

Model No. EE-E28

Two Post Vehicle Lift

Electrical Release

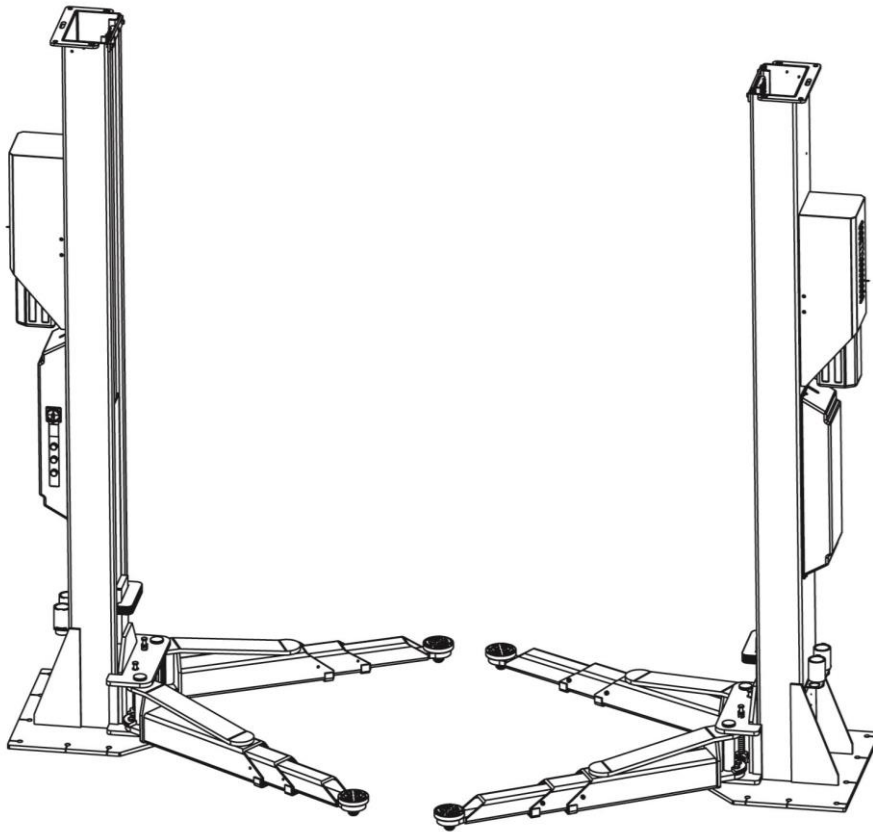
Wireless communication

Lifting Capacity 8000KG

**Installation, Operation
And Parts Manual
Translated Version**



EAE



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

08/05/2024

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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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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.

IMPORTANT NOTES	2
SAFETY NOTES.....	4
1.1 Operation of lifting platforms.....	4
1.2 Checking of the lifting platforms	4
1.3 Important safety notices.....	5
1.4 Warning labels	6
1.5 Potential safety risks	7
1.6 Noise level.....	7
PACKING, STORAGE AND TRANSPORTATION	8
2.1 The lift is packed by 3 sections for shipping	8
2.2 Storage.....	8
2.2 Lifting and handling	8
PRODUCTS DESCRIPTIONS	9
3.1 General descriptions.....	9
3.2 Construction of the lift.....	9
3.3 Technical data.....	9
3.4 Dimensions	10
3.5 Safety devices descriptions.....	11
INSTALLATION INSTRUCTIONS	12
4.1 Preparations before installation	12
4.2 Installation attentions.....	12
4.3 General Installation Steps.....	13
4.4 Items to be checked after installation.	20
OPERATION INSTRUCTIONS	20
5.1 Precautions	20
5.2 Descriptions of control system	21
5.3 Operation instructions.....	23
TROUBLE SHOOTING	24
MAINTENANCE.....	26
Annex 1, Floor plan.....	28
Annex 2, Electrical schemes and parts list.....	29
Annex 3, Hydraulic schemes and parts list	33
Annex 4, Mechanical schemes and parts list.....	37

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.

2.1 The lift is packed by 3 sections for shipping

<i>Name</i>	<i>Packed by</i>	<i>Dimension(mm)</i>	<i>Quantity</i>
<i>Lift</i>	<i>Steel brackets</i>	<i>3560*1000*1040</i>	<i>1</i>
<i>Power unit</i>	<i>Carton</i>	<i>850*250*350</i>	<i>2</i>
<i>Motor housing assembly</i>	<i>Bubble film</i>	<i>790*270* 290</i>	<i>2</i>

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.

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

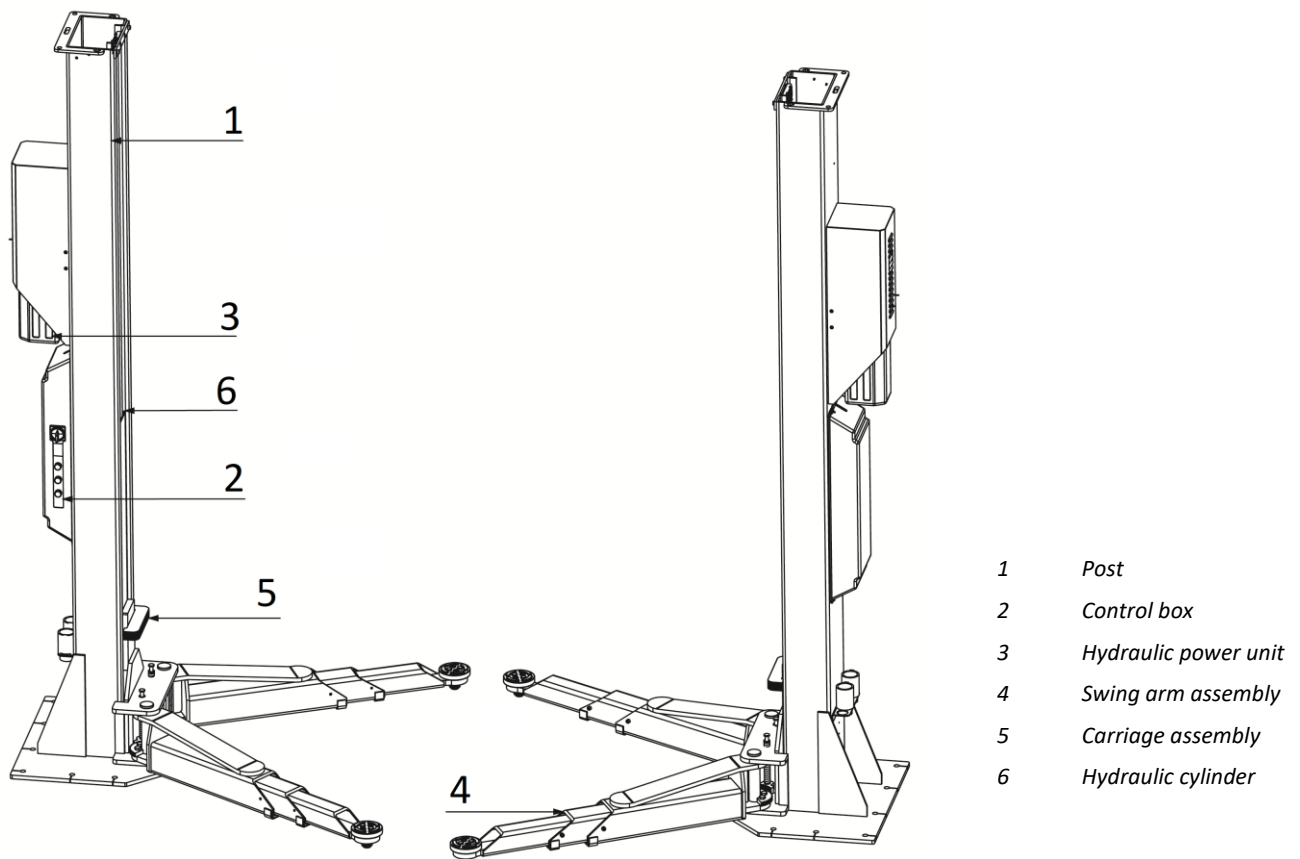
3.1 General descriptions

This is chassis supporting vehicle lift for road vehicles.

Each column has an independent control and hydraulic power unit which provides adequate power for fast lifting and make it able to control at either side. No interconnected ropes, hoses or wires between the two posts provides a free and unobstructed working space. Synchronization is automatically achieved by wireless communication technology and deviation is only allowed within a safe range.

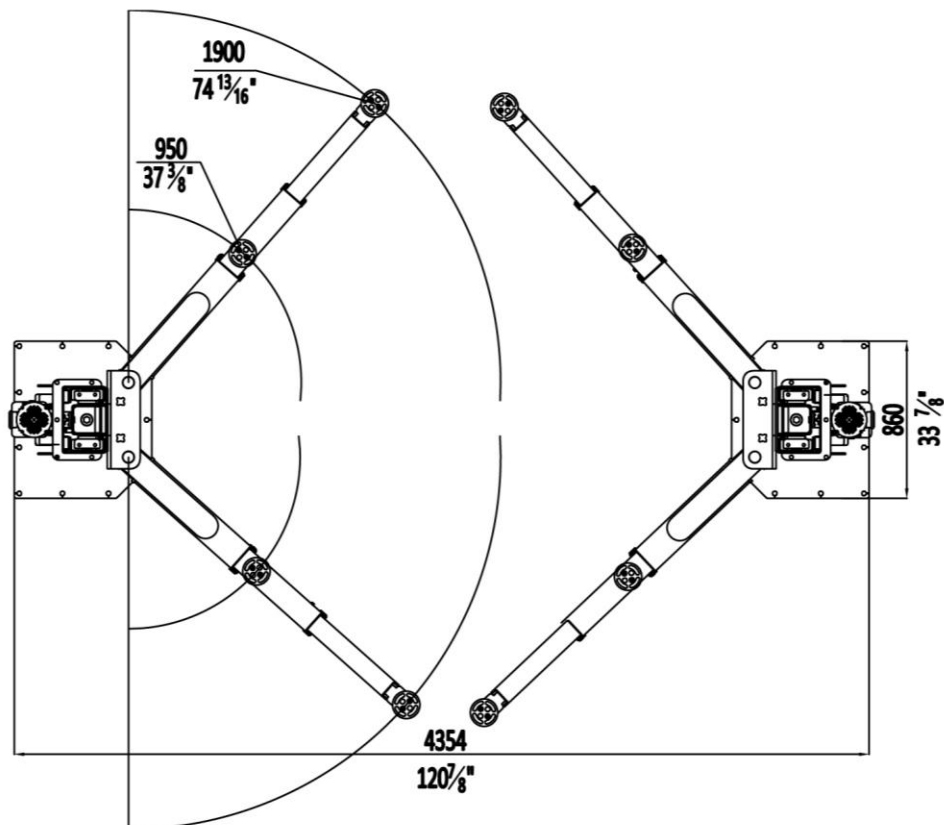
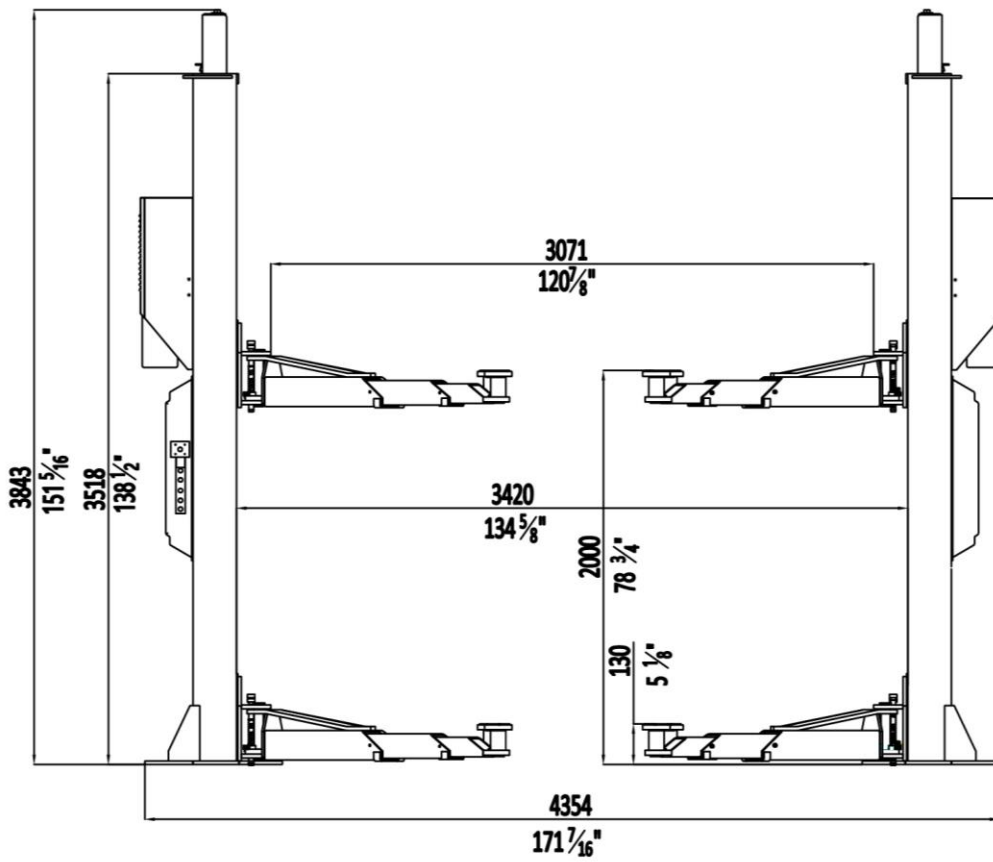
3.2 Construction of the lift

Lift with straight arms (double telescopic)

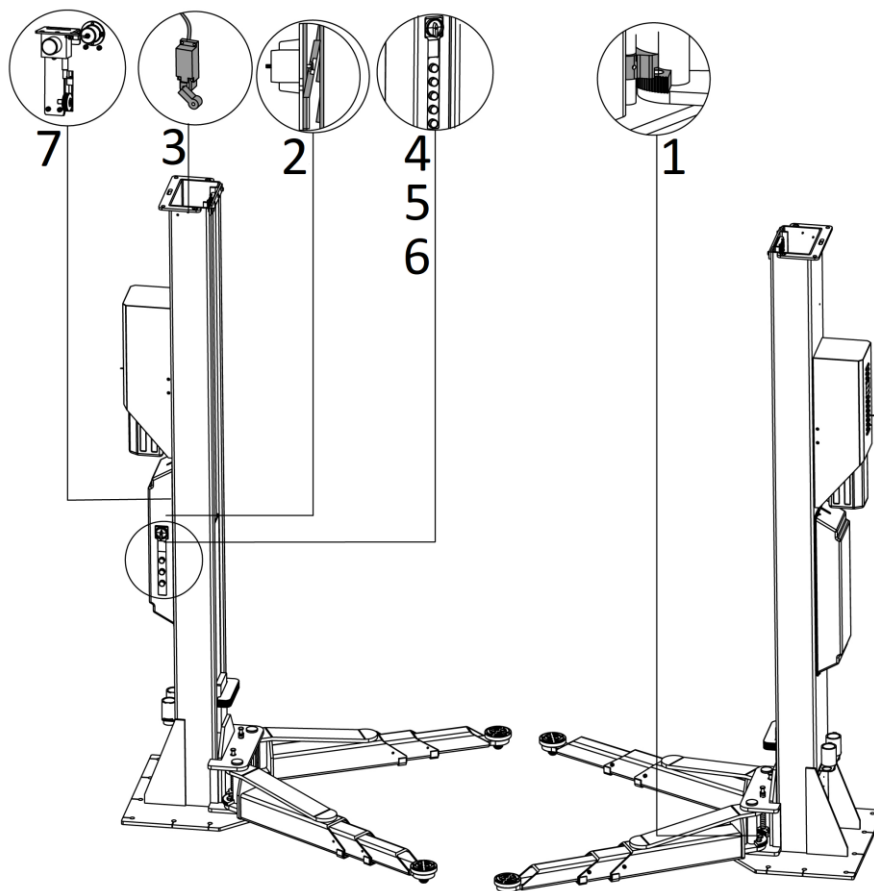


3.3 Technical data

Rated capacity	8000 kg
Max height of the pick-up adapter	2000 mm
Initial height of the pick-up adapter	130mm
Full raised time (with rated load)	Approx.55s
Full lowered time (with rated load)	Approx.50s
Hydraulic working pressure	Approx.18 MPa
Oil tank volume	8Lx2
Power	380V/400V-3Ph-50Hz , 2.2kW

3.4 Dimensions


3.5 Safety devices descriptions



Pos.	Safety related device	Descriptions
1	Swing arm locking device	Ensure the lifting arms are locked and avoid being swinging at raised position.
2	Mechanical locking device	Catch and support the carriages in case of hydraulic failure.
3	Max rise switch	Limit the max rise of the lifting system.
4	Feet protecting device	Double lowering control buttons and audible warning for final travel for lowering.
5	Insulation main switch	Isolate the main power supply when it is turned off.
6	Rising height deviation detecting device	Detect the rising height deviation. In case the deviation exceeds the value that has been set up, enforce to stop the lift and activate an audible warning which gives out at the post with higher rising height.
7	Locking detecting device	Identify the engagement and disengagement of the mechanical locking device and prevent height deviation caused by abnormal release of the locking device.
	Contacting detecting device	Detect the working status of both contactors. Disconnect the power of the entire lift in case one of contactor works abnormally.
	Overload protection	Prevent the lifting system from overloading when rising from the very beginning position.
	Leakage protection	Prevent the load carrying devices from lowering too faster in case of leakage occurs in the hydraulic line.

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 column 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 a qualified electrician.* 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 (see Annex 1, floor plan).

To ensure stability and safety under load, the lift shall be installed with the base frame being in direct and firm contact with the concrete foundation. Don't attempt to fix the base frame directly onto floor with ceramic and other decorated surfaces otherwise you are at risk of putting the lift into a dangerous situation.

C30 concrete foundation with a minimum thickness of 300mm.

Surface under the column base: 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	Qty
Electrical drill	With D20 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 than 2000kg	1
Torque spanner	MD400	1

4.2 Installation attentions

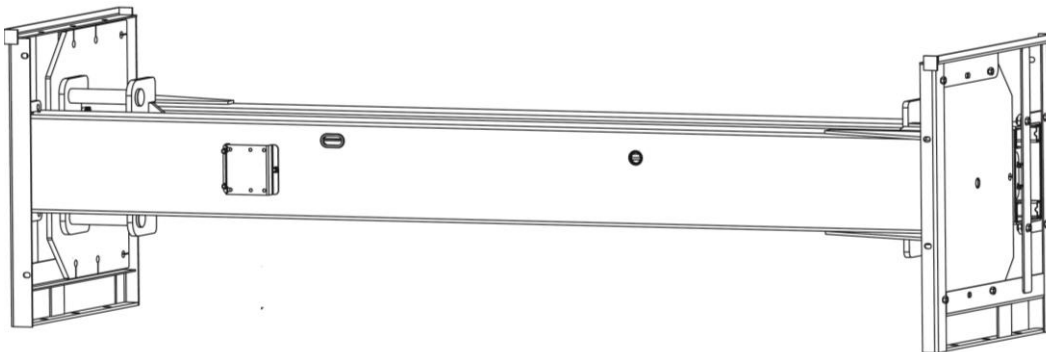
4.2.1 Tighten all hydraulic and electrical connections.

4.2.2 Tighten all screws, nuts and bolts.

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

4.3 General Installation Steps

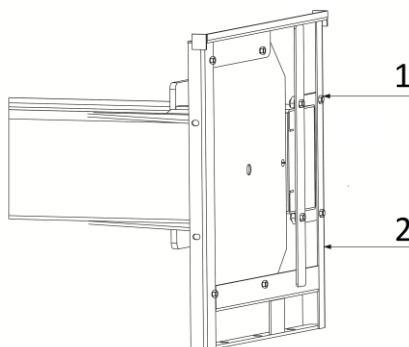
ONLY TRAINED AND QUALIFIED INSTALLERS CAN PERFORM LIFT INSTALLATION DUTIES.



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

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

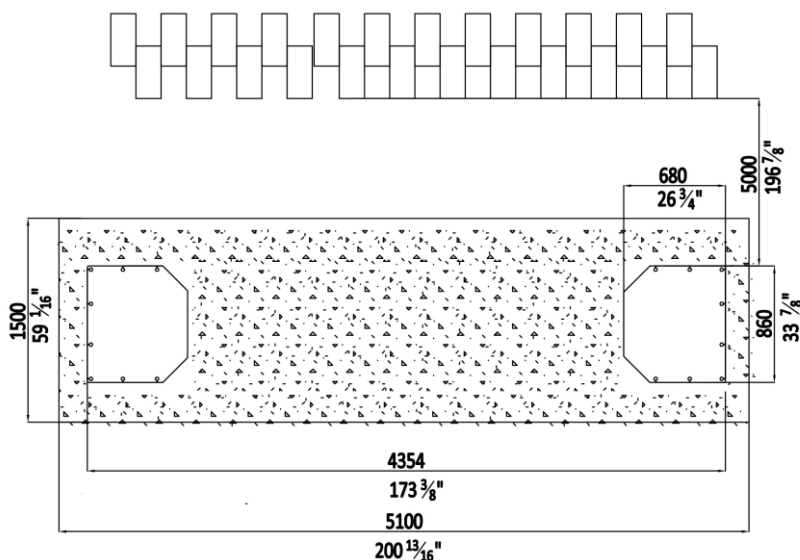
Attention: Please pay special attention not to let the post fall down for it may cause casualty or bring damages to the accessories fixed in the post.



1. Bolt
2. Packing racks

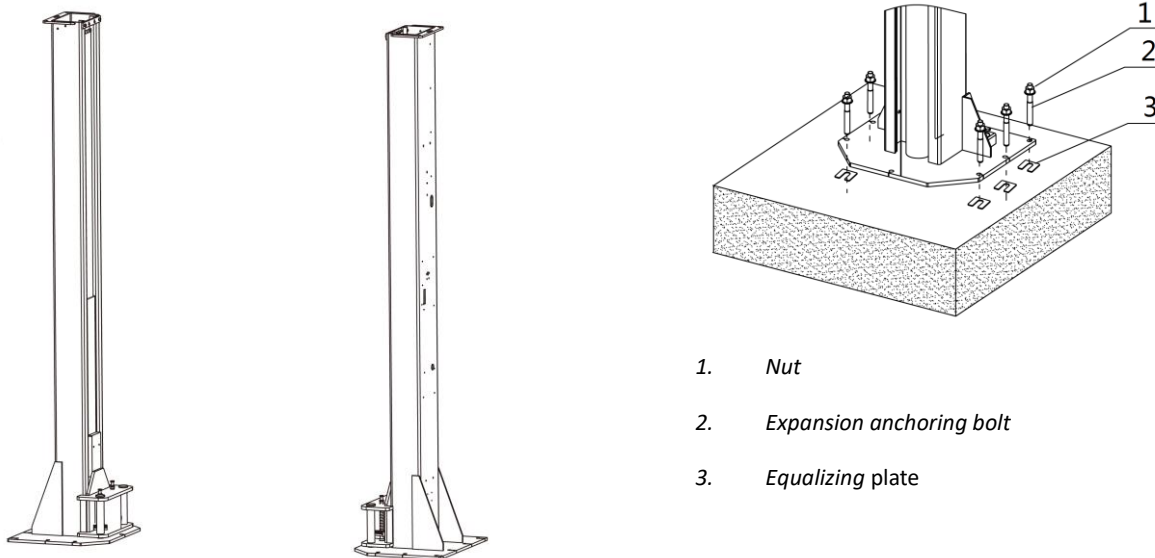
Step 2: Ascertain the standing position for the two posts.

Refer to the floor plan and draw an outline of two base plates on the ground with chalk to ascertain install positions for the two posts.

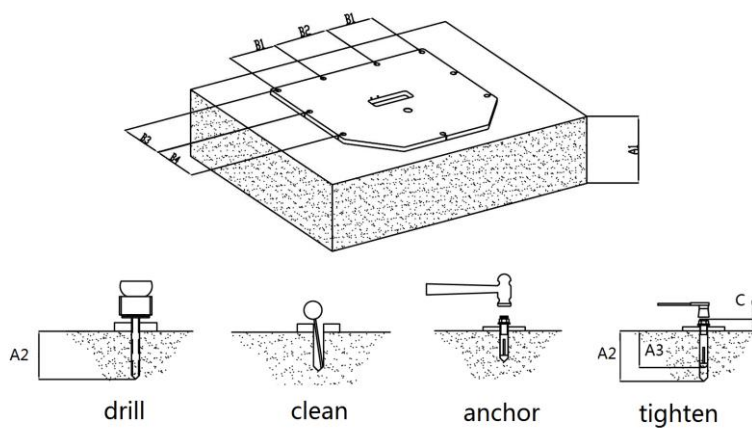


Step 3: Erect and secure the post.

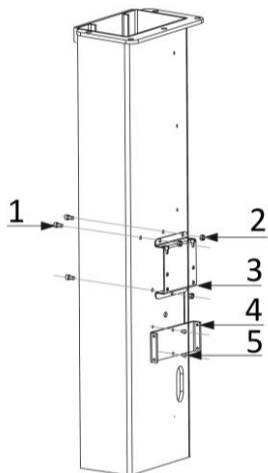
1. Use proper means to erect the post and make the posts face to each other.
2. Use suitable means to raise the lifting carriage to the first latching position. All the mounting holes in the base plate are then accessible. Make sure the locking pawl is engaged.
3. Check and align the position of the base plates again.
4. Use D20 drill bit. Drill the mounting holes. Remove the dust from the hole.
5. Use a spirit level to check the vertical alignment of the posts. If necessary, place equalizing plates under the base plates.
6. Tighten the nuts. **Torque: 100-120 Nm.**



1. Nut
2. Expansion anchoring bolt
3. Equalizing plate



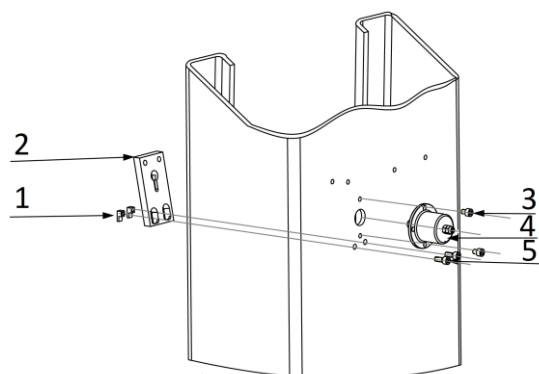
Anchoring bolt	A1 (foundation thickness)	A2 (drilling depth)	A3 (anchoring depth)	B1	B2	B3	B4	C
M20x220	≥300mm	180mm	160mm	240mm	280mm	225mm	195mm	≤60mm

Step 4: Fix the holder for power unit and motor housing


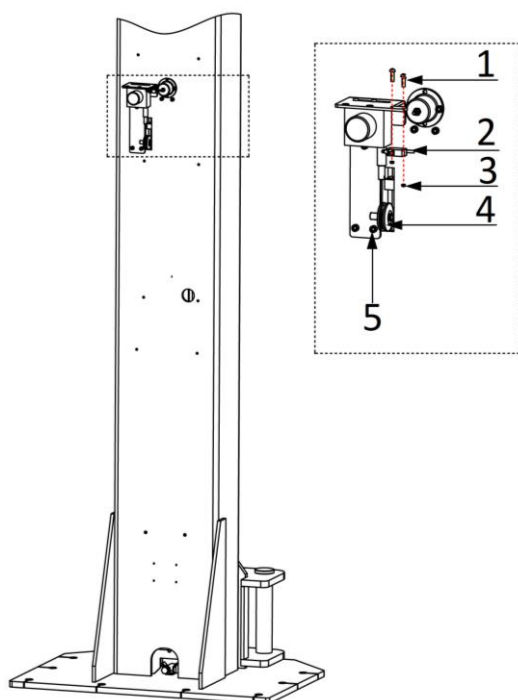
1. Hex socket button screw M10x25
2. Hex nut M10
3. Power unit holder
4. Motor housing holder
5. Hex socket button head screw M18x12

Step 5: Fix the locking device.

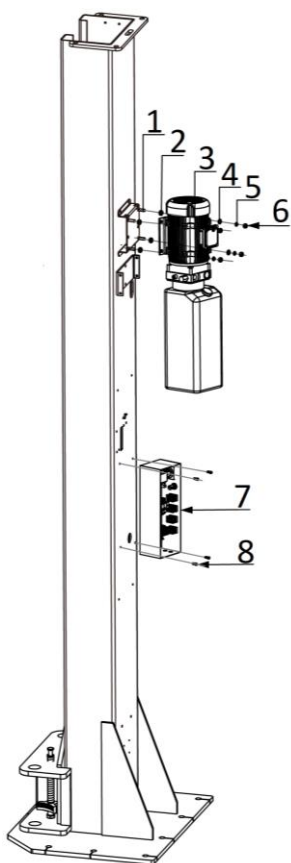
Refer to the Annex 2 and connect the wires of the electromagnet to the terminals reserved in the control box.



1. Orientation block
2. Locking plate
3. Hex socket cylinder head screw M6x8
4. Electromagnet
5. Hex socket cylinder head screw M6x15

Install detecting device for the locking device.


1. Cross socket cap head screw M3*25
2. Micro switch
3. Hex nut M3
4. Guiding wheel assembly
5. Hex socket cylinder head screw M6x8

Step 6: Install the power unit and control unit.


1. Hex head full threaded screw M10x35
2. Anti-shock pad
3. Power unit
4. Flat washer M10
5. Spring washer M10
6. Hex nut M10
7. Control box
8. Hex socket cylinder head screw M6x12

Step 7: Connect the electrical system.

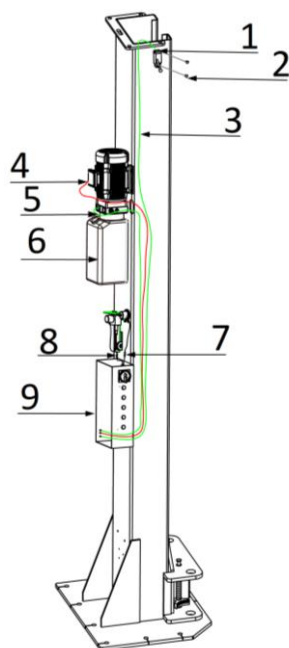
Attention: ONLY qualified electricians are permitted to do the electrical connection.

Refer to electrical connection diagram before making the connection.

Read the nameplate and ensure the supply voltage is adapted to the lift.

Before supplying power to the lift, check and ensure that the power supply has been supplied with overcurrent protection device.

1. Refer to scheme for wire connection and connect the wires of electrical components to the corresponding terminals reserved in the control box.



1. 8108 limit switch
2. Cross socket flat head screw M5x10
3. Wire of the limit switch
4. Wire of the motor
5. Wire of the solenoid valve
6. Hydraulic power unit
7. Wire of the electromagnet
8. Wire of the rope sensor
9. Control box

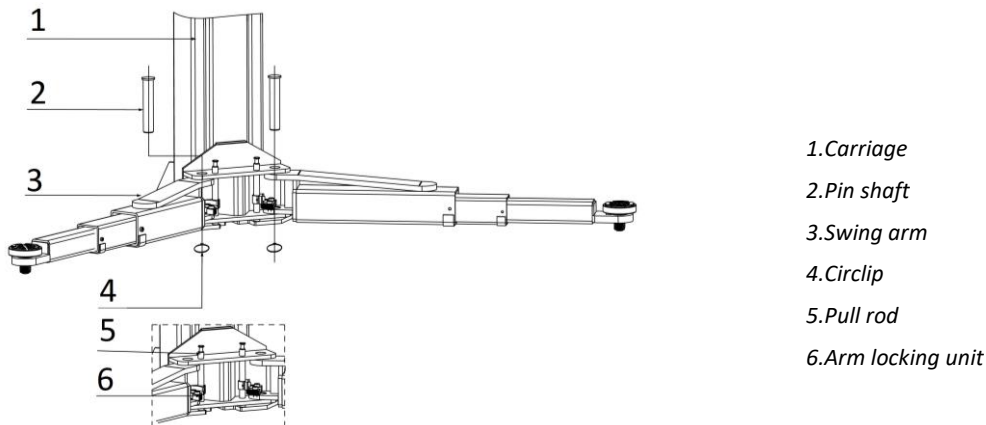
Attention: Wires of the solenoid valves shall be connected according to the color marks respectively attached. Connect the wire attached with a red mark to the solenoid valve marked with red. Connect the wire attached with a green mark to the solenoid valve marked with green. This is very important!!!



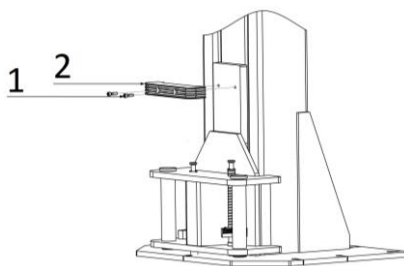
Step 8: Install lifting arms.

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

Attention: Install lifting arms **ONLY** after the complete assembly has been erected and anchored.



Step 9: Fix protection rubber pads.



- 1. Hex socket cylinder head screw M8*30
- 2. Protection rubber pad

Step 10: 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

Prepare 14 liters of anti-abrasive hydraulic oil.

Respectively pour about 6 liters of hydraulic oil into both oil tanks. 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.

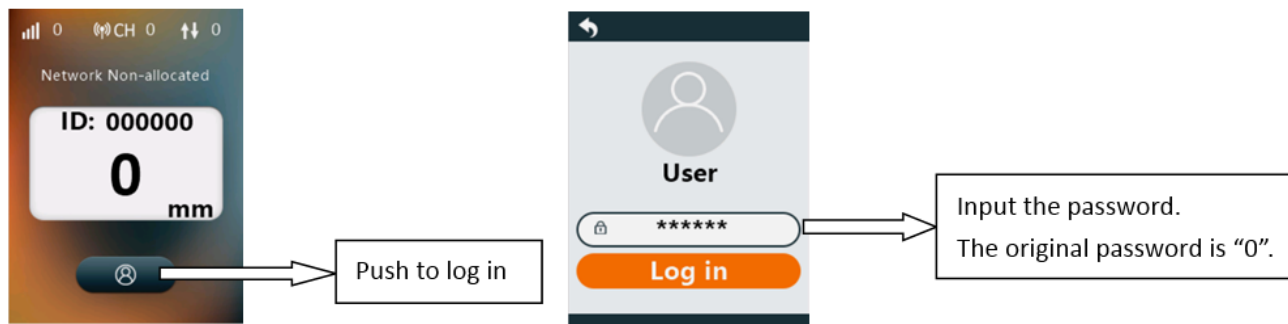
It is suggested to use HM NO.46 hydraulic oil. When the average temperature of the location is below 10°C, use HM NO.32 hydraulic oil. **Change the oil 6 months after initial use and change once per year thereafter.**

Step 11: Bleed the hydraulic line and do network connection

Refer to section 5.2 descriptions of control system and get familiar with the control and system setting methods.

1. Log in the setting system.

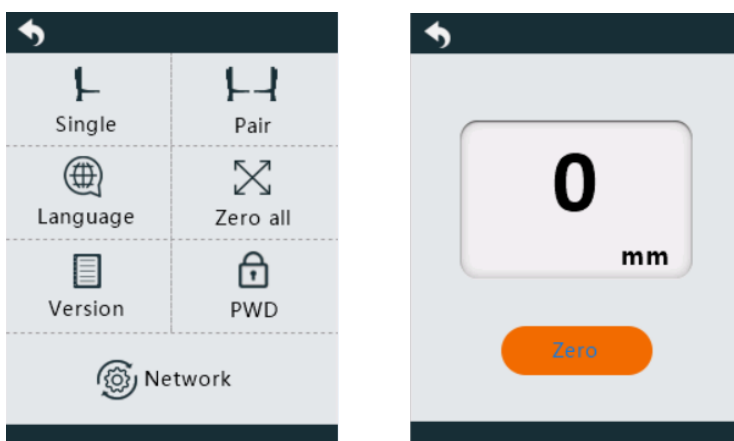
Turn on the main switch. Push the button at the bottom of the screen, log in and reset the lifting system


2. Bleed the hydraulic line and set "Zero" for each column in single control mode.

Enter the single control mode. Bleed the hydraulic line by raising and lower the carriage at least for 2 complete cycles.

After bleeding, lower the carriage completely to the bottom and push the "Zero" button.

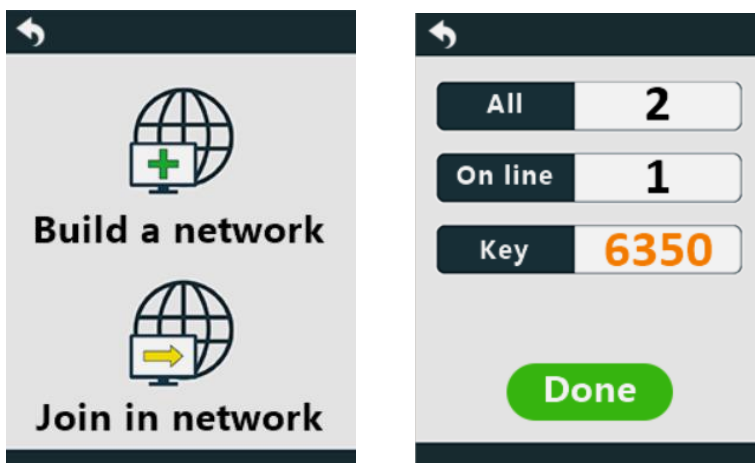
Bleed and set "Zero" to the other columns in the same way.


3. Pairing

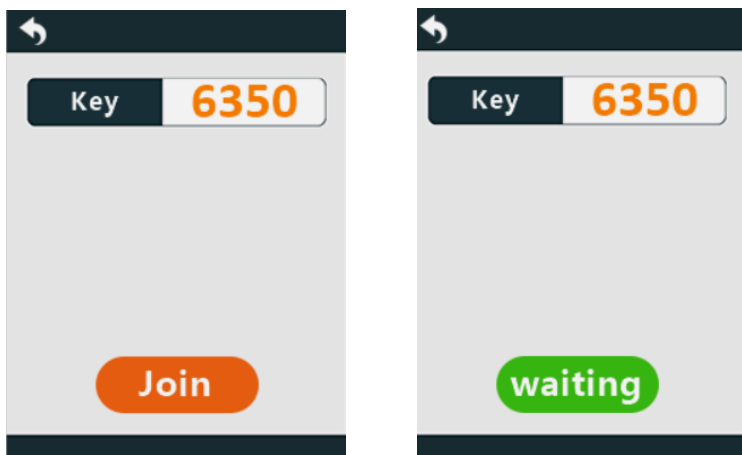
Firstly, turn on the main switch on both columns.

Push the "Network" button at the first column, build a new network and you will get a key number.

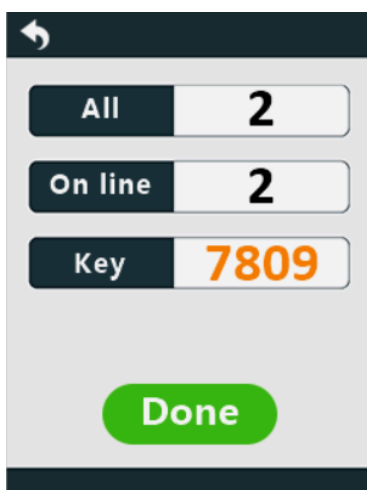
An example key number in the following is 6350. It is given randomly by the system.



Push “Join in network” button at the second column, input the same key number given by first column so as to join the network built by the first column.



Go back to the first column and push the button “Done”.



Return to the main setting page and push the button “Pair” to enter the pair control mode.



4.4 Items to be checked after installation.

S/N	Check items	YES	NO
1	Screw torque of expansion bolts : 100-120 Nm;	√	
2	Rising speed ≥20mm/s;	√	
3	Grounding resistance: not bigger than 4Ω;	√	
4	Height difference of the two carriages ≤5mm;	√	
5	Mechanical locks are robust and synchronized when running with rated load ;	√	
6	All control buttons work as “hold to run”.	√	
7	The earth wire is connected.	√	
9	The lift rises and lowers smoothly.	√	
10	There is no abnormal noise during running with load.	√	
11	There is no oil leakage when running with load.	√	
12	All expansion bolts, nuts or circlips have been tightened.	√	
13	The max rise can be reached.	√	
14	All safety advices, name plate and logos are clear.	√	

OPERATION INSTRUCTIONS

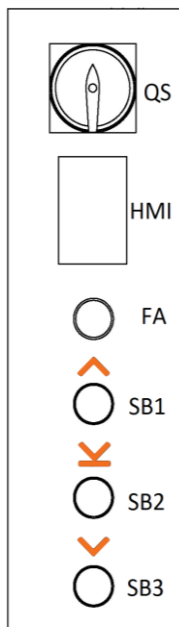
5.1 Precautions

·**ONLY authorized persons are permitted in the lift area.**

- Do not try to raise the vehicle with excessive length or width. Otherwise there is risk of vehicle falling from lift.
- Inspect the space above and below the load and the loading carrying devices. It shall be free of obstructions before operating.
- Before raising operation, run the lift without load for a complete cycle to ensure it is in good condition.
- Before lifting the vehicle and during all operations on the vehicle, make sure that it is properly stopped by the hand brake.
- Check the vehicle after raising a short distance to ensure that it is correctly and safely positioned.
- It is forbidden for people to stand in the field of motion during raising or lowering movement.
- The load carrying device shall be observed by the operator throughout the motion of the lift.
- Engage the safety locking mechanism before entering under the raised vehicle.
- Avoid excessive rocking of vehicle while on the lift.
- Always use safety stands when moving or installing heavy components.
- Do not climb onto the load or load carrying device when they are raised.

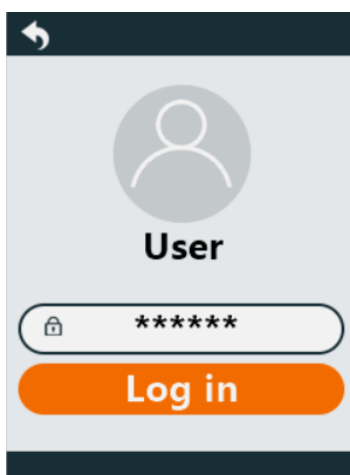
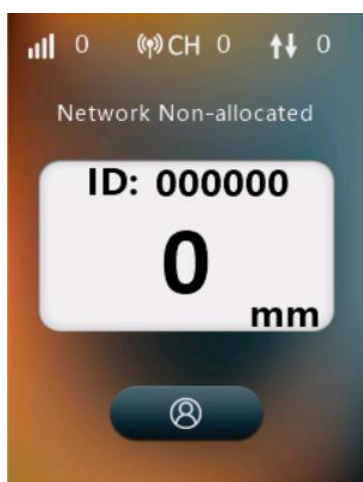
5.2 Descriptions of control system

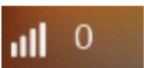

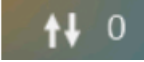
5.2.1 Layout of the control panel

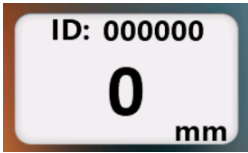
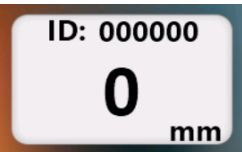
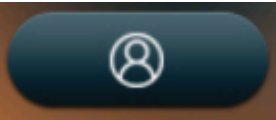
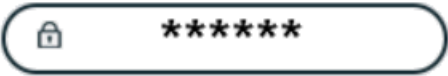
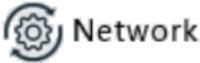









Pos.	Description	Function
QS	Main switch	Control main power.
HMI	Touch screen	Set up the communication system. Display information of the lifting system.
FA	Alarm buzzer	Audible warning for the final portion of travel down to bottom. Audible warning for excessive height deviation.
SB1	UP button	Control the rising movement.
SB2	Safety lock button	Engage the mechanical safety lock.
SB3	DOWN I and DOWN II button	On condition the mechanical locks are disengaged, the carriage can go directly down while the DOWN button is pushed. On condition the mechanical locks are engaged, the carriage will rise first to release the locks before lowering. The carriage will stop automatically at a safety distance from the floor. Reactivate it to control the final travel for lowering.

5.2.2 Layout of the touch screen



S/N	SYMBOL	Descriptions
1		The display of signal intensity. The signal is weak if the value followed by is less than 160.
2		The display of communication channel code. Two paired columns will display a same channel code.
3		The display of height deviation between two columns.

S/N	SYMBOL	Descriptions
4		ID: Identity code of the column. It is generated randomly. Two paired columns display a same ID code.
5		The display of vertical rise of the cylinder in mm. Lower the carriage completely to the bottom, push button “Zero” in single mode or “Zero all” in pair mode to clear the height value to zero for the control system. It must be attained that if you zero the height with the carriage being at a position above the bottom, you will get a negative height value.
6		Push this button to enter the page for “Log in”
7		Input the password.
8		Push this button to do network connections, such as build a network and join the network.
9		Push this button to enter into single control mode in which you can control a single column.
10		Push this button to enter into pair control mode after the network setting is done.
11		In pair control mode, lower the columns completely and push this “Zero all” button to clear the height deviation.
12		Reset the language.
13		Push this Version button to get detailed edition information of the control system.

S/N	SYMBOL	Descriptions
14		Push this PWD button to reset the password.
15		Display abnormal release. Quickly identify the trouble caused by abnormal release of the locking device.

5.3 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.

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. Push the UP button on the control panel until lifting adapters have touched the pick-up positions of vehicle.
4. Keep on raising the vehicle making its wheels be off the ground a little bit and check the stability.
5. Raise the vehicle to the height excepted, push the "Safety Lock" button to engage the mechanical safety locking unit. Check again the stability and then perform maintenance or repair work underneath.

Attention: In case the LOCK button does not work, please push the UP button or DOWN button to raise or lower the carriage a little bit and push the LOCK button again to engage the mechanical locking device.

Lower the lift

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

An audible warning is accompanied during the final portion of lowering travel.

1. Push the "DOWN" button on the control panel.
2. The carrying device will automatically stops at a safety distance from the floor. Reactivate "DOWN" button to lower the final descending movement.
3. When it is lowered completely, position the swing arms and adapters to provide an unobstructed exit before removing vehicle from lift area.
4. Drive the vehicle away.

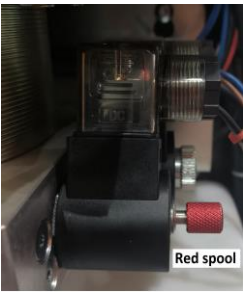

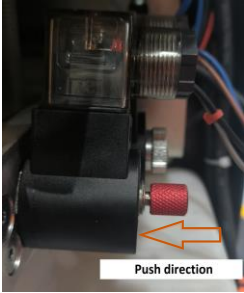
On condition the mechanical locks are disengaged, the carriage can go directly down while the DOWN button is pushed. On condition the mechanical locks are engaged, the carriage will rise first to release the locks before lowering.

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.

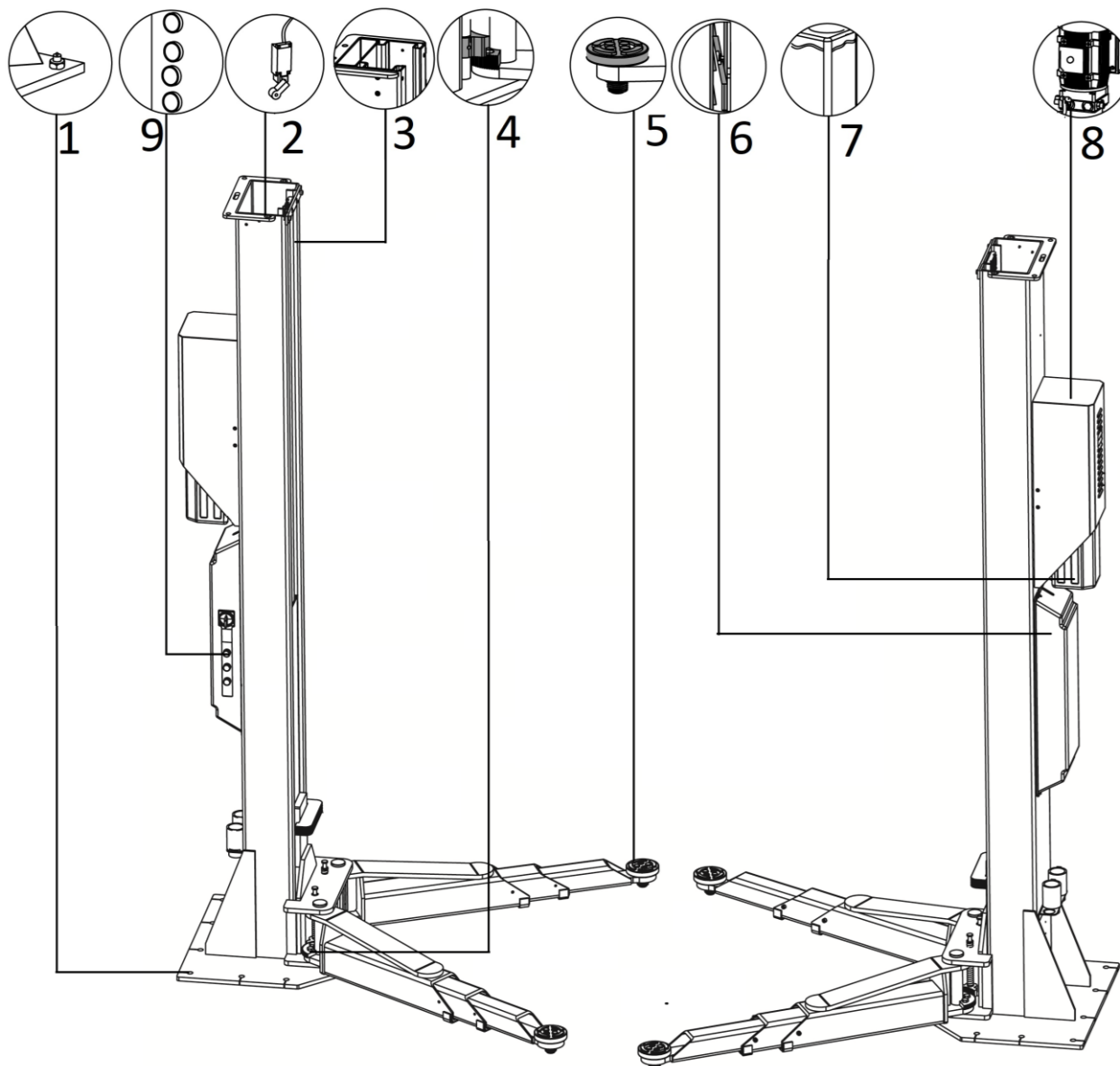
Troubles could be judged and solved much faster when more details or pictures could be provided.

TROUBLES	POSSIBLE CAUSES	SOLUTIONS
Not rise	The weight of the loaded vehicle exceeds the maximum capacity of the lift.	Reduce the load.
	The motor runs in the wrong direction.	Interchange the connection of wires U, V.
	Damaged rope displacement sensor.	Replace it.
	Abnormal interconnection network.	Restart both columns.
	Damaged gear pump. (Pos.11 in the hydraulic exploded scheme)	Replace it.
	Jammed relief valve. (Pos.3 in the hydraulic exploded scheme)	Clean or replace it.
	The red spool, attached with the unloading valve for emergency descent was not screwed tight. (Pos.4 in the hydraulic exploded scheme, coded as 330311004) <div style="text-align: center;">  <p>Red spool</p> </div>	① Open the control cabinet and find the emergency unloading valve. ② Take off the protective cap of the valve and see red spool of the valve. ③ Push and turn clockwise the red spool until hear sound which implicate the valve is off. <div style="display: flex; justify-content: space-around; align-items: center;">   </div>
Not lower	Damaged solenoid valve (Pos.9,10 in the hydraulic exploded scheme).	Replace it.
	Loose wire connection of electromagnet (YA1 in the electrical scheme).	Inspect and ensure a good wire connection.

TROUBLES	POSSIBLE CAUSES	SOLUTIONS
	Loose wire connection of micro switch (SQ2,SQ3 in the electrical exploded scheme).	Inspect and ensure a good wire connection.
Not rise and not lower while an audible warning occurs	Exceeded rising height deviation.	Turn one of the column into single control mode adjust the height of its carriage until both carriages are at the same level from ground.
	Reversed wire connection of the solenoid valve (YV1, YV2 in the electrical exploded scheme).	Correct the wire connection.
	Fully jammed pressure compensation valve, which causing the system exceeding the rising height deviation. (Pos.7,8 in the hydraulic exploded scheme)	Clean or replace the valve.
Lower too slowly	Jammed pressure compensation valve. (Pos.7,8 in the hydraulic exploded scheme)	Clean or replace the valve.
	Jammed solenoid unloading valve. (Pos.9, 10 in the hydraulic exploded scheme)	Clean or replace the valve.
	Jammed restrictive valve on the oil cylinder. (Pos.6 in the hydraulic line scheme)	Clean it
Rise and lower with vibration	Loose oil sucking pipe.	Tighten the pipe.
	No grease on the sliding surface of the carriage.	Add grease.
	The two pressure compensation valve elements are reversely installed.	Interchange the installed position.
	The wires of two solenoid valve are reversely connected.	Interchange the connection of wires.

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.



Pos.	Components	Methods	Period
1	Expansion bolts	Check with torque spanner. Torque:100-120Nm	Every 3 months
2	Limit switch	Push the UP button and inspect and to ensure the lifting platform stops rising when the switch is activated.	Every day
3	Running path inside the post for carriages	Lubricate the path with NO.1 lithium based grease. No obstruction on the track.	Every 3 months
4	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

Pos.	Components	Methods	Period
5	Rubber contact pads	Inspect the pads and clean off any objects that may cause sliding or damage.	Every day
6	Mechanical safety catch	Check and assure both mechanical catches can engage and disengage simultaneously by pushing control buttons.	Every day
7	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 day
8	Unloading valve oil hose connectors	Inspect to ensure no leakage before using the lift.	Every day
9	Control button	Check and assure all buttons work as "hold- to -run " and work as the function indicated.	Every day

Stick to the above maintenance requirements and the lift will always keep a good working condition and its service life could be extended.

Annex 1, Floor plan

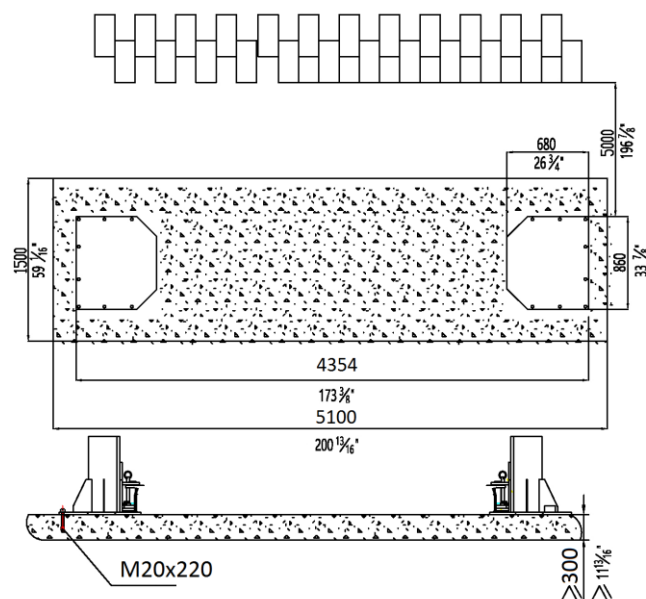
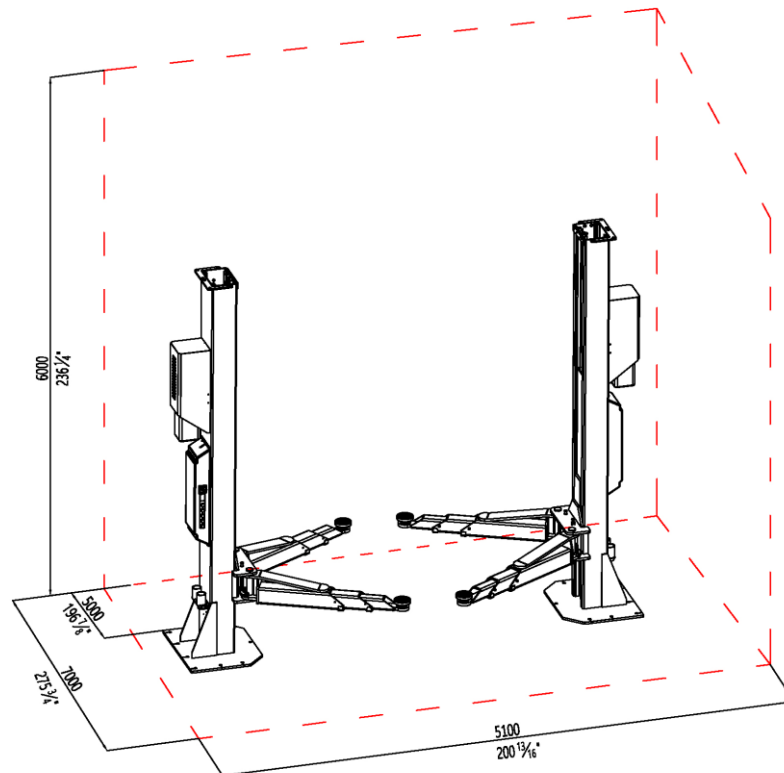
Indoor installation only. There must also be a clearance of at least 1 meter between the lifting platform and fixed elements (e.g. wall) in all lifting positions. There must be sufficient space for driving vehicles on and off.

C30 concrete foundation with a minimum thickness of 300mm.

Surface under the base frame: Horizontal and even (Gradients max. 0.5 % or a deviation less than 5mm)

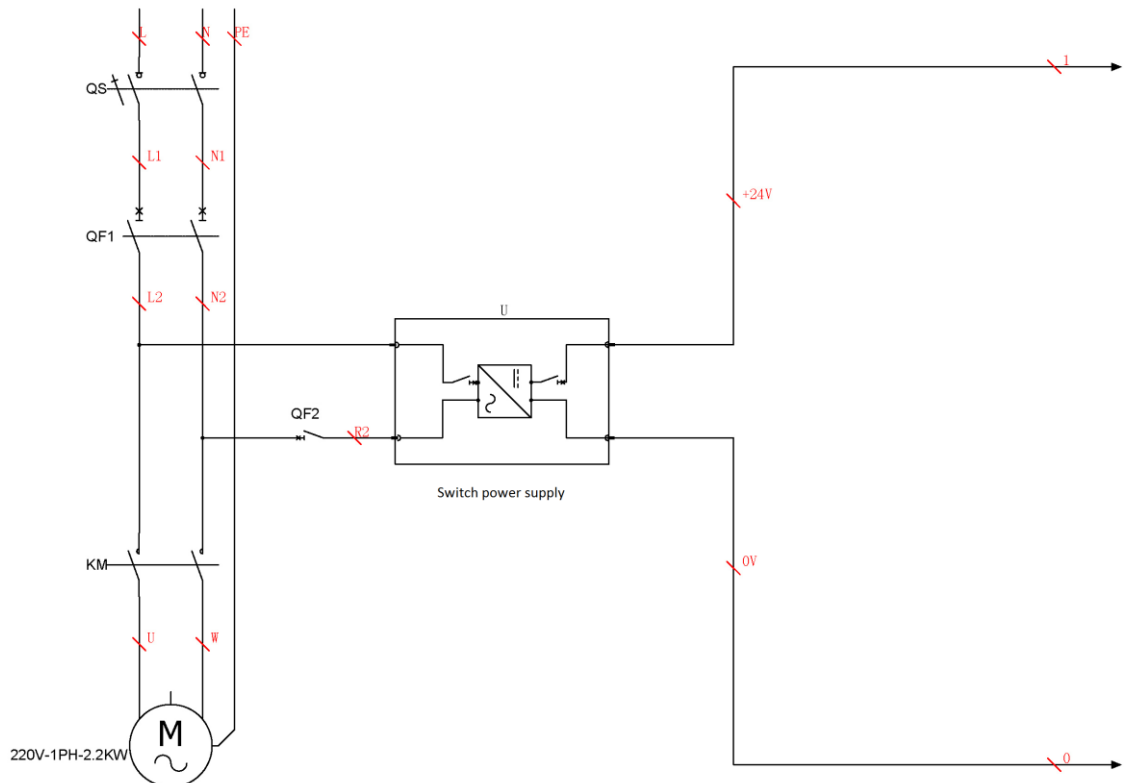
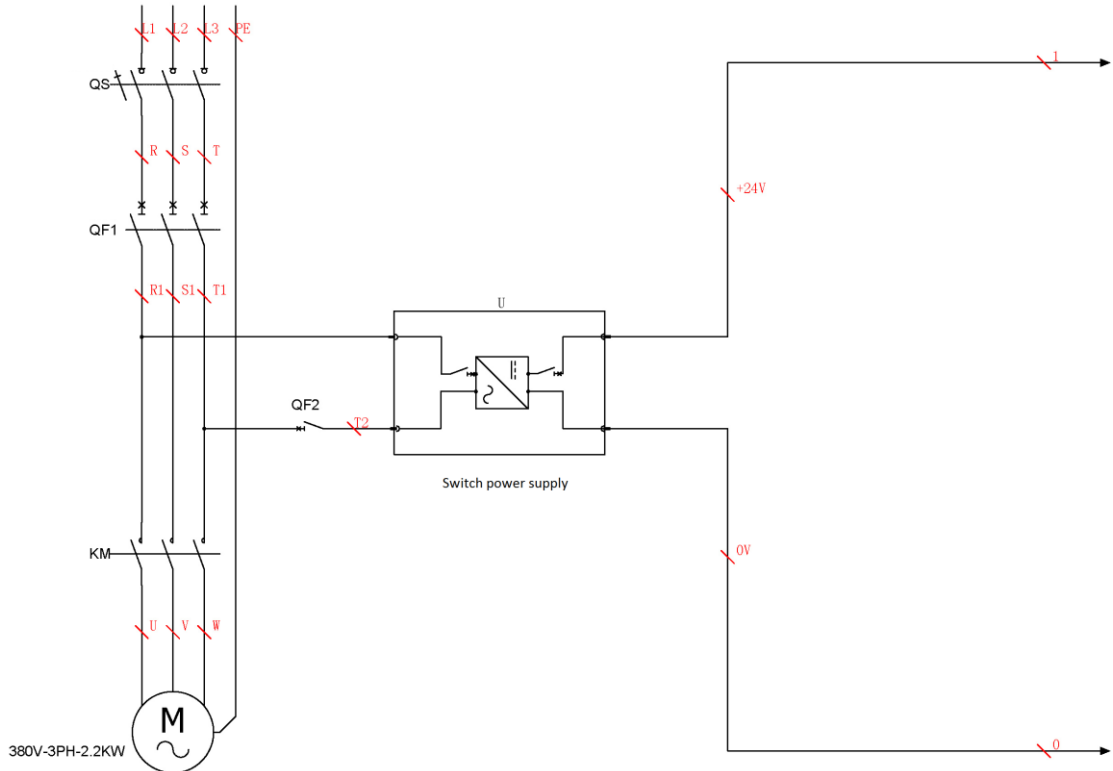
Newly built concrete ground must be older than 20days.

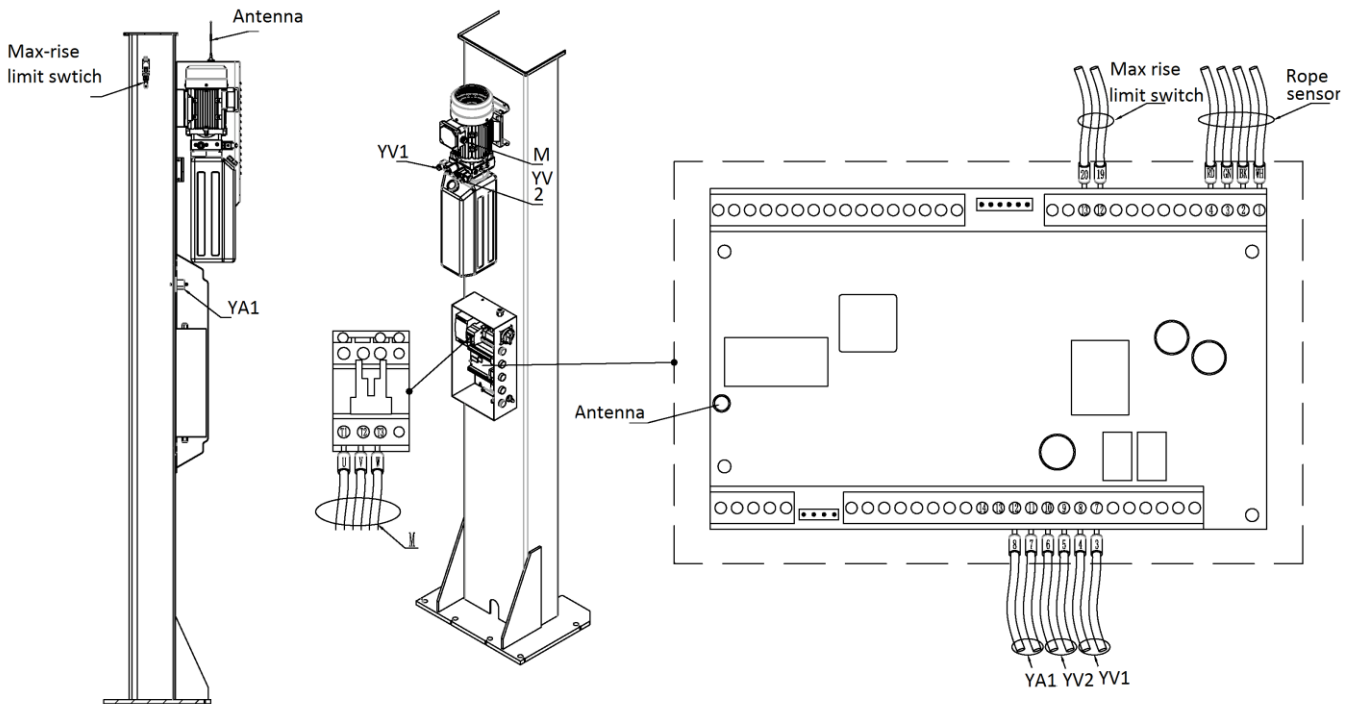
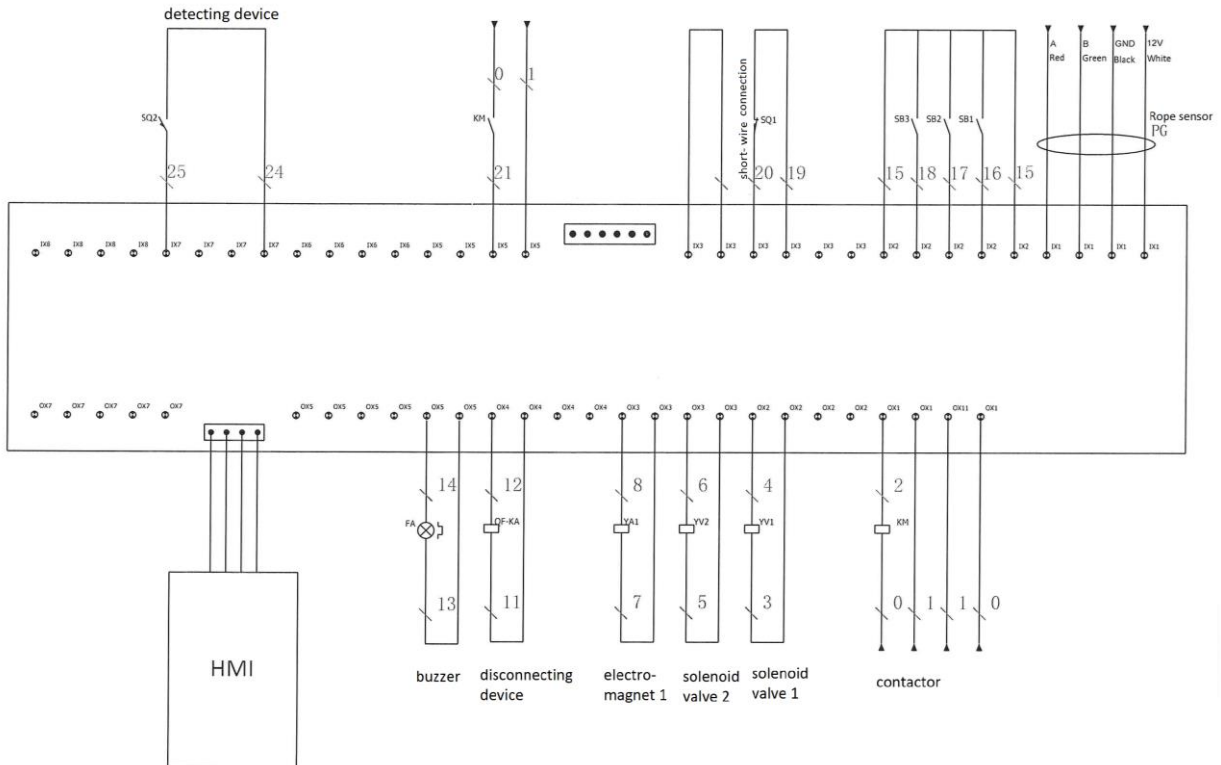
In millimeters and inches.

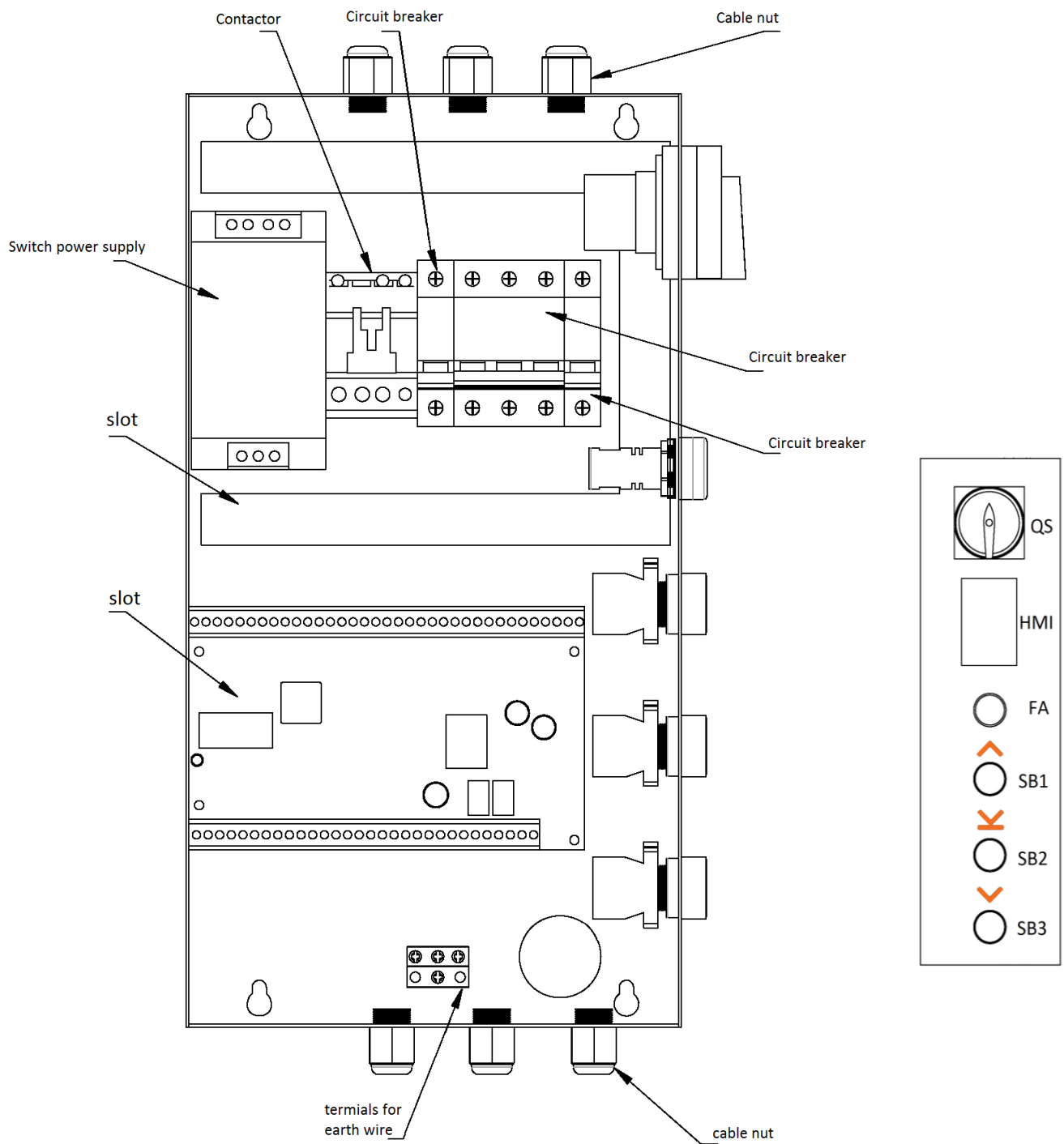


Annex 2, Electrical schemes and parts list

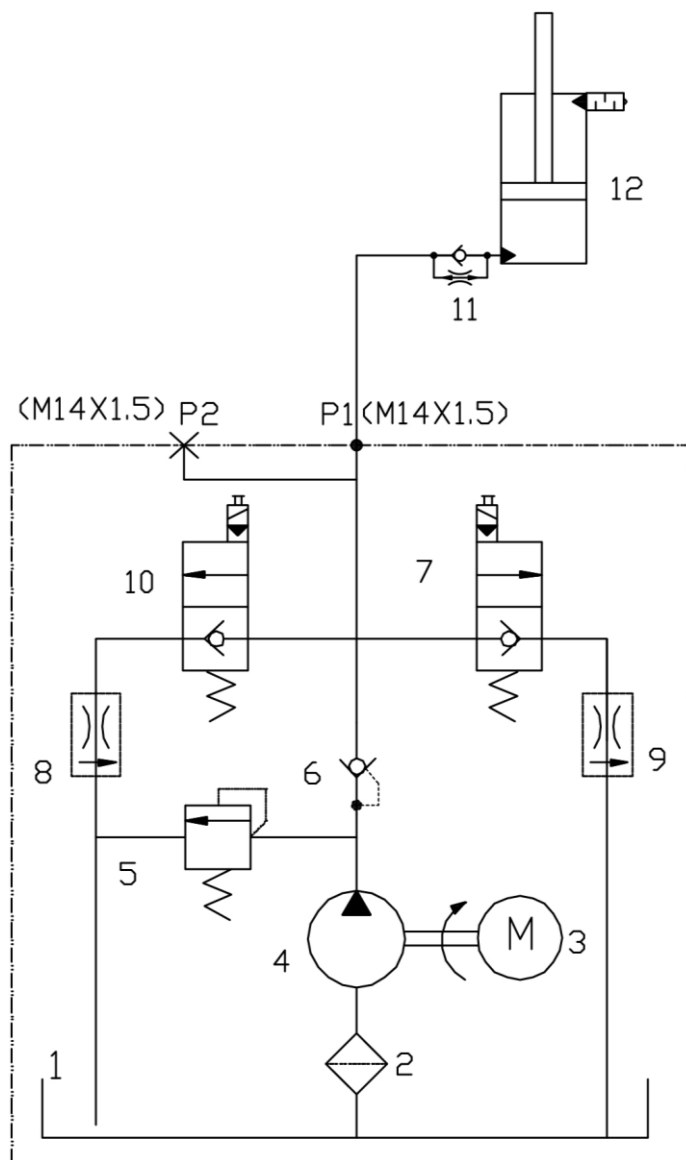
(Note: For the specific requirements on voltage, the actual voltage of your lift may differ with the following diagram)



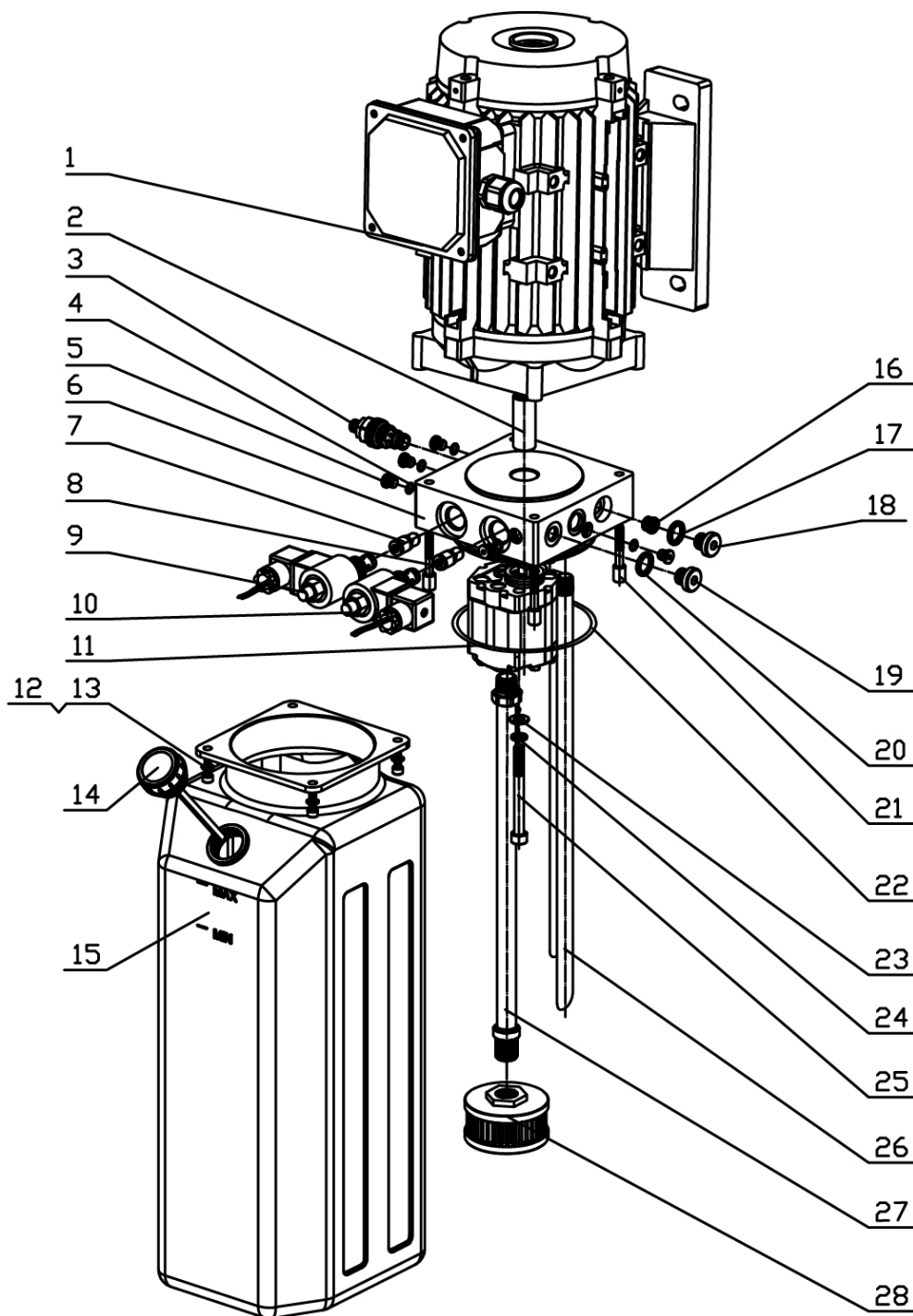




Code in the scheme	P-code	Component name	Specificataion	Qty
HMI	321500005	Touch screen	TJC3224K024_011R	2
QF1	320801003	Circuit breaker (3Ph)	CDB6iC25/3P (CB-60A C25)	2
	320802001	Circuit breaker(1Ph)	CDB6iC32/2P (CB-60A C32)	2
SQ1	320301011	Limit switch	TZ8108	2
QF2	320803005	Circuit breaker	CDB6iC6/1P(CB-60A C6)	2
KM	320902009	Contactoer	NC1-1810Z	2
FA	321202001	Alarm	AD118-22SM/R/AC/DC/24V	2
QS	320304001	Main switch	LW26GS-20-04	2
SB1,SB2,SB3	320401042	Button	NP2-EA11 (CDLA6H-EA11)	6
U	321004142	Switch power supply (380V/400V/415V)	DHR-120-24 320V-440VAC	2
	321103414	Switch power supply(220V/230V/240V)	DHR-120-24 100-120VAC/200-240VAC	2
PG	321004119	Rope sensor	2000mm/WF50-E-02	2
YA1	330310005	Electromagnet	6254E-A14	2
-	321301027	Circuit board	433	2
-	321004145	Disconnecting device	AC/DC 24V-48V	2
SQ2	320301026	Micro switch	CMV101D	2

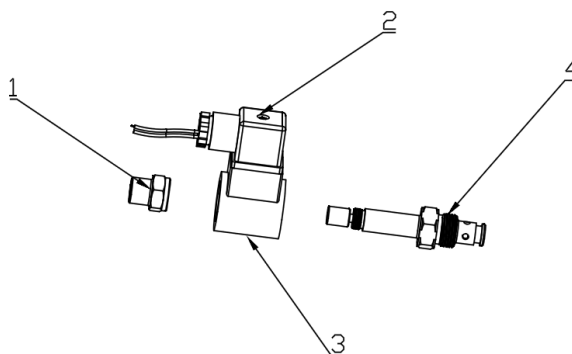
Annex 3, Hydraulic schemes and parts list


Pos.	Component name
1	Oil tank
2	Filter
3	Motor
4	Gear pump
5	Relief valve
6	Non-return valve
7	Solenoid shifting valve (unloading valve)
8	Pressure compensating valve
9	Pressure compensating valve
10	Solenoid shifting valve (unloading valve)
11	Restrictive valve
12	Hydraulic cylinder

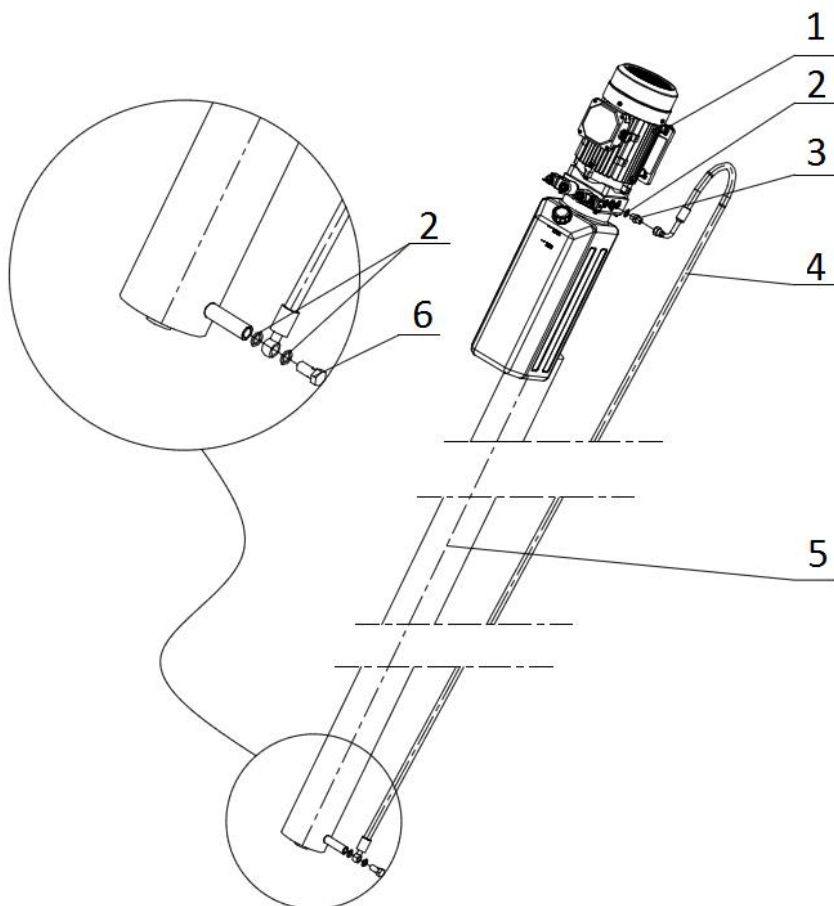


Pos.	Code	Component name	Specification	Qty
1	320204254	Motor	380V-2.2KW -3PH-50HZ-2P	1
	320204219	Motor	400V-2.2KW -3PH-50HZ-2P	1
	320204277	Motor	220V-2.2KW -1PH-60HZ-2P	1
2	330404006	Coupling	48mm (YBZ-F2.1D4H1/1-03)	1
3	330304007	Relief valve	YF08-40	1
4	207101100	Type O seal ring	EKM,6.5*1.5	7
5	210101015	Fitting	YBZ1-PG02A	7

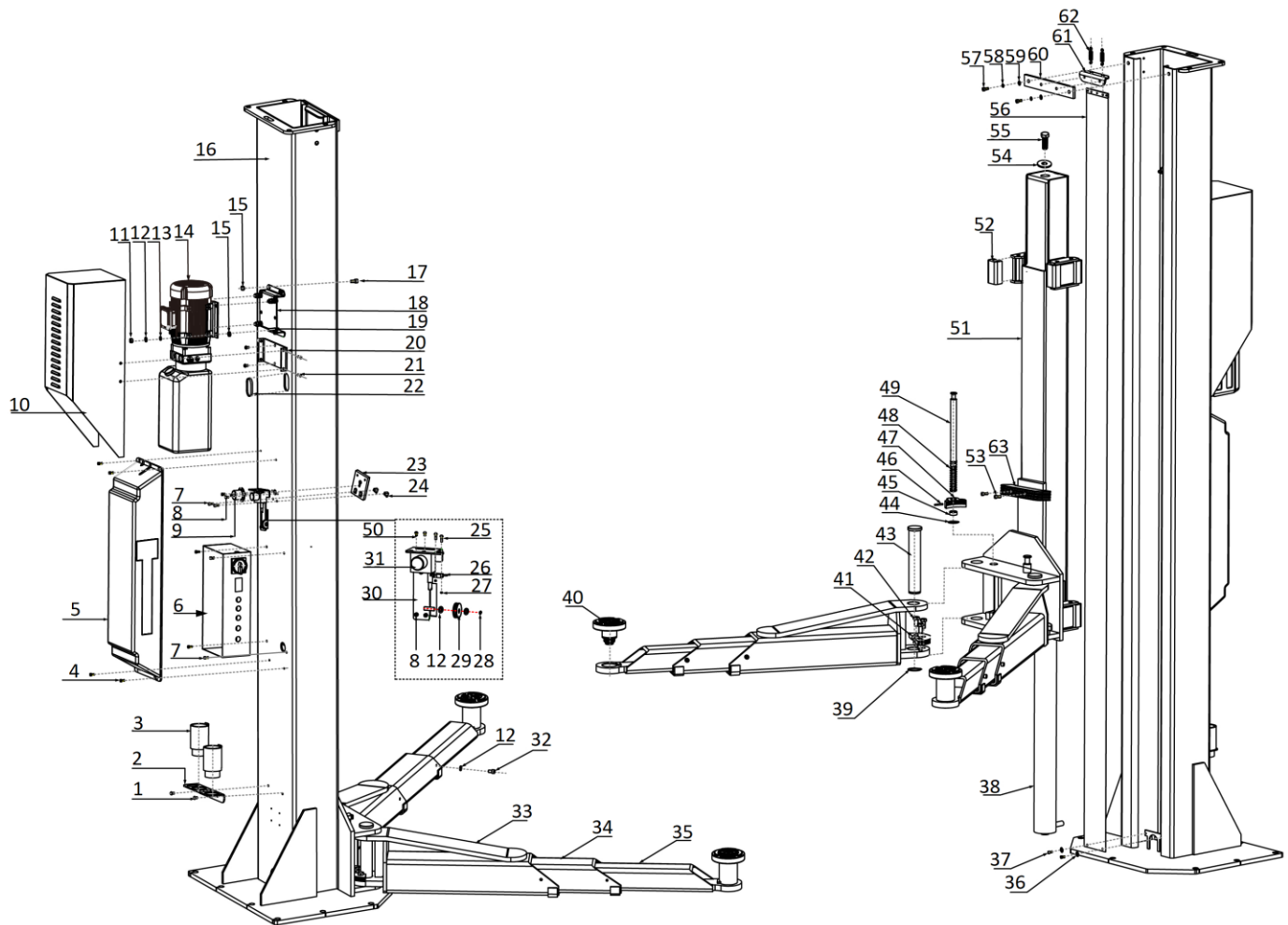
Pos.	Code	Component name	Specification	Qty
6	330101111	Hydraulic block	LBZ-T202BK-1	1
7	330308038	Pressure compensating valve	BL-I2.15	1
8	330308033	Pressure compensating valve	BL-I1.0	1
9	330311004	Shifting valve (core)	DHF08-220H-DC24	1
10	330311004	Shifting valve (core)	DHF08-220H-DC24	1
11	330201016	Gear pump (1Ph-50HZ)	CBK-F220-H/CBK-2.1F-H	1
	330201019	Gear pump (1Ph-60HZ)	CBK-F216-H	1
	330201010	Gear pump (3Ph-50HZ)	CBK-F225-H	1
12	202109144	Bolt	M5*18	4
13	204101003	Flat washer	M5	4
14	330502013	Breather	YBZ-BT-M30*2-B	1
15	330405066	Oil reservoir	SLYX-8L-L-BX	1
16	330302004	Non-return valve	ILCV2000-G1/4	1
17	207103019	Composite washer	M14	1
18	210101004	Hex socket fitting	G1/4	1
19	210101013	Fitting	M14*1.5	1
20	207103019	Composite washer	M14	1
21	202109145	Bolt	YBZ-E3D4H1/10-02	4
22	207101098	Type O seal ring	109*5.3	1
23	204201013	Spring washer	M8	2
24	204101005	Flat washer	M8	2
25	202109072	Hex socket cylinder head screw	M8*85 8.8	1
26	330402016	Oil-return pipe	YBZ-E2D1/1-01(340mm)	2
27	330401024	Oil-suck pipe	YB-F2.1D4H1/1-02(294mm)	1
28	330403003	Filter	YBZ-E2D311/1-10	1



Pos.	Code	Component name	Specification	Qty
1	203204102	Locking nut	FHLM-1/2-20UNF	1
2	330308032	Solenoid coil connector	DIN43650-DC	1
3	330308031	Solenoid coil	LC2-0-C-2H,24VDC	1
4	330311004	Shifting valve (core)	DHF08-220H-DC24	1



Pos.	Code	Component name	Specification	Qty
1	622034381	Power unit	380V-400V-2.2KW-3PH-50HZ-20MPa-8L	1
2	207103025	Composite washer	13_7X20X1_5	3
3	310101008	Connector	M14*1.5-G1/4	1
4	624002157	Oil hose	Φ8, L=2620	1
5	615068128	Oil cylinder	YG63-73-45-1846	1
6	410901094	Connector with restrictive valve	LR40-3	1

Annex 4, Mechanical schemes and parts list


Pos.	Code	Description	Specification	Qty
1	202110004	Hex socket button head screw	M8X12-GB70_2	8
2	410901744	Holder for height adapter	6254E-A1-B1-C6-V0	2
3	612013002	Height adapter	6214EKZ-A4-B5	4
4	202109018	Hex socket cylinder head screw	M6X10-GB70_1	8
5	420680132	Cover	E25-A1-B3-1	2
6	614901773	Frame of Control unit	E28-A15-B1-3	2
7	202109018	Hex socket cylinder head screw	M6X10-GB70_1	8
8	202109017	Hex socket cylinder head screw	M6X8-GB70_1	4
9	330310005	Electromagnet	6254E-A14	2
10	614004829B	Motor housing assembly	62-A22-B1	2
11	203101006	Hex nut	M10-GB6170	14
12	204101006	Flat washer	D10-GB95	16
13	204201005	Spring washer	D10-GB93	8
14		Hydraulic power unit		2
15	420040010	Anti-shock pad	6254E-A23	8
16	614901828	Welded post assembly	E28-A1-B1-1	2
17	202110012	Hex socket button head screw	M10X25-GB70_2	6

Pos.	Code	Description	Specification	Qty
18	410901745	Holder for power unit	6254E-A1-B1-C10-V0	2
19	201103004	Hex head full threaded bolt	M10X35-GB5783	8
20	410047003	Motor housing holder	62B-A22-B2	2
21	202110005	Hex socket button head screw	M8X20-GB70_2	4
22	420250050B	Protective sheath	6604B-A17	2
23	410901132	Safety locking plate	HDM84-A1-B4	2
24	410040071	Orientation block	6254E-A17	4
25	202109115	Cross socket cap head screw	M3x25-GB818	4
26	320301026	Micro switch	CMV10011C2	2
27	203103001	Hex nut	M3	4
28	204301001	Circlip	φ10	2
29	420080020	Pulley I	6214DS-A8	2
30	612901816	Guiding wheel assembly	E28-A13-B1	2
31	321004119	Rope displacement sensor	2000mm/WF50-E-02	2
32	202109040	Hex socket cylinder head screw	M10X16-GB70_1	8
33	614055003	Support arm	E28-A4-B1-1	4
34	614901572	Mid arm	E28-A4-B2	4
35	614055005	Retractable arm	E28-A4-B3-1	4
36	204101004	Flat washer	D6-GB95	4
37	202101027	Cross socket cap head screw	M5X10	4
38	615068128	Oil cylinder	YG63-73-45-1846	4
39	204301016	Circlip	D50-GB894_2	4
40	615035022	Lifting tray	6214EKZ-A4-B4-V0	4
41	410550321	Semi-teeht block	E28-A4-B4	4
42	201102040	Hex head full threaded bolt	M16X30-GB5783	12
43	410901646	Pin shaft	E28-A12	4
44	204301009	Circlip	D25-GB894_2	4
45	410901645	Sheath of the pull rod	E28-A3-B10	4
46	206102008	Elastic cylindrical pin	D5X50	4
47	410911189	Small teeth block	E28-A3-B4-1	4
48	410580371	Pressure spring	C18-A3-B5	4
49	410911188	Pull rod	E28-A3-B5-C1-1	4
50	202101021	Cross socket cap head screw	M5X10-GB818	4
51	614901829	Carriage	E28-A3-B1-2	2
52	420680114	Sliding block	HDM84-A3-B8-1	16
53	202109031	Hex socket cylinder head screw	M8X30-GB70_1	4
54	410901134	Washer	HDM84-A3-B4	2
55	201103006	Hex head full threaded bolt	M20*60	2
56	615068527	Protective curtain	E28-A1-B8	2
57	202109055	Hex socket cylinder head screw	M12X45-GB70_1	4
58	204201006	Spring washer	D12-GB93	4
59	204101007	Flat washer	D12-GB95	4
60	410912024	Pull plate	E28-A1-B7-1	2

Pos.	Code	Description	Specification	Qty
61	410912022	Installation plate for column curtain	E28-A1-B6-1	2
62	410274470C	Pull spring	6435B-A4-B30	4
63	420680124	Protection rubber pad	62B-A3-B11	2