

# Take Up Winder

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## Introduction

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The Take Up Winder is a Traversing Drum type, fitted with a static eliminator bar and is suitable for use with winding drums up to 0.5m diameter with an overall width of 300mm

The Take Up Winder is suitable for use with both small diameter 'fibres' and larger diameter 'canes'.

The Take Up Winder works on conjunction with a 'nodding arm' type dancer.

(Drawing numbers 380187A, 287576A, 287573A, 380172A, 380264A, 380246A, 380254A, 380261A, 380309A & 380963A refer).

## Description

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Traversing Drum Type Take Up Winder with static eliminator bar suitable for use with winding drums up to 0.5m diameter with an overall width of 300mm.

Note : it is assumed that the standard drum is a Sonoco Crellin type 9808 / 9812 industry standard process spool.

The spools are supported on a 20mm diameter shaft with adaptor cones as needed to accommodate industry standard 25 and 50km shipping spools in addition to the type 9808 / 9812 industry standard process spools referred to above.

The dancer is a two pulley 'nodding arm' type with 150mm diameter pulleys.

Drum traverse allows the winding pitch to be adjusted and automatically maintained as drum speed changes.

## Operation

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The winder is automatically operated from the SCADA interface on the tower PC/PLC system and features two modes of operation: #

### **Small Diameter Fibres**

For small diameter fibres the dancer is utilised to control take up speed and winding tension.

### **Large Diameter Fibres**

For larger diameter fibres (canes) the winder can be set to 'torque' mode where the dancer is not used and instead the fibre is wound directly from the capstan onto the winding drum.

A positive speed differential is automatically maintained between the speed of the winding drum and the speed of the capstan. The winder drive train incorporates a special electronically controlled, variable resistance clutch which allows the amount of pulling force that the drum can apply to the fibre to be varied as required for proper layering of the fibre on the drum.

# Maintenance

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## Routine

### Before every start up attempt

Remove any fibre debris from the drum carriage, winder frame and floor area surrounding the winder.

Rotate the drum slowly and check its surface for damage, fibre debris, tape or other contamination. Clean drum surface if required with an alcohol moistened lint-free wipe.

### Every 3 Months

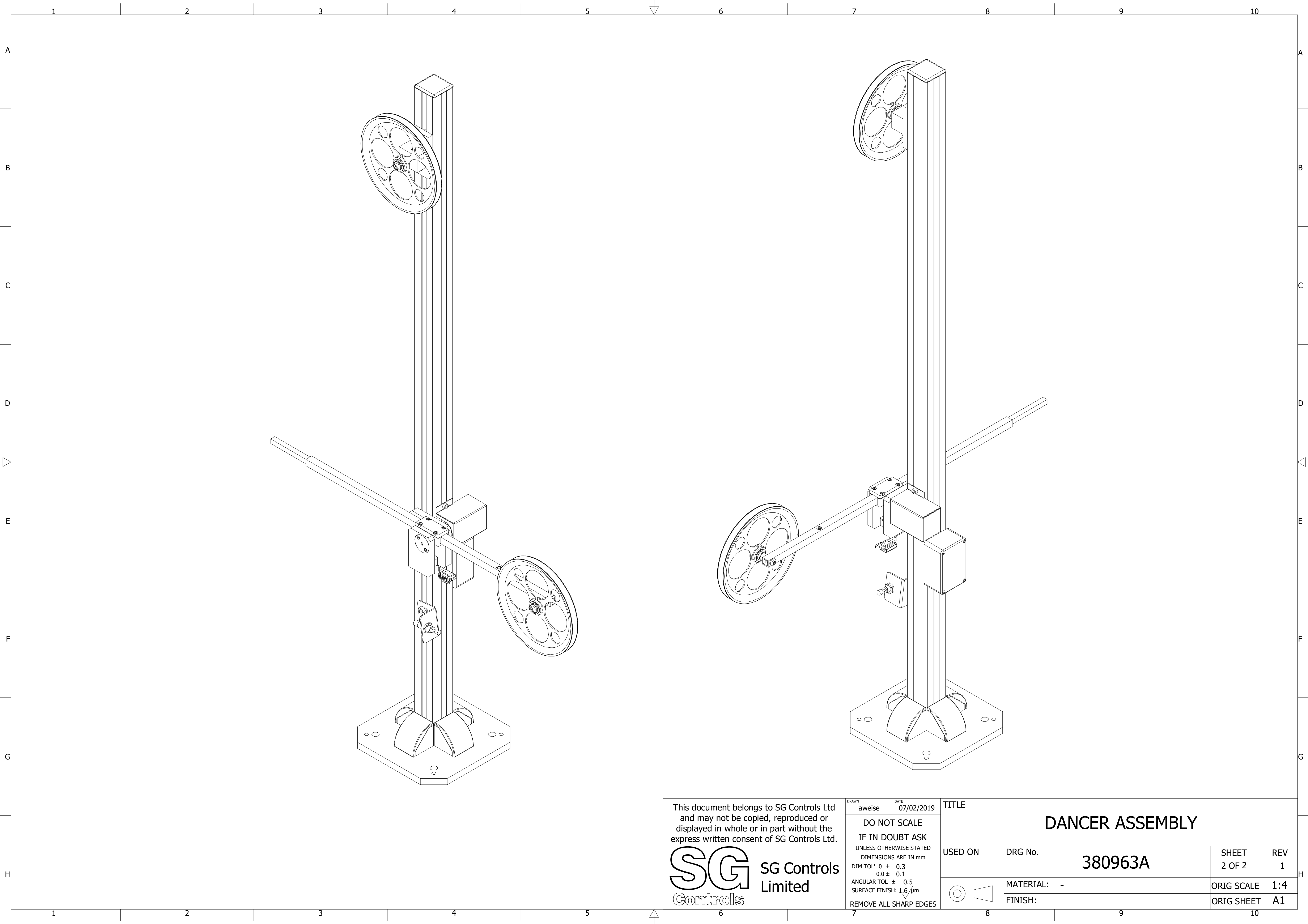
Clean the surface of the rotating shaft with a tissue moistened with alcohol and then apply a MoS2 free ball bearing grease, e.g. SKF Alfablub LGMT, Shell Alvania R2, G2 Esso Beacon 2 or BP Energrelse LS2, using a cloth, spreading it as thinly as possible. Any more than a very thin film is required or it will attract dirt.


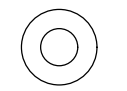
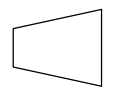
Move the drum carriage to one traverse limit and similarly wipe the exposed guide rails. Repeat for the opposite end.

### Every 6 Months

Remove the drive train cover, check belt tension and look for signs of contamination, wear or damage on all components.

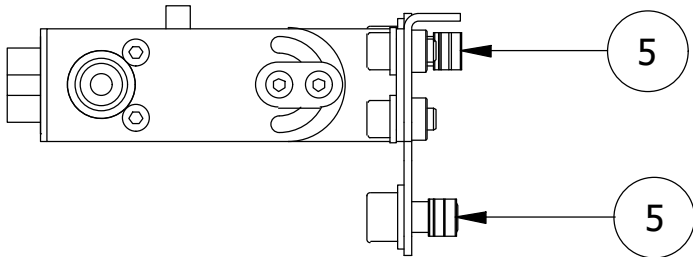
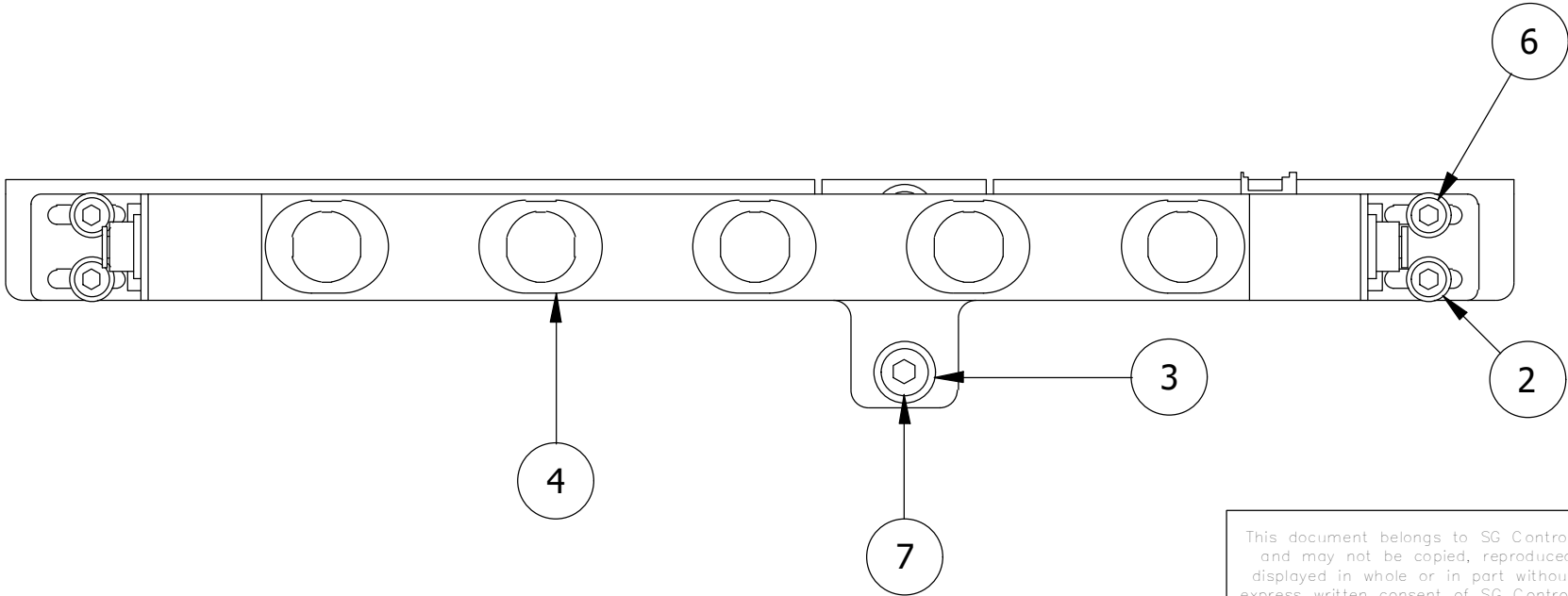
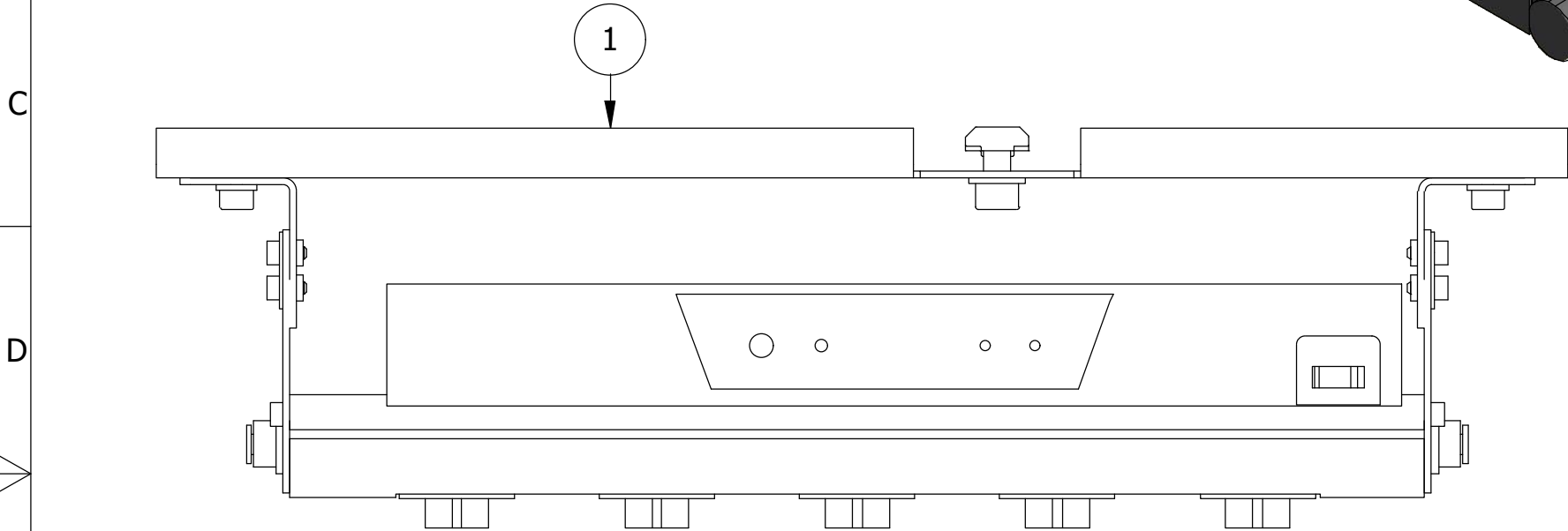
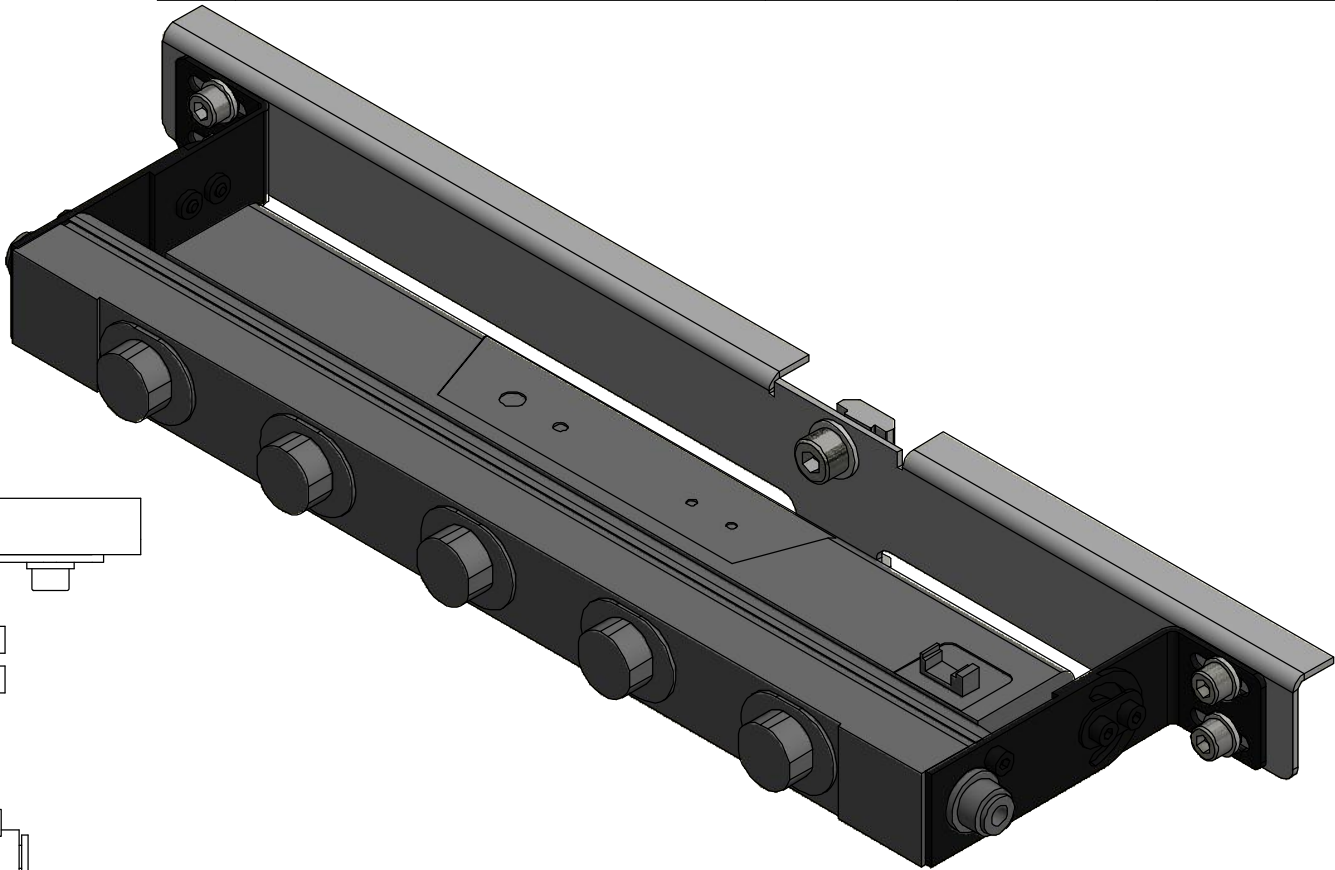




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		DO NOT SCALE IF IN DOUBT ASK UNLESS OTHERWISE STATED DIMENSIONS ARE IN mm DIM TOL' 0 ± 0.3 0.0 ± 0.1 ANGULAR TOL ± 0.5 SURFACE FINISH: 1.6 µm REMOVE ALL SHARP EDGES		USED ON	DRG No.  <b>380963A</b>	SHEET 2 OF 2	REV 1
 <b>SG Controls Limited</b>		 			MATERIAL: -	ORIG SCALE	1:4
					FINISH:	ORIG SHEET	A1

PARTS LIST			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	380310	IONISING BAR BRACKET
2	4	BS 4320 - M6 (Form A)	Bright metal washers - Metric series
3	2	BS 4320 - M8 (Form A)	Bright metal washers - Metric series
4	1	EL83075	IONIZING BAR 340mm LONG
5	2	H05162	T-SLOT NUT 10mm M8
6	4	ISO 4762 - M6 x 12	Hexagon Socket Head Cap Screw
7	2	ISO 4762 - M8 x 16	Hexagon Socket Head Cap Screw

REVISION HISTORY				
REV	DESCRIPTION	DCR No.	DATE	APPROVED
1	FIRST ISSUE		16.2.18	CK



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DO NOT SCALE  
IF IN DOUBT ASK

UNLESS OTHERWISE STATED  
DIMENSIONS ARE IN mm  
DIM TOL 0 ± 0.3  
0.0 ± 0.1  
ANGULAR TOL ± 0.5  
SURFACE FINISH -1.6 μm  
REMOVE ALL SHARP EDGES

IONISING BAR BRACKET ASSY

USED ON

DRG No. 380309A

MATERIAL:

FINISH:

SHEET 1 OF 1

REV 1

ORIG SCALE 1:2

ORIG SHEET A3

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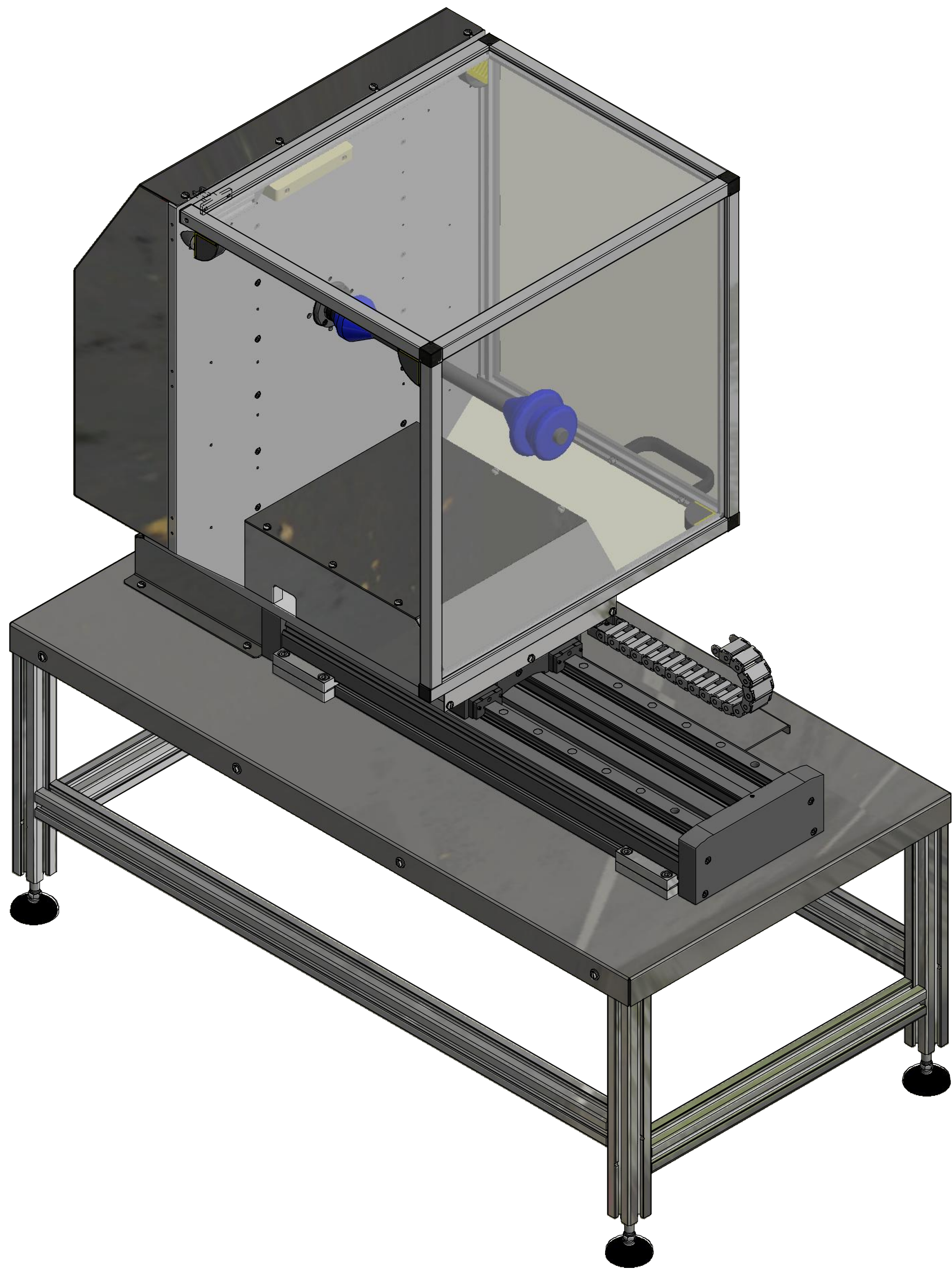
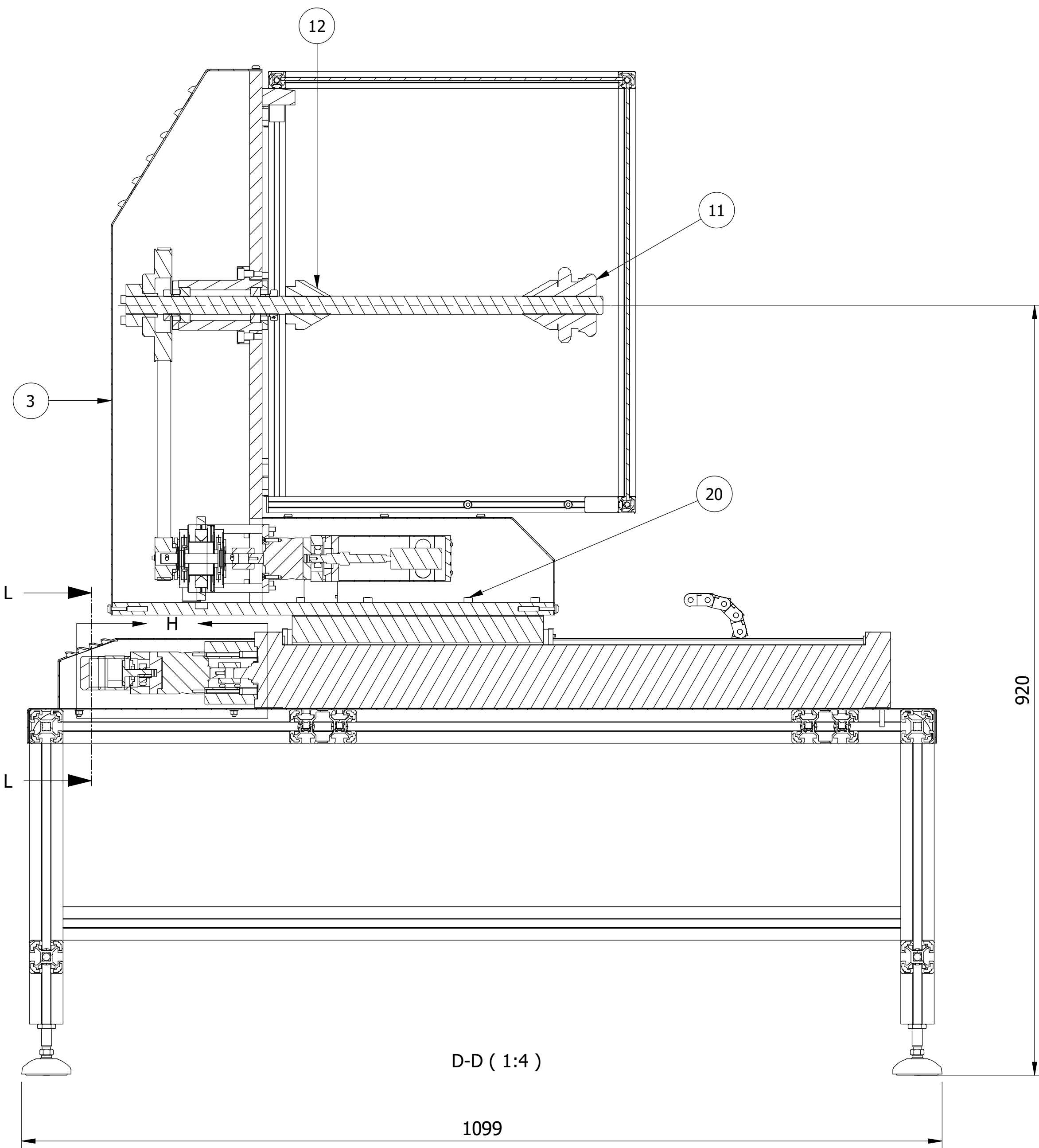
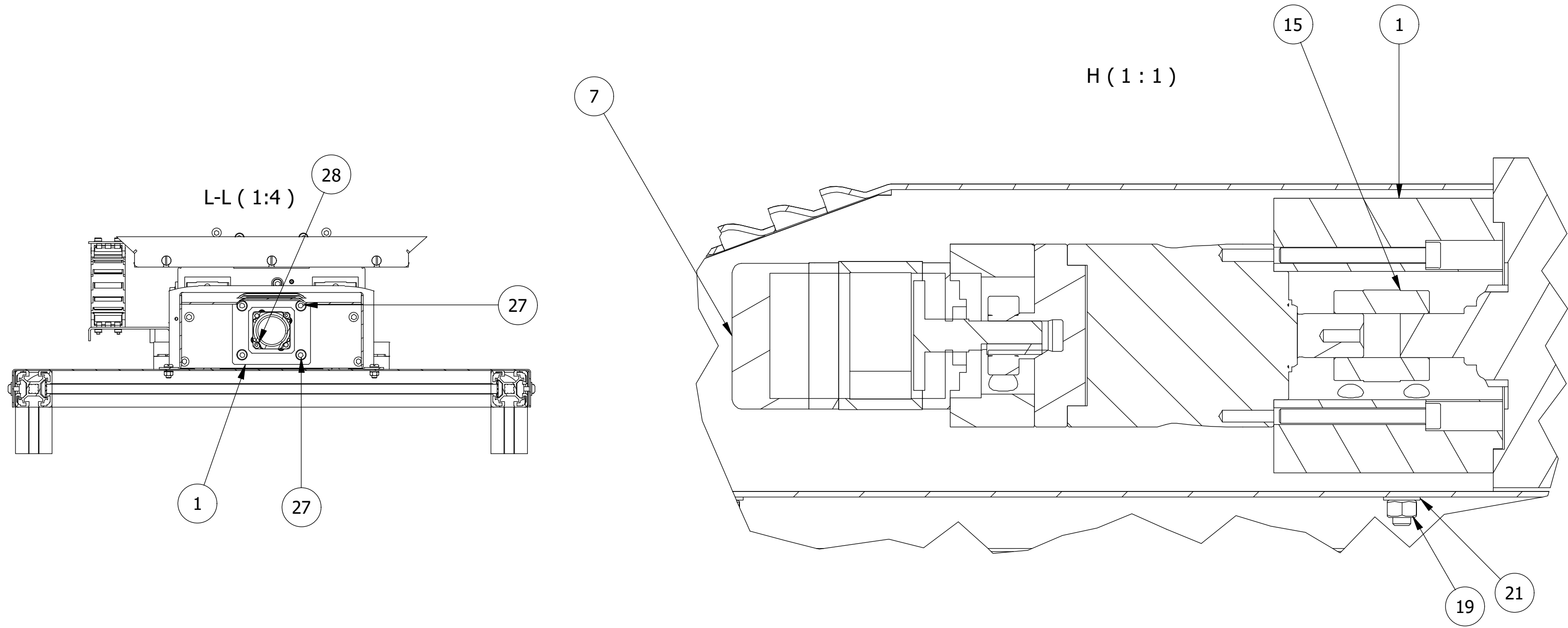
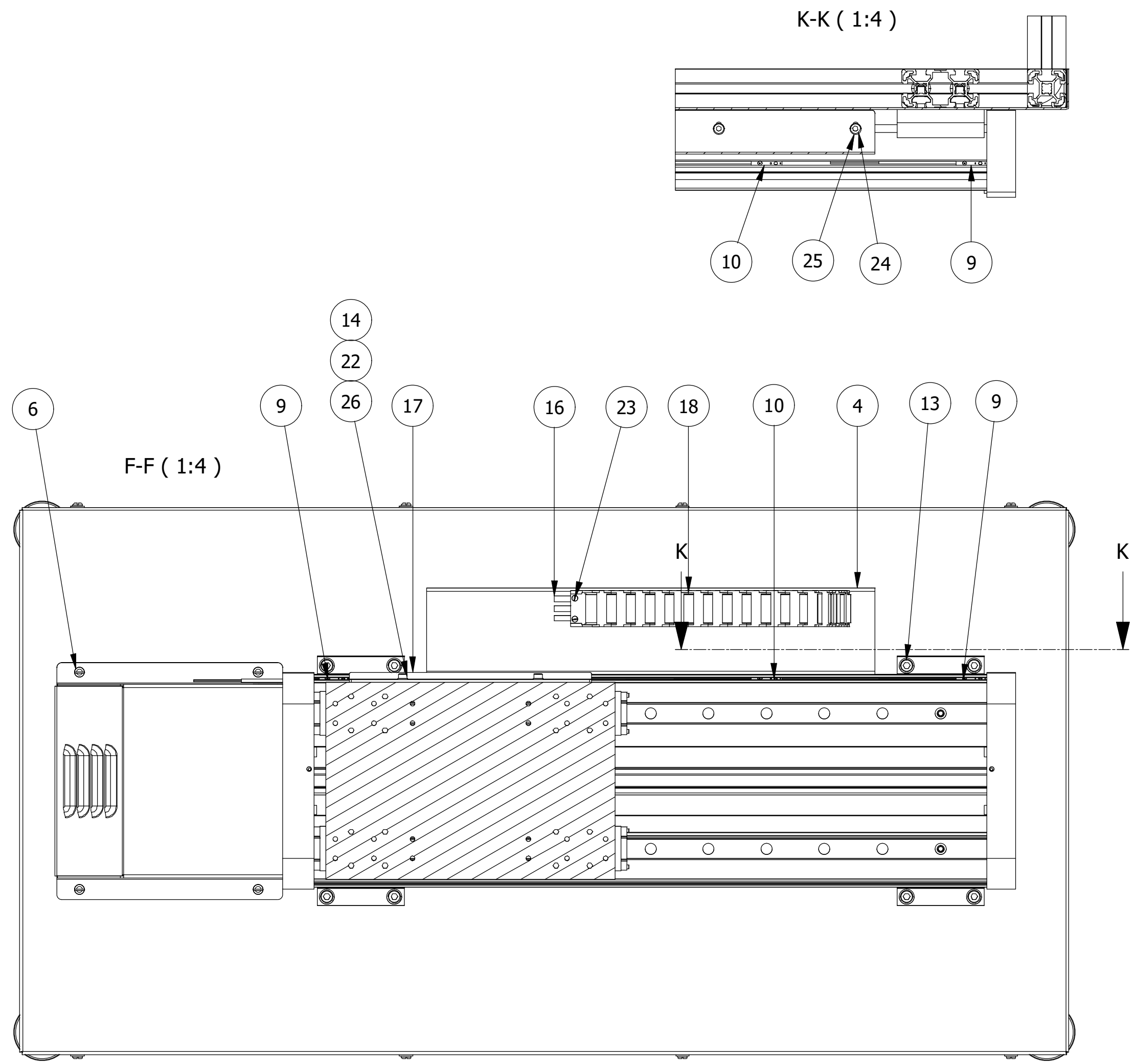
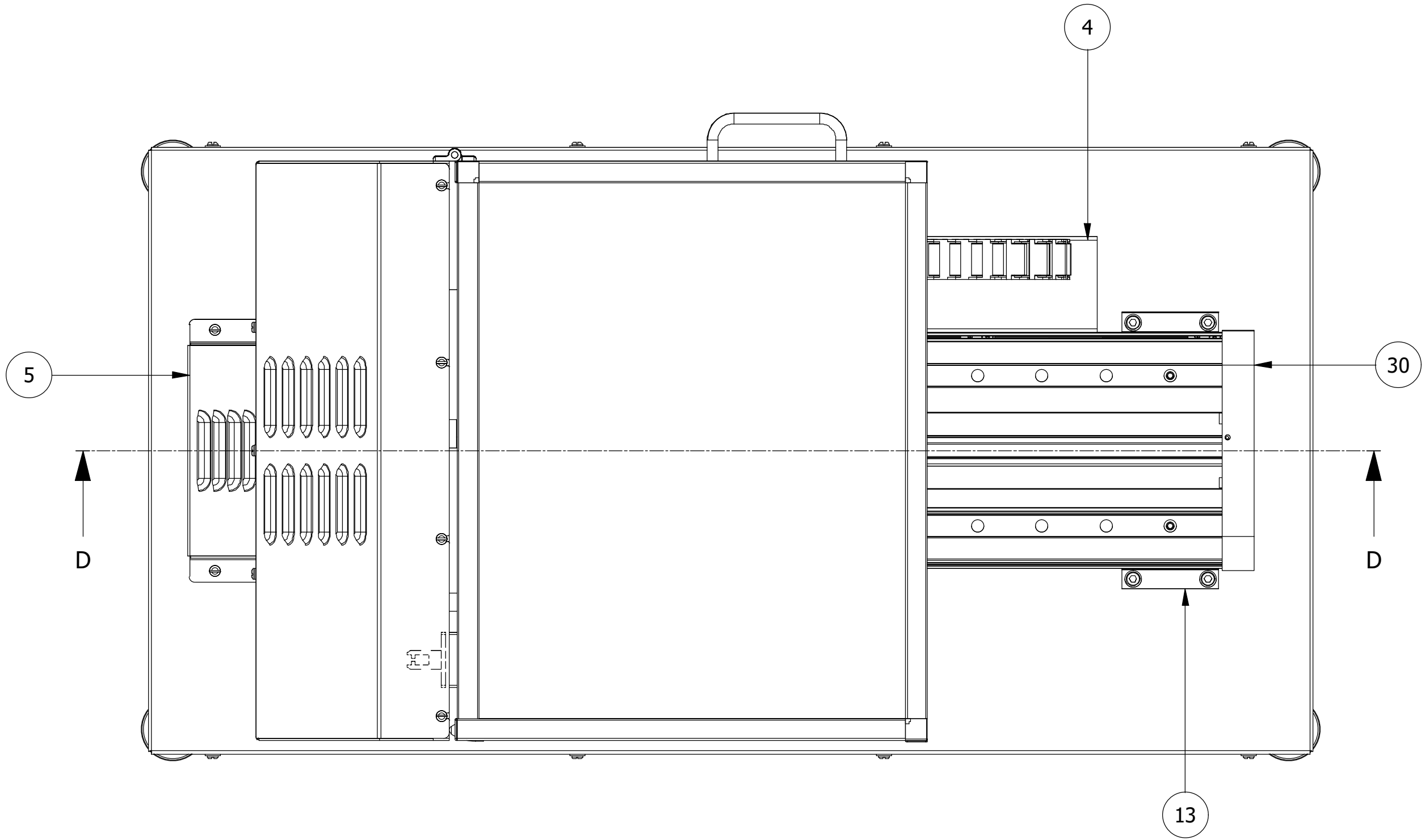
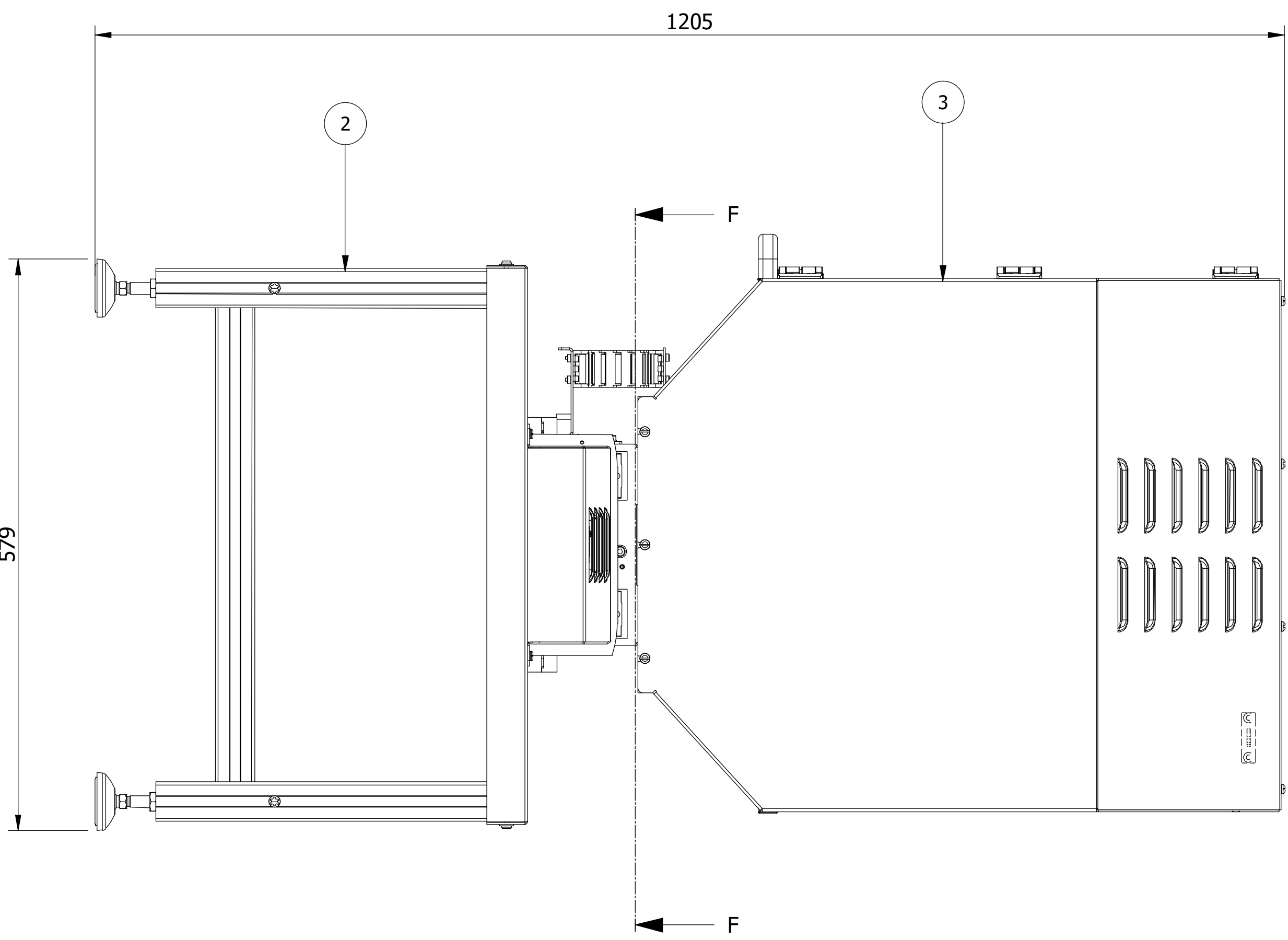
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


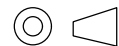

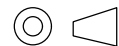

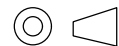

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1	FIRST ISSUE	26/04/16
DATE		APPROVED
		MT



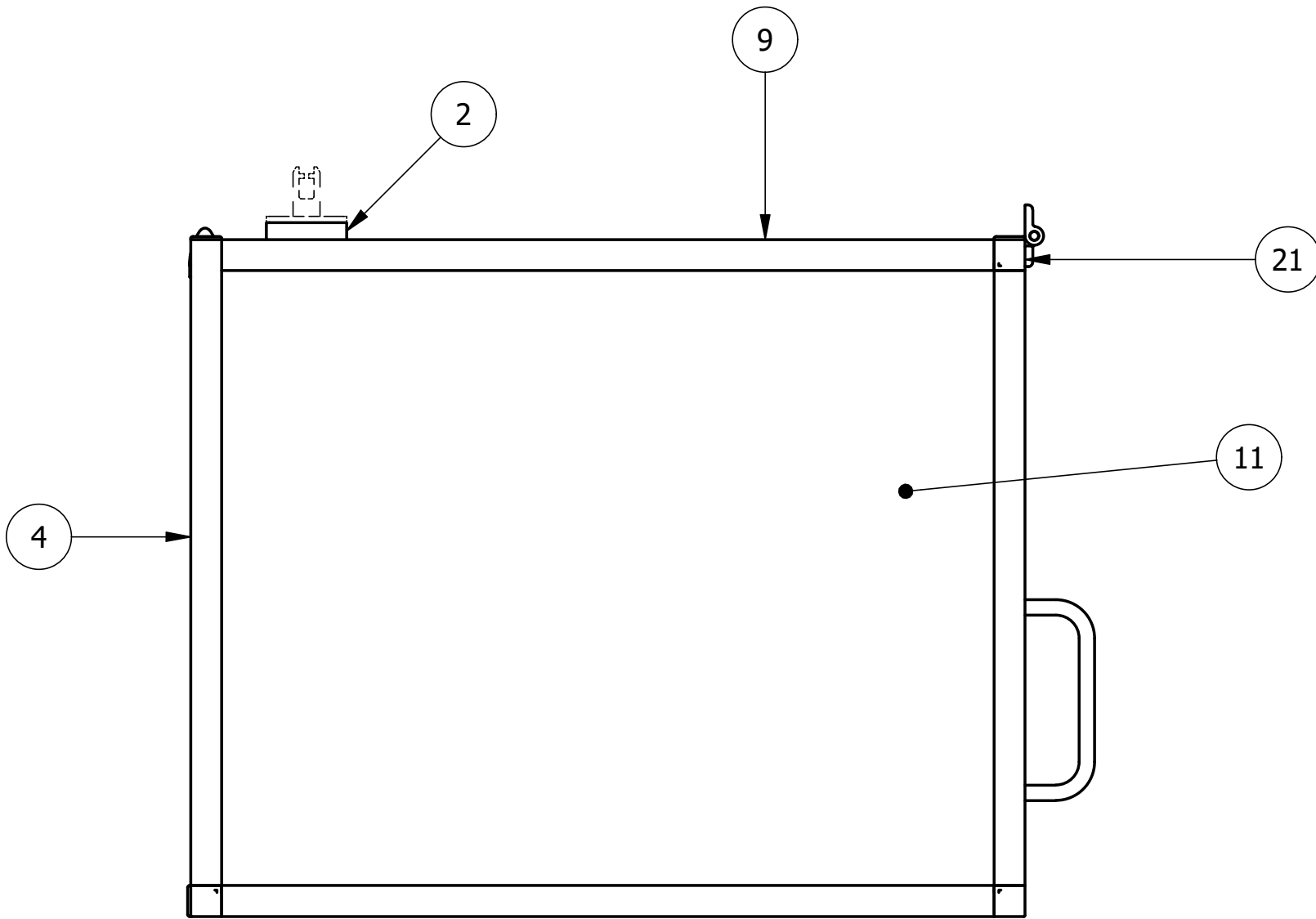
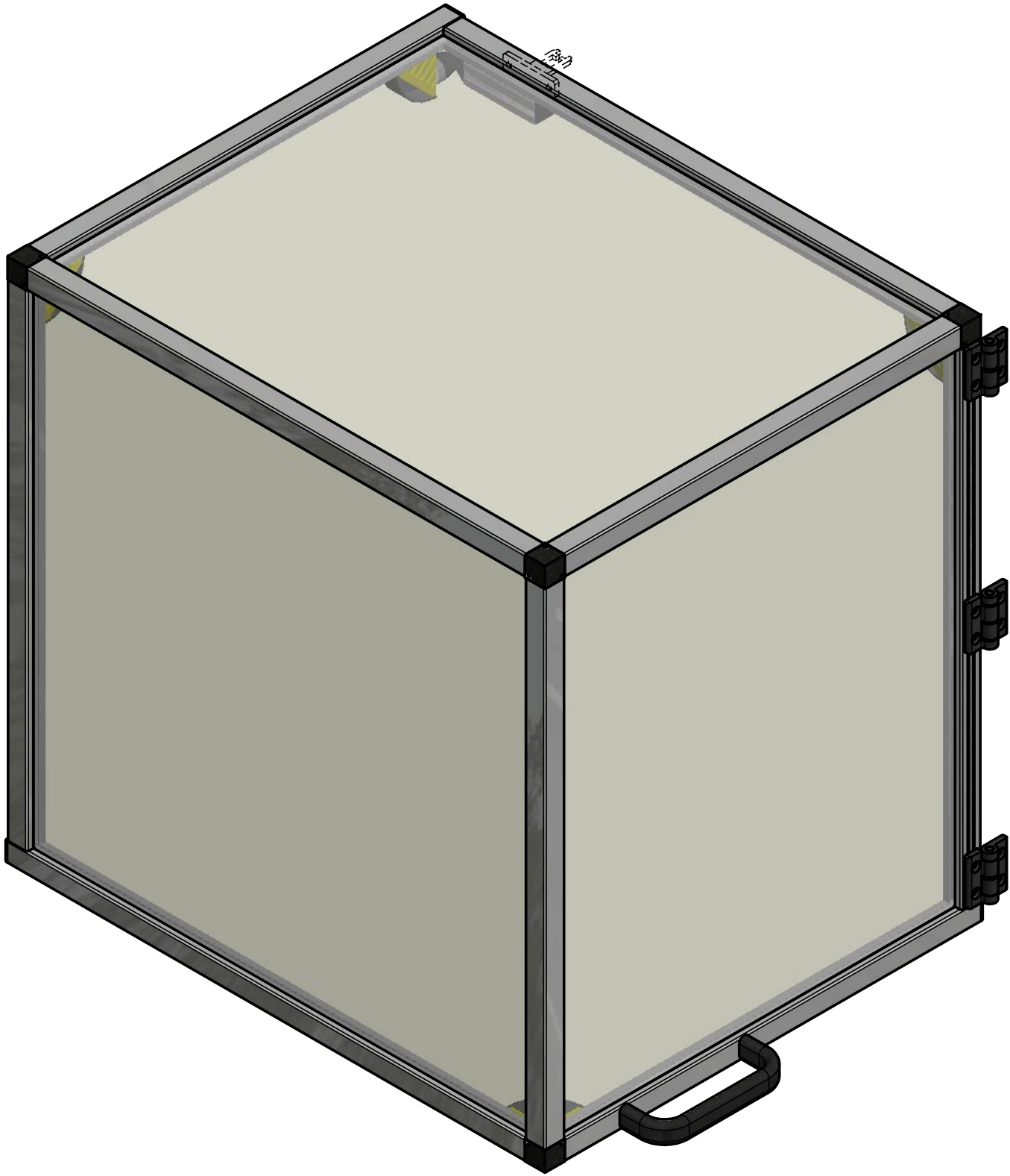
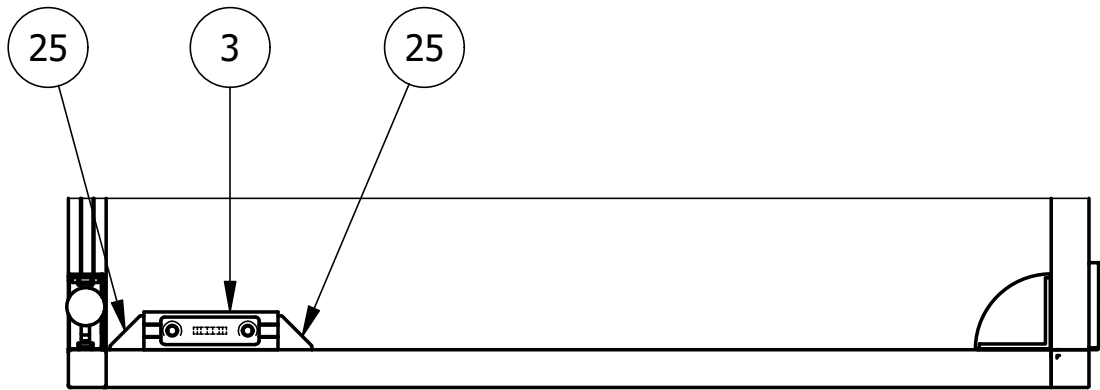
This document belongs to SG Controls Ltd and may not be copied, reproduced or modified in whole or in part without the permission in writing of SG Controls Ltd.		DATE	REVISED	TITLE
DO NOT SCALE IF IN DOUBT ASK DESIGN ENGINEER BY PG 1/1 DATE 10.4.13 DESIGNER (NAME)		350187A	380264A	WINDER WITH COVER
SG Controls Limited		DESIGNED BY	380264A	SHEET 1 OF 2
		MATERIALS		REV 1
		FINISHES		ORIG SCALE 1:10 ORIG SHEET A0

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A	PARTS LIST																				A																																											
	ITEM	QTY	PART NUMBER		DESCRIPTION																																																											
	1	1	287948		GEARBOX MOUNTING BLOCK																																																											
	2	1	380246A		WINDER WITH COVER																																																											
	3	1	380254A		MAIN WINDER BODY ASSY																																																											
	4	1	380276		WINDER MOTOR DRAG CHAIN REST																																																											
B	5	1	380277		WINDER REAR MOTOR COVER																		B																																									
	6	4	BS 4183 - M5 x 12		Slotted pan head machine screws - Metric series																																																											
	7	1	D00513		ROCKWELL MOTOR																																																											
	8	1	D00572		GEARBOX 100:1 REDUCTION RATIO - KEYED SHAFT																																																											
	9	2	EL82738		PROXIMITY SENSOR PNP N/C																																																											
	10	1	EL82787		PROXIMITY SENSOR PNP N/O																																																											
C	11	1	H04370		CLAMPING PINTLE1																		C																																									
	12	1	H04371		FIXED PINTLE1																																																											
	13	4	H04976		PROFILE MOUNT																																																											
	14	4	H04977		M6 SLOT NUT																																																											
	15	1	H04978		ELC COUPLING																																																											
D	16	1	H04980		ENERGY CHAIN BRAKET SET																		D																																									
	17	1	H05002		PROXIMITY SWITCH LUG																																																											
	18	1	H05347		ENERGY CHAIN 30 X 15 X 360 LONG																																																											
	19	4	ISO 4032 - M5		Hexagon nuts, style 1 - Product grades A and B																																																											
	20	9	ISO 4762 - M6 x 10		Hexagon Socket Head Cap Screw																																																											
	21	8	ISO 7089 - 5 - 140 HV		Plain washers - Normal series - Product grade A																																																											
E	22	2	K00061		Washer 5mm Std S/S																		E																																									
	23	4	K00072		CskSlT M3x10 S/S																																																											
	24	4	K00164		HxCpHd M6x16 S/S																																																											
	25	4	K00313		Washer 6mm Std S/S																																																											
	26	2	K00484		HxCpHd M5x10 S/S																																																											
	27	4	K00494		HxCpHd M6x60 S/S																																																											
F	28	2	K00957		HxCpHd M3x12 S/S																		F																																									
	30	1	L00071		SPINDLE AXIS 350mm TRAVEL																																																											
	92	4	BS 4168 - M4 x 40		Hexagon Socket Head Cap Screw																																																											
G																					G																																											
											<table><tr><td colspan="2">This document belongs to SG Controls Ltd and may not be copied, reproduced or displayed in whole or in part without the express written consent of SG Controls Ltd.</td><td>Drawn mtofts</td><td>Date 09/01/2018</td><td colspan="6">TITLE  WINDER WITH COVER</td></tr><tr><td colspan="2" rowspan="3"></td><td colspan="2" rowspan="3">SG Controls Limited</td><td colspan="2">DO NOT SCALE IF IN DOUBT ASK</td><td colspan="2">USED ON 380187A</td><td colspan="2">DRG No.  380264A</td><td colspan="2">SHEET 2 OF 2</td><td colspan="2">REV 1</td></tr><tr><td colspan="2" rowspan="2"></td><td colspan="2">MATERIAL:</td><td colspan="2">ORIG SCALE 1:10</td></tr><tr><td colspan="2">FINISH:</td><td colspan="2">ORIG SHEET A3</td></tr></table>										This document belongs to SG Controls Ltd and may not be copied, reproduced or displayed in whole or in part without the express written consent of SG Controls Ltd.		Drawn mtofts	Date 09/01/2018	TITLE  WINDER WITH COVER								SG Controls Limited		DO NOT SCALE IF IN DOUBT ASK		USED ON 380187A		DRG No.  380264A		SHEET 2 OF 2		REV 1				MATERIAL:		ORIG SCALE 1:10		FINISH:		ORIG SHEET A3											
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		SG Controls Limited		DO NOT SCALE IF IN DOUBT ASK		USED ON 380187A		DRG No.  380264A		SHEET 2 OF 2		REV 1																																																				
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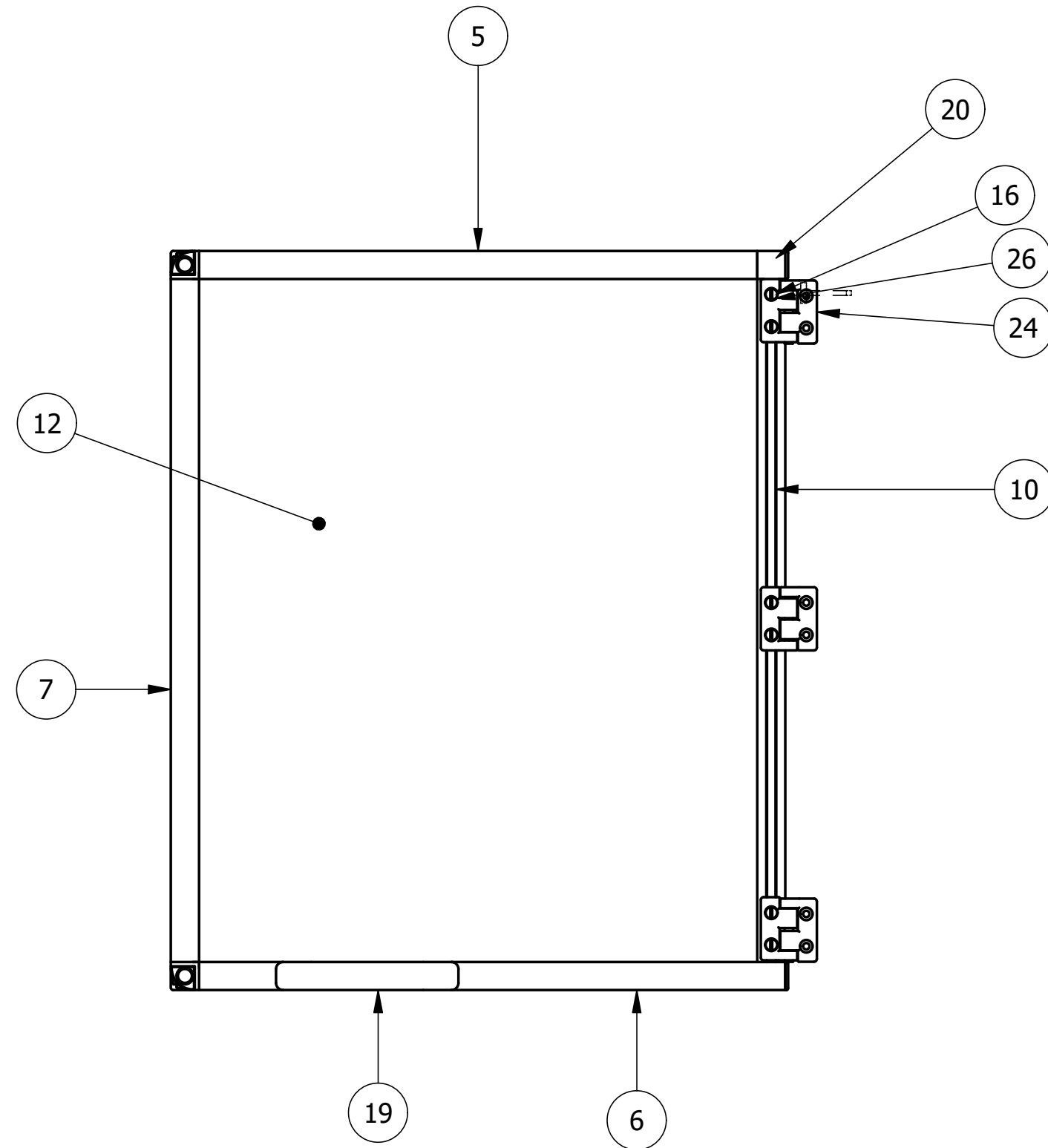
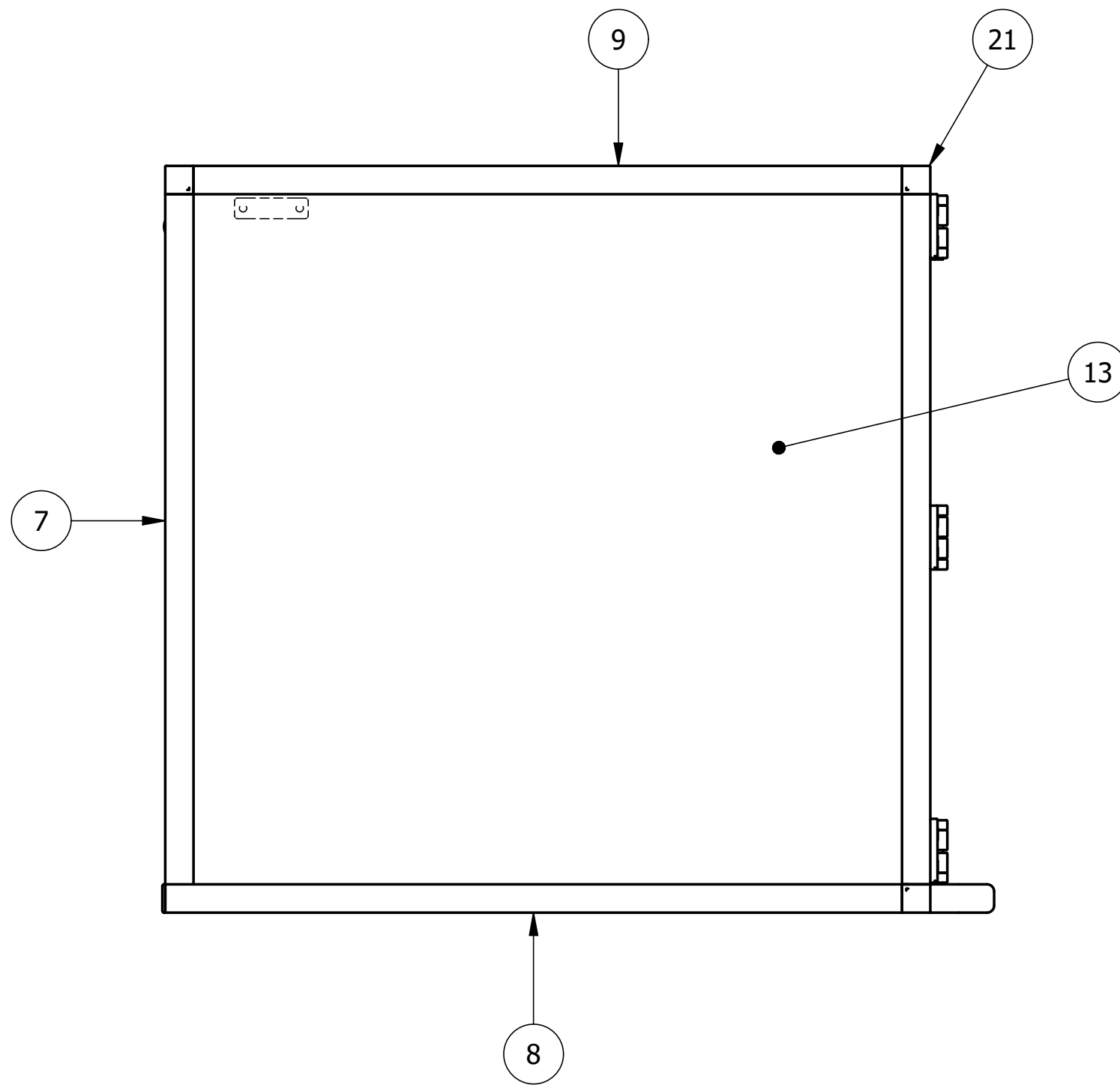
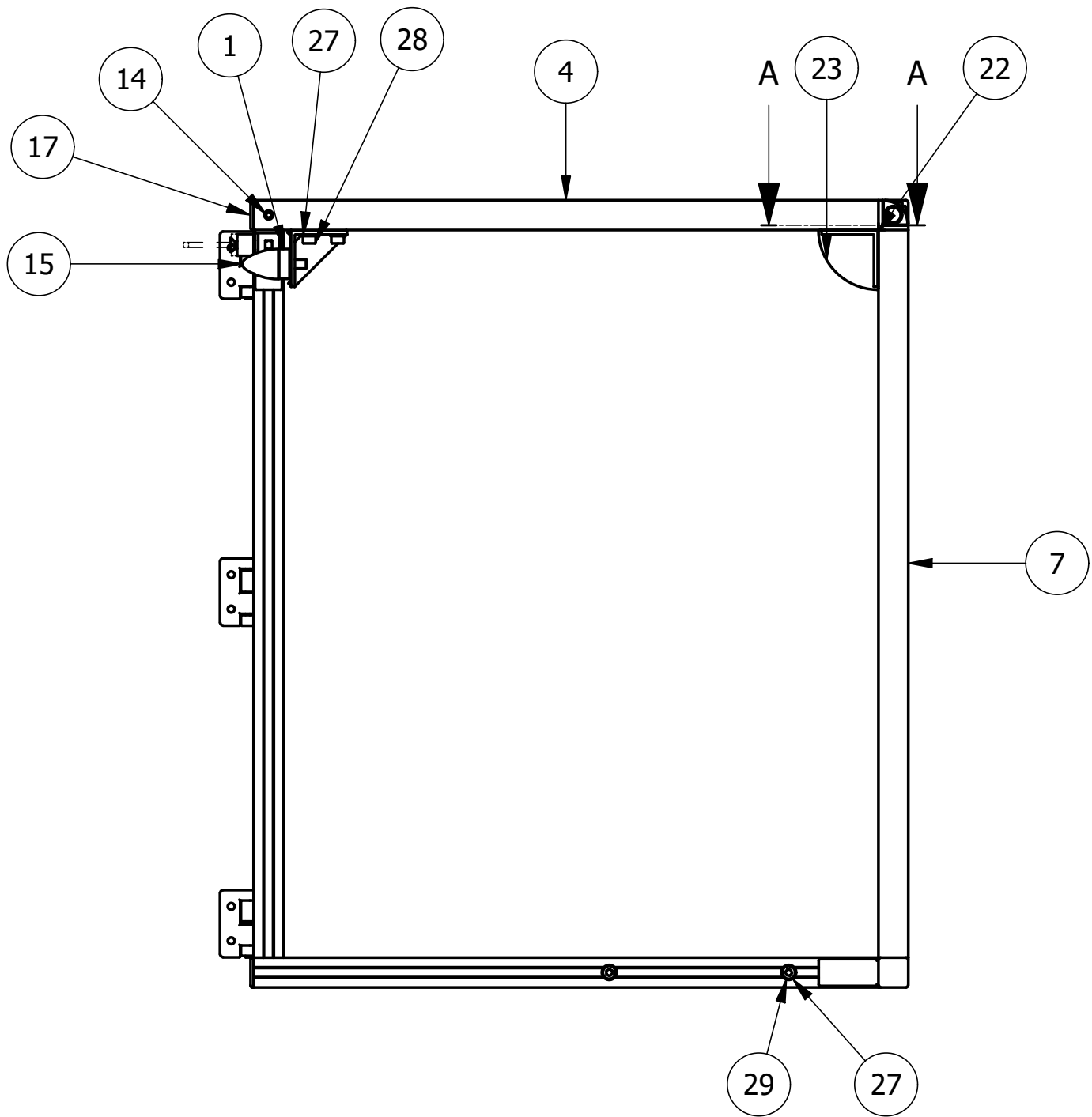
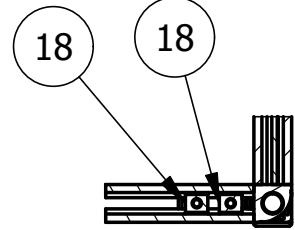


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2		1		289508		EUROMASTER CATCH BLOCK													
3		1		380265		20x20x71 EXTRUSION													
4		1		380266		20x20x418 EXTRUSION													
5		1		380267		20x20x398 EXTRUSION													
6		1		380268		20x20x418 EXTRUSION WITH HOLES FOR HANDLE													
7		2		380269		20x20x487 EXTRUSION													
8		1		380270		20x20x520 EXTRUSION													
9		2		380271		20x20x500 EXTRUSION 2 GROOVE													
10		1		380272		20x20x487 EXTRUSION 3 GROOVE													
11		1		380273		TOP WINDOW PANEL 510x408													
12		1		380274		SIDE WINDOW PANEL 497x408													
13		1		380275		WINDER END WINDOW PANEL 510x497													
14		3		H04378		CORE SCREW T25													
15		1		H04527		RUBBER BUMP STOP													
16		6		H04621		M4 TEE NUT 6mm GROOVE													
17		3		H04624		END CAP 20X20													
18		16		H04637		M5 TEE NUT 6mm GROOVE													
19		1		H04726		HANDLE													
20		4		H04727		CORNER JOINT													
21		4		H04728		CORNER COVER													
22		4		H04729		CORNER BRACKET													
23		4		H04730		CORNER COVER													
24		6		H04731		HINGE													
25		2		H05346		20x20 AL EX 90 DEG ANGLE BRACKET													
26		9		ISO 2009 - M4 x 6		Slotted countersunk													
27		16		K00061		*Varies*													
28		14		K00162		HxCpHd M5x8 S/S													
29		2		K00282		M5x25 SKT CAP SCREW S/S													
30		2		K00429		M5x20 CSK SLOT S/S													

REVISION HISTORY				
REV	DESCRIPTION	DCR No.	DATE	APPROVED
1	FIRST ISSUE		30.1.18	CK

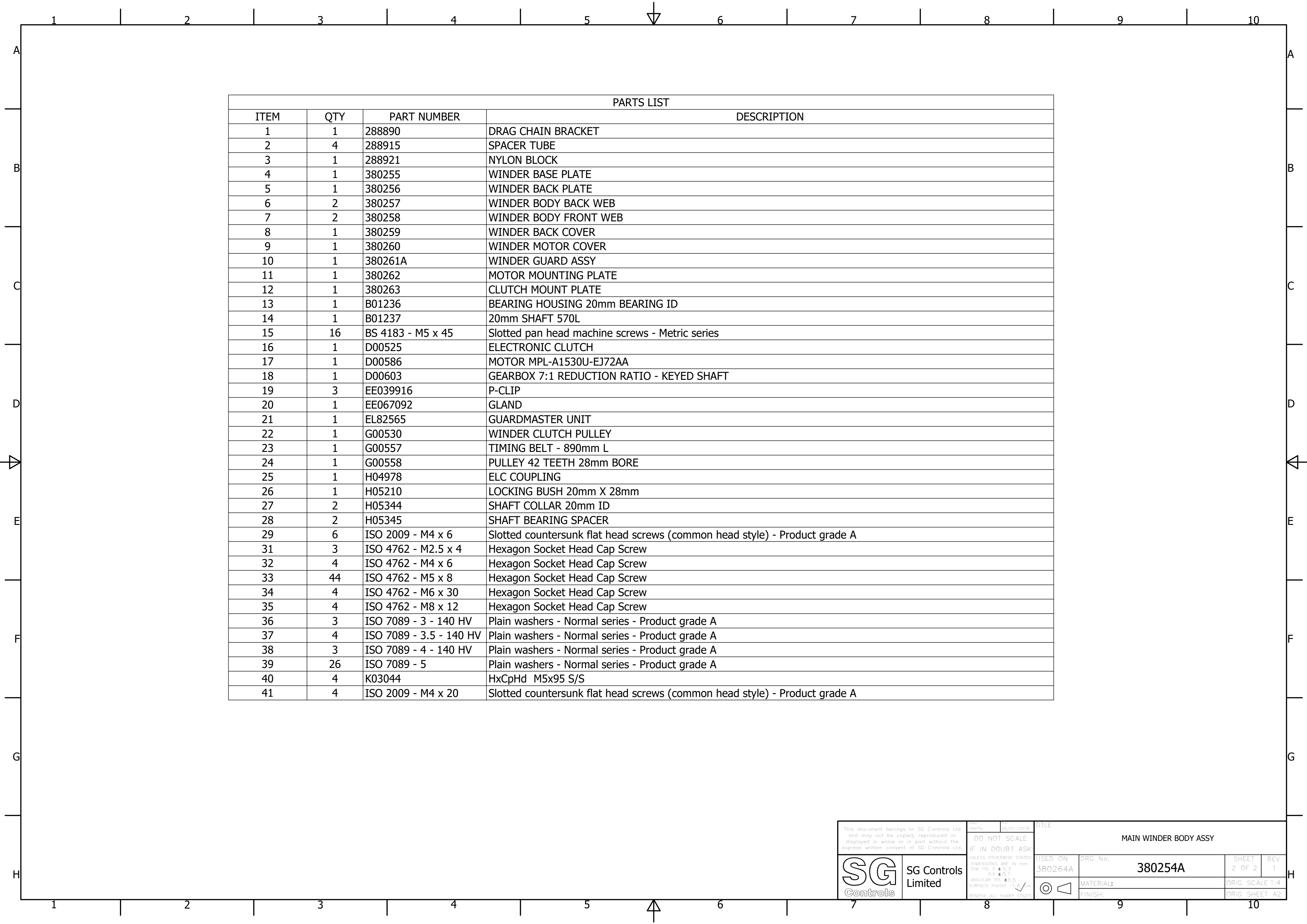


A-A ( 1 : 4 )



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DO NOT SCALE IF IN DOUBT ASK		UNLESS OTHERWISE STATED DIMENSIONS ARE IN mm DIM TOL: 0.4 ± 0.3 0.8 ± 0.1 1.6 ± 0.2 SURFACE FINISH: -1.2 ± 0.1		USED ON	DRG. No.	380261A	SHEET 1 OF 1
SG Controls Limited		MATERIAL:		FINISH:		ORIG SCALE 1:1	



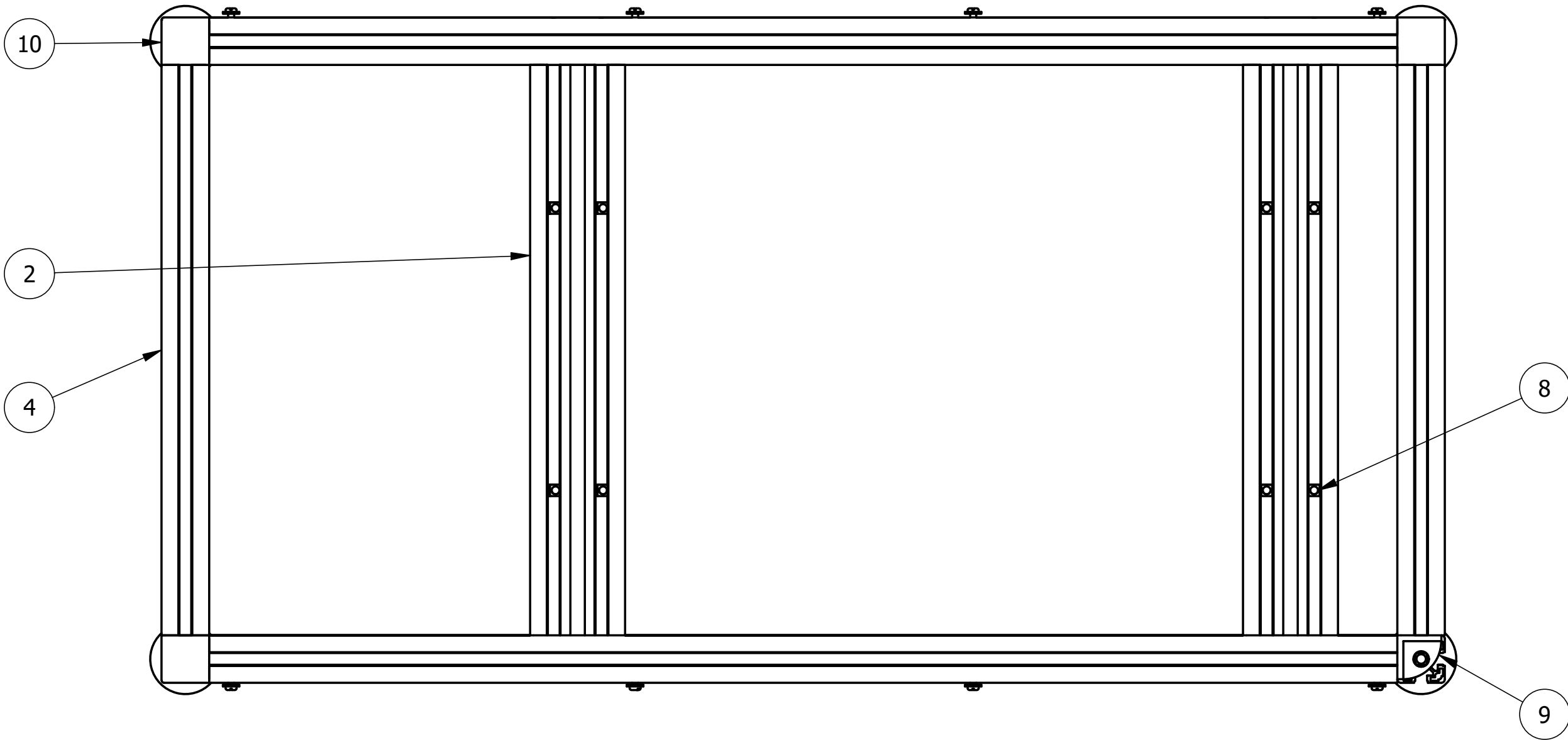




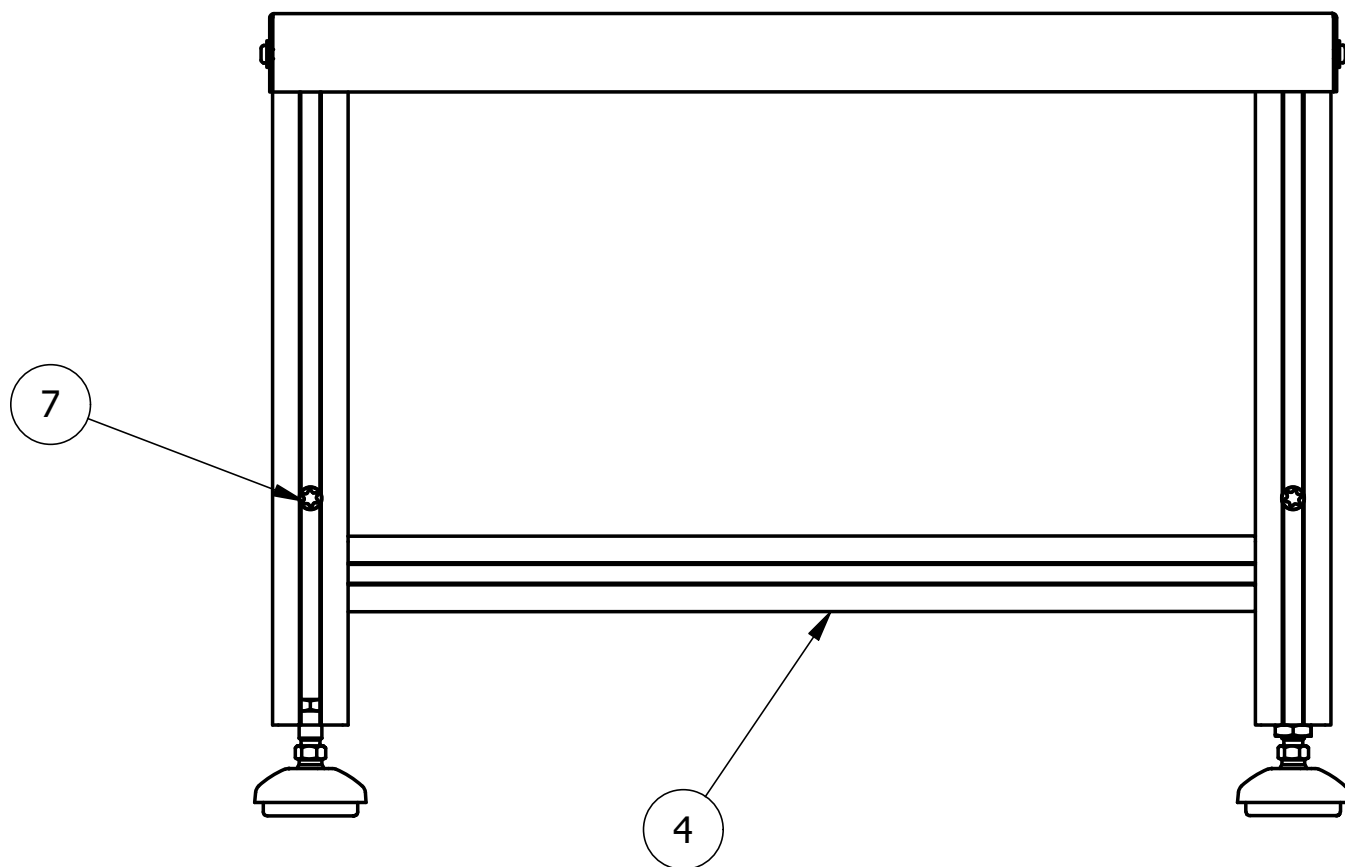
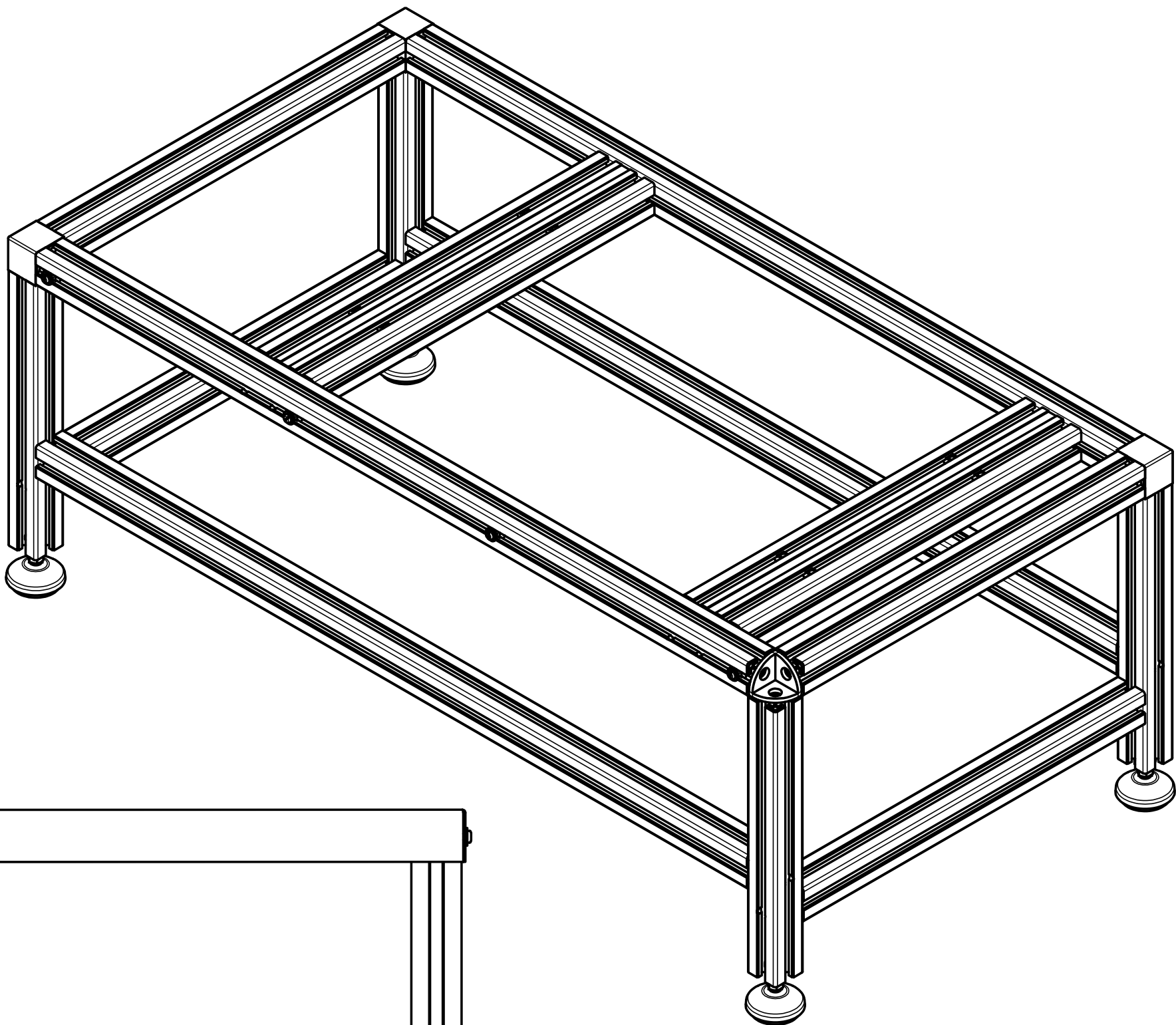
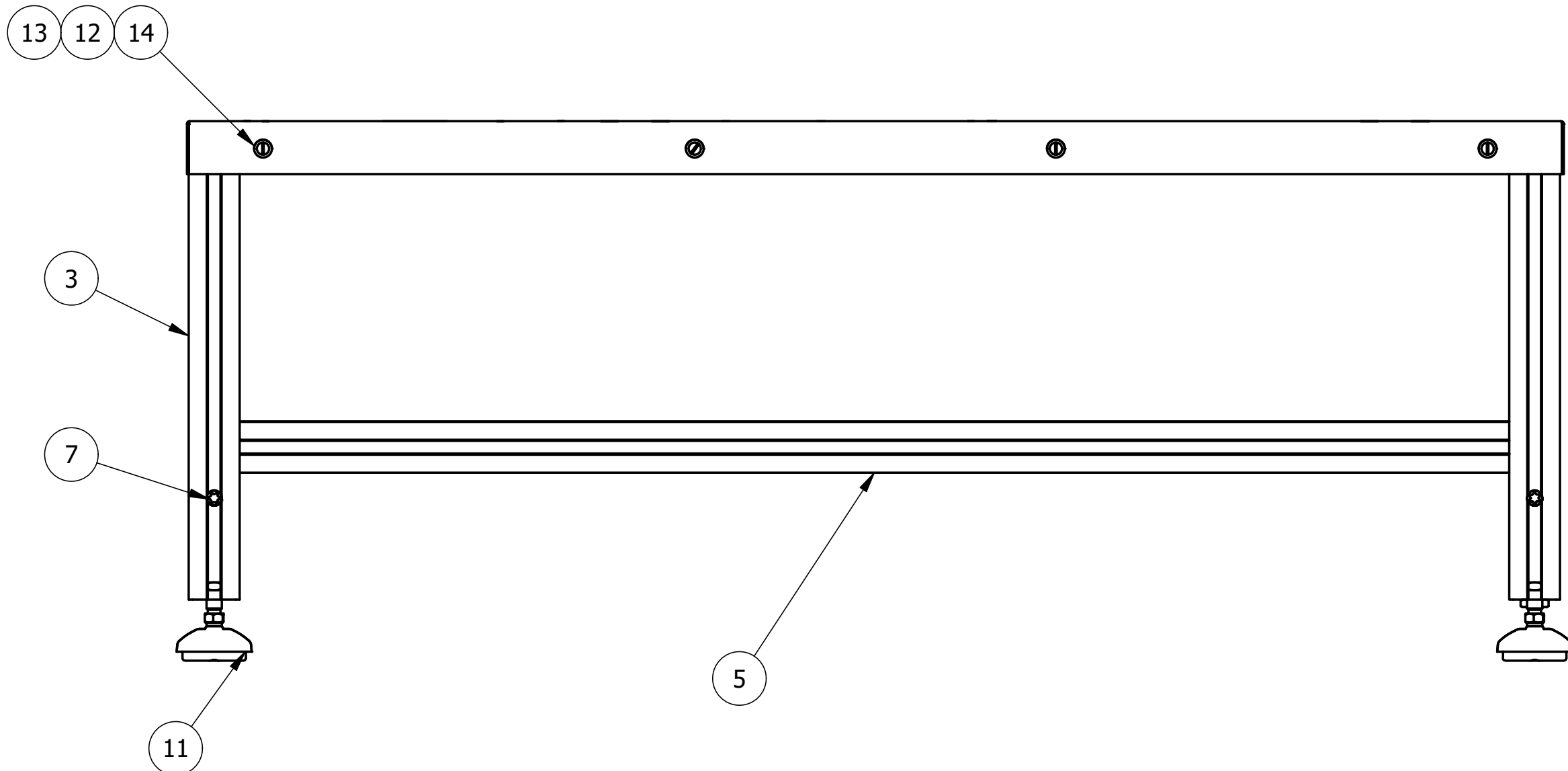
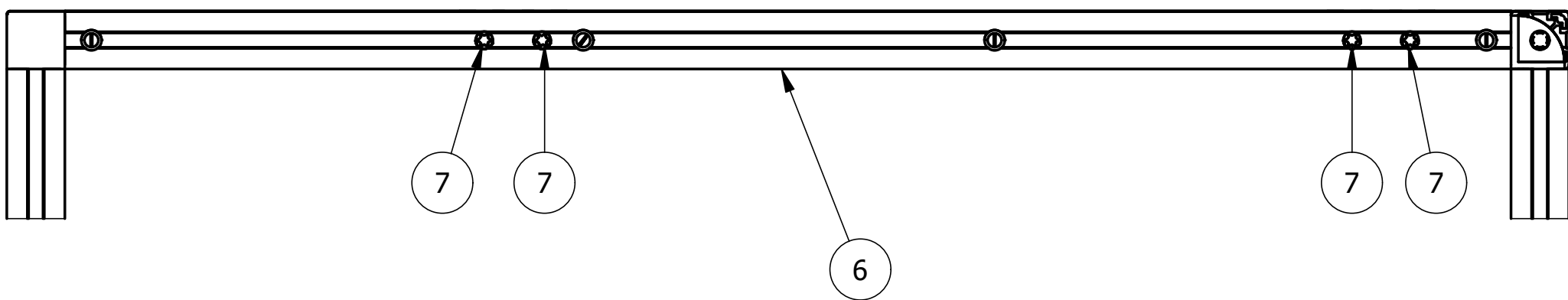
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1	1	380247	STAND COVER	
2	2	380248	STAND CROSS BEAM	
3	4	380249	STAND LEG	
4	4	380250	STAND CROSS SUPPORT SHORT	
5	2	380251	STAND CROSS SUPPORT LONG	
6	2	380253	STAND CROSS SUPPORT LONG TOP	
7	16	H05055	S12x30 CORE SCREW	
8	8	H05162	T-SLOT NUT 10mm M8	
9	4	H05340	40x40 CORNER BRACKET & FIXINGS	
10	4	H05341	40x40 CORNER BRACKET CAP SQUARE	
11	4	H05342	M12 ADJUSTABLE FOOT	
12	8	H05343	T NUT 10mm SLOT M5	
13	8	K00258	PnHd M5 x 16 S/S	
14	8	K02923	6mm PLAIN WASHER - LGE, S/S	

REV	DESCRIPTION	DCR No.	DATE	APPROVED
1	FIRST ISSUE		26.1.18	CK
2	ADD 2x HOLES IN COVER (rev2)		13/09/2019	LAR
3	rev3 COVER - additional HOLES		20/01/2020	LAR

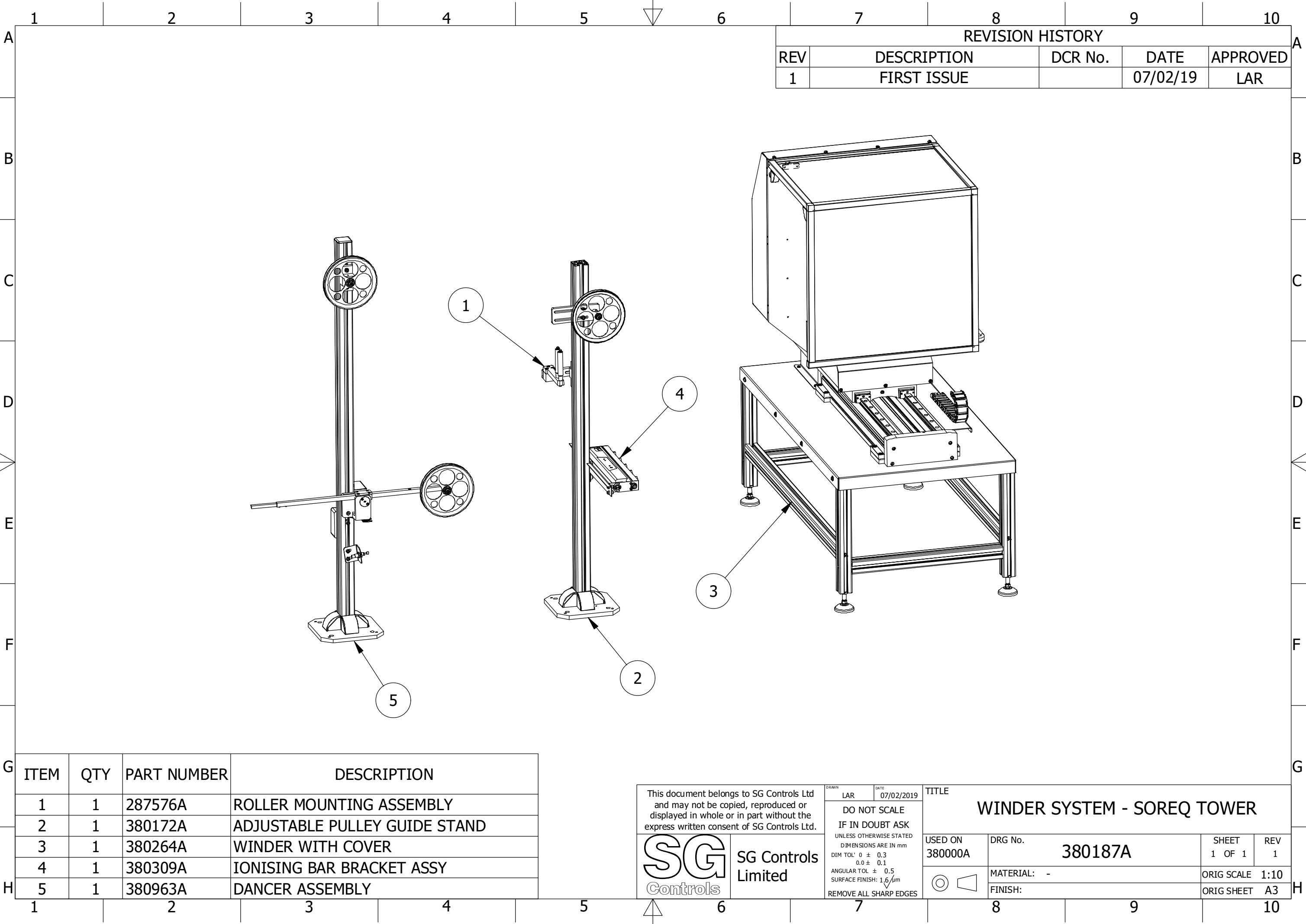
PLAN VIEW SHOWN W/O COVER ( 1 : 4 )



PARTIAL SIDE VIEW W/O COVER FITTED ( 1 : 4 )


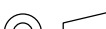


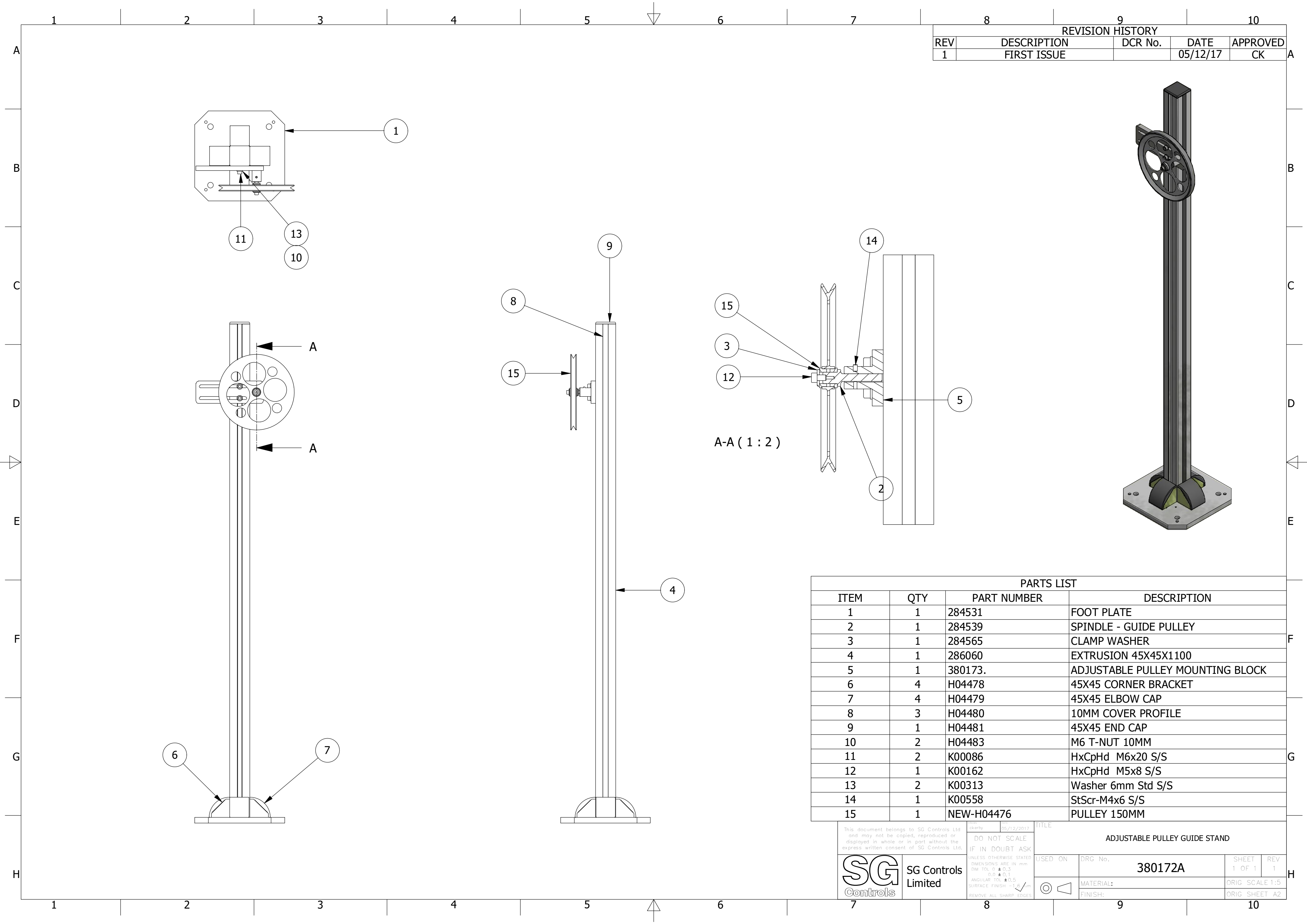
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DO NOT SCALE IF IN DOUBT ASK UNLESS OTHERWISE STATED DIM TOL: 0 ± 0.3 0.0 ± 0.1 ANGULAR TOL: ± 0.5 SURFACE FINISH: 1.6/6mm REMOVE ALL SHARP EDGES		USED ON	DRG No. 380246A	SHEET 1 OF 1
SG Controls Limited		MATERIAL:	FINISH:	REV 3
				ORIG SCALE 1 : 4
				ORIG SHEET A1



REVISION HISTORY				
REV	DESCRIPTION	DCR No.	DATE	APPROVED
1	FIRST ISSUE		07/02/19	LAR

ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	287576A	ROLLER MOUNTING ASSEMBLY
2	1	380172A	ADJUSTABLE PULLEY GUIDE STAND
3	1	380264A	WINDER WITH COVER
4	1	380309A	IONISING BAR BRACKET ASSY
5	1	380963A	DANCER ASSEMBLY

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		DO NOT SCALE IF IN DOUBT ASK UNLESS OTHERWISE STATED DIMENSIONS ARE IN mm DIM TOL' 0 ± 0.3 0.0 ± 0.1 ANGULAR TOL ± 0.5 SURFACE FINISH: 1.6µm REMOVE ALL SHARP EDGES					
 SG Controls Limited				USED ON 380000A	DRG No.  380187A	SHEET 1 OF 1	REV 1
				MATERIAL: -		ORIG SCALE	1:10
			FINISH:		ORIG SHEET	A3	

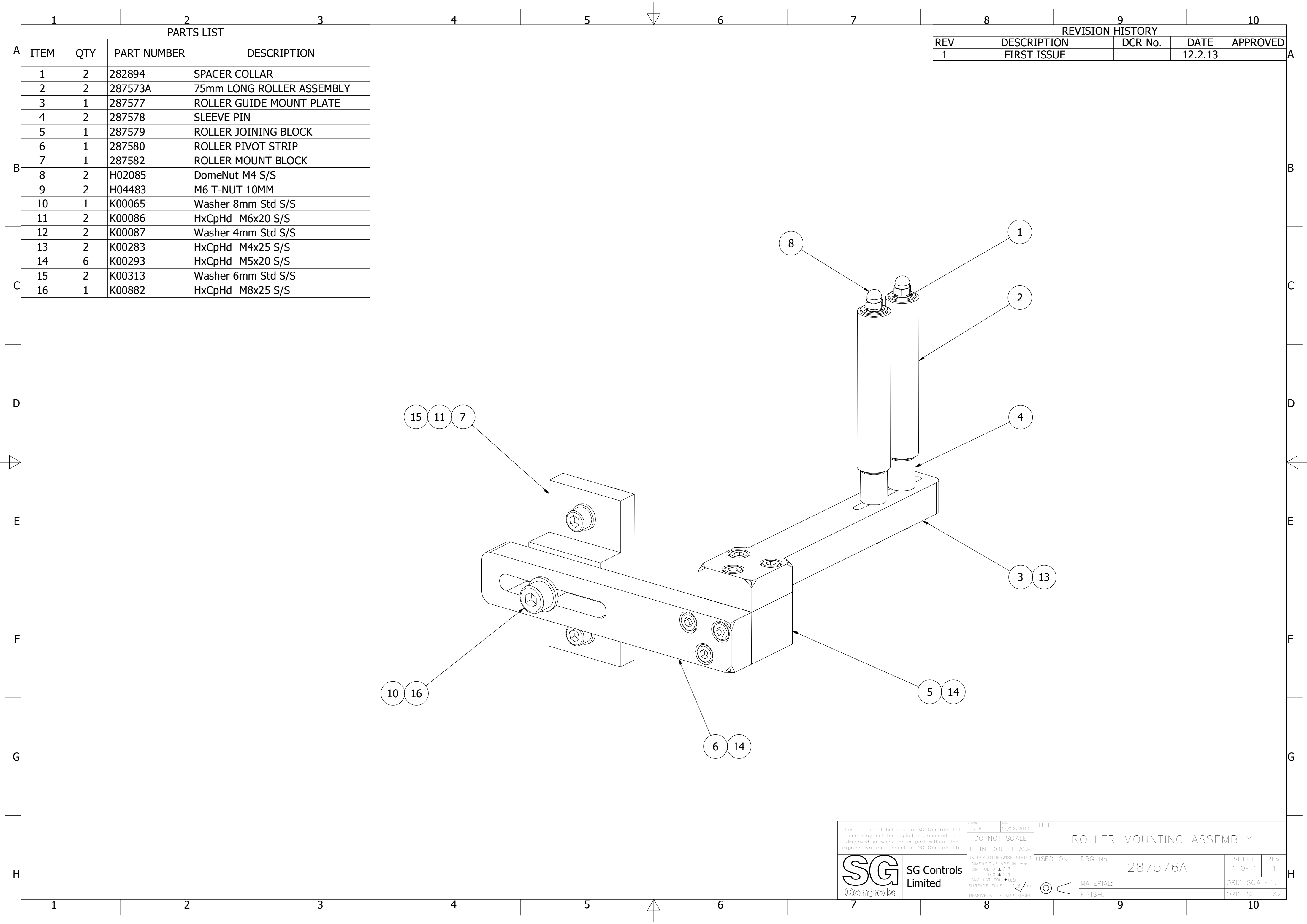


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REV	DESCRIPTION	DCR No.	DATE	APPROVED
1	FIRST ISSUE		05/12/17	CK

PARTS LIST			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	284531	FOOT PLATE
2	1	284539	SPINDLE - GUIDE PULLEY
3	1	284565	CLAMP WASHER
4	1	286060	EXTRUSION 45X45X1100
5	1	380173.	ADJUSTABLE PULLEY MOUNTING BLOCK
6	4	H04478	45X45 CORNER BRACKET
7	4	H04479	45X45 ELBOW CAP
8	3	H04480	10MM COVER PROFILE
9	1	H04481	45X45 END CAP
10	2	H04483	M6 T-NUT 10MM
11	2	K00086	HxCpHd M6x20 S/S
12	1	K00162	HxCpHd M5x8 S/S
13	2	K00313	Washer 6mm Std S/S
14	1	K00558	StScr-M4x6 S/S
15	1	NEW-H04476	PULLEY 150MM

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SG Controls Limited			MATERIAL: FINISH:		ORIG SCALE 1:5 ORIG SHEET A2			

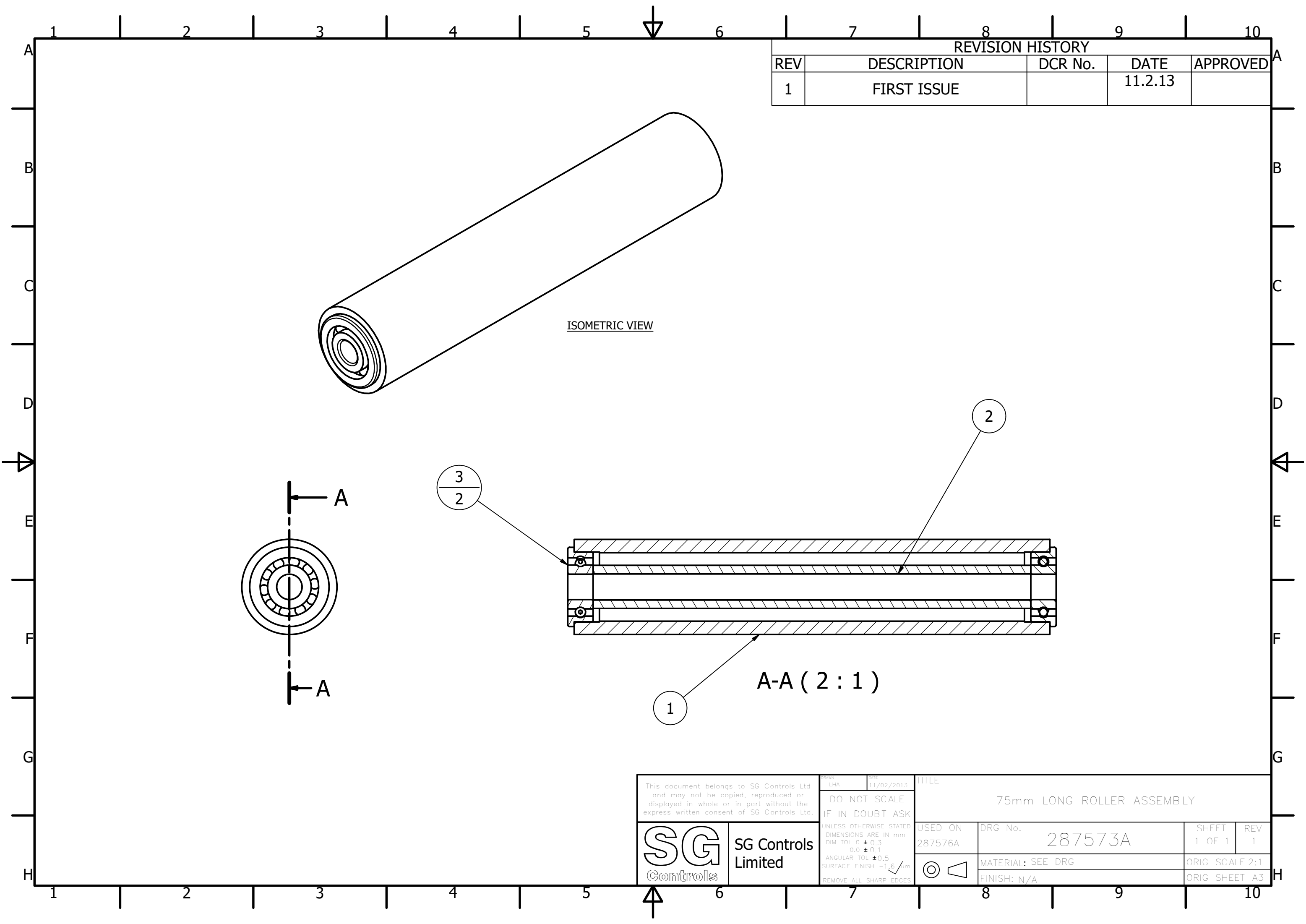




A	PARTS LIST			
	ITEM	QTY	PART NUMBER	DESCRIPTION
	1	2	282894	SPACER COLLAR
	2	2	287573A	75mm LONG ROLLER ASSEMBLY
	3	1	287577	ROLLER GUIDE MOUNT PLATE
	4	2	287578	SLEEVE PIN
	5	1	287579	ROLLER JOINING BLOCK
	6	1	287580	ROLLER PIVOT STRIP
	7	1	287582	ROLLER MOUNT BLOCK
B	8	2	H02085	DomeNut M4 S/S
	9	2	H04483	M6 T-NUT 10MM
	10	1	K00065	Washer 8mm Std S/S
	11	2	K00086	HxCpHd M6x20 S/S
	12	2	K00087	Washer 4mm Std S/S
	13	2	K00283	HxCpHd M4x25 S/S
	14	6	K00293	HxCpHd M5x20 S/S
C	15	2	K00313	Washer 6mm Std S/S
	16	1	K00882	HxCpHd M8x25 S/S

REVISION HISTORY				
REV	DESCRIPTION	DCR No.	DATE	APPROVED
1	FIRST ISSUE		12.2.13	


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		UNLESS OTHERWISE STATED DIMENSIONS ARE IN mm DIM TOL 0 $\pm$ 0.3 0.0 $\pm$ 0.1 ANGULAR TOL $\pm$ 0.5 SURFACE FINISH -1.6 $\sqrt{m}$ REMOVE ALL SHARP EDGES	USED ON	DRG No. 287576A
SG Controls Limited			MATERIAL:	SHEET 1 OF 1 REV 1
			FINISH:	ORIG SCALE 1:1 ORIG SHEET A2



REVISION HISTORY				
REV	DESCRIPTION	DCR No.	DATE	APPROVED
1	FIRST ISSUE		11.2.13	

ISOMETRIC VIEW

A-A ( 2 : 1 )

This document belongs to SG Controls Ltd and may not be copied, reproduced or displayed in whole or in part without the express written consent of SG Controls Ltd.		DRAWN LHA	DATE 11/02/2013	TITLE 75mm LONG ROLLER ASSEMBLY	
		DO NOT SCALE IF IN DOUBT ASK UNLESS OTHERWISE STATED DIMENSIONS ARE IN mm DIM TOL 0 ± 0.3 0.0 ± 0.1 ANGULAR TOL ± 0.5 SURFACE FINISH -1.6 / $\mu$ m REMOVE ALL SHARP EDGES		USED ON 287576A	DRG No. 287573A
		SG Controls Limited		SHEET 1 OF 1	
				REV 1	
				MATERIAL: SEE DRG	
				FINISH: N/A	
				ORIG SCALE 2:1	
				ORIG SHEET A3	