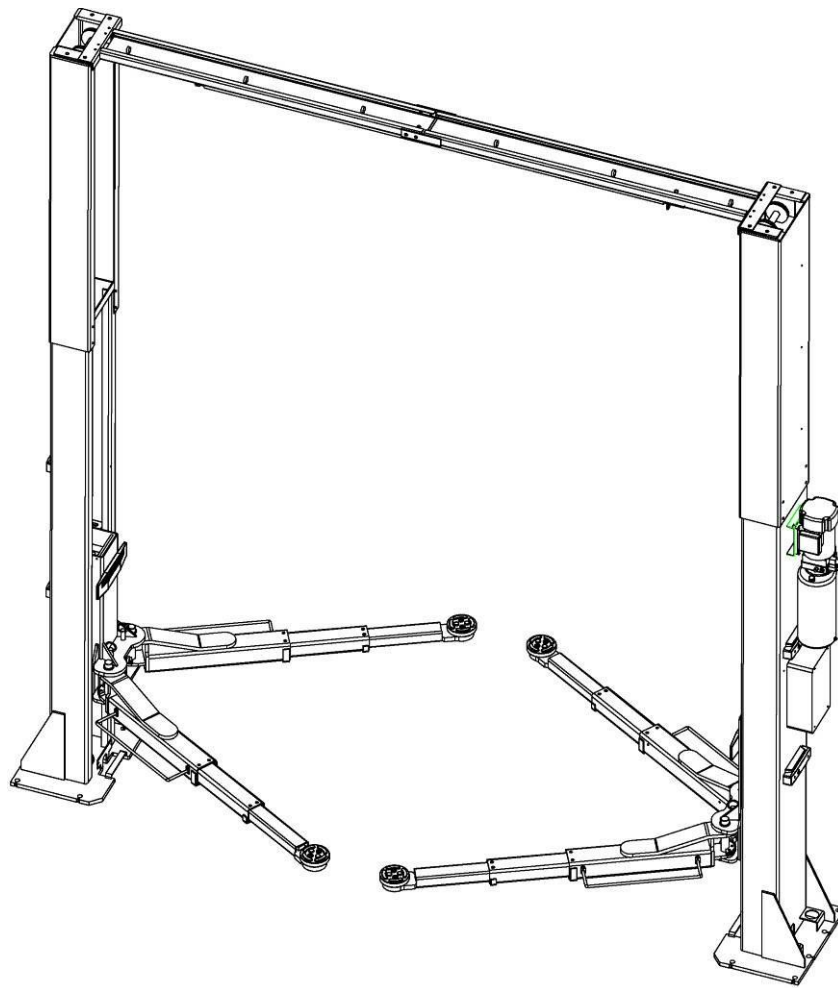


Model No. EE-6215E
Clear Floor Two Post Lift
Electrical Release
Lifting Capacity 5000KG

Installation, Operation
and Parts Manual



EAE



Distributed by

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

DATE: 04/08/2017

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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Warranty

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 ensured 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, tires, 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

540101441



Only trained personnel are allowed to operate the lift.



Always keep lift area clear when lowering or raising vehicle.



Do not try to raise a vehicle exceeds the rated capacity.



Always raise a vehicle with four swing arms.



Position and adjust pads to lifting points recommended by vehicle manufacturers.



Stop and check lift arm locks and stability of vehicle after short raising, then to desired height.



Watch closely the vehicle during raising or lowering.



It is not allowed to work under the vehicle if safety latch is not engaged.



Always use safety stands when moving/ installing heavy components.



Avoid excessive rocking of vehicle while on lift.



Do not climb onto the lift or raised vehicle during lifting or lowering.

1.5 Potential safety risks

1.5.1 Main 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 The lift was dismantled into the following 3 parts for transportation

Name	Packed by	Dimension	Weight	Quantity
Lift	Steel brackets	2860*660*930	908kg	1
Extending post	Bubble film	1800*400*430	145kg	1
Power unit	Carton	850*250*350	24kg	1

2.2 Storage

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:

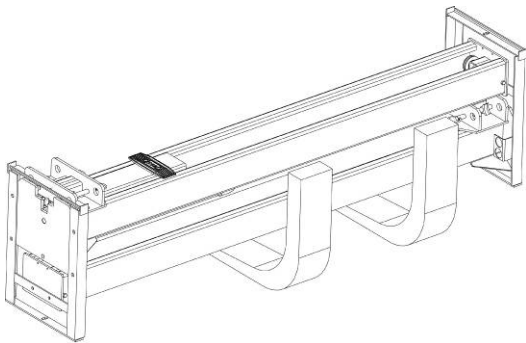
- never stack to more than 2 meters in height.

- 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.

2.3 Lifting and handling

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



Opening the packs

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.

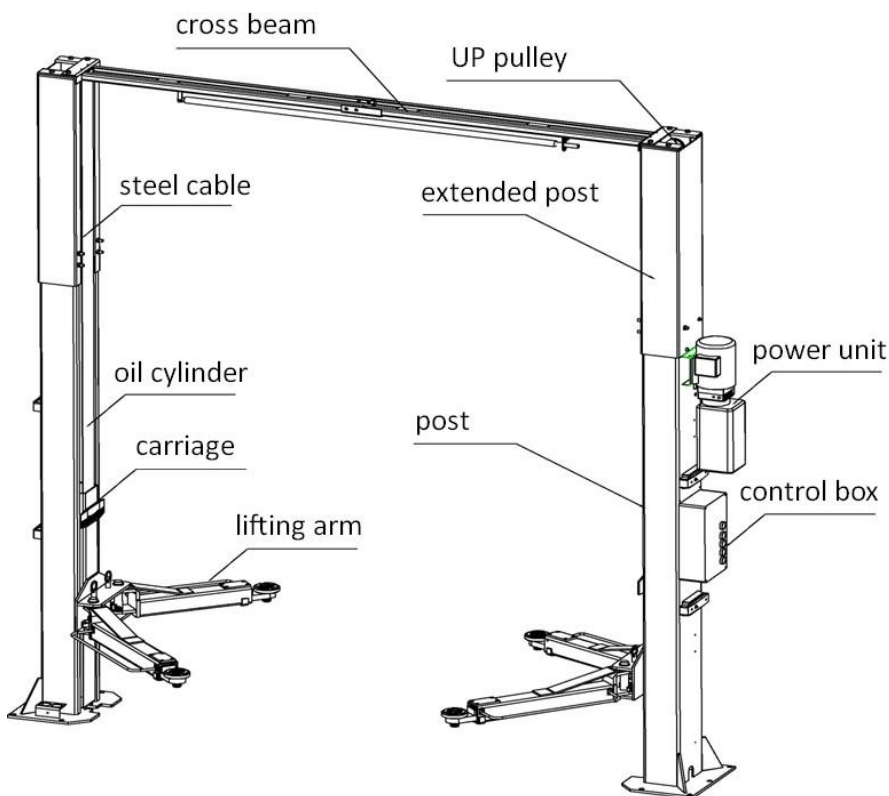
PRODUCTS DESCRIPTIONS

3.1 General descriptions

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

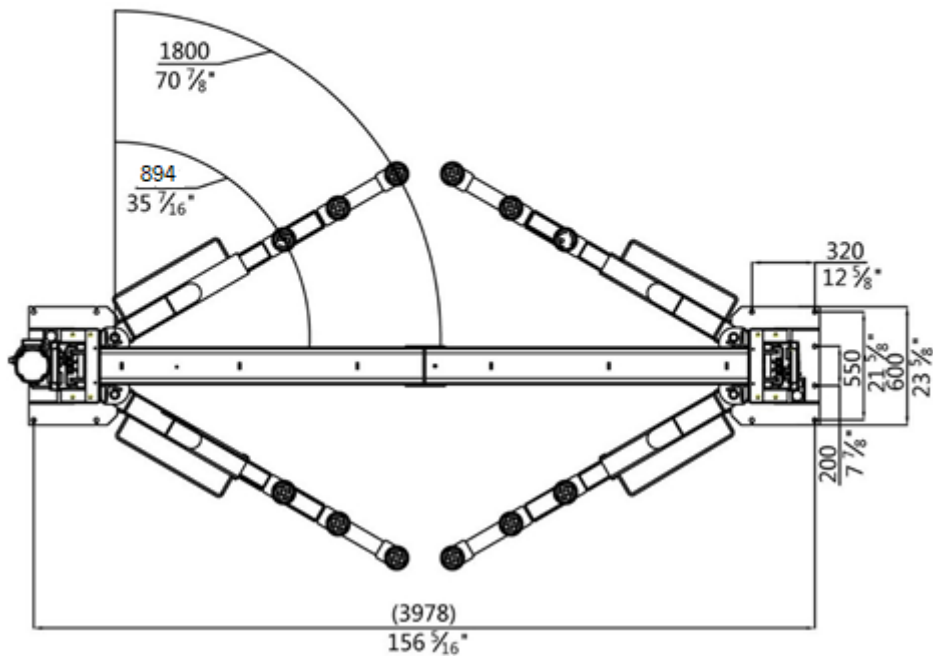
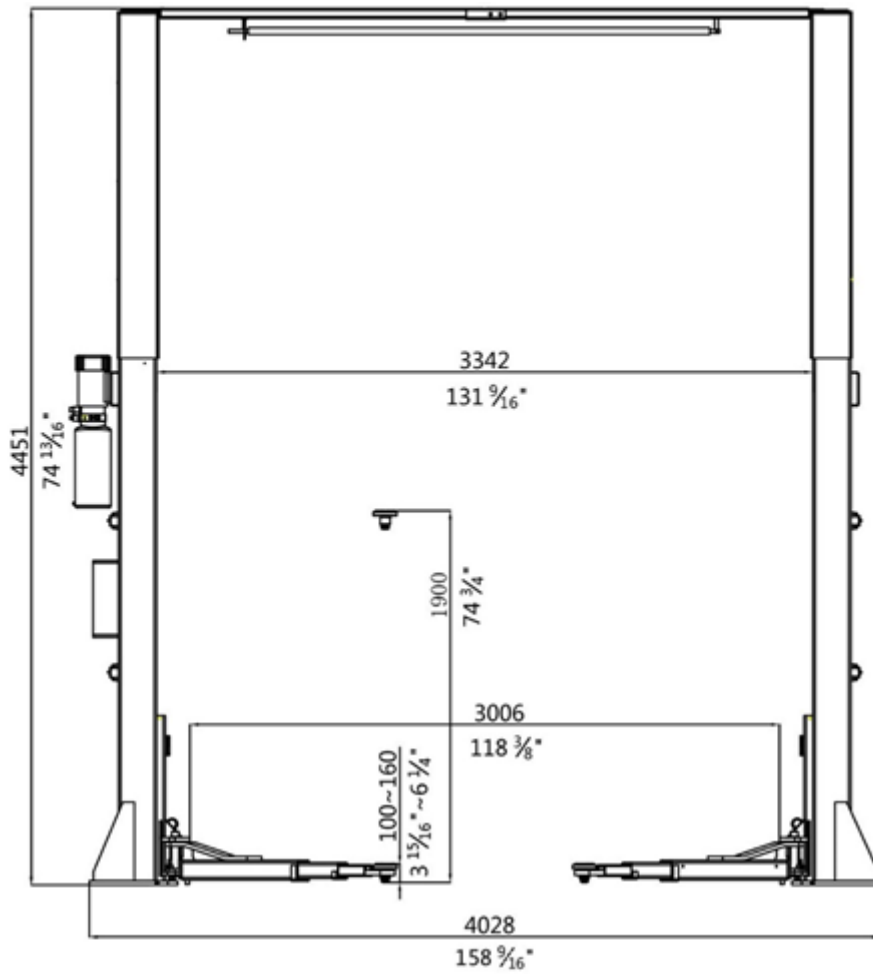
It is driven by electro-hydraulic system. The gear pump delivers hydraulic oil to oil cylinders and pushes upwards its piston. The piston drives to raise the carriage and the lifting arms. During lifting process, the mechanical safety locking system ensures no slipping in case of failure hydraulic system.

3.2 Construction of the lift

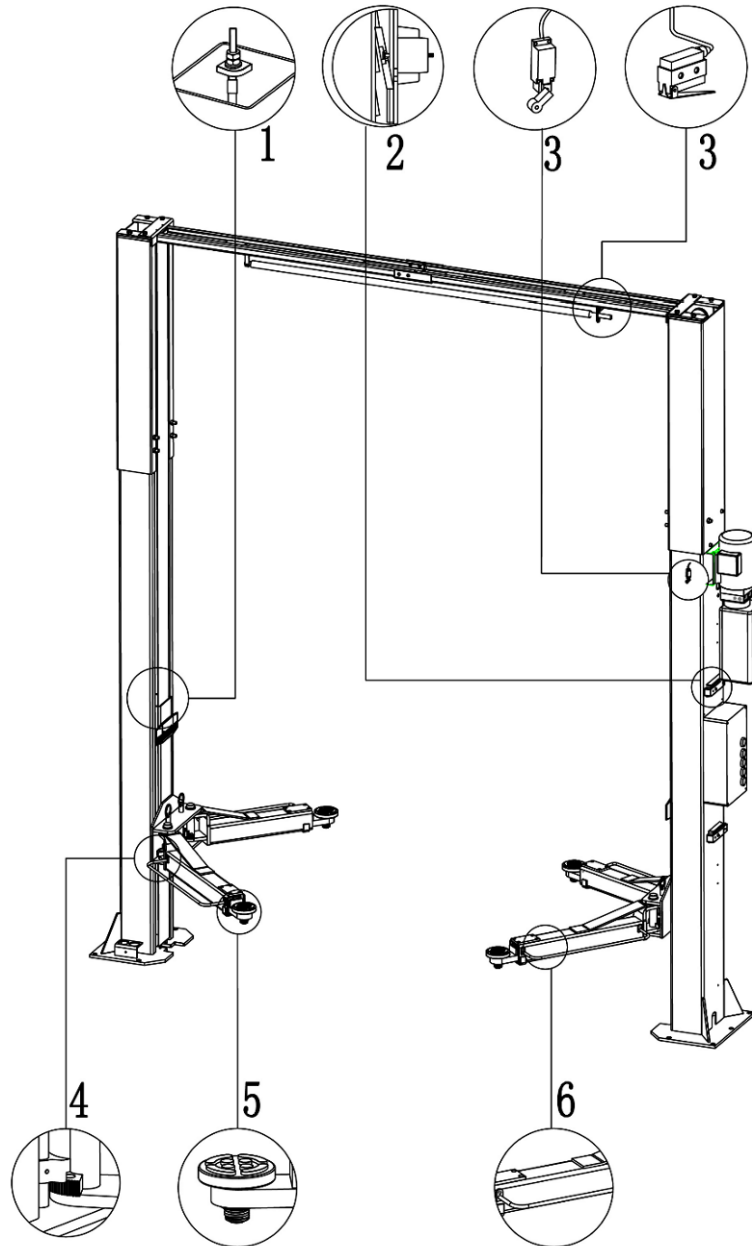


3.3 Technical data

Model	Lifting capacity	Full rise	Full rise time (3.5kW motor)	Full rise time (2.2kWmotor)
EE-6215E	5000kg	1900mm	45S	50S

3.4 Dimensions


3.5 Safety devices descriptions



POS.	Name	Function
1	Steel cable	Ensure sure the synchronization for both carriages
2	Mechanical safety catch	Catch the carriages in case of hydraulic failure
3	Limit switch	Stop rising movement at maximum safety height
4	Arm locking unit	Ensure the lifting arms are locked and avoid being swinging during lifting process
5	Lifting pad	Safe rubber contact with the wheel base of lifted vehicle
6	Fender	Protect feet from entering into danger areas that may cause pinching or shearing

INSTALLATION INSTRUCTIONS

4.1 Preparations before installation

4.1.1 Space requirements.

Indoor installation only. 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. *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 on the name plate and in the operation instructions. **Before doing electrical connection, make sure the lift is electrically adapt to the local power supply.**

4.1.3 Foundations preparations (see Annex 1, floor plan)

Indoor installation only. 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.

C20/25 concrete base with strength more than 3000psi, Minimum thickness of 200mm. Surface: Horizontal and even (Gradients max. 0.5 %)

Newly built concrete ground must be older than 20days.

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
Levelling device	1mm accuracy	1
Hammer	10 pounds	1
Truck lift	Capacity more than1000KG	1
Torque spanner	MD400	1

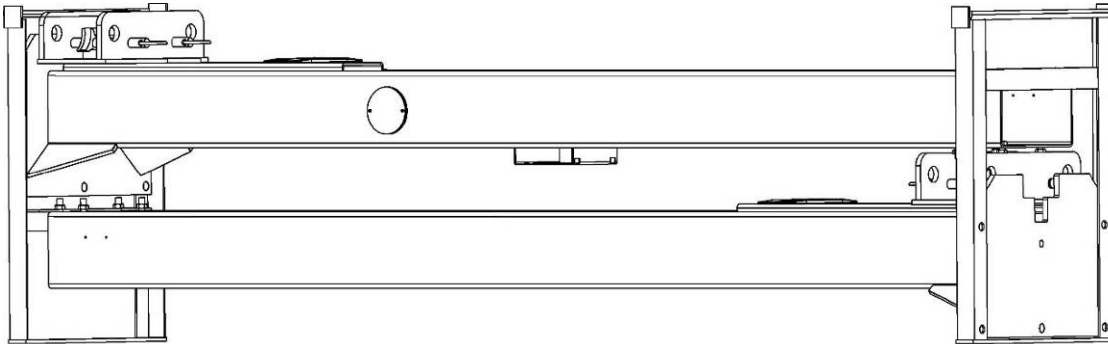
4.2 Installation attentions

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.

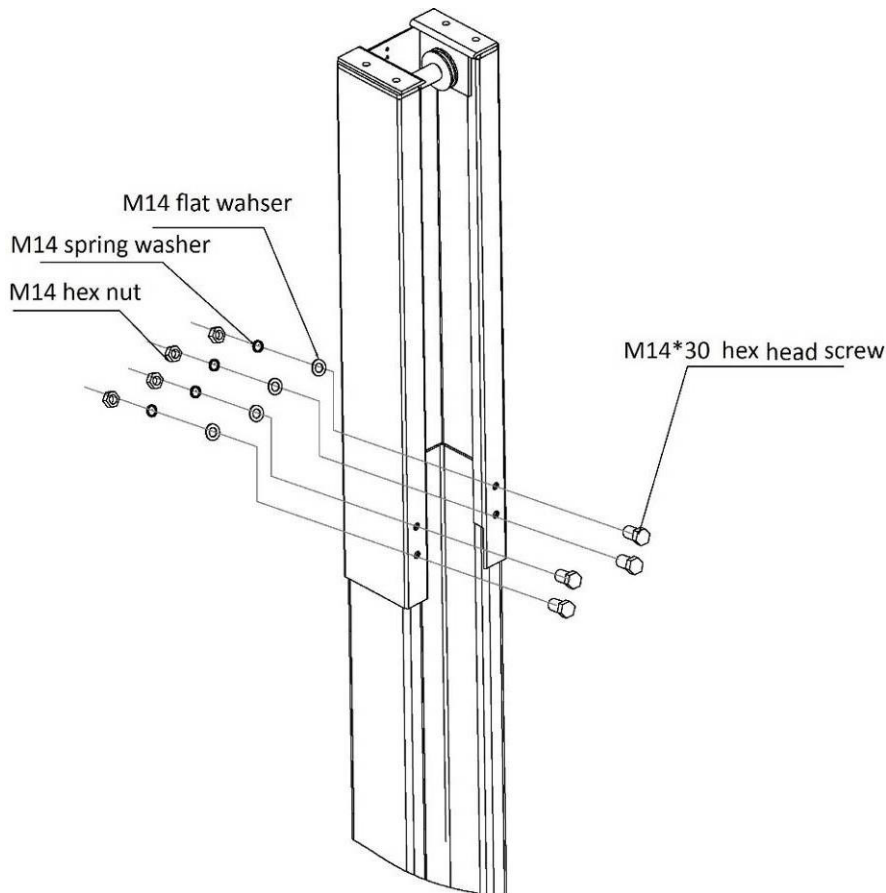
Step 2: Firstly, put something supporting between the two posts or suspend one of the posts by a crane and then remove the bolts from the packing frame.

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.

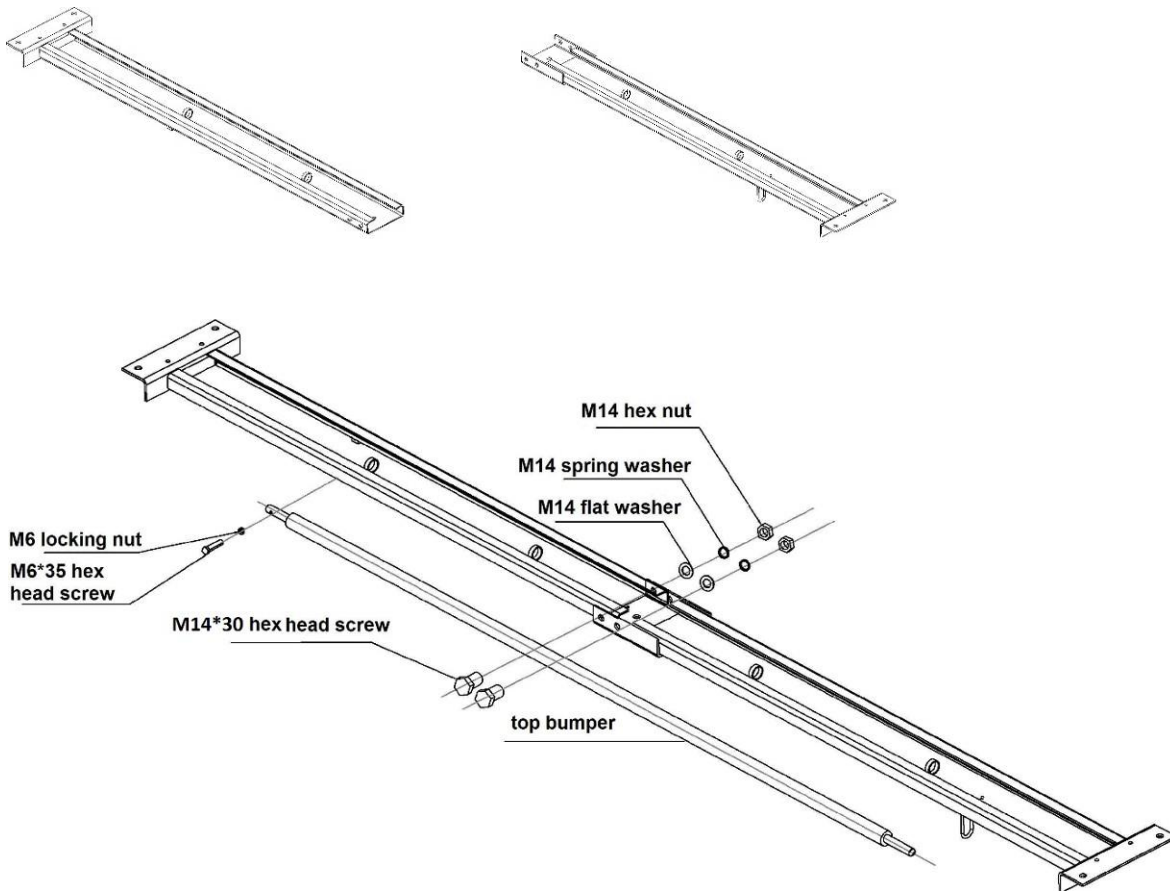
Step 3: When the first post has been taken away, place something supporter under the second post and then remove the bolts from the packing frame.

Step 4: Connect extending posts and cross beams

1. Firstly fix the extending post onto the body posts. This is only necessary when your lift is ordered with extending posts.



2. Connect the beams and fix the roof protection bumper

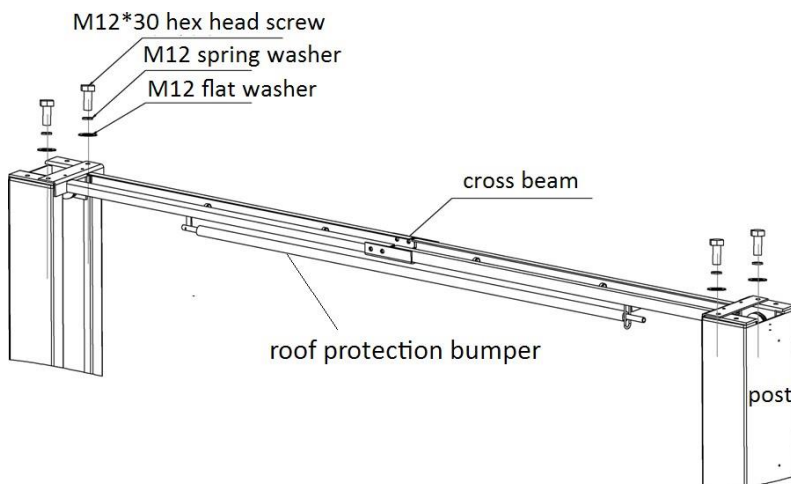


Step 5: Fix the standing position for the two posts.

1. Unfold the package and decide on which post the power unit will be mounted.
2. Ascertain the position for the two posts with chalk and tape measure and draw an outline of the two base plates on the ground.

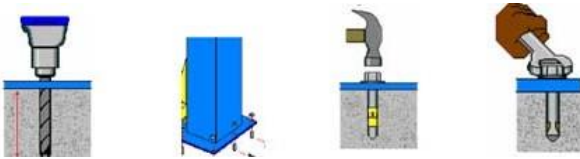
Step 6: Connect cross beam.

Make the posts face to each other and the distance between the posts equals to the length of the overhead crossbeam.
Fix the beam with the posts by screw M12×30.



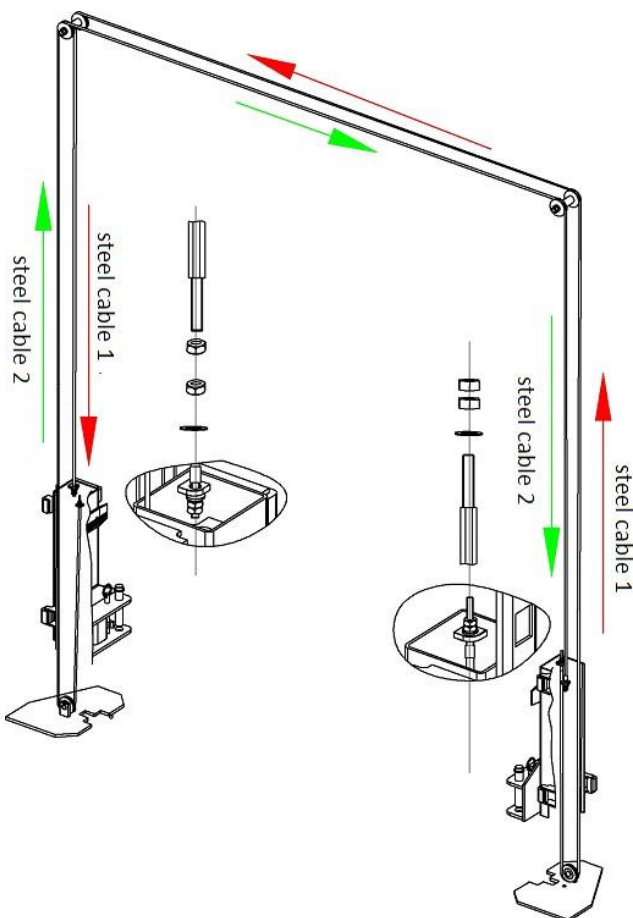
Step 7: Erect and secure the post.

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.



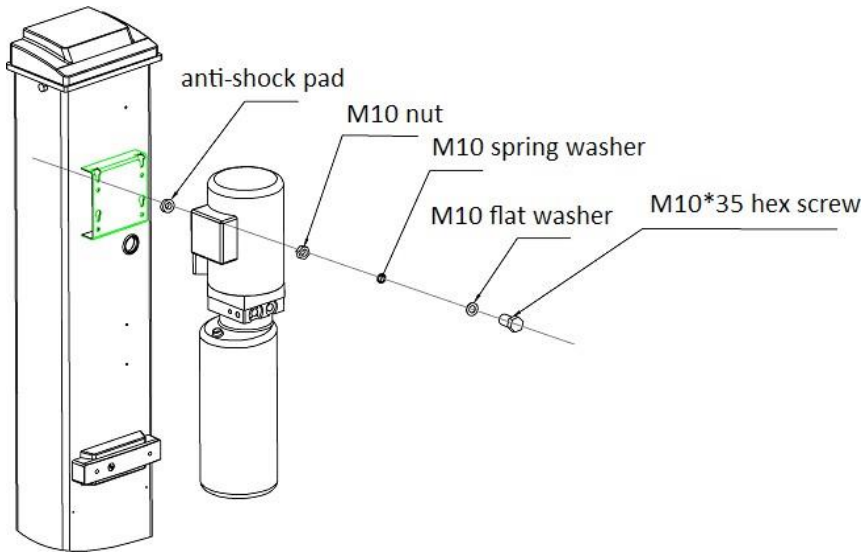
Step 8: Connect steel cables.

1. Route and fix according to the following diagram of steel cable connection.
2. Use suitable means to raise carriages at both sides to the first latching point. Ensure the both carriages are locked.
3. After the cable being fixed, adjust and make the cables at both sides be with the same tightness. (This could be judged by the sound caused by mechanical safety locking system during lifting process.)
4. Grease with NO.1 lithium grease (It is a must.)



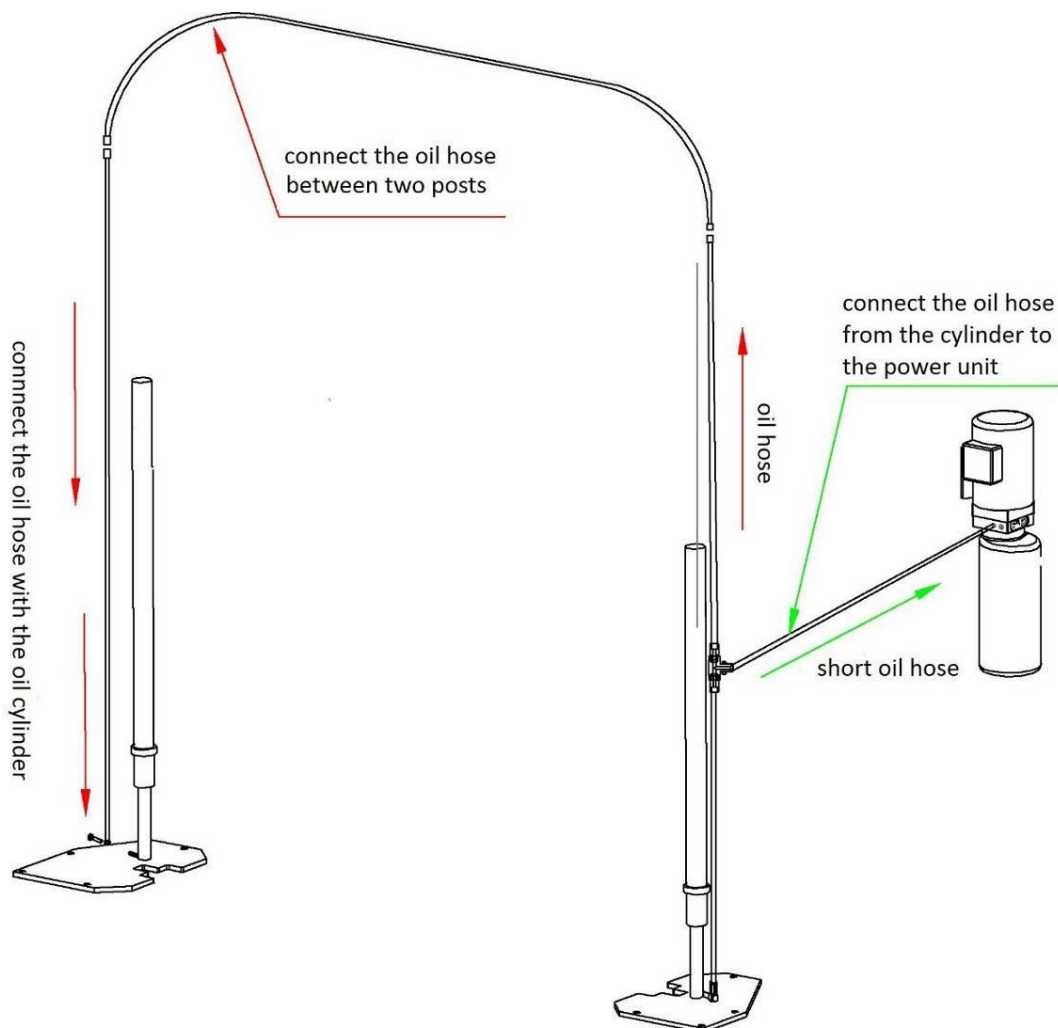
Step 9: Connect oil hoses.

1. Mount the power unit onto the power side post.

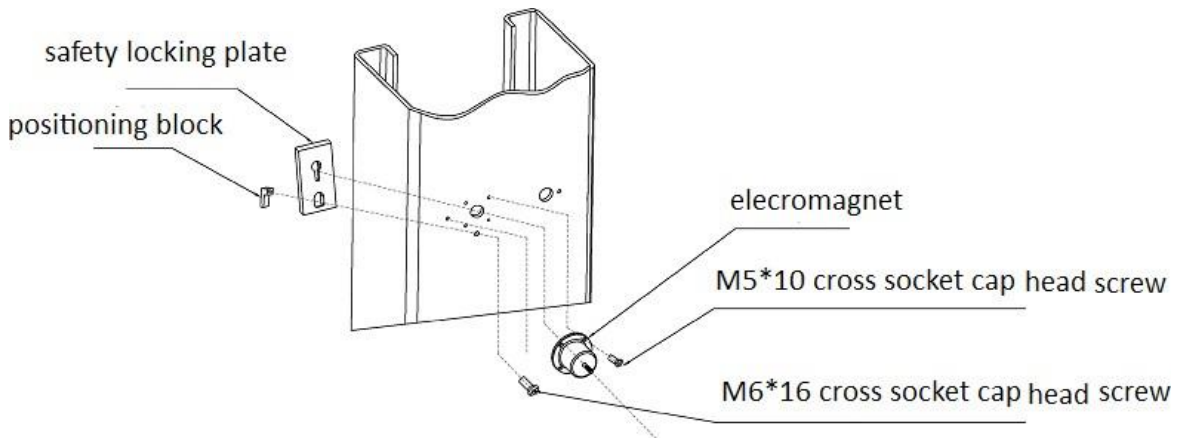


2. Connect oil hoses according to the following diagram.

NOTE: make sure the connectors and hose are clean.



Step 10: Fix the electromagnets.



safety locking plate

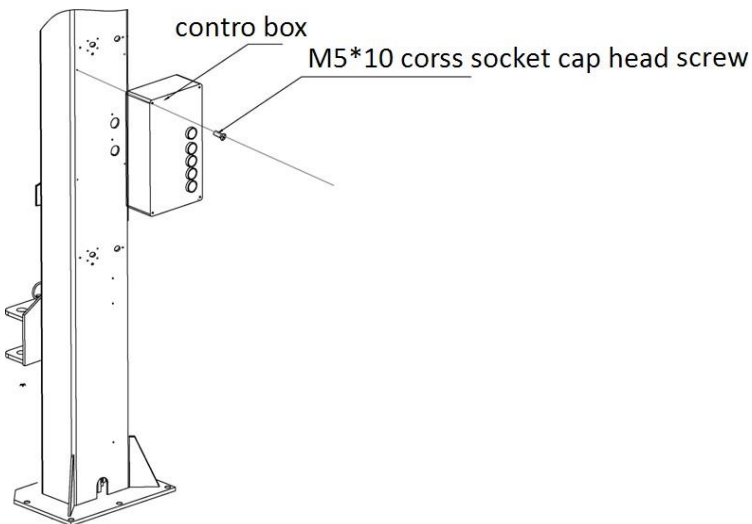


electromagnet

Step 11: Connect electrical system.

Refer to electrical connection diagram.

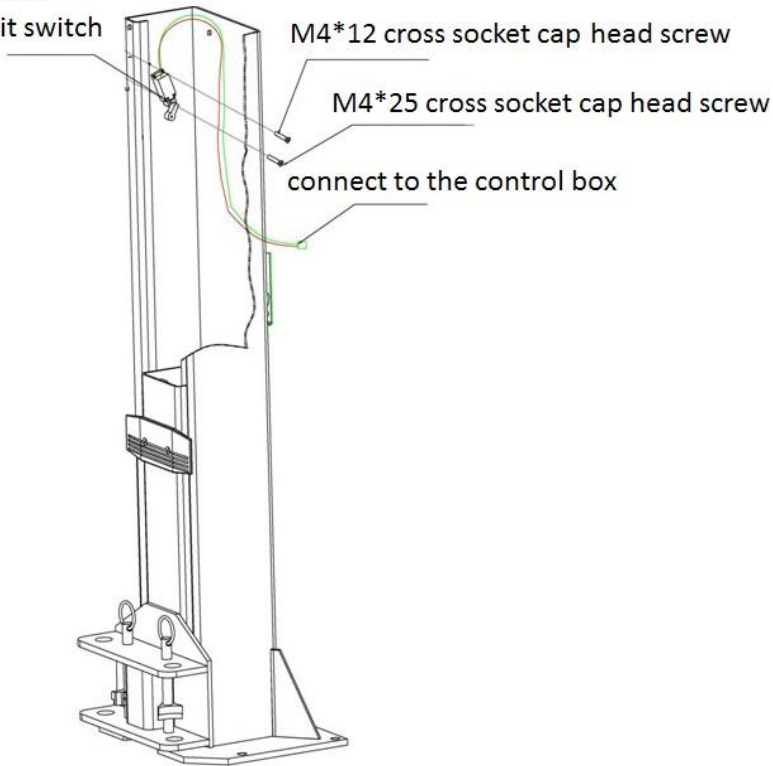
1. Mount the control box on to the power side post.



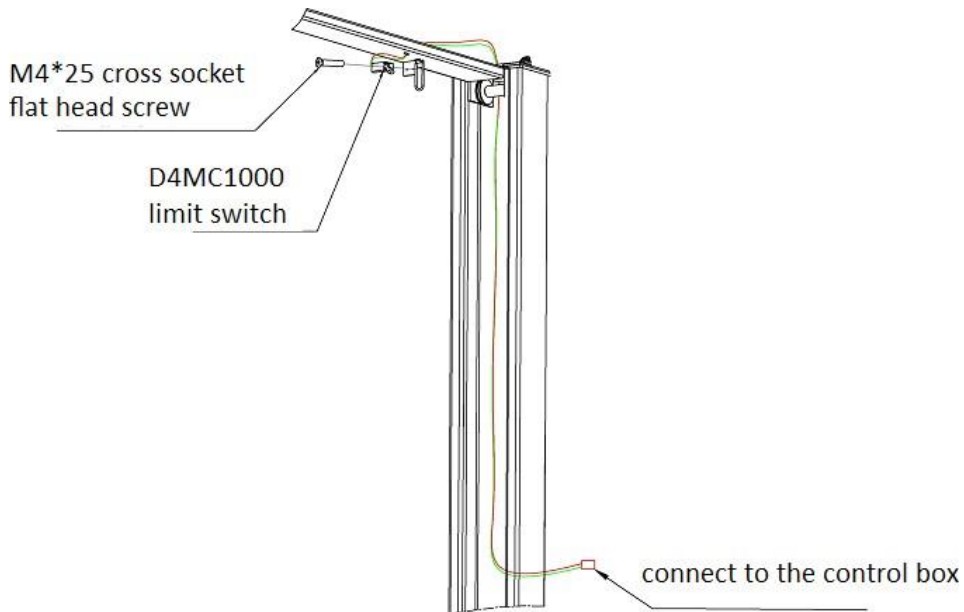
2. Connect the limit switch fixed inside the power-side post.

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limit switch



3. Connect the limit switch fixed at the cross beam.



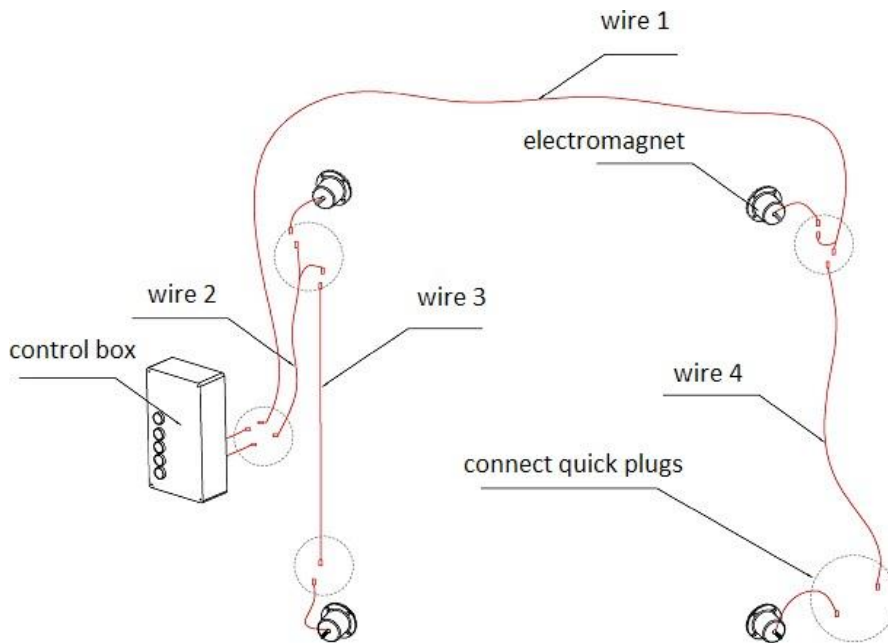
4. Connect wires of electromagnet



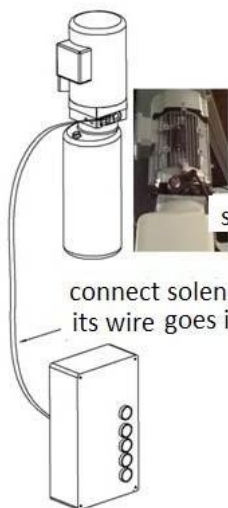
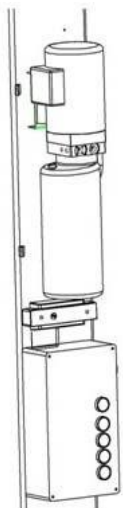
connect quick plugs



adjustable screw

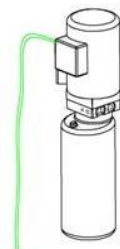


5. Connect solenoid valve, motor wire and power supply cable .

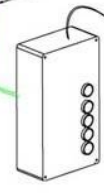


solenoid valve

connect solenoid valve with its wire goes inside the post



connect motor wire to the control box with wire goes inside the post

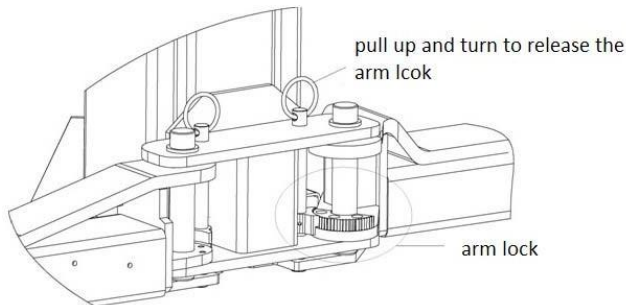


power supply cable

Step 12: Install lifting arms.

Connect the lifting arm and the carriage. The arm pin shafts must be greased at the installation. Ensure the arm lock can engage and release effectively.

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

**Step 13: 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.

Usually it needs 13 liters of hydraulic oil. Firstly, fill about 10Ls 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: It is suggested 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 months after initial use and change once per year thereafter.**

Step 14: 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 hoses are well connected. The connection is qualified when there is no abnormal sound or leakage after having been tested for 5-6 cycles.

Bleeding the hydraulic system

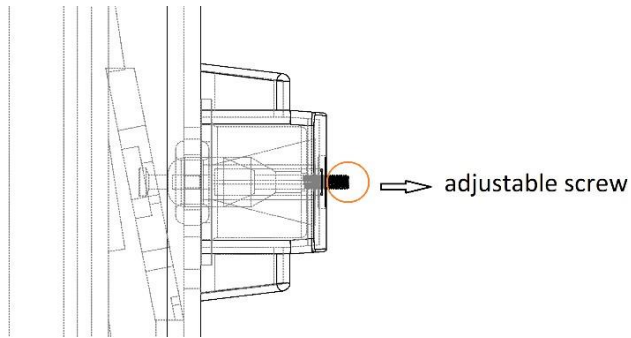
Unscrew but don't remove the nut on top of the oil cylinder and slightly press the UP button until oil gets out. Screw the nut tight thereafter. After bleeding, oil level in power unit reservoir may be down. Raise and lower lift several cycles. Add more oil if necessary to raise lift to full height. It is only necessary to add oil to raise lift to full height.



Vent air remained in the cylinder

Check the mechanical safety locking system

Check if mechanical locks can be well engaged or released in the running process. Adjust by screwing the screw as showed in the following drawing in case the locks do not work well.



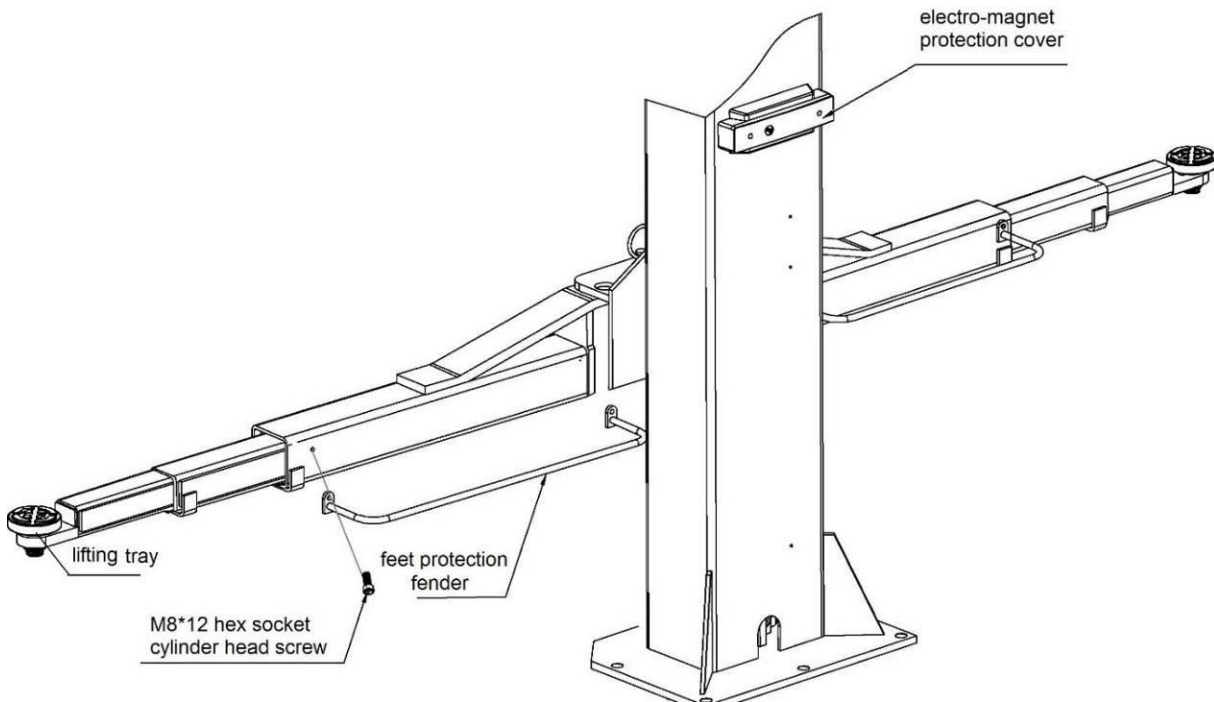
Check the synchronization of both lifting carriages.

Ensure the **synchronization** by adjusting the balance steel cables at both sides are of the same tightness.

This could be judged by the sound emitted during lifting process.

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.

Step 15: Fix feet protection fenders, chain protection clothes, electro-magnet protection covers, door-opening protections and lifting trays.



4.4 Items to be checked after installation.

S/N	Check items	YES	NO
1	Screw torque of expansion bolts : 60-80N•m;	√	
2	Rising speed $\geq 20\text{mm/s}$;	√	
3	Noise with rated load $\leq 75\text{db}$;	√	
4	Grounding resistance: not bigger than 4Ω ;	√	
5	Height difference of the two carriages $\leq 5\text{mm}$;	√	
6	Mechanical locks are robust and synchronized when running with rated load ;	√	
7	If the control button works as "hold to run"?	√	
8	If limit switches work well?	√	
9	If grounding wire is connected?	√	
10	If rising and lowering smoothly?	√	
11	If there is no abnormal notice during running with rated load?	√	
12	If there is no oil leakage when running with rated load?	√	
13	If there is no air leakage when running with rated load?	√	
14	If expansion bolts, nuts or circlips are well secured?	√	
15	If the max lifting height is 1900mm?	√	
16	If Safety advices, name plate and logos are clear?	√	

OPERATION INSTRUCTIONS

5.1 Precautions

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

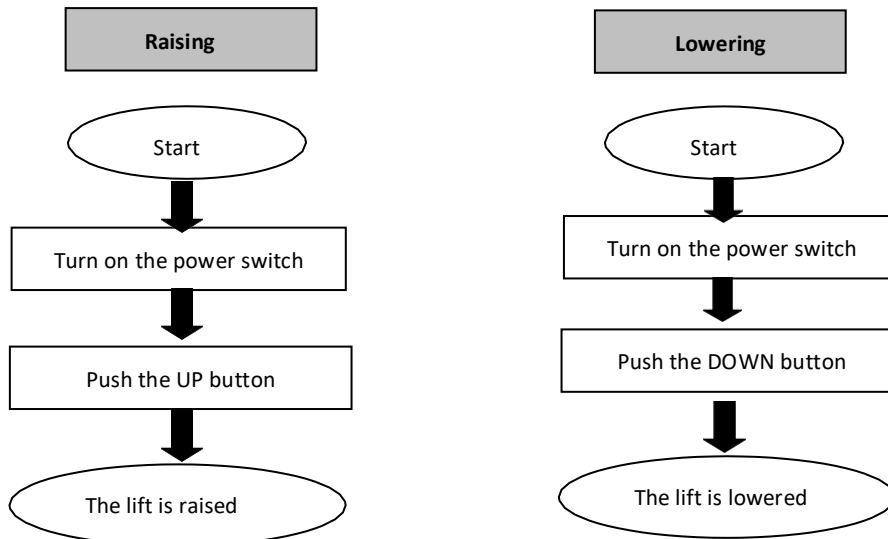
5.1.2 The lift, if its safety device malfunctions, shall not be used.

5.1.3 The machine shall not lift or lower an automobile if its center of gravity is not positioned midway of the rising platforms. Otherwise, the manufacturer as well as the dealers will not bear any responsibility for any consequence resulted thereby.

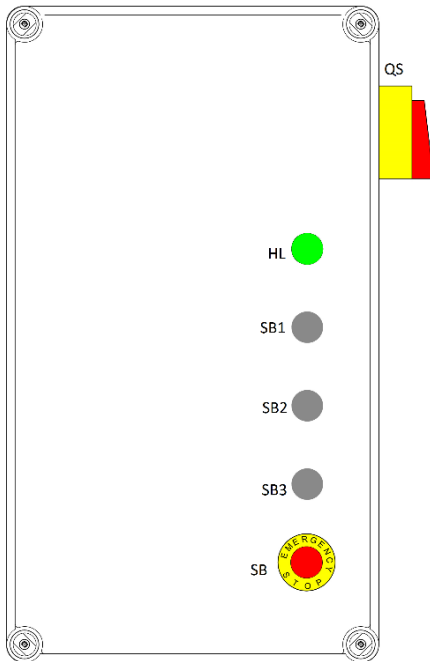
5.1.4 Operators and other personnel concerned should stand in a safety area during lifting and lowering process.

5.1.5 When platforms rise to the expected height, turn off the power to prevent any wrong operation done by unconcerned people. If necessary, lock the switch with a padlock.

5.2 Flow chart for operation



5.3 Operation instructions



Pos.	Name	Function
QS	Power switch	Control main power
HL	Power indicator	Show if electricity is connected
SB1	UP button	Control the rising movement
SB2	Safety lock button	Engage the mechanical safety lock
SB3	DOWN button	Control the lowering movement
SB	Emergency stop	Cut off operation power in emergency case

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. Do not attempt to transport a load on the lift.

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. Park the vehicle between two posts.
2. 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.
3. Turn on the Main power switch.
4. Push the "UP" button on the control box until lifting trays have touched the pick-up positions of vehicle.
5. Keep on raising the vehicle making its wheels have a bit clearance off the ground and check again the stability.
6. Raise the vehicle to the expected 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.

1. Push the "DOWN" button on the control box. Initially the carriage will go upwards about 5CM to release the safety lock. After that the carriage 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.
3. Drive the vehicle away.

TROUBLE SHOOTING

ATTENTION: If the trouble could not be fixed by yourself, please do not hesitate to contact us for help.

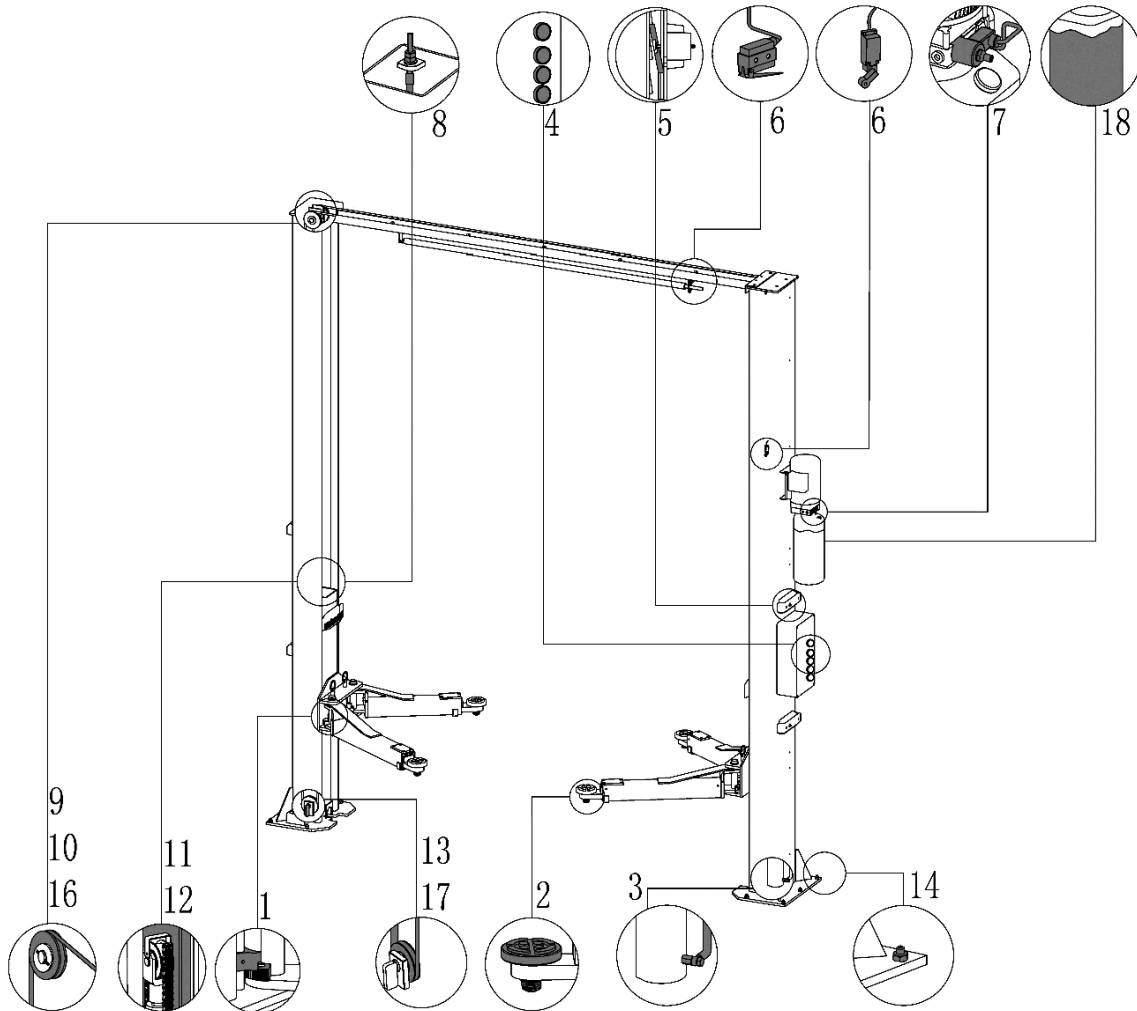
We will offer our service at the earliest time we can.

Troubles could be judged and solved much faster if more details or pictures could be provided.

TROUBLES	CAUSES	SOLUTIONS
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	Loose wire connection	Check and make a good connection.
	Blown motor.	Replace it.
	Damaged limit switch or its wire connection is loose.	Adjust or replace the limit switch.
Motor runs but will not raise	The motor run reversely.	Check the wire connection.
	Overflow valve is not well screwed up or jammed.	Clean or make adjustment
	Damaged gear pump.	Replace it.
	Too low oil level.	Add oil.
	The hose connection is loose.	Tighten it.
	The cushion valve is not well screwed up or jammed.	Clean or make adjustment
Carriages go down slowly after being raised	The oil hose leaks.	Check or replace it.
	Untightened oil cylinder.	Replace the seal.
	The single way valve leaks.	Clean or replace it.
	Solenoid valve fails to work well.	Clean or replace it.
	Slack steel cable	Check and adjust the tightness.
Raising too slow	Jammed. Oil filter	Clean or replace it.
	Too low oil level.	Add oil.
	The overflow valve is not adjusted to the right position.	Make adjustment.
	Too hot hydraulic oil (above 45°) .	Change the oil.
	Abraded. Seal of the cylinder	Replace the seal.
	Inside surface of the posts is not well greased.	Add grease.
Lowering too slow	Jammed throttle valve	Clean or replace.
	Dirty hydraulic oil	Change the oil.
	Jammed anti-surge valve	Clean it.
	Jammed oil hose	Replace it.
The steel cable is abraded	No grease at 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. Follow the below routine maintenance schedule with reference to the actual working condition and frequency of yo ur lift.



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 switch	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 cables	Check the synchronization of both carriages and adjust the tightness of the cable 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 cables	Lubricate the cables with NO.1 lithium based grease. Change with new steel cables 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 cable 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 cable 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 stick to the above maintenance requirements, the lift will always keep a good working condition and its service life could be extended.

Annex 1, Floor plan

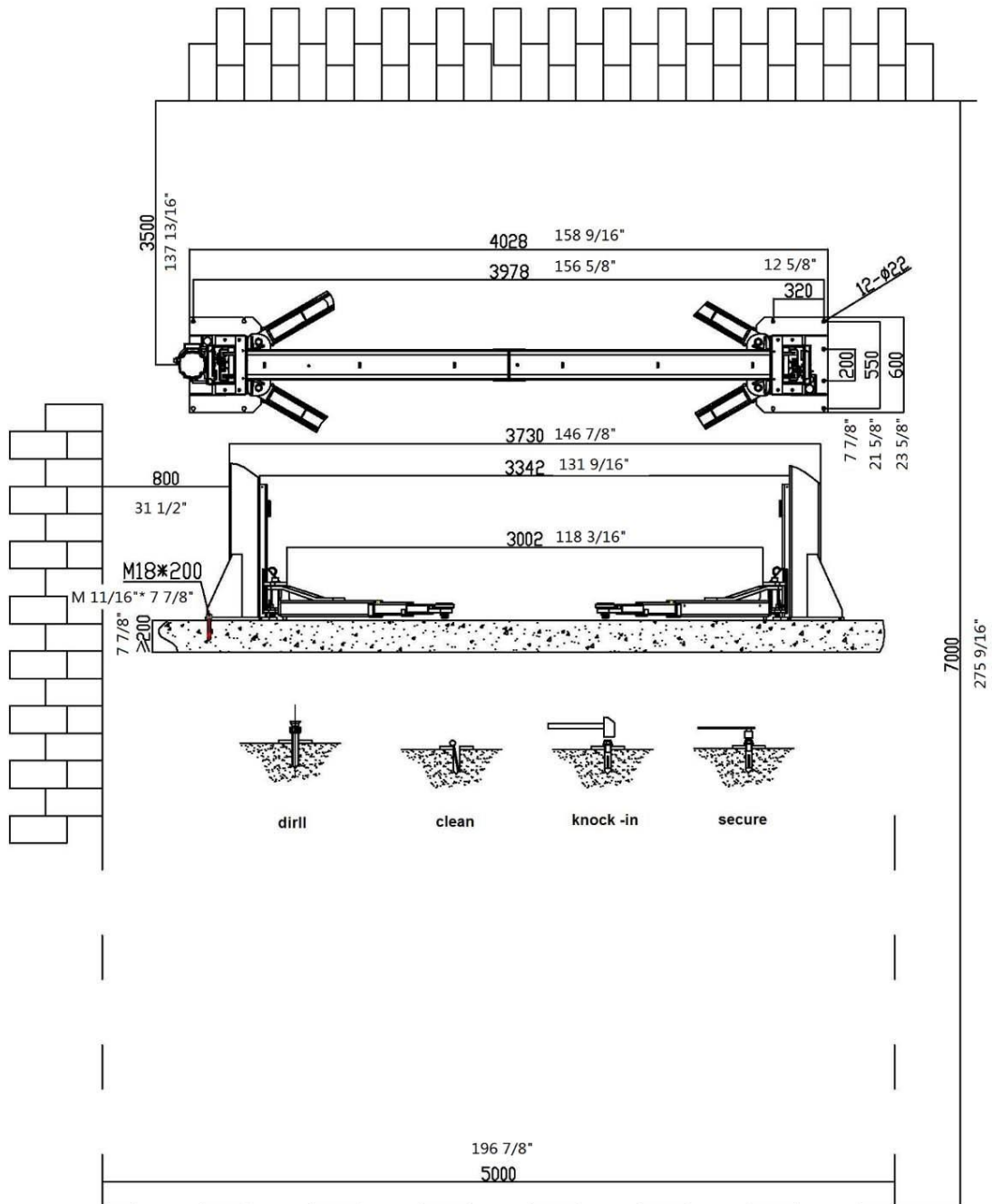
Indoor installation only. There must also be a clearance of at least 1 meter between the lifting platform and fixed elements (e.g. wall) in all lifting positions. There must be sufficient space for driving vehicles on and off.

C20/25 concrete base with strength more than 3000psi, Minimum thickness of 200mm.

Surface: Horizontal and even (Gradients max. 0.5 %)

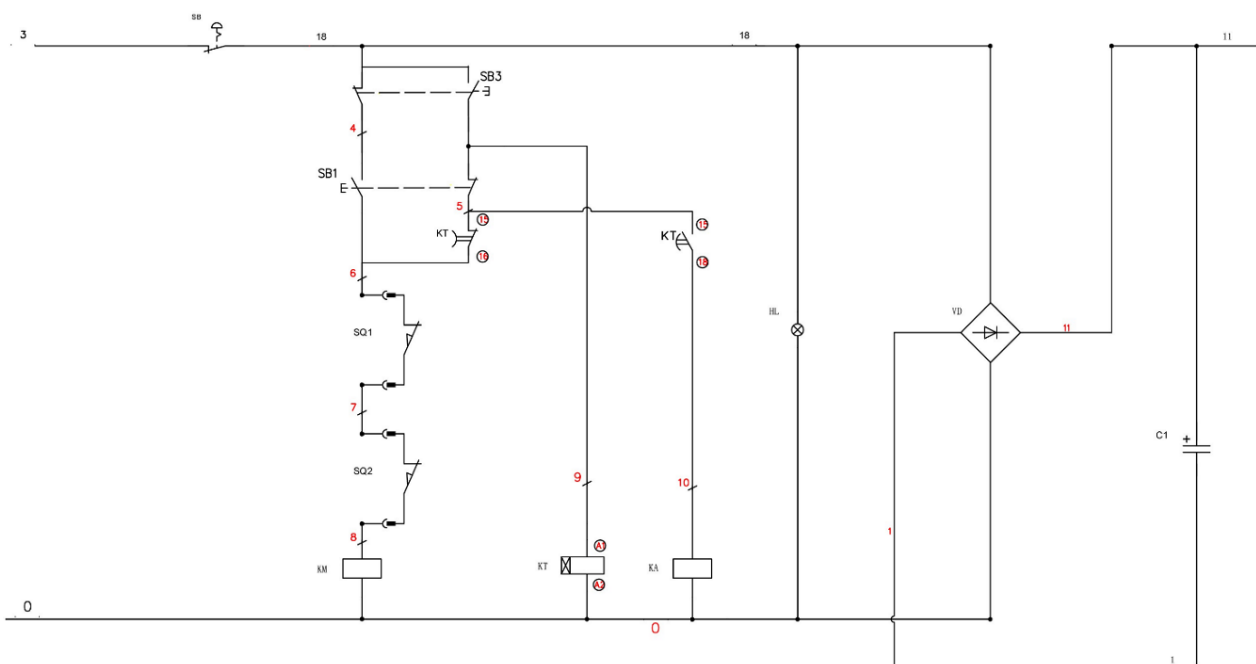
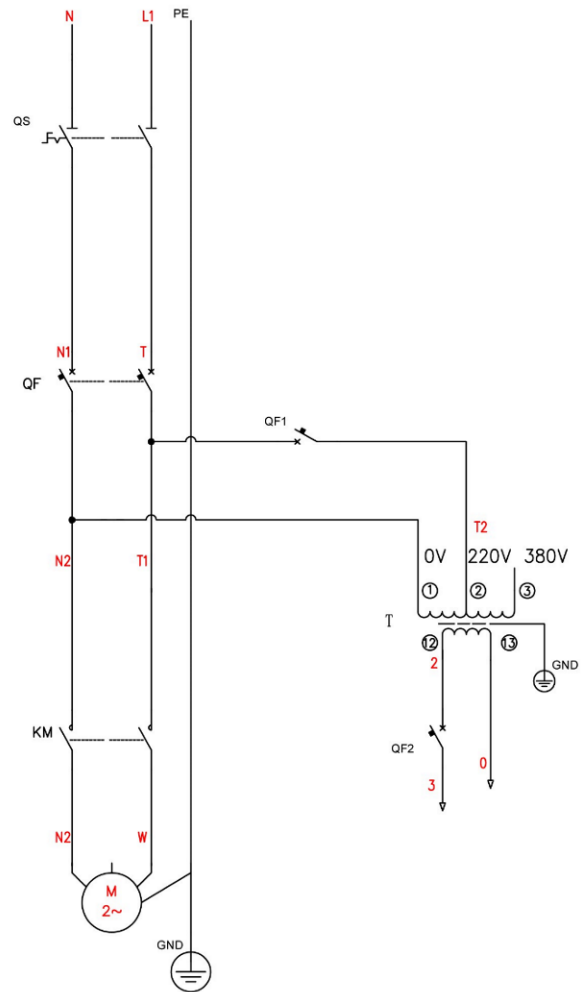
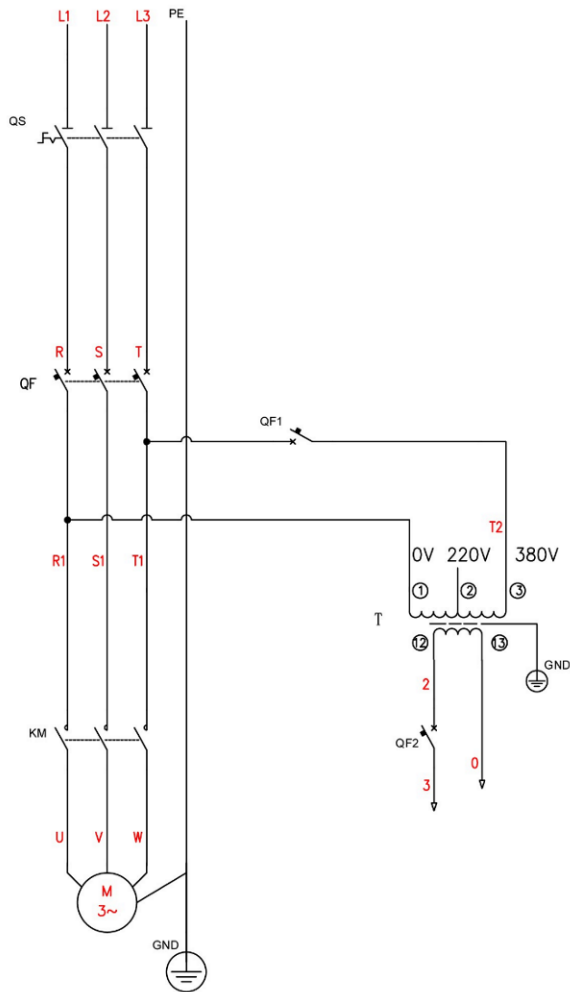
Newly built concrete ground must be older than 20days.

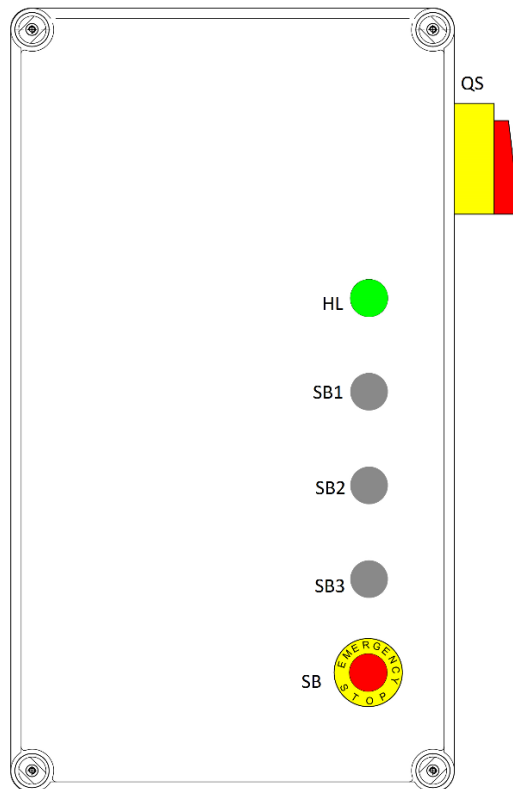
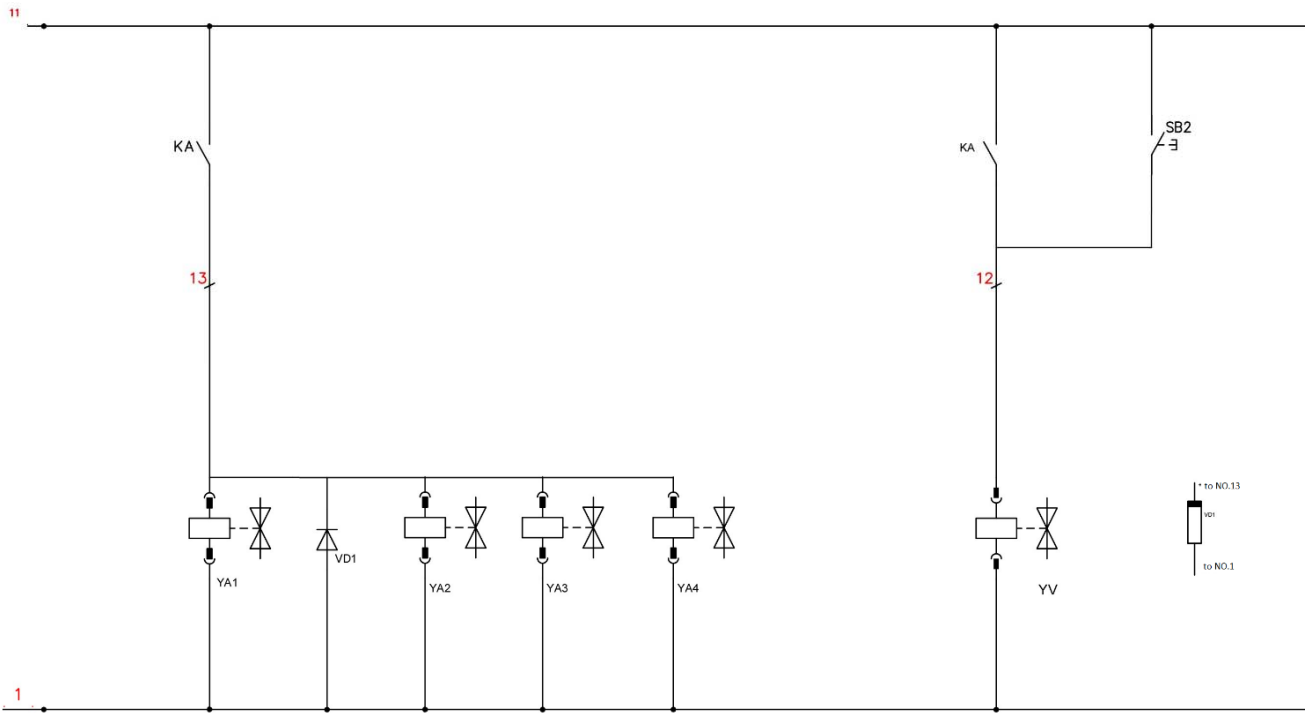
In mm.

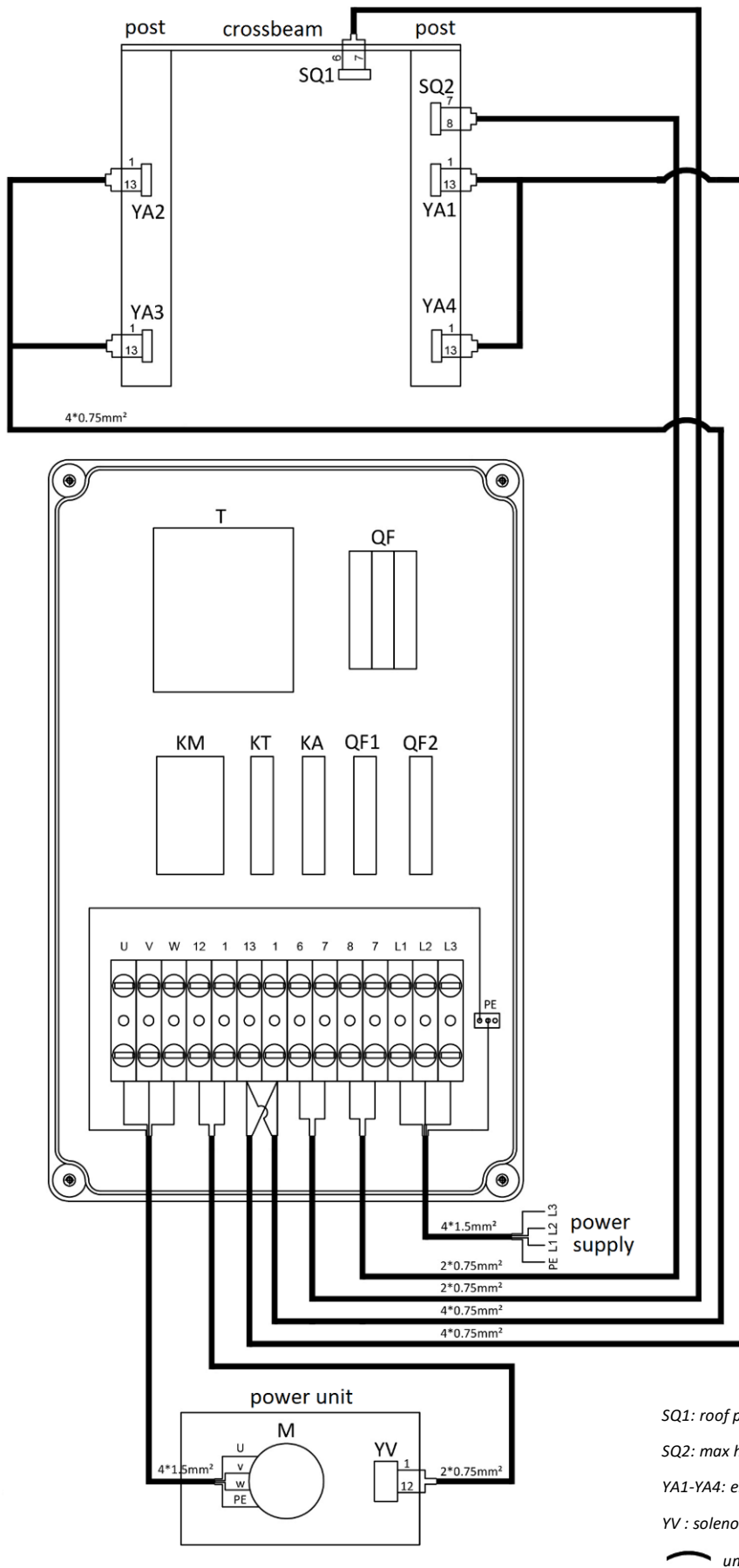


Annex 2, Electrical diagrams and parts list

(Note: For the specific requirements on voltage, the actual voltage of your lift may differ with the following diagram)



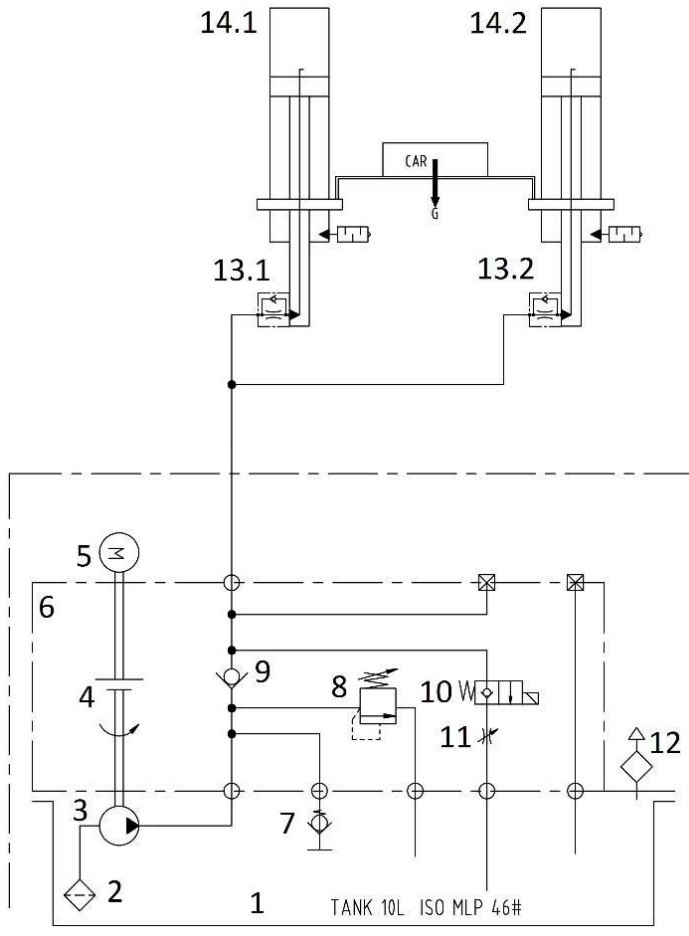




Pos.	CODE	Name	Specification	Qty
T	320101048	Transformer(220V)	JBK3(JBK5)-160VA 220V/24V	1
	320101049	Transformer(230V)	JBK3(JBK5)-160VA 230V-24V	1
	320101050	Transformer(240V)	JBK3(JBK5)-160VA 240V-24V	1
	320101051	Transformer(380V)	JBK3(JBK5)-160VA 380V-24V	1
	320101052	Transformer(400V)	JBK3(JBK5)-160VA 400V-24V	1
	320101053	Transformer(415V)	JBK3(JBK5)-160VA 415V-24V	1
	320102014	Transformer (Dual 400V-230V)	BK-200VA 400V230V-24V	1
SQ1	320301002	Limit switch	D4MC-1000	1
SQ2	320301011	Limit switch	TZ8108	1
QS	320304001	Power switch	LW26GS-20/04	1
SB1-SB3	320401013	Button	AR22F0R-11-W	3
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
QF	320801003	Circuit breaker(dual)	DZ47-63C25/3P	1
	320801001	Circuit breaker(3Ph)	DZ47-63C16/3P	1
	320802001	Circuit breaker(1Ph)	DZ47-63C32/2P	1
QF1	320803003	Circuit breaker	DZ47-63C3/1P	1
QF2	320803006	Circuit breaker	DZ47-63C10/1P	1
KM	320901011	AC contactor (dual or 3.0,3.5kW)	CJX2-1810/AC24V	1
	320901001	AC contactor(1Ph or 3Ph)	CJX2-1210/AC24	1
C	321001004	Capacitor	4700UF/50V	1
VD	321002001	Bridge rectifier	KBPC5A-35A	1
HL	321201001	Power indicator	AD17-22G-AC24	1
YA1-YA4	330310005	Electromagnet	6254E-A14 MQZ2-15/DC24V	4

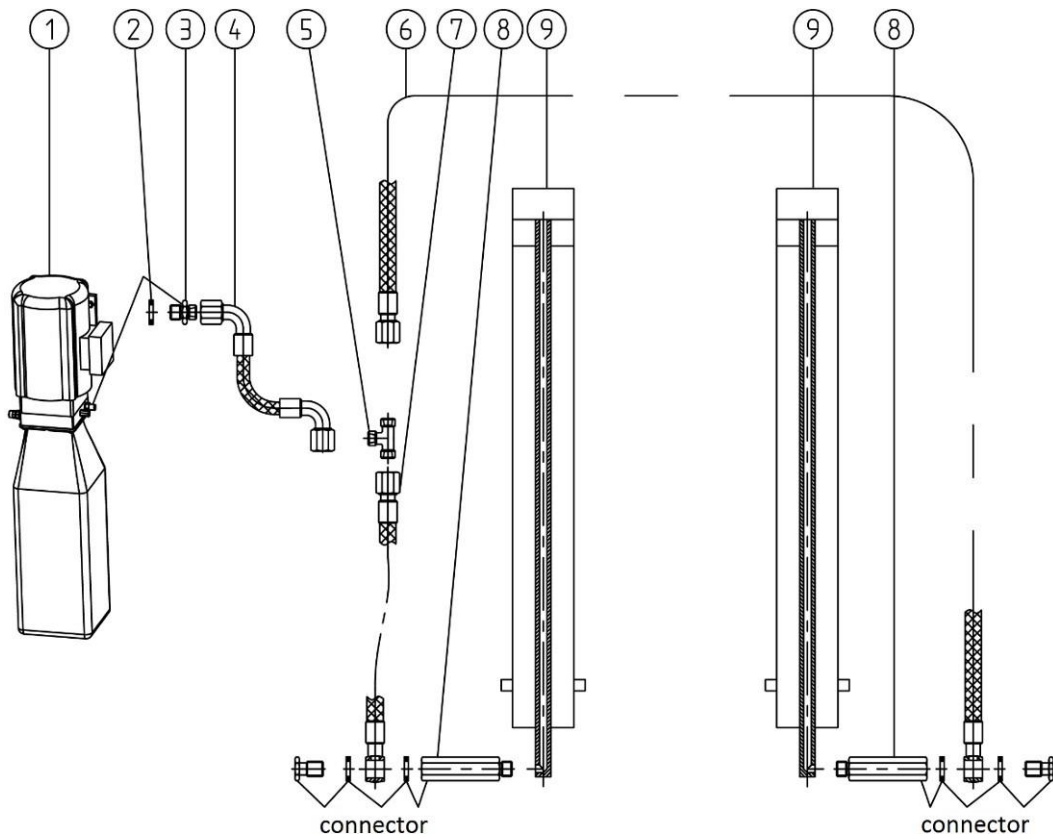
**NOTE: For power supply of other voltage, the transformers are different.
Please check with our customer service people when order spare parts.**

Annex 3, Hydraulic diagrams and parts list

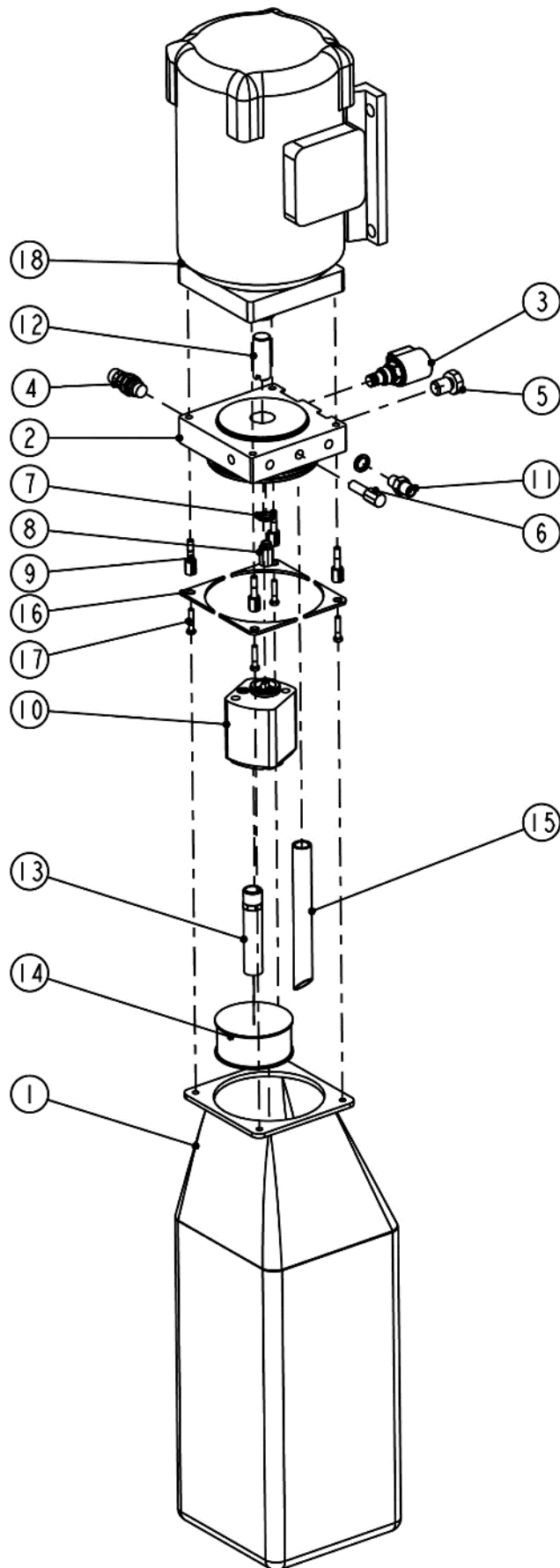


- 1.oil tank
- 2.oil filter
- 3.gear pump
- 4.coupling
- 5.aluminium motor
- 6.hydraulic block
- 7.cushion valve
- 8.overflow valve
- 9.single way valve
- 10.solenoid unloading valve
- 11.flow control valve
- 12.tank cover
- 13.composite connector
- 14.oil cylinder

Seal rings	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



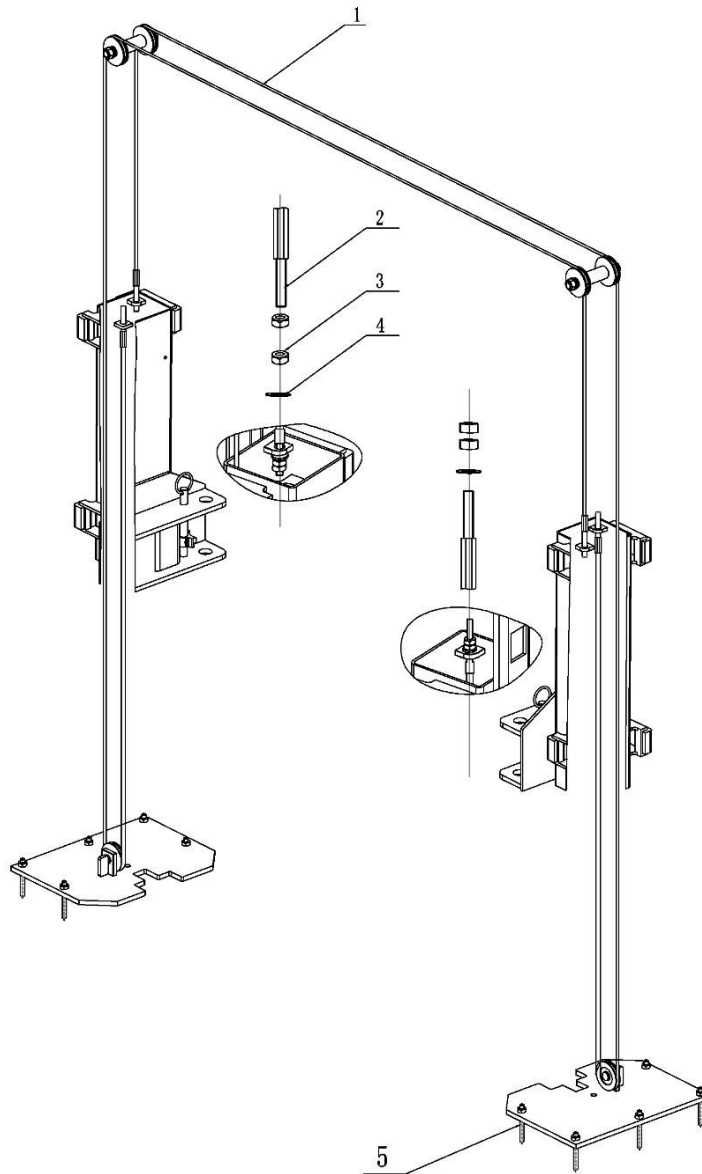
Pos.	CODE	Name	Specification	Qty
1		Hydraulic power unit	2.2kW or 3.5kW	1
2	207103025	Composite washer	M14	1
3	310101028	Shift connector	G1/4M14x1.5,M14x1.5 with protective cap	1
4	624001042B	Rubber oil hose	DN8 ,L=400	1
5	615006003	Three-way connector	6214E-A4-B4	1
6	624002005B	Rubber oil hose	L=10100mm	1
7	624002004B	Rubber oil hose	DN8, L=2265mm	1
8	615015003	Composite connector	6254E-A4-B8	2
9	615017013	Oil cylinder	6264-A24	2



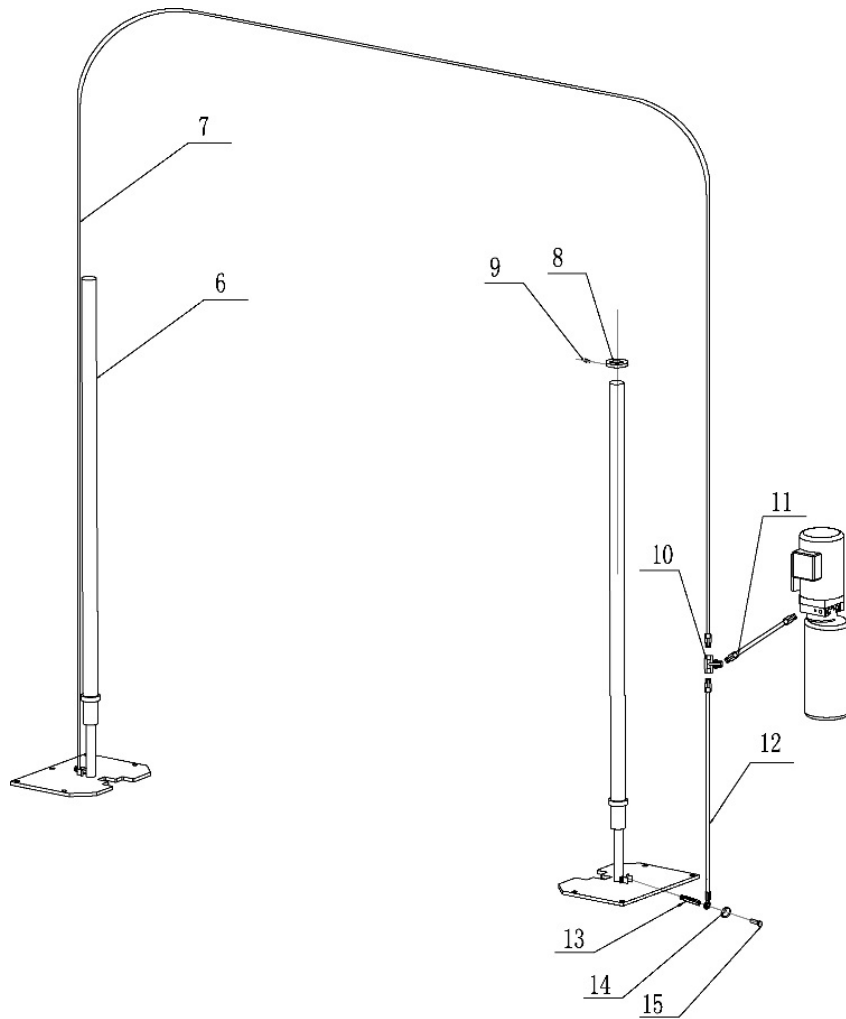
Pos.	CODE	Name	Specification	Qty
1	330405001	Oil tank	10L	1
2	330101063B	Hydraulic block (E)	YF-2D	1
3	330308006	Solenoid unloading valve	DHF06-220H/DC24	1
4	330304001	Overflow valve	EYF-C	1
5	330302001	Single way valve	DYF-C	1
6	330305002	Throttle valve	TC-VF	1
7	207103019	Composite washer	M14	2
8	330301001	Cushion valve	HZYF-C1	1
9	202109064	Screw for oil tank installation	M6*30	4
10	330201006	Gear pump (3Ph,2.2kW)	CBK-F225/CBK-2.5F	1
	330201008	Gear pump (3Ph,3.5kW)	CBK-F242	1
	330201007	Gear pump (3Ph,3.0W)	CBK-F233	1
	330201005	Gear pump (1Ph,2.2kW)	CBK-F220/CBK-2.1F	1
11	310101028	Shift connector	G1/4M14x1.5	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 tube	YH-D	1
16	410010091	Tank reinforced plate	6254E-A4-B12	4
17	201103001	Hex flange screw	M5*25	4
18	320201001	Motor	220V-2.2KW -1PH-50HZ-2P	1
	320201002	Motor	230V-2.2KW -1PH-50HZ-2P	1
	320201003	Motor	240V-2.2KW -1PH-50HZ-2P	1
	320201004	Motor	380V-2.2KW -3PH-50HZ-2P	1
	320201005	Motor	400V-2.2KW -3PH-50HZ-2P	1
	320201006	Motor	415V-2.2KW -3PH-50HZ-2P	1
	320203001	Motor	380V-3.5KW -3PH-50HZ-2P	1
	320203005	Motor	400V/3.5KW-3PH-50HZ-2P	1
	320203006	Motor	415V/3.5KW-3PH-50HZ-2P	1
	320204016	Motor	380V-3.0KW -3PH-50HZ-2P	1
	320204017	Motor	400V-3.0KW -3PH-50HZ-2P	1
	320204018	Motor	415V-3.0KW -3PH-50HZ-2P	1

NOTE: The motor is different for different voltage or capacity.

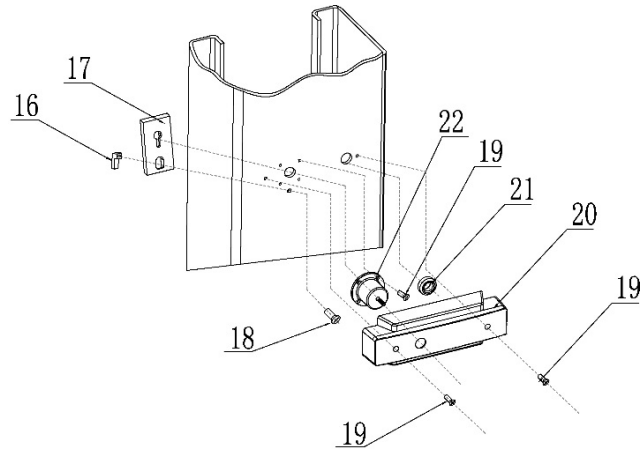
Please check with our customers service people when order spare parts.

Annex 4, Mechanically exploded drawings and parts list


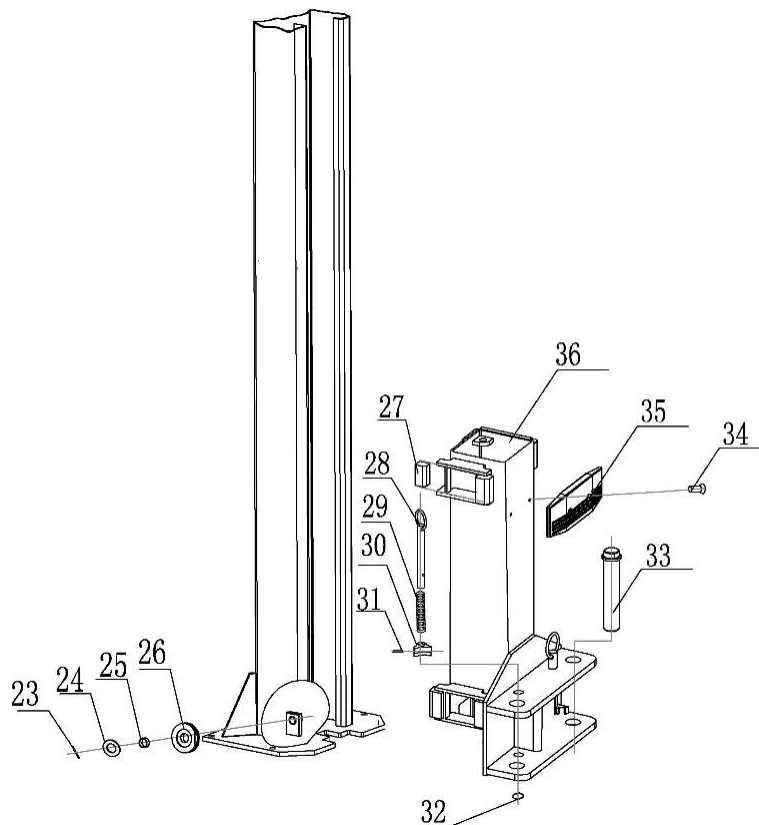
Pos.	CODE	Name	Specification	Qty
1	615016001C	Steel cable	6215E-A8 L=12530mm	1
2	615016001C	Steel cable	6215E-A8 L=12530mm	1
3	203101012	Hex nut M20	M20	8
4	204101011	Class C flat washer M20	M20	4
5	201201008	Expansion bolt M18*200	M18*200	12



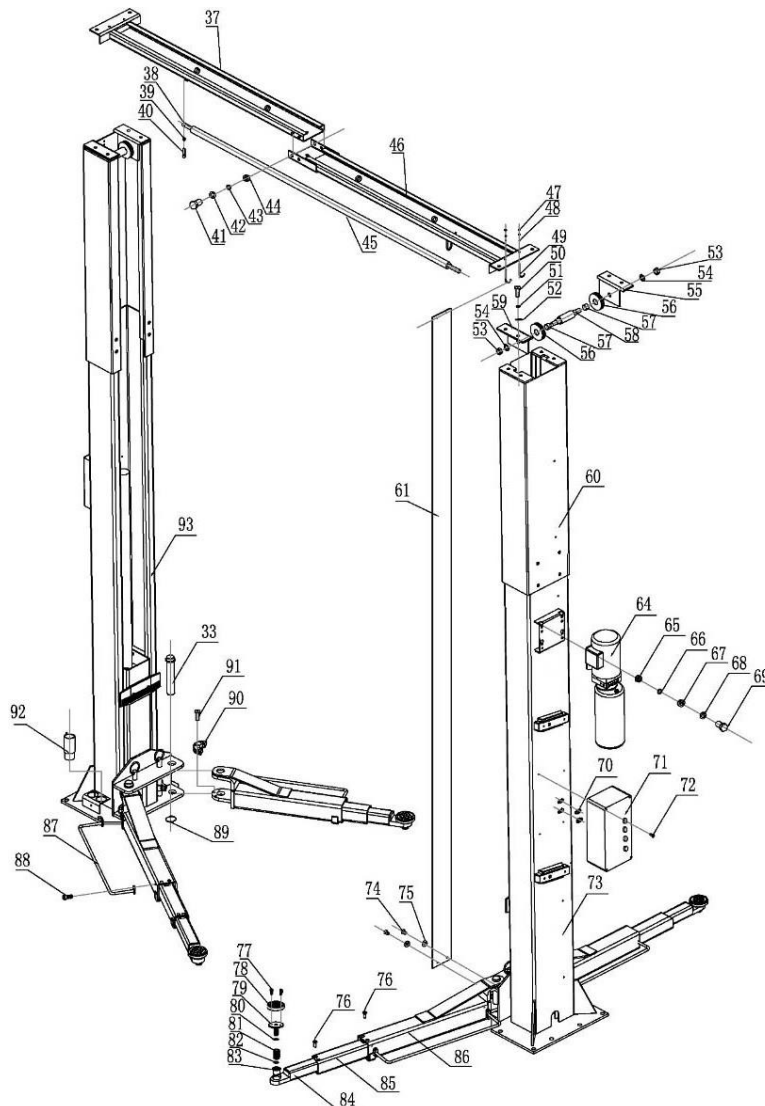
Pos.	CODE	Name	Specification	Qty
6	615017013	Oil cylinder	6264-A24	2
7	624002005B	Φ8 rubber oil hose	L=10100mm	1
8	410170101B	Cylinder fix ring	6264-A24-B1	2
9	202109024	Hex head full swivel screw M6*35	M6*35	2
10	615006003	Three-way connector	6214E-A4-B4	1
11	624001042B	Φ8 Rubber oil hose	L=400mm	1
12	624002004B	Φ8 Rubber oil hose	L=2265(mm)	1
13	615015003	Composite connector	6255E-A7-B7	2
14	207103025	Composite washer	13.7*20.00*1.50(BS224)	4
15	615015003	Composite connector	6255E-A7-B7	2



Pos.	CODE	Name	Specification	Qty
16	410040071	Positioning block	6254E-A17	4
17	410040061	Safety locking plate	6254E-A13	4
18	202101031	Cross socket cap head screw M6*16	M6*16	4
19	202101021	Cross socket cap head screw M5*10	M5*10	24
20	420040100	Electromagnet protector	6254E-A15	4
21	420040020	Ø20 hose clip	6254E-A22	4
22	330310005	Electromagnet(small)	6254E-A14 MQZ2-15/DC24V	4



Pos.	CODE	Name	Specification	Qty
23	206201004	Cotter pin	M3*45	2
24	410010031	Washer	6254E-A1-B3	2
25	205101008	Bearing 2518	2518	2
26	410130051	Pulley	6255E-A1-B2	2
27	420010010	Sliding block	6254E-A2-B5(6254A-A7-B1)	16
28	612015006C	Pulling pod	6255E-A3-B4	4
29	410150121	Pressure spring	6254E-A2-B4 (6215-A3-B50)	4
30	410150921	Teeth block	6255E-A3-B5	4
31	206102008	Elastic pin 5*50	M5*50	4
32	204301008	Type B circlip 22	M22	4
33	612015005	Shaft	6255E-A13	4
34	202103021	Cross socket flat head screw M8*16	M8*16	4
35	420130040B	Protection rubber pad	6255E-A3-B3	2
36	614016003B	Carriage	6215E-A3-B1	2



Pos.	CODE	Name	Specification	Qty
37	614016006	Cross beam (in)	6215E-A10-B2	1
38	410160023	Roof protection bar	6215E-A10-B3	1
39	203103005	Hex locking nut with non-metallic insert M6	M6	1
40	202109024	Hex head full swivel screw M6*35	M6*35	1
41	201102035	Hex head full swivel screw M14*30	M14*30	5
42	204101008	Flat washer M14	M14	5
43	204201007	Spring washer M14	M14	5
44	203101008	Hex nut M14	M14	5
45	420060010	Black foam	ID=22	1
46	614016005	Cross beam (out)	6215E-A10-B1	1
47	203101004	Hex nut M6	M6	8
48	204101004	Flat washer M6	M6	4
49	410010051	Rod of chain protection cloth	6254E-A1-B5	4
50	201102027	Hex head full swivel screw M12*30	M12*30	4
51	204201006	Spring washer M12	M12	4
52	204101008	Flat washer M12	M14	4
53	203101012	Hex nut M20	M20	1
54	204101011	Flat washer M20	M20	1
55	410060033	Left supporting bracket	6214E-A22-B1	2
56	410130051	Pulley	6255E-A1-B2	4
57	205101008	Bearing 2518	2518	4
58	410160011B	Shaft of up pulley	6215E-A9-B3	2
59	410060023	Right supporting bracket	6214E-A22-B3	2
60	614016004	Extending post	6215E-A9-B1	2
61	615016004	Chain protection cloth	6215E-A5 (4320*180)	2
64		Hydraulic power unit	6215E	1
65	203101006	Hex nut M10	M10	4
66	204201005	Spring washer M10	M10	4
67	420040010	Anti-shock pad	6254E-A23	4
68	204101006	Flat washer M10	M10	4
69	201103004	Hex head full swivel screw M10*35	M10*35	4
70	420040030	Φ40 hose clip	6254E-A21	2
71		Control box	6255E	1
72	202101021	Cross socket cap head screw M5*10	M5*10	4
73	614016001B	Power side post	6215E-A1-B1	1
74	202101027	Cross socket cap head screw M6*8	M6*8	4
75	204101004	Flat washer M6	M6	4
76	202109040	Hex socket cylinder head screw M10*15	M10*15	16
77	202110004	Hex socket button head screw M8*12	M8*12	8

Pos.	CODE	Name	Specification	Qty
78	420130010	Rubber lifting pad	6214EKZ-A4-B4-C4	4
79	612013001	Lifting tray	6214EKZ-A4-B4-C1	4
80	204302001	Circlip 35	φ35	4
81	410130031	Swivel sheath	6214EKZ-A4-B4-C2	4
82	204302005	Circlip 42*2.5	φ42*2.5	8
83	410130041	Inside swivel sheath	6214EKZ-A4-B4-C3	4
84	614013213B	Tensile arm	6255E-A4-B3	4
85	614013212	Mid arm	6255E-A4-B2	4
86	614013211	Supporting arm	6255E-A4-B1	4
87	614004013B	Feet protection fender	6254E-A8-B5	4
88	202110004	Hex socket cylinder button head screw M8*12	M8*12	8
89	204301013	Circlip 38	M38	4
90	410150911	Semi-Teeth block	6255E-A4-B4	4
91	202109085	Hex socket cylinder head screw M12*30	M12*30	12
92	612013002	Height adapter	6214EKZ-A4-B5	4
93	614016002B	Post	6215E-A2-B1	1