# BarBot
by Naomi Wu


Based on **Arduino Cocktail Mixing Robot**
by **Lukas Šidlauskas**
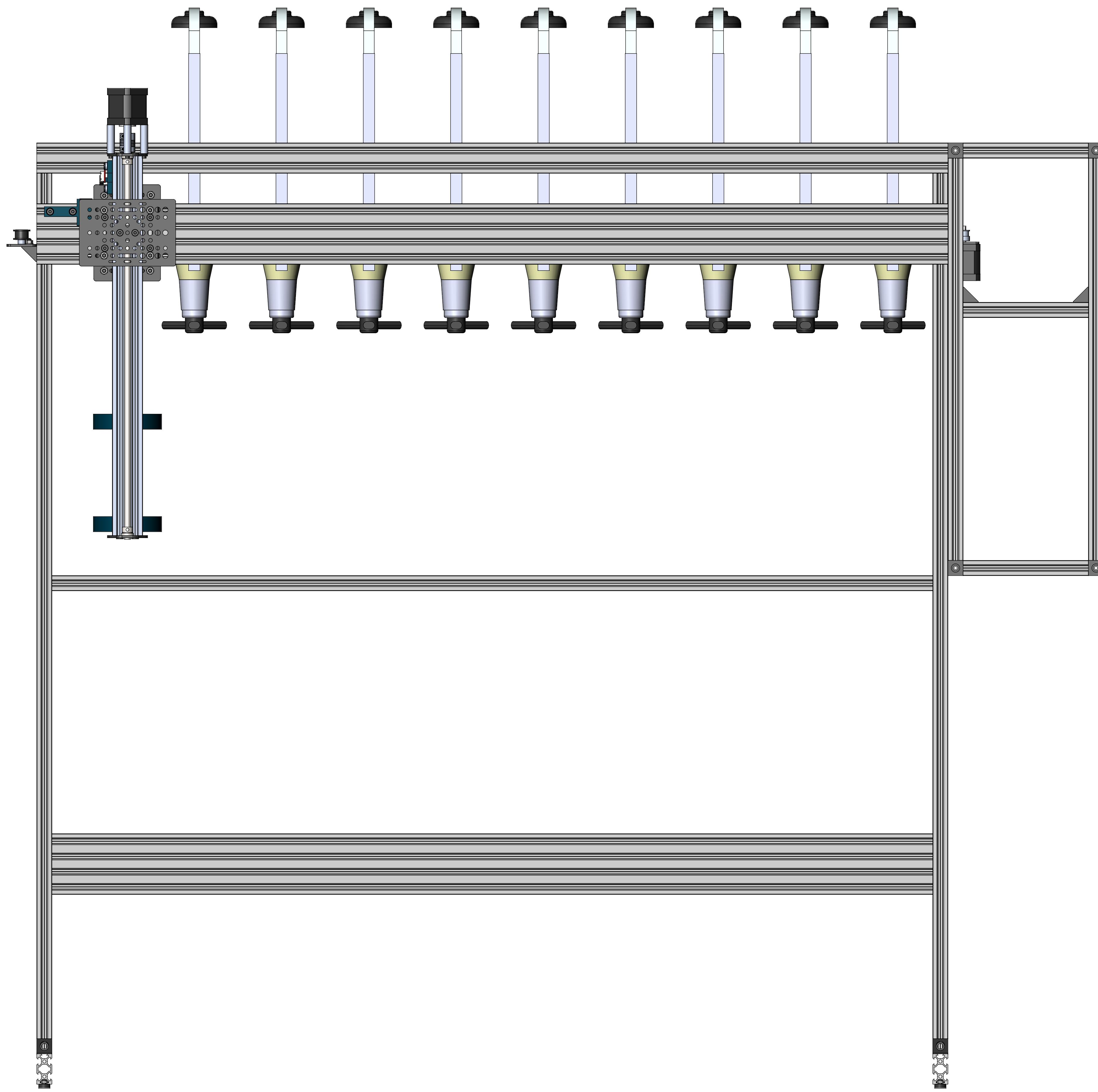
Drawings by **Vexelius**
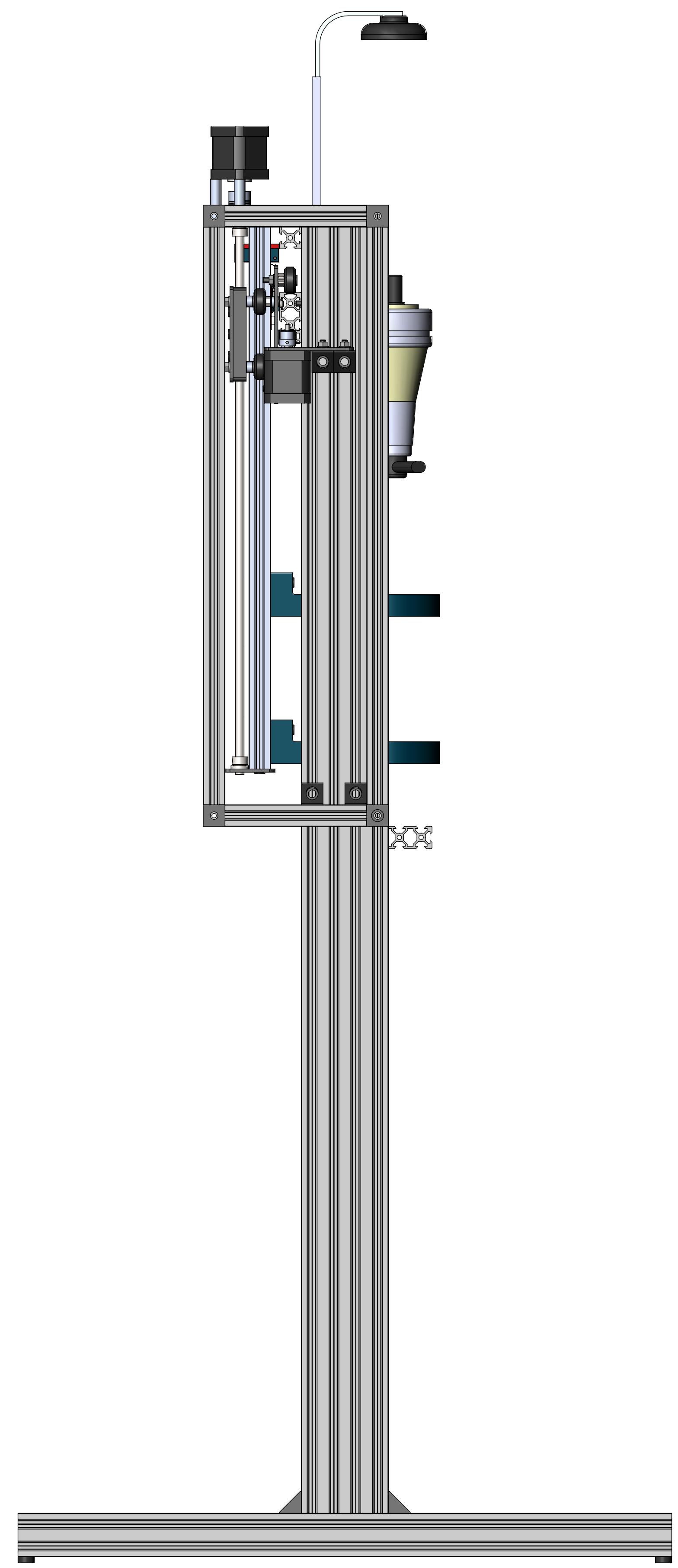
Front view
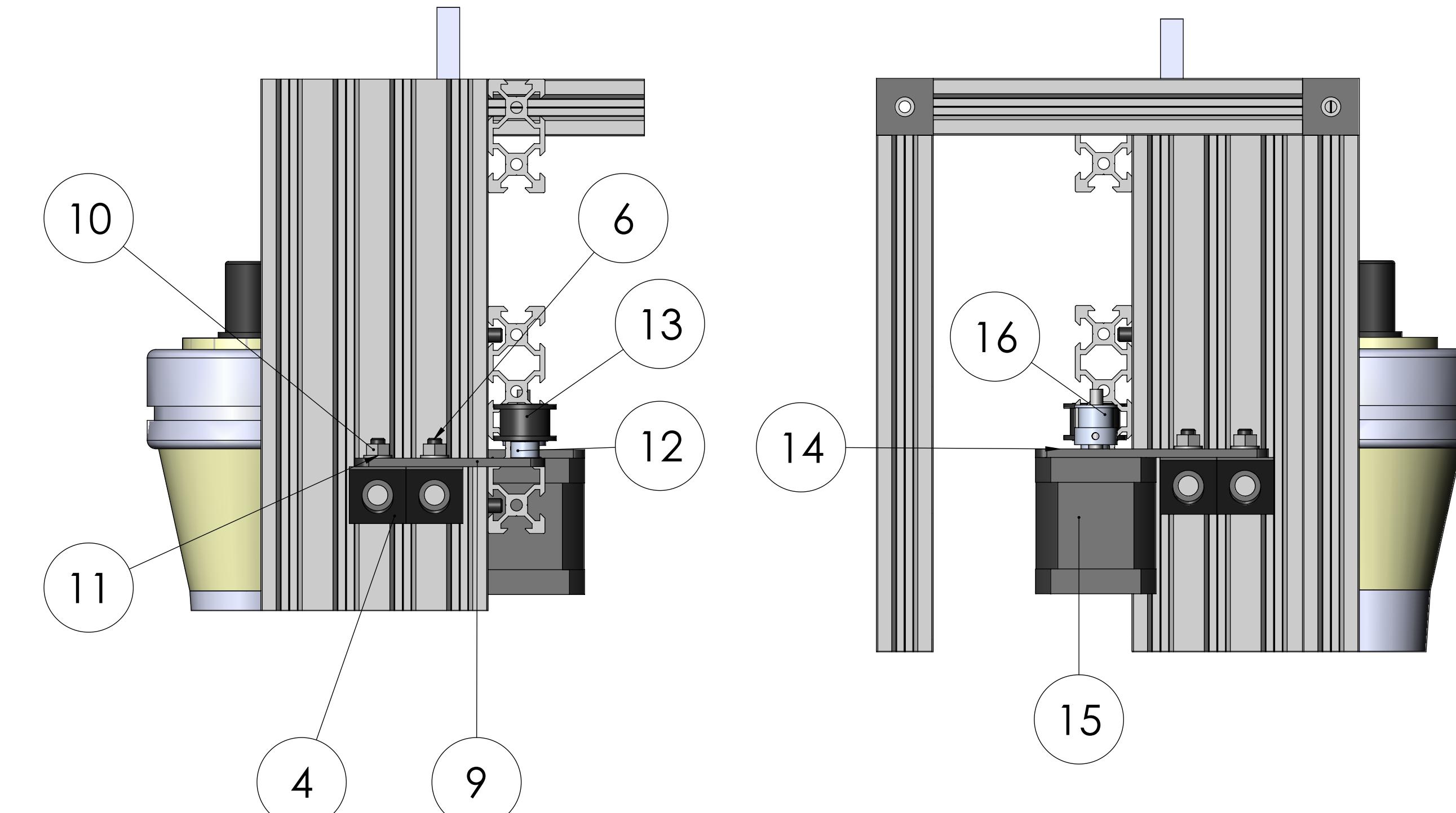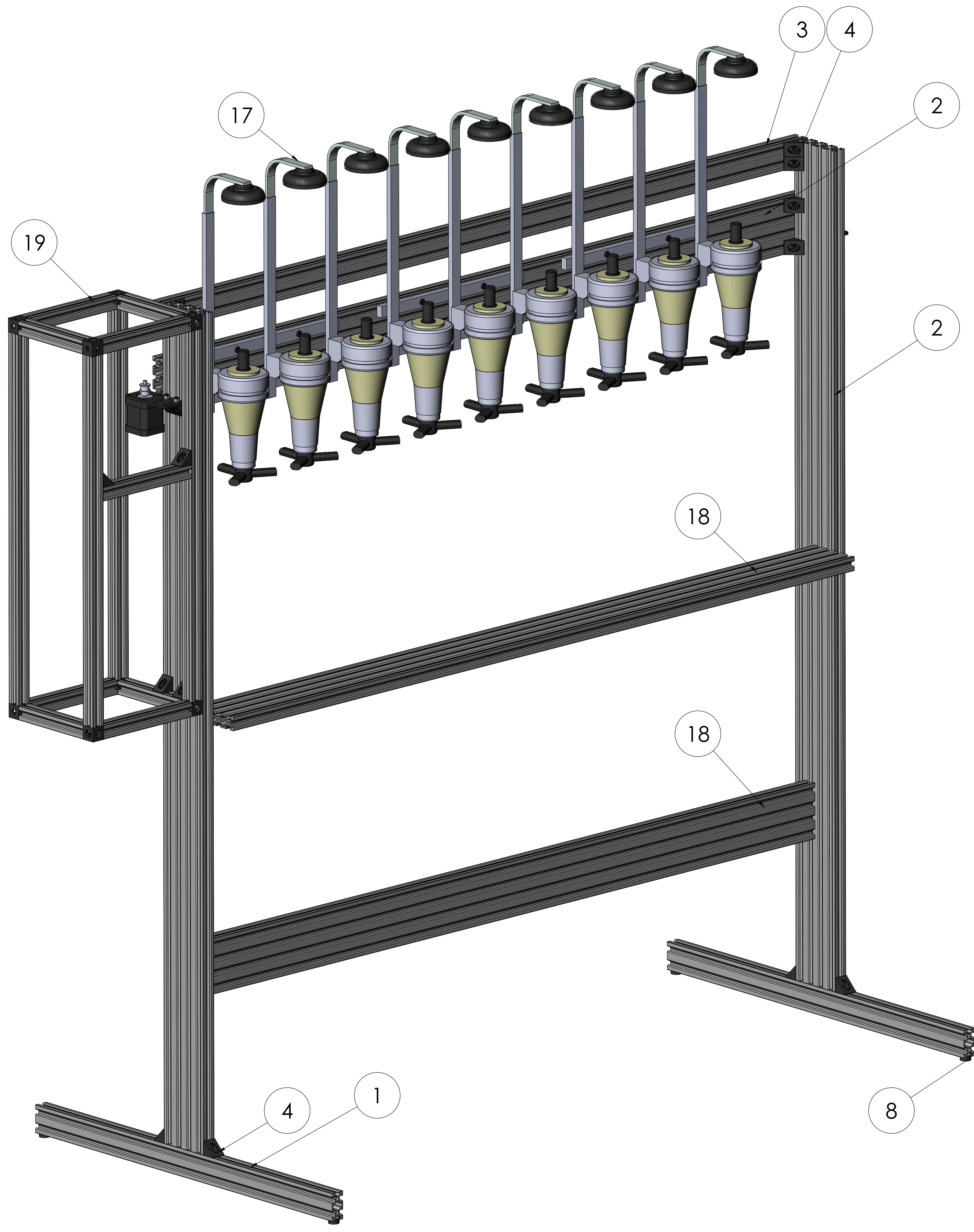
Side view (Left)
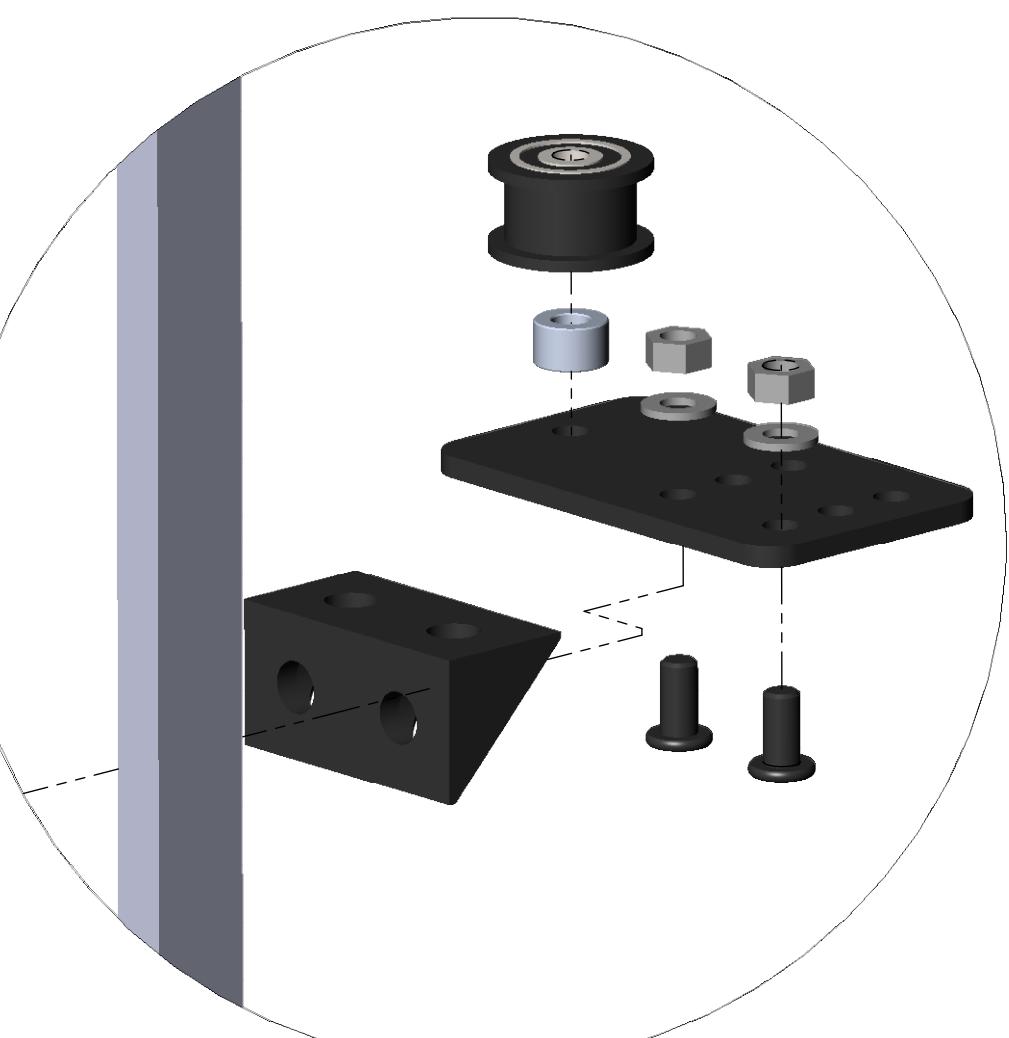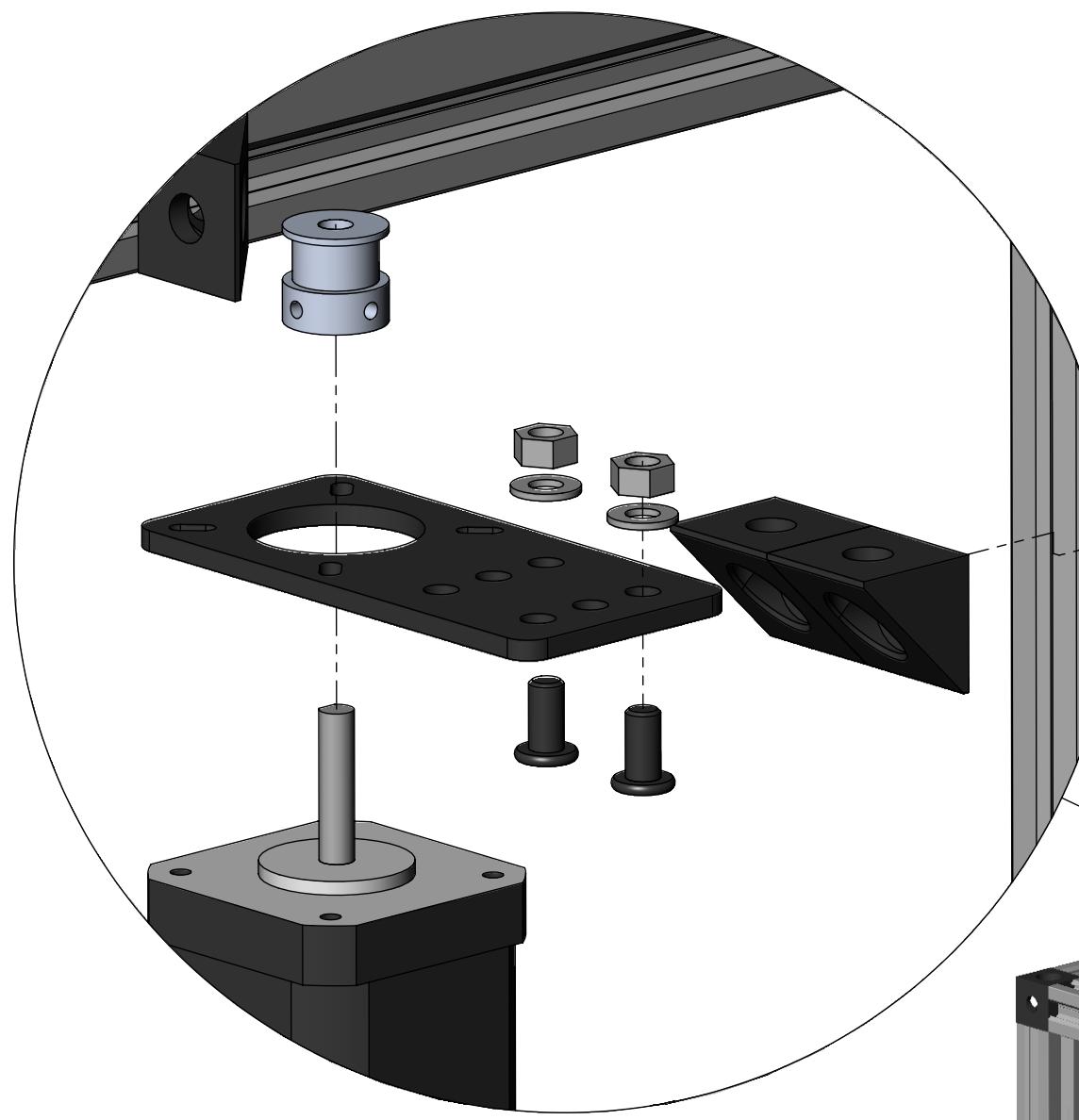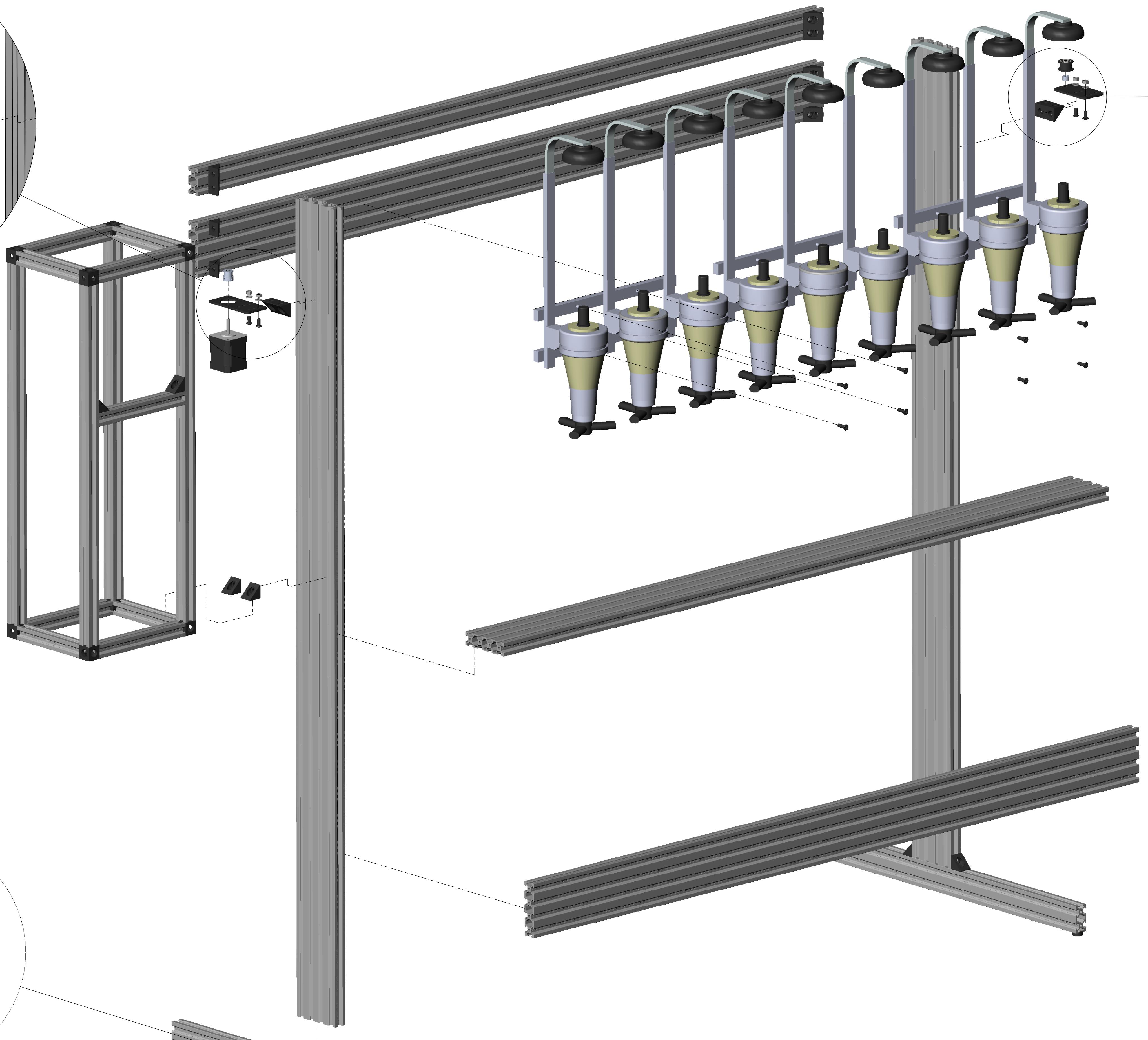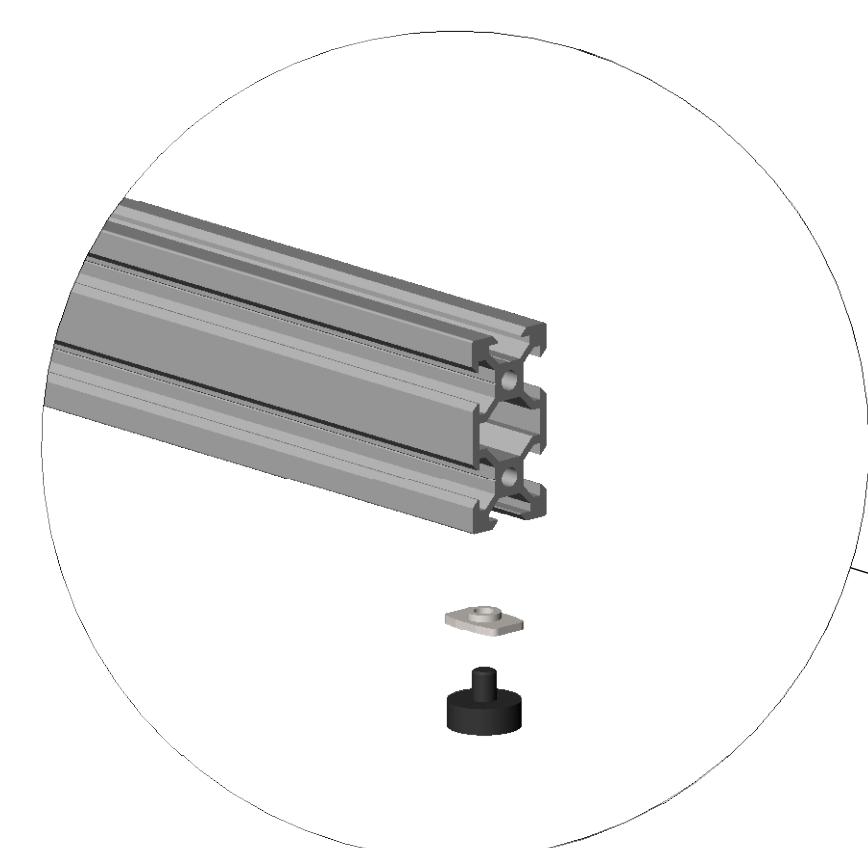
Back View
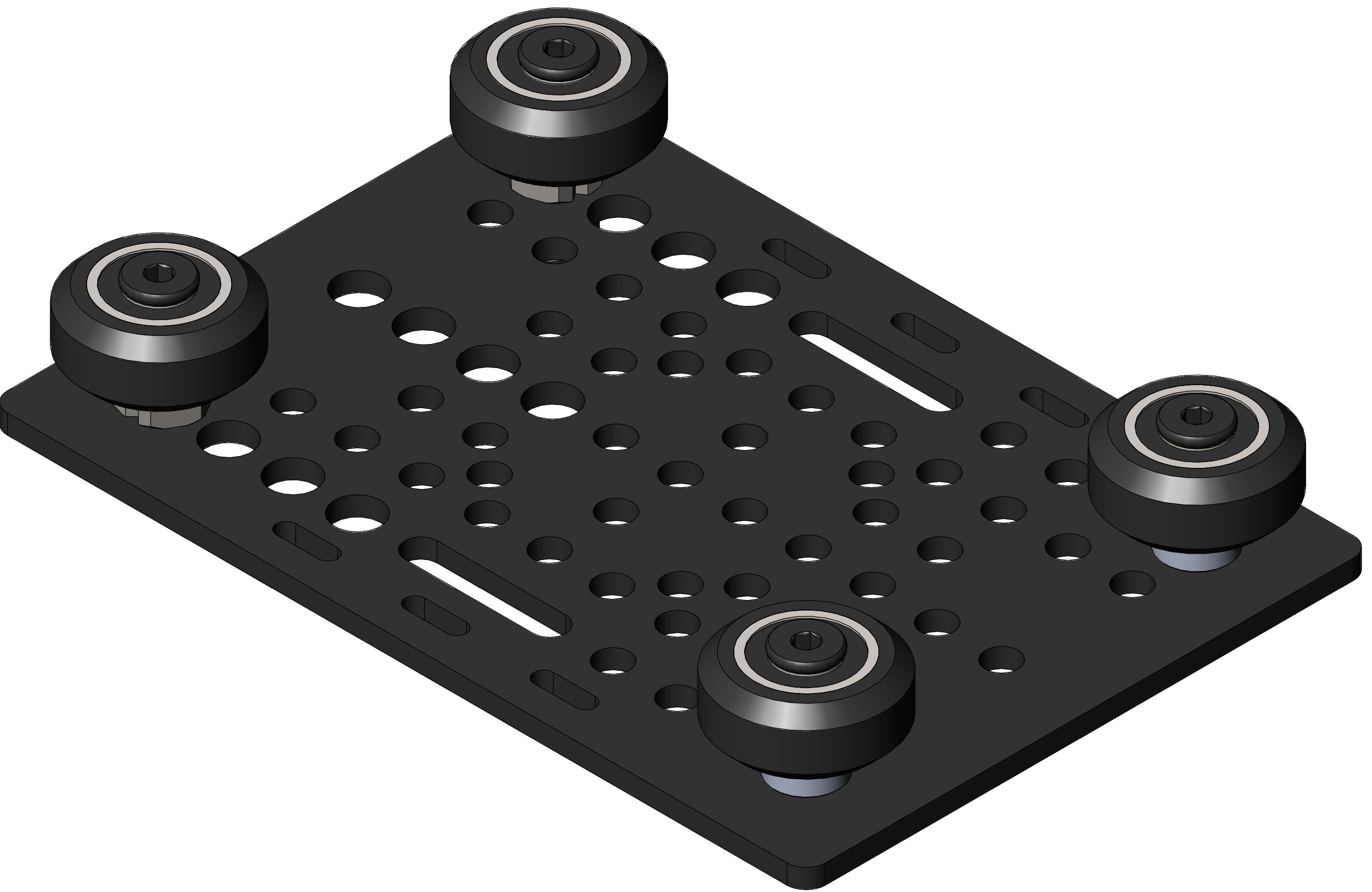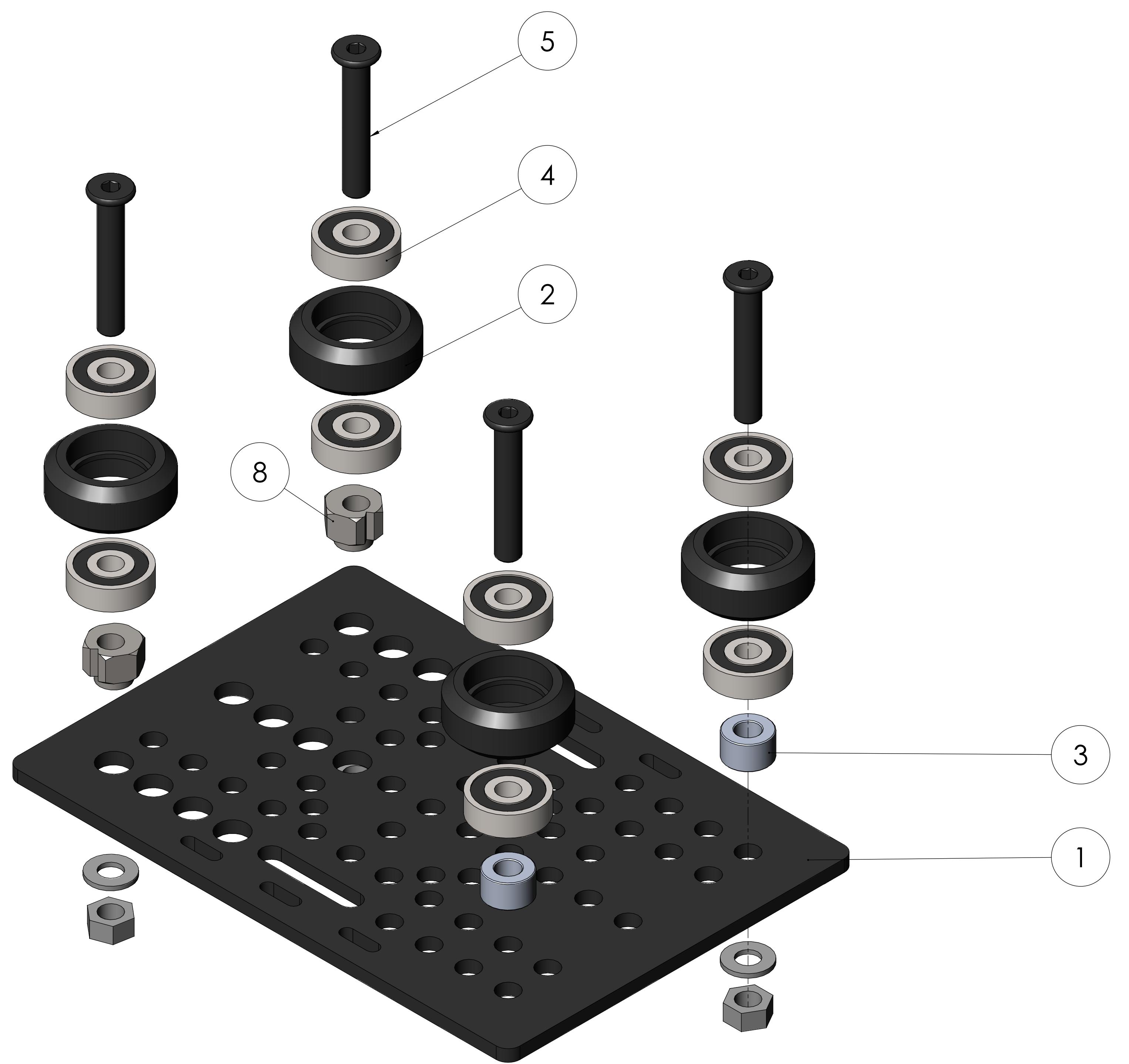
Side View (Right)

| ELEMENT #	PART #	DESCRIPTION	QUANTITY
1	V-Slot 20x40x600		2
2	V-Slot 20x80x1200		3
3	V-Slot 20x40x1200		1
4	Black Angle Corner Connector		18
5	Tee Nut	Tee Nut	4
6	M5 x 10	Low Profile Screw M5 x 10	8
7	M5 x 15	Low Profile Screw M5 x 15	12
8	RubberPad		4
9	Idler Pulley Plate		1
10	STDNut		4
11	STDWasher		4
12	Aluminum Spacer 6mm		1
13	Smooth Idler		1
14	Motor Mount Plate Nema 17		1
15	Nema 17 Stepper Motor	Nema 17 Stepper Motor	1
16	GT2 Timing Pulley 20 Tooth	GT2 profile, 2mm pitch. For 6mm belt width. Two M3 se screws included.	1
17	Bar Butler		3
18	V-Slot 20x80x1160		2
19	Control Box		
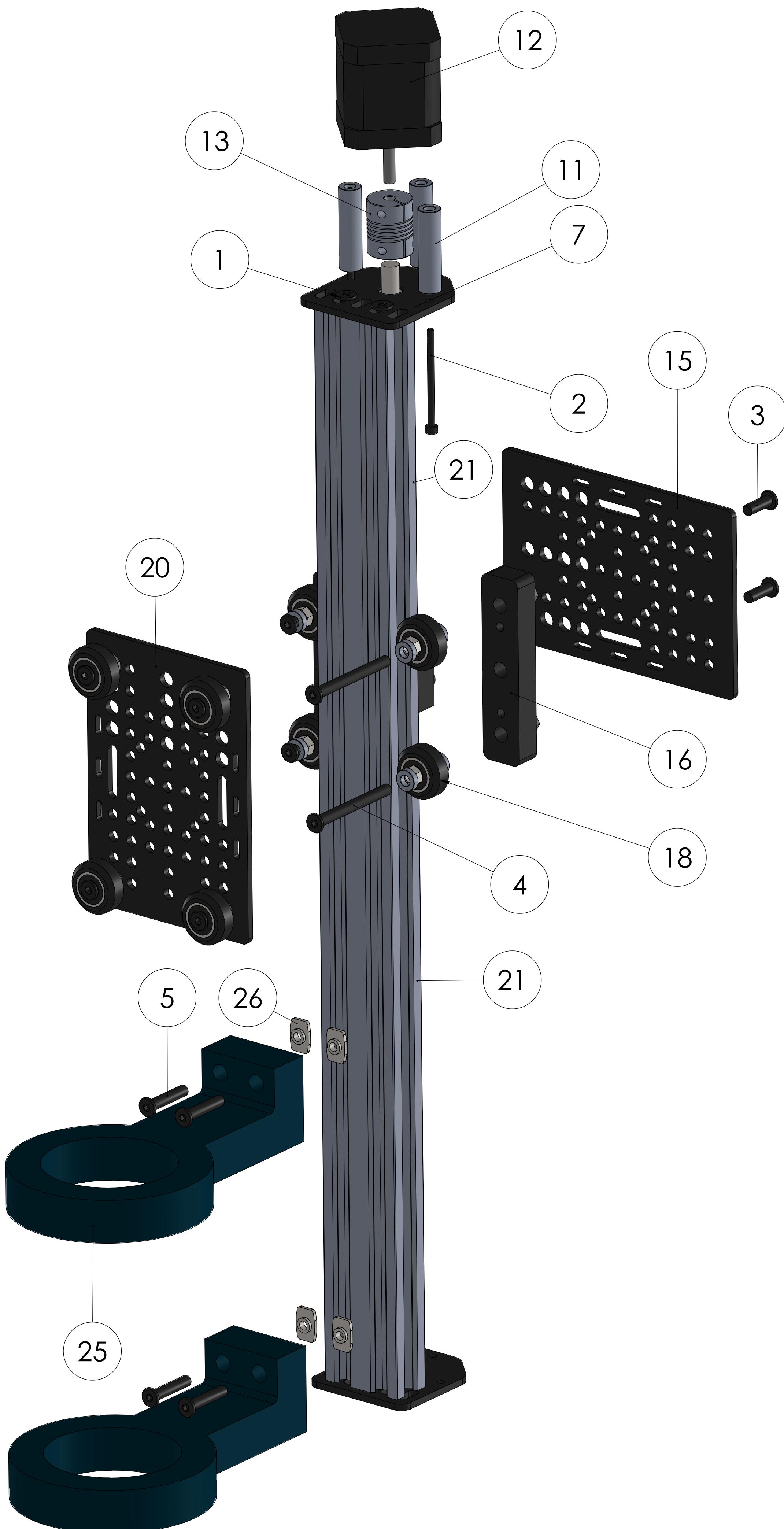
Frame Assembly
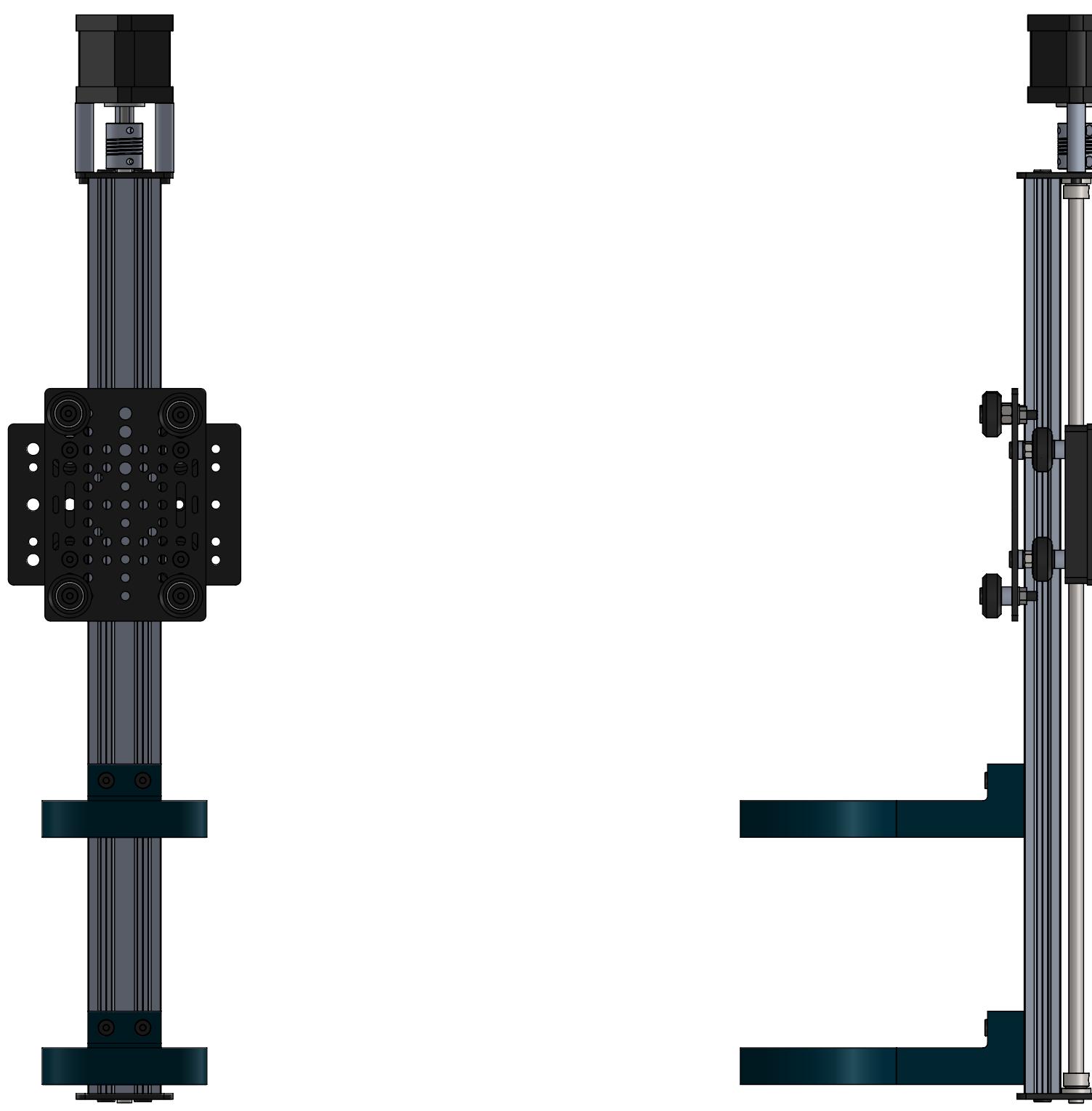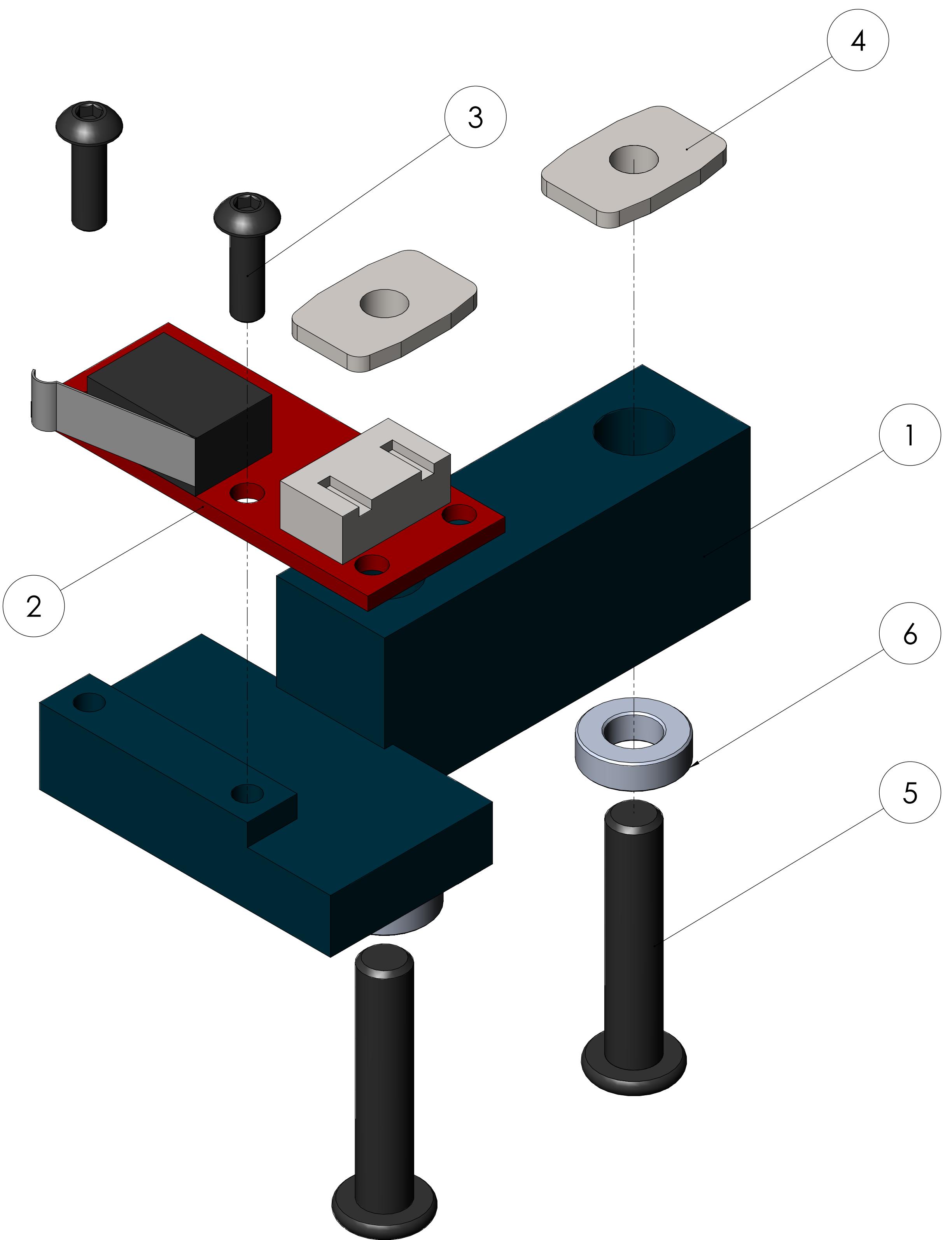
ELEMENT #	PART #	DESCRIPTION	QUANTITY
1	V-Slot Gantry Plate 20-80mm		1
2	Solid V Wheel		4
3	Aluminum Spacer 6mm		2
4	Ball Bearing 5 x 16 x 5	625 2RS Ball Bearing, ABEC 1.	8
5	M5 x 30	Low Profile Screw M5 x 30	4
6	STDWasher		4
7	STDNut		4
8	Eccentric Spacer 6mm		2

Dispenser Carriage
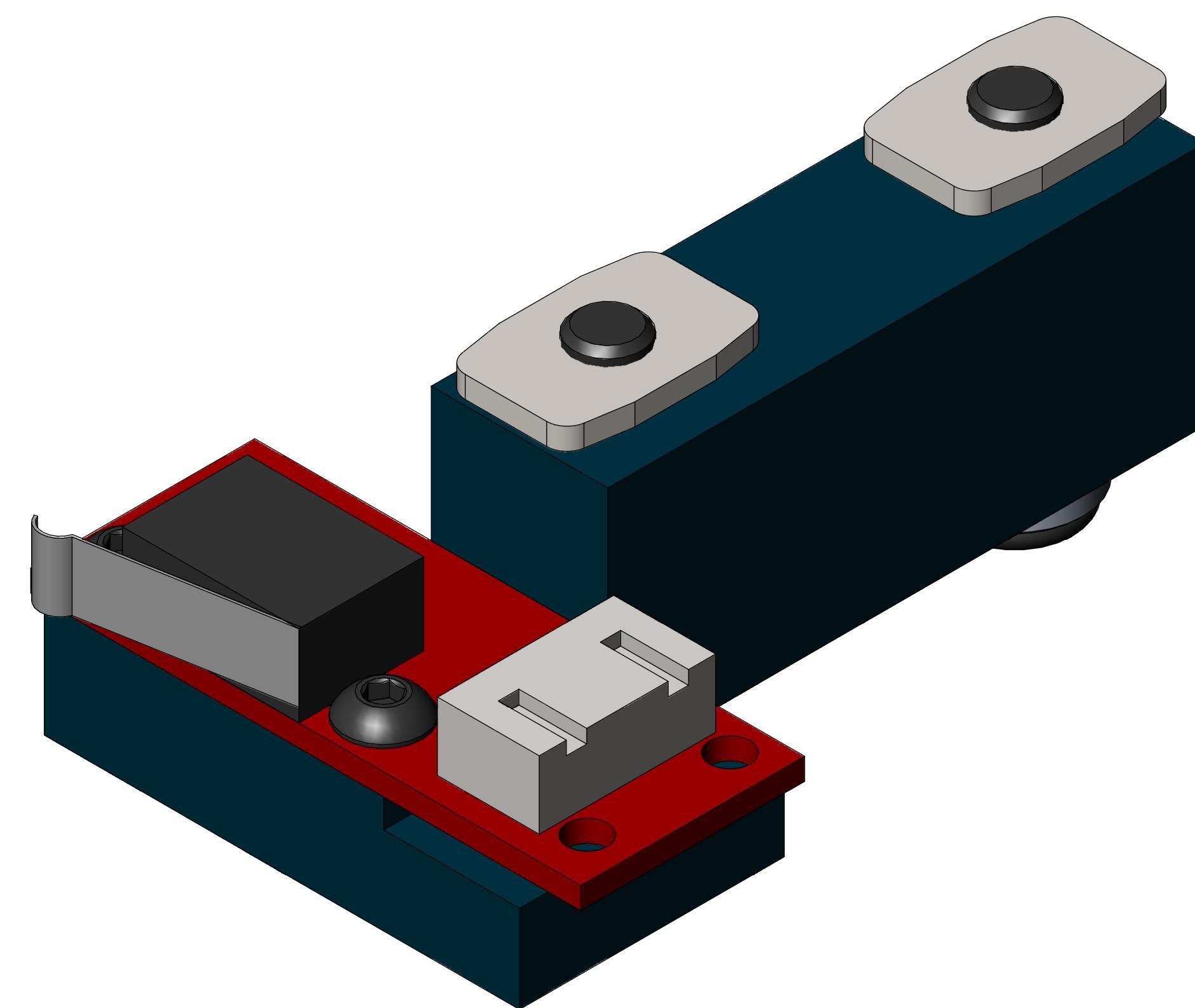
Dispenser Actuator
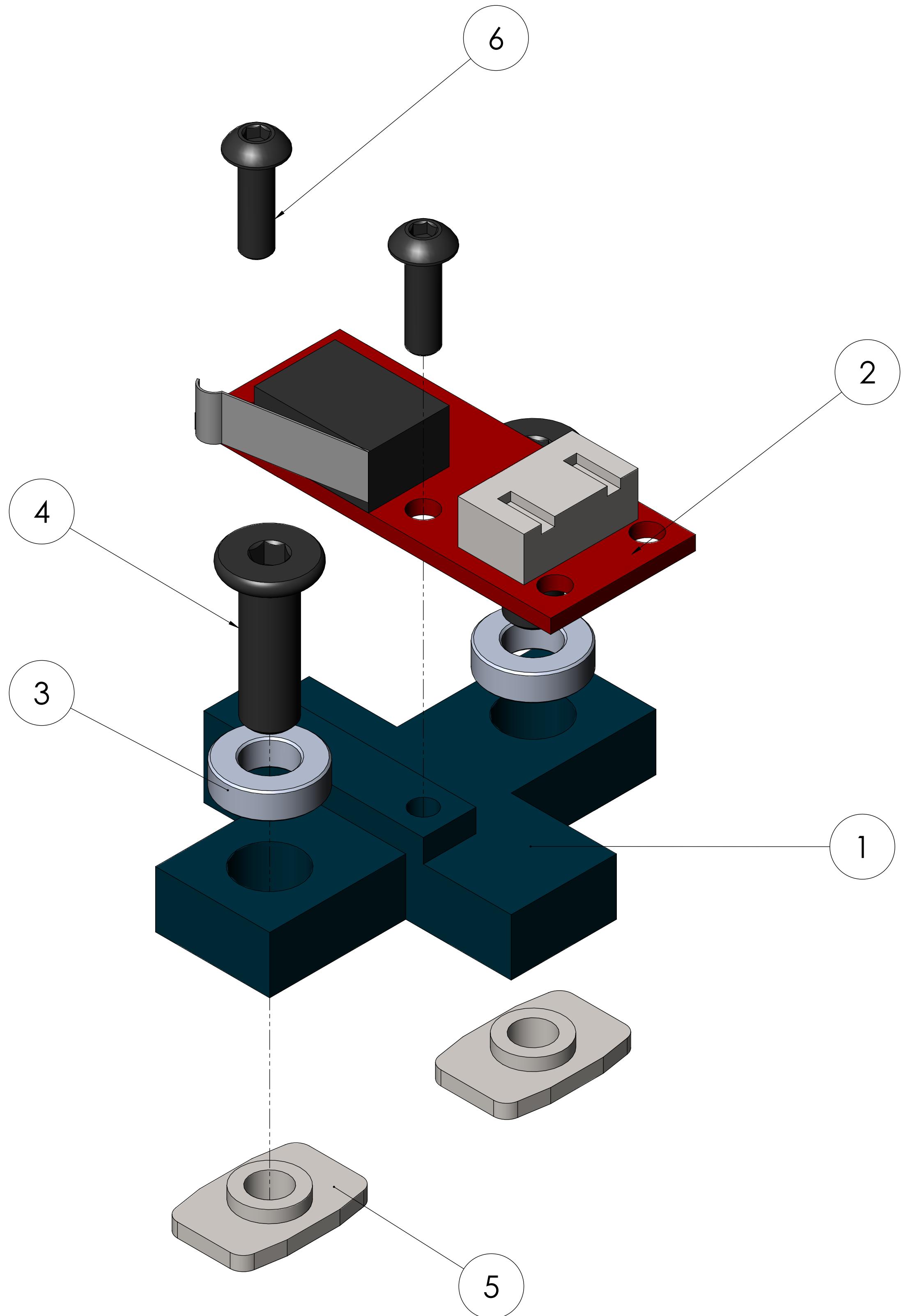
ELEMENT #	PART #	DESCRIPTION	QUANTITY
1	Self Tapping Screw	Self Tapping Screw	4
2	M3 x 45	Socket Head Cap Screw M3 x 45	3
3	M5 x 15	Low Profile Screw M5 x 15	6
4	M5 x 50	Low Profile Screw M5 x 50	4
5	M5 x 25	Low Profile Screw M5 x 25	4
6	Nylon Insert Lock Nut M5	Nylon Insert Locknut	2
7	Threaded Rod Plate Nema 17		2
8	Ball Bearing 8 x 16 x 5		2
9	Shim Washer 8mm		2
10	Lock Collar 8mm		2
11	Aluminum Spacer 1.5in		3
12	Nema 17 Stepper Motor	Nema 17 Stepper Motor	1
13	Flexible Coupling 5mm x 8mm		1
14	8mm leadscrew 520mm		1
15	V-Slot Gantry Plate 20-80mm		1
16	Spacer Block		2
17	Solid V Wheel		2
18	Solid V Wheel		2
19	8mm Acme Nut Block		1
20	Dispenser Carriage		1
21	V-Slot 20x40x500 Linear Rail		1
22	STDNut		4
23	STDWasher		4
24	Aluminum Spacer 3mm		4
25	CupRing		2
26	Tee Nut	Tee Nut	4
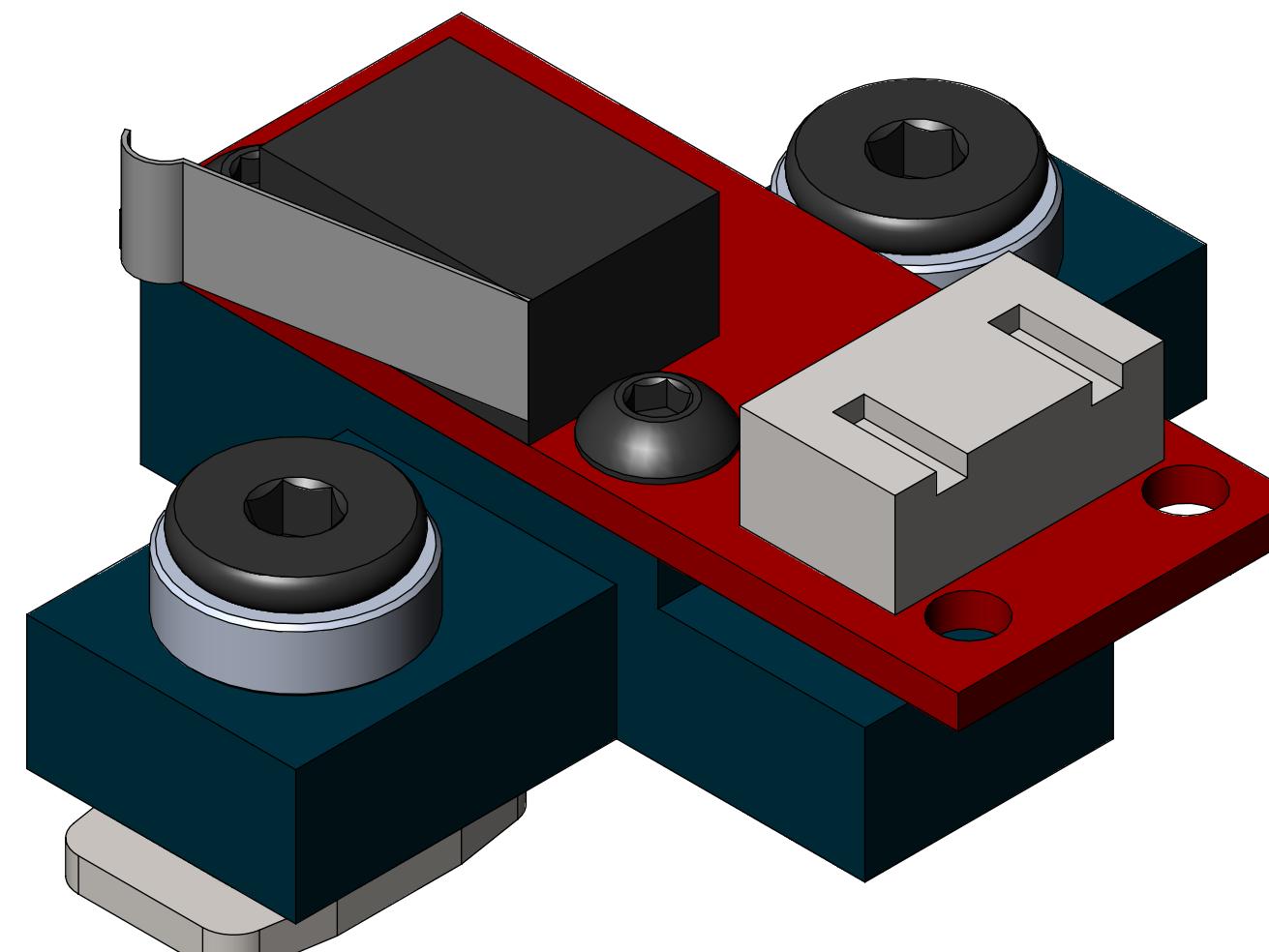
X-Axis Endstop
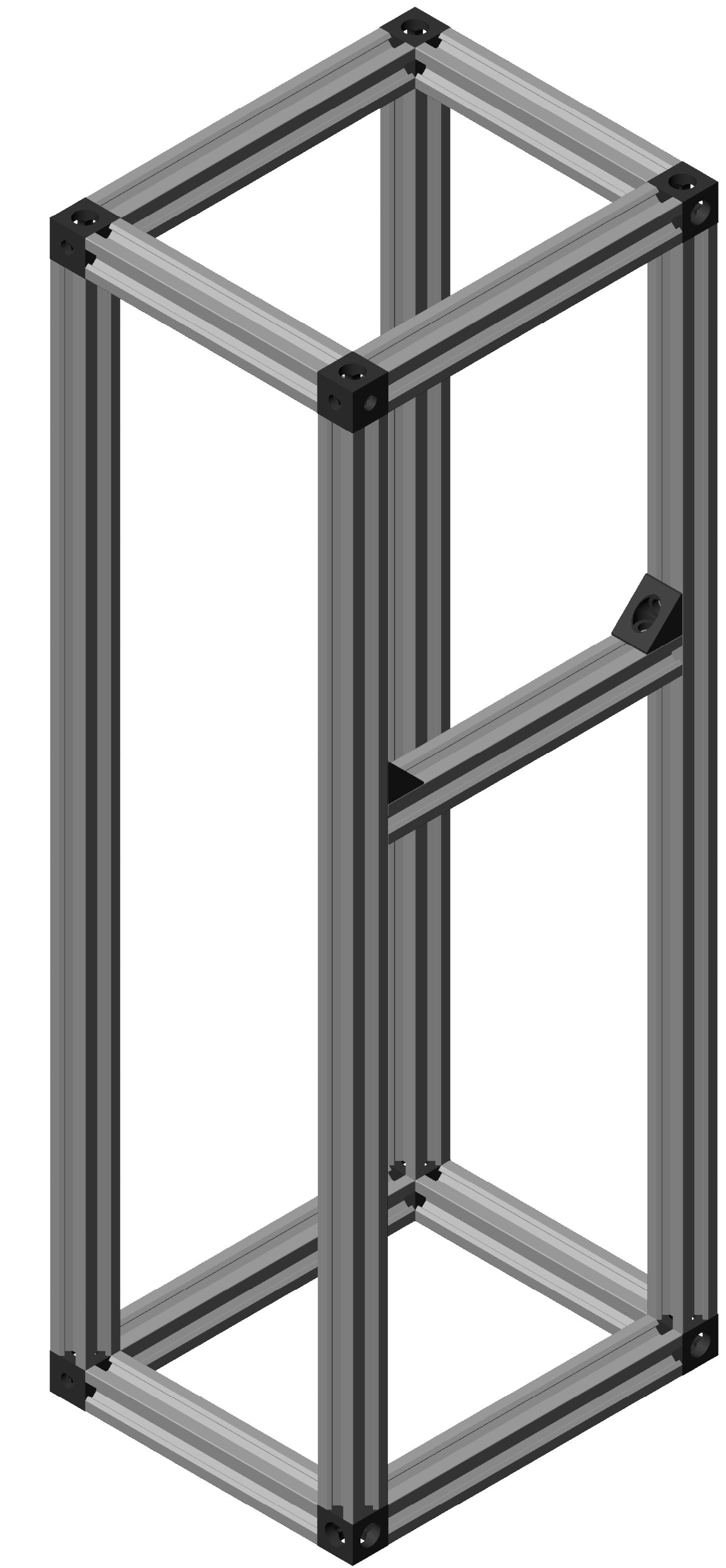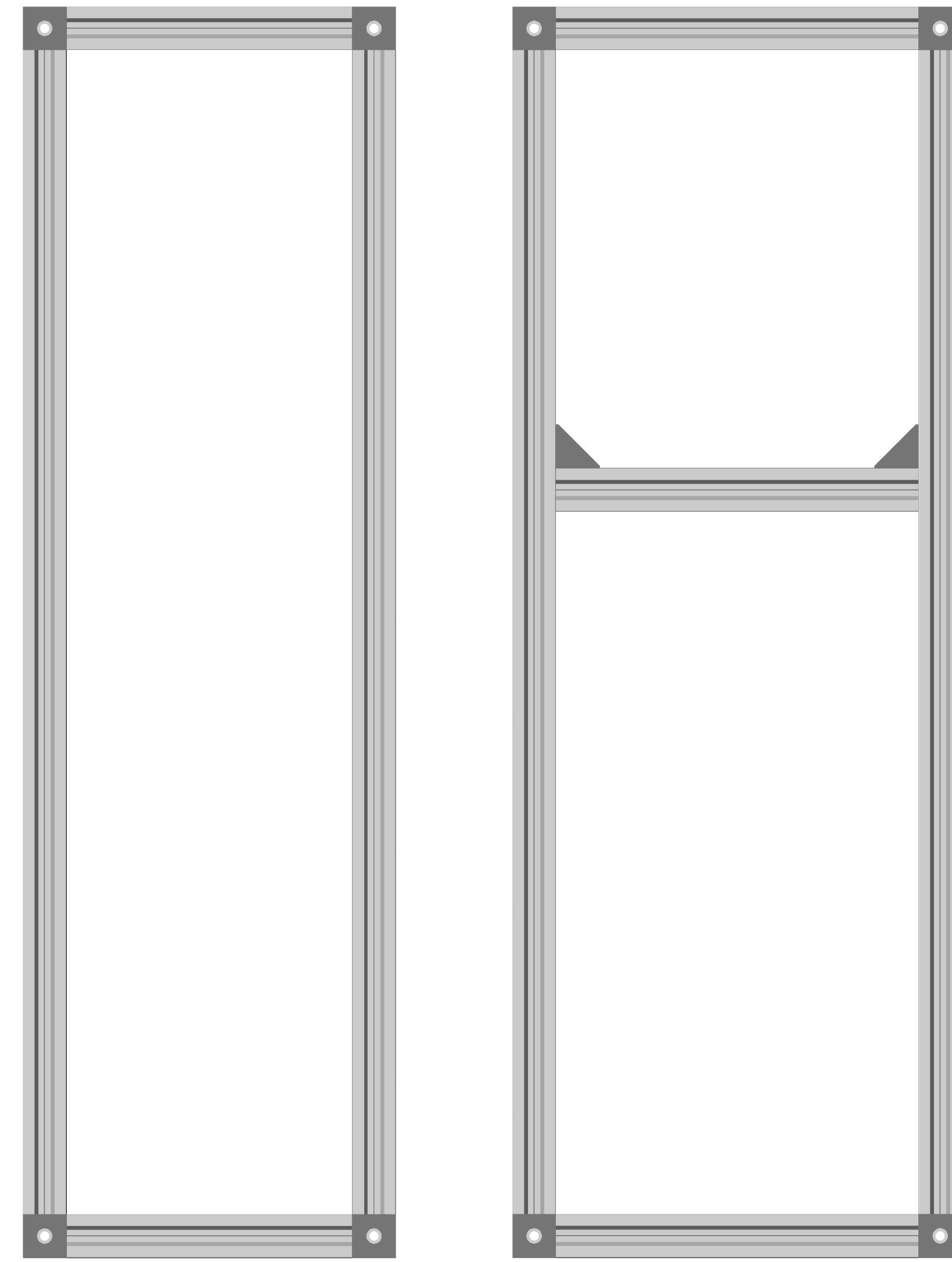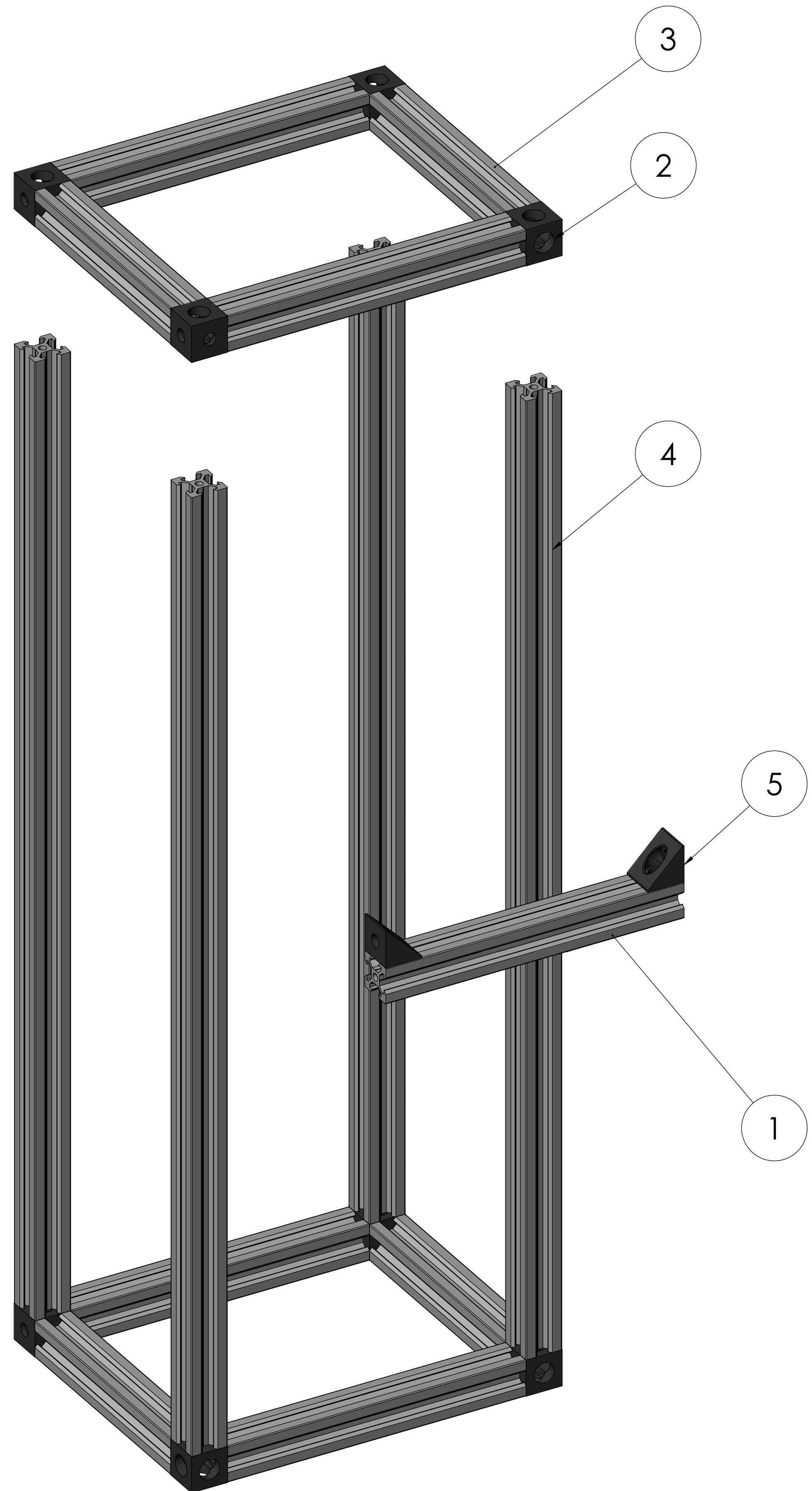
ELEMENT #	PART #	DESCRIPTION	QUANTITY
1	XAxis Endstop Holder		1
2	RAMPSEndStop		1
3	M3 x 10	Button Head Socket Cap Screw M3 x 10	2
4	Tee Nut	Tee Nut	2
5	M5 x 25	Low Profile Screw M5 x 25	2
6	Aluminum Spacer 3mm		2

Z-Axis Endstop

ELEMENT #	PART #	DESCRIPTION	QUANTITY
1	ZAxis Endstop Holder		1
2	RAMPSEndStop		1
3	Aluminum Spacer 3mm		2
4	M5 x 15	Low Profile Screw M5 x 15	2
5	Tee Nut	Tee Nut	2
6	M3 x 10	Button Head Socket Cap Screw M3 x 10	2

Control Box

ELEMENT #	PART #	QUANTITY
1	V-Slot 20x20x165	5
2	Cube Corner Connector	8
3	V-Slot 20x20x130	4
4	V-Slot 20x20x530	4
5	Black Angle Corner Connector	2