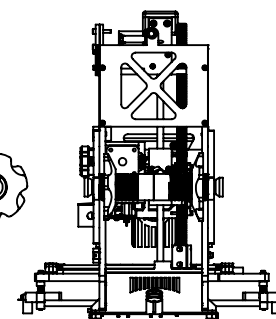
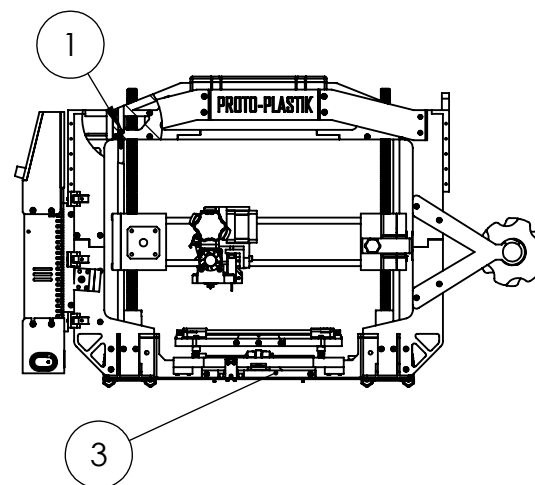
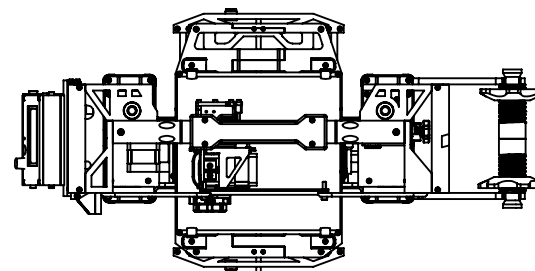
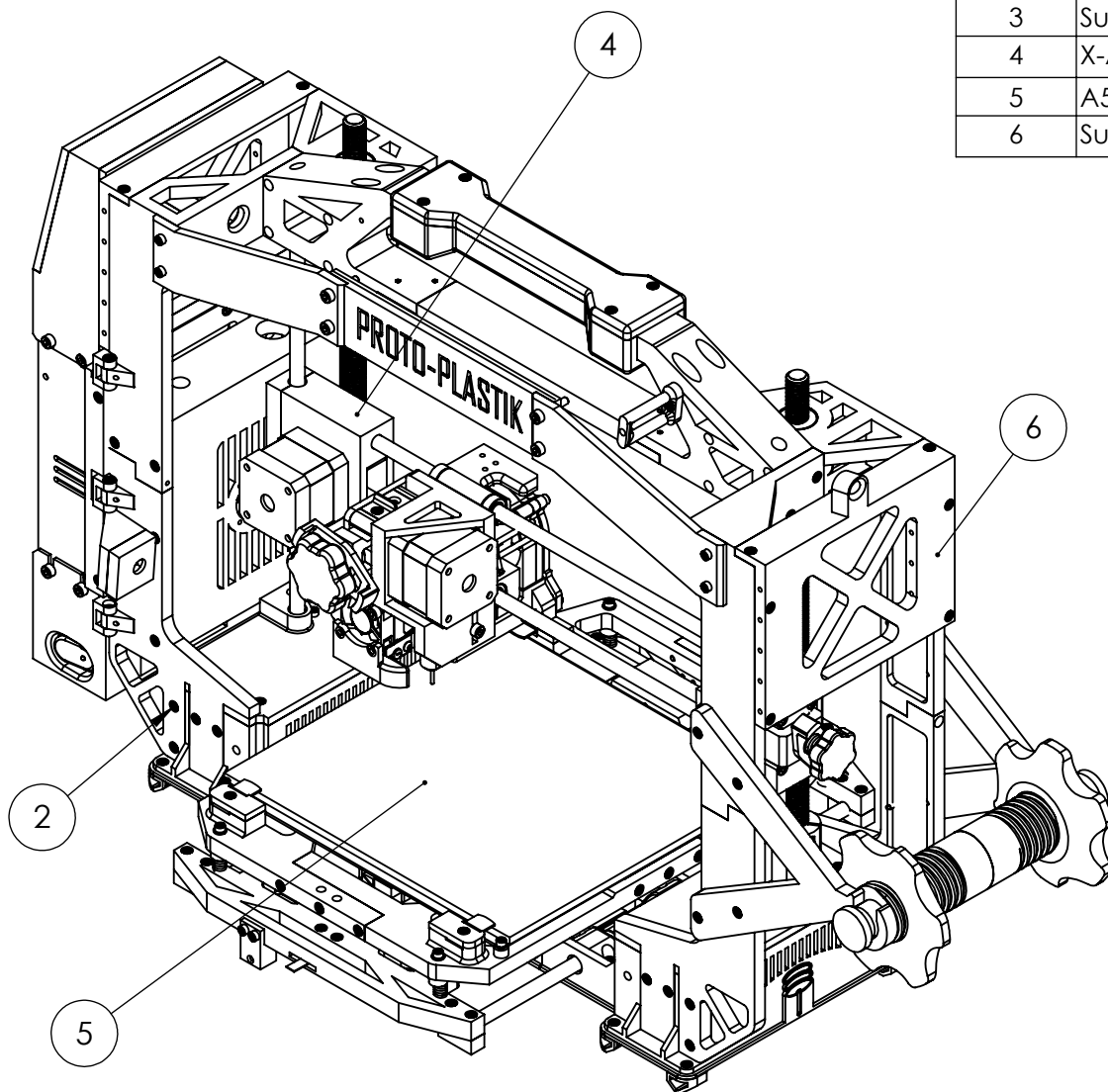


ITEM NO.	PART NUMBER	QTY.
1	B18.3.1M - 4 x 0.7 x 20 Hex SHCS -- 20NHX	2
2	B18.3.1M - 3 x 0.5 x 25 Hex SHCS -- 18NHX	16
3	Subframe	1
4	X-Axis Gantry	1
5	A5 Bed	1
6	Superstructure	1



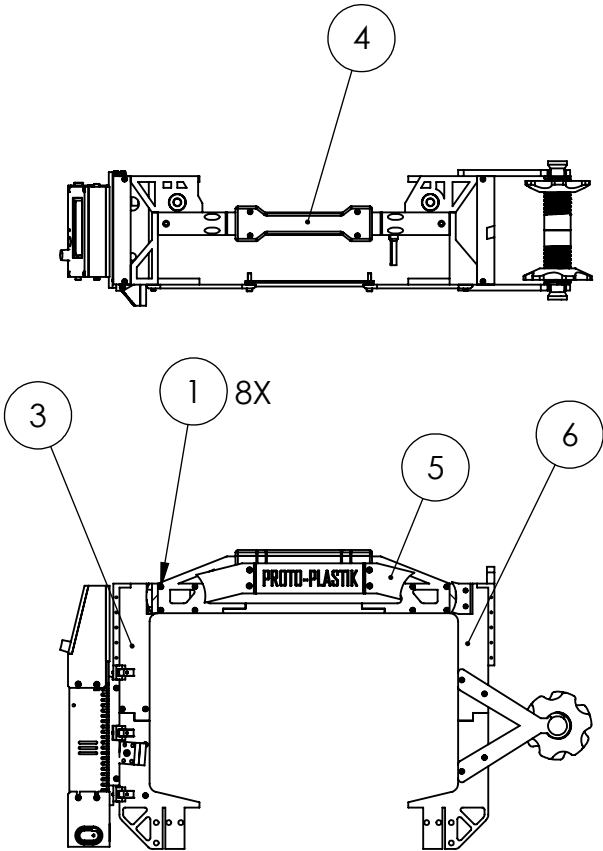
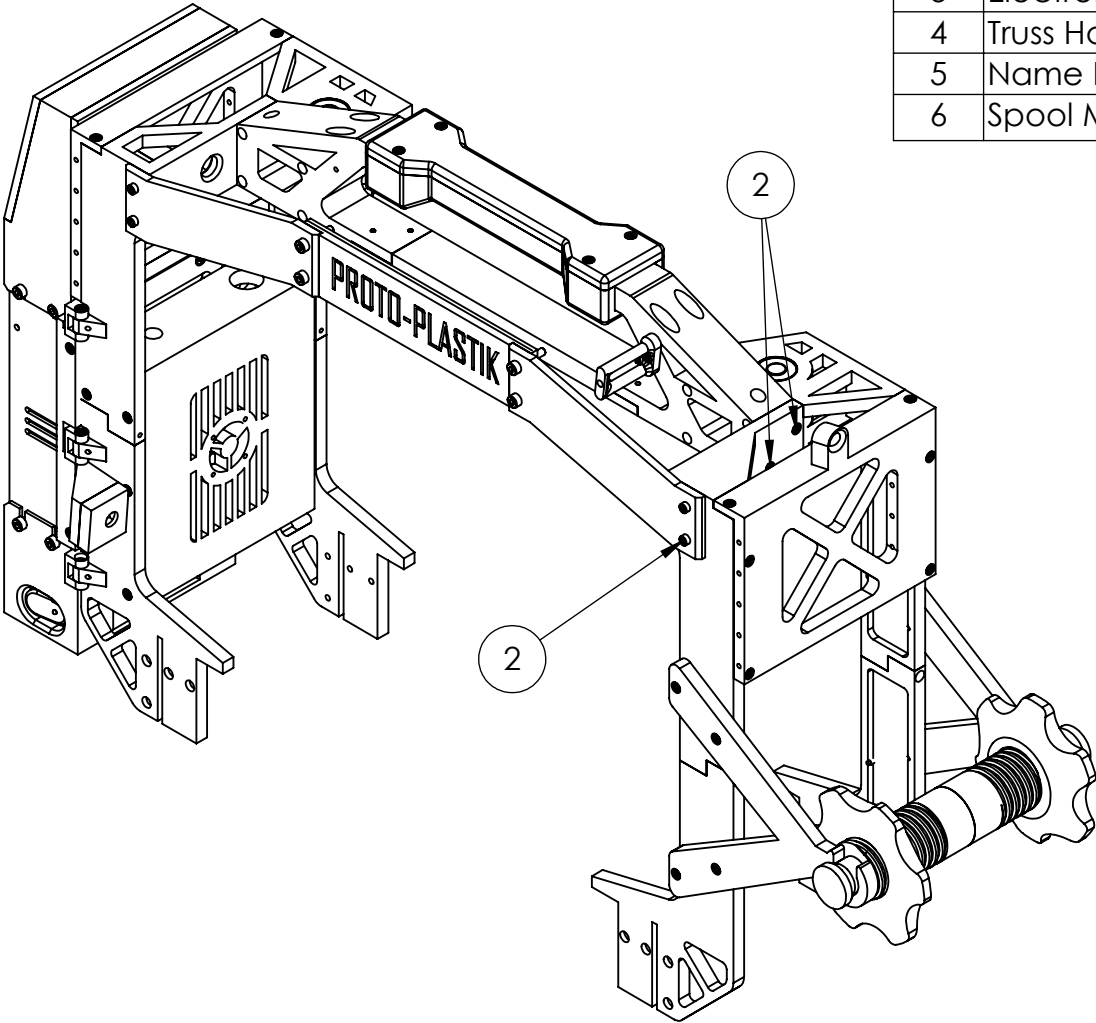
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SHEET 1 OF 16

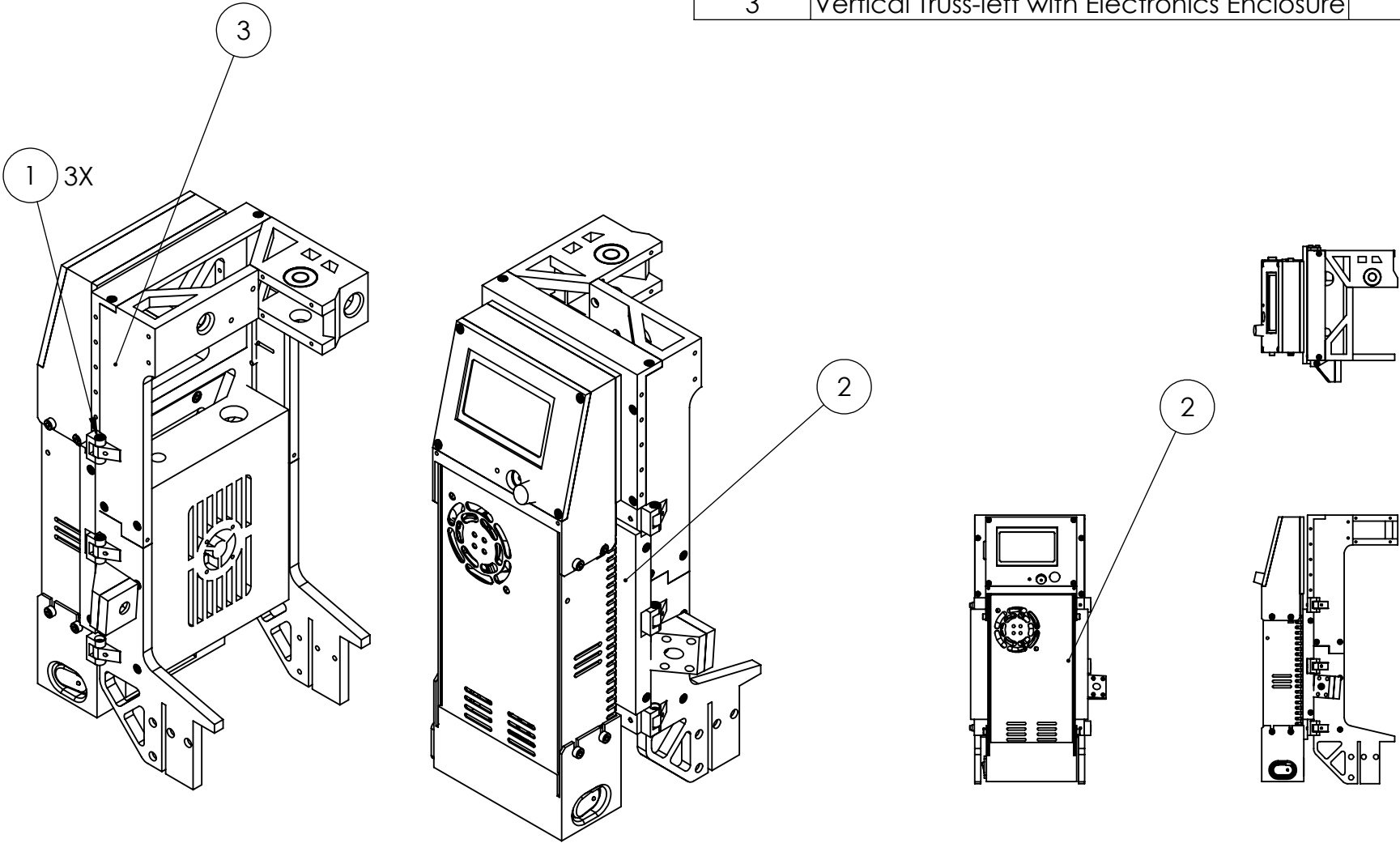
## Top Level Assembly

Proto-Plastik A52Z Ultimate

ITEM NO.	PART NUMBER	QTY.
1	B18.3.1M - 3 x 0.5 x 20 Hex SHCS -- 20NHX	8
2	B18.3.1M - 3 x 0.5 x 10 Hex SHCS -- 10NHX	8
3	Electronics Truss	1
4	Truss Handle	1
5	Name Bar	1
6	Spool Mount Truss	1



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	B18.3.1M - 3 x 0.5 x 8 Hex SHCS -- 8NHX	SHCS M3x8	3
2	Power Supply Mount		1
3	Vertical Truss-left with Electronics Enclosure		1



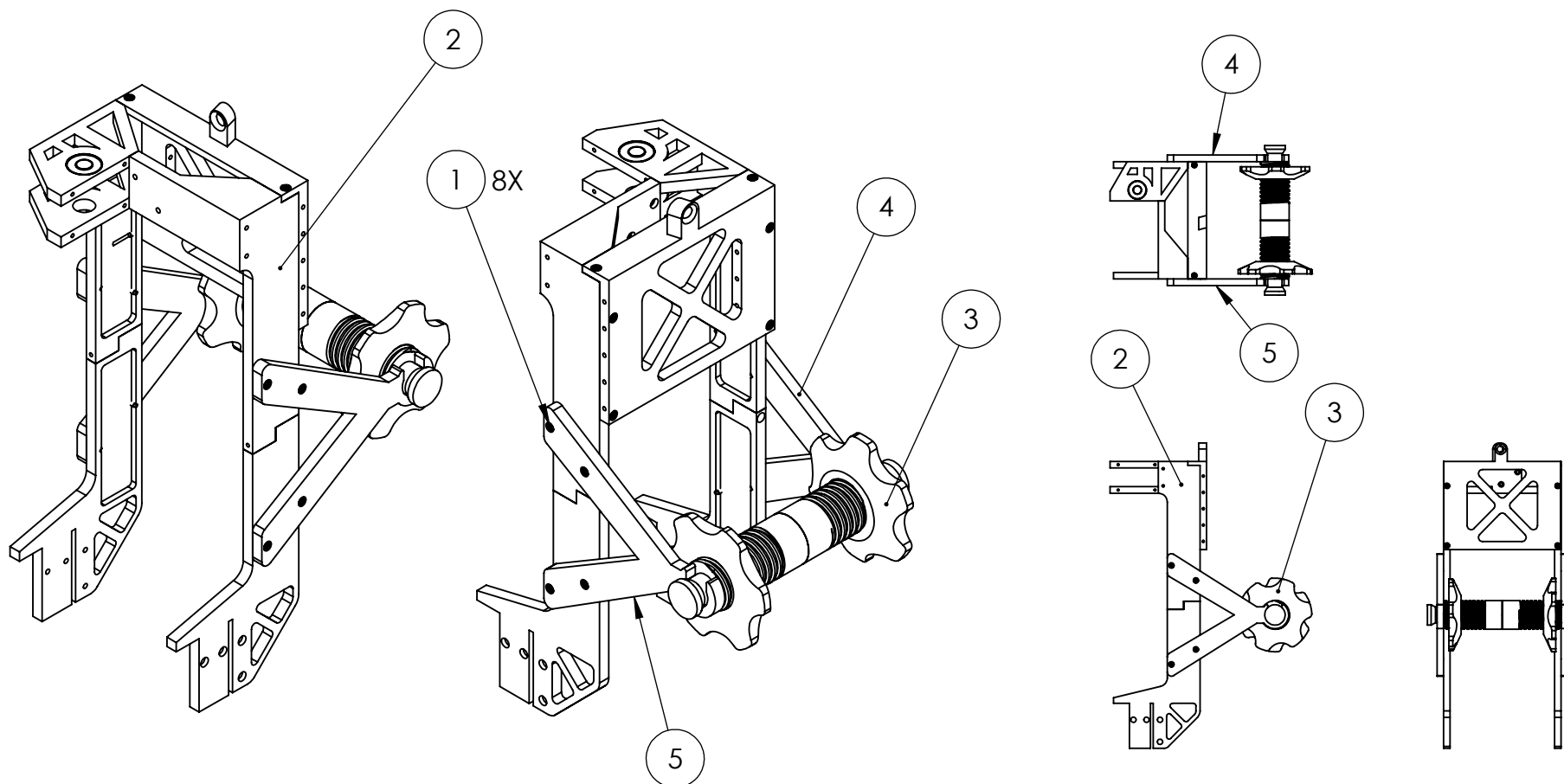
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SHEET 3 OF 16

# Electronics Truss

Proto-Plastik A52Z Ultimate

ITEM NO.	PART NUMBER	QTY.
1	B18.3.1M - 3 x 0.5 x 12 Hex SHCS -- 12NHX	8
2	Vertical Truss-right with Spool Mount	1
3	Filament Spool Holder	1
4	spool holder bracket - rear	1
5	spool holder bracket - front	1



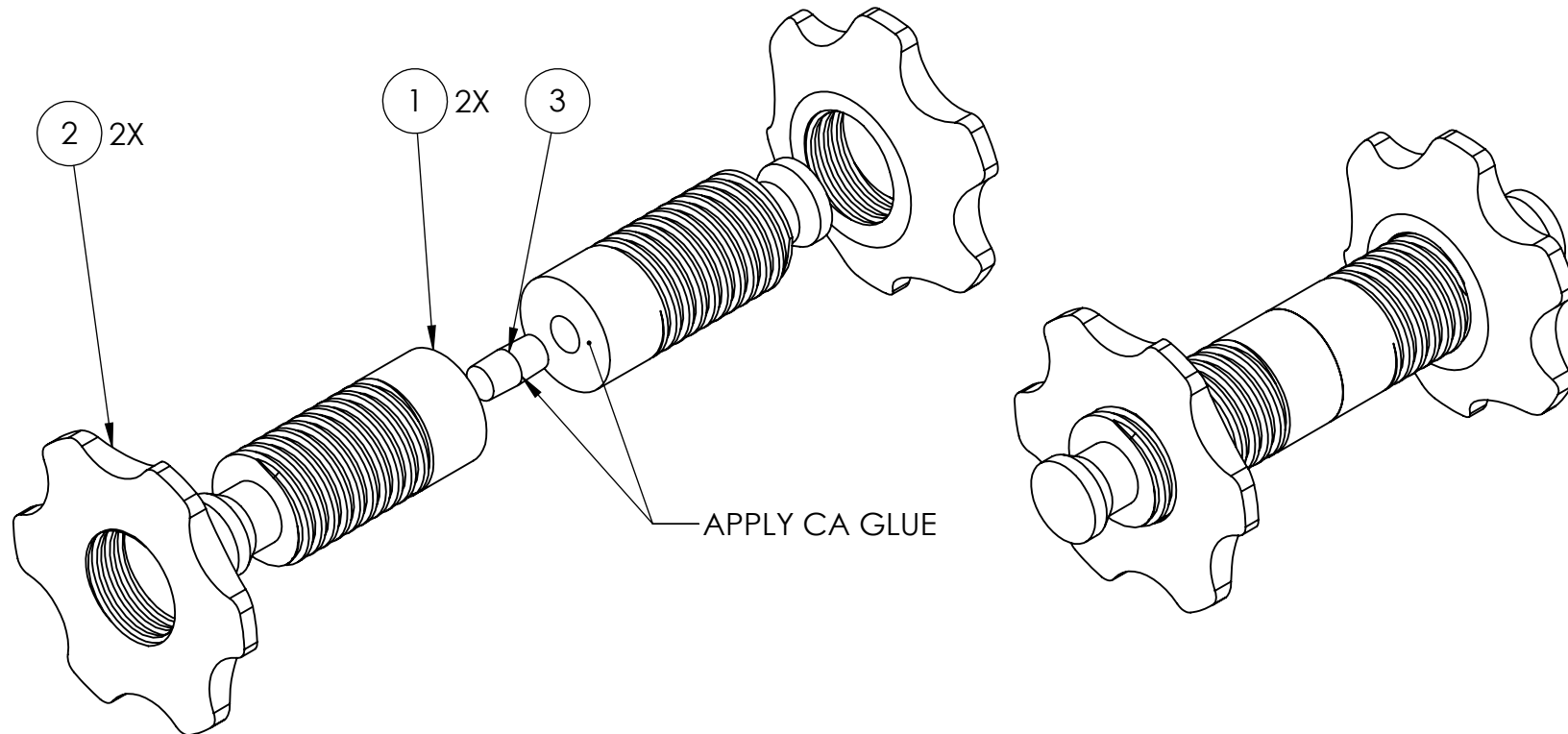
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SHEET 4 OF 16

## Spool Mount Truss

Proto-Plastik A52Z Ultimate

ITEM NO.	PART NUMBER	ULTIMATE/QTY.
1	filament spool holder spindle-shaft 1Z	2
2	filament spool holder spindle-hub	2
3	Proto-Plastik filament spool holder spindle pin	1

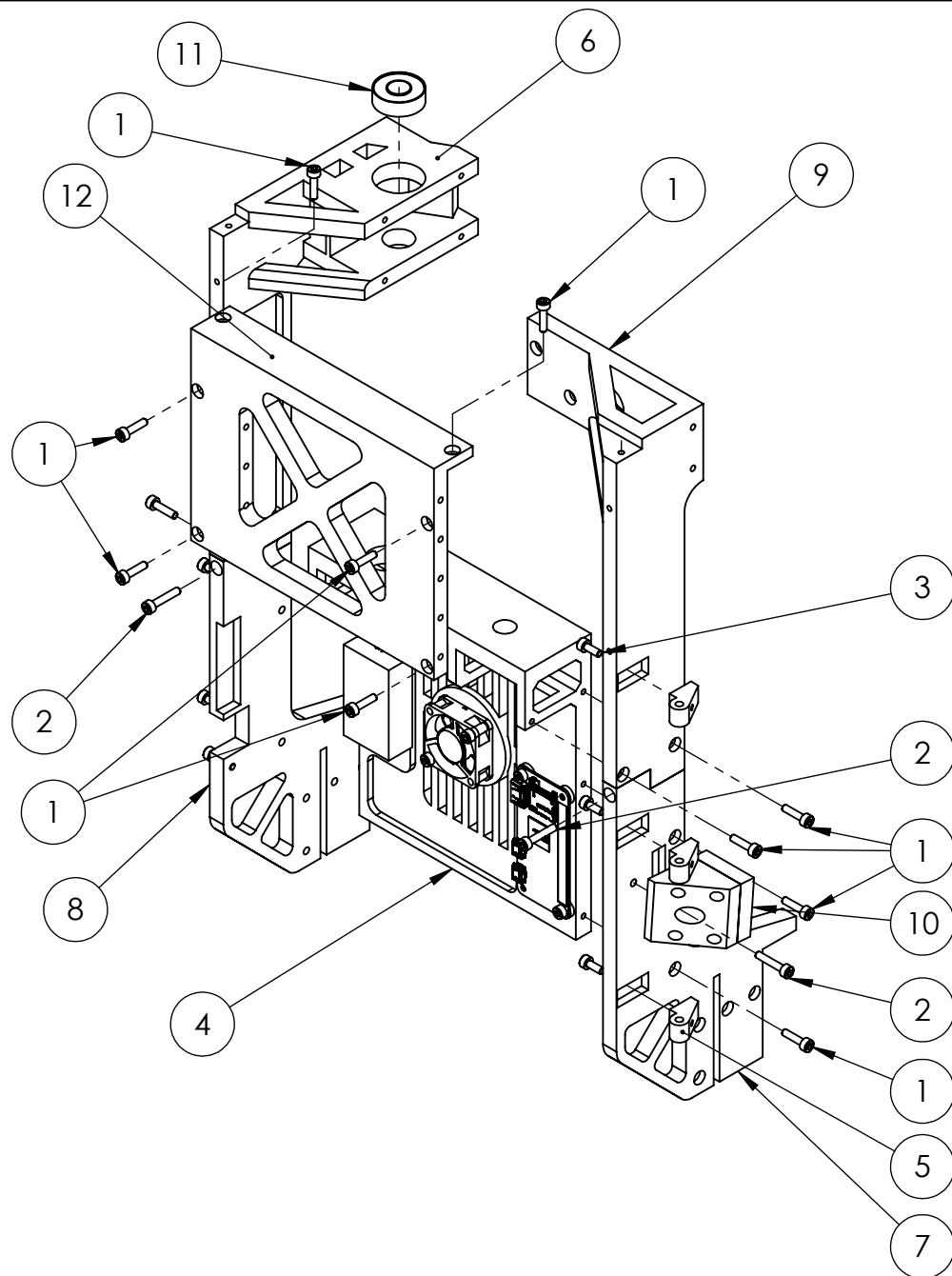


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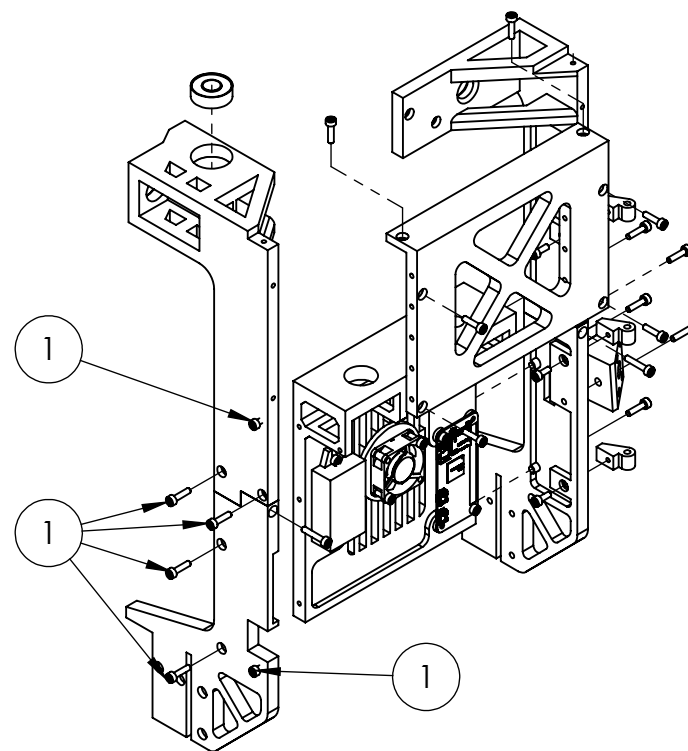
SHEET 5 OF 16

## Filament Spool Holder

Proto-Plastik A52Z Ultimate



ITEM NO.	PART NUMBER	QTY.
FASTENERS		
1	B18.3.1M - 3 x 0.5 x 12 Hex SHCS -- 12NHX	16
2	B18.3.1M - 3 x 0.5 x 16 Hex SHCS -- 16NHX	3
3	B18.3.1M - 3 x 0.5 x 8 Hex SHCS -- 8NHX	3
4	Electronics Base	1
5	lower front-hinge	3
6	vertical truss -left rear upper	1
7	vertical truss-left front lower	1
8	vertical truss-left rear lower	1
9	vertical truss-left front upper	1
10	PI_CAMERA	1
11	R6RS bearing	1
12	top cross brace	1



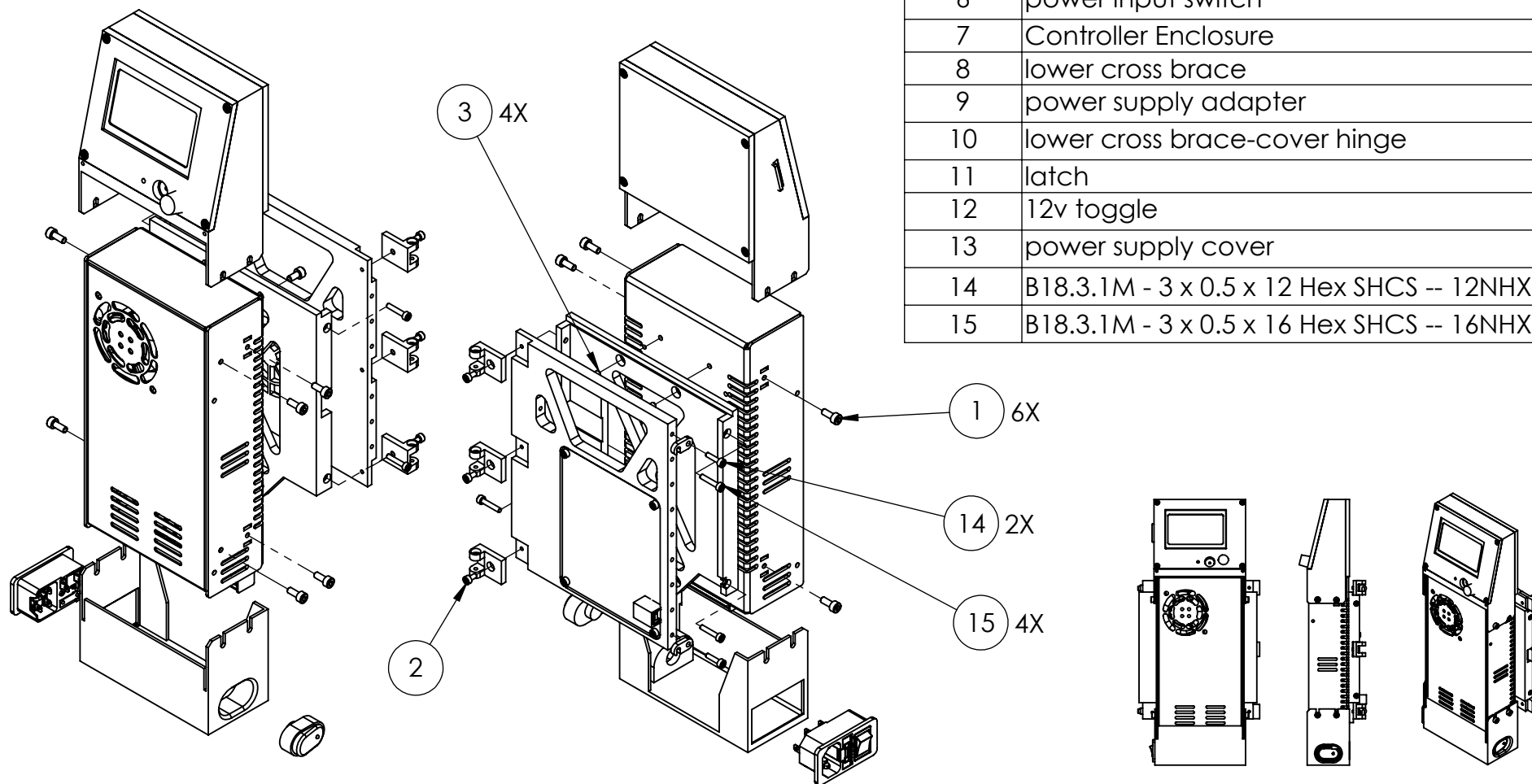
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SHEET 6 OF 16

Vertical Truss Left

Proto-Plastik A52Z Ultimate

ITEM NO.	PART NUMBER	QTY.
1	B18.3.1M - 4 x 0.7 x 10 Hex SHCS -- 10NHX	6
2	B18.3.1M - 3 x 0.5 x 6 Hex SHCS -- 6NHX	7
3	NYLON - 4 x 0.7 x 8 Hex SHCS -- 8NHX	4
4	Power Supply	1
5	BASE V1.5	1
6	power input switch	1
7	Controller Enclosure	1
8	lower cross brace	1
9	power supply adapter	1
10	lower cross brace-cover hinge	3
11	latch	2
12	12v toggle	1
13	power supply cover	1
14	B18.3.1M - 3 x 0.5 x 12 Hex SHCS -- 12NHX	2
15	B18.3.1M - 3 x 0.5 x 16 Hex SHCS -- 16NHX	4

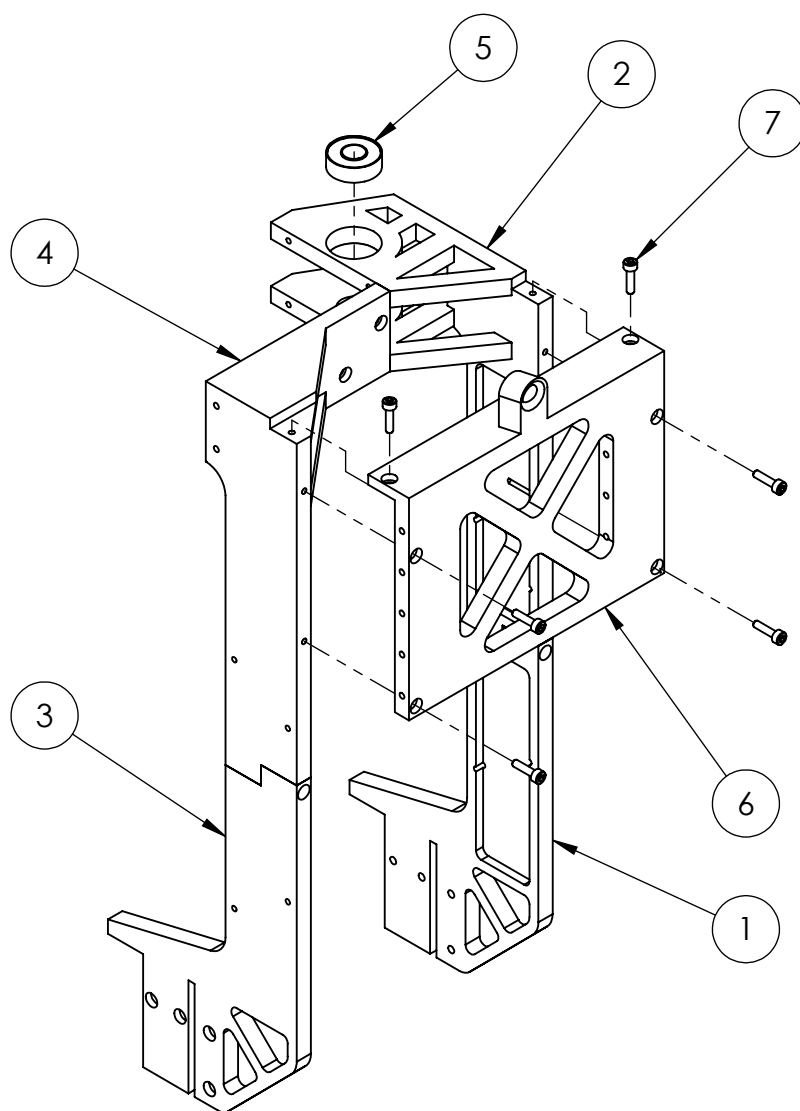


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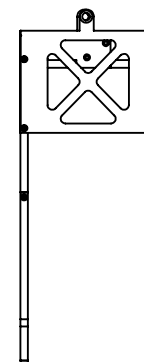
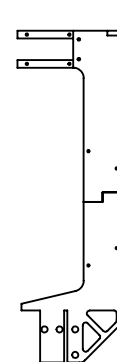
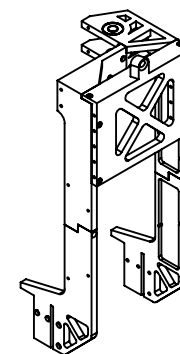
SHEET 7 OF 16

## Power Supply Mount

Proto-Plastik A52Z Ultimate



ITEM NO.	PART NUMBER	QTY.
1	vertical truss -right rear lower	1
2	vertical truss-right rear upper	1
3	vertical truss-right front lower	1
4	vertical truss-right front upper	1
5	R6RS bearing	1
6	top cross brace	1
7	B18.3.1M - 3 x 0.5 x 12 Hex SHCS -- 12NHX	6



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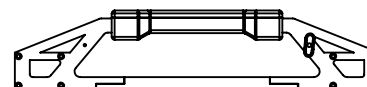
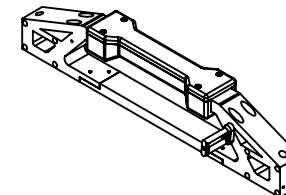
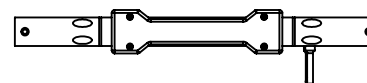
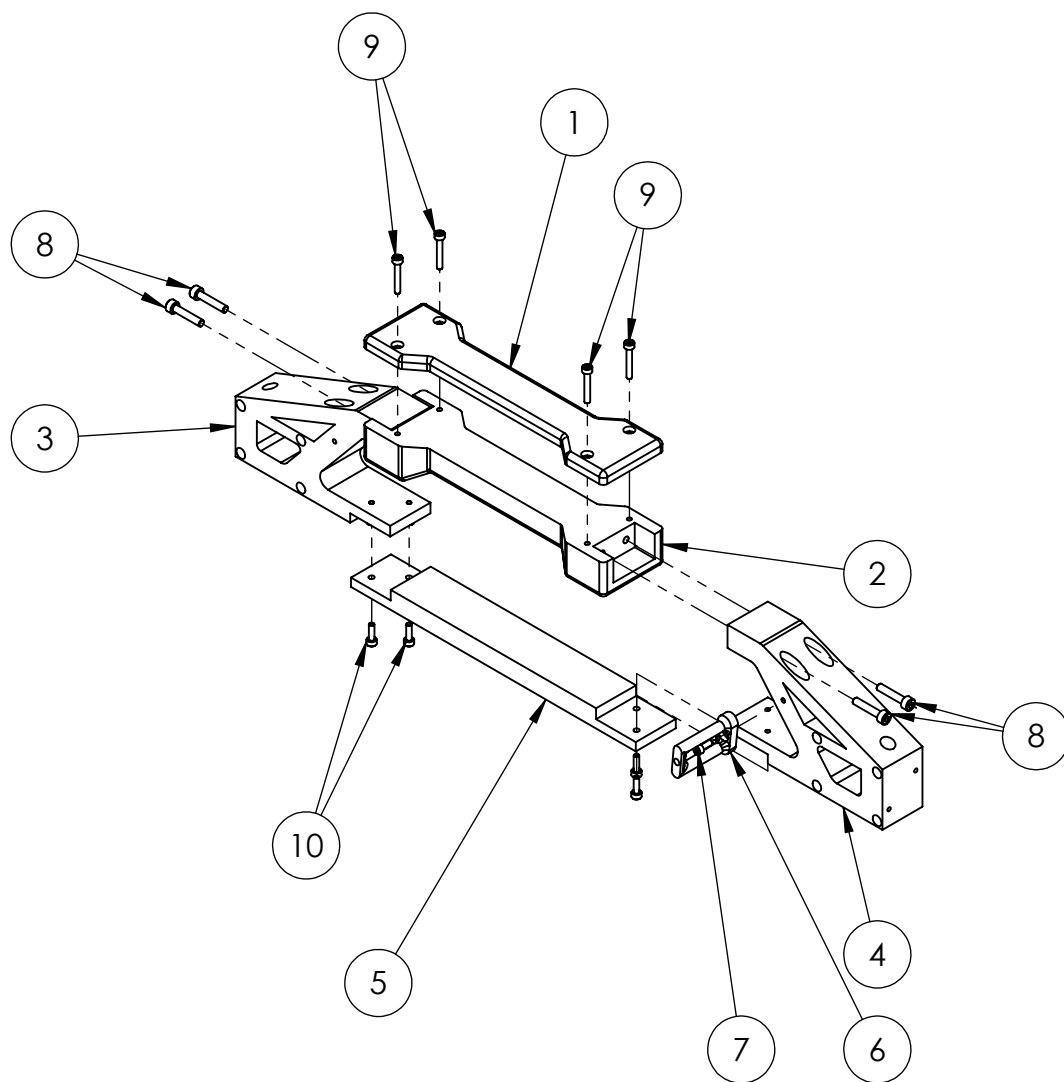
SHEET 8 OF 16

## Vertical Truss Right

Proto-Plastik A52Z Ultimate



ITEM NO.	PART NUMBER	QTY.
1	truss handle top	1
2	truss handle bottom	1
3	truss end	1
4	truss end	1
5	truss center	1
6	filament guide	1
7	B18.3.1M - 3 x 0.5 x 8 Hex SHCS -- 8NHX	1
8	B18.3.1M - 4 x 0.7 x 20 Hex SHCS -- 20NHX	4
9	B18.3.1M - 3 x 0.5 x 20 Hex SHCS -- 20NHX	4
10	B18.3.1M - 3 x 0.5 x 10 Hex SHCS -- 10NHX	6



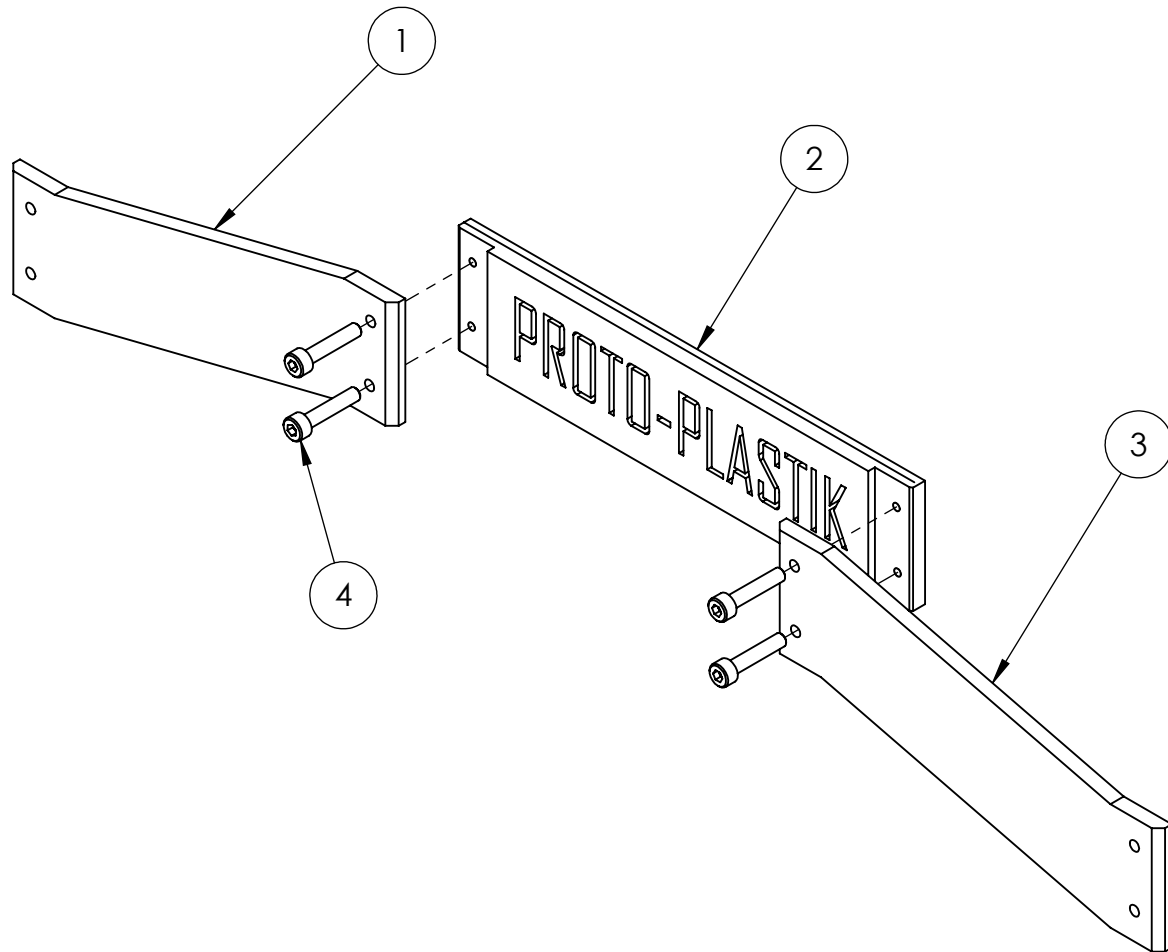
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SHEET 9 OF 16

## Truss Handle

Proto-Plastik A52Z Ultimate

ITEM NO.	PART NUMBER	QTY.
1	Name Bar-end	1
2	Name Bar-banner	1
3	Name Bar-end-OH	1
4	B18.3.1M - 4 x 0.7 x 20 Hex SHCS -- 20NHX	4



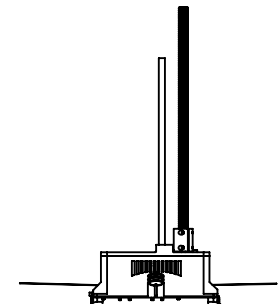
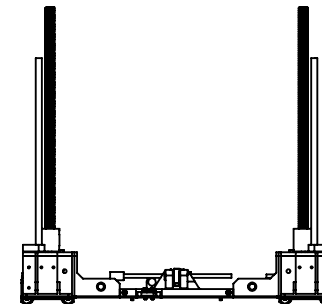
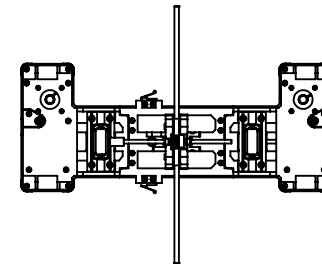
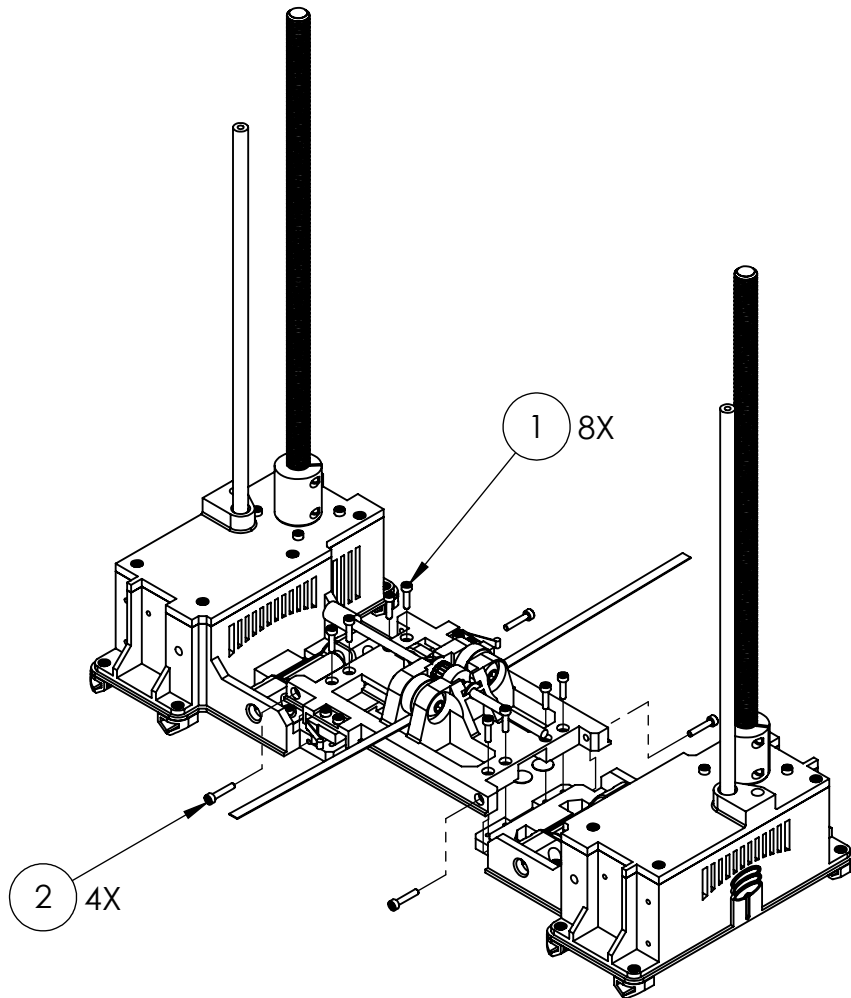
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SHEET 10 OF 16

Name Bar

Proto-Plastik A52Z Ultimate

ITEM NO.	PART NUMBER	QTY.
1	B18.3.1M - 3 x 0.5 x 12 Hex SHCS -- 12NHX	8
2	B18.3.1M - 3 x 0.5 x 16 Hex SHCS -- 16NHX	4
3	Motor Housing YZ-Axis	1
4	Motor Housing Z-Axis	1
5	A5 Frame Chassis Center	1



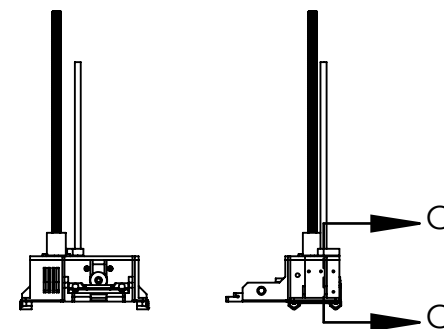
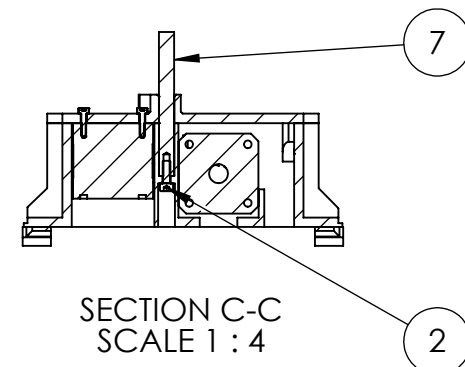
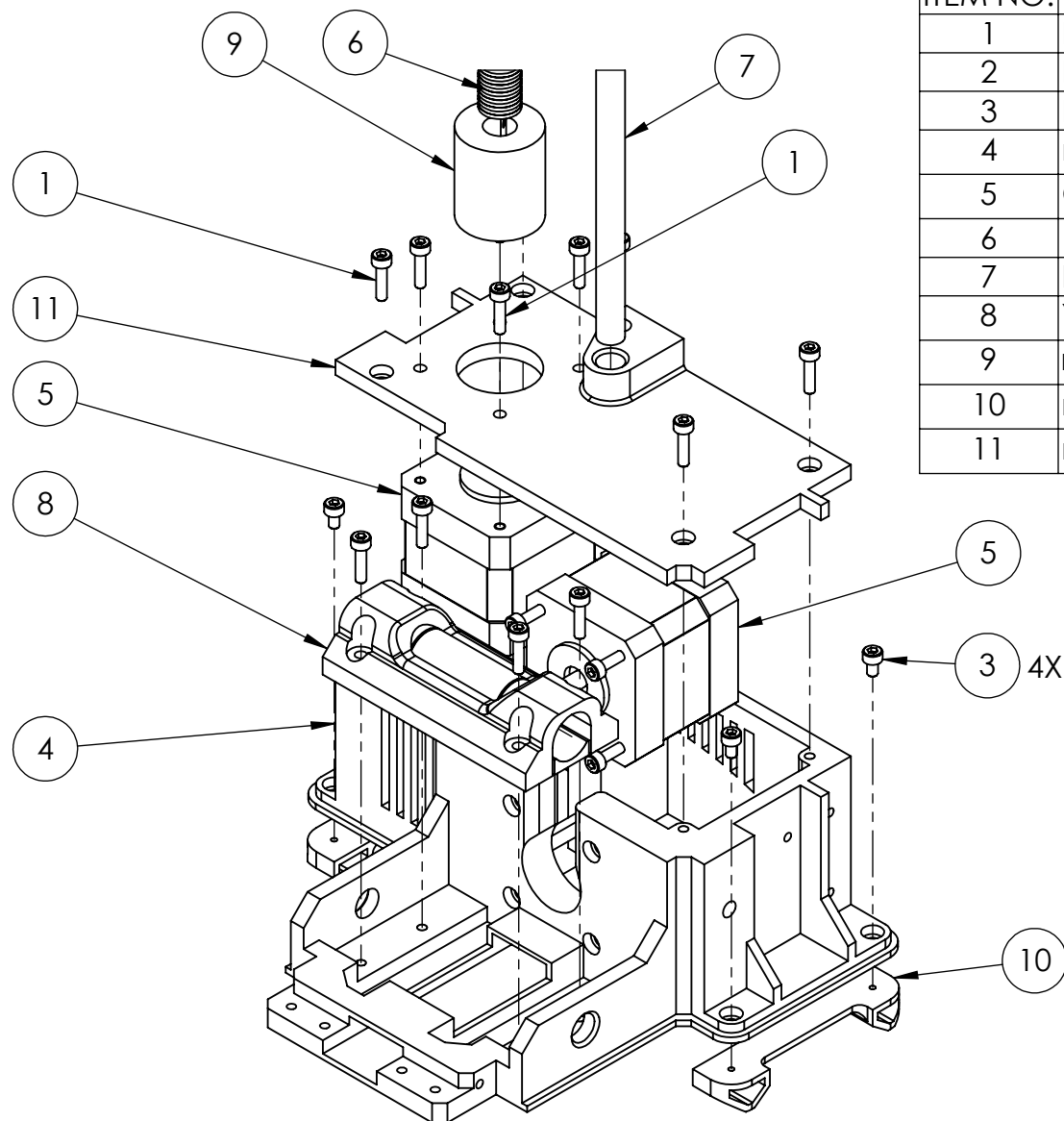
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SHEET 11 OF 16

Subframe

Proto-Plastik A52Z Ultimate

ITEM NO.	PART NUMBER	QTY.
1	B18.3.1M - 3 x 0.5 x 12 Hex SHCS -- 12NHX	17
2	B18.3.1M - 4 x 0.7 x 12 Hex SHCS -- 12NHX	1
3	B18.3.1M - 3 x 0.5 x 5 Hex SHCS -- 5NHX	4
4	motor housing RIGHT-body	1
5	OpenBuilds Nema 17 SKU775	2
6	.375-12 x 12 Leadscrew	1
7	RDOM8 8mm rod	1
8	Y-Axis Bearing Cover and Tray	1
9	rigid coupler	1
10	mounting foot TPE	2
11	motor housing RIGHT-cover	1



NOTES:  
ITEM 7 290mm with 4mm threaded ends  
ITEM 9 can be replaced with 5mm x 3/8" flexible coupler

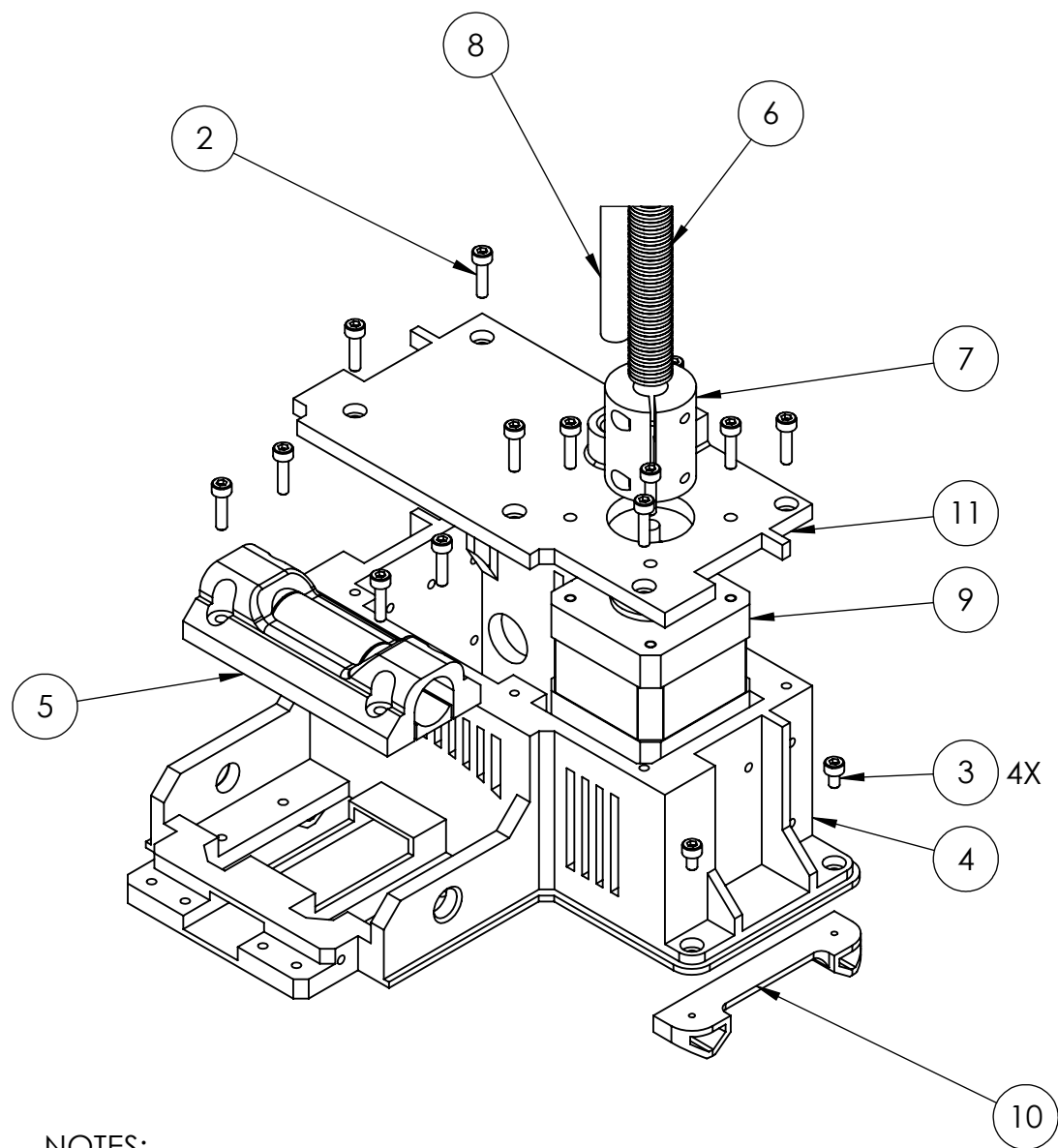


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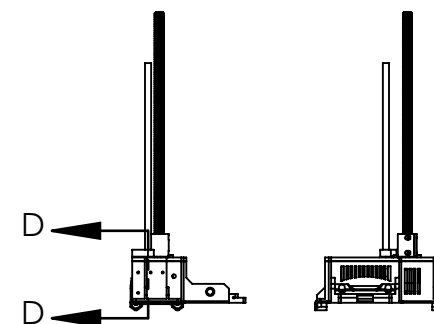
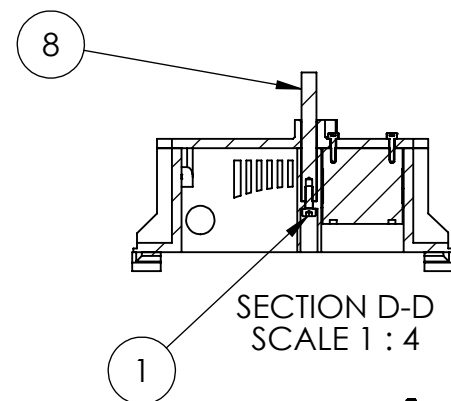
SHEET 12 OF 16

## Motor Housing YZ Axis

# Proto-Plastik A52Z Ultimate



ITEM NO.	PART NUMBER	QTY.
1	B18.3.1M - 4 x 0.7 x 12 Hex SHCS -- 12NHX	1
2	B18.3.1M - 3 x 0.5 x 12 Hex SHCS -- 12NHX	14
3	B18.3.1M - 3 x 0.5 x 5 Hex SHCS -- 5NHX	4
4	motor housing LEFT-Body	1
5	Y-Axis Bearing Cover and Tray	1
6	.375-12 x 12 Leadscrew	1
7	rigid coupler	1
8	RDOM8 8mm rod	1
9	OpenBuilds Nema 17 SKU775	1
10	mounting foot TPE	2
11	motor housing LEFT-Cover	1



NOTES:  
 ITEM 8 290mm with 4mm threaded ends  
 ITEM 7 can be replaced with 5mm x 3/8" flexible coupler



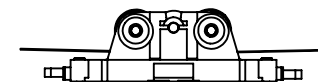
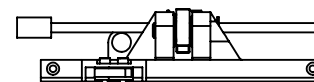
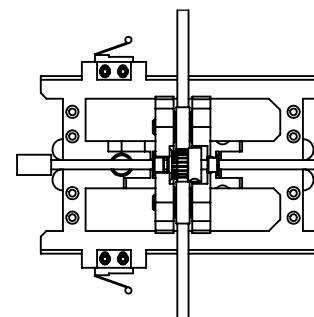
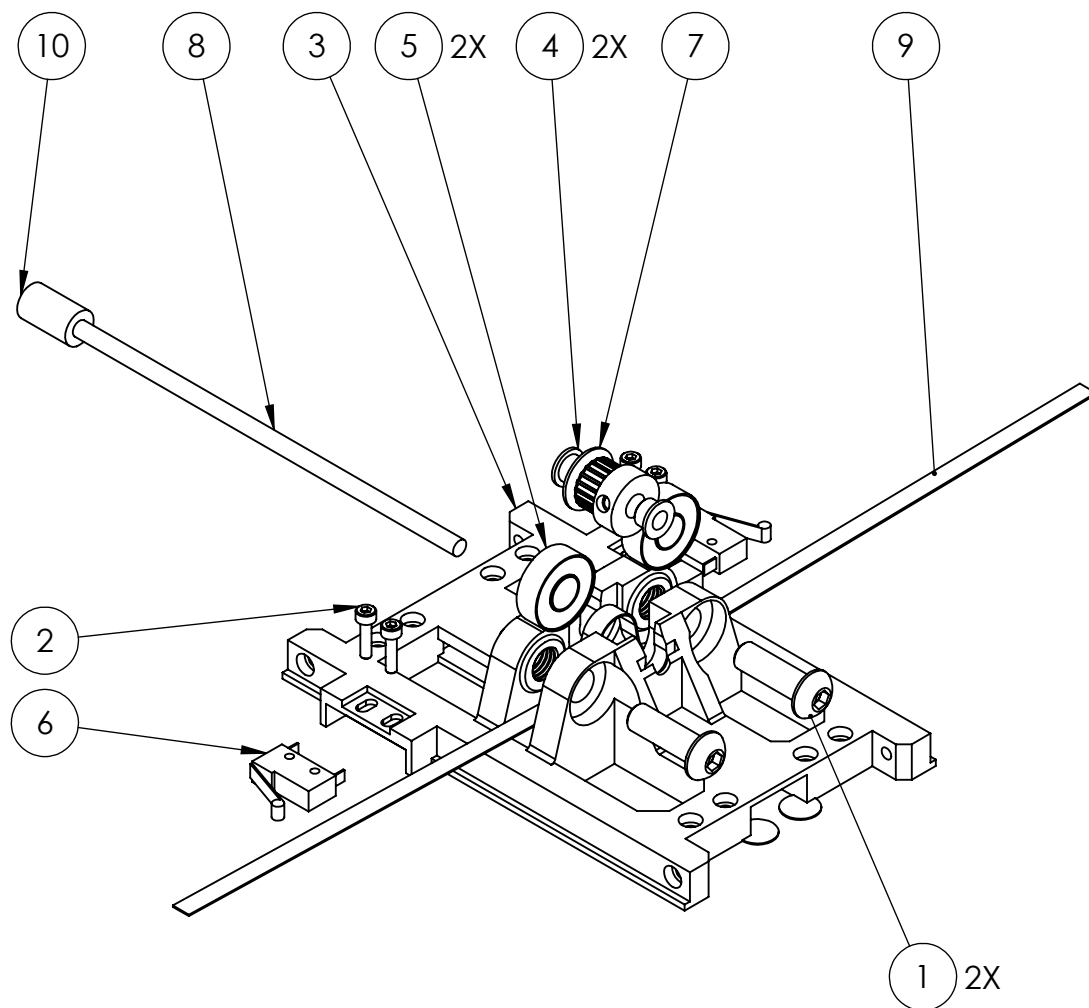
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SHEET 13 OF 16

## Motor Housing Z Axis

Proto-Plastik A52Z Ultimate

ITEM NO.	PART NUMBER	QTY.
1	SBHCSCREW 0.3125-18x1-HX-N	2
2	B18.3.1M - 3 x 0.5 x 12 Hex SHCS -- 12NHX	4
3	chassis	1
4	5mm ID x 8mm OD x 6mm Flanged	2
5	R6RS bearing	2
6	endstop	2
7	GT2 Drive Pulley	1
8	driveshaft	1
9	belt^A5 Frame Chassis Center	1
10	5mm Rigid Coupler	1



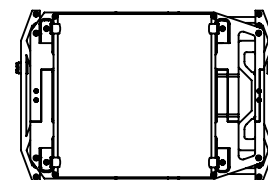
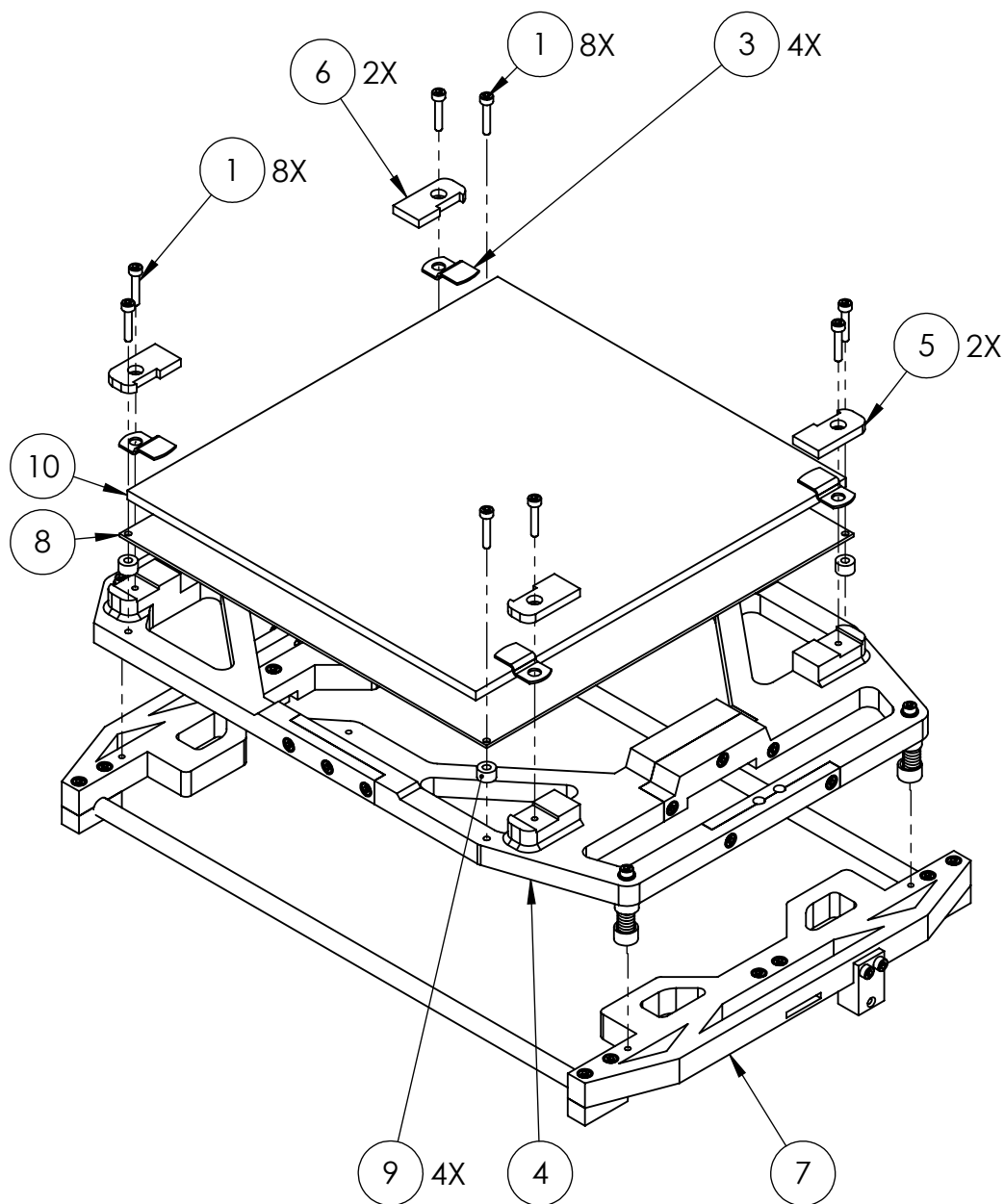
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SHEET 14 OF 16

## Frame Chassis Center

Proto-Plastik A52Z Ultimate

ITEM NO.	PART NUMBER	QTY.
1	B18.3.1M - 3 x 0.5 x 16 Hex SHCS -- 16NHX	8
2	B18.3.1M - 3 x 0.5 x 10 Hex SHCS -- 10NHX	2
3	glass clip	4
4	A5 Bed Build Platform	1
5	build platform-clip retainer-OH	2
6	build platform-clip retainer	2
7	A5 Bed Chassis	1
8	heated-bed	1
9	silicon standoff	4
10	heated-bed-glass	1



SCALE: 1:10

SHEET 15 OF 16

A5 Bed

Proto-Plastik A52Z Ultimate



SCALE: 1:10

SHEET 16 OF 16

Sheet2

Proto-Plastik A52Z Ultimate