12,000lb ALIGNMENT HOIST

LFPA12

User Manual

Model: LFPA12 Serial No. _____

Note: Above image shows lift with optional rolling jack.

Motors for Appliance Applications - Component

COMPANY

YANGZHOU JINSHENG MACHINE AND ELECTRIC MANUFACTURE CO,LTD
Zhong'Ai Village Daqiao Town Jiangdu
Yangzhou Jiangsu, 225241 China

E536637

Marking: Company name and model designation.
Note: For additional marking information, refer to the Guide Information Page.

Model(s): YL90L-2-1, YL90L-2-1A, YL90L-2-2

Last Updated on 2024-01-02

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VERIFICATION OF CONFORMITY

S/N: 013017

No.: **ICR/VC/HM250363**

Name and address of Applicant	Daytona Automotive Equipment Inc. 101 Applewood Dr. Unit 3, Brighton, Ontario. K0K1H0, Canada
Name and address of manufacturer:	Acme Industrial Technologies (Nanjing) Limited FORTUNE PLAZA, 2703 WEST TOWER, 359 HONGWU ROAD, NANJING, CHINA
Product name:	Vehicle Lift
Product types:	LTPF9, LTPA10, LTPO10, LTPO12, LTPF12, LTPO14, LTPO15, LTOP18, LFPP9A, LFPP10A, LFPA12, LFPA14, LFPA24, RAJ4, RAJ5, RAJ8, RAJ9, RAJ11, RAJ12, LHS7, LMS6, LMATV, LMC16
Product trademark:	n/a

Verification was carried within following scope:

Information on the Declaration of Conformity:

Result:	**Legislation:**	**Standard:**
✓	MD [2006/42/EC]	EN ISO 12100:2010 EN 60204-1:2018 EN 1493:2022 EN 1494:2000+A1:2008

The assessment process has been carried out in accordance with individual rules and conditions agreed with the applicant. Evaluation has been carried out in accordance with:

Test report:	MTZ202503035MD
Tests conducted by:	Daytona Automotive Equipment Inc.
Issue date:	07.03.2025
Expiration date:	06.03.2030

Remarks:

- VoC was issued on voluntary basis and does not imply meeting all essential requirements listed in Declaration of Conformity.
- For introducing this product on European market may be needed EC/EU-type examination conducted by appropriate Notified Body.

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Daytona
AUTOMOTIVE EQUIPMENT

Safety Information for 4-Post Lifts

I. Instructions for Owner and/or Employer

• The Owner/Employer shall ensure that lift operators are qualified and that they are trained in the safe use and operation of the lift using the manufacturer's operating instructions;

• The Owner/Employer shall establish procedures to periodically inspect the lift in accordance with the lift manufacturer's instructions, Inspection and Maintenance; and The Employer Shall ensure that lift inspectors are qualified and that they are adequately trained in the inspection of the lift.

• The Owner/Employer shall establish procedures to periodically maintain the lift in accordance with the lift manufacturer's instructions The Employer Shall ensure that lift maintenance personnel are qualified and that they are adequately trained in the maintenance of the lift.

• The Owner/Employer shall maintain the periodic inspection and maintenance records recommended by the manufacturer

• The Owner/Employer shall display the lift manufacturer's operating instructions operator.

• The Owner/Employer shall provide necessary lockout/tagout means for energy sources per, Safety Requirements for the Lockout/Tagout of Energy Sources, before beginning any lift repairs.

• The Owner/Employer shall not modify the lift in any manner without the prior written consent of the manufacturer.

II. Safety Instructions

• Never allow unauthorized or untrained persons to operate lift or rolling jacks.

• Shop Policy should prohibit customers or non-authorized persons from being in shop area while lift is in use.

• Thoroughly train all employees in the use and care of lift and rolling jacks.

• Be sure no one is standing in front or behind lift while vehicle is being driven onto or backed off the lift.

• DO NOT allow rear tires or portion of vehicle to interfere with ramp/chocks.

• Be Sure front wheel stops are in raised position before driving vehicle onto lift.

• Never allow front wheels to strike the front wheel stops.

• DO NOT permit employees or customers on lift when it is either being raised or lowered.

• Always stand clear of lift when raising or lowering and observe "Pinch Points" Warning.

• Never overload lift: Follow recommended capacities listed on the data tag mounted near the controls the post of the lift.

• Always engage parking brake and use the rear wheel chocks to keep the vehicle from rolling freely on the runways.

• Always lower lift on locks before working on vehicle.

• Keep area around lift clean of tools, debris, grease, and oil.

• Always keep runway clean.

• Replace all caution, warning, or safety related decals on the lift when unable to read or missing.

• For Rolling Jack Safety Instructions see Rolling Jack Installation, Operation and Maintenance Instructions in the rolling jack box.

III. Operating instructions

WARNING To avoid personal injury and/or property damage, permit only trained personnel to operate lift. After reviewing these instructions, get familiar with lift controls by running the lift through a few cycles before loading vehicle on lift. Observe and heed SAFETY and WARNING labels on the lift.

1. Loading: Lift must be fully lowered and no one in service bay while the vehicle is brought on lift.

2. If lift is equipped with rolling jacks, jacks must be fully lowered and the rear jack pushed toward center of lift to provide under car clearance.

WARNING Engage runway locks before raising vehicle on jacks! DO NOT operate lift while jacks are engaged with a vehicle!

3. Stop vehicle when it contacts the front wheel stops. At all times, be sure rear wheels are forward of the ramp/chocks and the ramp/chocks will clear tires when the lift is raised,
Driver and passengers must exit before raising.

4. Place triangular wheel chocks on each side of one of the rear tires,

5. To Raise Lift: Push the "RAISE" button on the power unit. Release button at desired height.

7. Before Lowering Lift: Be sure no one is in the lift area and that all tools, tool trays, etc. have been removed from under the lift and vehicle.

CAUTION Keep hands clear of yoke ends during lift operation.

WARNING The runways, ramps and connecting yokes at each end of lift are designed to rest on the floor when fully lowered. Observe pinch point warning decals,

8. Repeat Step 2.

9. To Lower Lift: If lift has been resting on the locking latches, lift must be raised high enough for all four latches to clear the latch plate slots inside the columns.

10. Actuate the latch release handle near the power unit column to disengage all four locking latches, Hold the handle until lift has fully lowered. Note: If the handle is released, the latches will automatically reset to the engaged position.

11. Push the lowering handle on the power unit to lower lift . Lowering speed can be controlled by the force applied to the lowering handle.

12. Observe lift and vehicle to be sure lift is level while being lowered. If not, STOP repeat Steps 10 through 13.

13. Fully lower lift, remove the triangular wheel chocks and check to be sure area is clear before removing vehicle from lift,
14. If your lift is not operating properly, DO NOT use until adjustments or repairs have been made by qualified lift service personnel.

WARNING Keep hands clear of yoke ends while the lift is being raised or lowered,

IV. Maintenance Instructions

WARNING If you are not completely familiar with automotive lift maintenance procedures, STOP. Contact factory for instructions.

To Avoid Personal Injury, permit only qualified lift service personnel to perform maintenance on this equipment.

- Periodically: Check all column, lift/runway attaching bolts for tightness.

- Always raise lift when cleaning floor area with solvents and/or cleaning compounds.

- Always keep runways and linkages clean. In salt belt or other corrosive environments, the lift must be washed down weekly.

- Daily: Check cables and sheaves for wear. Observe for frayed cable strands. Wipe cables with a rag to detect hard to see small broken cable strands. Replace cables showing any broken strands. Replace worn parts as required with genuine Daytona parts.

- Daily: Inspect front wheel stops and ramp/chocks for damage or excessive wear. Replace as required with genuine Daytona parts.

- Daily: Check locking latch operation and reset. Adjust per instructions or repair if required with genuine Daytona parts.

- Weekly: Clean foreign debris from rear wheel slip plates and turning radius gauges by blowing out with shop air.

- Weekly: Check torque on the column anchor bolts per specifications .

- Monthly: Clean wire rope cables with lift in both lowered and raised position by spraying with penetrating oil and wiping the cable down.

- Monthly: Check cables for wear. Refer to 4-Post Inspection and Maintenance Guide for wear inspection information.

- Monthly: Check level of runway. Adjust per instructions.

- Monthly: Lubricate Guide on each turning radius plate . Clean and lubricate more often as conditions warrant.

- Semi-Annually: Check fluid level of lift power unit and refill if required. If fluid is required, inspect all fittings, hoses and seals. Repair as required.

• Semi-Annually: Lubricate front wheel stop and ramp/ chock hinge pins. IMPORTANT Cable adjustment should be checked by Installer after the first 50 loaded lift cycles and after 300 loaded lift cycles.

• For Rolling Jack Maintenance Instructions see Rolling Jack Installation, Operation and Maintenance Instructions in the rolling jack box.

V. Lift Lock Out/Tag Out Procedure

Purpose

This procedure establishes the minimum requirements for the lockout of energy that could cause injury to personnel by the operation of lifts in need of repair or being serviced. All employees shall comply with this procedure.

Responsibility

The responsibility for assuring that this procedure is followed is binding upon all employees and service personnel from outside service companies (i.e., Authorized Daytona Installers, contactors, etc.). All employees shall be instructed in the safety significance of the lockout procedure by the facility owner/manager. Each new or transferred employee along with visiting outside service personnel shall be instructed by the owner/manager (or assigned designee) in the purpose and use of the lockout procedure.

Preparation

Employees authorized to perform lockout shall ensure that the appropriate energy isolating device (i.e., circuit breaker, fuse, disconnect, etc.) is identified for the lift being locked out. Other such devices for other equipment may be located in close proximity of the appropriate energy isolating device. If the identity of the device is in question, see the shop supervisor for resolution. Assure that proper authorization is received prior to performing the lockout procedure.

Sequence of Lockout Procedure

1) Notify all affected employees that a lockout is being performed and the reason for it.
2) Unload the subject lift. Shut it down and assure the disconnect switch is "OFF" if one is provided on the lift.
3) The authorized lockout person operates the main energy isolation device removing power to the subject lift.
• If this is a lockable device, the authorized lockout person places the assigned padlock on the device to prevent its unintentional reactivation. An appropriate tag is applied stating the person's name, at least 3" x 6" in size, an easily noticeably color, and states not to operate device or remove tag.

• If this device is a non-lockable circuit breaker or fuse, replace with a "dummy" device and tag it appropriately as mentioned above.
4) Attempt to operate lift to assure the lockout is working. Be sure to return any switches to the "OFF" position.
5) The equipment is now locked out and ready for the required maintenance or service.

Restoring Equipment to Service

1) Assure the work on the lift is complete and the area is clear of tools, vehicles, and personnel.
2) At this point, the authorized person can remove the lock (or dummy circuit breaker or fuse) & tag and activate the energy isolating device so that the lift may again be placed into operation.

Rules for Using Lockout Procedure

Use the Lockout Procedure whenever the lift is being repaired or serviced, waiting for repair when current operation could cause possible injury to personnel, or for any other situation when unintentional operation could injure personnel. No attempt shall be made to operate the lift when the energy isolating device is locked out.

For further information or assistance, please reach out to Daytona Automotive Equipment at 613-475-5400, or toll free at 1-866-219-9991

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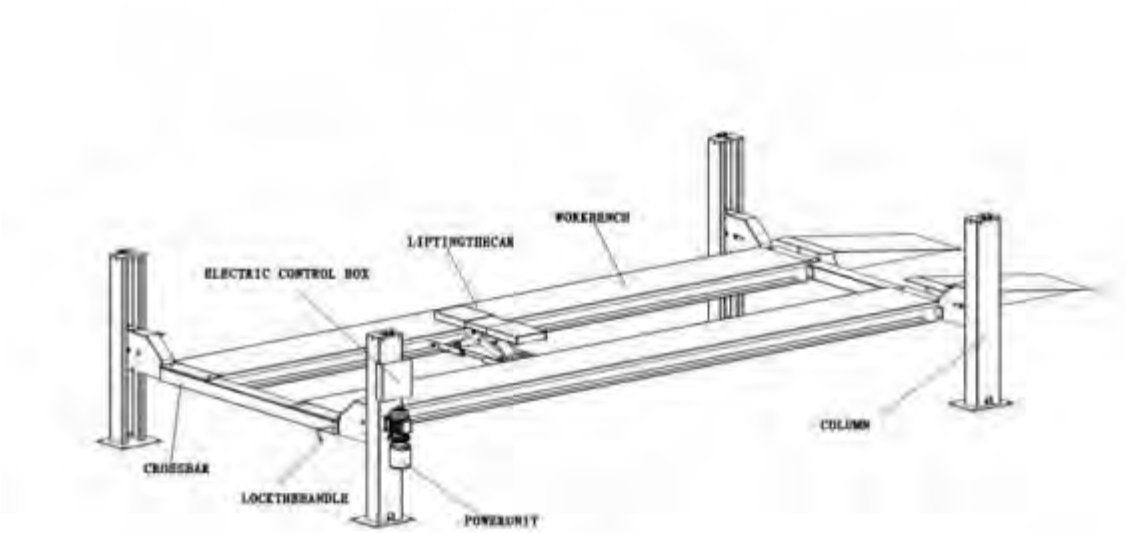


图 1

1. Safety precautions

1.1. Please read this instruction carefully before using the equipment. It is strictly forbidden. To operate this machine without reading this instruction.

1.2. Remove barriers around and below the platform before working.

1.3. Not Lift type, lift the left, right and up and down can not stand people, lift the car also can not not ride personnel.

1.3. The weight of the lifted vehicle shall not exceed the lifting capacity of the lifting machine.

1.4. Lift should be performed according to the car's manual. Ensure the use of good anti-skid triangle wood and other anti-skid devices (user self-provided).

1.5. Only when the lock core of the four safety locks is determined to enter the square hole of the lock plate, the maintenance personnel can enter the working area.

1.7 When the lift is not used, cut off the power supply.

1.8 After the lifting machine is used for a period of time, the wire rope will be stretched . different degrees to cause uneven work table. At this time, the length of the wire rope should be adjusted in time.

1.9 The machine should be maintained in strict accordance with this

manual, and the main parts should be checked and maintained carefully.

1.10 Fire protection devices, such as fire extinguishers, should be equipped on the site of equipment use (users' own)

2. Characteristics of the profile

The lifting machine has been carefully designed, with a reasonable structure, safe and reliable.hydraulic drive, hydraulic drive of work table, stable work, easy operation, low noise;lock and pneumatic unlock mechanism, sensitive and reliable ;type of wire rope break insurance, with double middle insurance performance.

3. Main Lifting Capacity:6000KG

Platform Length:5500MM

Overall Height:2480MM

Minimum Height:240MM

Platform Width:650MM

Width Between Platforms:1100MM

Motor Power:3.0KW

Electricity Supply: 380V/220v/(50HZ)

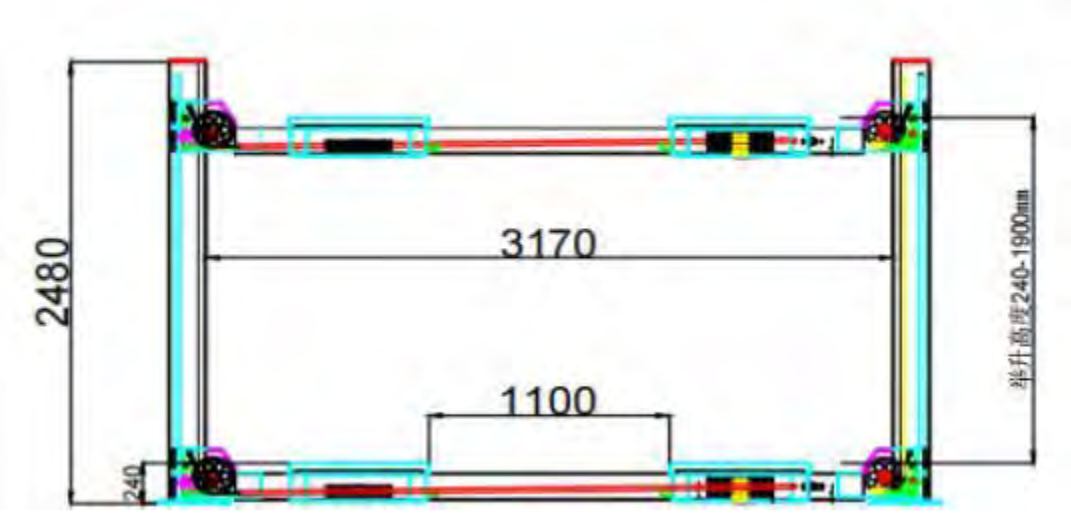
Lifting Time:110S

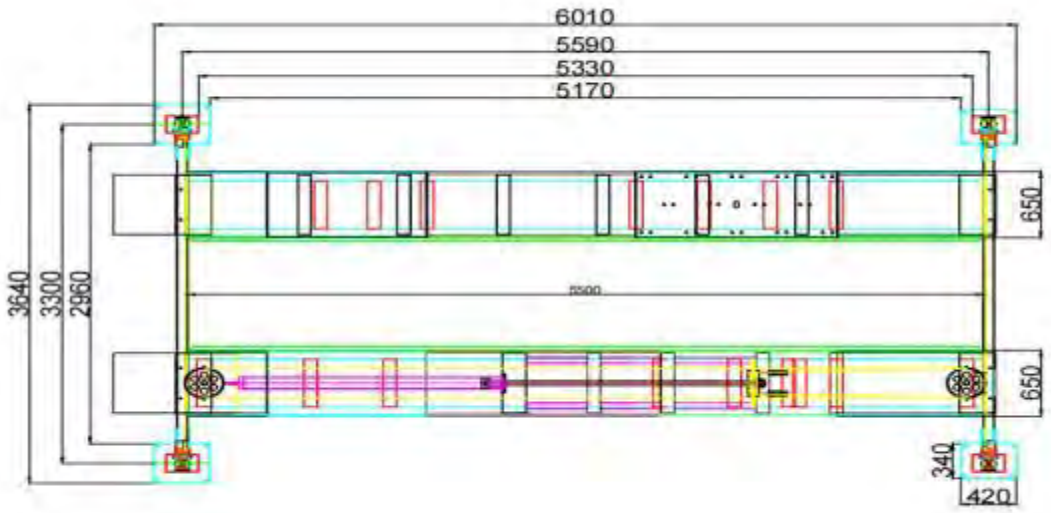
Max. Lifting Height:1900MM

Weight:2200KG

Note: items marked with a "*" symbol can provide products with different voltages and frequencies according to user requirements (for specific parameters, please refer to the equipment label)

4. Overall dimensions of the lift (see picture 2)





5. THE STRUCTURE AND WORKING PRINCIPLE OF THE MACHINE

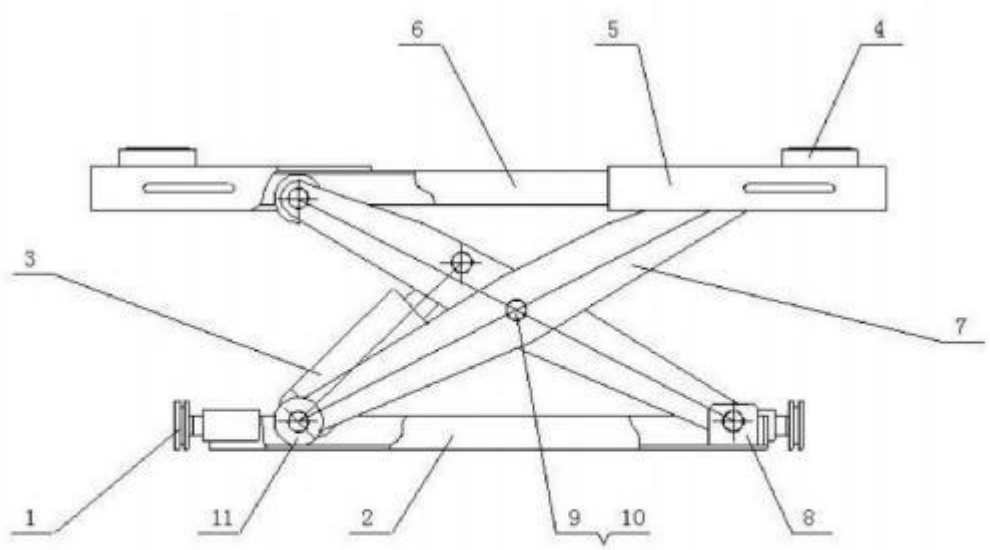
The machine is composed of column, longitudinal working table, beam, wire rope pulley block, lifting car, hydraulic power unit, etc. (see figure 1, figure 2 and figure 3 for details). Table drive principle: rises motor driven oil pump, oil Cylinder.

hydraulic oil input, because the machine is driven by the piston rod pull, the hydraulic oil input cylinder cavity, under the action of hydraulic oil cylinder piston rod slowly income, at this time, fixed in front of the piston rod pull institutions under the tension of the piston rod, smooth drag four wire rope tightening at the same time. As the other end of the wire rope is fixed at the top of the four columns, with the piston rod retraction, four wire ropes at the same time shorter, under the action of the pulley group, tighten the wire rope makes the work table in the middle of the four columns slowly rise, complete the lifting work. When descending, the return oil valve of the hydraulic system is opened, the work table under the effect of its own gravity, the hydraulic oil in the cavity of the cylinder is slowly discharged back to the tank, the piston rod is restored to the initial state, wire rope is restored to the original length, the work table is returned to the original position, completed the drop work.

The working principle of the secondary lifting trolley is shear type.

connecting rod mechanism (see the picture below). When the trolley is rising, The cylinder of the trolley pushes the connecting rod arm to make the trolley rise. When The trolley is falling, the oil return pipeline is opened.

(According to the needs of users , they can choose two cars)



1、guide wheel 2、The car chassis 3、Small oil cylinder 4、rubber blanket 5、Moving board on top
6、Car board 7、support plate 8、dead plate 9、center pin 10、spring washer 11、Supporting pulley

6. EQUIPMENT INSTALLATION AND DEBUGGING

Before installing the machine, read the manual carefully, make clear the structure of the machine, check whether the machine is damaged in the process of transportation and loading and unloading, and whether the accessories are complete, and then follow the following steps:

6.1. The equipment shall be installed in an indoor environment free from dust and other pollution and with sufficient illumination (the illumination shall not be less than 100 lx).

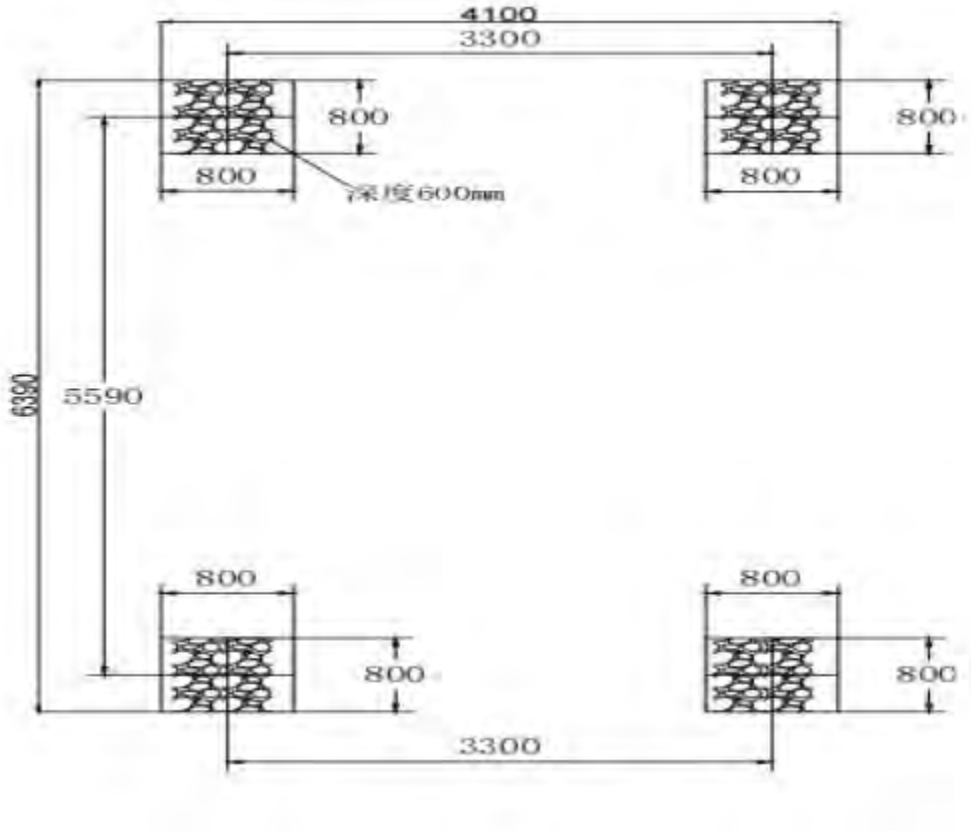
6.2 Choose the installation site and location of the equipment according to the provisions of the manual, and do the concrete casting of the equipment according to the provisions, and carry out the health preservation for a week.

6.3 Lay out the line according to the position of the equipment foundation, determine the exact position of the installation column, and put the column next to the exact position to be installed. The column with pump station is no. 1, and the rest.
The columns are arranged according to the position of no. 2, 3 and 4 (see picture 4).

6.4. Unpack the beam and place it in the area to be installed. Place a beam assembly in the direction of "1" and "2" columns. Also place a beam assembly in the direction of "3" and "4" columns.

6.5. Place the work table, and place the main work table (with oil cylinder and groove wheel) between the "1" and "4" columns ;

The table (without cylinder and pulley block) is placed between "2" and "3" columns. Note: the main table should be placed with the bottom facing up for easy installation of wire rope.



6.6 Install steel cable

First make the cylinder piston rod extended to the longest position.

6.6.1 Installation of traction mechanism: place the roller of the traction mechanism in the middle of channel steel on both sides of the main table, and thread the piston rod into the center hole of the traction mechanism according to the direction marked on the material, and then fix the traction mechanism on the piston rod correctly and firmly with the piston rod's own nut (see picture 5).

6.6.2 Disassemble the packaging of the steel cable. There are two steel cables with a length of 19000mm. share the same steel cable;

share the same steel cable. Take out any steel cable and use it as "no. 1" steel cable

and "no. 3" steel cable. First, measure the length of the steel cable, turn back at the 7093mm of the steel cable to make a sleeve, add the attached steel cable splint, cover it on the hanging shaft on the right side of the pulling mechanism (stand on one end of the four groove wheel facing the direction of the oil cylinder), confirm the accurate position, tighten the splint screw, make the steel cable firmly cover on the hanging shaft of the pulling mechanism, do not fall off.

6.6.3 Determine the length of the steel cable as "1" steel cable.Draw the end of "1" rope into the groove of the "3" wheel, and draw the groove of the "6" wheel to the other end of the table (one end of the cylinder tail) after half a circle, and then straighten it to the right after 1/4 circle, and prepare to fix it in the "1" column (at this time, pull it to the "2" column, and then it will be the "1" column after the table is turned over).

6.6.4. Determine the short section of the steel cable as "3" cable.Lead the end of "3 " cable into the groove of "1" wheel. After 1/4 circle, straighten it to the left and prepare to fix it to "3" column (at this time, pull it to "4" column, which will be the direction of "3" column after the table is flipped).

6.6.5 Use the other steel cable as "2" cable and "4" cable. Measure the length of the rope, turn back at 5337mm to make a sleeve, add the attached wire cable splint, cover it on the hanging shaft on the left side of the pulling mechanism (stand at one end of the four groove wheel, facing the direction of the oil cylinder), confirm the correct position, tighten the splint screw, make the wire rope firmly cover the hanging shaft of the pulling mechanism, not fall off.

6.6.6 Determine the length of the steel cable as "2" cable. Introduce the end of "2" cable into the groove of "2" wheel, make half a circle and then pull it to the other end of the table (one end of the oil cylinder tail), introduce the groove of "5"wheel, make a quarter of a circle and then straighten it to the left, prepare to fix it on the "2" column (at this time, pull it to the "1" column, and then it will be in the direction of "2" column after the table is turned over).

6.6.7. Determine the short section of the steel cable as "4" cable. Introduce the end of "4" cable into the groove of "4" wheel, make a quarter of a circle and then straighten it to the right, prepare to fix it to "4" column (at this time, pull it to "3" column, which will be the direction of "4" column after the table is flipped).

6.6.8 Turn the table over, then the end of the four steel cables and the four columns

Column number corresponding (that is, "1" cable head to "1" column, "2" cable head to "2" column column, "3" cable head to "3" column, "4" cable head to "4" column).

6.6.9 Insert the ends of the four steel cables into the beam from the empty space inside the corresponding beam, and introduce the grooves of the corresponding steel wire wheel, and pull them out from the upper end of the beam end after 1/4 circle of the steel wire wheel, ready to be combined with the column.

6.6.10. Install the "steel cable limit pin" under the beam separately, so that the steel
A cable can only move in the groove of the wheel without slipping out of the groove.At the same time, the small steel wheel of the "broken rope safety lock" is attached to the outside of the wire rope, which can open the safety lock under the tension of the wire re rope.

6.6.11. Remove the four attached "steel cable lifting ring screws", one for each rope head. Put the end of the steel cable into the round hole of the lifting ring screw, and turn back at 180mm from the ring hole of the lifting ring screw at the end of the wire rope. Use the attached "wire rope clip" (buckle) to tighten the folded and combined rope head at 50mm from the lifting ring. Set another wire rope clip 100mm apart, and tighten the screw to the limit.

6.7 Installing the Workbench

Put the upper connecting plate on both ends of the main workbench & offside workbench on the plane of the beam, make the "mesa connecting plate" on both sides of the main and sub-workbench align with the M14 connecting screw holes inside the beam respectively, and use the attached M14 bolts to firmly connect the workbench with the beam. Adjust the integral position of good workbench and beam at the same time, make the two ends of beam aim at the position that 4 column place want to install.

6.8 Column mounting

6.8.1. First, use square wood to pad up the beam together with the lower part of the main workbench and offside workbench (about 40 ~ 50mm from the ground).

6.8.2. Place the columns at their respective installation positions, so that the end of the beam into the opening of the front of the column (for example, the safety lock A hanging plate has been placed in the middle of the column during packaging and transportation. Take out the hanging plate first, and install the hanging plate after the column is in place). And make the nylon sliders at the end of the beam close to the inner wall of the front side of the column.

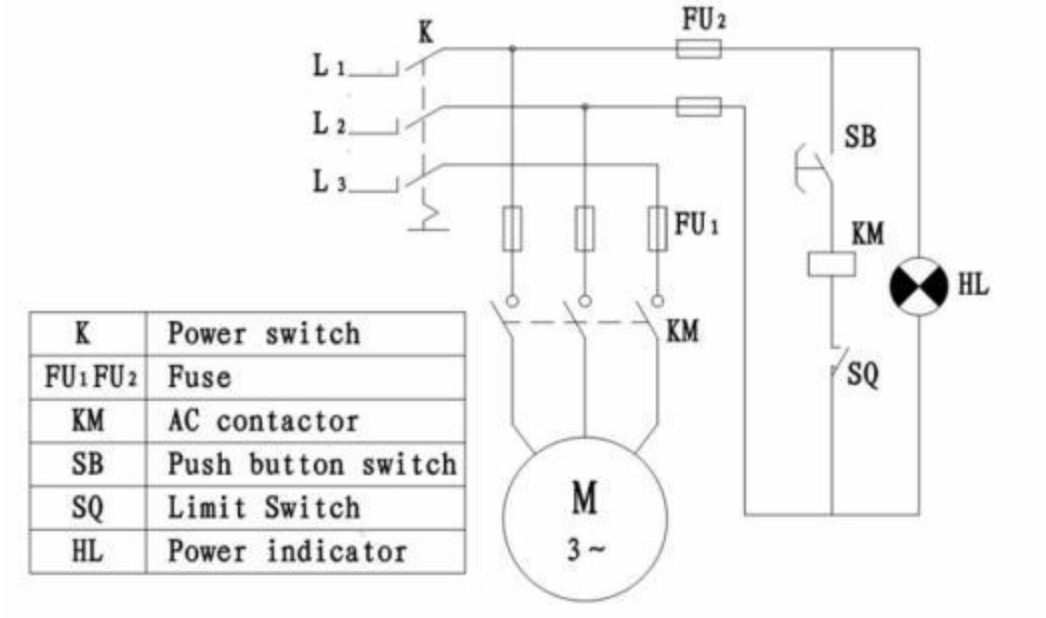
6.8.3. Insert the safety latch plate into the long hole at the top of the column. He ends of the beam directly, passing through the position of the safety lock in the connector plate, and fall to the bottom of the column, so that the hole above the hanging plate corresponds to the moving position of the safety lock tongue.

6.8.4. After the position is adjusted, fasten the lower part of the hanging plate to the fixing seat of the column bottom plate with the attached M8 screw,and adjust the hanging plate screw on the top of the column to straighten the hanging plate,The purpose for which the safety lock can function normally when the beam takes off and lands.

6.8.5. After the column is in place, the hoisting ring screw of the wire rope can be passed through the 35 holes on the top of the column and fixed with a nut on the top. (note: the top side by side with two 35 round holes, screw should choose and wire rope groove wheel groove in a corresponding hole).

6.8.6. The initial adjustment makes the tightness of four wire ropes basically consistent.

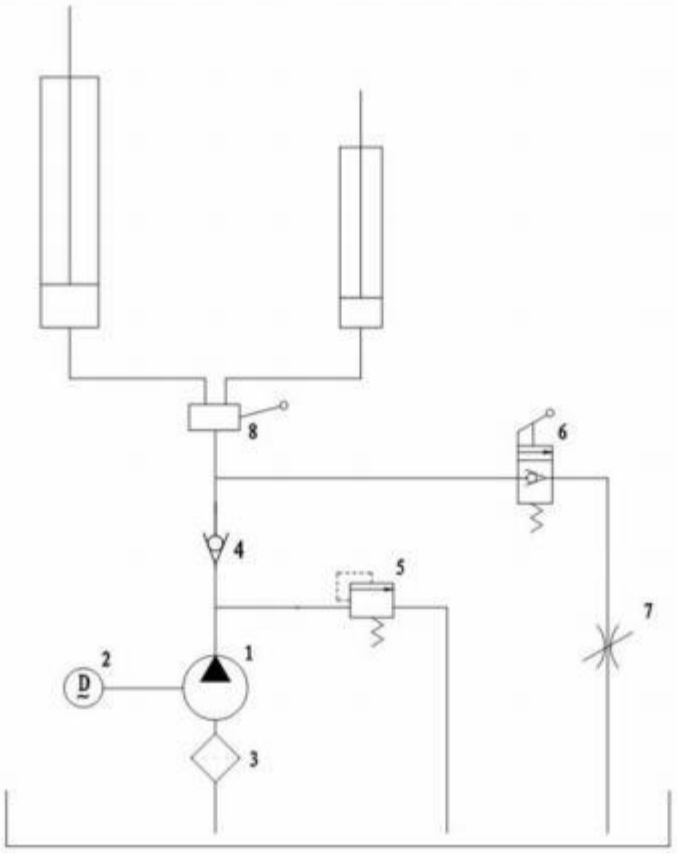
6.9.Connection circuit: connect the equipment circuit well according to figure 6 in the manual, connect the power cord well, and do the safe grounding to ensure the smooth, safe and reliable circuit.



K	Power switch
FU1 FU2	Fuse
KM	AC contactor
SB	Push button switch
SQ	Limit Switch
HL	Power indicator

Figure 6 Schematic diagram of electrical system

6.10. Oil connection: connect according to the hydraulic system schematic diagram in FIG. 7 of the instruction manual. Please check whether the high pressure oil pipe mouth is clean and free of foreign matter before connecting. If any foreign matter is found, it must be blown clean with compressed air or cleaned with diesel oil.



1. Gear pump 2. Motor 3. Filter 4. Check Valve 5. Relief Valve
6. Unloading Valve 7. Throttle Valve 8. Manual reversing valve

Figure 7 Schematic diagram of hydraulic system

6.11 Install gas path: as the device is unlocked by air circuit, the air connection must be unblocked and the pressure is stable at 6Kg/c ㎡. Before connecting the air passage, it is necessary to check that there is no foreign matter in the trachea. Before connecting the gas passage.

6.12. After the connection of electric circuit, oil circuit and air circuit, the tubing clip and air pipe clip shall be attached to properly fix the tubing and air pipe, so as not to fall off and affect the normal use.

6.13 Add 18 L L-HM32 anti wear hydraulic oil into the oil tank of the pump station. The highest oil level is about 10mm above the oil tank, and the lowest is 30mm above the oil tank (check with the gauge on the oil-filled air hood above the oil tank).

6.14. Equipment debugging: power debugging can be carried out after reconfirming.

The correctness of the above installation parts (including wire rope, circuit, oil circuit, air circuit, etc.)

6.14.1. Press the "up" button to make the table rise under the action of oil pressure. On the way up, listen for the clatter of the four safety locks and remember which one rings first and which rings later.

6.14.2. When the workbench rises to 1 meter high or so, stop to test whether the dist The distance between the plane on the beam and the column bottom plate is consistent. If any inconsistency is found, it can be achieved by adjusting the tightness of the lifting ring screw on the top of the column.

6.14.3 Press the "down" button to lower the workbench and observe whether the four corners are synchronized when the platform is falling. If not, stop

Immediately and check whether the safety lock at the backward end of the fall is opened. If it is not opened, it can be solved by adjusting the pull rod screw and cylinder piston rod end screw.

6.14.4 After adjustment, carry out "rise" and "fall" test again until the rise and fall is smooth and free.

6.14.5. The issue of the four safety locks being out of sync can be resolved by making adjustments.sting the height of the safety bars. Strike the part where the sound is fast, and raise tow parts, can also be adjusted by the top of the column hanging plate screw, hanging plate drop a little to solve. It is advisable to adjust in this way so that the time difference.

The recurrence of the knock sound of four lock plates is no more than 0.5 seconds (basically synchronous).

6.14.6. After repeatedly "rising" and "falling" operate freely, raise the working table to the specified height (1700mm), and adjust the travel switch to the limit height. t accordingly.

Additional expansion bolts may be used to secure the column to the concrete foundation.

6.15 Load trial test

6.15.1. The lubrication points of each part are injected with grease; Check whether the limit switch is sensitive; Whether oil leak. After all the above items are normal, the load test can be carried out for 2-3 times without any abnormal conditions. Add the rated load and run it for 2-3 times without abnormal noise and leakage, and the lifting height and lifting time are in line with the technical parameters, and the test load ends.

6.15.2. After the load test, the wire rope may be slightly elongated. After unloading the table again after leveling, the machine can be put into normal use.

7. SAFETY MECHANISM

7.1 The safety locking plate is hung on the column. The safety locking mechanism and pneumatic unlocking mechanism are installed in the beam. When the working.The platform rises, the locking mechanism rises accordingly. When the platform reaches the required height, you can press the lock/unlock button on the control panel, make through pneumatic actuators or lock the lock tongue in a square hole hangs, Then workbench down a little, that hangs Taiwan under the weight of the whole workbench and car, the workbench safely to stay for a long time at the height, in all kinds of maintenance operations. When the table needs to drop, just press the "lock/unlock" button on the control panel, then the table will automatically rise a little, and then the pneumatic device to execute the operation instructions, the lock tongue in the action of the connecting rod from the hanging plate, the table will drop under the self-weight. When the table descends to the required height, press the "lock/unlock" button again and insert the lock core into the square hole on the hanging plate to ensure safety.

7.2 Steel cable fracture protection (see picture)

Rope safety lock "2" ground in beams, lock plate attached roller abuts on the steel cable "1", while working roller movement up and down on the tension of steel cable, the rope insurance tip of the lock plate and hangs Taiwan to maintain a certain gap, when once the steel wire rope fractures, roller lost, broken rope safety lock plate under the spring tension, rapid reverse rotation insert insurance lock plate, point ed hangs Taiwan "3" square hole, can effectively avoid the workbench's fall.

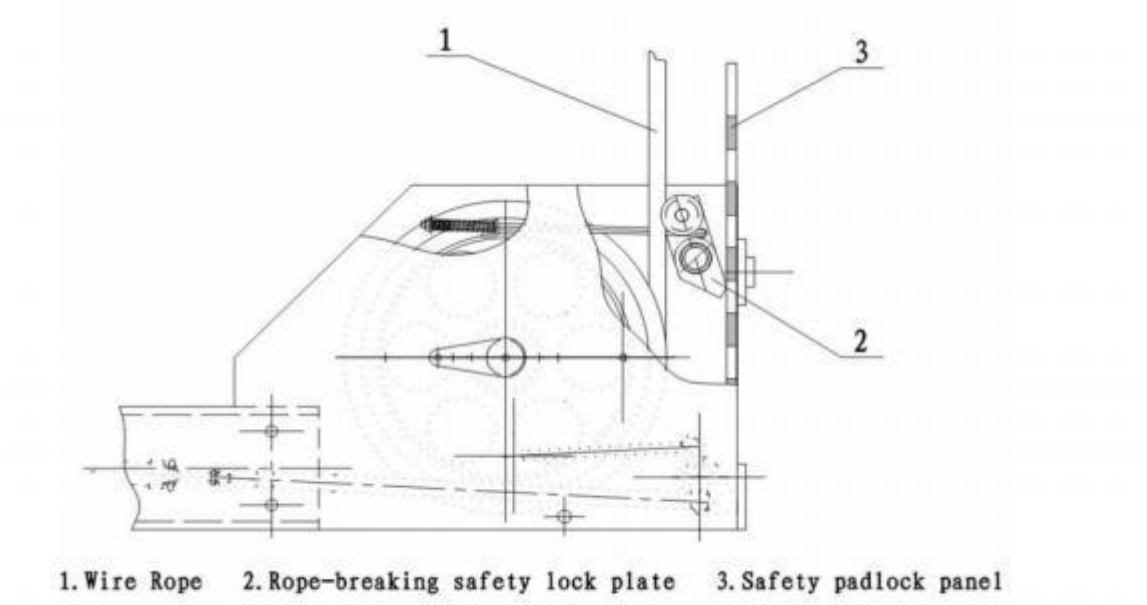


Figure 5

8. Lift hydraulic system

The hydraulic system of lifting machine is divided into single hydraulic system and double hydraulic system according to the selection of users. When installing and using the lift machine for the first time, attention should be paid to the rotation direction of the motor when wiring (see the fan blade of the motor is counterclockwise). If the motor rotates in the wrong direction for too long, the gear pump may be damaged.

8.1 The hydraulic pump station of the lifting machine is hung on the column. See figure X for the links of motor, integrated block, valve and oil cylinder. Hydraulic system The schematic diagram is shown in figure X. Adjust the "overflow valve" to change the system pressure (which has been adjusted in the factory) to change the lifting capacity (but not the rated oil pressure of 18MPa). By turning the handle of the "three-way ball valve" (90°), the system can connect with the main engine oil cylinder and trolley oil cylinder respectively.

9. Operating instructions for car lifting

According to the different functions, now the big car (the whole lifting platform) is an d small car (the second lifting) are explained respectively.

9.1 Operation instructions for hydraulic system of large truck

First, according to the direction of the car shown in the figure into the car, and the car's manual pull, pad good anti-skid triangle wood and other anti-skid devices (self-provided by the user). Turn on the "power switch" and press the "up button". At this time, the motor M will start running immediately and the main machine will rise immediately. Release the "up button" motor to stop running, and the machine immediately stops rising. When the lifting height is reached, as long as you release the "rise button" and press the "lock button", the lock tongue of the safety lock enters the square hole of the hanging plate,

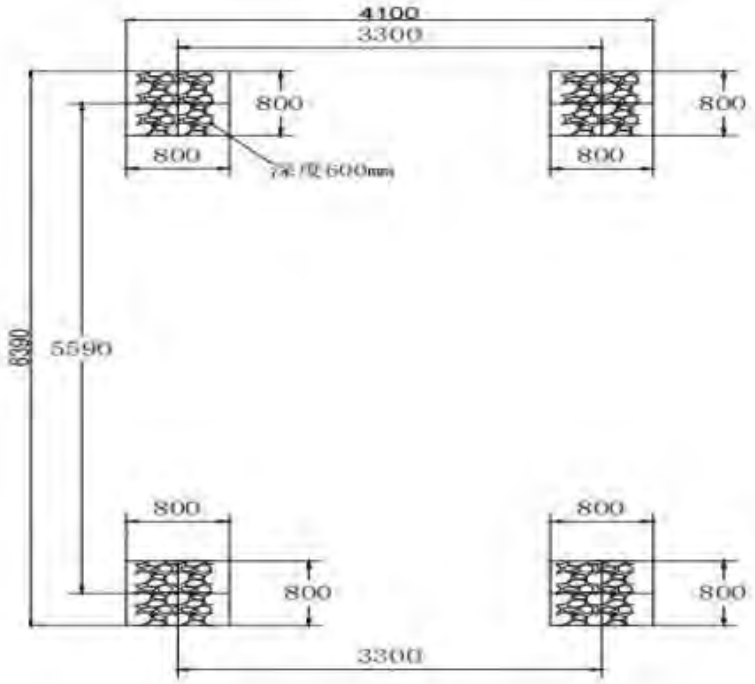
the lifting platform is locked at the required height, and the maintenance personnel can enter the bottom of the car for maintenance.

9.2. When the workbench needs to descend, the "unlock button" must be pressed first and then the "descend button" should be pressed to lift the platform up slightly. The pneumatic unlocking device will pull the lock tongue out of the square hole of the hanging plate. At the same time, the oil return valve will be opened to lower the platform.

9.3 When it is necessary to lift the car, just rotate the handle of the three-way ball valve 90 and press the "up button", the car will rise. When the car rises to the required height and maintenance personnel need to enter the work area, the car's safety lock plate must be raised and stuck on the safety fulcrum (manual).

9.4. When the car needs to drop, just press the "drop button", the pump station starts to move, lift the car first a little, the operator quickly opens the safety lock support, the car will slowly drop.

9.5 When the trolley is finished, the handle of three
way ball valve must be turned back to the original position.



10. Care and maintenance

10.1. first time use or Don't use it for a long time (more than one month), L HM32 anti wear hydraulic oil should be added before normal operation, and maintain the oil level.

10.2. The operator should check the visible and fixed parts of the steel cable regularly. If any of the following conditions is found, the steel cables should be scrapped and replaced in time.

10.2.1 When the whole steel cable breaks.

10.2.2. In the range of 80mm length, external broken wires exceed 9 or 350mm length exceeds 20.

10.2.3. Due to wear , the outside diameter reduction is in excess of 15%.

10.2.4 When broken wires gather in the same strand or are concentrated in a very short range.

10.3. The length of wire rope should be adjusted periodically or irregularly.
according to its situation. When the working table is in the lowest position, all four wire ropes are pulled tight.

10.4 The four safety locks shall always be synchronously entered into the square

hole of the lock plate, and shall be adjusted in time to ensure the safe operation of the machine.

10.5 The oil filter in the oil tank should be cleaned every three months, the hydraulic oil should be replaced after the first use of three months, and the hydraulic oil should be replaced every half a year. The oil tank and the oil filter should be cleaned with gasoline when the oil is changed.

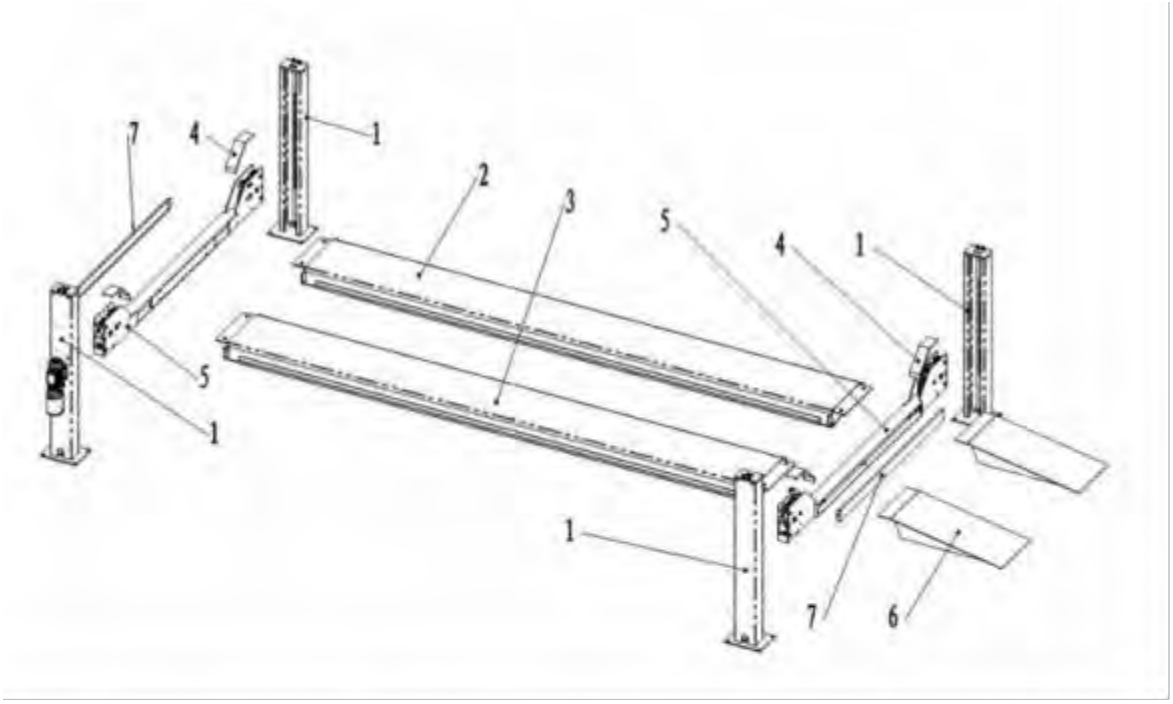
10.6 If the local voltage fluctuation value exceeds 10%, a voltage regulator should be installed.

11. NOISE STATEMENT

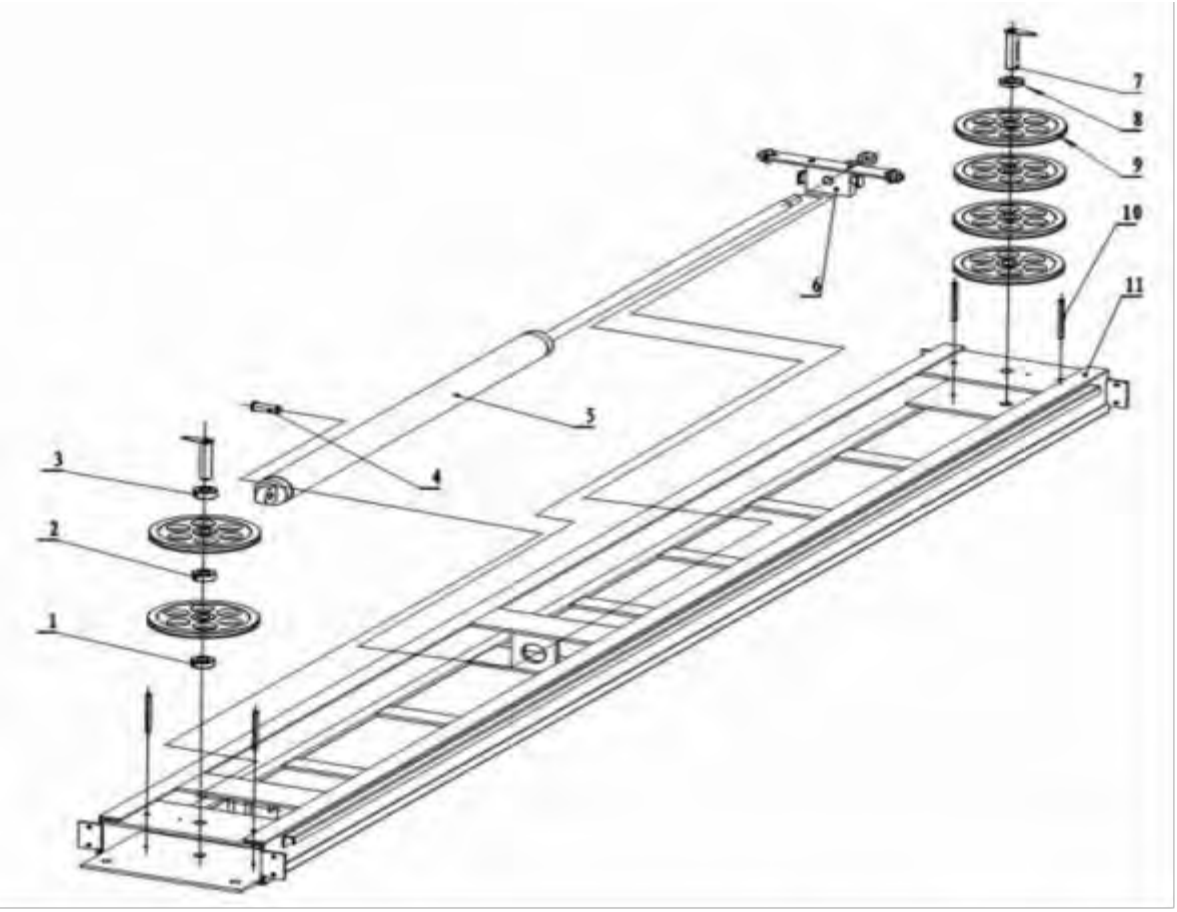
The working noise of the lift is less than 80dB (A).

12. TROUBLE SHOOTING

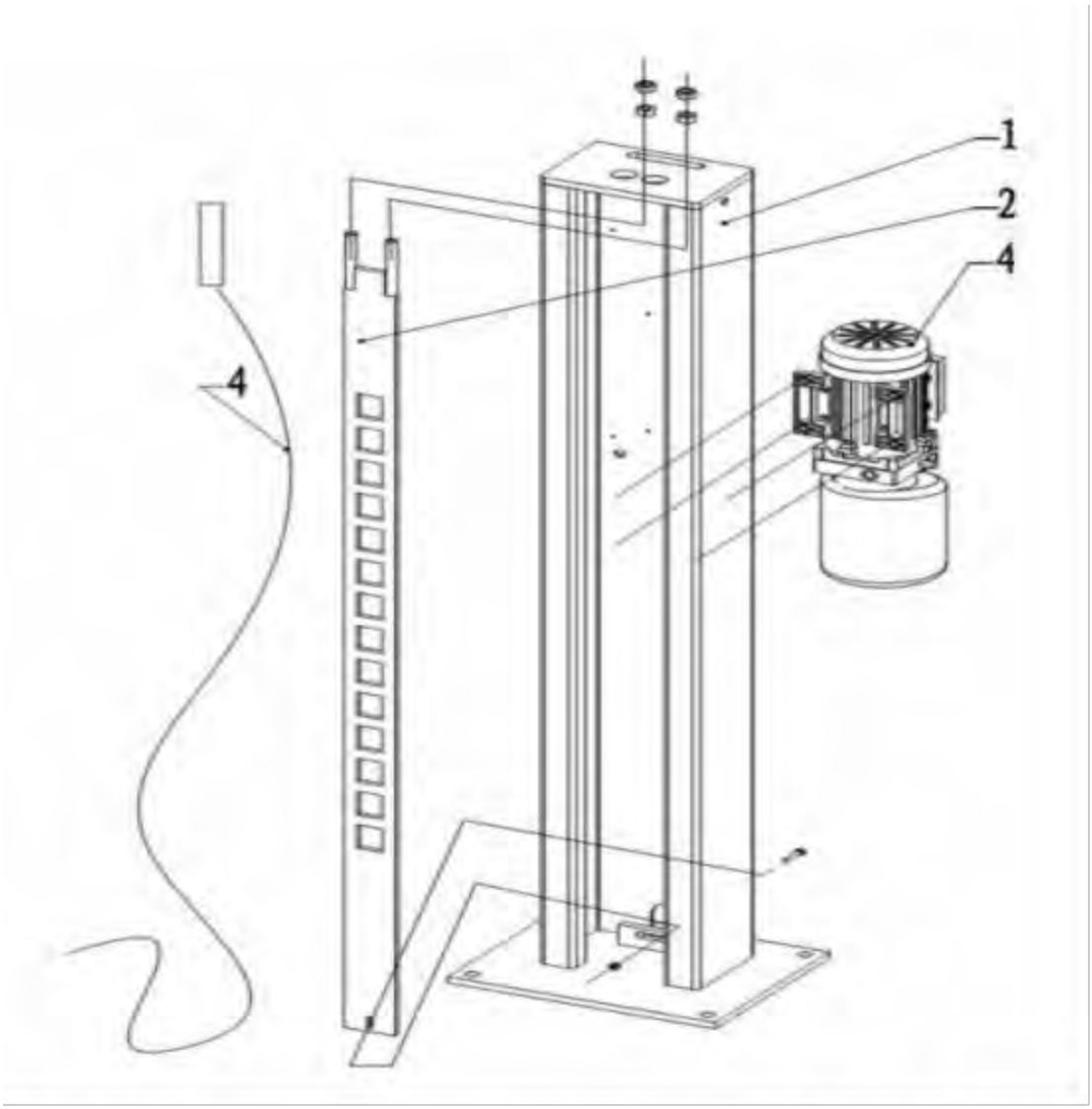
TROUBLES	CAUSE	SOLUTION
Press the up button and the motor won't turn	Power supply failure	Troubleshoot power supply problems, such as missing zero lines Look for electrical system faults, such as fuses, etc
Press the up button and the workbench will not rise	1. Motor reversal 2. The hydraulic system is leaking badly 3. Safety valve failure 4.Severe wear on oil pump and insufficient output pressure 5.Cylinder seal is damaged	1. Replace the phase sequence of the power supply 2. Locate and rule out leaks 3.Repair or replace 4.replace 5.Replace seals
Press the down button and the workbench will not drop	1. The safety lock is not open 2. Electrical system failure 3. Too little clearance between column and beam	1. Adjust the lock core pull rod to make the handle,When pressing down, the lock core is detached from the hanging plate 2. Find the cause and rule it out 3.Adjust the clearance between the beam and the column
The hydraulic system is too noisy	1.The oil filter is blocked 2.Oil level is too low 3.Poor sealing of suction pipe	1.Clean or replace 2.Added refueling 3.Find and solve



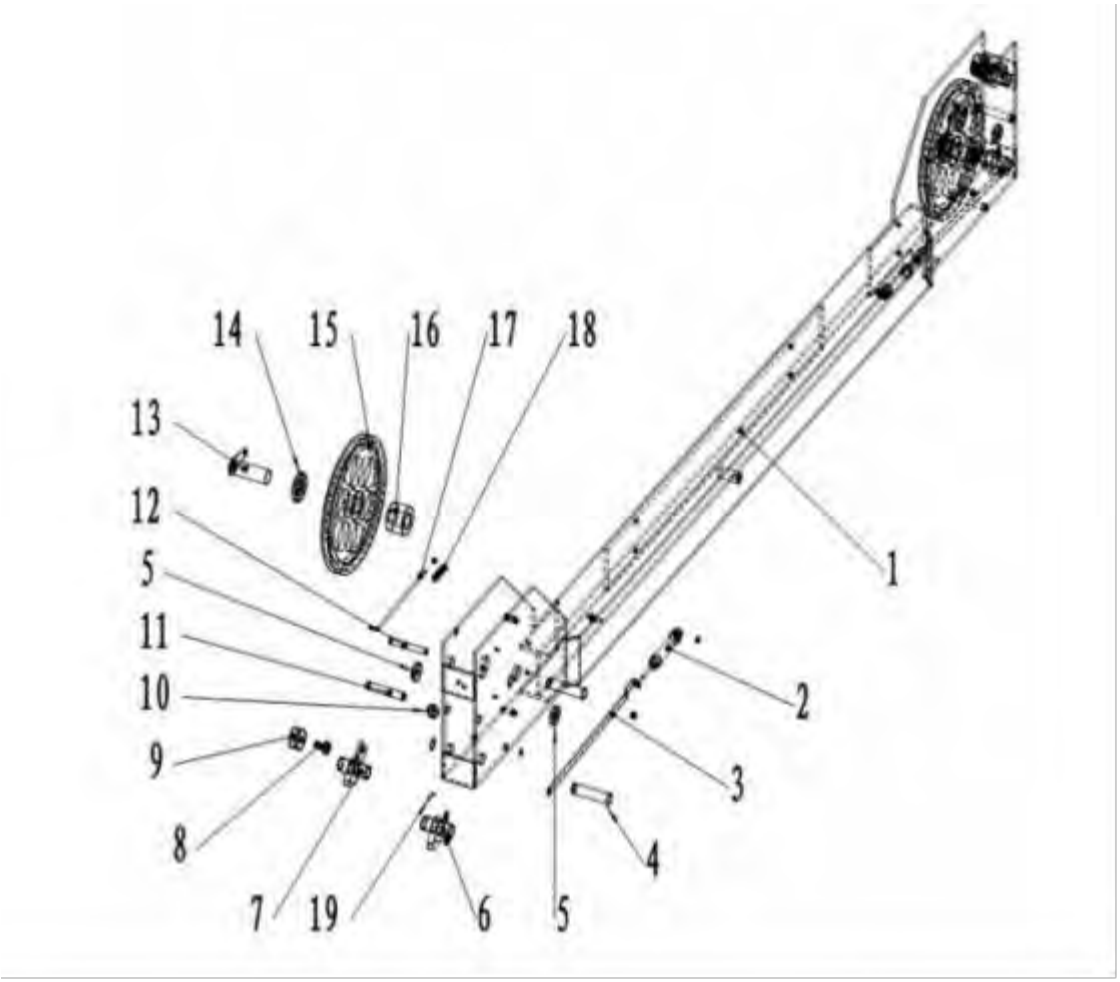
No.	Type	Name	Amount	Material	Remark
1	S12-01-00	Column assy Weld	4		
2	S12-02-00	Locating board assy	1		
3	S12-04-00	Locating layboard assy	1		
4	S12-03-17	Cover plate	4	Q235A	
5	S12-03-00-00	beam assy	2		
6	S12-05-00	Slope-plate	2	Q235A	
7	S12-03-18	Cover plate	2	Q235A	
8					
9					
10					



No.	Type	Name	Amount	Material	Remark
1	S12-02-20	SPACER sleeve	1	Q235A	
2	S12-02-19	SPACER sleeve	1	Q235A	
3	S12-02-18	SPACER sleeve	1	Q235A	
4	S12-02-23	Cylinder shaft	1	45	
5		Oil Cylinder	1		
6	S12-02-09-01	Wire Rope drawbar	1	ZG450	
7	S12-02-17-00	Wire wheel axle	2	45	
8	S12-02-21	SPACER sleeve	1	Q235A	
9	S12-02-15	pulley	6	Q235A	
10	S12-02-24	Limit Screw	4	45	
11	S12-02-01-00	Welding of main workbench	1		
12					
13					
14					



No.	Type	Name	Amount	Material	Remark
1	S12-01-01	Column Weld	4	Q235A	
2	S12-01-04-00	Lock plate assy weld	4	Q235A	
3		Pump station assy	1		
4		Wire Rope Assembly	4		
5					
6					
7					
8					
9					
10					



No.	Type	Name	Amount	Material	Remark
1	S12-03-01-00	Beam welding	2		
2		Air Cylinder	2		
3	S12-03-12	Safety Lock Lever	2	Q235A	
4	S12-03-07	Safety Shaft	2	45	
5	S12-03-15	Nylon slider	4		
6	S12-03-06	Safety Plate	2	ZG260	
7	S12-03-08	Rope-breaking safety plate	2	ZG260	
8	S12-03-10	Safety wire axle	2	45	
9	S12-03-09	Rope-breaking safety wire wheel	2	Q235A	
10	S12-03-16	Nylon slider	2	45	
11	S12-03-17	Control Shaft	2	45	
12	S12-03-05	Wire Rope Stop Pin	2	45	
13	S12-03-02-00	Wire wheel axle	2	45	
14	S12-02-21-12.5	Wire Wheel Bush	2	Q235A	
15	S12-02-15	pulley	2	Q235A	
16	S12-02-21-57	Wire Wheel Bush	2	Q235A	
17	S12-03-13	Safety Spring Lever	2	Q235A	
18	S12-03-14	Safety Spring	2	65Mn	
19	S12-03-11	Safety Spring	2	65Mn	

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