Single Post Parking Lift Installation & Operation & Maintenance Instructions

Model No.:SAE-P166M

- **Single Posting Lift**
- **Single (1) Point Manual Release**
- **Lifting Capacity:6600LBS**

Installation & Operation

Maintenance & Instructions

STRATUS®
auto equipment

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.

Table of contents

1-The main performance of equipment

The product is a hydraulic lift . The product is manually unlocked, easy to operate, suitable for parking of various models below 6600LBS.

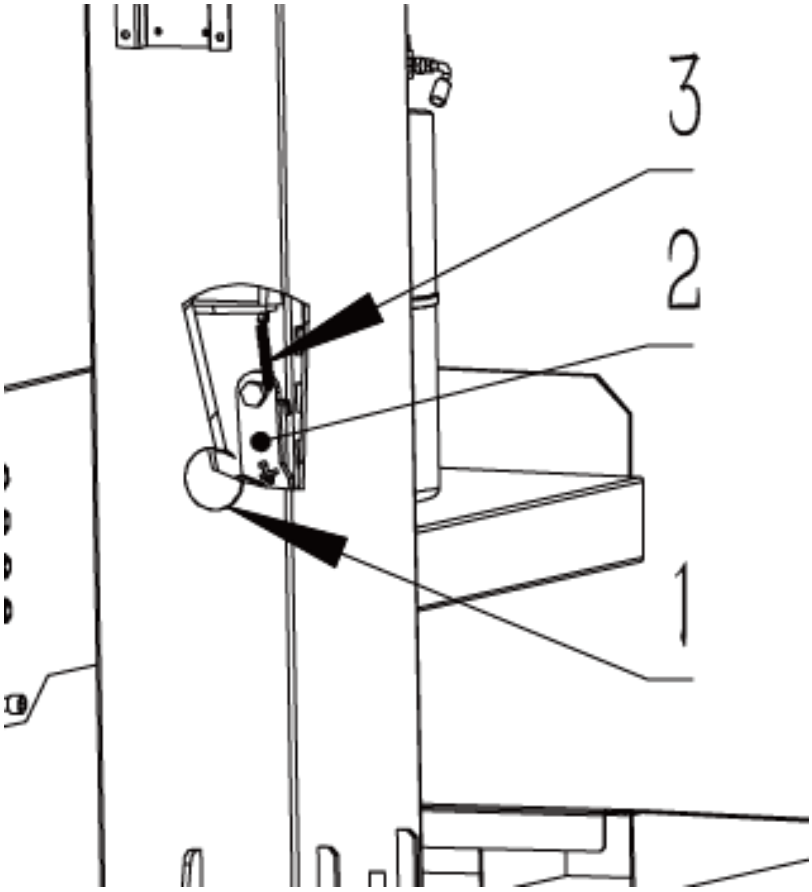
1.1-Product Features

When the hydraulic lift is powered on through the power unit, press the button switch, the gear pump works, the hydraulic oil pushes the piston rod up, and is brought up by the chain to the pulley and the lifting arm, so as to achieve the purpose of lifting; In the process of lifting the machine, the block and the safety lock tooth will blink and bite together during each ascent process, so as to ensure that the hydraulic system will not cause slippage;

1.2-Safety lock structure (as shown in the picture)

Every time you use the lift, you must check whether the safety lock is normal through the observation hole of the column;

Method: Press the button switch when there is no load, the platform rises to check whether it is engaged; press the lowering lever to check whether the safety lock is lowered to the lock position; repeat the operation several times before the vehicle can be lifted;

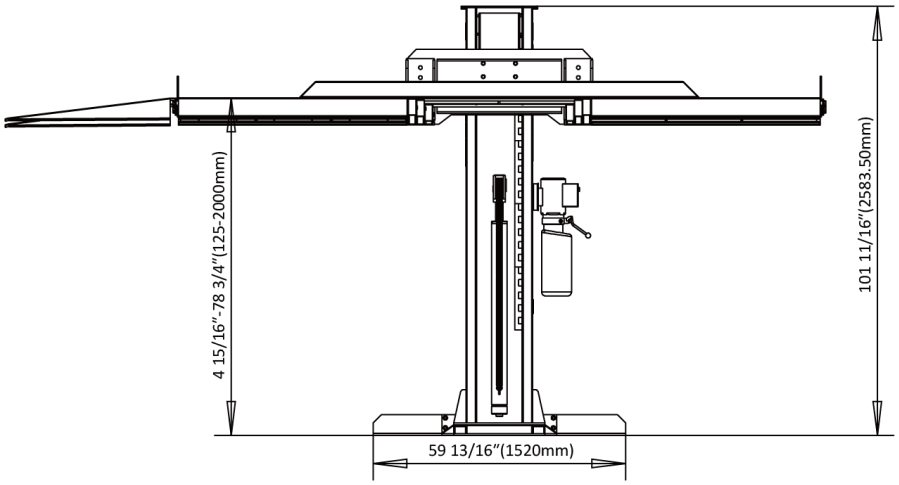


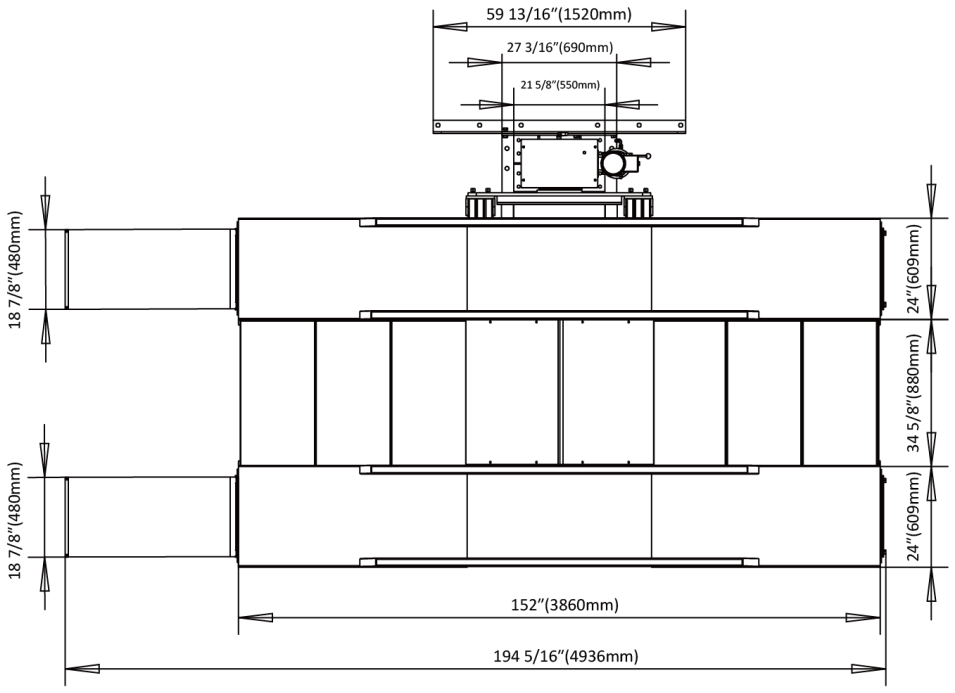
Serial number	Name	Specification	Quantity	Remark
1	Post observation hole		1	
2	Safety Lock Assembly		1	
3	Return spring		1	

2-Basic parameters of the equipment

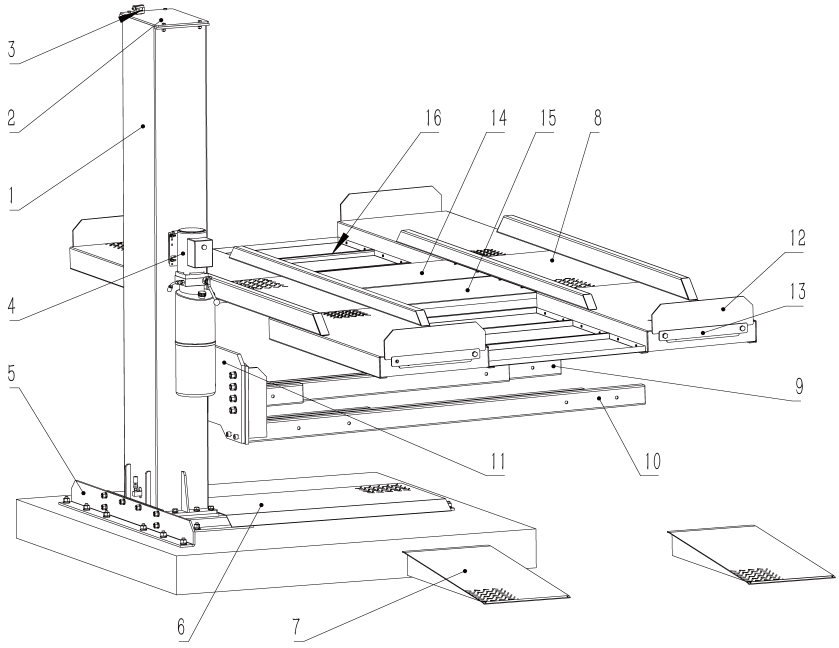
Lifting capacity	6600LBS/3000KG	Motor voltage	220V
Max lifting height	78 3/4″/2000mm	Power	2.2Kw
Min height	4 15/16″/215mm	Frequency	60Hz
Platform length	152″/3860mm	Breaker	30A
Platform width	24″/609mm	Hydraulic oil	AW46/AW32
Platform space	34 5/8″/880mm	Shipping Size	155″×30″×38″ 3920×740×960mm
Lifting time	About 60s	Shipping Weight	2753LBS/1250Kg
Lowering time	About 50s		

2.1-Product dimensions (as shown in the figure)





2.2-The structural group of the product (as shown in the figure)



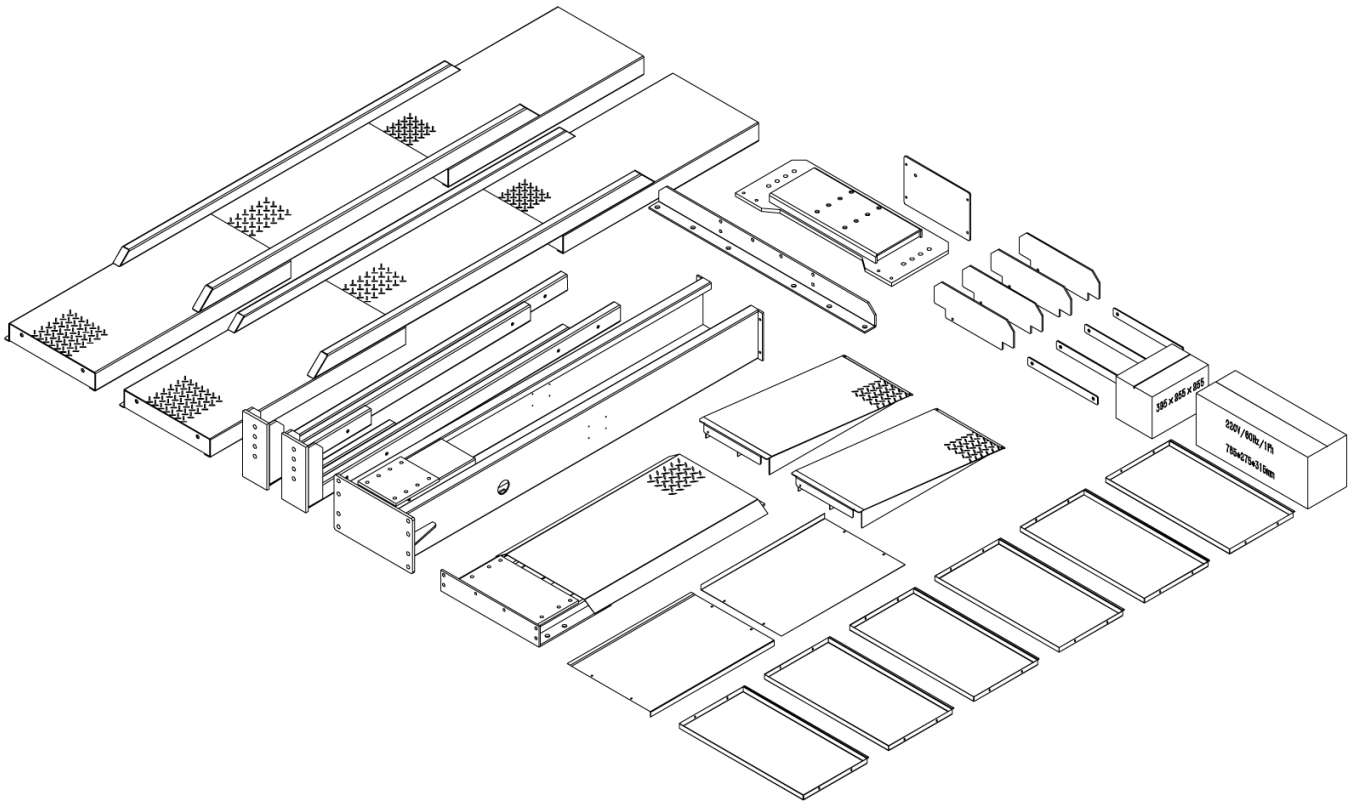
Ser	Name	Qty	Ps	Ser	Name	Qty	Ps
1	Post welding	1	created by self	9	Platform Support Left Arm Welding	1	created by self
2	Upper cover	1	created by self	10	Platform Support Right Arm Welding	1	created by self
3	limit switch	1	Purchased parts	11	connecting yoke	1	created by self
4	power unit	1	Purchased parts	12	fender	4	created by self
5	Foot angle iron	1	created by self	13	car slats	4	created by self
6	Chassis welding	1	created by self	14	Dust tray1	1	created by self
7	Approach board	2	created by self	15	Dust tray2	1	created by self
8	Platform welding	2	created by self	16	Dust tray	6	created by self

2.3-The tools required before installation are as follows:

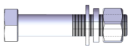
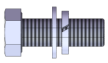
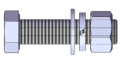
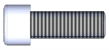
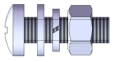
Rotary hammer drill（Φ19)		English spanner(12")	
carpenter's chalk		Pliers	
Hammer		Ratchet spanner with socket(28#)	
Screw Sets		Socket head wrench(3#,5#,8#)	
Level bar		Lock wrench	
Tap measure		Wrench set (10#,13#,14#,15#,17#,19,24#,27#,30#)	

3- Installation steps

3.1- Please check the parts of the lift before installation (as shown in the picture)



3.2- Check the standard parts, etc. in the accessory box (as shown in the table below)

Sec.	Name	Photo	Specification	Qty	PS
1	Outer hex bolt with elastic flat washer and hex nut		M16×50	14	
2	Expansion screw		M19×160	12	3/4″
3	Outer hex bolt with elastic flat washer and hex nut		M20×100	8	半扣
4	Outer hexagon bolt with elastic flat washer		M20×60	8	
5	Outer hex bolt with elastic flat washer and hex nut		M20×80	8	
6	Socket head cap screws		M16×45	4	
7	Phillips button head screw with spring flat washer and hexagon nut		M6×20	32	

Sec.	Name	Photo	Specification	Qty	PS
8	Hexagon socket screw with elastic flat washer and hex nut		M12×180	4	half buckle
9	Hexagon socket screw with elastic flat washer and hex nut		M12×130	2	half buckle
10	Hexagon socket screw with elastic flat washer and hex nut		M12×80	2	half buckle
11	fender cover			8	
12	power unit backpack			1	
13	Hexagon socket head screw with elastic flat washer		M6×16	4	
14	Outer hex bolt with elastic flat washer and hex nut		M8×20	4	
15	Limit switch (with wire)			1	
16	hydraulic hose			1	
17	Column plastic buckle cover			1	
18	plastic gasket			15	
19	plastic cable ties			15	
20	manual			1	

3.3-Equipment installation space

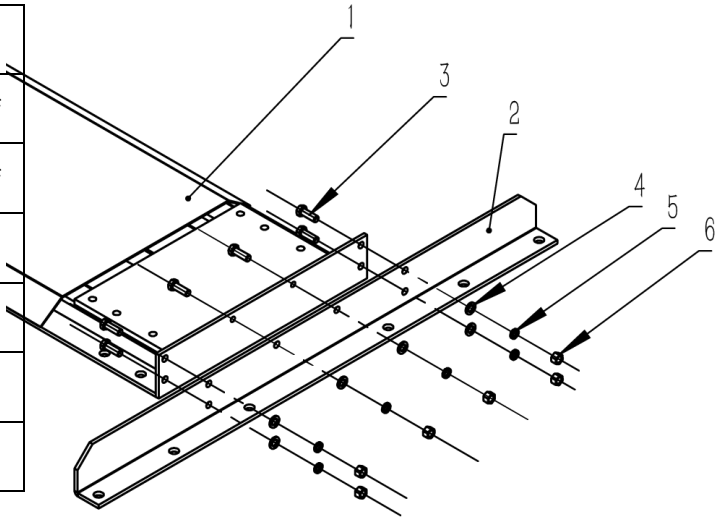
According to the external dimension drawing of the product; the lift must be at least 1 meter away from other fixed objects (such as the wall) to ensure that there is enough space to ensure that the vehicle can be driven on and off the lifting platform;

3.4 - Foundation preparation for installation

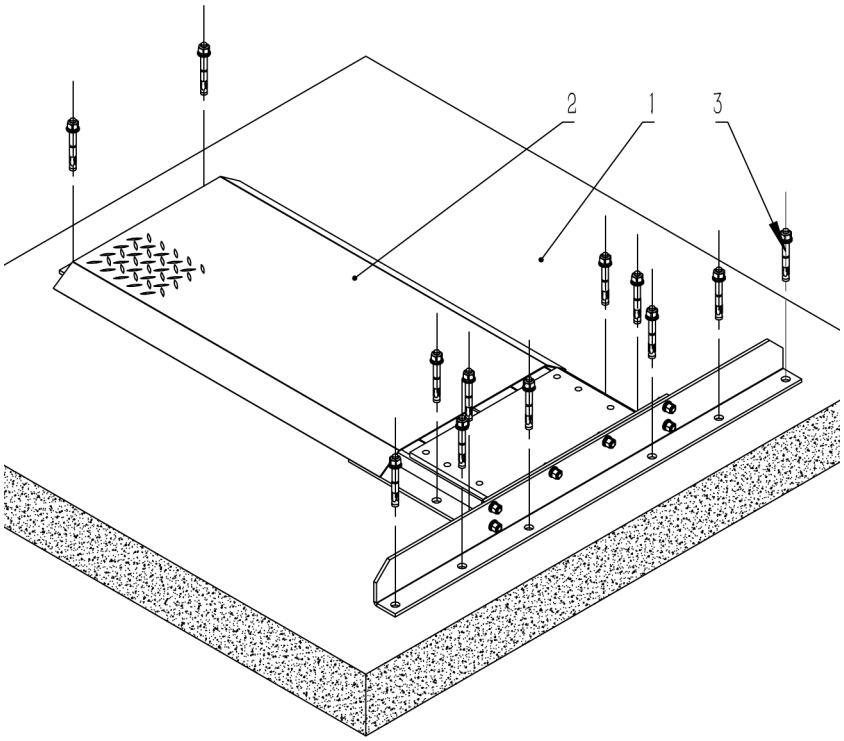
Concrete type C20/25, the minimum thickness is 200mm, the strength is above 3000PSI, the flatness error is less than 0.5%, and the newly poured concrete needs to be cured for more than 20 days;

3.5- Chassis and foot angle iron installation (as shown in the picture)

Ser	Name	Spec	Qty	Ps
1	Chassis welding		1	created by self
2	Foot angle iron		1	created by self
3	Hex bolts	M16×50	6	Standard Parts
4	Flat pad	ϕ16	6	Standard Parts
5	spring washer	ϕ16	6	Standard Parts
6	Hex nuts	M16	6	Standard Parts

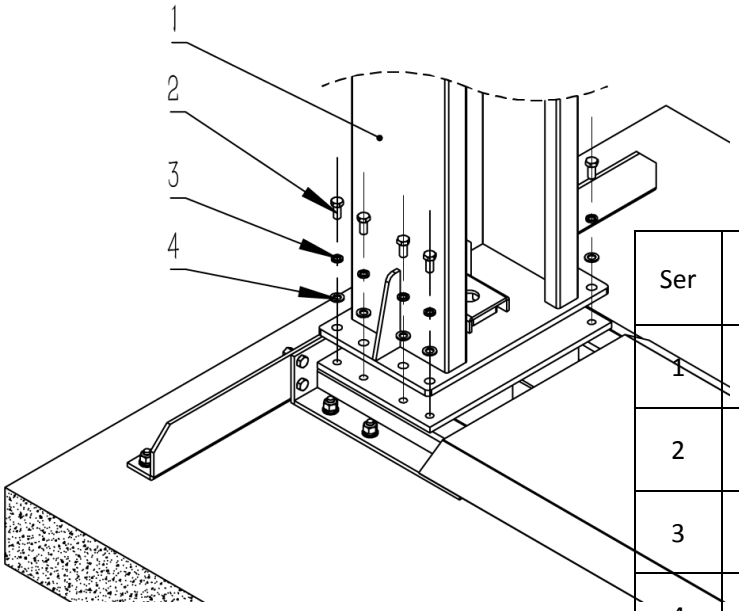


3.6-Expansion screw installation (as shown in the picture)



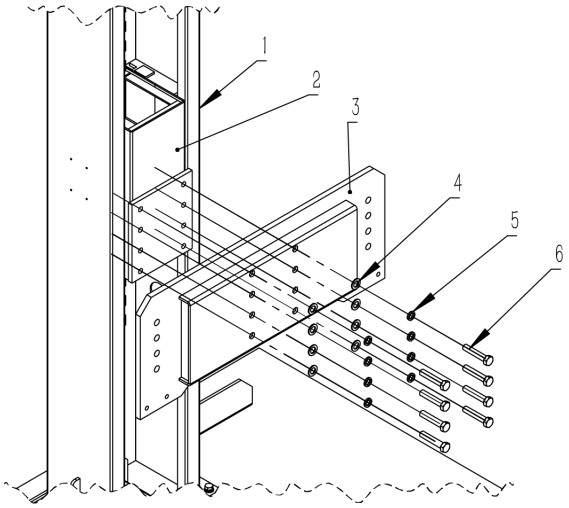
Ser	Name	Spec	Qty	Ps
1	Concrete floor		1	
2	Chassis and foot angle iron assembly			created by self
3	Expansion screw	3/4″	12	Purchased parts

3.7- Column installation (as shown in the picture)



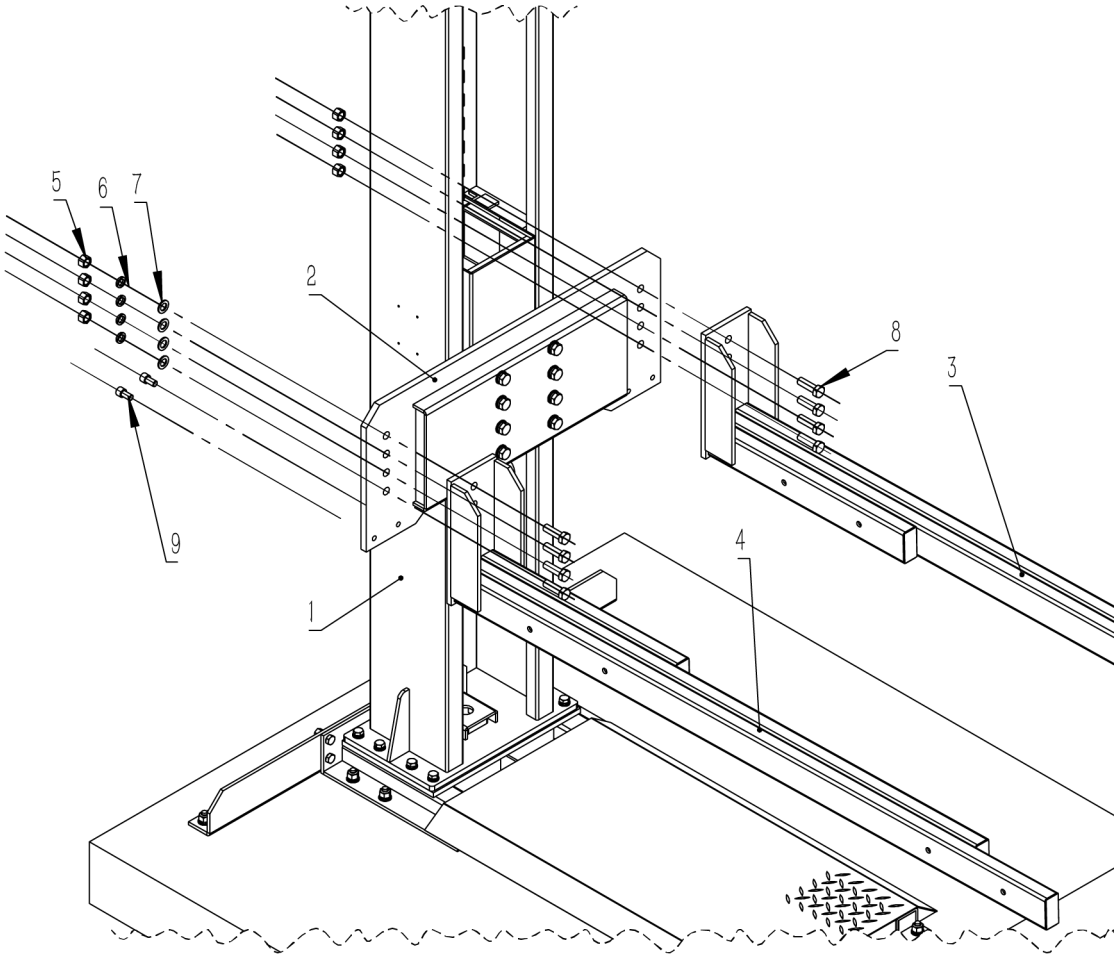
Ser	Name	Spec	Qty	Ps
1	Column assembly		1	created by self
2	Hex bolts	M20×60	8	Standard Parts
3	spring washer	ϕ20	8	Standard Parts
4	Flat pad	ϕ20	8	Standard Parts

3.8 - Attachment yoke installation (as shown in the picture)



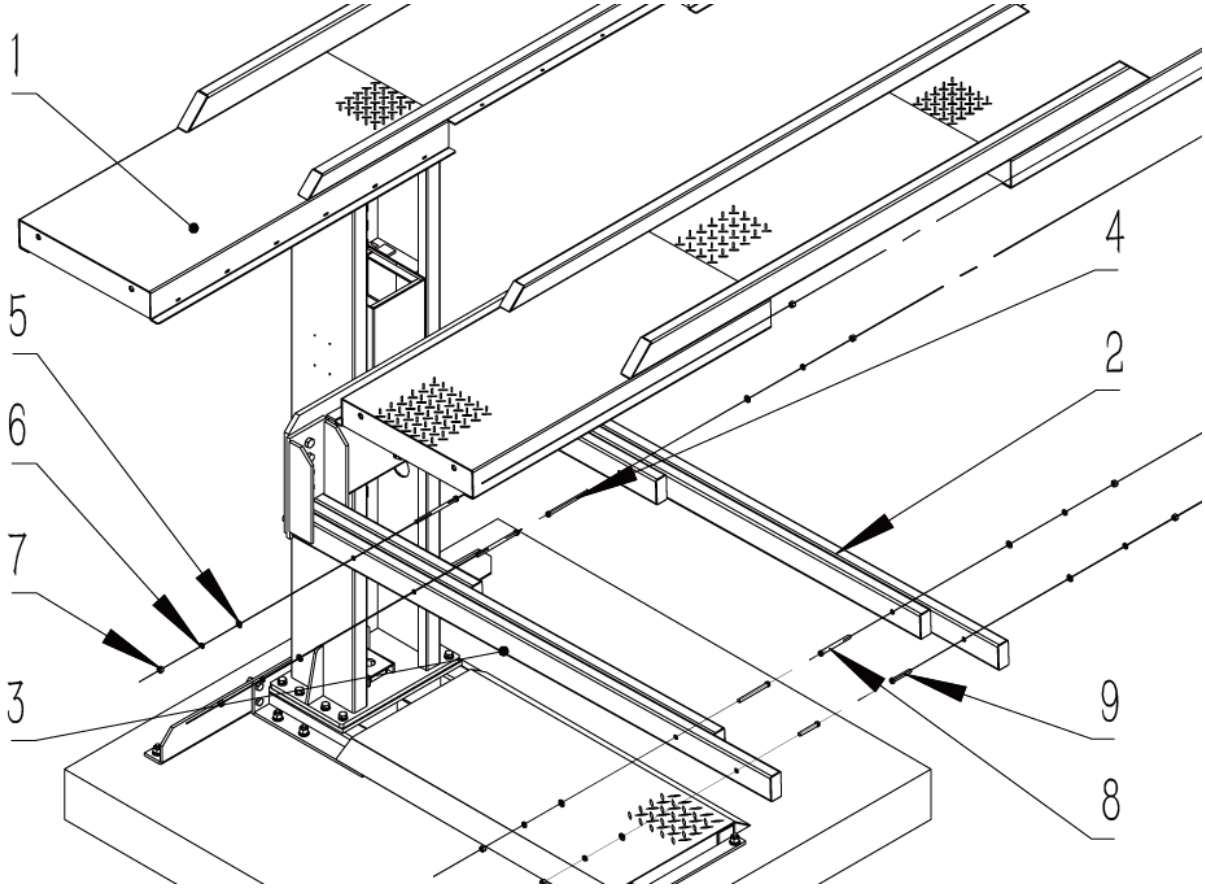
Ser	Name	Spec	Qty	Ps
1	Column assembly		1	created by self
2	Pulley assembly		1	created by self
3	Joining Yoke Welding		1	created by self
4	Flat pad	ϕ20	8	Standard Parts
5	spring washer	ϕ20	8	Standard Parts
6	Hex bolts	M20×100mm	8	Standard Parts

3.9-Platform yoke installation (as shown in the picture)



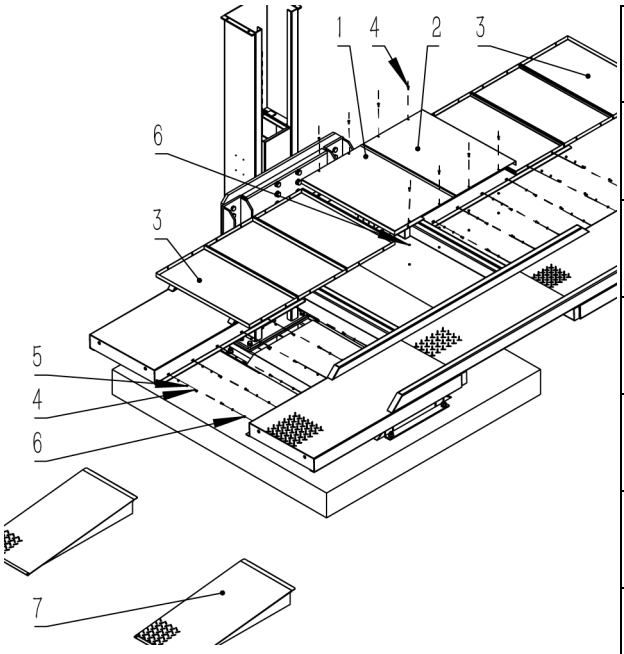
Ser	Name	Spec	Qty	Ps
1	Column assembly		1	created by self
2	Joining Yoke Welding		1	created by self
3	Platform support right fork arm welding		1	created by self
4	Platform support left fork arm welding		1	created by self
5	Hex nuts	M20	8	Standard Parts
6	spring washer	Φ20	8	Standard Parts
7	Flat pad	Φ20	8	Standard Parts
8	Hex bolts	M20×80mm	8	Standard Parts
9	Hexagon socket head screw (adjust platform support yoke)	M16×45L	4	Standard Parts

3.10-Platform installation (as shown in the figure)



Ser	Name	Spec	Qty	Ps
1	Purchased parts		2	created by self
2	Platform left fork arm welding		1	created by self
3	Platform right fork arm welding		1	created by self
4	Socket head cap screws	M12×180	4	Standard Parts
5	Flat pad	Φ12	8	Standard Parts
6	spring washer	Φ12	8	Standard Parts
7	Hex nuts	M12	8	Standard Parts
8	Socket head cap screws	M12×130	2	Standard Parts
9	Socket head cap screws	M12×80	2	Standard Parts

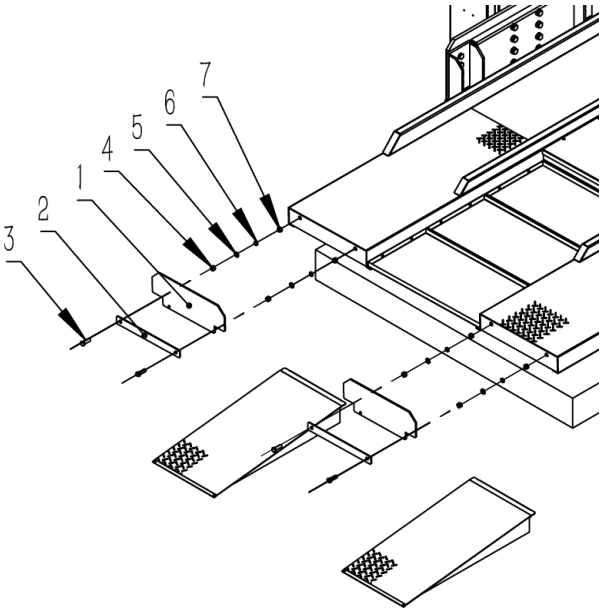
3.11-Dust tray installation (as shown in the figure)



Ser	Name	Spec	Qty	Ps
1	Dust tray2		1	created by self
2	Dust tray1		1	created by self
3	Dust tray		6	created by self
4	Phillips button head screw	M6×20mm	32	Standard Parts
5	Flat pad	ϕ6	32	Standard Parts
6	Hex nuts	M6	32	Standard Parts
7	Approach board		2	created by self

3.12-Installation of car fender (as shown in the figure)

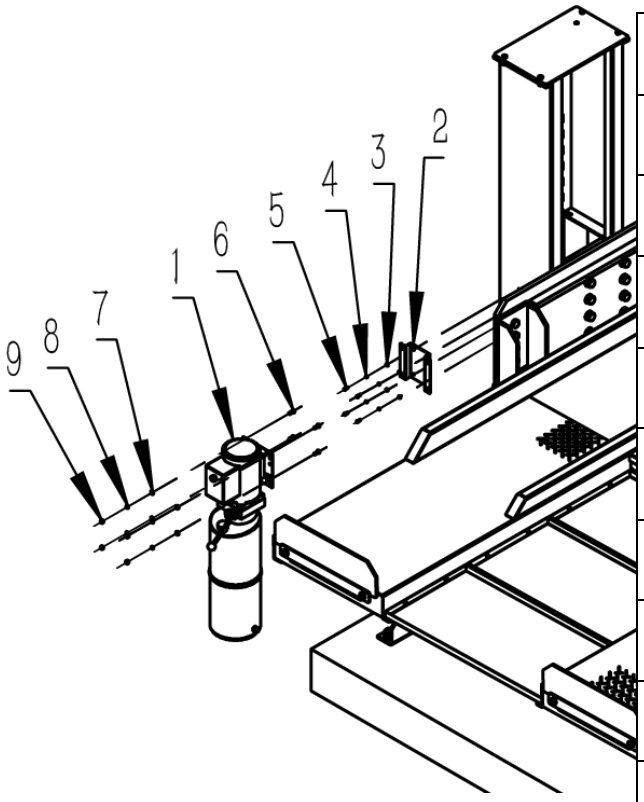
Note: The equipment adopts a separate bridge approach plate. When parking a vehicle on the platform, the vehicle barrier must be inserted into the designated position;



Ser	Name	Spec	Qty	Ps
1	fender		4	created by self
2	car slats		4	created by self
3	Hex bolts	M16×50mm	8	Standard Parts
4	fender cover		8	created by self
5	Flat pad	ϕ16	8	Standard Parts
6	spring washer	ϕ16	8	Standard Parts
7	Hex nuts	M16	8	Standard Parts

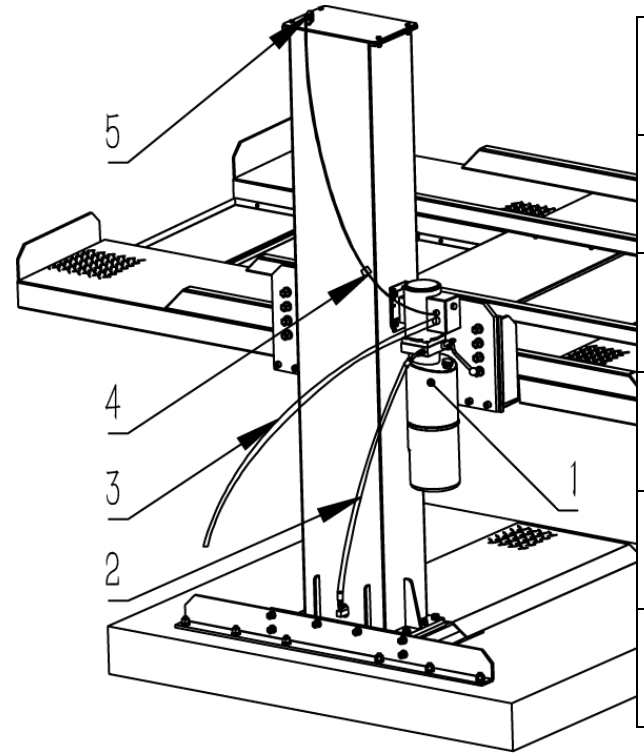
3.13-Power unit installation (as shown in the figure)

Note: The power unit can be installed on both sides of the column, which can be selected according to the needs of customers;



Ser	Name	Spec	Qty	Ps
1	power unit		1	Purchased parts
2	power unit backpack		1	created by self
3	Flat pad	ϕ6	4	Standard Parts
4	spring washer	Φ6	4	Standard Parts
5	Socket head cap screws	M6×16	4	Standard Parts
6	Hex bolts	M8×20	4	Standard Parts
7	Flat pad	Φ8	4	Standard Parts
8	spring washer	Φ8	4	Standard Parts
9	Hex nuts	M8	4	Standard Parts

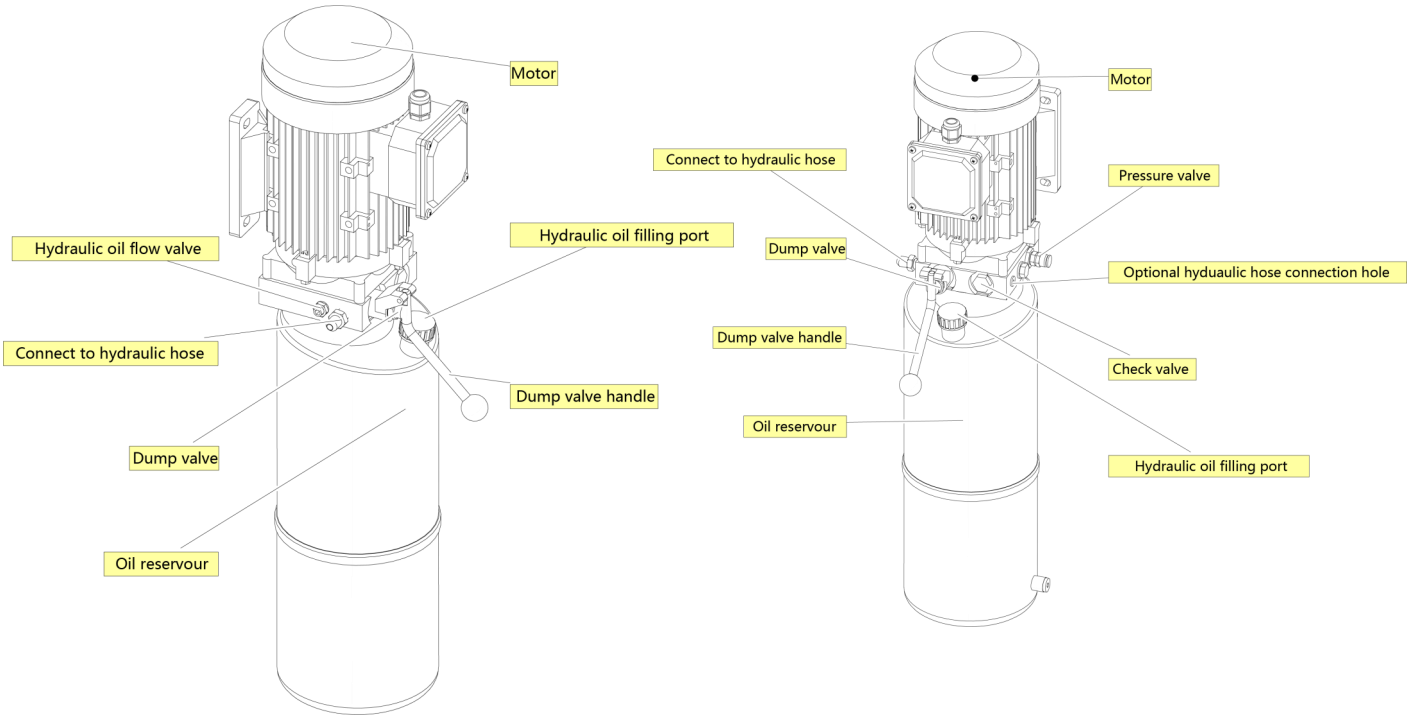
3.14- Limit switch installation and oil pipe installation (as shown in the picture)



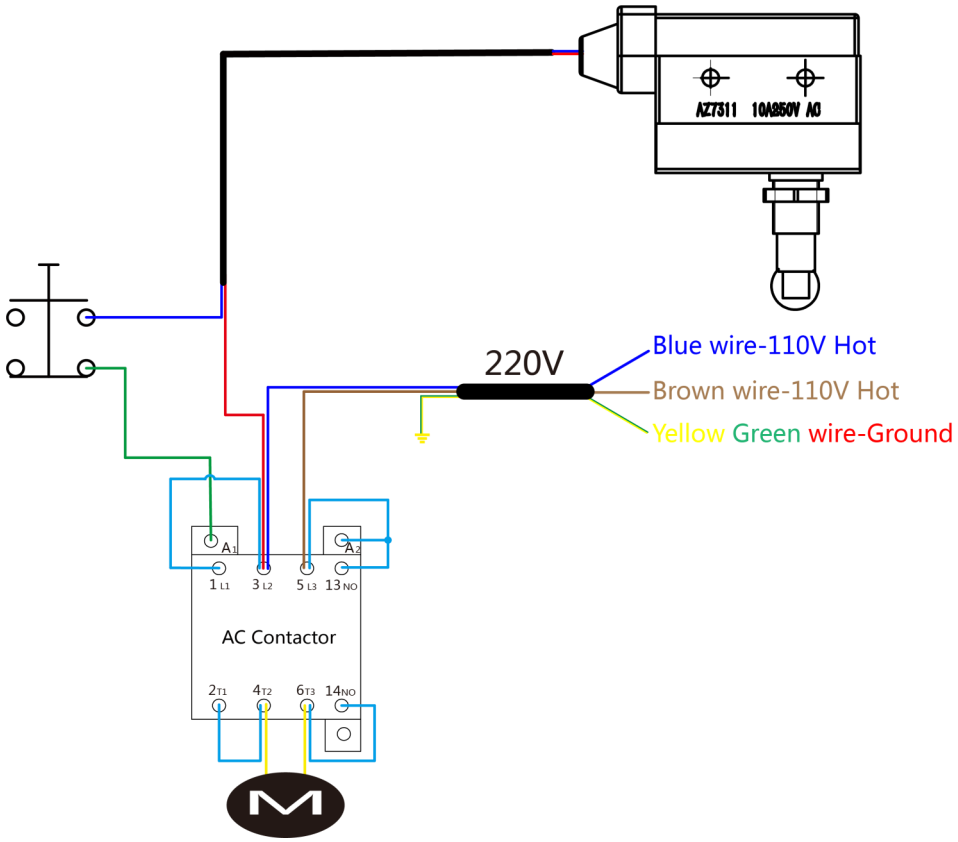
Ser	Name	Spec	Qty	Ps
1	power unit		1	Purchased parts
2	hydraulic hose		1	created by self
3	power cable		1	Purchased parts
4	Connect the limit switch plug		1	Purchased parts
5	limit switch		1	Purchased parts

Note: Only fresh and clean hydraulic oil is allowed, and 46# hydraulic oil is recommended; do not fill the oil barrel completely for the first refueling, the hydraulic oil volume can meet the lifting platform to the highest level; Suggestion: replace the hydraulic oil with new hydraulic oil 6 months after the first use, and then replace it once a year;

3.15-Description of each component of the power unit



Functional description of each part of the power unit



****Important Information****

Pressure Valve: Clockwise adjustment increases pressure to make the power unit to have more power, counterclockwise adjustment decreases pressure to make the power unit to have less power.

Hydraulic Oil flow valve: Clockwise adjustment to speed up, counterclockwise adjustment to slow down.

4-Check after installation

1) Whether the expansion bolts are installed in place;
2) Whether the button stops when the hand is released;
3) Whether the sensitivity of the limit switch is valid;
4) Rise and fall without jitter; no abnormal noise;
5) Check whether the fixing bolts, nuts and circlips are loose;
6) There is no oil leakage at the oil pipe connection;
7) Product warning stickers and nameplates are complete and clearly visible;

4.1-Notes on operation

1) Check the connection of the oil pipe to ensure that there is no oil leakage before starting operation;
2) It cannot be used if there is a problem with the safety device;
3) Check whether the center of gravity of the lifted vehicle is in the middle of the lifting platform, if not, please adjust the center of gravity before lifting;
4) During the lifting process, the operator and other relevant personnel should stand in the safe area;
5) When the platform is lifted to the required height and the operator leaves, the power should be turned off to avoid misoperation by other personnel;
6) Make sure that the safety lock is locked in place before working under the vehicle;
7) Make sure that there is no one under the car before lifting and lowering;

4.2-Operation steps

1) In order to avoid personal injury and property damage, only trained personnel are allowed to operate the lift;
2) Park the lifted vehicle on the two platforms to ensure that the vehicle is parked in the correct position, stable and does not slip;
3) After pressing the button to raise the lifting platform slightly, check the stability of the vehicle on the platform again;
4) When the platform is lifted to the required height, press the lowering lever to lock the mechanical safety lock in place and turn off the power; check the stability of the lifted vehicle again;
5) Before descending, be sure to check around the lifted vehicle to make sure there are no people and obstacles;
6) Turn on the power switch; press the button switch, when the safety lock is out of the lock position, pull the unlocking rope to lower the lifting platform;

5-Maintenance and inspection of equipment

Ser	Name	Method	Cycle
1	Oil cylinder and oil pipe joint	Before using the lift, check for oil leakage;	every day
2	control button	Check whether the button is "press to run, hand off to stop"；	every day
3	safety lock combination	Check whether the security lock can be unlocked and locked simultaneously；	every day
4	limit switch	Press the up button, and when the limit switch is activated, does the lift stop the upward movement;	every day
5	Slider running track	No. 1 lithium base grease is used for lubrication, and there is no obstruction by foreign objects on the running track;	every three months
6	Chains and chain pins	Lubricate with No. 1 lithium base grease. If there are cracks, they should be replaced;	every three months
7	Expansion bolt	Check the condition of the expansion bolts and the ground, if there is any looseness, deal with it urgently;	every three months
8	overall	Lift the lift several times back and forth with rated load or no load, and the lift should run stably without any abnormal noise;	every three months
9	Hydraulic oi	Change the hydraulic oil 6 months after first use and then annually thereafter. Check the cleanliness of the hydraulic oil. If the hydraulic oil turns black or there are impurities in the oil barrel, replace the hydraulic oil immediately;	Per year

6- Troubleshooting of common faults

Symptoms	reason	solution
Unusual sound found	Are there any traces of friction inside the cylinder?	Add lubricating oil inside the cylinder
	Is there any obstacle in the column	to clear
The motor does not turn and does not rise	Bad wire contact	Check and connect the wiring
	The motor is disconnected and burned	replace the motor
	Damaged limit switch	Replace limit switch
Motor turns but doesn't rise	motor reverse	Correct the wire connection
	Relief valve is loose or obstructed	adjust or clean
	Damaged gear pump	Replace the gear pump
	The oil suction pipe is loose and falls off	Tighten the suction pipe
	Suction pipe filter clogged	to clean
Slowly unload after ascending	Check oil pipe for oil leakage	replace oil pipe
	Poor cylinder seal	replace
	Poor sealing of one-way valve	clean or replace
	Defective relief valve	clean or replace
	Solenoid unloading valve defective	clean or replace
slow ascent	Oil filter clogged	clean or replace
	air mixed in oil pressure	Supplementary hydraulic oil
	Overflow valve adjustment is not in place	Adjustment
	Hydraulic oil becomes hot (above 45°)	replace
	Cylinder seals worn	replace
slow down	Down throttle stuck with obstruction	clean or replace
	Dirty hydraulic oil	replace
	Throttle valve is stuck	replace
	There is an obstacle in the tubing	clean or replace