

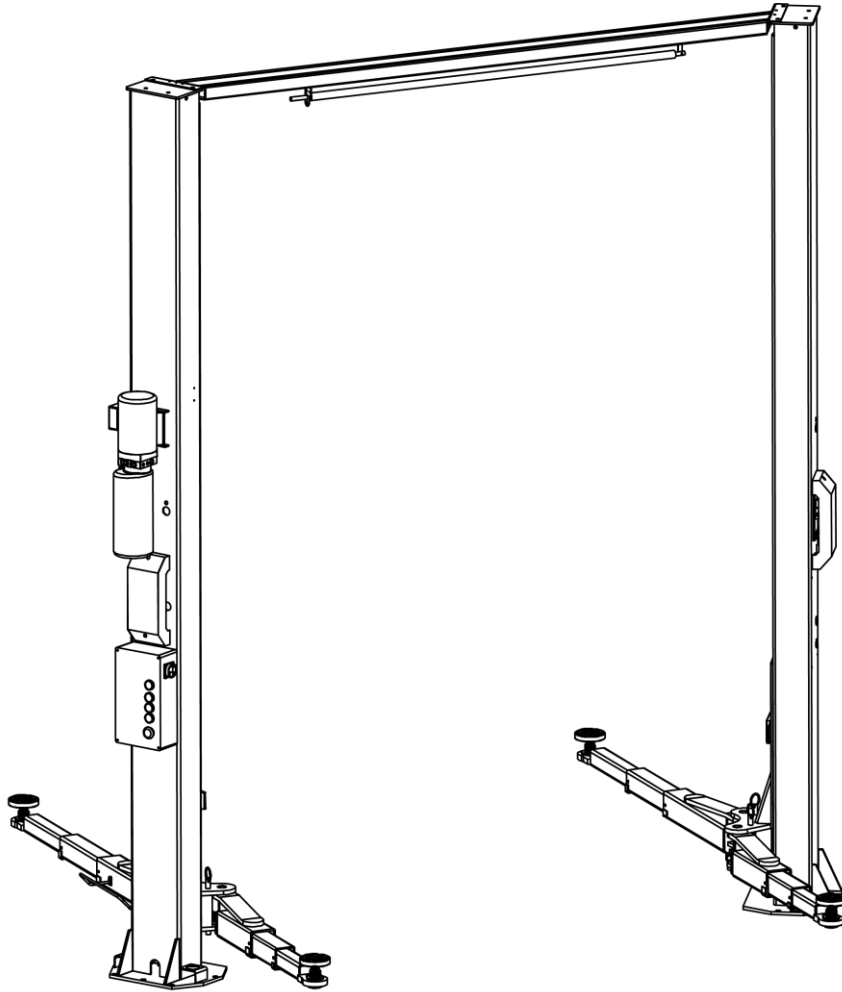
Model No. EE-6214EKZ

Two Post Lift,
Electrical Release
Lifting Capacity 4000KG

**Installation, Operation
and Parts Manual**



EAE



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Please read this entire manual carefully and completely before installation or operation of the lift.

DATE: 27/06/2017

www.eae-ae.com

IMPORTANT NOTES

Before start up, connecting and operating EAE products, it is absolutely essential that the operating instructions/owner's manual and, in particular the safety instructions are studied carefully. By doing so you can eliminate any uncertainties in handling EAE products and thus associated safety risks up front; something which is in the interest of you own safety and will ultimately help avoid damage to the device, When an EAE product is handed over to another person, not only the operating instructions but also the safety instructions and information on its designated use must be handed over to the person.

By using the product you agree the following conditions:

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The use of non-approved hardware will result in a modification of our products and thus to the exclusion of any liability or warranty, even if such hardware has been removed again in the interim.

It is not permissible to make any changes to our products and these are not only to be used together with genuine accessories and genuine replacement parts. Otherwise any warranty claims will be invalid.

Liability

The liability of EAE is limit to the amount that the customer has actually paid for this product. This exclusion of liability does not apply to damages caused through willful misconduct or gross negligence on the part of EAE.

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SAFETY NOTES

1.1 Operation of lifting platforms

This lift is specially designed for lifting motor vehicles. Users are not allowed to use it for any other purposes. The applicable national regulations, laws and directives must be observed.

Only users aged 18 or above who have been instructed on how to operate the lifting platform and have proven their ability to do so to the owner are to be entrusted with unsupervised operation of lifting platforms. The task of operating the lifting platforms must be granted in writing.

Before loading a vehicle onto the lift, users should study the original operation instructions and familiarize themselves with the operating procedures in several trial runs.

Lift vehicle within the rated load. Don't attempt to raise vehicles with excessive weight.

1.2 Checking of the lifting platforms

Checks are to be based on the following directives and regulations:

- Basic principles for testing lifting platforms
- The basic health and safety requirements stipulated in the directive 2006/42/EC
- Harmonized European standards
- The applicable accident prevention regulations

The checks are to be organized by the user of the lifting platform. The user is responsible for appointing an expert or qualified person to perform checking. It must be ensure that the person chosen satisfies the requirements.

The user bears special responsibility if employees of the company are appointed as experts or qualified persons.

1.2.1 Scope of checking

Regular checking essentially involves performing a visual inspection and a functional test. This includes checking the condition of the components and equipment, checking that the safety systems are complete and functioning properly and that the inspection log book is completely filled in. The scope of exceptional checking depends on the nature and extent of any structural modification or repair work.

1.2.2 Regular checking

After initial commissioning, lifting platforms are to be checked by a qualified person at intervals of not longer than one year.

A qualified person is somebody with the training and experience required to possess sufficient knowledge of lifting platforms and who is sufficiently familiar with the pertinent national regulations, accident prevention regulations and generally acknowledged rules of engineering to be able to assess the safe operating condition of lifting platforms.

1.2.3 Exceptional checking

Lifting platforms with a lift height of more than 2 meters and lifting platforms intended for use with people standing under the load bearing elements of the load are to be checked by an expert prior or reuse following structural modifications and major repairs to load bearing components.

An expert is somebody with the training and experience required to possess specialist knowledge of lifting platforms and who is

sufficiently familiar with the pertinent national work safety regulations, accident prevention regulations and generally acknowledged rules of engineering to be able to check and give an expert opinion on lifting platforms.

1.3 Important safety notices

1.3.1 Recommend for indoor use only, DO not expose the lift to rain, snow or excessive moisture.

1.3.2 Only use this lift on a surface that is stable and capable of sustaining the load. Do not install the lift on any asphalt surface.

1.3.3 Read and understand all safety warnings before operating the lift.

1.3.4 Do not leave the controls while the lift is still in motion.

1.3.5 Keep hands and feet away from any moving parts. Keep feet clear of the lift when lowering.

1.3.6 Only these properly trained personnel can operate the lift.

1.3.7 Do not wear unfit clothes such as large clothes with flounces, ties, etc., which could be caught by moving parts of the lift.

1.3.8 To prevent evitable incidents, surrounding areas of the lift must be tidy and with nothing unconcerned.

1.3.9 The lift is simply designed to lift the entire body of vehicles, with its maximum weight within the lifting capacity.

1.3.10 Always insure the safety locks are engaged before any attempt to work near or under the vehicle. Never remove safety related components from the lift. Do not use if safety related components are damaged or missing.

1.3.11 Do not rock the vehicle while on the lift or remove any heavy component from vehicle that may cause excessive weight shift.

1.3.12 Check at any time the parts of the lift to ensure the agility of moving parts and the performance of synchronization. Ensure regular maintenance and if anything abnormal occurs, stop using the lift immediately and contact our dealers for help.

1.3.13 Lower the lift to its lowest position and do remember to cut off the power source when service finishes.

1.3.14 Do not modify any parts of the lift without manufacturer's advice.

1.3.15 If the lift is going to be left unused for a long time, users are required to:

- a. Disconnect the power;
- b. Empty the oil tank;
- c. Lubricate the moving parts with hydraulic oil.

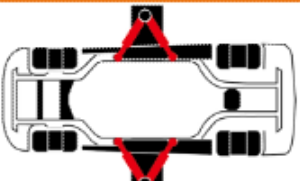
WARNING: The warnings, cautions and instructions discussed in this instruction manual cannot cover all possible conditions and situations that may occur. It must be understood by the operator that common sense and caution are factors which cannot be built into this product, but must be supplied by the operator.

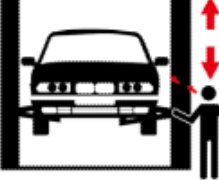



1.4 Warning labels

All safety warning labels are clearly depicted on the lift to ensure that the operator is aware of and avoid the dangers of using the lift in an incorrect manner. The labels must be kept clean and they have to be replaced if detached or damaged. Please read carefully the meaning of each label and memories them for future operation

SAFETY ADVICE

S40101441

| | |
|---|---|
|  | <p>Only trained personnel are allowed to operate the lift.</p> |
|  | <p>Always keep lift area clear when lowering or raising vehicle.</p> |
|  | <p>Do not try to raise a vehicle exceeds the rated capacity.</p> |
|  | <p>Always raise a vehicle with four swing arms.</p> |
|  | <p>Position and adjust pads to lifting points recommended by vehicle manufacturers.</p> |

| | |
|--|--|
|  | <p>Stop and check lift arm locks and stability of vehicle after short raising, then to desired height.</p> |
|  | <p>Watch closely the vehicle during raising or lowering.</p> |
|  | <p>Always use safety stands when moving/ installing heavy components.</p> |
|  | <p>Avoid excessive rocking of vehicle while on lift.</p> |
|  | <p>Do not climb onto the lift or raised vehicle during lifting or lowering.</p> |

1.5 Potential safety risks

1.5.1 Mains voltage



Insulation damage and other faults may result in accessible components being live

Safety measures:

- Only ever use the power cord provided or a tested power cord.
- Replace wires with damaged insulation.
- Do not open the operating unit.

1.5.2 Risk of injury, danger of crushing

In the event of excessive vehicle weight, incorrect mounting of the vehicle or on removing heavy object, there is a risk of the vehicle falling off or tipping up.

Safety measures:

- The lift is only ever to be employed for the intended purpose.
- Carefully study and heed all the information given in Section 1.4.
- Observe the warning notices for operation.

1.6 Noise level

Noise emitted during operating the lift should be less than 70dB. For your health consideration, it is suggested to place a noise detector in your working area.

PACKING, STORAGE AND TRANSPORTATION

Packing, lifting, handling, transporting operations must be performed only by experienced personnel with appropriate knowledge of the lift and after reading this manual.

2.1 Storage and transportation

The packs must be kept in a covered and protected area in a temperature range of -10°C to $+40^{\circ}\text{C}$. They must not be exposed to direct sunlight, rain or water.

Stacking the packs

We advise against stacking because the packs are not designed for this type of storage. The narrow base, heavy weight and large size of the packs make stacking difficult and potentially dangerous.

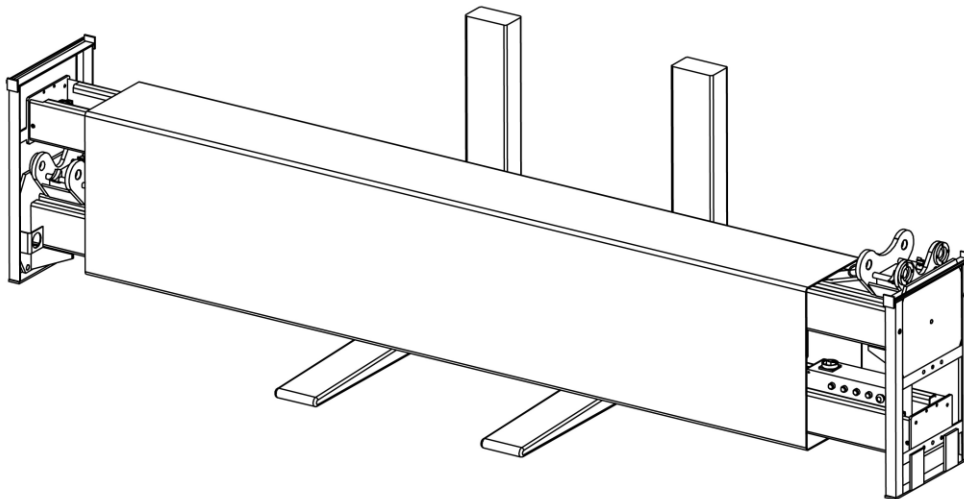
If stacking is unavoidable, use all appropriate precautions:

- never stack to more than 2 meters in height.
- never make stacks of single packs. Always stack pairs of packs in a cross pattern so that the base is bigger and the resulting stack is more stable. Once the stack is complete, restrain it using straps, ropes or other suitable methods.

A maximum of two packs can be stacked on lorries, in containers, and in railway wagons, on condition that the packs are strapped together and restrained to stop them falling.

2.2 Opening the packs

The packs can be lifted and transported only by using lift trucks. Never attempt to hoist or transport the unit using lifting slings.



When the lift is delivered make sure that it has not been damaged during transportation and that all the parts specified on the packing list are present.

Packs must be opened adopting all the precautions required to avoid injury to persons (keep at a safe distance when cutting the straps) or damage to parts of the machine (be careful that no parts are dropped while you are opening the packing)

Take special care with the hydraulic power unit, the control panel and the cylinder.

PRODUCTS DESCRIPTIONS

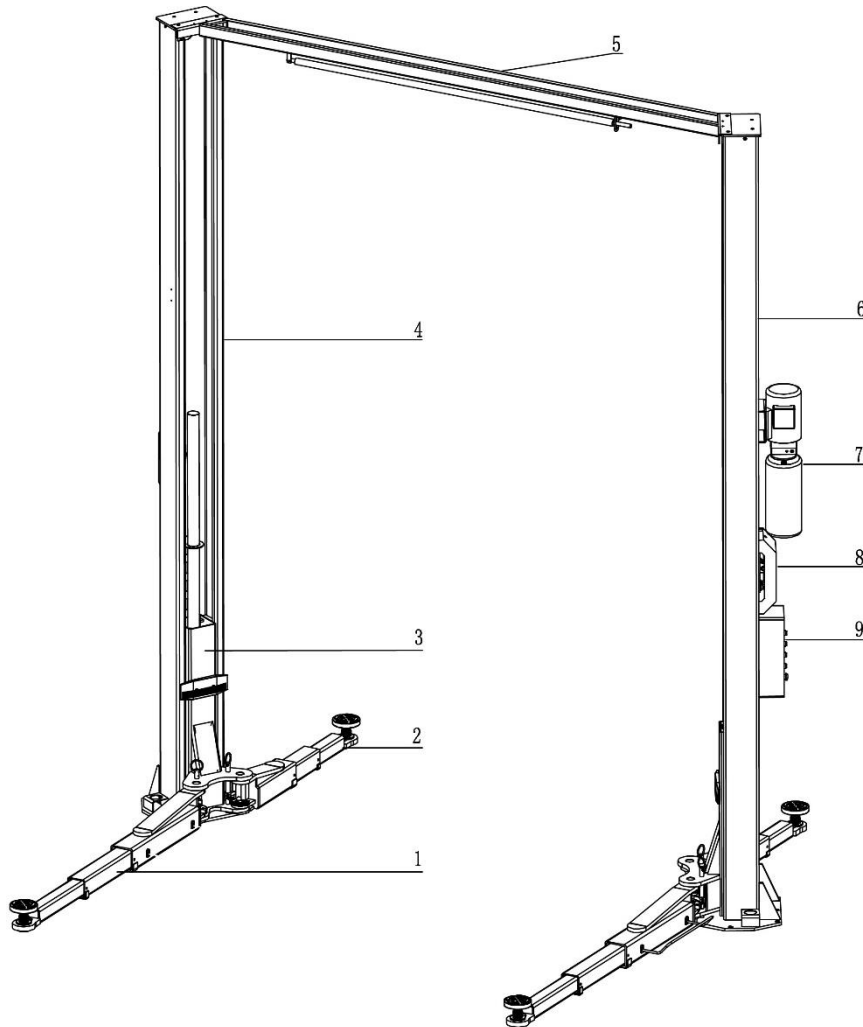
3.1 General descriptions

This lift is composed of posts, carriages, lifting arms, cylinders and power unit.

The lift is drove by an electro- hydraulic system. The gear pump delivers hydraulic oil to oil cylinders and pushes upwards its piston.

The piston drives to raise the carriage and the lifting arms. During lifting process, the safety lock will automatically and firmly bite with the safety teeth block in the posts. Therefore, no sudden dropping-down will happen in case the hydraulic system breaks down.

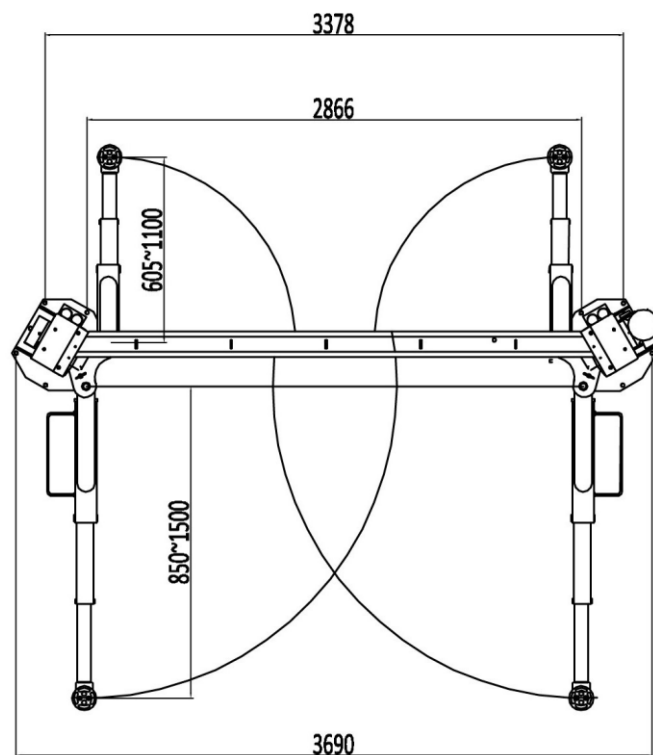
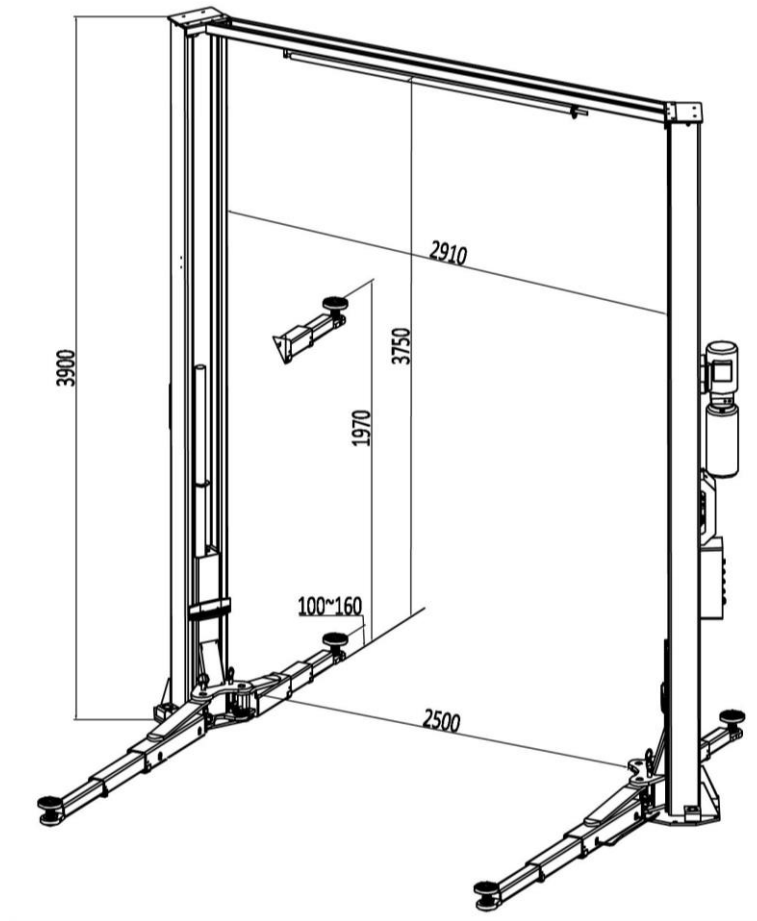
3.2 Construction of the lift



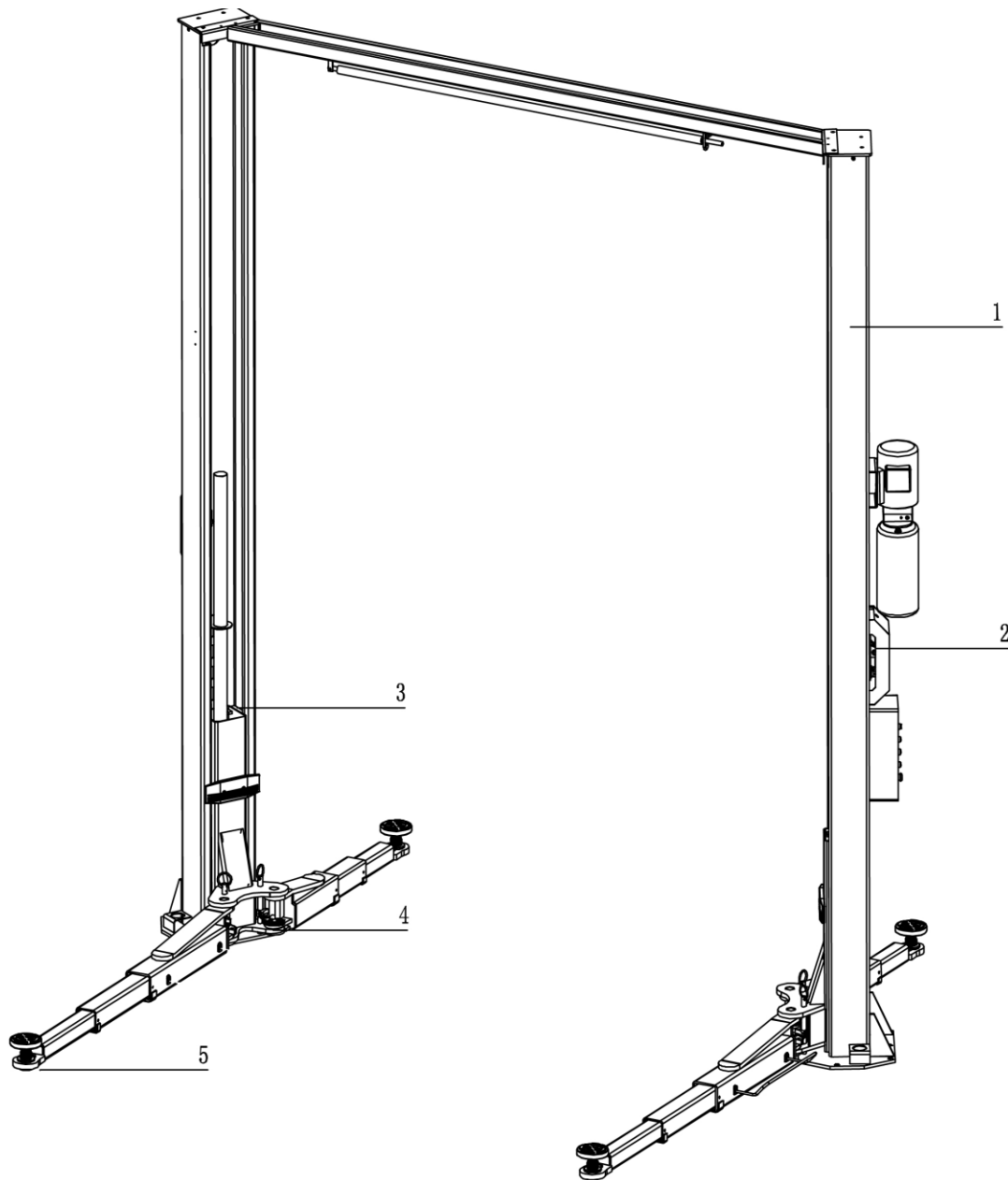
1. Three stage long arm
2. Three stage short arm
3. Carriage
4. The secondary post
5. Overhead crossbeam
6. Main post
7. Power unit
8. Locking device
9. Operation unit

3.3 Technical data

| Model | Lifting capacity | Full rise time | Release type | Full rise |
|------------|------------------|----------------|--------------|-----------|
| EE-6214EKZ | 4000kg | 50 Sec | Electrical | 1970mm |

3.4 Dimensions


3.5 Safety devices descriptions



| POS. | Name | Function |
|------|-------------------------|--|
| 1 | Max height limit switch | Stop rising at max height |
| 2 | Mechanical lock | Catch the carriages in case of hydraulic failure |
| 3 | Steel ropes | Ensure the synchronization for both carriages |
| 4 | Arm lock | Ensure the lifting arms are locked and avoid being swinging during lifting process |
| 5 | Rubber lifting pad | Rubber protects the wheel base from being damaged |

INSTALLATION INSTRUCTIONS

4.1 Preparations before installation

4.1.1 Space requirements.

Refer to 3.4 for the dimensions of the lift. There must also be a clearance of at least 1 meter between the lifting platform and fixed elements (e.g. wall) in all lifting positions. There must be sufficient space for driving vehicles on and off.

4.1.2 Foundations and connections

The user must have the following work performed before erecting the lift.

- Construction of the foundation following consultation with the manufacturer's customer service or an authorized service agent. Routing of the wiring to the installation location. The user must provide fuse protection for the connection.
- **Attention: electrical system connection must be done by licensed technicians. Requirements for power supply cable of the installation site: at least 2.5mm² wire core for 3Ph power and 4.0mm² wire core for 1Ph power.**
- Refer also to the corresponding information in the operation instructions.

4.1.3 Foundations preparations (see Annex 1, floor plan)

- C20/25 concrete base with strength more than 3000psi, tolerance of flatness less than 5mm and minimum thickness of 200mm. In addition, newly built concrete ground must be older than 20days. If not specially noted, this lift is for indoor use only.

4.1.4 Tools and equipment needed for installation

| Tool name | Specification | Quantity needed |
|---------------------------------------|-----------------------------|-----------------|
| Electrical drill | With D16 and D18 drill bit. | 1 |
| Open spanner | D17-19mm | 2 |
| Adjustable spanner | bigger than D30mm | 1 |
| Cross socket screw driver | PH2 | 1 |
| Quick spanner handle adapter/ Ratchet | REB-310 | 1 |
| Socket spanner | D24mm | 1 |
| Levelling device | 1mm accuracy | 1 |
| Hammer | 10 pounds | 1 |
| Truck lift | Capacity more than1000KG | 1 |
| Lifting string | Capacity, 1000KG | 2 |
| Torque spanner | MD400 | 1 |

4.2 Installation attentions

4.2.1 Joints of oil hose and wiring must be firmly connected in order to avoid leakage of oil hose and looseness of electrical wires.

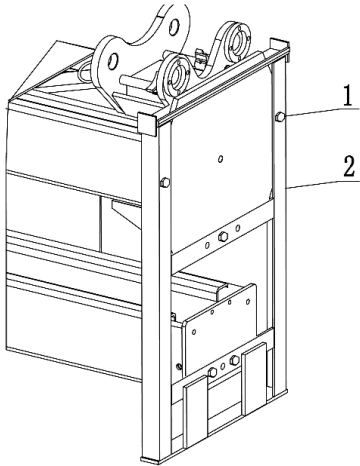
4.2.2 All bolts should be firmly screwed up.

4.2.3 Do not place any vehicle on the lift in the case of trial running.

4.3 General Installation Steps

Step 1: Remove the packaging, take out the carton for accessories and cover plate.

Step 2: Firstly, put something supporting between the two posts or suspend one of the posts by a crane and then remove the bolts on the package.



1.Hex bolt 2.Iron rack

Attention : Please pay special attention not to let the post fall down for it may cause casualty or bring damages to the accessories fixed in the post.

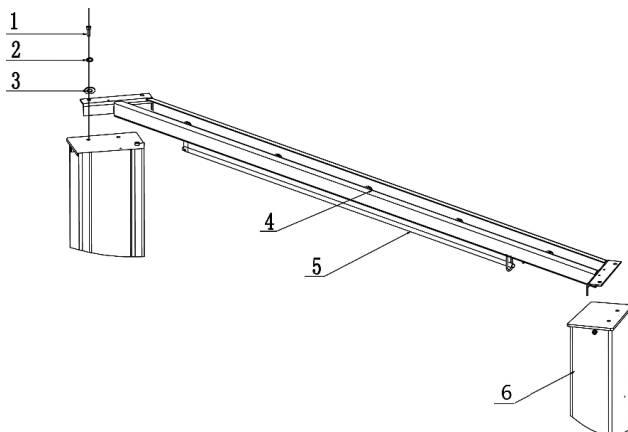
Step 3: When the first post has been taken away, place something supporter under the second post and then remove the bolts on the package.

Step 4: Fix the standing position for the two posts. (See Annex 1, floor plan)

1. Unfold the package and decide on which post the power unit will be mounted.
2. Draw an outline of the base plate on the ground with chalk and ascertain the position for the post.

Step 5: Connect crossbeam.

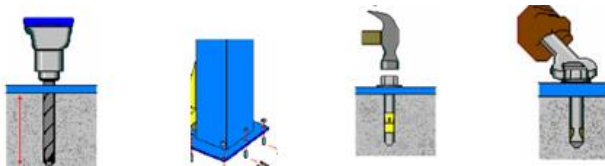
Make the posts face to each other and the distance between the posts equals to the length of the overhead crossbeam. Fix the beam to the posts by screw M12×20.



1.Hex socket cylinder head screw M12*20
 2.Spring washing M12
 3.Flat washer M12
 4.Overhead crossbeam
 5.Vehicle roof protection rod
 6.Post

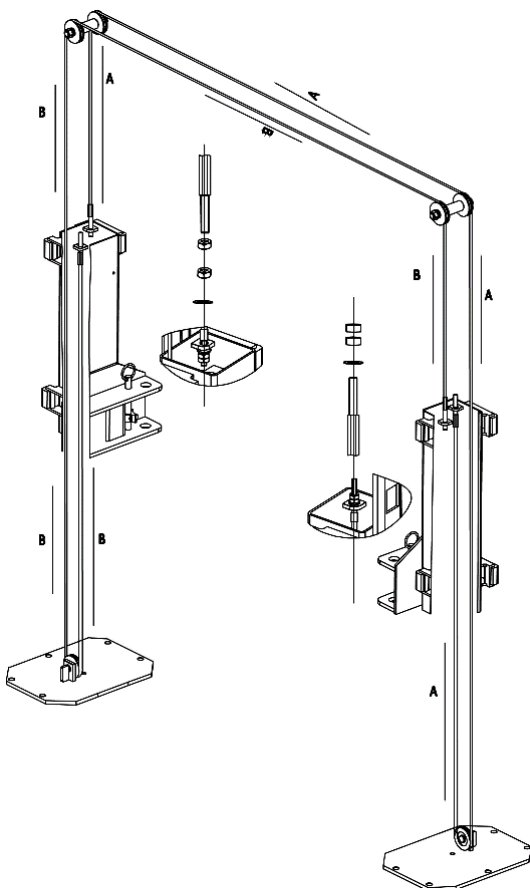
Step 6: Erect and secure the post.

1. Use suitable means to raise the lifting carriage to the first latching position. All the mounting holes in the base plate are then accessible. Make sure the locking pawl is engaged.
2. Check the position of the base plates again.
3. Drill the mounting holes. Remove the drilling dust from the hole.
4. Use a spirit level to check the vertical alignment of the lifting posts. If necessary, place equalizing plates under the base plates. The equalizing plates must be of the same length as the side of the base plate resting on them. Otherwise the load of the base plate will not be transferred evenly to the foundation.
5. Erect and secure the other post similarly.



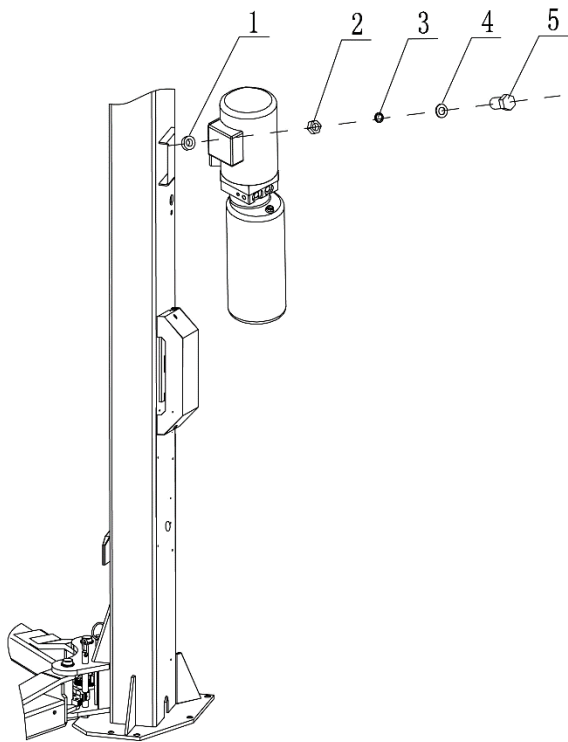
Step 7: Connect the synchronization steel ropes.

1. Route and fix according to the following diagram of steel rope connection.
2. Raise both carriages to the first locking point.
3. Make sure that the mechanical safety locks in each post are fully engaged before attempting to route ropes.
4. After being fixed, adjust and make the ropes at both sides be with the same tightness which could be judged by the sound emitted during lifting process. Make judge and adjustment after trial running.
5. Grease after being fixed. (It is a must.)



Step 8: Connect oil hoses.

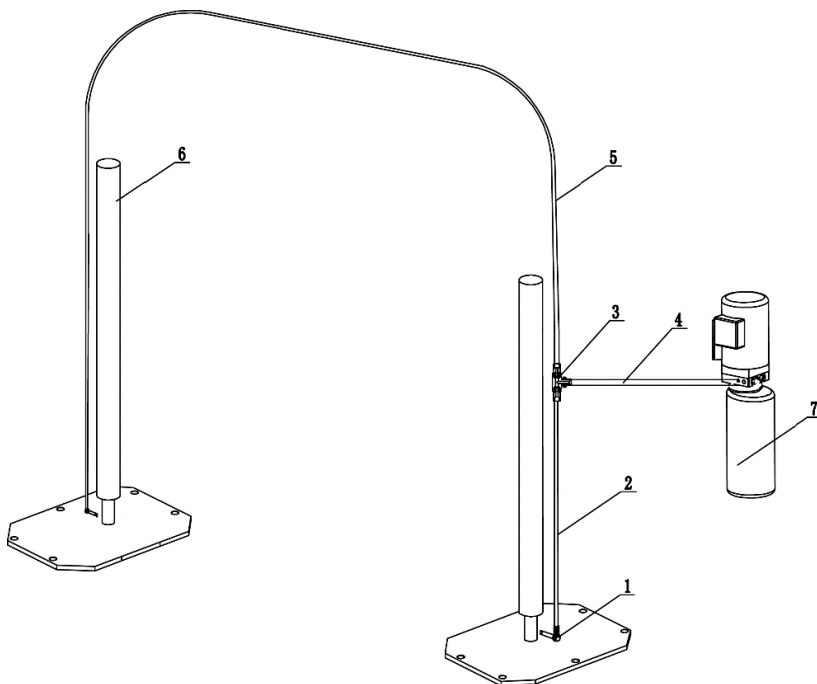
1. Install hydraulic power unit onto the main post.



1. *Anti-vibration washer*
2. *Hex head nut M10*
3. *Spring washer M10*
4. *Flat washer M10*
5. *Hex head full swivel screw M10*35*

2. Connect oil hoses (NO.4 and 5 in the below Fig.) to the “T” connector in the main post.

NOTE: make sure the connectors and hose are clean.

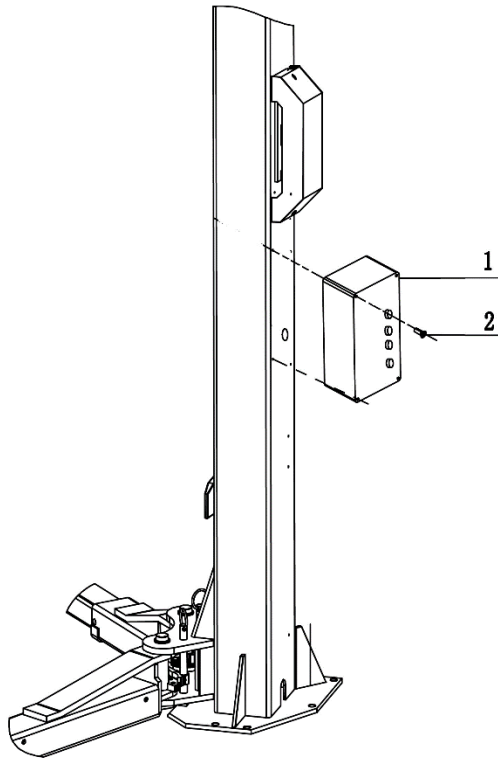


1. *Composite connector*
2. *Rubber oil hose*
3. *“T” connector*
4. *Short oil hose*
5. *Long oil hose*
6. *Oil cylinder*
7. *Hydraulic power unit*

Step 9: Connect electrical system.

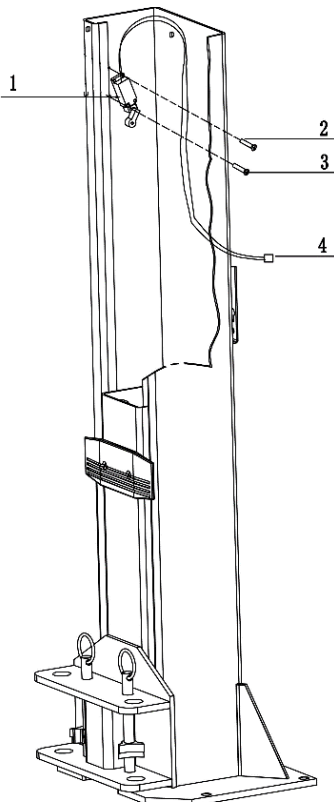
Refer to electrical connection diagram.

1. Fix the operation unit onto the main post.



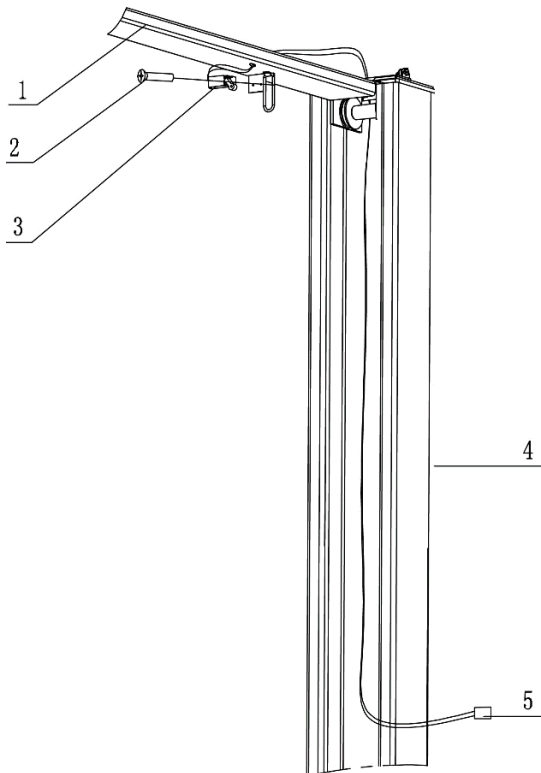
1. Control box
2. Cross socket cap head screw M5*8

2. Fix max height limit switch onto the inside surface of the main post and connect its wire with the corresponding wire comes from the control box by quick electrical connector.



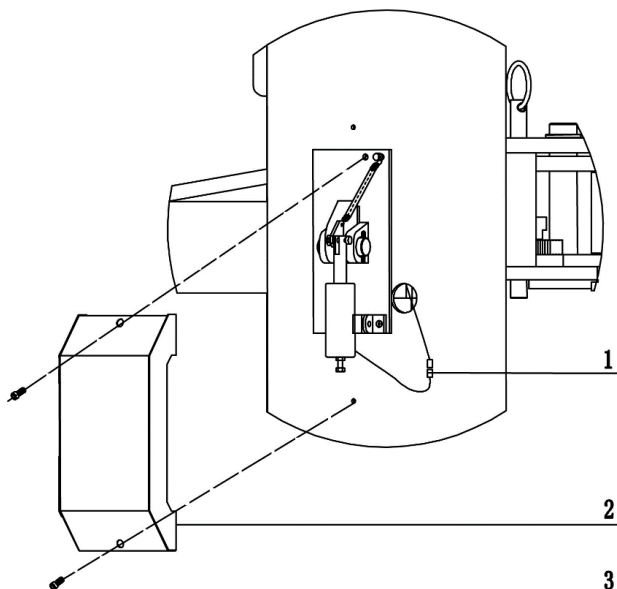
1. Max height limit switch TZ8108
2. Cross socket cap head screw M4*12
3. Cross socket cap head screw M4*25
4. Quick electrical connector

3. Fix car roof protection limit switch onto the overhead crossbeam and connect its wire with the corresponding wire comes from the control box by quick electrical connector.



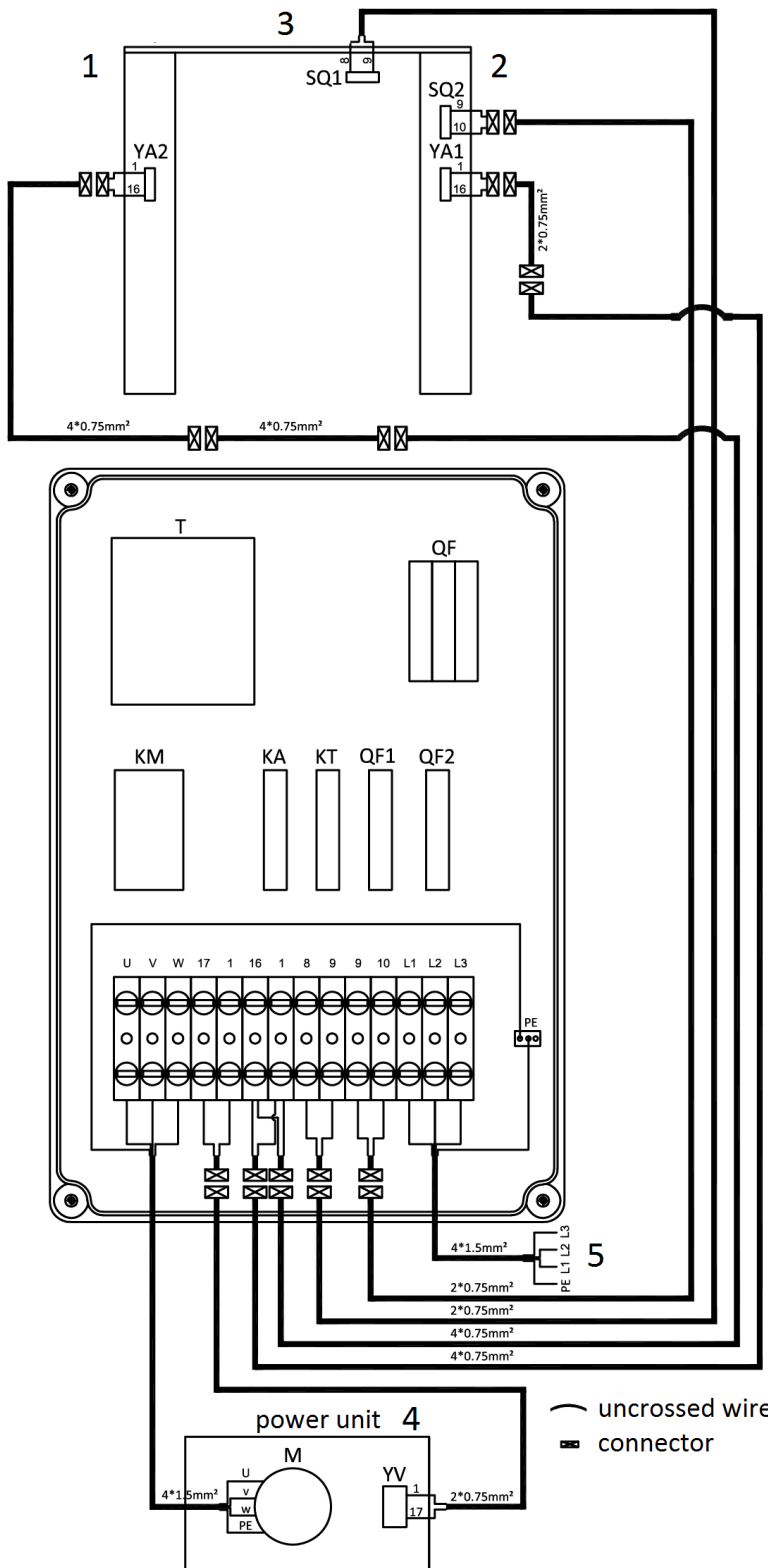
1. *Overhead crossbeam*
2. *Cross socket flat head screw M4*25*
3. *Car roof protection limit switch D4MC1000*
4. *Main post*
5. *Quick electrical connector*

4. Connect wires of electromagnets. Dismantle its protection cover before making the connection.



1. *Quick electrical connector*
2. *Protection cover*
3. *Hex socket cylinder head screw M6*8*

5. Connect electrical wires referring to the following wire connection diagram. Check that the supply voltage is adapted to the voltage of the lift.



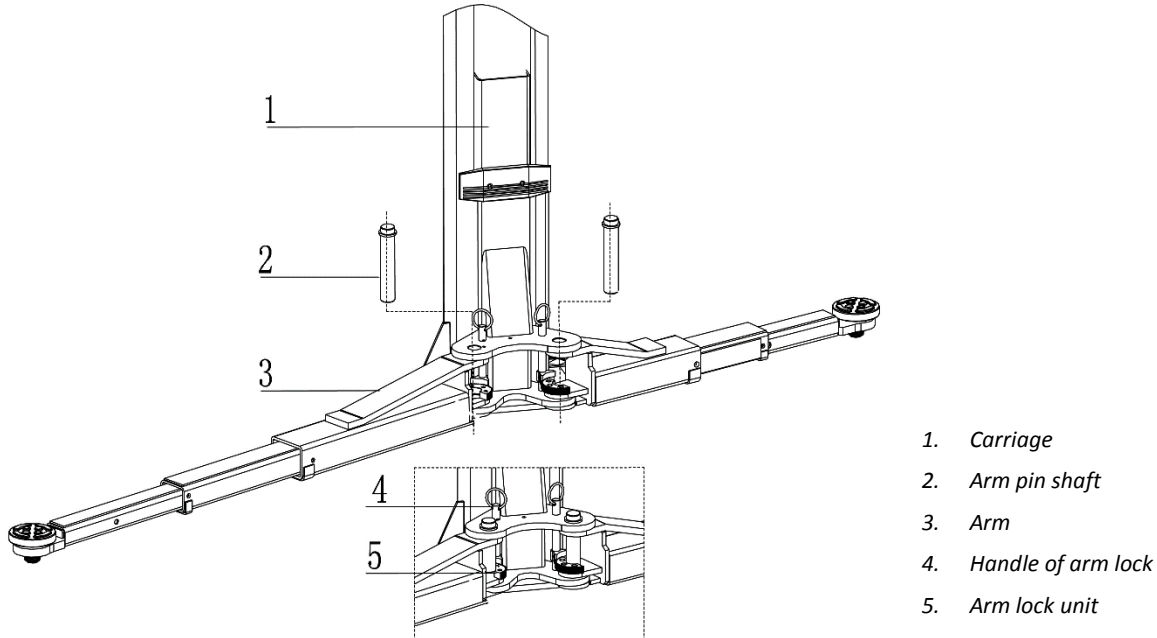
- 1. The secondary post
 - 2. Main post
 - 3. Overhead crossbeam
 - 4. Hydraulic power unit
 - 5. Electricity supply wire
- SQ1.Vehicle roof protection limit switch
SQ2.Max height limit switch
YA1/YA2. Electromagnet
M. Motor
YV: Solenoid valve

Step 10: Install lifting arms.

Connect the lifting arm and the carriage. The arm pin shafts (No. 2) must be greased at the installation

Install the lifting arms onto the carriages and ensure the arm lock could work.

Attention: Install Lifting arms and fix feet protection bars ONLY after the complete assembly has been erected and anchored.



Step 11: Fill with hydraulic oil.

CLEAN AND FRESH OIL ONLY. DON'T FILL THE TANK COMPLETELY FULL.

Lift must be fully lowered before changing or adding hydraulic oil.

It needs 13 liters of hydraulic oil. Fill about 10 liters into the oil tank to run the lift up and down for 2 or 3 times.

After running the lift for several cycles, add more oil if necessary to raise lift to full height.

Note: As running speed of the lift is mainly decided by the viscosity of the hydraulic oil, we suggest using NO.46 hydraulic oil when average temperature of the location is above 18 degree Celsius and using NO.32 hydraulic oil when temperature is below 18 degree Celsius. **Change the oil 6 month after initial use and change once per year thereafter.**

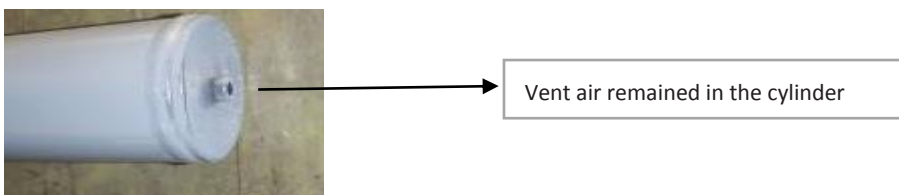
Step 12: Trial running.

Get familiar with lift controls by running the lift through a few cycles before loading vehicle on lift. This step is of particular importance for it can check if the oil hose is well connected. The connection is qualified when there is no abnormal sound or leakage after having been tested for 5-6 times.

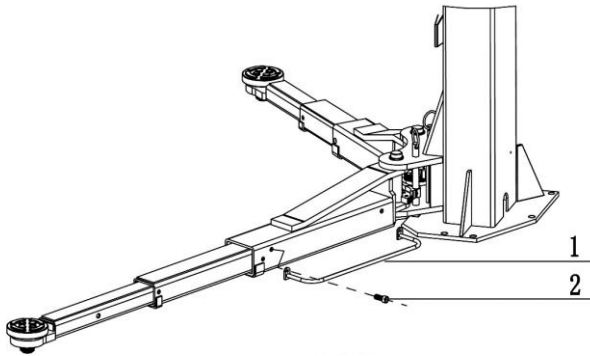
If the lift doesn't raise, the motor may turn in the wrong direction. In such event, interchange wires U, V in the connection box.

Bleeding the hydraulic system

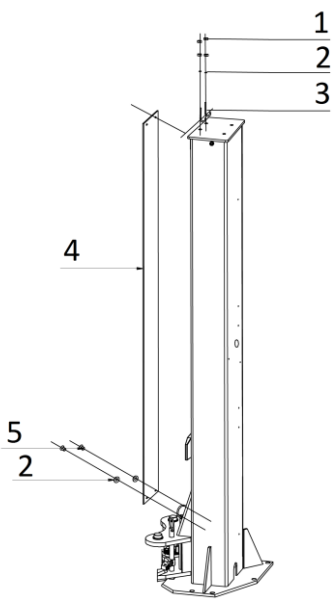
Unscrew but don't remove the nut on top of the oil cylinder and slightly press the UP button until oil gets out. Screw the nut tight thereafter.



After bleeding system, fluid level in power unit reservoir may be down. Add more fluid if necessary to raise lift to full height. It is only necessary to add fluid to raise lift to full height.

Step 13: Fix feet protection fenders, chain protection clothes, and lifting trays.


1. Feet protection fender
2. M10*15 Hex socket cylinder head screw M10*15



1. Hex nut M6
2. Flat washer M6
3. Hook for chain protection cloth
4. Chain protection cloth
5. Cross socket cap head screw M6*8

4.4 Items to be checked after installation

| S/N | Check items | YES | NO |
|-----|---|-----|----|
| 1 | Are the posts vertical to the floor? | | |
| 2 | Are the two posts paralleled? | | |
| 3 | Are oil hoses well connected? | | |
| 4 | Are steel ropes well connected? | | |
| 5 | Are all lifting arms well fixed? | | |
| 6 | Are electrical connections right? | | |
| 7 | Are the rest joints firmly screwed? | | |
| 8 | Are all items need lubricating added with grease? | | |

OPERATION INSTRUCTIONS

5.1 Precautions

5.1.1 Check all connections of oil hose. Only when there is no leakage, the lift can start work.

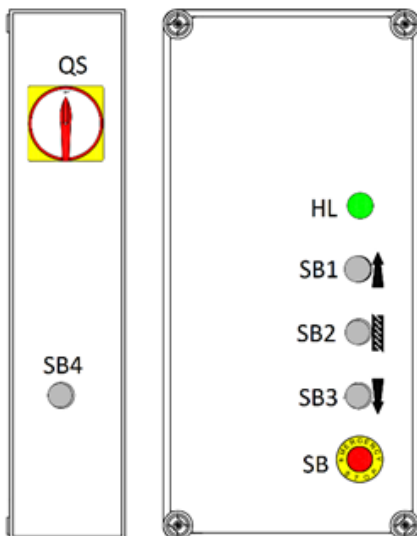
5.1.2 The lift, if its safety device malfunctions, shall not be used.

5.1.3 It shall not lift or lower an automobile if its center of gravity is not positioned midway of the runways. Otherwise, we as well as our dealers will not bear any responsibility for any consequence resulted thereby.

5.1.4 Operators and other personnel concerned should stand in a safety area during lifting and lowering process.

5.1.5 When the lift is raised to the desired height, switch off the power at once to lock the button with a padlock to prevent any wrong operation done by unconcerned people.

5.2 Operation instructions



| POS. | Name | Function |
|------|-----------------|-------------------------------------|
| QS | Main switch | Control main power |
| HL | Power indicator | Show if electricity is connected |
| SB1 | UP button | Control the rising movement |
| SB2 | LOCK button | Engage mechanical lock |
| SB3 | DOWN button | Control the lowering movement |
| SB4 | APS button | Control directing lowering movement |

To avoid personal injury and/or property damage, permit only trained personnel to operate the lift. After reviewing these instructions, get familiar with lift controls by running the lift through a few cycles before loading vehicle on lift. Always lift the vehicle using all four adapters. Never raise just one end, one corner or one side of vehicle adapters.

Raise the lift

Make sure vehicle is neither front nor rear heavy and center of balance should be midway between adapters and centered over the lift.

1. Make sure that you have read and understood the operation manual before operation.
2. Park the vehicle between two posts.
3. Adjust the lifting arms until lifting trays are under the pick-up positions of the vehicle and make sure the gravity of vehicle located over the center of four lifting arms.
4. Turn on the Main power switch.
5. Push the "UP" button on the control box until lifting trays touched the pick-up positions of vehicle.
6. Keep on raising the vehicle to let it have a bit clearance off the ground and check again the stability.
7. Raise the vehicle to the excepted height, push the "Safety Lock" button to engage the mechanical safety lock. Check again the stability and then perform maintenance or repair work underneath.

Lower the lift

When lowering the lift pay careful attention that all personnel and objects are kept clear.

Push APS button and DOWN button for direct lowering.

1. Push the "DOWN" button on the control box. Meanwhile the lifting arms automatically go upwards about 5CM which releases the safety lock. After that the lift starts descending.
2. When the lift is fully lowered, position the lift arms and adapters to provide an unobstructed exit before removing vehicle from lift area.

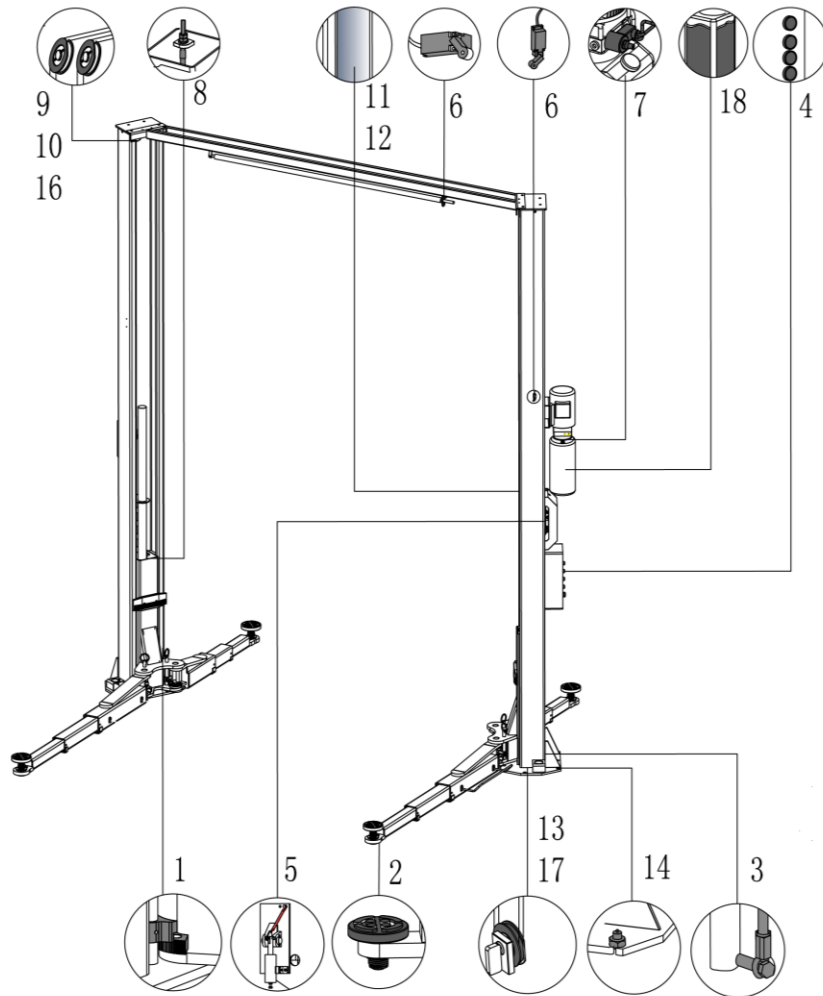
TROUBLE SHOOTING

ATTENTION: If the trouble could not be fixed by yourself, please do not hesitate to contact us for help .We will offer our service at the earliest time we can. By the way, your troubles will be judged and solved much faster if you could provide us more details or pictures of the trouble.

| TROUBLES | CAUSE | SOLUTION |
|--|--|---|
| Abnormal noise | Abrasion exists on insider surface of the posts. | Grease the inside of the post. |
| | Trash in the post. | Clear the trash |
| Motor does not run and will not rise | The wire connection is loose. | Check and make a good connection. |
| | The motor is blown. | Replace it. |
| | The limit switch is damaged or the wire connection is loose. | Connect it or adjust or replace the limit switch. |
| Motor runs but will not raise | The motor run reversely. | Check the wire connection. |
| | Overflow valve is loose or jammed. | Clean or adjust it. |
| | The gear pump is damaged. | Replace it. |
| | Oil level is too low. | Add oil. |
| | The oil hose became loose or dropped off. | Tighten it. |
| | The cushion valve became loose or jammed. | Clean or adjusts it. |
| Carriages go down slowly after being raised | The oil hose leaks. | Check or replace it. |
| | The oil cylinder is not tightened. | Replace the seal. |
| | The single valve leaks. | Clean or replace it. |
| | The overflow valve leaks. | Clean or replace it. |
| | Manual unloading valve or electrical unloading valve leaks. | Clean or replace it. |
| Raising too slow | The oil filter is jammed. | Clean or replace it. |
| | Oil level is too low. | Add oil. |
| | The overflow valve is not adjusted to the right position. | Adjust it. |
| | The hydraulic oil is too hot (above 45°) . | Change the oil. |
| | The seal of the cylinder is abraded. | Replace the seal. |
| | Inside surface of the posts is not well greased. | Add grease. |
| Lowering too slow | The throttle valve jammed. | Clean or replace. |
| | The hydraulic oil is dirty. | Change the oil. |
| | The anti-surge valve jammed. | Clean it. |
| | The oil hose jammed. | Replace it. |
| The steel rope is abraded | No grease when installation or out of lifetime | Replace it. |

MAINTENANCE

Easy and low cost routine maintenance can ensure the lift work normally and safely. Following are requirements for routine maintenance. Frequency of routine maintenance is determined by working condition and frequency.



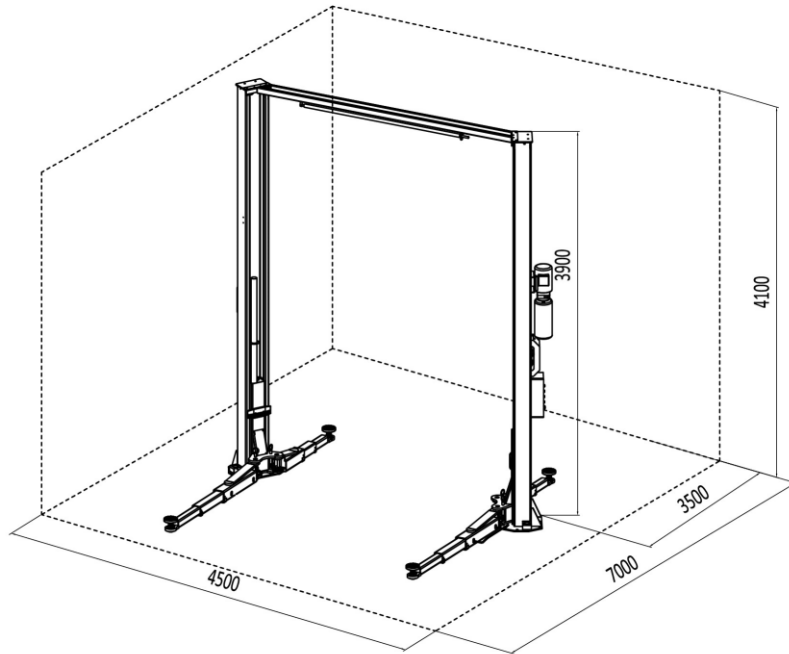
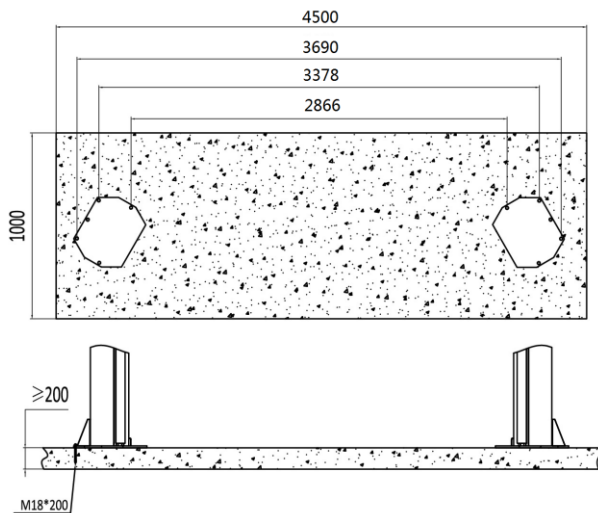
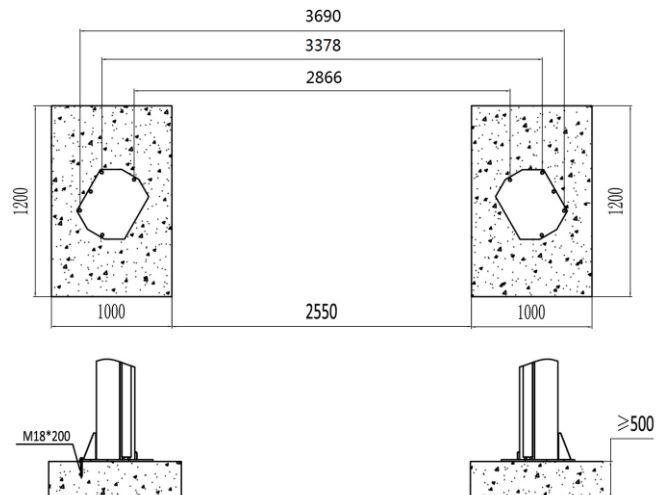
| S/N | Components | Methods | Period |
|-----|----------------------------------|---|-----------|
| 1 | Swing arm locking units | Push the UP button to raise the lifting arms and check if four swing arms are locked into position. Add grease in case necessary. | Every day |
| 2 | Rubber contact pads | Inspect the pads and clean off any objects that may cause sliding or damage | Every day |
| 3 | Cylinder and oil hose connectors | Inspect to ensure no leakage before using the lift. | Every day |
| 4 | Control buttons | Check if control buttons work as "hold- to -run " and check if they work as the function indicated. | Every day |
| 5 | Mechanical safety catch | Check if both mechanical catches can engage and disengage simultaneously by pushing control buttons. | Every day |
| 6 | Limit switches | Push the UP button and inspect and to ensure the lifting platform stops rising when the switch is activated. | Every day |
| 7 | Unloading valve | Inspect if the valve leaks or not. Clean or change the valve if it leaks. | Every day |

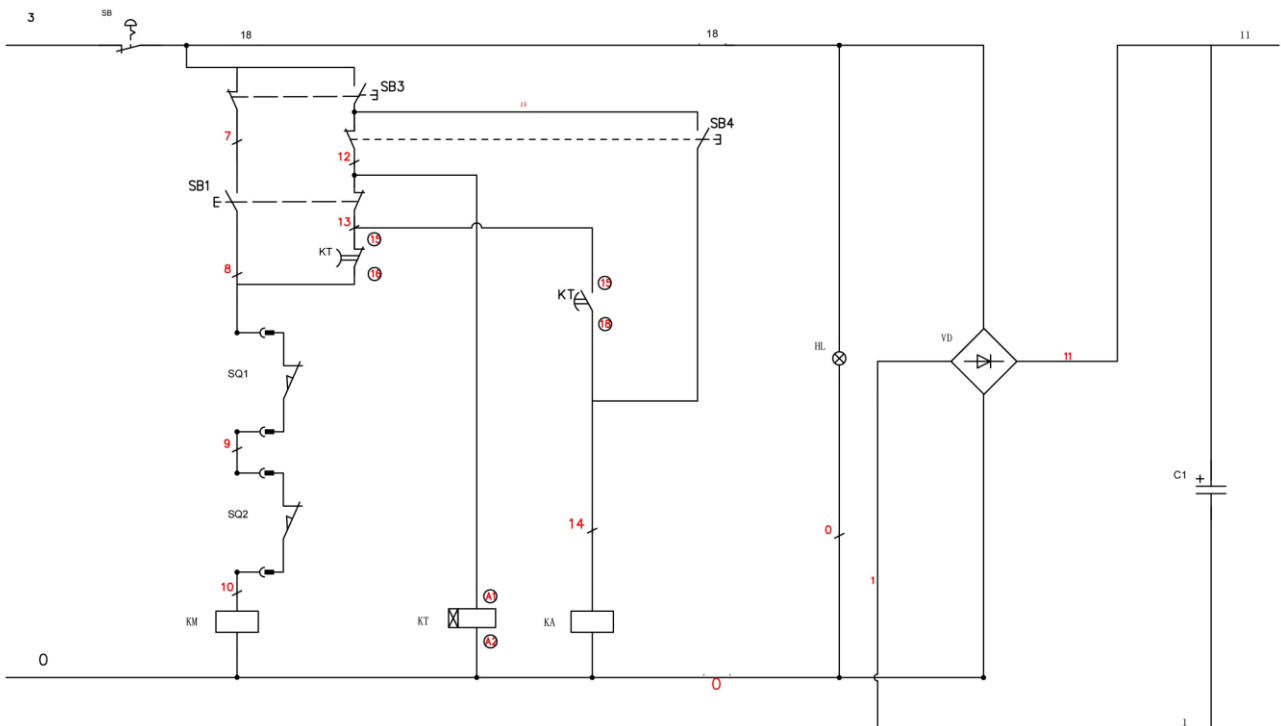
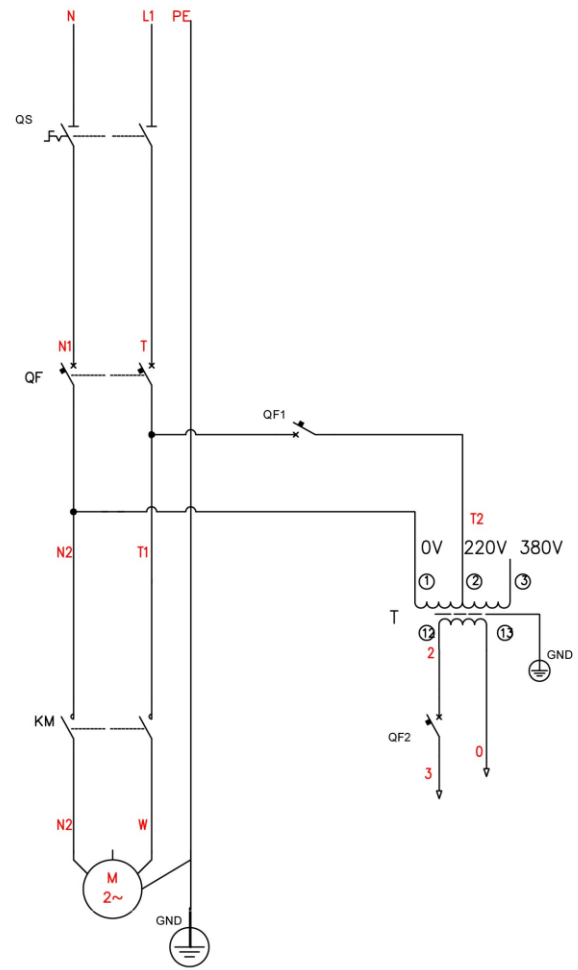
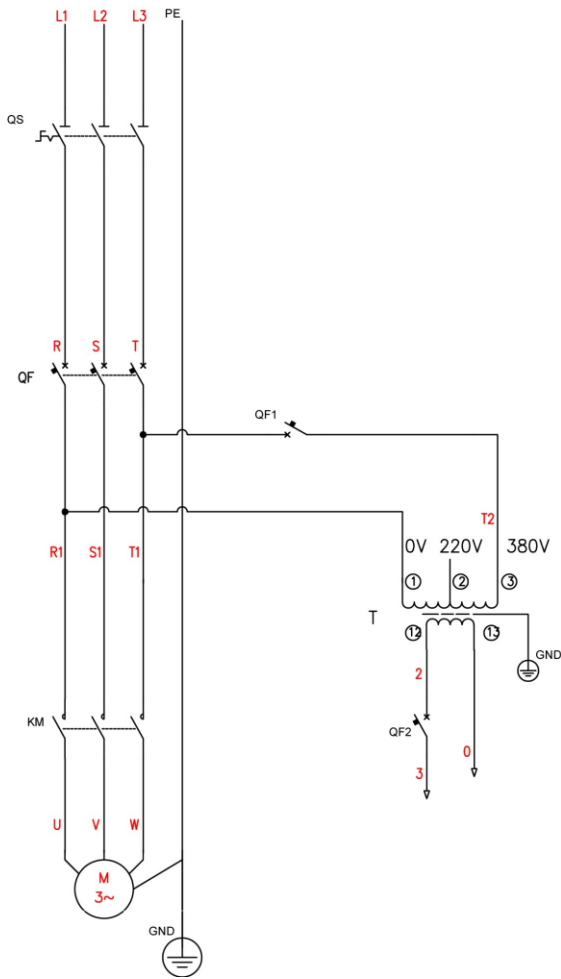
| S/N | Components | Methods | Period |
|-----|---|---|----------------|
| 8 | Steel rope | Check the synchronization of both carriages and adjust the tightness of the rope if desynchronization is unacceptable. | Every day |
| 9 | Bushing of the upside pulley and circlip of the shaft | Lubricate the bushing with NO.1 lithium based grease. Check if the circlip is in its original position. | Every 3 months |
| 10 | Steel rope | Lubricate the rope with NO.1 lithium based grease. Change with new steel ropes every 3 years or ten single wires have broken. | Every 3 months |
| 11 | Running track inside the post for carriages | Lubricate path with NO.1 lithium based grease. No obstruction on the path. | Every 3 months |
| 12 | Chain and its pins (optional) | Lubricate the chain with NO.1 lithium based grease. Change the chains every 3 years or if any cracks occurred to the pin of the chain. | Every 3 months |
| 13 | Bushing of the downside pulley and circlip of the shaft | Lubricate the bushing with NO.1 lithium based grease. Check if the circlip is in its original position. | Every 3 months |
| 14 | Expansion bolts | Check with torque spanner. For M18 bolt ,the torque is no less than 80N.m / For M16, the torque is no less than 60N.m | Every 3 months |
| | Whole Lift | Running the lift for several cycles with and without rated load. The lift can run steadily and smoothly with no abnormal noise. | Every 3 months |
| 16 | Bushing of the upside pulley and circlip of the shaft | Slacken the steel ropes and dismantle the bushing. Measure the abrasive clearance and change the bushing if the clearance is bigger than 0.5mm. | Every year |
| 17 | Bushing of the downside pulley and circlip of the shaft | Slacken the steel ropes and dismantle the bushing. Measure the abrasive clearance and change the bushing if the clearance is bigger than 0.5mm. | Every year |
| 18 | Hydraulic oil | Change the oil 6 months after initial use and once per year thereafter. Inspect the hydraulic oil and change the oil if the oil becomes black or there is dirt in the oil tank. | Every year |

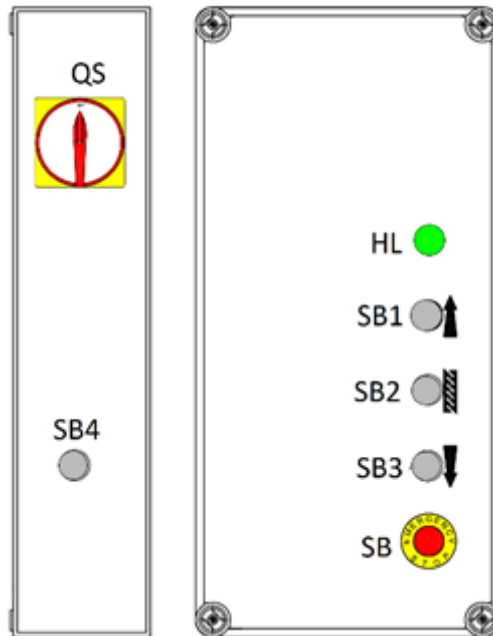
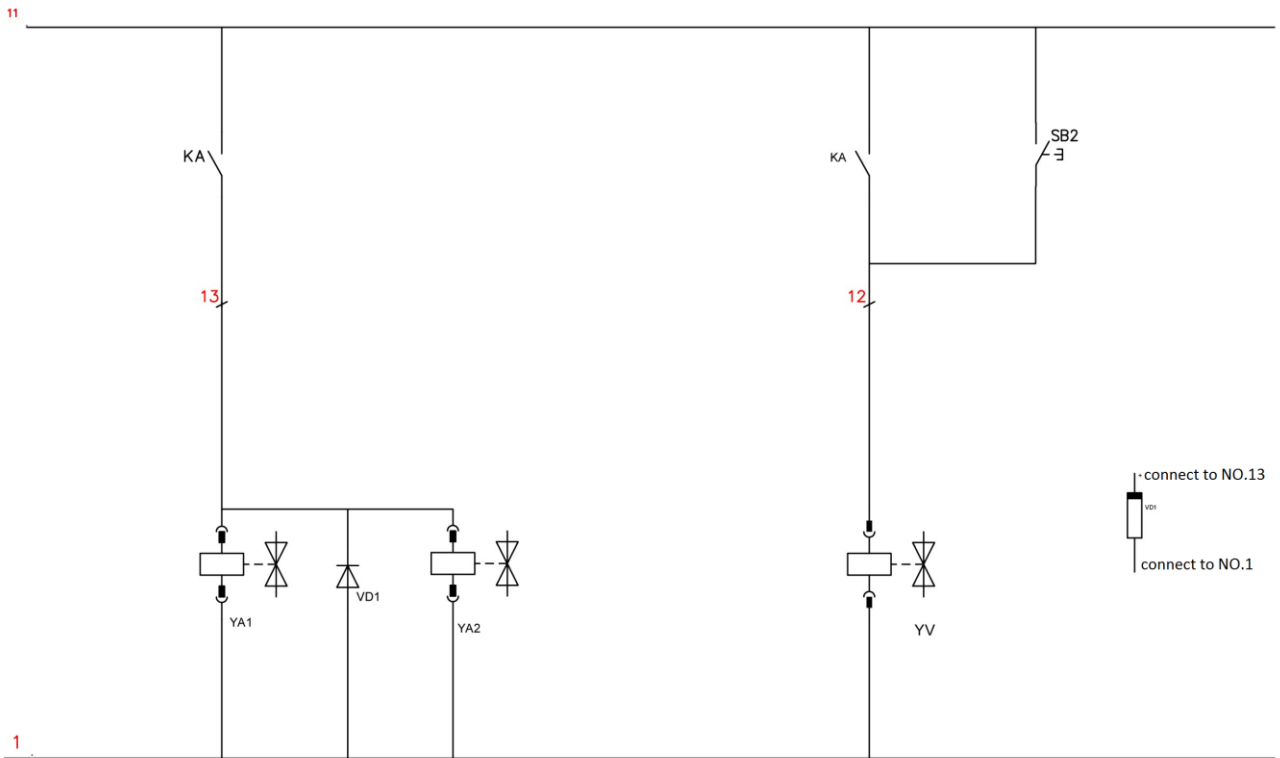
If users strictly follow the above maintenance requirements, the lift will keep in a good working condition and meanwhile accidents could be avoided to a large extent.

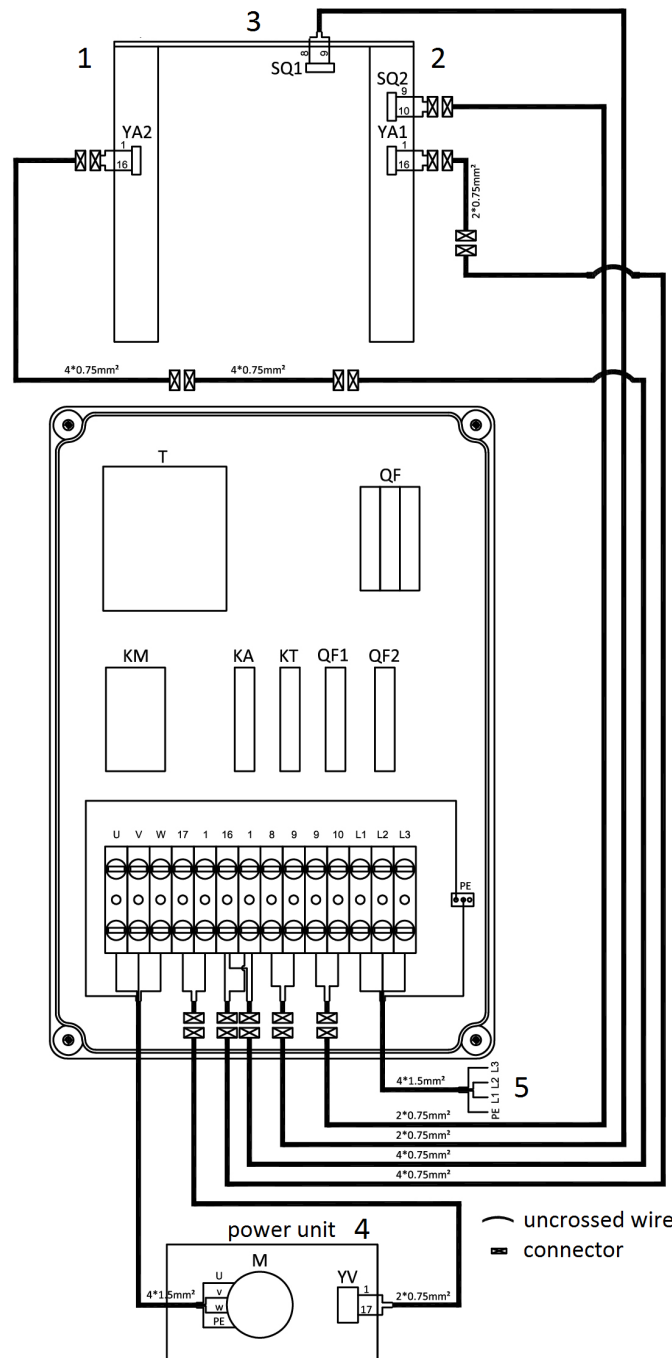
Annex 1, Floor plan

C20/25 concrete base with strength more than 3000psi, tolerance of flatness less than 5mm and minimum thickness of 200mm. In addition, newly built concrete ground must be older than 20days. If not specially noted, this lift is for indoor use only.


Continuous footing

Individual footing


Annex 2, Electrical schemes and parts list


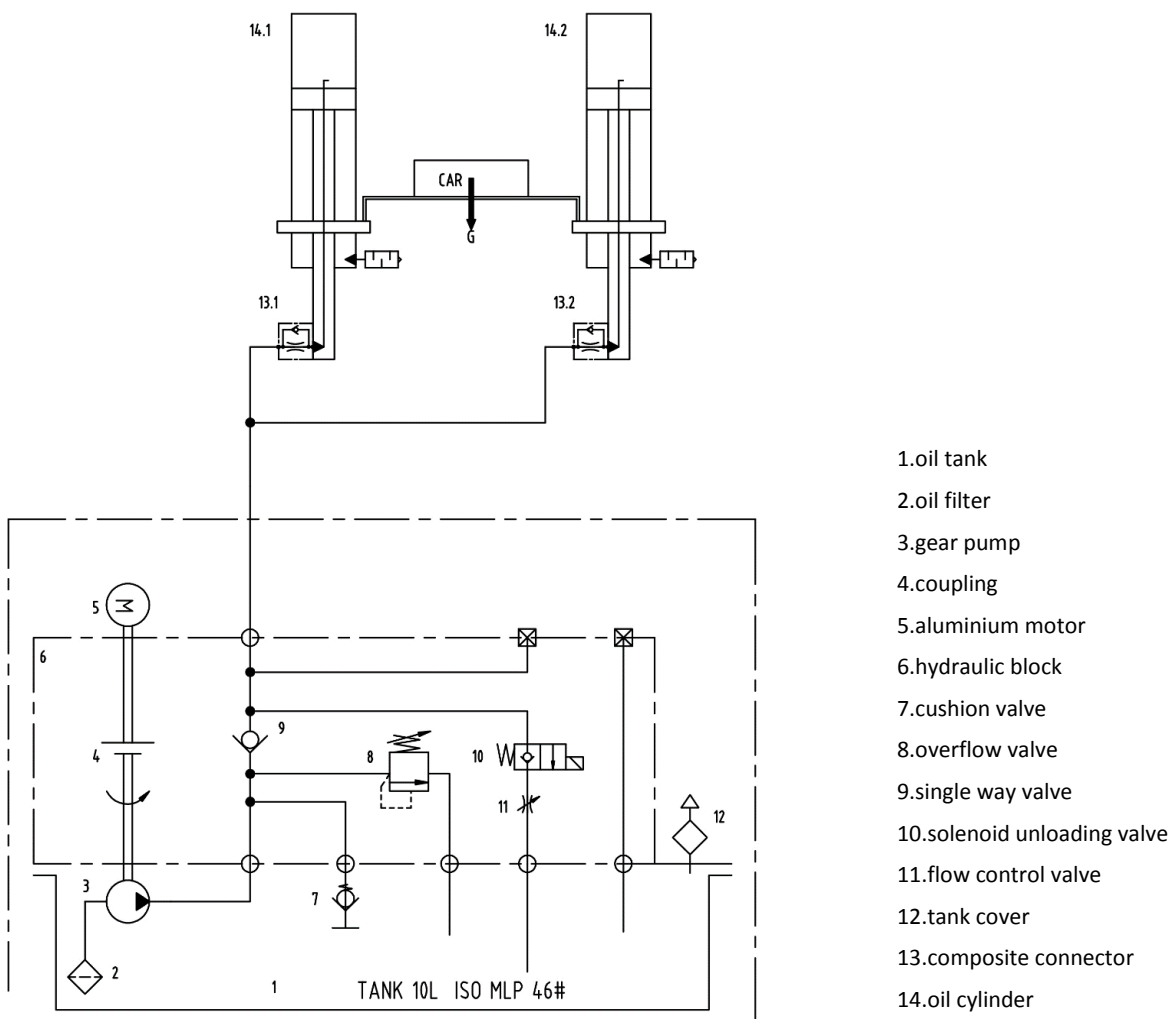


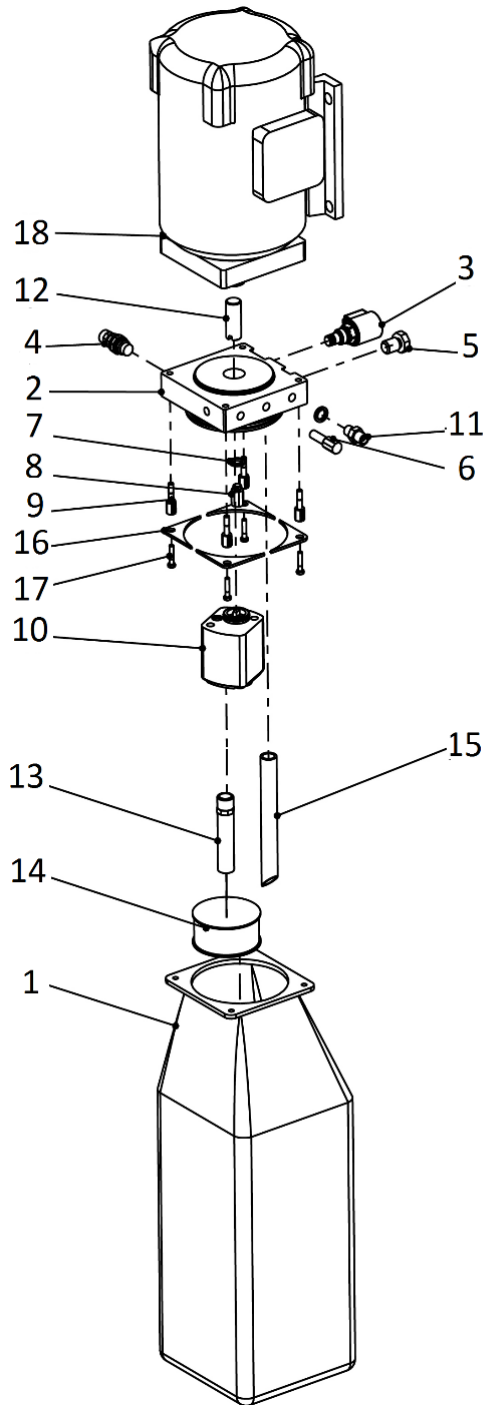


| POS. | Code | Name | Specification | Qty |
|---------|-----------|-----------------------|---------------------------|-----|
| T | 320101035 | Transformer | JBK3(JBK5)-100VA 380V-24V | 1 |
| | 320101036 | Transformer | JBK3(JBK5)-100VA 400V-24V | |
| SQ1 | 320301002 | Limit switch | D4MC-1000 | 1 |
| SQ2 | 320301011 | Limit switch | TZ8108 | 1 |
| QS | 320304001 | Power switch | LW26GS-20/04 | 1 |
| SB1-SB4 | 320401013 | Button | AR22F0R-11-W | 4 |
| SB | 320402002 | Emergency stop | XB2BS542C | 1 |
| KA | 320601026 | Integrated relay | NCH8-20/20 AC24V | 1 |
| KT | 320602009 | Integrated time relay | ZYS11-A(AC24, 5S) | 1 |

| POS. | Code | Name | Specification | Qty |
|---------|------------|---------------------|-----------------|-----|
| QF | 320801001 | Circuit breaker-3Ph | DZ47-63C16/3P | 1 |
| QF1 | 320803003 | Circuit breaker | DZ47-63C3/1P | 1 |
| QF2 | 320803005 | Circuit breaker | DZ47-63C6/1P | 1 |
| KM | 320901011 | AC contactor | CJX2-1810/AC24V | 1 |
| C | 321001004 | Capacitor | 4700UF/50V | 1 |
| VD | 321002001 | Bridge rectifier | KBPC5A-35A | 1 |
| HL | 321201001 | Power indicator | AD17-22G-AC24 | 1 |
| YA1-YA2 | 410044350B | Electromagnet | 6254E.V3-A14 | 2 |

Annex 3, Hydraulic schemes and parts list

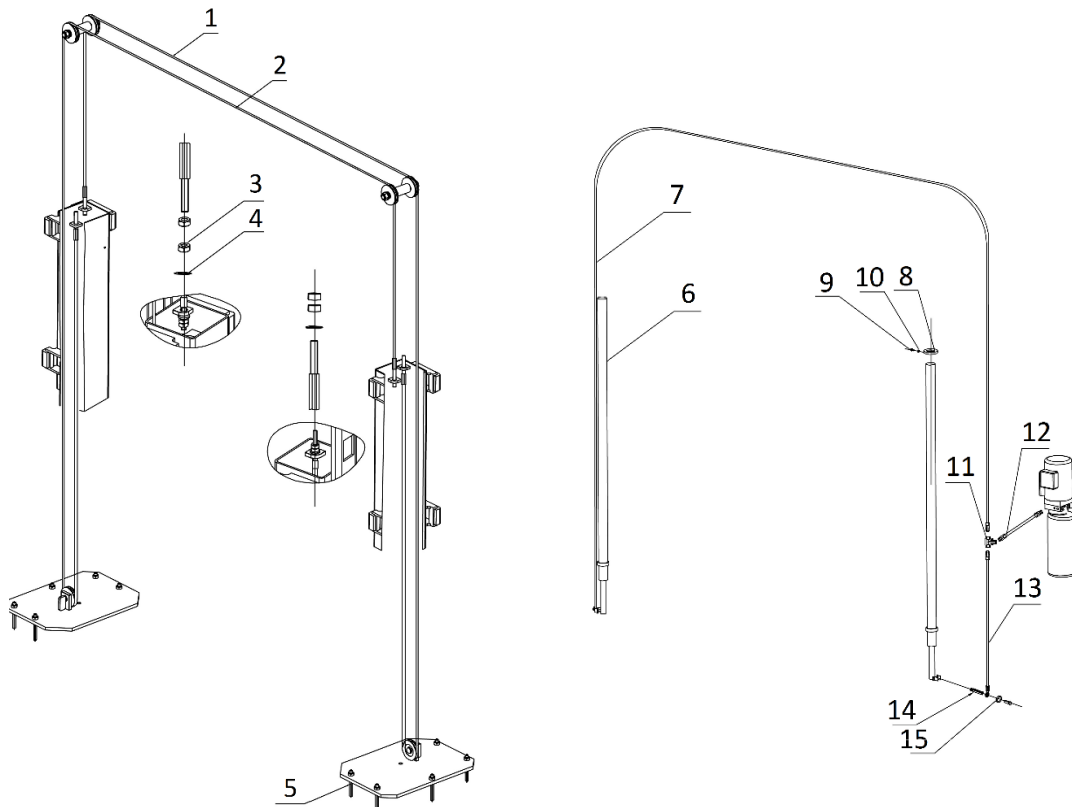




| POS. | Code | Name | Specification | Qty |
|------|------------|---------------------------------|-----------------|-----|
| 1 | 330405001 | Oil tank | 10L | 1 |
| 2 | 330101063B | Hydraulic block | YF-2D | 1 |
| 3 | 330308006 | Solenoid unloading valve | DHF06-220H/DC24 | 1 |
| 4 | 330304001 | Overflow valve | EYF-C | 1 |
| 5 | 330302001 | Single way valve | DYF-C | 1 |
| 6 | 330305002 | Throttle valve | TC-VF | 1 |
| 7 | 207103019 | Composite washer | M14 | 2 |
| 8 | 330301001 | Cushion valve | HZYF-C1 | 1 |
| 9 | 202109064 | Screw for oil tank installation | M6*30 | 4 |

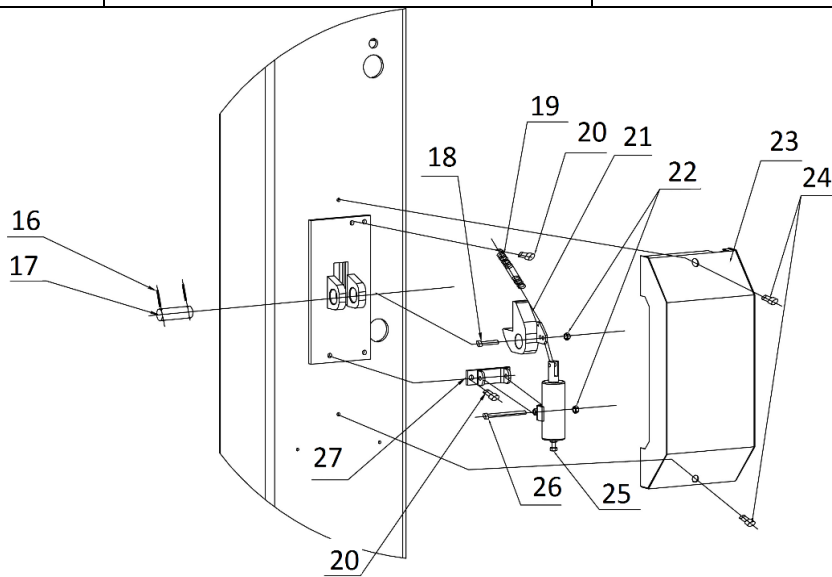
| POS. | Code | Name | Specification | Qty |
|------|-----------|----------------------------|-------------------------|-----|
| 10 | 330201007 | Gear pump (for 3Ph motor) | CBK-F233 | 1 |
| 10 | 330201006 | Gear pump (for 1Ph motor) | CBK-F225/CBK-2.5F | 1 |
| 11 | 310101028 | Shift connector | G1/4,M14x1.5 | 1 |
| 12 | 330404001 | Coupling | YL-A | 1 |
| 13 | 330401005 | Oil sucking tube | XYGN-L293 | 1 |
| 14 | 330403001 | Oil filter | YG-C | 1 |
| 15 | 330402001 | Oil back pipe | YH-D | 1 |
| 16 | 410010091 | Tank reinforced plate | 6254E-A4-B12 | 4 |
| 17 | 201103001 | Hex flange screw | M5*25 | 4 |
| 18 | 320204016 | Aluminum motor | 380V-3.0KW -3PH-50HZ-2P | 1 |
| 18 | 320204017 | Aluminum motor | 400V-3.0KW-3PH-50HZ-2P | 1 |

Annex 4, Mechanical exploded drawings and parts list

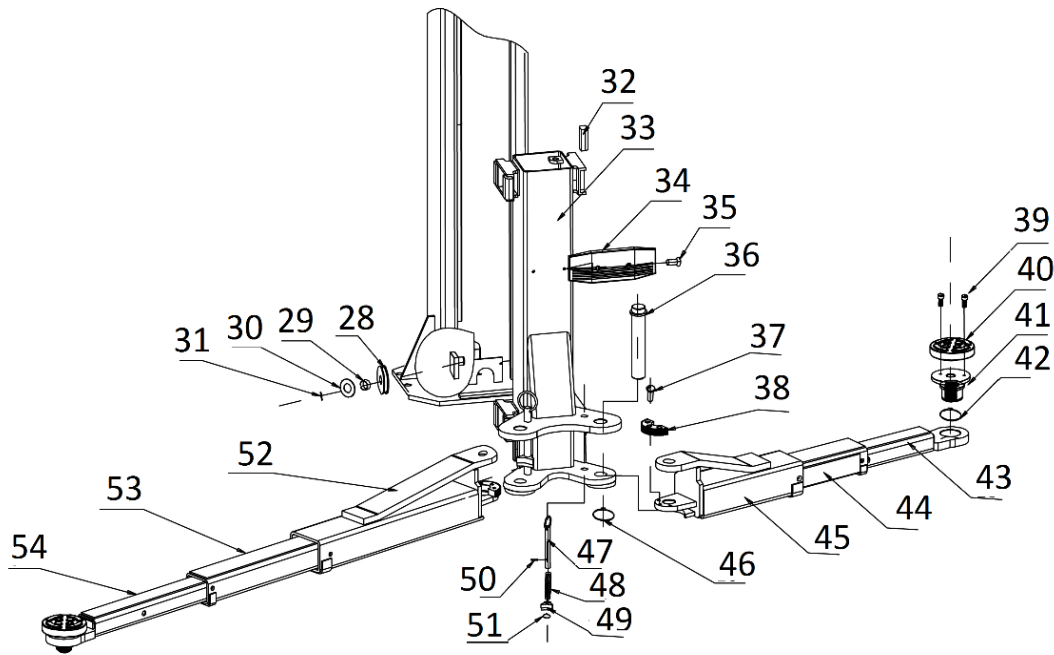


| POS. | Code | Name | Specification | Qty |
|------|------------|-------------------------|-------------------------|-----|
| 1 | 615015004B | Steel rope | 6214EKZ.V2-A7 L=10950mm | 1 |
| 2 | 615015005B | Steel rope | 6214EKZ.V2-A8 L=11100mm | 1 |
| 3 | 203101009 | Hex nut M16 | M16 | 8 |
| 4 | 204101009 | Class C flat washer M16 | M16 | 4 |
| 5 | 201201008 | Expansion bolt M18*200 | M18*160 | 10 |
| 6 | 615017013 | Oil cylinder | 6264-A24 | 2 |
| 7 | 624002025B | Oil hose | Ø8, L=8625mm | 1 |

| POS. | Code | Name | Specification | Qty |
|------|------------|--------------------------------|---------------|-----|
| 8 | 410170101B | Cylinder fixation ring | 6264-A24-B1 | 2 |
| 9 | 202109024 | Hex socket cylinder head screw | M6*35 | 2 |
| 10 | 203101004 | Hex nut M6 | M6 | 2 |
| 11 | 615006003 | Oil hose | 6214E-A4-B4 | 2 |
| 12 | 624001814 | Oil hose | Ø8,L=300mm | 1 |
| 13 | 624002004B | Oil hose | L=2265 | 1 |
| 14 | 615015003 | Composite connector | 6255E-A7-B7 | 2 |
| 15 | 207103025 | Composite washer | 13.7*20*1.5 | 4 |

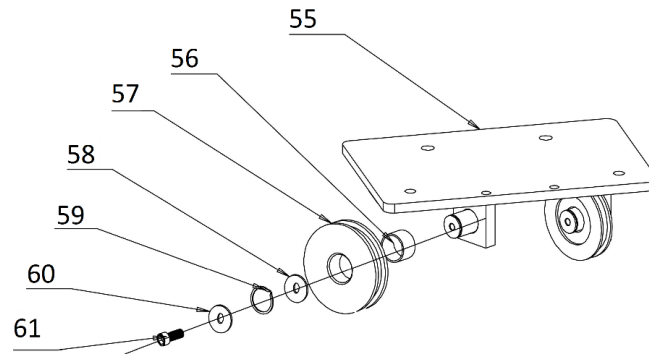


| POS. | Code | Name | Specification | Qty |
|------|------------|-------------------------------------|----------------|-----|
| 16 | 206201004 | Cotter pin | 3*45 | 4 |
| 17 | 410044340 | Safety shaft | 62B-A1-B6 | 2 |
| 18 | 202109024 | Hex socket cylinder head screw | M6*35 | 2 |
| 19 | 410047530B | Pull spring | 62B-A10-B9-M | 2 |
| 20 | 202109027 | Hex socket cylinder head screw | M8*12 | 10 |
| 21 | 614004806 | Safety hook assembly | V3-A1-B4 | 2 |
| 22 | 203103005 | Hex locking nut M6 | M6 | 4 |
| 23 | 614035034 | Safety lock protective cover | 6215EKZ.V2-A13 | 2 |
| 24 | 202109017 | Hex socket cylinder head screw M6*8 | M6*8 | 4 |
| 25 | 410044350B | Electromagnet | 6254E.V3-A14 | 2 |
| 26 | 202109132 | Hex socket cylinder head screw | M6*65 | 2 |
| 27 | 614004809B | Fixation holder of electromagnet | 62B-A1-B6-E | 2 |

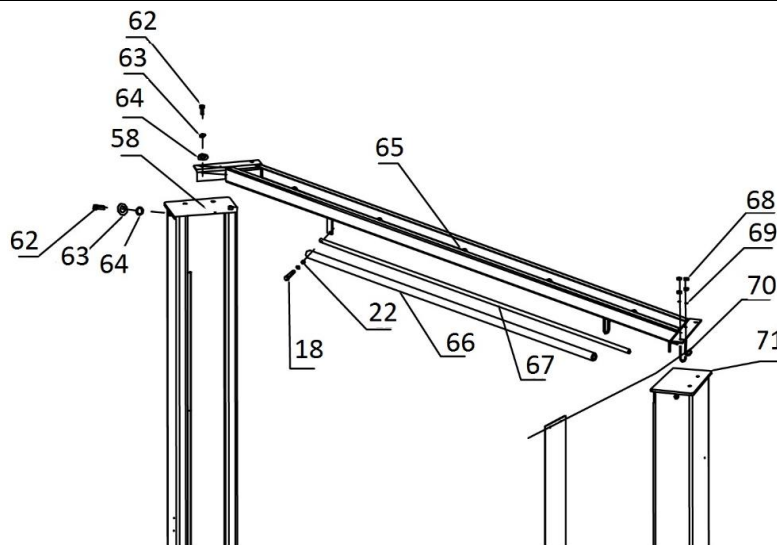


| POS. | Code | Name | Specification | Qty |
|------|------------|------------------------------------|----------------------------|-----|
| 28 | 410010021B | Down pulley | 6254A-A1-B1 Φ 88 L=16 | 2 |
| 29 | 205101007 | Bearing 2512 | SF-1,2512 | 2 |
| 30 | 410010031 | Washer | 6254E-A1-B3 | 4 |
| 31 | 206201004 | Cotter pin | 3*45 | 2 |
| 32 | 420010010 | Slider | 6254E-A2-B5 | 8 |
| 33 | 614035030B | Carriage | 6215EKZ.V2-A3-B1 | 2 |
| 34 | 420010020B | Protection rubber pad | 6254E-A2-B6 | 2 |
| 35 | 202103021 | Cross socket flat head screw M8*16 | M8*16 | 4 |
| 36 | 612015005 | Arm shaft assembly | 6255E-A13 | 4 |
| 37 | 202109085 | Hex socket cylinder head screw | M12*30 | 12 |
| 38 | 410150901 | Teeth wheel (half) | 6215-A4-B3 (6254E-A7-B6) | 4 |
| 39 | 202111007 | Hex socket flat head screw M8*20 | M8*20 | 8 |
| 40 | 420040050B | Round lifting pad | 6254E-A7-B4-C4 | 4 |
| 41 | 615004003D | Lifting tray | 6254E-A7-B4 | 4 |
| 42 | 204301008 | Circlip ϕ 22 | Type B,22 | 4 |
| 43 | 614035024 | Short third stage arm | 6214EKZ.V2-A4-B3 | 2 |
| 44 | 614035023B | Short second stage arm | 6214EKZ.V2-A4-B2 | 2 |
| 45 | 614035022C | Short first stage arm | 6214EKZ.V2-A4-B1 | 2 |
| 46 | 204301013 | Circlip | M38 | 4 |
| 47 | 612013004C | Pulling rod assembly (left) | 6255E-A3-B4 | 2 |
| 47 | 612015006C | Pulling rod assembly (right) | 6255E-A3-B4 | 2 |
| 48 | 410150121 | Pressure spring | 6254E-A2-B4 | 4 |
| 49 | 410150891 | Teeth block | 6254E-A2-B3(6215-A3-B3) | 4 |
| 50 | 206102008 | Elastic post pin | 5*50 | 4 |

| POS. | Code | Name | Specification | Qty |
|------|------------|-----------------------|------------------|-----|
| 51 | 204301008 | Circlip $\phi 22$ | Type B, 22 | 4 |
| 52 | 614035025C | First stage long arm | 6214EKZ.V2-A5-B1 | 2 |
| 53 | 614035026B | Second stage long arm | 6214EKZ.V2-A5-B2 | 2 |
| 54 | 614035027 | Third stage long arm | 6214EKZ.V2-A5-B3 | 2 |

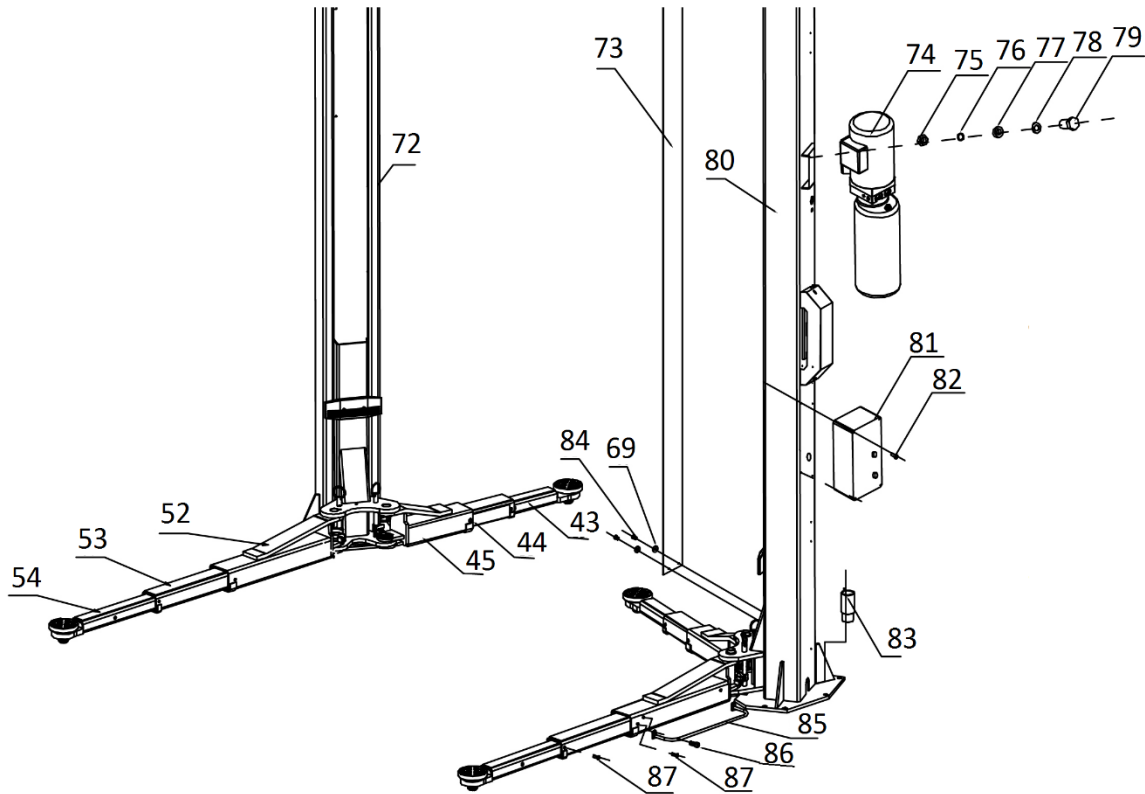


| POS. | Code | Name | Specification | Qty |
|------|-----------|------------------------------------|-------------------|-----|
| 55 | 614035004 | Top plate | 6214EKZ-A2-B2-C1 | 1 |
| 56 | 205101008 | Bearing 2518 | SF-1,2518 | 4 |
| 57 | 410010061 | Up pulley | 6254E-A5-B1 | 4 |
| 58 | 410010031 | Washer | 6254E-A1-B3 | 4 |
| 59 | 204301009 | Type B circlip $\phi 25$ | Type B, $\phi 25$ | 4 |
| 60 | 204104001 | Large washer | M40*8*2.5 | 4 |
| 61 | 202110005 | Hex socket button head screw M8*20 | M8*20 | 4 |



| POS. | Code | Name | Specification | Qty |
|------|-----------|--------------------------------|------------------|-----|
| 62 | 202109093 | Hex socket cylinder head screw | M12*30 | 8 |
| 63 | 201102027 | Flat washer | M12 | 8 |
| 64 | 204201006 | Spring washer M12 | M12 | 8 |
| 65 | 614035031 | Crossbeam | 6215EKZ.V2-A6-B1 | 1 |
| 66 | 420060010 | Black foam tube | 0 | 1 |

| POS. | Code | Name | Specification | Qty |
|------|-----------|---------------------------------------|------------------|-----|
| 67 | 410060013 | Long rod | 6214E-A21-B5 | 1 |
| 68 | 203101004 | Hex nut M6 | M6 | 8 |
| 69 | 204101004 | Class C flat washer M6 | M6 | 4 |
| 70 | 410010051 | Pulling rod of chain protection cloth | 6254E-A1-B5 | 4 |
| 71 | 614035002 | Top plate | 6214EKZ-A1-B2-C1 | 1 |



| POS. | Code | Name | Specification | Qty |
|------|------------|-----------------------------------|--------------------------------------|-----|
| 72 | 614035021 | Secondary post | 6214EKZ.V2-A2-B1 | 1 |
| 73 | 615006001 | Chain protection cloth | 6214E-A1-B3(6214A-A1-B3(3743*140MM)) | 2 |
| 74 | | Hydraulic power unit | 2.2kW | 1 |
| 75 | 203101006 | Hex nut M10 | M10 | 4 |
| 76 | 204201005 | Spring washer M10 | M10 | 4 |
| 77 | 420040010 | Anti-shock pad | 6254E-A23 | 4 |
| 78 | 204101006 | Class C flat washer M10 | M10 | 4 |
| 79 | 201103004 | Hex head full swivel screw M10*35 | M10*35 | 4 |
| 80 | 614035020 | Main post | 6214EKZ.V2-A1-B1 | 1 |
| 81 | 321204002 | Control box | 460*260*135 | 1 |
| 82 | 202101020 | Cross socket cap head screw | M5*8 | 4 |
| 83 | 612004003B | Height adapter | 6254E-A11 L=130MM | 4 |
| 84 | 202101027 | Cross socket cap head screw M6*8 | M6*8 | 4 |
| 85 | 614035038 | Feet protection fender (left) | 6215EKZ.V2-A14-B1-1 | 2 |

| POS. | Code | Name | Specification | Qty |
|------|-----------|--------------------------------------|---------------------|-----|
| 85 | 614035039 | Feet protection fender (right) | 6215EKZ.V2-A14-B1-2 | |
| 86 | 202110004 | Hex socket cylinder head screw M8*12 | M8*12 | 4 |
| 87 | 202109040 | Hex head full swivel screw M10*15 | M10*15 | 8 |

Seal rings for oil cylinders

| POS. | Code | Name | Specification | Qty |
|------|-----------|--------------------|-----------------|-----|
| 1 | 207103002 | Y seal ring | B7-50*35*9 | 1 |
| 2 | 207105004 | Dust proof ring | DHS38 (38*46*6) | 1 |
| 3 | 207106018 | Anti-abrasion ring | 50X46X15 | 1 |
| 4 | 207106019 | Anti-abrasion ring | 38X42X15 | 1 |