

Frame Assembly

Parts Needed

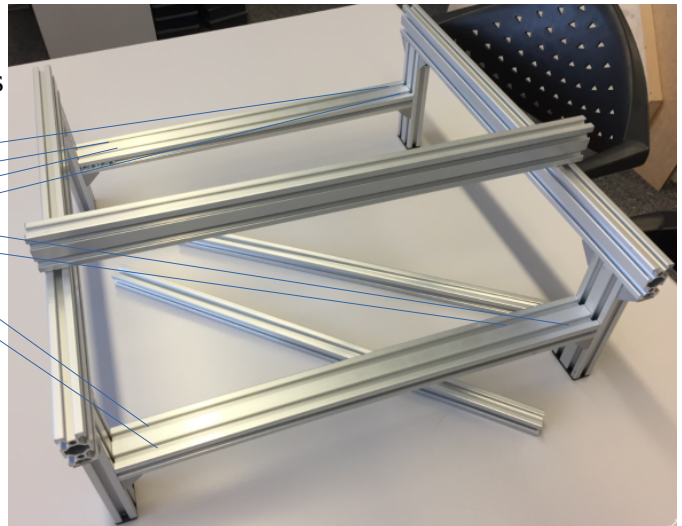
Legs - 2040 x 15 cm x 4 pcs
Rail mounts - 2040 x 50 cm x 3 pcs
Cross supports – 2040 x 450 cm x 2 pcs
Corner Bracket - 16 pcs
Screws 5mm x 8 mm L x 32 pcs
T-Nuts – 5mm x 32 pcs

Assembly heights

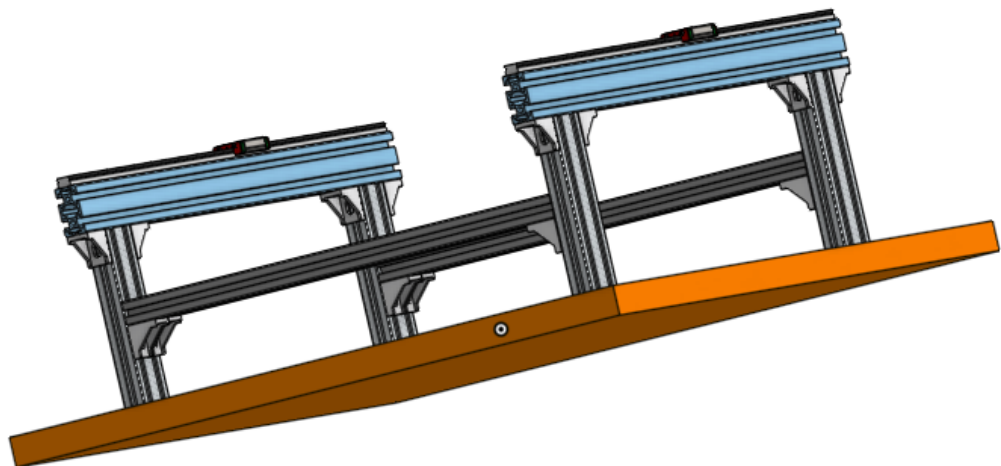
Cross bars tops measure 105 mm from bottom. (45mm from top of 150mm leg).
Legs are mounted with the outside edge 20 mm from the top to allow for the 2020 corner bracket. The corner brackets are attached with 5mm x 8 mm button head Philips screws in the T-nuts.

Add T nuts

Future proofing - Actually if you add in 2 t-nuts per channel for a total of 8 on the lower cross bars, it will save you from taking it apart when you want to mount the top board.



The locations of the 2020 corner brackets can be seen in this view.



Rail Assembly

Parts

MGN12 12mm Rail block and Slide (50 cm)

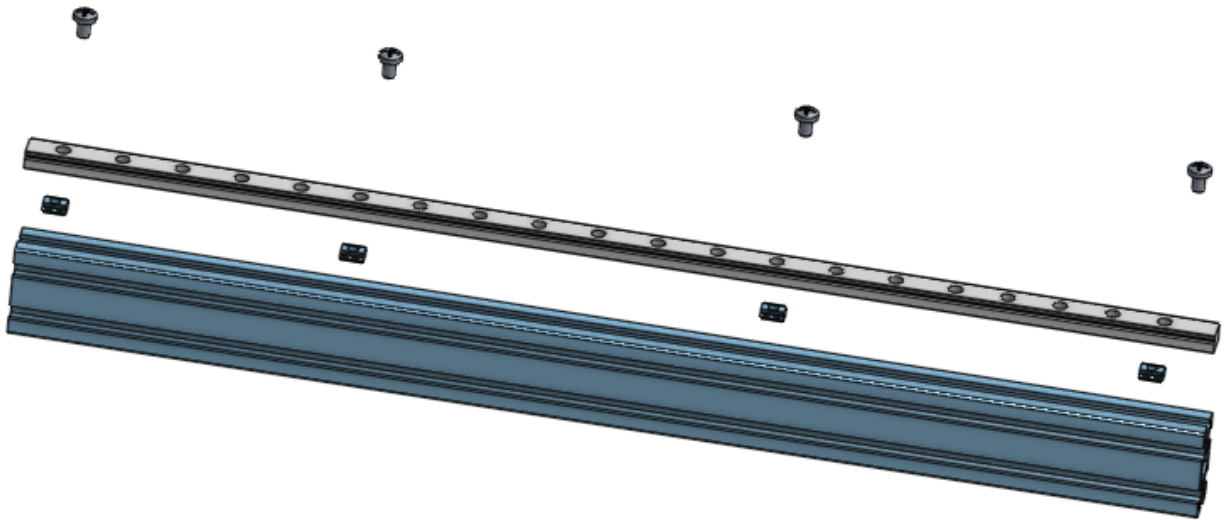
M5 T-Nuts

M5 10mm screws

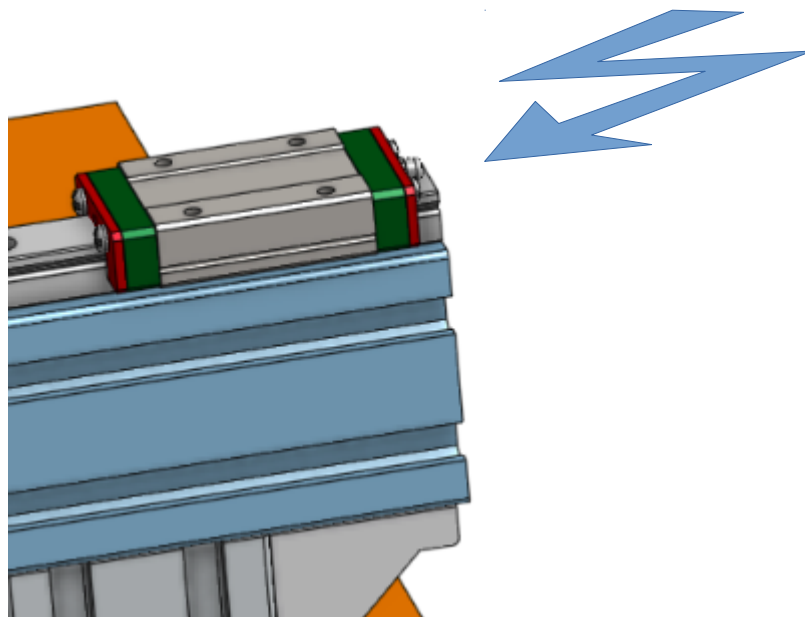
Optical Endstops

Endstopsensorholder.stp

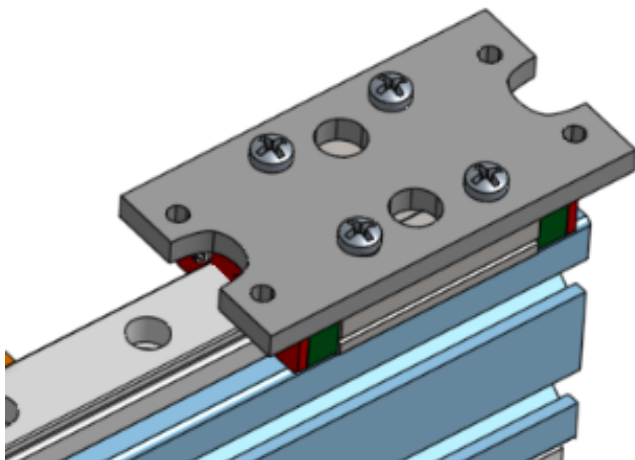
Attach the rails on the tops of the 3 50 cm 2040 Rail mounts.
The rails again will take the 5mm screws and T-nuts.



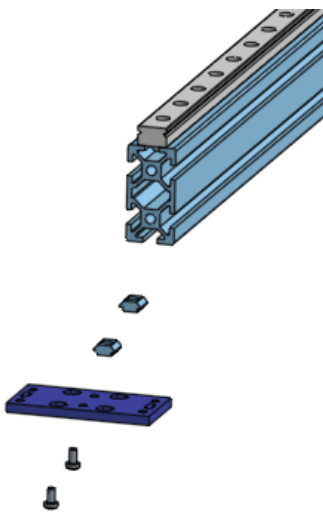
Next put the the 12mm Rail Block (MGN 12) on the slide. Use caution because if the block goes off of the end of the slide, the bearings fall all over the floor..



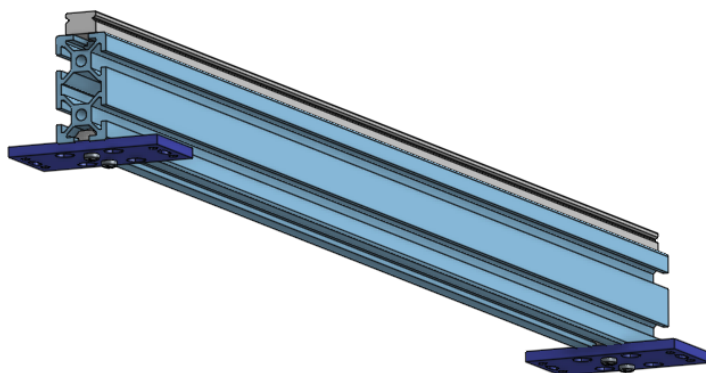
Then mount the bottom Sled block and screw it to the slide with 3mm screws.



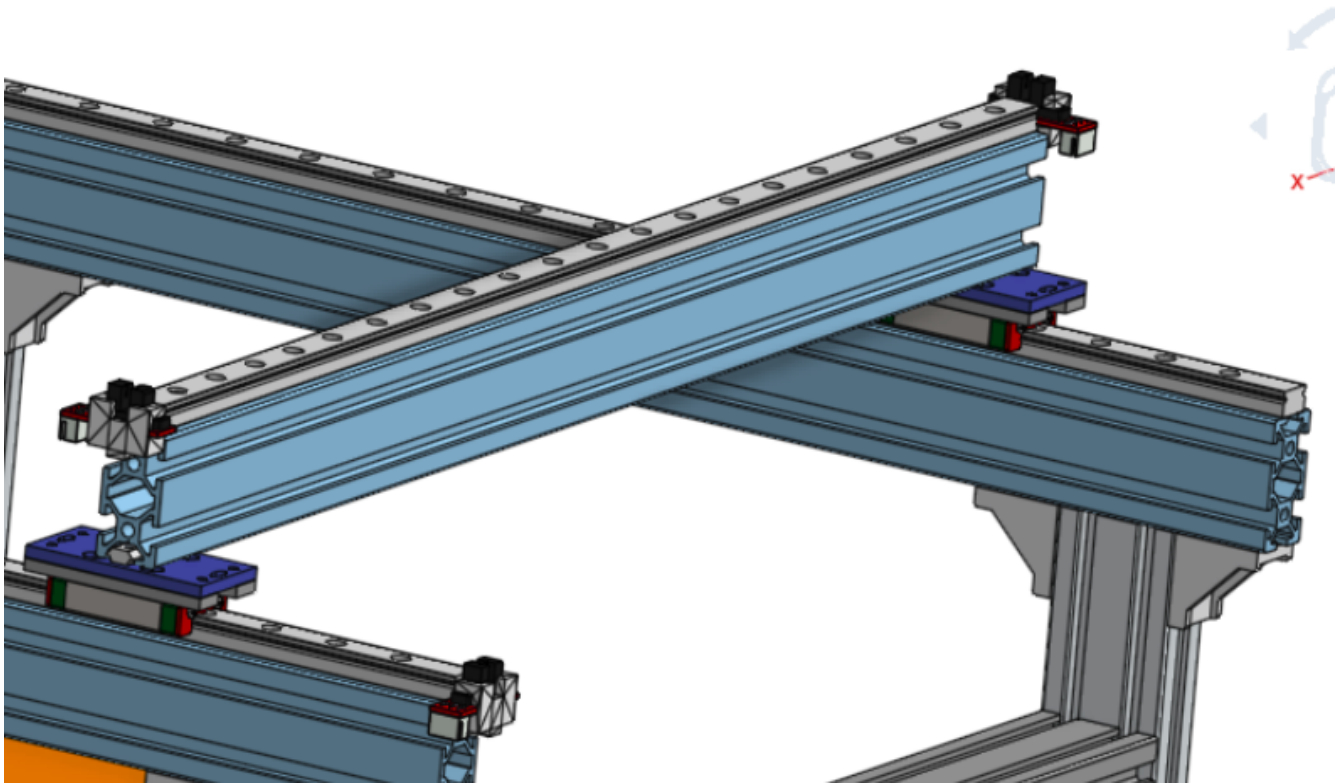
The next part is very clever but a little difficult to grasp. Attach the top sled block to the sliding cross rail with 3 x 8mm screws and T-nuts.



Assemble it to both sides like this.



Finally drop it down on top of the slides like this.



Lastly lets assemble the endstopsensorholder.stp and Optical Endstops end of the channels.
3D print the endstopsensorholder.stp x 4 pcs. Assemble them with the connector on the outside or facing to the back of the device. Having these on will prevent the sliders from coming off and the balls falling all over the place.

