

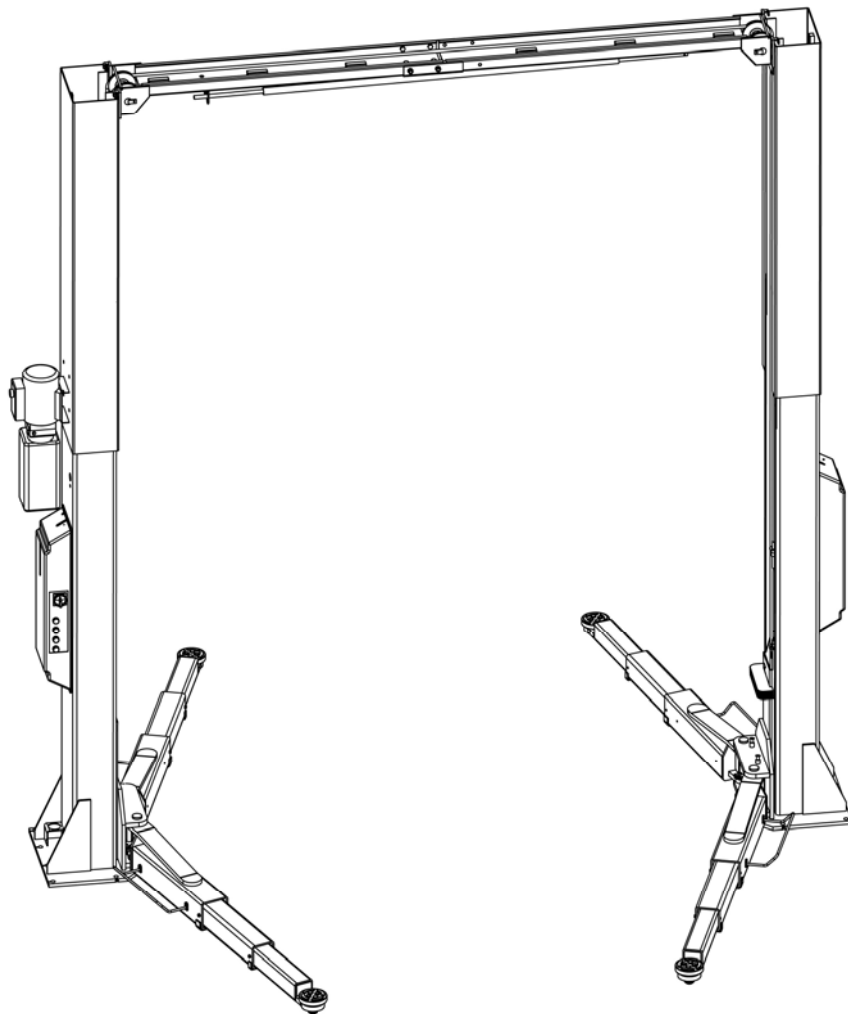
Model No. EE-62CE-60T

Two Post Vehicle Lift
Chassis Supporting
Electrical Release
Lifting Capacity 6000KG

**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: 18/01/2024

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IMPORTANT NOTES

Before start up, connecting and operating 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 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 a 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 enclosed instructions are the property of the manufacturer or its supplier, and are protected against duplication and reproduction by copyright laws, international agreements, and other domestic legislation. The reproduction or disclosure of instructions or an extract thereof is prohibited and offenders are liable to prosecution; the manufacturer reserves the right or initiates criminal proceedings and asserts claims for damages in the event of infringements.

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 the manufacturer 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 the manufacturer.

All information in this manual is believed to be correct at time of publication.

The manufacturer reserves the right to amend and alter technical data and composition without prior notice.

Please confirm at time of ordering.

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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, 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

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	<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>It is not allowed to work under the vehicle if safety latch is not engaged.</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 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 (A). 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. 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(mm)	Weight (kg)	Quantity
Lift	Steel brackets	2850×660×940	1230	1
Extension post (Overall height: 4451)	Bubbled film	2150×540×450	250	1
Extension post (Overall height: 5051)	Bubbled film	2750×540×450	290	1
Power unit	Carton	830×380×380	41	1

2.2 Storage

The packs must be kept in a covered and protected area in a temperature range of -10°C to +40°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.

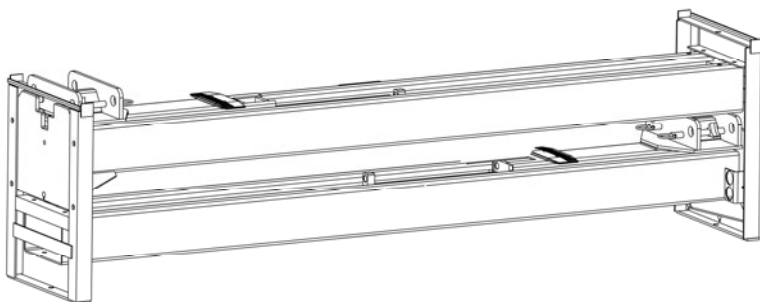
If stacking is unavoidable, use all appropriate precautions:

- 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 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 straps.



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

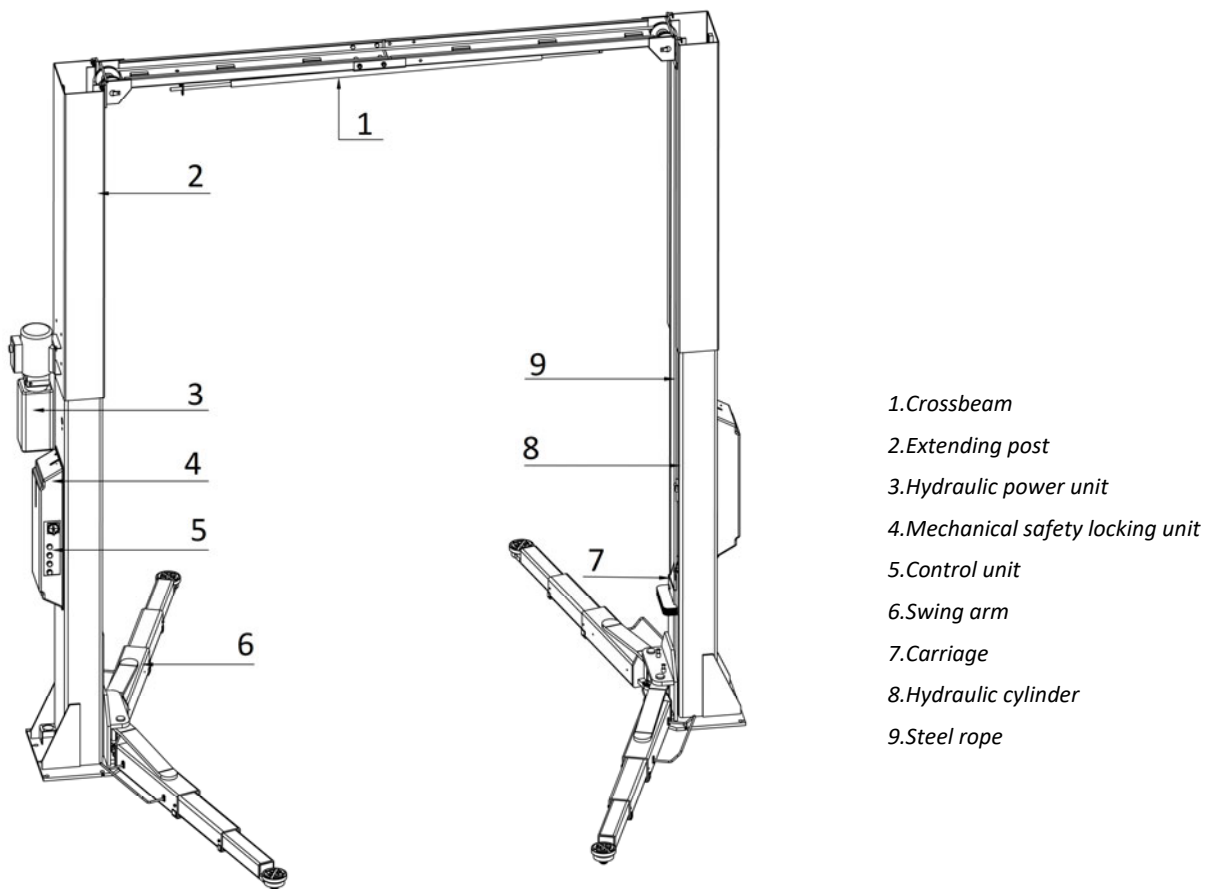
3.1 General descriptions

This chassis supporting vehicle lift for road vehicles.

It is mainly composed by two posts, two carriages, four swing arms and a power and control unit.

It is driven 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 swing arms. It is equipped with mechanical safety locking unit which ensures no risks of slipping off in case of hydraulic failure.

3.2 Construction of the lift

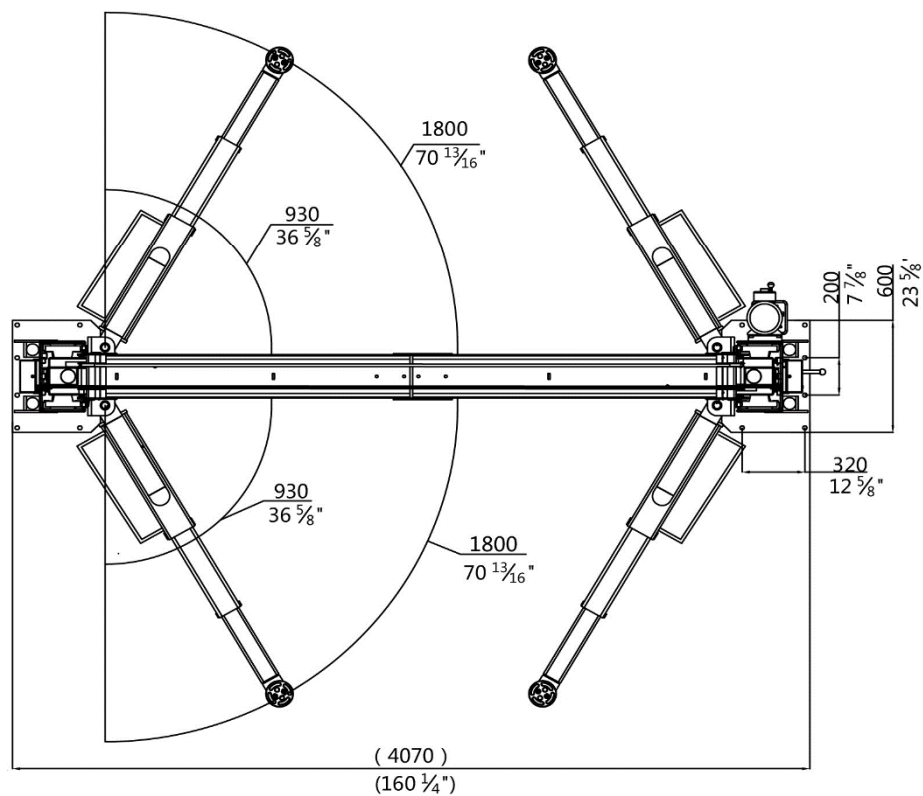
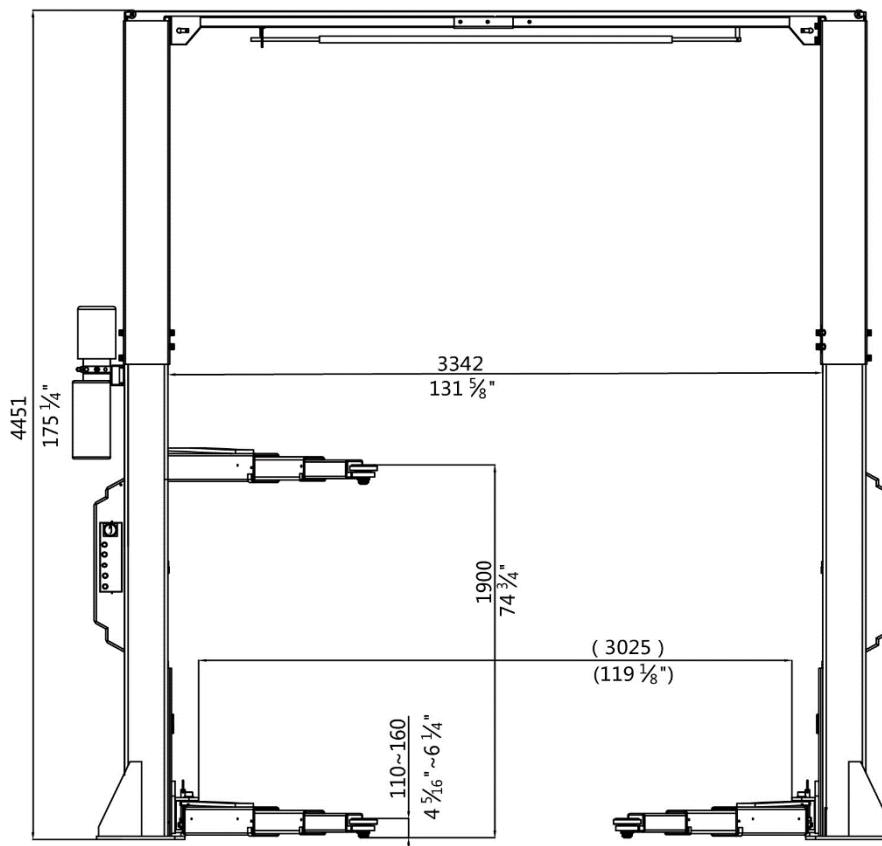


3.3 Technical data

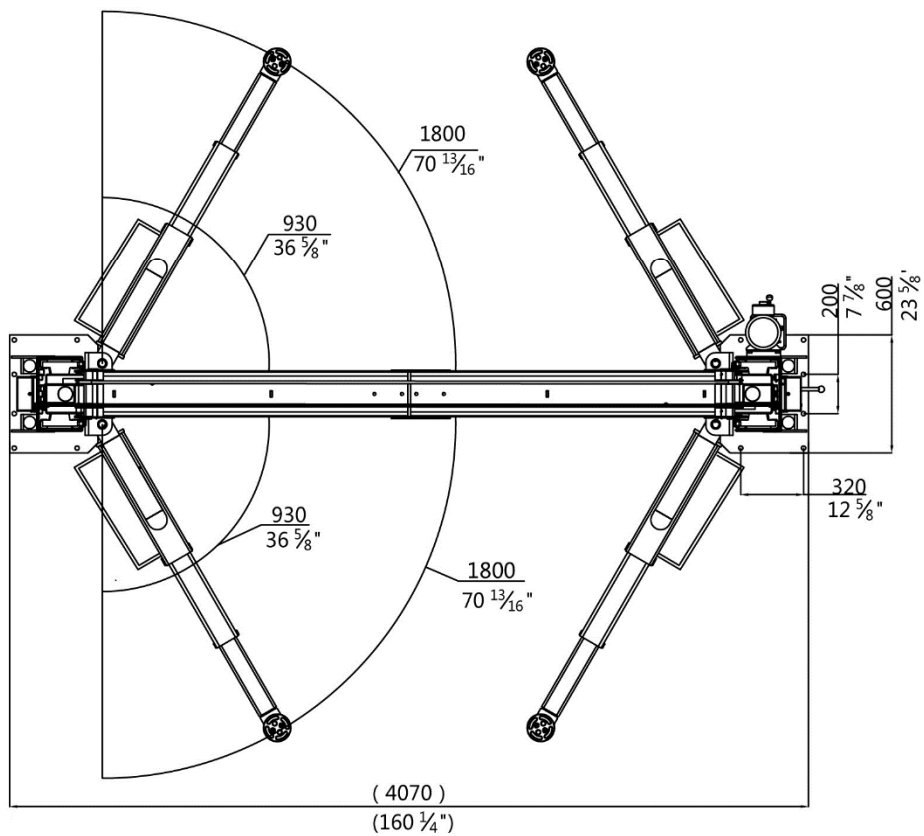
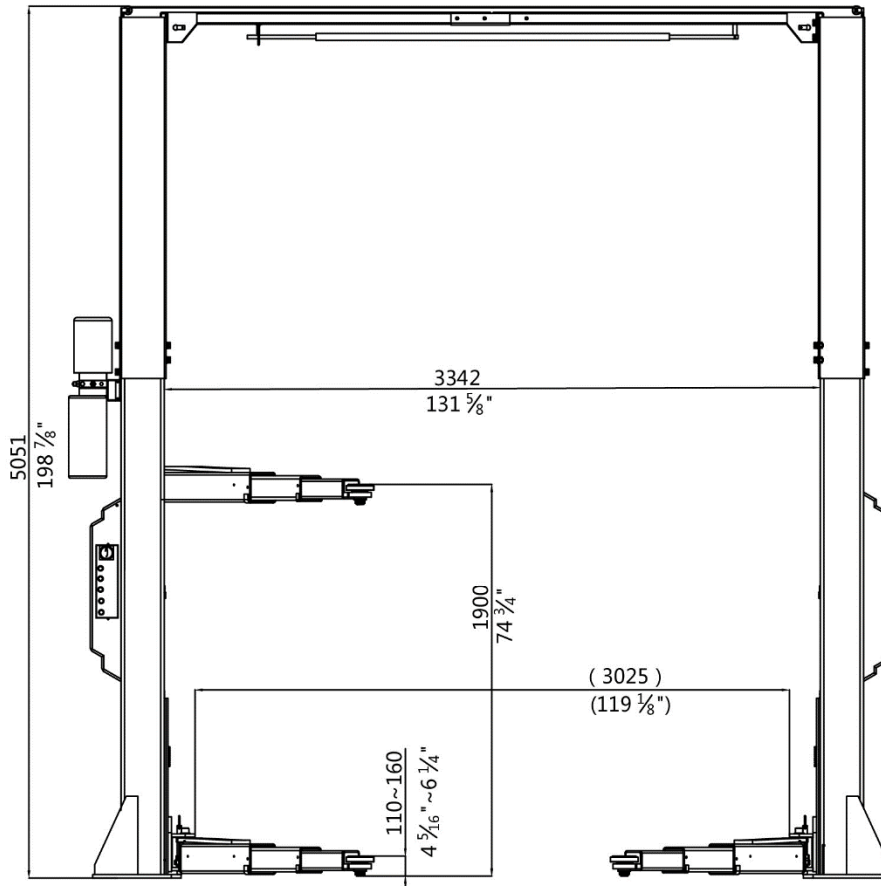
Item	Data
Power	Electro-hydraulic
Rated capacity	6000KG
Max height for the pick-up adapter	1900mm
Initial height	110mm
Full rise time(with rated road)	About 90s (2.2kW-3Ph motor) About 120s (2.2kW-1Ph motor) About 80s (3.0kW-3Ph motor)
Working pressure	20MPa
Oil tank	12L

3.4 Dimensions

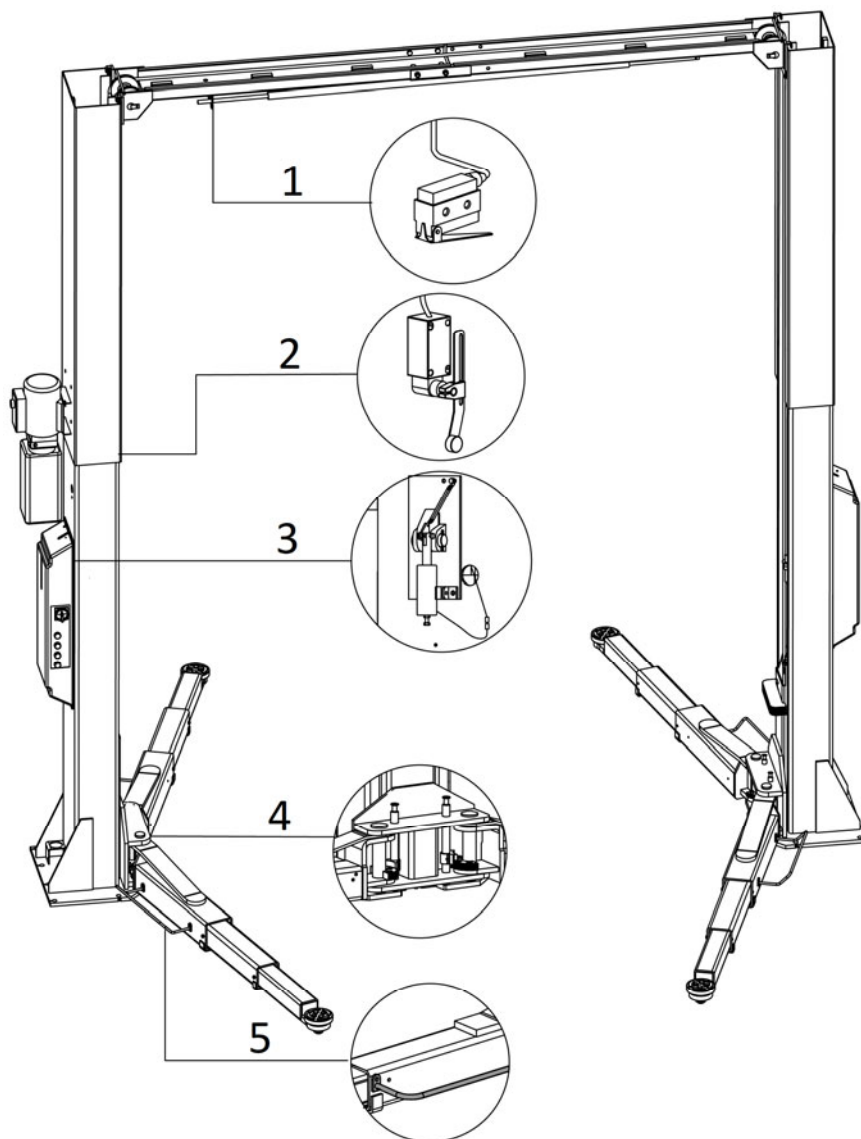
Overall height: 4451



Overall height: 5051



3.5 Safety devices descriptions



POS.	Descriptions	Function
1	Roof protective limit switch	Stop rising in case vehicle roof has touched the overhead bar.
2	Max height limit switch	Stop rising at max height.
3	Mechanical locking unit	Catch the carriages in case of hydraulic failure.
4	Arm locking device	Ensure the lifting arms are locked and avoid swinging at lifted position.
5	Arm fender	Guard against pinching or shearing.

INSTALLATION INSTRUCTIONS

4.1 Preparations before installation

4.1.1 Space requirements.

The lift is designed for indoor installation only. Do not expose the lift to rain, snow or excessive moisture. Do not use the lift near explosives or open areas containing inflammable liquids.

Refer to 3.4 for the dimensions of the lift. There must be sufficient space for driving and lifting vehicles and enough safety distance shall be reserved according to the regulations of the local authorities. It is advised to reserve a clearance of at least 1 meter between the lift and fixed elements (e.g. wall) in all lifting positions.

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 only be done by qualified electricians. 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.
- Foundations preparations

C30 concrete foundation with a minimum thickness of 250mm.

Surface: Horizontal and even (Gradients max. 0.5 %). Newly built concrete ground must be older than 20days.

4.1.3 Tools and equipment needed for installation

Tool name	Specification	Quantity
Electrical drill(C12)	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	Accuracy: 1mm	1
Hammer	10 pounds	1
Truck lift	Capacity more than 2230lbs	1
Lifting string	Capacity more than 2230lbs	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.

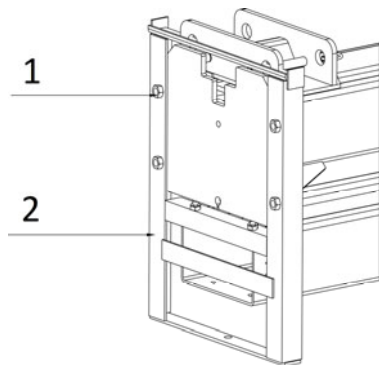
4.3 General Installation Steps

ONLY TRAINED AND QUALIFIED INSTALLERS CAN PERFORM LIFT INSTALLATION DUTIES.

Step 1: Remove the packaging and take out the accessories attached.

Attention : The 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).

Use proper means (put something supporting under the post or suspend the post by a crane) to suspend the post, unscrew and remove the bolts fixed on the iron rack.



- 1. Hex bolt
- 2. Iron rack

Attention : Please pay special attention not to let the

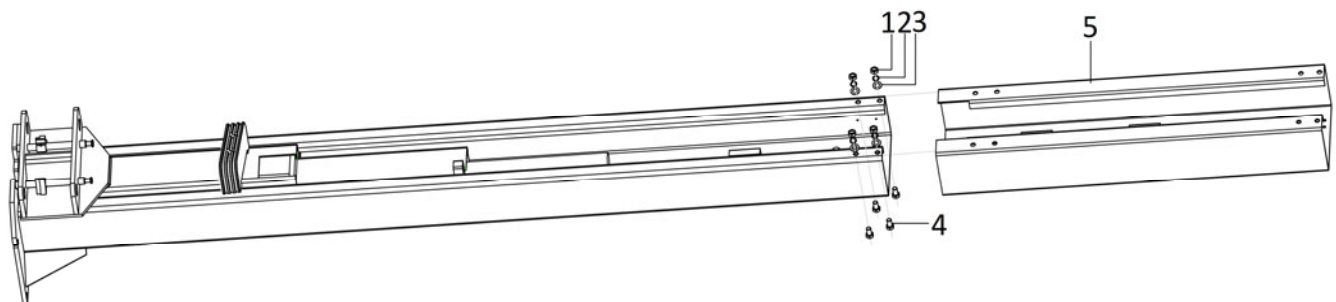
post fall down for it may cause casualty or bring

damages to the accessories fixed in the post.

Step 2: When the first post has been taken away, place something supporter under the second post and then remove the bolts on the package.

Step 3: Connect extending posts.

- 1. Firstly have the extending post secured with the body post.



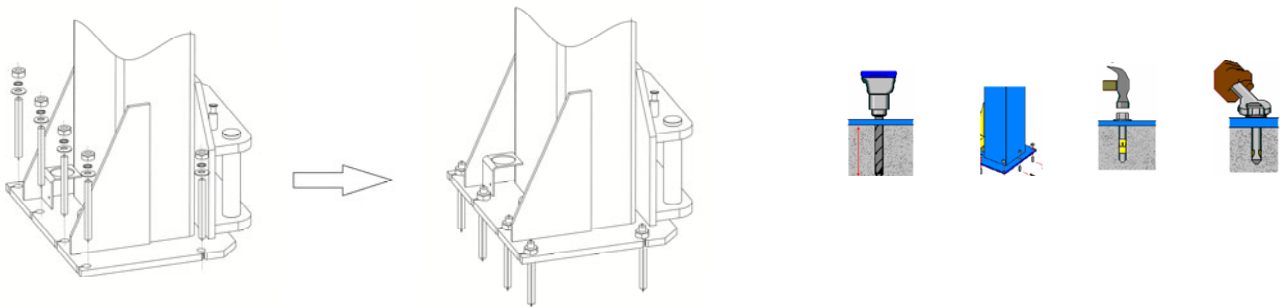
- 1.Hex nut M14
- 2.Flat washer M 14
- 3.Spring washer M14
- 4.Hex head full swivel screw M14*30
- 5.Extending post

Step 4: Fix the standing position for the two posts.

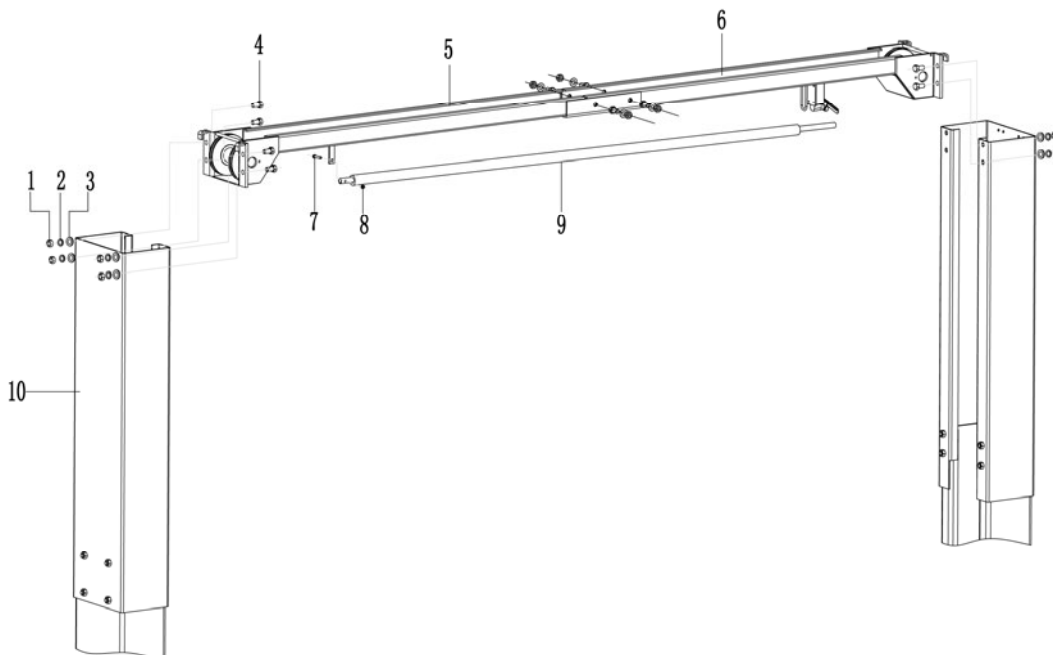
- 1. Unfold the package and decide on which post the power unit will be mounted.
- 2. Ascertain the position for the two posts with chalk and tape measure and draw an outline of the two base plates on the ground.

Step 5: Erect and secure the post.
Screw Torque: 80-100Nm

1. Make the posts face to each other and the distance between the posts equals to the length of the overhead crossbeam. Use proper means to erect the post.
2. Check the position of the base plates.
3. Drill the mounting holes. Remove the drilling dust from the hole.
4. Use a spirit level to check the vertical alignment of the 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 6: Connect crossbeam.

Make the posts face to each other and the distance between the posts equals to the length of the overhead crossbeam.



1.Hex nut M14

3.Spring washer M14

5.Crossbeam (out)

7.Hex socket cylinder head screw M6*30

9.Protective rod

2.Flat washer M14

4.Hex head full swivel screw M14*40

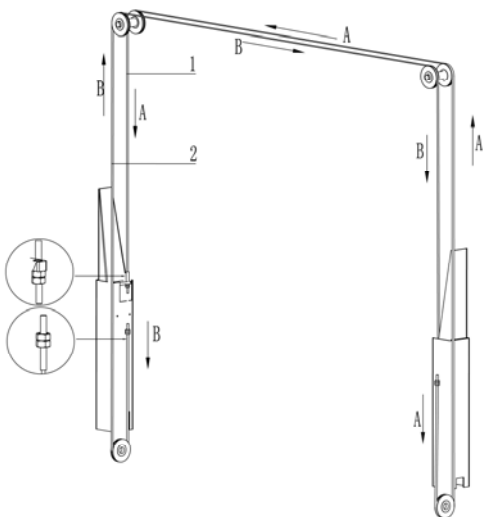
6.Crossbeam (in)

8.Hex nut M6

10.Extending post

Step 7: Connect the synchronization steel cables.

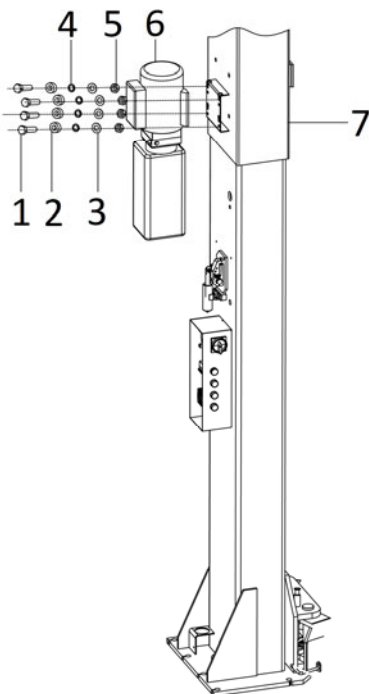
1. Route and fix according to the following diagram of steel cable connection.
2. Use suitable means to raise carriages at both sides to the first latching point. Ensure the both carriages are locked.
3. After the cable being fixed, adjust and make the cables at both sides be with the same tightness. Otherwise mechanical locking units at both sides will be not able to lock synchronously. (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.)



1. Steel cable A
2. Steel cable B

Step 8: Connect the hydraulic lines.

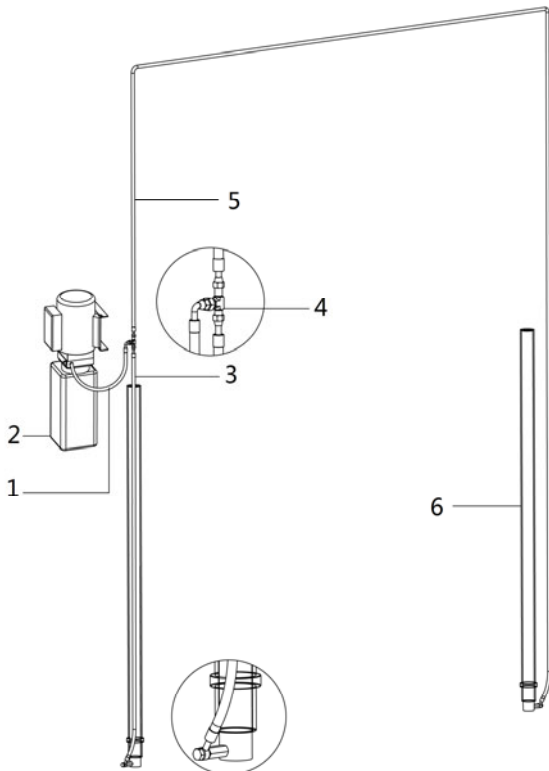
1. Install hydraulic power unit onto the power side post.



1. Hex head full swivel screw M10*35
2. Anti-shock pad
3. Flat washer M10
4. Spring washer M10
5. Hex nut M10
6. Hydraulic power unit
7. Post

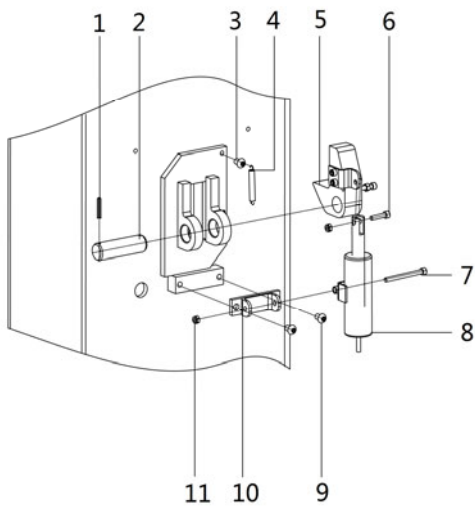
2. Connect oil hoses to the "T" connector in the power side post.

Don't let any solid substance go into the hydraulic line. Ensure the connectors are screwed tight against leakage.



1. Oil hose
2. Power unit
3. Oil hose
4. "T" connector
5. Oil hose
6. Cylinder

Step 9: Fix the electromagnets.



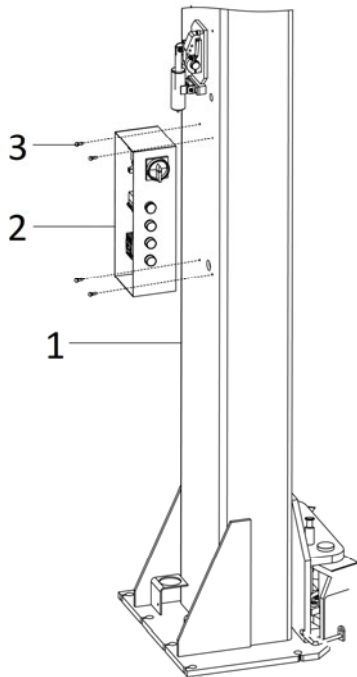
1. Cotter pin M3x45
2. Shaft
3. Hex socket button head screw M8x12
4. Pull spring
5. Hook
6. Hex socket cylinder head screw M6x25
7. Hex socket cylinder head screw M6x65
8. Electromagnet
9. Hex socket button head screw M8x12
10. Support bracket
11. Self-locking nut

Step 10: Connect electrical system.

Electrical connection must be done by qualified electricians.

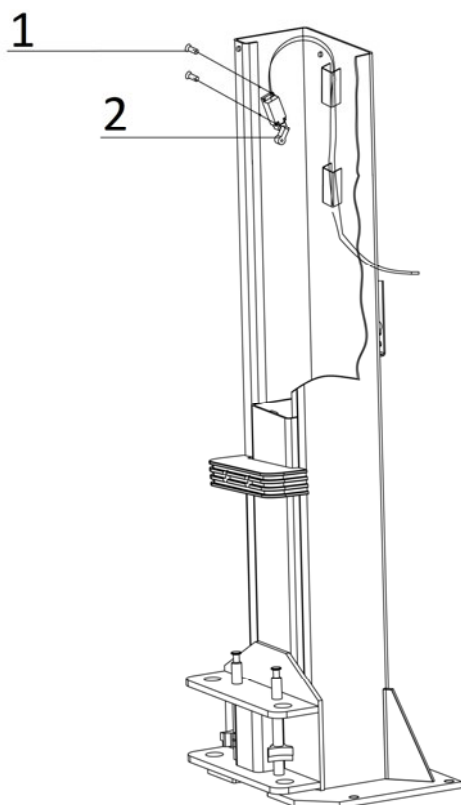
Check that the supply voltage is adapted to the voltage of the lift. Connect electrical wires referring to the following wire connection scheme.

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



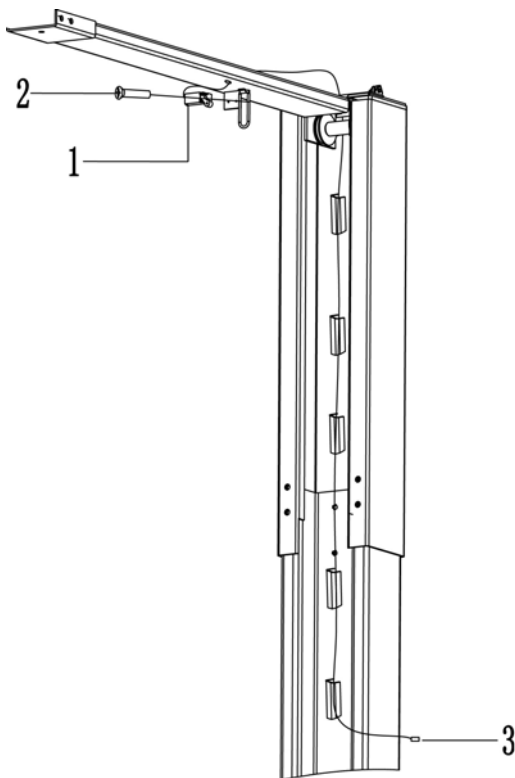
1. *post*
2. *control box*
3. *hex socket cylinder head screw M6x15*

2. Fix max lifting height limit switch onto the inside surface of the main post and connect its wire to the corresponding terminals in the control box.

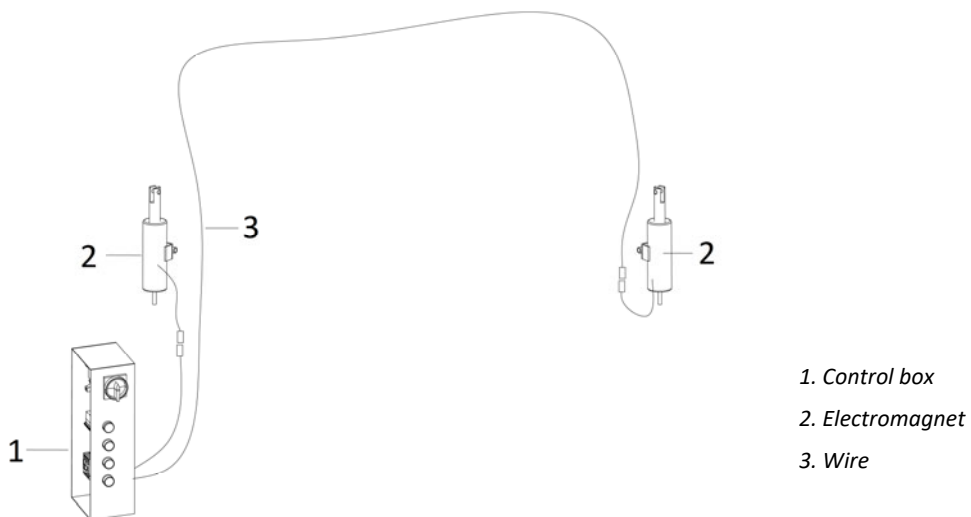


1. *Cross socket flat head screw M5x10*
2. *Limit switch*

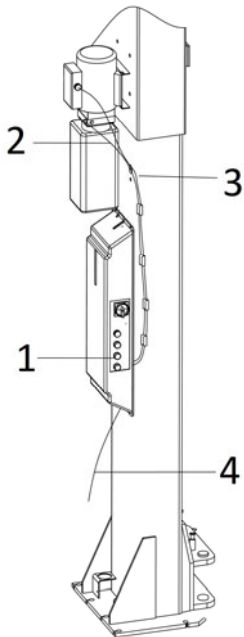
3. Fix roof protection limit switch onto the overhead crossbeam and connect its wire to the corresponding terminals in the control box.



4. Connect wires of electromagnets



5. Connect wires come from motor and solenoid valve to the corresponding terminals in the control box.



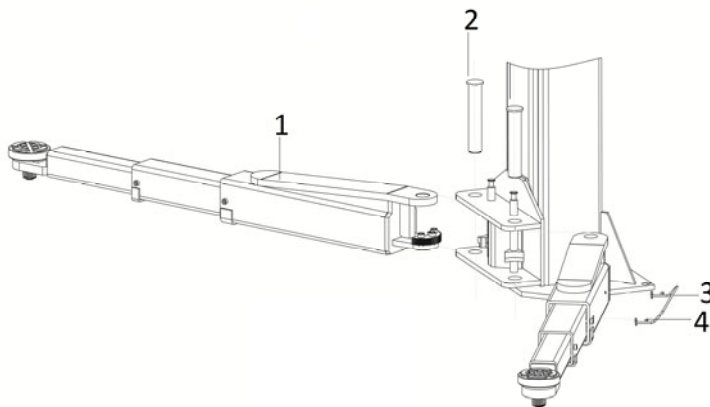
1. control box
2. Solenoid valve wire
3. Motor wire
4. Main power cable to be connected with external electricity supply

Step 11: Install lifting arms.

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.



1. Swing lifting arm
2. Arm pin shaft
3. Fender for feet protection
4. Hex socket cap head screw M8x12

Step 12: 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.

Pour about **12** liters of anti-abrasion hydraulic oil into the oil tank. The level of oil shall reach the tippets volume mark of the tank.

Add more oil after running the lift for several cycles until the lift can rise to the maximum lifting height.

It is suggested to use HM NO.46 hydraulic oil. When average temperature of the location is below 10°C, use HM NO.32 hydraulic oil.

Change the oil 6 months after initial use and change once per year thereafter.

Step 13: 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.

Vent air remained the oil cylinder.

Screw loose but not remove the nut on top of the oil cylinder and slightly press the UP button until oil gets out. Screw the nut tight thereafter.



Vent air remained in the cylinder

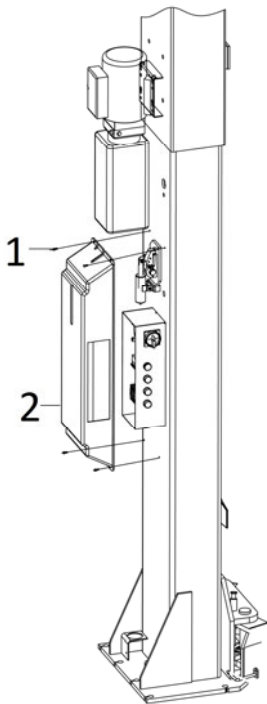
After bleeding, fluid level in power unit reservoir may be down. Add more fluid if necessary to raise lift to full height. It is only necessary to add fluid to raise lift to full height.

Check the synchronization of lifting carriages.

Ensure the synchronization by adjusting the steel cables at both sides. Make both cables be of the same tightness.

This could be judged by the sound emitted by the safety locking unit 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 14: Fix the covers at both sides of post.

1.Hex socket cylinder head screw M6x12

2. Cover.

4.4 Items be checked after installation

S/N	Check items	YES	NO
1	Screw torque of expansion bolts : 80-100Nm;	√	
2	Rising speed ≥ 20 mm/s;	√	
3	Noise with rated load ≤ 75 dB(A);	√	
4	Grounding resistance: not bigger than 4 Ω ;	√	
5	Height difference of the two carriages ≤ 5 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 noise during running with rated load?	√	
12	If there is no oil leakage when running with rated load?	√	
13	If expansion bolts, nuts or circlips is well secured?	√	
14	If the max lifting height is 1900mm?	√	
15	If safety advices, name plate and logos are clear?	√	

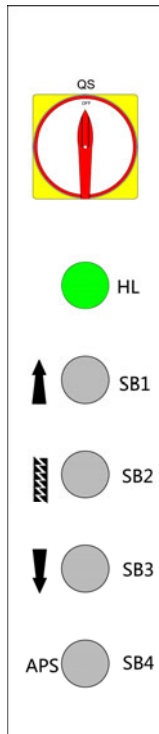
OPERATION INSTRUCTIONS

5.1 Precautions

- 5.1.1. Read and digest the complete operation instructions before operating the lift.
- 5.1.2. Only authorized persons are permitted to operate the lift.
- 5.1.3. Do not try to raise the vehicle with excessive length or width.
- 5.1.4. The space above and below the load as well as of the loading carrying devices shall be free of obstructions.
- 5.1.5. Position supporting pads to pick-up positions recommended by vehicle manufacturers.
- 5.1.6. Check the vehicle after raising a short distance to ensure that it is corrected and safely positioned.
- 5.1.7. The load carrying device shall be observed by the operator throughout the motion of the lift.
- 5.1.8. Engage the safety locking mechanism before entering under the raised vehicle.
- 5.1.9. Avoid excessive rocking of vehicle while on the lift
- 5.1.10. It is forbidden for people to stand in the field of motion during raising or lowering movement.
- 5.1.11. Do not climb onto the load or load carrying device when they are raised.

5.2 Operation instructions

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. The lift must be only used in a static position for lifting and lowering vehicles.



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
SB4	APS button	Use together with SB3 for direct descent

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. Always use safety stands before removing and installing heavy component which may cause uneven load distribution.

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 adapters 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 height expected, push the "Safety Lock" button to engage the mechanical safety locking unit. 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. Meanwhile the lifting arms automatically go upwards about 5CM which releases the mechanical safety locking unit. 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.
3. Drive the vehicle away.

APS function

In the case the mechanical locking unit is released, push APS button and DOWN button for direct lowering.

TROUBLE SHOOTING

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

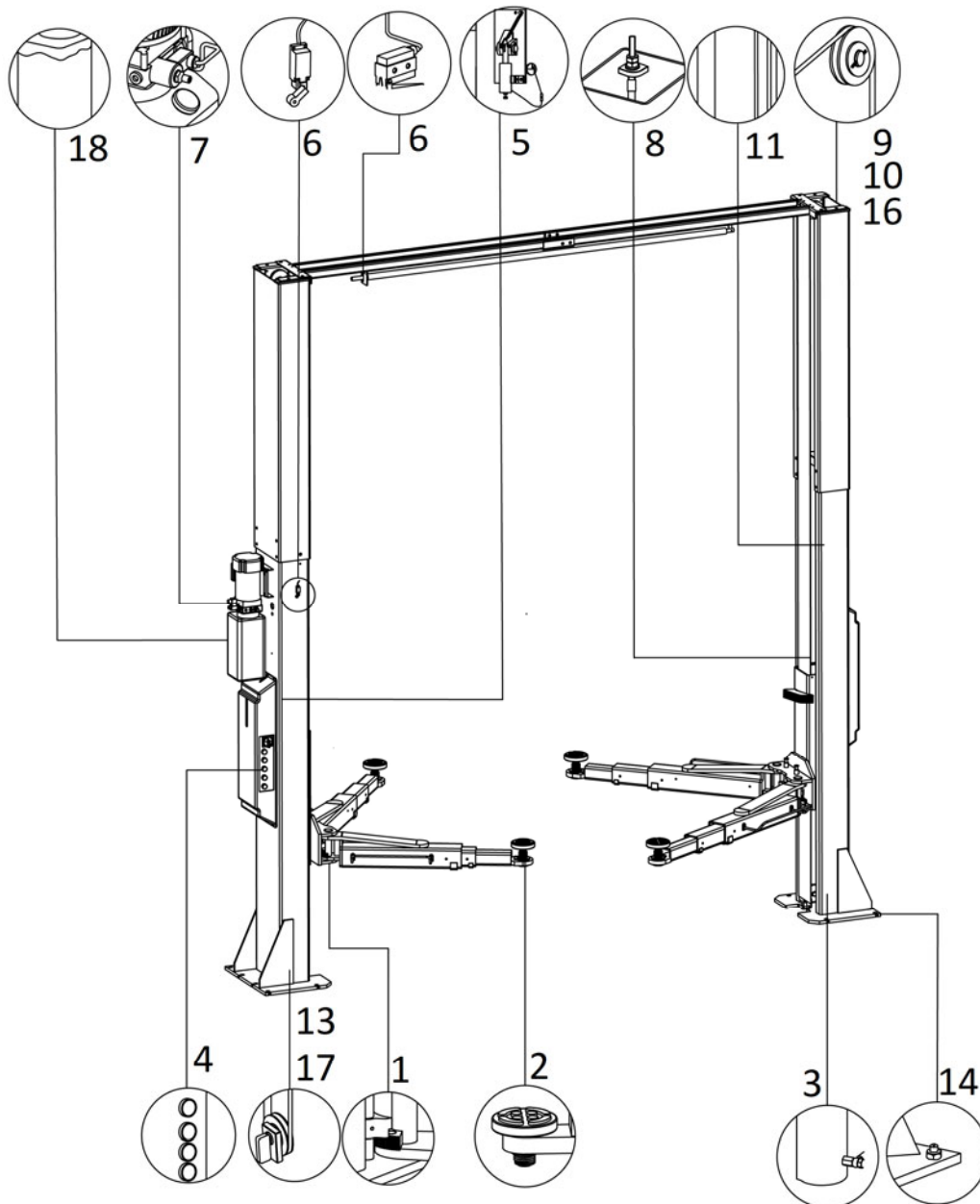
We will offer our service at the earliest time we can.

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

TROUBLES	CAUSES	SOLUTIONS
Abnormal noise	Abrasion exists on insides 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.
	Unloading 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 it.
	Dirty hydraulic oil	Change the oil.
	Jammed oil hose	Replace it.
The steel cable is abraded	No grease at installation or out of lifetime	Replace it.

MAINTENANCE

Following are requirements for routine maintenance. Easy and low cost routine maintenance can ensure the lift work normally and safely. 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 swing 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

S/N	Components	Methods	Period
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
8	Steel cable	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 cable	Lubricate the cable 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 track with NO.1 lithium based grease. No obstruction on the track.	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 (80Nm)	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	Lock the carriage and slacken the steel cable and dismantle the pulley assembly. 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	Lock the carriage and slacken the steel cable and dismantle the pulley assembly .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 and change the oil if it 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

The lift is designed for indoor installation only. Do not expose the lift to rain, snow or excessive moisture. Do not use the lift near explosives or open areas containing inflammable liquids.

The space requirement specified in the below scheme is for reference only.

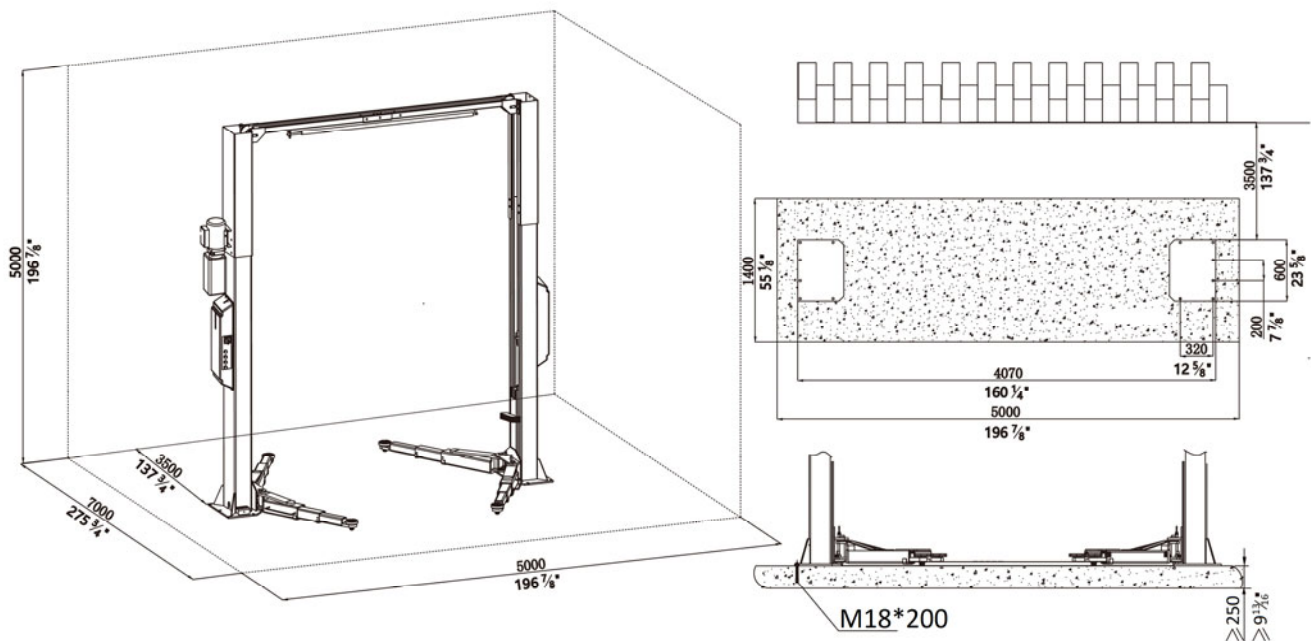
There must be sufficient space for driving and lifting vehicles and enough safety distance shall be reserved according to the regulations of the local authorities. It is advised to reserve a clearance of at least 1 meter between the lift and fixed elements (e.g. wall) in all lifting positions.

C30 concrete foundation with a minimum thickness of 250mm.

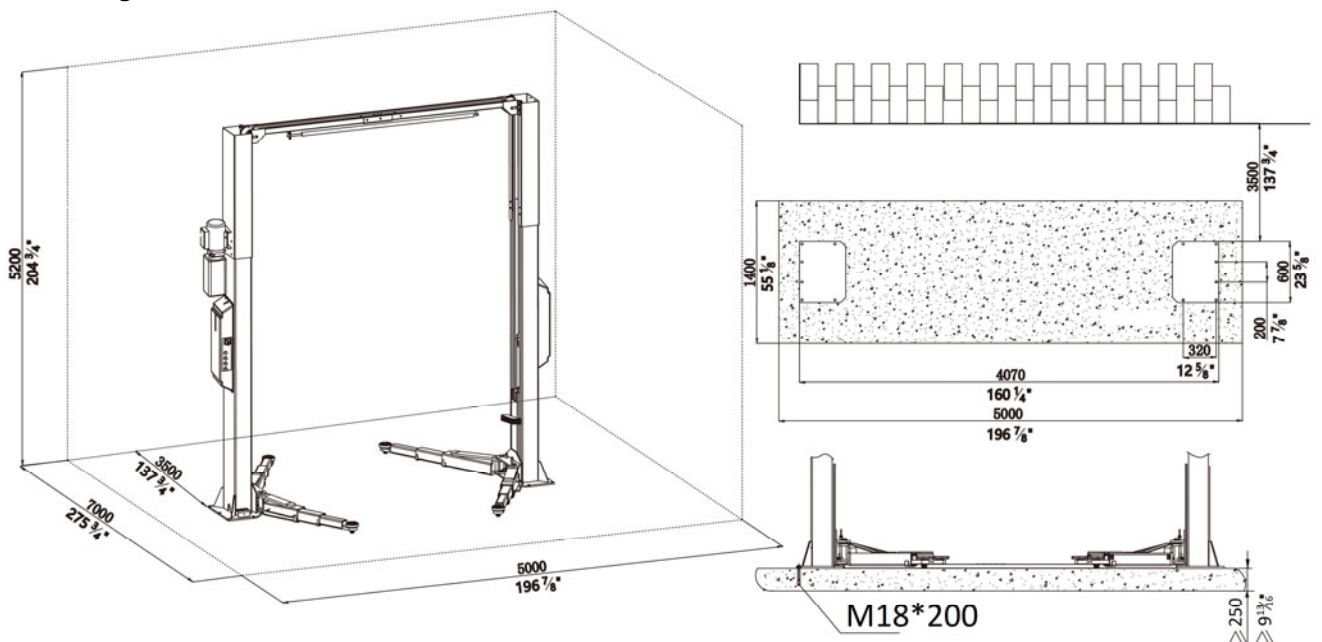
Surface under the base of the post: Horizontal and even (Gradients max. 0.5 %)

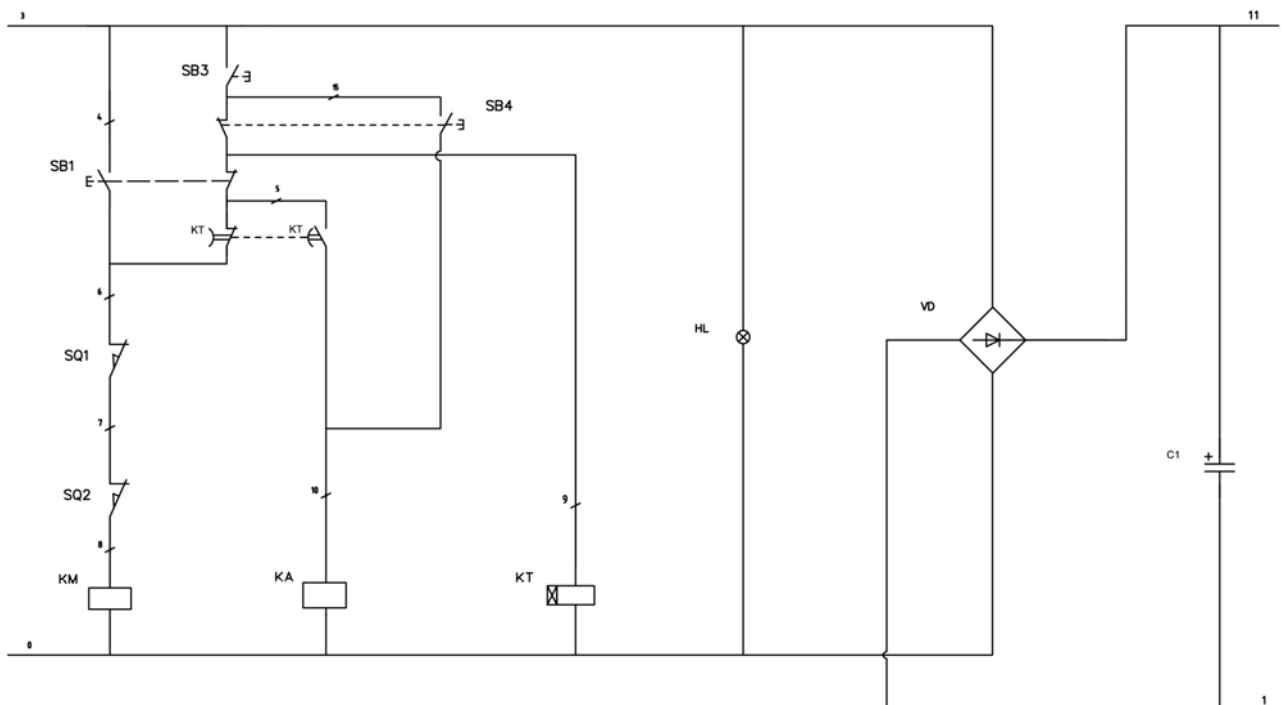
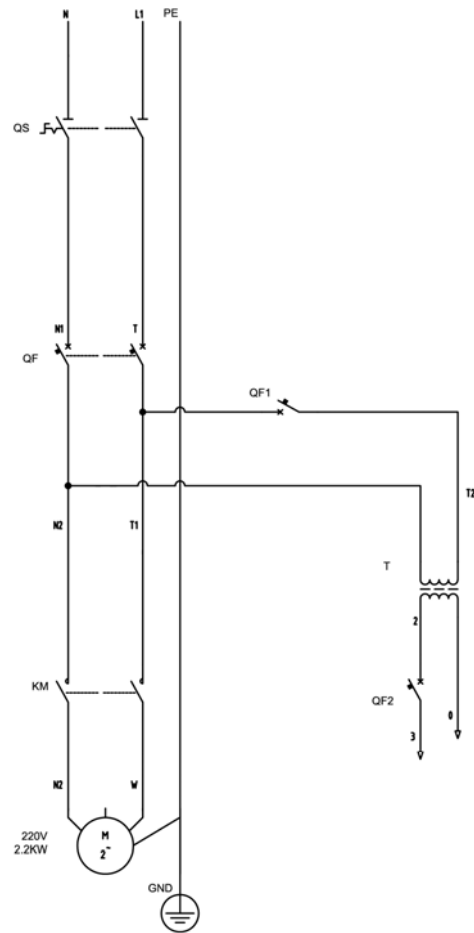
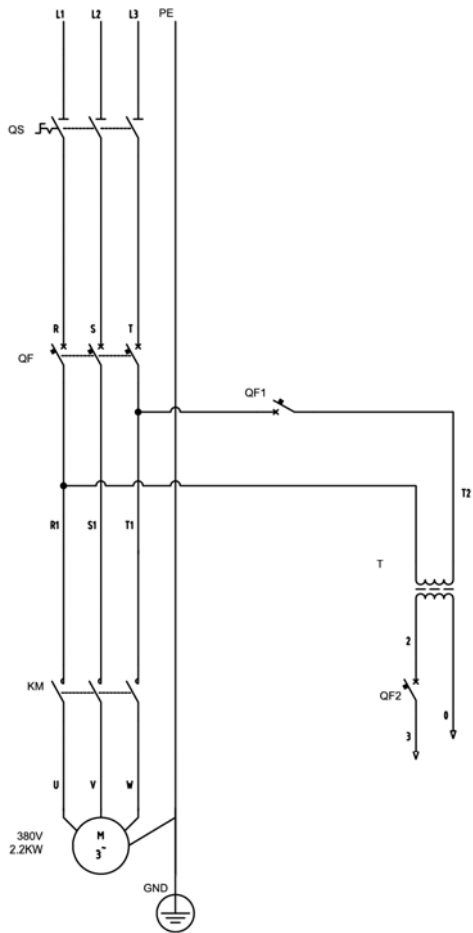
Newly built concrete ground must be older than 20days.

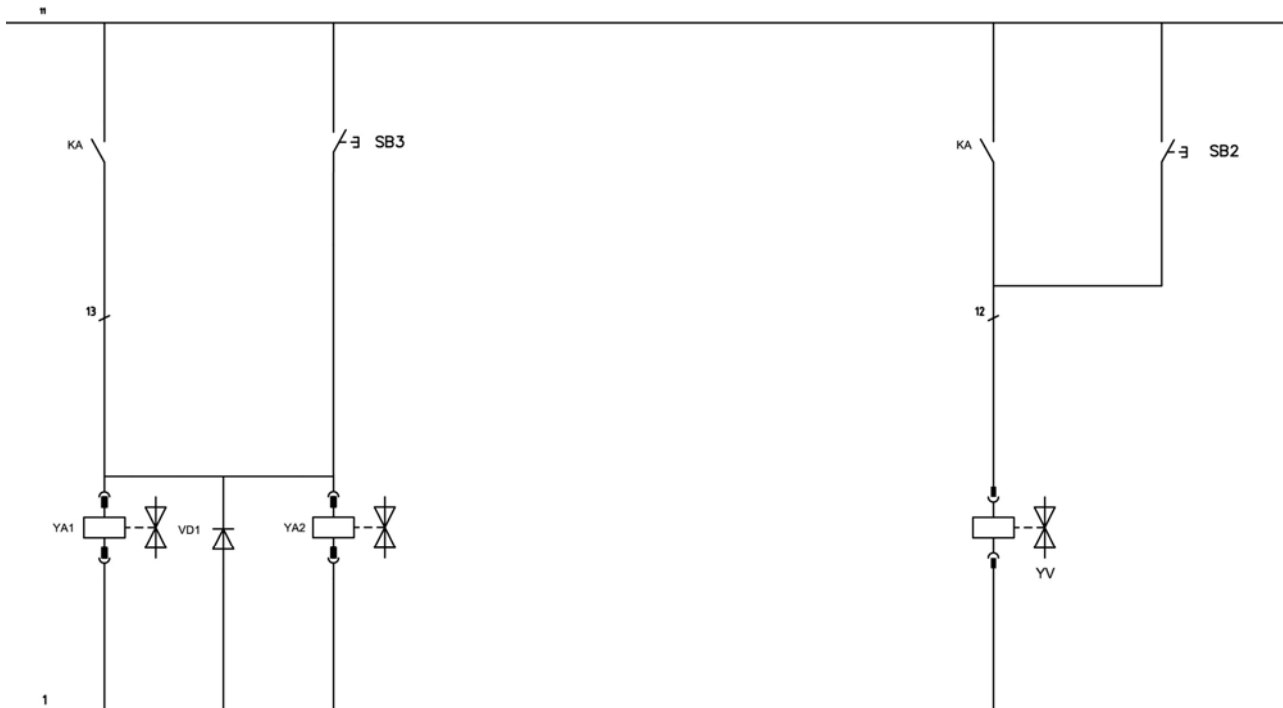
Overall height: 4451



Overall height: 5051



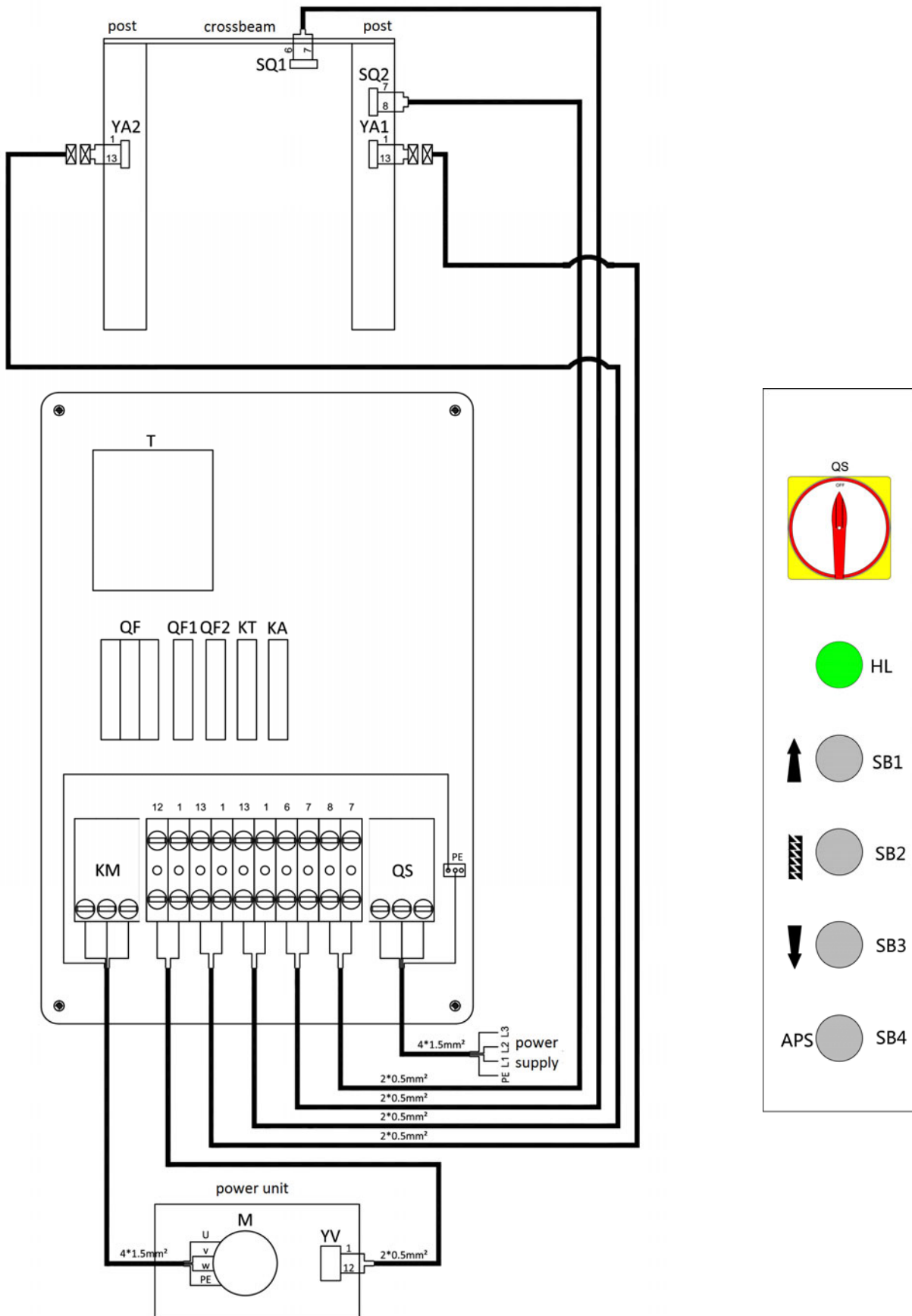
Annex 2, Electrical schemes and parts list


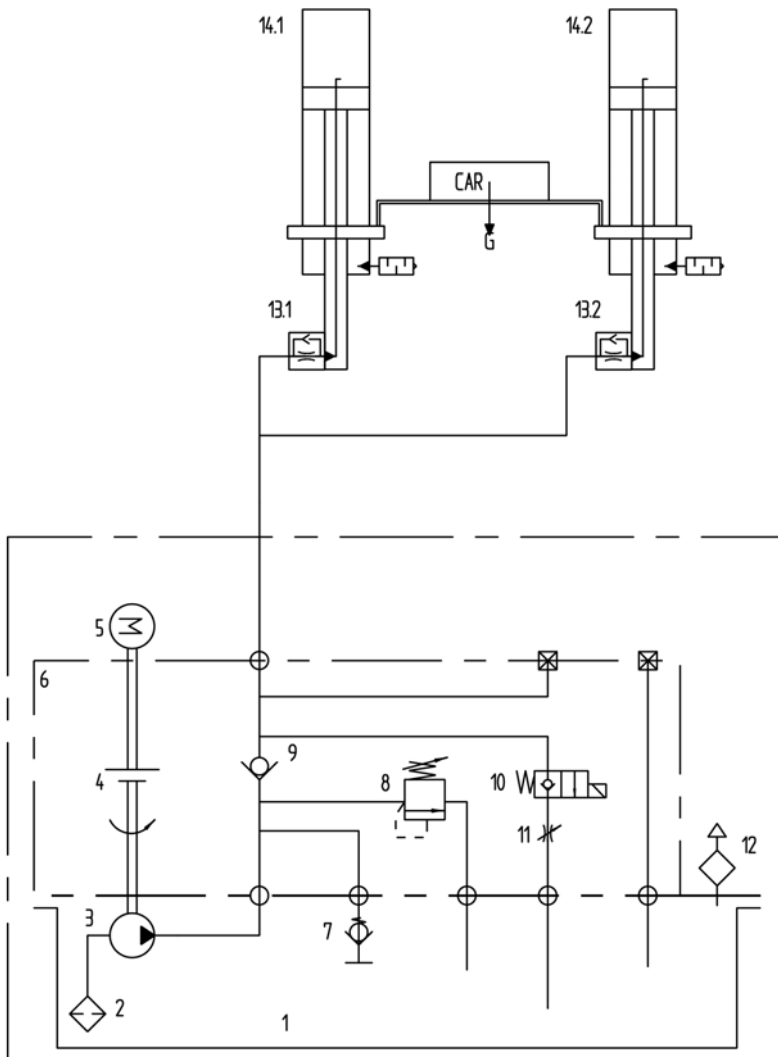


POS.	Code	Description	Qty
T	320104005	Transformer (220V230V240V-24V)	1
	320104006	Transformer (380V400V415V-24V)	1
	320102014	Transformer 400V230V-24V (dual voltage)	1
QF	320801001	Circuit breaker C16/3P (3Ph)	1
	320802001	Circuit breaker C32/2P (1Ph)	1
	320801003	Circuit breaker C25/3P (for dual voltage)	1
QF1	320803003	Circuit breaker	1
QF2	320803006	Circuit breaker	1
KM	320901011	AC contactor	1
SQ1	320301002	Limit switch	1
SQ2	320301011	Limit switch	1
YA1,YA2	410044350B	Electromagnet	2
QS	320304001	Main switch	1
SB3	320401038	Push button	1
SB1,SB4	320401041	Push button	2
SB2	320401042	Push button	1
KA	320601026	Compact relay	1
KT	320602009	Compact time relay	1
C	321001004	Capacitor	1
VD	321002001	Bridge rectifier	1
HL	321201001	Power indicator	1

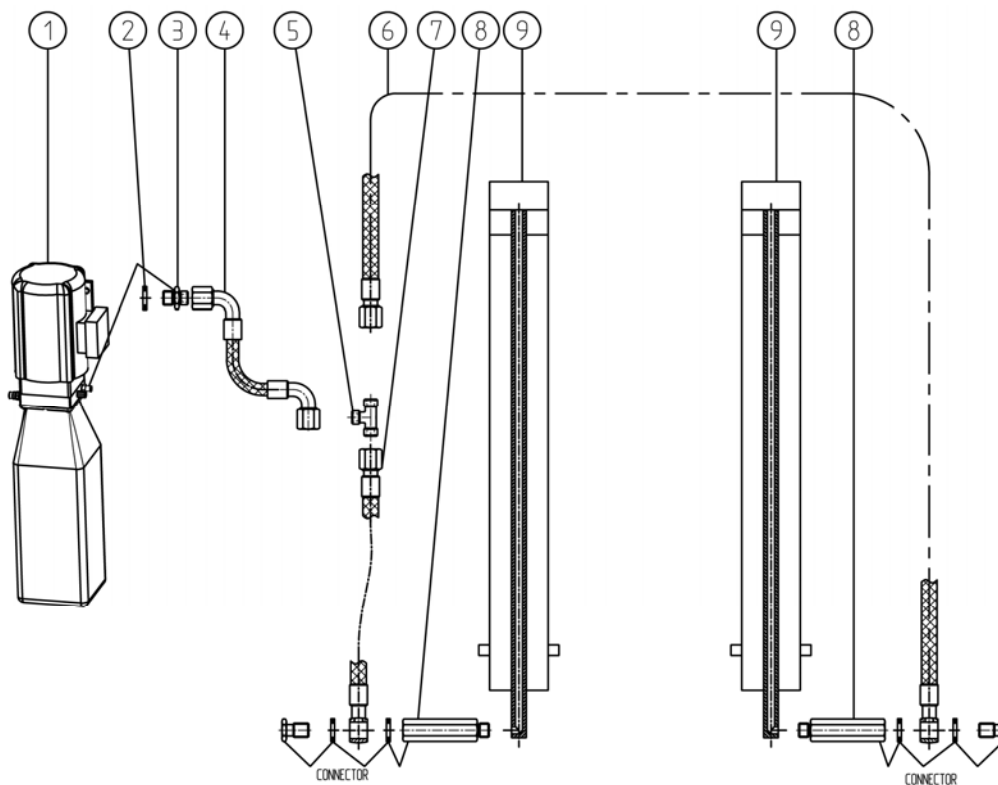
NOTE: For power supply of other voltages, the transformers are different.

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

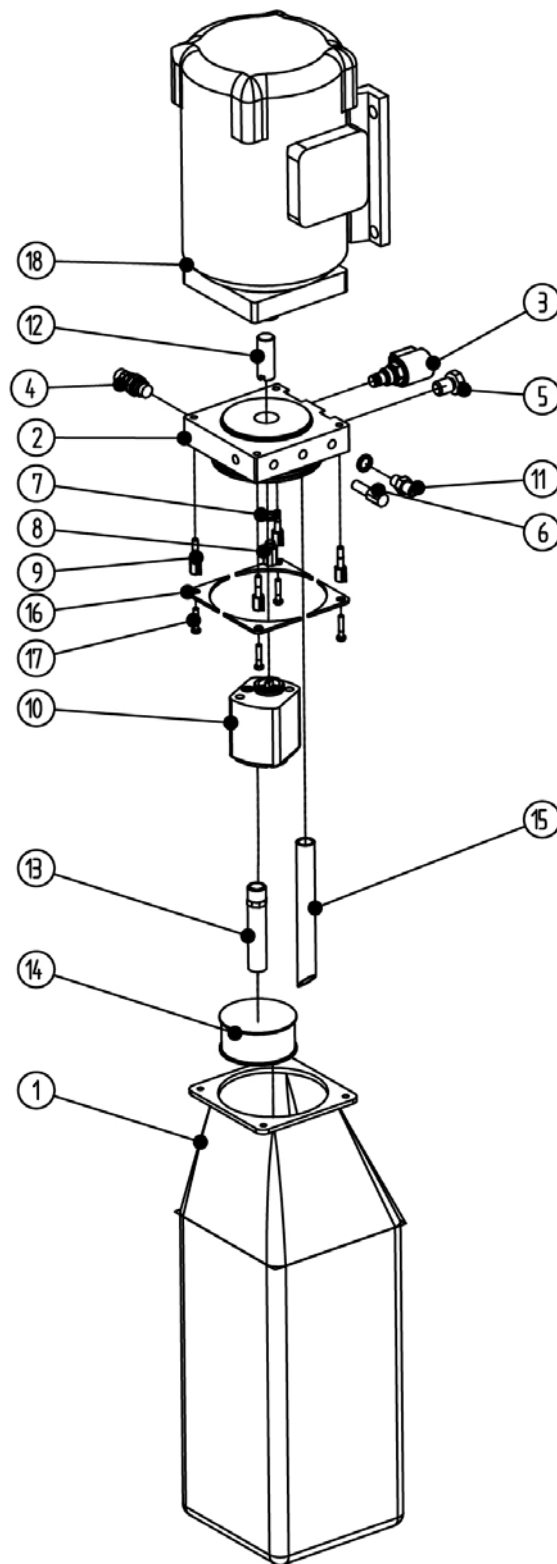


Annex 3, Hydraulic schemes and parts list


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

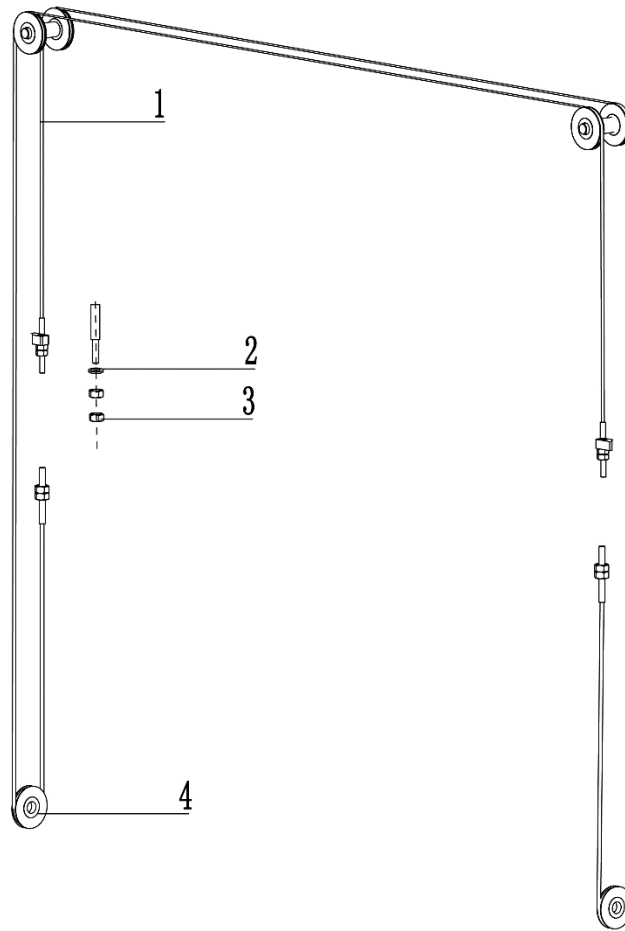


POS.	Code	Description	Specification	Qty
1		Power unit	2.2kW/3.0kW	1
2	207103025	Composite washer	13_7X20X1_5	5
3	310101008	Transfer connector	M14*1.5-G1/4 inside cone	1
4	624002093	Oil hose	L=360	1
5	615006003	Three way connector	6214E-A4-B4	1
6	624002094	Oil hose (for post with a total height of 4451)	L=10300	1
	624001059B	Oil hose (for post with a total height of 5051)	L=11500	
7	624002095	Oil hose	L=2140	1
8	310101048	Composite connector	BG14-JG14BLT-L75	1
9	615056116	Cylinder	YG7083-60-1760	2

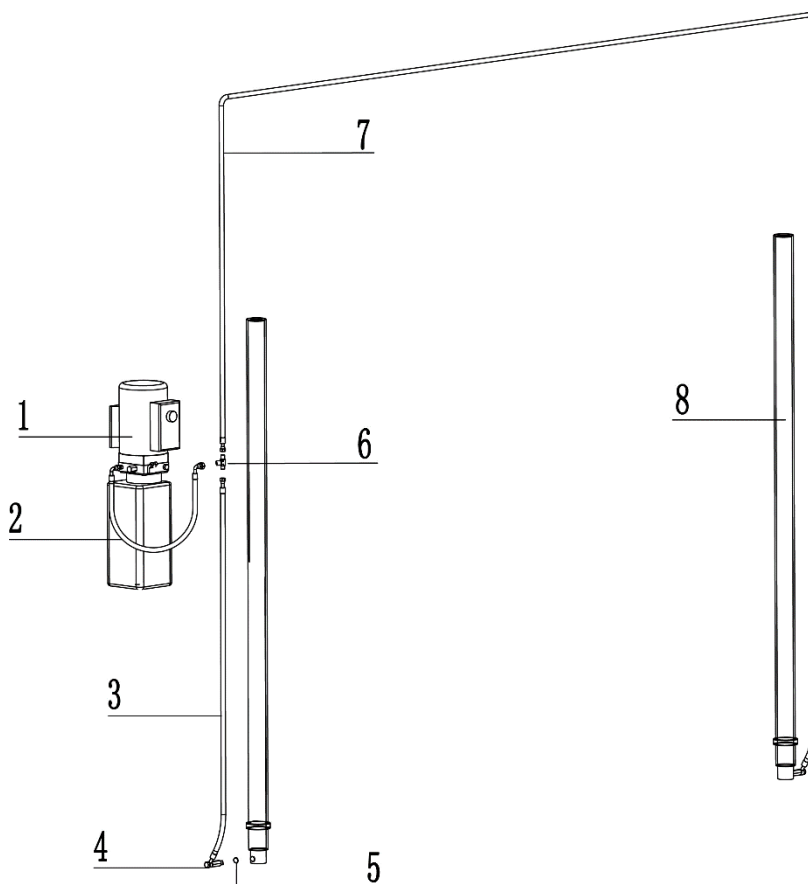


POS.	Code	Description	Specification	Qty
1	330405030	Oil tank	14L	1
2	330101063B	Composite hydraulic block	YF-2	1
3	330308006	Unloading solenoid valve	DHF06-220H/DC24	1
4	330304001	Overflow valve	EYF-C	1
5	330302001	Single valve	DYF-C	1

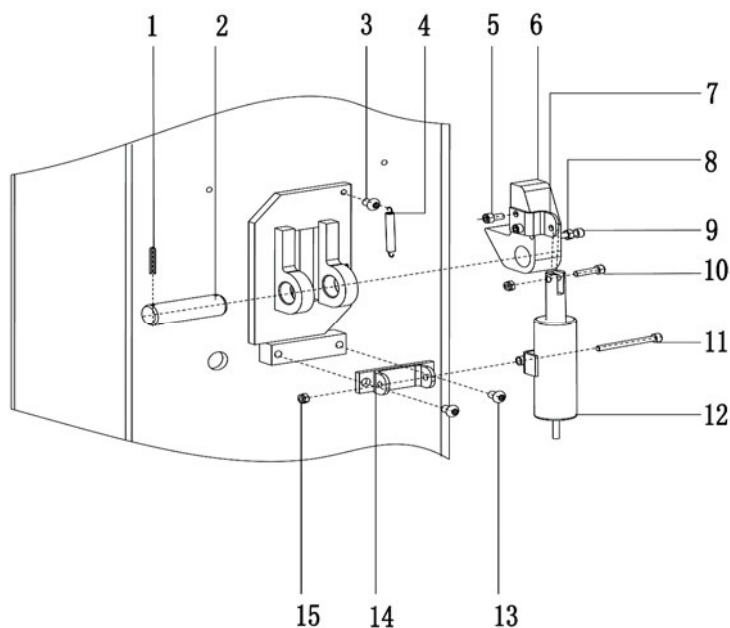
POS.	Code	Description	Specification	Qty
6	330305002	Throttle valve	TC-VF	1
7	207103019	Composite washer	M14	2
8	330301001	Cushion valve	HZYF-C1	1
9	202109064	Installation screw	M6*30	4
10	330201006	Gear pump (2.2KW)	CBK-F220/CBK-2.1F	1
	330201007	Gear pump (3.0KW,50Hz)	CBK-F233	1
	330201915	Gear pump (3.0KW,60Hz)	CBKA-F227/CBK-2.7F	1
11	310101008	Transfer connector	M14*1.5-G1/4 inside cone	1
12	330404001	Coupling	YL-A	1
13	330401009	Oil sucking tube	XYGN-ZG-L350	1
14	330403002	Filter	YG-B	1
15	330402001	Oil back tube	YH-D	1
16	410010091	Reinforced plate	6254E-A4-B12	4
17	201103001	Hex flange screw	M5*25	4
18	320201004	Motor	380V-2.2KW -3PH-50HZ-2P	1
	320201001	Motor	220V-2.2KW -1PH-50HZ-2P	1
	320201005	Motor	400V-2.2KW-3PH-50HZ-2P	1
	320201006	Motor	415V-2.2KW -3PH-50HZ-2P	1
	320204004	Motor	220V-3.0KW -3PH-60HZ-2P	1
	320204016	Motor	380V-3.0KW -3PH-50HZ-2P	1
	320204017	Motor	400V-3.0KW -3PH-50HZ-2P	1

Annex 4 , Mechanically exploded drawings and parts list


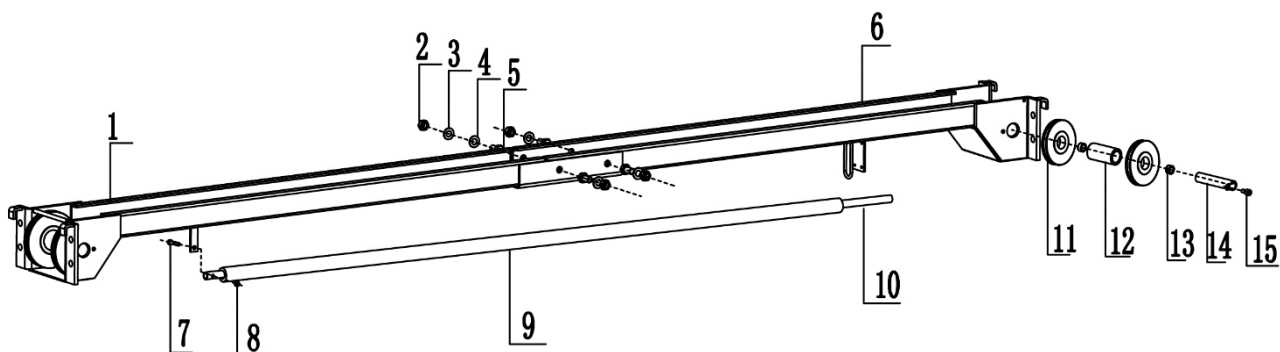
POS.	Code	Description	Specification	Qty
1	615056003	Steel cable (for post with a total height of 4451)	L=12000	2
	615056004	Steel cable (for post with a total height of 5051)	L=13200	2
2	204101011	Flat washer	$\phi 20$	4
3	203101012	Hex nut	M20	8
4	410540041	Pulley	C12-A1-B2	2



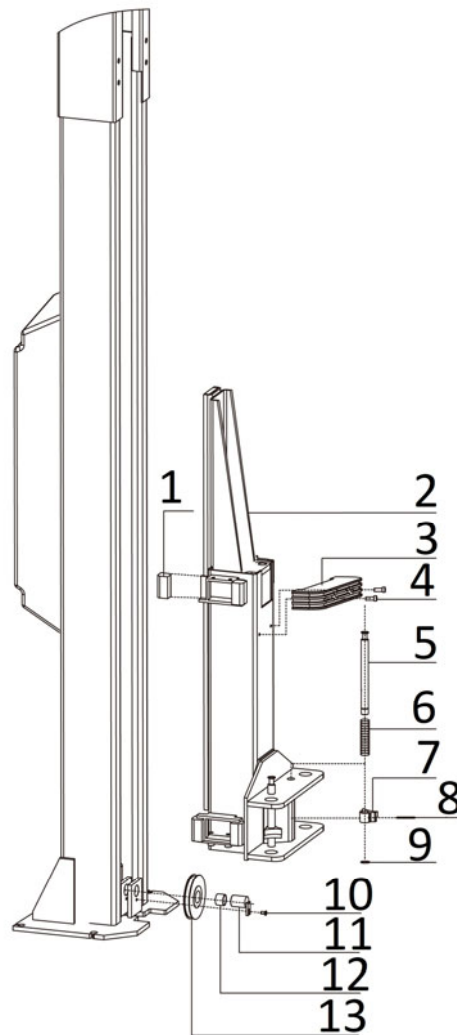
POS.	Code	Description	Specification	Qty
1		Power unit	2.2kW/3.0kW	1
2	624002093	Oil hose	L=360	1
3	624002095	Oil hose	L=2140	1
4	310101048	Composite fitting (C12)	BG14-JG14BLT-L75	2
5	207103025	Composite washer	13.7*20.00*1.50(BS224)	2
6	615006003	Three way fitting	6214E-A4-B4(6214A-A5-B2)	1
7	624002094	Oil hose (for post with a total height of 4451)	L=10300	1
	624001059B	Oil hose (for post with a total height of 5051)	L=11500	1
8	615056116	Cylinder	YG7083-60-1760	2



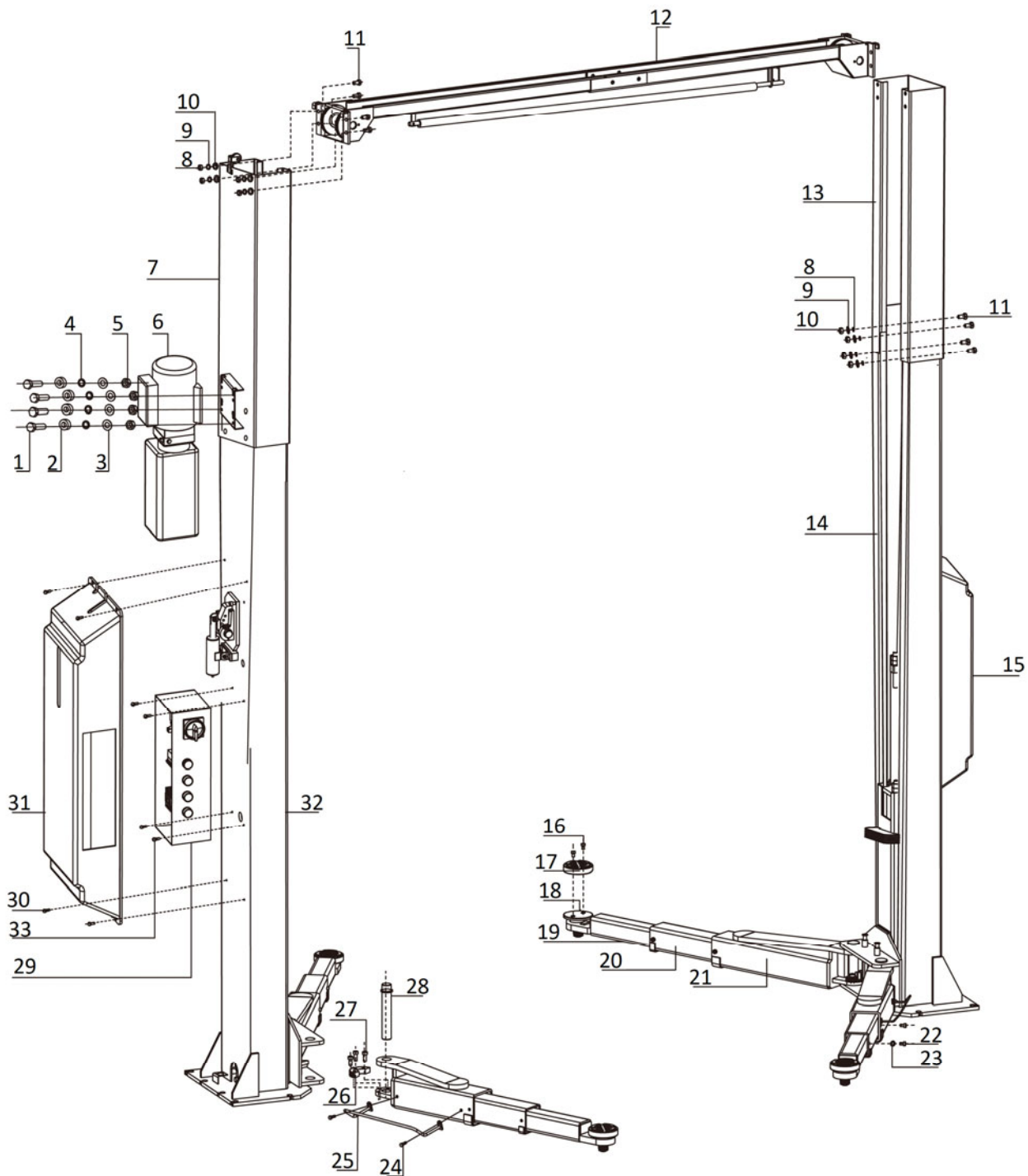
POS.	Code	Description	Specification	Qty
1	206201001	Cotter pin	M2.5*30	4
2	410540031	Shaft	C12-A1-B6	2
3	202109027	Hex socket cylinder head screw	M8*12	2
4	410350990	Pull spring	6214EKZ.V2-A15	2
5	202109024	Hex socket cylinder head screw	M6*35	4
6	410540591	Hook of the safety catch unit	C12E-A1-B4-C1	2
7	410541171	Connection plate	C12E-A1-B4-C3	2
8	203101004	Hex nut	M6	2
9	202109024	Hex socket cylinder head screw	M6*35	1
10	202109022	Hex socket cylinder head screw	M6*25	2
11	202109132	Hex socket cylinder head screw	M6*65	2
12	410044350B	Electromagnet	6254E.V3-A14	1
13	202110004	Hex socket button head screw	M8*12	4
14	614004809	Holder for the electromagnet	62B-A1-B6-E	2
15	203103005	Locking nut	M6	2



POS.	Code	Description	Specification	Qty
1	614054505	Cross beam (in)	C12-A21-B2	1
2	203101008	Hex nut	M14	6
3	204101008	Flat washer	M14	6
4	204201007	Spring washer	M14	6
5	201102035	Hex head full swivel bolt	M14*30	6
6	614054504	Cross beam (out)	C12-A21-B1	1
7	202109024	Hex socket cylinder head screw	M6*35	1
8	203103005	Locking nut	M6	1
9	420060010	Black foam tube	22	1
10	410160023	Long rod	6215E-A9	1
11	410540041	Pulley	C12-A1-B2	4
12	410540011	Spacer sheath	C12-A21-B4	2
13	205101101	Bushing	3520	2
14	612054506	Shaft for upside pulley assembly	C12-A21-B3	2
15	202111004	Hex socket flat head screw	M8*12	2



POS.	Code	Description	Specification	Qty
1	420540030	Sliding block	C12E-A3-B2	16
2	614901723	Carriage assembly	C12E-A3-B1-1	2
3	420680124	Protective rubber pad	62B-A3-B11	2
4	202109031	Hex socket cylinder head screw	M8X30-GB70_1	4
5	410911601	Pulling rod	C12-A3-B2-C1-1	4
6	410540400	Pressure spring	C12-A3-B5	4
7	410901966	Teeth block	6255E-A3-B6	4
8	206102013	Elastic post pin	D6X40-GB879	4
9	204301009	Circlip	M25	4
10	202111004	Hex socket flat head screw	M8*12	2
11	612056001	Shaft of the downside pulley assembly	C12-A1-B3	2
12	205101101	Bushing	3520	2
13	410540041	Pulley	C12-A1-B2	4



POS.	Code	Description	Specification	Qty
1	201103004	Hex head full swivel bolt	M10*35	4
2	420040010	Anti-shock ring	6254E-A23	4
3	203101006	Hex nut	M10	4
4	204201005	Spring washer	M10	4
5	203101006	Hex nut	M10	4
6		Power unit		1
7	614054010	Extending post (for post with a total height of 4451)	C12E-A19-B1	1
7	614054020	Extending post (for post with a total height of 5051)	C12E-A19	1

POS.	Code	Description	Specification	Qty
8	203101008	Hex nut	M14	24
9	204101008	Flat washer	M14	24
10	204201007	Spring washer	M14	24
11	201102037	Hex head full swivel bolt	M14*40	24
12	615056105	Crossbeam assembly	C12-A21	1
13	614054009	Extending post for the secondary post (for post with a total height of 4451)	C12E-A20-B1	1
13	614054021	Extending post for the secondary post (for post with a total height of 5051)	C12E-A20	1
14	614054008	The secondary post	C12E-A2-B1	1
15	420540040	Protective cover at the secondary post	C12E-A15	1
16	202111007	Hex socket flat head screw	M8*20	4
17	615035037	Round supporting adapter	6214EKZ-A4-B4	4
18	420130010	Rubber pad	6214EKZ-A4-B4-C4	4
19	614054509	The third stage arm	C12-A4-B3	4
20	614054508	The second stage arm	C12-A4-B2	4
21	614054507B	The first stage arm	C12-A4-B1-1	4
22	202109040	Hex socket button head screw	M10*15	8
23	204101006	Flat washer	M10	8
24	202110004	Hex socket button head screw	M8*12	8
25	614004030B	Fender for feet protection	6254E-A8-B5	4
26	410901967	Semi-teeth wheel	6255E-A4-B5	4
27	202109085	Hex socket cylinder head screw	M12*30	12
28	410911602	Pin shaft	C12-A12-1	4
29		Control unit		1
30	202109019	Hex socket cylinder head screw	M6*12	8
31	420680105	Cover for electromagnets	E25-A1-B3	1
32	614054007	The power side post	C12E-A1-B1	1
33	202109020	Hex socket cylinder head screw	M6X15-GB70_1	4