
FOUR POST PARKING LIFT



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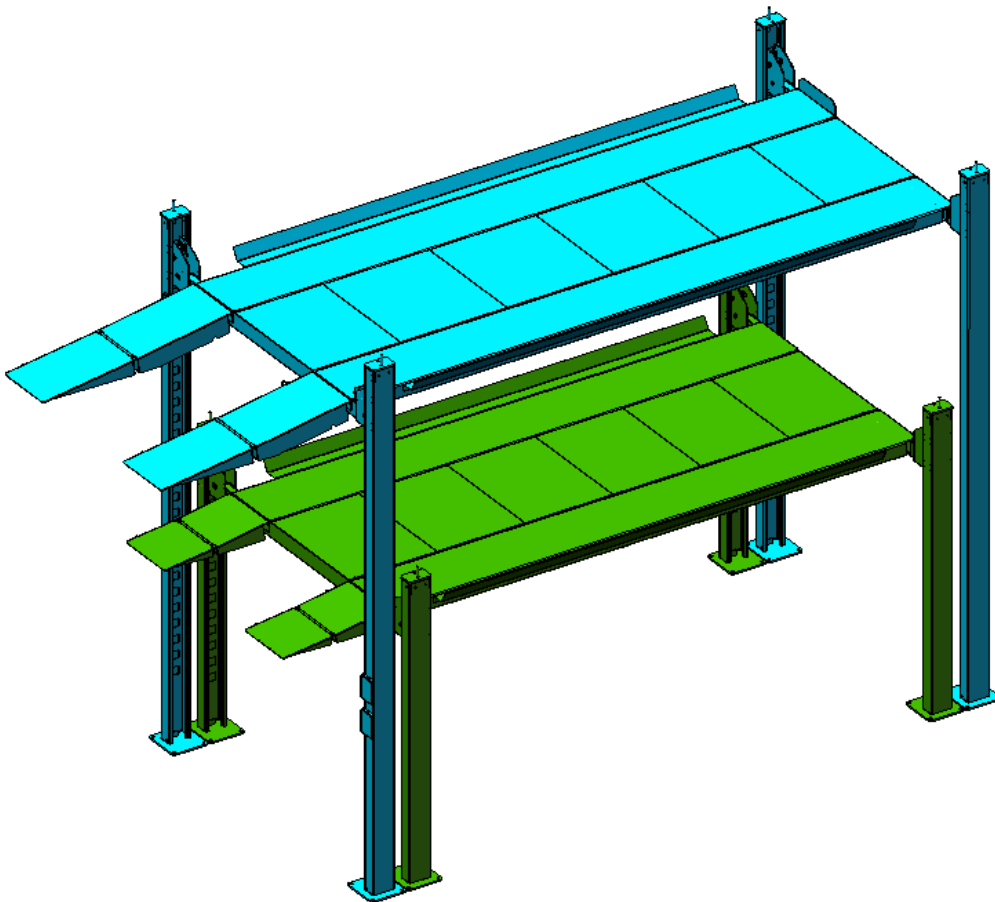
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1、 Introduction

- Electrical release ;
- For Parking or Repairing ;
- Each column is equipped with a mechanical locking device and wire rope breaking prevention device, high safety ;
- The Ramp and runway adopt pattern board to prevent sliding and make it safer;
- Adopt hydraulic system, hydraulic pump output high pressure oil to promote the hydraulic cylinder, hydraulic cylinder to drive the wire rope, realize the load plate synchronous steady rise or fall, to achieve the parking car ;
- Plastic oil plate or iron cover plate can be selected between runway to prevent oil dripping from the upper car ;



Model	capacity	Lifting height	Down time	Power of motor	Power Supply
Big Parking	2.7T	3500mm	120S	2.2kw	110V
Small Parking	2.7T	1800mm	60S	2.2kw	110V

2. Installation

1. Prepare Tools

Tape (7.5m)



hammer



monkey wrench(12")



spanner (one set)



Allen key (one set)

spirit level



chalk, ink fountain



screwdriver

pliers



strong forceps



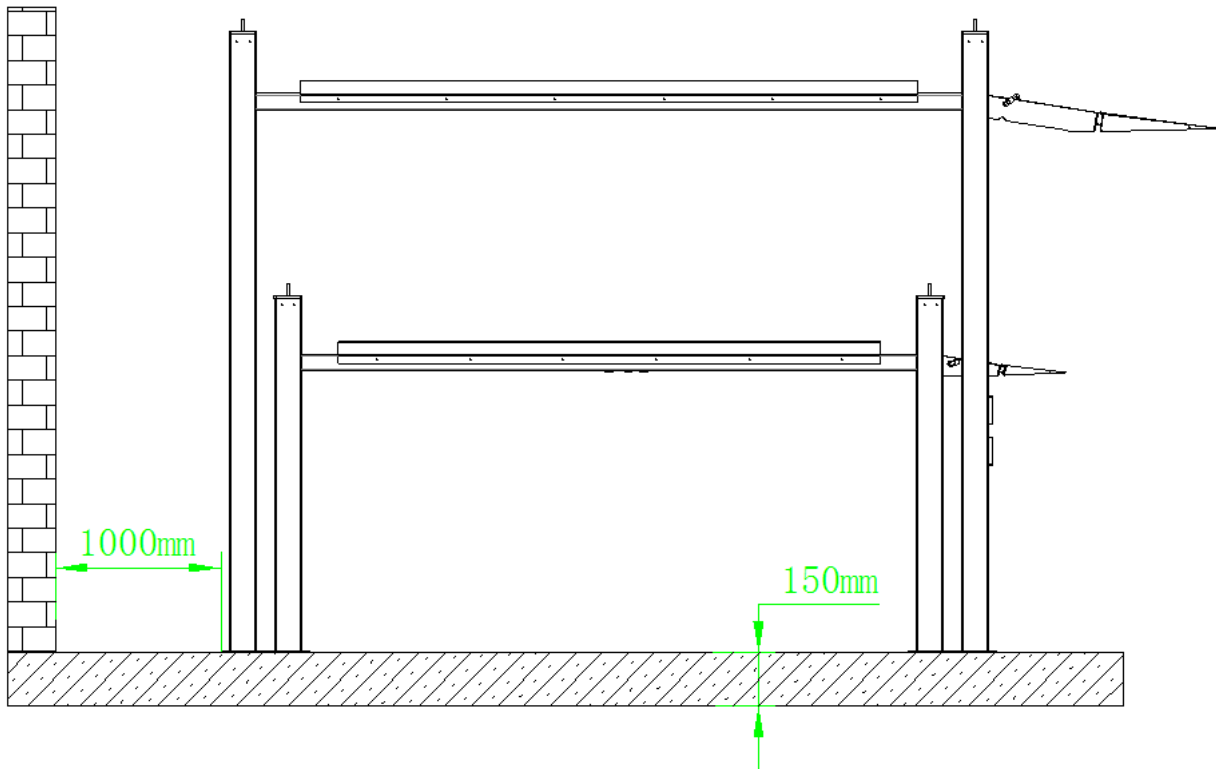
Impact drill (with M18 impact drill bit, the length of the drill bit is not less than 130mm)



2. Installation environment requirements

- 1) The minimum concrete thickness is 150mm, and the new foundation concrete must be solidified for more than 28 days;

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- 2) Concrete must be in good condition without cracks. The strength is tested to be at least 3000psi, or 210kg/cm²;
 - 3) The ground needs to be flat without cracks, and the flatness should be less than or equal to 5mm.
 - 4) The length, width and height of the space can meet the requirements of the equipment.



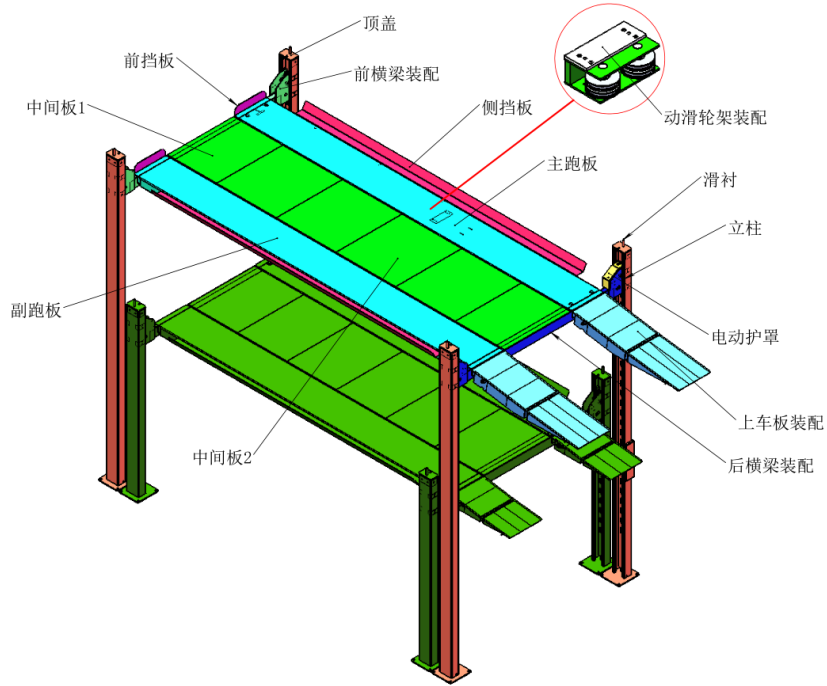
三、 Installation steps (the installation steps of the four-post size are the same)

1、 Please check the package for missing parts before installation.

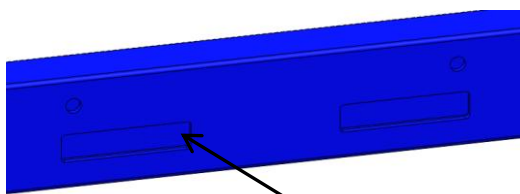
It mainly includes sheet metal parts, power units and standard parts boxes.



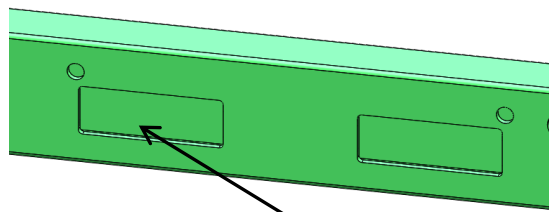
2、 Open the outer packaging of the product, remove the hair shelf, and then check the product quantity against the shipping



list.



后横梁



前横梁

发货清单					
序号	名称	型号	规格	数量	备注
1	立柱	大四柱	3987	4件	3副1主
2	滑衬		4040	4件	
3	立柱顶盖			4件	2左2右
4	前横梁装配		2476	1件	
5	后横梁装配		2476	1件	
6	主跑板装配		4778	1件	
7	副跑板		4778	1件	
8	动滑轮架装配			1件	
9	中间板1		945*698	2件	
10	中间板2		945*845	4件	
11	折叠上车板装配		1530	2件	
12	侧挡板		3960	2件	
13	电动解锁护罩			4件	2左2右
14	跑板挡板			2件	
15	钢丝绳轮		Φ 120*Φ 28	6件	
16	跑板轴		Φ 25	4件	
17	动力单元			1件	
18	标准件箱			1件	
19	钢丝绳			1套	4根
20	立柱	小四柱	2287	4件	3副1主
21	滑衬		2340	4件	
22	立柱顶盖			4件	2左2右
23	前横梁装配		2476	1件	
24	后横梁装配		2476	1件	
25	主跑板装配		4198	1件	
26	副跑板		4198	1件	
27	中间板1		945*698	2件	
28	中间板2		945*698	4件	
29	折叠上车板装配		846	2件	
30	侧挡板		3480	2件	
31	电动解锁护罩			4件	2左2右
32	跑板挡板			2件	
33	钢丝绳轮		Φ 120*Φ 28	6件	
34	动力单元			1件	
35	标准件箱			1件	
36	钢丝绳			1套	4根

3、Open the standard parts packing box and check the parts against the parts list.

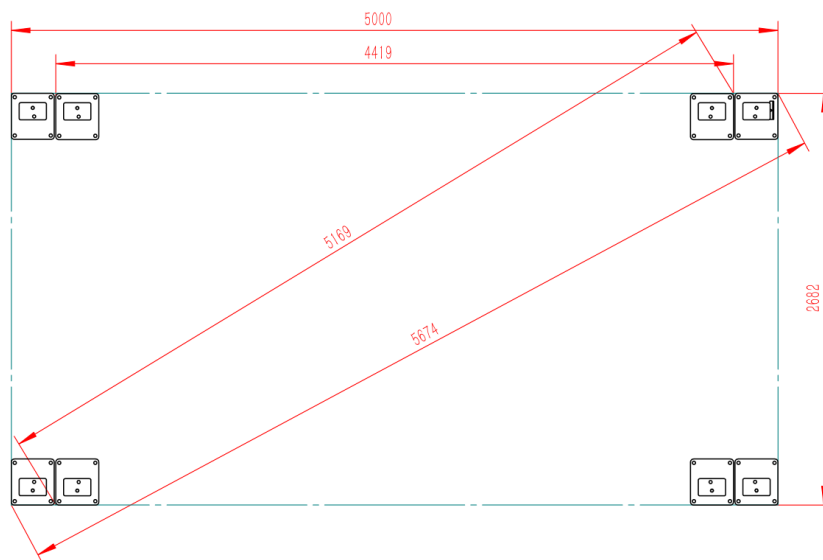
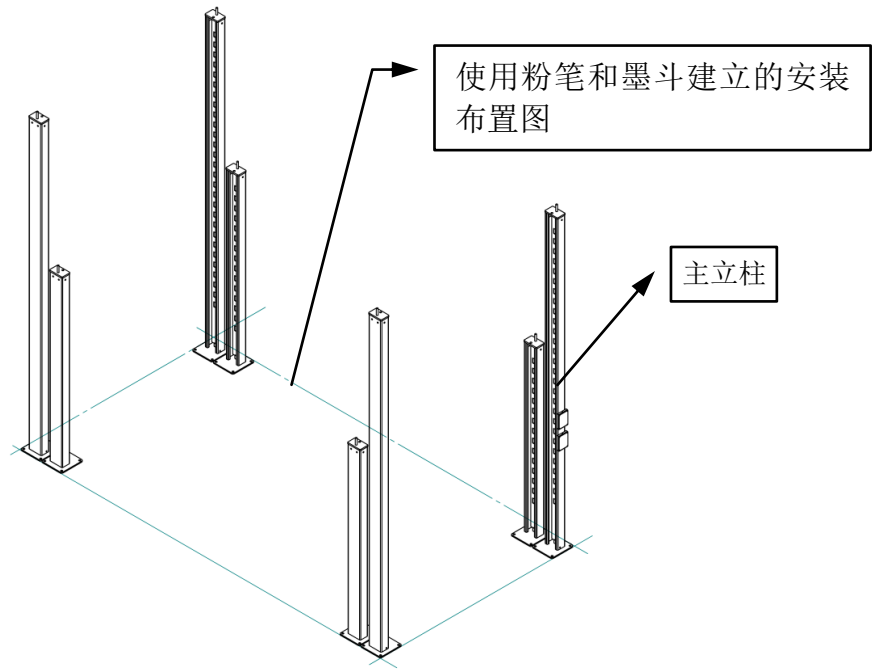


4、 Choose a suitable installation site:

Unless otherwise specified, our equipment is intended for indoor installation only. Choose a suitable installation site according to the size of the equipment (see appendix 1). Note that there should be no obstructions such as heating, building supports or electrical wiring above the installation site.

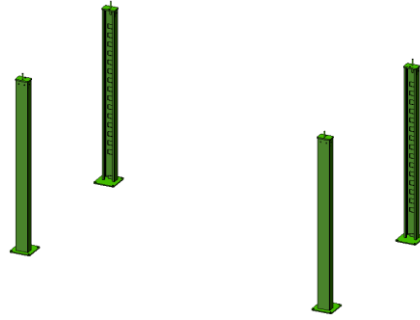
5、 Determine the installation layout:

After determining the installation location, use a tape measure and chalk to mark the installation points of the large and small four-post pillars, and make sure that the two diagonals are the same length. Then place the 8 uprights at the marked locations (first determine the installation position of the main uprights, and then place the other 3 in sequence).



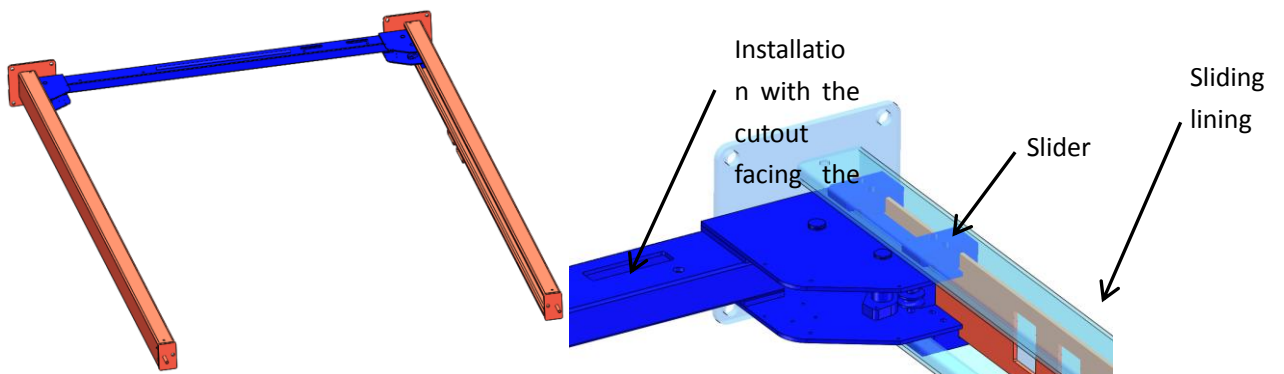
6、Placing uprights

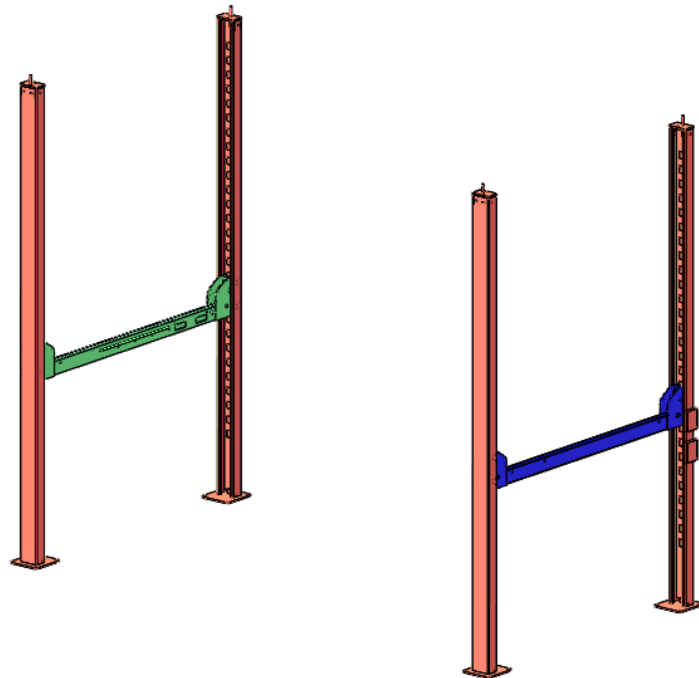
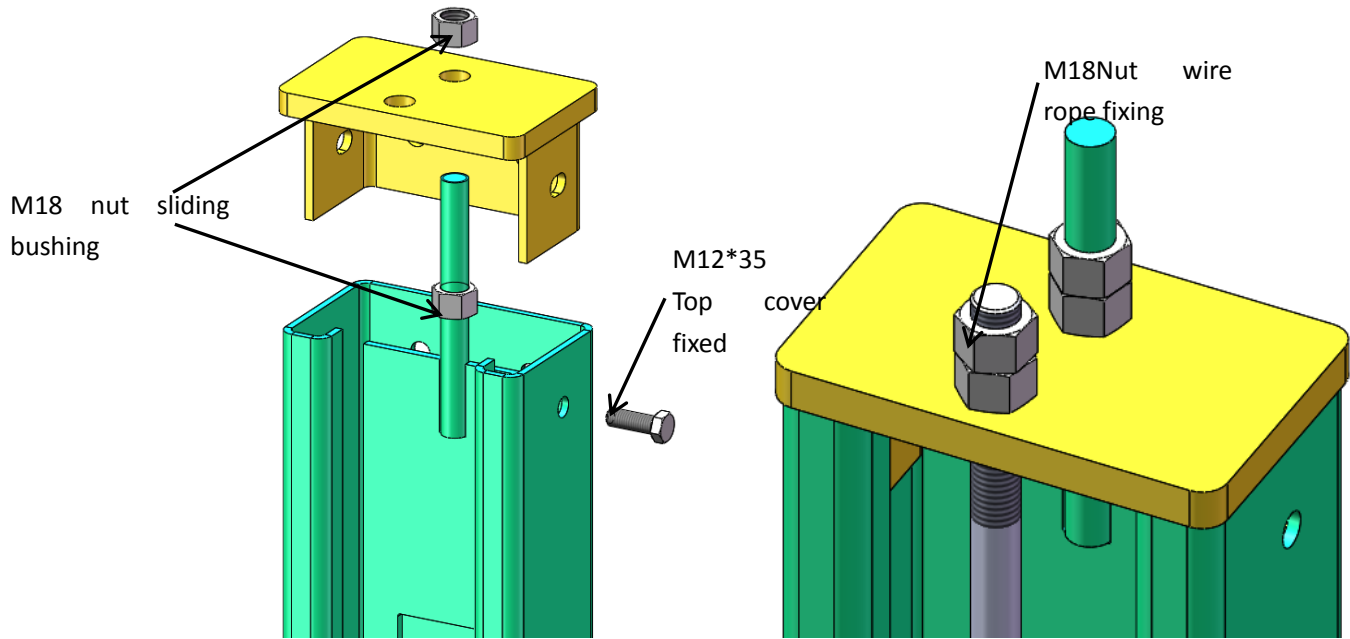
After the position of the column is determined, put the 4 columns (install the small four columns first) in the corresponding positions respectively, pay attention to the position of the power supply, the main column has a control box seat and an electrical box seat.



7、Beam installation

Put the two uprights down, put the beams (the incisions are all facing the inside) into the uprights first, slide them to a distance of 1.5m~1.6m from the bottom of the uprights, and then put in the slip lining, and slide it all the way to the bottom of the upright (The sliding lining is 1-2mm away from the bottom plate), lock the unlocking block, then install the top cover of the column (left and right, with the wire hole facing inward), and then stand up the column.

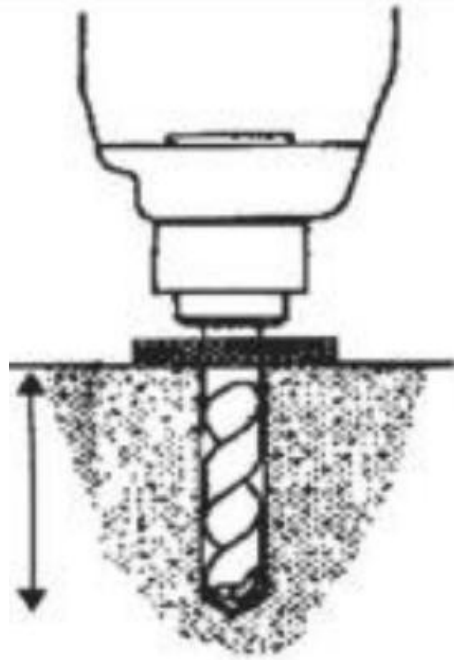




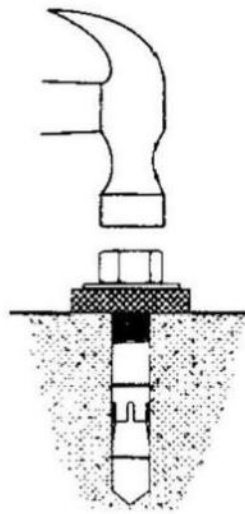
8、Column fixation

After the position of the column is determined, first fix the main column, directly punch the ground with an impact drill through the installation hole on the bottom plate of the column, and then fix it with expansion bolts. Do not punch and fix the remaining 3 uprights, so as to make fine adjustments after trial operation.

Align the bottom plate hole with an impact drill M18 drill bit, and directly drill a 130mm deep hole.



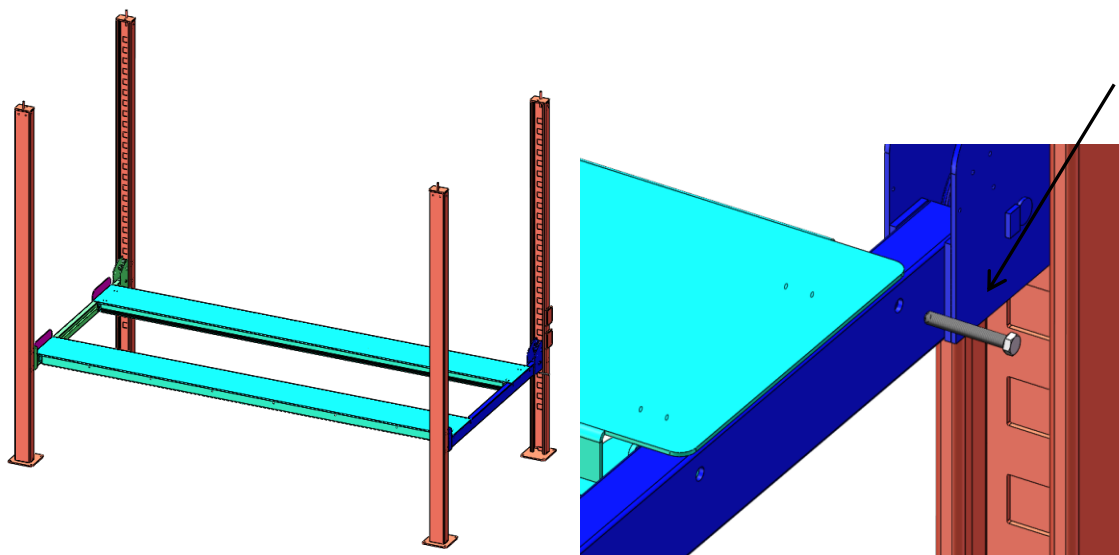
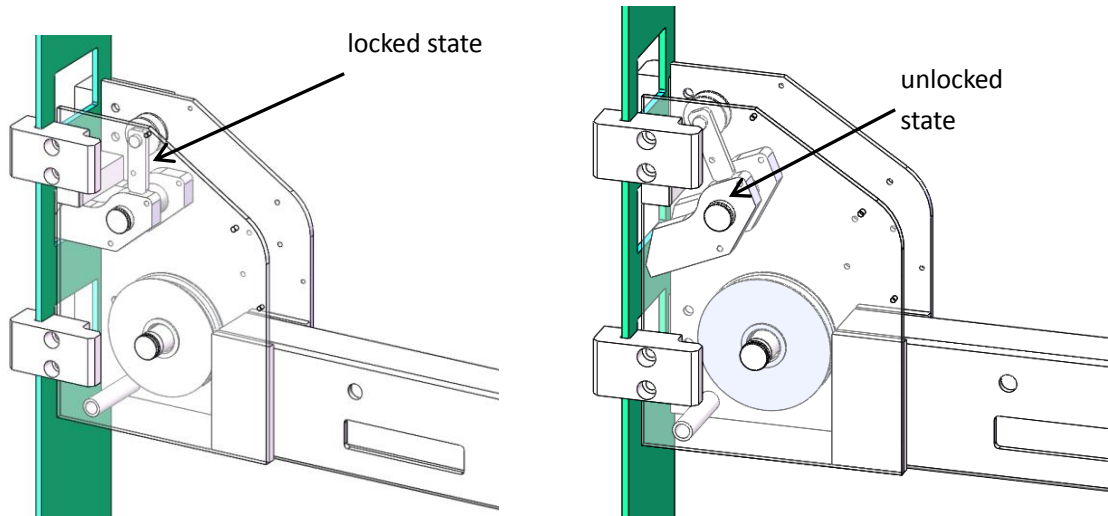
After drilling, clean up the dust, put the expansion bolt on, and hit it directly with a hammer.



9、 Running board installation

First confirm that the height of the front and rear beams is the same, then move the main and auxiliary running boards to the beam with a forklift or other lifting tools, and align the connecting holes on the running board and the beam. Bolt the front fender to the cross member along with the running deck. **Note that the installation position of the**

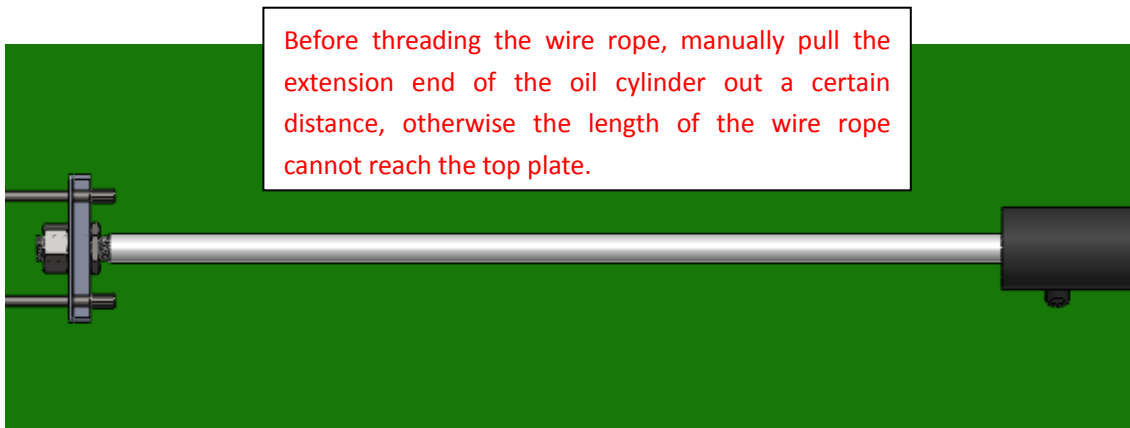
main running board (the main running board with the oil cylinder) should be on the side of the main column.



10、Wire rope installation

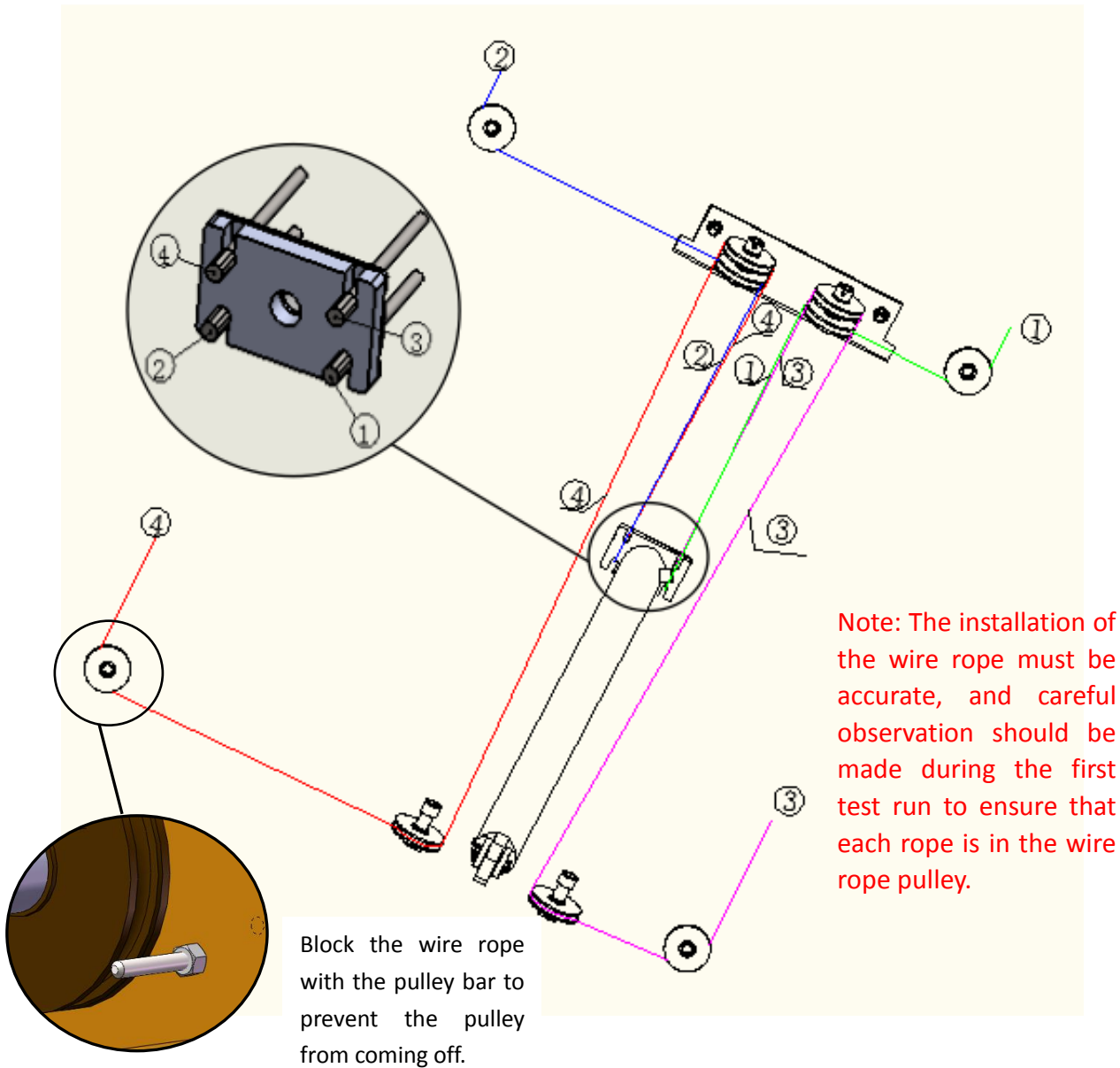
We have preinstalled the running board part of the steel wire rope before leaving the factory. The customer only needs to thread the 4 steel wire ropes to

the top plate of the 4 columns according to the length.



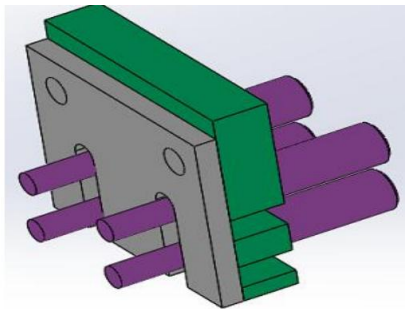
(1) Installation method of small four-column wire rope

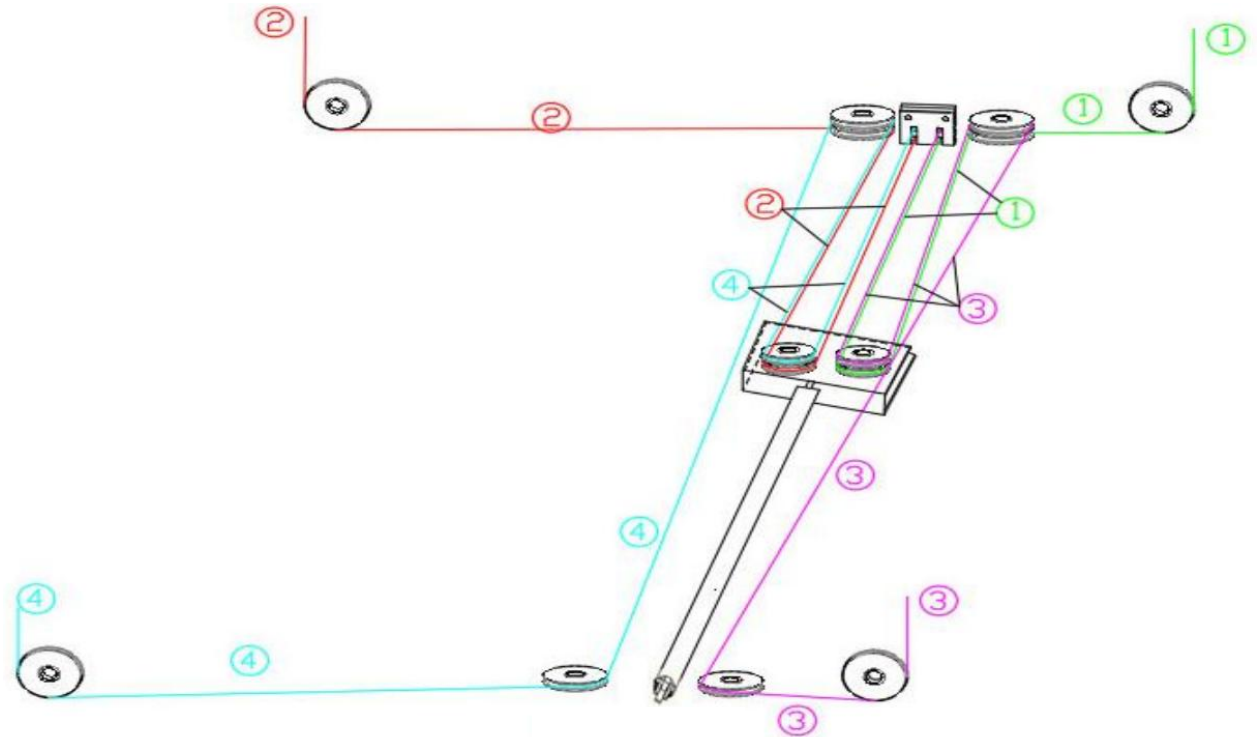




(2) Installation method of large four-column wire rope

Large four-column oil cylinder upper movable pulley frame





11、Electrical installation

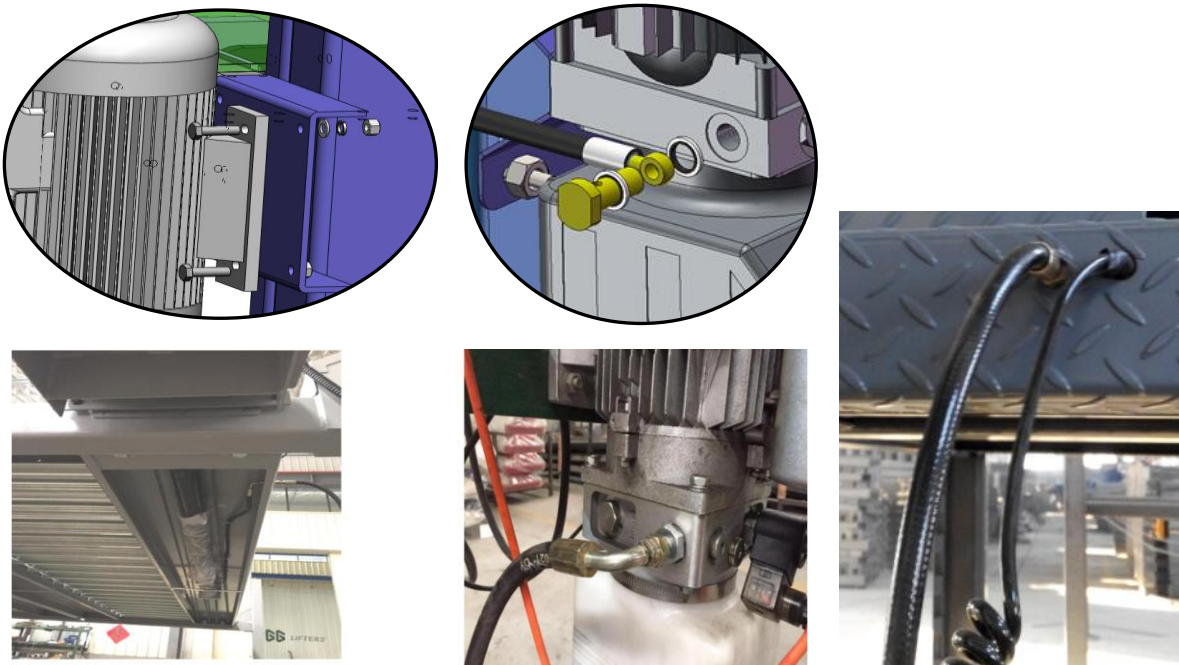
Install the control box and the electric control box on the column respectively. Electric unlocking, the unlocking electromagnet on the beam, the parallel line, the spring wire is used to connect to the electric control box, and then the cover is installed. Install the limit switch on the main column of the large and small four columns.



12、 Power unit installation

(1) The power unit is mounted on the seat plate of the main column and should be on the side with the unlocking handle.

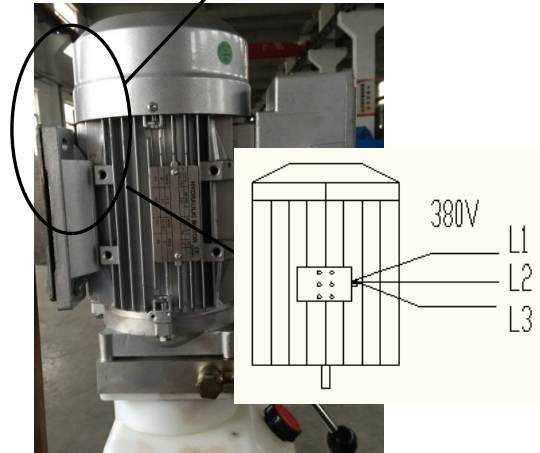
(2) There are two oil pipes in the equipment, one is connected to the oil cylinder at the bottom of the main running board, the other is connected to the power unit, and then the two oil pipes are connected together by connecting wires.



13、 Circuit connection

The electrical part of the equipment of the M model series has only one

wire on the power unit, which can be directly connected to the external

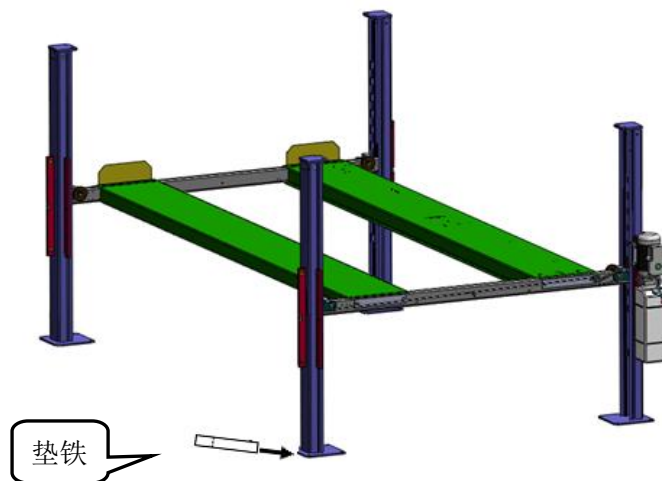


For three-phase electrical equipment, turn on the power supply. If the motor runs but the equipment does not operate, please exchange the connection of any 2 wires among the 3 wires.

power supply.

14、Fixed equipment

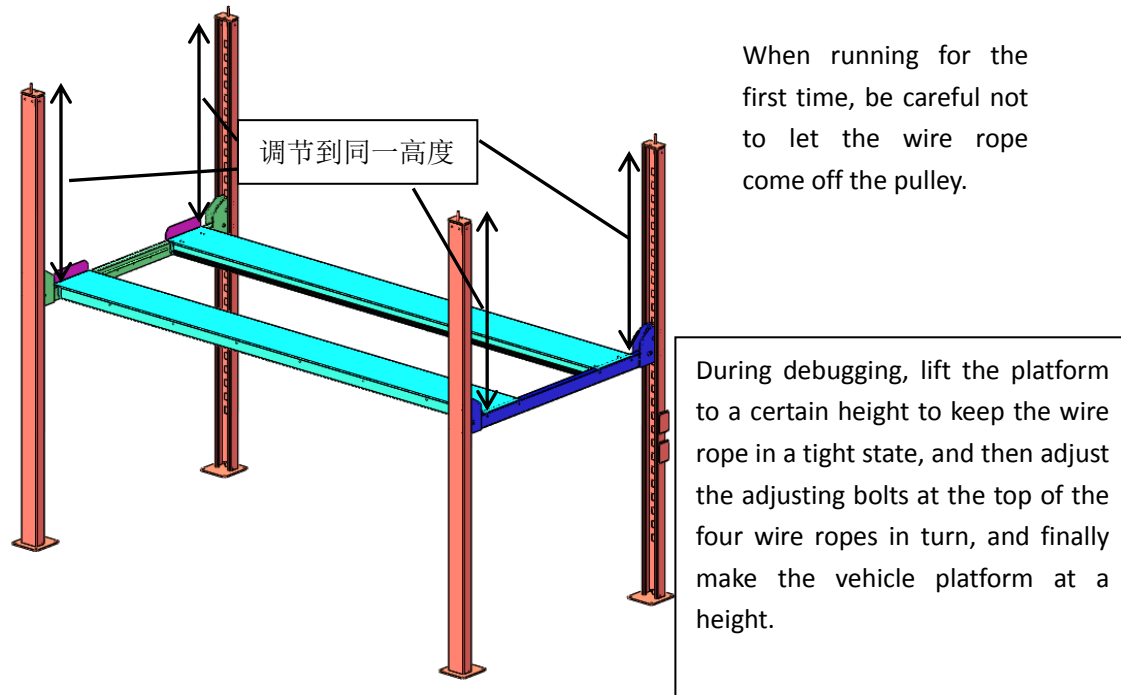
Before fixing the equipment, fasten all the connecting bolts between the beam and the running board, and then measure each column with a spirit level to keep it vertical (if it is not vertical, add a pad between the column and the ground). After the no-load debugging is completed, fix the column with expansion bolts (the size error is controlled within 5mm).



四、test run

1、 Before commissioning, add 12 liters of No. 46 hydraulic oil to

the oil drum of the power unit, and then turn on the power supply of the equipment. Press the button box up button to raise the device, and then debug the device as follows.



Note: After adjusting to the same height, lower the vehicle platform to see if it can reach the bottom. If not, adjust the wire rope downwards.

2、 Adjust the unlocking part of the equipment, and tighten all bolts and nuts on the equipment after the adjustment is completed. Then run the device back and forth a few times to see if it goes smoothly.

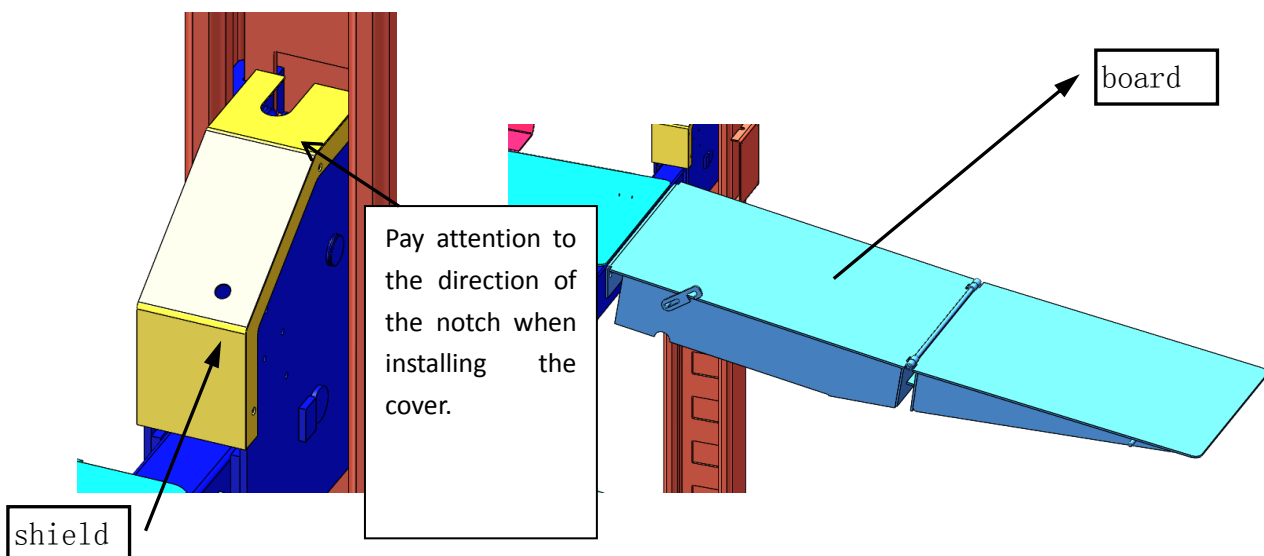
3、 The specific operation steps of the device are as follows:

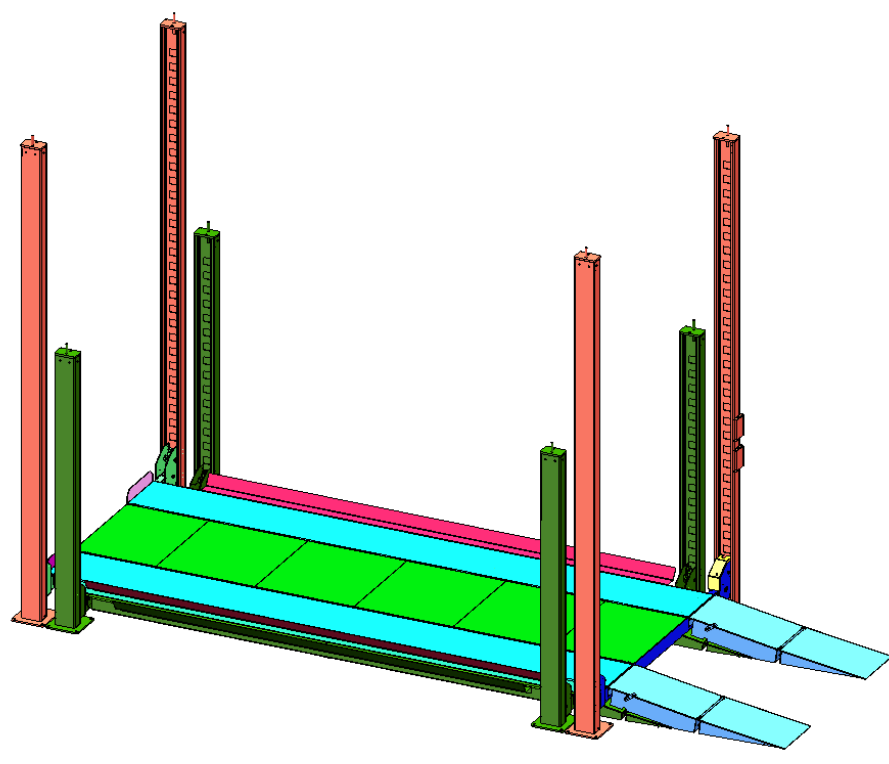
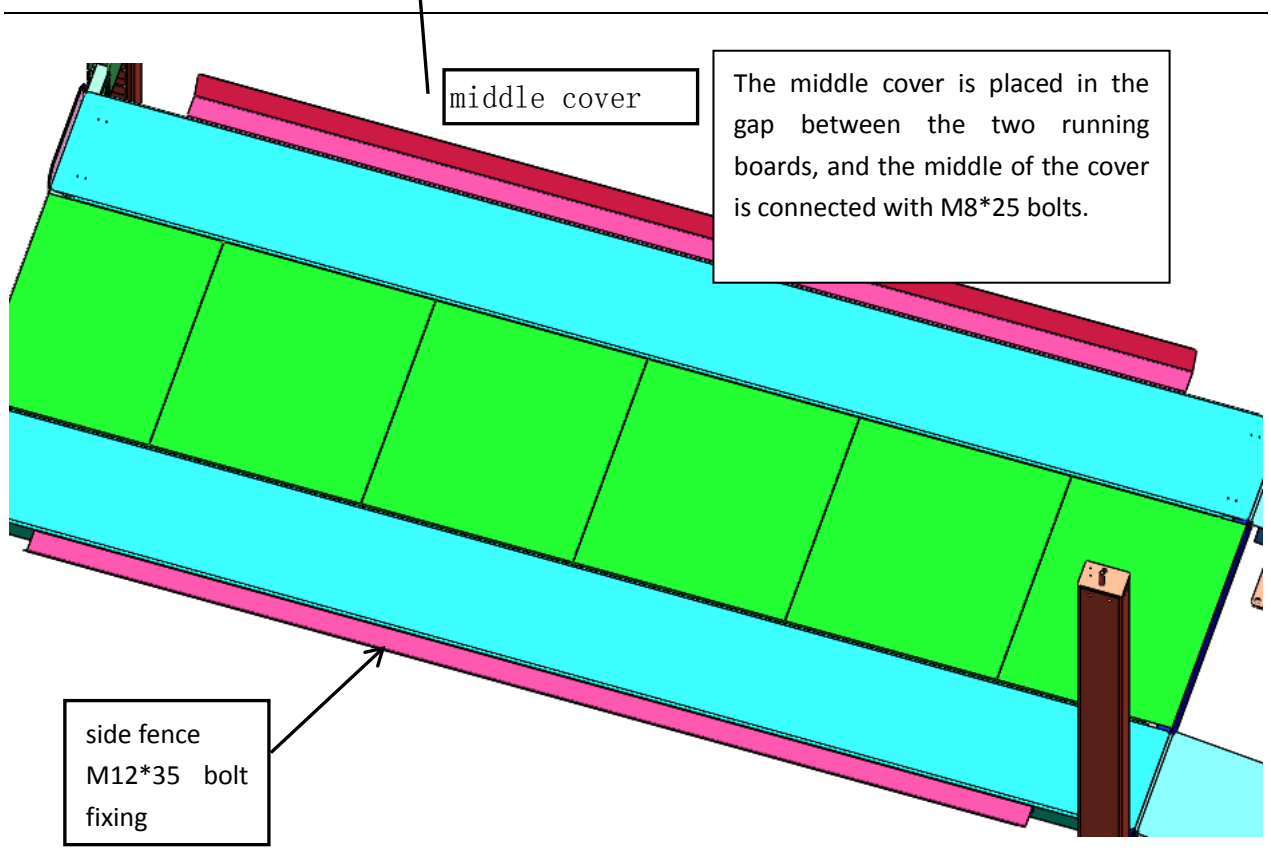
① Raise: Twist the key of the control box to rise. After the desired height, press the lock button of the control box to make the equipment in a locked state (when the equipment is locked, stop immediately to prevent excessive pressure relief).

② Descending: At the beginning of the descent, since the equipment is in a locked state, the equipment must be raised for a certain distance

(about 4cm), and the rising distance is controlled by the adjustable time relay, and then the electromagnet is energized to shrink, the unlocking is completed, the solenoid valve is energized, and the oil is energized. The road opens and the equipment drops. **Pay attention to observe the synchronization of the platform's descent, stop descending immediately if an abnormality is found, and find the reason).**

4、 At this point, the installation and debugging of the equipment is completed. Check again whether all bolts are tightened and whether the expansion bolts are fixed. Finally, install the guard, middle cover, upper plate and side baffle on the equipment, and apply grease to the chute of the column. can be used normally.



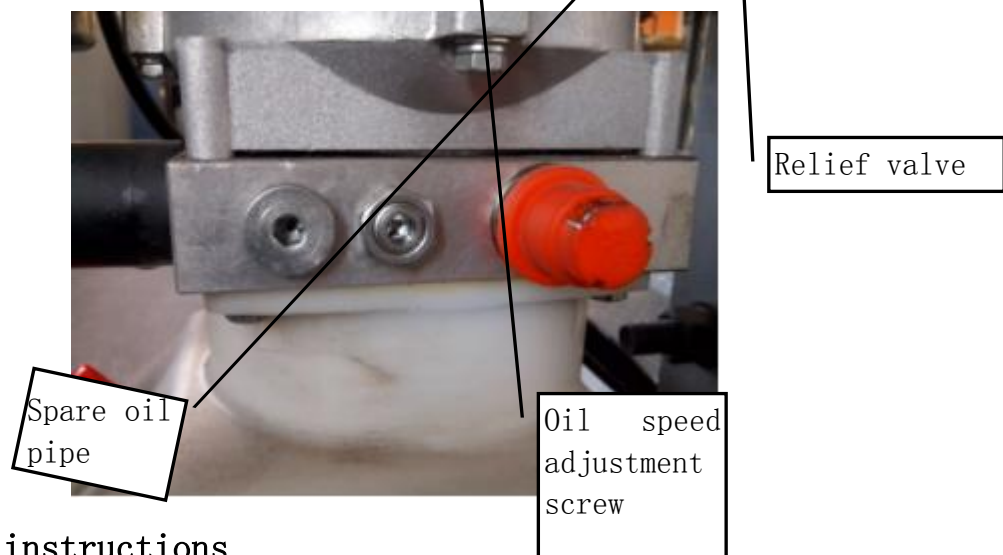


Power unit function description:

① Oil speed adjustment screw: Loosen the lock nut, and use the hexagon socket to adjust the inner screw to change the falling speed of the equipment (clockwise rotation is fast, and counterclockwise is the opposite).

② Spare oil pipe interface: It is the same as the opposite oil pipe interface, and the orientation is different. Which one is convenient to choose which one, and seal the unused ones well.

③ Relief valve: When the pressure of the oil circuit increases due to external factors, the oil will be forced to drain, and the pipeline will not burst due to the continuous increase of the pressure. Open the red cover, and then open the nut inside, you can adjust the safety oil pressure value.



五、 Operation instructions

1、 car storage

① Make sure there are no obstacles around the device and no obstacles

at the bottom.

② Drop the car platform to the ground, drive the car onto the car platform, and apply the handbrake.

③ Press the green button of the power unit, the device will rise. Release the button when you reach the desired position, then lock the device.

④ Drive into the vehicle on the lower deck.

2. Pick up the car

① Take out the vehicle on the lower deck and make sure that there are no other obstacles below.

② Raise the device to complete the unlocking.

③ The descending speed can be adjusted by adjusting the oil speed adjusting screw of the power unit according to its own situation

④ Lower the platform to the ground, drive the upper vehicle to the equipment, and complete the pickup.

⑤ Turn off the power of the device.

六、Maintenance measures

per month:

- ◆ Check the connection of hydraulic pipes and whether there is oil leakage.
- ◆ Check the connection of the wire rope and the wire sheave.
- ◆ Check the tightness of the expansion bolts.
- ◆ Check the flexibility of the moving parts.
- ◆ Check the condition of the safety components.

Half year:

- ◆ Tightening of bolts.
- ◆ The tightness of the hydraulic system, if oil leakage is found, tighten the joints.
- ◆ Check the lubrication and wear of the pins, rollers, platform structure and related components, and replace them in time if any damage is found.

七、troubleshooting

fault phenomenon	Reason	Method of exclusion
find unusual sounds	Whether there are friction marks inside the column	Add some lubricating oil inside the column
	Are there any obstacles in the column?	Clear internal obstacles
The motor does not rotate and does not rise	Poor wire contact	Check and connect the wiring
	The upper limit switch is not wired	Connect the limit switch to the corresponding place
	The motor is broken and burned out	Replace the motor
Motor turns but does not rise	Motor reverse	Correct the wiring method
	Insufficient hydraulic oil	replenish hydraulic oil
	Oil pipe loose and falling off	Tighten the tubing
	Manual relief valve not tightened	Tighten the manual pressure relief valve

	The load is too large, exceeding the limit	lighten the load
Slowly unload after rising	Check the oil pipe for oil leaks	Replace the oil pipe
	Poor cylinder seal	Replace the seal
	Whether the wire rope is loose and not leveled	Check whether the wire rope is level
slow ascent	oil filter plug	Clean out or replace
	Air mixed in oil pressure	replenish hydraulic oil
	Oil speed adjustment screw is not adjusted properly	Adjustment
	Cylinder seal wear	Replace the seal
	Poor cylinder lubrication	Change the lubricating oil inside the cylinder
When descending, the lock cannot be unlocked	When pressing down, the device will rise first, so that the unlocking block has sufficient time and place to open, and the rising time is short	There is a time relay in the electric control box, adjust the time relay, and lengthen the time to rise before falling
