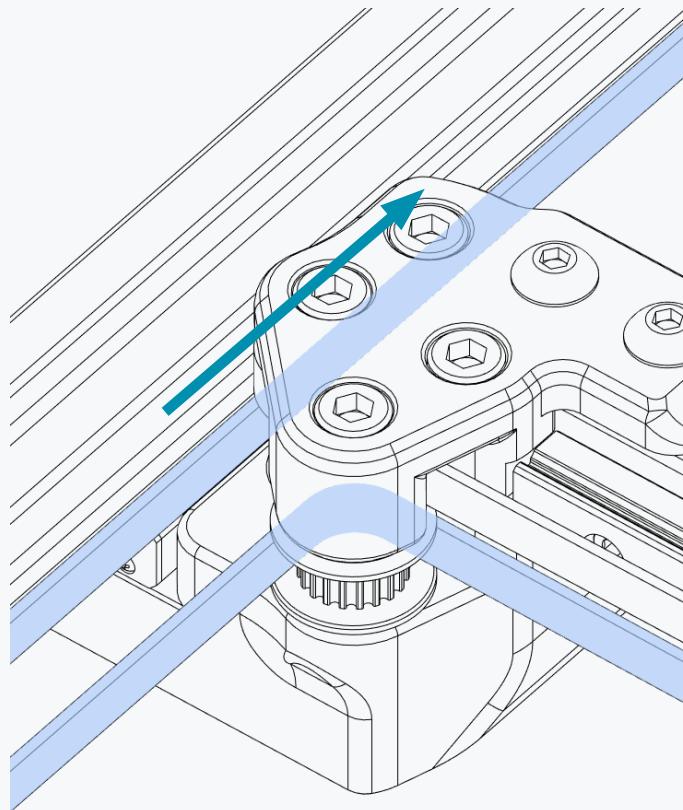


BELTING IDLERS

If you're having trouble guiding the belts around
the bearing stack temporarily remove the M3x40
SHCS to get better access.

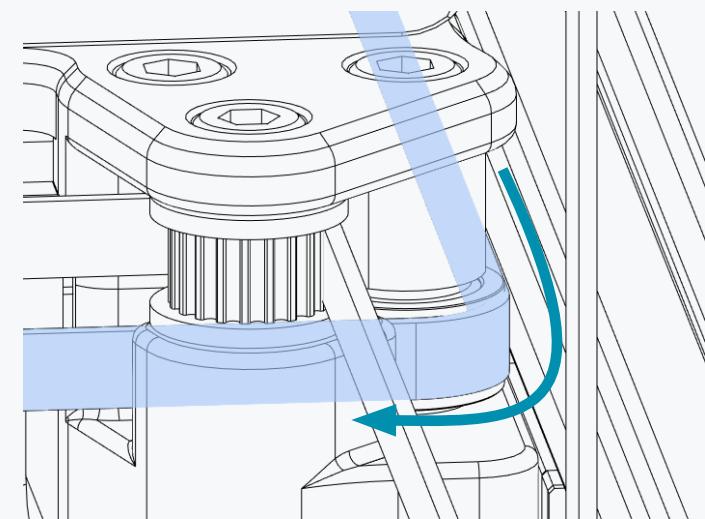
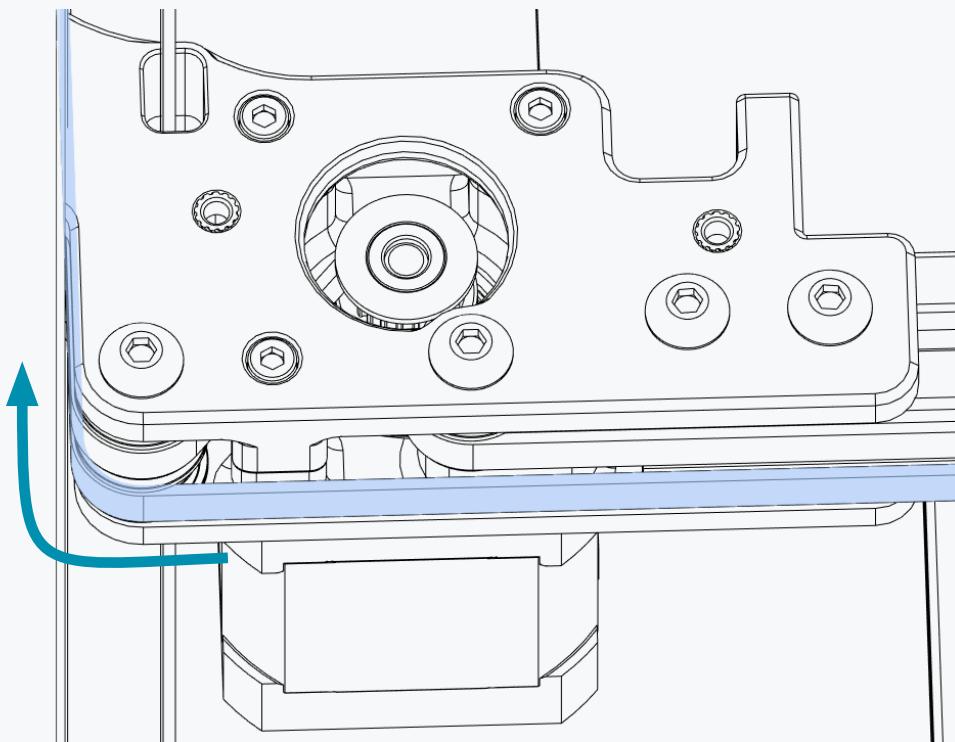
B BELT

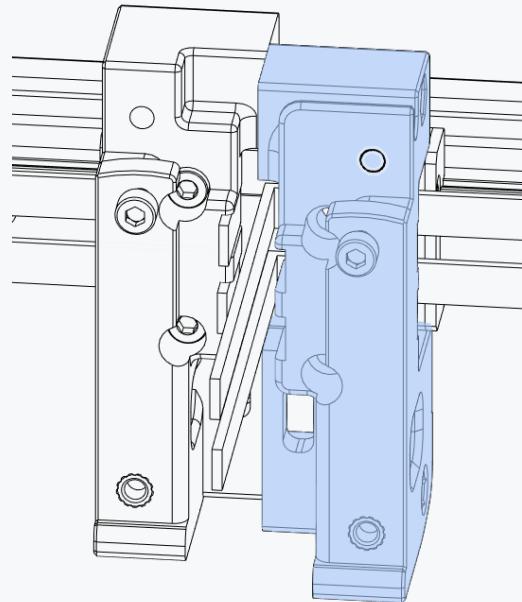
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B BELT

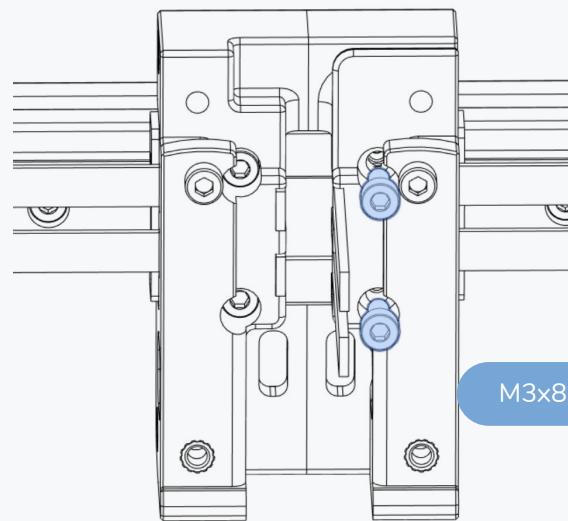
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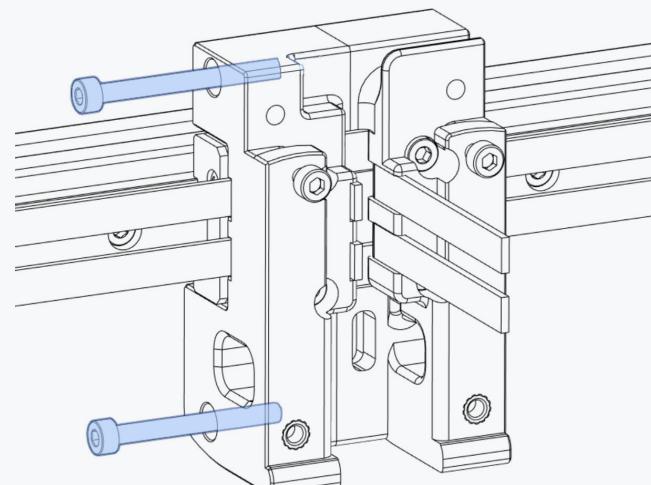
X CARRIAGE

Use the second part of the X carriage to capture
the belt ends.



M3x8 SHCS

M3x30 SHCS



M3x30 SHCS

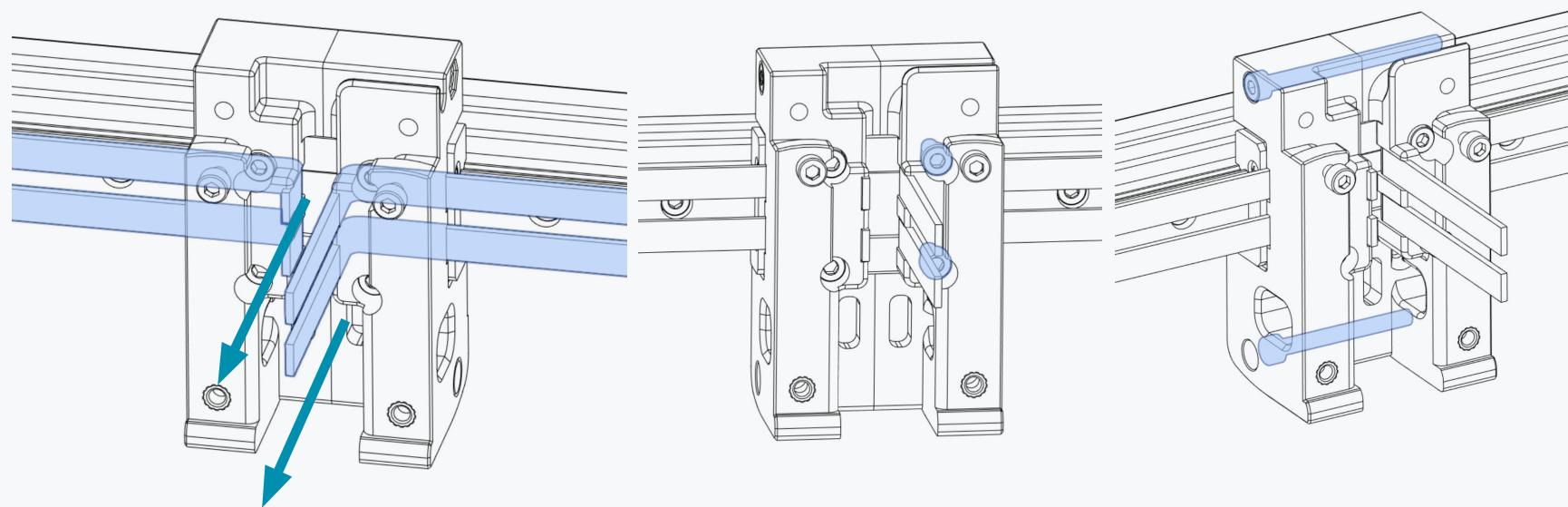
FIX BELTS

Lightly tighten the screws.

The belt must still be able to move.

LEAVE LOOSE

Lightly tighten the bolts.

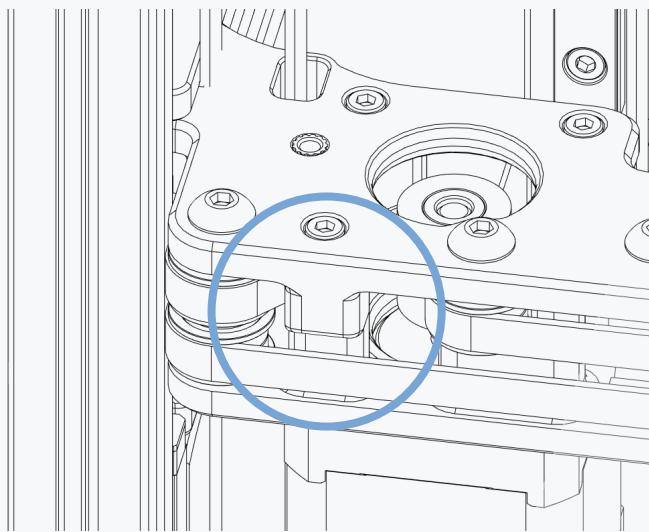
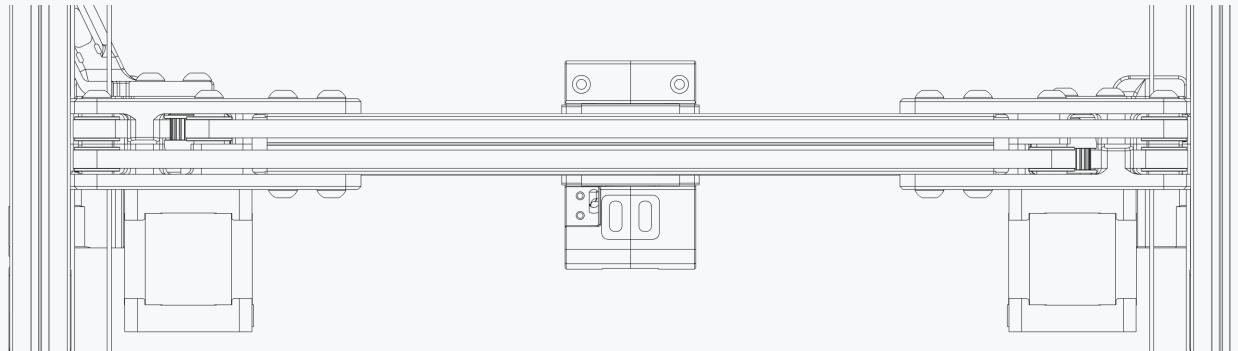
**PULL TIGHT**

Grab both belt ends with a pair of pliers and pull the belt tight.

As both belts are cut to the exact same total length and the belt paths are equal length in this design make sure the same length of belt protrudes from the carriage. you can tuck a small amount of excess belt into the empty space in the

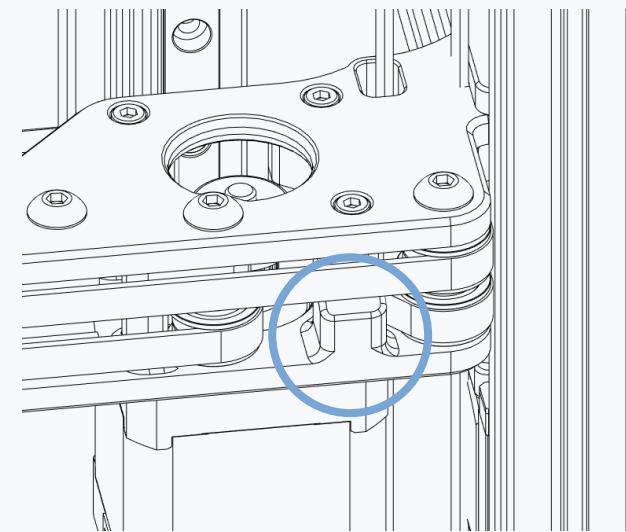
TIGHTEN BOLTS

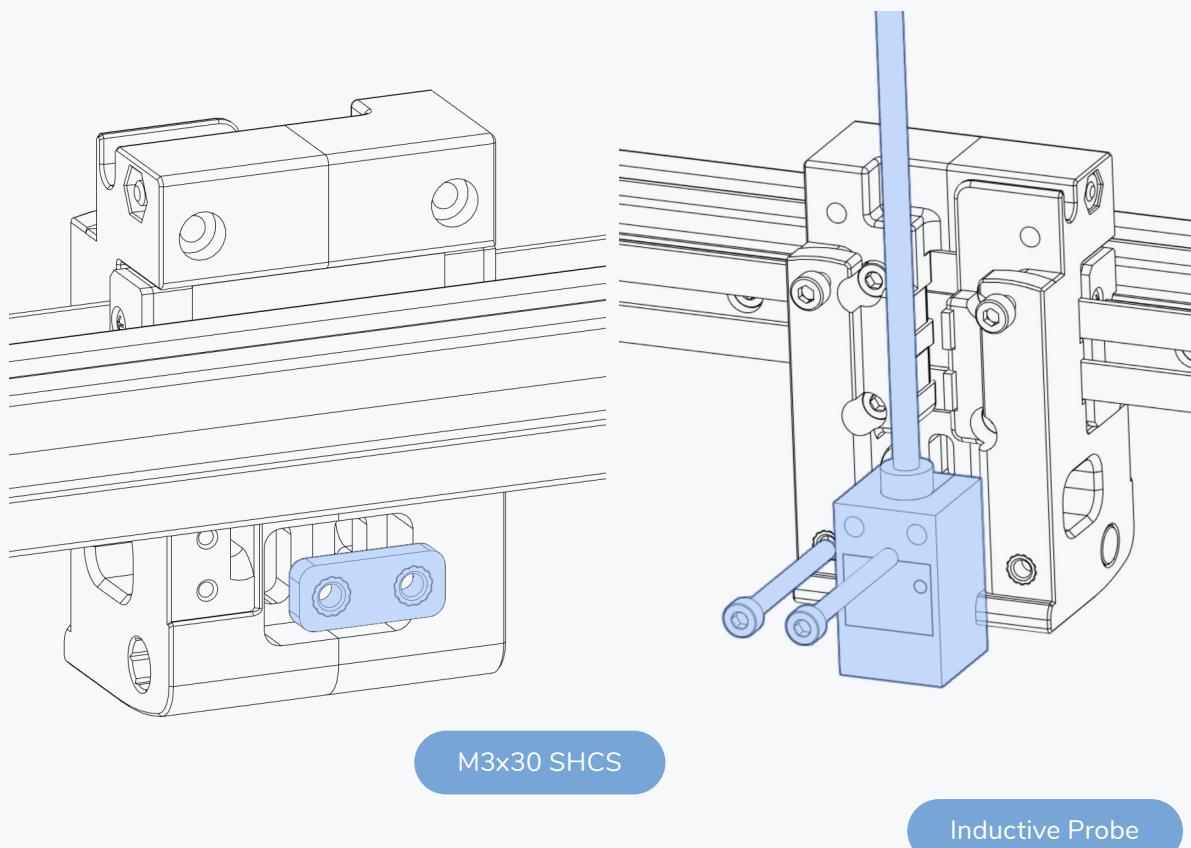
Fully tighten the carriage bolts.



CHECK YOUR WORK

Make sure that the belt is not riding on the plastic parts.





PROBE WIRES

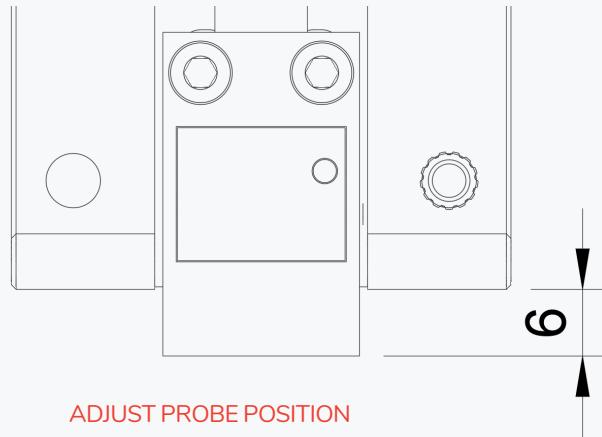
Cut the probe wires to about 150mm.

OTHER PROBE TYPES

The picture shows the recommended Omron TL-Q5MC probe.

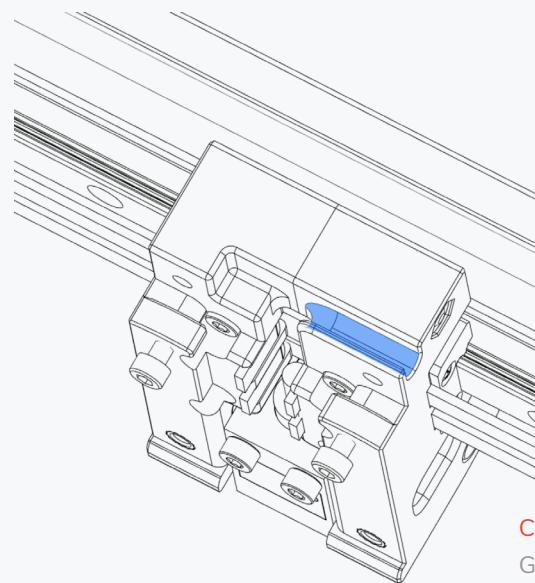
Other probes with a similar form factor and characteristics might work as well. A design for a PINDA probe adapter is included in the released files.

X CARRIAGE



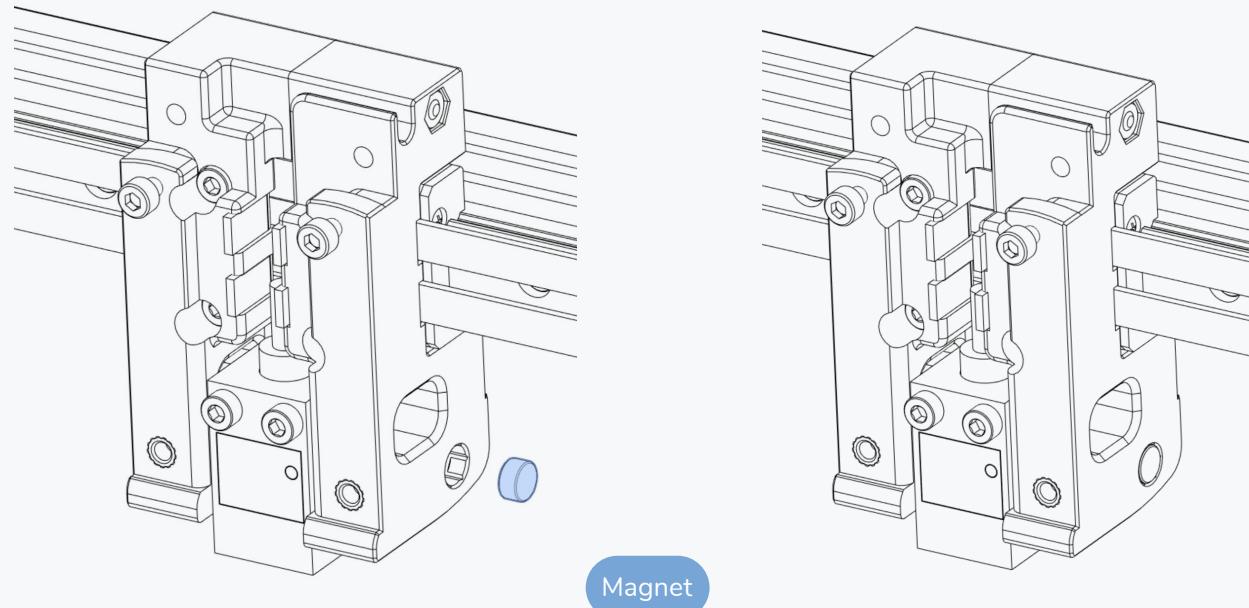
ADJUST PROBE POSITION

The position can be fine-tuned later.
Set an initial position of about 6mm
below the plastic part.



CHANNEL FOR PROBE CABLE

Guide the probe cable into the
highlighted slot.

**OPTION: HALL EFFECT ENDSTOP**

If you are using a Hall Effect Endstop insert a 3x6 magnet into the highlighted position.