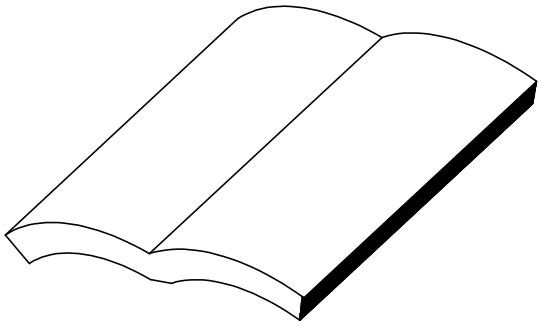
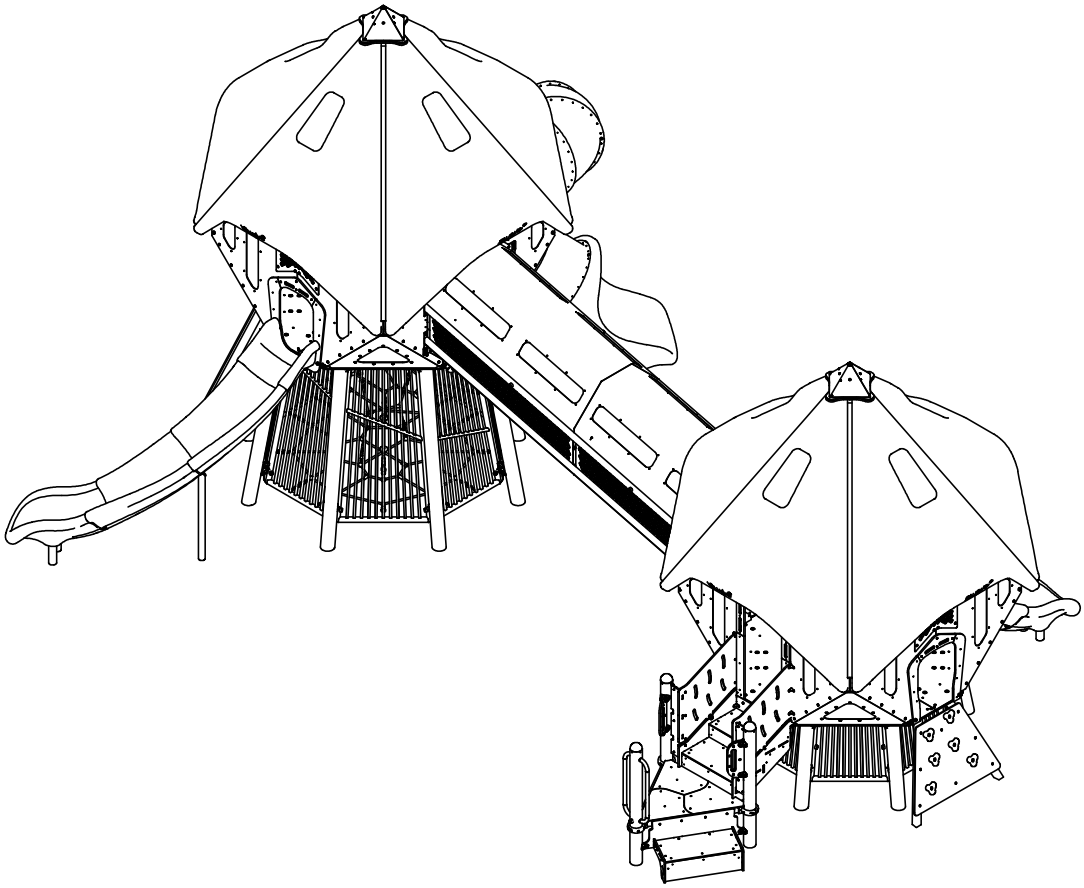
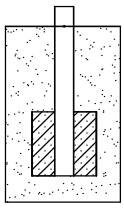
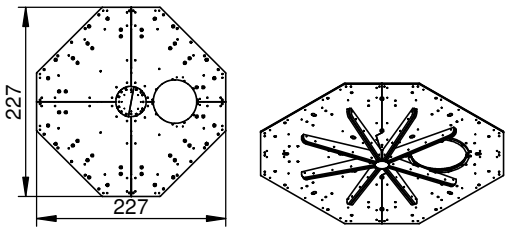
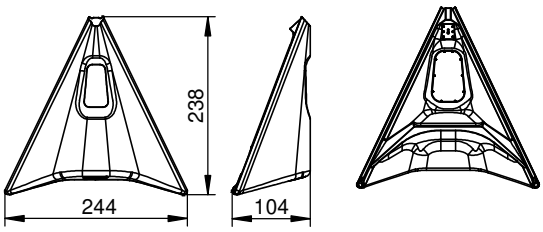
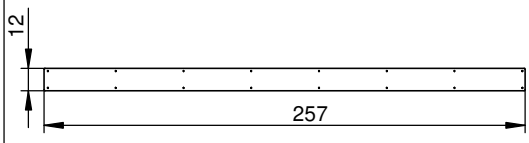
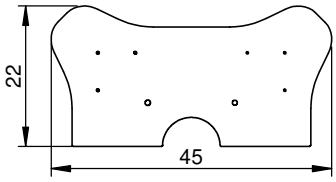
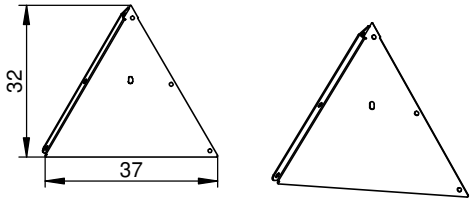
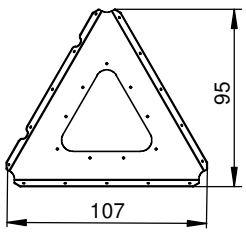


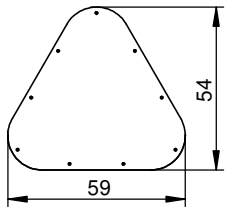
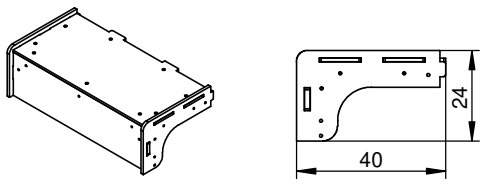
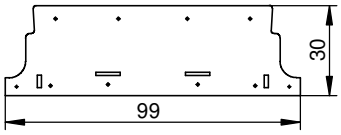
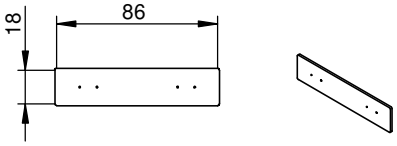
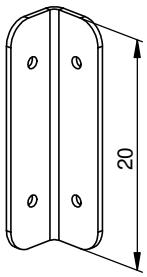
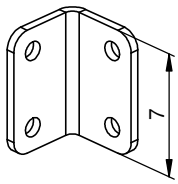
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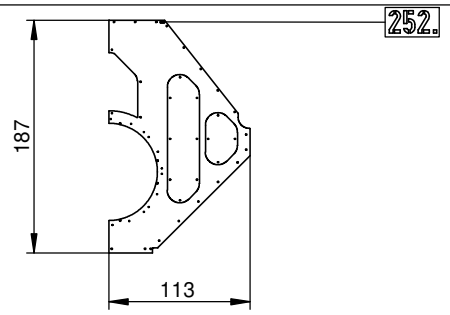
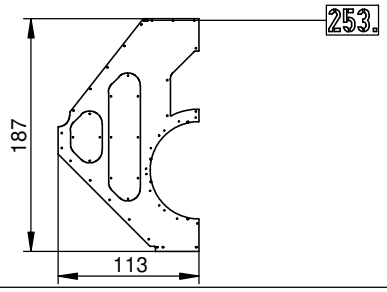
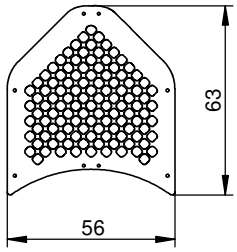
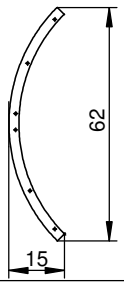
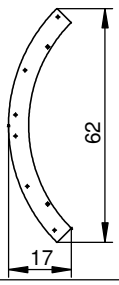
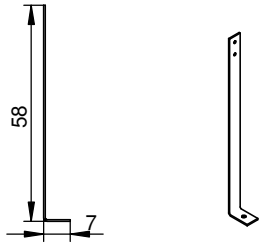


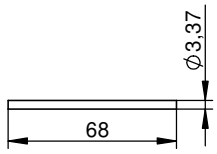
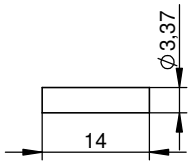
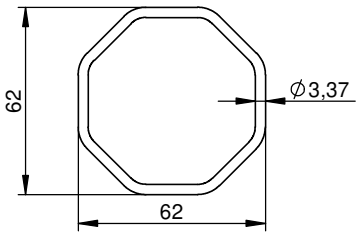
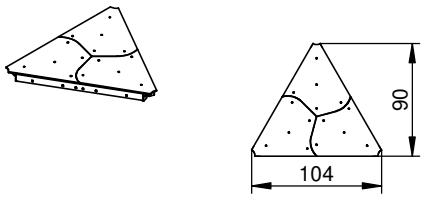
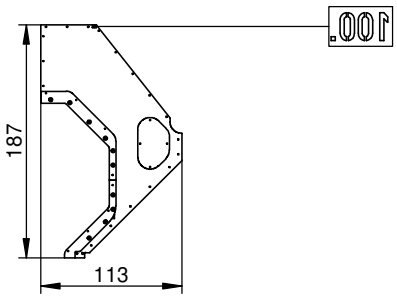
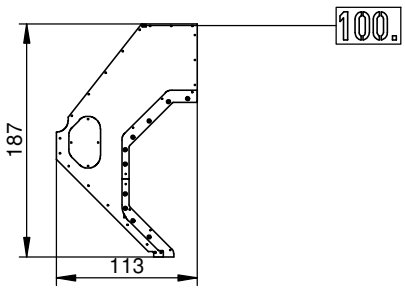


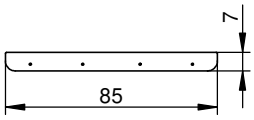
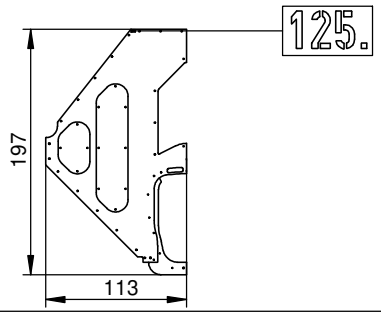
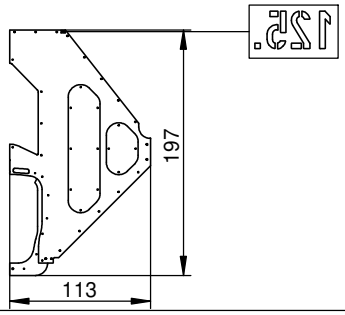
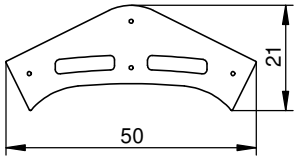
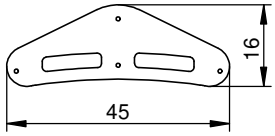
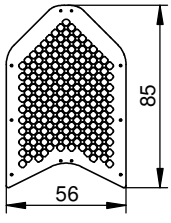
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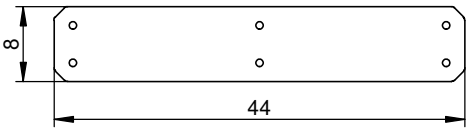
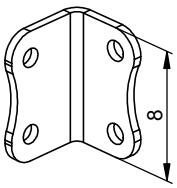
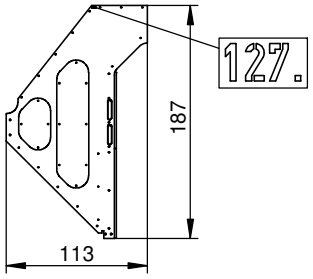
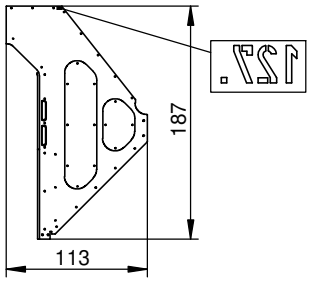
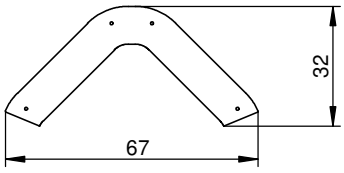
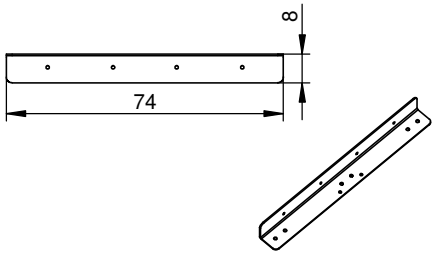
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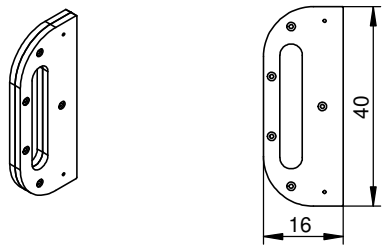
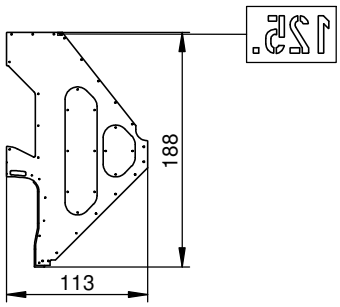
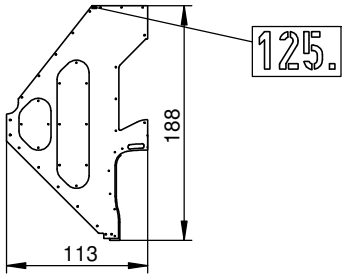
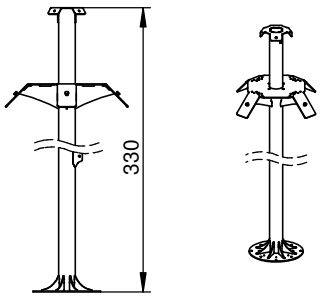
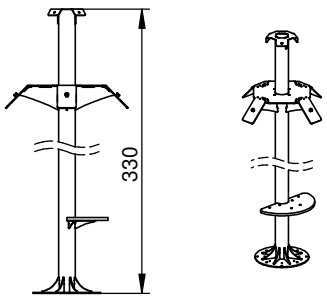
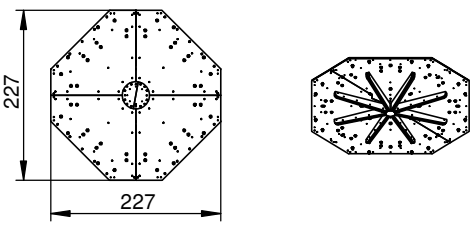
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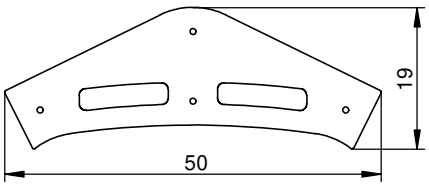
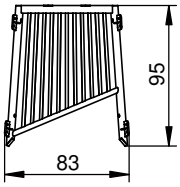
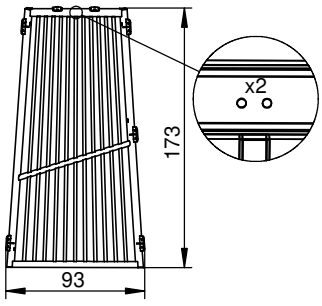
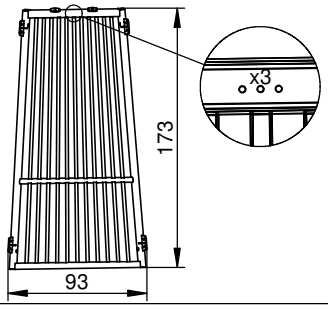
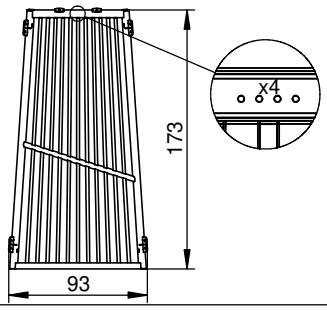
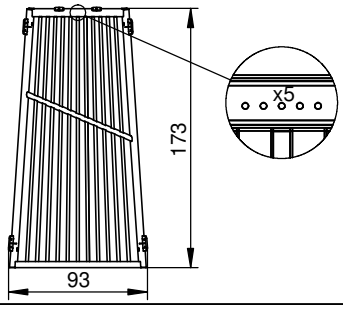
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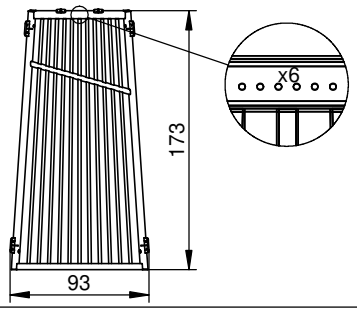
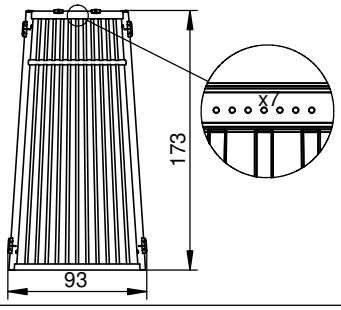
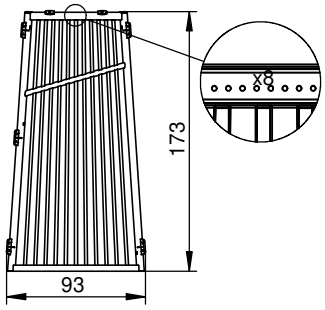
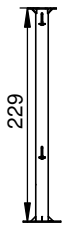
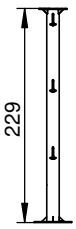
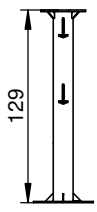
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E24		2

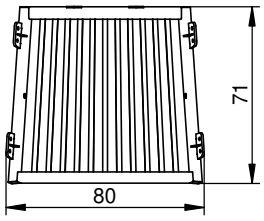
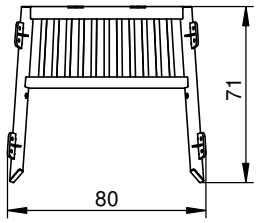
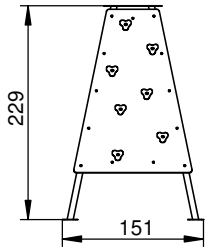
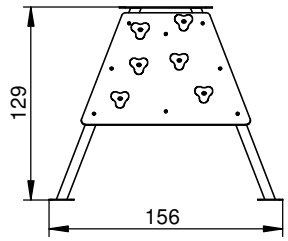
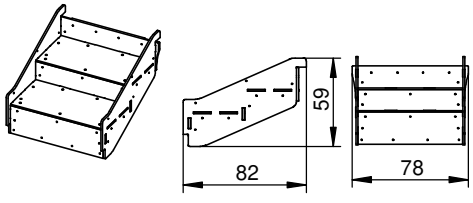
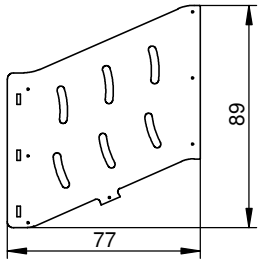
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E26		2
E27		2
E28		2
E29		4
E30		4

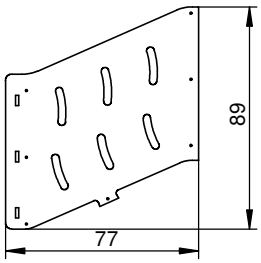
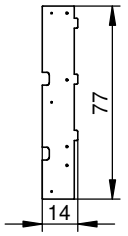
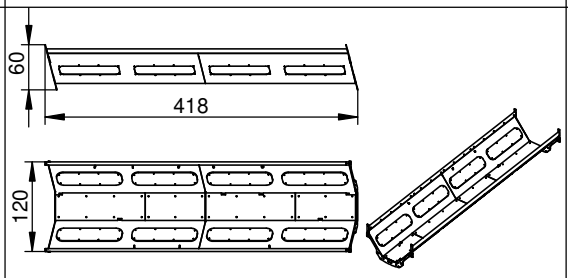
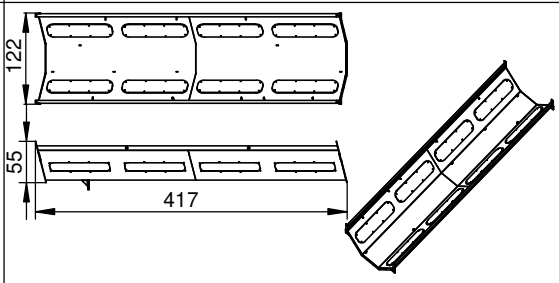
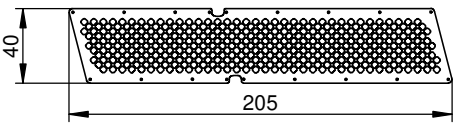
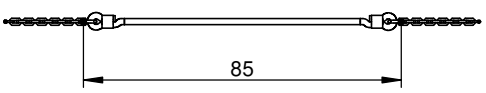
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E32		2
E33		1
E34		1
E35		1
E36		1

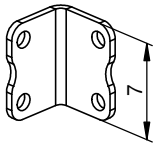
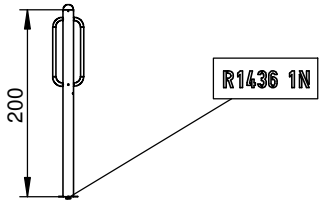
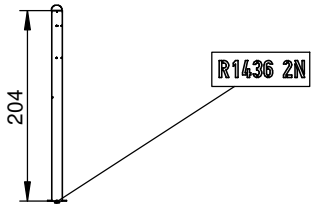
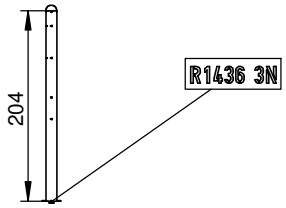
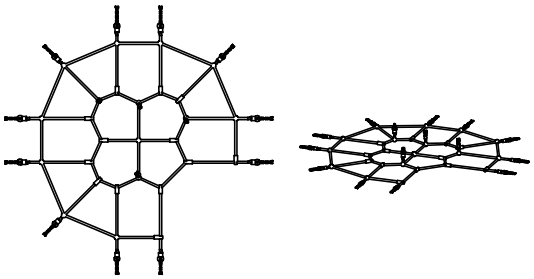
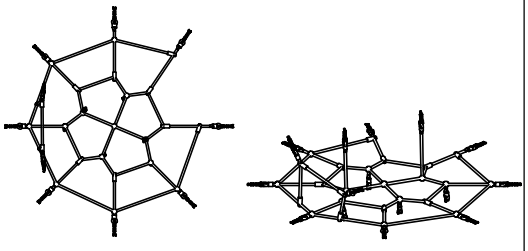
NR	ELEMENT	1436N
E37		2
E38		2
E39		2
E40		1
E41		1
E42		1

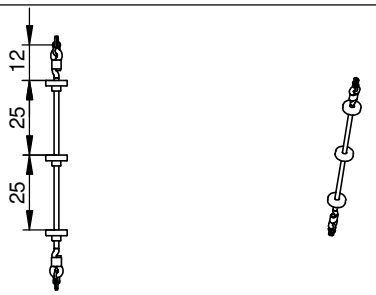
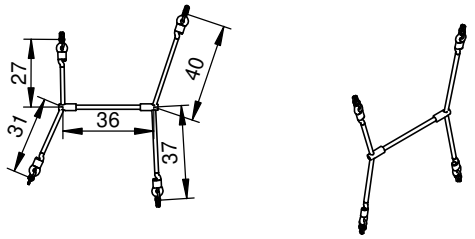
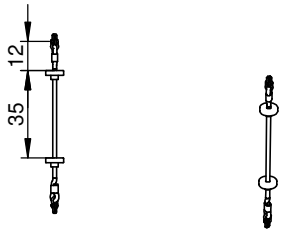
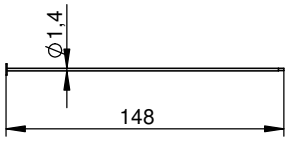
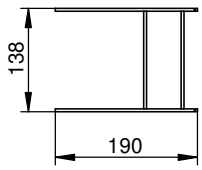
NR	ELEMENT	1436N
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E44		1
E45		1
E46		1
E47		1
E48		1

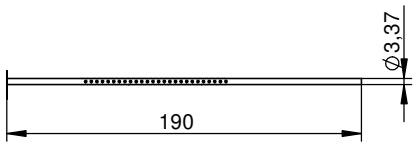
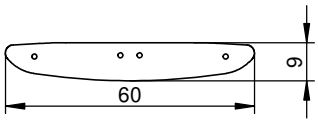
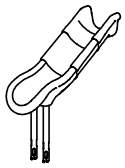
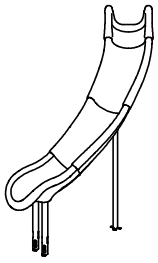
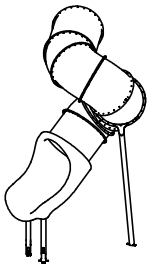
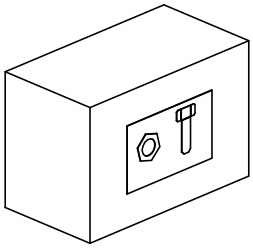
NR	ELEMENT	1436N
E49		1
E50		1
E51		1
E52		6
E53		2
E54		8

NR	ELEMENT	1436N
E55		7
E56		1
E57		1
E58		1
E59		1
E60		1

NR	ELEMENT	1436N
E61		1
E62		2
E63		1
E64		1
E65		4
E66		14

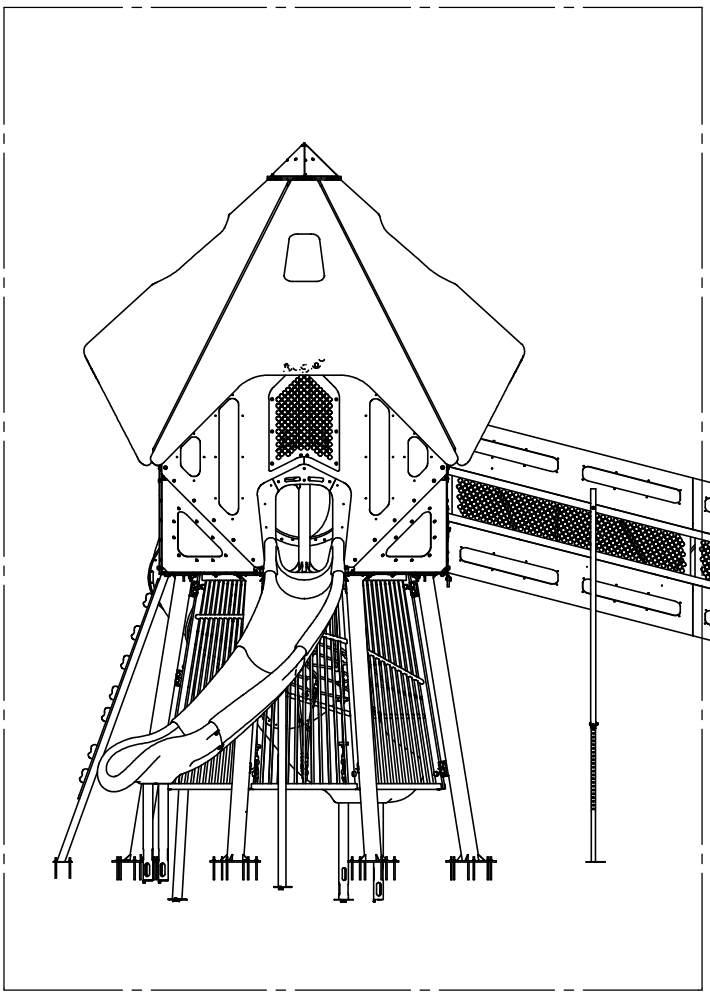
NR	ELEMENT	1436N
E67		2
E68		1
E69		1
E70		1
E71		1
E72		1

NR	ELEMENT	1436N
E73		1
E74		1
E75		1
E76		2
E77		1
E78		1

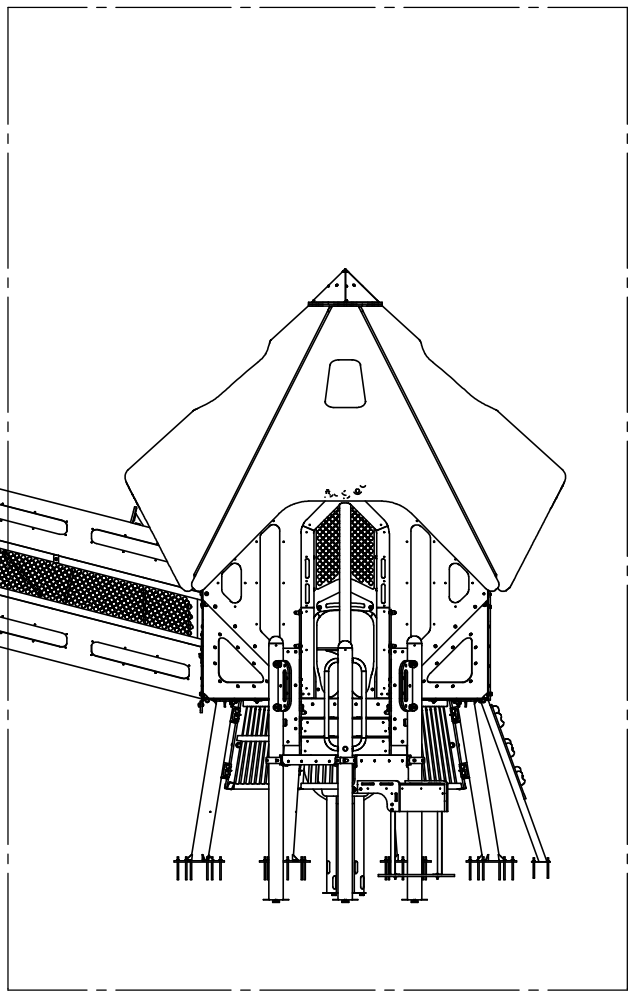
NR	ELEMENT	1436N
E79		2
E80		2
E81		1
E82		1
E83		1
E84		1

1436N

A

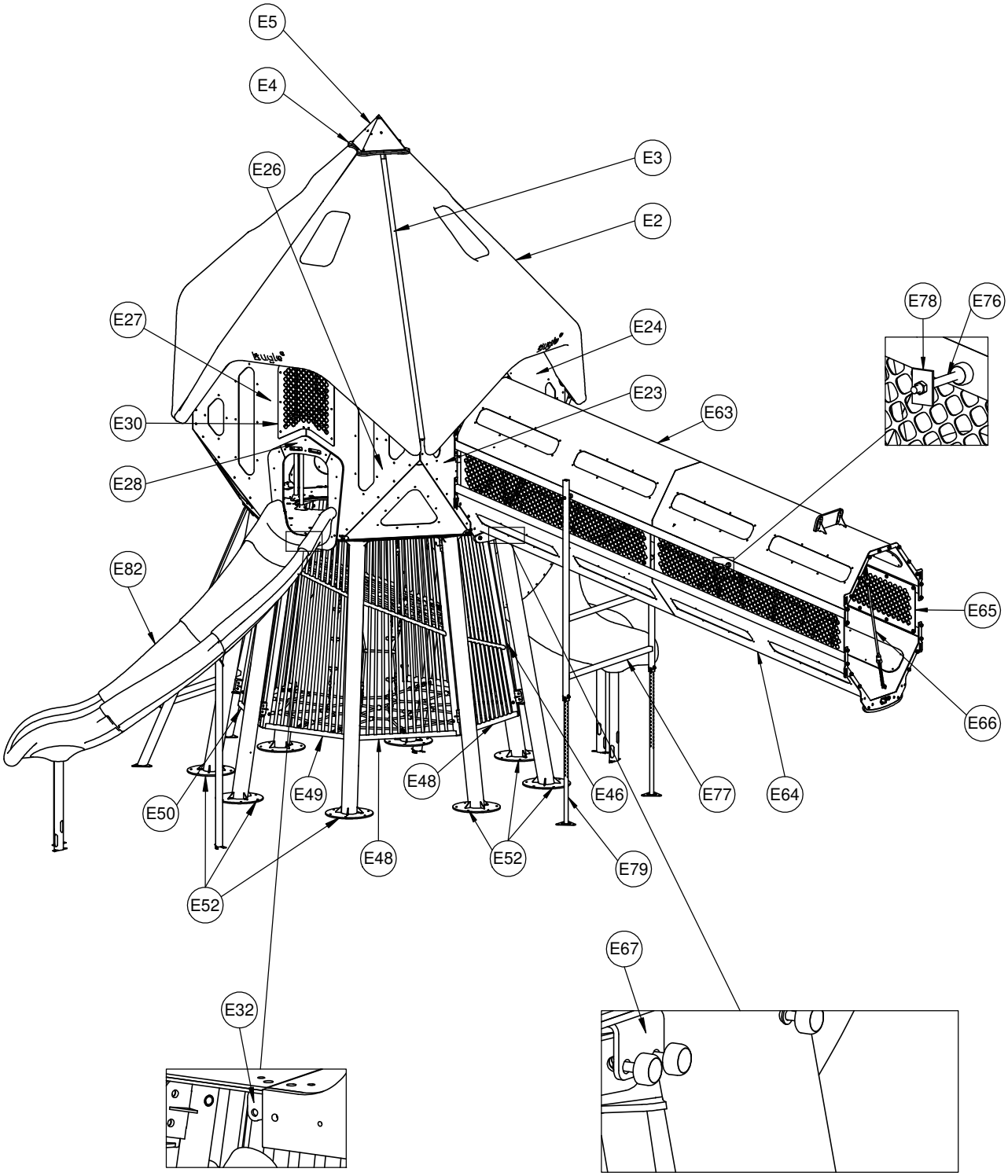


B



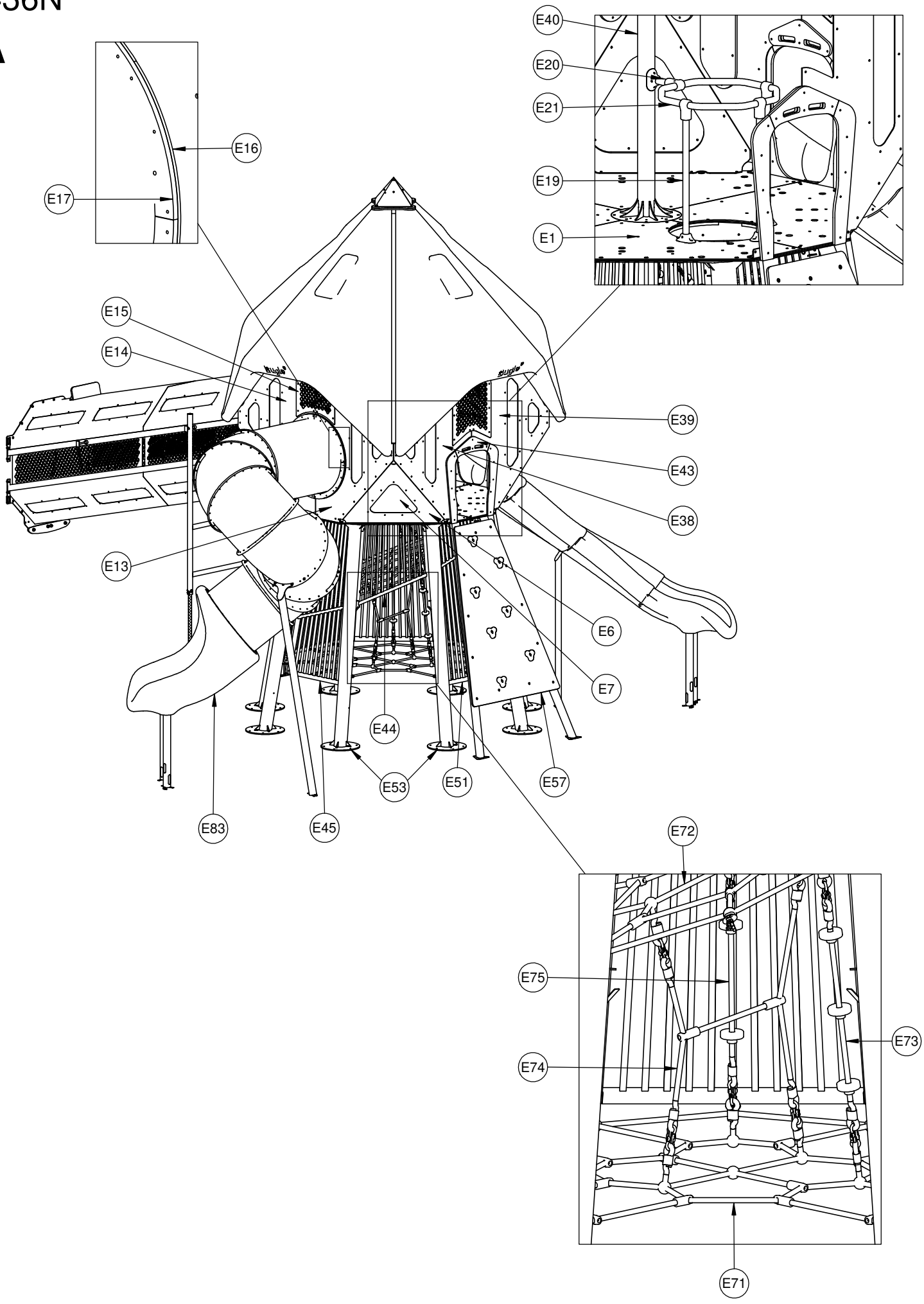
1436N

A


E5
E4
E26
E3
E2
E27
E24
E78
E76
E23
E63
E30
E28
E82
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E48
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E79
E52
E67
E32

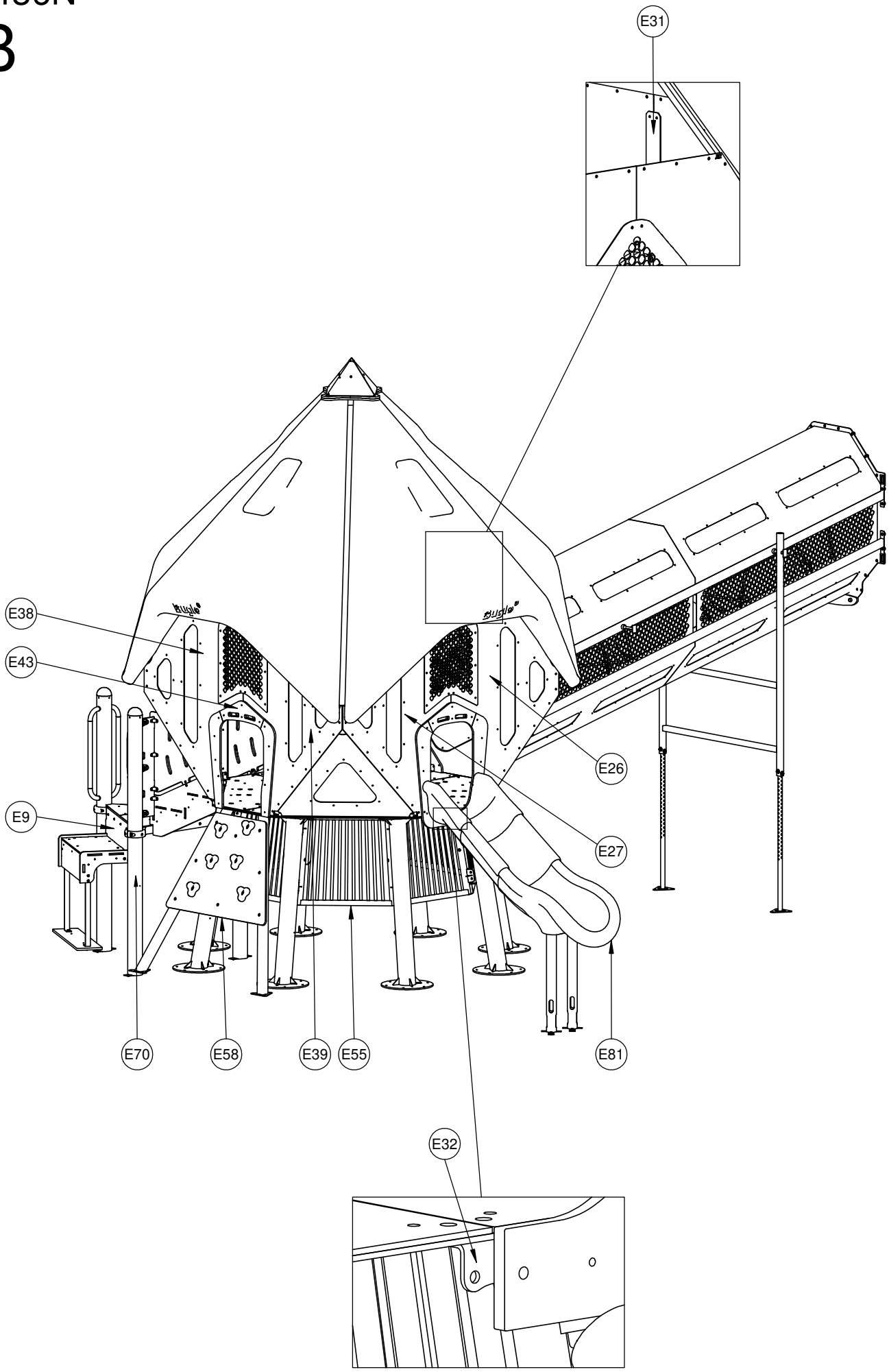
1436N

A


E40
E20
E21
E19
E1
E16
E17
E15
E14
E39
E43
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E7
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E45
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E75
E73
E74
E71

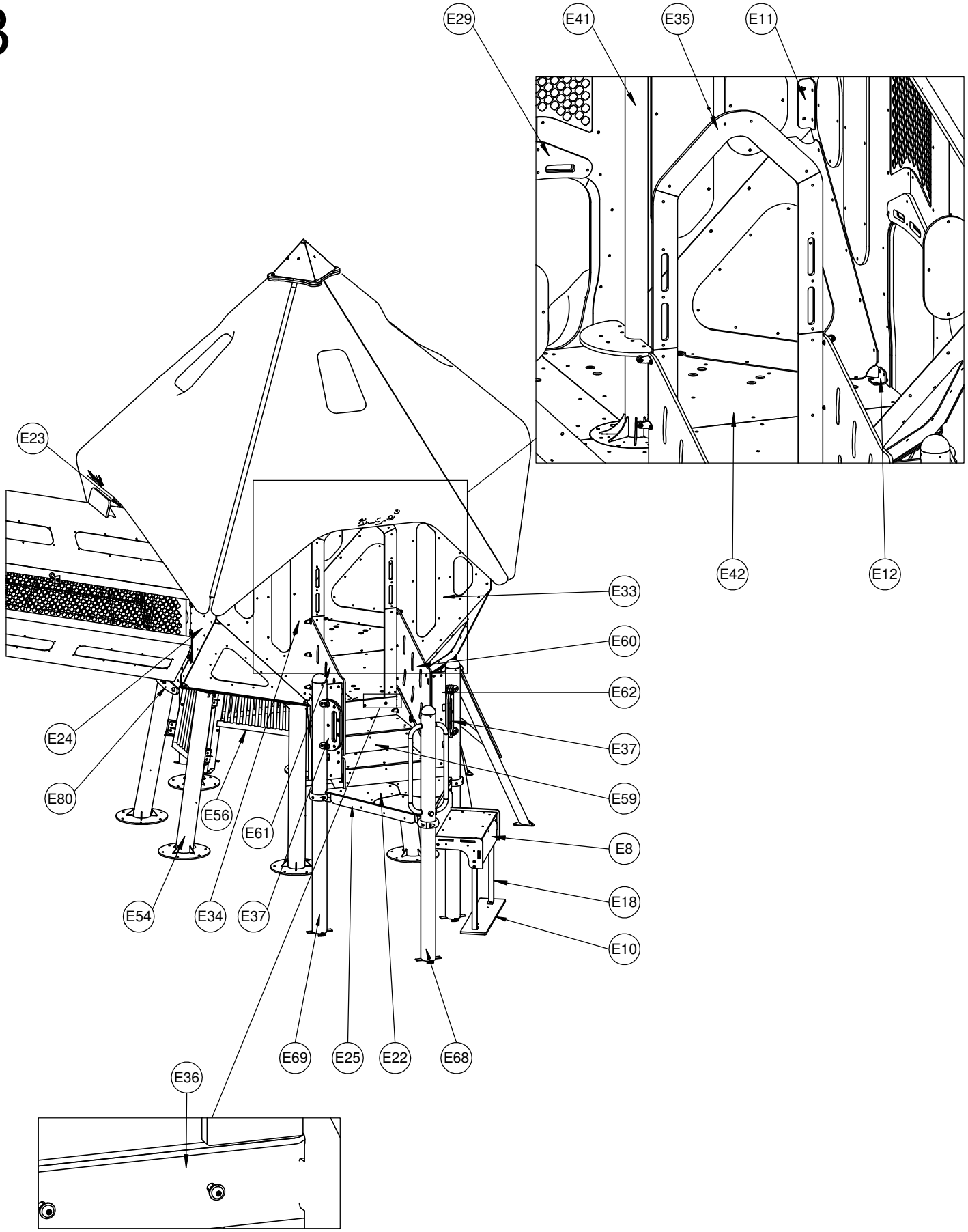
1436N

B

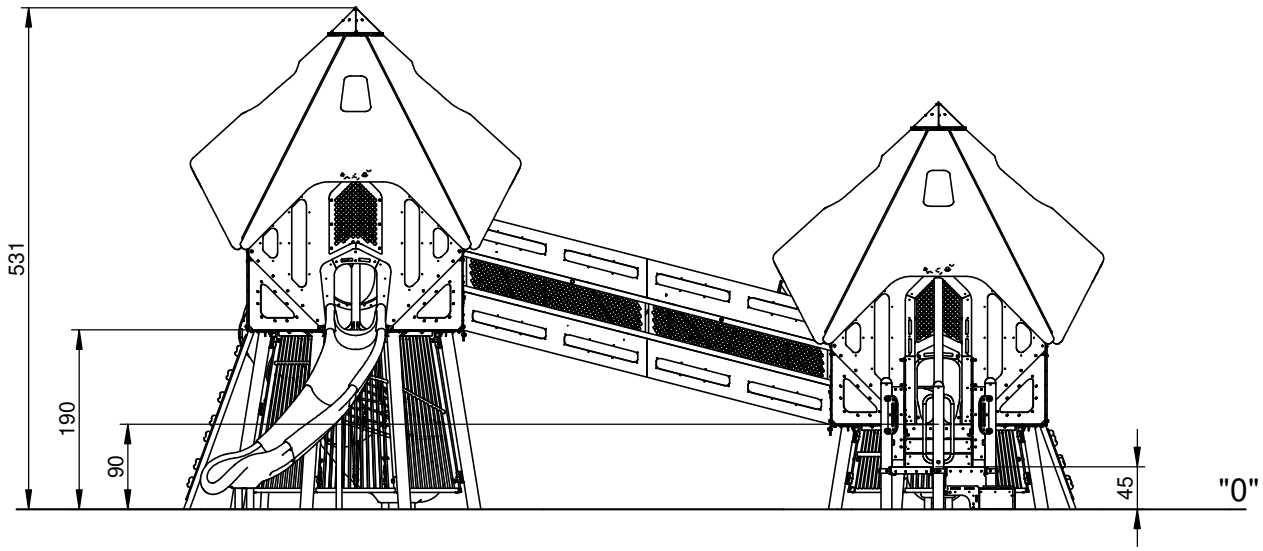


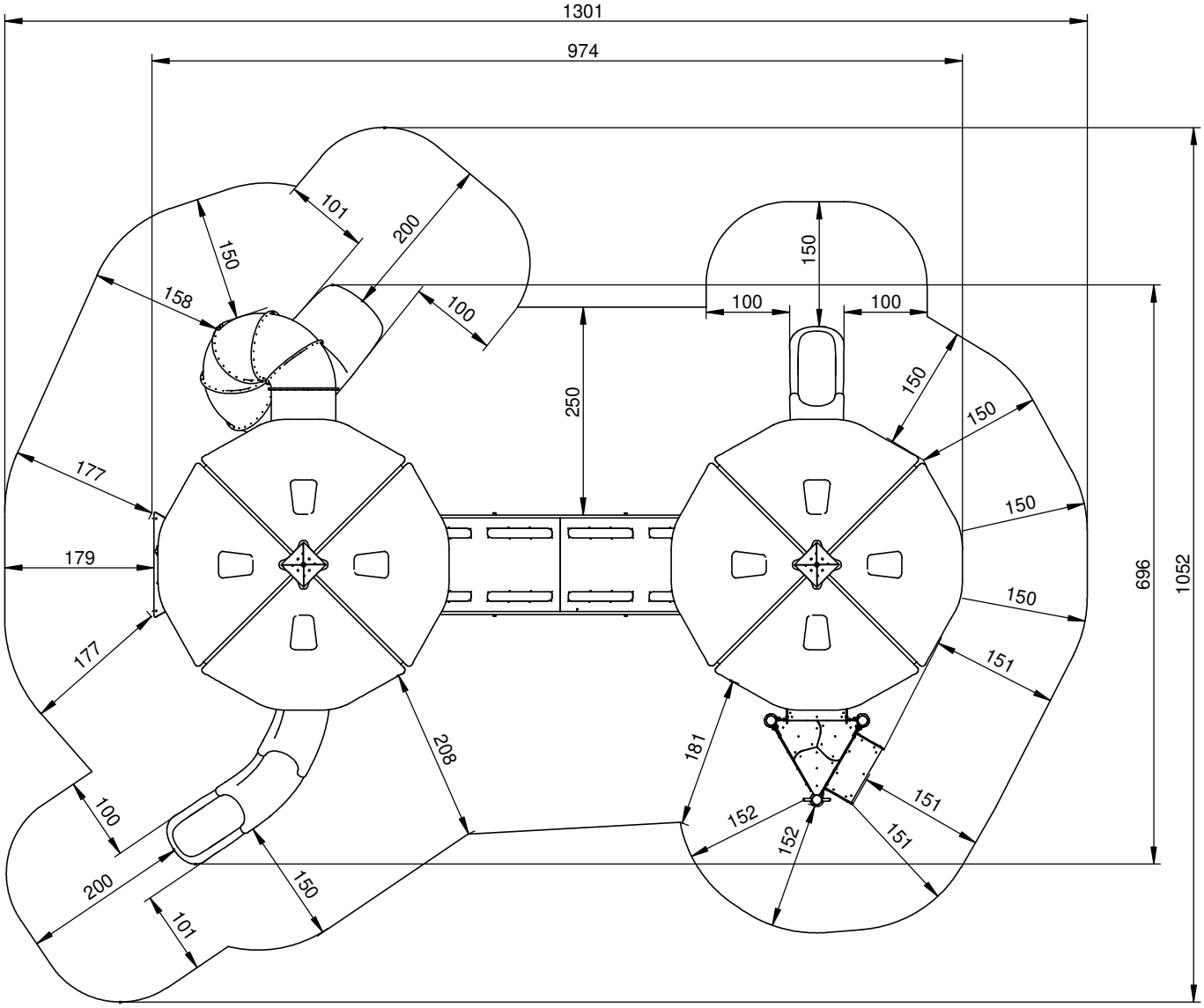
1436N

B

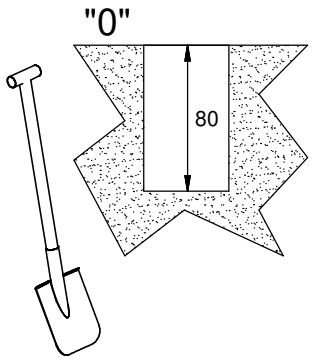

E29
E41
E35
E11
E23
E42
E12
E33
E60
E62
E24
E37
E80
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E25
E22
E68
E36

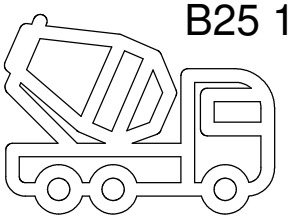
1436N

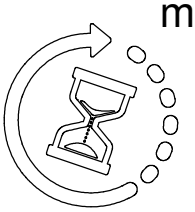

531
190
90
45
"0"

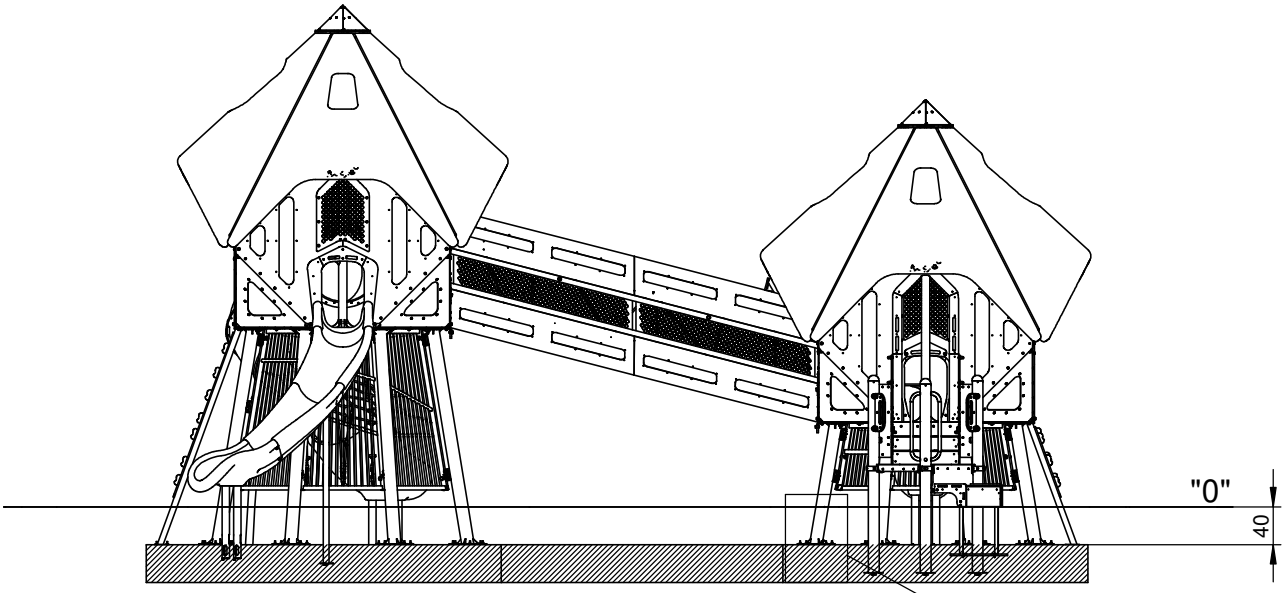

1301
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151

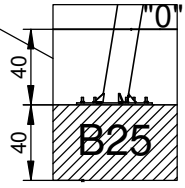
1436N

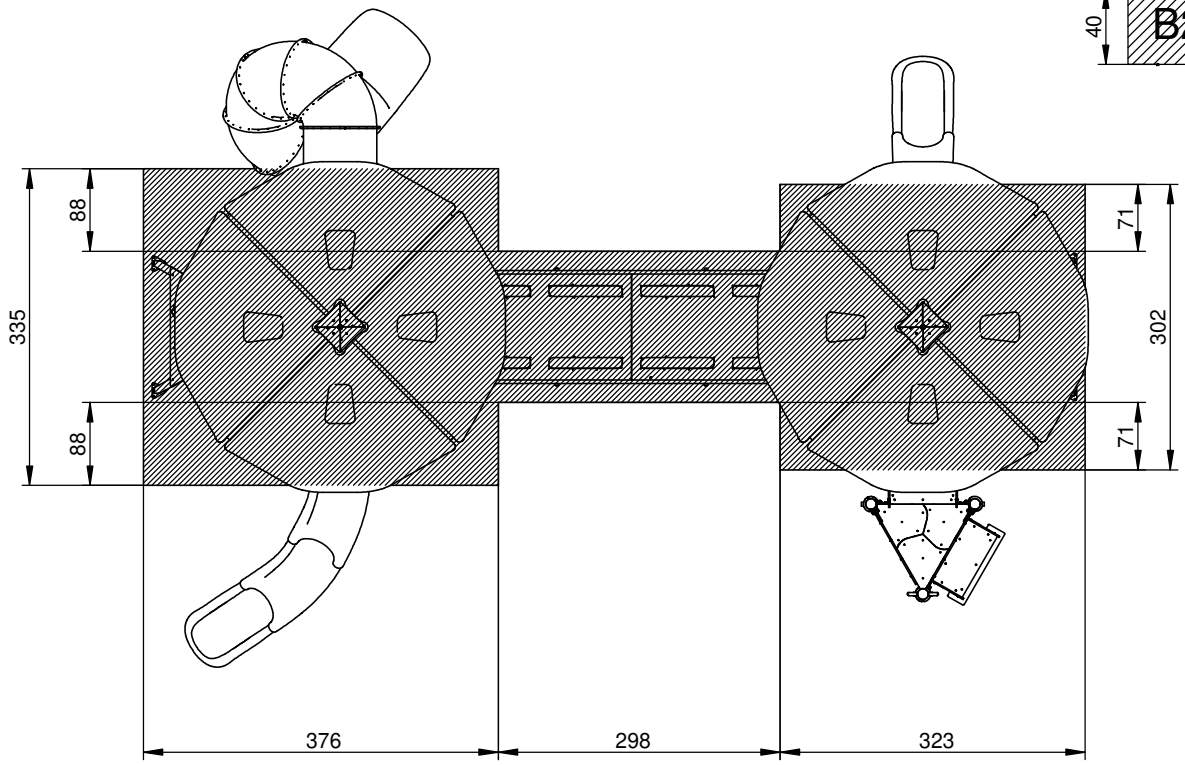

"0"
80


B25 10,9 m3

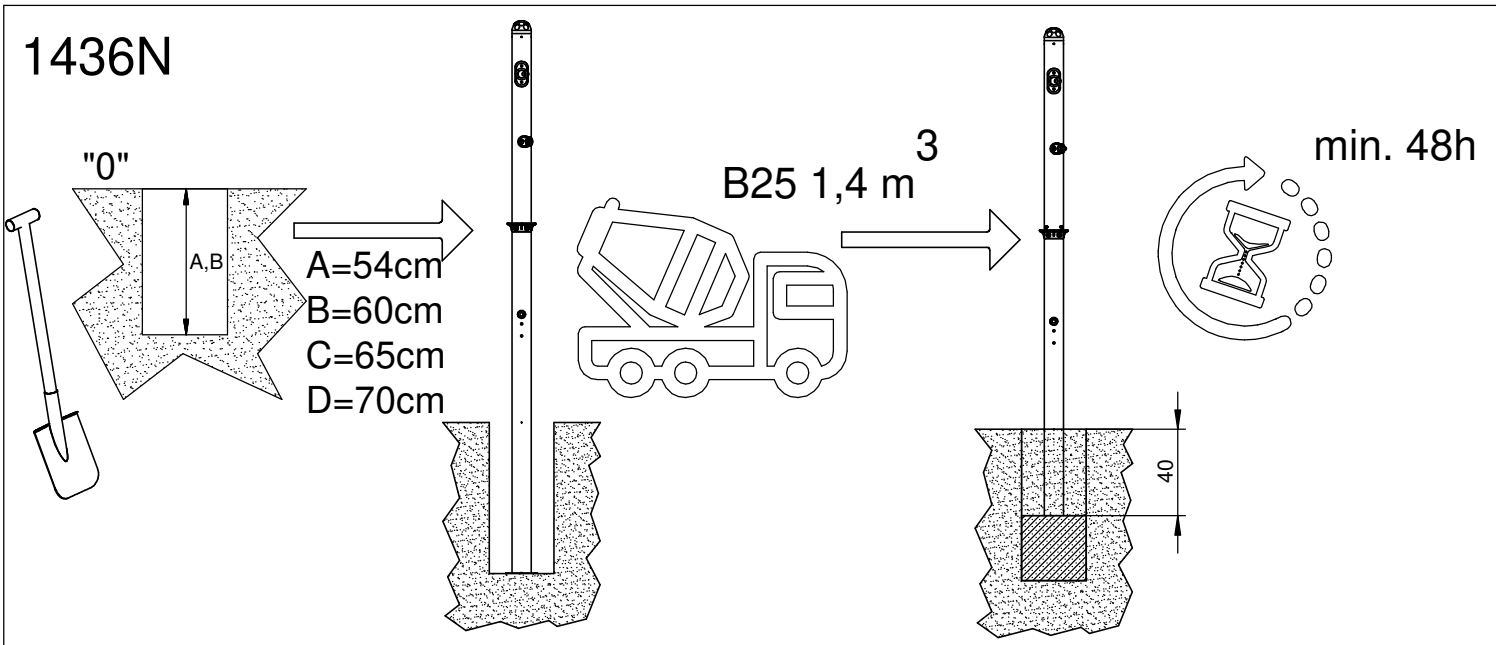

min. 48h

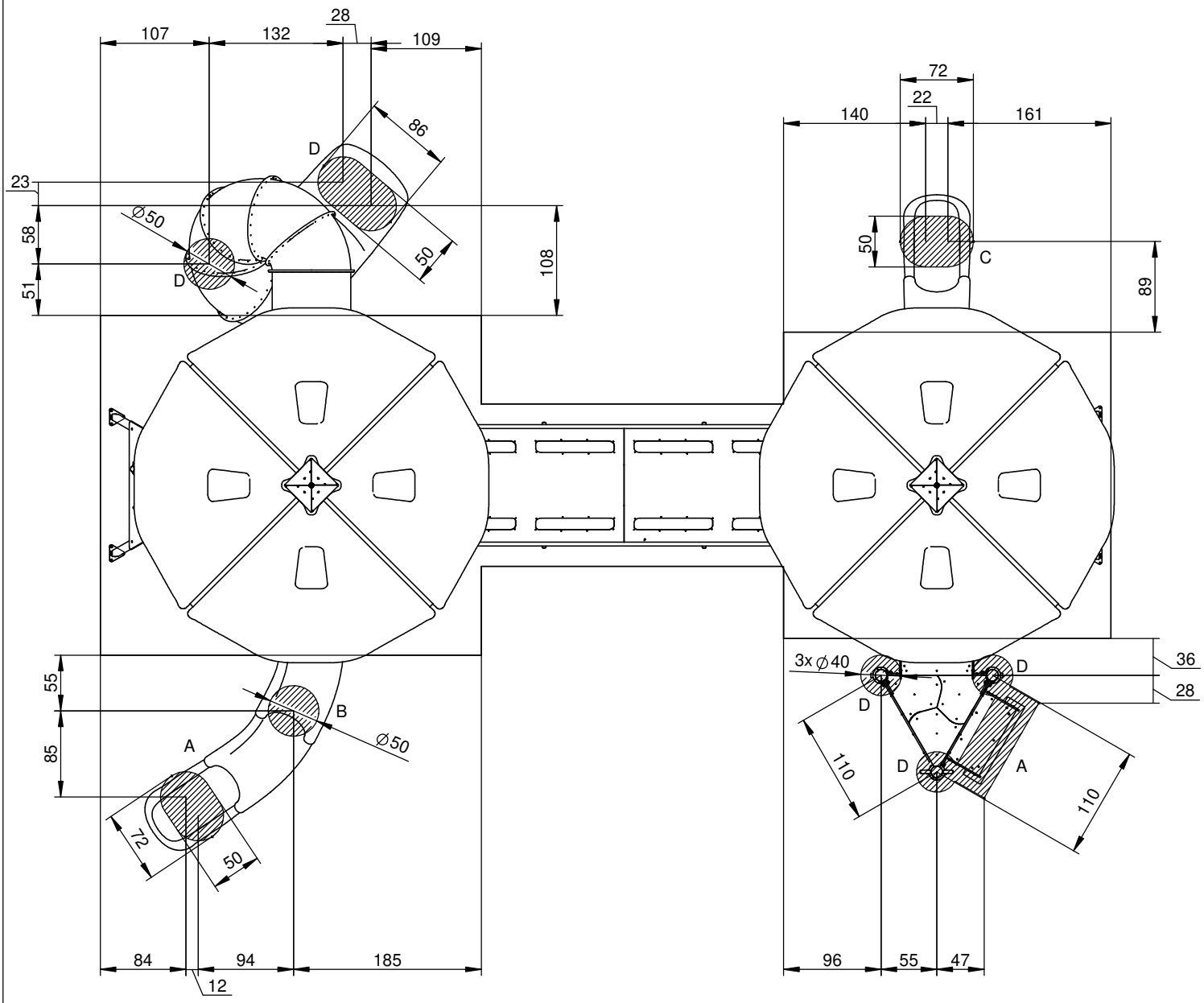

"0"
40


"0"
40
40
B25

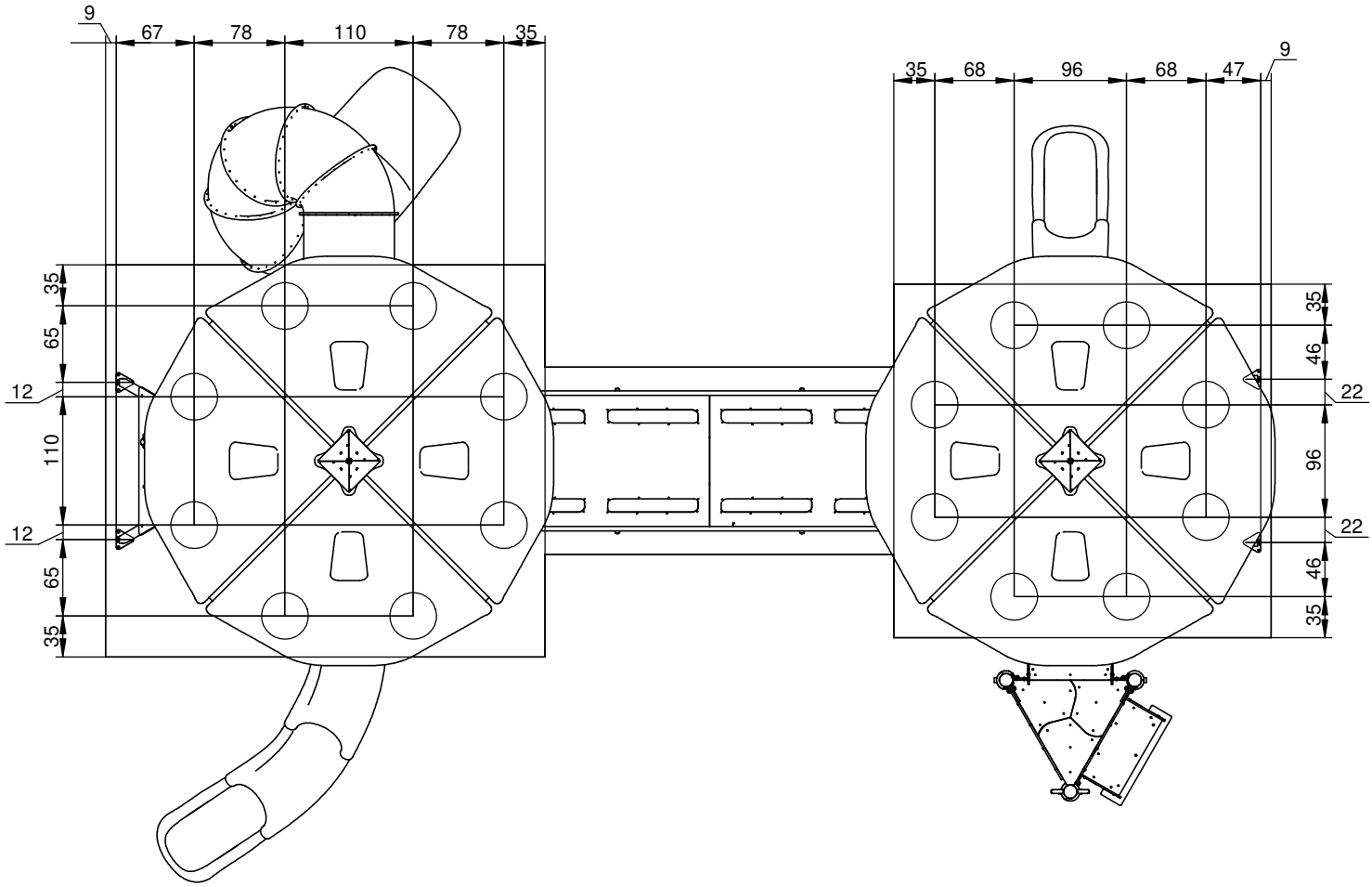

88
335
88
71
302
71
376
298
323

1436N


"0"
A,B
A=54cm
B=60cm
C=65cm
D=70cm
B25 1,4 m3
min. 48h
40

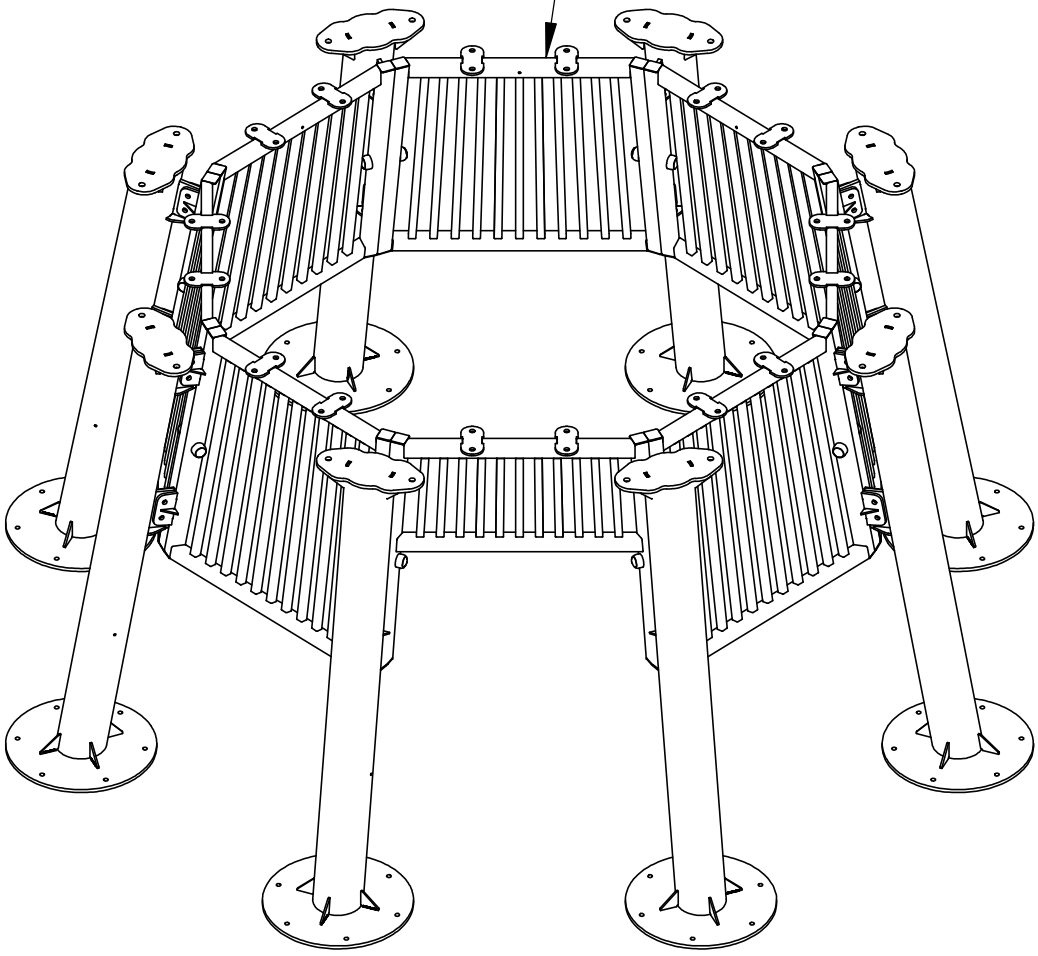

107
132
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86
D
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51
Ø50
50
108
72
22
140
161
50
C
89
55
85
B
A
Ø50
72
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D
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84
94
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12
96
55
47

1436N

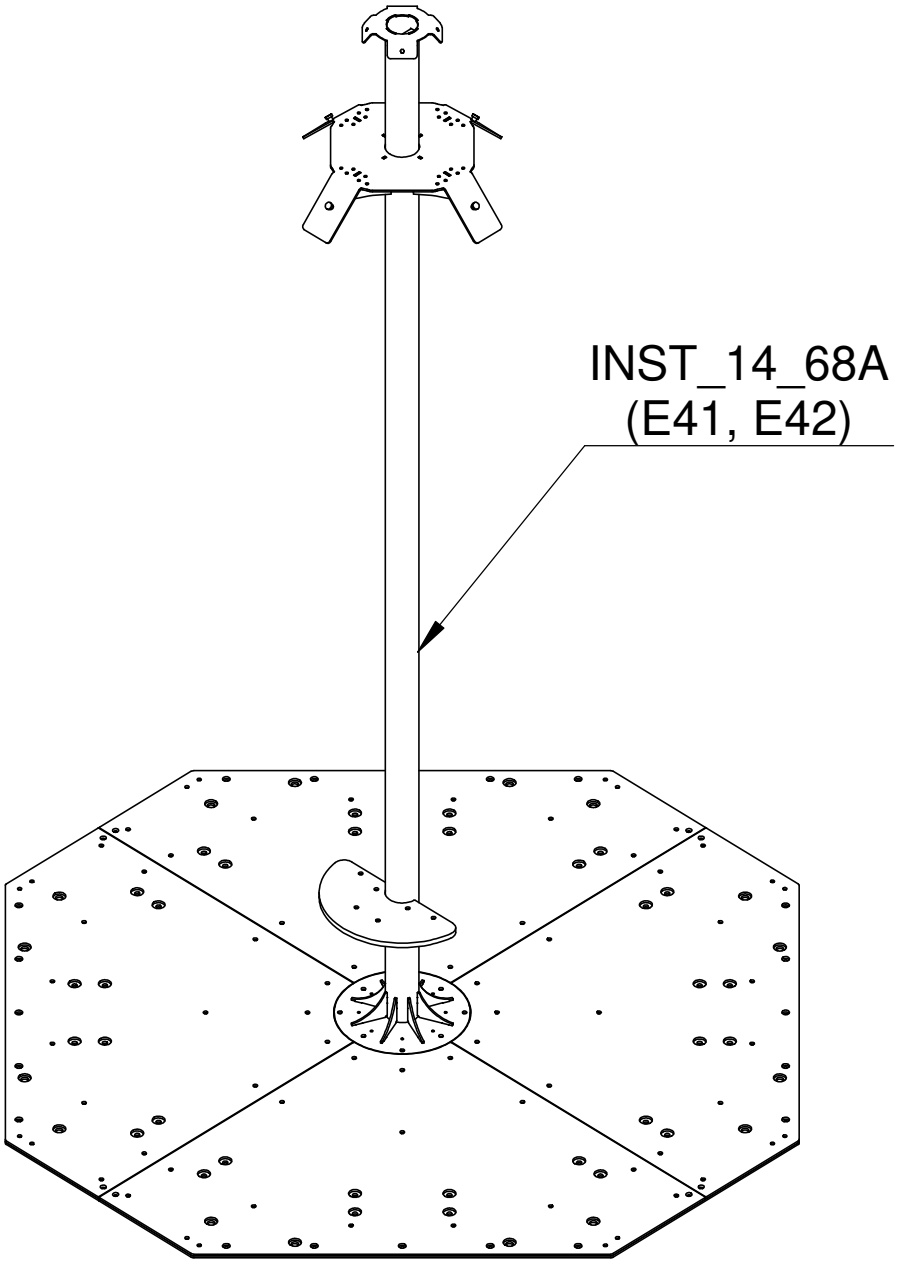

9
67
78
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35
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46
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46
35

1 1436N

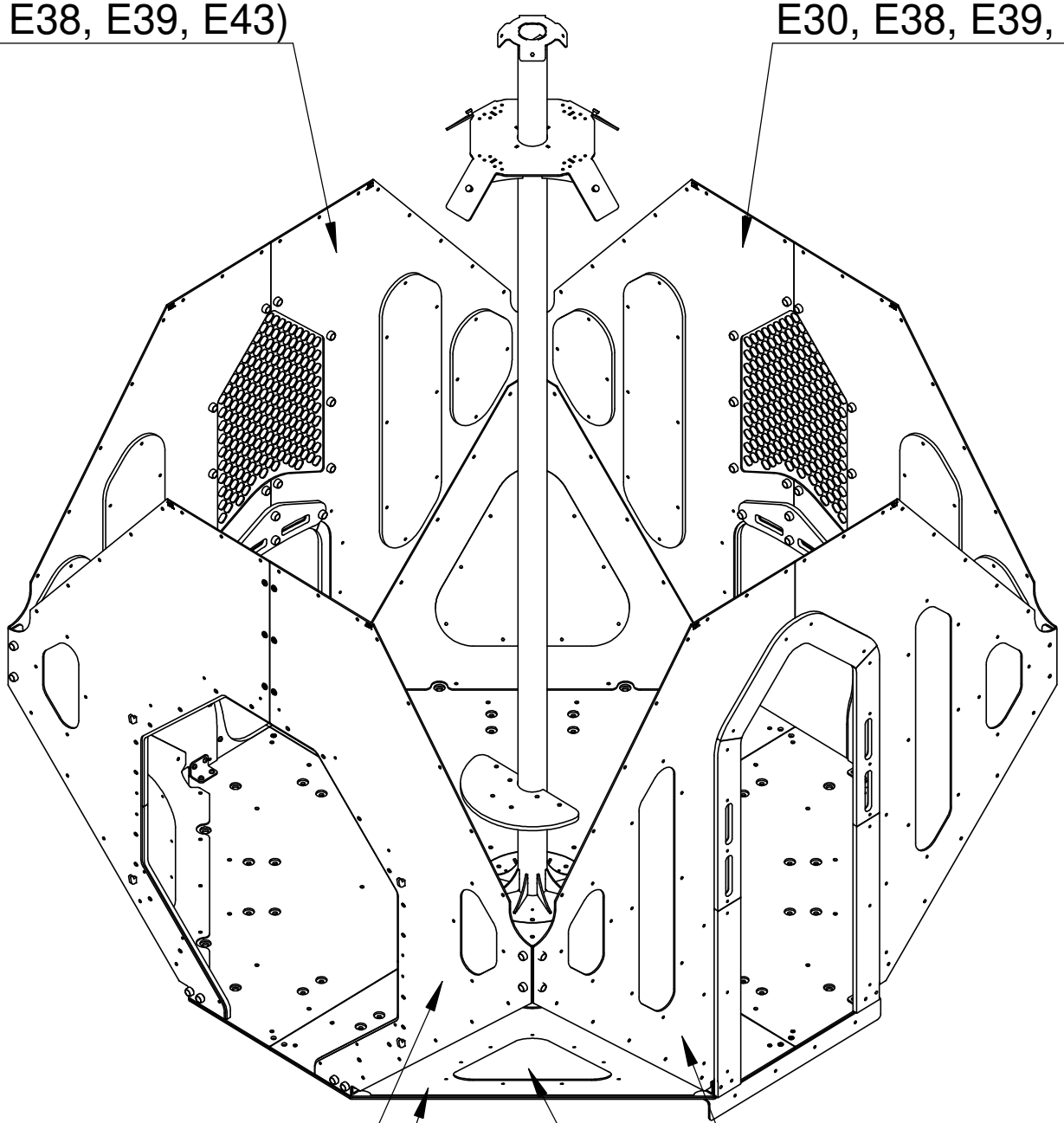
INST_14_134
INST_14_135
(8xE54, 7xE55, E56)



2 1436N

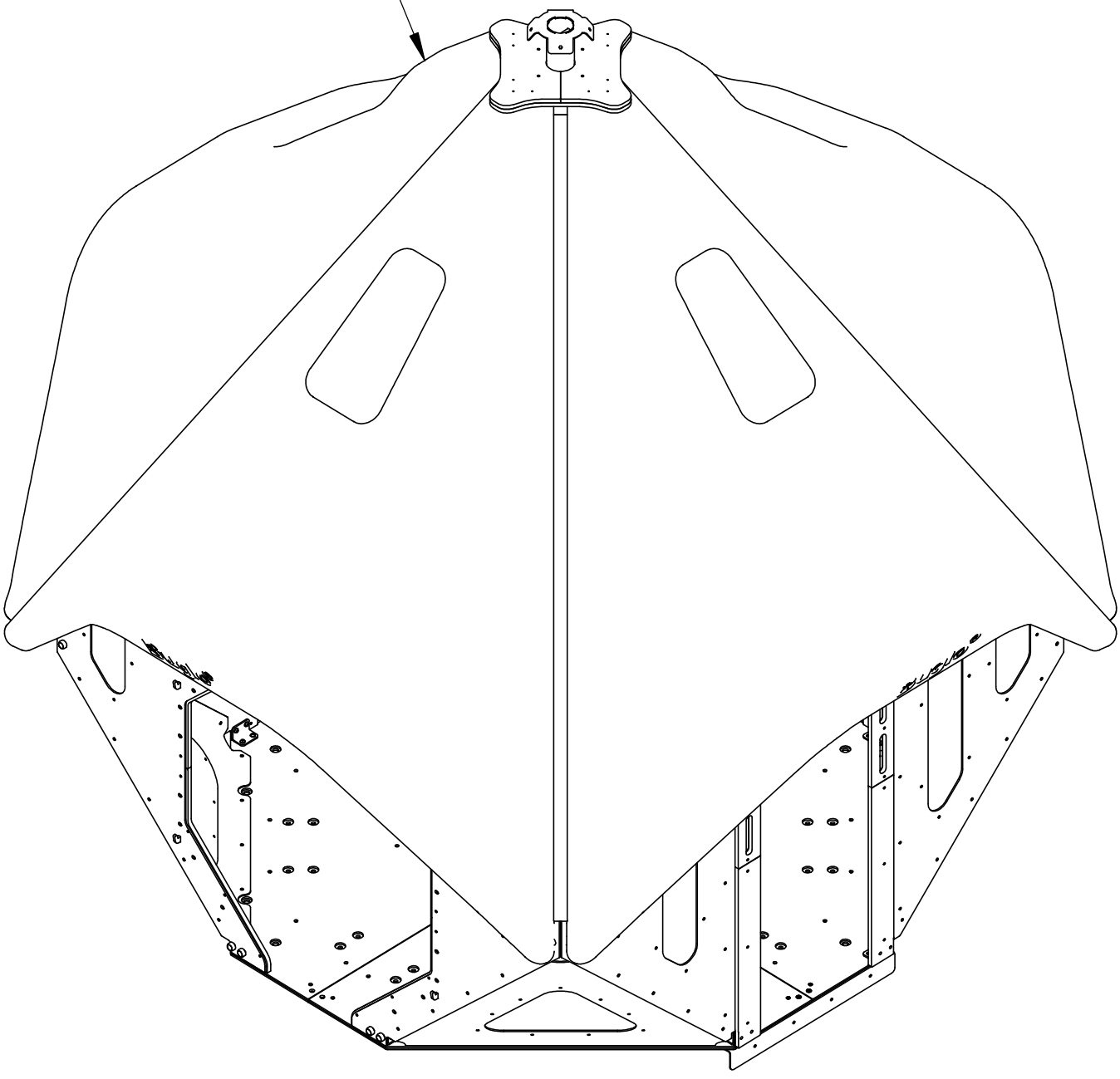


3 1436N

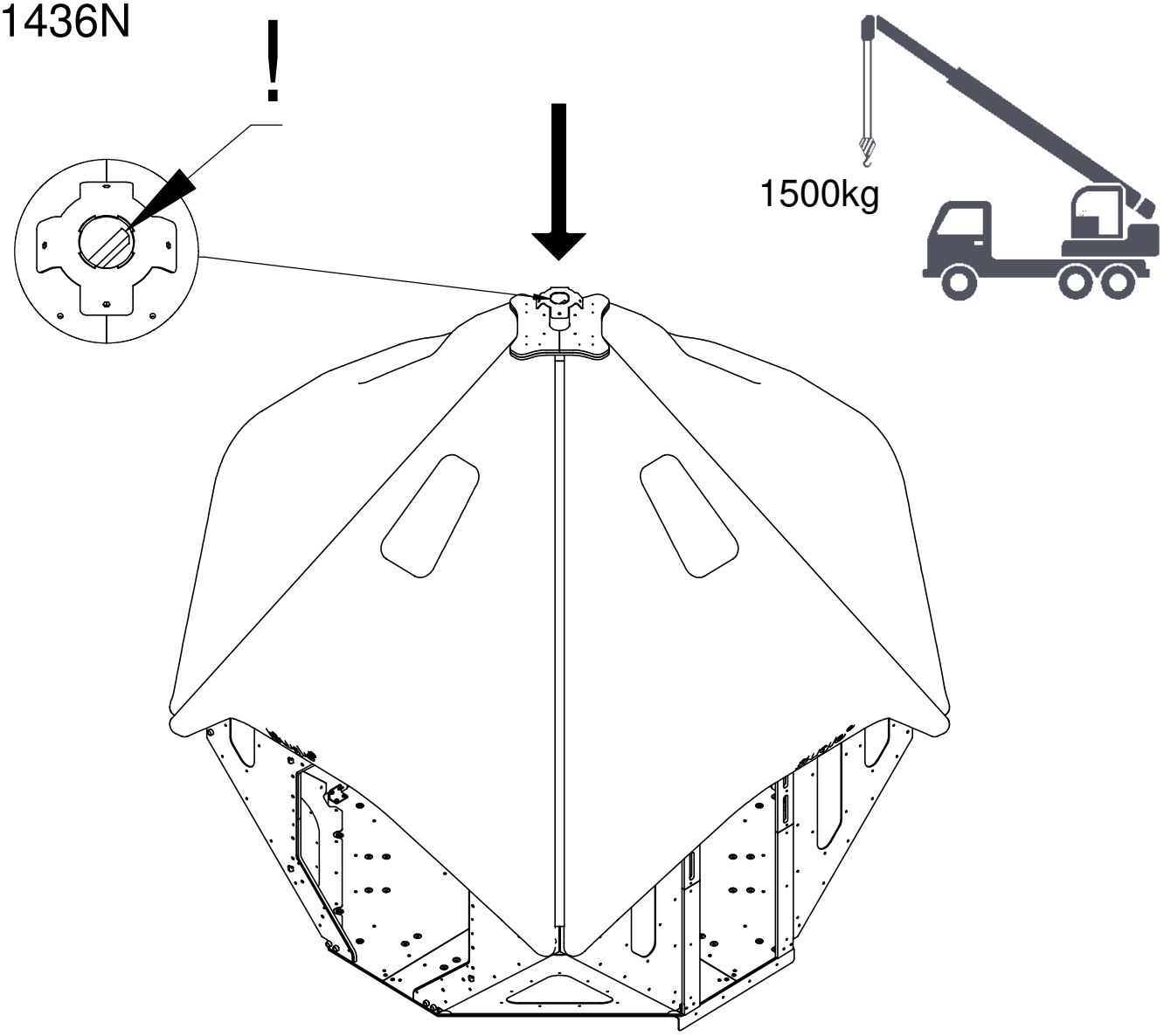

INST_14_60
(E11, 2xE12, E29,
E30, E38, E39, E43)
INST_14_60
(E11, 2xE12, E29,
E30, E38, E39, E43)
INST_14_47
(E11, 2xE12, E23,
E24, E31)
INST_14_54
(E11, 2xE12, E33,
E34, E35)
INST_14_39A
(E6)
INST_14_39A
(E6, E7)

4 1436N

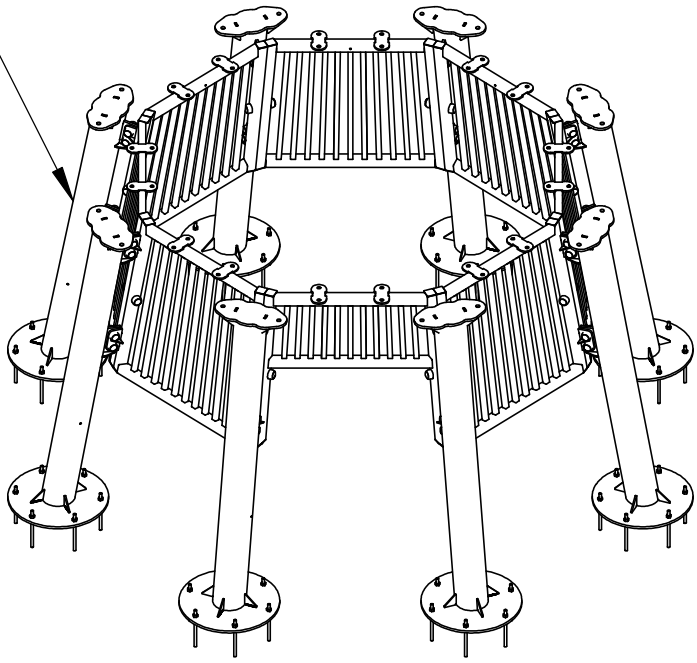
INST_14_37
(4xE2, 4xE3, 4xE5)



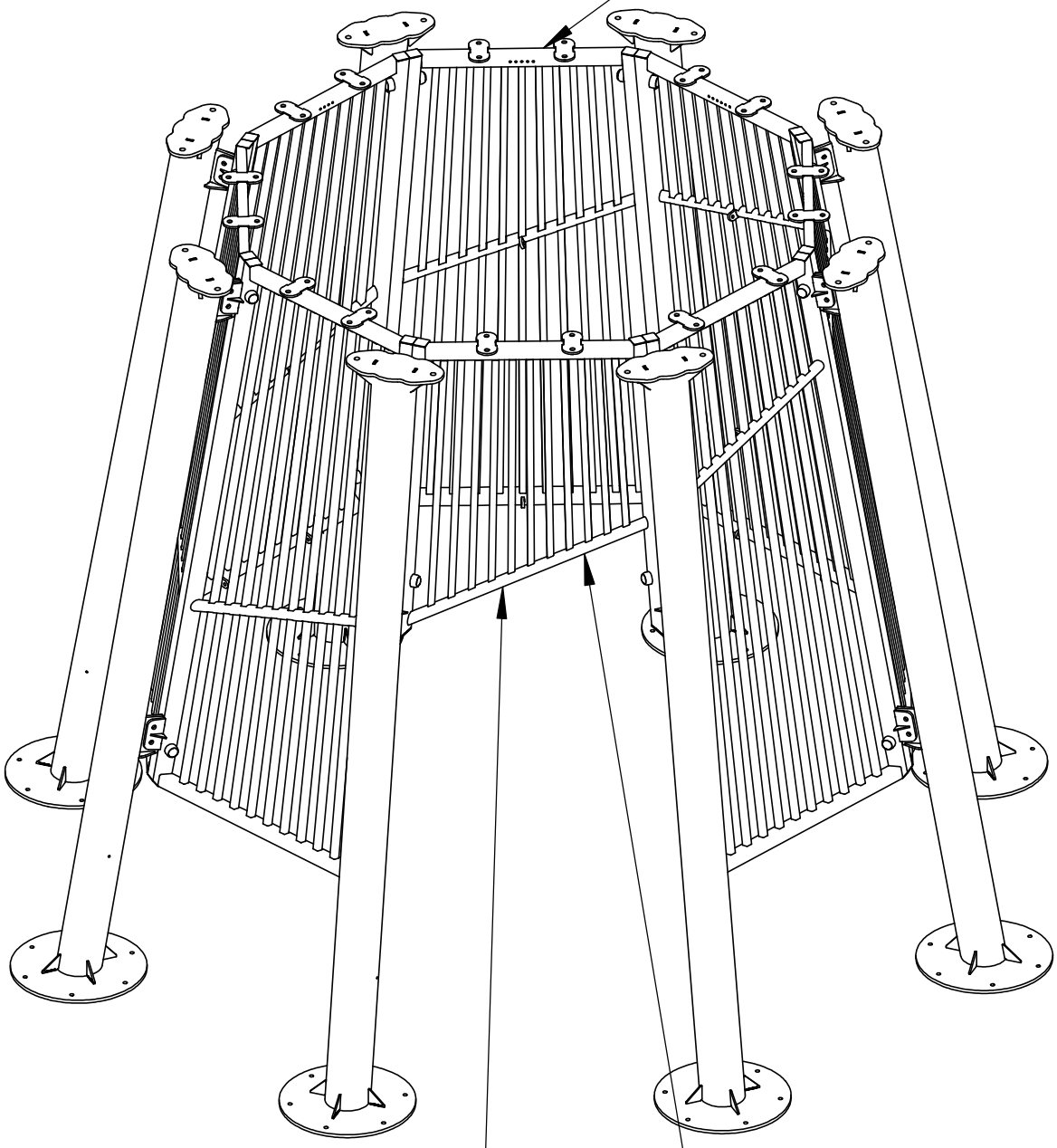
5 1436N



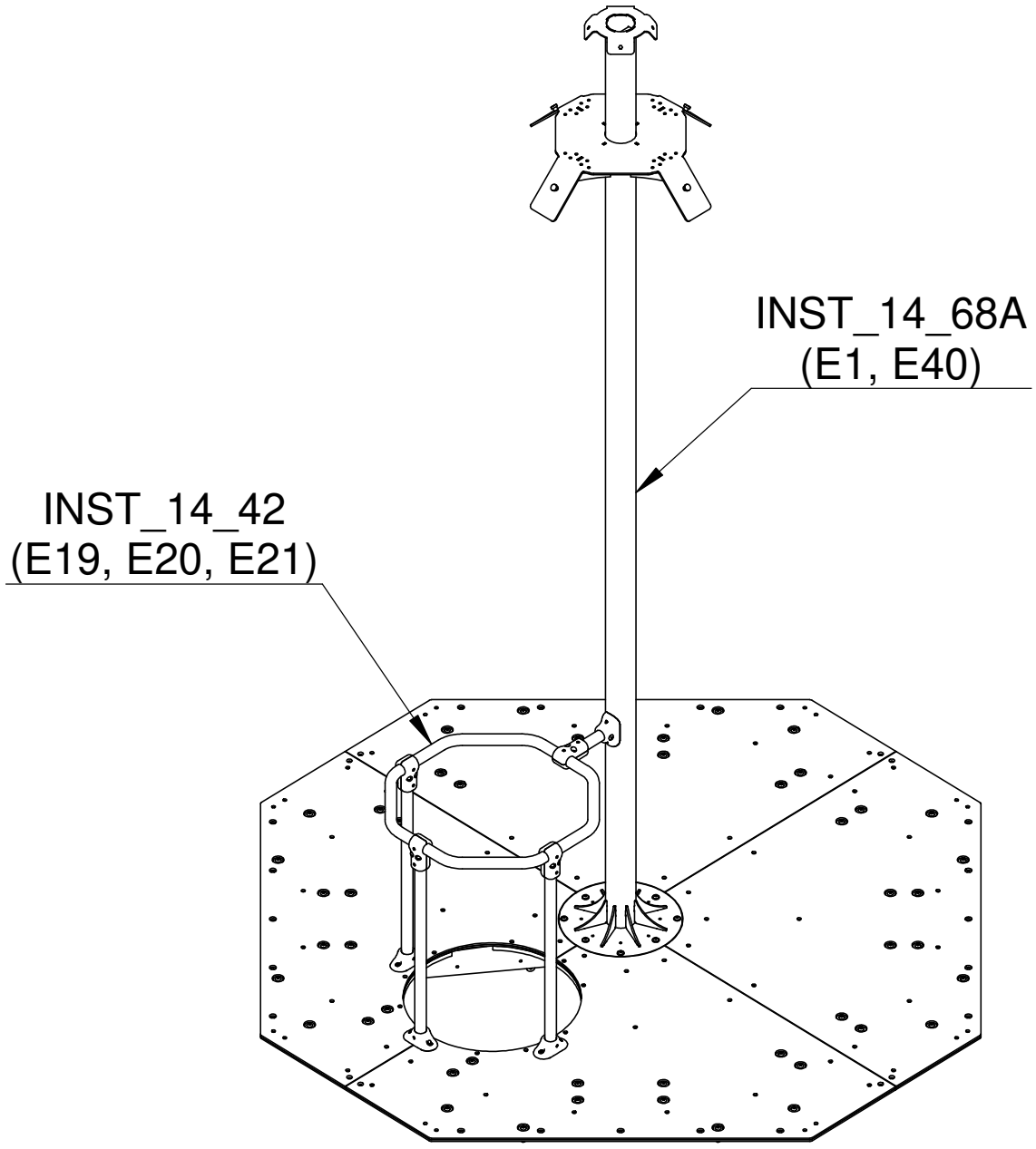
INST_14_36



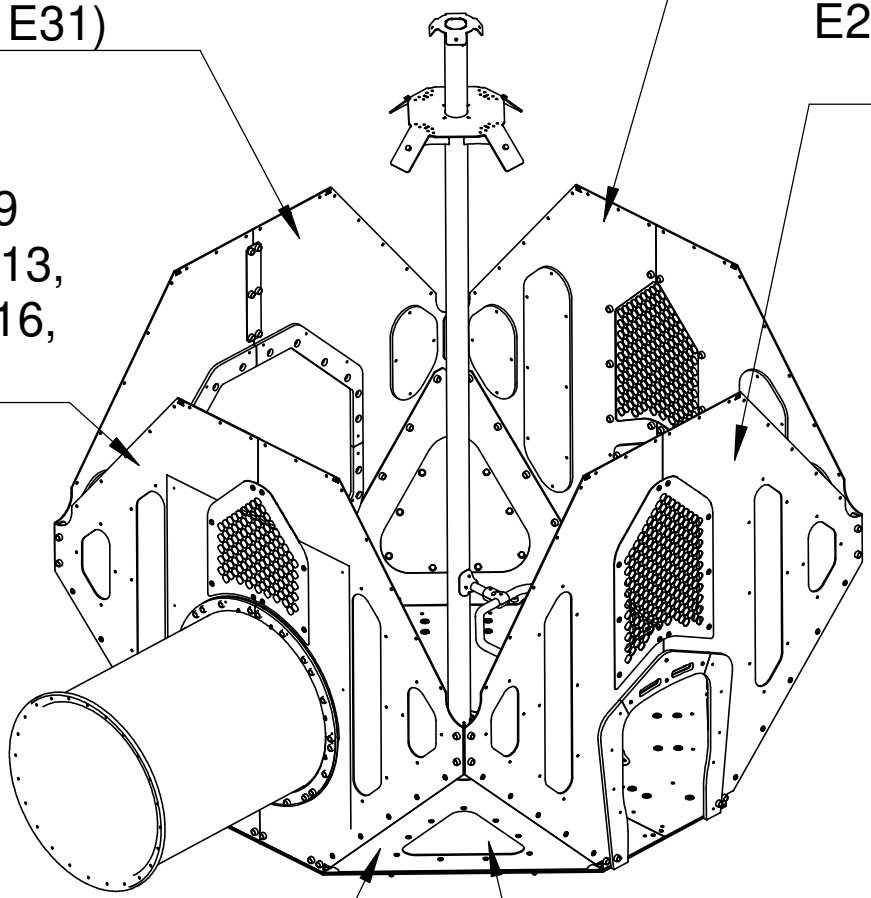
6 1436N


INST_14_133A
(E52, E45, E46, E47,
E48, E49, E50, E51)
INST_14_132
(E44, E45, E46, E47,
E48, E49, E50, E51)
INST_14_133B
(E44, E45, E51, 2xE53)

7 1436N

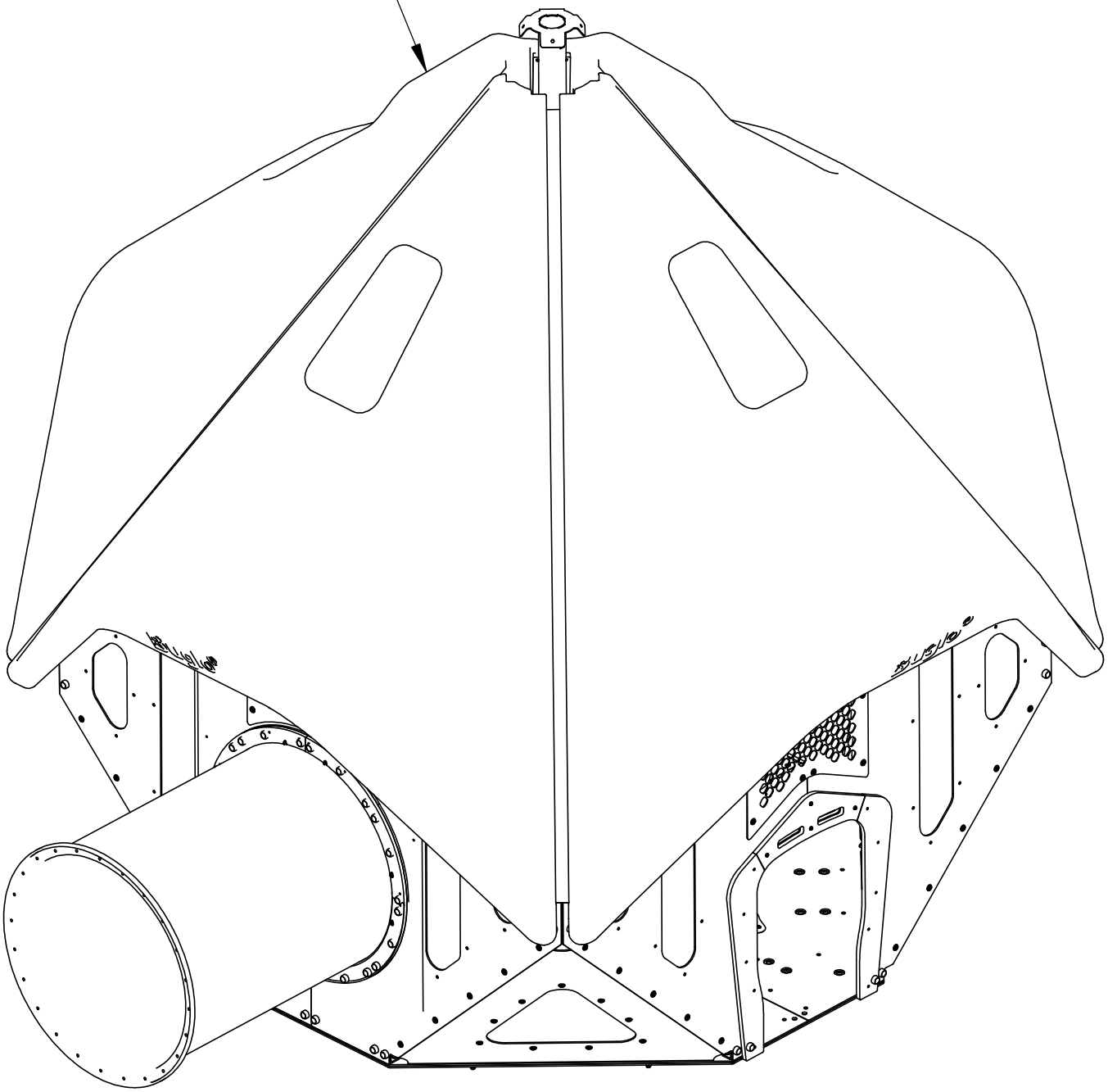


8 1436N

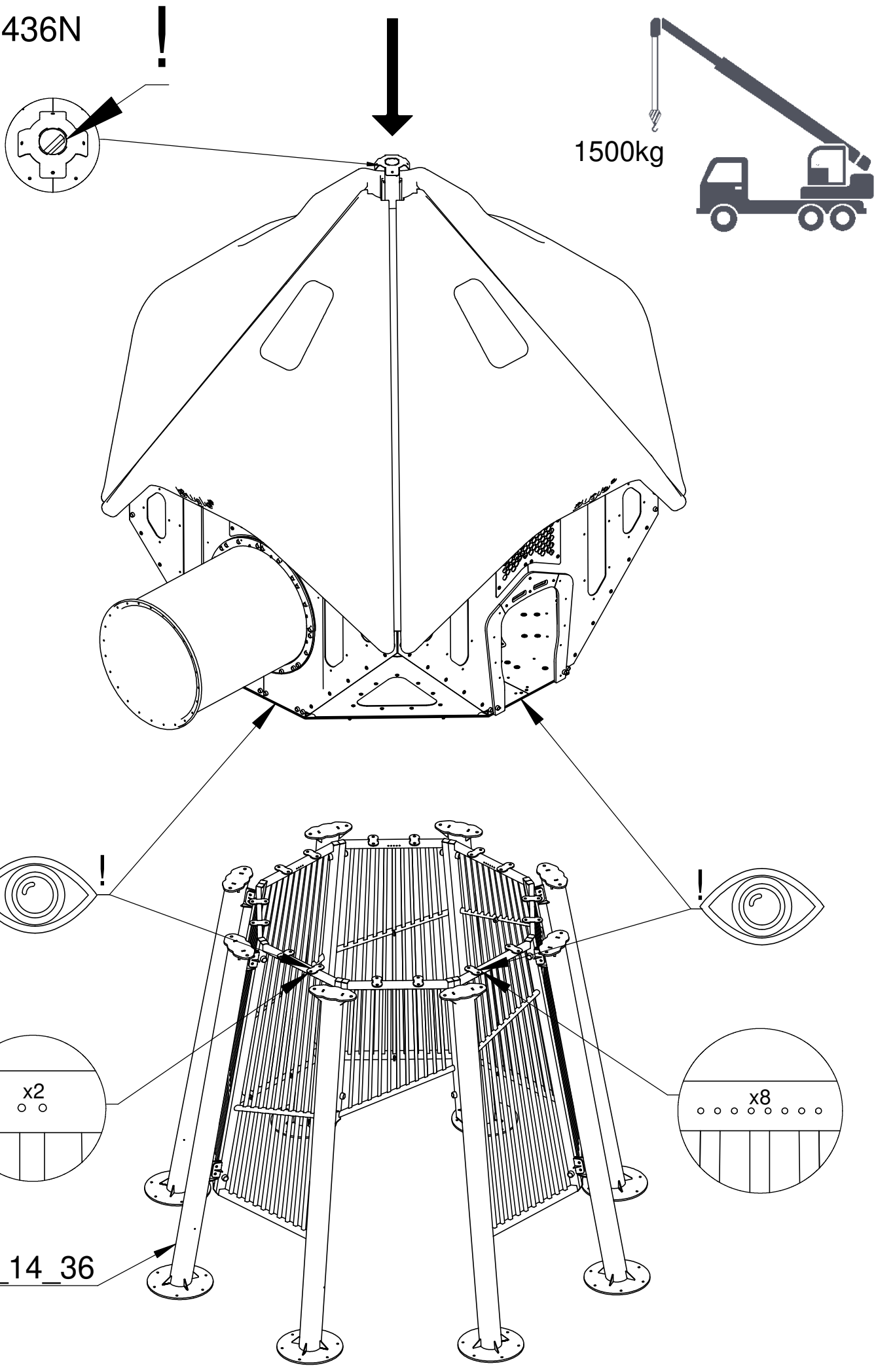

INST_14_53
(E11, 2xE12, E26, E27, E28, E29, E30, E32)
INST_14_47
(E11, 2xE12, E23, E24, E31)
INST_14_60
(E11, 2xE12, E29, E30, E38, E39, E43)
INST_14_139
(E11, 3xE12, E13, E14, E15, 4xE16, 8xE17, E83)
INST_14_39A
(E6)
INST_14_39A
(E6, E7)

9 1436N

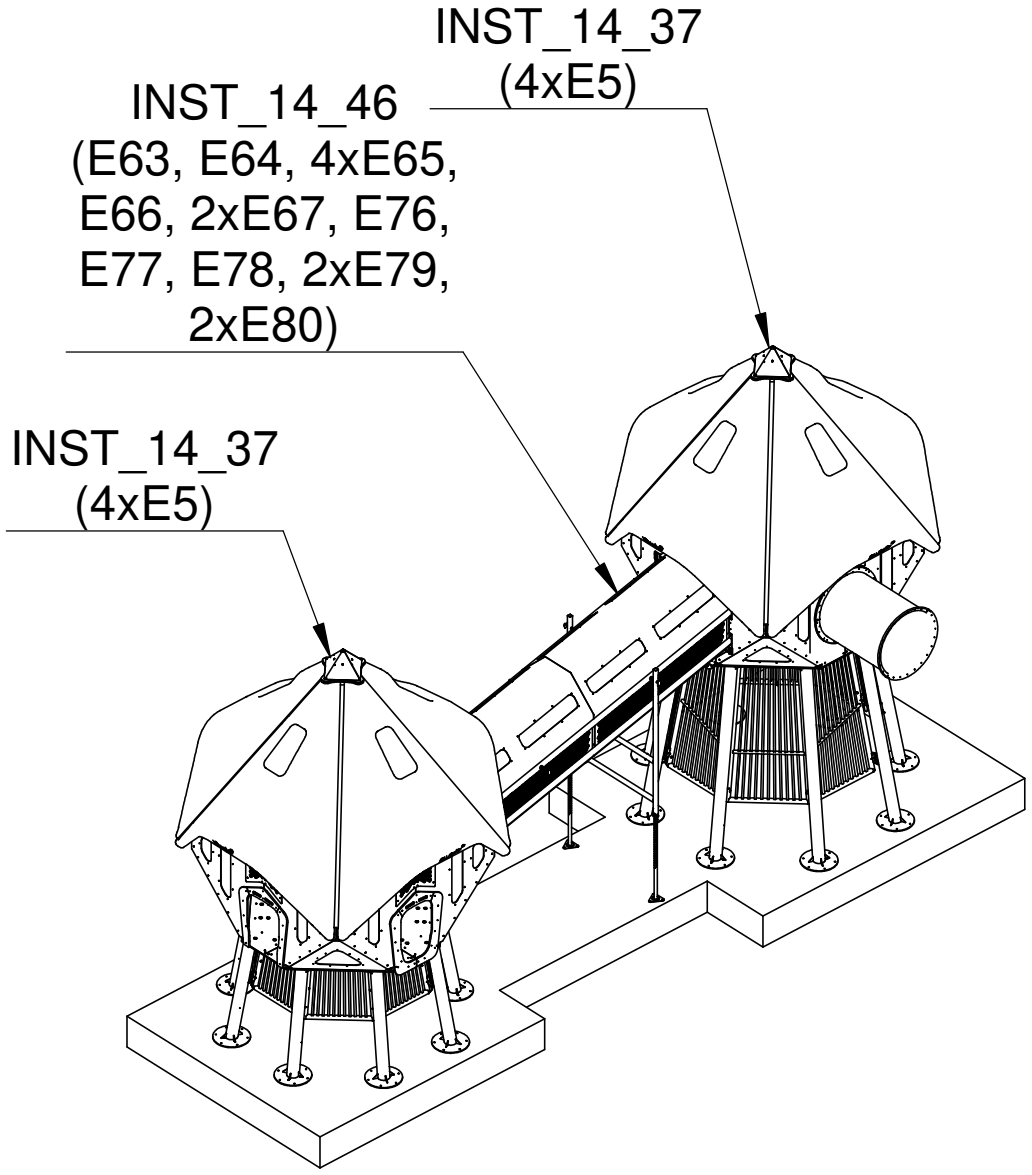
INST_14_37
(4xE2, 4xE3, 4xE5)

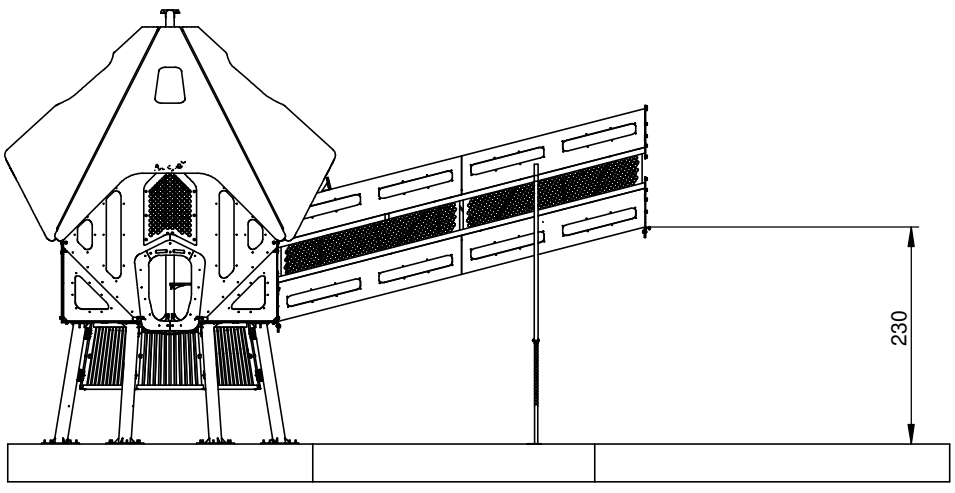


10 1436N

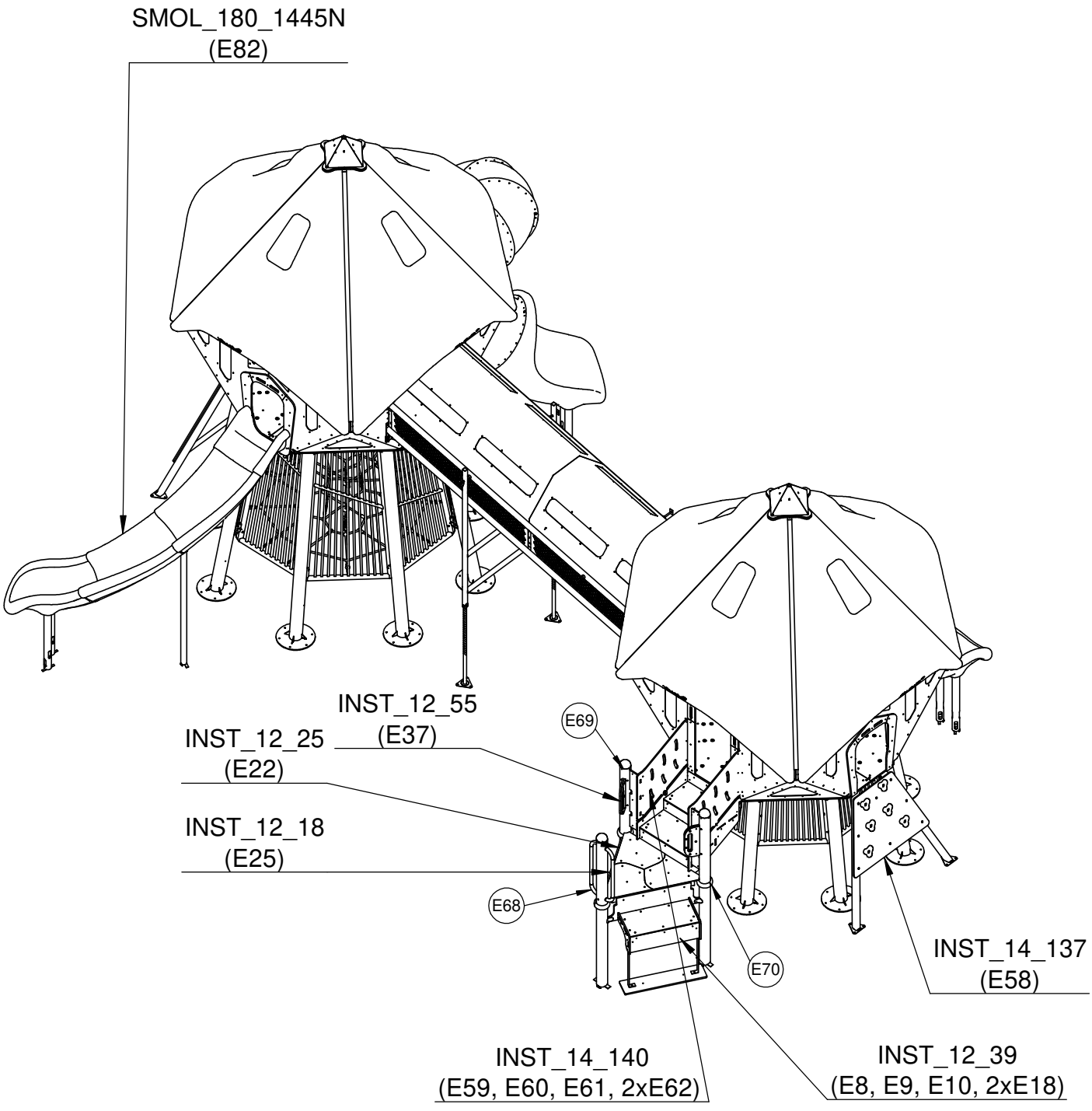


11 1436N

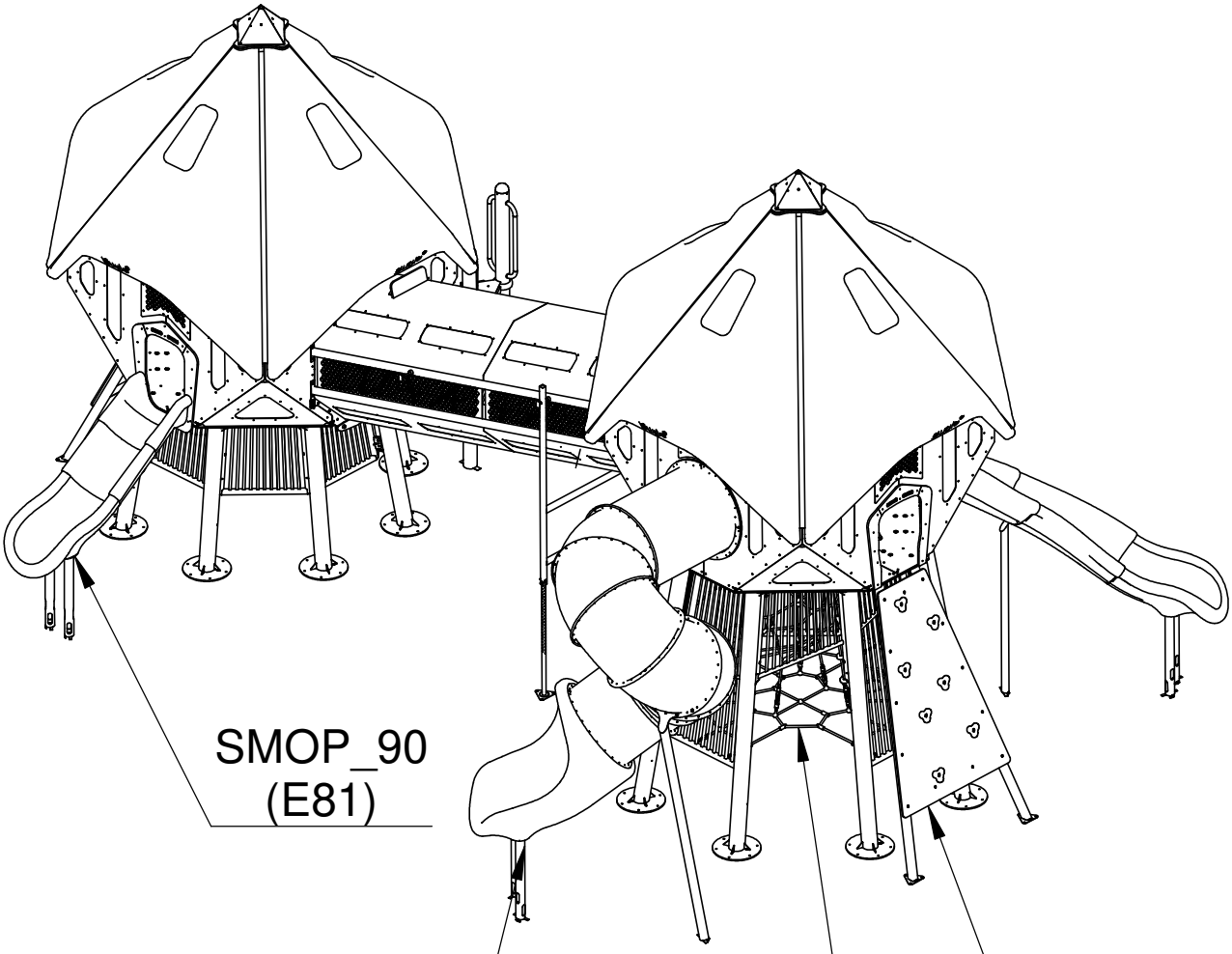

INST_14_37
(4xE5)
INST_14_46
(E63, E64, 4xE65,
E66, 2xE67, E76,
E77, E78, 2xE79,
2xE80)
INST_14_37
(4xE5)


230

12 1436N


SMOL_180_1445N
(E82)
INST_12_55
(E37)
INST_12_25
(E22)
INST_12_18
(E25)
E69
E68
E70
INST_14_137
(E58)
INST_14_140
(E59, E60, E61, 2xE62)
INST_12_39
(E8, E9, E10, 2xE18)

13 1436N



SMOP_90
(E81)

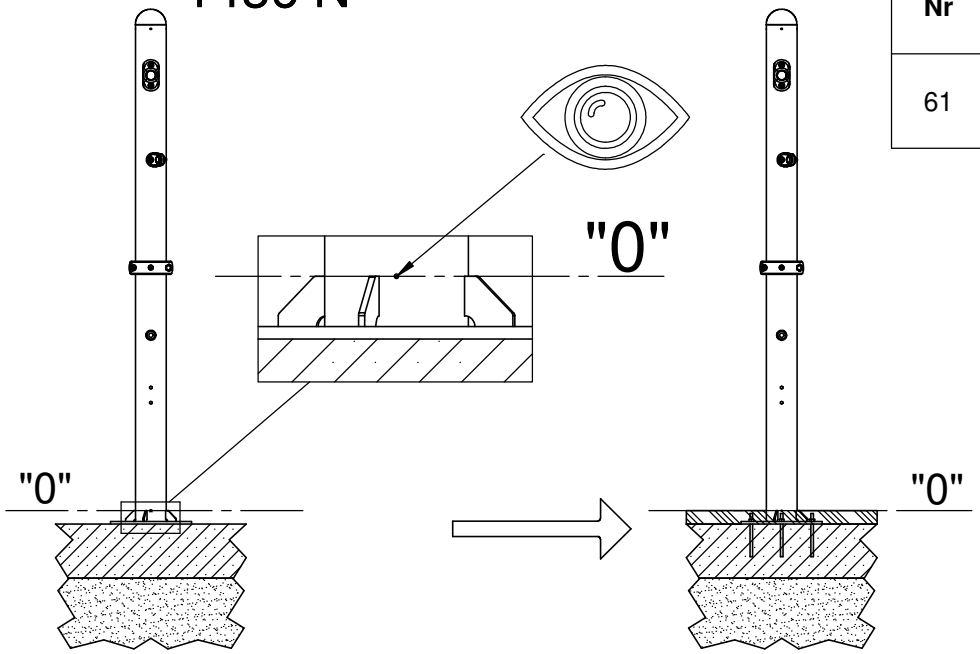
INST_14_141
(E57)

MTSS_H210_245555
3316 (LZ)
(E83)

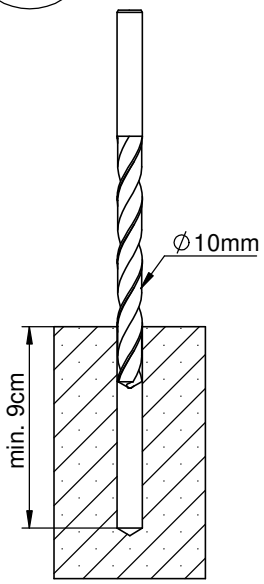
INST_14_64B
(E71, E72, E73, E74,
E75)

1436 N

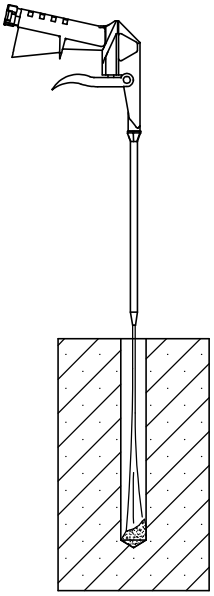
Nr	Element		
61		-	KL105 (OC)

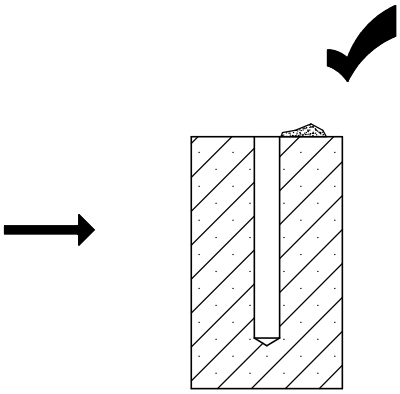


I

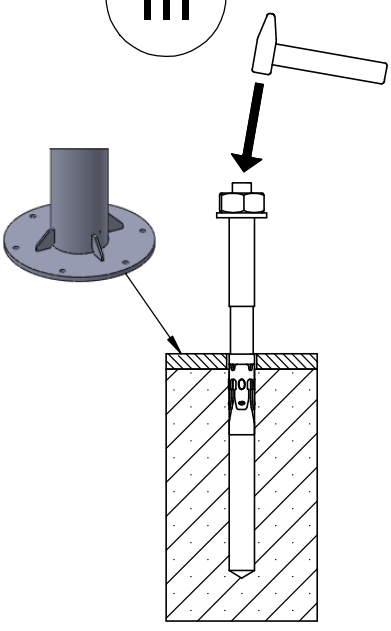


II

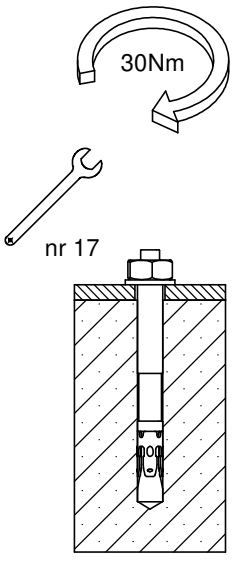




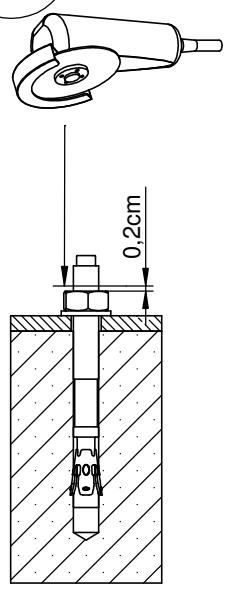
III



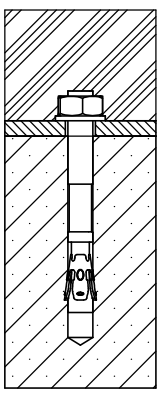
IV



V



VI



INST_12_18

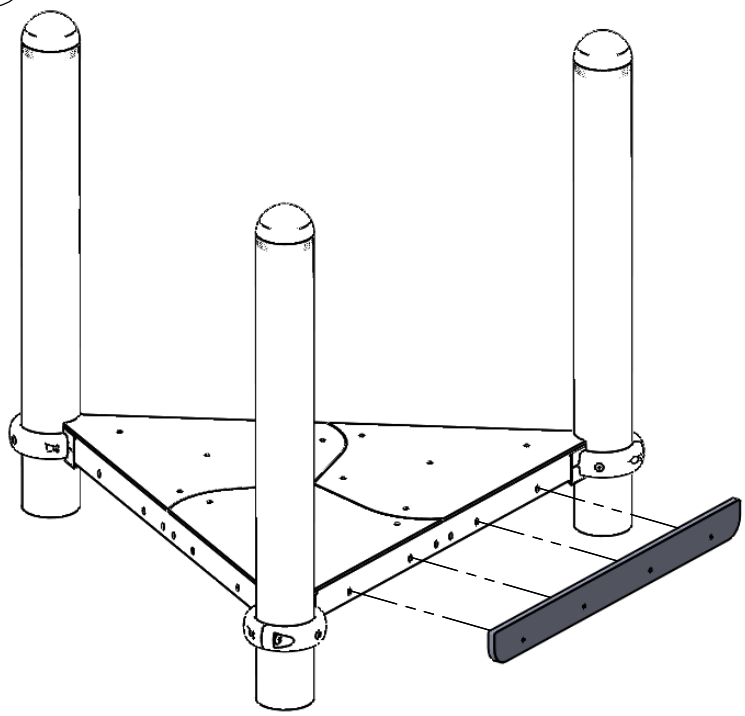




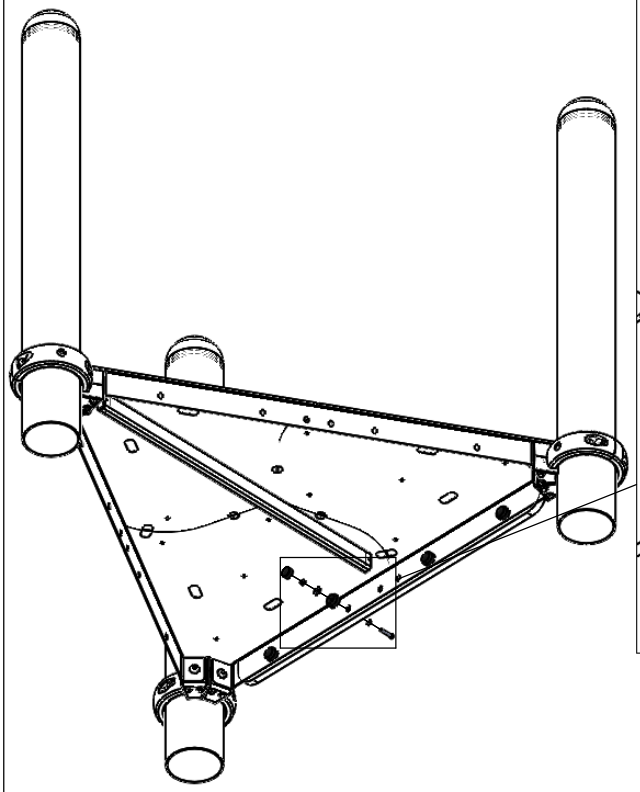
Nr. 4 Nr. T30

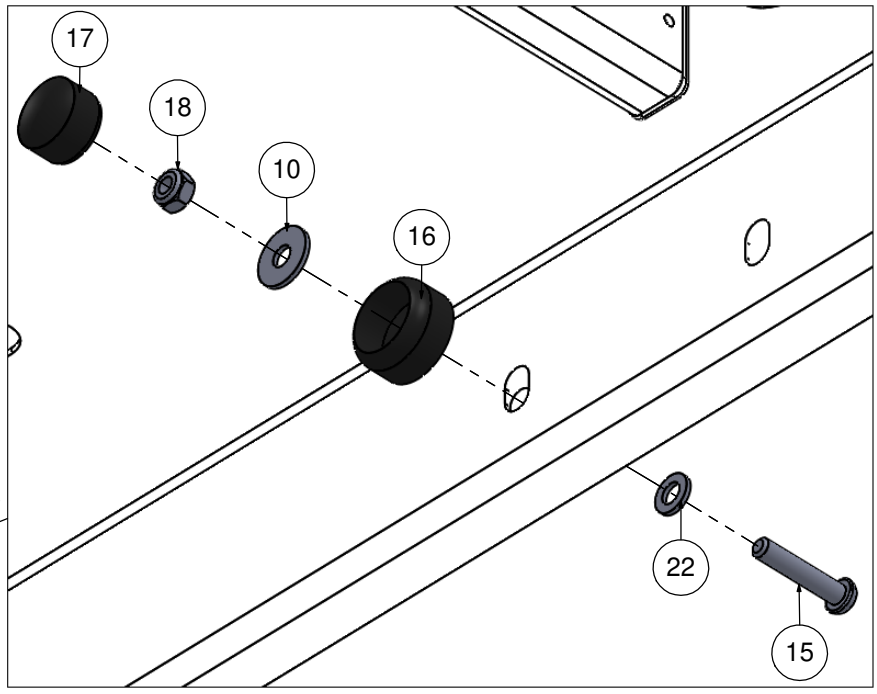
Nr	Σ	Element		
10	4		DIN 9021	6x18
15	4		ISO 7380	M6x30
16	4		-	K1_d21_B
17	4		-	Z1_d21_B
18	4		DIN 985	M6 (OC)
22	4		DIN 125	6x12
58	1		-	LOCTITE

1

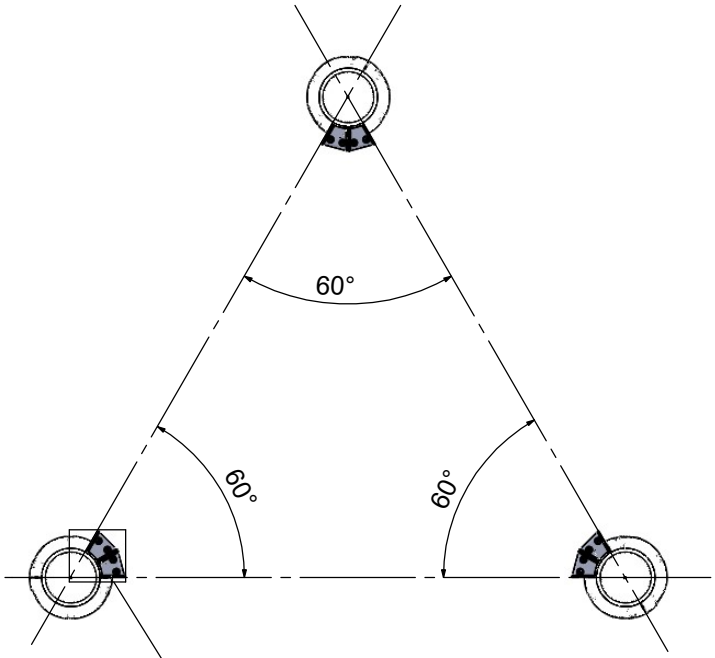


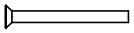
2

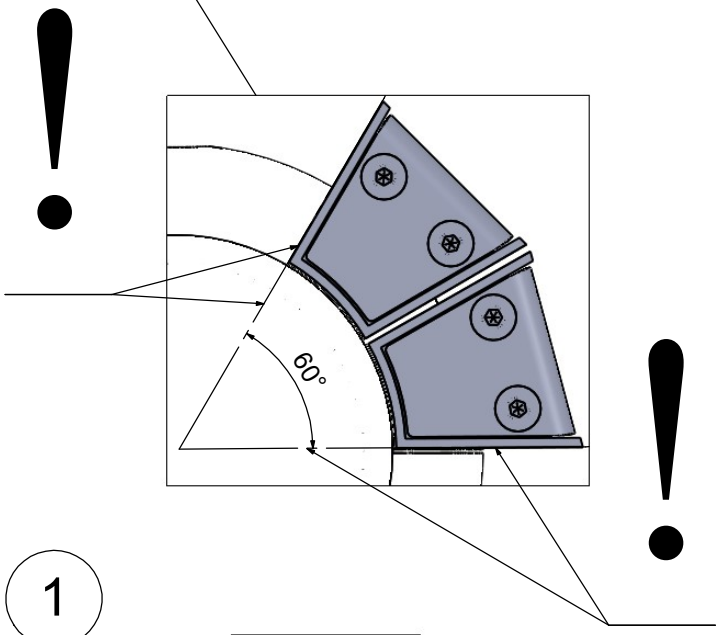


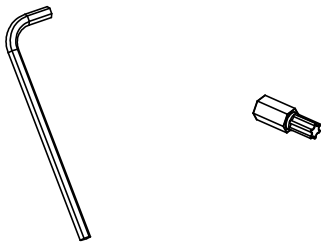


INST_12_25



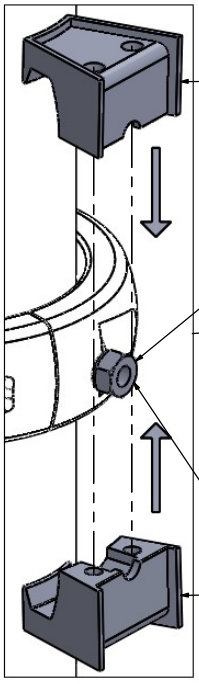
Nr	Σ	Element		
5	6		DIN 985	M10
21	12		DIN 125	8x16
44	6		ISO 7380	M10x25
58	1		-	LOCTITE
147	12		-	M6x10
242	6		-	1200_1_A2_g3_G_v3
243	12		-	UCHW_114,3
245	12		DIN 7991	M6x65
249	6		NYLON DIN 125	10x20

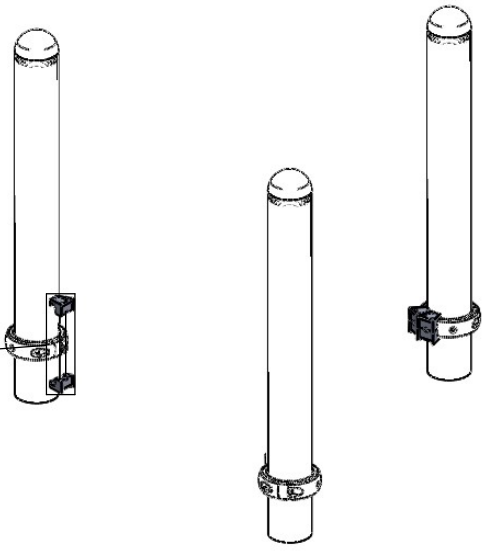




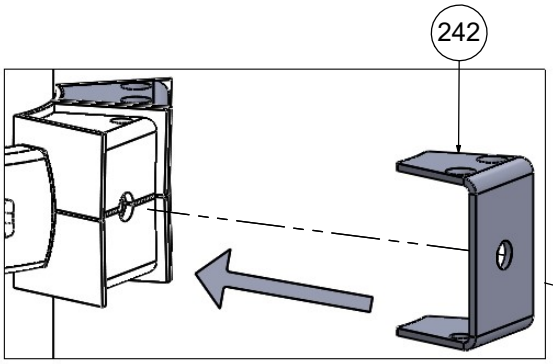
Nr. 4, 6 Nr. T30

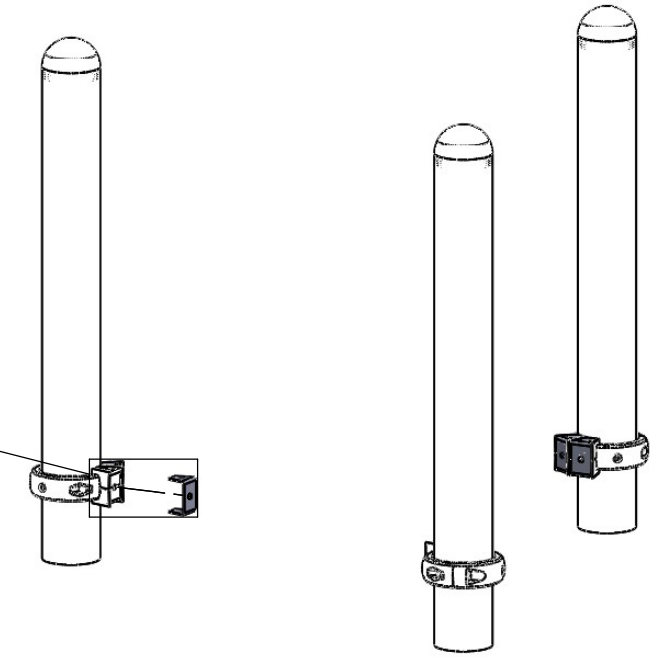
1



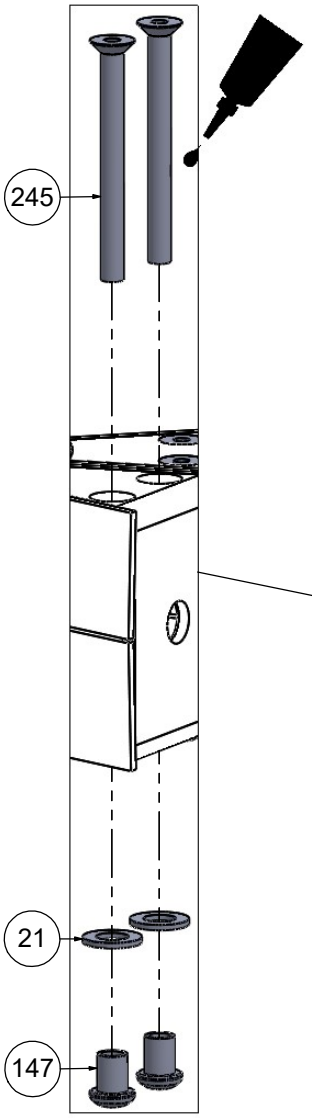


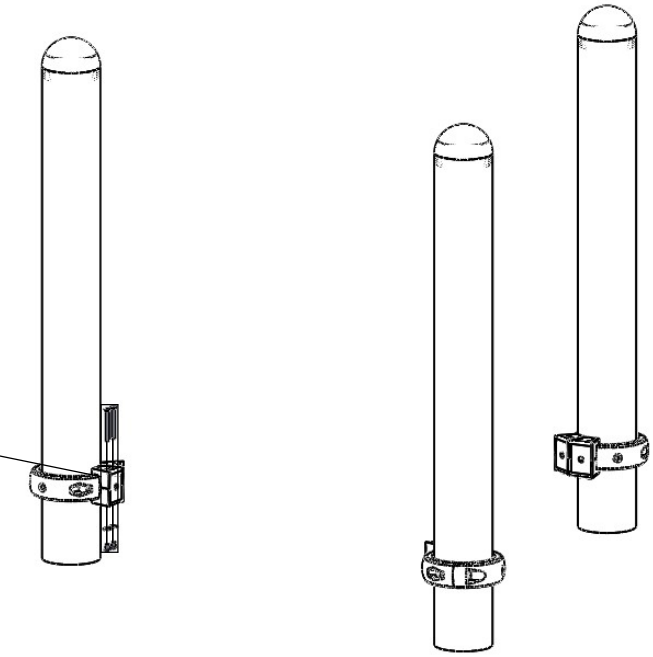
2



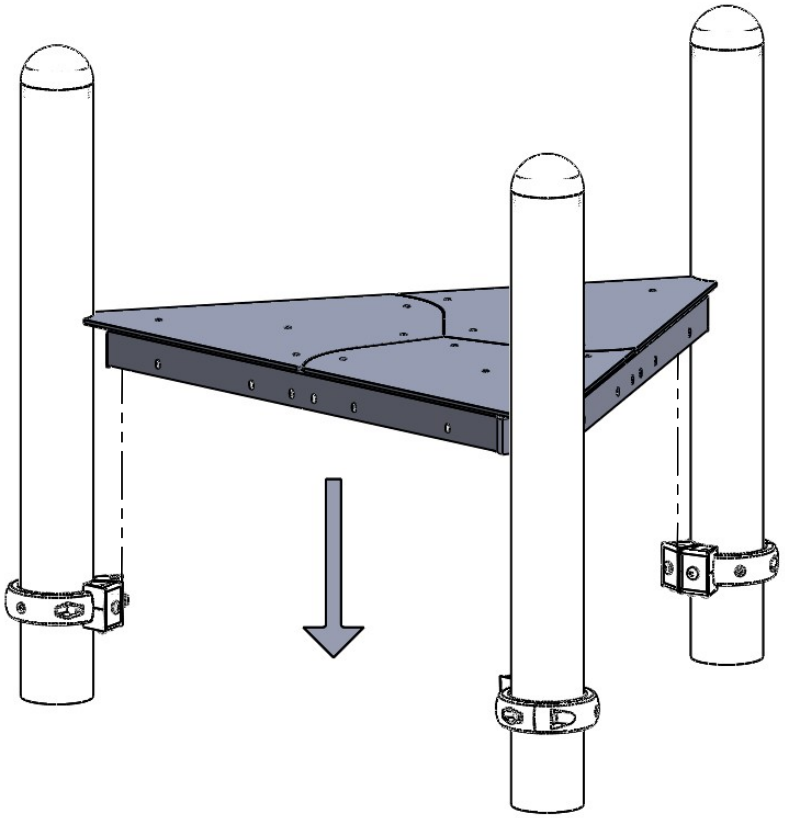


3

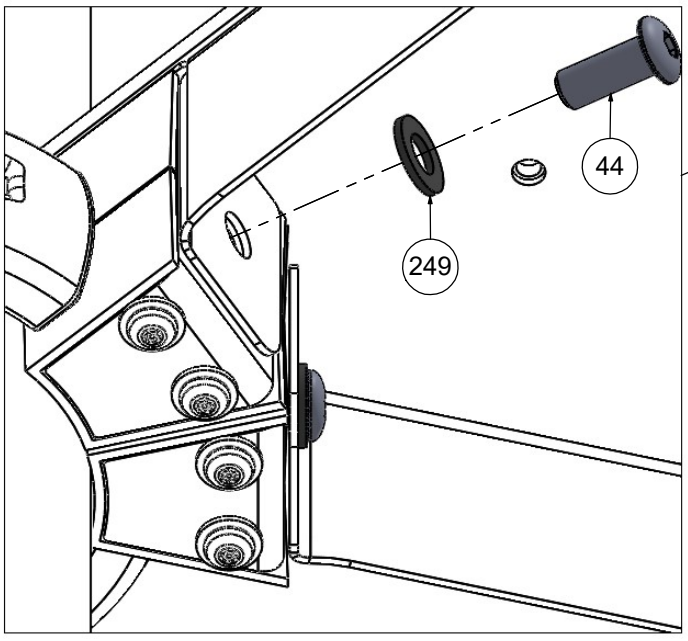


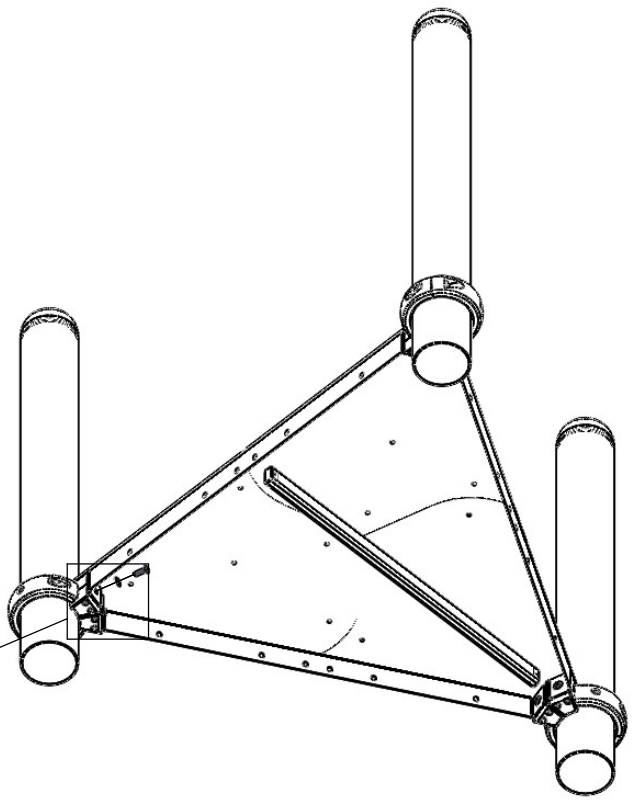


4



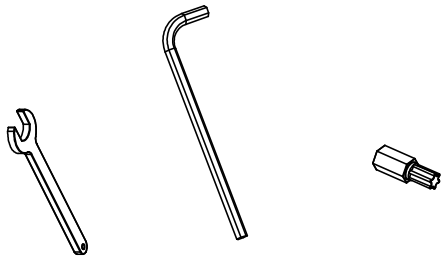
5





INST_12_25 3/3

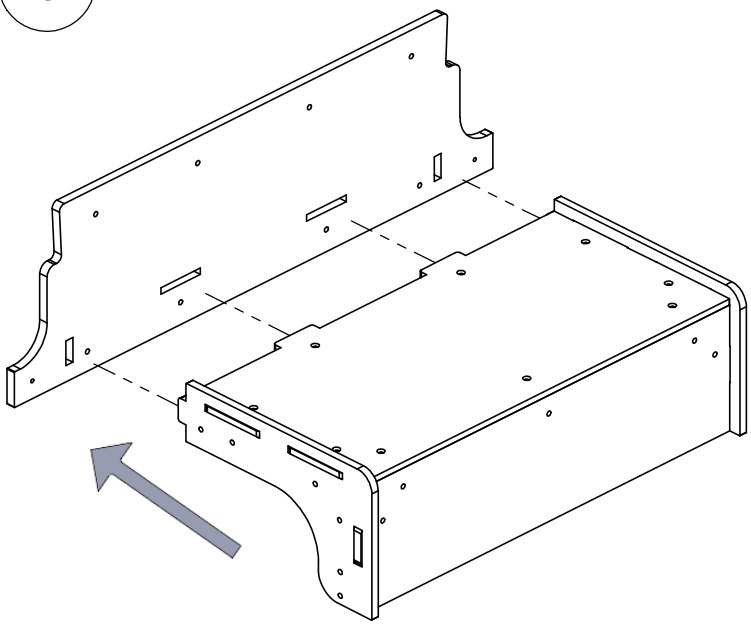
INST_12_39



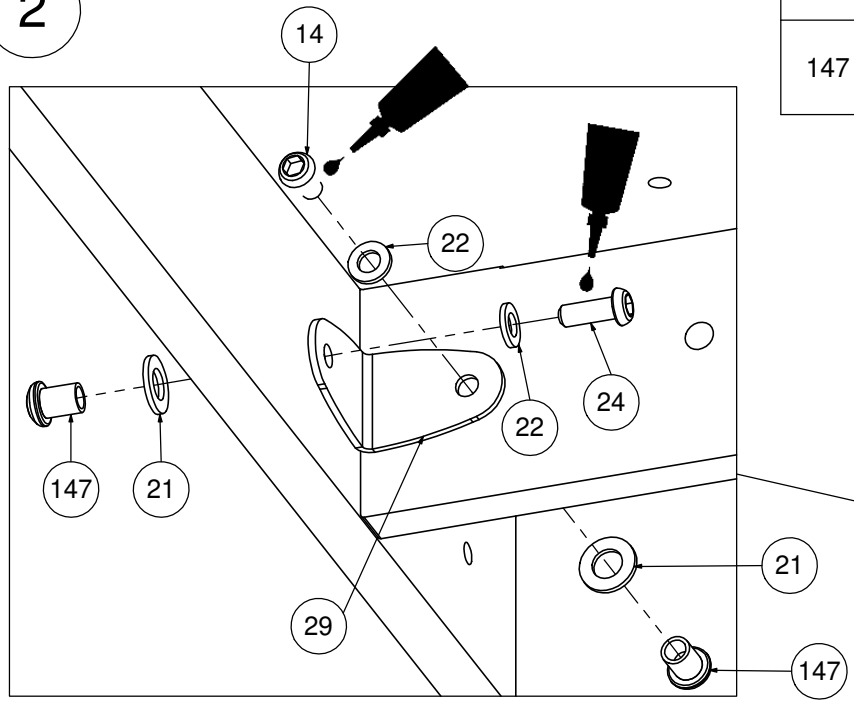
Nr. 10 Nr. 4 Nr. T30

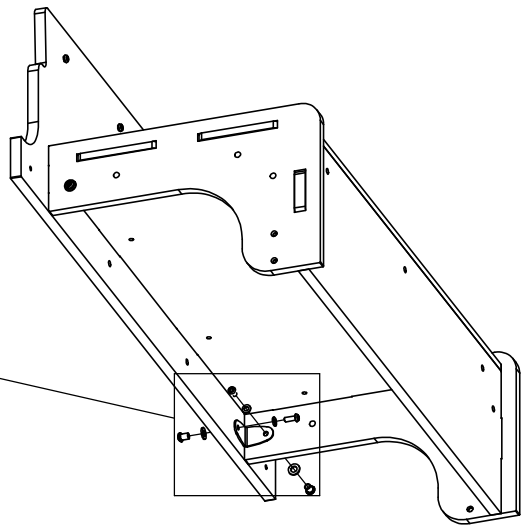
Nr	Σ	Element		
10	8		DIN 9021	6x18
11	2		DIN 1587	M6
14	2		ISO 7380	M6x12
15	4		ISO 7380	M6x30
16	6	ϕ2,1	-	K1_d21_B
17	6	ϕ2,1	-	Z1_d21_B
18	6		DIN 985	M6 (OC)
21	6		DIN 125	8x16
22	12		DIN 125	6x12
24	4		ISO 7380	M6x16
25	2		ISO 7380	M6x35
29	4		-	K_5_A2_g2_G_v2
58	1		-	LOCTITE
124	2		DIN 7991	M6x20
147	6		-	M6x10

1

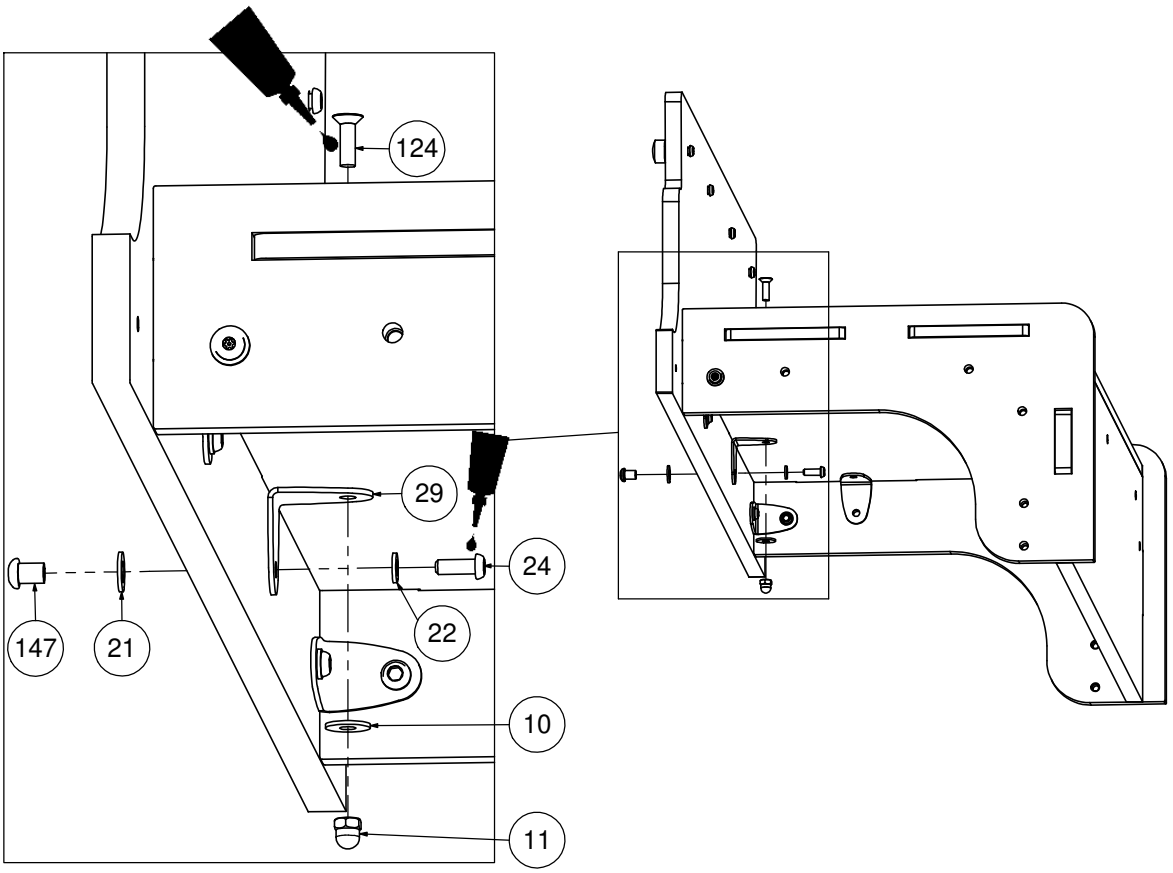


2



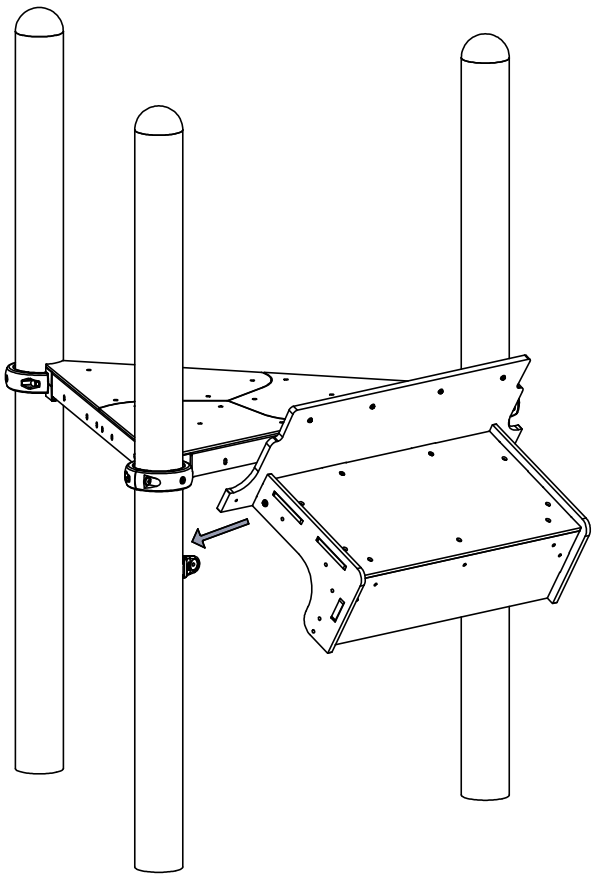


3

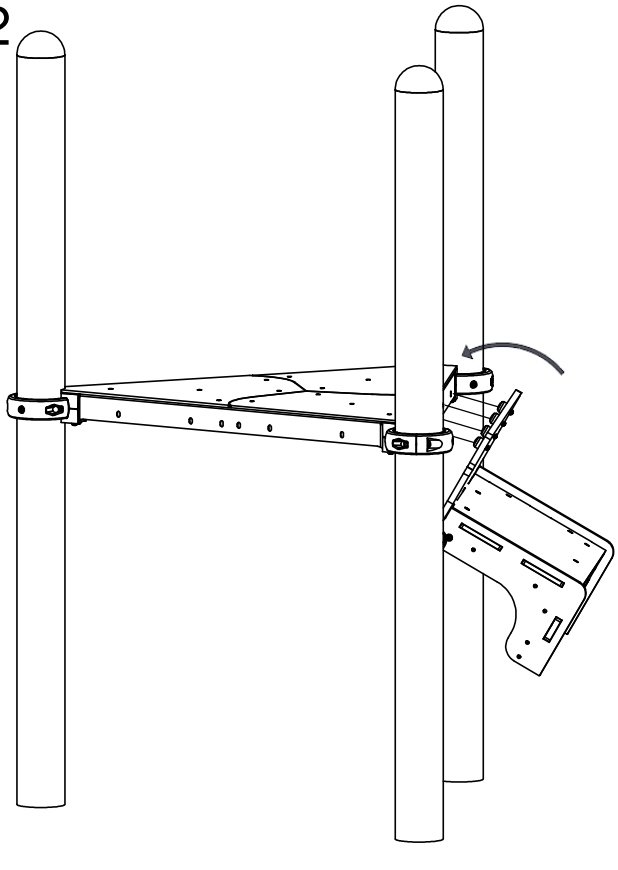


4

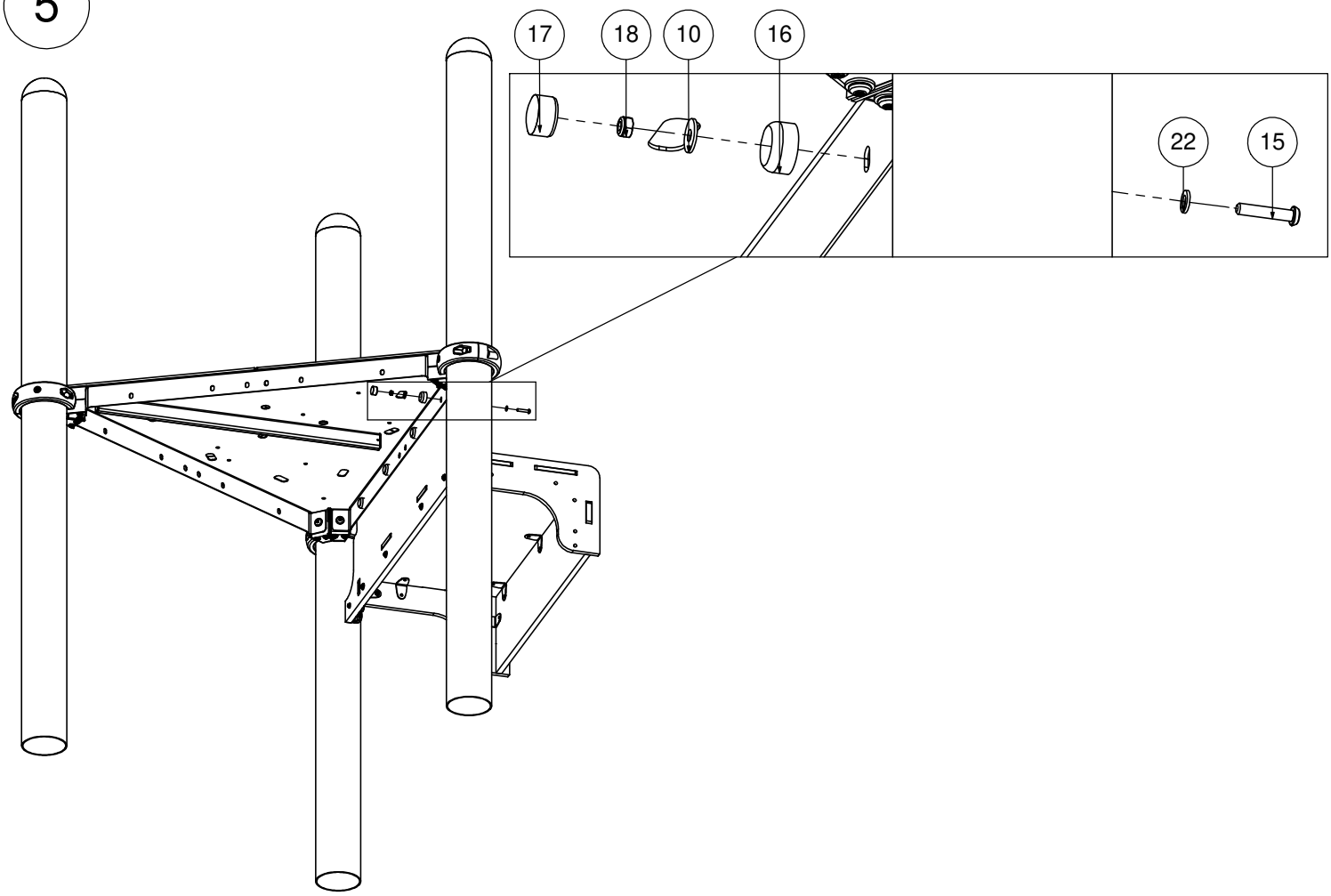
4.1



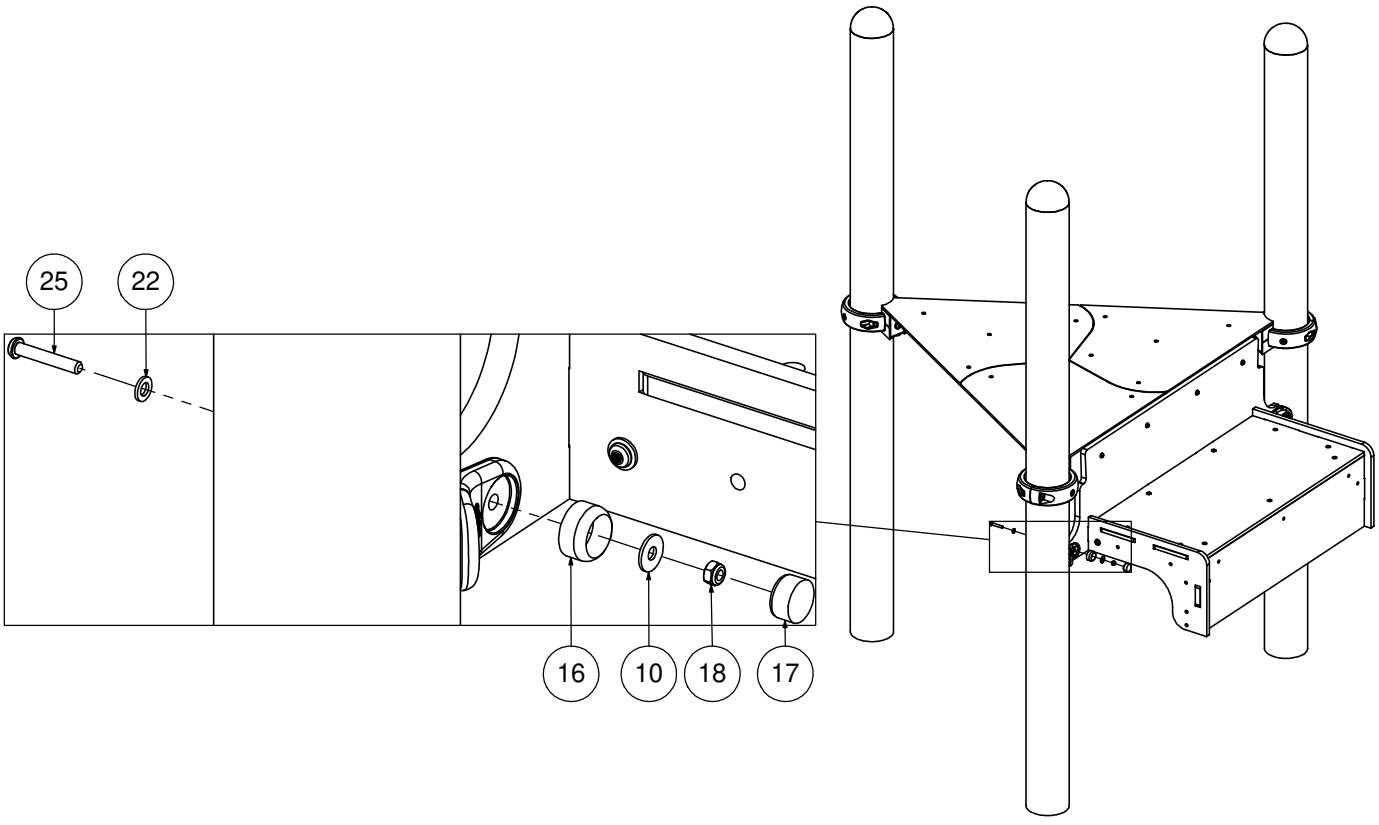
4.2



5



6

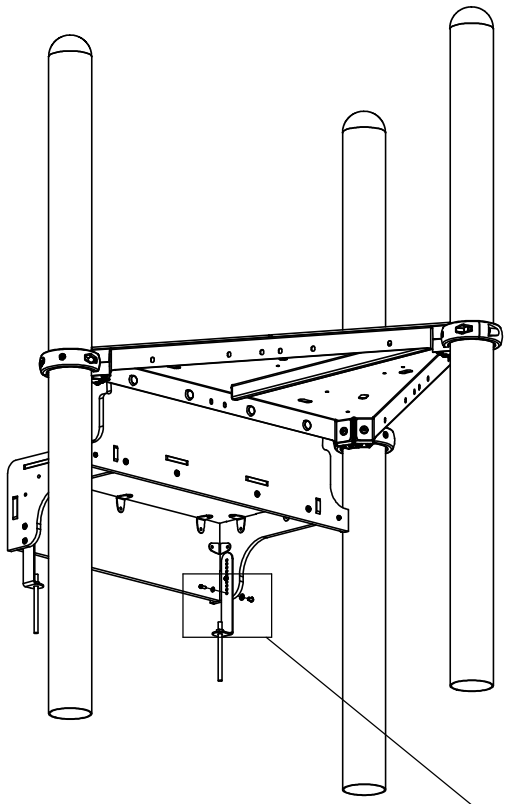


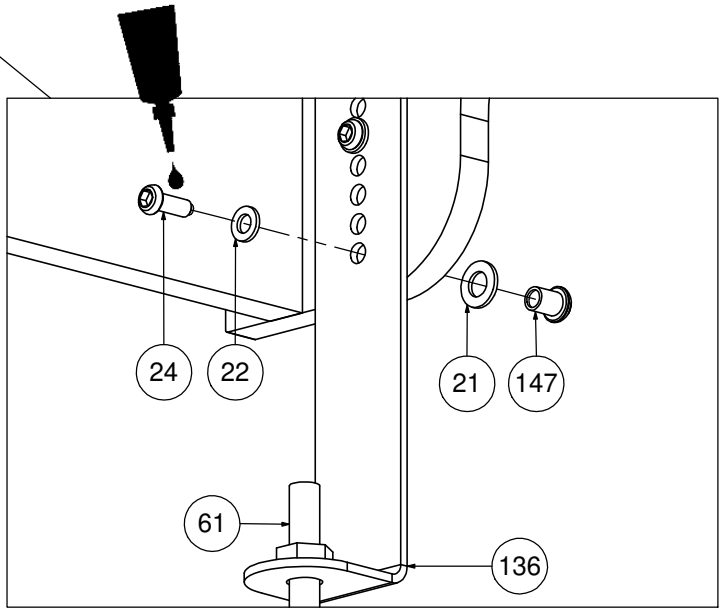
7 F5

Nr	Σ	Element		
21	4		DIN 125	8x16
22	4		DIN 125	6x12
24	4		ISO 7380	M6x16
61	2		-	KL105 (OC)
121	2		-	7100_5_A2_g3_G_v1
147	4		-	M6x10

7 F10

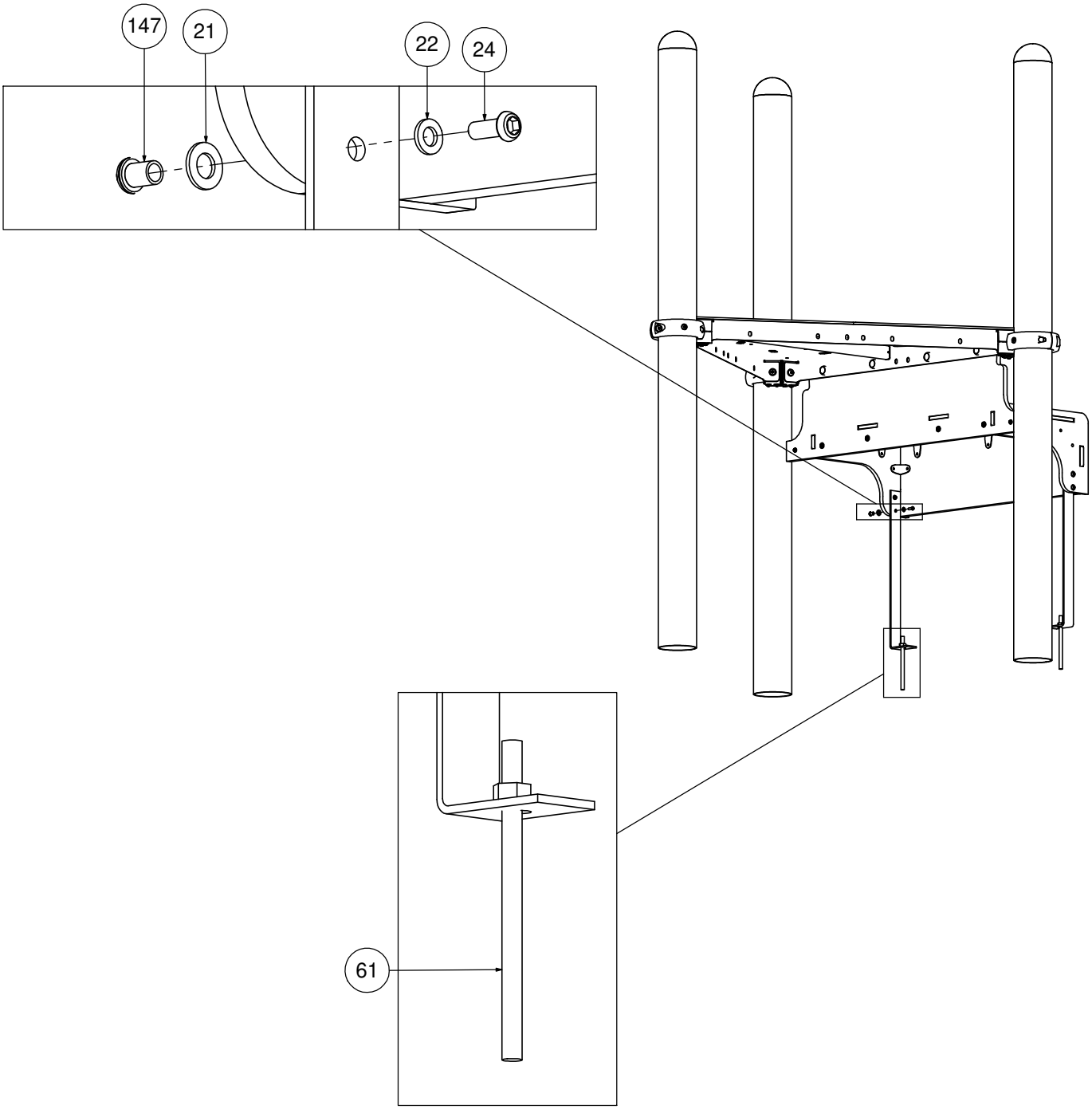
Nr	Σ	Element		
21	4		DIN 125	8x16
22	4		DIN 125	6x12
24	4		ISO 7380	M6x16
61	2		-	KL105 (OC)
136	2		-	1100_6_A2_g3_G_v2
147	4		-	M6x10





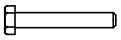
7 F40

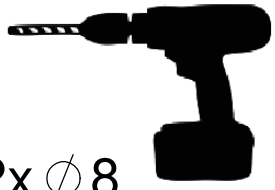
Nr	Σ	Element		
21	4		DIN 125	8x16
22	4		DIN 125	6x12
24	4		ISO 7380	M6x16
61	2		-	KL105 (OC)
147	4		-	M6x10



7 N

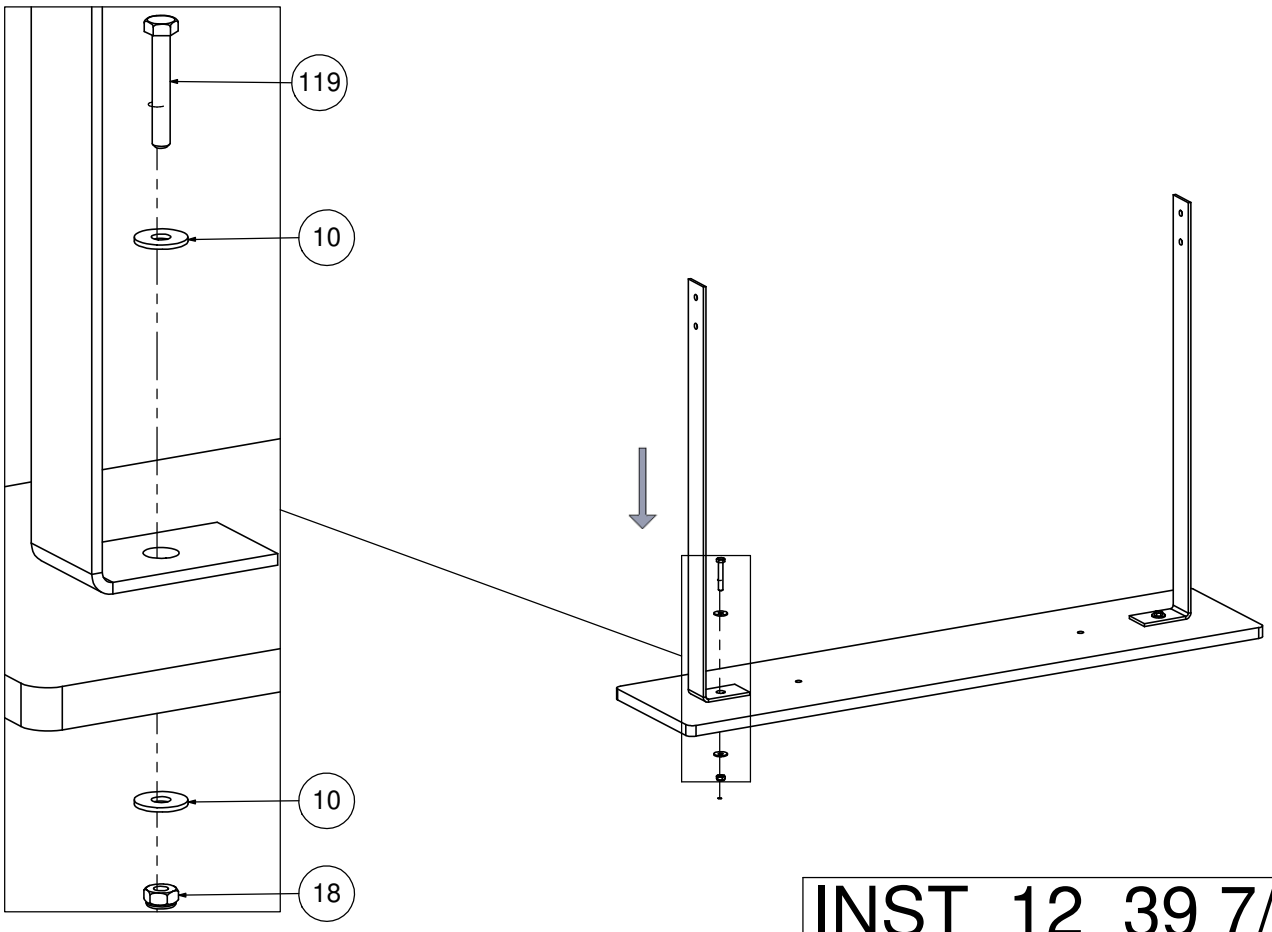
7.1

Nr	Σ	Element		
10	4		DIN 9021	6x18
18	2		DIN 985	M6 (OC)
21	4		DIN 125	8x16
22	4		DIN 125	6x12
24	4		ISO 7380	M6x16
119	2		DIN 933	M6x40
147	4		-	M6x10

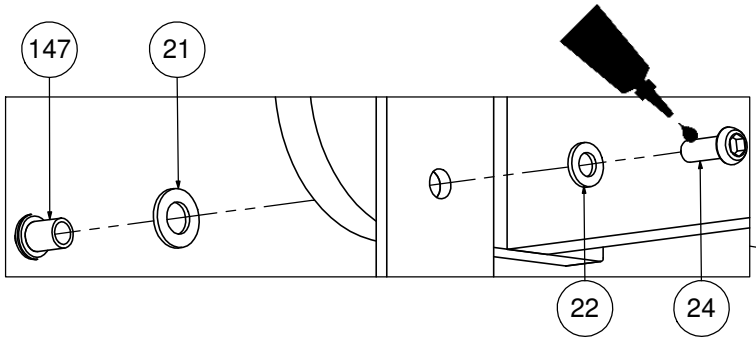


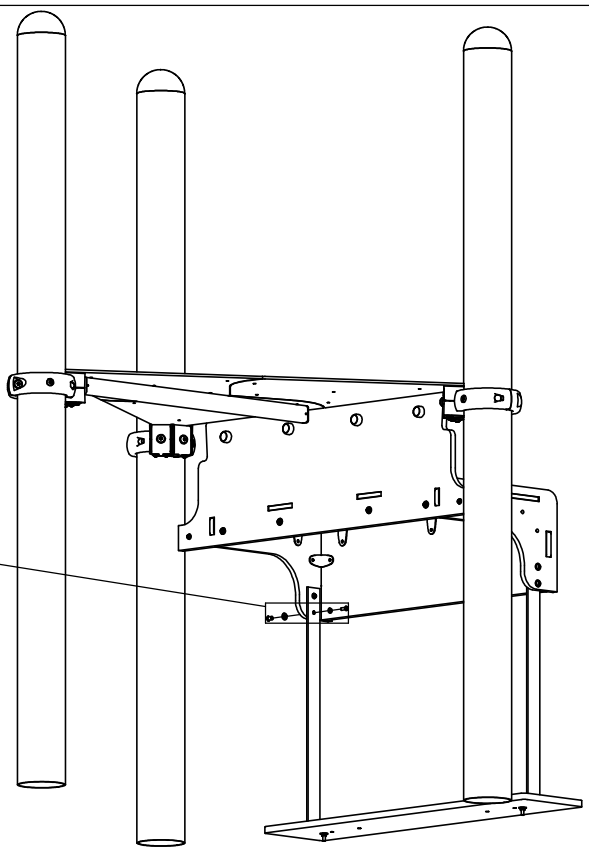
2x ∅8

7.2

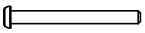


7.3

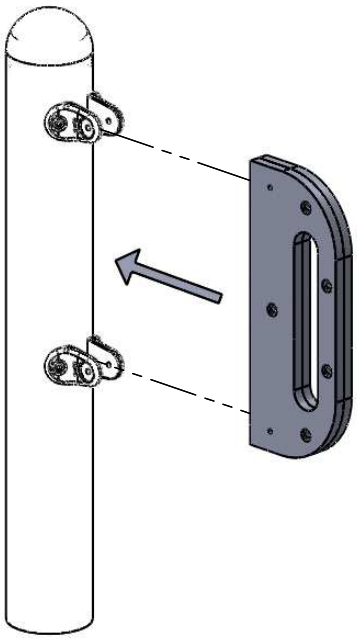


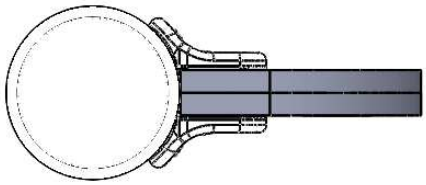


INST_12_55

Nr	Σ	Element		
10	4		DIN 9021	6x18
16	4		-	K1_d21_B
17	4		-	Z1_d21_B
18	2		DIN 985	M6
101	2		ISO 7380	M6x60

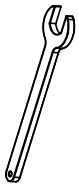
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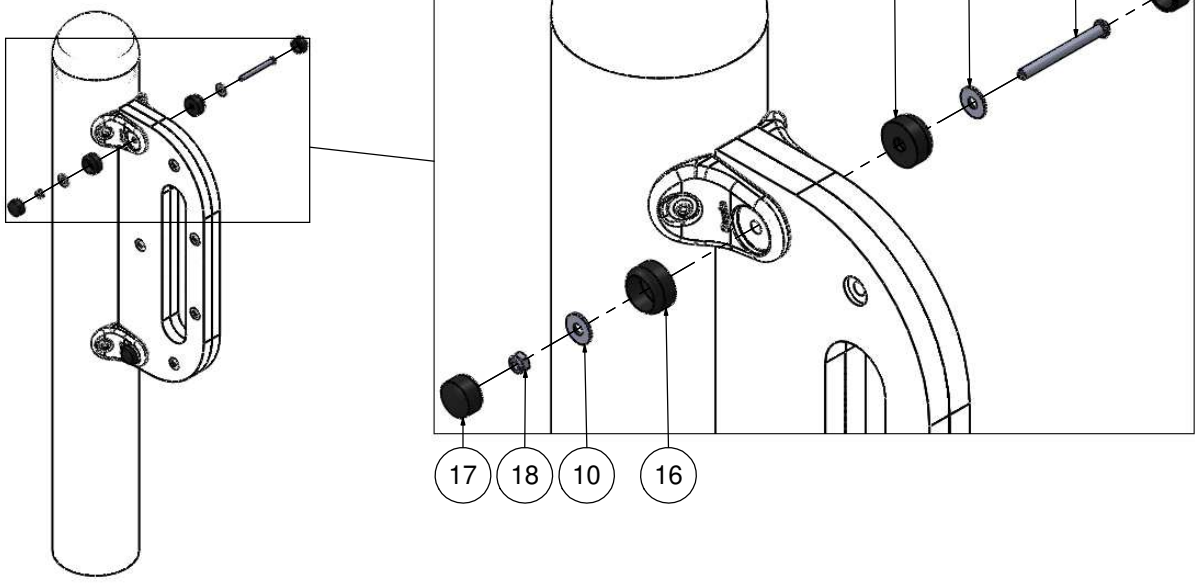


Nr. 4

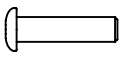


Nr. 10

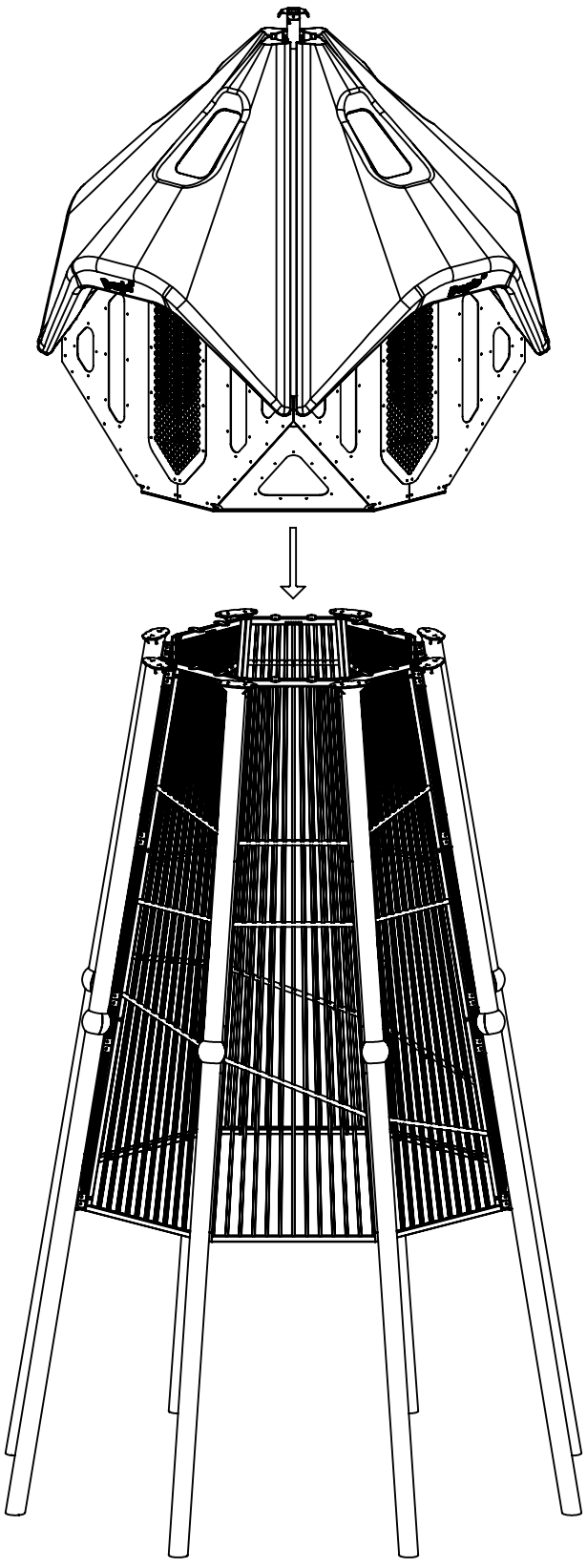
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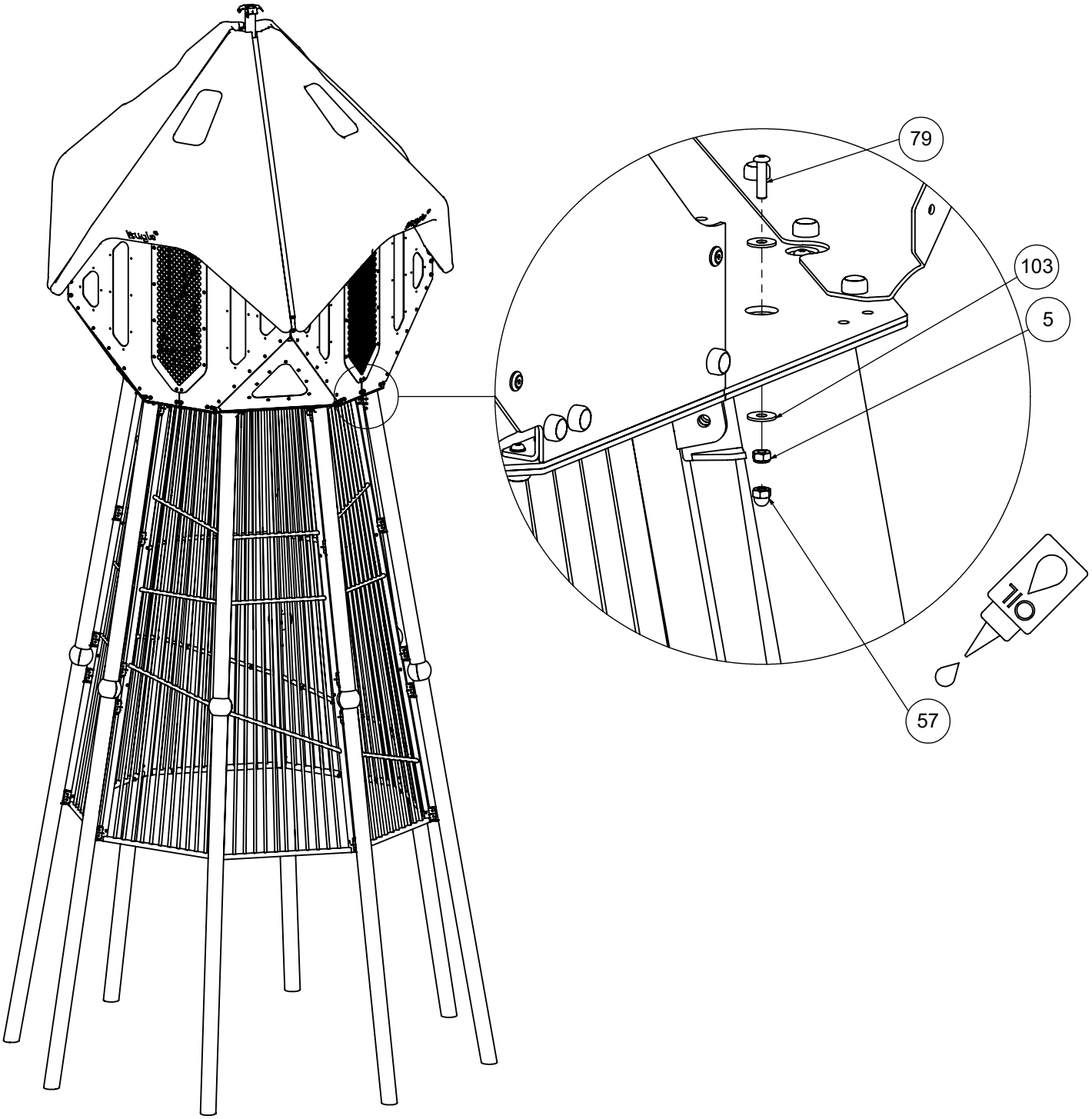
INST_14_36

Nr	Σ	Element		
5	16		DIN 985	M10
44	32		ISO 7380	M10x25
57	48		DIN 1587	M10
79	16		ISO 7380	M10x40
103	96		DIN 9021	10x30
579	1		-	OIL

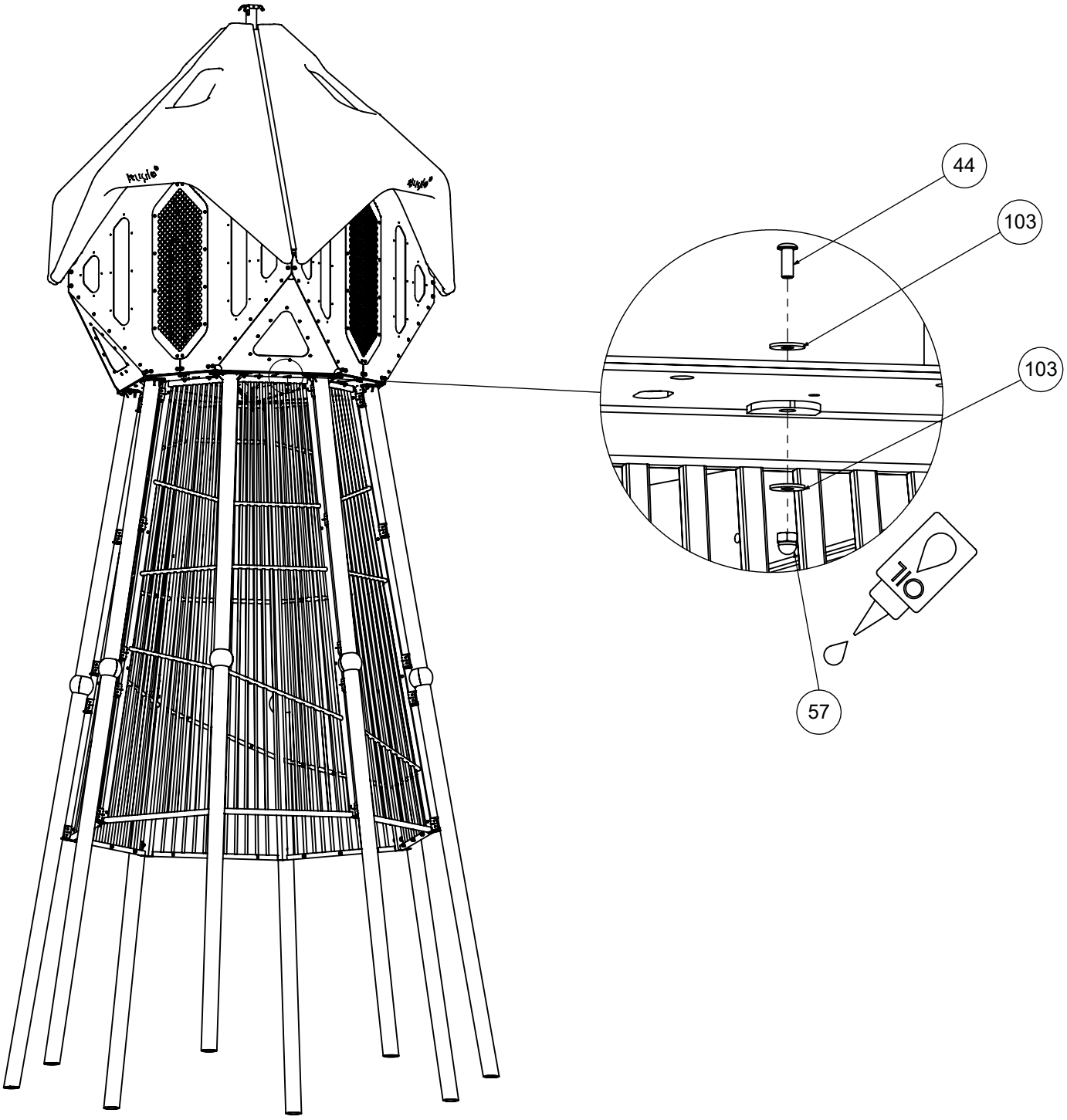
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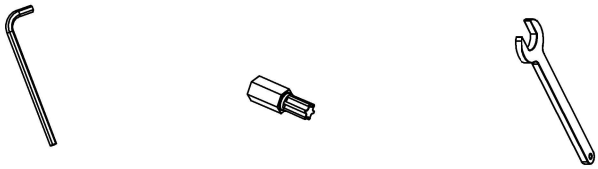
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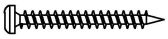
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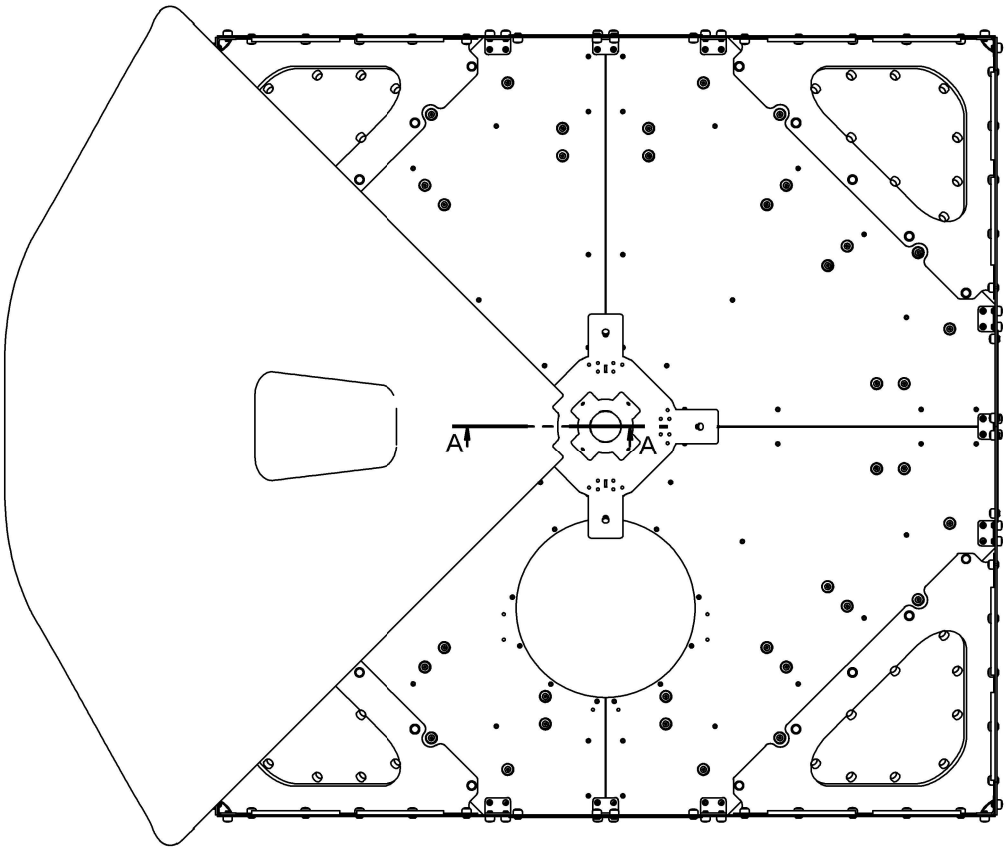
INST_14_37



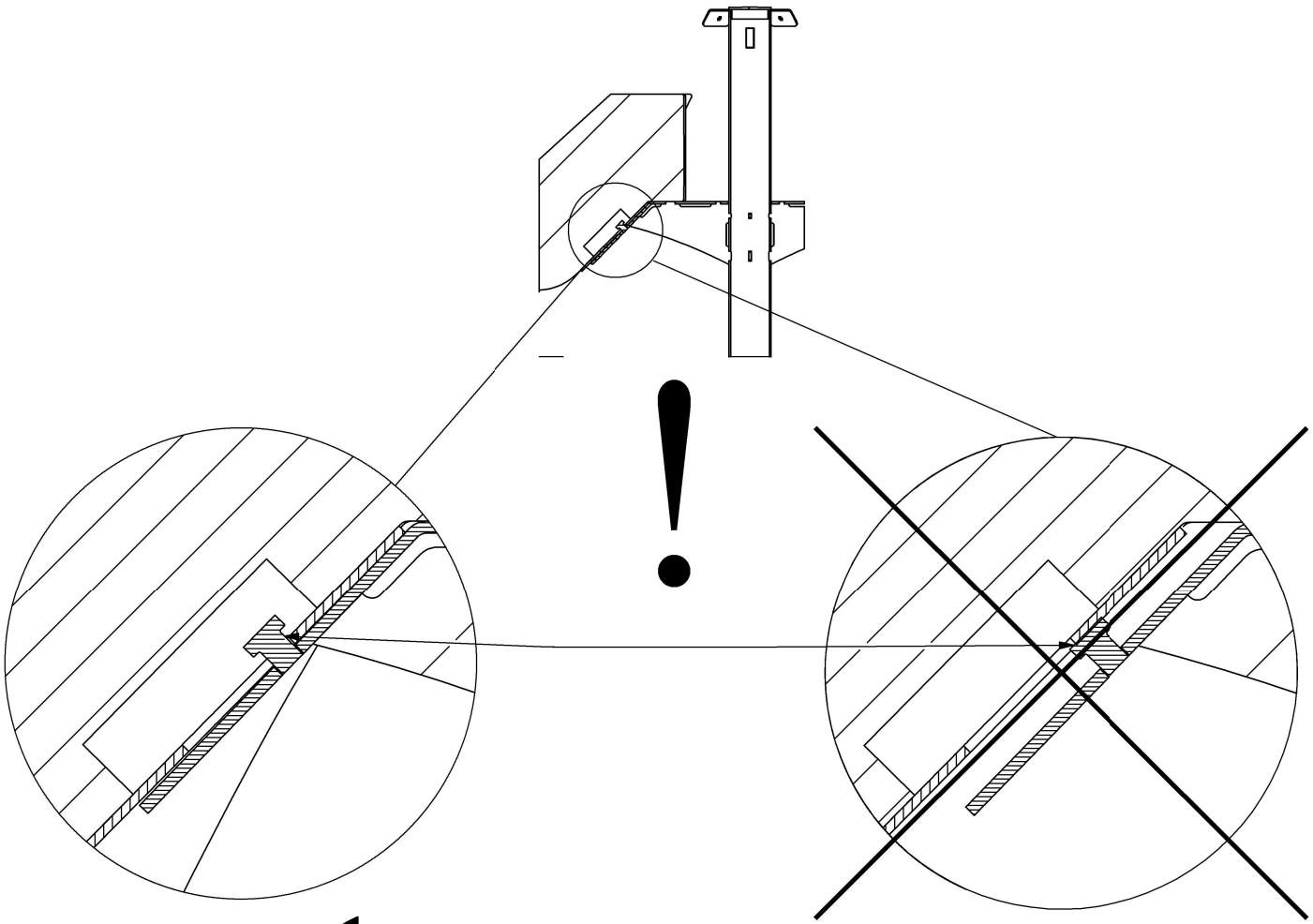
Nr. 4 Nr. T25, T20 Nr. 10

Nr	Σ	Element		
1	100		-	S6x60
2	100		-	W6x60
10	8		DIN 9021	6x18
13	4		ISO 7380	M6x20
16	4		-	K1_d21_B
17	4		-	Z1_d21_B
18	4		DIN 985	M6 (OC)
19	4		ISO 7380	M6x40
22	80		DIN 125	6x12
24	12		ISO 7380	M6x16
26	64		-	S4x40
518	1		-	ZASP_88,9

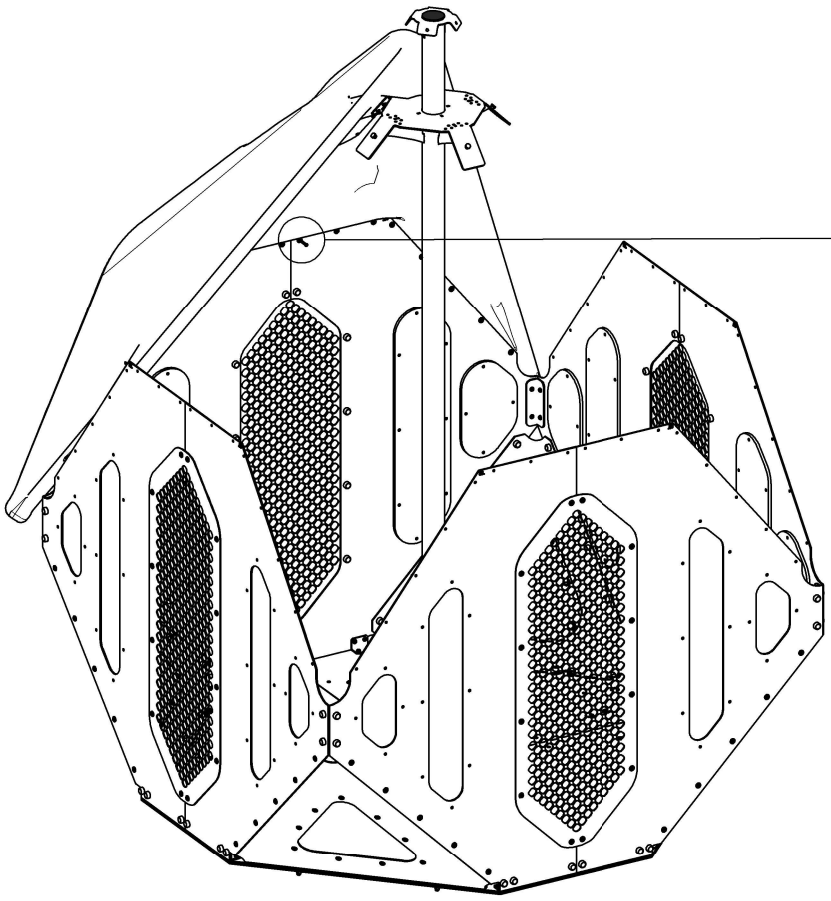
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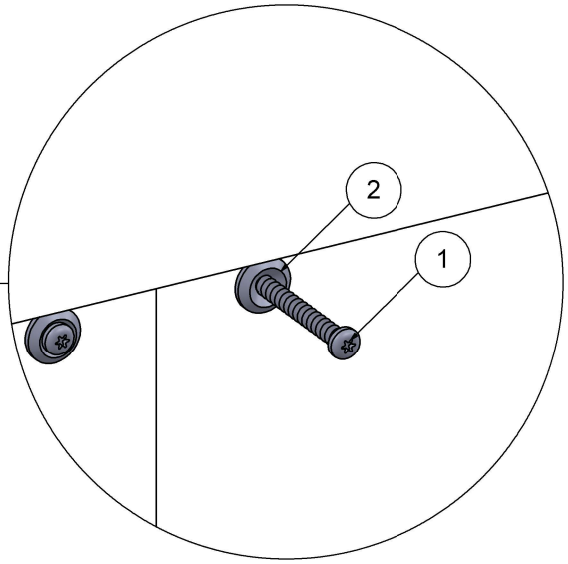


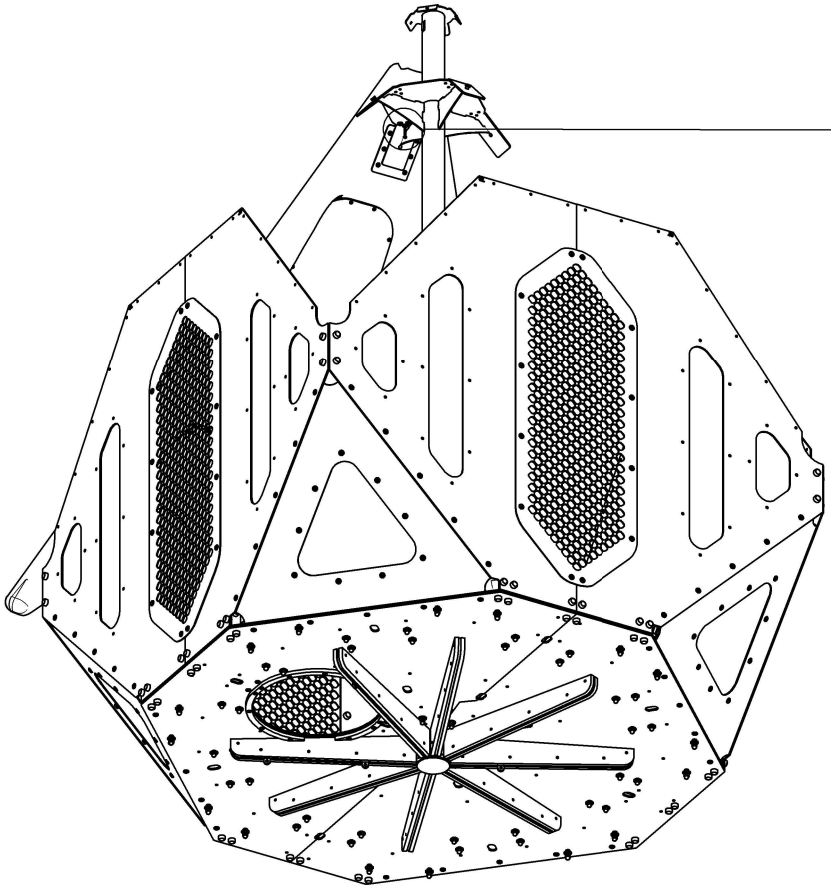
A-A (1 : 15)

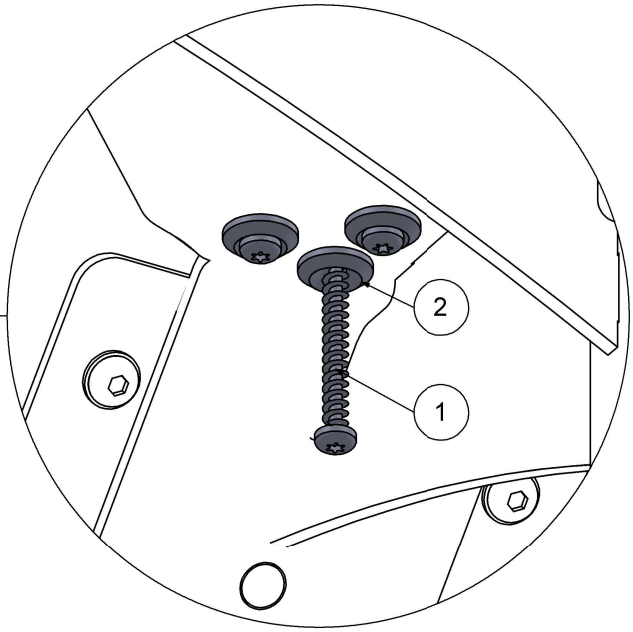


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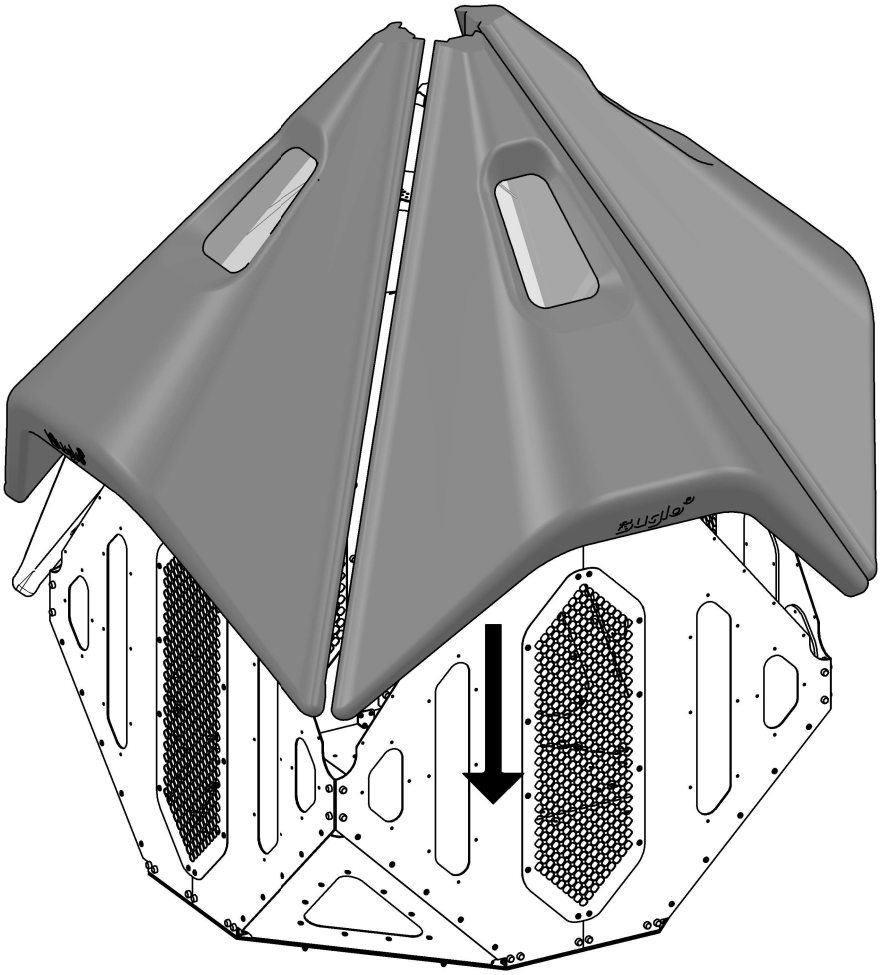




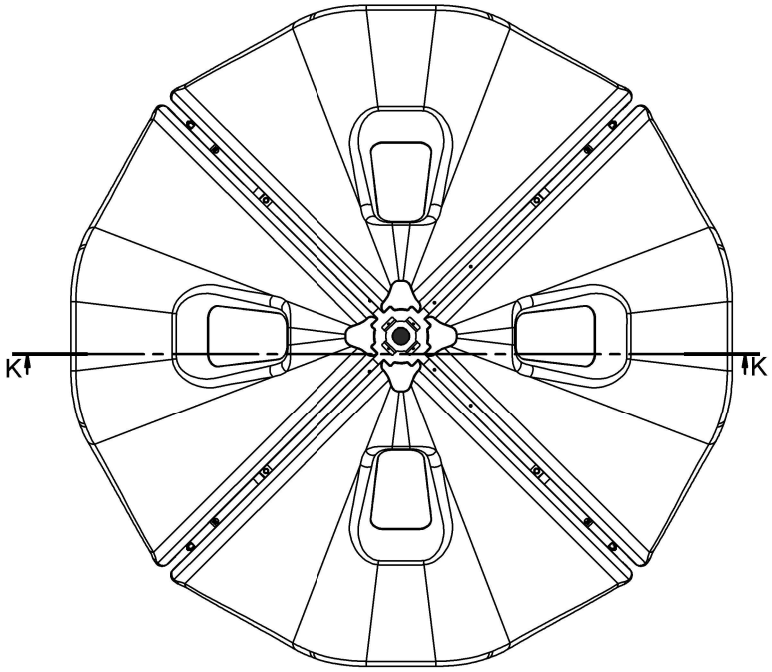




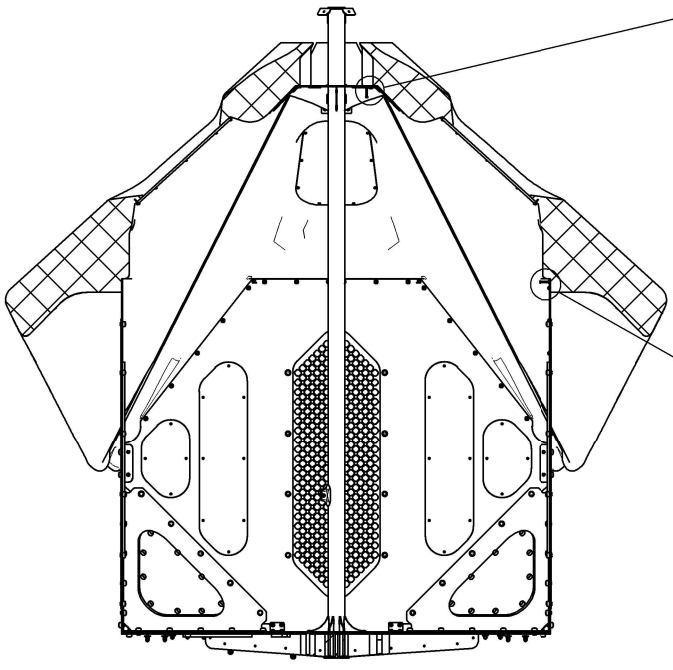
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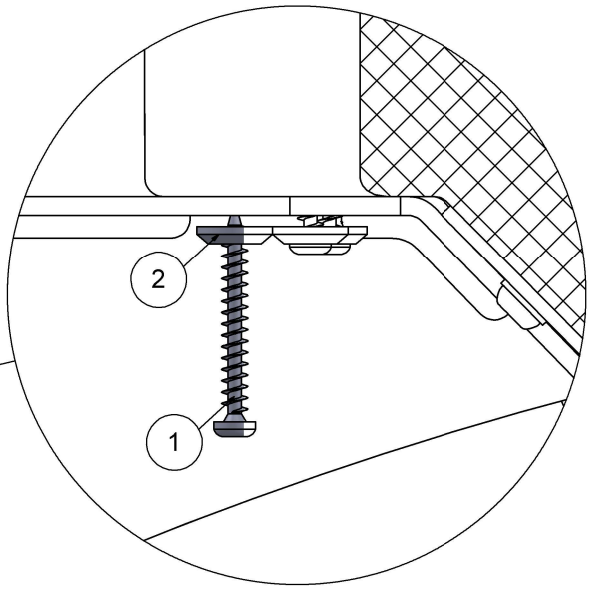


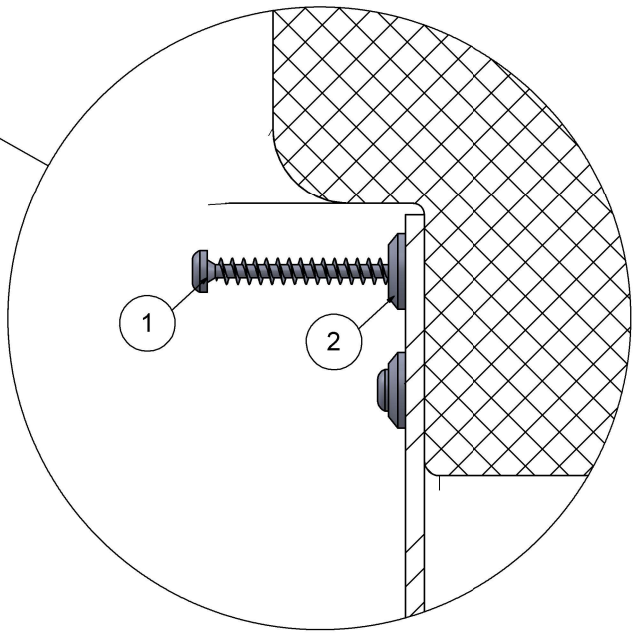
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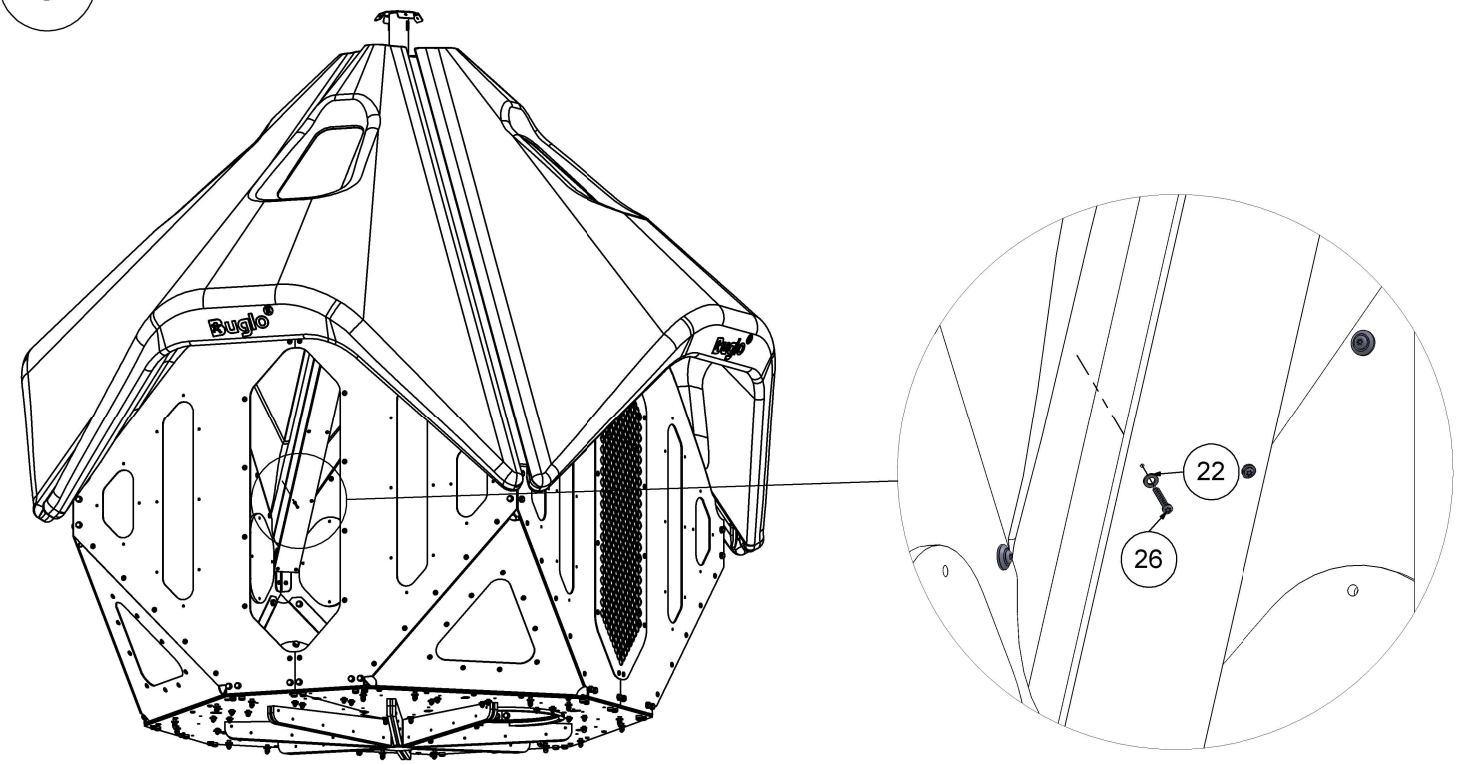
K-K (1 : 40)



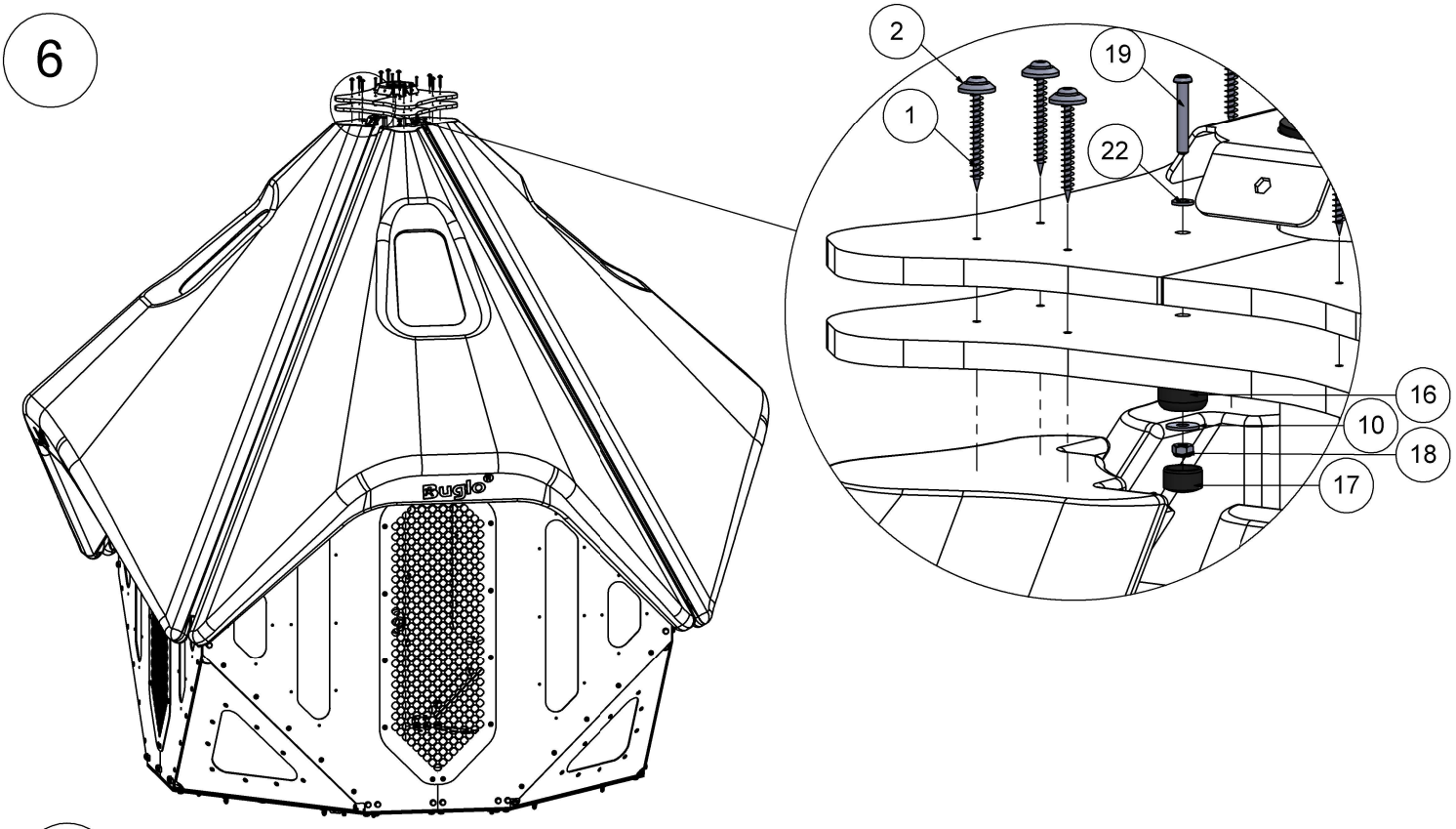




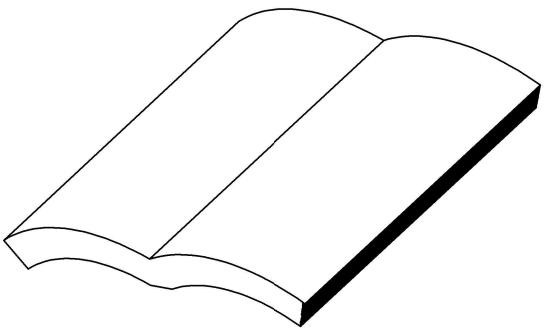
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6



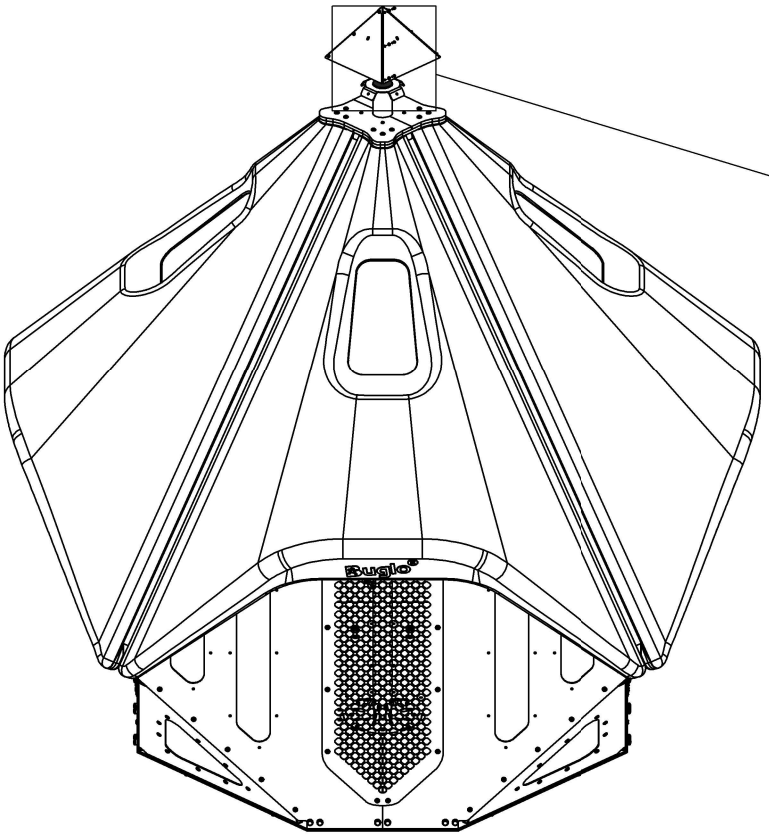
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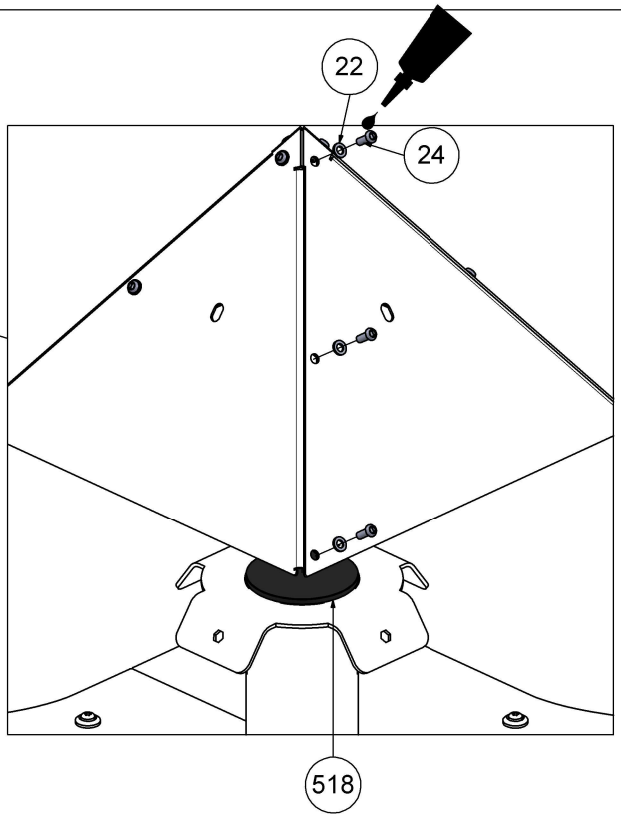


14....

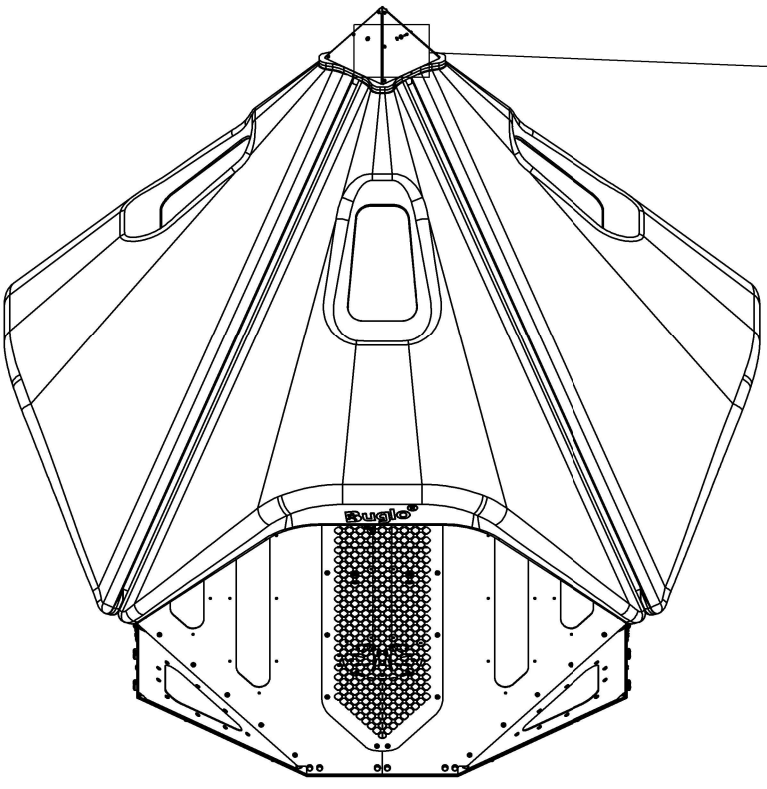
INST_14_37 6/7

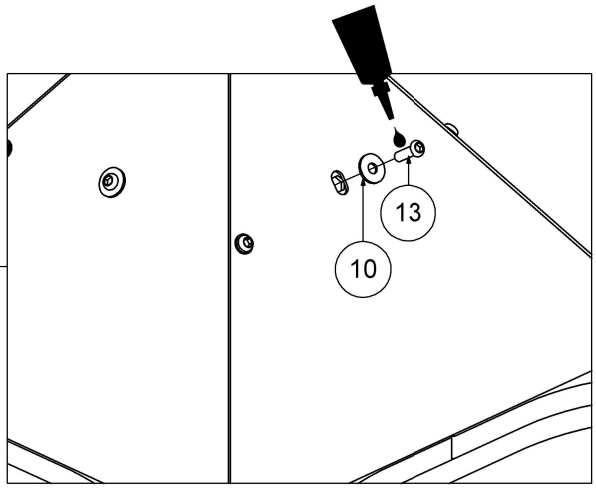
8





9





INST_14_39A



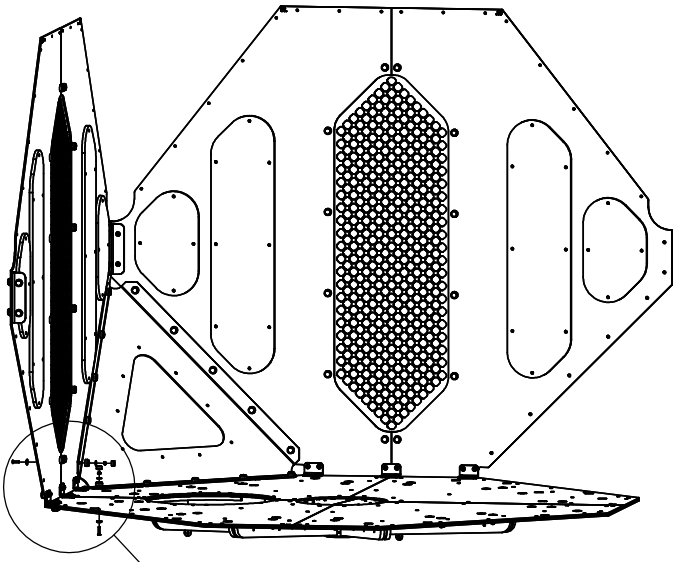
Nr. 4

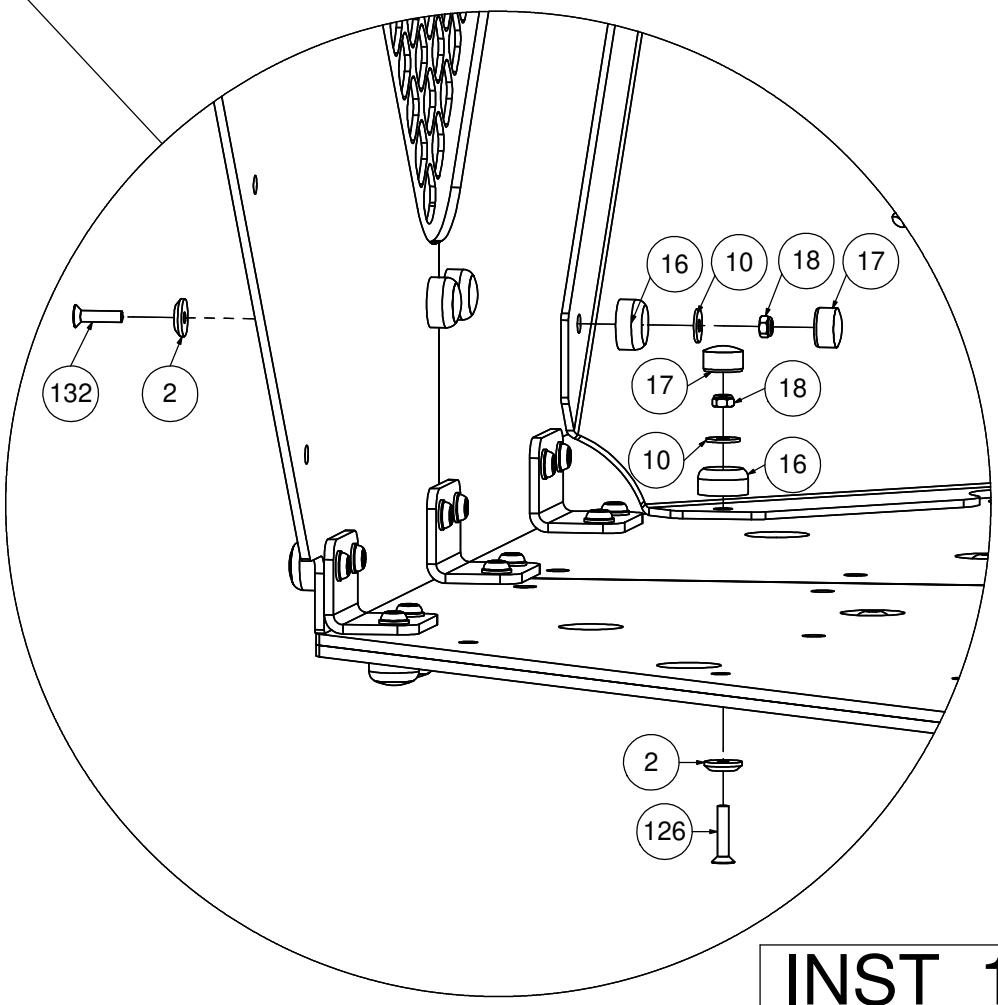


Nr. 10

Nr	Σ	Element		
2	15		-	W6x60
10	15		DIN 9021	6x18
16	15		-	K1_d21_B
17	15		-	Z1_d21_B
18	15		DIN 985	M6 (OC)
126	5		DIN 7991	M6x30
132	10		DIN 7991	M6x25

1





INST_14_39A 1/1

INST_14_39B



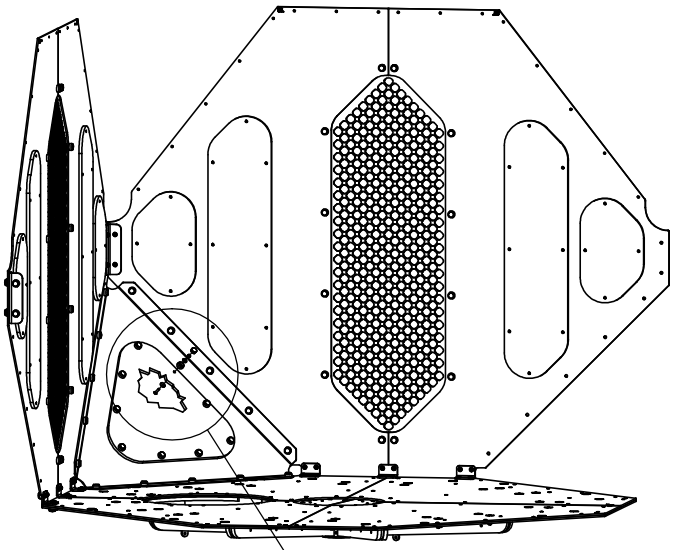
Nr. 4

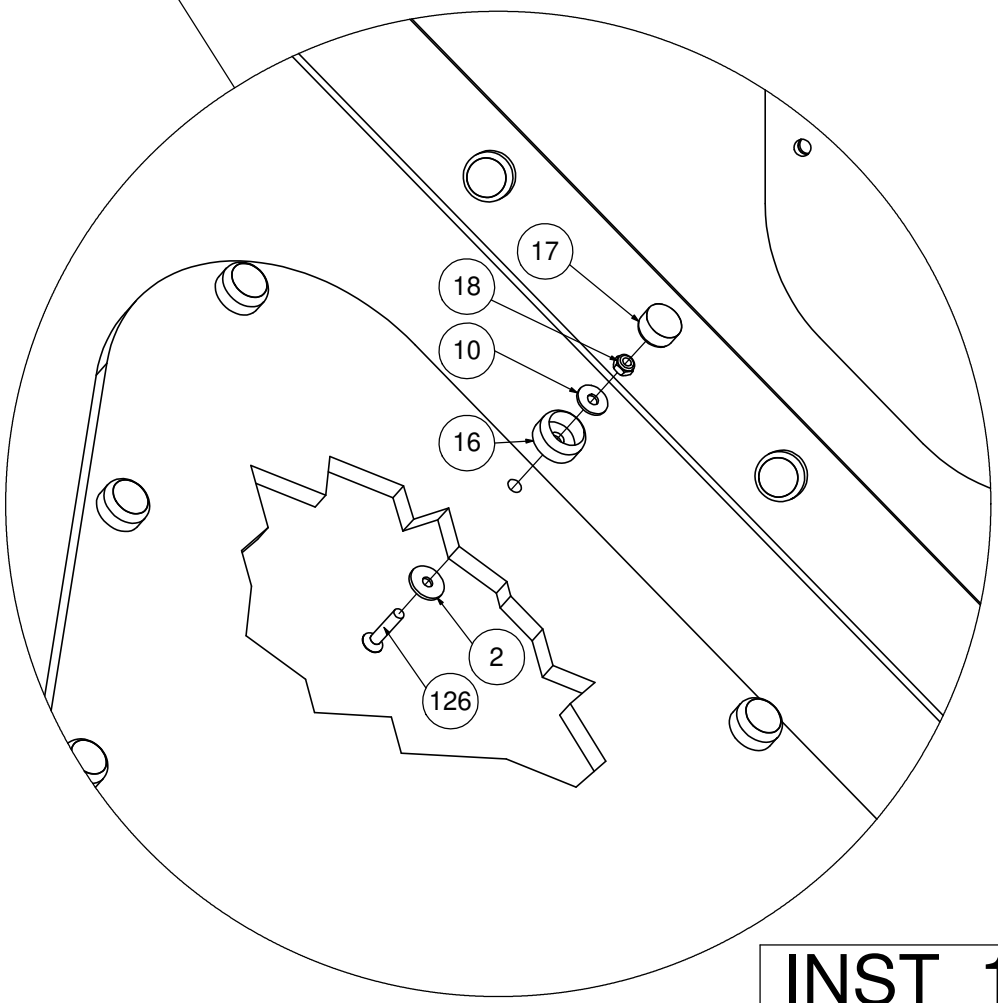


Nr. 10

Nr	Σ	Element		
2	9		-	W6x60
10	9		DIN 9021	6x18
16	9		-	K1_d21_B
17	9		-	Z1_d21_B
18	9		DIN 985	M6 (OC)
126	9		DIN 7991	M6x30

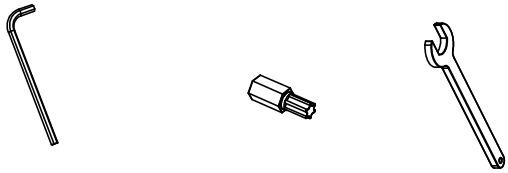
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INST_14_39B 1/1

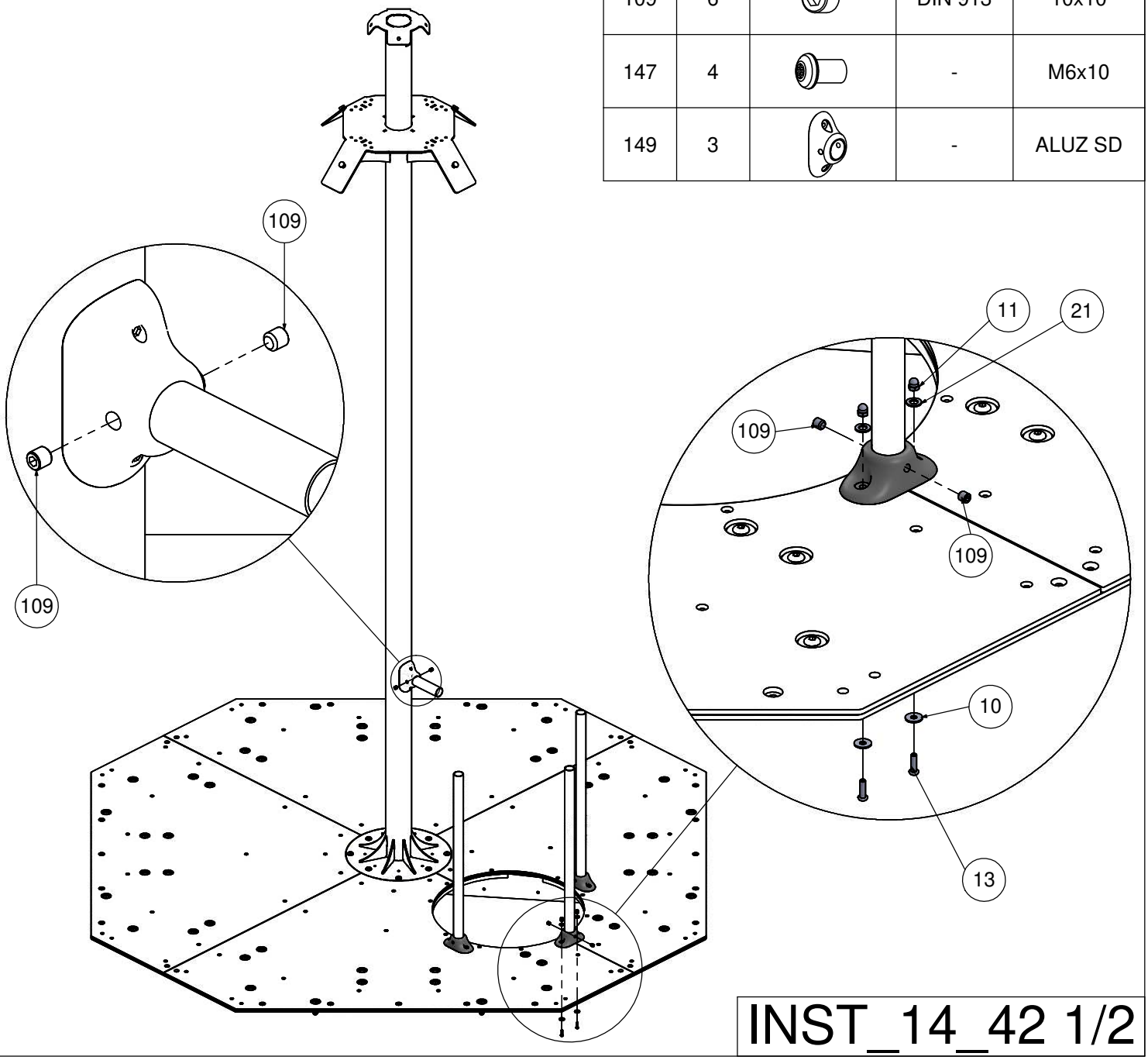
INST_14_42



Nr. 4, 5 Nr. T30 Nr. 13

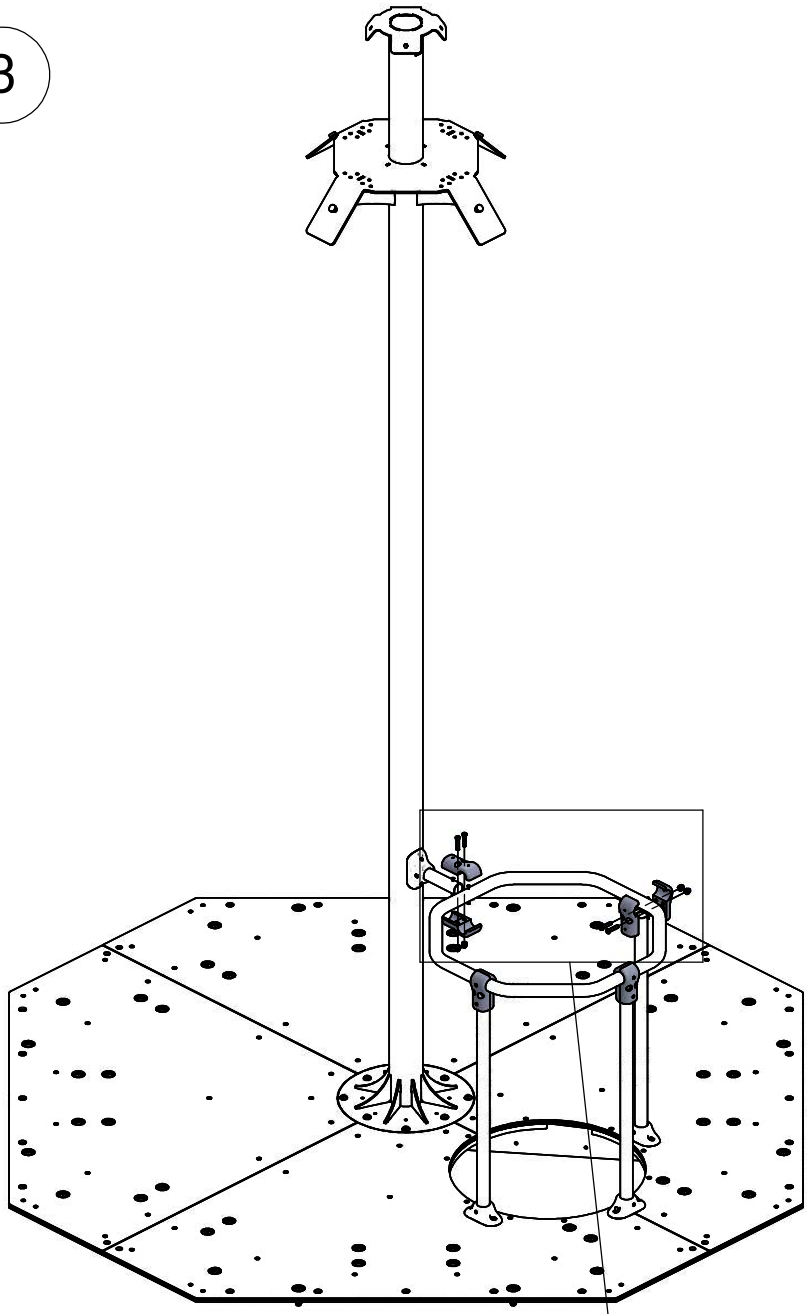
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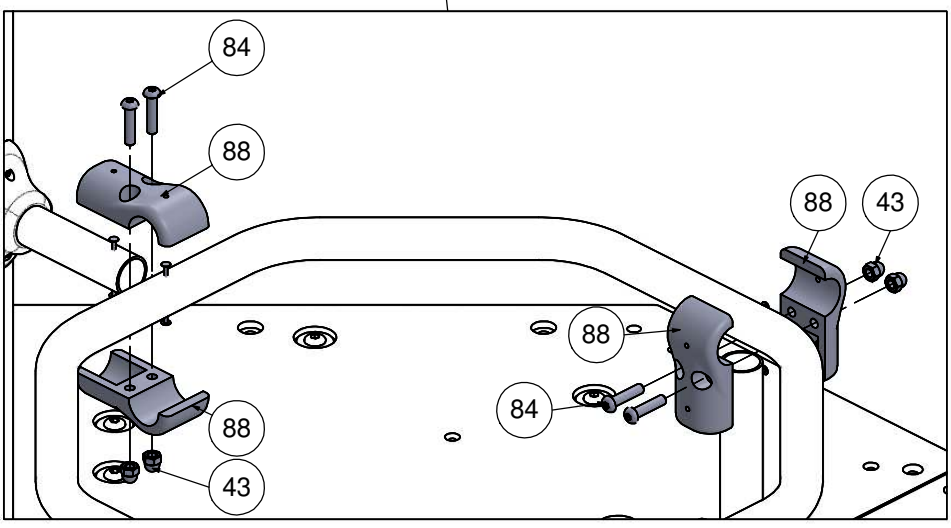
Nr	Σ	Element		
10	2		DIN 9021	6x18
11	2		DIN 1587	M6
13	6		ISO 7380	M6x20
21	10		DIN 125	8x16
43	8		DIN 1587	M8
84	8		ISO 7380	M8x35
88	4		-	ALUZ RR
109	6		DIN 913	10x10
147	4		-	M6x10
149	3		-	ALUZ SD



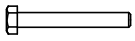
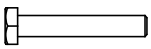
INST_14_42

3

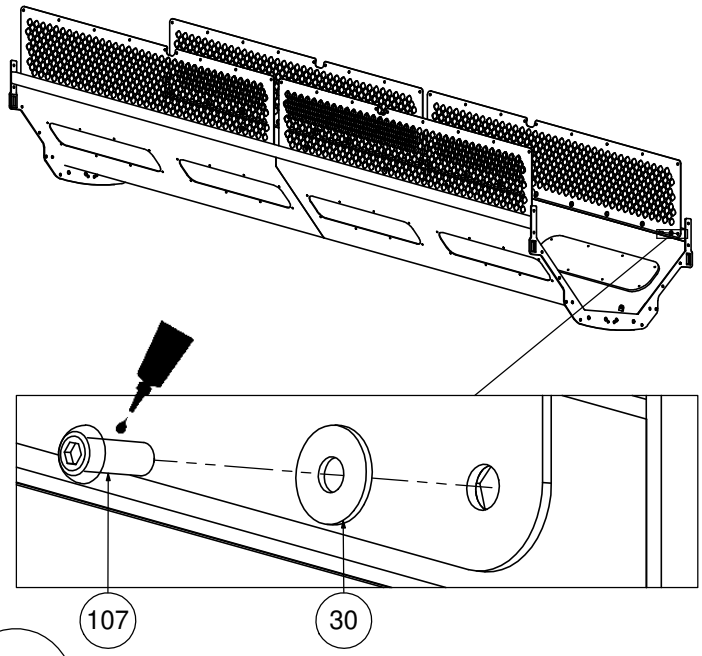




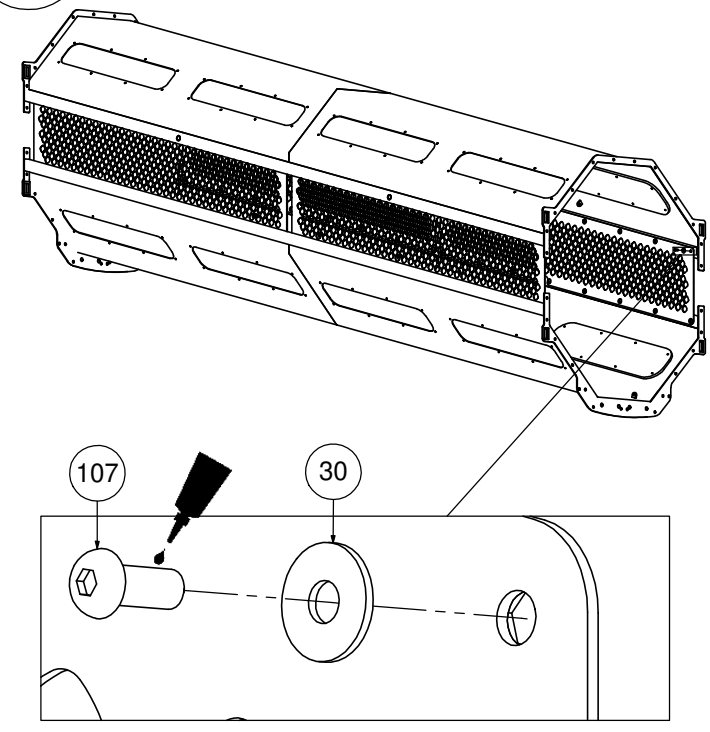
INST_14_46

Nr	Σ	Element		
3	8		-	K2_d30_B
5	4		DIN 985	M10
6	8		-	Z2_d30_B
9	40		ISO 7380	M6x25
10	80		DIN 9021	6x18
16	48		-	K1_d21_B
17	48		-	Z1_d21_B
18	40		DIN 985	M6 (OC)
21	20		DIN 125	8x16
30	72		DIN 9021	8x24
31	12		DIN 985	M8 (OC)
32	4		DIN 931	M8x60
43	4		DIN 1587	M8
45	8		ISO 7380	M8x30
58	1		-	LOCTITE
74	1		DIN 985	M12 (OC)
103	8		DIN 9021	10x30
107	64		ISO 7380	M8x20
215	4		DIN 7991	M8x30
466	4		DIN 933	M10x60

1

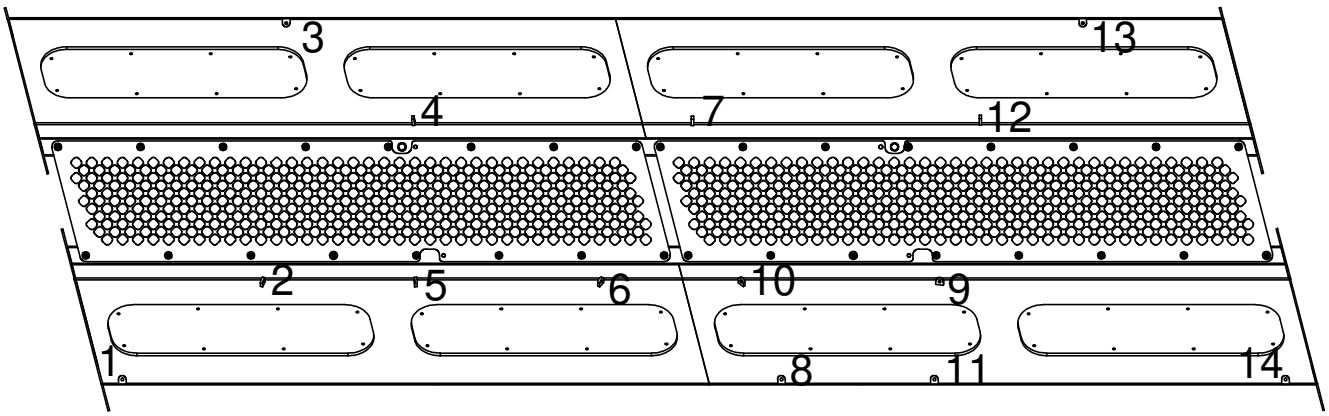


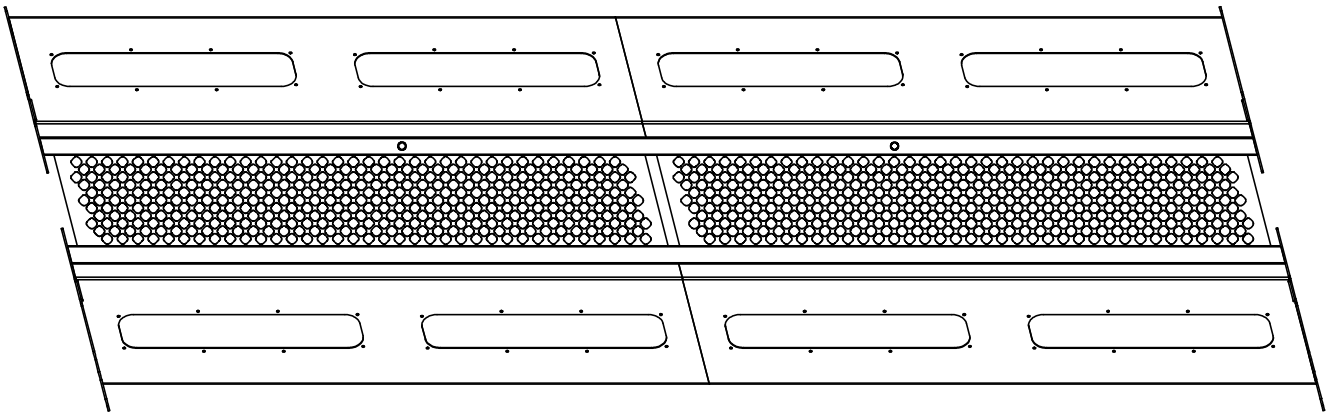
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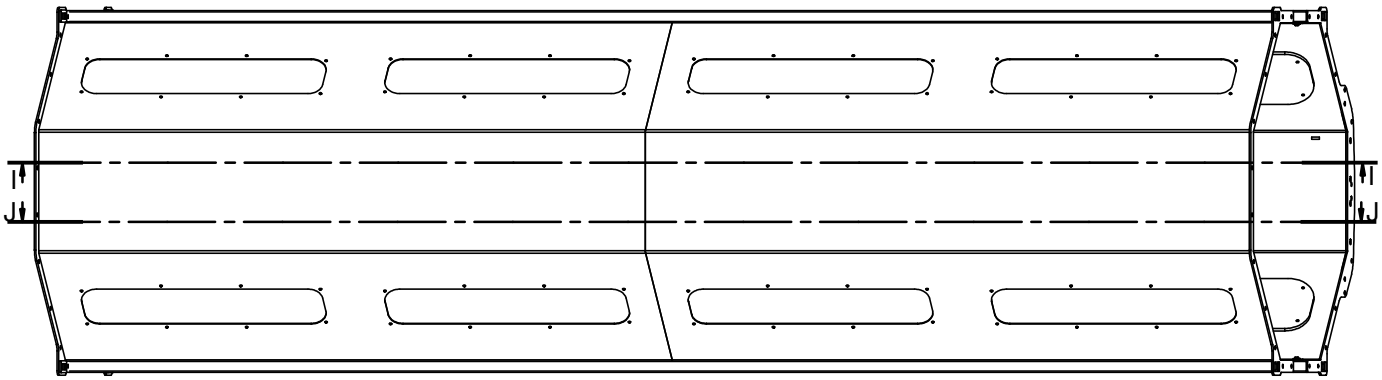


3

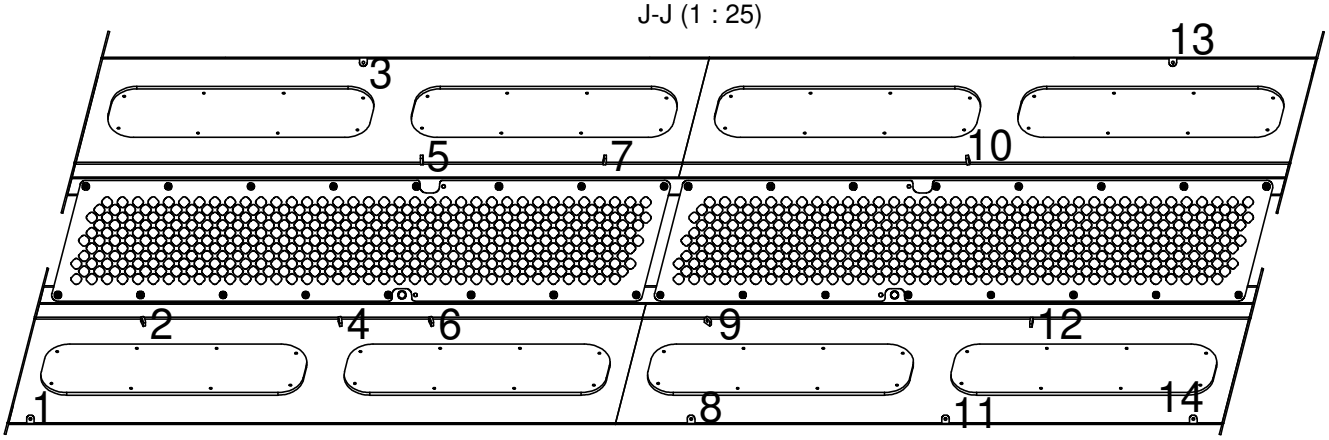
I-I (1 : 25)



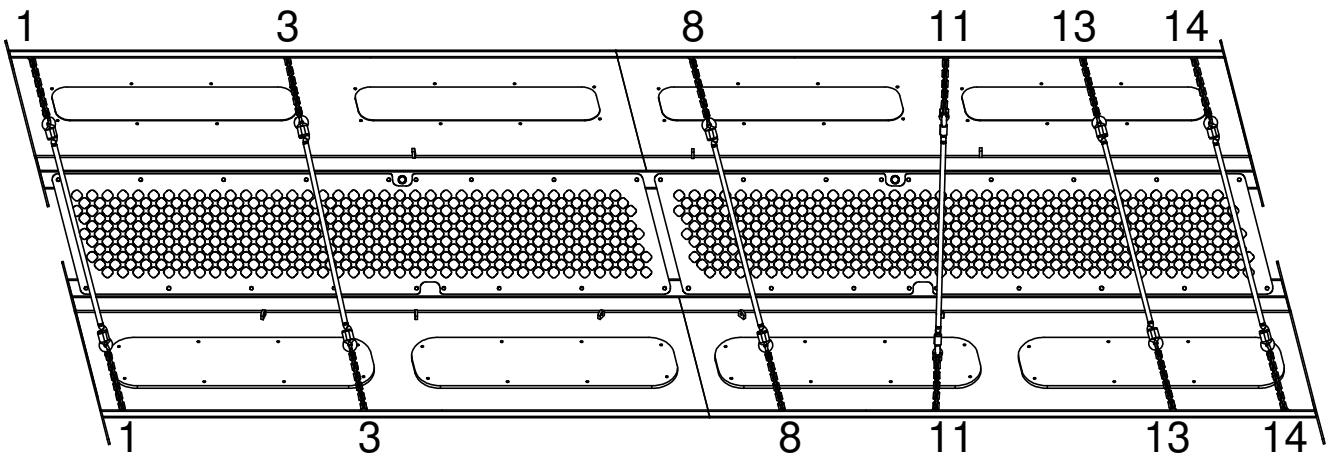


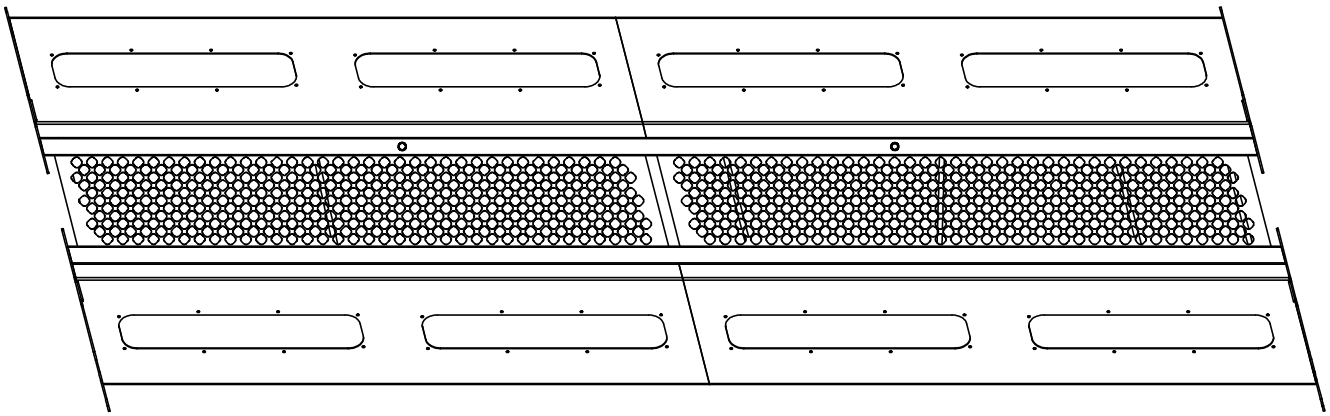


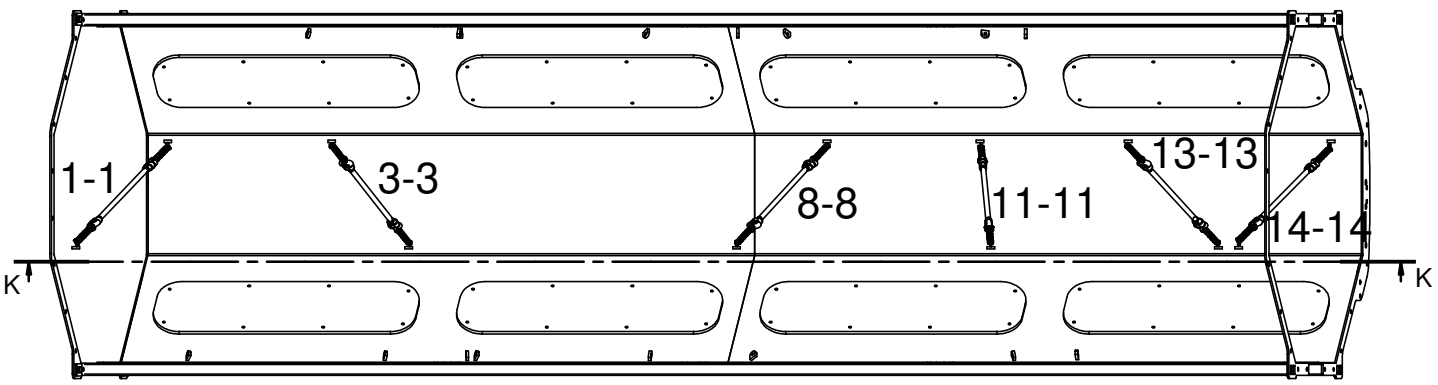
J-J (1 : 25)

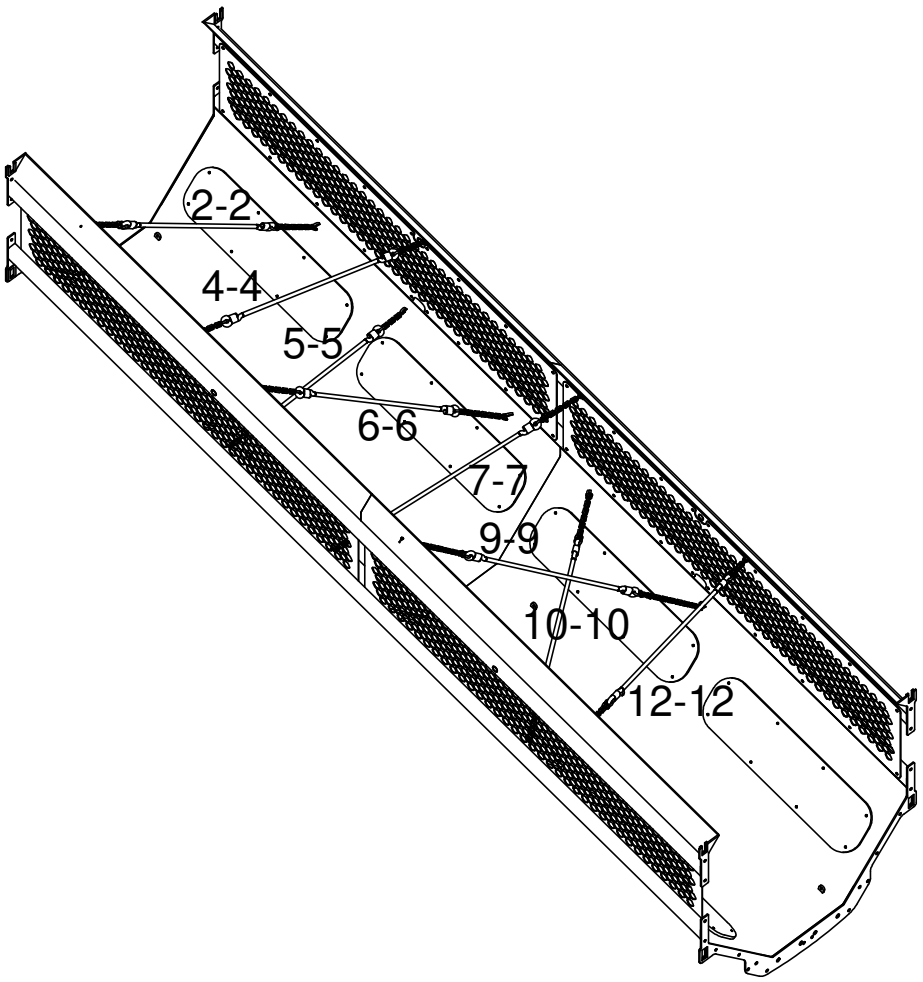


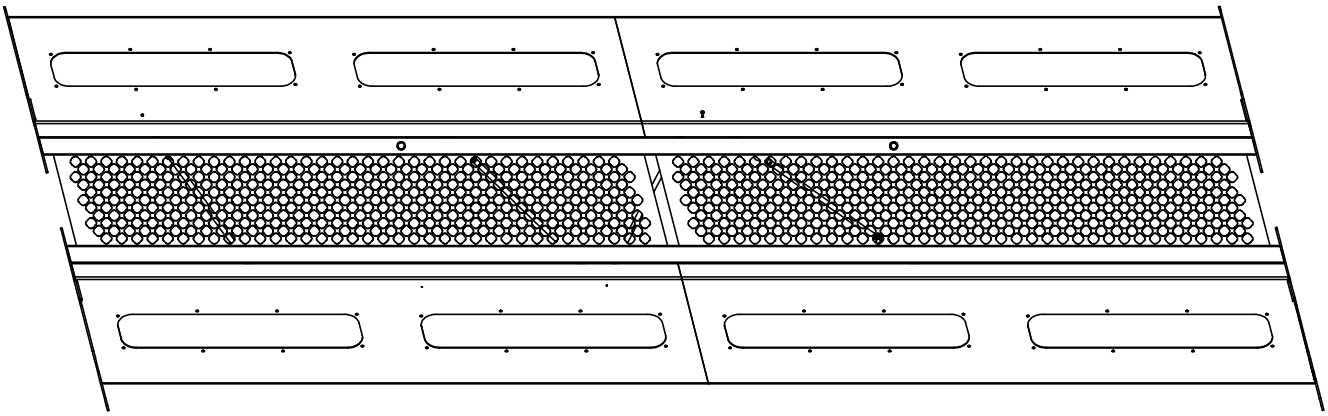
K-K (1 : 25)

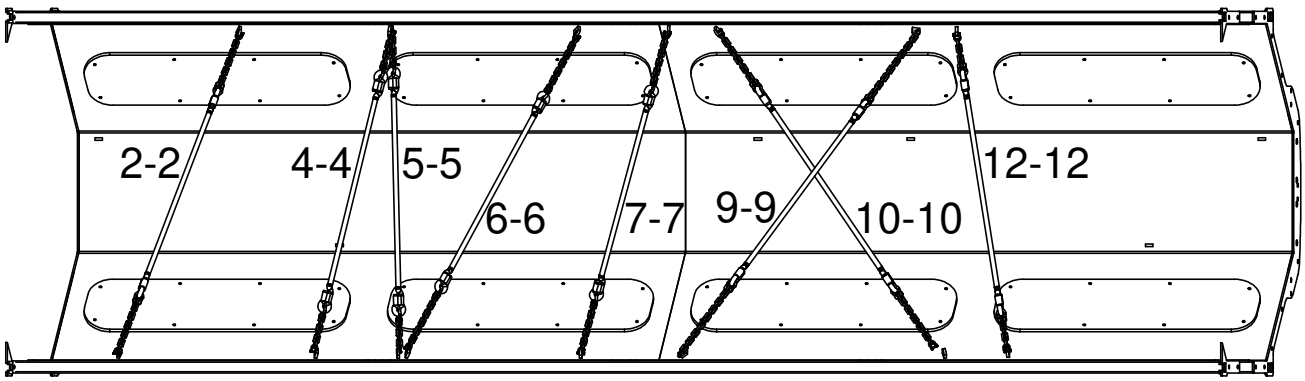




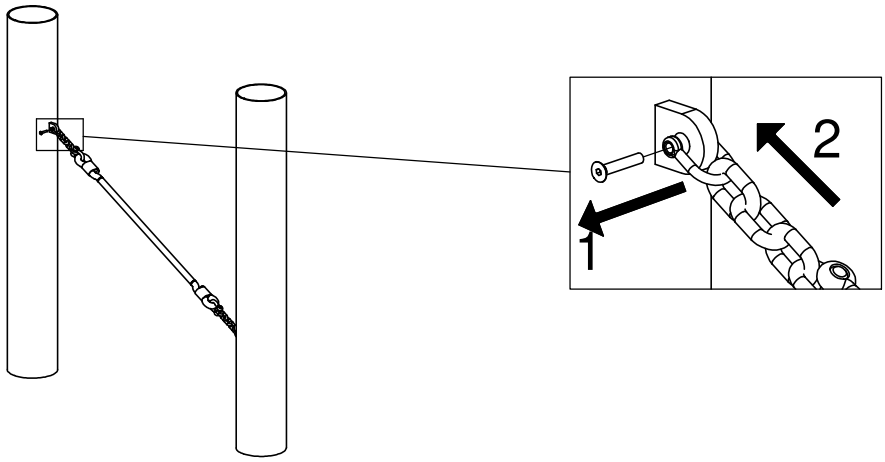



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12-12

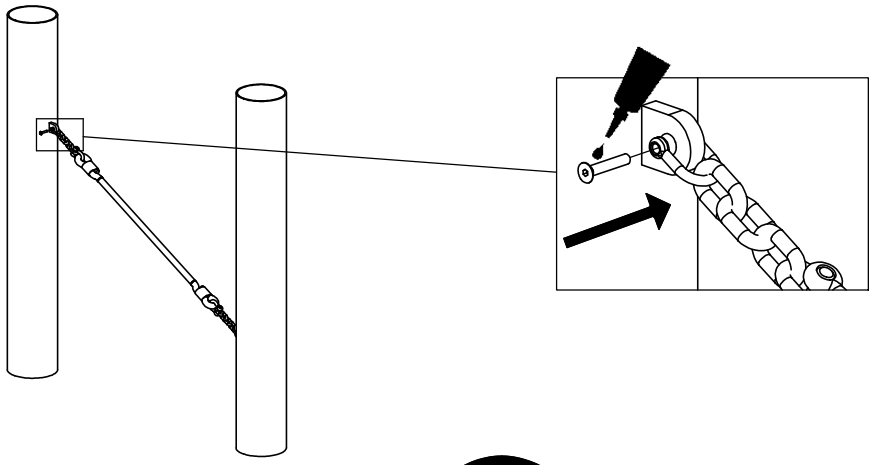



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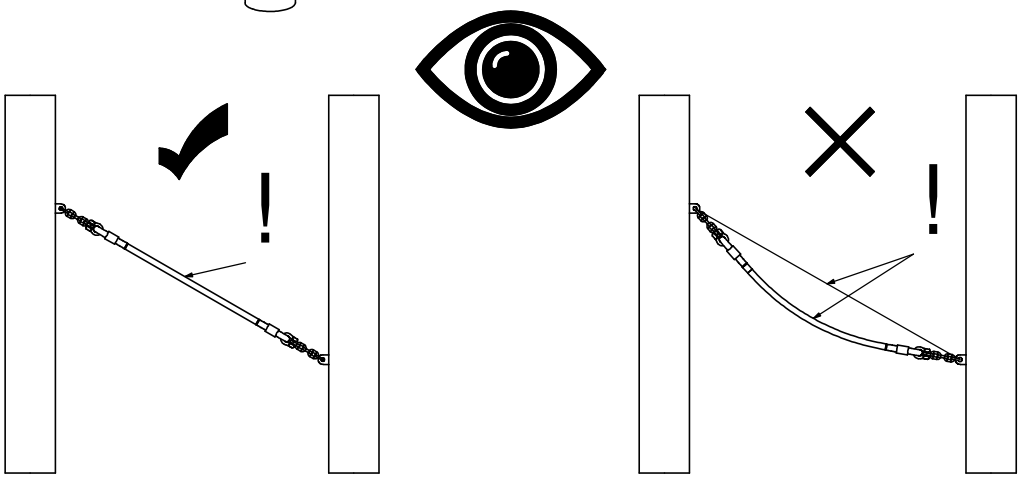
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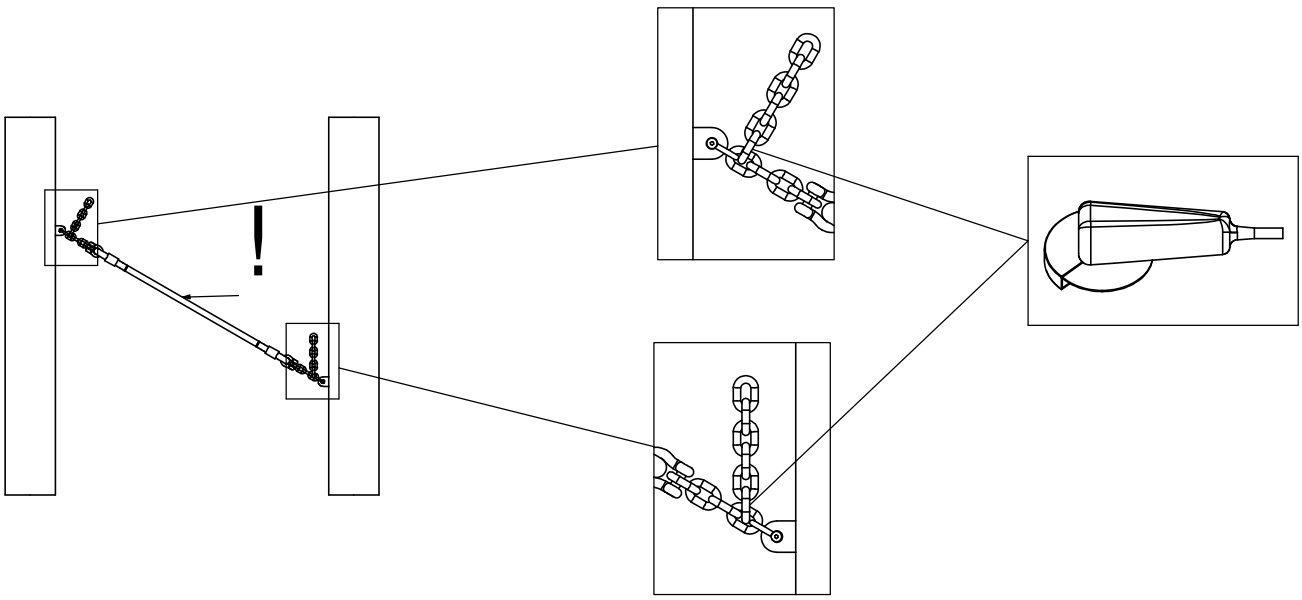
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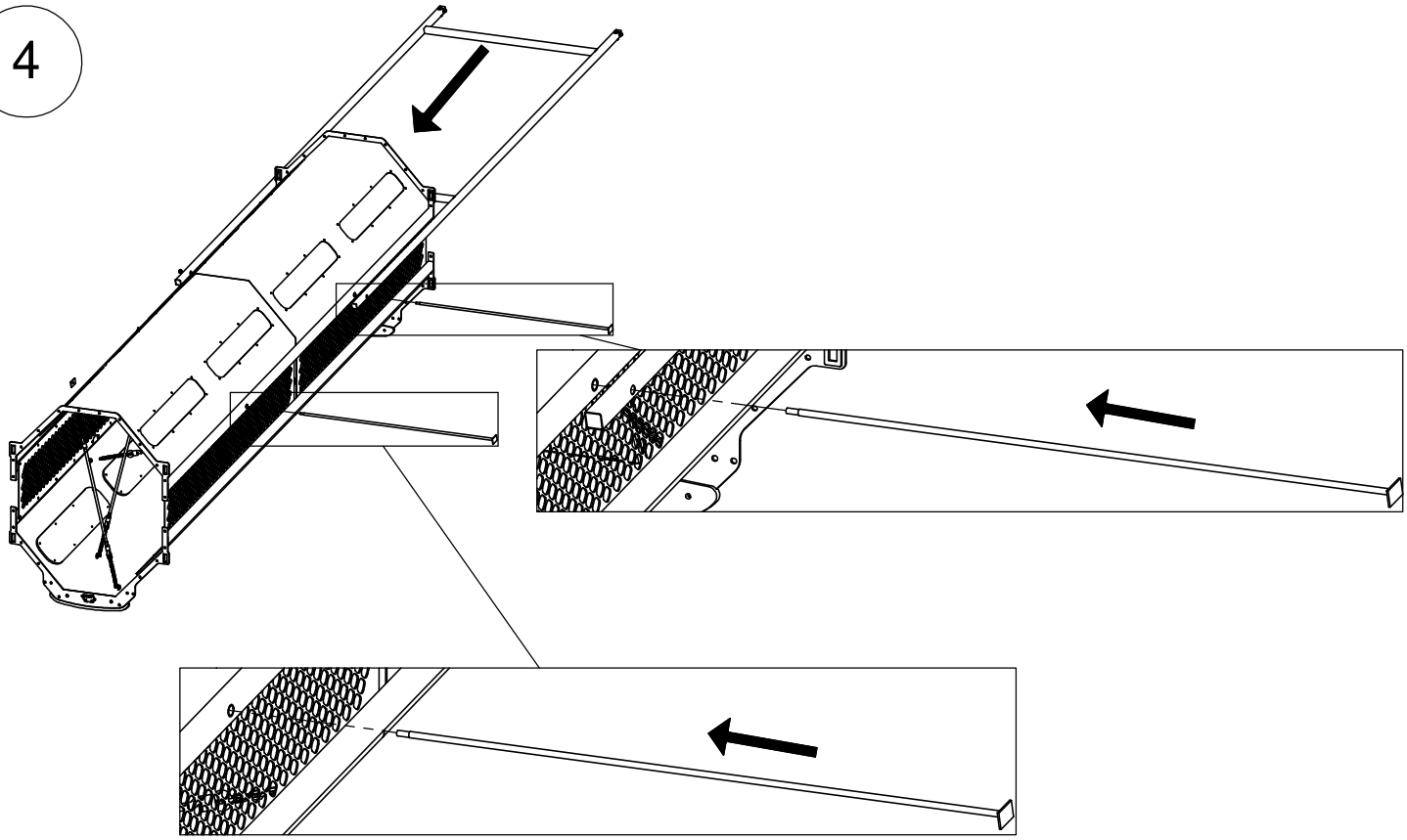
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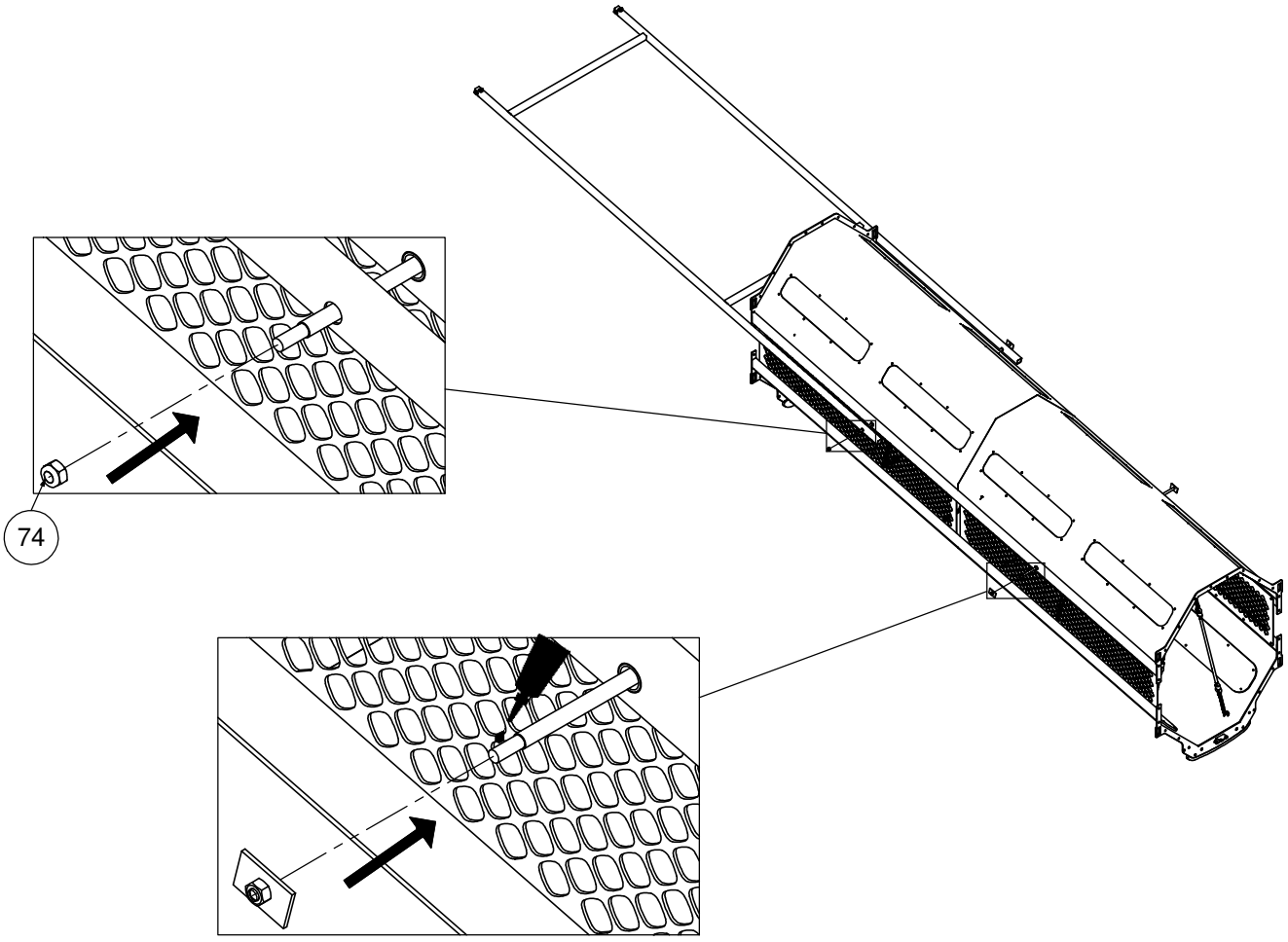
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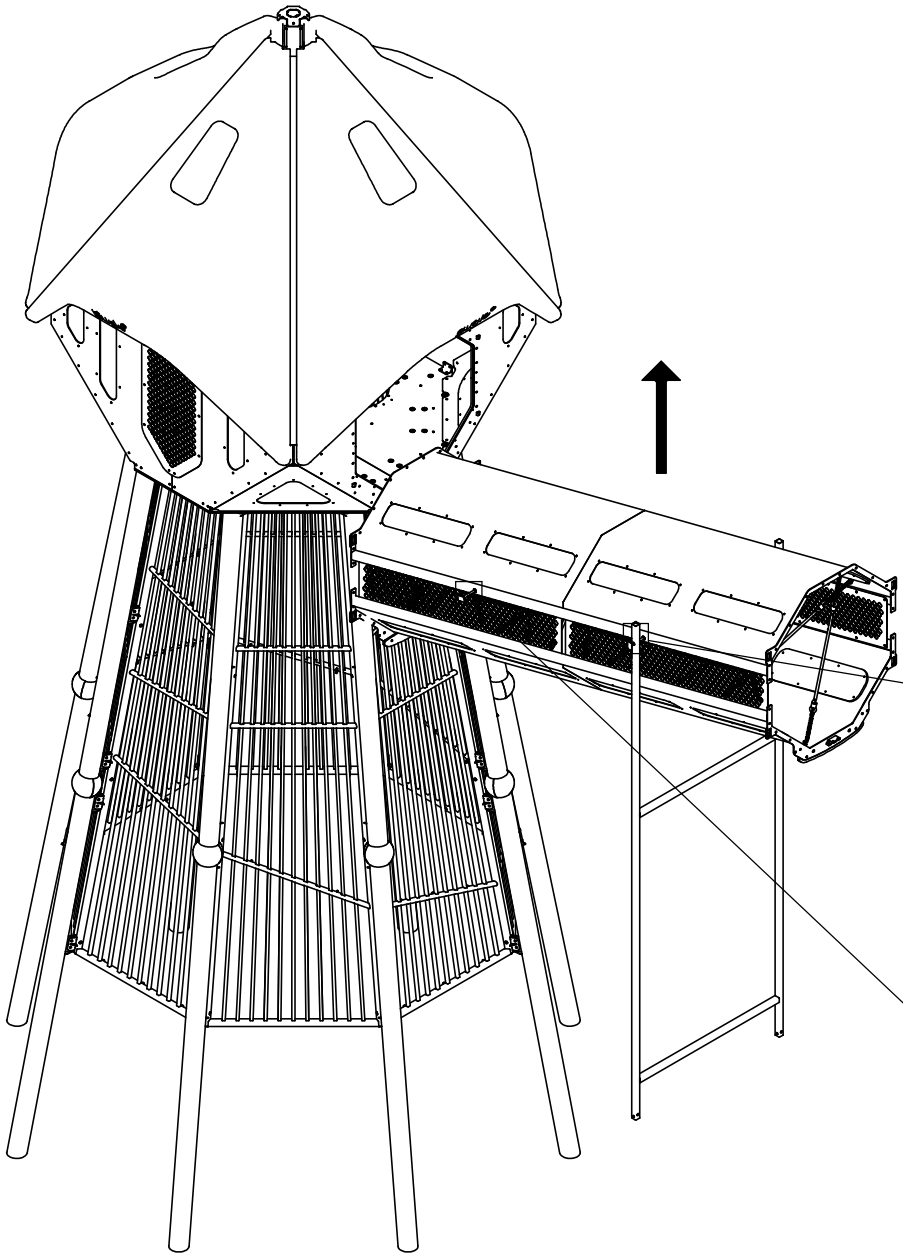
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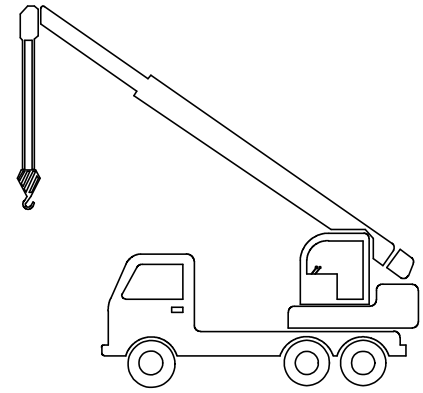


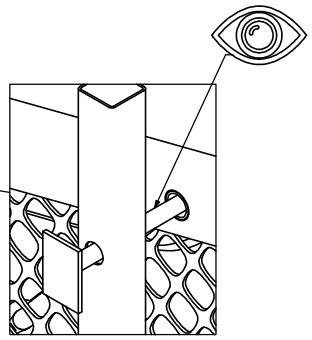
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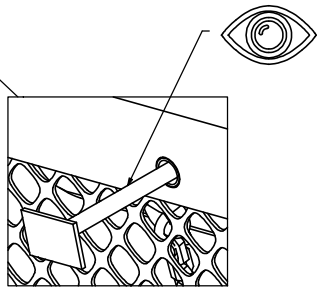


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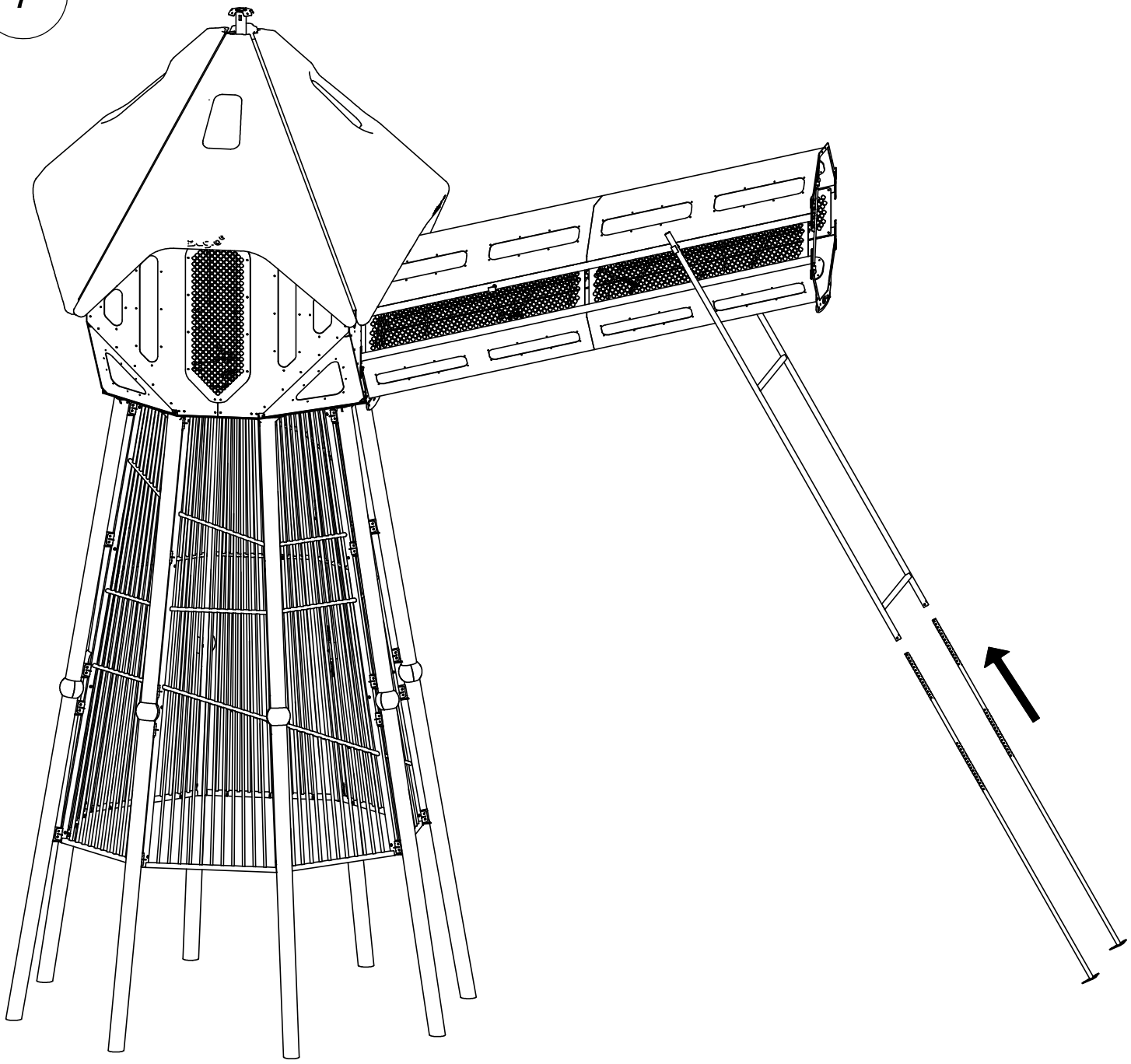




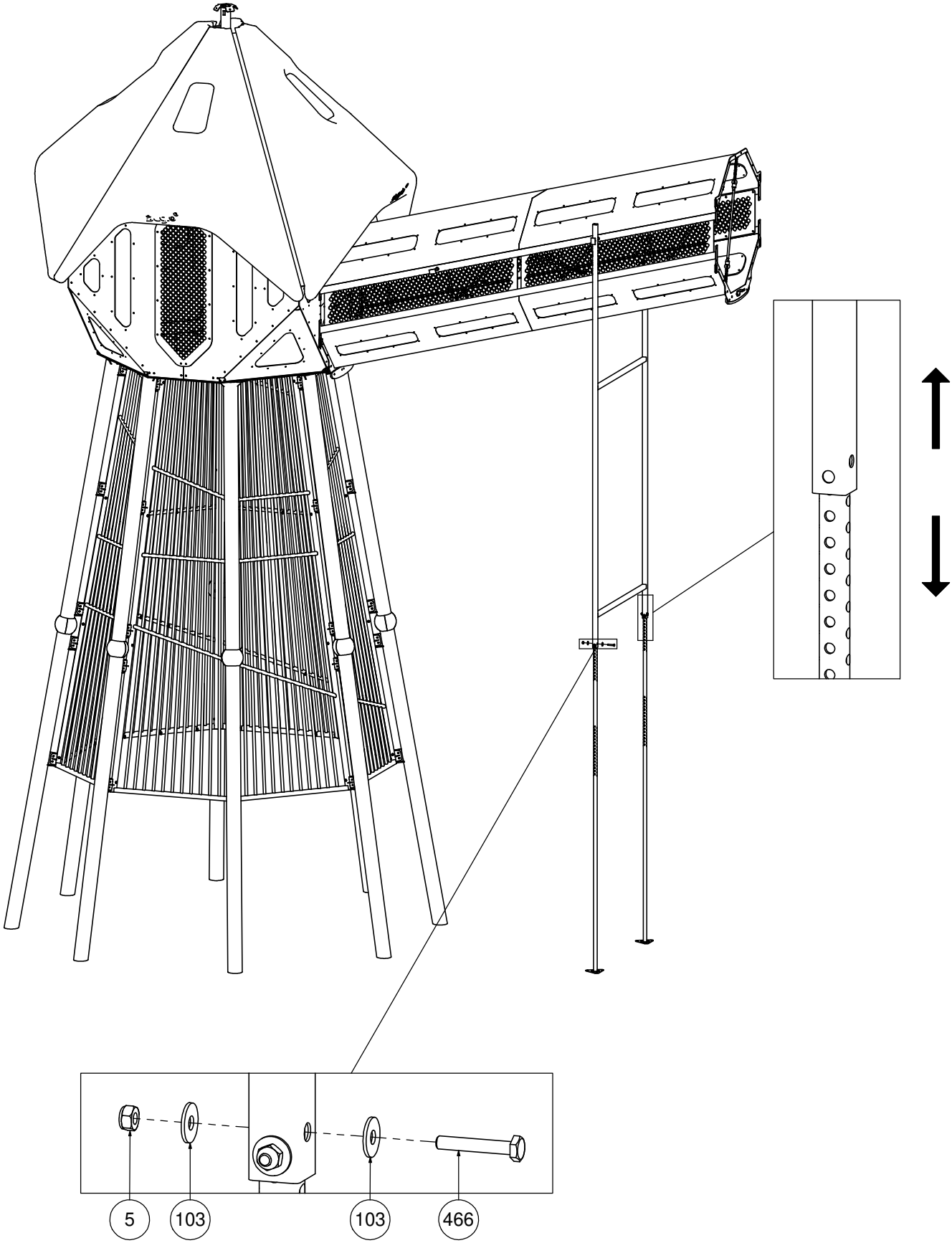




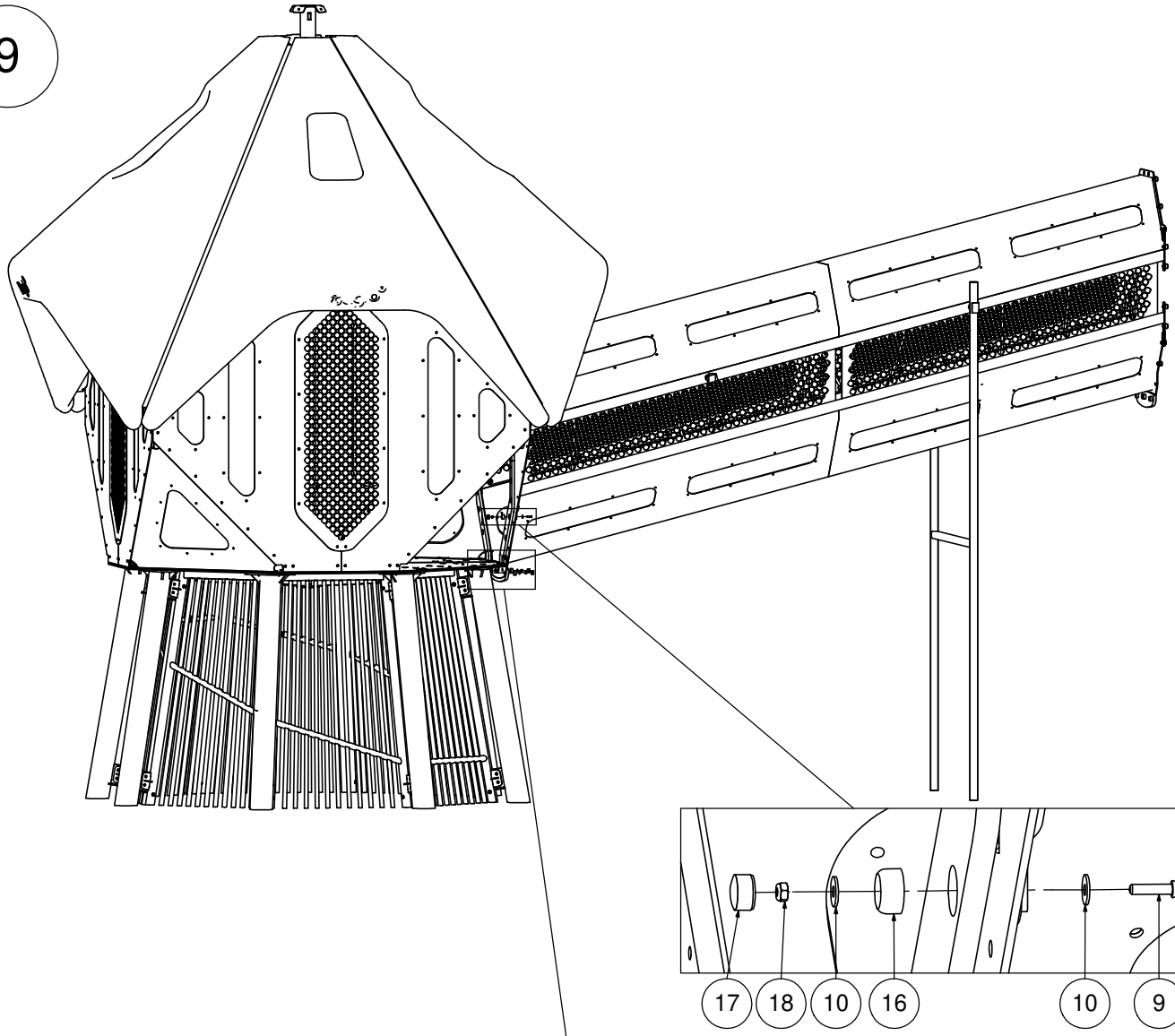
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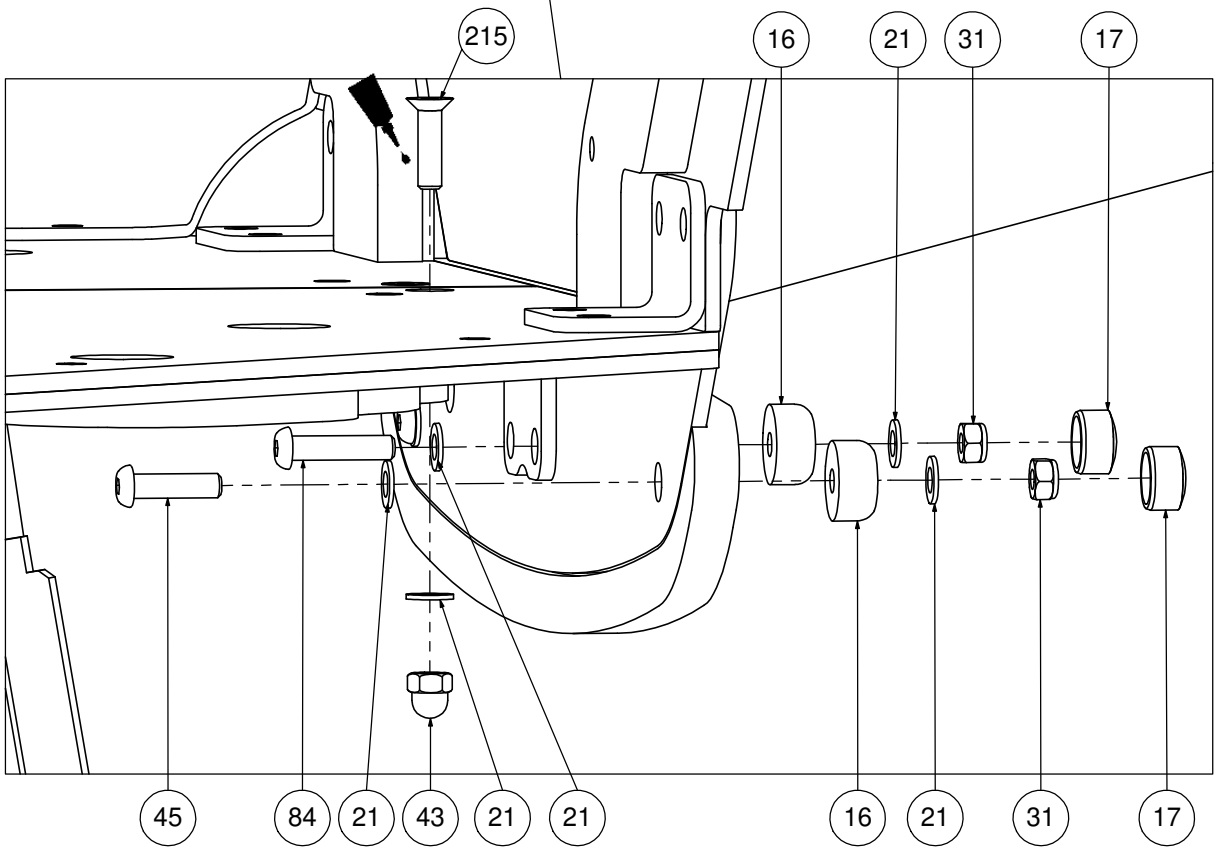


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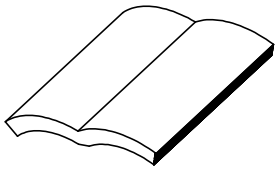


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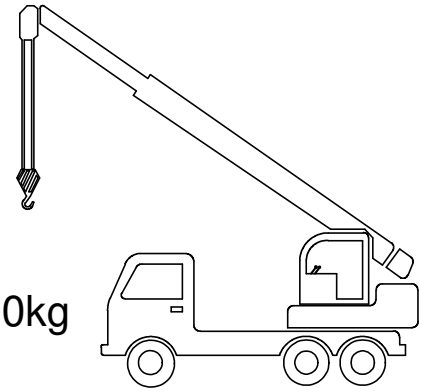


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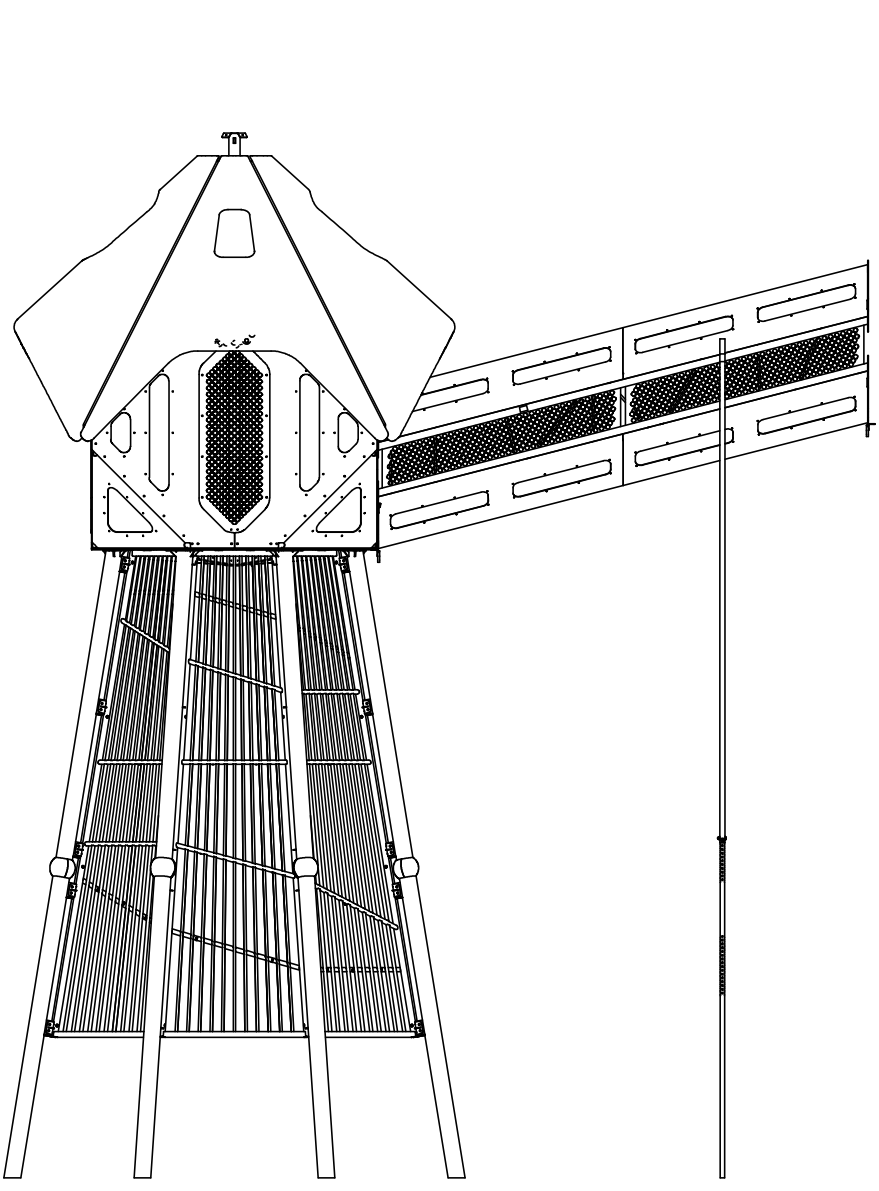
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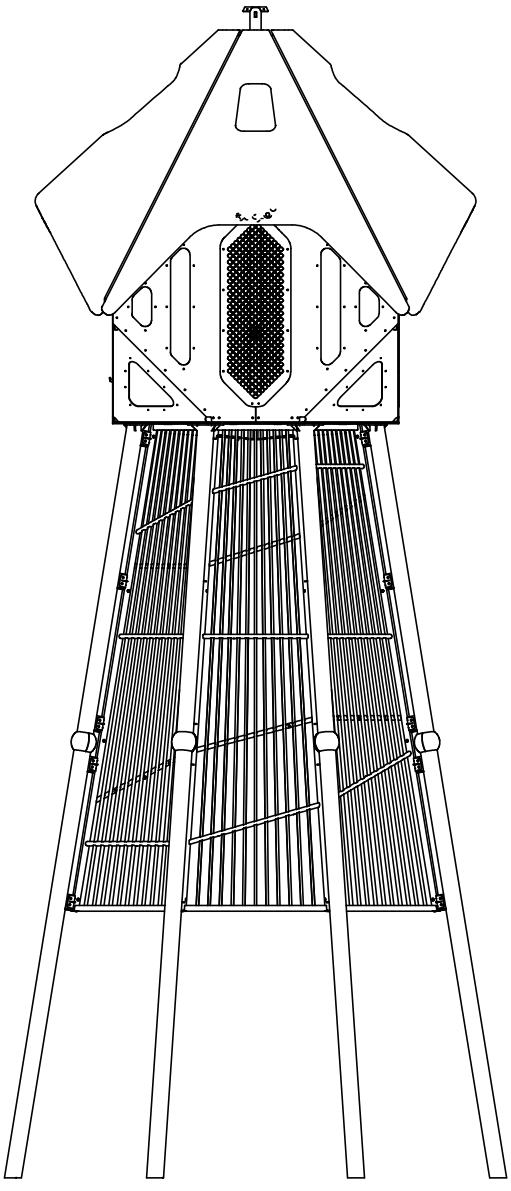
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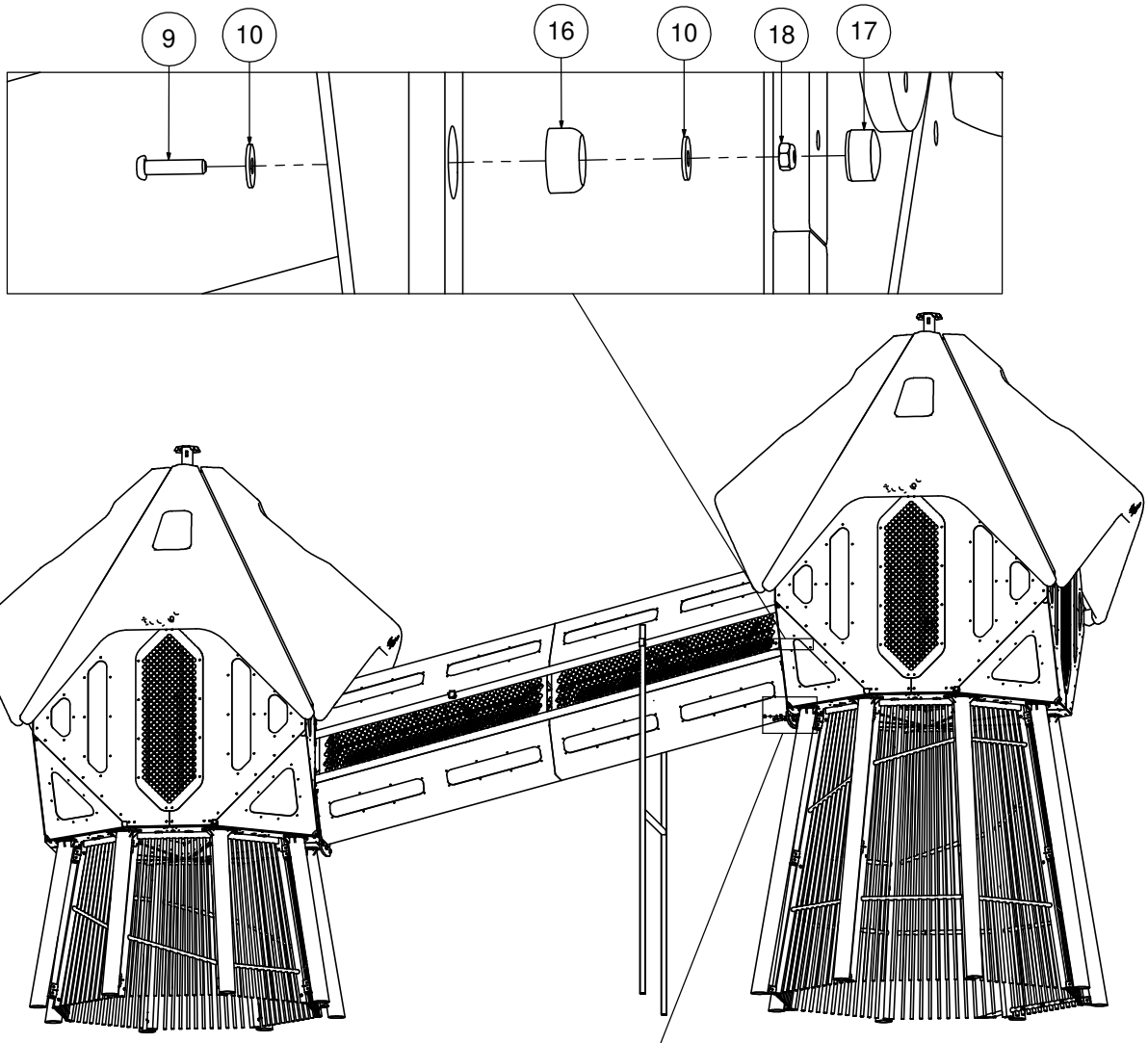
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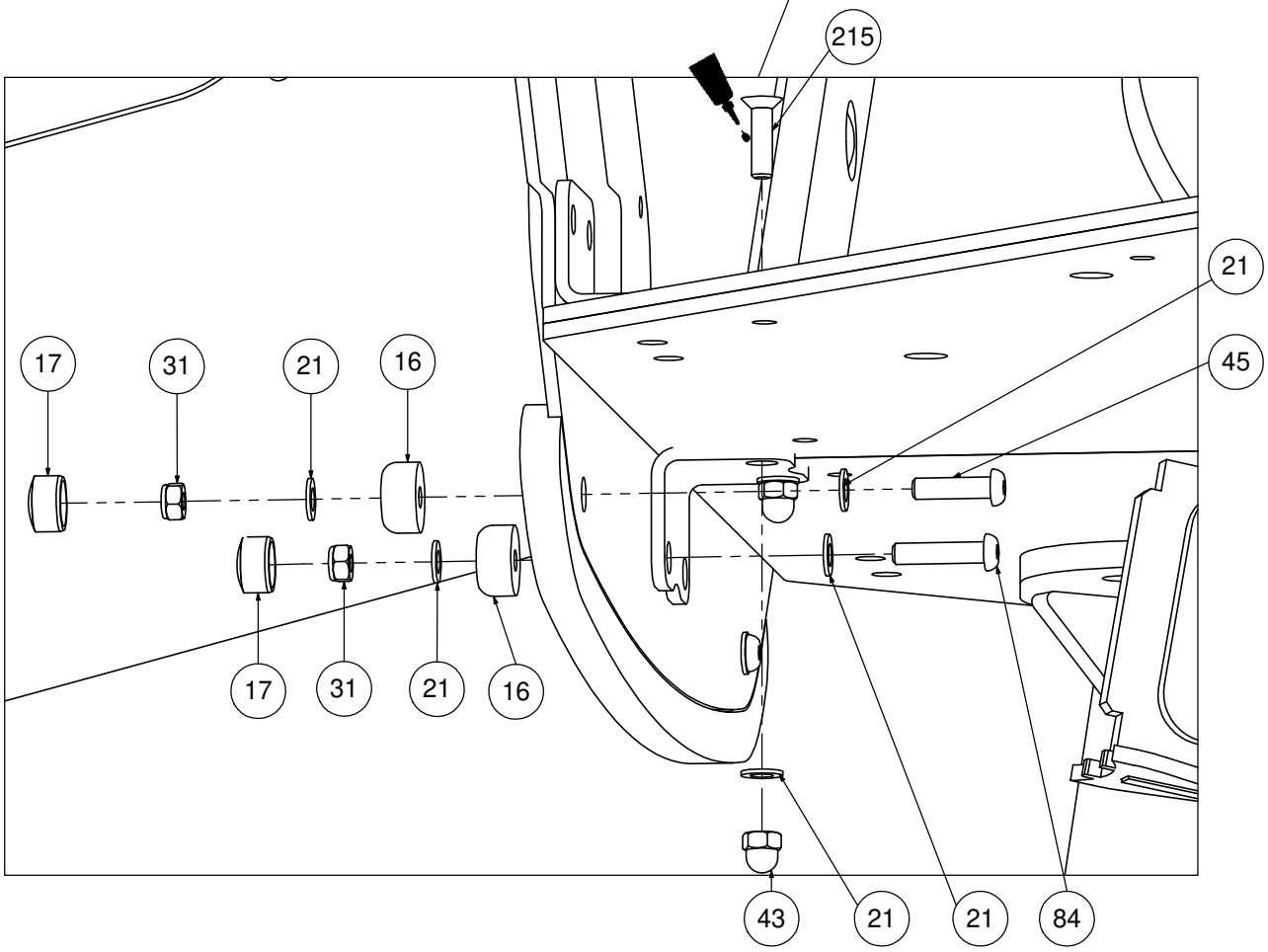




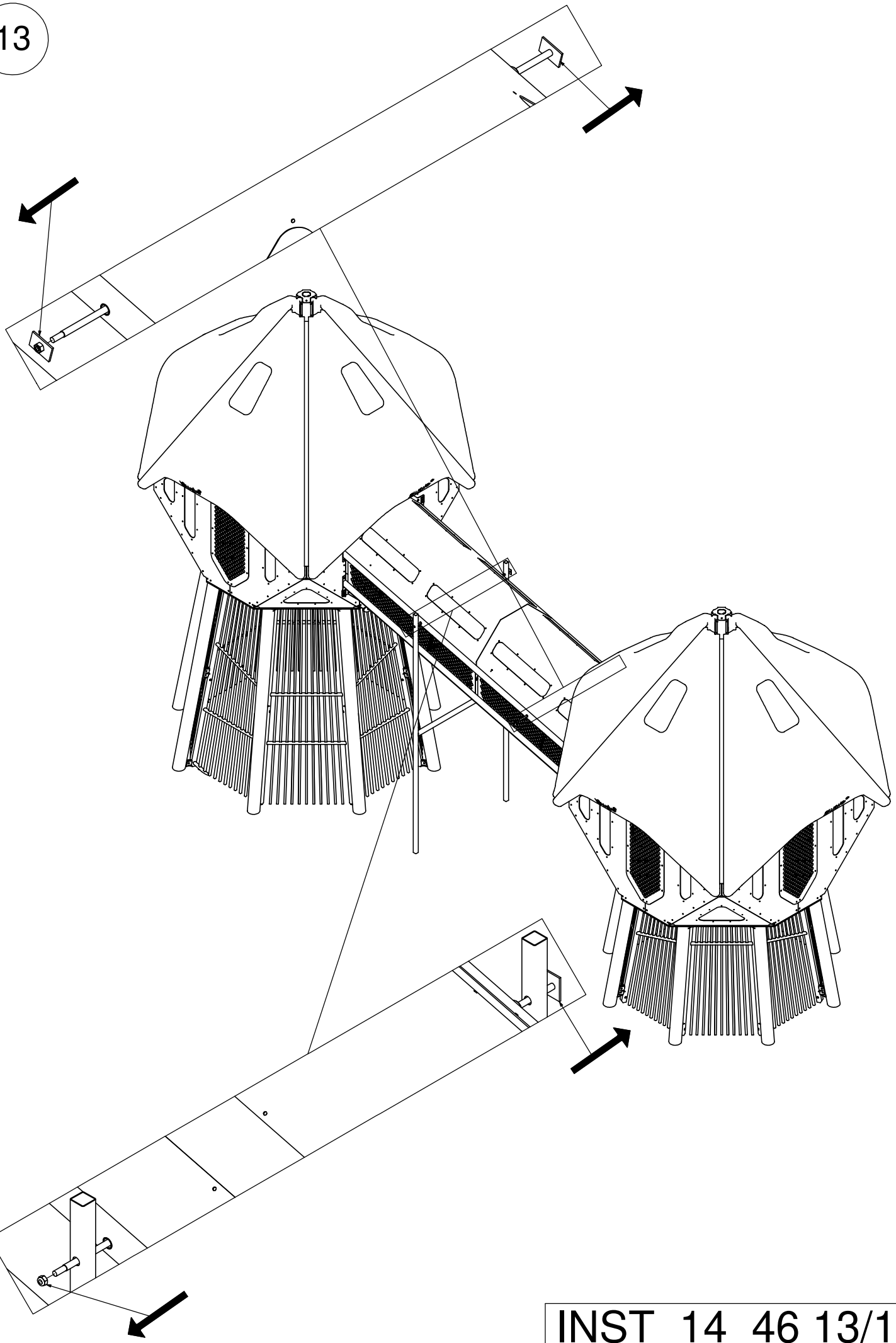


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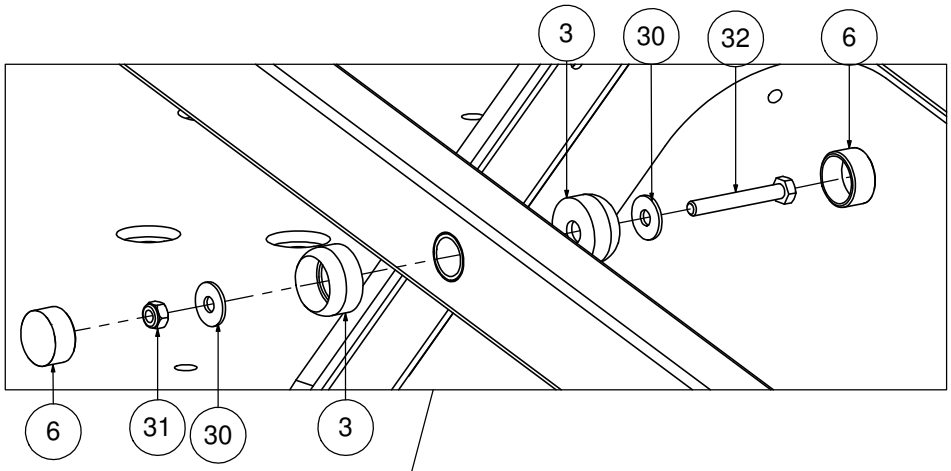


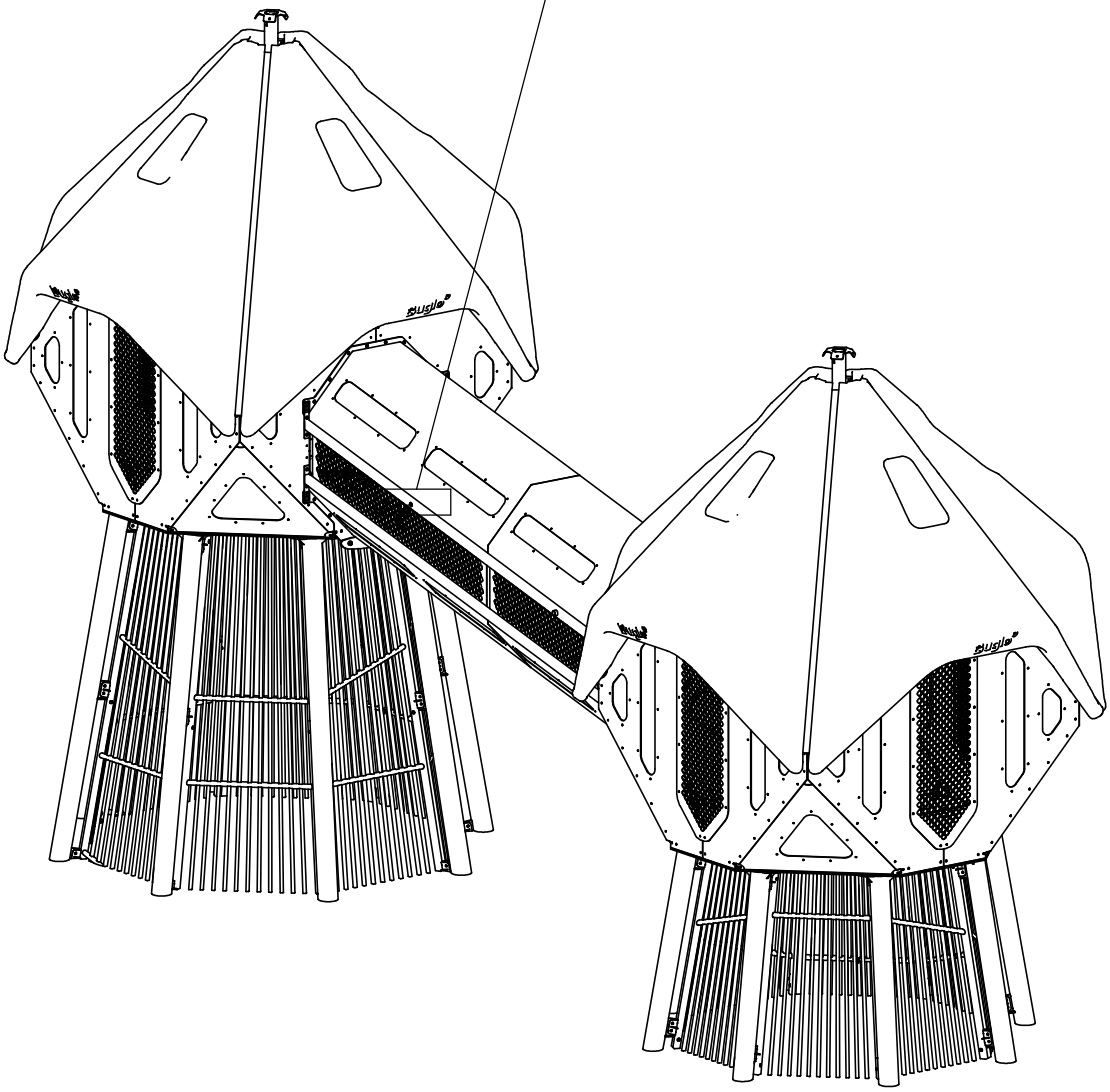


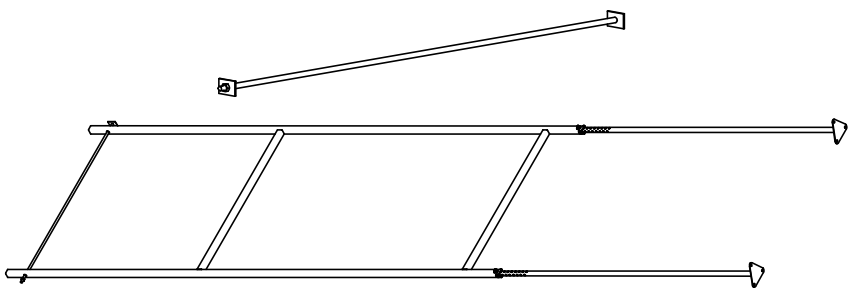
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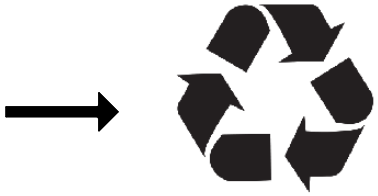


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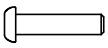
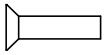


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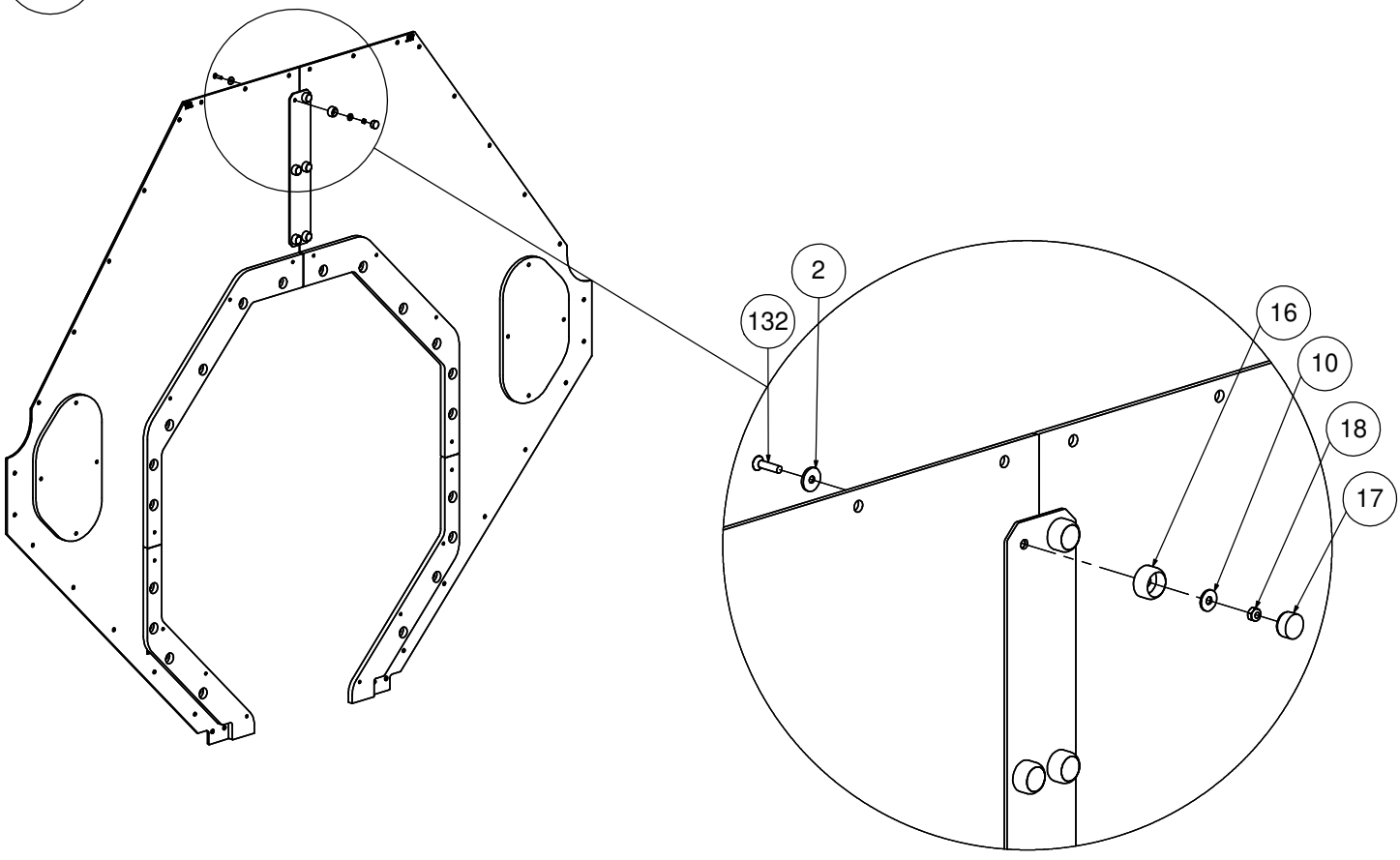




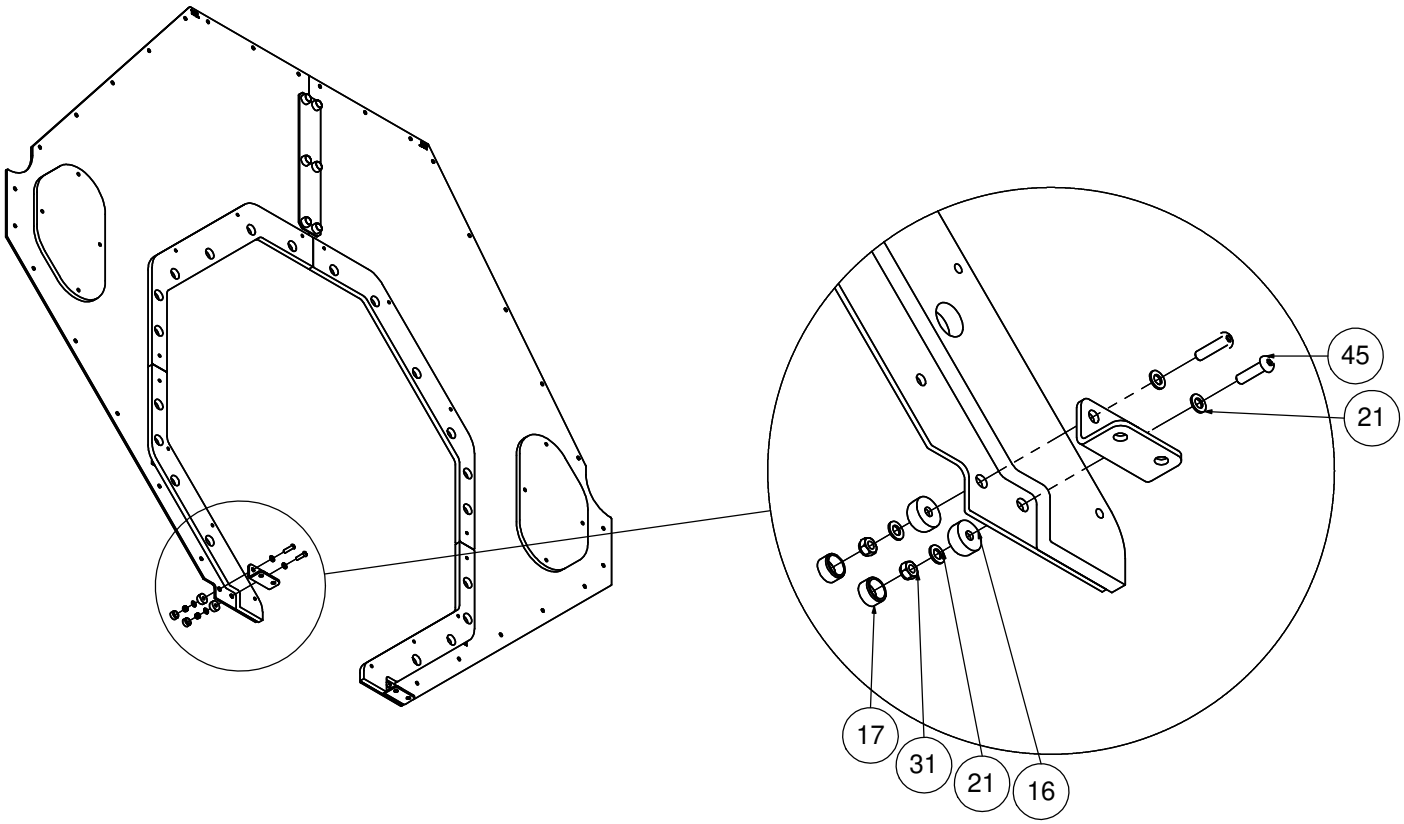
Nr. 4, 5 Nr. 10, 13

Nr	Σ	Element		
2	6		-	W6x60
10	6		DIN 9021	6x18
16	18		-	K1_d21_B
17	18		-	Z1_d21_B
18	6		DIN 985	M6 (OC)
21	24		DIN 125	8x16
28	4		ISO 7380	M8x25
31	12		DIN 985	M8 (OC)
45	8		ISO 7380	M8x30
132	6		DIN 7991	M6x25

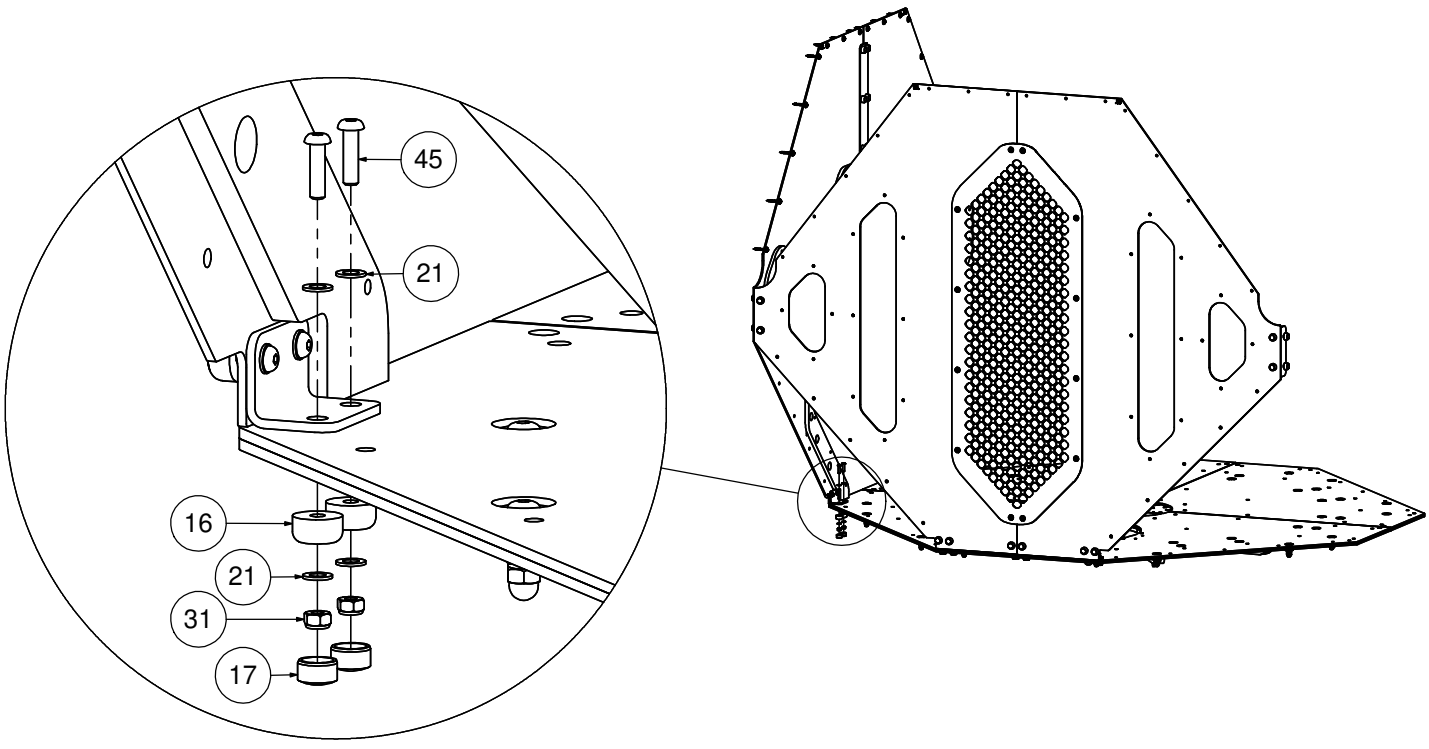
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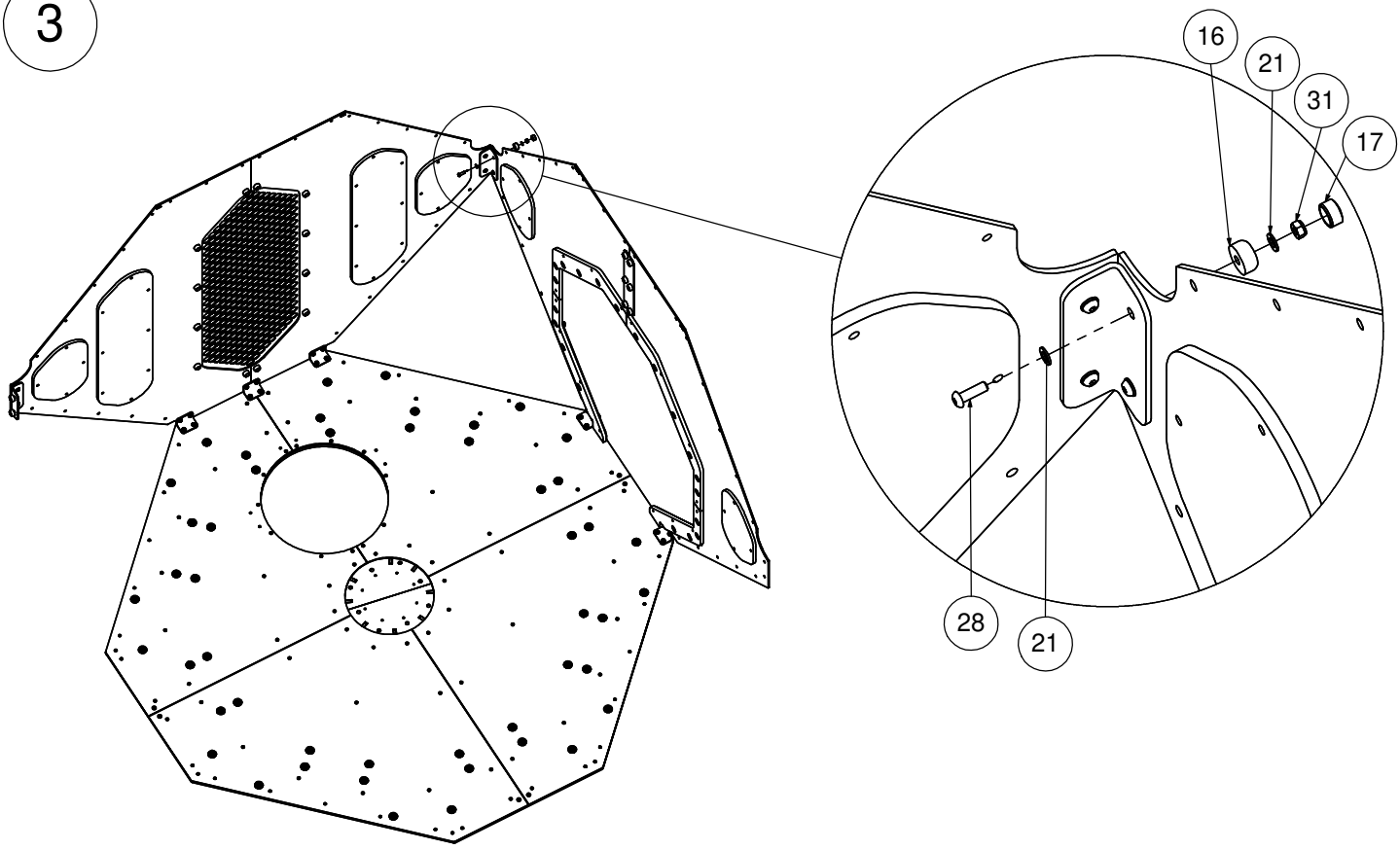
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3



3



INST_14_53

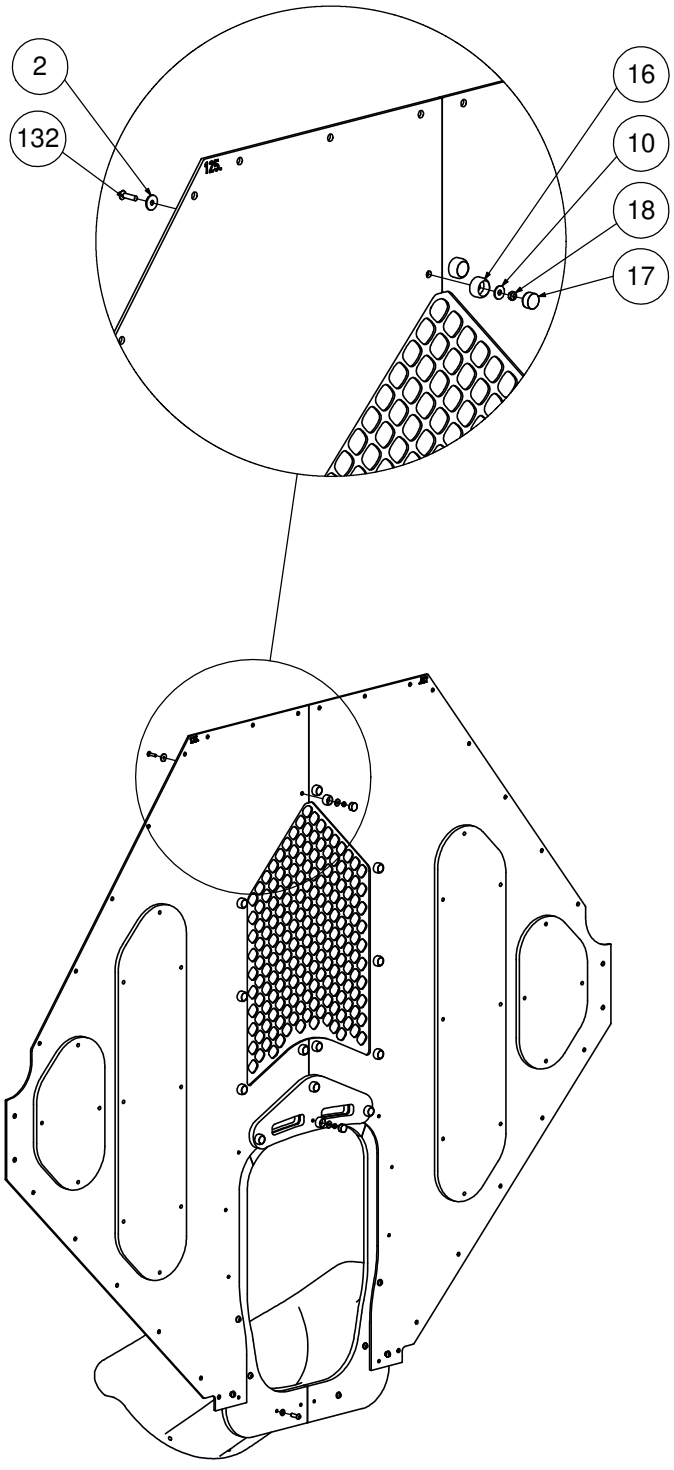


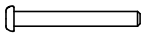
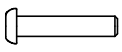
Nr. 4, 5



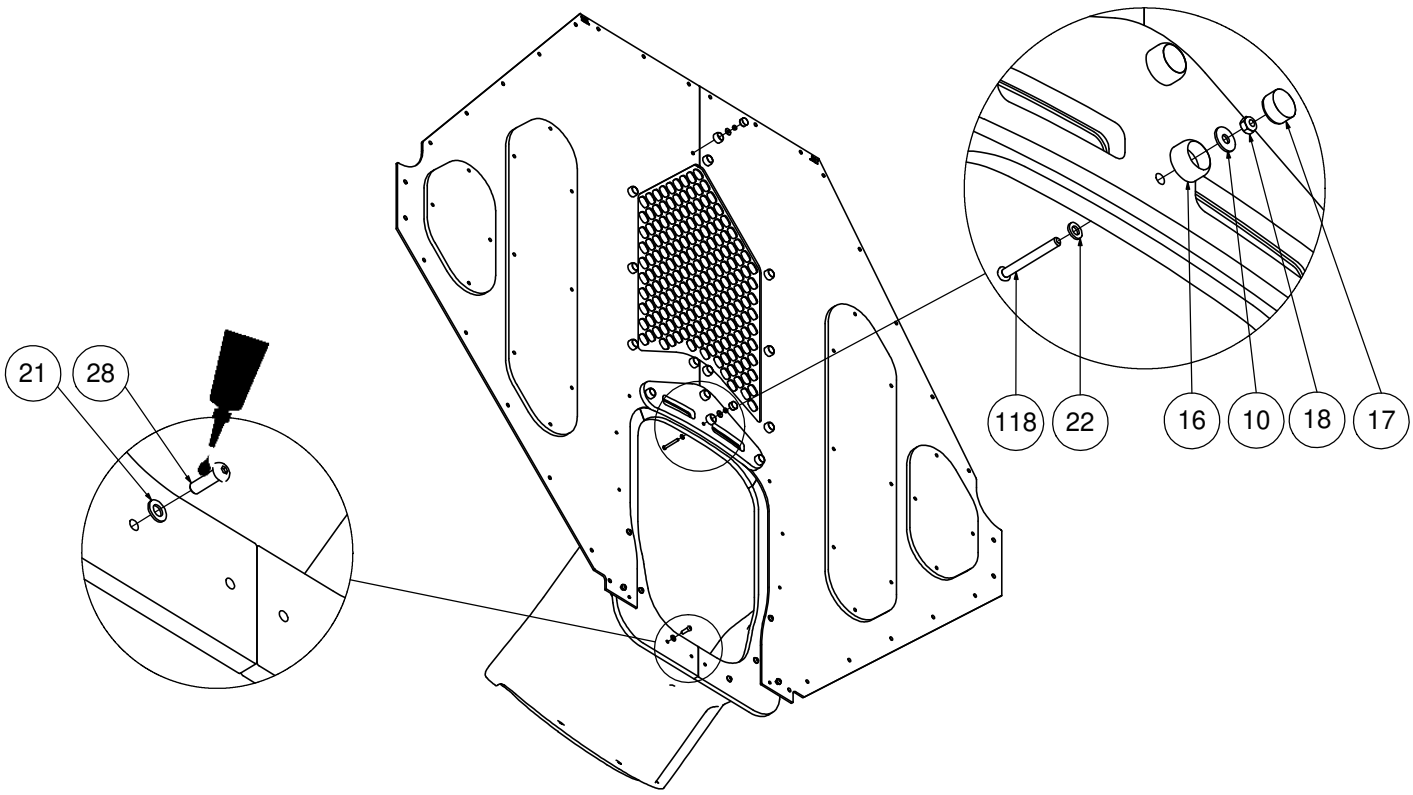
Nr. 10,13

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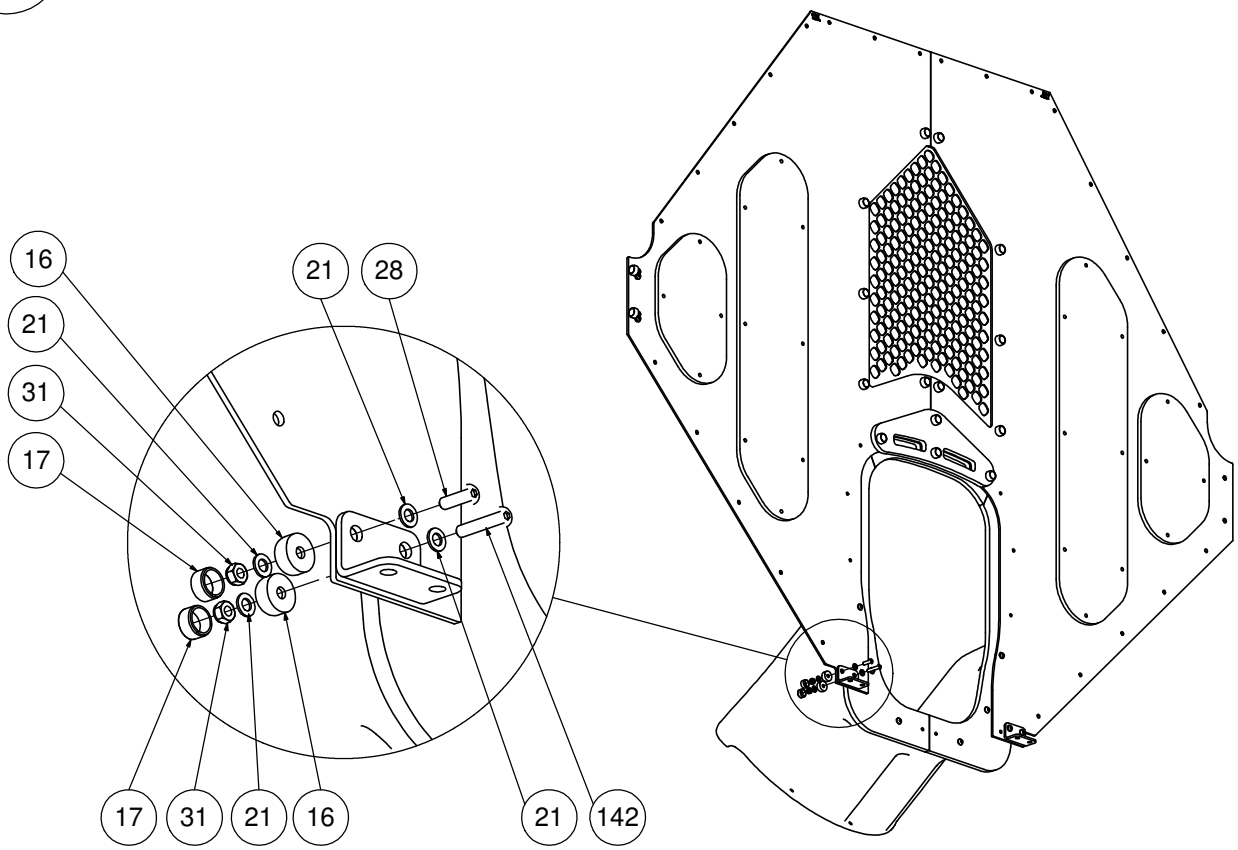


Nr	Σ	Element		
2	10		-	W6x60
10	14		DIN 9021	6x18
16	28		-	K1_d21_B
17	28		-	Z1_d21_B
18	14		DIN 985	M6 (OC)
21	34		DIN 125	8x16
22	4		DIN 125	6x12
28	10		ISO 7380	M8x25
31	14		DIN 985	M8 (OC)
45	8		ISO 7380	M8x30
118	4		ISO 7380	M6x50
132	10		DIN 7991	M6x25
142	2		ISO 7380	M8x40
215	2		DIN 7991	M8x30

INST_14_53

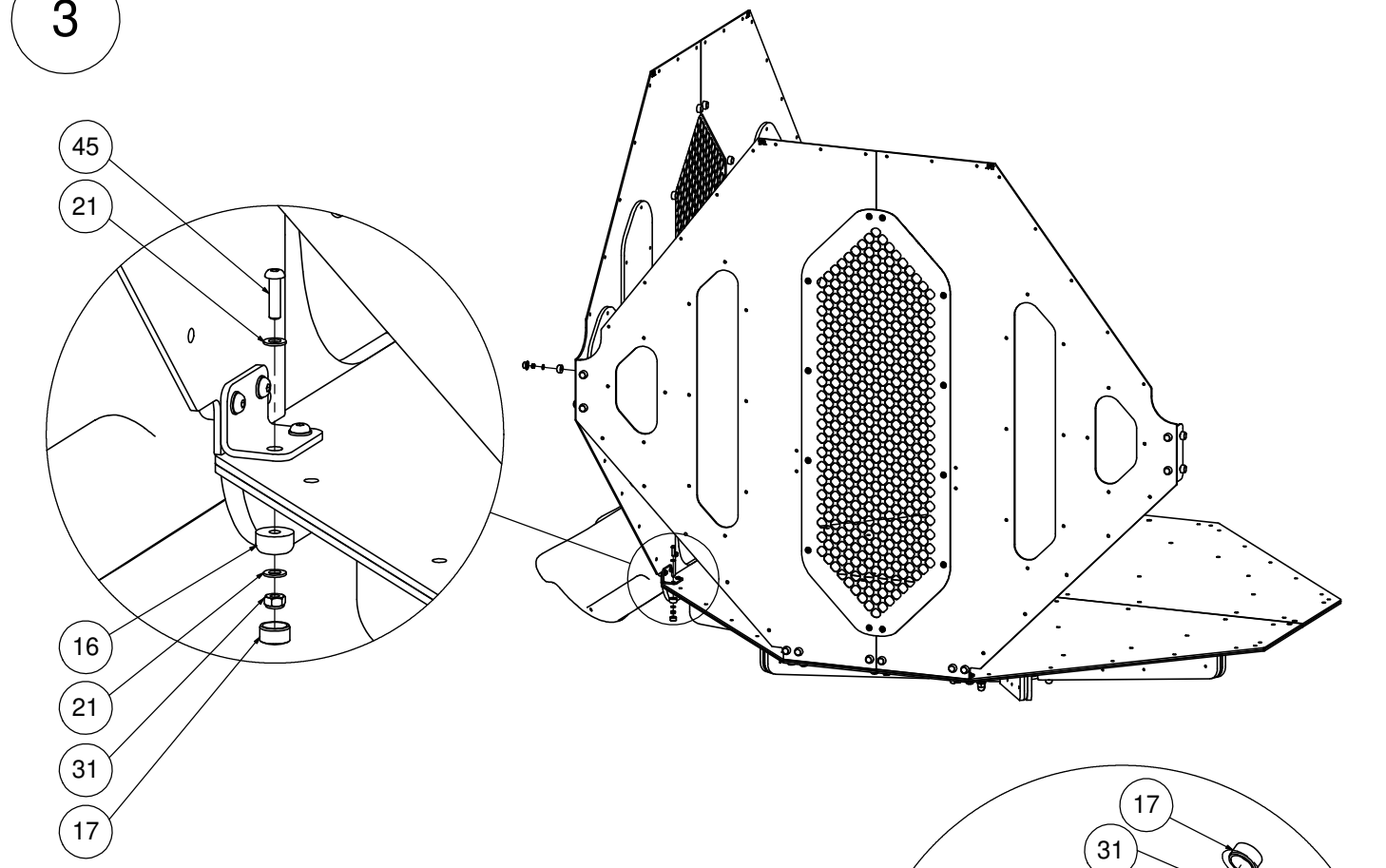


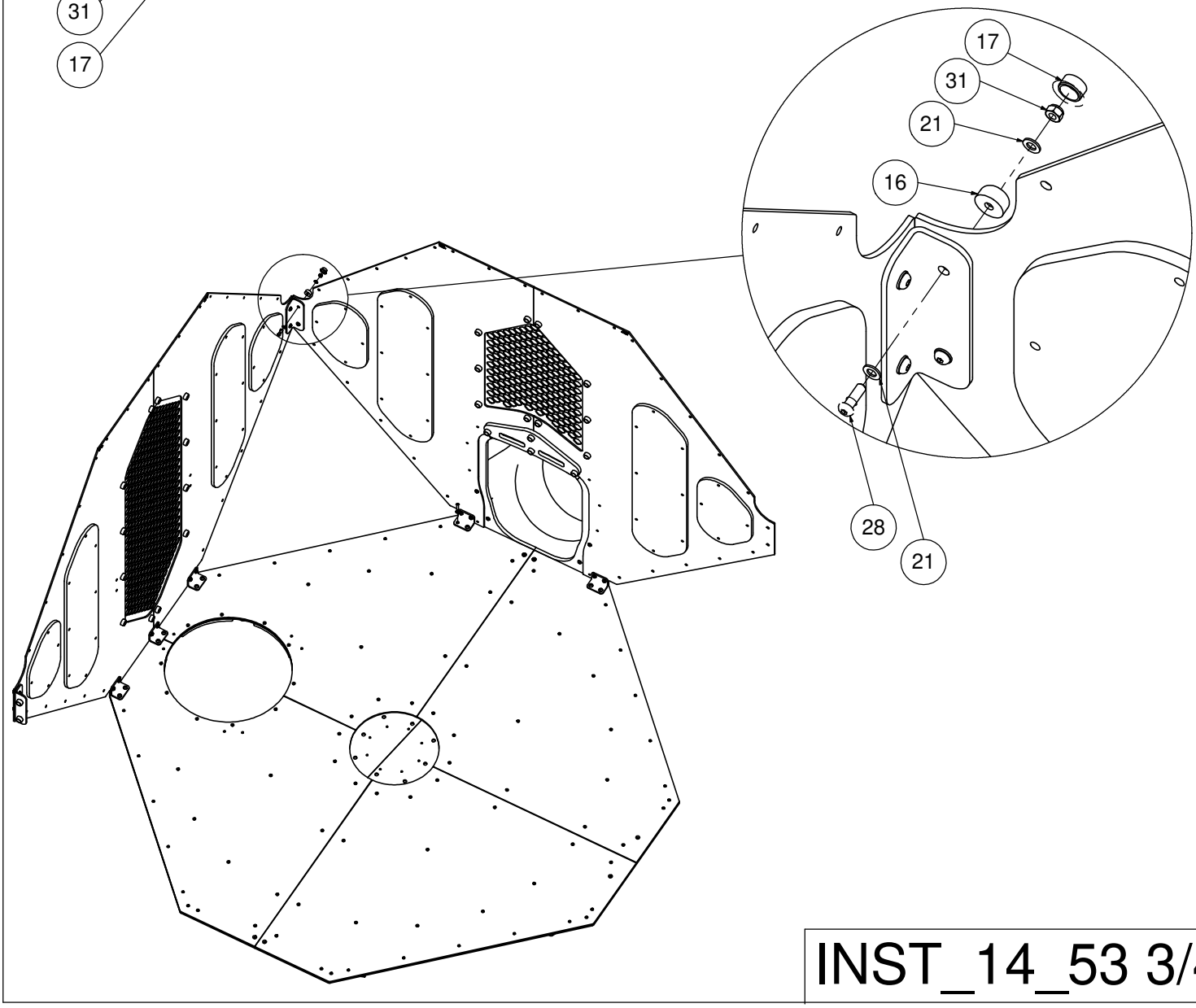
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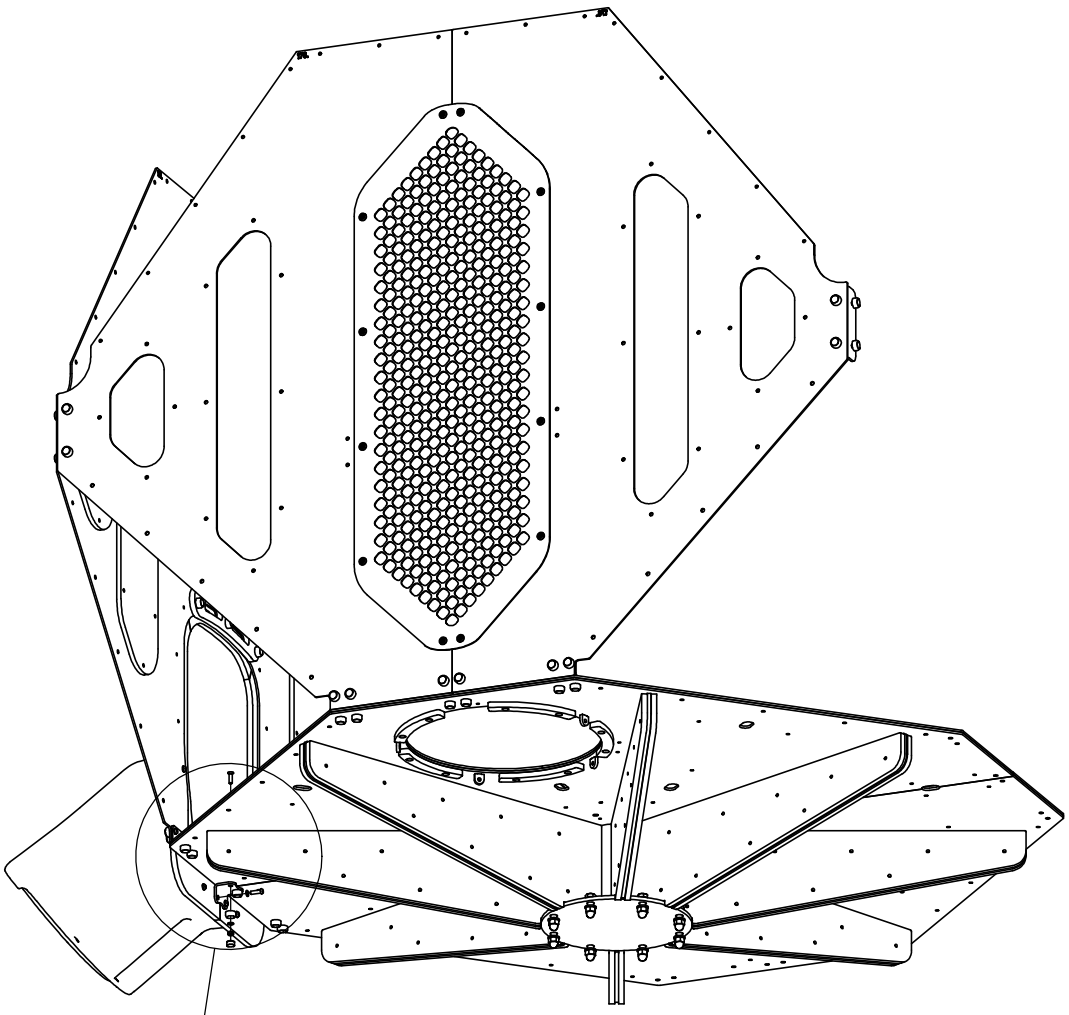
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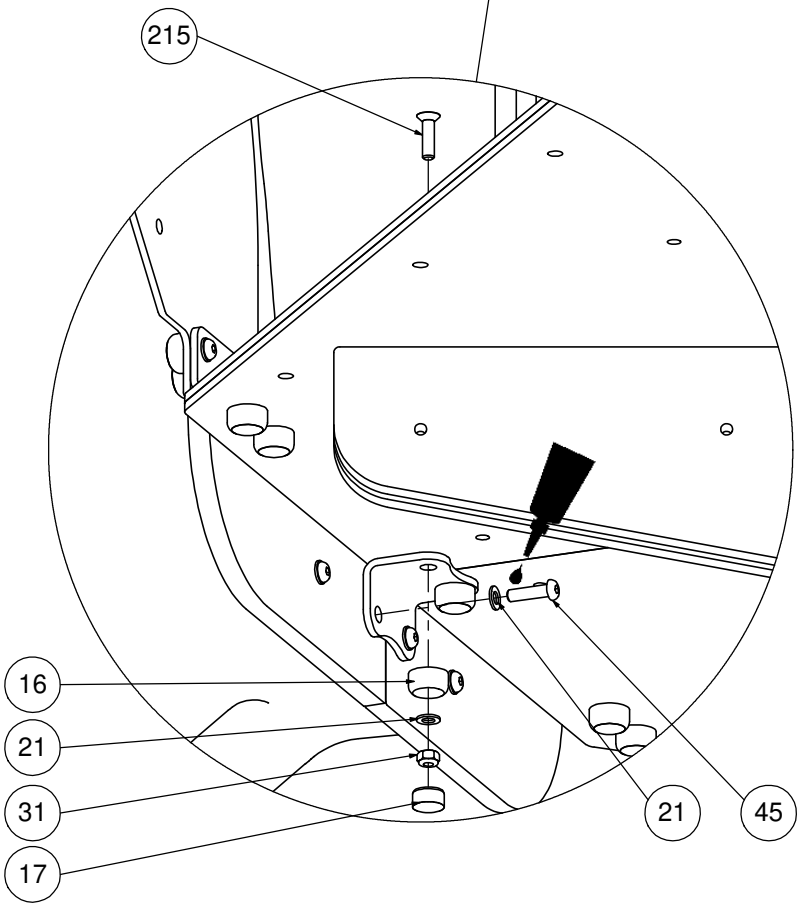
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INST_14_53





INST_14_54

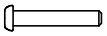
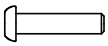
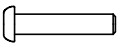


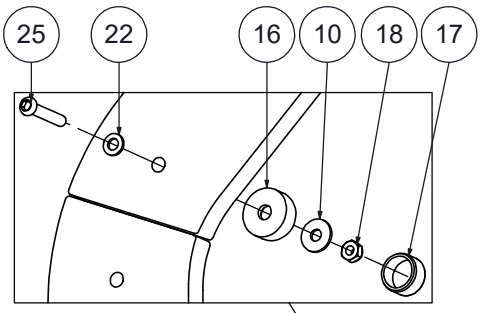
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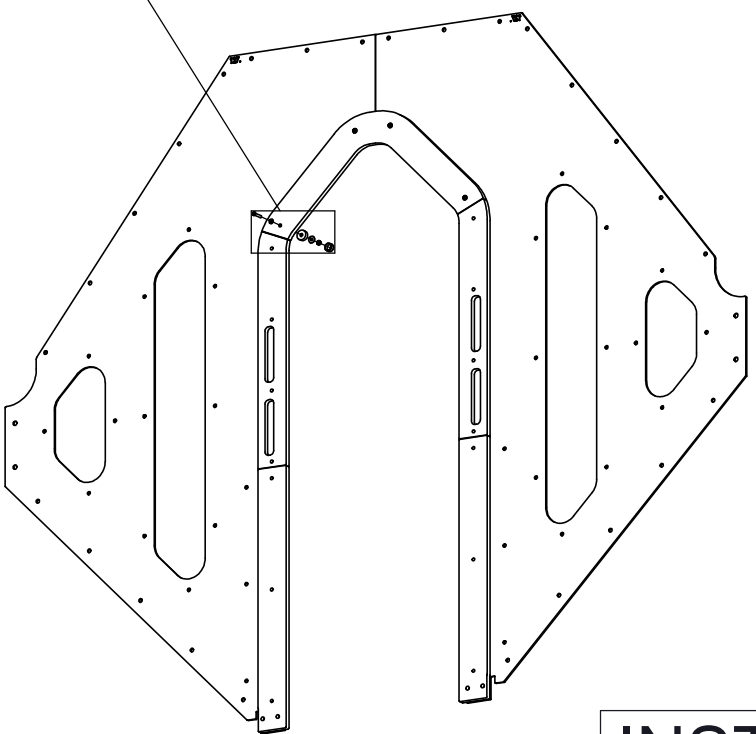


Nr. 10,13

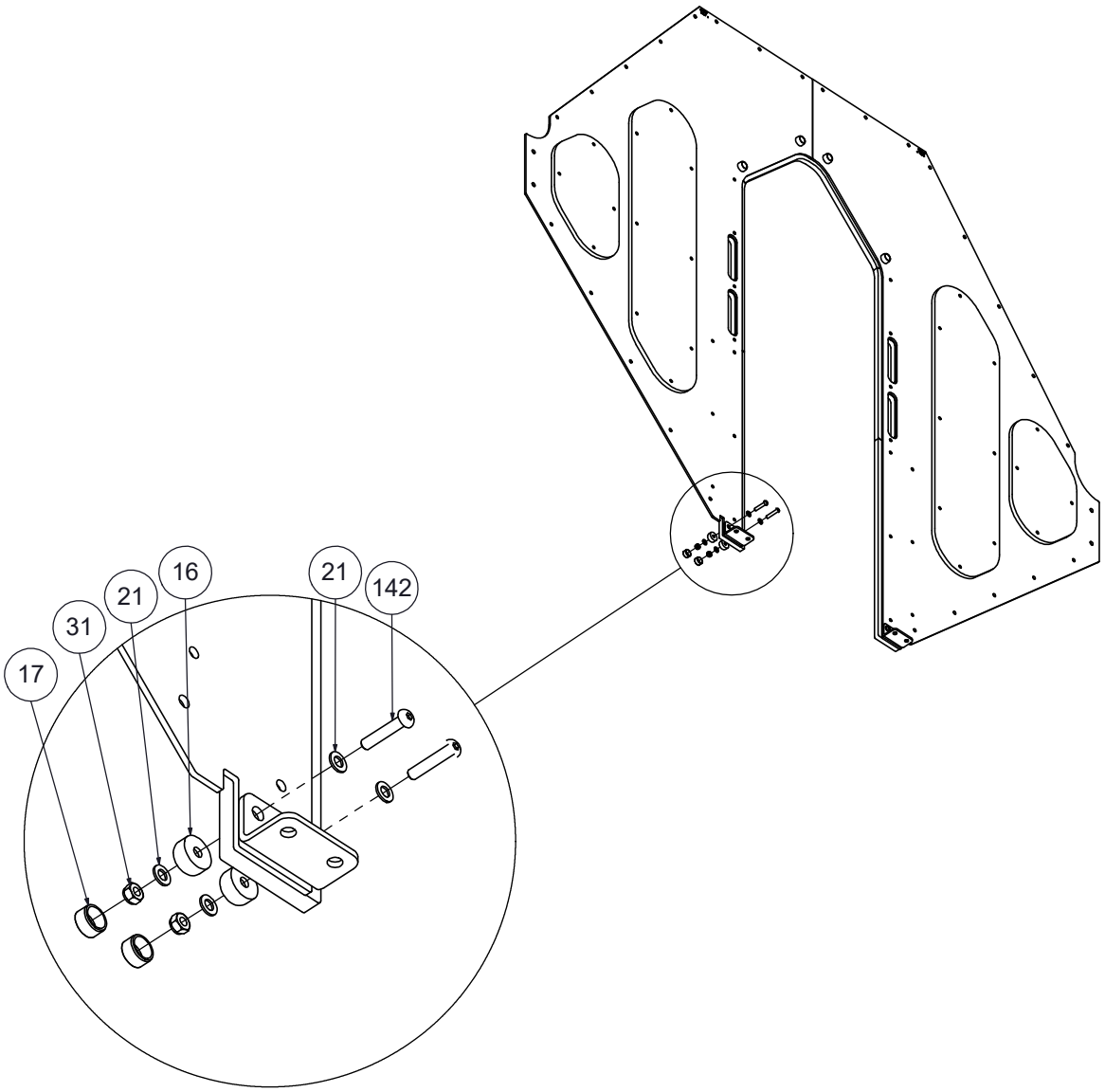
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Nr	Σ	Element		
10	6		DIN 9021	6x18
16	20		-	K1_d21_B
17	20		-	Z1_d21_B
18	6		DIN 985	M6 (OC)
21	26		DIN 125	8x16
22	4		DIN 125	6x12
25	4		ISO 7380	M6x35
28	4		ISO 7380	M8x25
31	14		DIN 985	M8 (OC)
84	4		ISO 7380	M8x35
126	2		DIN 7991	M6x30
142	4		ISO 7380	M8x40
215	2		DIN 7991	M8x30

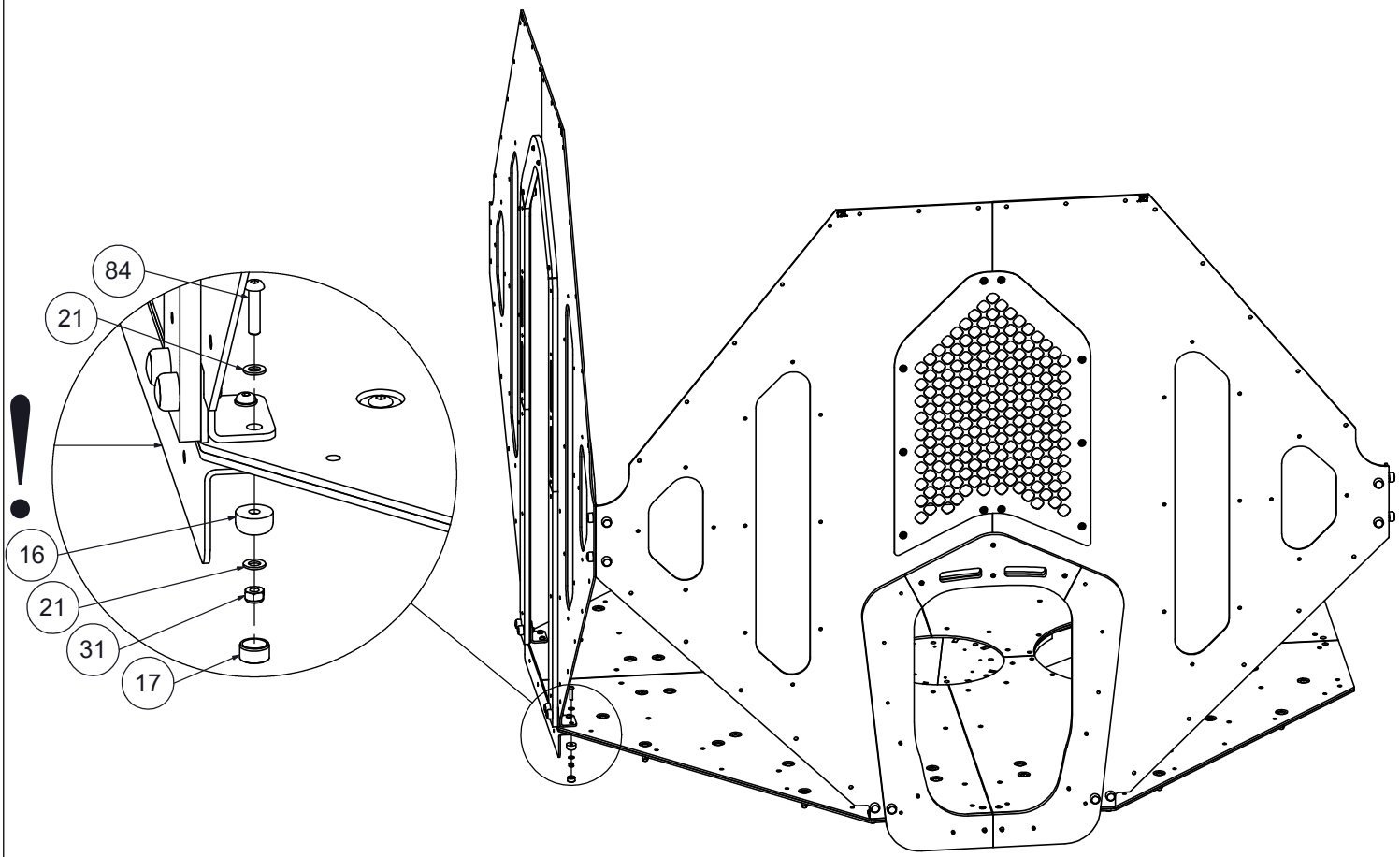


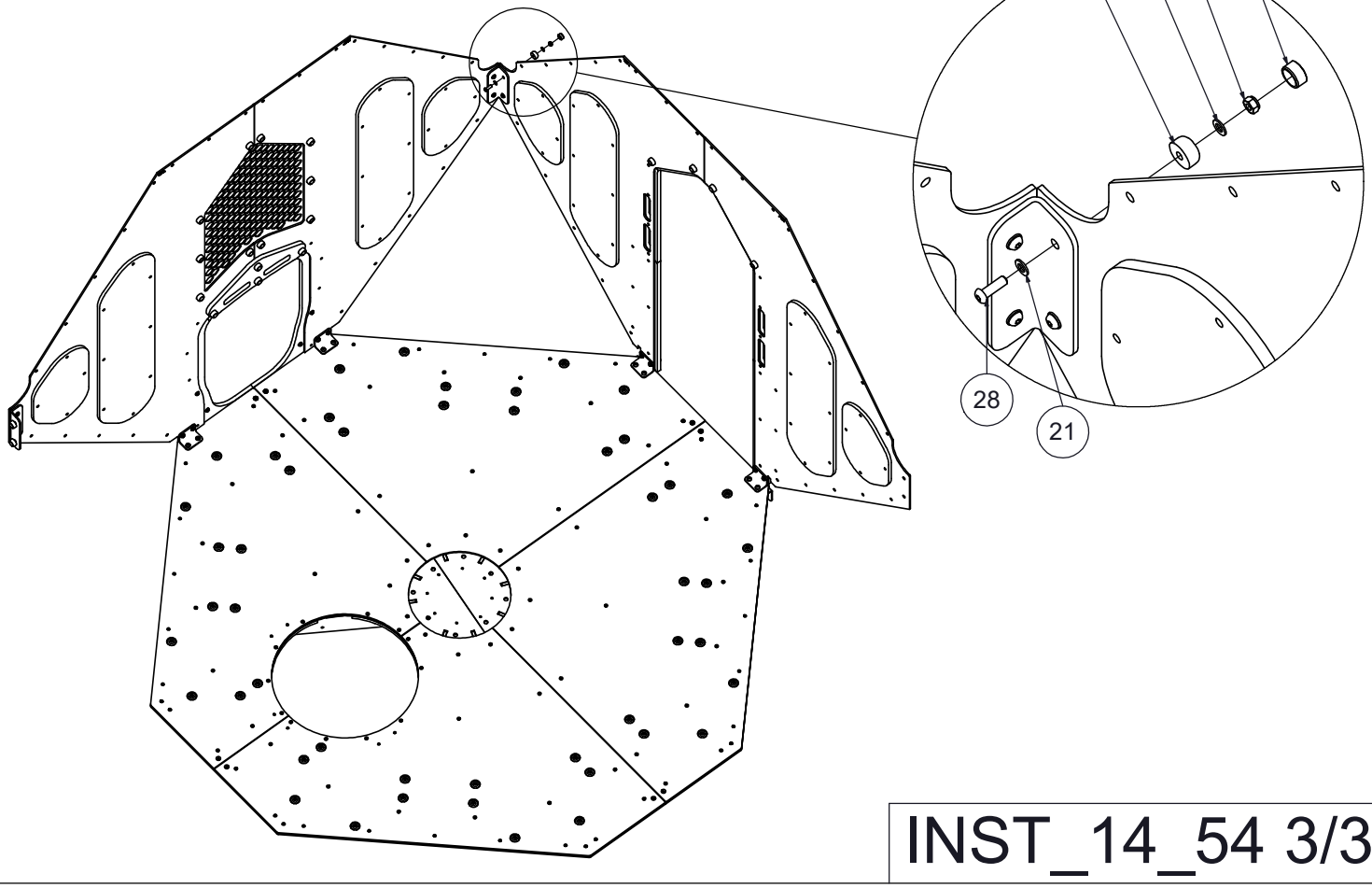


2



3





INST_14_54 3/3

INST_14_60

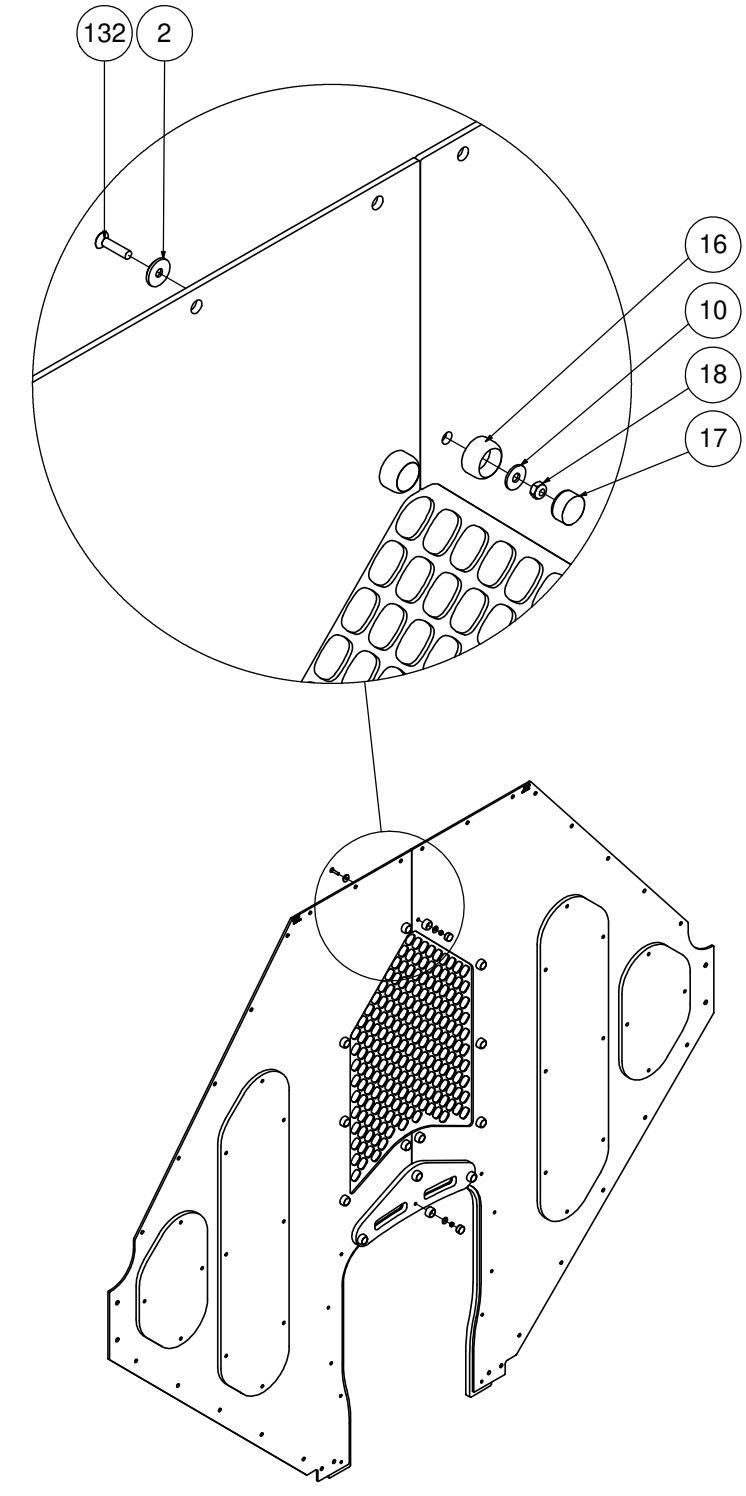


Nr. 4, 5



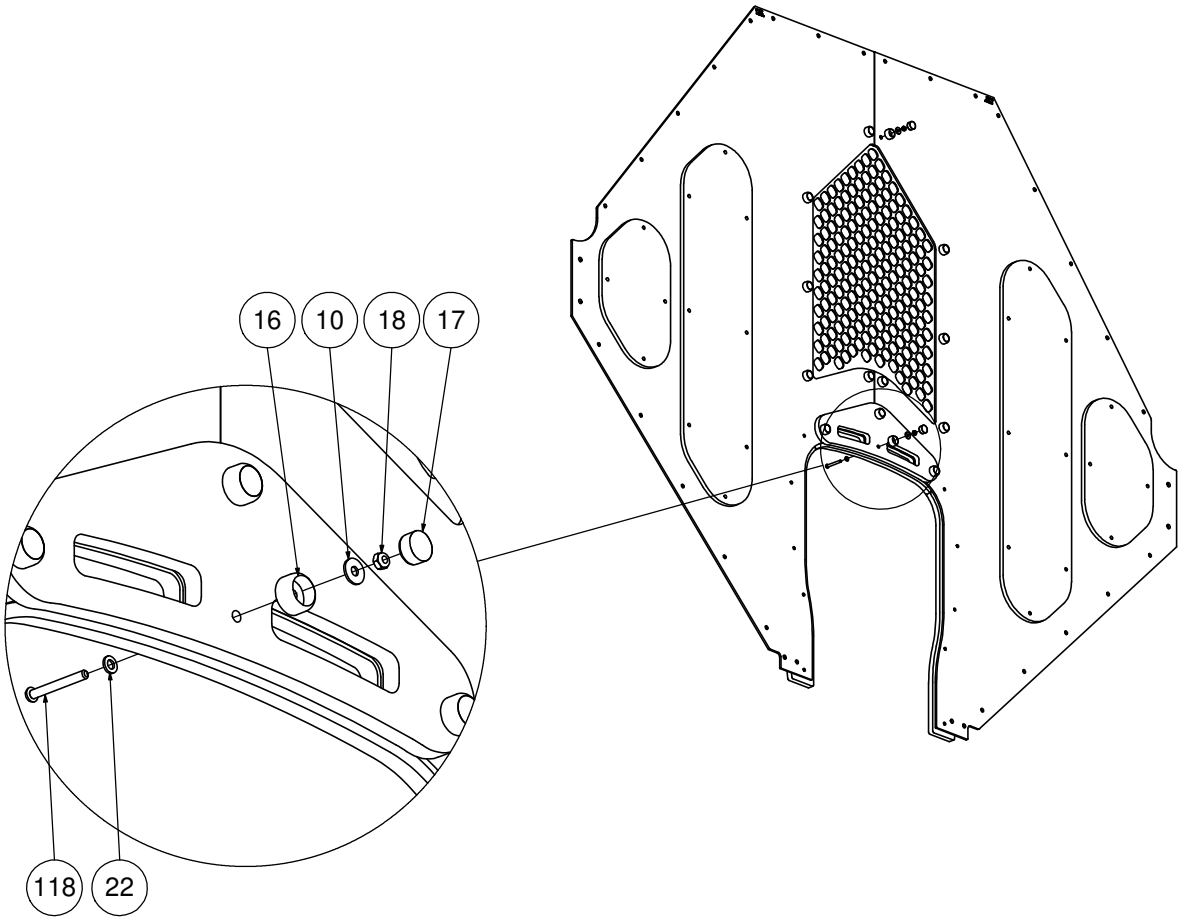
Nr. 10,13

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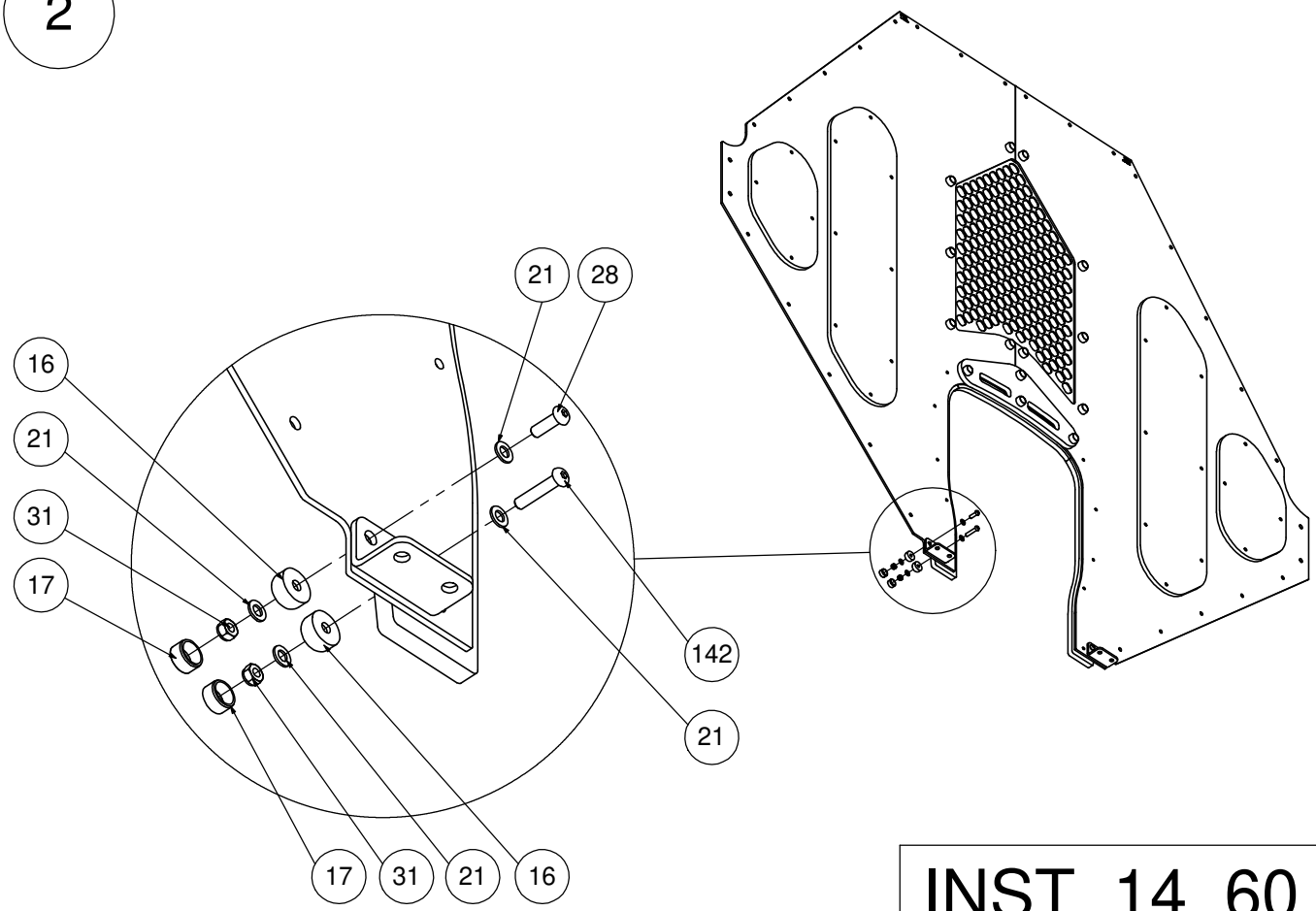


Nr	Σ	Element		
2	10		-	W6x60
10	14		DIN 9021	6x18
16	24		-	K1_d21_B
17	24		-	Z1_d21_B
18	14		DIN 985	M6 (OC)
21	20		DIN 125	8x16
22	4		DIN 125	6x12
28	6		ISO 7380	M8x25
31	10		DIN 985	M8 (OC)
45	2		ISO 7380	M8x30
118	4		ISO 7380	M6x50
132	10		DIN 7991	M6x25
142	2		ISO 7380	M8x40

INST_14_60

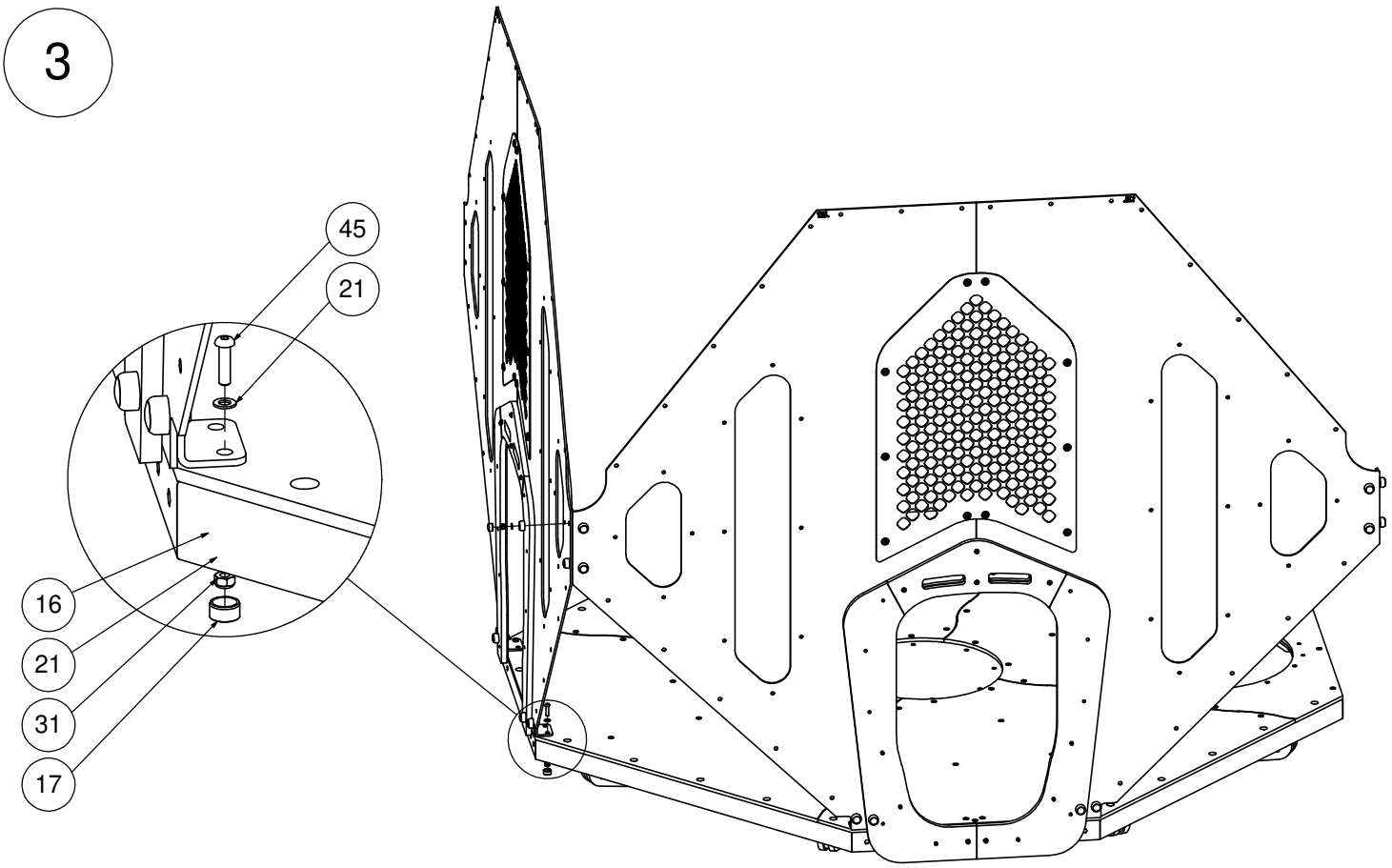


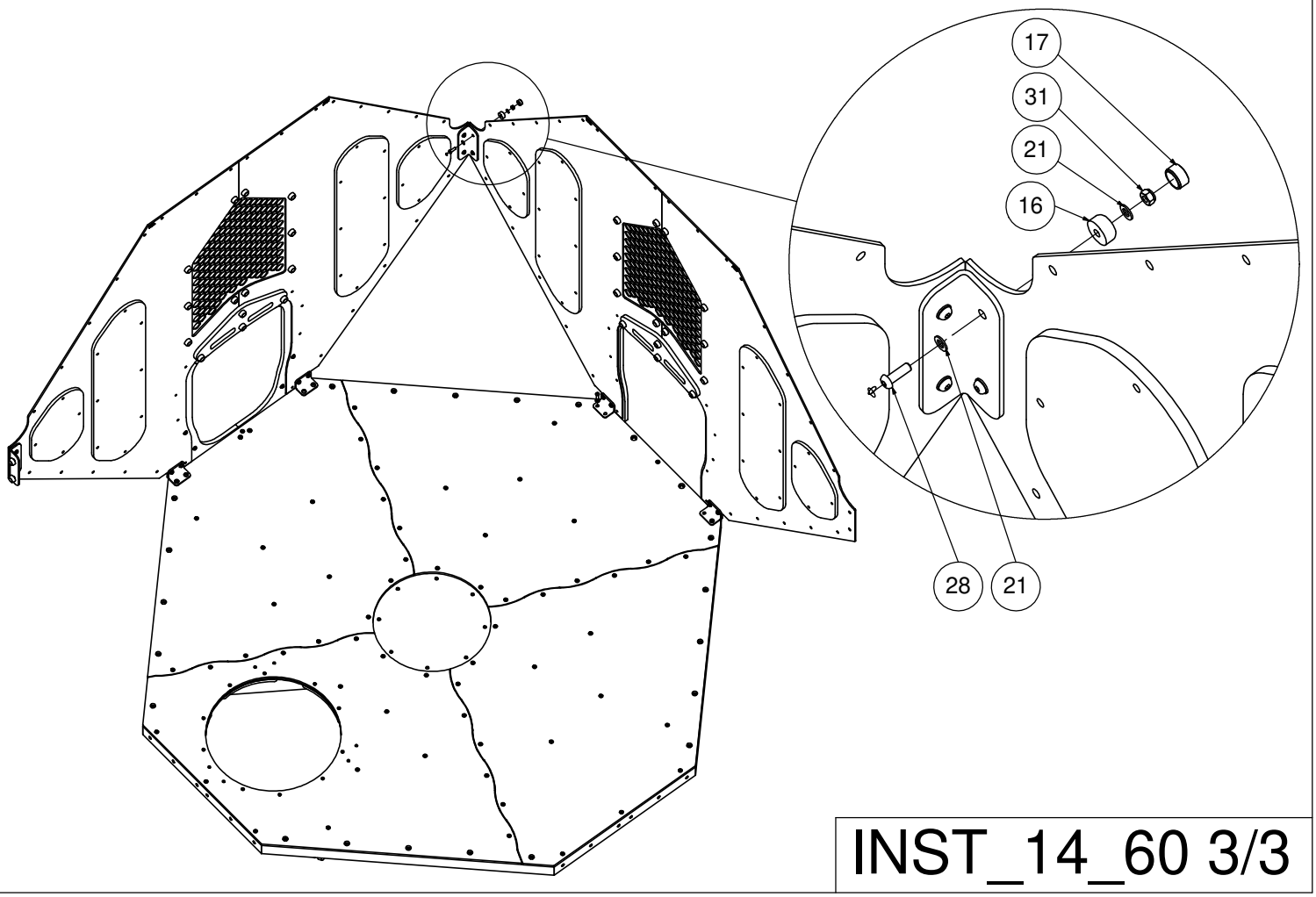
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INST_14_60

3



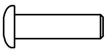


INST_14_68A

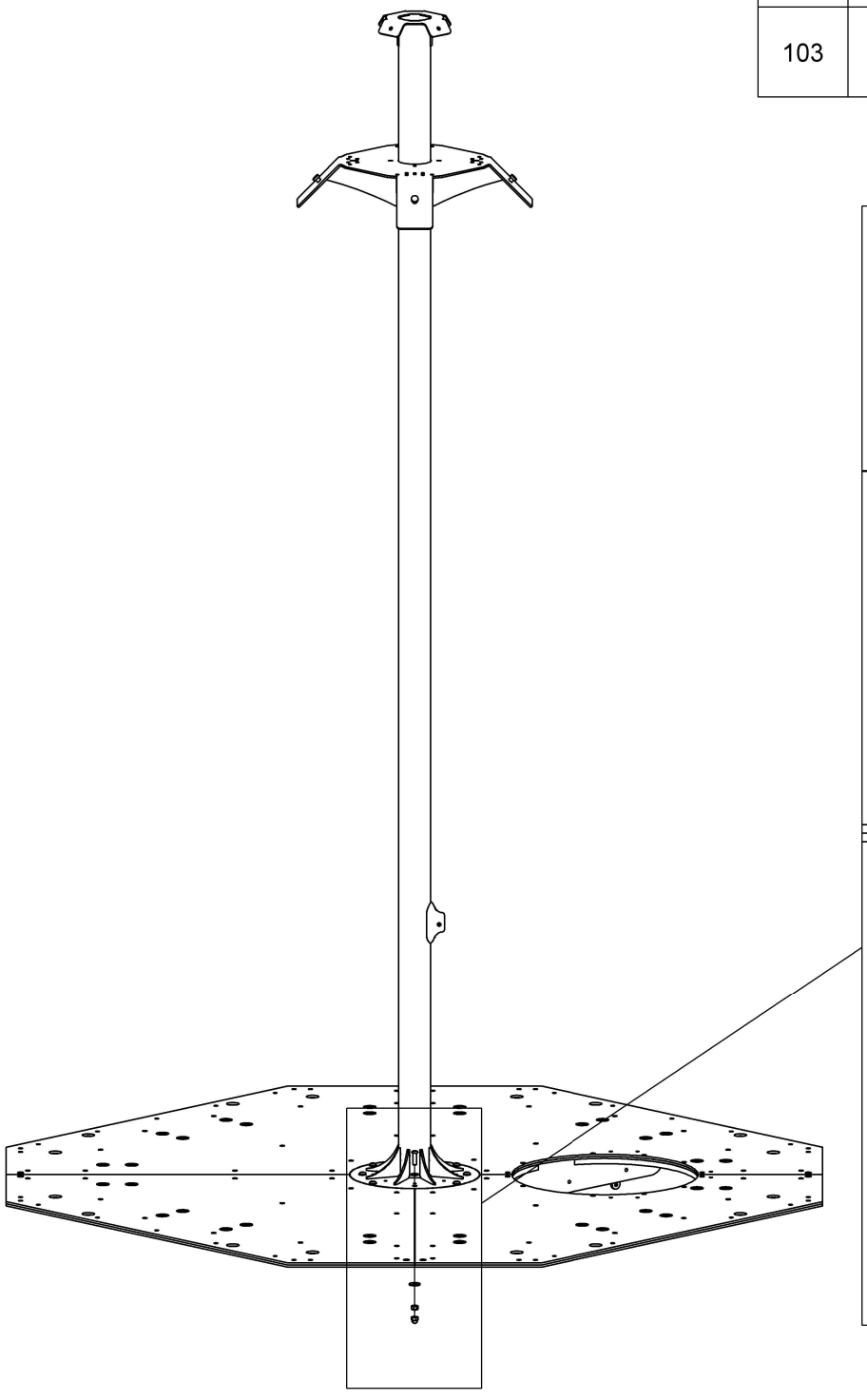


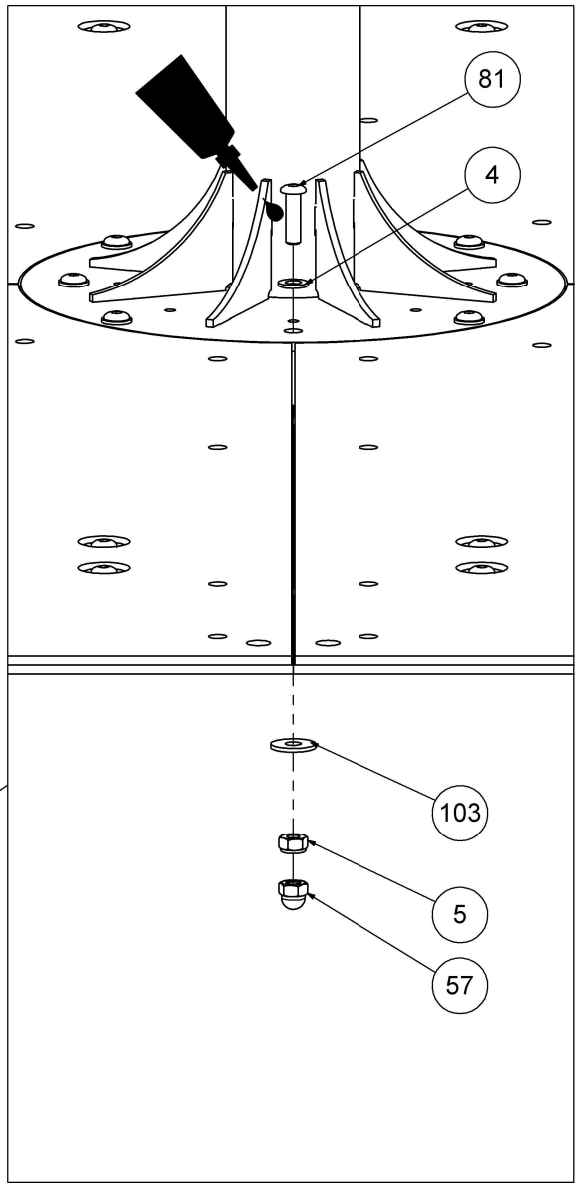


Nr. 6 Nr. 17

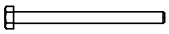
Nr	Σ	Element		
4	8		DIN 125	10x20
5	8		DIN 985	M10
57	8		DIN 1587	M10
58	1		-	LOCTITE
81	8		ISO 7380	M10x35
103	8		DIN 9021	10x30

1

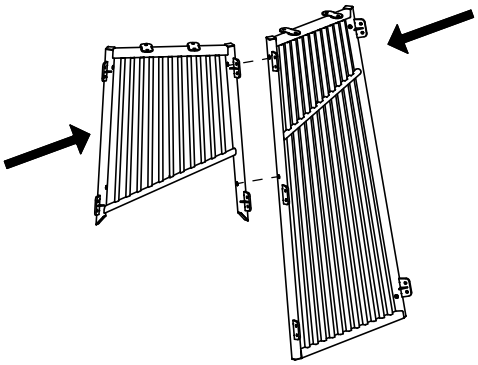




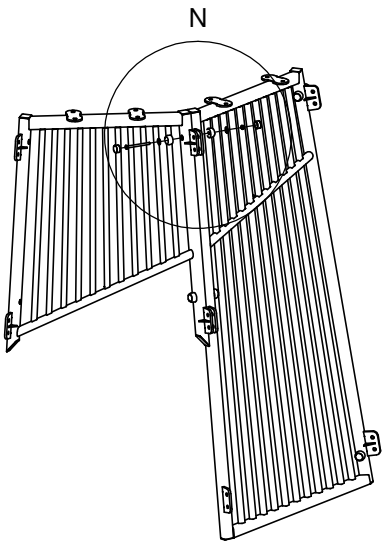
INST_14_132

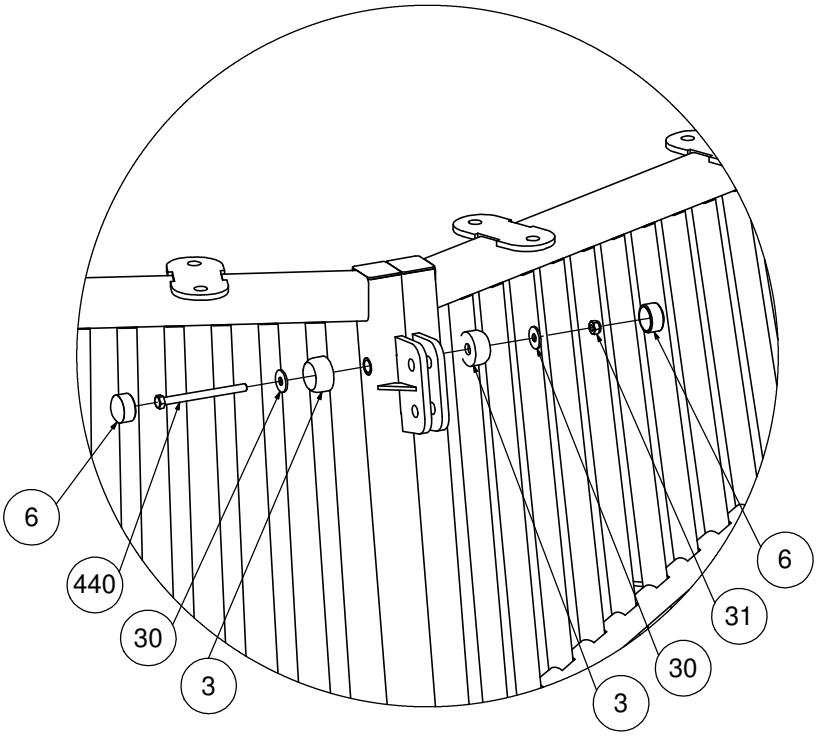
Nr	Σ	Element		
3	4		-	K2_d30_B
6	4		-	Z2_d30_B
30	4		DIN 9021	8x24
31	2		DIN 985	M8 (OC)
440	2		DIN 931	M8x100

1



2

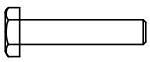




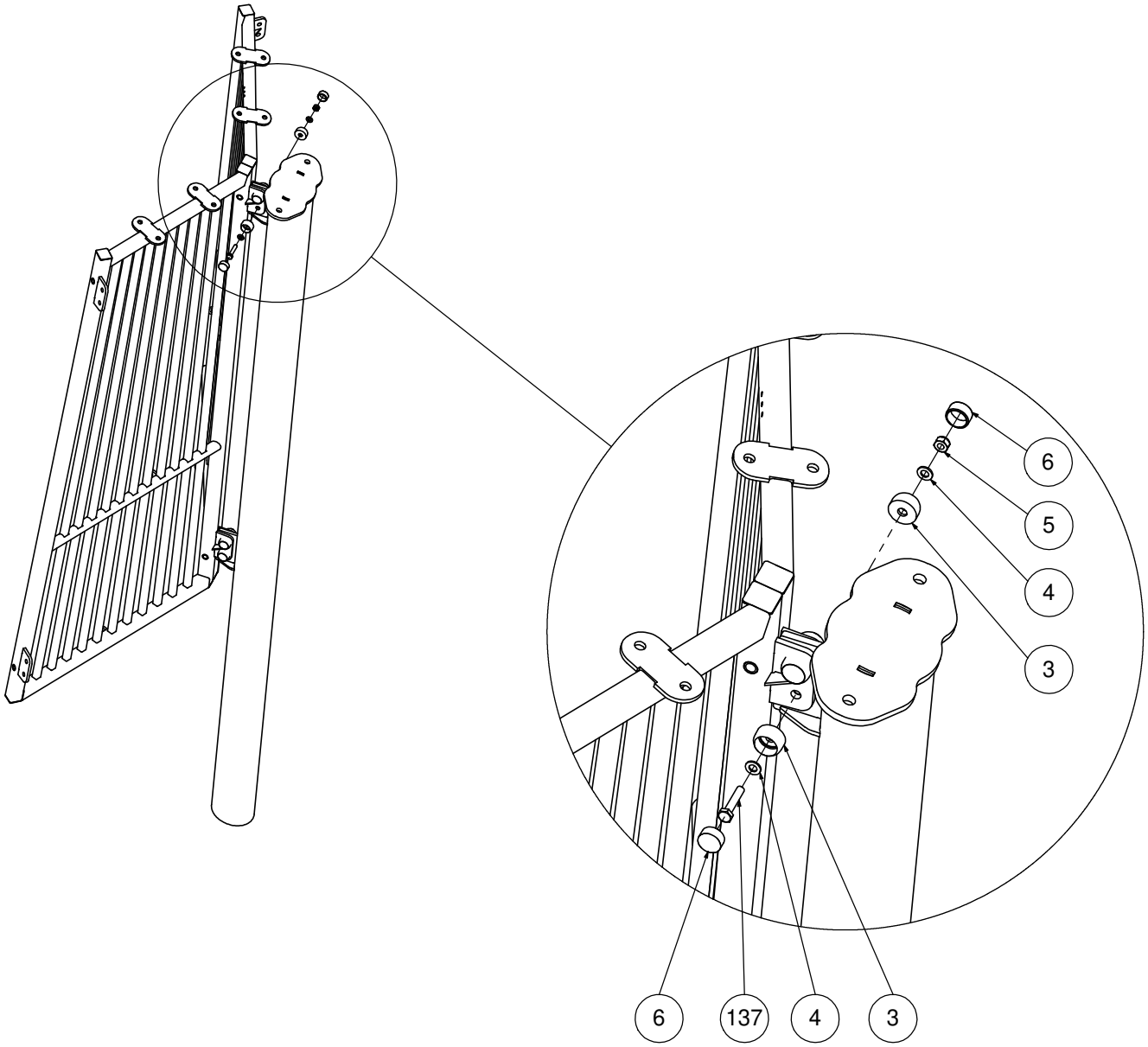
INST_14_133A



Nr. 17

Nr	Σ	Element		
3	8		-	K2_d30_B
4	8		DIN 125	10x20
5	4		DIN 985	M10
6	8		-	Z2_d30_B
137	4		DIN 931	M10x50

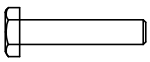
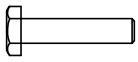
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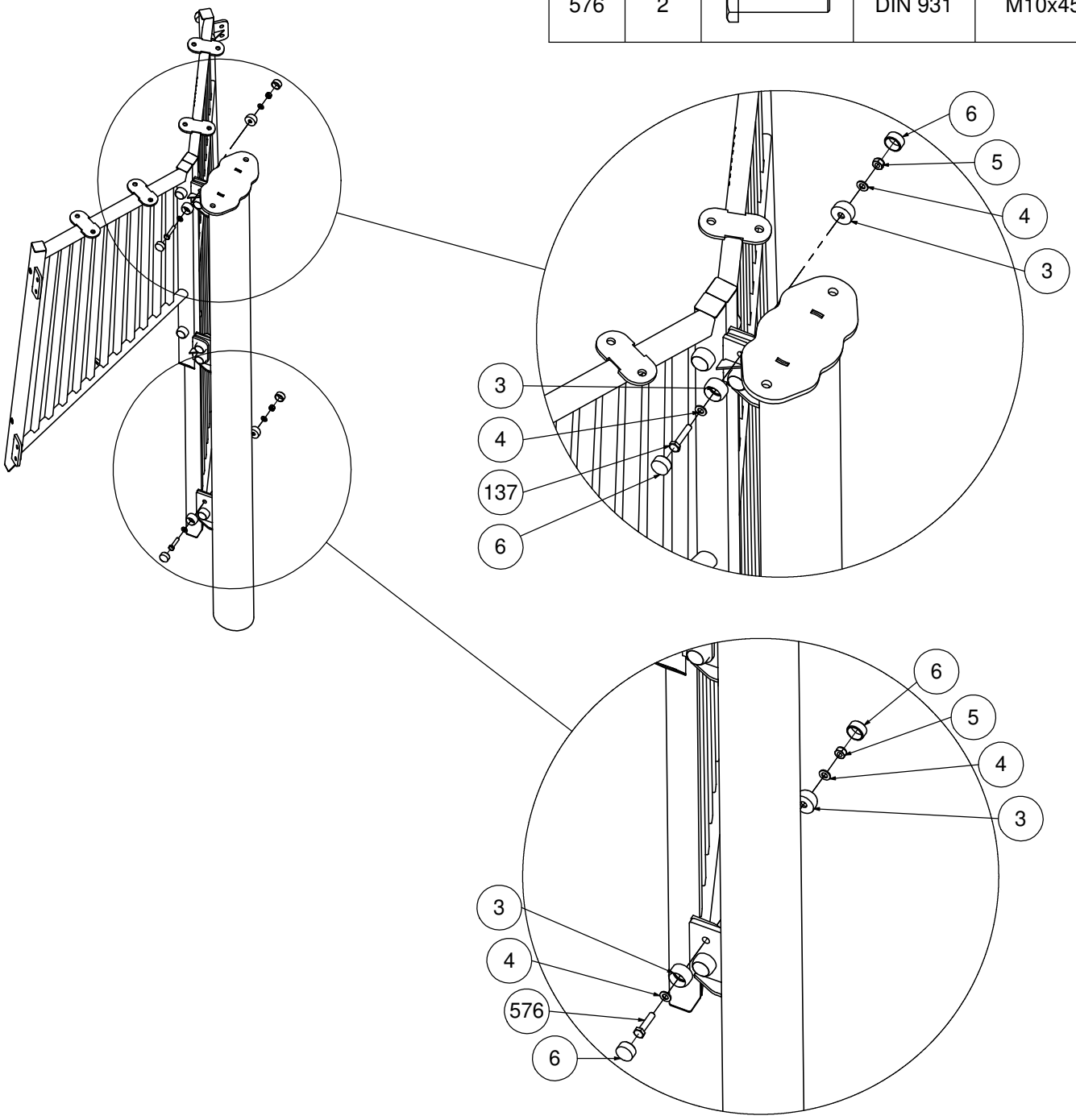
INST_14_133B



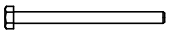
Nr. 17

Nr	Σ	Element		
3	12		-	K2_d30_B
4	12		DIN 125	10x20
5	6		DIN 985	M10
6	12		-	Z2_d30_B
137	4		DIN 931	M10x50
576	2		DIN 931	M10x45

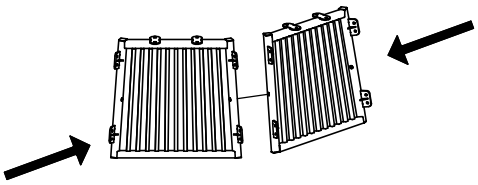
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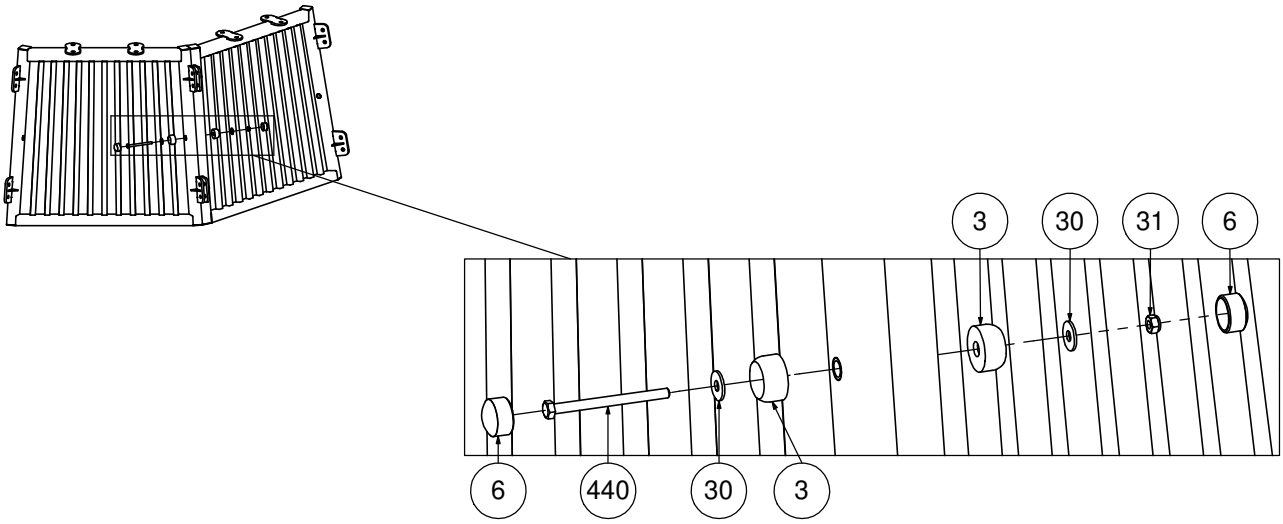
INST_14_134

Nr	Σ	Element		
3	2		-	K2_d30_B
6	2		-	Z2_d30_B
30	2		DIN 9021	8x24
31	1		DIN 985	M8 (OC)
440	1		DIN 931	M8x100

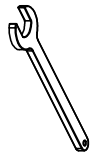
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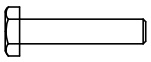
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INST_14_135



Nr. 17

Nr	Σ	Element	DIN	ELEMENT
3	8		-	K2_d30_B
4	8		DIN 125	10x20
5	4		DIN 985	M10
6	8		-	Z2_d30_B
137	4		DIN 931	M10x50

1

INST_14_137



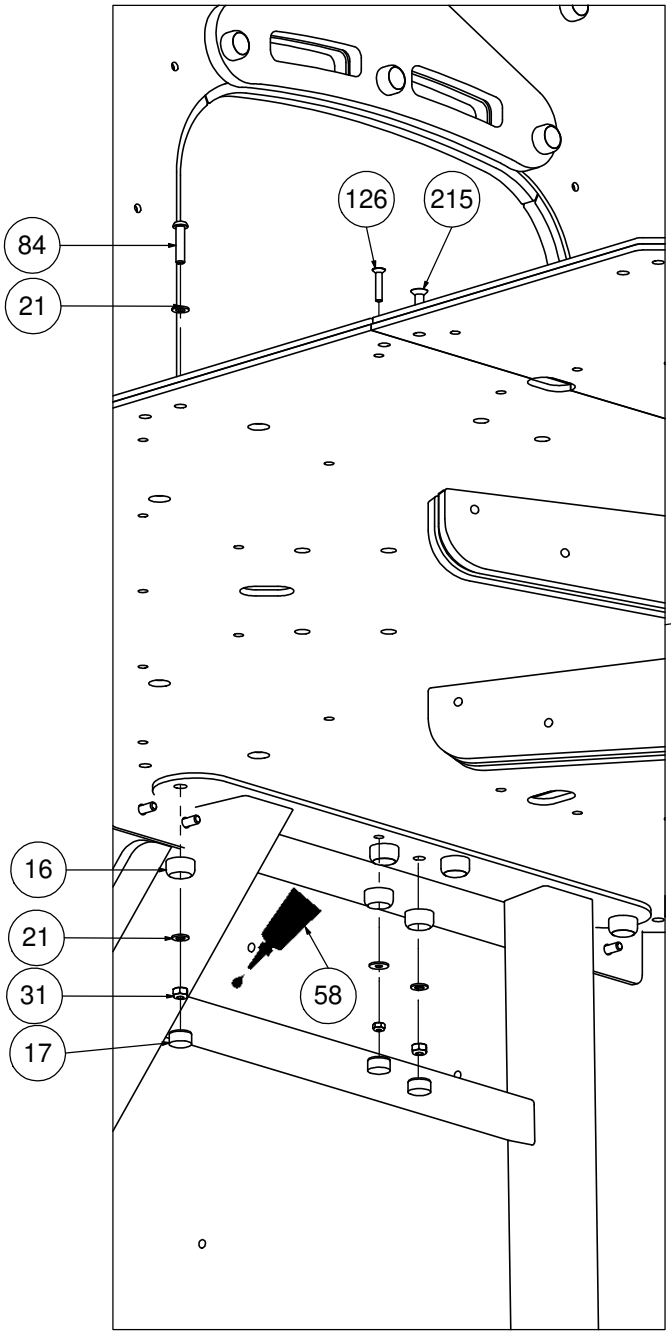
Nr. 4, 5

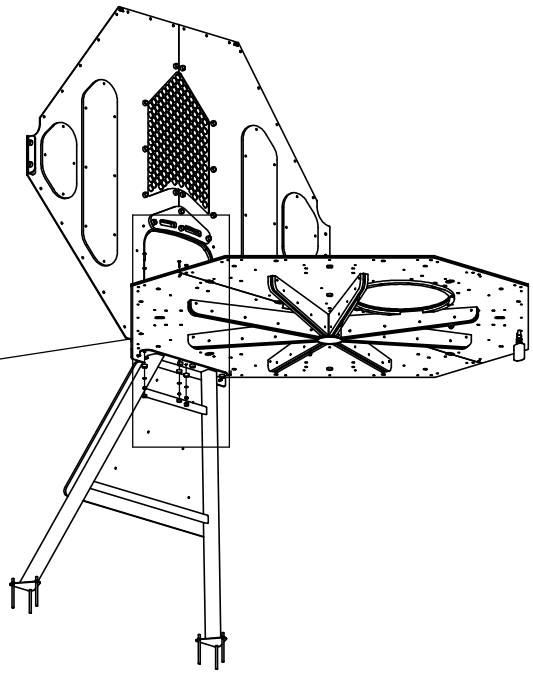


Nr. 13

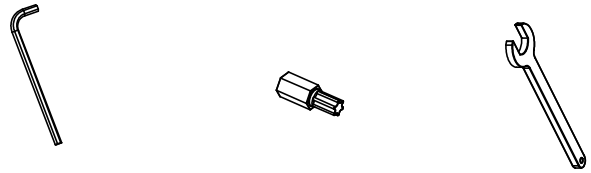
Nr	Σ	Element	DIN	ELEMENT
16	6		-	K1_d21_B
17	6		-	Z1_d21_B
21	6		DIN 125	8x16
31	4		DIN 985	M8 (OC)
58	1		-	LOCTITE
84	2		ISO 7380	M8x35
126	2		DIN 7991	M6x30
215	2		DIN 7991	M8x30

1

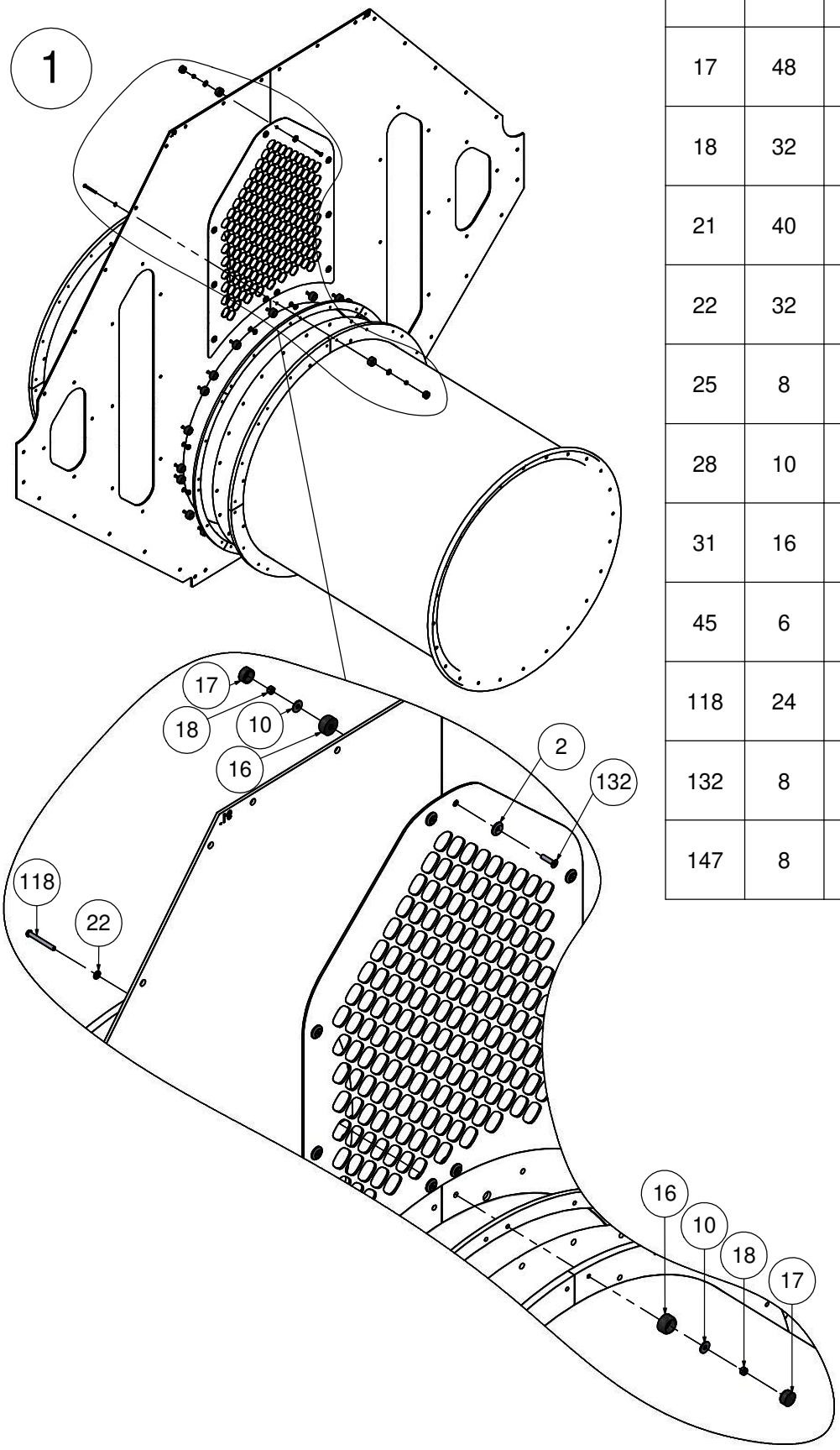




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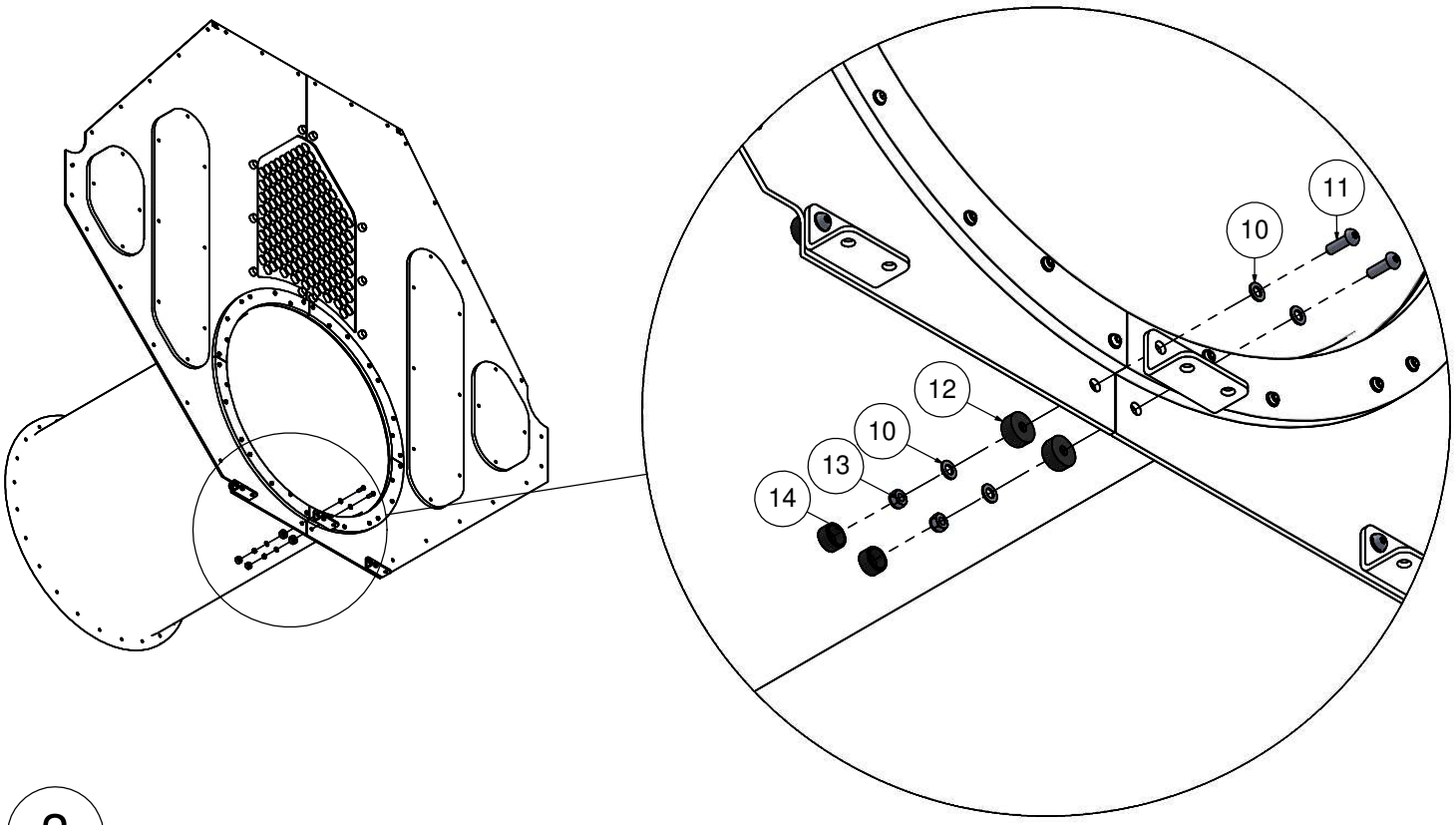
Nr. 4, 5 Nr. T30 Nr. 10, 13



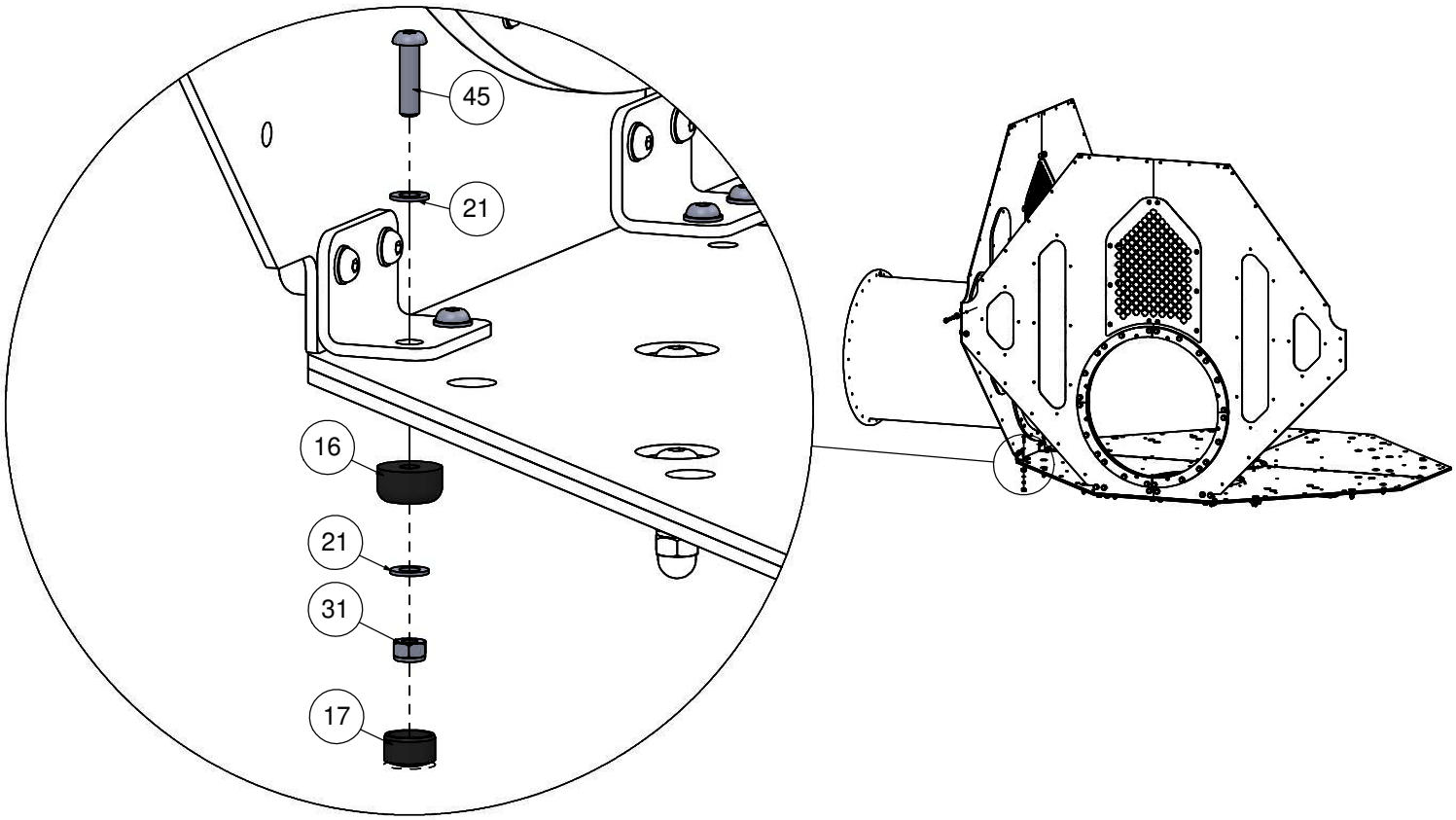
Nr	Σ	Element		
2	8		-	W6x60
10	32		DIN 9021	6x18
16	48		-	K1_d21_B
17	48		-	Z1_d21_B
18	32		DIN 985	M6 (OC)
21	40		DIN 125	8x16
22	32		DIN 125	6x12
25	8		ISO 7380	M6x35
28	10		ISO 7380	M8x25
31	16		DIN 985	M8 (OC)
45	6		ISO 7380	M8x30
118	24		ISO 7380	M6x50
132	8		DIN 7991	M6x25
147	8		-	M6x10

INST_14_139

2

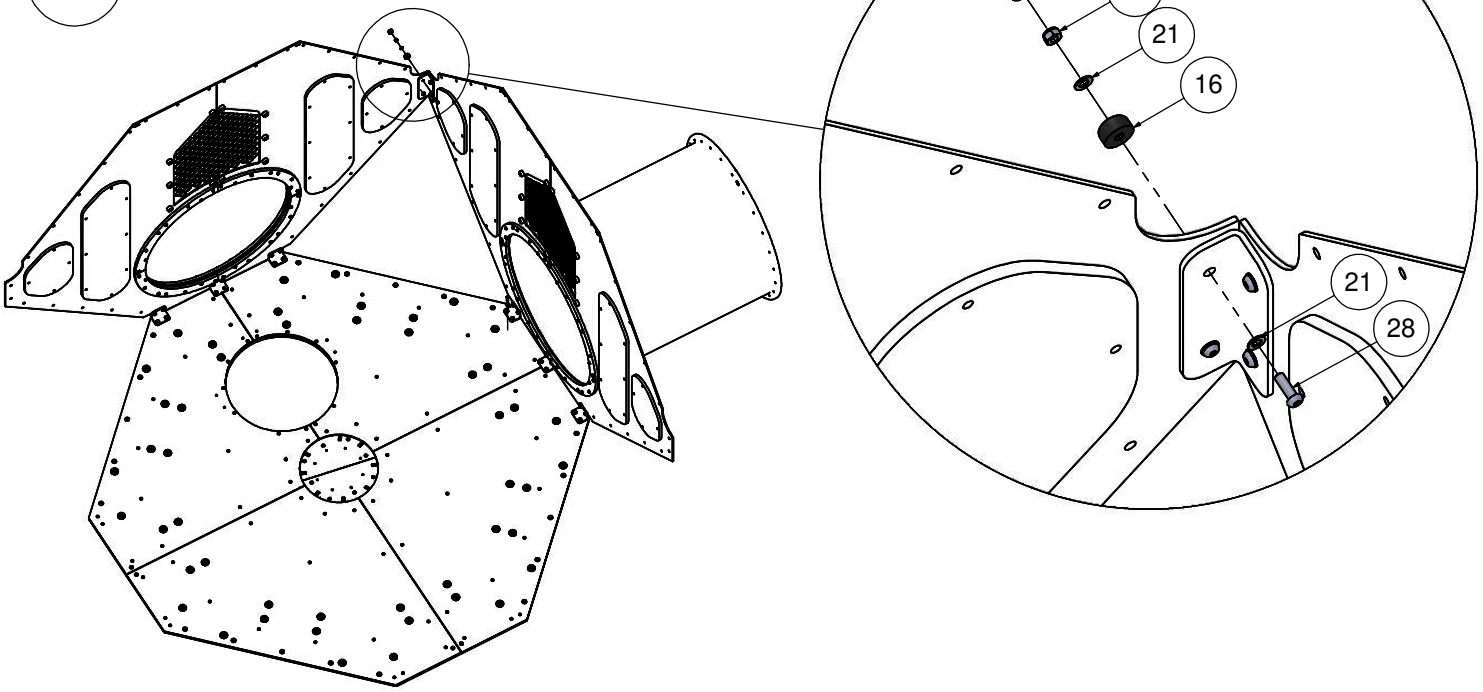


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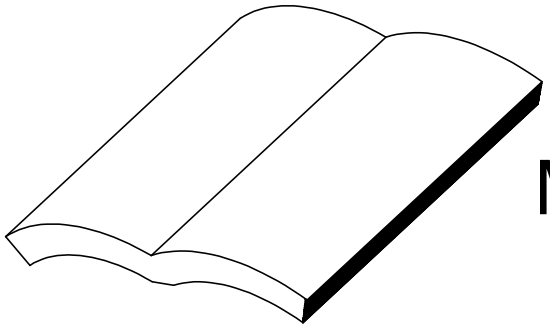


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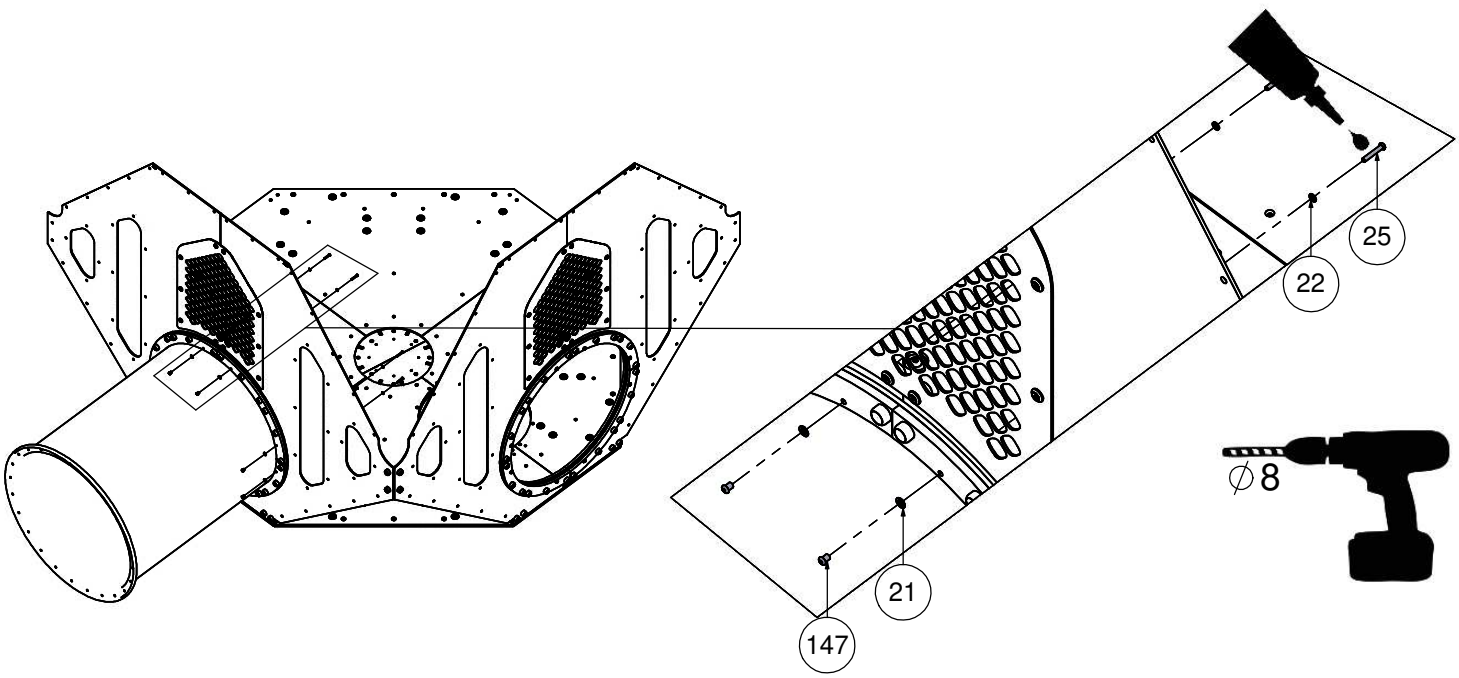


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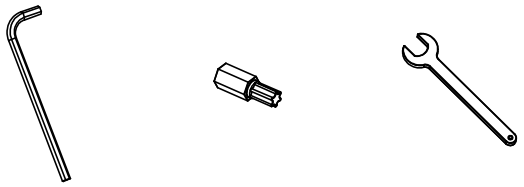


MTS....

5

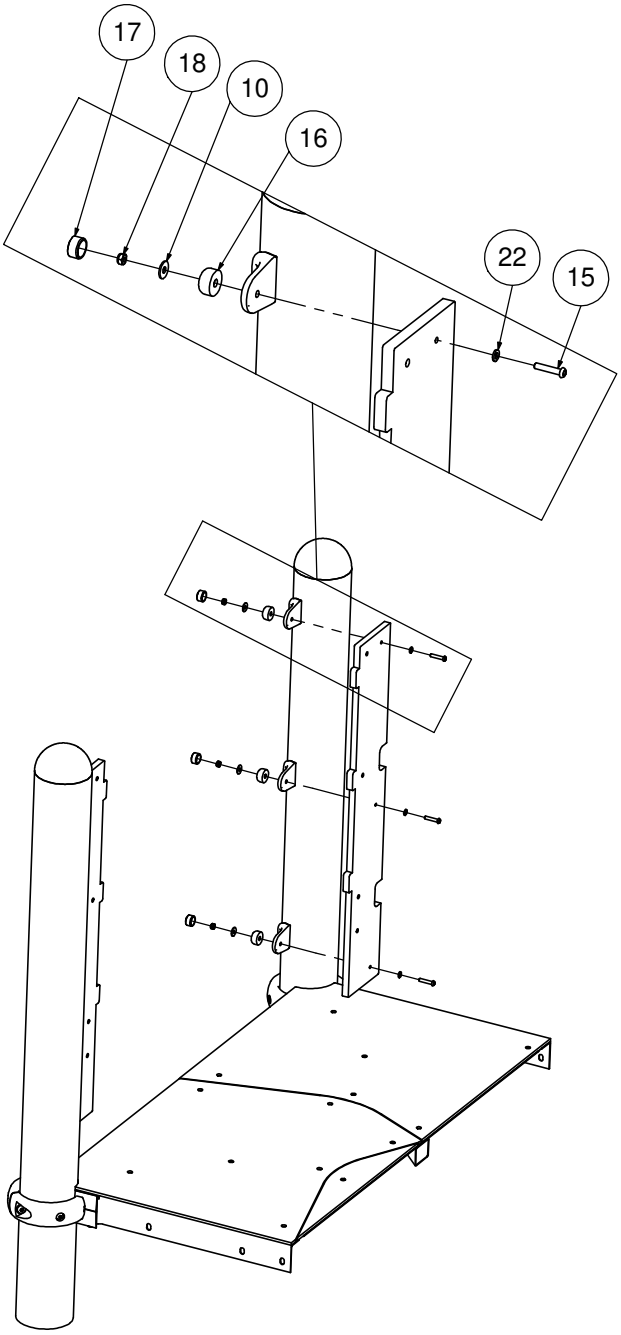


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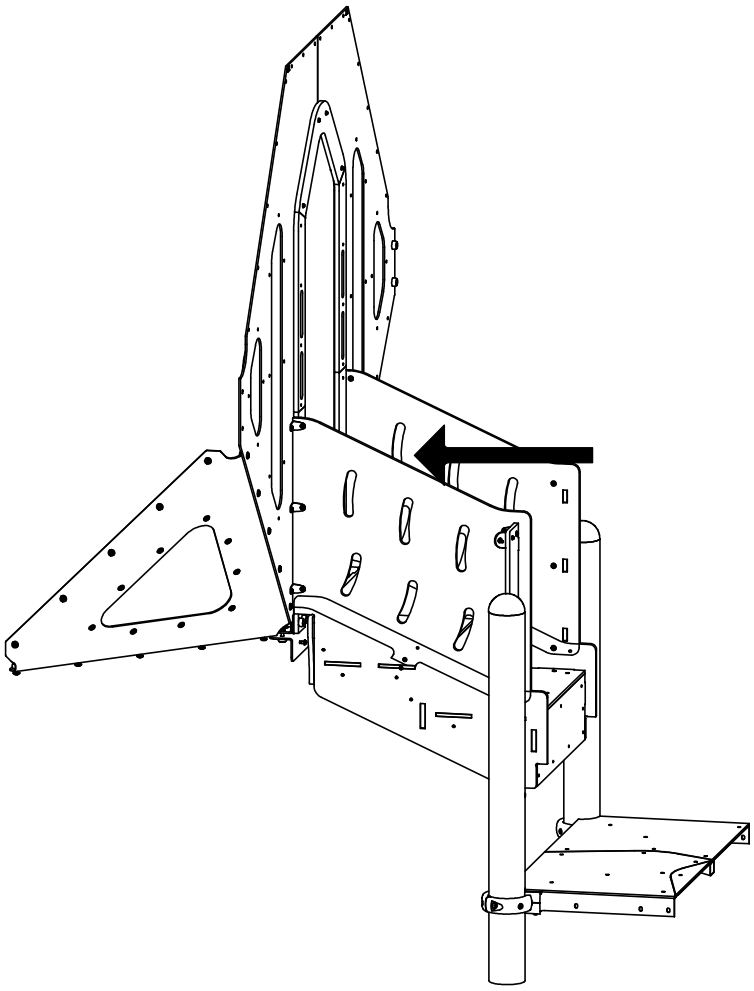
Nr. 4 Nr. T30 Nr. 10

1

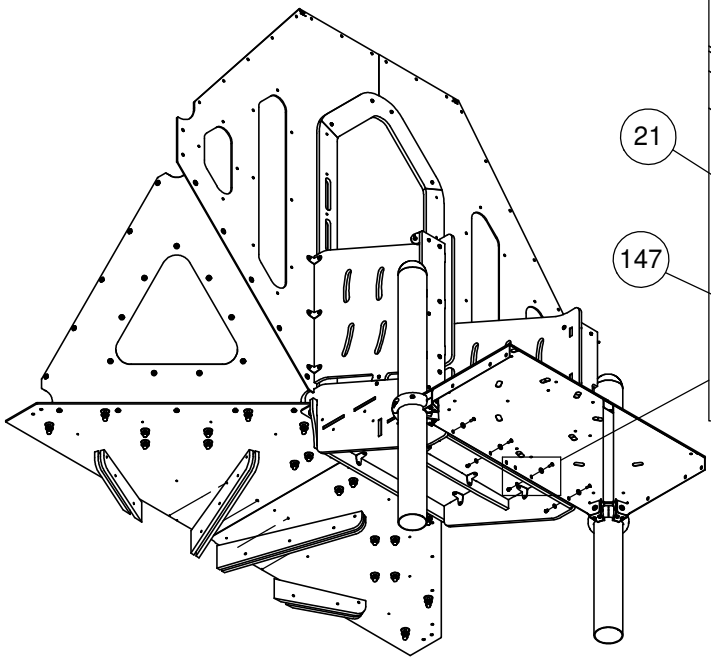


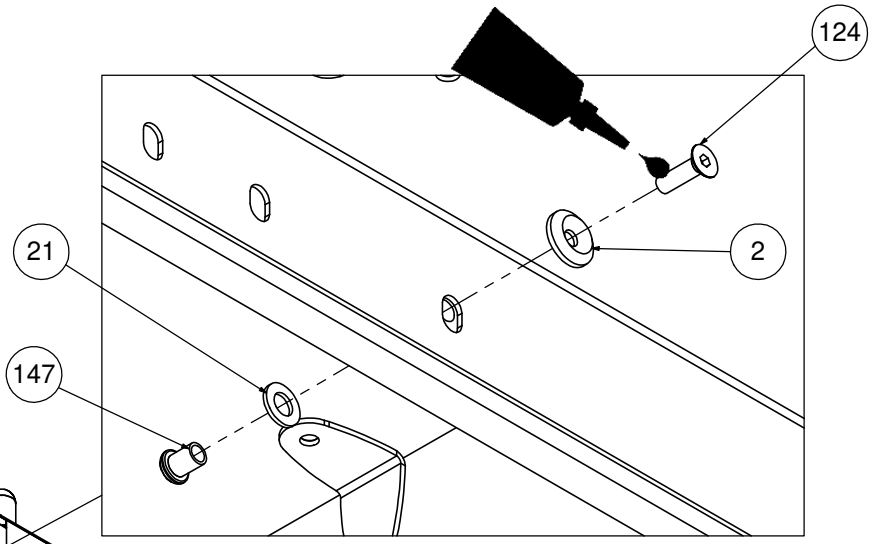
Nr	Σ	Element		
2	4		-	W6x60
9	4		ISO 7380	M6x25
10	12		DIN 9021	6x18
13	6		ISO 7380	M6x20
14	22		ISO 7380	M6x12
15	6		ISO 7380	M6x30
16	12	ϕ2,1	-	K1_d21_B
17	12	ϕ2,1	-	Z1_d21_B
18	12		DIN 985	M6 (OC)
21	34		DIN 125	8x16
22	42		DIN 125	6x12
24	4		-	M6x16
58	1		-	LOCTITE
29	14		-	K_5_A2_g2_G_v2
98	2		-	F20X_44_HP_g13
124	4		DIN 7991	M6x20
147	34		-	M6x10

2

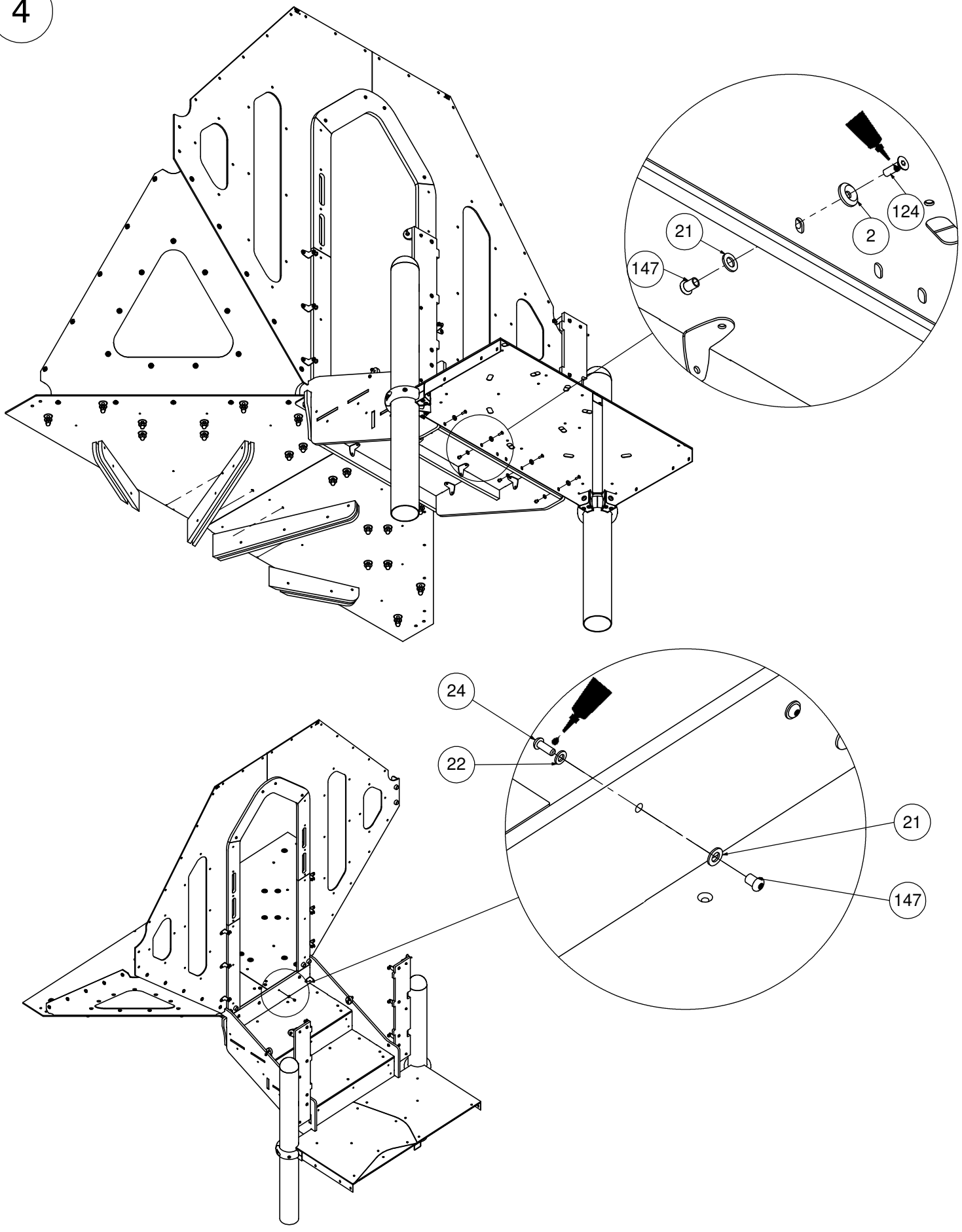


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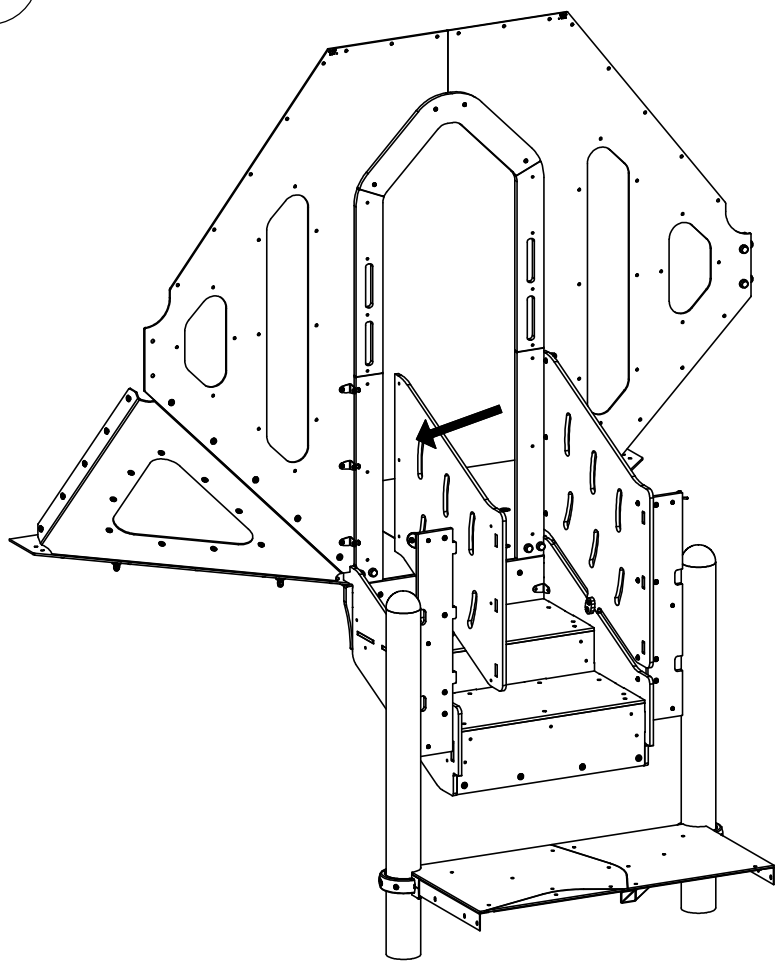




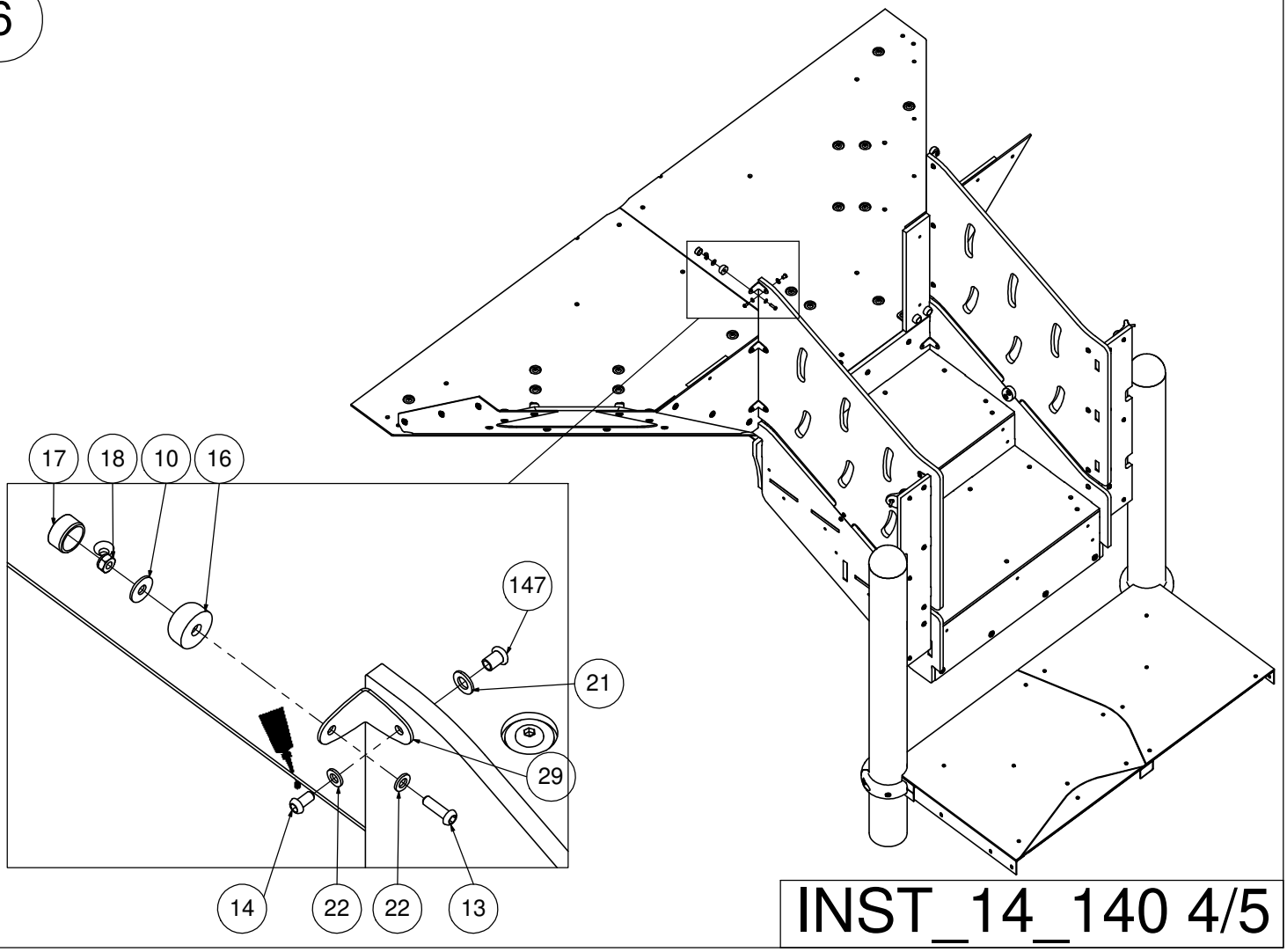
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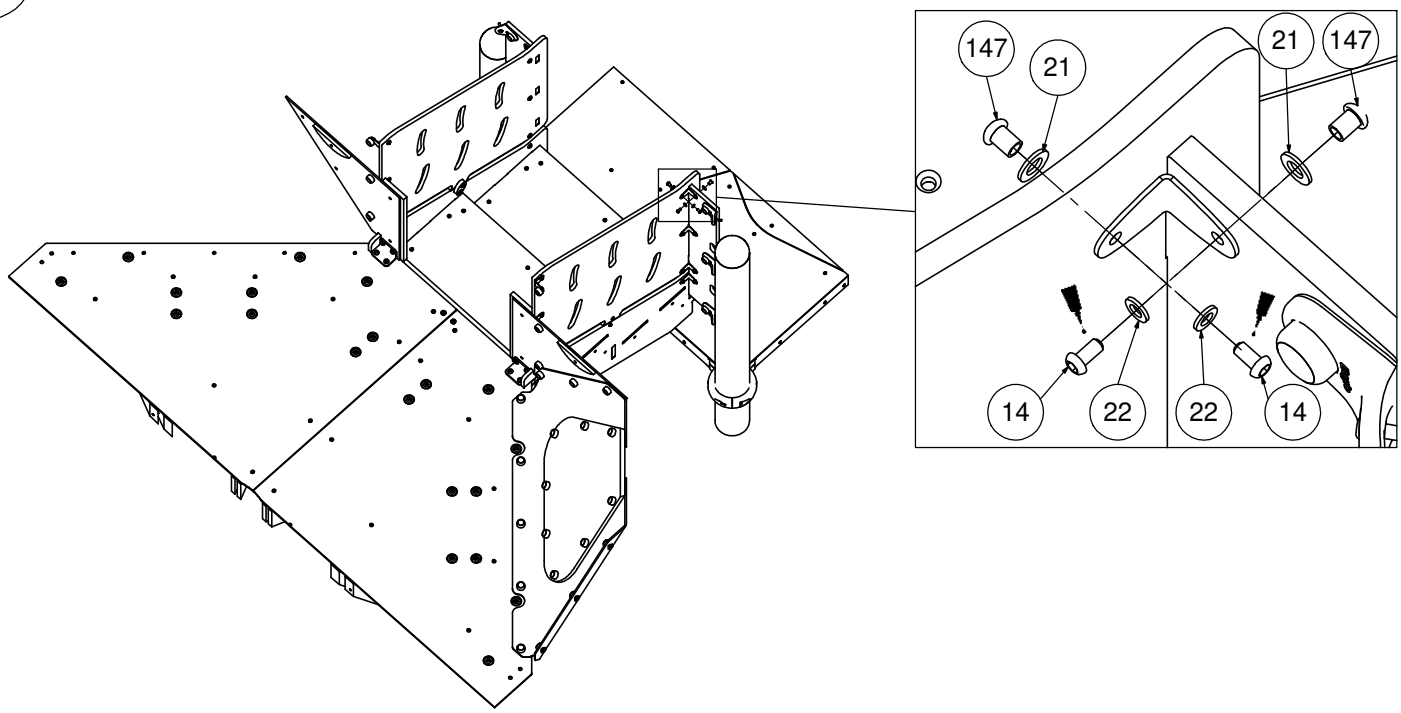
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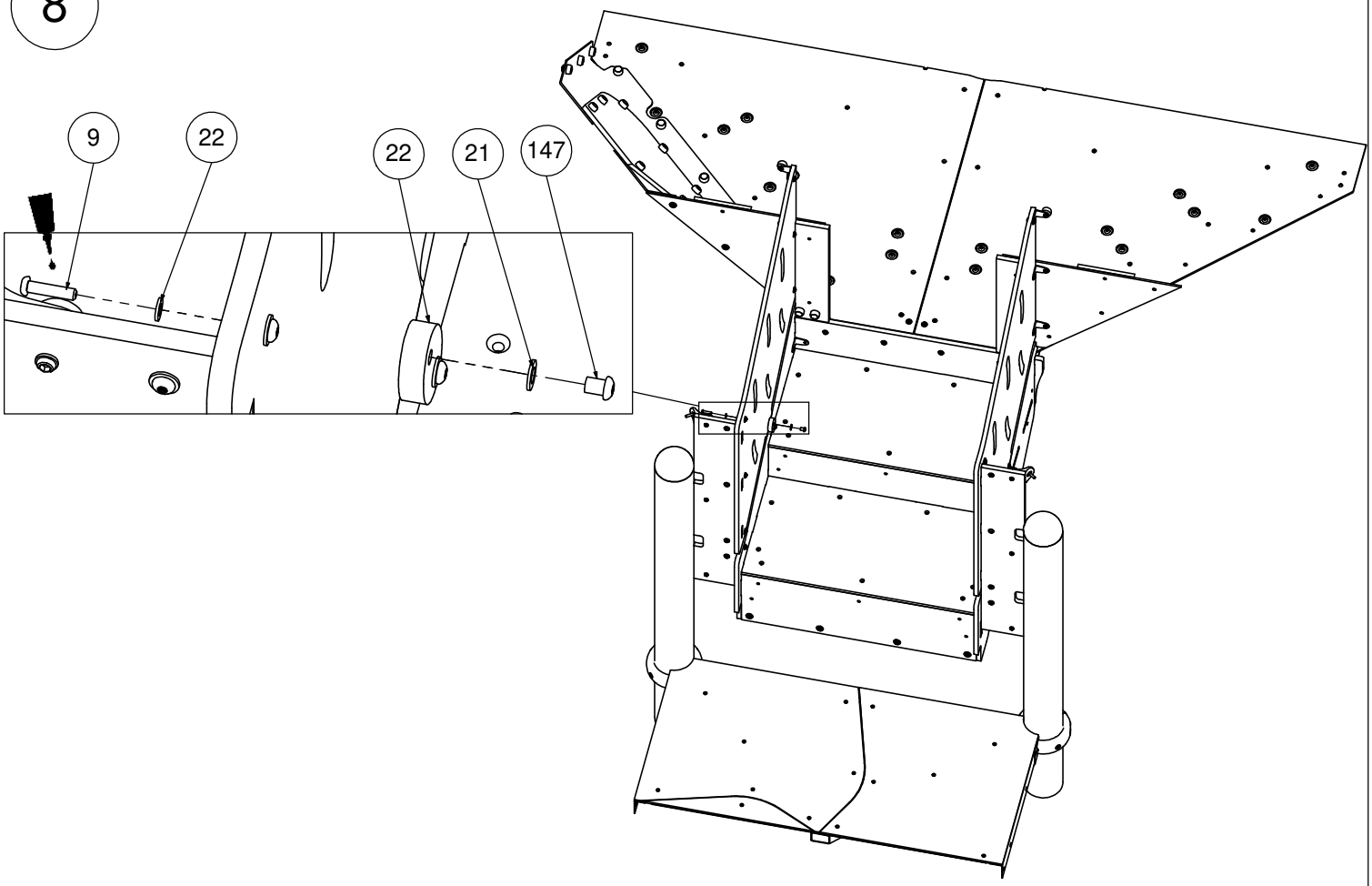
6



7



8



INST_14_141



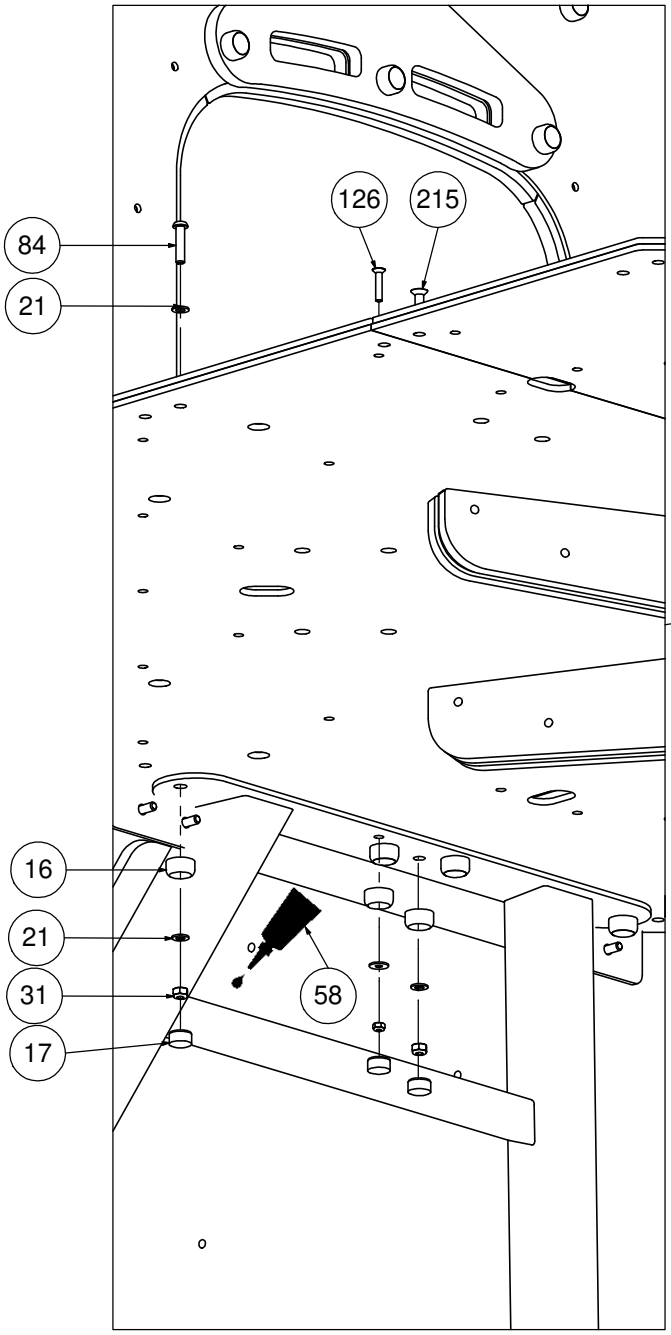
Nr. 4, 5

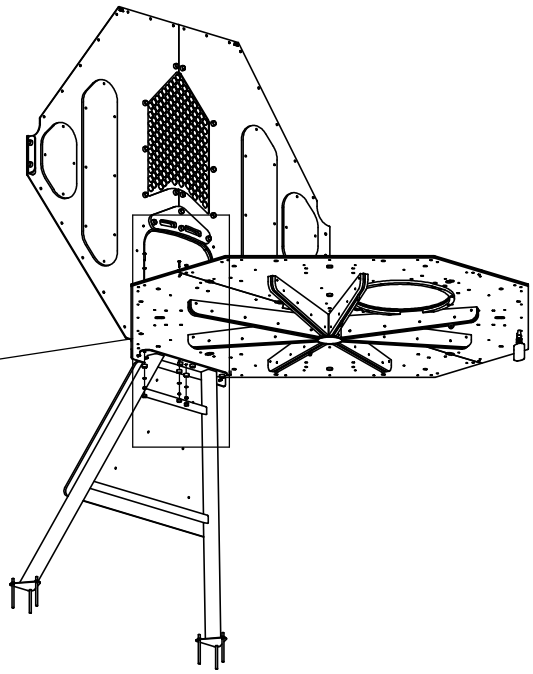


Nr. 13

Nr	Σ	Element	DIN	ELEMENT
16	6		-	K1_d21_B
17	6		-	Z1_d21_B
21	6		DIN 125	8x16
31	4		DIN 985	M8 (OC)
58	1		-	LOCTITE
84	2		ISO 7380	M8x35
126	2		DIN 7991	M6x30
215	2		DIN 7991	M8x30

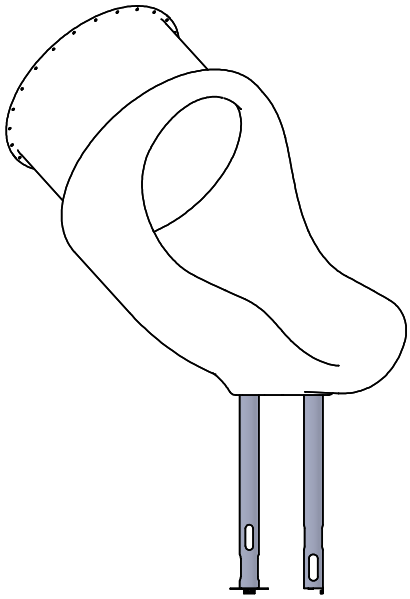
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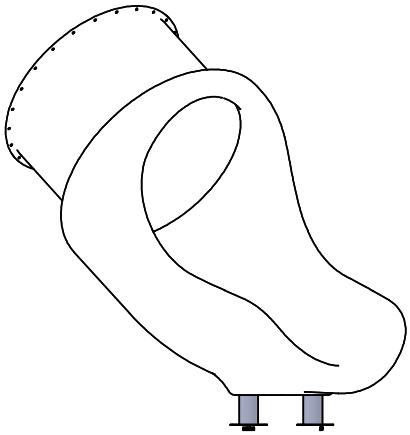


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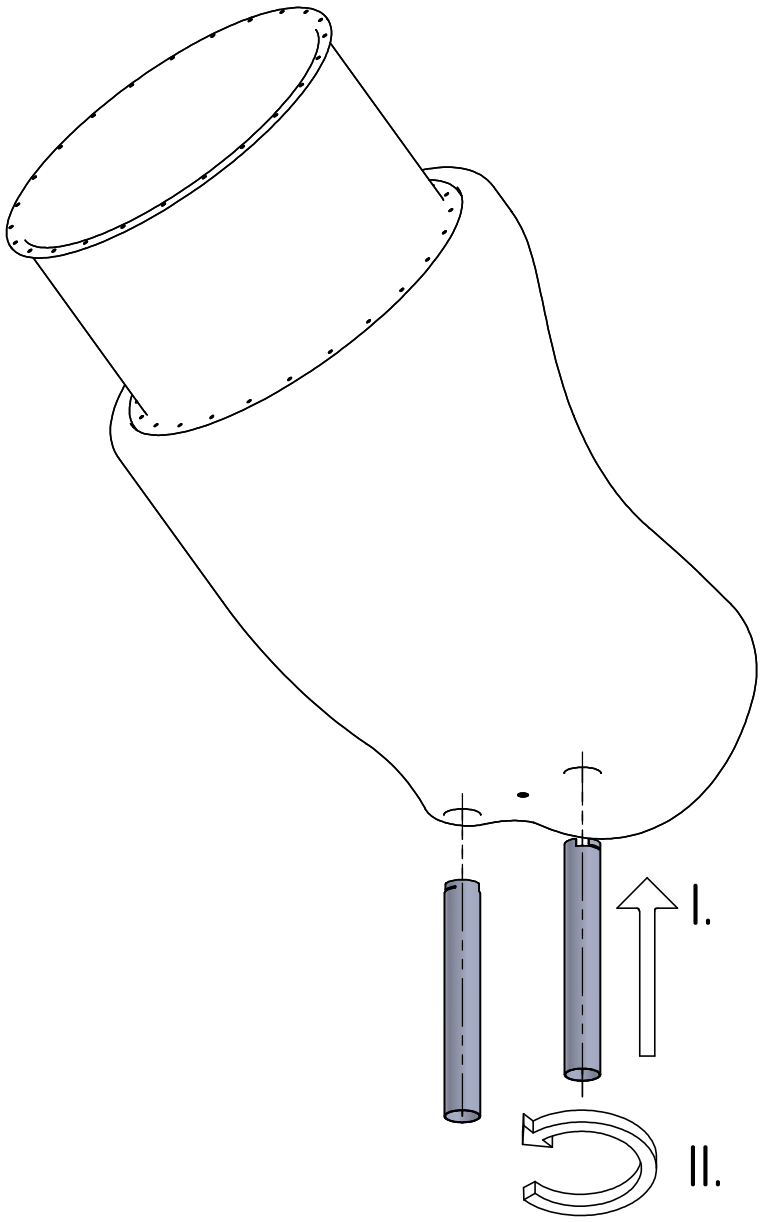
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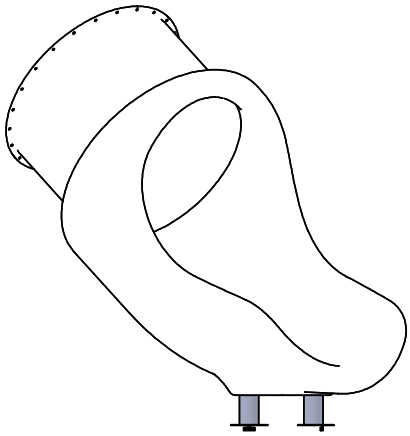
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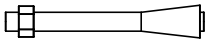


1



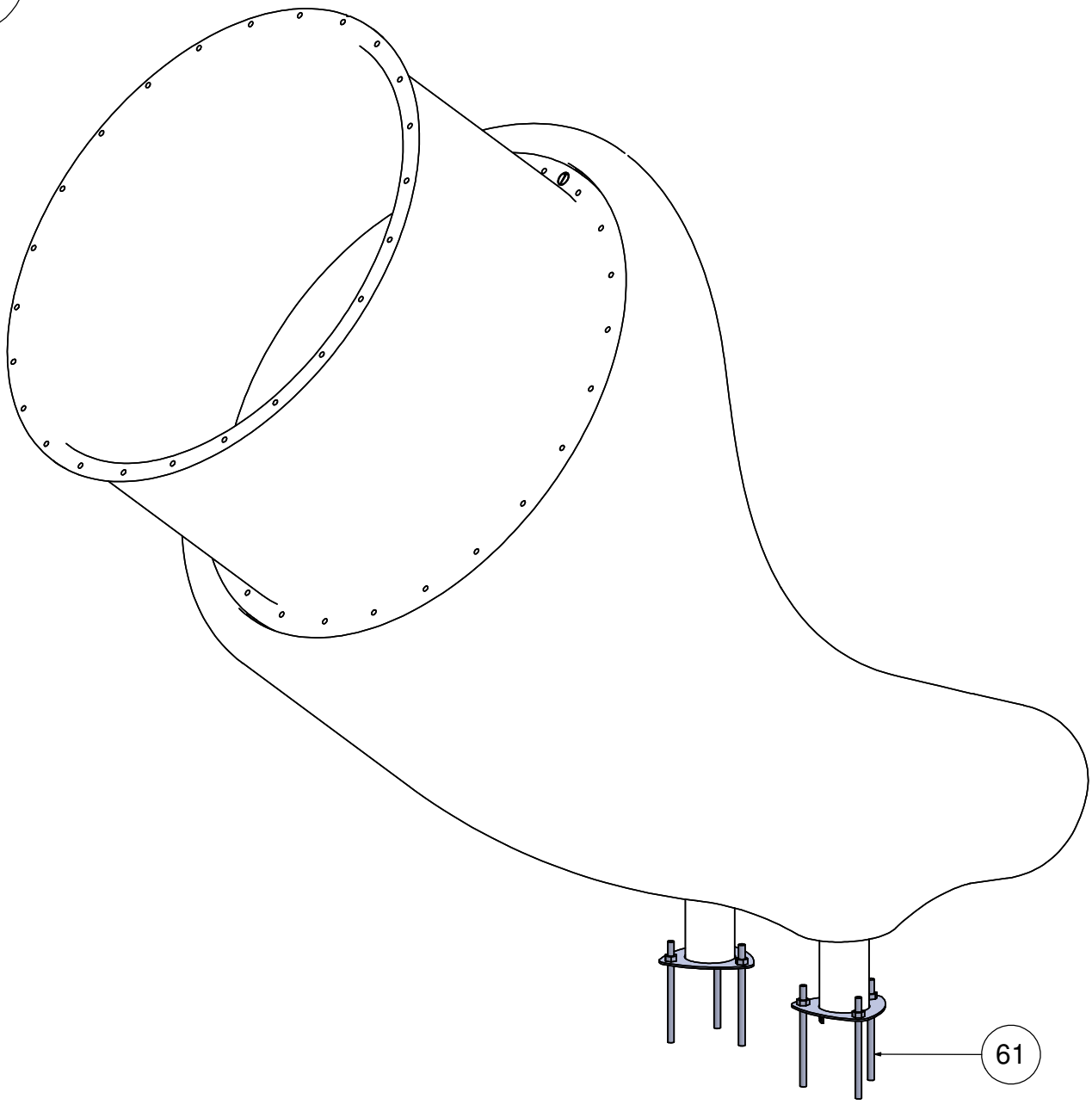
F



Nr	Σ	Element	DIN	ELEMENT
61	6		-	KL105 (OC)



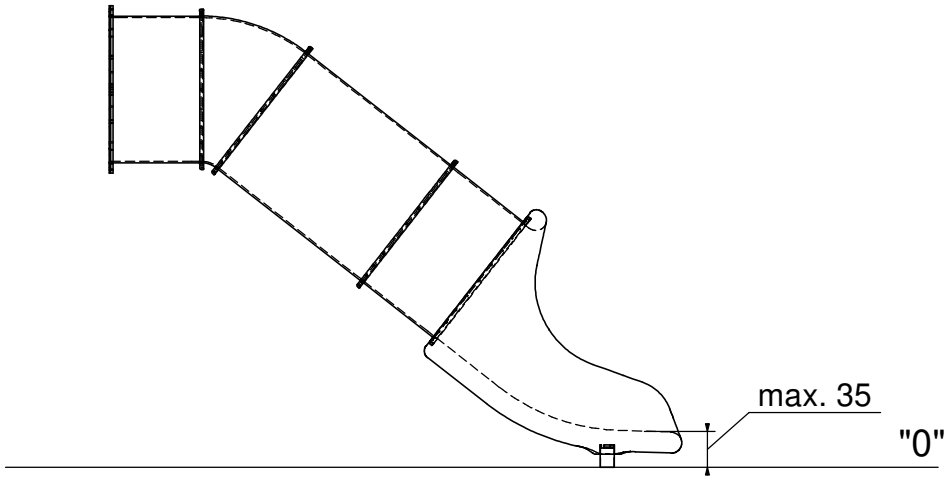
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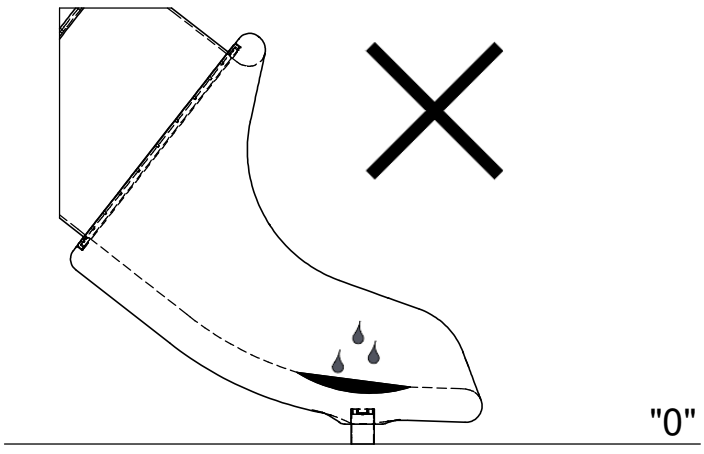


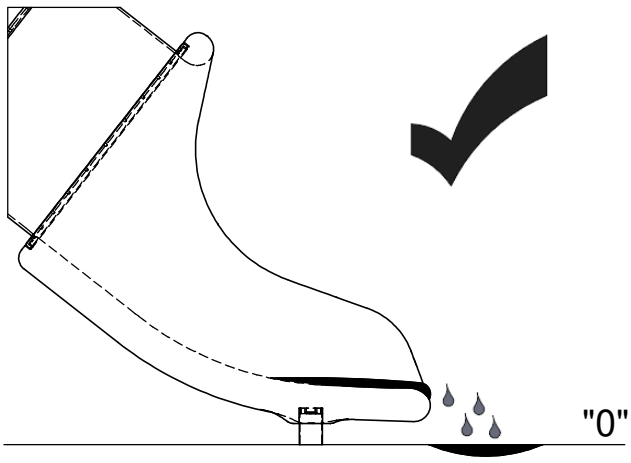
INST_MTS_1

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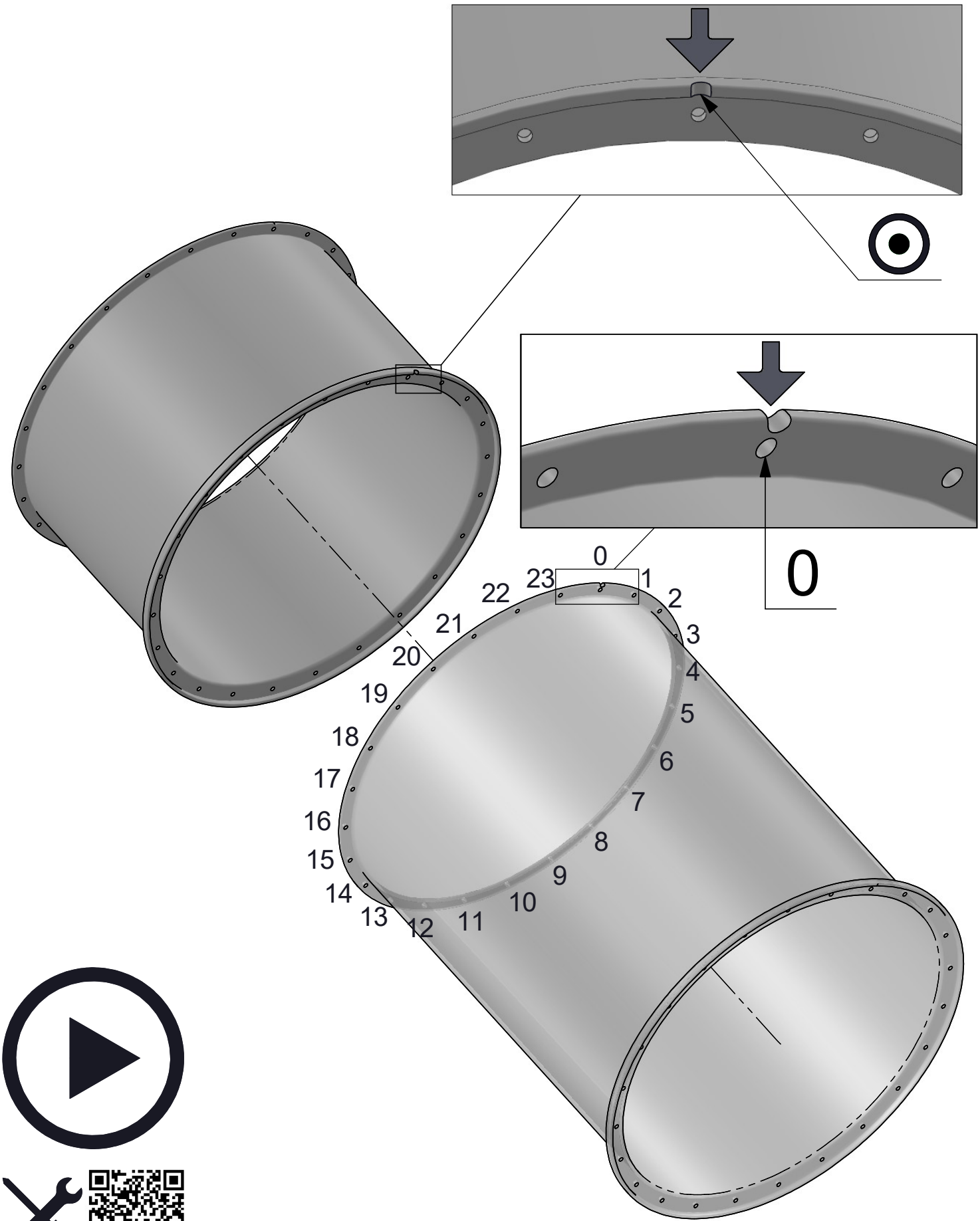
3







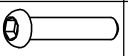
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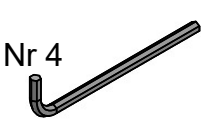


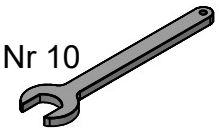
buglo.pl/mts-manual

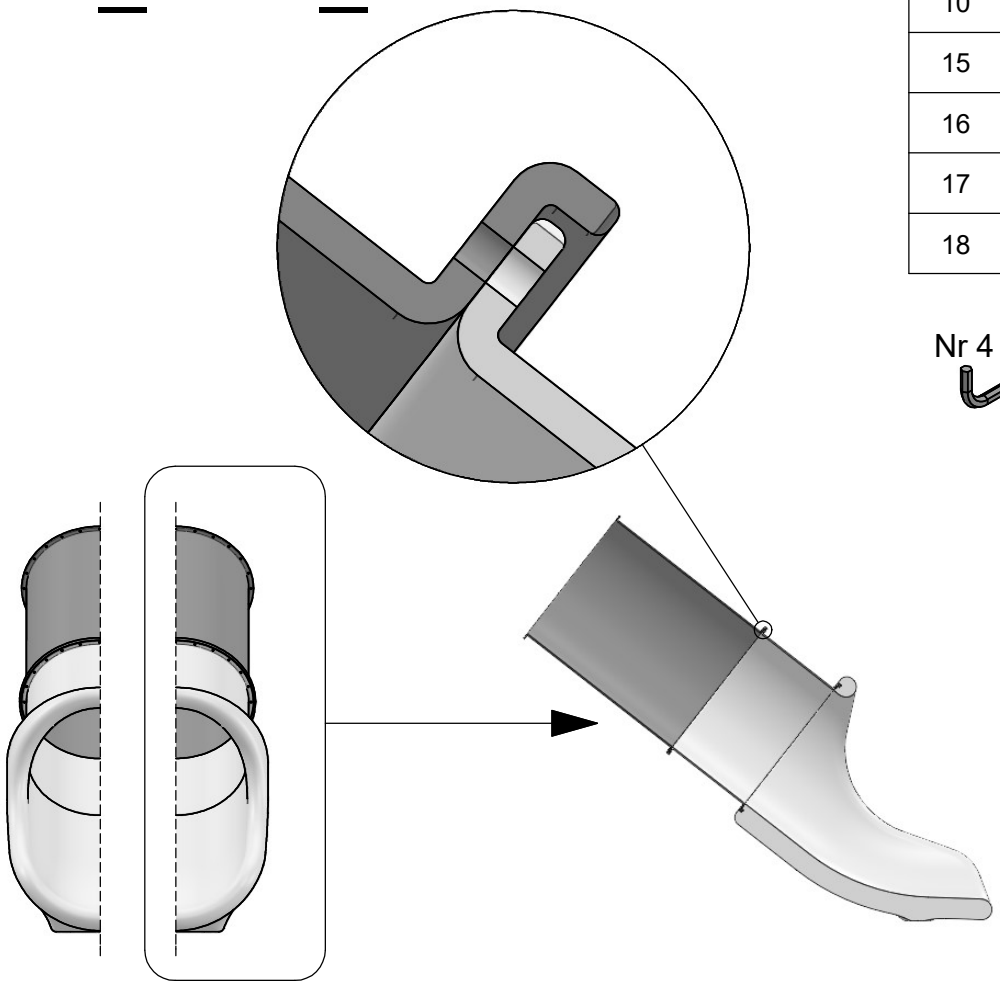
MANUAL

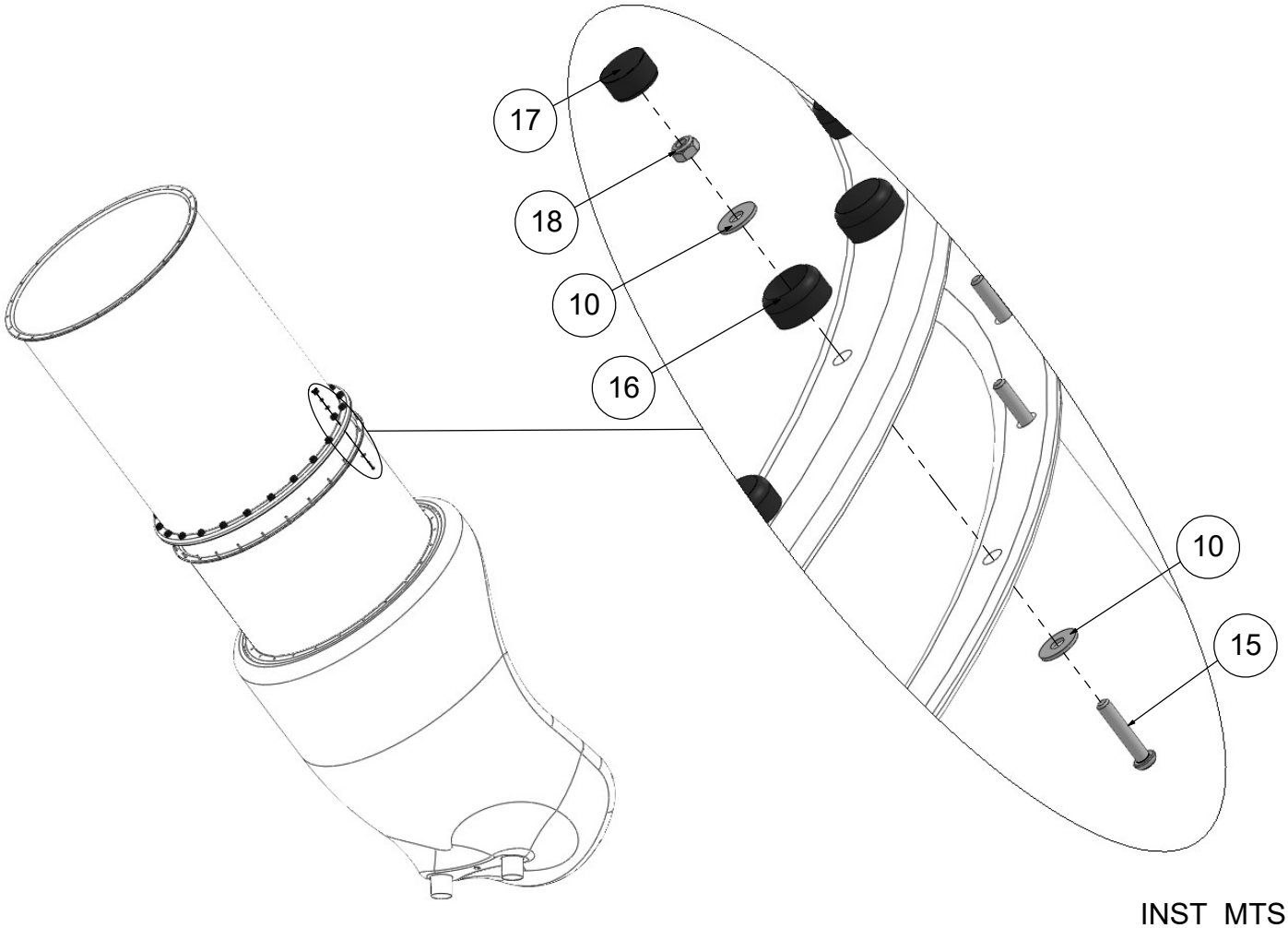
INST_MTS_3

Nr	Element	DIN	ELEMENT
10		DIN 9021	6x18
15		ISO 7380	M6x30
16		-	K1_d21_B
17		-	Z1_d21_B
18		DIN 985	M6



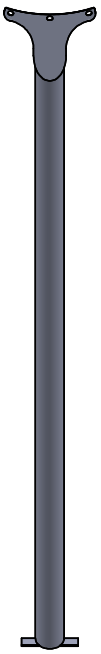




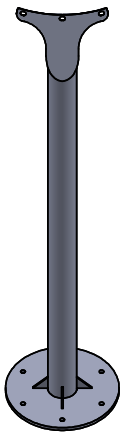


INST_MTS_4

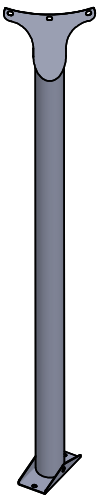
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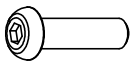
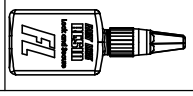


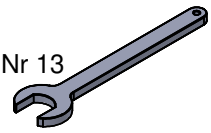
F*



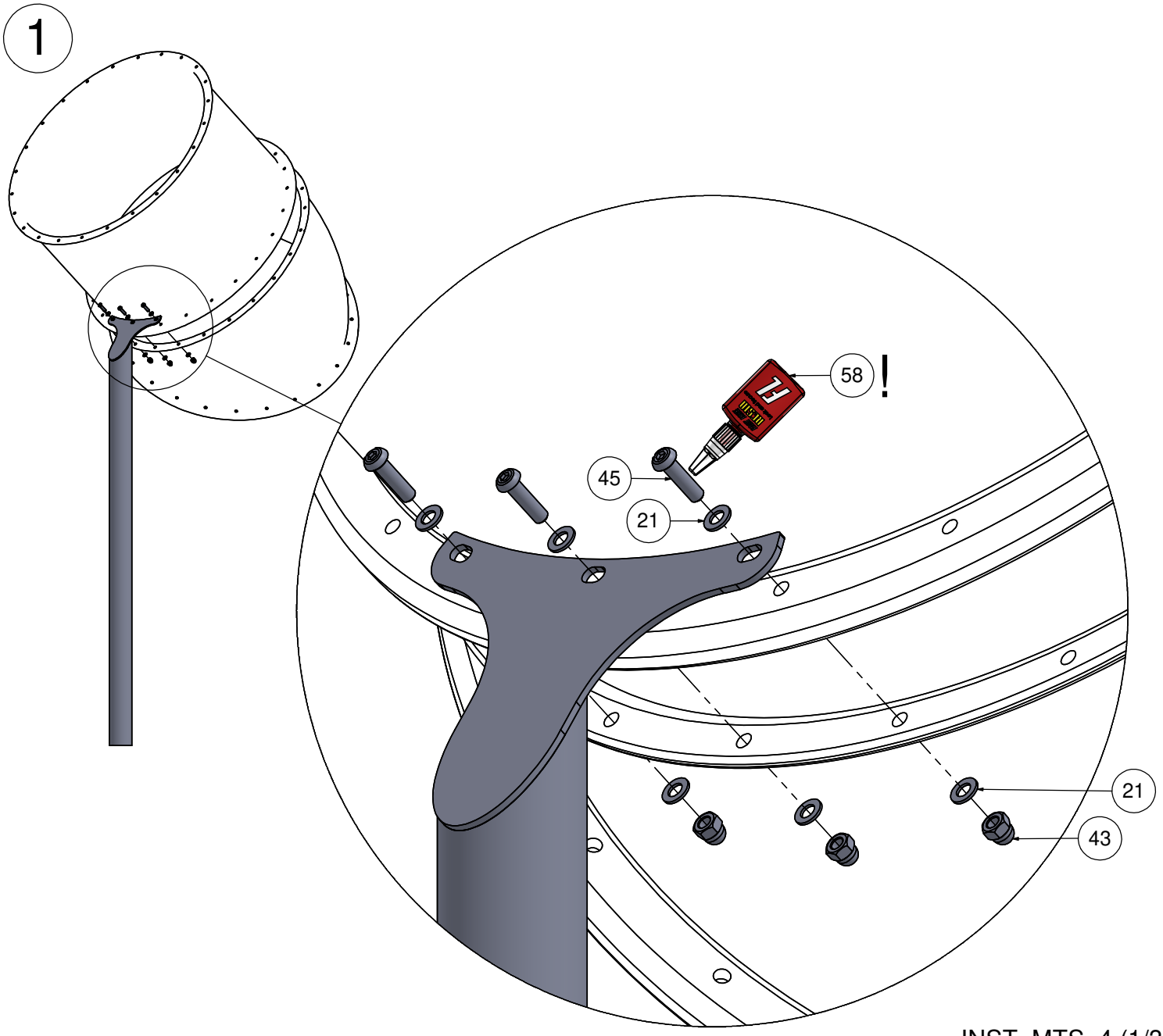
F**



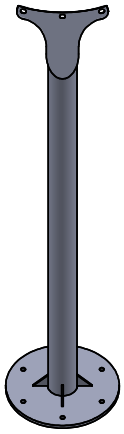
Nr	Σ	Element		
21	6		DIN 125	8x16
43	3		DIN 1587	M8
45	3		ISO 7380	M8x30
58	1		-	LOCTITE

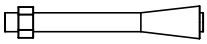


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F*

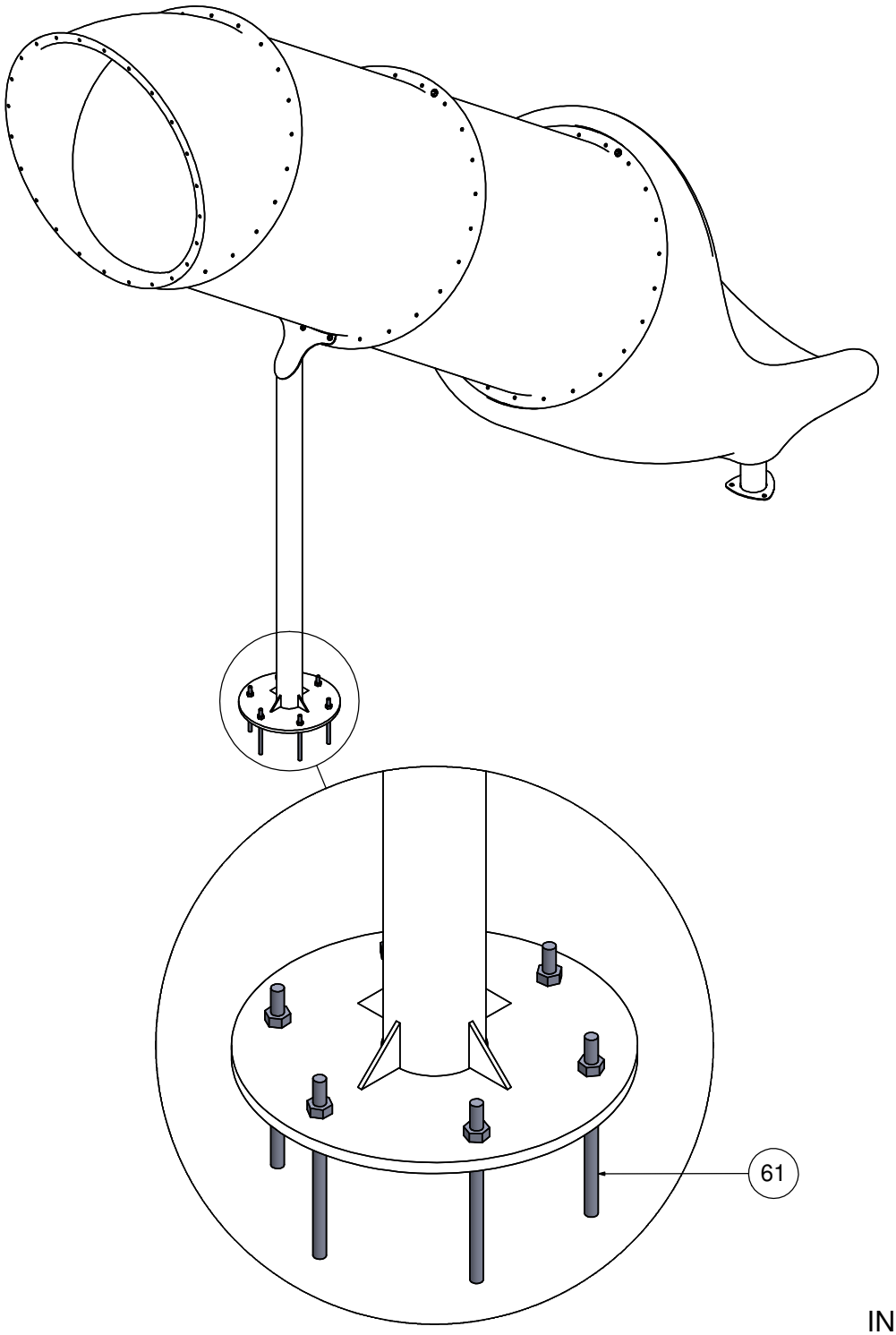


Nr	Σ	Element	DIN	ELEMENT
61	6		-	KL105

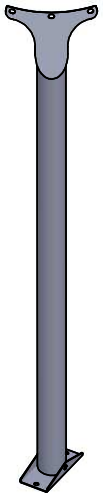
Nr 17

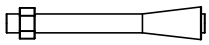
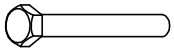
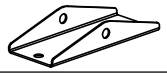


2F*

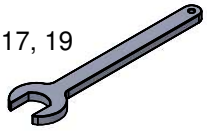


F**

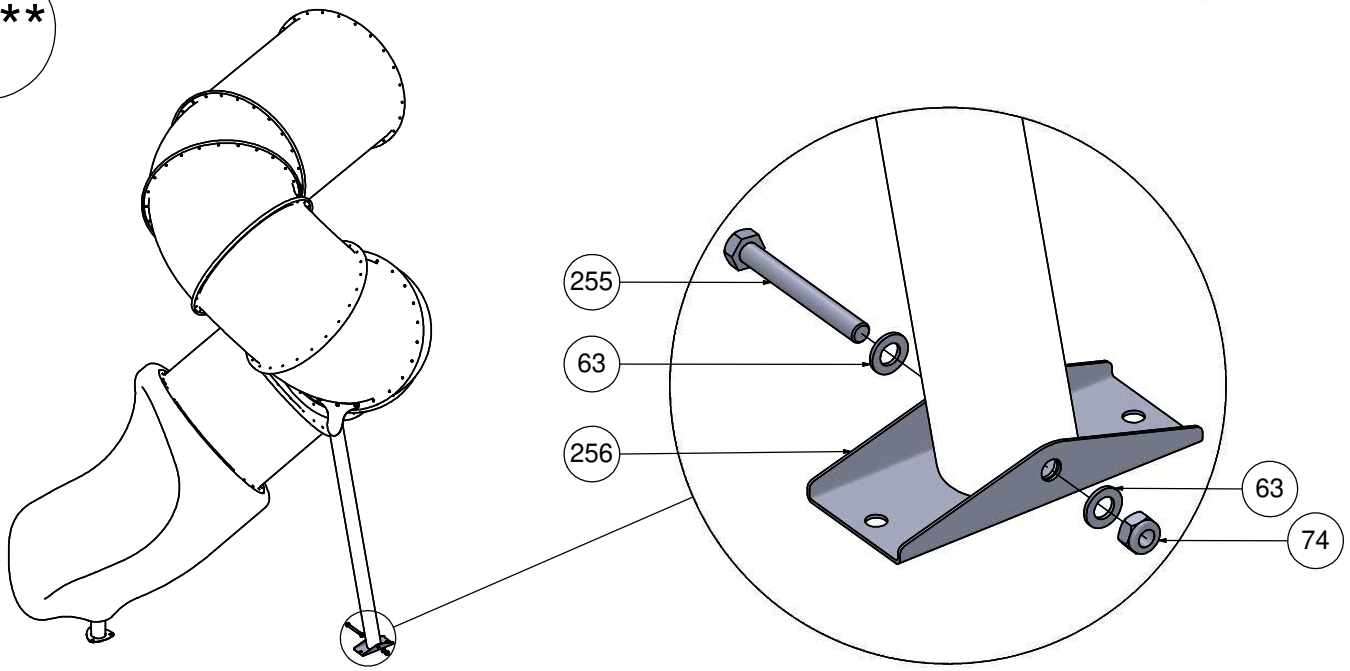


Nr	Σ	Element		
61	2		-	KL105
63	2		DIN 125	12x24
74	1		DIN 985	M12
255	1		DIN 931	M12x100
256	1		-	MTS_5_g2_G_v1

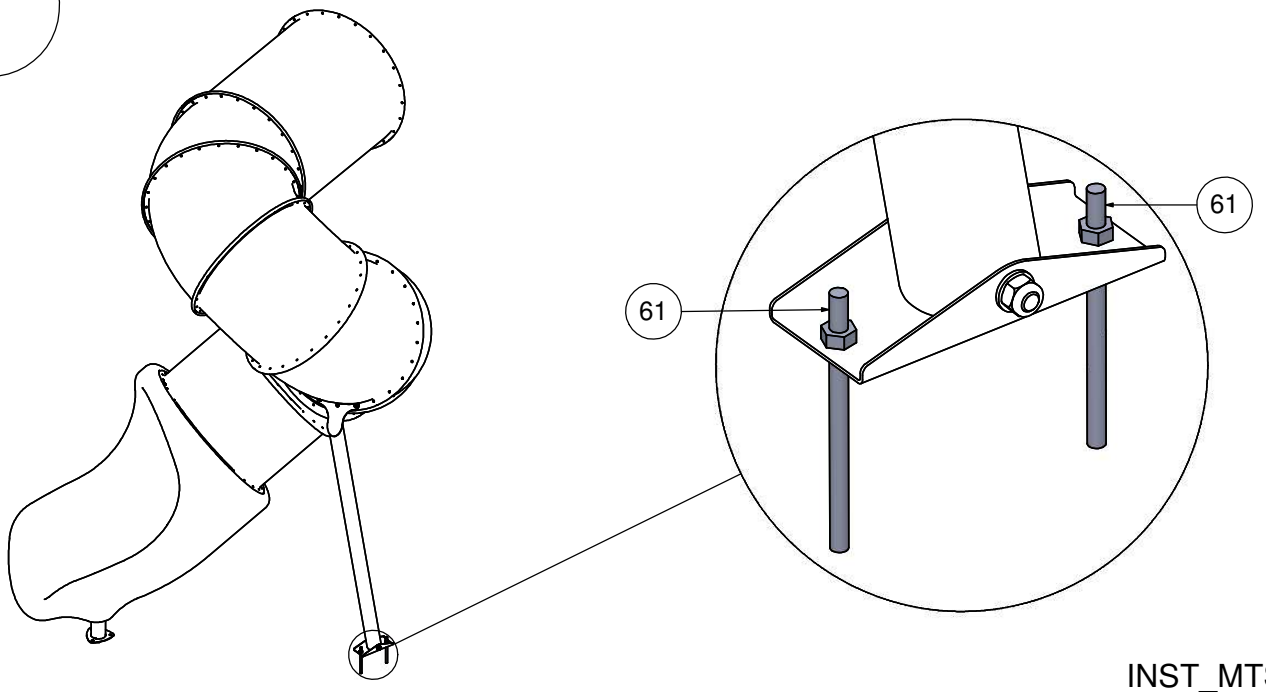
Nr 17, 19



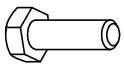
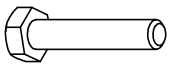
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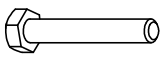
3F**

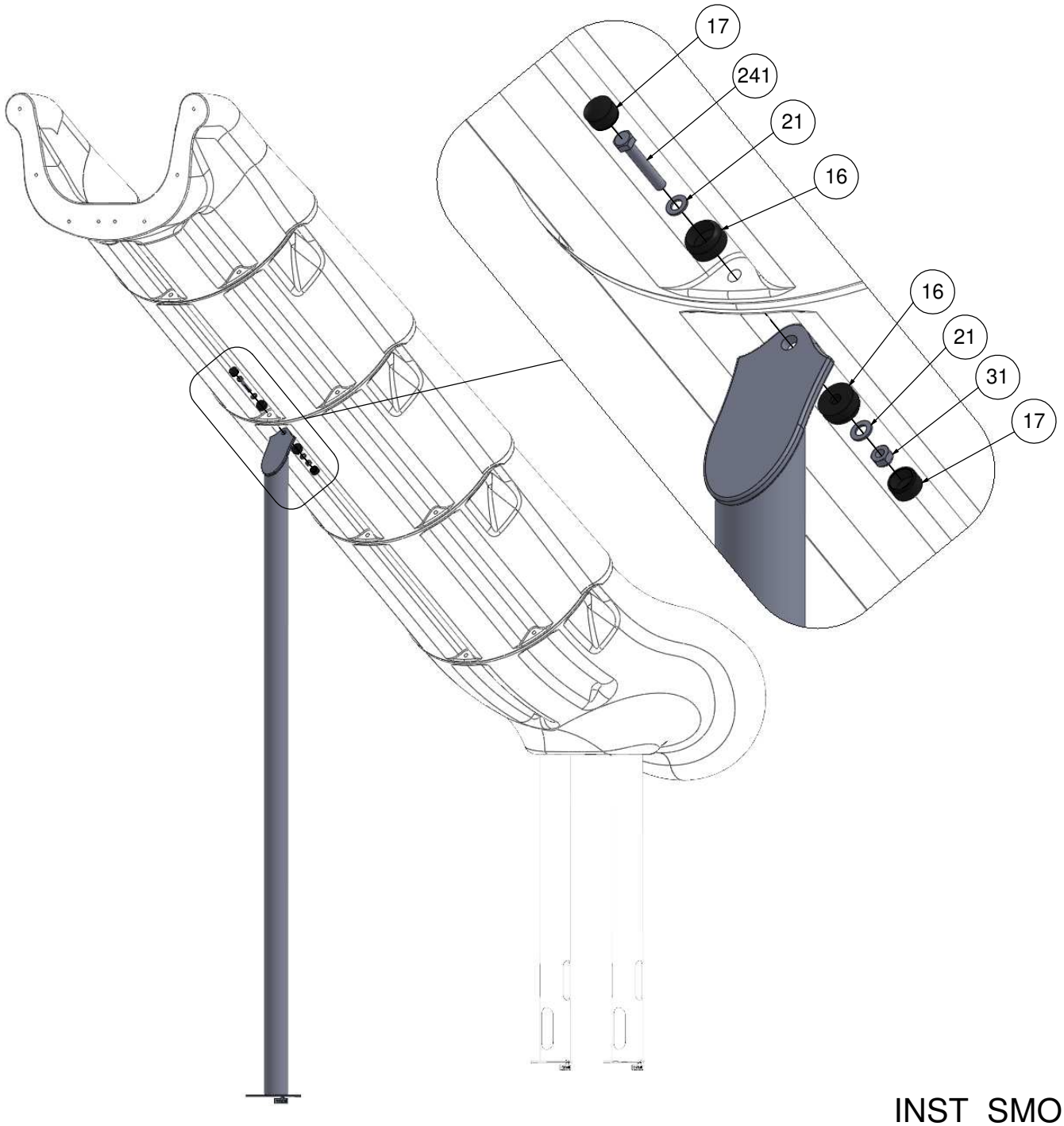


INST_SM0_1

Nr	Element	DIN	ELEMENT
16		-	K1_d21_B
17		-	Z1_d21_B
21		DIN 125	8x16
31		DIN 985	M8 (OC)
240		DIN 933	M8x25 (OC)
210		DIN 933	M8x40 (OC)
58		-	LOCTITE

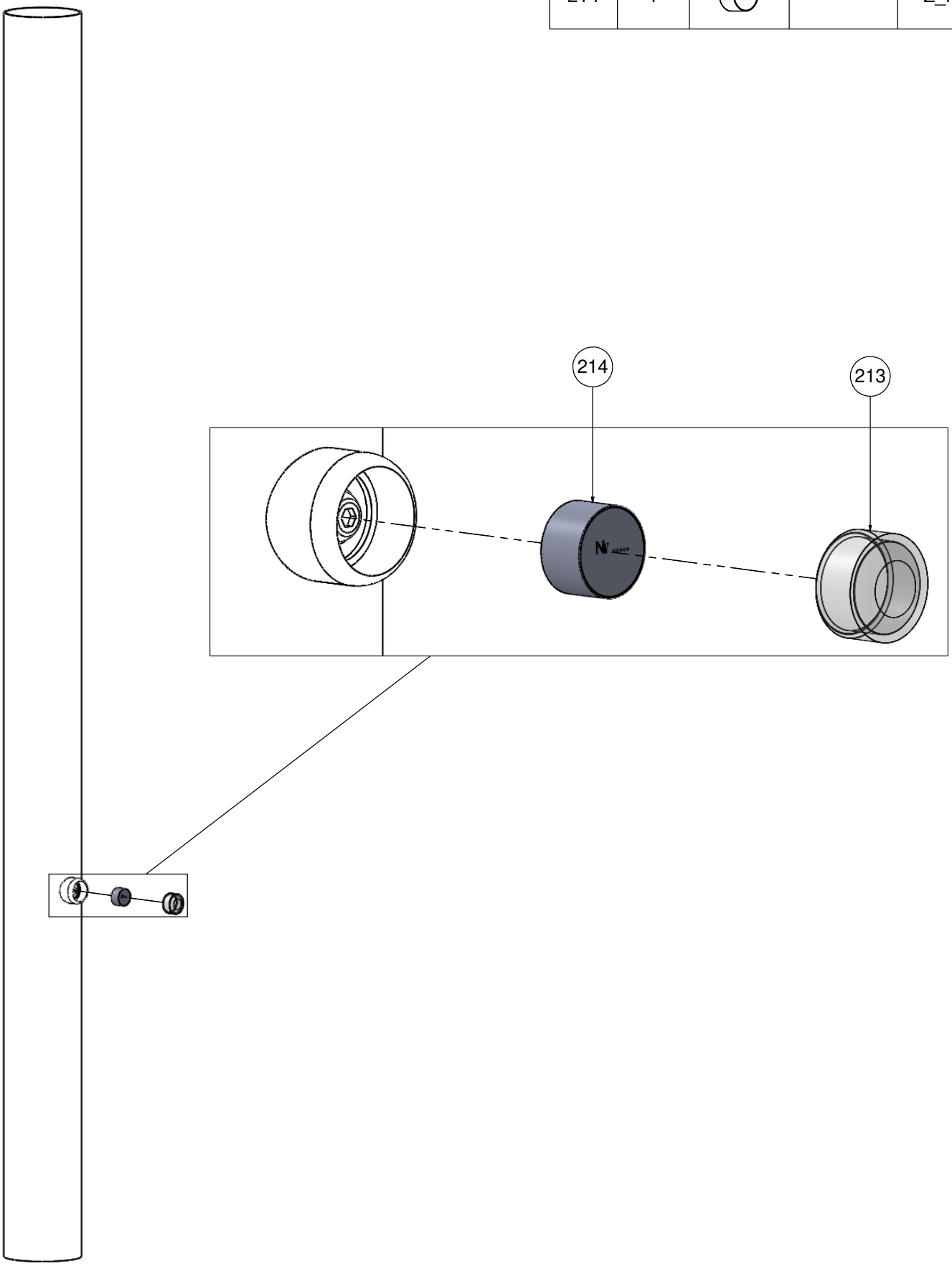
INST_SMO_2

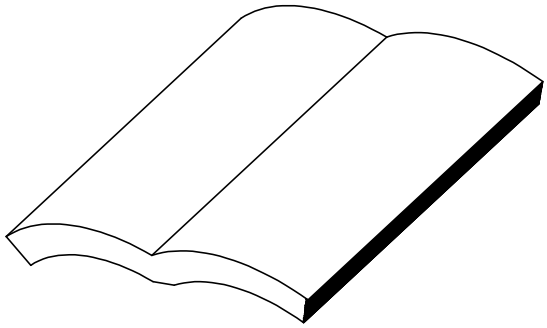
Nr	Element	DIN	ELEMENT
16		-	K1_d21_B
17		-	Z1_d21_B
21		DIN 125	8x16
31		DIN 985	M8 (OC)
241		DIN 933	M8x50 (OC)



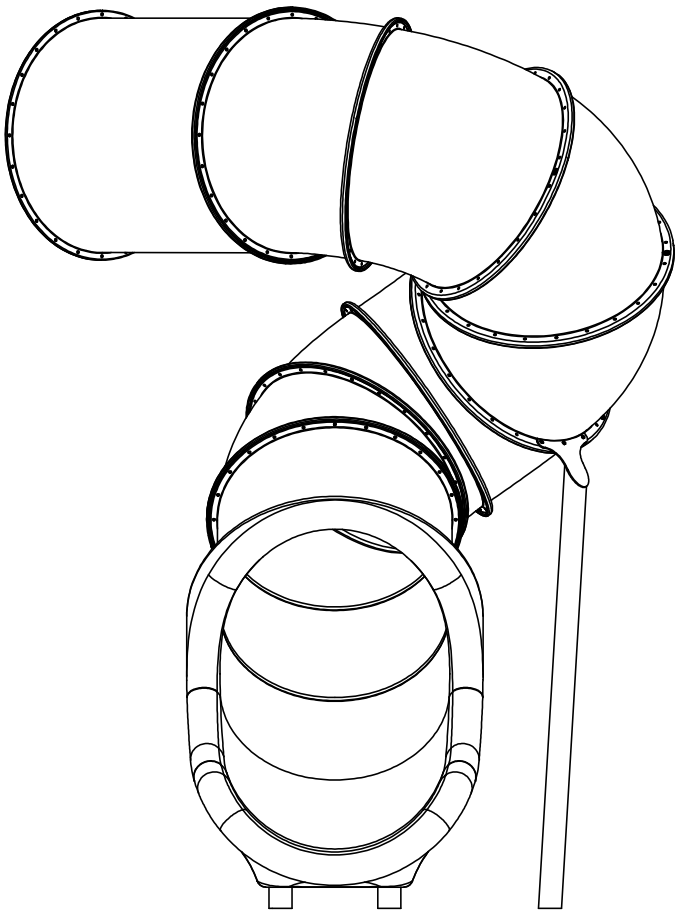
INST_Z_1

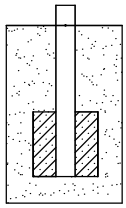
Nr	Σ	Element		
213	1		-	Z_NA_1
214	1		-	Z_NA_2





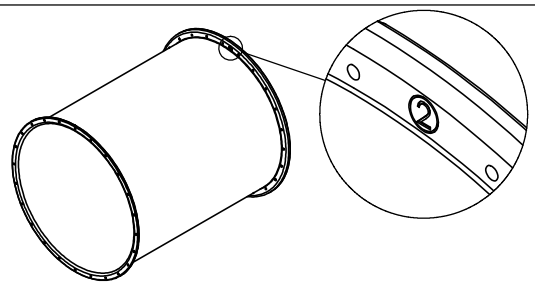
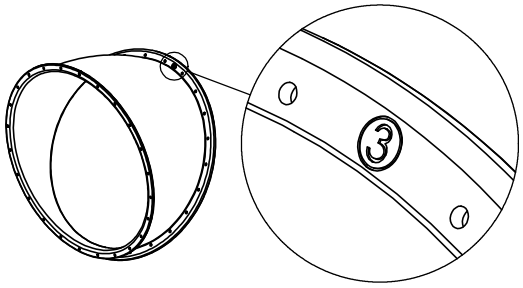
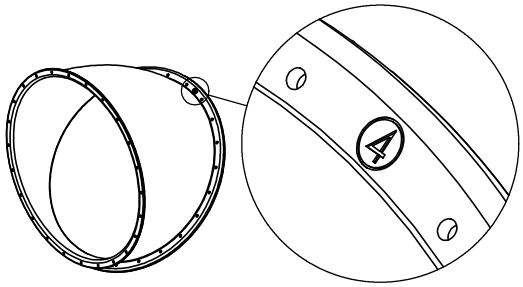
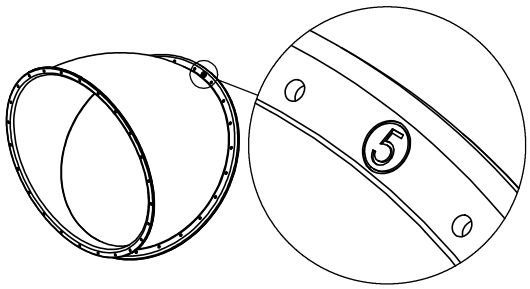
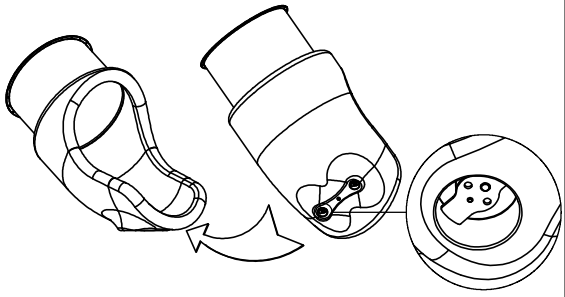
MTSS_H210_2455553316(LZ)



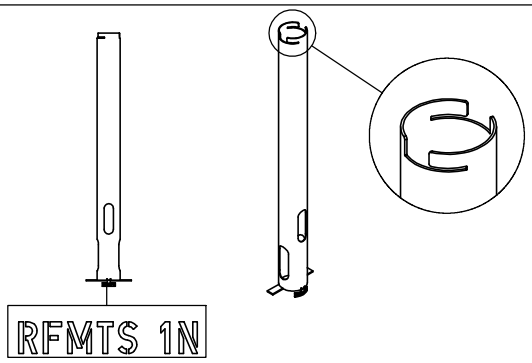
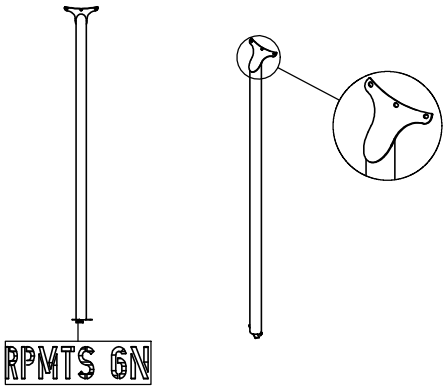
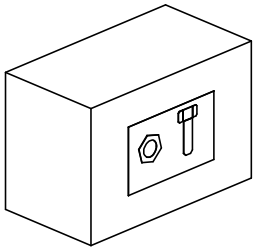


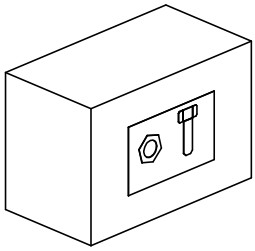
MTSS_H210_2455553316N

MTSS_H210_2455553316N(LZ)

NR	ELEMENT	
1		
2		1
3		2
4		1
5		4
6		1

MTSS_H210_2455553316N (LZ)

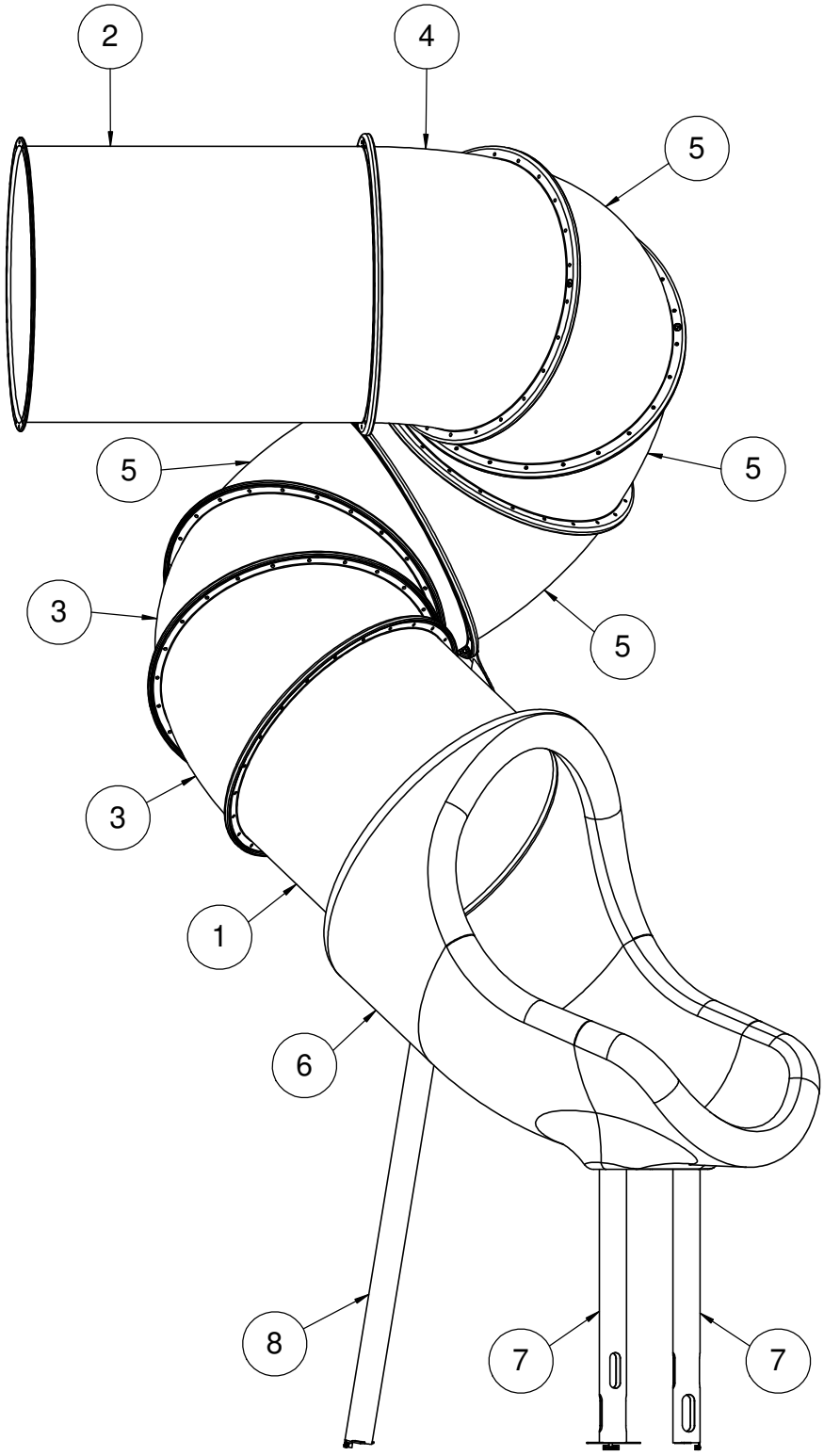
NR	ELEMENT	
7		2
8		1
9		1



MTSS_H210_2455553316N

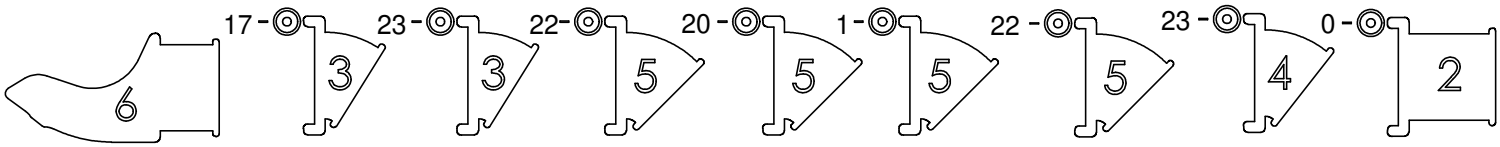
Nr	Element			Σ
10		DIN 9021	6x18	384
15		ISO 7380	M6x30	192
16		-	K1_d21_B	192
17		-	Z1_d21_B	192
18		DIN 985	M6	192
21		DIN 125	8x16	6
43		DIN 1587	M8	3
45		ISO 7380	M8x30	3
58		-	LOCTITE	1

MTSS_H210_2455553316 (LZ)

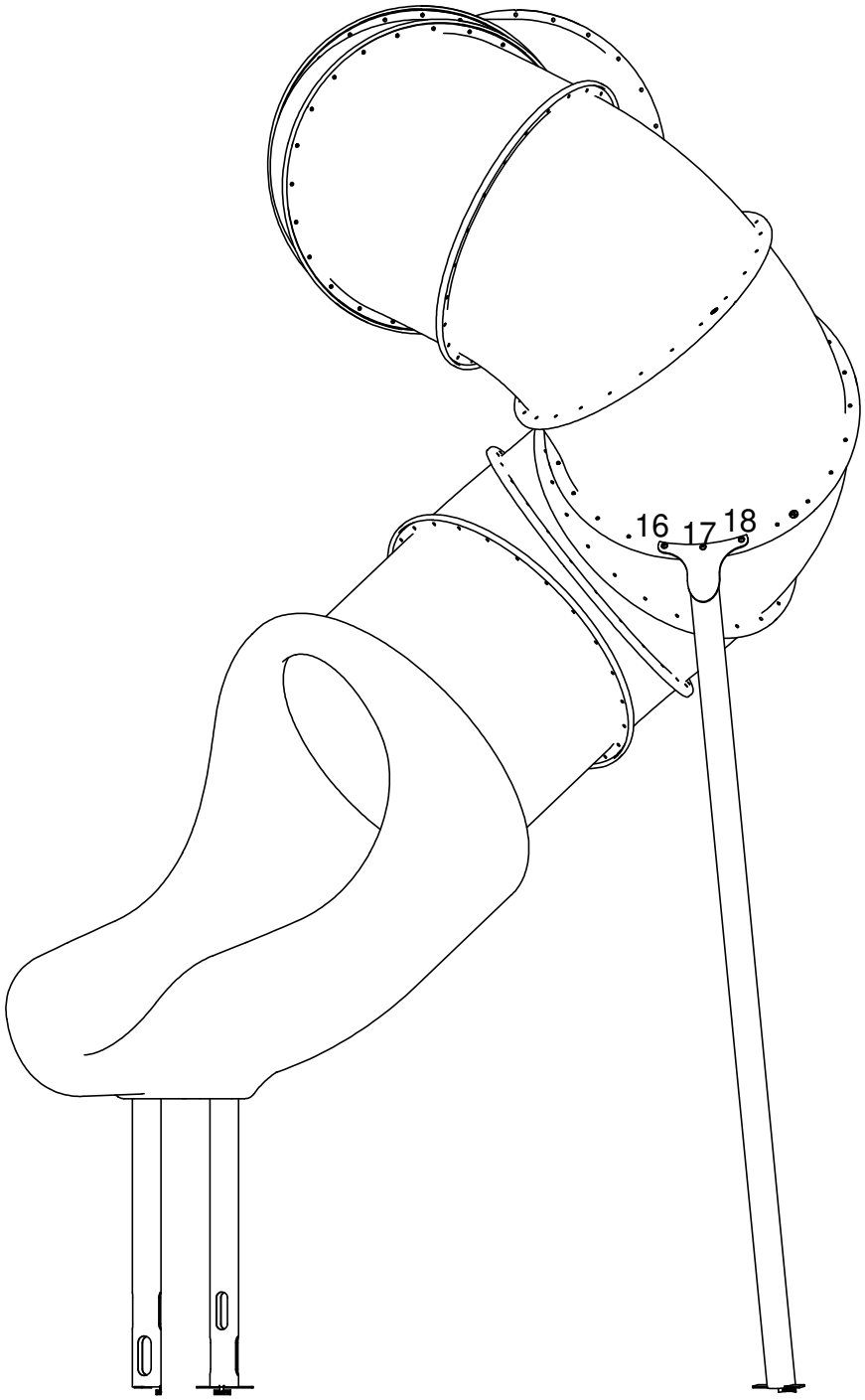


1 MTSS_H210_2455553316 (LZ)

INST_MTS_1
INST_MTS_2
INST_MTS_3
INST_MTS_4







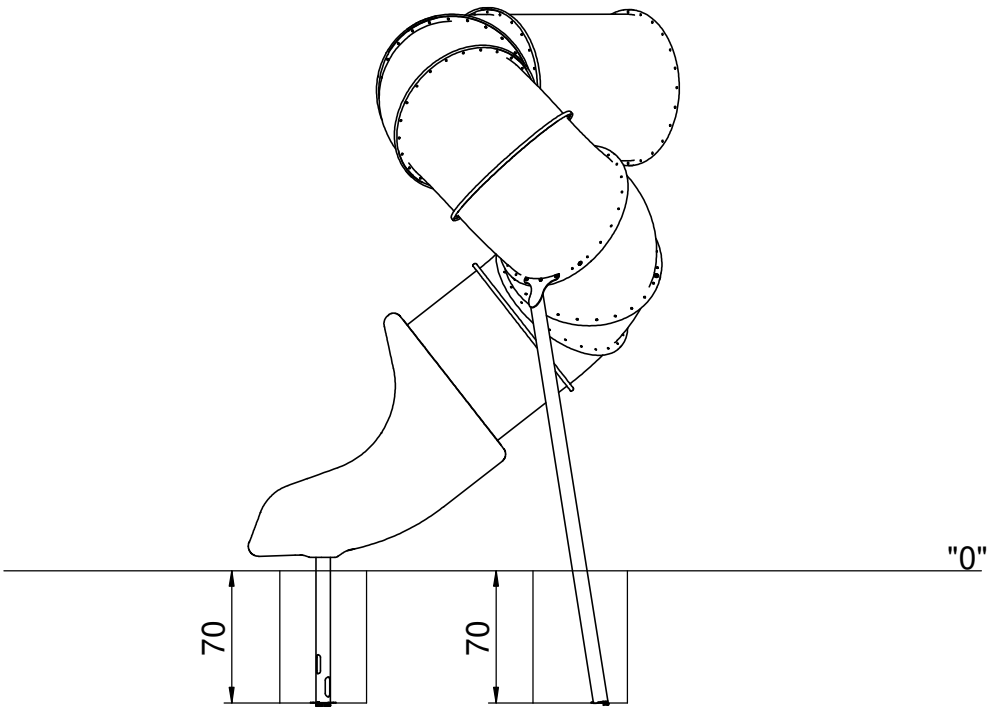
buglo.pl/mts-manual

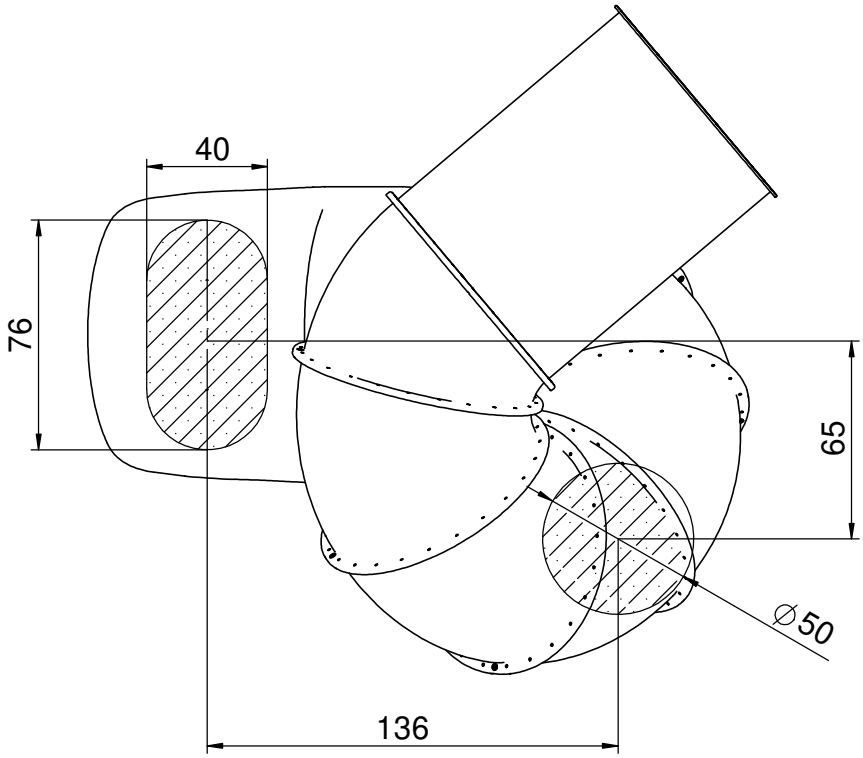
MANUAL

2

MTSS_H210_2455553316 (LZ)



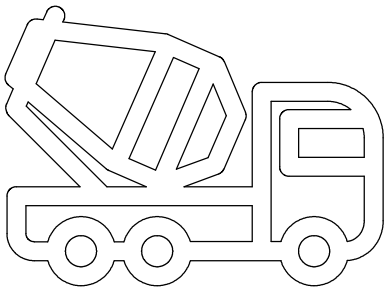




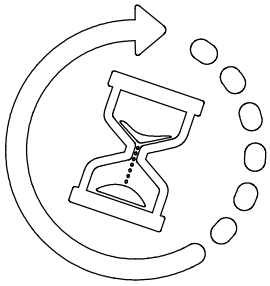
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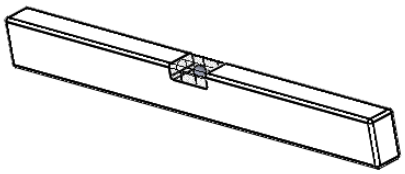
MTSS_H210_2455553316 (LZ)

B15 0,15m^3

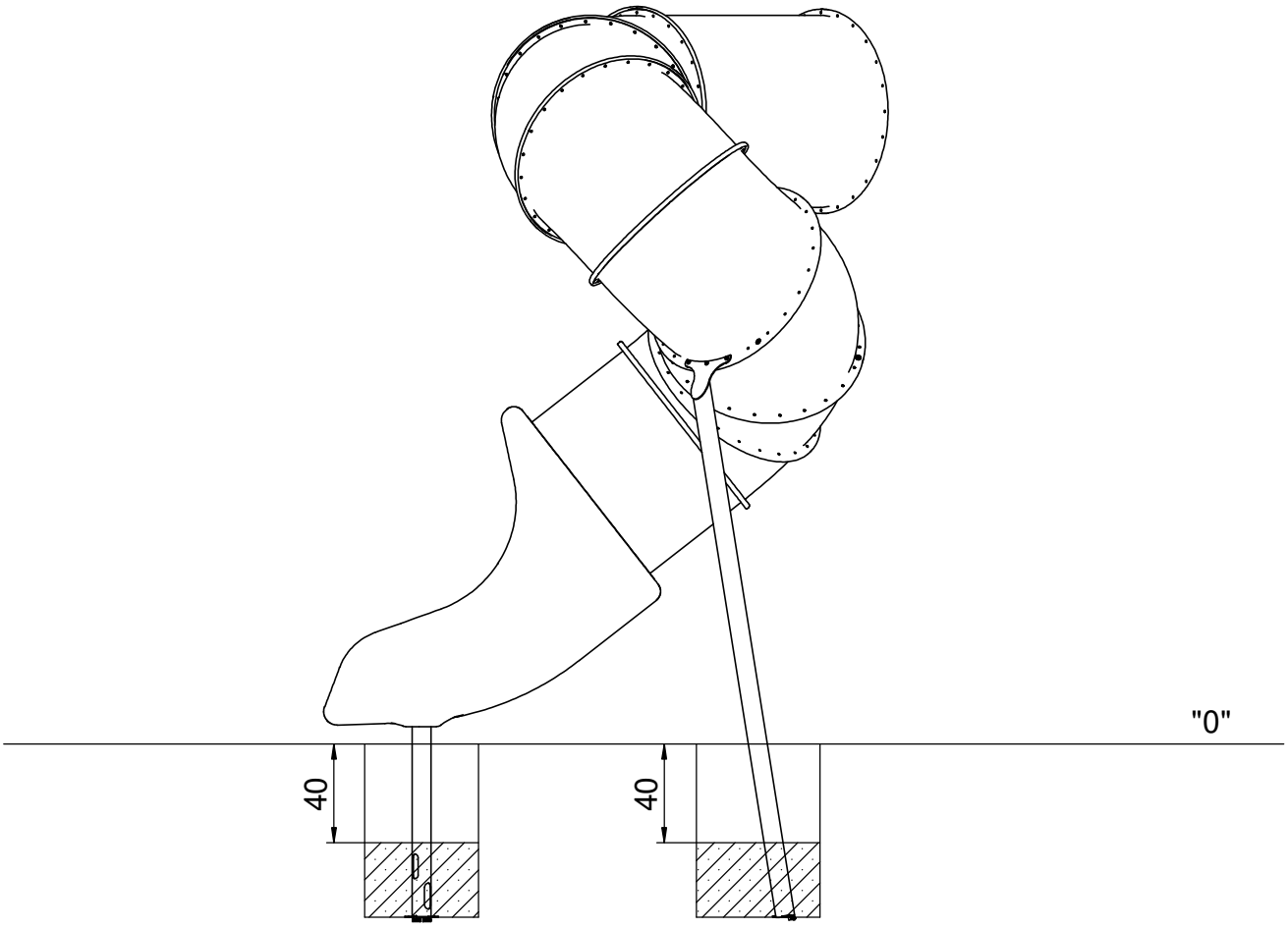


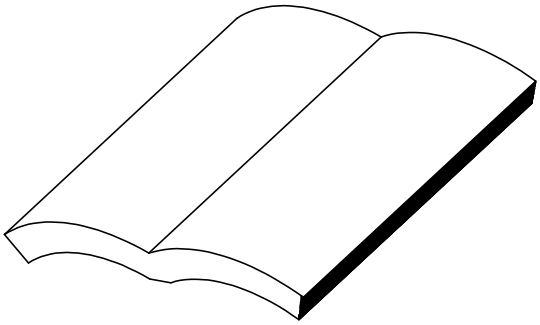
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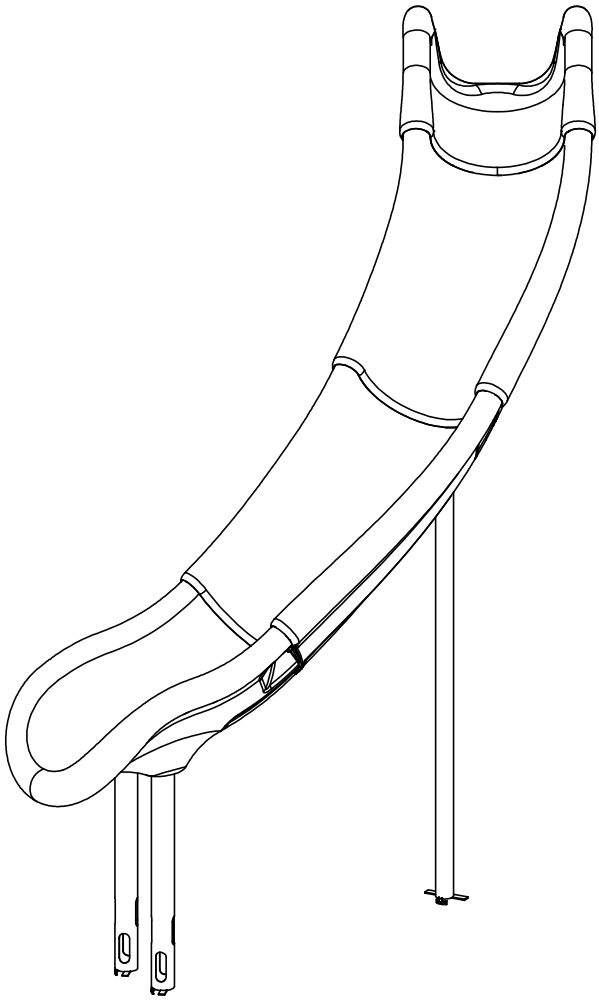


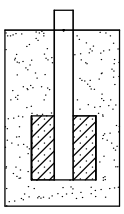
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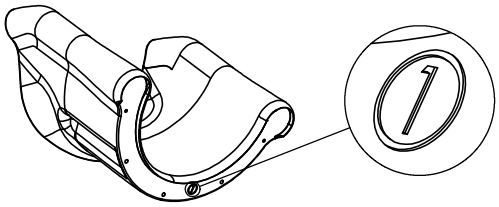
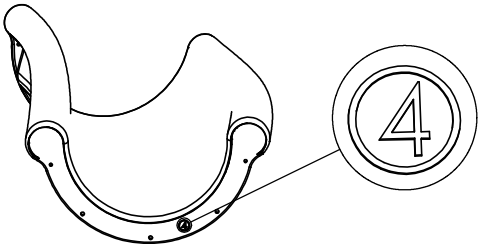
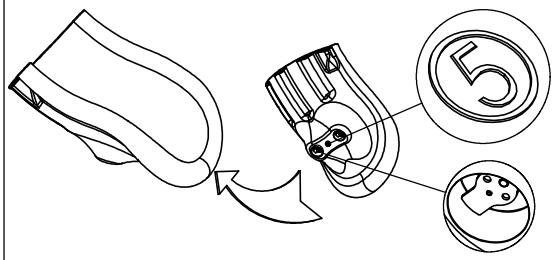
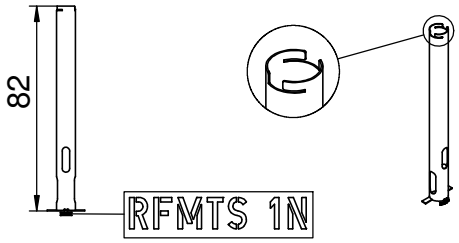
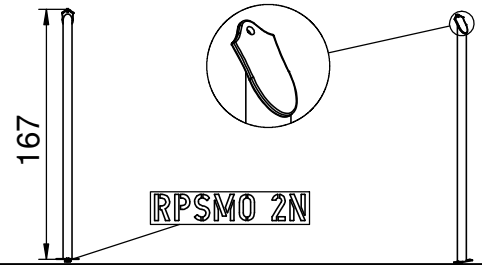


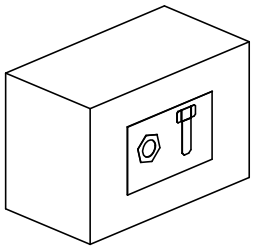
SMOL_180_1445



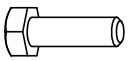
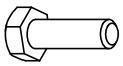
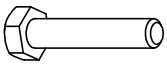


SMOL_180_1445N

NR	ELEMENT	SMOL_180_1445N
1		1
2		
3		
4		2
5		1
6		2
7		1

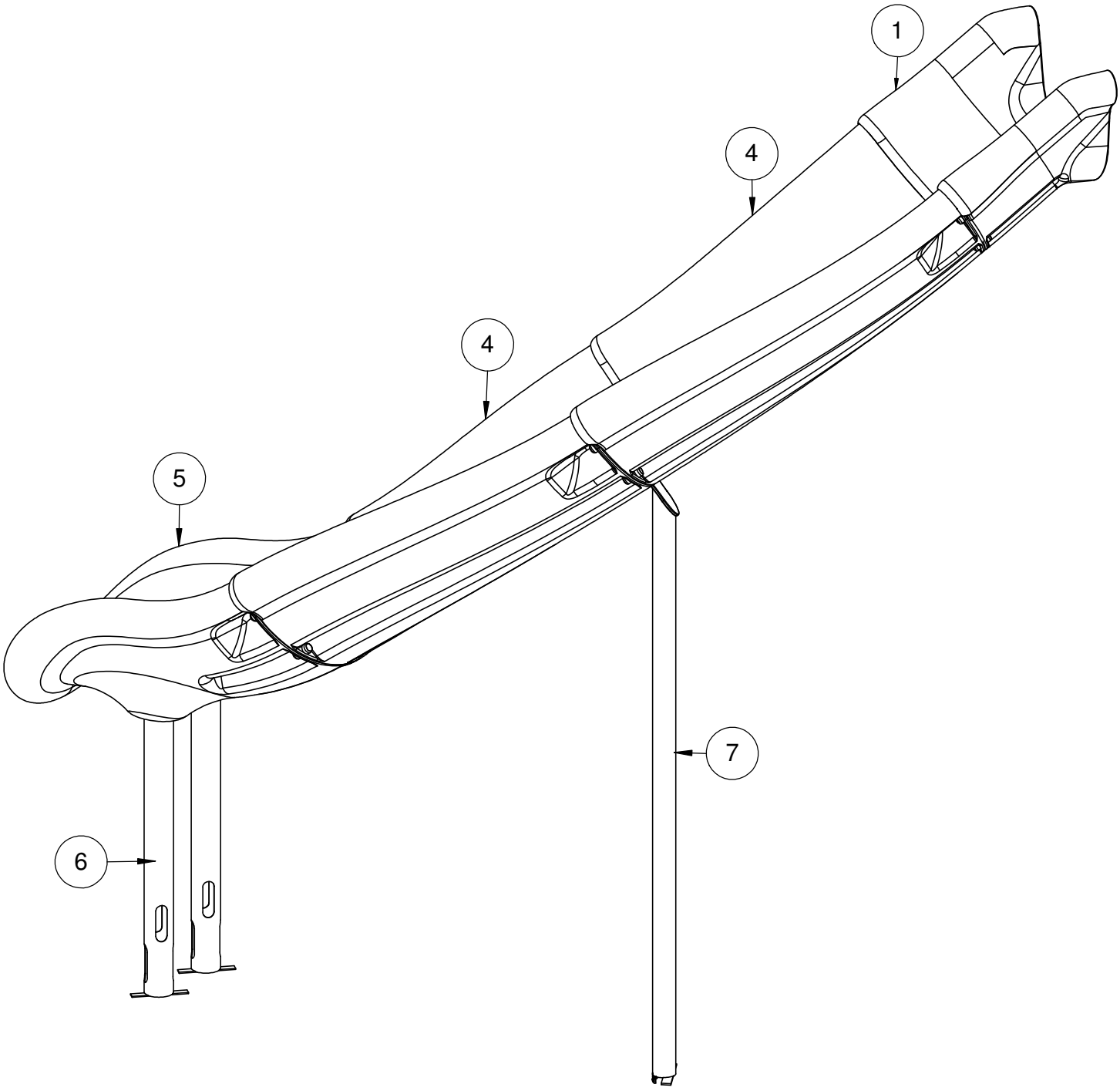


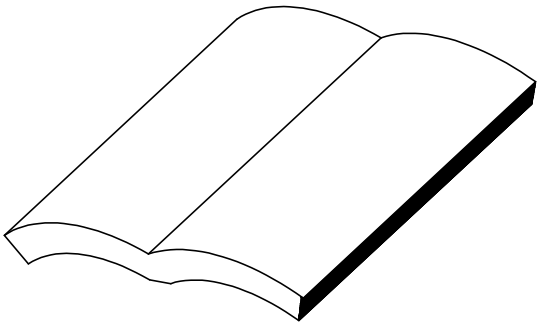
SMOL_180_1445N

Nr	Element			Σ
16		-	K1_d21_B	26
17		-	Z1_d21_B	26
21		DIN 125	8x16	26
31		DIN 985	M8 (OC)	10
58		-	LOCTITE	1
210		DIN 933	M8x40 (OC)	9
240		DIN 933	M8x25 (OC)	6
241		DIN 933	M8x50 (OC)	1

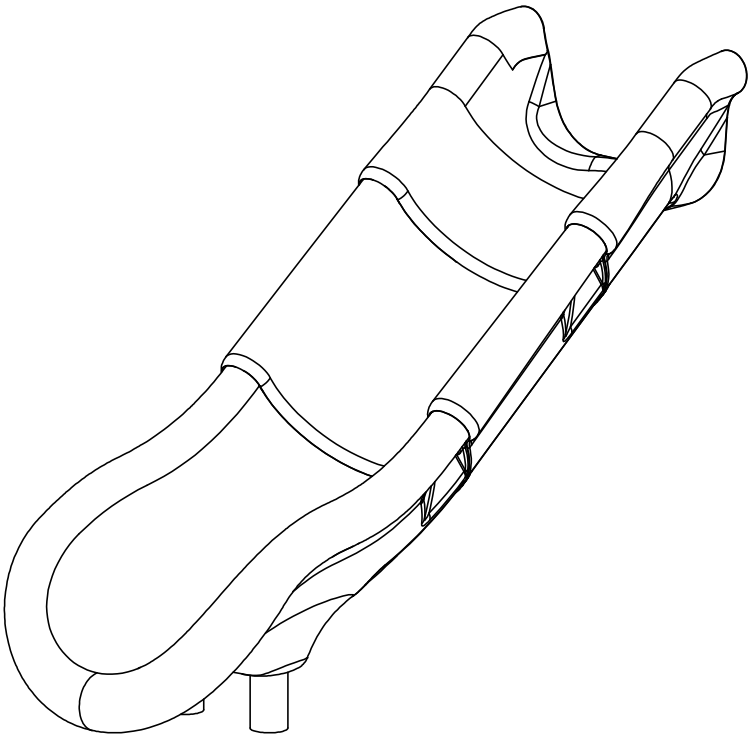
1 SMOL_180_1445N

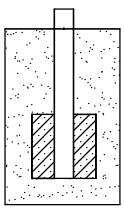
INST_SMO_1
INST_SMO_2



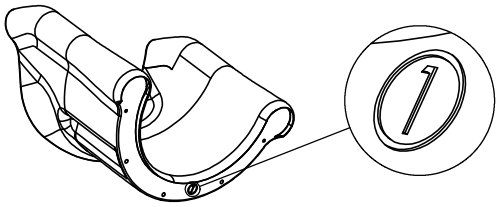
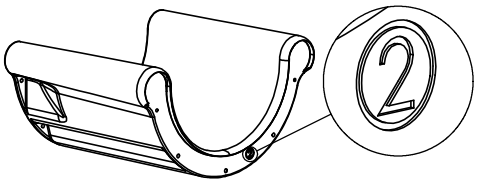
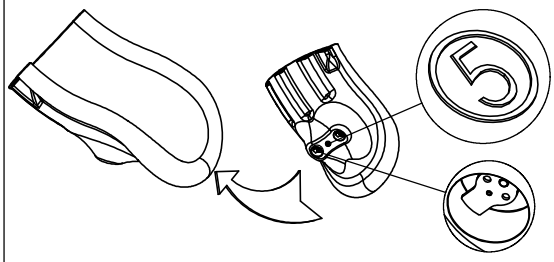
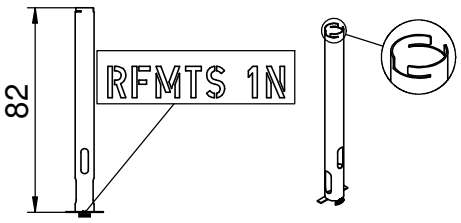


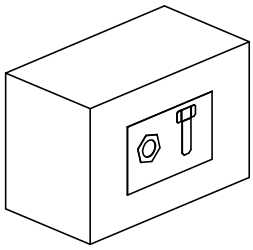
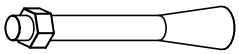
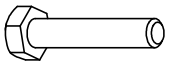
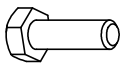
SMOP_90





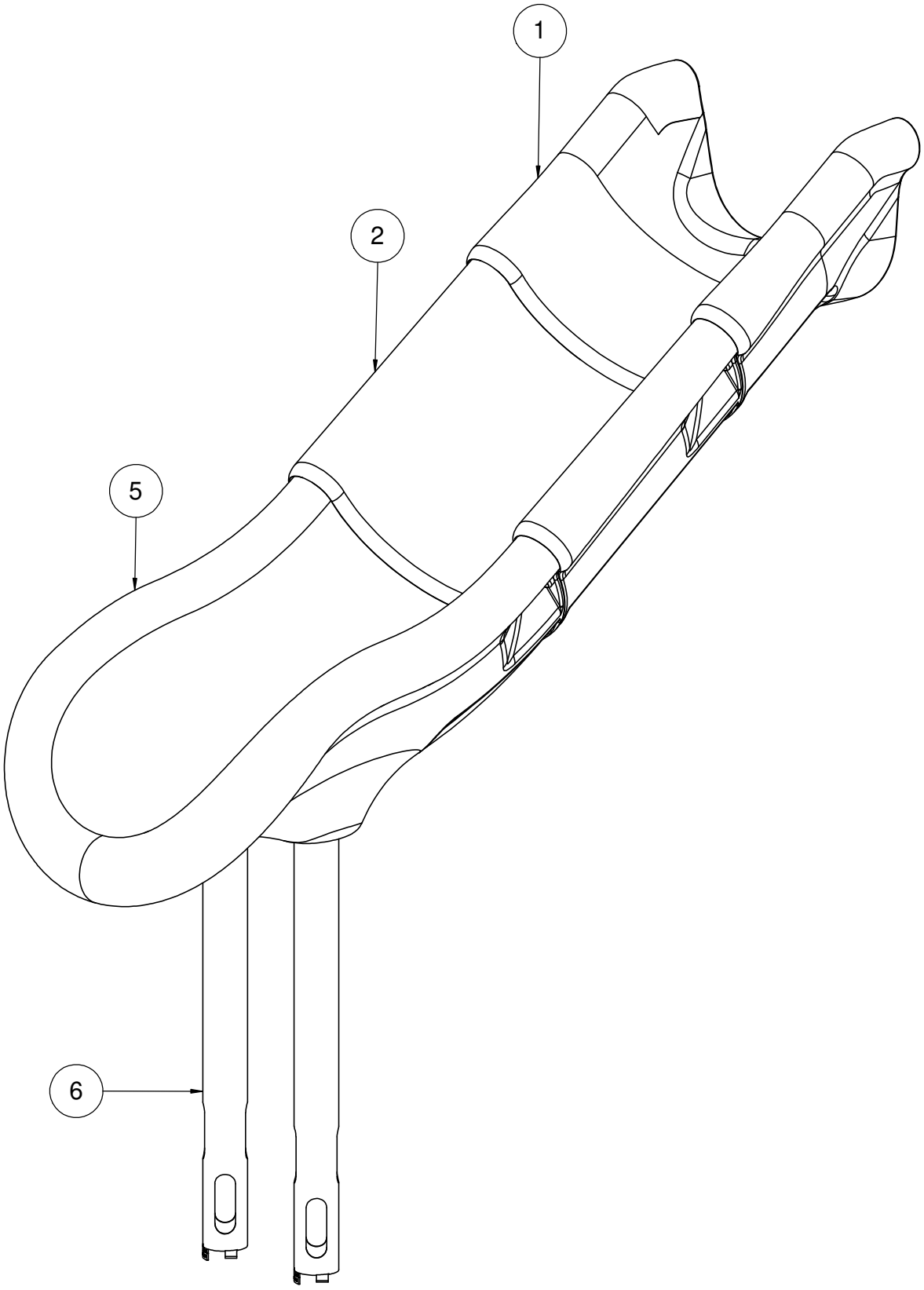
SMOP_90N

NR	ELEMENT	SMOP_90N
1		1
2		1
3		
4		
5		1
6		2
7		

				SMOP_90N	SMOP_90F
Nr	**Element**	**DIN**	**ELEMENT**	**Σ**	**Σ**
16		-	K1_d21_B	16	16
17		-	Z1_d21_B	16	16
21		DIN 125	8x16	16	16
31		DIN 985	M8 (OC)	6	6
58		-	LOCTITE	1	1
61		-	KL105 (OC)		6
210		DIN 933	M8x40 (OC)	6	6
240		DIN 933	M8x25 (OC)	4	4

1 SMOP_90N

INST_SMO_1



Konserwacja i kontrola urządzenia
Zgodnie z normą PN EN 1176-1:2017-12

Eksploatacja i konserwacja:
Wszelkie czynności konserwacyjne nie opisane w poniższej instrukcji elementów objętych gwarancją należy konsultować z producentem urządzeń.

Powłoki antykorozyjne:
Uszkodzone powłoki malarskie konstrukcji stalowych należy oczyścić z kurzu, pyłu, tłuszczu oraz wszelkich ognisk korozyjnych. W kolejnym etapie pokryć antykorozyjną farbą podkładową do podłoży stalowych. Po wyschnięciu, dwukrotnie pomalować farbą w sprayu.
Zestawienie kolorów BUGLO wg palety RAL:
Szary – RAL 7035, Żółty – RAL 1003, Niebieski – RAL 5015, Czerwony – RAL 3000, Zielony – RAL 6018, Czarny – RAL 9005, Fioletowy – RAL 4008, Grafitowy – RAL 7016, Srebrny – RAL 9006, Beżowy – RAL 1019, Pomarańczowy – RAL 2009, Brązowy – RAL 8017

Drewno:
Elementy wykonane z drewna klejonego wymagają okresowego odnawiania. W zależności od czynników klimatycznych, stopnia eksplantacji i uszkodzeń mechanicznych zaleca się ponowną impregnację po okresie od 2 do 5 lat.
Przed impregnacją elementy drewniane należy zmatowić, a następnie zastosować kolejno:
1) Podkład impregnujący – GORI 356
2) Farba nawierzchniowa – NORDICA EKO 3330 – 12TM1806
Produkty dostępne w sieci dystrybucji Firmy Teknos (www.teknos.com). Sposób użycia wg zaleceń producenta.

Drewno IROKO: konserwować środkiem Owatrol D1.

Stal nierdzewna:
Zaleca się raz w roku czyszczenie elementów ze stali nierdzewnej w celu usunięcia osadów i zanieczyszczeń, których nagromadzenie może spowodować powstanie odbarwień na powierzchni stali.
Myć używając bawełnianej ścierki i rozcieńczonych w wodzie łagodnych detergentów, np. płynu do mycia naczyń.
Po myciu elementy należy spłukać czystą wodą i wytrzeć do sucha.
Uwaga!
Do czyszczenia wyrobów ze stali nierdzewnej nie wolno używać środków, które zawierają takie składniki jak: chlor, sól, kwasy oraz wybielacze. Nawet niewielka zawartość tych składników może spowodować trwałe uszkodzenie powłoki tlenków chromu.

Zalecenia dotyczące kontroli urządzenia zgodnie z normą PN EN 1176-7: 2020-09 Wyposażenie placów zabaw i nawierzchnie część 7: Wytyczne instalowania, kontroli, konserwacji i eksploatacji:

1) Kontrola po instalacji - zalecana przed otwarciem placu zabaw do użytku publicznego, mająca na celu ocenę dostępu do sprzętu i jego otoczenia pod kątem ogólnego poziomu bezpieczeństwa.

2) Kontrola okresowa - zalecana przynajmniej raz w tygodniu lub częściej jeżeli urządzenie jest intensywnie użytkowane lub jest szczególnie narażone na wandalizm.
W ramach kontroli okresowej należy sprawdzić:
- Potencjalne uszkodzenia części urządzenia.
- Dokręcenie mocowań.
- Wykończenie powierzchni zestawu.
- Stan nawierzchni amortyzującej.
- Smarowanie łożysk.
- Kompletność elementów zestawu.
- Występowanie pęknięć, ostrych krawędzi i innych uszkodzeń.
- Czystość wokół urządzenia (szczególne zagrożenie stanowi rozbite szkło) oraz wyrównanie nawierzchni bezpiecznej.
- Występowanie przeszkód w przestrzeni wolnej lub przestrzeni upadku i usunięcie ich w przypadku wystąpienia.
- Ogólny stan bezpieczeństwa placu zabaw.

3) Kontrola funkcjonalna - zalecana raz na trzy miesiące.
Obejmuje zakres kontroli okresowej powiększoną o sprawdzenie funkcjonalności urządzenia.
- W ramach kontroli funkcjonalnej należy dokonać oględzin elementów nierozbieralnych (kompletność zaślepek i maskownic).
- Sprawdzić stabilność słupów.
- Sprawdzić, wyrównać sypką nawierzchnię bezpieczną, a w przypadku gdy jej poziom sięga więcej niż 10cm poniżej oznaczonego poziomu powierzchni zabawy – uzupełnić.
- Sprawdzić stan mocowań i dokręcić śruby.
- Sprawdzić stan napięcia elementów linowych oraz siatek i piramid linowych.
- Sprawdzić stan spawów.
- Wymiana zużytych lub uszkodzonych elementów.

4) Kontrola funkcjonalna i główna - obowiązkowa raz w roku.
Kontrola główna obejmuje:
- Sprawdzenie stateczności konstrukcji.
- Sprawdzenie i rekonstrukcja uszkodzonych powłok antykorozyjnych.
- Sprawdzenie stanu fundamentu.
- Sprawdzenie i wyrównanie sypkiej nawierzchni bezpiecznej. W przypadku, gdy jej poziom sięga więcej niż 10cm poniżej oznaczonego poziomu powierzchni zabawy – uzupełnić.
- Sprawdzenie stanu elementów drewnianych, jeżeli występują.

Urządzenia powinny być kontrolowane przez kompetentne do tego osoby (z potwierdzonym poziomem kompetencji).
Kontrole produktów powinny odbywać się okresowo. Każdorazowo administrator placu zabaw powinien prowadzić zapisy z kontroli w postaci kart kontroli.
Modyfikacje części wyposażenia lub konstrukcji, które mogą mieć wpływ na podstawowe bezpieczeństwo sprzętu, powinny być przeprowadzane tylko po konsultacji z producentem lub kompetentną osobą.
Cały personel zaangażowany w zarządzanie bezpieczeństwem placu zabaw musi posiadać odpowiednie kompetencje.
Pełen zakres wymagań wg normy **PN EN 1176-7: 2020-09.**

Przykładową kartę kontroli placu zabaw zawarto w załacznikau A. 1.

Załącznik A1

Karta kontroli placu zabaw

Administarcja placu zabaw

Kontrolowane produkty (nr produkty, producent)

Harmonogram kontroli			
	Kontrola wykonywana raz w tygodniu lub częściej jeżeli urządzenie jest intensywanie użytkowane (okresowa)	**TAK**	**NIE**
1	Ogólny stan bezpieczeństwa na placu zabaw.		
2	Dokręcenie mocowań, nasmarowanie łożysk, sprawdzenie stanu nawierzchni amortyzującej.		
3	Czy zestaw jest kompletny?		
4	Czy wystepują pęknięcia, ostre krawędzie lub inne uszkodzenia?		
5	Czy teren wokół urzędzenia jest czysty (brak szkła, równa nawierzchnia bezpieczna)?		
6	Czy występują przeszkody w przestrzeni wolnej lub przestrzeni upadku?		

	Kontrola wykonywana raz na trzy miesiące (funkcjonalna)	**TAK**	**NIE**
1	Czy elementy nierozbieralne są kompletne (zaślepki i maskownice są kompletne)?		
2	Czy słupy są stabilne?		
3	Czy nawierzchnia bezpieczna sypka jest równa?		
4	Czy poziom nawierzchni bezpiecznej sięga do oznaczonego poziomu lub jest max. 10cm poniżej tego poziomu?		
5	Czy stan mocowań jest odpowieni?		
6	Czy stań spawów jest odpowiedni?		
7	Czy napięcie lin i siatek jest odpowiednie?		
8	Wymiana zużytych lub uszkodzonych elementów.		

	Kontrola wykonywana raz w roku (funkcjonalna i główna)	**TAK**	**NIE**
1	Czy konstrukcja jest stateczna?		
2	Czy występują uszkodzenia powłok antykorozyjnych?		
3	Czy nawierzchnia bezpieczna sypka jest równa?		
4	Czy stan fundamentów jest odpowiedni?		
5	Czy stan elementów drewnianych jest odpowiedni?		
6	Czy poziom nawierzchni bezpiecznej sięga do oznaczonego poziomu lub jest max. 10cm poniżej tego poziomu?		

Usterki / naprawa	
1	
2	
3	
4	
5	

Wymiana części			
	Nazwa części	**Ilość**	**Powód**
1			
2			
3			

	Data kontroli	**Osoba wykonująca kontrolę**
1		
2		
3		
4		