

Model No. SAE-P49D

4 Post Parking Lift

Single Point Manual Release

Lifting Capacity 9,000 lbs

Installation & Operation & Maintenance Instructions



Important Note

- 1. This equipment can not be installed, operated or repaired without reading instructions.**
- 2. Electricity must be hooked up by certified electrician.**
- 3. Do not use this equipment beyond its rated capacity.**

Special Instructions

▲ Any damage to the equipment caused in the process of shipment shall be claimed by the buyer to the carrier.

▲ Safety has been designed and manufactured with safety in mind. However, proper training and careful operation can also increase safety. Do not operate or repair the equipment without reading the instructions.

▲ Check the requirements of power supply and current state on the motor nameplate, and have a professional qualified electrician connect the power.

▲ To ensure personal safety and avoid electric shock accidents, ensure that all ground points are reliably grounded.

▲ The company does not inform the partial structural improvement of the product. There is no obligation to update previously sold products.

▲ Do not lift more than the rated lifting weight of the equipment (9,000lbs) load.

▲ Read the warning signs on your device carefully.

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1. Main Features

Double parking lift, beautiful appearance, save space.

Motor driven oil pump to drive hydraulic cylinder, steel cable transmission, quiet working environment.

Mechanical safety lock, can be locked arbitrarily in the design range of height for operation, safe and reliable.

The levelness of the four angles can be adjusted at the locked position.

2. Specifications

1. Lifting capacity:	9,000lbs (4,000kg)
2. Lifting height:	86 5/8" (2200mm)
3. Min. height:	5 7/8" (150mm)
4. Overall height:	97 1/2" (2476mm)
5. Overall width:	233 15/16" (5942mm)
6. Platform length:	165 3/8" (4200mm)
7. Overall length:	207 3/4" (5277.5mm)
8. Lifting time:	≤55s
9. Lowering time:	≥35s
10. Noise level:	< 85 dB(A)/1m
11. Working temperature:	41°F - 104°F
12. Voltage:	220V/60Hz/1PH
13. Power:	3.0KW /4HP
14. Breaker:	32A

3. Overall Size

Reference Fig.1 & Fig. 2

4. Step of Installation

Step 1: Choose the venue

Before installing a new lift, note the following:

- 1). The position of the lift should be in accordance with the requirements of the design and plan of the whole field, and enough space should be considered as far as possible.
- 2). According to the size of the foundation drawing in FIG. 1, determine the installation position and draw the line.
- 3). Ensure that the ground is free of any defects and that the base concrete strength reaches 3000psi (2.1kg/mm²)
- 4). Unpack and inspect for missing parts and damage in transit. According to the packing List.

Step 2: Install the column and cross beam (Z-1,Z-2), install a safety piece on the column cover plate, and drop the safety hook of the beam into the square hole of the safety piece. (Z - 2, Z - 2-1, Z - 2-2).

Step 3: Install cross beam and runway, steel cable and shield. (Z, Z -, 3-1-3-2 Z, Z - 3-3, Z - 3-4).

Step 4: Install power unit and hydraulic hose (Z-4).

Step 5: Install the manually unlocked part (Z-5,Z-5-1,Z-5-2,Z-5-3,Z-5-4,Z-5-5).

Step 6: Install jack tray, ramps, block plate, rubber brake pad, plastic oil drip. (Z - 6).

Step 7: Install caster kits (Z-7).

Step 8: According to the requirements on the motor nameplate, connect the power supply and add hydraulic oil.

Step 9: point up, pay attention to observe whether the position of the wire rope is correct. The electromagnet unlocks the safety down the runway to the lowest point and adjusts the tension of the wire rope so that the four roots are consistent.

Step 10: Adjust the position between column components and beam. Limit block is required to be close to the column. Adjust the vertical of the column to the ground plane with iron inserts. Drill anchor bolt holes and tighten bolts.

Step 11: Adjust the level of the runway. Lift a certain height to lock. Measure the levelness. If necessary, adjust the nut to the required position and lock it.

Step 12: Label all and organize.

5. Equipment Operation

- ☞ Fill the power unit tank with pressure oil (hydraulic oil grade: N32 or N46).
- ☞ Move the lift start button to lift the runway frame and remove the support frame.
Pay special attention to the first move to observe whether the rope is pulling inside the wheel, position it correctly.
- ☞ Press the down button to make the lift in the locking state, and observe whether the locking block can effectively enter the square hole of the lifting strip.
- ☞ Lower the runway to the lowest position and adjust the nuts on the four steel ropes so that the tension is the same.
- ☞ No-load test up and down twice to check whether each part works normally.
Runway lock reliability check, repeat several times to remount the car to check whether the hydraulic system works normally.

Special Attention

- ▲ Vehicles parked on the runway should brake and use wedges.
- ▲ When lifting and lowering the vehicle, pay attention to the surrounding people and objects to keep a distance from the lift.
- ▲ After the installation of the four columns should be vertical with the ground plane, otherwise there will be danger in use!
- ▲ Before the descending operation, you must first move up a little, so that the lock block leaves the lifting bar square hole, to descend. Otherwise it will cause damage to the control mechanism.

6. Maintenance and Inspection

Daily maintenance and inspection

1. Check the working position of the safety lock during operation.
2. Check the unlocking and padlock of safety lock and column safety plate.
3. Check whether the hydraulic joint, gas pipe joint and hose leak.
4. Check the connection of the wire rope -- whether it is bent, broken or loose.
5. Check the wear and tear of the wire rope during lifting and lowering.
6. Check all spring connections and be sure to connect reliably.
7. Check the connection of all bolts, nuts and screws -- tighten them immediately if they are loose
8. Check whether the wires and switches are damaged.
9. Check foundation strength around expansion bolts.
10. After the lift is put into use, lubricate the cable wheel shaft with an oil finger gun at least once a year or regularly

Weekly Maintenance and Inspection

1. Check the strength and connection of the expansion bolt. Tighten the expansion bolt immediately if it is loose.
2. Check the foundation strength around the expansion bolt.
3. Check the hydraulic oil level.
4. Check and tighten loose bolts, nuts, and screws.
5. Check the fit of all gear and gear shaft.

Monthly Maintenance and Inspection

- 1). Lubricate cable wheel and cable wheel shaft.
- 2). Check the wear of the wire rope. If the wear is serious, replace it immediately.
- 3). Replace the hydraulic oil.

7. Parts Diagram and List.

FIG. 1

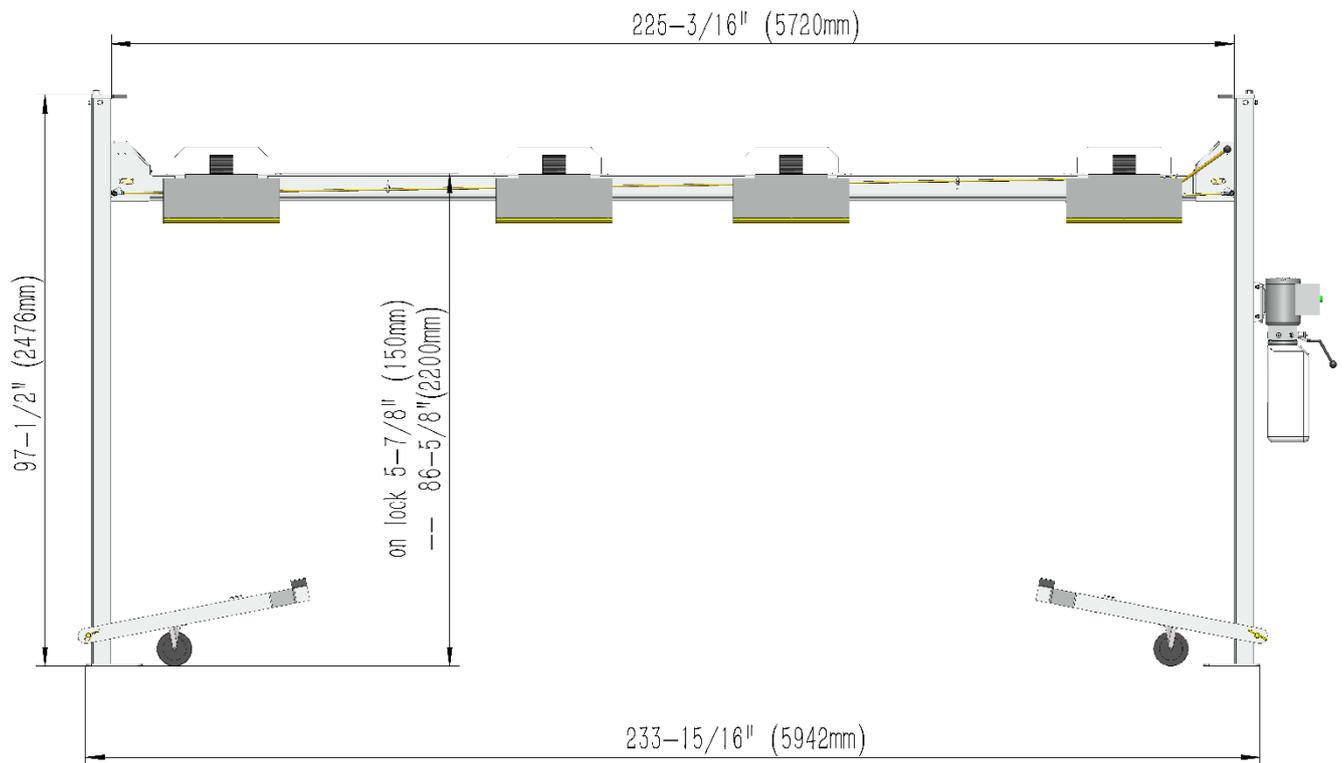
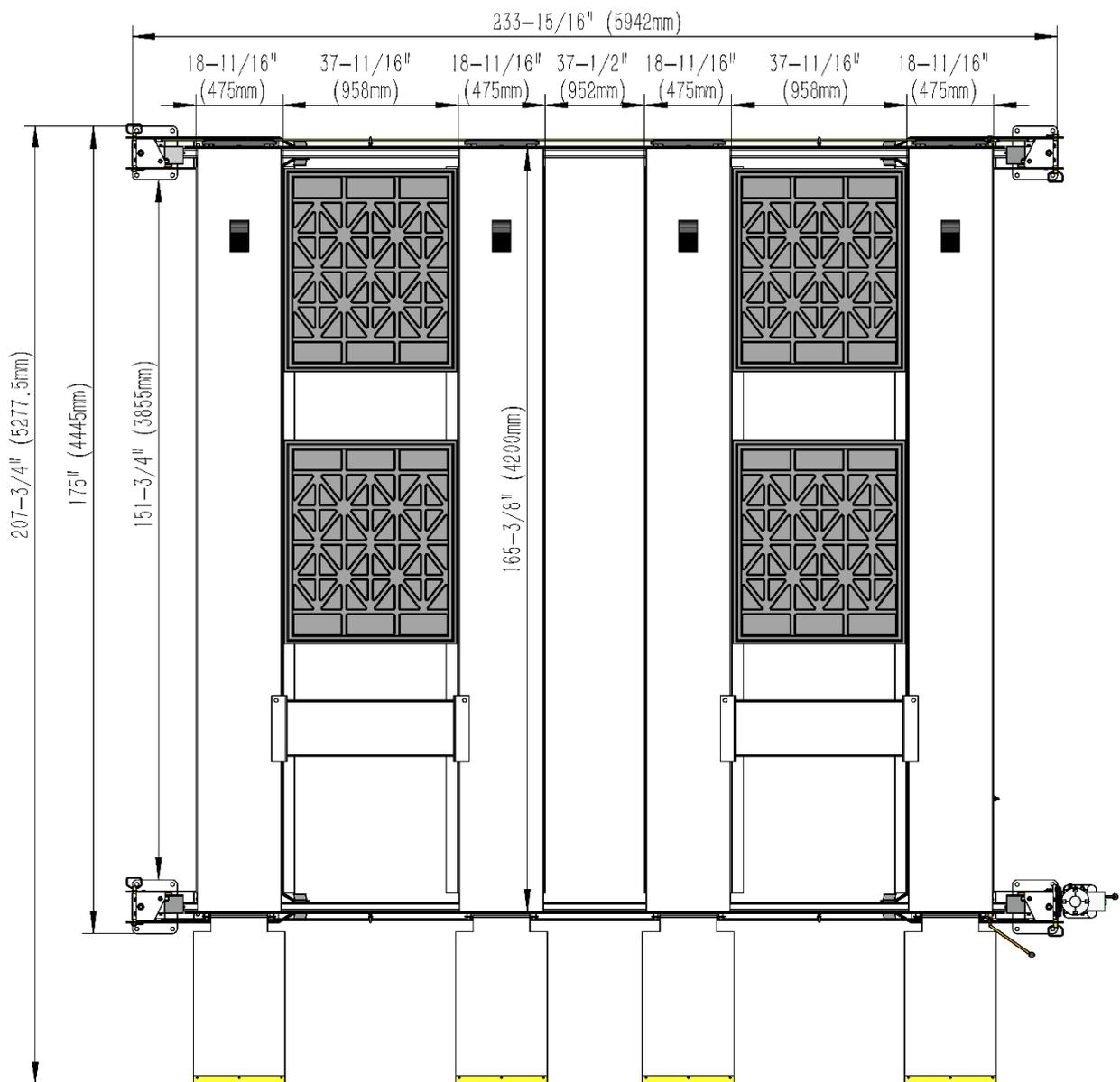
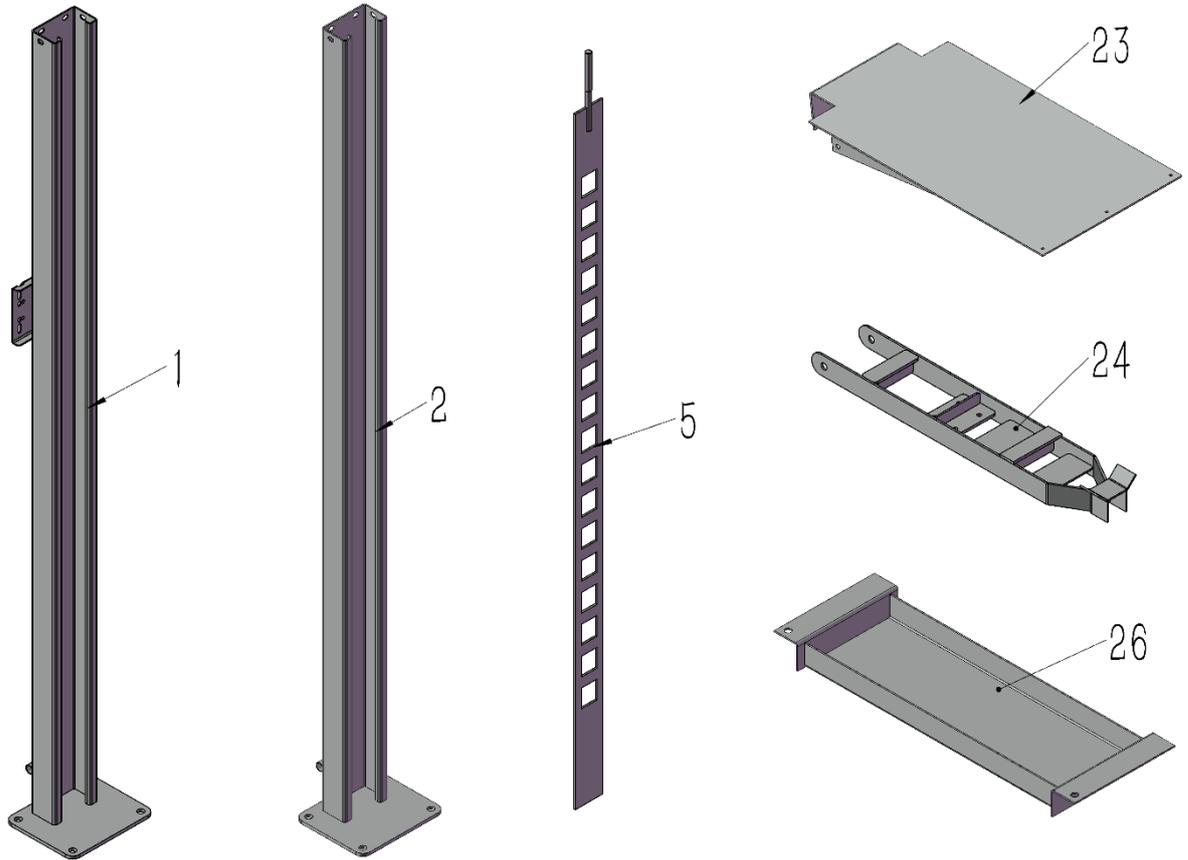


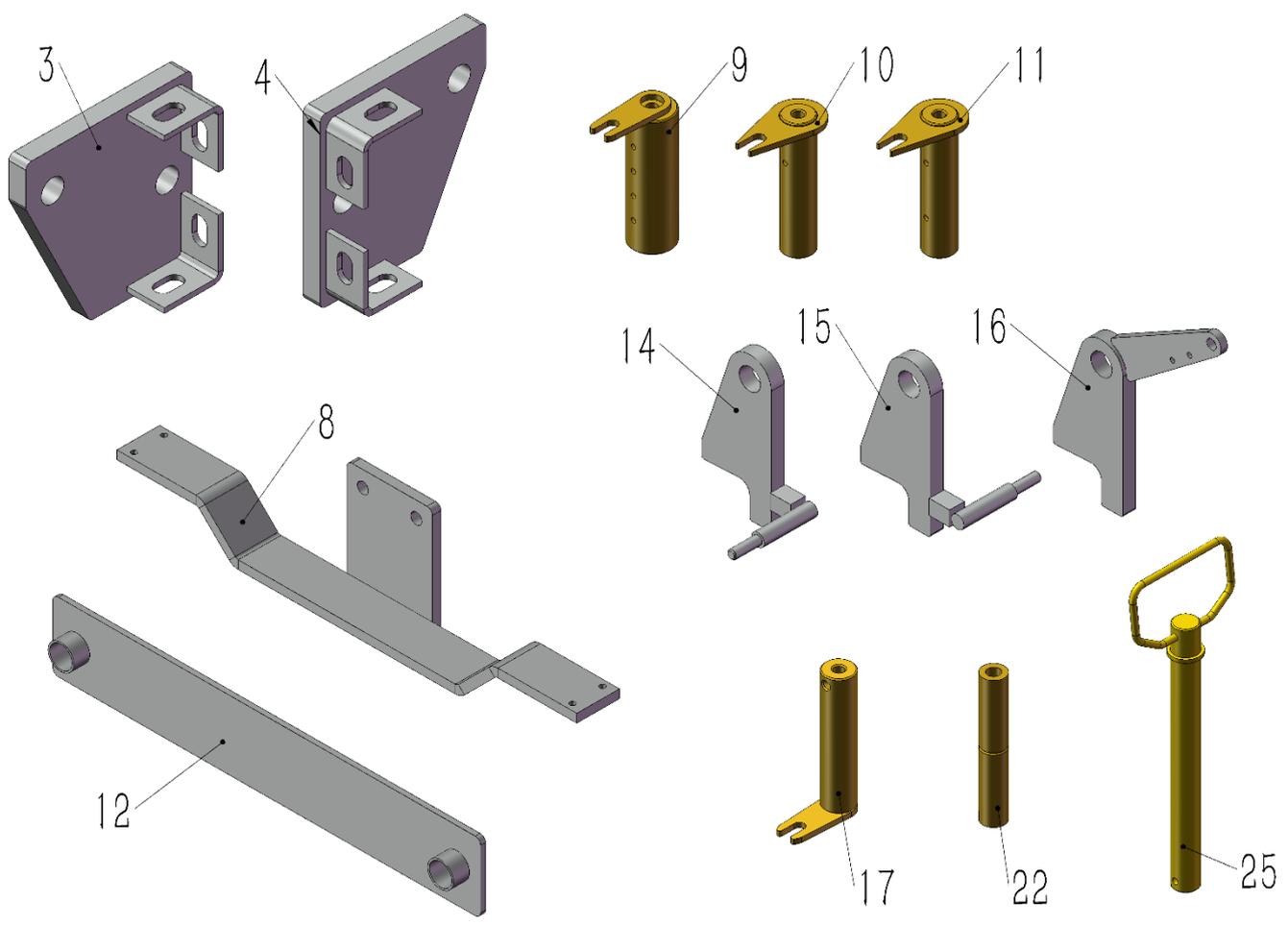
FIG. 2



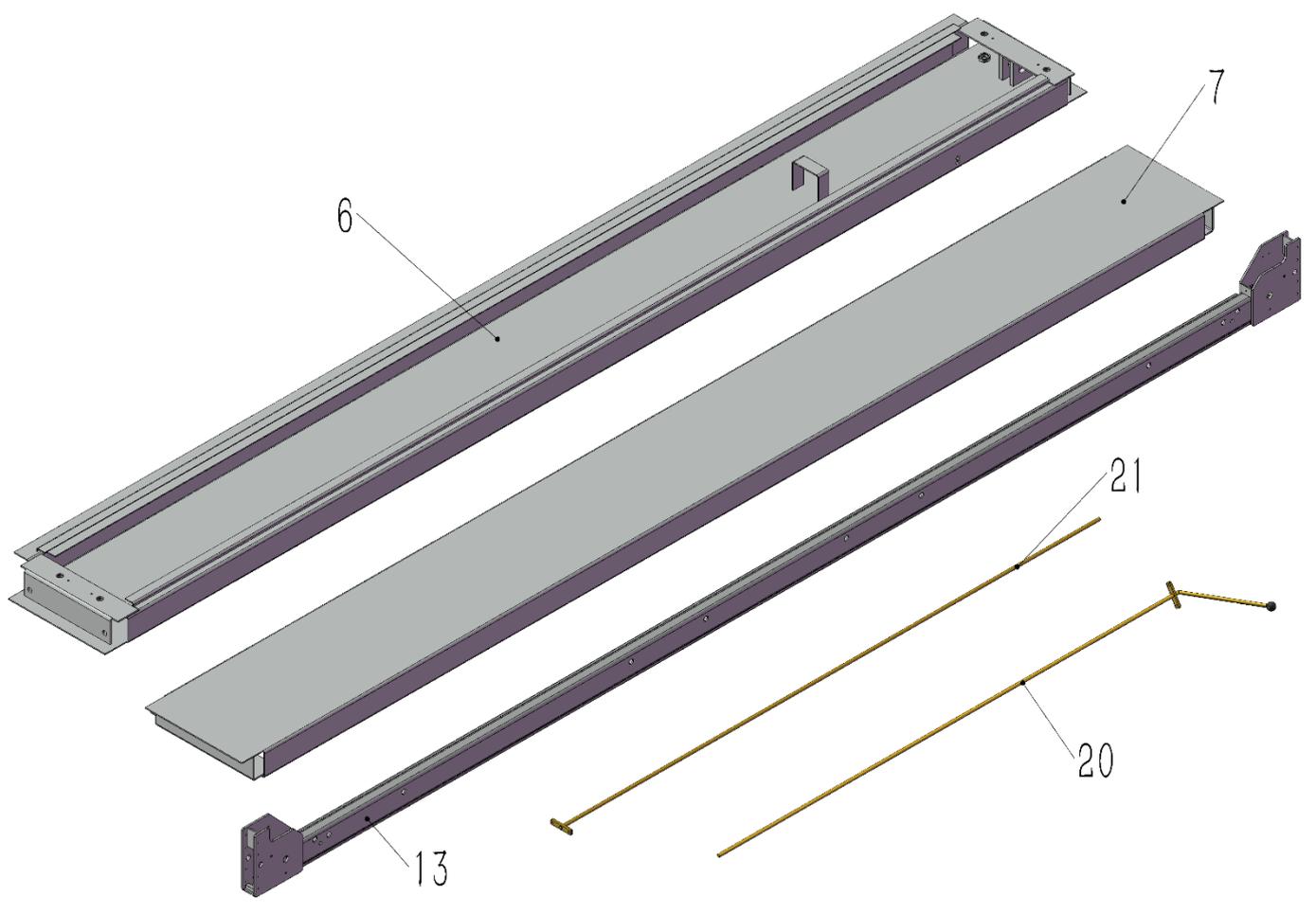
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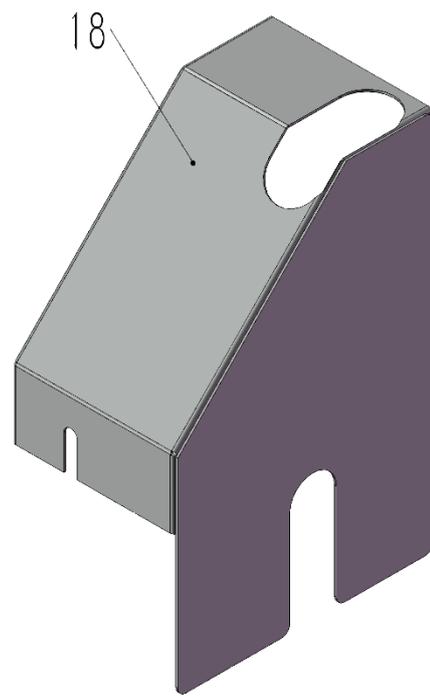
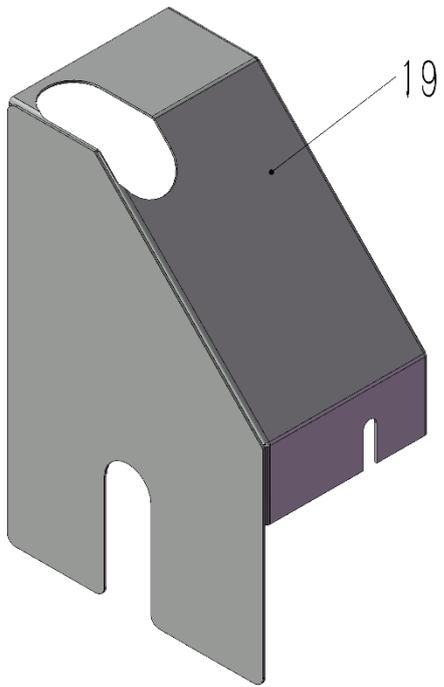
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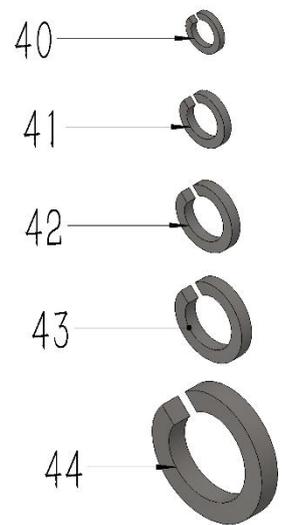
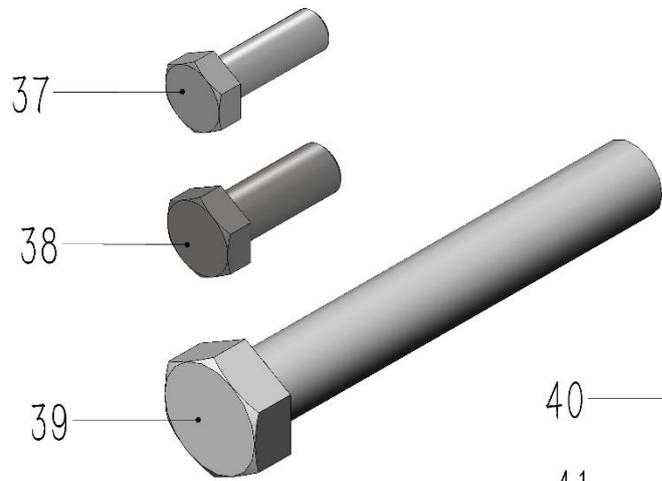
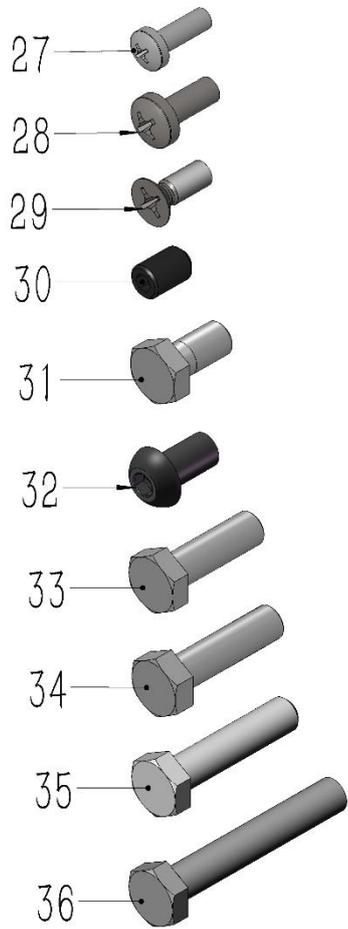
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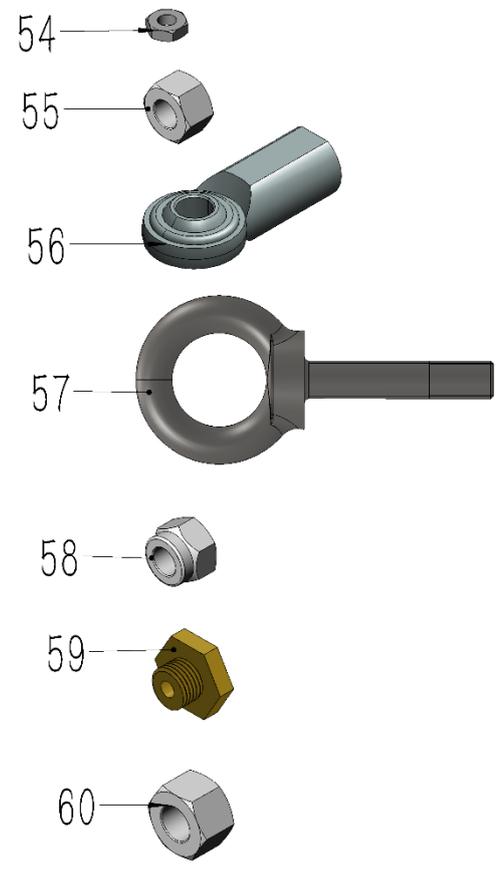
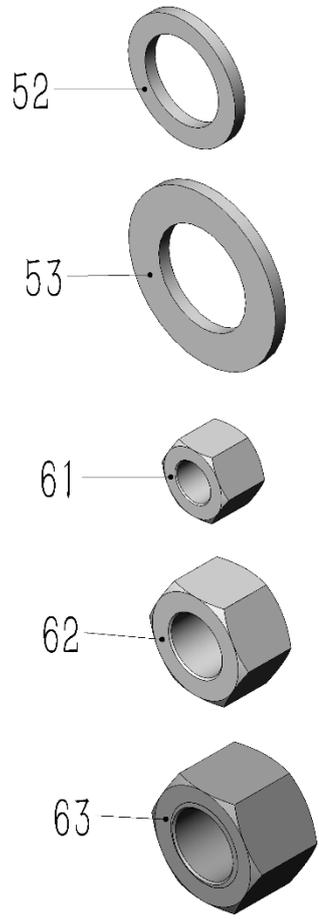
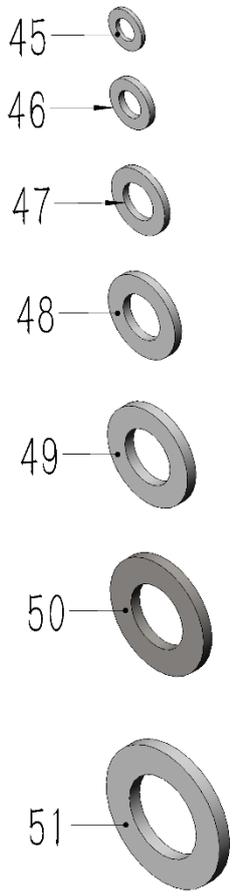
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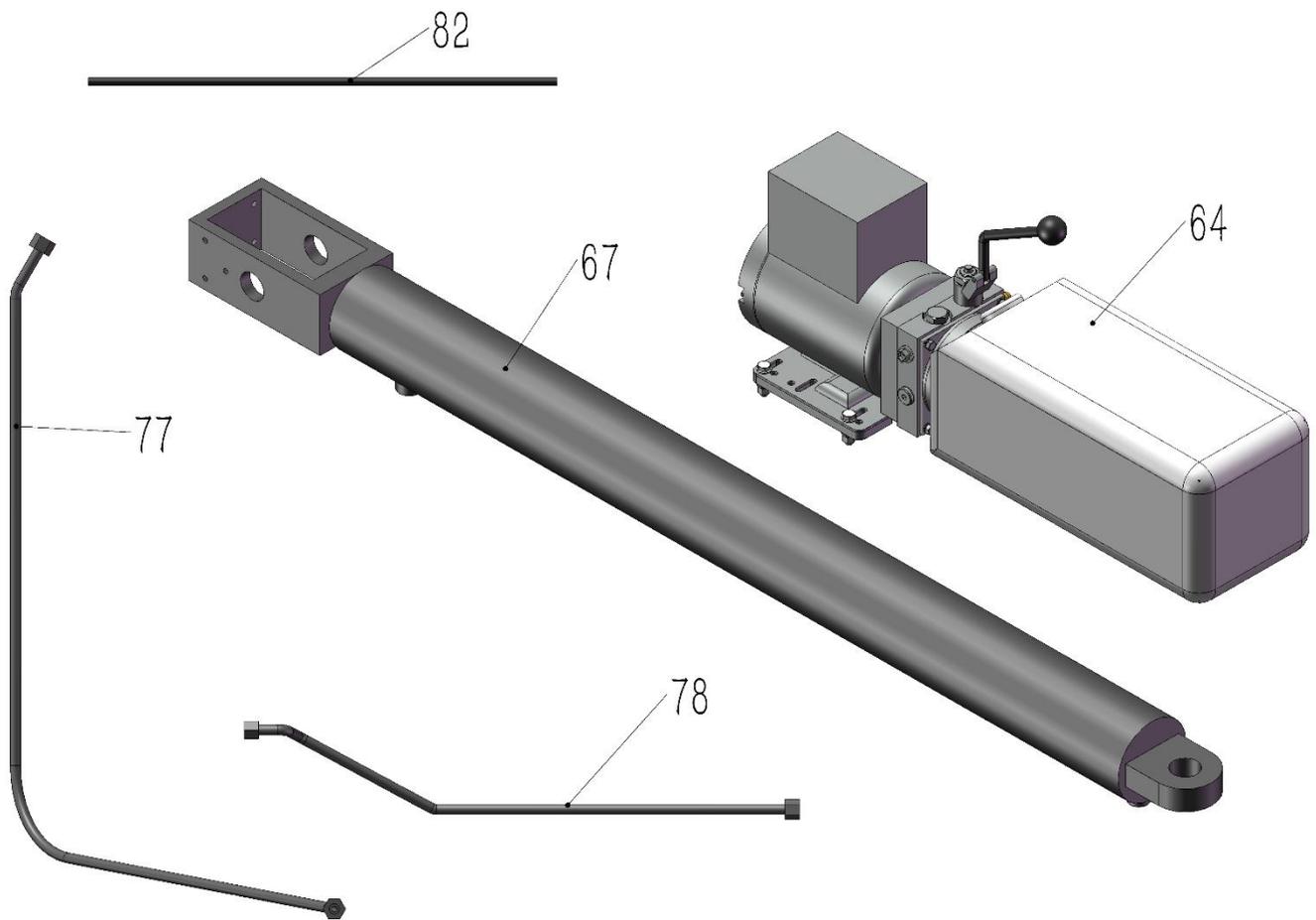
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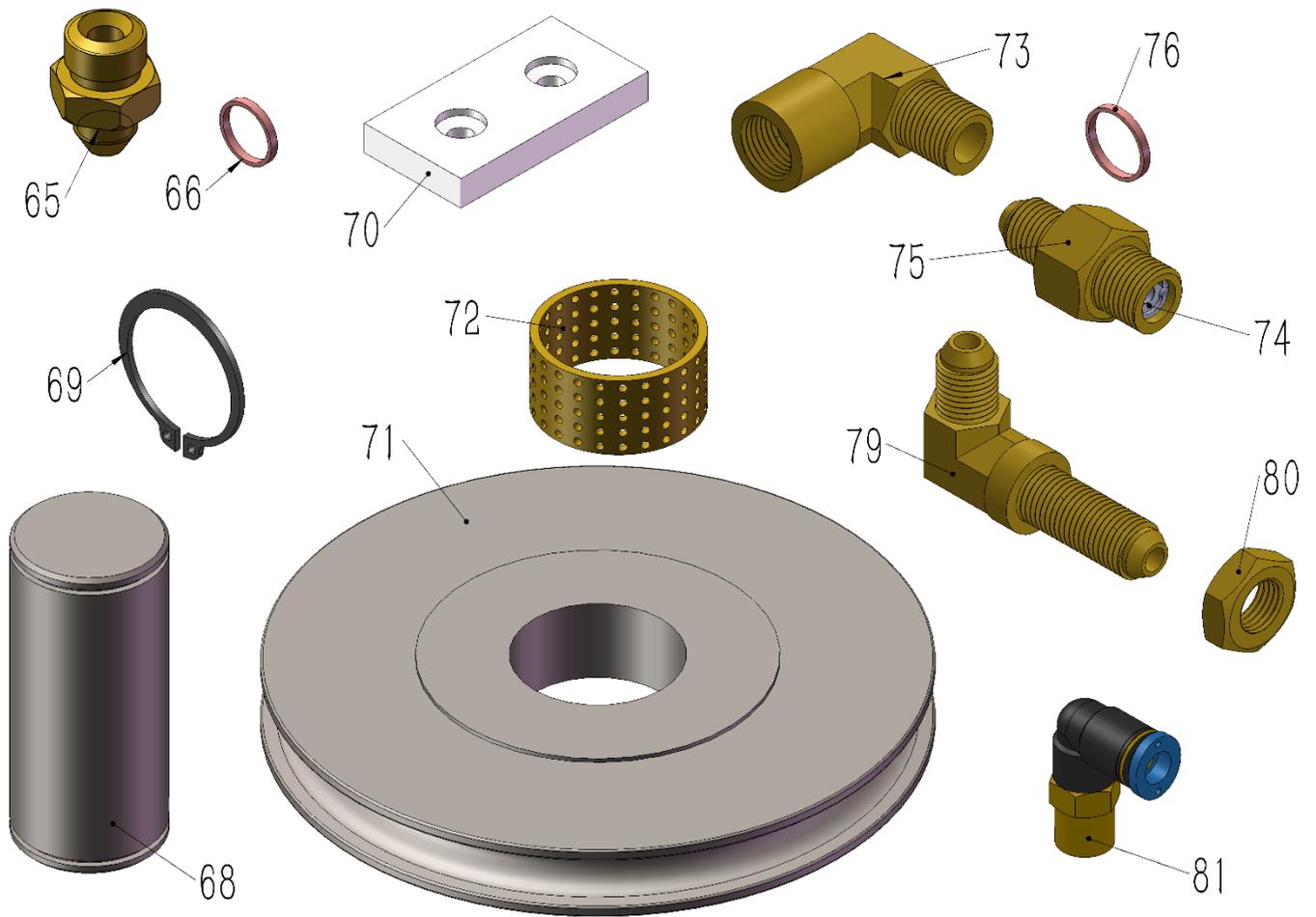
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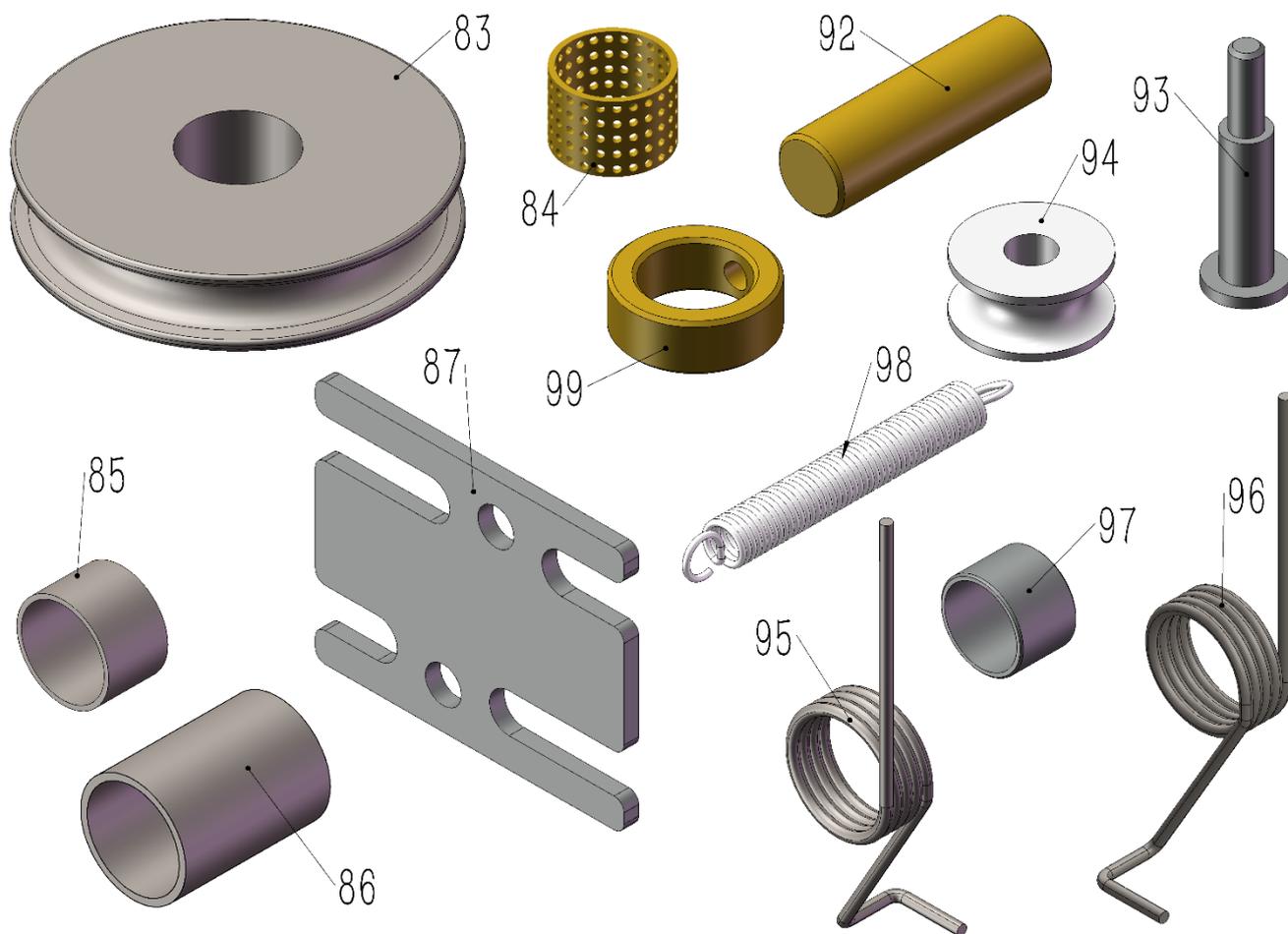
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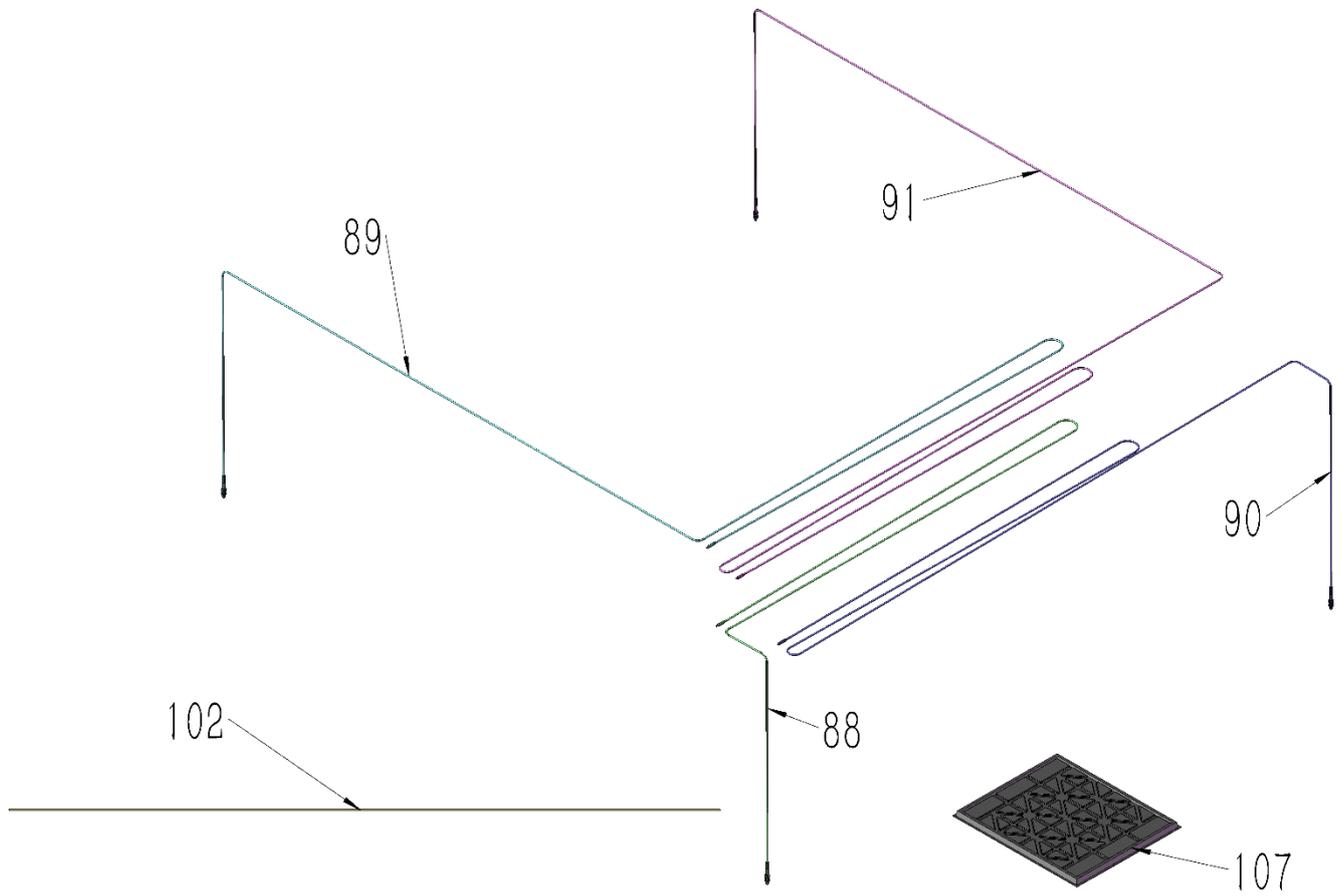
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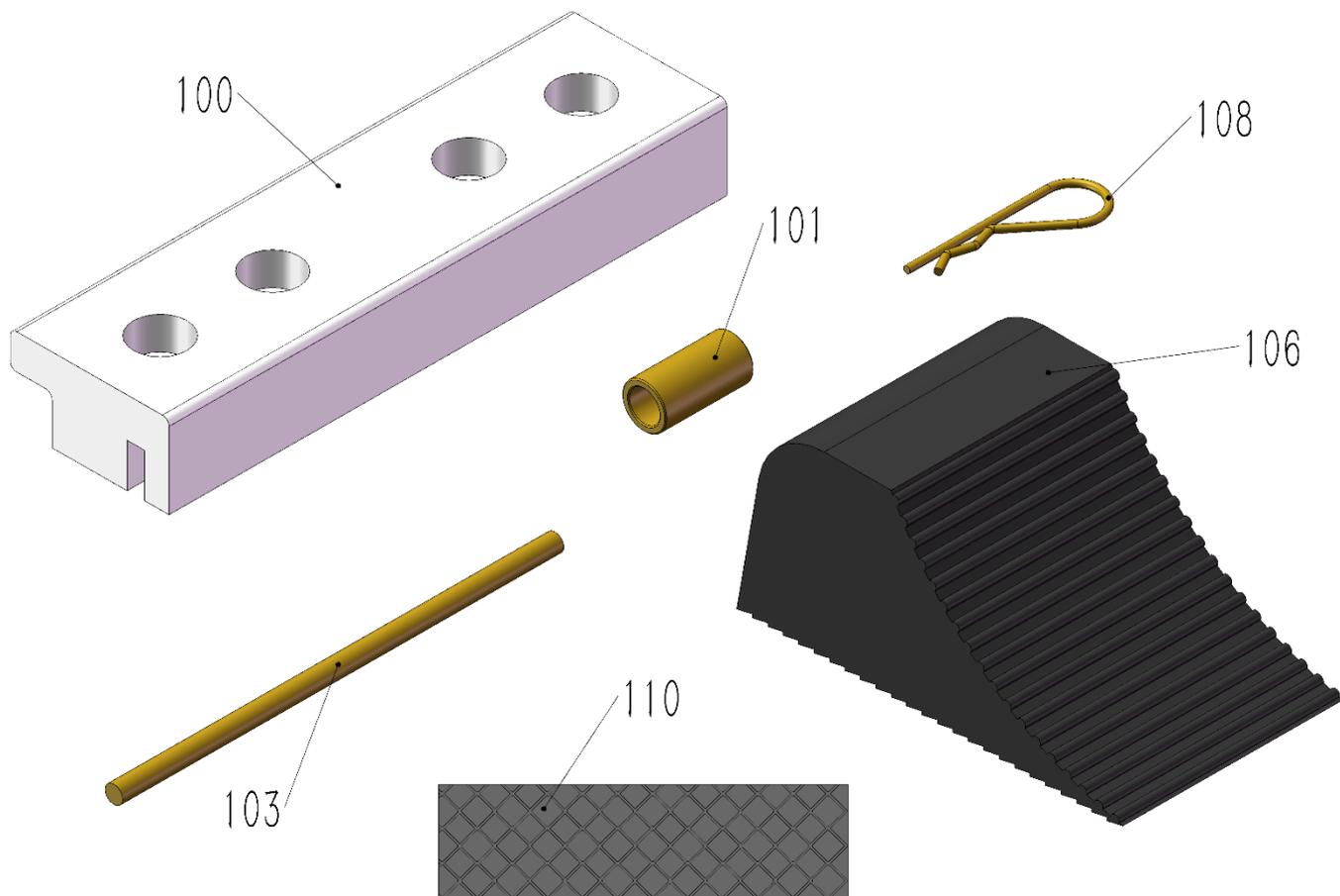
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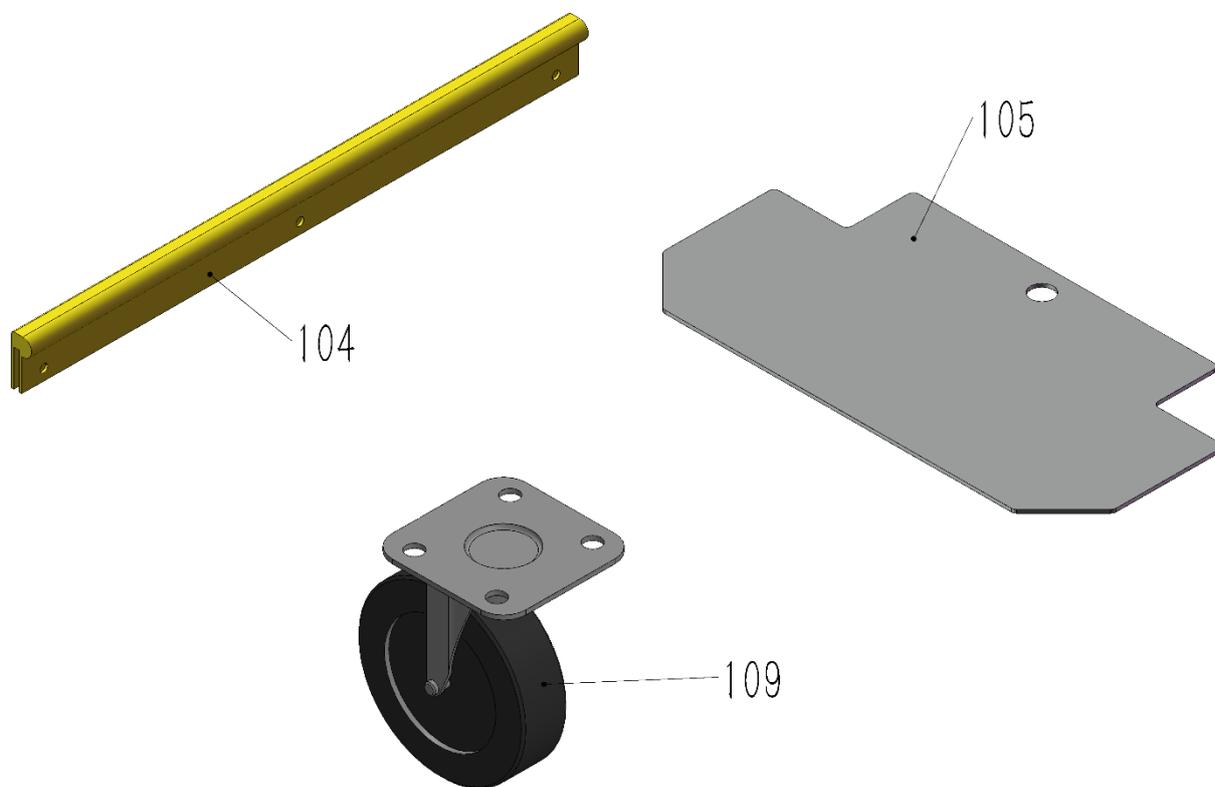
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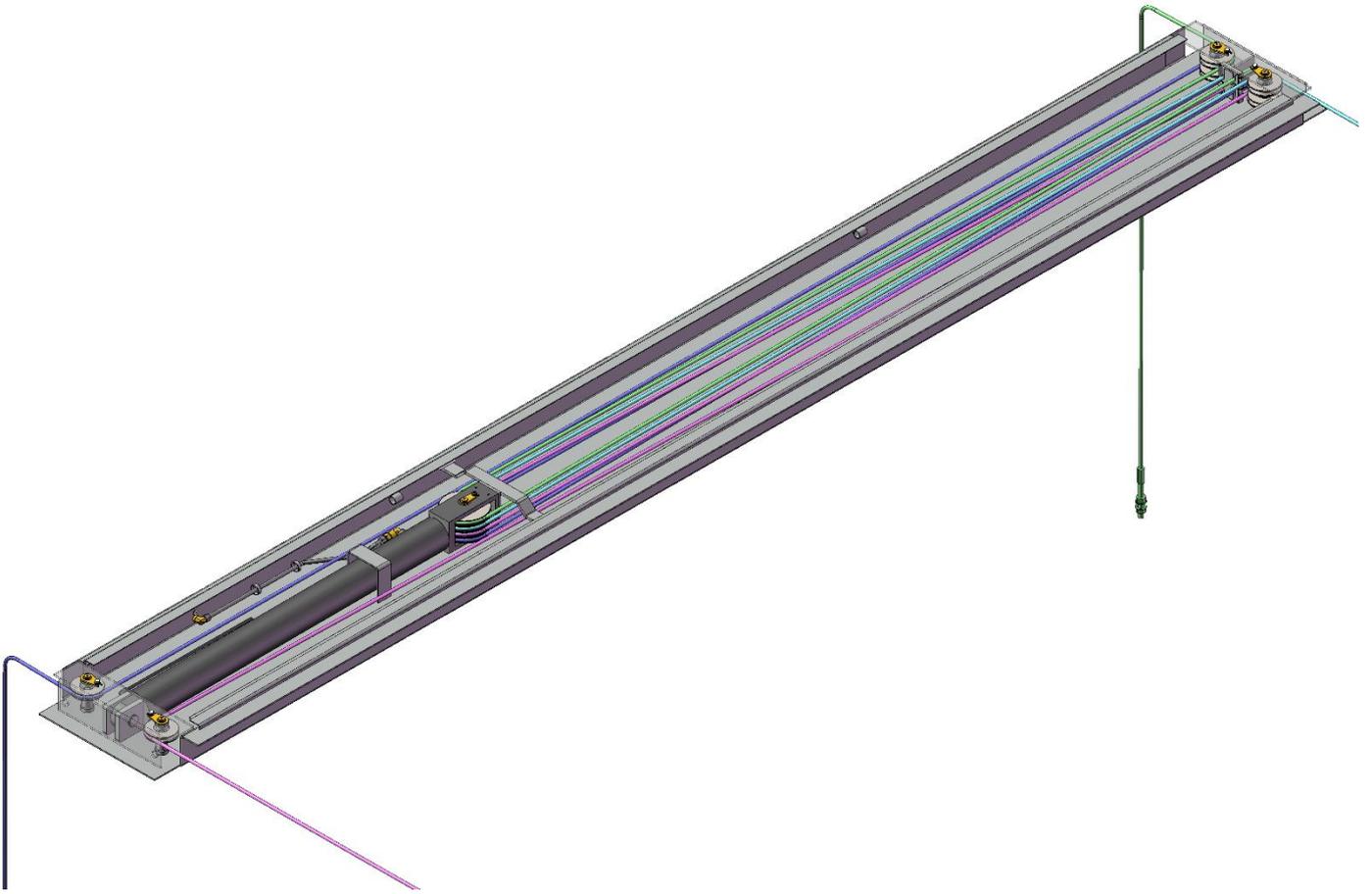
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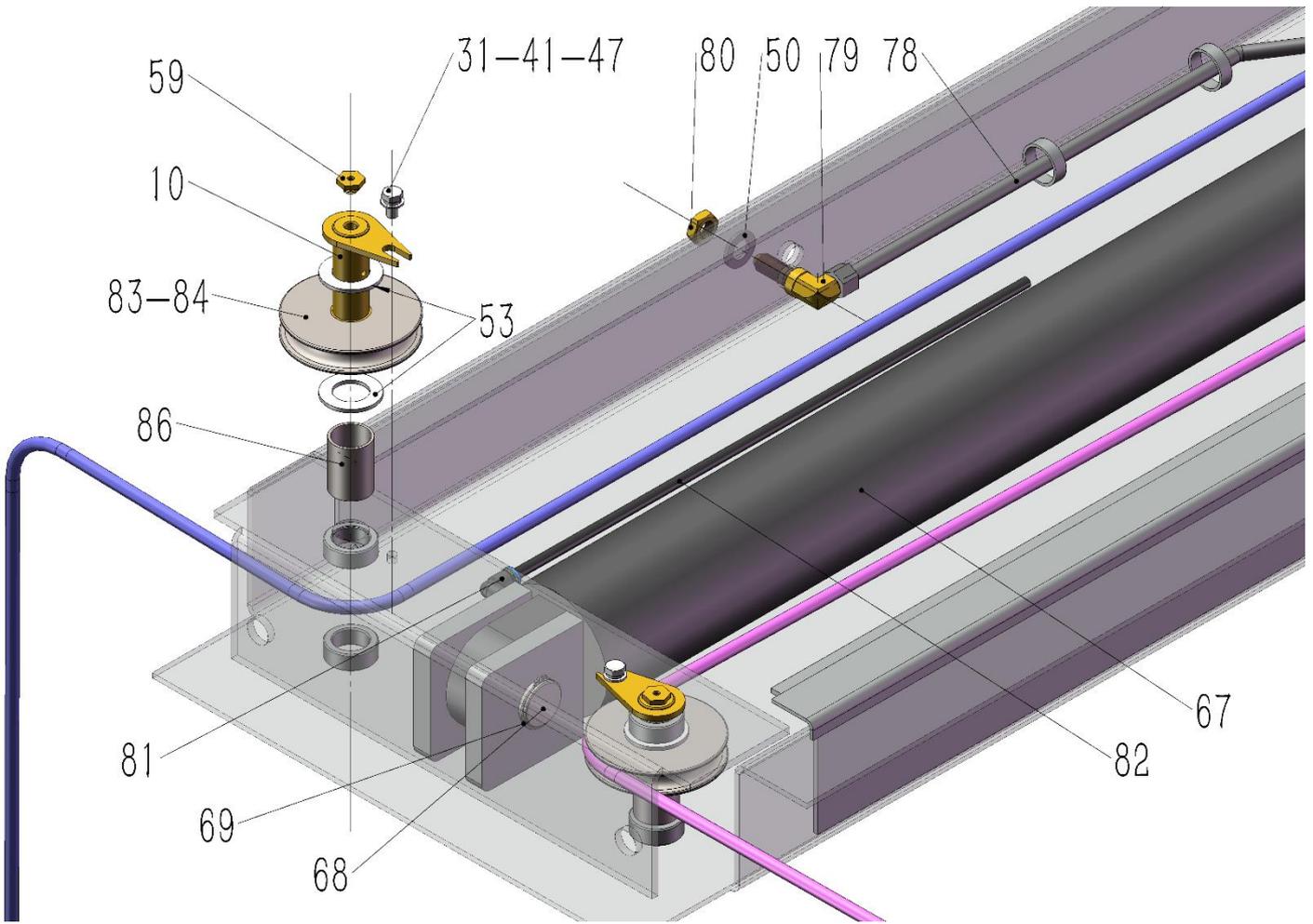


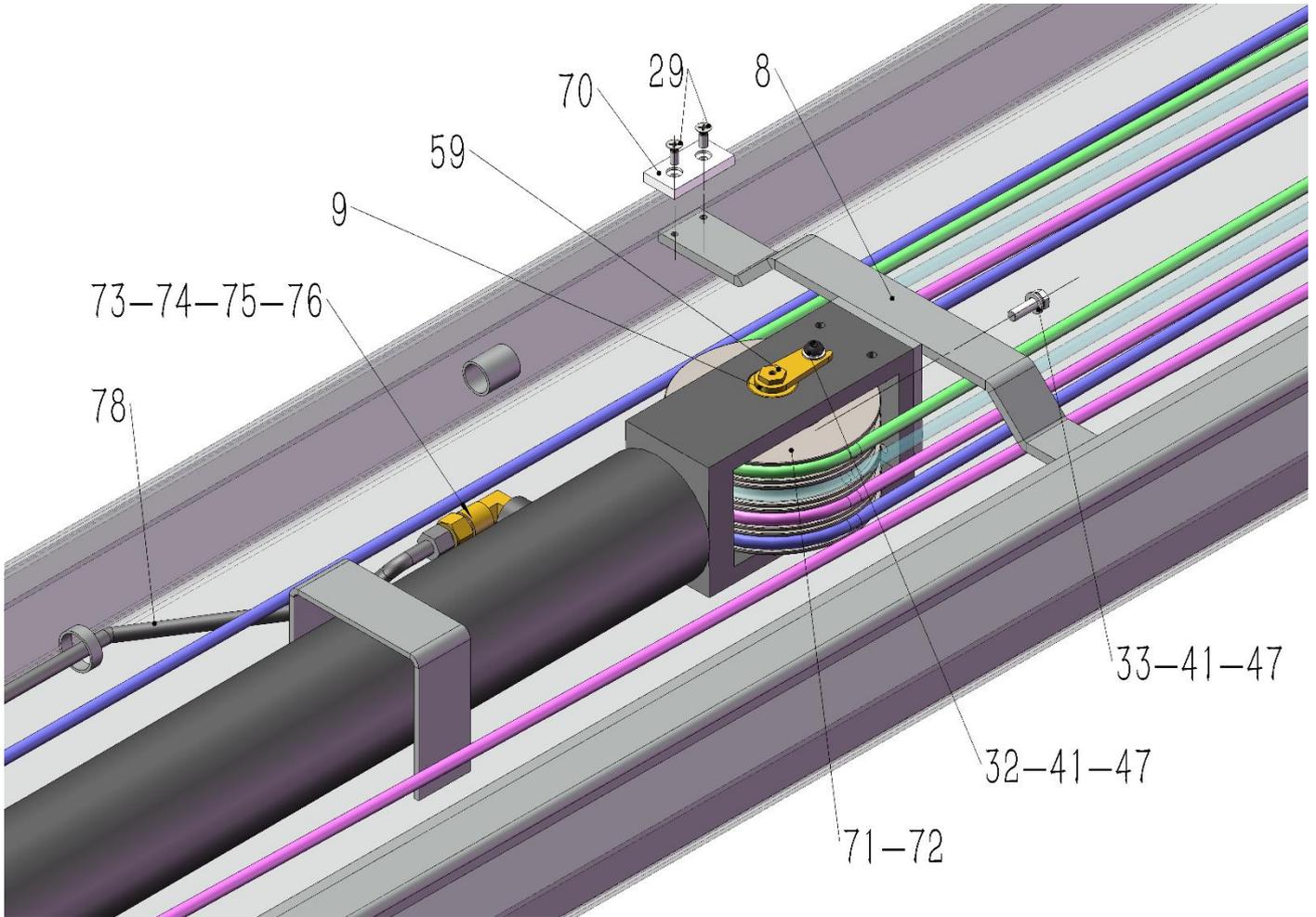
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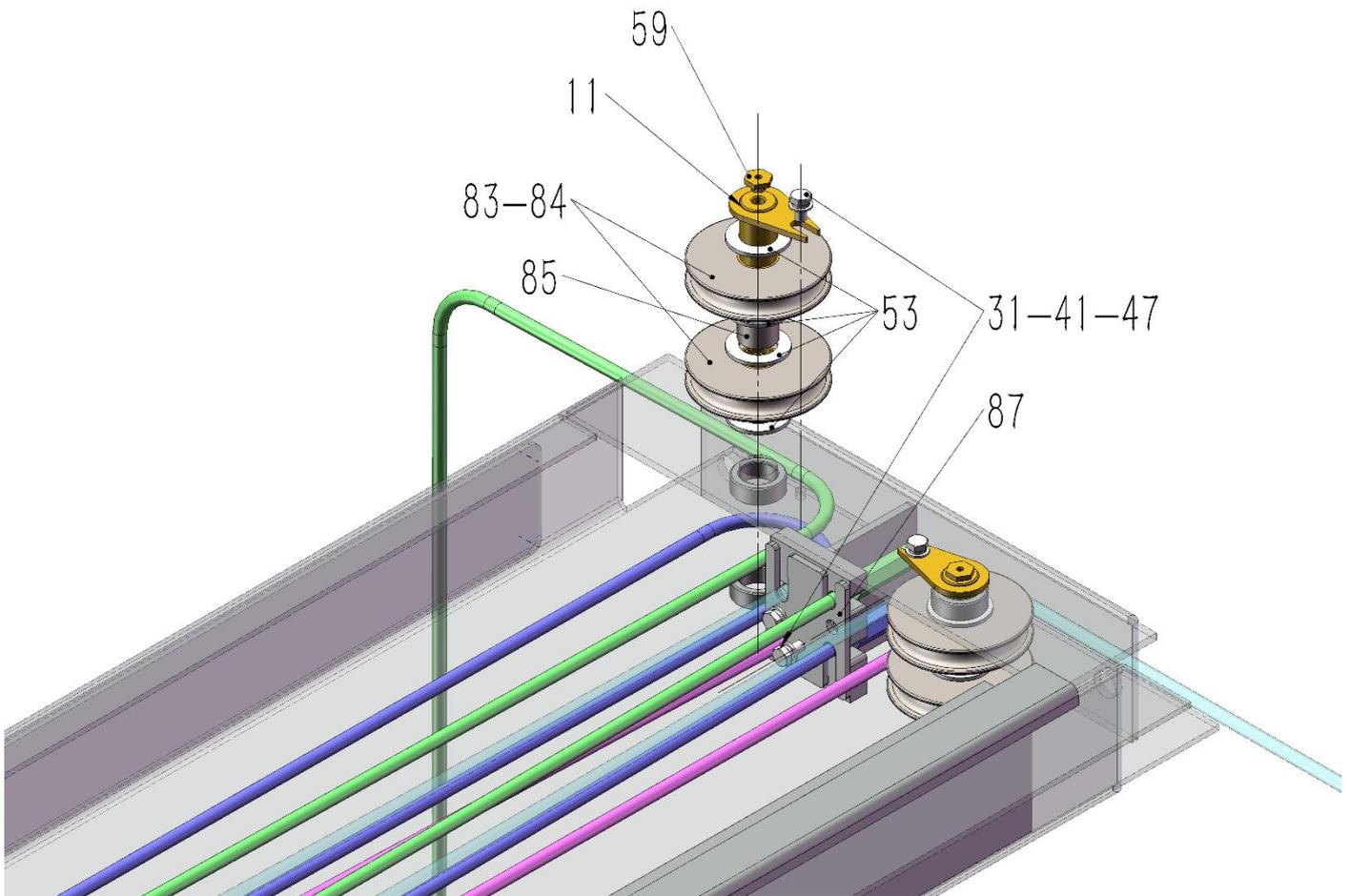


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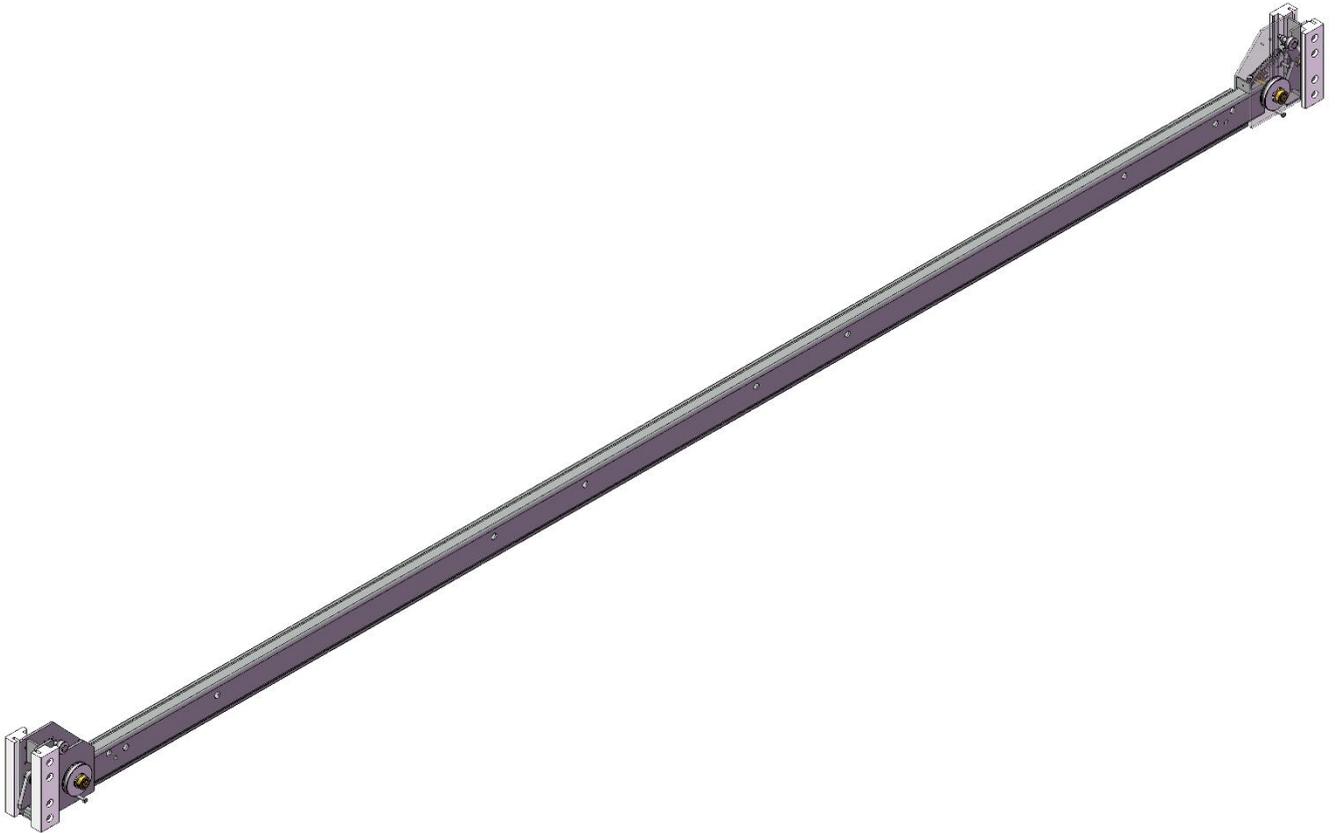


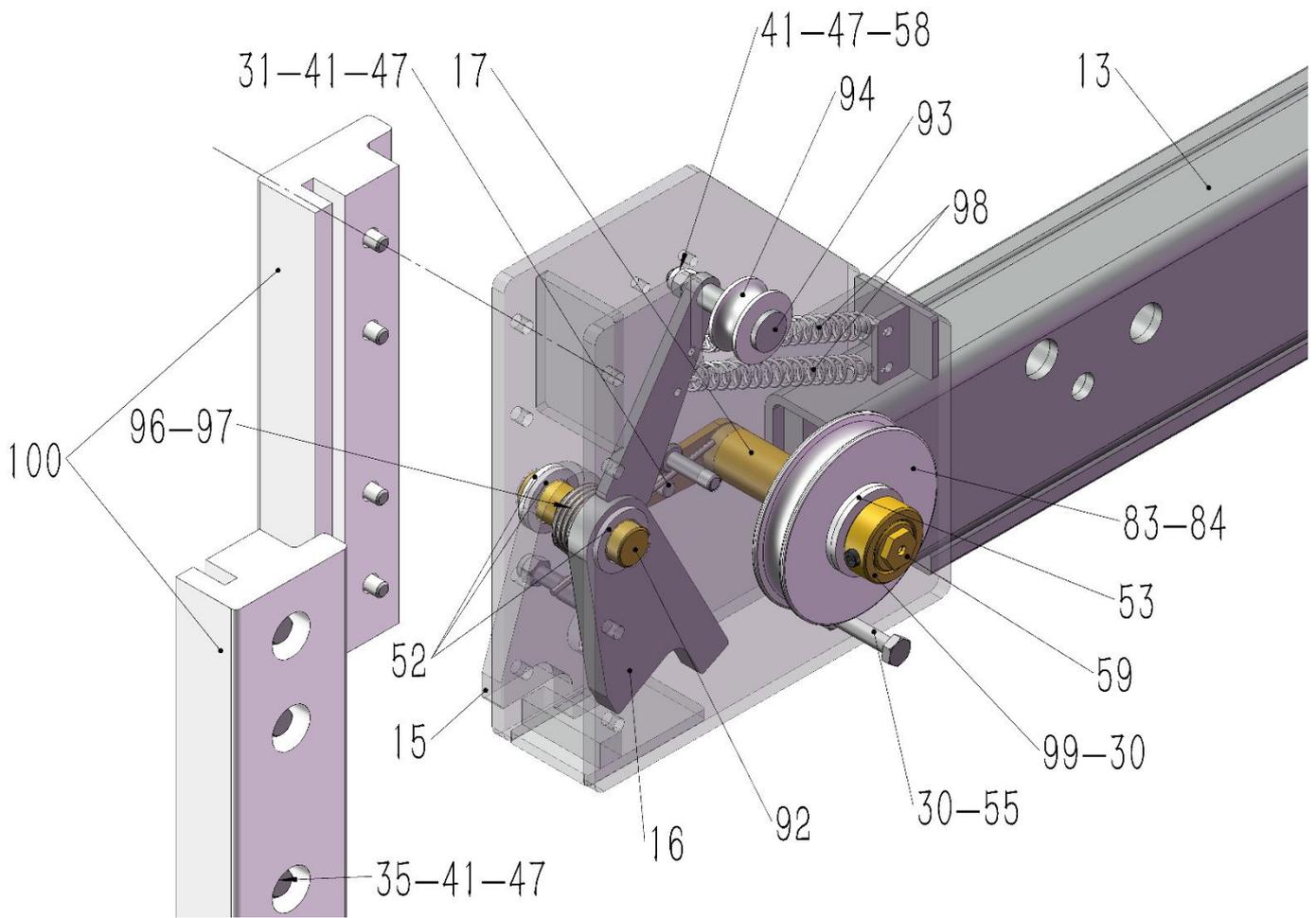


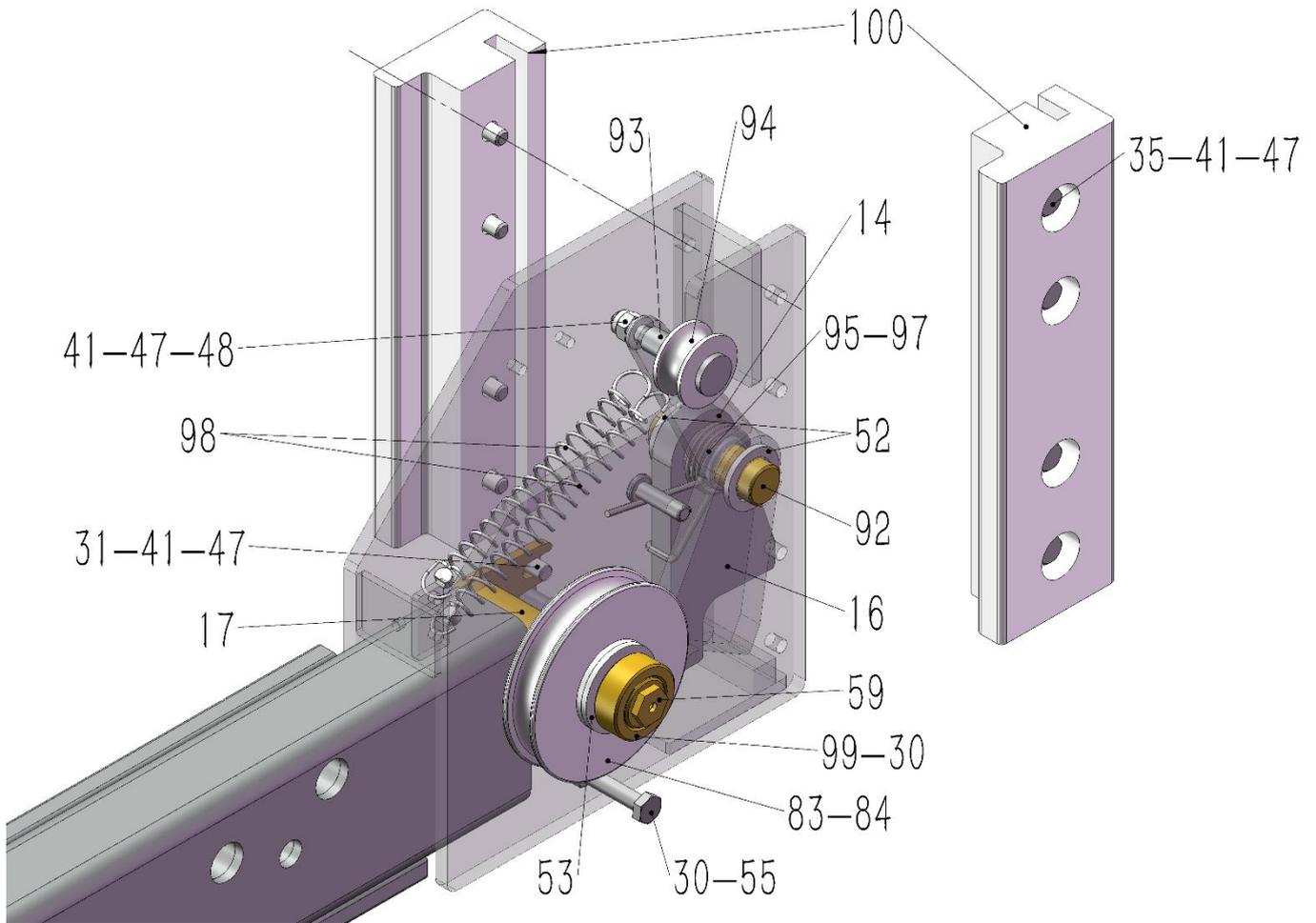




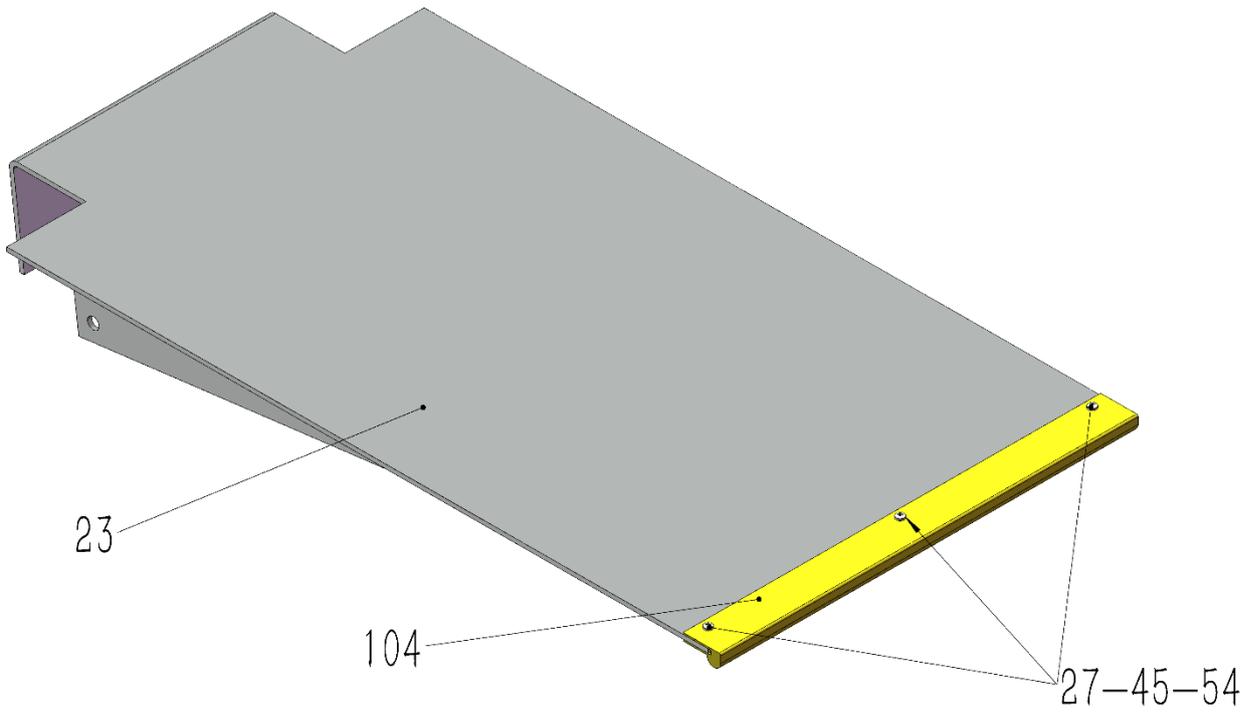
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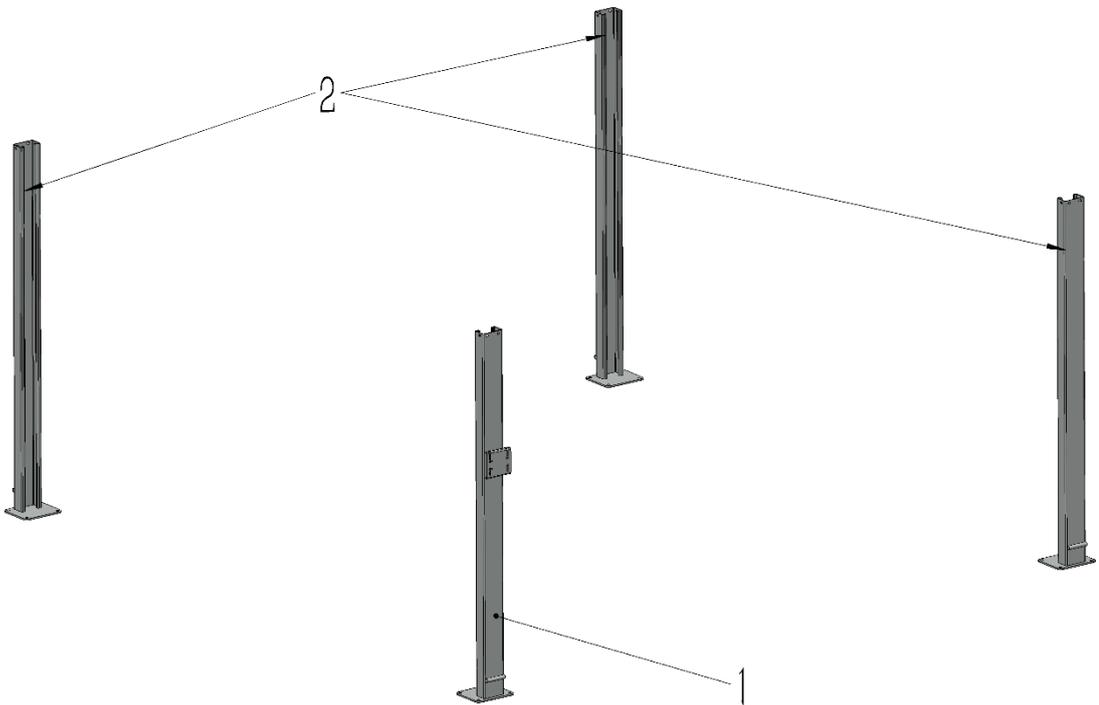


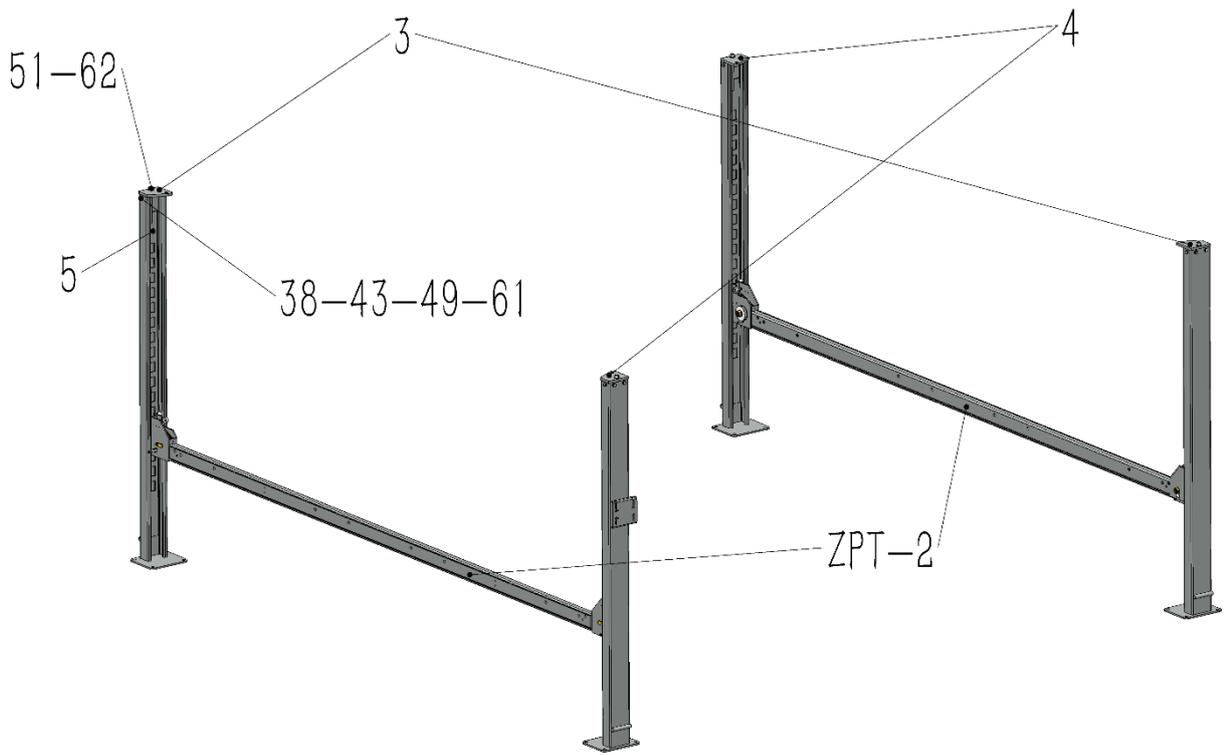


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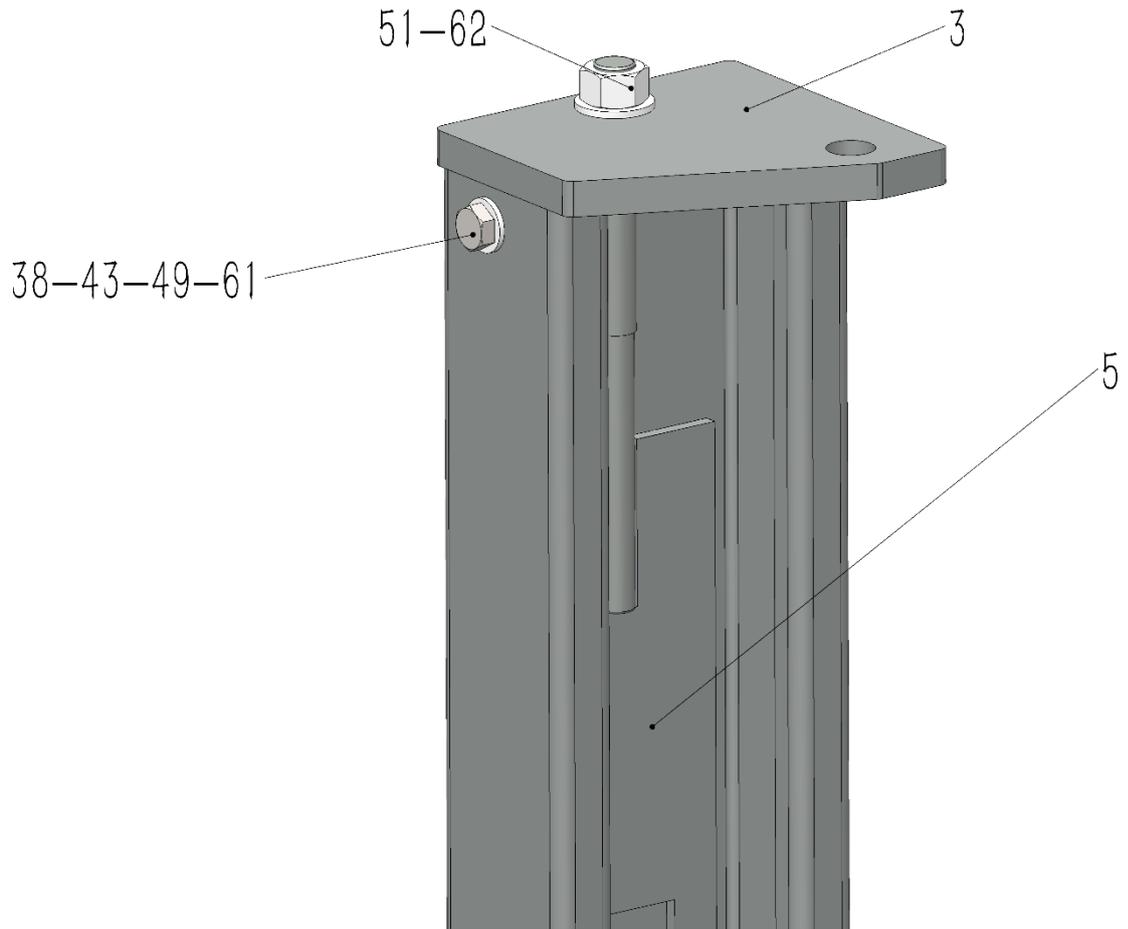


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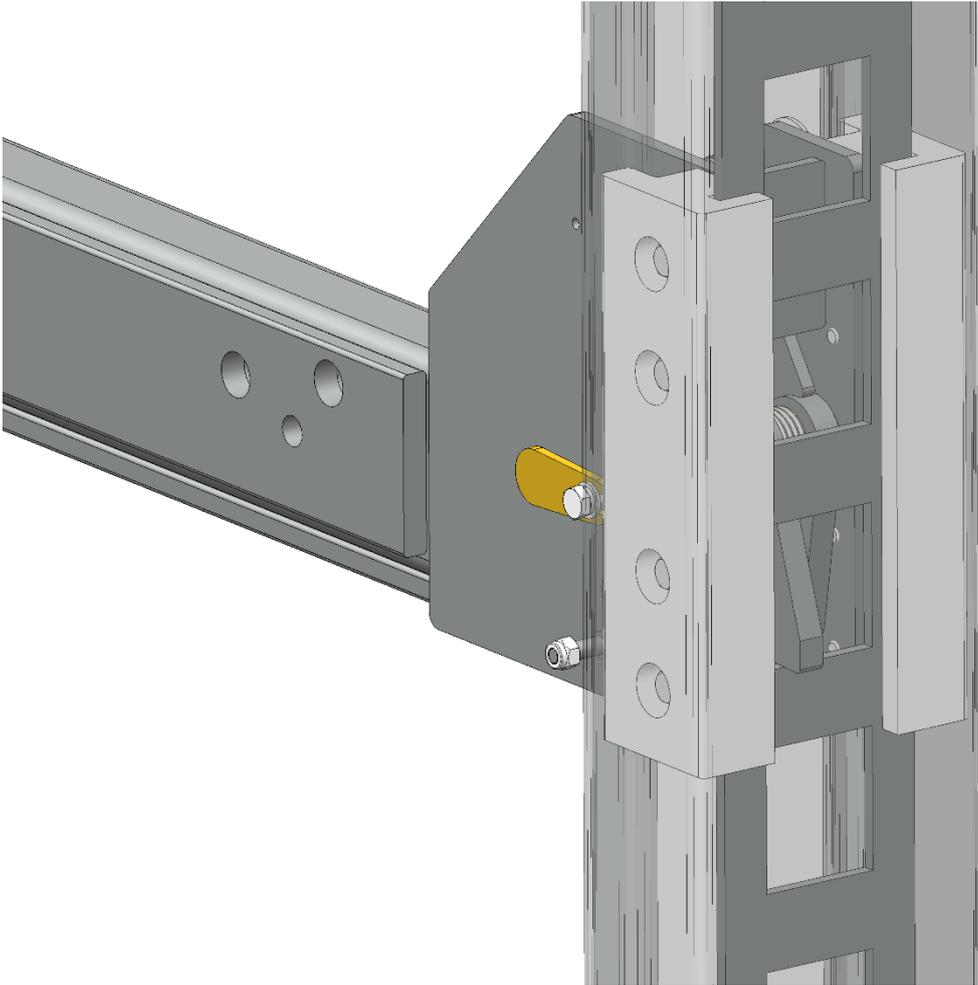




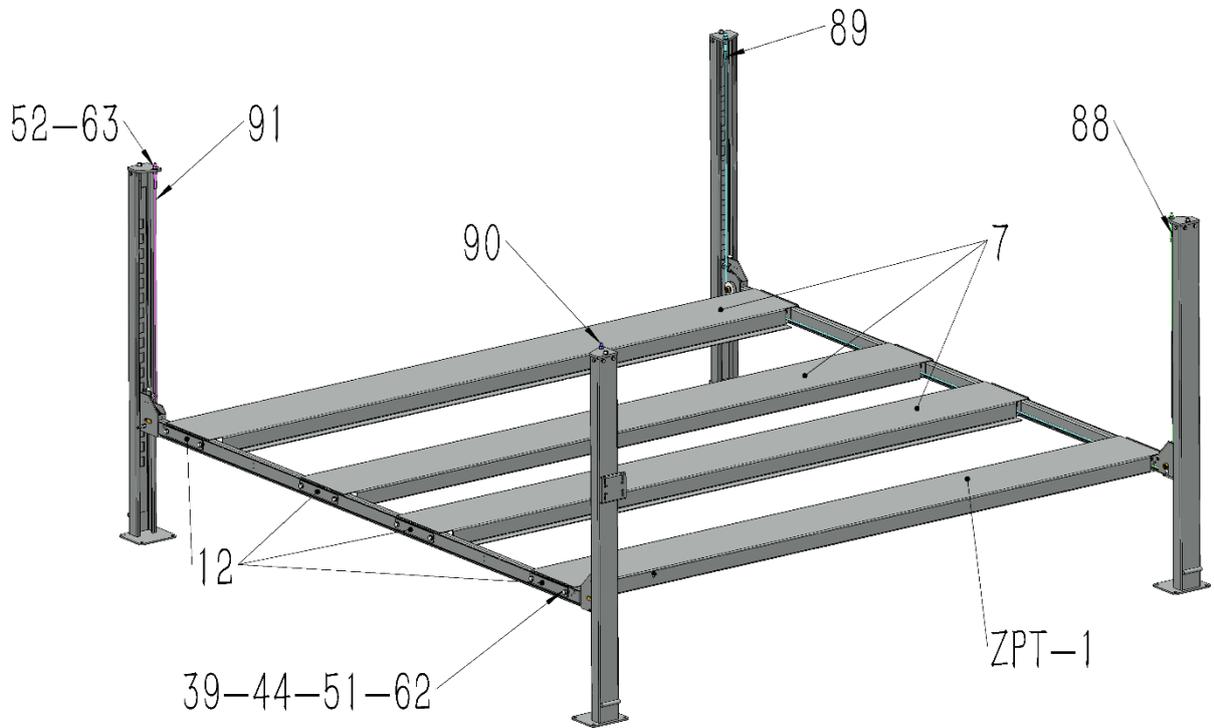
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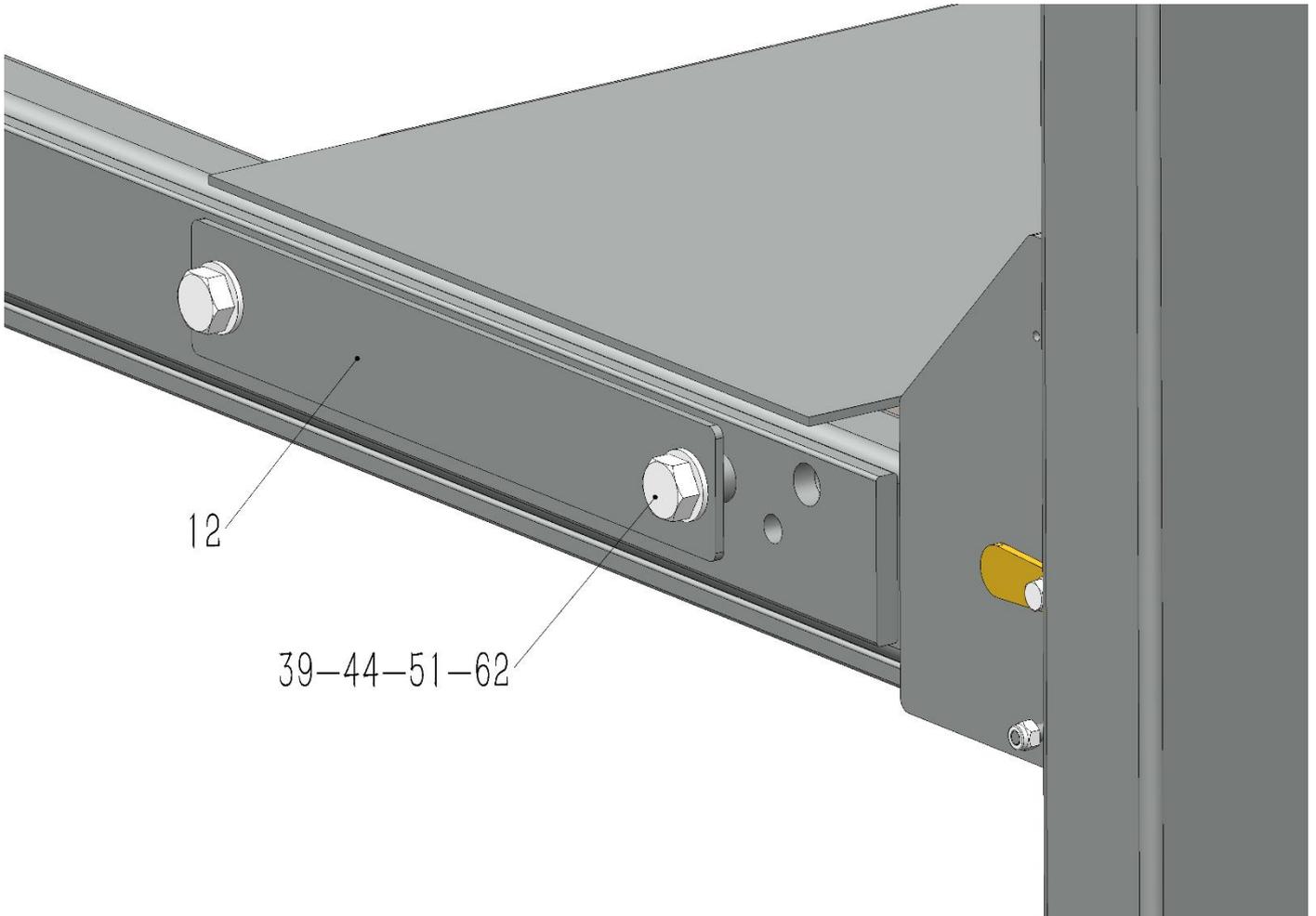
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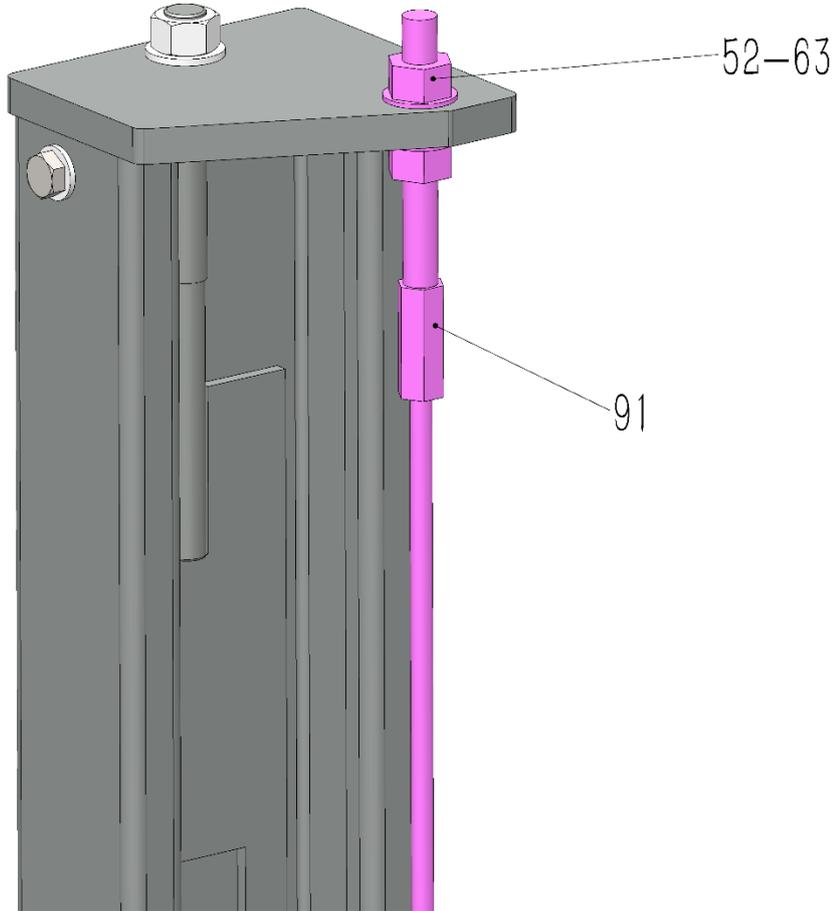
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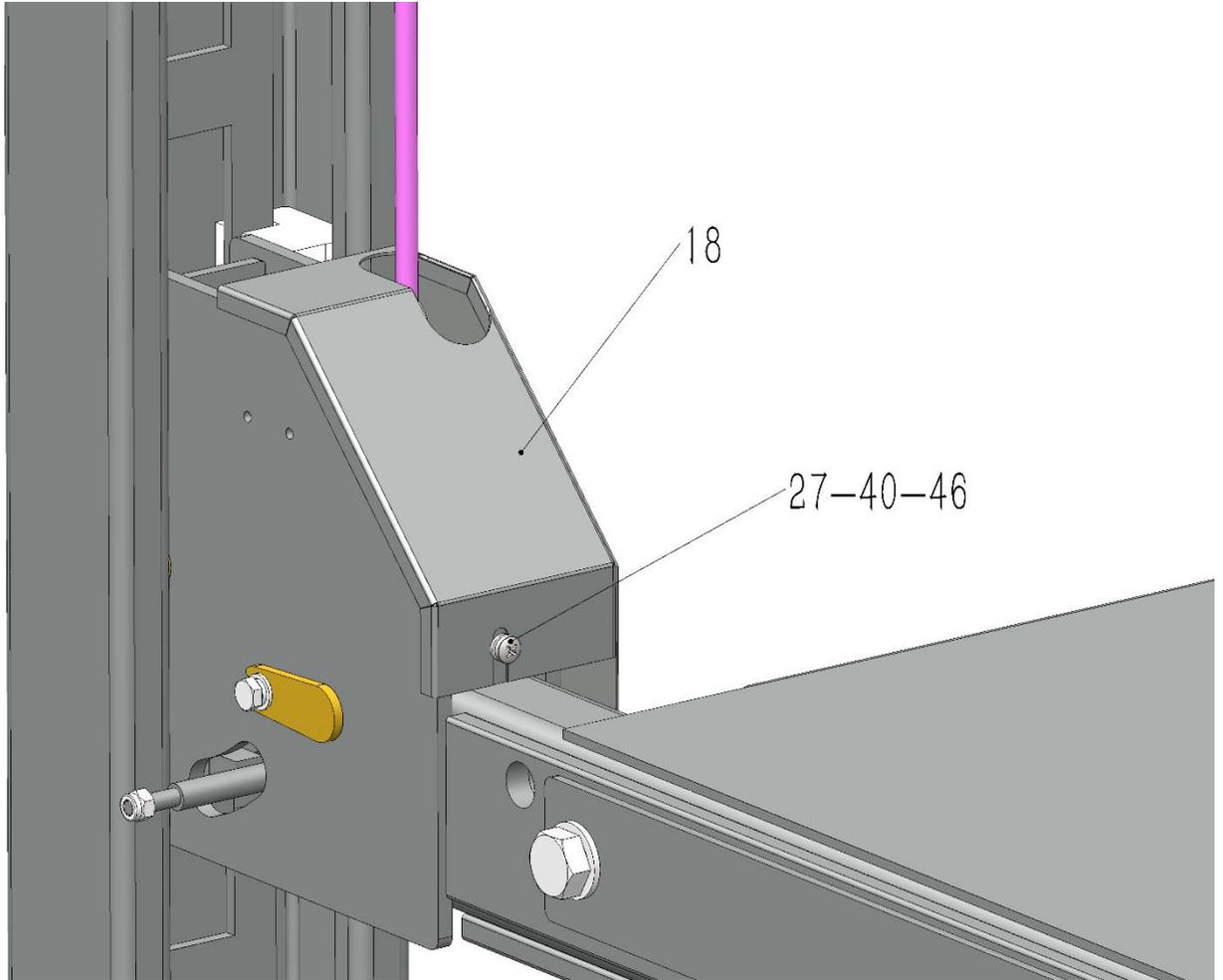
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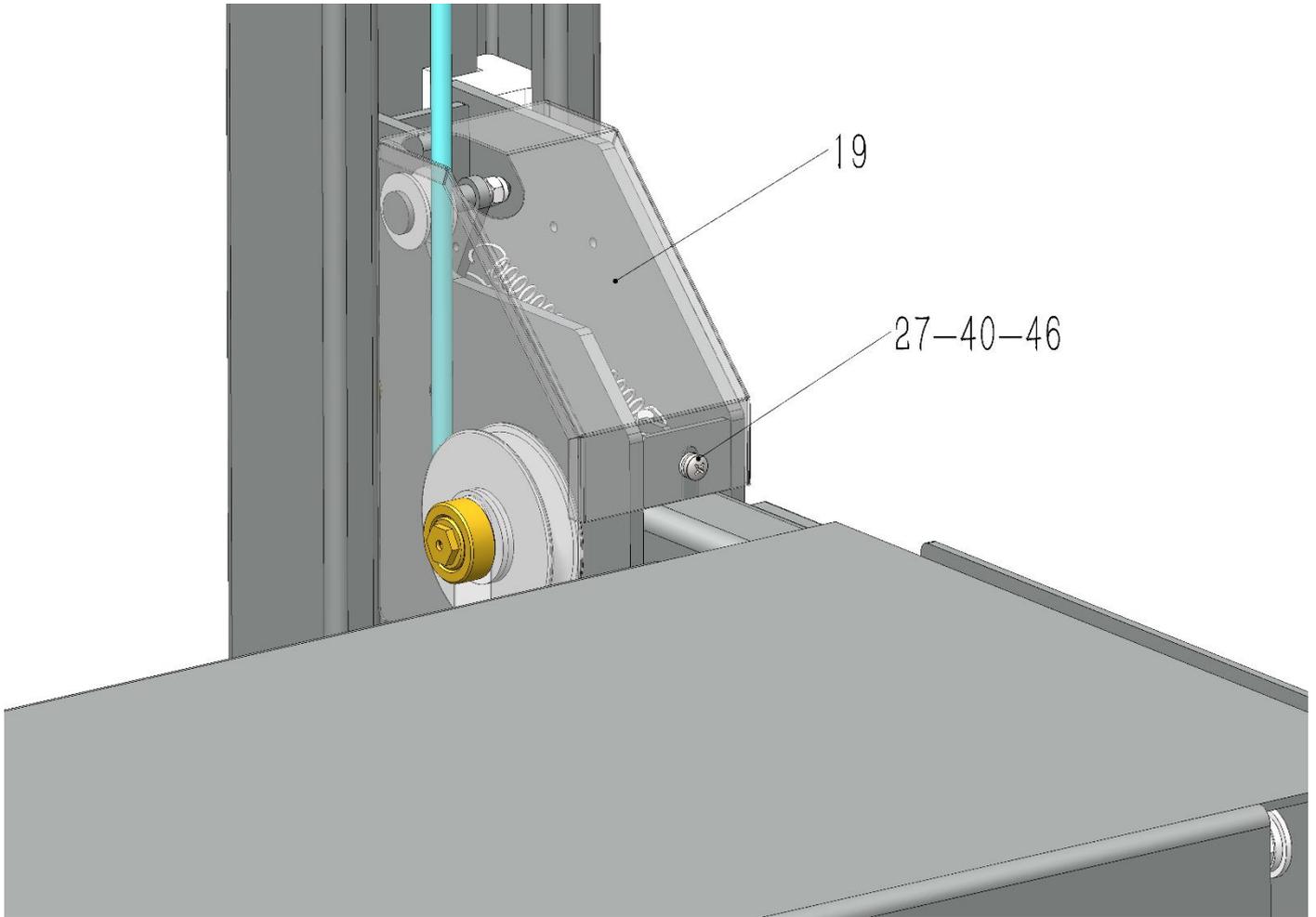
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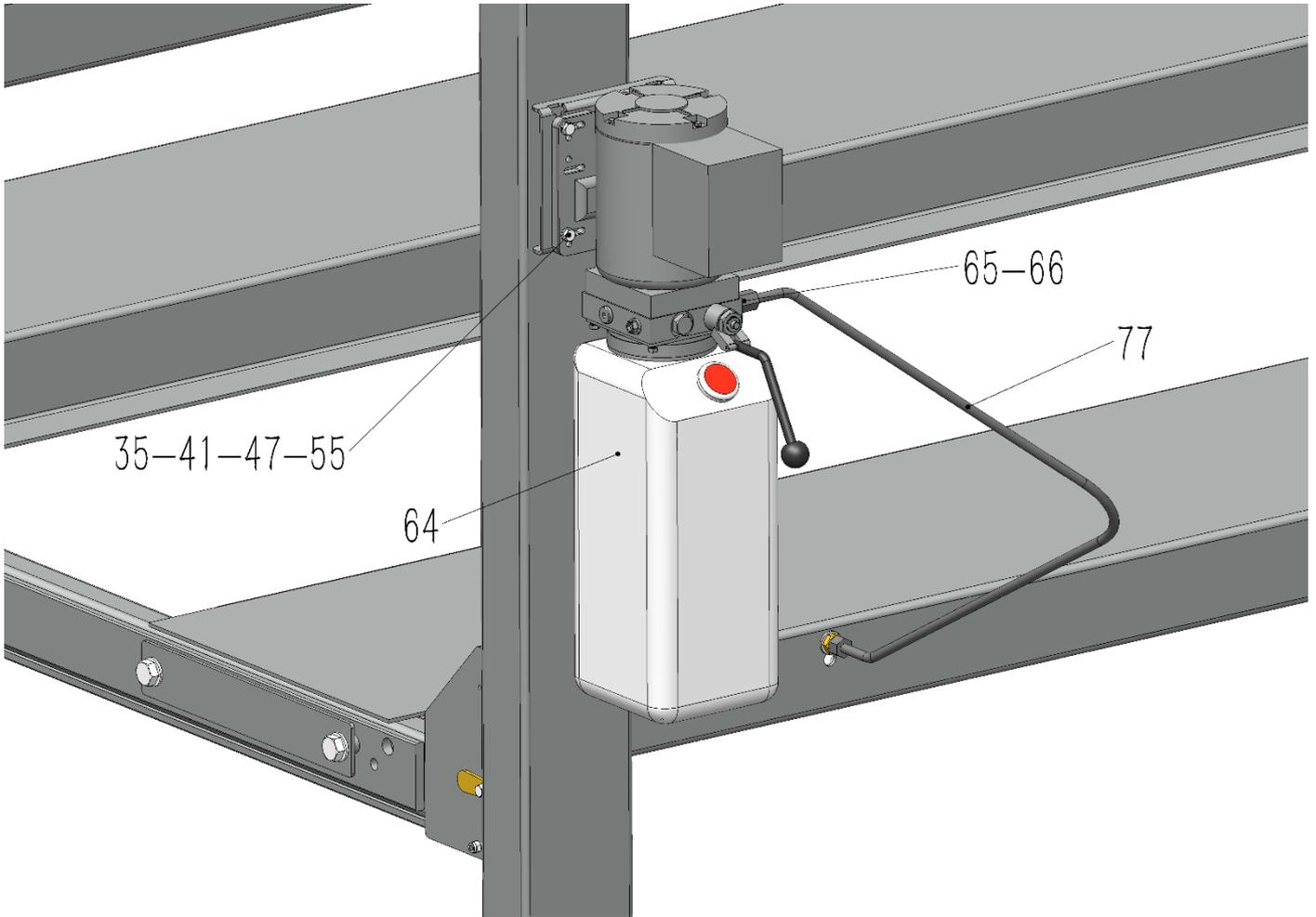


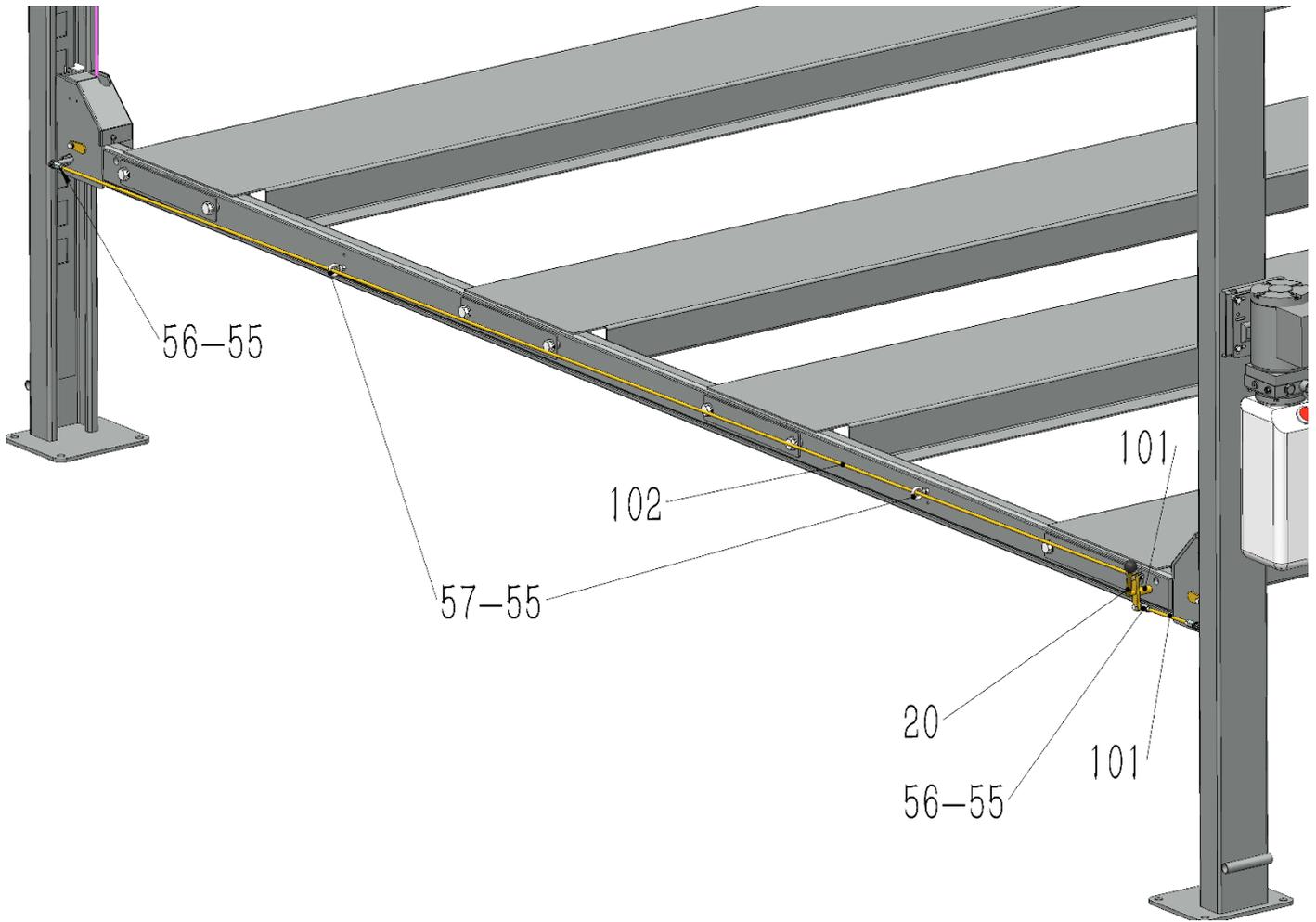
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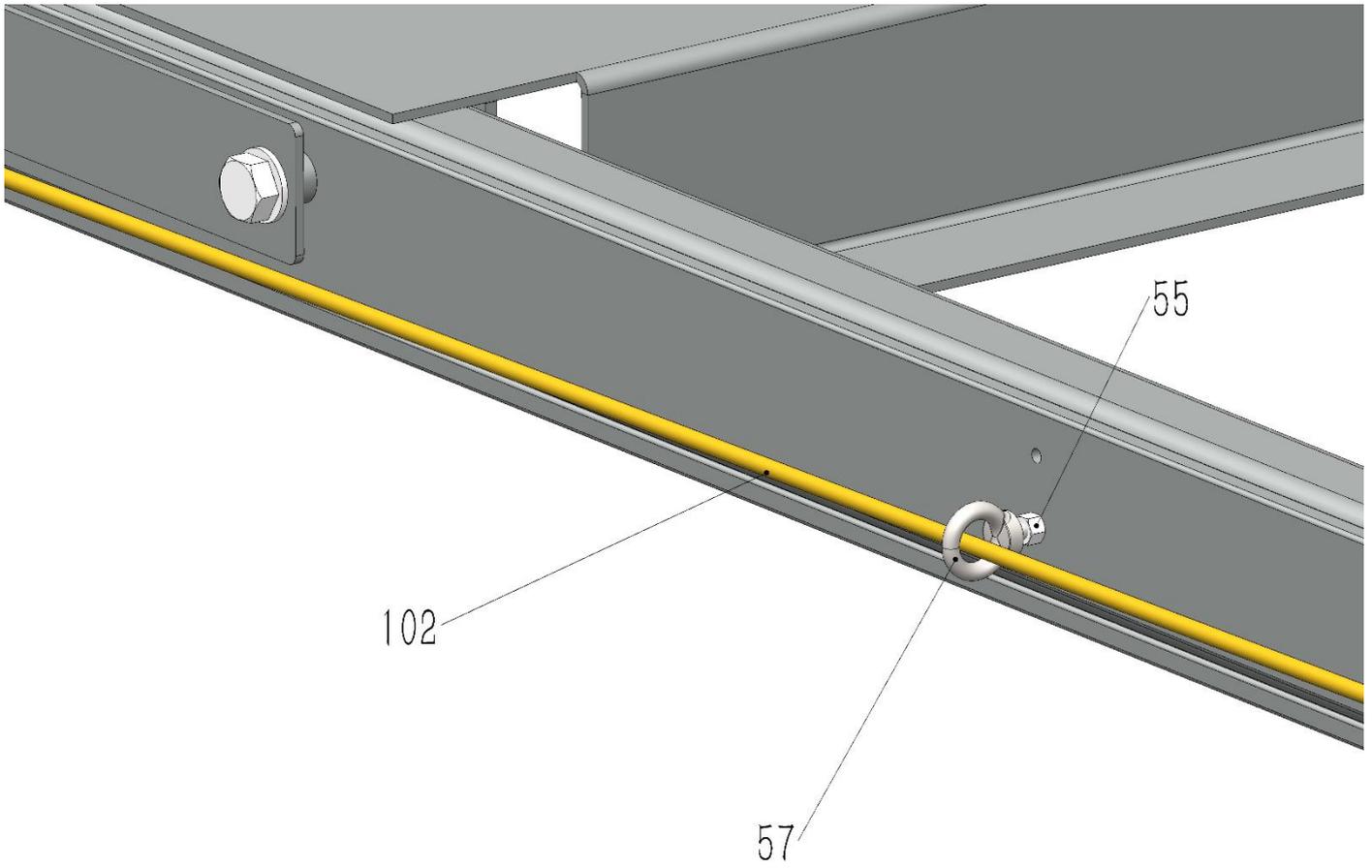


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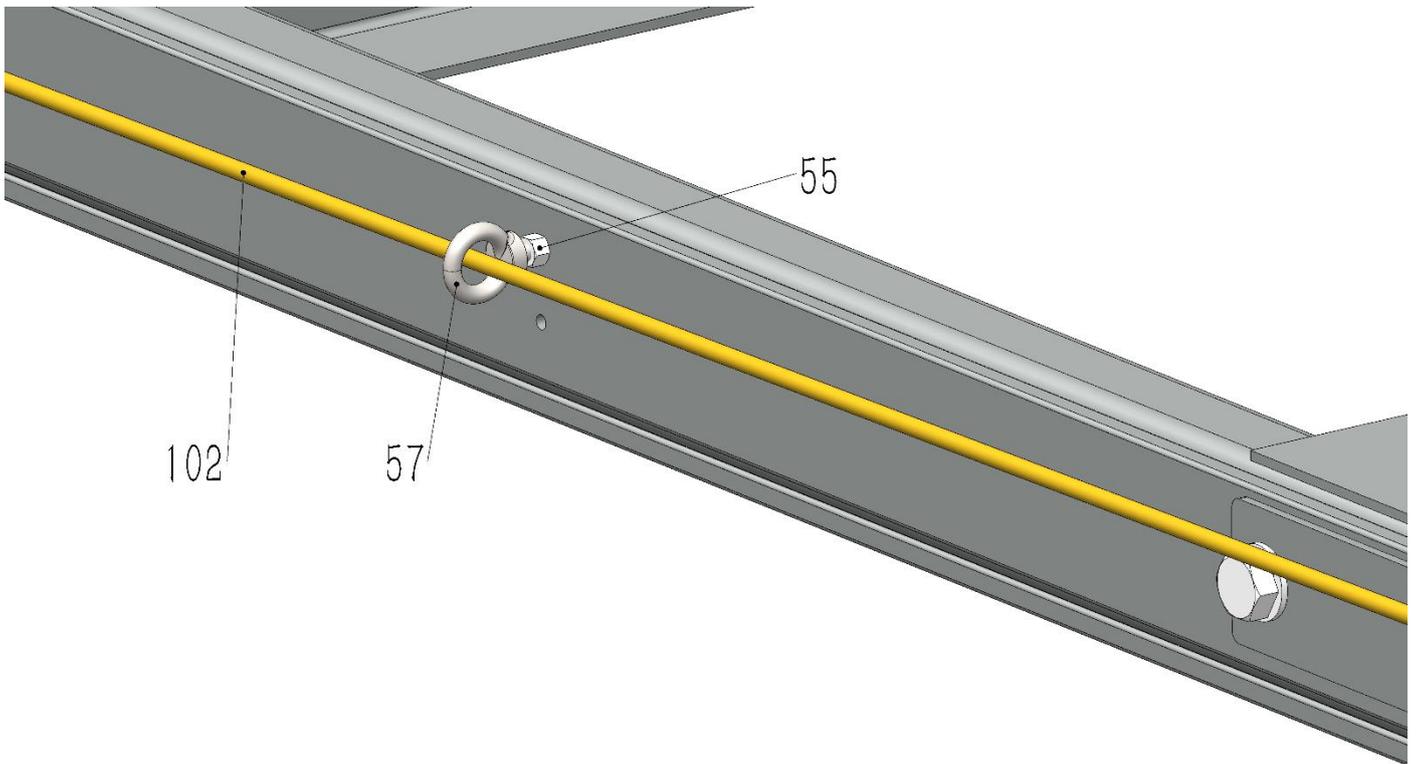




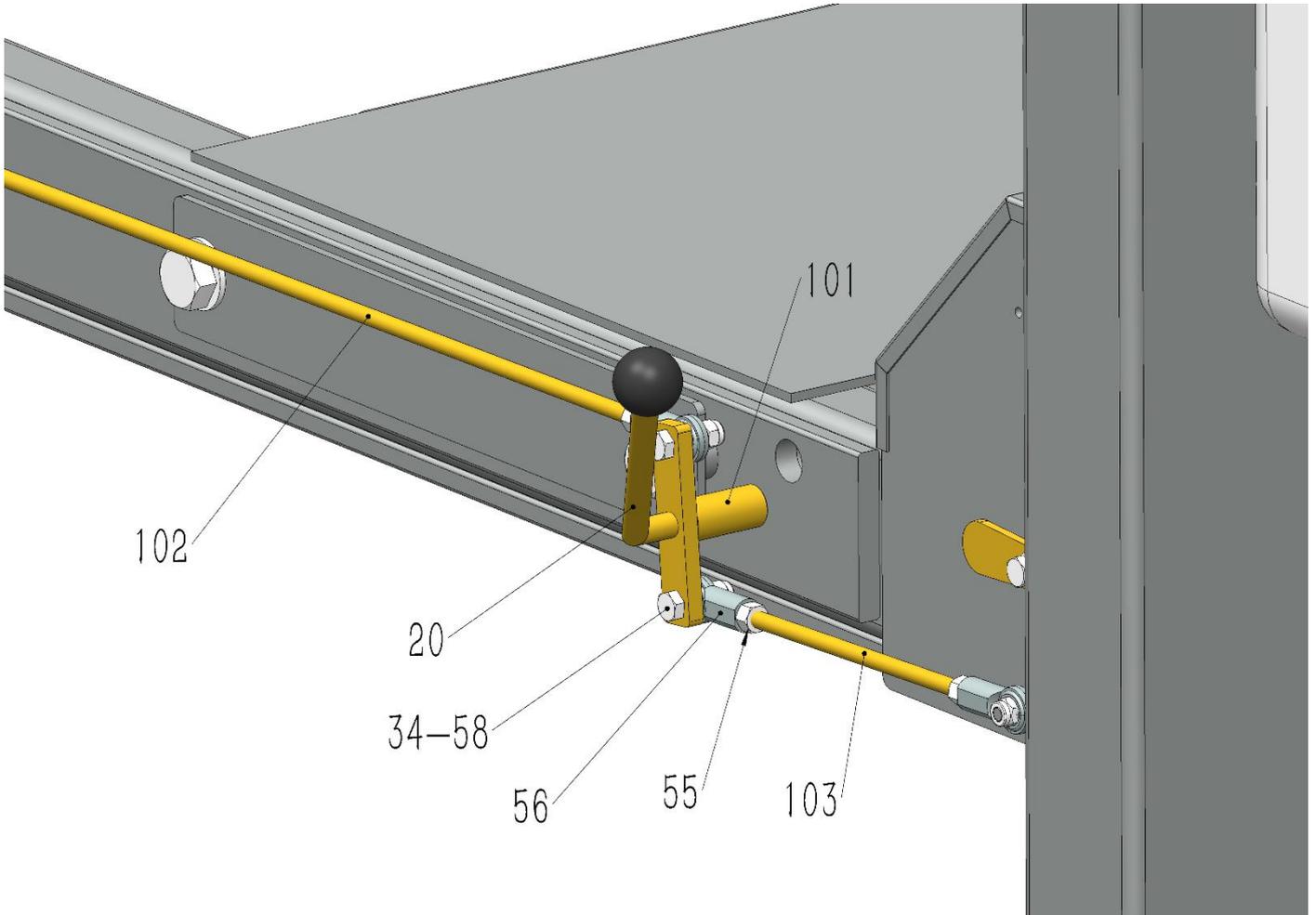




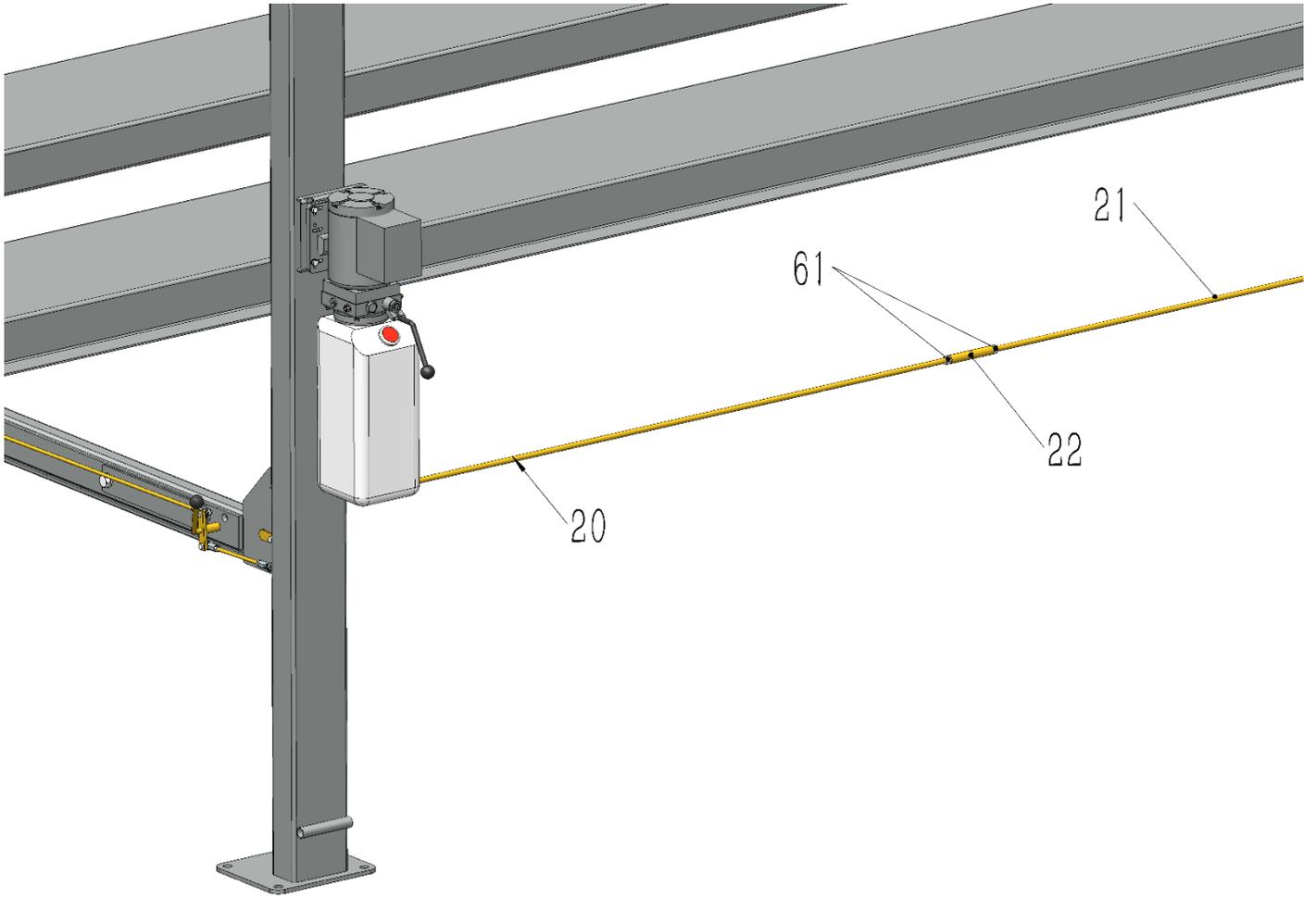
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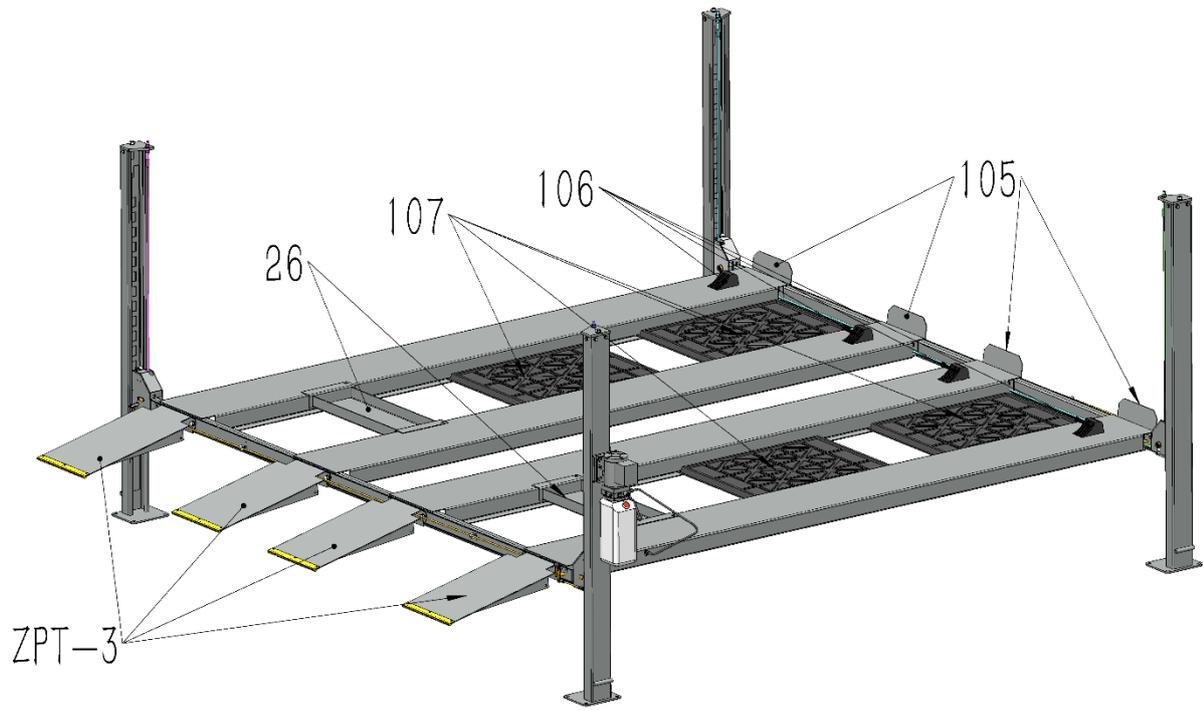
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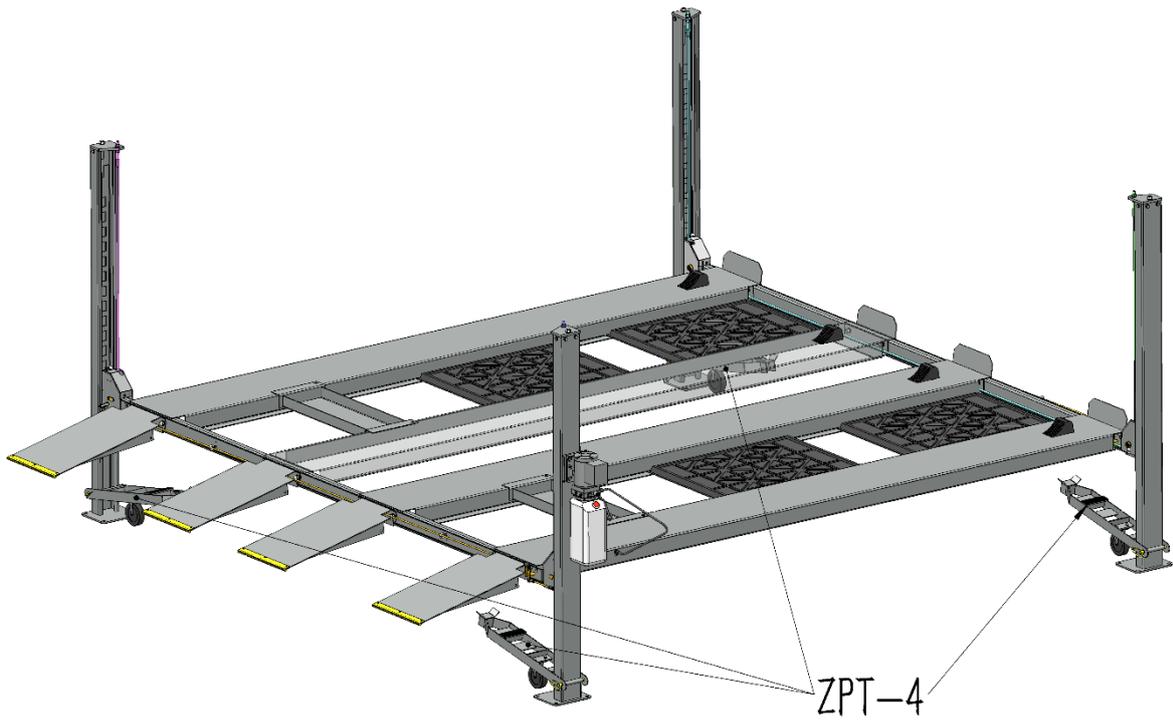
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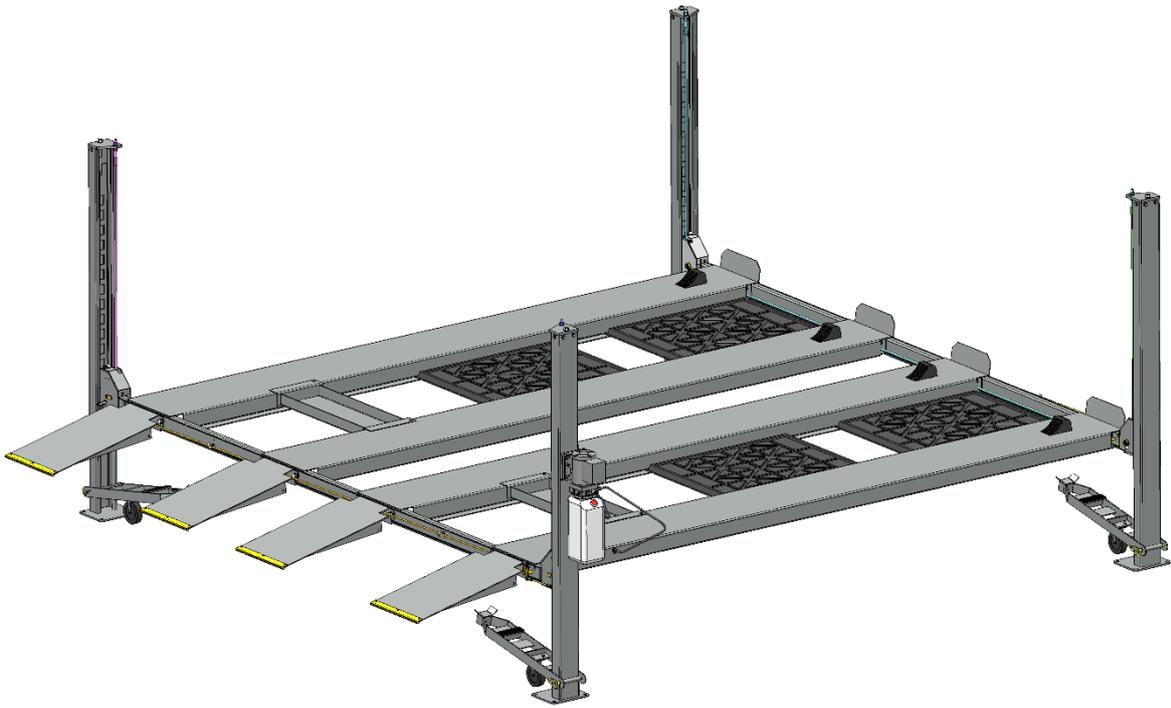
Z-6



Z-7



Z-8



Parts List

Main No.	Vice No.	Part Name	Quantity
Welding part			
1		Main column	1
2		Vice column	3
3		Column top plate-A	2
4		Column top plate-B	2
5		Safety lock plate	4
6		Main runway	1
7		Vice runway	3
8		Cylinder slider bracket	1
9		Cylinder speed up pulley shaft	1
10		Main runway A steel cable pulley shaft	2
11		Main runway B steel cable pulley shaft	2
12		Hook	8
13		Cross beam	2
14		Left hand safety hook	2
15		Right hand safety hook	2
16		Stop falling safety hook	4
17		Cross beam steel cable pulley shaft	4
18		Left protect cover	2
19		Right protect cover	2
20		Safety handle	1
21		Safety pole	1
22		Safety pole connector	1
23		Ramps	4
24		Caster kits	4
25		Caster kits pin welding	4
26		Jack tray	2
Standard Part			
27		M5×15 Round head bolt	12
28		M6×15 Round head bolt	4
29		M6×15 Flat head bolt	4
30		M8×10 Fixed bolt	4

31		M8X15 Hex head bolt	4+6
32		M8X15 Round head hexagon bolt	1
33		M8x25 Hex head bolt	2
34		M8X30 Hex head bolt	4
35		M8X35 Hex head bolt	4+32
36		M8x50 Hex head bolt	4
37		M10x30 Hex head bolt	16
38		M12x30 Hex head bolt	16
39		M18x115 Hex head bolt	16
40		Ø6 Spring washer	4
41		Ø8 Spring washer	4+2+1+6+4+4+32
42		Ø10 Spring washer	16
43		Ø12 Spring washer	16
44		Ø18 Spring washer	16
45		Ø5 Flat washer	12
46		Ø6 Flat washer	4
47		Ø8 Flat washer	8+2+1+6+4+4+32
48		Ø10 Flat washer	32
49		Ø12 Flat washer	32
50		Ø14 Flat washer	1
51		Ø18 Flat washer	16+32
52		Ø20x3 Flat washer	8+12
53		Ø24x3 Flat washer	12
54		M5 Nut	12
55		M8 Nut	4+4+12
56		M8 Bearing	8
57		M8 Ring bolt	4
58		M8 Self-lock nut	4+4+4
59		M10 Grease fitting	1+4+4
60		M10 Nut	16
61		M12 Nut	16+2
62		M18 Nut	16+16
63		M20 Nut	8
Column Part			
	1	Main column	1

	2	Vice column	3
64		Power unit	1
65		9/16 Power unit fitting	1
66		Ø14 Copper seal pad	1
	35	M8X35 Hex head bolt	4
	47	Ø8 Flat washer	8
	41	Ø8 Spring washer	4
	55	M8 Nut	4
	3	Left column top plate	2
	4	Right column top plate	2
	38	M12x30 Hex head bolt	16
	43	Ø12 Spring washer	16
	49	Ø12 Flat washer	32
	61	M12 Nut	16
	5	Column safety plate	4
	51	Ø18 Flat washer	16
	62	M18 Nut	16
Runway Part			
	6	Main runway	1
	7	Vice runway	3
67		Hydraulic cylinder	1
68		Cylinder shaft SH	1
69		Ø35 out snap ring	2
	8	Cylinder slider bracket	1
	33	M8x25 Hex head bolt	2
	41	Ø8 Spring washer	2
	47	Ø8 Flat washer	2
70		Nylon legs	2
	29	M6x15 Flat head bolt	4
71		Speed up pulley	4
72		Oil-free bearing-35	4
	9	Cylinder speed up pulley shaft	1
	59	M10 Grease fitting	1
	32	M8X15 Round head hexagon bolt	1
	41	Ø8 Spring washer	1

	47	Ø8 Flat washer	1
73		90° ZG3/8 In-out fitting	1
74		In-out ZG3/8 anti-explosion valve	1
75		9/16 Fitting	1
76		Ø16 Copper pad	2
77		Straight & bent 9/16 hydraulic hose	1
78		Double straight 9/16 hydraulic hose	1
79		Out fitting 9/16-ZG3/8	1
	50	Ø14 Flat washer	1
80		Out fitting nut	1
81		1/4 Return hose straight fitting	1
82		Air hose	1
83		Steel cable pulley	6
84		Oil-free bearing -25	6
	53	Ø24X3 Flat washer	12
85		1" galvanized Tube x18	2
86		1" galvanized Tube x44	2
	10	Main runway A steel cable pulley shaft	2
	11	Main runway B steel cable pulley shaft	2
	59	M10 Grease fitting	4
87		Main runway steel cable lock plate	1
	31	M8X15 Hex head bolt	6
	47	Ø8 Flat washer	6
	41	Ø8 Spring washer	6
88		Steel cable Ø9.53, L1	1
89		Steel cable Ø9.53, L2	1
90		Steel cable Ø9.53, L3	1
91		Steel cable Ø9.53, L4	1
	63	M20 Nut	8
	52	Ø20X3 Flat washer	8
	12	Hook	8
	39	M18x115 Hex head bolt	16
	51	Ø18 Flat washer	32
	44	Ø18 Spring washer	16
	62	M18 Nut	16

Cross Beam Part			
	13	Cross beam	2
	14	Left hand safety hook	2
	15	Right hand safety hook	2
	58	M8 Self-lock nut	4
92		Cross beam safety shaft	4
	52	Ø20X3 Flat washer	12
	16	Stop falling safety hook	4
93		Stop falling safety hook limit pulley pin	4
94		Stop falling safety hook limit pulley	4
	47	Ø8 Flat washer	4
	41	Ø8 Spring washer	4
	58	M8 Self-lock nut	4
95		Torsional spring -left	2
96		Torsional spring -right	2
97		6mm galvanized tube x17	4
98		Pull spring (φ 1.6x φ 12 x72)	8
	17	Cross beam steel cable pulley shaft	4
	31	M8X15 Hex head bolt	4
	47	Ø8 Flat washer	4
	41	Ø8 Spring washer	4
	53	Ø24X3 Flat washer	12
	83	Steel cable pulley	4
	84	Oil-free bearing-25	4
99		Cross beam steel cable pulley sleeve	4
	30	M8x10 Fixed bolt	4
	59	M10 Grease fitting	4
	36	M8x50 Hex head bolt	4
	55	M8 Nut	4
100		Cross beam slider	8
	35	M8x35 Hex head bolt	32
	47	Ø8 Flat washer	32
	41	Ø8 Spring washer	32
	18	Left protect cover	2
	19	Right protect cover	2

	27	M6x15 Round head bolt	4
	46	Ø6 Flat washer	4
	40	Ø6 Spring washer	4
Whole Lift Part			
	20	Safety handle	1
	21	Safety pole	1
	22	Safety pole connector	1
	61	M12 Nut	2
101		Safety pole sleeve	2
102		Cross beam safety release pole A	2
103		Cross beam safety release pole B	2
	56	M8 Bearing	8
	57	M8 Ring bolt	4
	34	M8X30 Hex head bolt	4
	55	M8 Nut	12
	58	M8 Self-lock nut	4
	23	Ramps	4
104		Nylon slider	4
	27	M5X15 Round head bolt	12
	45	Ø5 Flat washer	12
	54	M5 Nut	12
105		Wheel guard plate	8
106		Rubber brake pad	4
	26	Jack tray	2
107		Oil plastic tray	4
	24	Caster kits	4
	25	Caster kits pin welding	4
108		R Type spring pin	4
109		Ø150 universal wheel	4
	37	M10x30 Hex head bolt	16
	48	Ø10 Flat washer	32
	42	Ø10 Spring washer	16
	60	M10 Nut	16
110		Plastic pad	4

8. Hydraulic System and Electrical Components

1. Explosion diagram of power unit

2. Hydraulic system

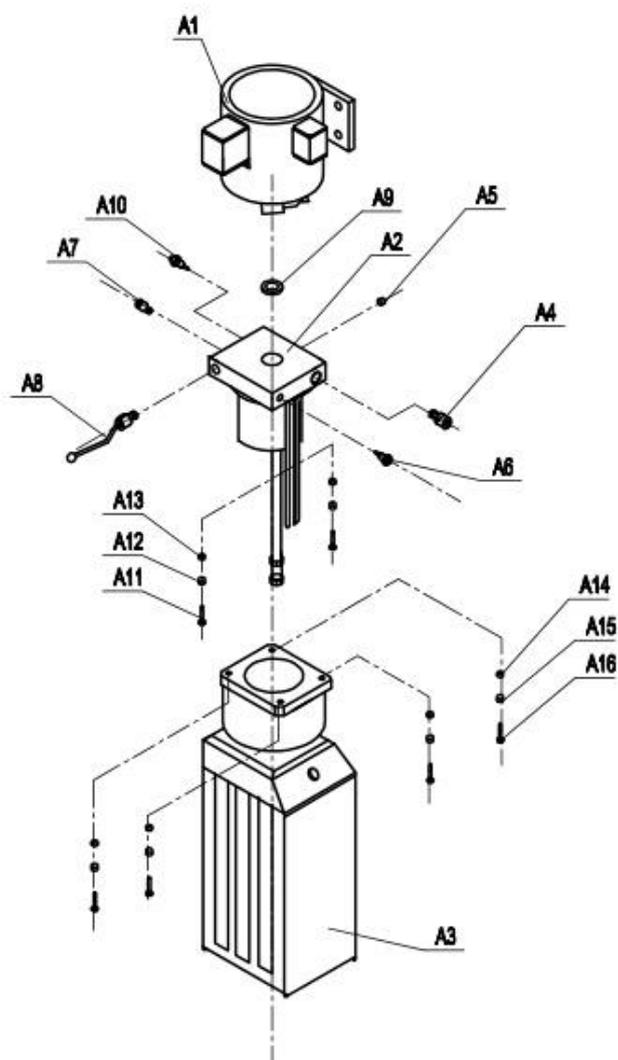
a. Hydraulic schematic diagram

b. List of hydraulic components

c. Working principle of hydraulic system

d. Electrical schematic diagram

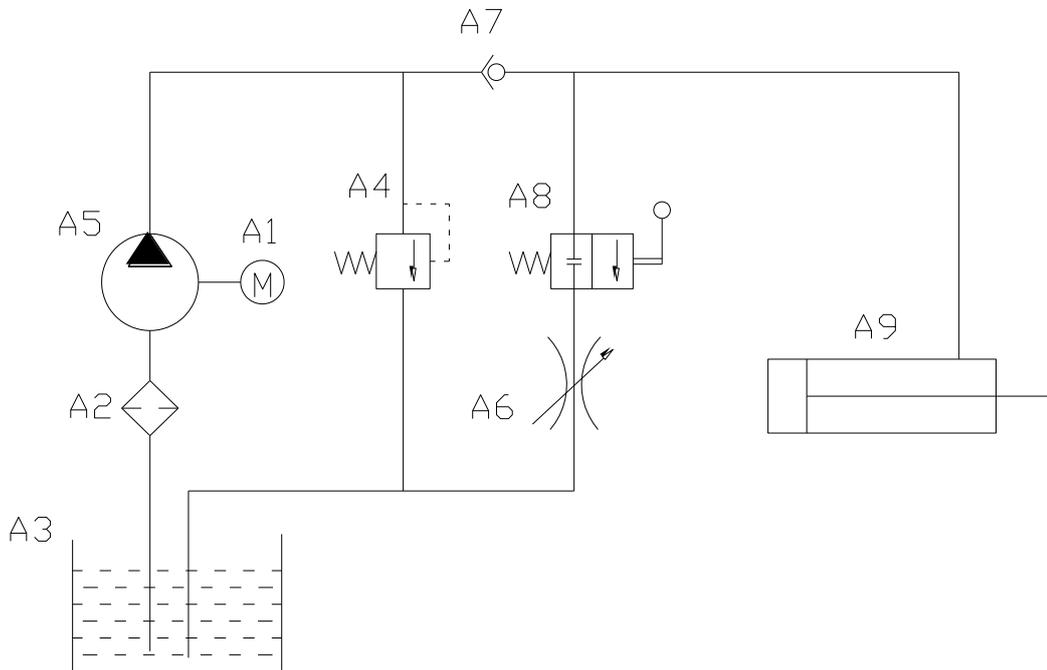
1) Explosion diagram of power unit



No.	Part Name	Q'ty	No.	Part Name	Q'ty
A1	Motor	1	A9	Seal spacer	1
A2	Valve element	1	A10	Manifold block	1
A3	Oil tank	1	A11	M5X40 Hex screw	4
A4	Flow valve	1	A12	Φ5 Flat washer	4
A5	Manifold block	1	A13	Φ5 Spring washer	4
A6	Outlet	1	A14	M6X20 Hex screw	4
A7	Inlet	1	A15	Φ6 Flat washer	4
A8	Handle valve	1	A16	Φ6 Spring washer	4

2) Hydraulic System

a. Hydraulic schematic diagram



b. List of hydraulic components

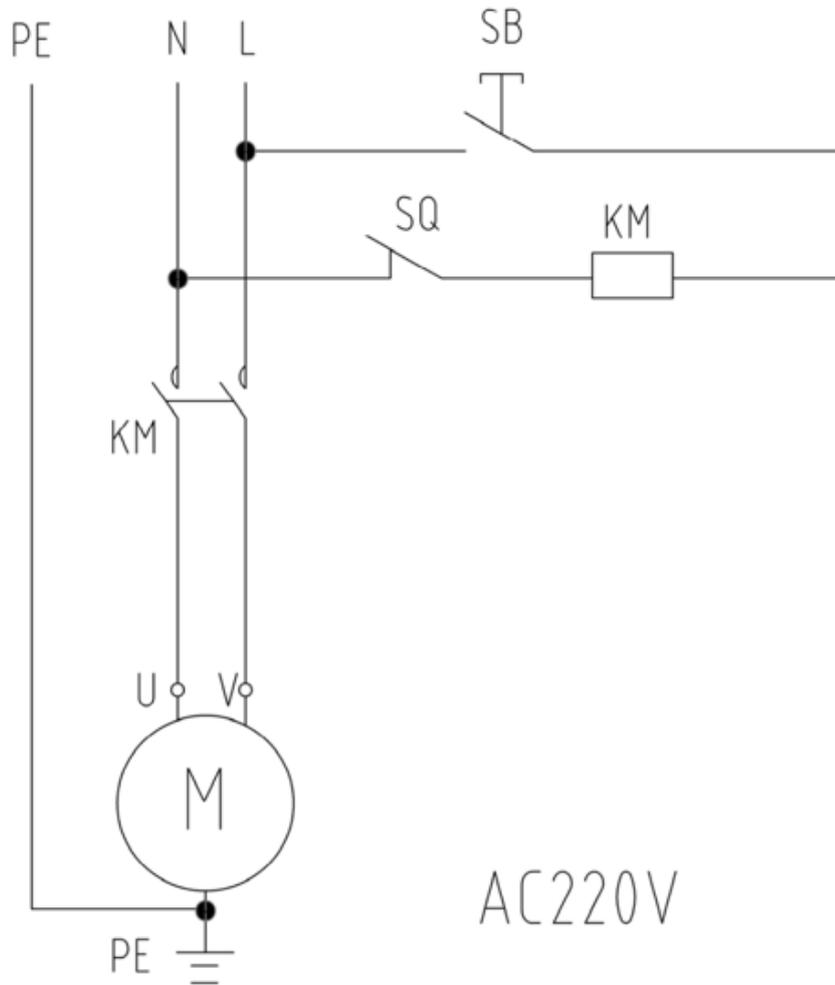
No.	Part Name	Quantity	Remark
A9	Hydraulic cylinder	1	
A8	Hand valve	1	
A7	Check valve	1	
A6	Flow valve	1	
A5	Power Unit	1	
A4	Relief valve	1	
A3	Oil tank	1	
A2	Oil filter	1	
A1	Motor	1	

c. Working principle of hydraulic system

When pressing the start button on the power unit, the motor starts, drives the oil pump, and sucks the pressure oil from the tank to the no. A9 cylinder to make the piston rod move. At this time, the A4 relief valve closes (the pressure of the relief valve has been adjusted before leaving the factory to ensure the rated load requirements of the garage). If the pressure in the system exceeds the pressure set by the relief valve, the relief valve will discharge oil automatically. Release the start button to stop the oil supply, the lifting is finished, and the operation can start. If you want to go down, first click the start button, rise a little, then open the manual safety hook, press the manual valve A8, the cylinder unloading oil, the vehicle began to descend.

d. Electrical schematic diagram

(* Wiring must be done according to the schematic diagram during installation to ensure reliable grounding of each grounding point, and the input power must be equipped with leakage and overcurrent protection switches)



Code	Name	Model	Quantity
SB	inching button	LXW5-11M/L	1
KM	AC Contactor	CJX1-6.3/01-380V	1
SQ	Limit switch	LXME-8108	1

9. Trouble shooting

No.	Problem	Solution
1	Motor does not run	<ul style="list-style-type: none"> ● Check whether the power supply is powered on ● Check whether the wiring in the motor junction box is loose
2	Motor run pressure free oil	<ul style="list-style-type: none"> ● If the direction of single-phase electric rotation is not correct, change the position of two incoming lines. ● Check if suction pipe in tank falls off.
3	Hydraulic pressure drops slowly after lifting (Bad pressure holding)	<ul style="list-style-type: none"> ● Clean the power unit check valve and reversing valve.
4	The safety lock won't hold	<ul style="list-style-type: none"> ● Observe whether the position of locking hook is normal. ● Observe whether the position of the column is correct. ● Check the return spring action of the safety hook.
5	Motor and electrical failure	<ul style="list-style-type: none"> ● Cut off the power supply in time, check, repair and replace by a professional electrician.
6	Others	<ul style="list-style-type: none"> ● Other discovery work is not normal, can telephone consultation.

10. Packing list

No.		Part Name	Quantity
64		Power unit	1
65		9/16 Power unit fitting	1
66		ϕ 14 Copper seal pad	1
	35	M8X35 Hex head bolt	4
	47	Ø8 Flat washer	8
	41	Ø8 Spring washer	4
	55	M8 Nut	4
77		Straight & bent 9/16 hydraulic hose	1
105		Wheel guard plate	8
106		Rubber brake pad	4
107		Plastic oil tray	4
		M19 Anchor bolts	16
		Circular notched flat washer	20
		Ties	10

11. List of Spare Parts

No.		Part Name	Quantity
70		Nylon legs	2
71		Speed up pulley	4
72		Oil-free bearing -35	4
83		Steel cable pulley	6
84		Oil-free bearing -25	6
88		Steel cable Ø9.53, L1	1
89		Steel cable Ø9.53, L2	1
90		Steel cable Ø9.53, L3	1
91		Steel cable Ø9.53, L4	1
100		Cross beam slider	8
104		Nylon slip strip	4
106		Rubber brake pad	4
107		Plastic oil tray	4
109		Ø150 universal wheel	4
110		Plastic pad	4