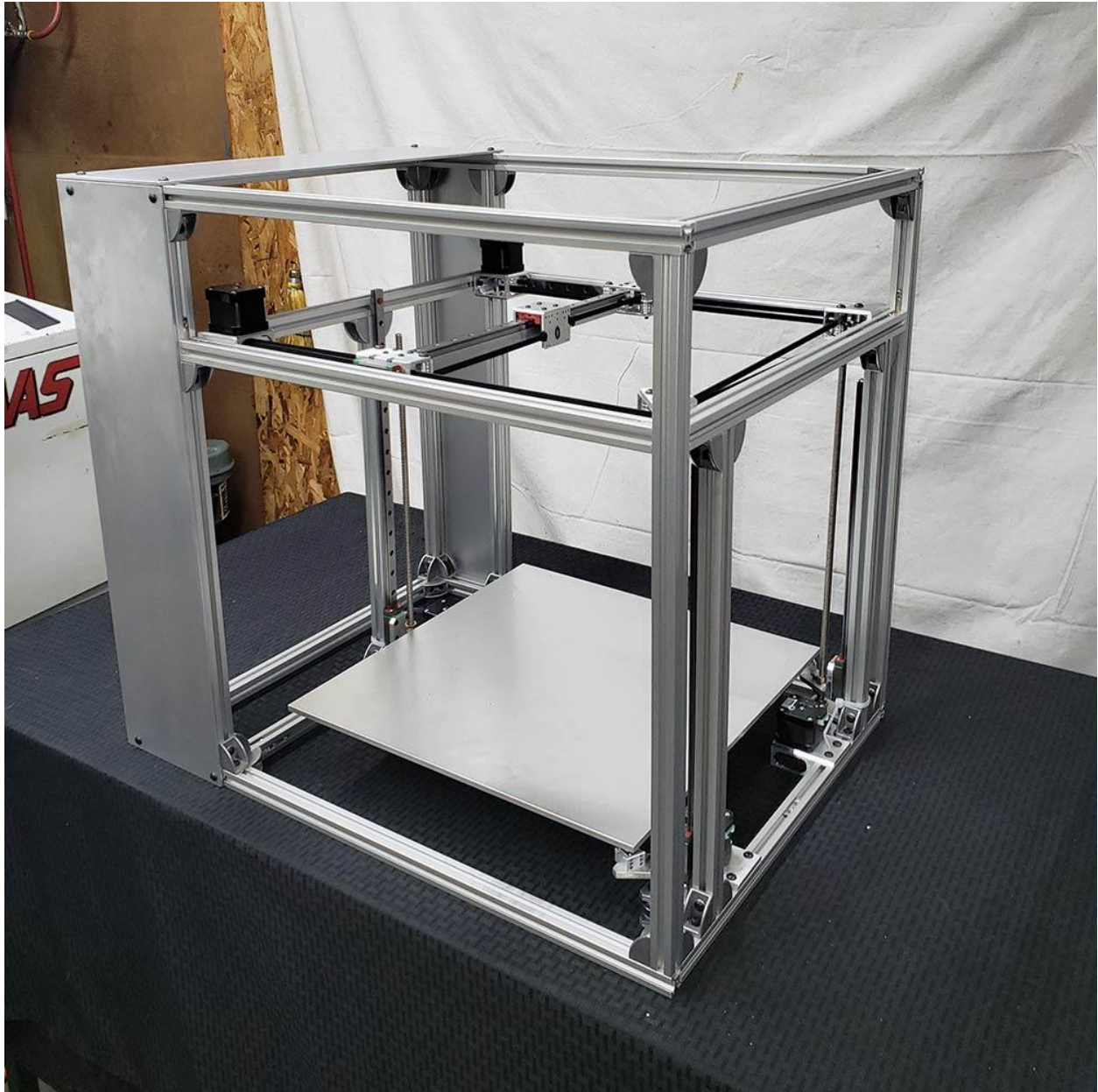


SolidCore CoreXY Updates 11/19/21



SolidCore CoreXY Build Updates

Build Volume

We decided to focus on different build sizes. The square build plates and printing area makes more sense rather than the rectangular build sizes. Since most corexy 3d printers **use a square**

print bed there are a number of suppliers that SolidCore builders can source parts and materials from.

When we first started designing the SolidCore we ran some polls on what the ideal print bed size would be. Although we are used to building larger printers, the data at the time led to the decision to build a smaller printer. After building the first two prototype iterations of the machine design and getting feedback from SolidCore builders and people contacting us interested in actually building a SolidCore we've decided to increase and square the print size.

- 300x300x300 mm
- 350x350x350 mm
- 400x400x400 mm
- 500x500x500 mm

See [SolidCore CoreXY](#)

SolidCore Standard Part Changes

- More [Y-Carriage](#) threaded holes for mounting miscellaneous components
- Beautiful chamfers on all the parts
- Increased Side Panels Width from 4 inches to 6 inches.
See [Frame](#)

SolidCore Upgrade Part Changes

- Reinforced motor and idler mounts
- Kinematic Bed (Adjustable)
- Triple Z-independent Stepper Motors
- Beautiful chamfers on all the parts
- Reinforced Z-axis Idler Pulleys

Build Instructions Videos

- XY-Motor & Idler assembly explained
- Pulley & Belt Alignment
- X-Carriage Assembly
- Y-Carriage Assembly

SolidCore BOM

The BOM is a work in progress. Please [email me](#) if you are purchasing parts or have questions.

SolidCore BOM							
350mm x 350mm x350mm	Quantity	Description	Source	\$ Each	\$ Total	Documentation	Folder
Frame Extrusions		2020 T-Slot	ZylTech			Frame Size List	Frame Folder
570mm Long	6	Vertical (Tall)	ZylTech			Frame Size List	Frame Folder
430mm Long	3	Vertical (Z-Axis Rail)	ZylTech			Frame Size List	Frame Folder
660mm Long	4	Length (Long)	ZylTech			Frame Size List	Frame Folder
500mm Long	2	Length (XY-Rail Short)	ZylTech			Frame Size List	Frame Folder
450mm Long	8	Width	ZylTech			Frame Size List	Frame Folder
Corner Brackets							
Screws							
Linear Rails	Quantity	Description	Source	\$ Each	\$ Total	Documentation	Folder
Linear Rails w/Carriage - MGN12H	6	XYZ-Axis	Zyltech	\$29.95	\$179.70	Linear Rail	Linear Rail
X-Carriage	Quantity	Description	Source	\$ Each	\$ Total	Documentation	Folder
Carriage	2	Aluminum Carriage	3D Distributed			Documentation	X-Carriage
MGN12H Rail Clamps	2	MGN12H Rail Clamps	3D Distributed			Documentation	X-Carriage
M5 Nylon Washers	100	For Idler Pullys	Amazon	\$6.99	\$6.99	Documentation	X-Carriage
Gates 2GTToothed Idlers		6mm Belt - 20 Tooth - 5mm ID				Documentation	X-Carriage
Gates 2GT Smooth Idlers		6mm Belt - 12mm OD - 5mm ID				Documentation	X-Carriage

3D Distributed

Washer Stainless	100	5mm ID x 1mm Stainless Steel	Amazon	\$7.49	\$7.49	Documentation	X-Carriage
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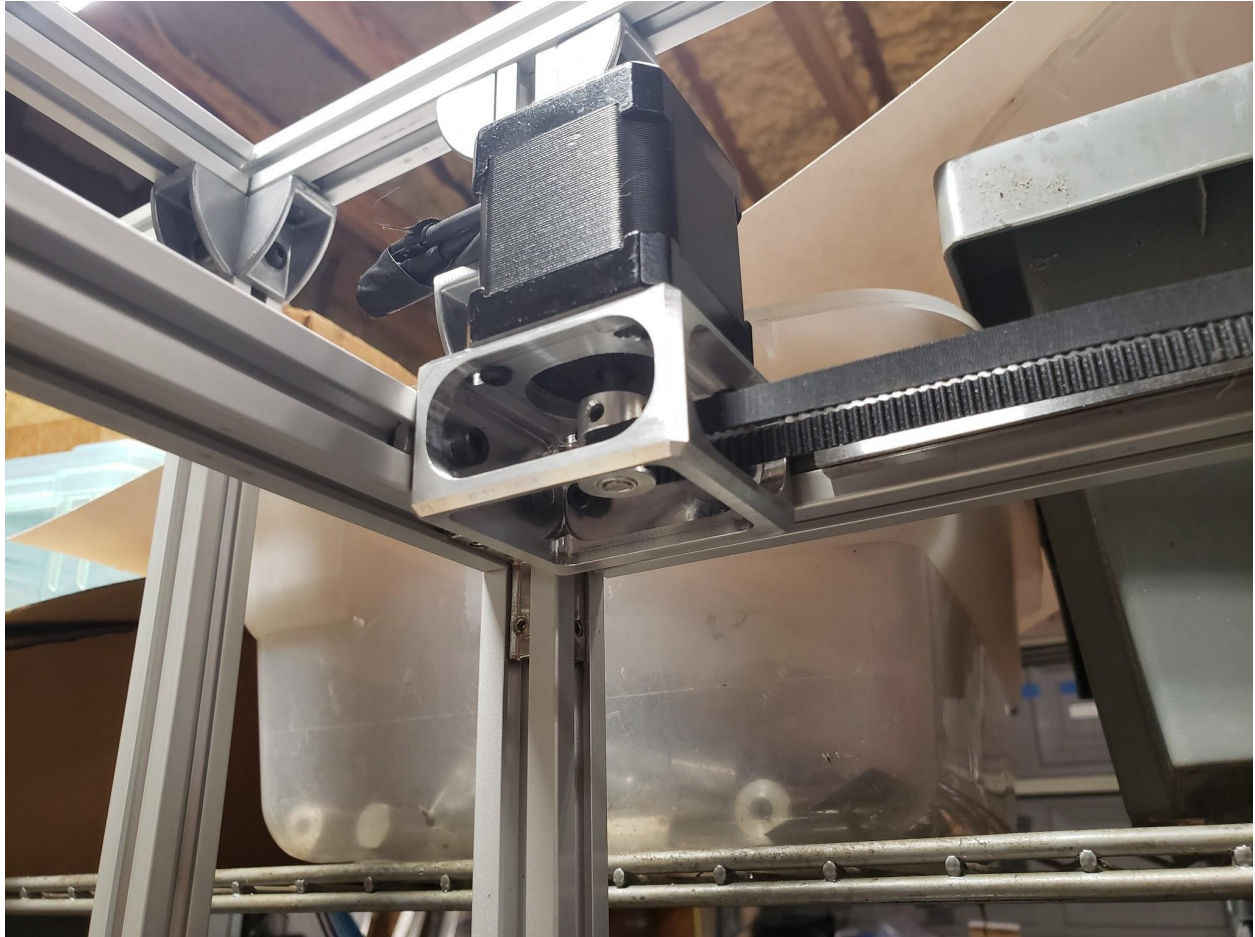
Y-Carriage	Quantity	Description	Source	\$ Each	\$ Total	Documentation	Folder
Y-Carriage	1	Aluminum Carriage	3D Distributed			Documentation	Folder
Hotend Mount	1	Aluminum Mount	3D Distributed			Documentation	Folder
M3 x 5mm Screws	4	Carriage To Rail Mount	3D Distributed			Documentation	Folder

XY-Motor-Idler Mounts	Quantity	Description	Source	\$ Each	\$ Total	Doc	Folder
XY-Motor Mounts	2	Aluminum Motor Mounts	3D Distributed	\$15.00	\$30.00	Documentation	Folder
GATES 2GT PULLEY	2	20 TOOTH 6MM	Filistruder	\$3.99	\$7.98	Documentation	Folder
	2		3D Distributed			Documentation	Folder
XY-Idler Mounts	2	Aluminum Idler Mounts	3D Distributed	\$15.00	\$30.00		
GATES 2GT IDLER	4	GATES 2GT Toothed IDLER	Filistruder	\$5.49	\$21.96		

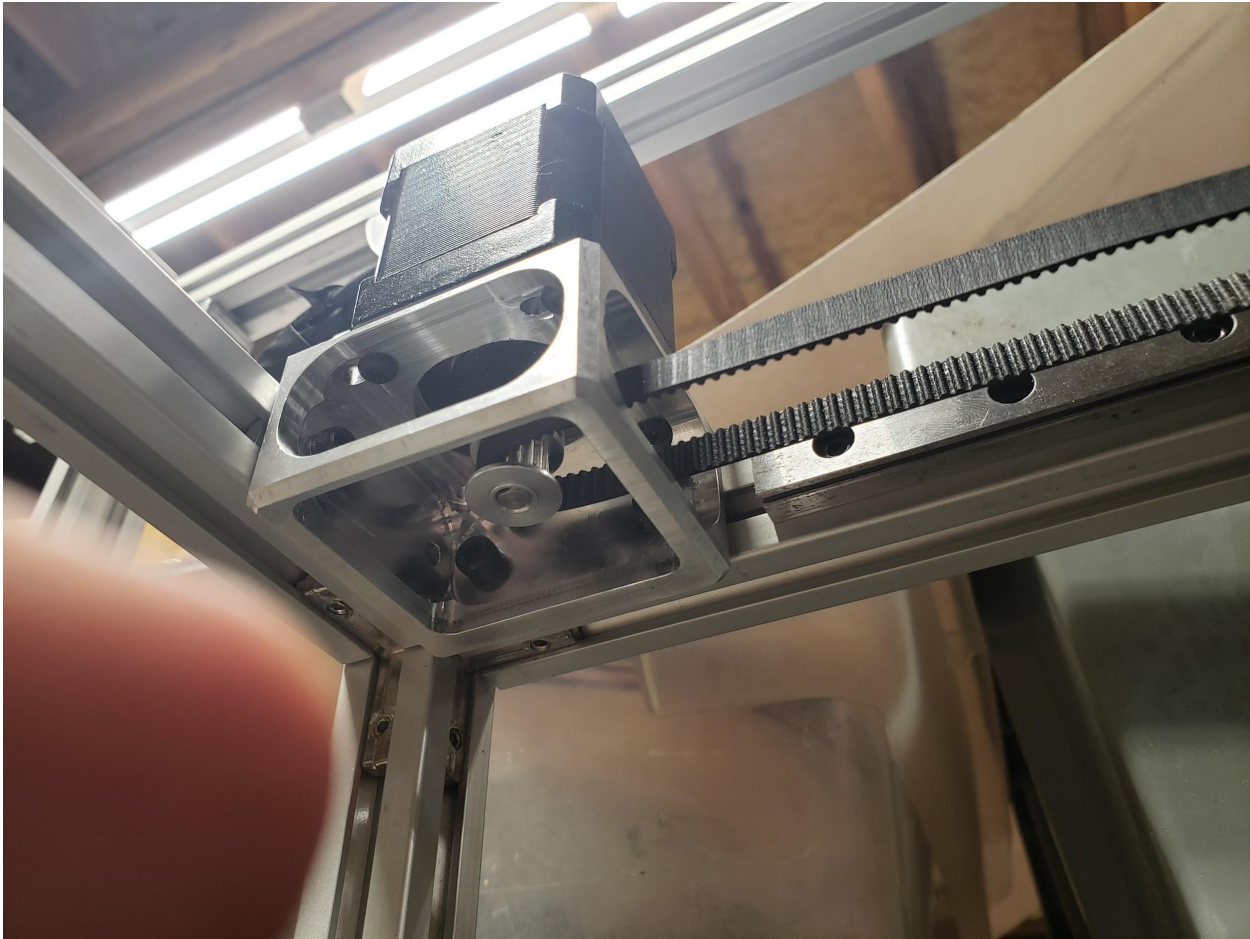
Z-Axis	Quantity	Description	Source	\$ Each	\$ Total	Documentation	Folder
L-Brackets	3	L-Brackets	3D Distributed			L-Brackets	L-Brackets
M3 Screws 6mm Long	12	M3 Screws 6mm Long				M3 Screws	M3 Screws
GT2 Timing Pulley 40 Teeth	3	8mm Thru, 6mm Belt Width	Amazon			GT2 Pulley 40 Teeth	Pulley
GT2 Pulley 20 Teeth Bore 5mm	3	20 Teeth Bore 5mm				GT2 Pulley 20 Teeth	Pulley
Lead Screw - 8mm T8x8	3	Lead Screw 400mm Long	Zyltech	\$11.95	\$35.85	Lead Screw	Lead Screw
Flange Bearing 8x16x5mm	6	10pack F688ZZ Steel Bearings	Amazon	\$11.39	\$11.39	Flange Bearing	Flange Bearing

Build Plate	Quantity	Description	Source	\$ Each	\$ Total	Documentation	Folder
Mic6 Build Plate	1	3D Distributed	3D Distributed	\$80.00	\$80.00		Build Plate

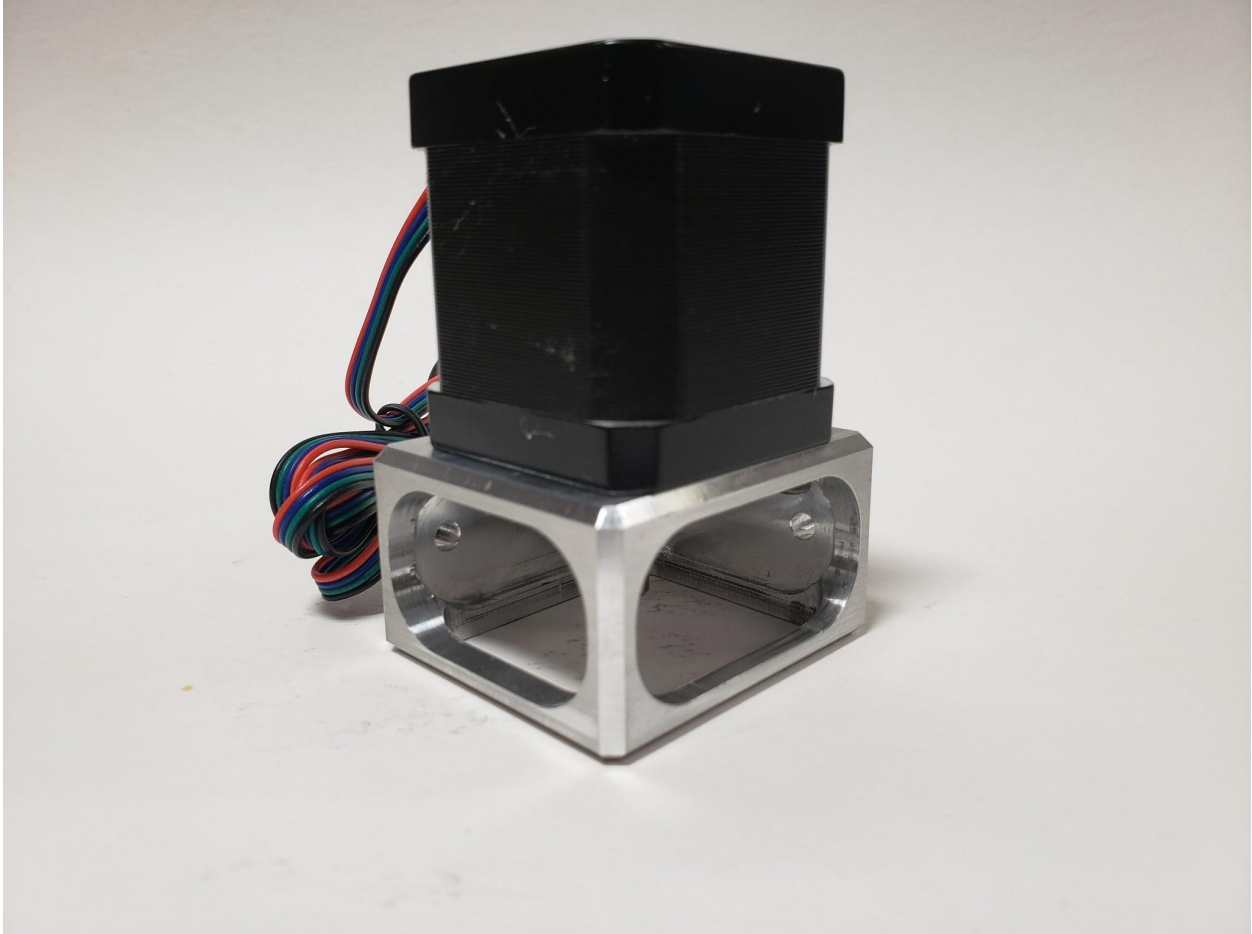
Motor Mounts Upgrade



Due to the number of newer 2020 frame extrusions beginning to use an endcap style frame connectors and brackets we updated the [SolidCore](#) motor and idler plates to a mount that mounts within the frame. We're hoping this will also increase the overall rigidity of the printer frame. See [SolidCore Frame](#)





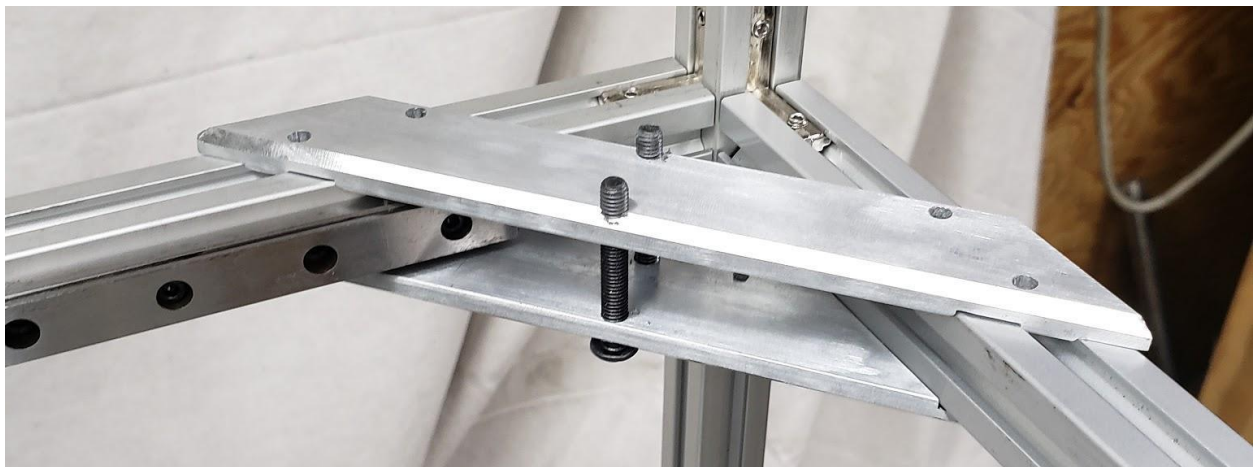


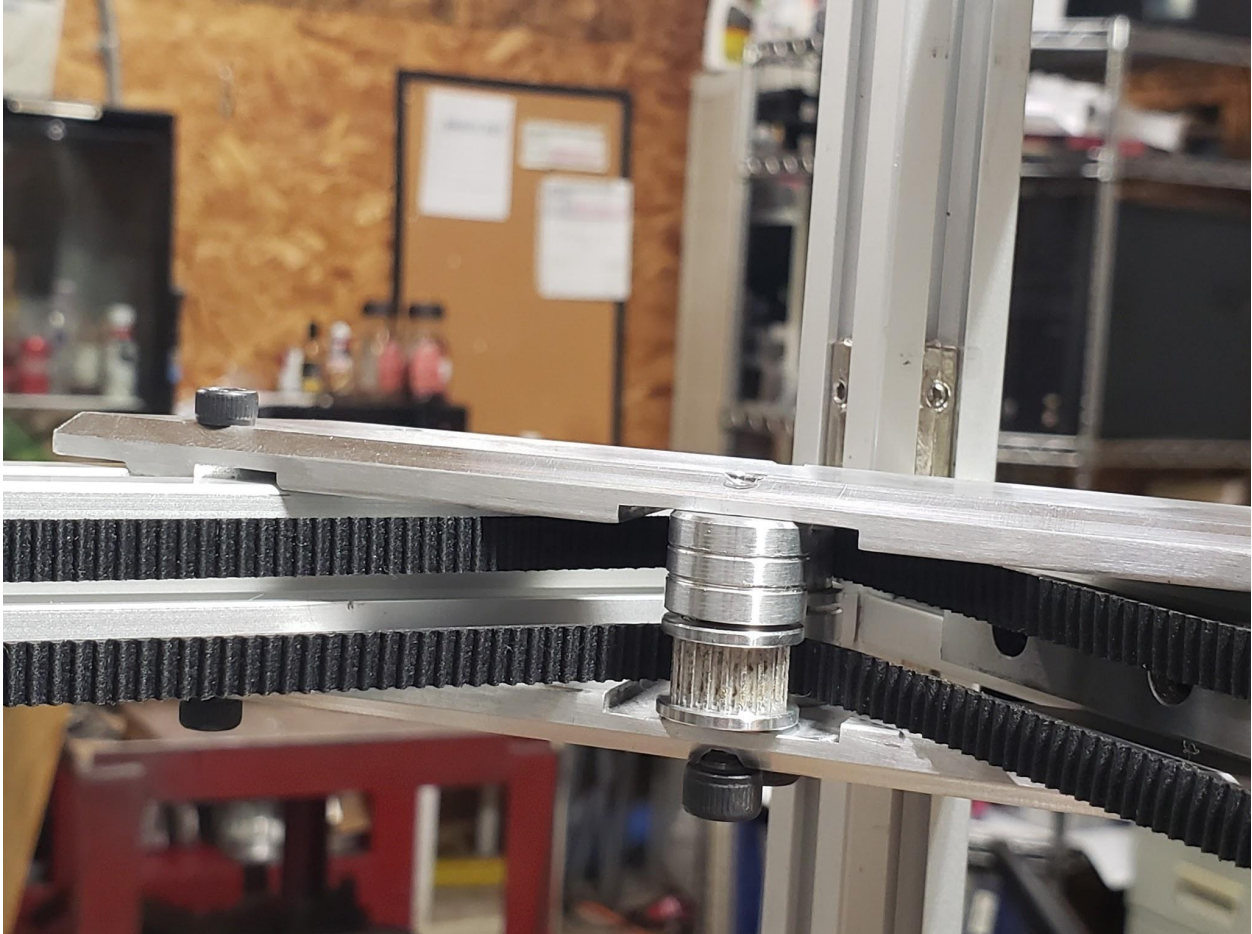
Belt Tensioning



See Details
[XY Motor Mount](#)

Idler Mount Upgrade - Gusset Bracket





Idler Mount Upgrade - Corner Bracket

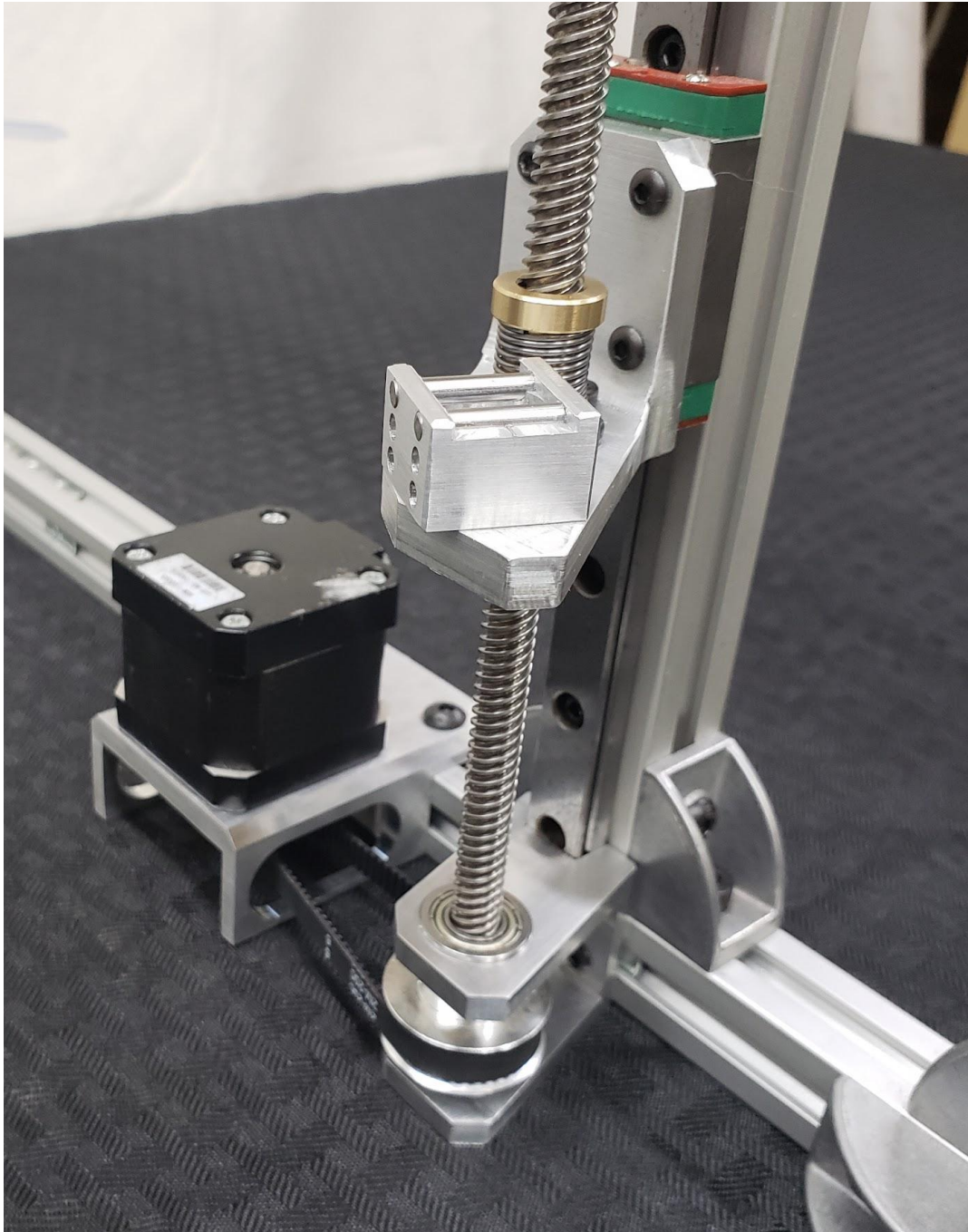


See Details

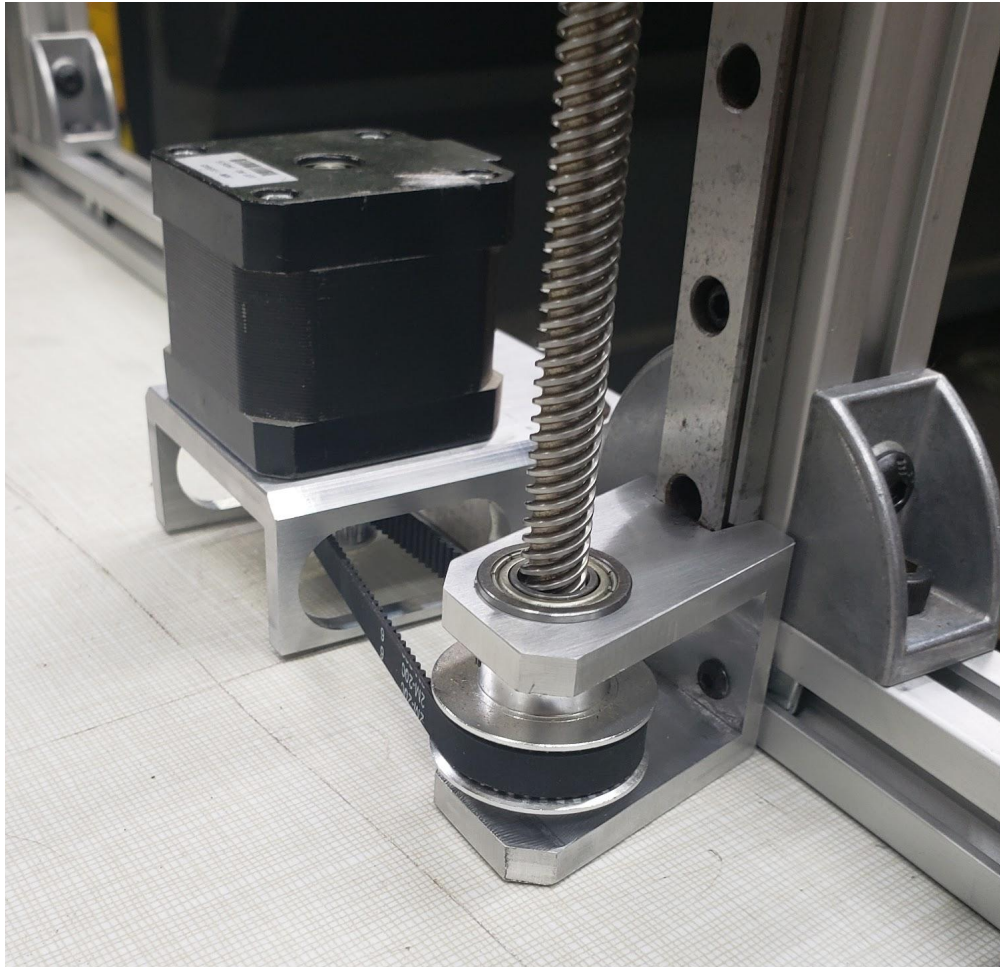
[Belt Routing](#)

[CoreXY Kinematics](#)

Kinematic Bed



Triple Z Brackets



See Details

[Z-Axis](#)

[Triple Z Setup](#)

[Kinematic Bed Mounting System](#)

[Kinematic Bed Design](#)

[Z-Axis Documentation](#)