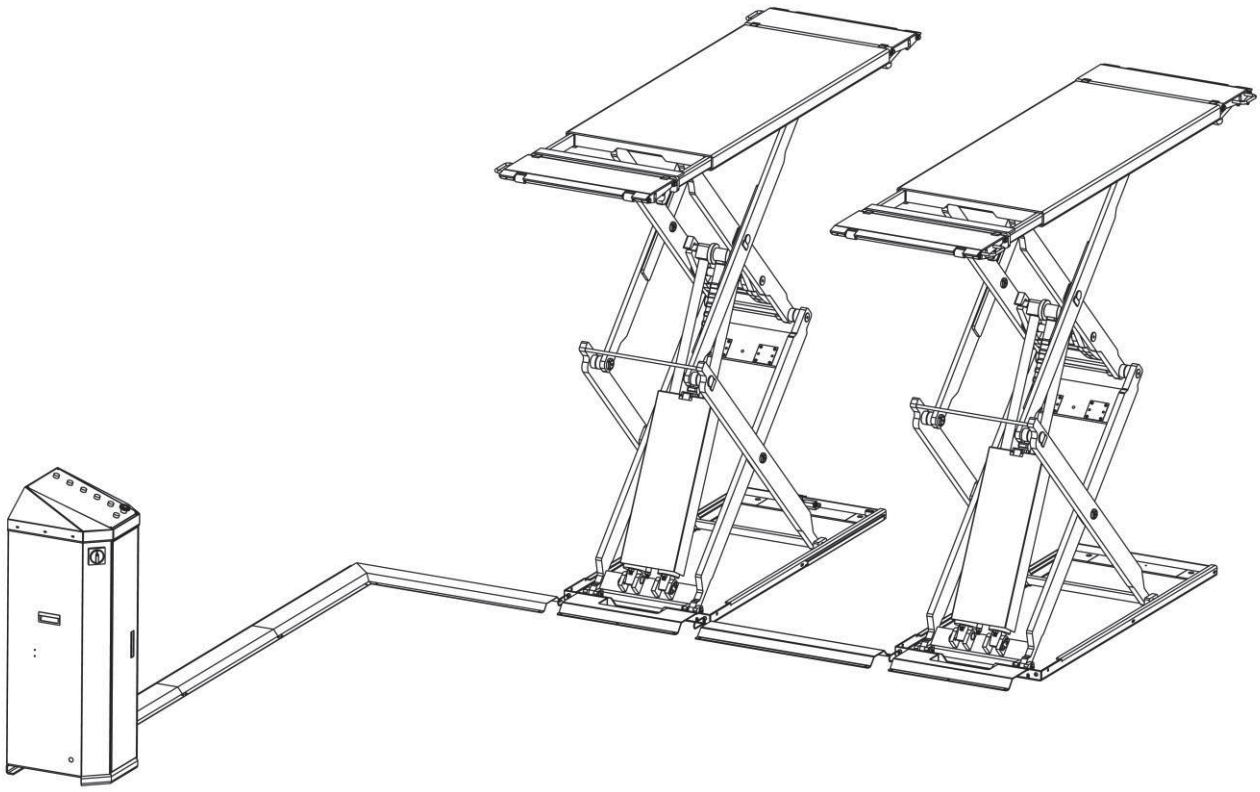
Model No. EE-6501

Short platform scissor lift
Low profile
Electrical release
Lifting capacity: 3500KG

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: 28/06/2024

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IMPORTANT NOTES

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

By using the product you agree the following conditions:

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Warranty

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

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

Liability

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

All information in this manual is believed to be correct at time of publication.
EAE reserves the right to amend and alter technical data and composition without prior notice.
Please confirm at time of ordering.

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 lifting platform, 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 option 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 remember them for future operation.

1.5 Potential safety risks

1.5.1 Mains voltage


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

Safety measures:

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

1.5.2 Risk of injury, danger of crushing


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

Safety measures:

- The lifting platform 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 2 sections for shipping

Name	*Packed by*	*Dimension(mm)*	*Quantity*
Control cabinet	*Wooden case*	*500*470*1020*	*1*
Lifting platforms and hose covers	*Carton with wooden base*	*2110*720*350*	*2*

2.2 Storage

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

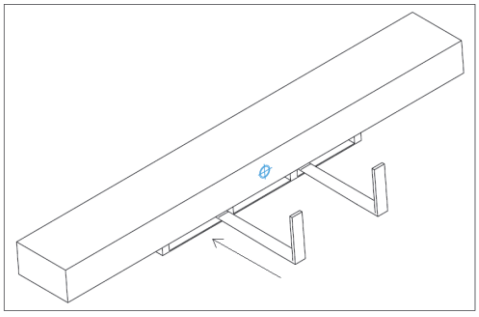
If stacking is unavoidable, use all appropriate precautions:

-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.

2.3 Lifting and handling

The packs can be lifted and transported only by using fork trucks.



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 power unit, the control panel and the hydraulic cylinder.

PRODUCT DESCRIPTIONS

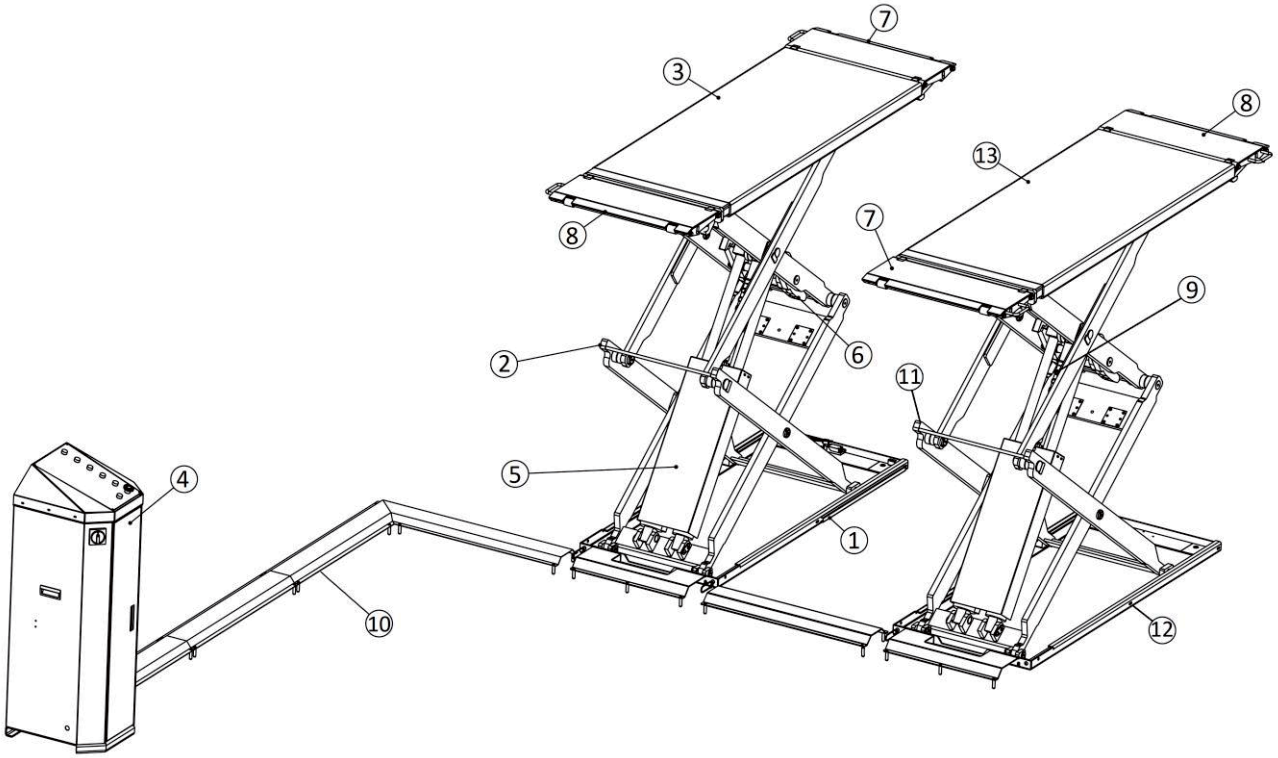
3.1 General descriptions

This is chassis-support vehicle lift, which is preferably for floor surface mounting. It is mainly composed by two lifting platforms and a power and control cabinet. Being hydraulically powered, the gear pump delivers oil to push upwards the pistons of oil cylinders and let the scissor arms of the lift rise accordingly.

The ramps, installed at both ends of the platforms, can serve as an extended part of the supporting platform for longer vehicles.

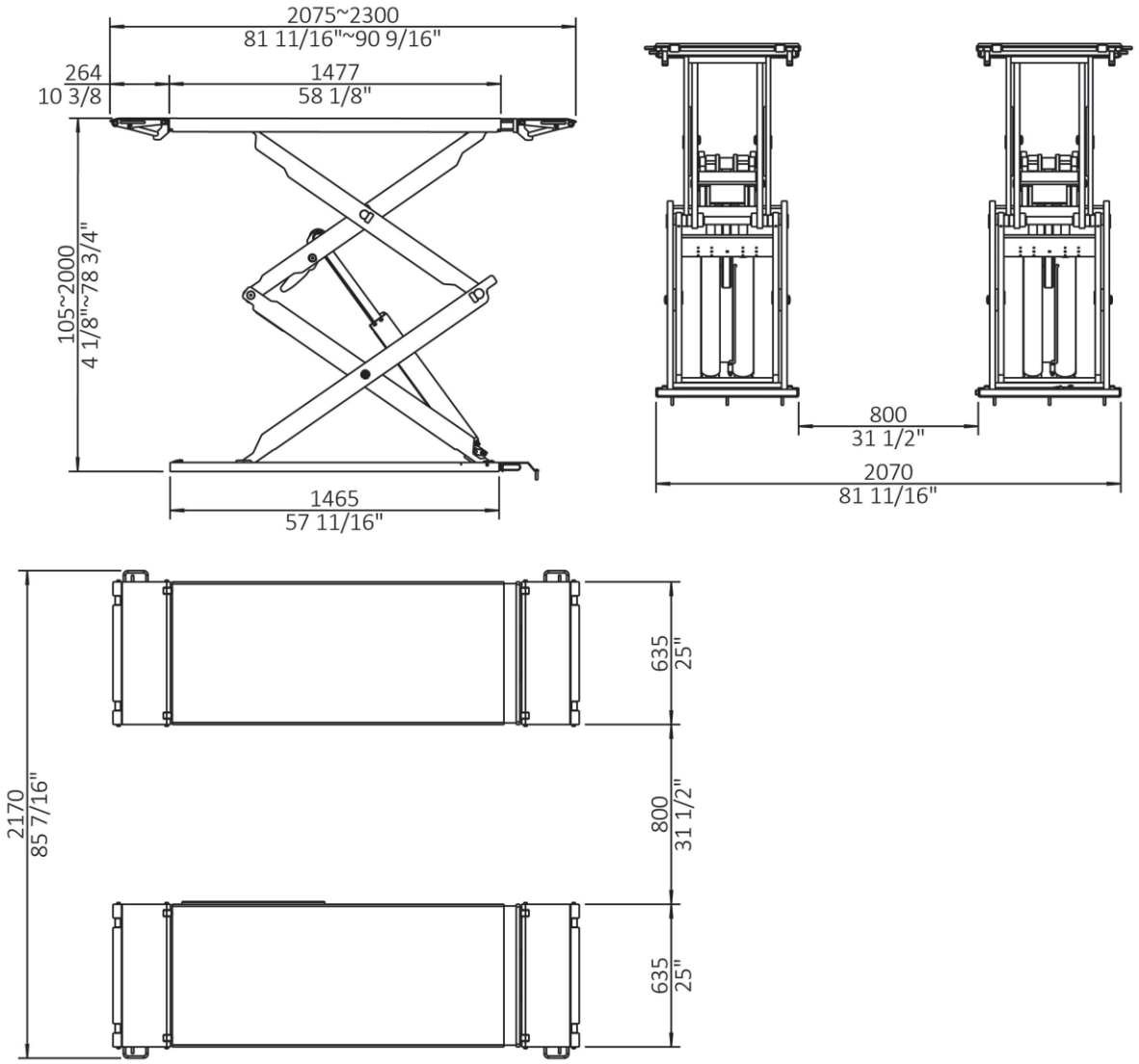
Besides, features like 24V control voltage and limit switch, low-height alarming buzzer, mechanical locking device, flow restrictive valves, etc. have fully considered the user's personal safety.

3.2 Construction of the lift



1.	Base frame A	7.	Ramp B assembly
2.	Scissor bracket B	8.	Ramp A assembly
3.	Support platform A assembly	9.	Mechanical safety locking device
4.	Control cabinet	10.	Hose cover
5.	Hydraulic cylinder assembly	11.	Scissor bracket A
6.	Start-up plate assembly	12.	Base frame B
		13.	Support platform B assembly

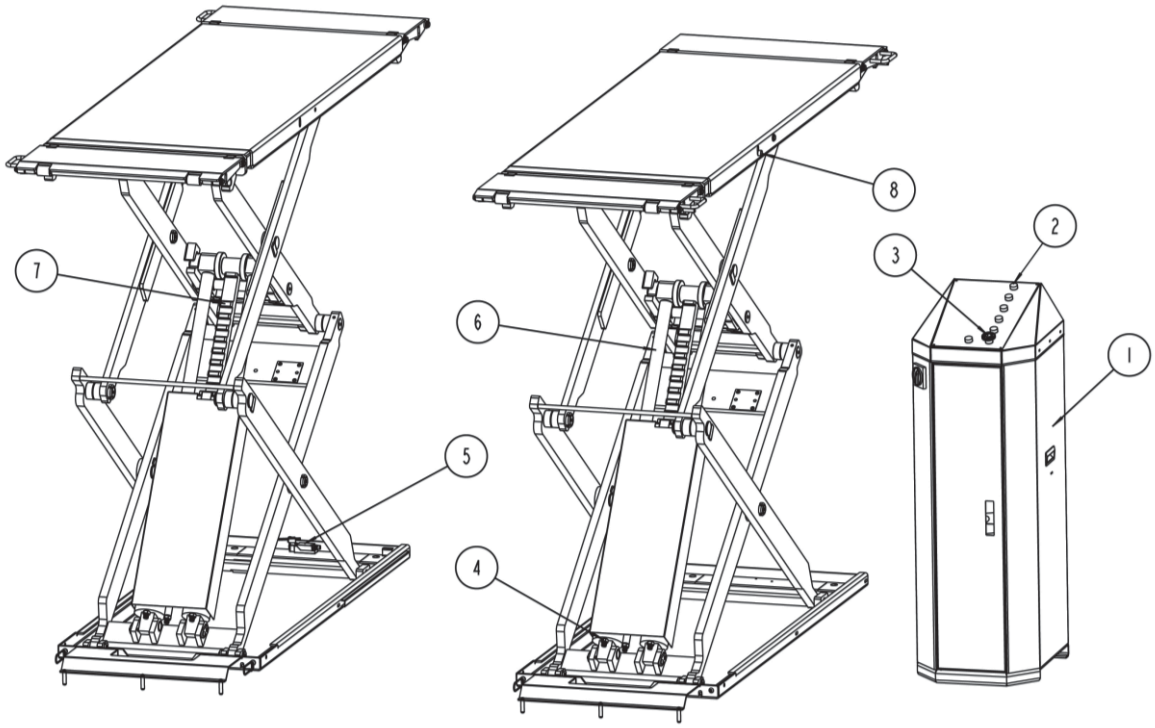
3.3 Dimensions



3.4 Technical data

Rated load capacity	3500kg
Max height of the platform	2000mm
Initial height of the platform	105mm
Full raise time with load	55s (3.0kW/1Ph)
	45s (3.5kW/3Ph)
Full lower time with load	30s-40s (adjustable)
Max hydraulic working pressure	29 MPa
Oil tank volume	10L

3.5 Safety devices descriptions



Pos.	Safety device	Function
1	24V control voltage	Safety voltage for operator.
2	Alarm buzzer	Acoustic warning for the final travel of lowering.
3	Emergency stop	Disconnect operation power in emergency conditions.
4	Restrictive valve	Control the speed of descending in case of leakage in the hydraulic circuit.
5	Safe descent limit switch	Protective device which stops the movement of the lift for the purpose of feet protection. The support platforms automatically stop lowering at a safe distance above the ground. Push an additional DOWN II button to restart the lowering movement which is accompanied by an audible warning alerting service persons being away from the moving parts.
6	Automatic synchronization cylinder	Push the “UP button”to rise until max height to bleed the hydraulic system. Synchronization can be maintained automatically after bleeding.
7	Mechanical locking device	Prevent the lifting platform from falling down dangerously in case of hydraulic leakage.
8	**Latching device**	**Prevent extending bracket from moving.**

INSTALLATION INSTRUCTIONS

4.1 Preparations before installation

4.1.1 Space requirements.

Refer to 3.3 for the dimensions of the lift. There must also be a clearance of at least 1 meter between the lift and fixed elements (e.g. wall) in all lifting positions. There must be sufficient space at the ends of the lifting platform for driving vehicles on and off.

To stop vehicles colliding with the ceiling, it is advisable to fit an overhead light barrier in low ceiling buildings.

4.1.2 Foundations and connections

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

- Construction of the foundation following consultation with the manufacturer's customer service or an authorized service agent. Routing of the wiring to the installation location. The user must provide fuse protection for the connection. *Electrical system connection must be done by licensed technicians.* Requirements for power supply cable of the installation site: at least 2.5mm^2 wire core for 3Ph power and 4.0mm^2 wire core for 1Ph power.
- Refer also to the corresponding information on the name plate and in the operation instructions. Before doing electrical connection, make sure the lift is electrically adapt to the local power supply.

4.1.3 Foundations preparations

Indoor installation only.

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.

C25/C30 concrete foundation with a minimum thickness of 150mm.

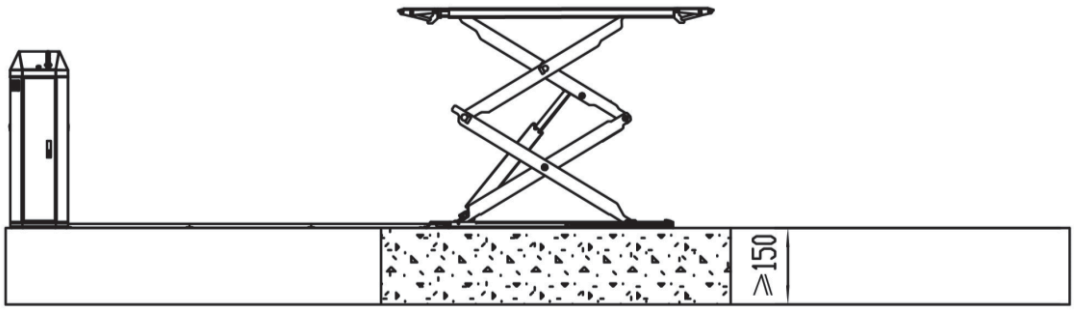
Surface: Horizontal and even (Gradients max. 0.5 %)

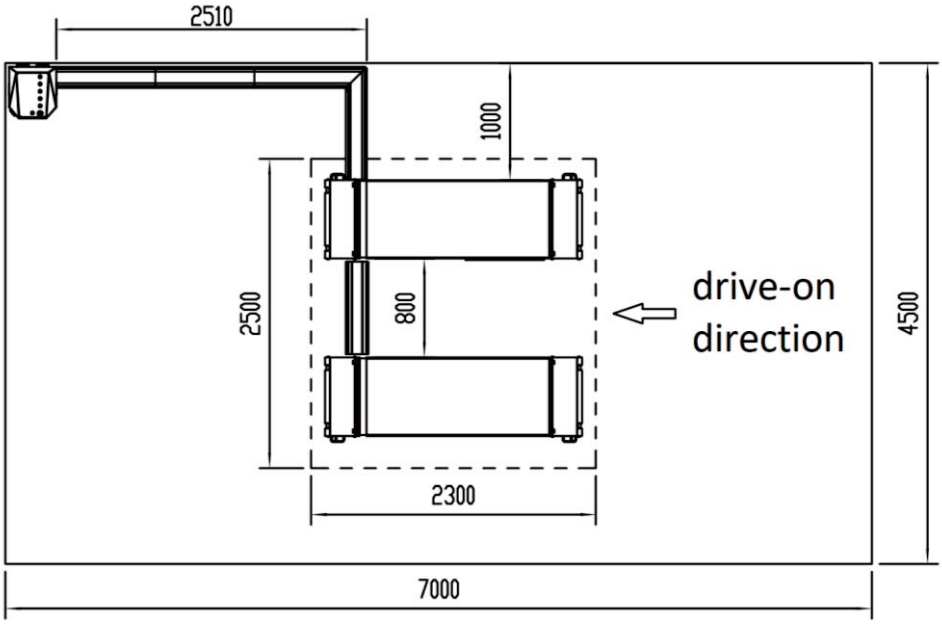
Newly built concrete ground must be older than 20days.

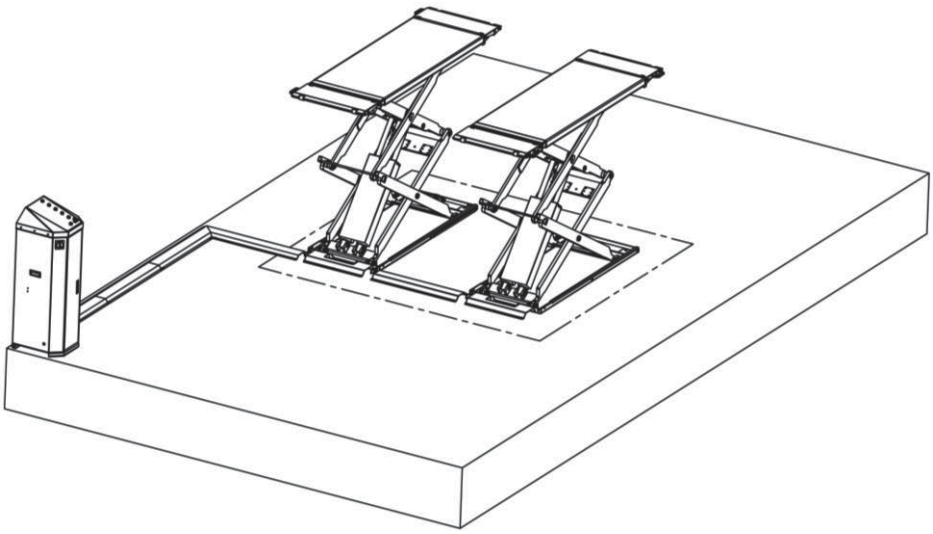
In mm.

Surface mounting

The area enclosed by the dash line (2300mm*2500mm) shall have a minimum thickness of 150mm.







4.1.4 Tools and equipment needed for installation

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

4.1.5 Checking parts list

Unfold the package and check if any parts missed as per the following list. Do not hesitate to contact us in case any parts missed, but if you do not contact us and insist installing upon the lack of some parts, we as well as our dealers will not bear any responsibility for this and will charge for any parts subsequently demanded by the buyer.

Power and control cabinet package		
No.	Name	Qty
1	Control cabinet	1
2	Rubber pick-up pad	4
3	Expansion bolt	8
4	Plastic expansion tube	26
5	Cross socket cap head screw	26
6	Operation manual	1
7	Conformity certificate	1
8	Key	1
9	Oil tank label	1
Platform package		
No.	Name	Qty
1	Main platform	1
2	Secondary platform	1
3	Oil hose covers	5

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

Step 1: Dismantle the package of the lifting platforms.

Remove the carton and packing films wrapped on the platform.

Attention 1: Take off oil hose protectors when cut off the packing strips.

Attention 2: Avoid scratching the painting surface, hoses and other elements.

Step 2: Place the lifting platform at expected installation site.

Raise the upper platform by using a forklift and 2 lifting straps until the mechanical lock is engaged. (Refer to the following **fig. 1 and 2)** Hoist the platform onto the expected installation site. Remove the bolts that fixed the lower platform and its wooden package, then hoist it to the installation site in the same way as the upper platform.

Attention 1: Before hoisting, make sure the hoses and wires are well protected against damage.

Attention 2: It is necessary to hold the platform during the hoisting process. Irrelevant person is not allowed in installation area.

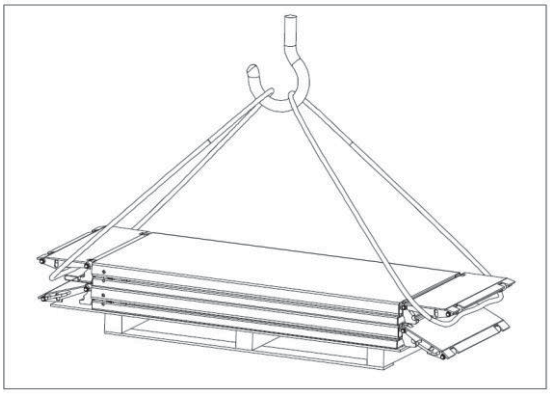


Fig 1

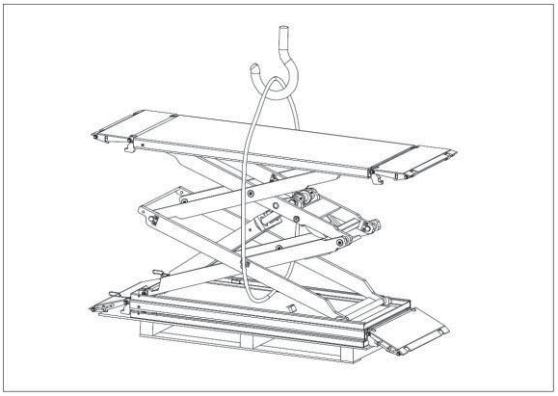


Fig2

Step 3: Open the package of the control cabinet and take out accessories in it.

Step 4: Connect oil hoses.

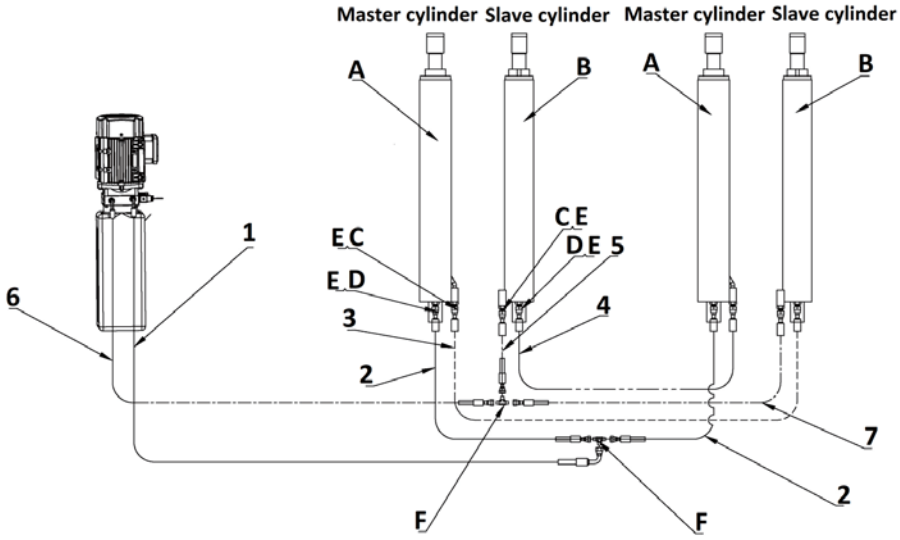
Refer to the following diagram to connect oil hoses.

Don't let any solid substance go into the hydraulic line.

Connect as per the marks attached with the hoses and fittings.

It must be taken adequate care that all fittings shall be tightened. Severe leakage will occur if the hose fittings are not tightened.

Screw torque: 25-30Nm.



Step 5: Connect the electrical system.

Electrical connections must be done by a qualified electrician.

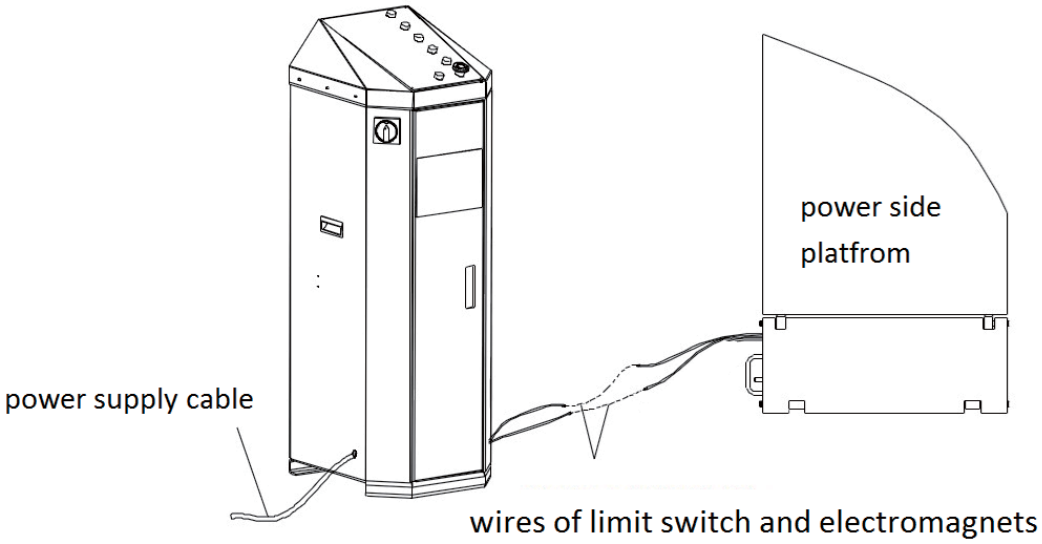
Requirements for power supply cable of the installation site: at least 2.5mm² wire core for 3Ph power and 4.0mm² wire core for 1Ph power.

Refer to Annex 1.

Connect fast connectors for the limit switch and electromagnets.

Connect power supply cable to the external electricity supply.

(For three phase power supply, if the lift doesn't raise and the motor may turn in the wrong direction, in such event, interchange wires U, V in the control cabinet).



Step 6: 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 12 liters anti-abrasion hydraulic oil.

Firstly, fill 10 liters oil into the oil tank. Add more oil after running the lift for several cycles until it can rise to the maximum height.

Note： It is suggested to use HM NO.46 hydraulic oil. Use HM NO.32 hydraulic oil when temperature is below 10 degree Celsius.

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

Step 7: Levelling

Check the installation and connection of the hydraulic and electrical system before levelling operation.

All switches should be correctly installed and connected as per the instructions.

All the oil hoses should be correctly connected. Otherwise, severe risks of damage may occur.

Refer to operation instructions and get familiar with lift controls by running the lift through a few cycles before levelling operation.

CAUTION: In the event the platforms were raised by an external lifting equipment, it is necessary to push the UP button to raise the platforms before trying to lower them, otherwise there could be risks of damaging the electromagnets of the locking system.

Push the UP button to raise the platform to the maximum height position and keep on pushing the UP button for 30 more seconds.

Lower the platform completely to the bottom.

Raise the platform to check the synchronization.

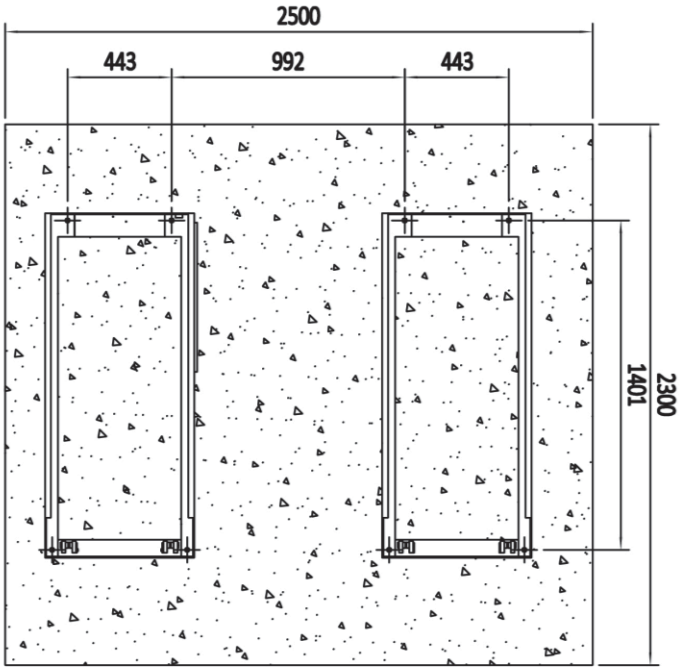
If not being synchronized, continue pushing the UP button for another 5 seconds after the platform has been raised to the maximal height.

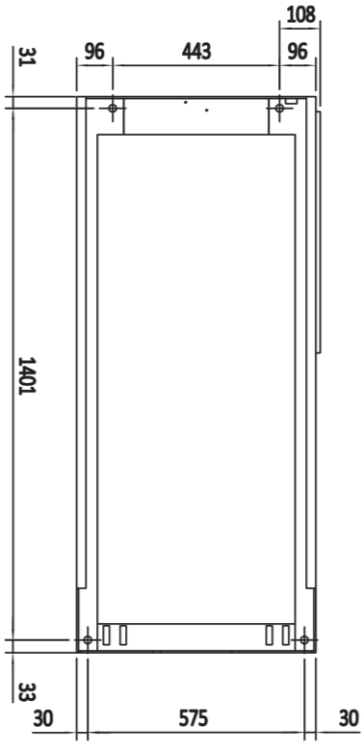
Repeat above operations until the two platforms run synchronously.

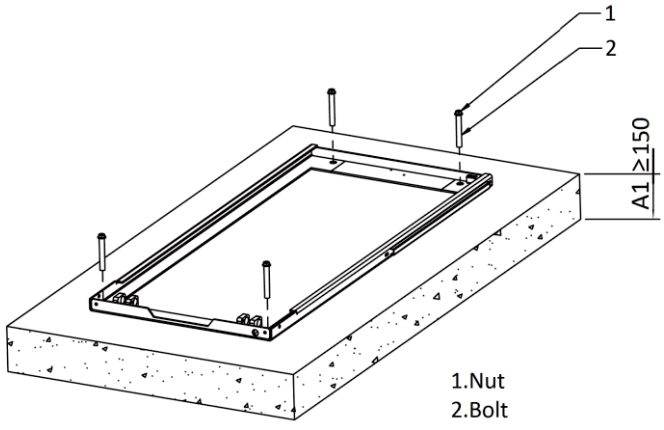
Step 8: Fix base frames with expansion bolts.

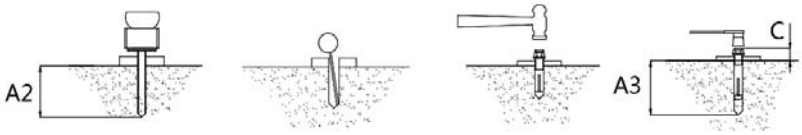
Screw torque: 60 -80Nm

1. Adjust the distance between the two lifting platforms and mark the points for each anchoring bolt as per the following diagram.
2. Drill anchor holes with an electrical drill. Make sure drill vertically.
3. Clear the debris and dust from the holes.
4. Hammer in the expansion bolts and tighten the nuts.



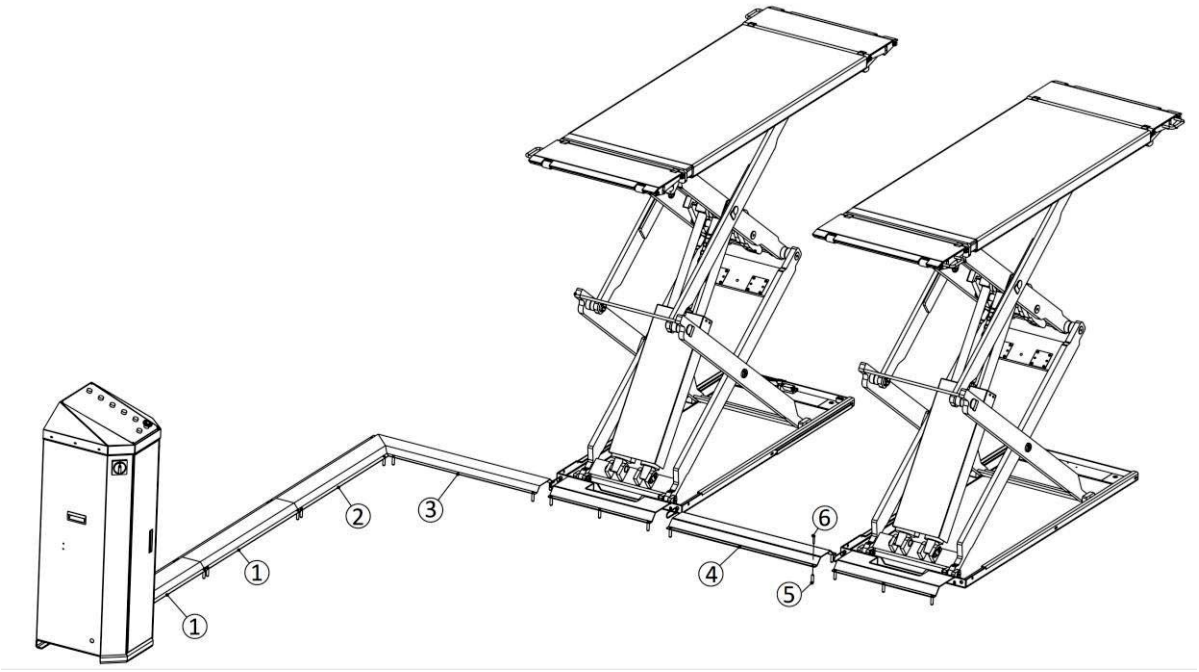






Bolt specification	A1 (Foundation thickness)	A2 (Drilling depth)	A3 (Anchoring depth)	C
M16x120	≥150mm	110mm	85mm	≤40mm

Step 9: Fix oil hose protection covers.



1.	Hose cover A	4.	Hose cover 2
2.	Hose cover B	5.	Plastic expansion tube
3.	Hose cover C	6.	Cross socket cap head tapping screw

4.4 Items to be checked after installation.

S/N	Check items	YES	NO
1	Screw torque of expansion bolts: 60-80Nm;		
2	Rising speed ≥20mm/s;		
3	Noise under rated load ≤75dB(A);		
4	Grounding resistance: not bigger than 4Ω;		
5	Height difference of the two platform ≤5mm;		
6	Mechanical locks are robust and synchronized when running with rated load ;		
7	All control buttons works as “hold to run” ;		
8	The limit switches work well;		
9	The grounding wire is connected;		
10	The platforms rise and lower smoothly;		
11	There is no abnormal noise when run with load;		
12	There is no oil leakage when run with load;		
13	The expansion bolts, nuts or circlips are well secured or tightened;		
14	The max lifting height can be reached;		
15	All 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.

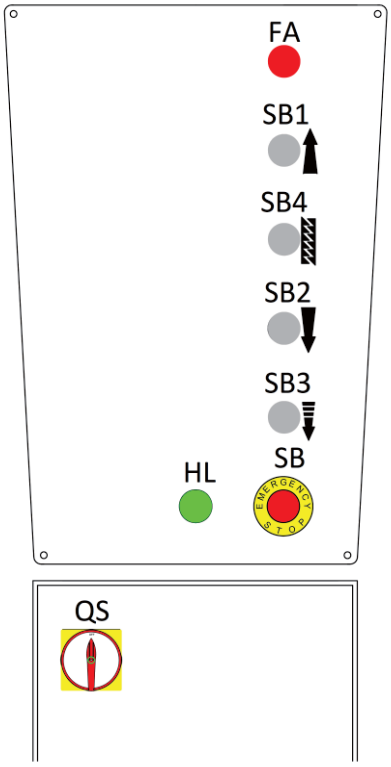
5.1.9 Always use safety stands before removing and installing heavy component which may cause uneven load distribution.

5.1.10 Avoid excessive rocking of vehicle while on the lift.

5.1.11 It is forbidden for people to stand in the field of motion during raising or lowering movement.

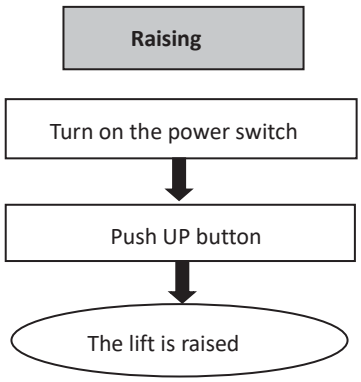
5.1.12 Do not climb onto the load or load carrying device when they are raised.

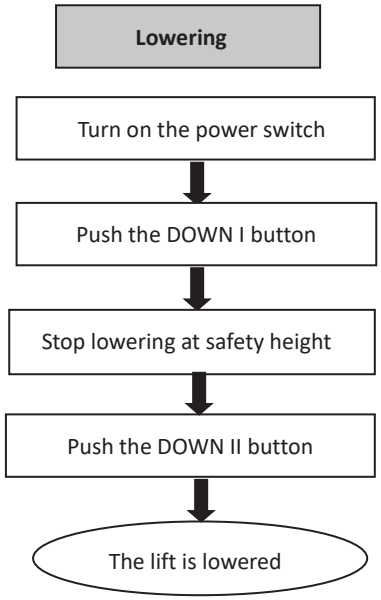
5.2 Operation instructions



Pos.	Name	Function
FA	Alarm buzzer	Acoustic warning
SB1	UP button	Control the rising movement
SB2	DOWN I button	Control the lowering movement
SB3	DOWN II button	Control the lowering movement (for safe descent)
SB4	Safety lock button	Engage the mechanical safety lock
SB	Emergency stop	Disconnect operative power
HL	Power indicator	Indicate if power is on.
QS	Power switch	Control main power

5.3 Flow chart for operation





5.4 Operation instructions

To avoid personal injury and/or property damage, permit only trained personnel to operate the lift.

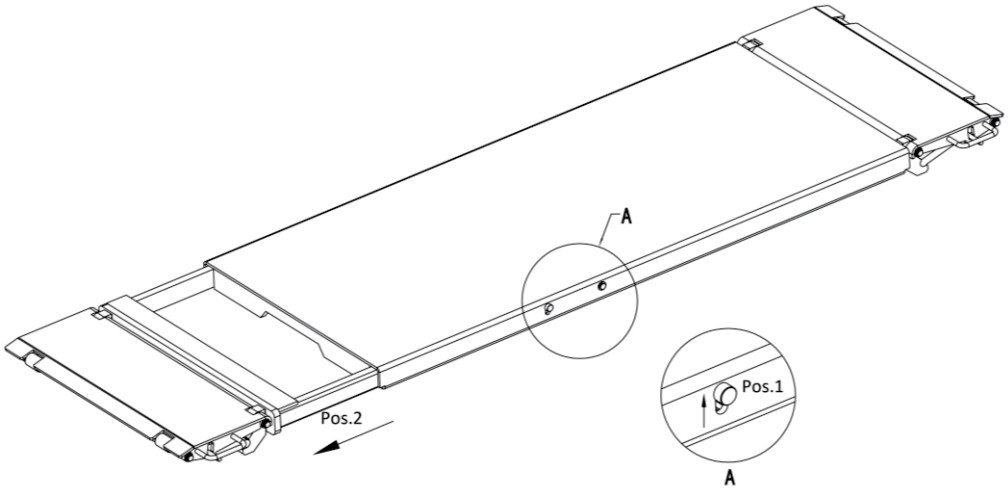
After reviewing these instructions, get familiar with lift controls by running the lift through a few cycles before loading vehicle on lift. Always lift the vehicle using all four supporters. Never raise just one end, one corner or one side of vehicle.

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

Caution: Always remember to push the extending brackets back before driving on or off the platform, otherwise there could be risks of damage.

Correct use of the platform extensions.

1. Manually pull up the knob (Pos.1) to release the latching device and pull the extendable bracket until an expected position (Pos.2).
2. Put down the knob (Pos.1) to engage the latching device which prevents the extending device from moving.
3. It is not necessarily raise the knob (Pos.1) to push back the extendable brackets.



Pos.1 Knob for disengaging

Pos.2 Extendable bracket

Raise the lift

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

1. Make sure that you have read and understood the operation manual before operating the lift.

2. Load vehicle on lift carefully. Position the rubber pads to contact at the vehicle manufacturer's recommended lift points. **The rubber pads shall be placed against falling off. Don't place any rubber pad on the extending brackets.**

3. Push the "UP button" to raise lift until the pads contact vehicle.

4. Check rubber pads for secure contact with vehicle. Raise lift to expected working height.

5. Push the "Safety Lock button" to engage the mechanical safety lock.

Check again the stability and then perform maintenance or repair work underneath.

Lower the lift

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

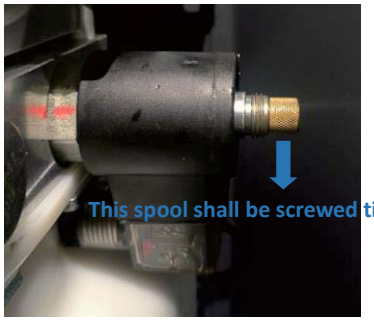
1. Push the "DOWNI button", meanwhile the platform will raise a little bit to release the mechanical safety lock. After that the lift starts descending.

2. The platform will automatically stops at a safety distance from the floor, push the "DOWN II button" to continue lowering the platforms which accompanies with an acoustic warning.

3. After the lifting platform is fully lowered, **push back extended brackets,** remove rubber pads and other tools to provide an unobstructed exit for moving vehicle from the lift area.

TROUBLE SHOOTING

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

TROUBLES	POSSSIBLE CAUSES	SOLUTIONS
Motor does not run and will not rise.	Loose wire connection.	Check and reconnect the wire.
	Burnt motor.	Replace with a new motor.
Motor runs but will not rise.	The motor run reversely.	Adjust the wire connection.
	Relief valve is not well screwed up or jammed.	Clean or make adjustment.
	Damaged gear pump.	Replace with a new gear pump.
	Insufficient hydraulic oil.	Add oil.
	Loose oil-sucking pipe.	Tighten it.
	The cushion valve was not well screwed up or jammed.	Clean or tighten it.
	The spool, attached with the solenoid unloading valve, for emergency descent was not screwed tight	**Tighten the spool. (Pos.4 in the hydraulic scheme, coded as 330311005).** 
Platforms go down slowly after being raised.	Untightened hose connectors or leaking hoses.	Tighten the hose-connector or replace with a new hose.
	Untightened oil cylinder.	Replace with the new seal.
	The non-return valve leaks.	Clean or replace it.

TROUBLES	POSSSIBLE CAUSES	SOLUTIONS
	Relief valve fails to work well.	Clean or replace it.
	Solenoid unloading valve fails to work well.	Clean or replace it.
Rise too slow.	Jammed oil filter.	Clean or replace with a new filter.
	Insufficient hydraulic oil.	Add oil.
	Jammed relief valve.	Clean it.
	Too hot hydraulic oil (above 45°）.	Change the oil.
	Abraded cylinder seals.	Replace with the new seal.
	The spool, attached with the solenoid unloading valve, for emergency descent was not screwed tight	**Tighten the spool(Pos.4 in the exploded scheme, coded as 330311005)**
Lower too slow.	Jammed restrictive valve.	Clean or replace with a new restrictive valve.
	Dirty hydraulic oil.	Replace with fresh and clean oil.
	Jammed oil hose.	Replace with new oil hose.
Not lower	Disconnected wire connection to electromagnets or damaged electromagnets.	Reconnect the wire or replace it.
	Blocked restrictive valve.	Turn valve anticlockwise (Pos.25 in the hydraulic diagram).
	Jammed restrictive valve.	Replace it. (Pos.D in the hydraulic diagram).
	Loose wire connection of the solenoid unloading valve.	Reconnect the wire.

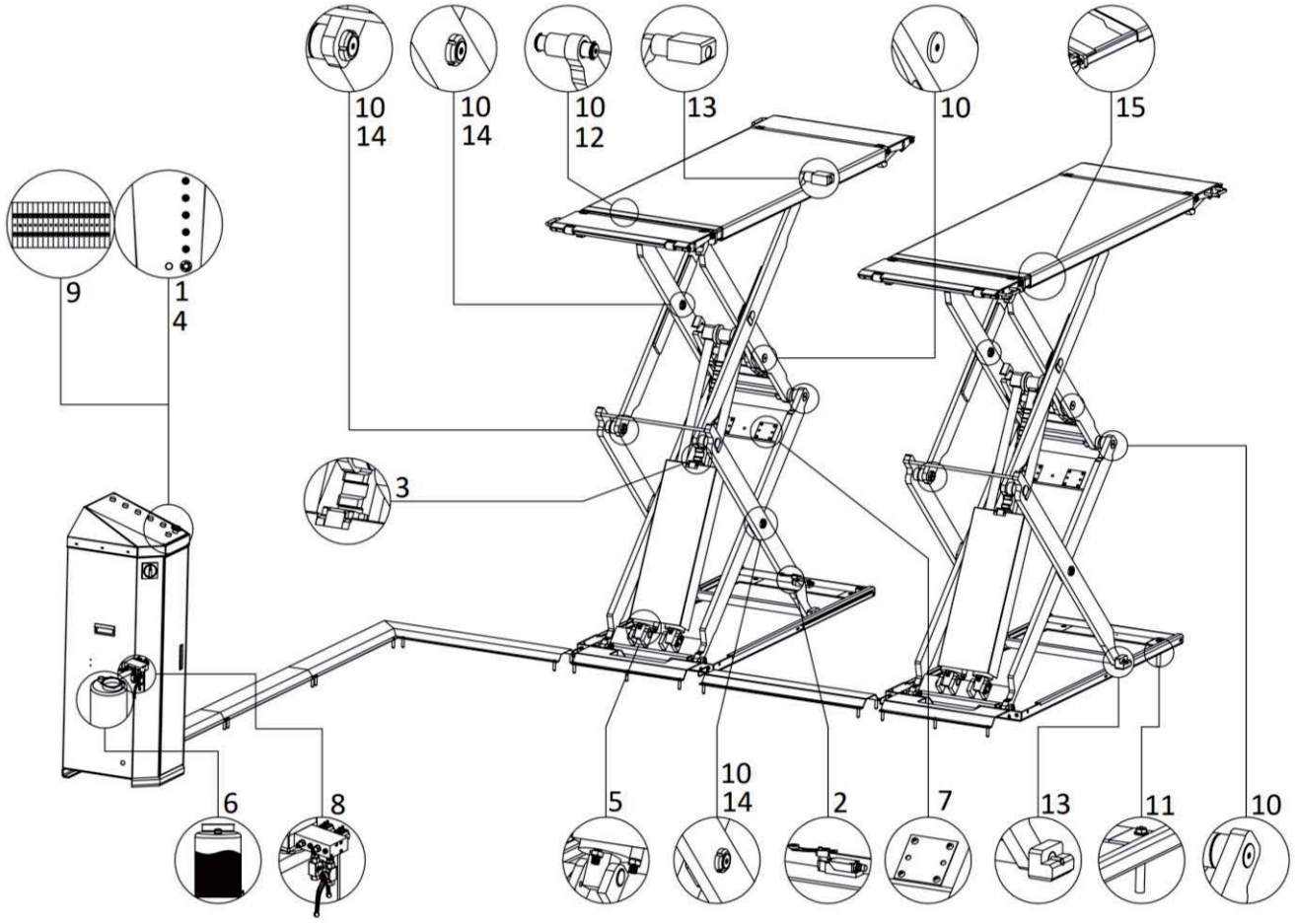
MAINTENANCE

Easy and low cost routine maintenance can ensure the lift work normally and safely.

Following are requirements for routine maintenance.

Follow the below routine maintenance schedule with reference to the actual working condition and frequency of your lift.

Lubricate moving parts with NO.1 lithium base grease before use.

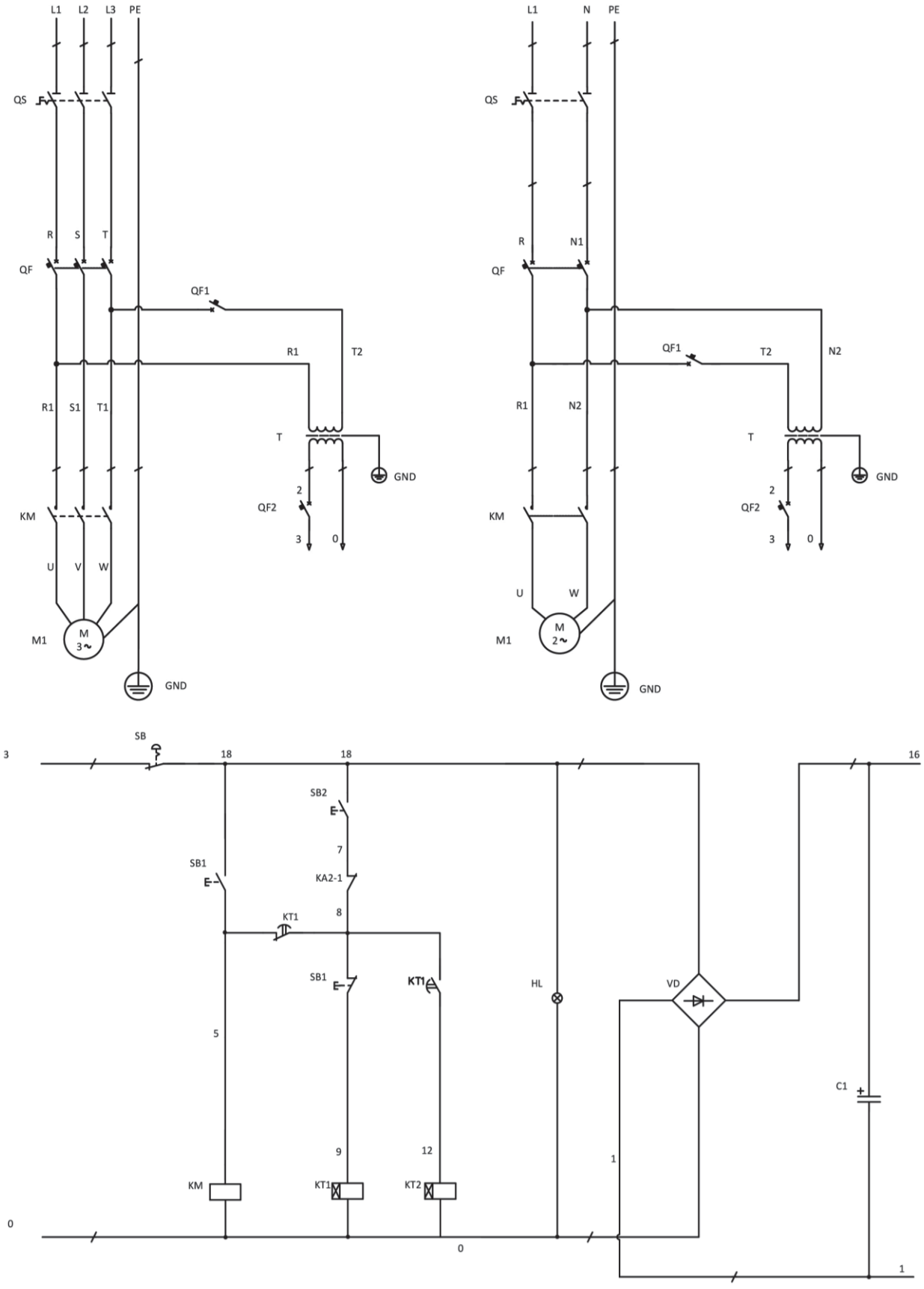


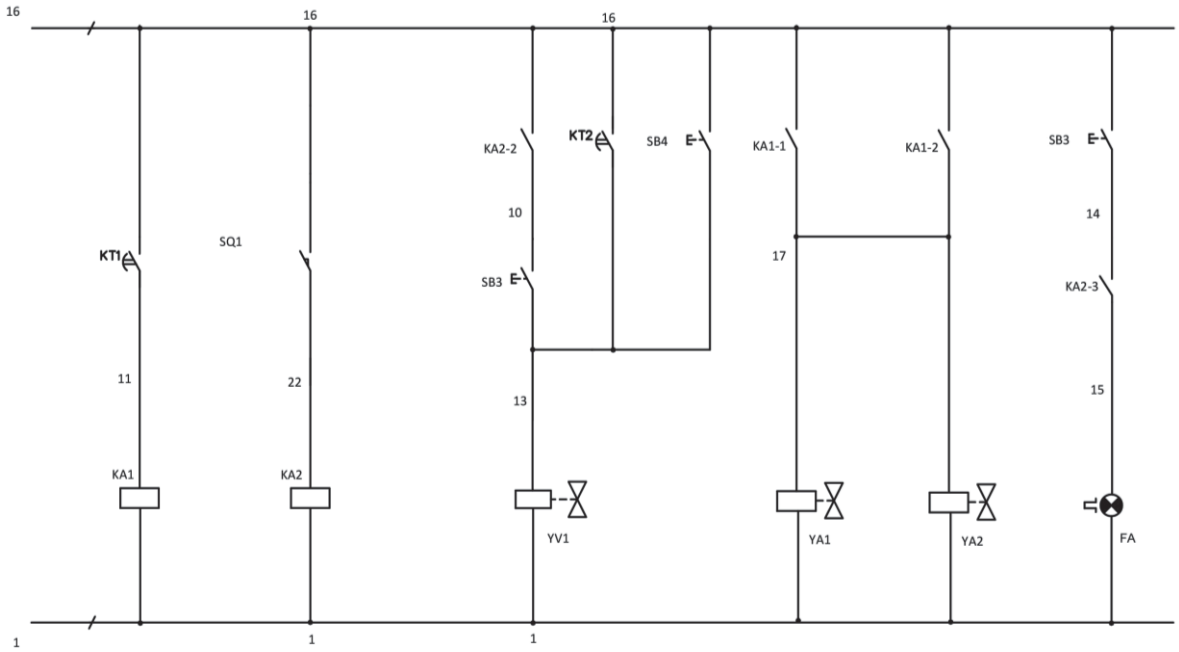
Pos.	Components	Methods	Period
1	Control buttons	Check if control buttons work as "hold- to -run " and check if they work as the function indicated.	Every day
2	Safe descent limit switch	Push the DOWN I button, inspect and ensure the lifting platform stops descending at a proper height above ground.	Every day
3	Mechanical safety locking unit	Check if both mechanical locks can engage and disengage effectively and synchronously by pushing control buttons.	Every day
4	Alarming buzzer	Push DOWN II button to continue the lowering movement when the lifting platforms automatically stop lowering at safety height above the ground. Check if the buzzer alarms.	Every day
5	Oil hose and its connectors	Inspect to ensure no leakage before using the lift.	Every day

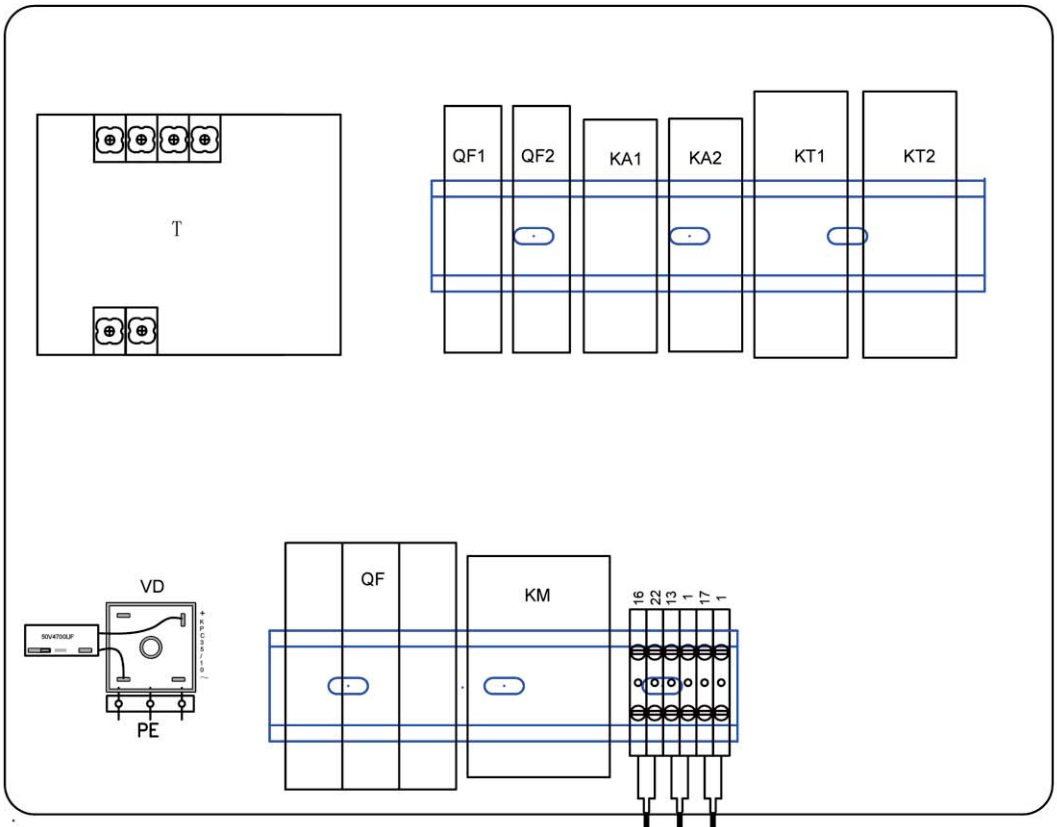
Pos.	Components	Methods	Period
6	Hydraulic oil	Change the oil 6 months after initial use and once per year thereafter. Inspect the hydraulic oil and change the oil if the oil becomes black or there is dirt in the oil tank.	Every year
7	Padding plate for the start roller	Check its tightness and add grease.	Every 3 months
8	Hydraulic block and valves	Inspect if the valves leak or not. Clean or change the valve if any leakage.	Every 3 months
9	Terminals in the control unit	Inspect the wire terminals and screw firmly if any terminals become loose in the control unit.	Every 3 months
10	Joint shafts	Inject into grease cups for lubrication	Every 3 months
11	Anchored expansion bolts	Check with torque spanner. Torque: 60-80N.m	Every 3 months
12	Circlips of shaft	Inspect if the circlip goes off its groove. Make sure it is positioned in the groove.	Every 3 months
13	Sliders and their running tracks	Add grease to ensure smooth running. Change over-worn (wear more than 2mm) blocks.	Every 3 months
14	Nylon-loop locking nut	Inspect the wear to the nylon-loop. The end surface of the shaft were originally installed with its end staying over the nylon-loop. Replace the nut with a new one on condition it is worn and the shaft becomes loose.	Every year
15	**Extendable bracket**	**Check if the extendable bracket can be pulled smoothly. Remove the tighten screws and release the latching device to dismantle the bracket, then lubricate the bracket (exclude the ratchet portion) with NO.1 lithium based grease.**	**Every 6 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. Check the synchronization of both lifting platforms. Ensure both platforms ascend and descend synchronously.	Every 3 months

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, Electrical diagrams and parts list







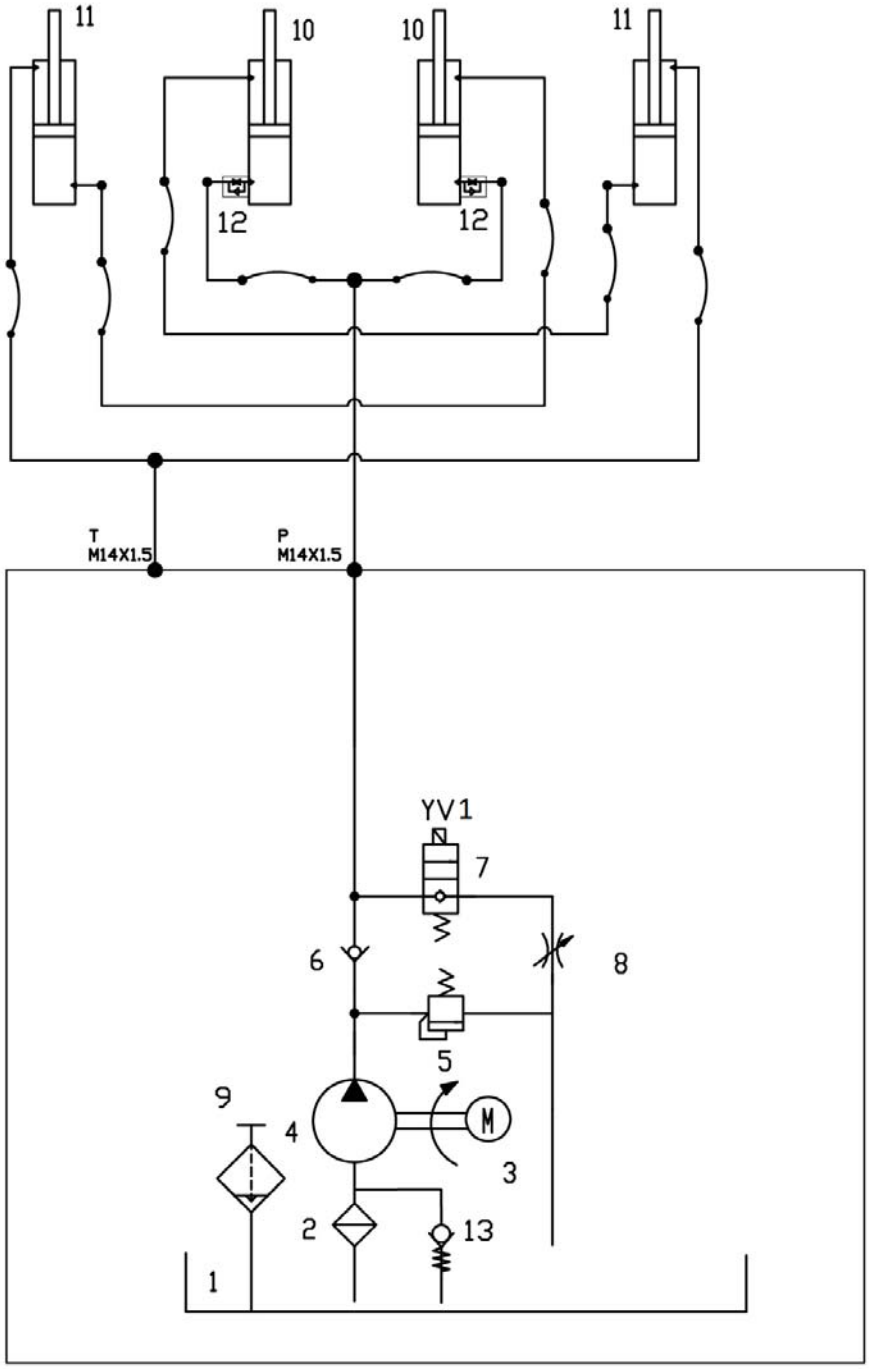
SQ1: Safe descending limit switch
YV1: Solenoid unloading valve
YA1: Electromagnet 1
YA2: Electromagnet 2

Power supply details (3Ph)		Power supply details (1Ph)	
Isolating main switch	20A	Isolating main switch	20A
Circuit breaker	C16/3P	Circuit breaker	C32/2P
Power cord	4*1.5mm^2	Power cord	3*2.5mm^2

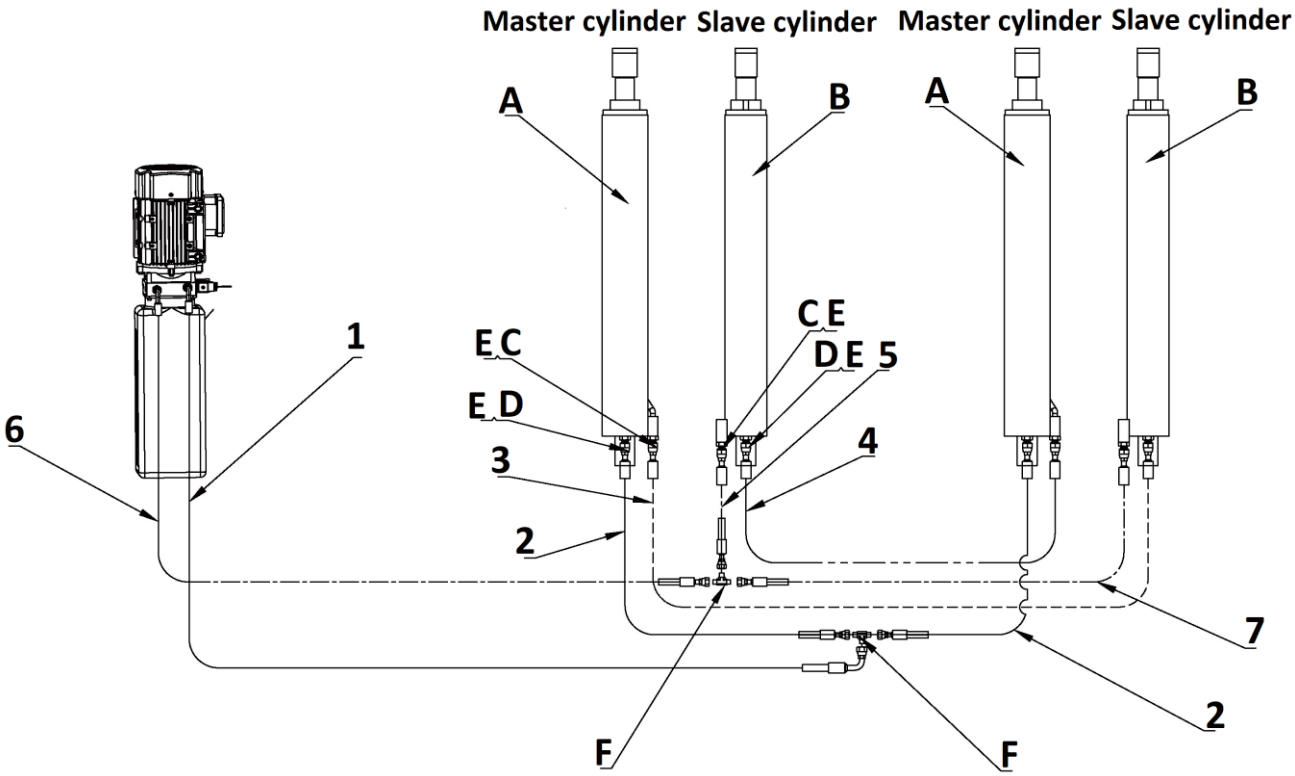
Supply cable	Yellow-Green	Blue	Other colors
3 wires	Earth wire	Neutral wire	Phase wire
Supply cable	**Yellow-Green**	**Other colors**	
4 wires	Earth wire	Phase wire	

Pos.	Code	Description	Specification	Qty
T	320104006	Transformer	JBK5-160VA 380V400V415V-24V	1
T	320104005	Transformer	JBK5-160VA 220V230V240V-24V	1
QF	320801001	Circuit breaker (3Ph)	CDB6iC16/3P（CB-60A C16）	1
	320802001	Circuit breaker (1Ph)	CDB6iC32/2P（CB-60A C32）	1
QF1	320803003	Circuit breaker	CDB6iC3/1P	1
QF2	320803006	Circuit breaker	CDB6iC10/1P（CB-60A C10）	1
KM	320901011	AC contactor	CJX2-1810/AC24V(CDC6i-1810/AC24V)	1
SQ1	320301011	Limit switch	TZ8108	1
YA1, YA2	330310181	Electromagnet	DCT	2
YA1, YA2	**330310181B**	**Electromagnet (Replace 330310181 since May 13th, 2025)**	**DCT_B**	**2**
QS	320304001	Power switch	LW26GS-20-04	1
SB	320402002	Emergency stop	NP2-BS542(CDLA6H-BS542)	1
SB2, SB4	320401042	Button	NP2-EA11(CDLA6H-EA11)	2
SB3	320401038	Button	NP2-EA13(CDLA6H-EA13)	1
SB1	320401041	Button	NP2-EA15(CDLA6H-EA15)	1
KA1	320601005	Relay	HH62P-L/DC24V-10A（LY2NJ）（ZYR1-LY2L）	1
	320601009	Relay holder(KA1)	PTF-08A-E(RS-NXJ-2ZH/C2 10A 250AC)	1
KA2	320601001	Relay	HH54P-L/DC24V（MY4NJ) (ZYR1-MY4L)	1
	320601011	Relay holder(KA2)	PYF-14A-E(RS-NXJ-4Z/C2 7A 250AC)	1
	320601018	Relay feet fixer		4
KT1, KT2	320602009	Compact time relay	CDJS8 0.5s-100h AC/DC24V	2
C	321001004	Capacitor	4700UF/50V	1
VD	321002001	Bridge rectifier	KBPC5A-35A	1
HL	321201001	Power indicator	ND16-22DS-2	1
FA	321202001	Alarm buzzer	AD118-22SM/R/AC/DC/24V	1

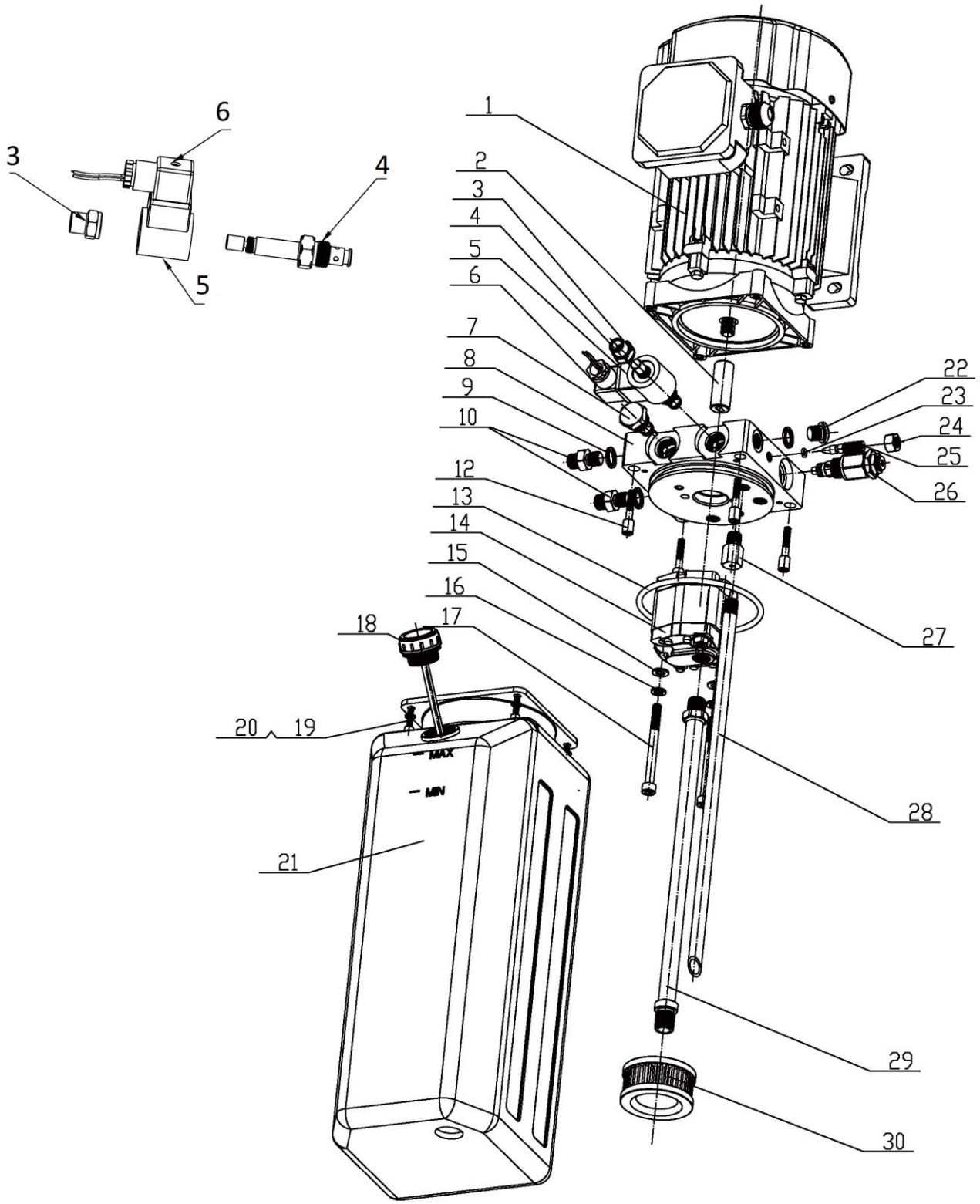
Annex 2, Hydraulic diagrams and parts list



1	Oil tank	7	Solenoid unloading valve
2	Filter	8	Restrictive valve
3	Motor	9	Lid of the tank
4	Gear pump	10	Master cylinder
5	Relief valve	11	Slave cylinder
6	Non-return valve	12	Straight connector with restrictive valve
		13	Cushion valve



Pos.	Code	Description	Specification	Qty
1	624001876	Oil hose	L=4900	1
2	624001898	Oil hose	L=900	2
3	624008225	Oil hose	L=1860	1
4	624001129	Oil hose	L=1750	1
5	624008238	Oil hose	L=220	1
6	624008207	Oil hose	L=4300	1
7	624008237	Oil hose	L=1650	1
A	625000022	Master cylinder	YG80-92-38-550	2
B	625000023	Slave cylinder	YG70_4-80-38-550	2
C	310101010	Straight connector	G1/4---G1/4	4
D	330305009	Straight connector with restrictive valve	BDPF-G14-G14-I60	4
E	207103025	Composite washer	13_7X20X1_5	8
F	410210181	Three-way connector	6603B-A9-B7	2



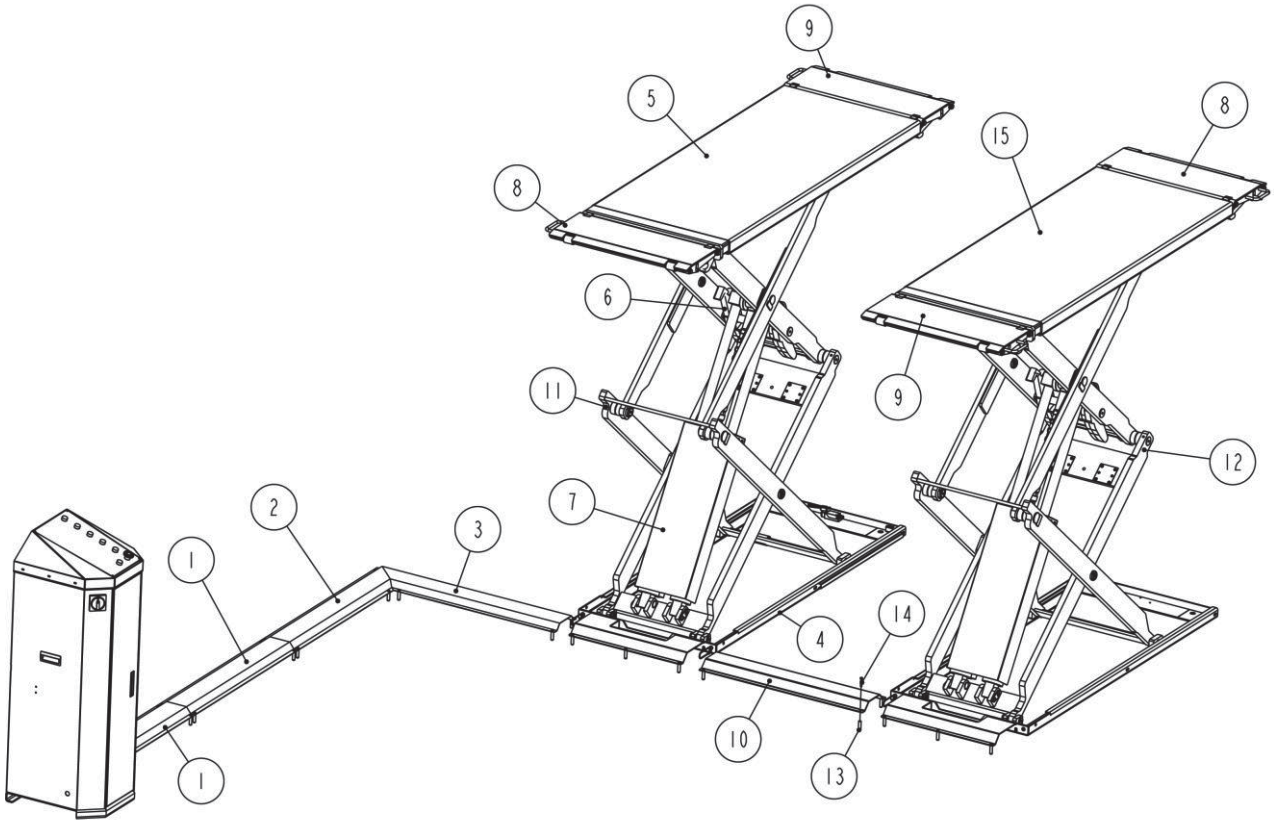
Pos.	Code	Description	Specification	Qty
1+2	320204291+330404006	Motor+coupling (48)	220V~230V-3.0kW -1Ph-50Hz-2P	1
1+2	320204314+330404006	Motor+coupling (48)	220V-3.0kW -1Ph-60Hz-2P	1

Pos.	Code	Description	Specification	Qty
1+2	320204291+ 330404006	Motor+coupling (48)	230V-3.0kW -1Ph-50Hz-2P	1
1+2	320204307+330404006	Motor+coupling (48)	240V-3.0kW -1Ph-50Hz-2P	1
1+2	320204260+330404006	Motor+coupling (48)	380V-3.5kW -3Ph-50Hz-2P	1
1+2	320204261+330404006	Motor+coupling (48)	400V-3.5kW -3Ph-50Hz-2P	1
1+2	320204262+330404006	Motor+coupling (48)	415V-3.5kW -3Ph-50Hz-2P	1
	791150005	Solenoid valve assembly (include part No.3,4,5 and 6)	DC24V	1
3	203204102	Tightening nut	FHLM-1/2-20UNF	1
4	330311005	Spool of the solenoid valve	24DC(Keta)（LSV-08-2NCP-M-2H）	1
5	330308031	Solenoid coil	LC2-0-C-2H,24VDC	1
6	330308032	Plug for the solenoid coil	DIN43650-DC	1
7	330302008	Non-return valve	YBZ-E2D3I1/1-03	1
8	330105005	Hydraulic block	LBZ-T2BK-13	1
9	207103019	Composite washer	M14	3
10	310101008	Power unit connector	M14*1.5-G1/4	2
12	201101100	Bolt	M6*50(NLJLD)	4
13	207101098	Type O seal ring	109*5.3	1
14	330201915	Gear pump(3.5kW 3ph)	CBKA-F227/CBK-2.7F	1
	330201005	Gear pump(3.0kW 1ph,50Ph)	CBK-F220/CBK-2.1F	1
	320201308	Gear pump(3.0kW1ph,60Ph)	CBK-F216-G	1
15	204101005	Flat washer	D8-GB95	4
16	204201013	Spring washer	M8	2
17	202109072	Hex socket cylinder head bolt	M8x85-GB70_1	2
18	330502013	Lid of the tank	YBZ-BT-M30*2-B	1
19	202109144	Bolt	M5x18	4
20	204101003	Flat washer	D5-GB95	4
21	330405001	Oil tank	10L	1
22	210101013	Fitting	M14*1.5	1
23	207101099	Type O seal ring	5*1.8	4
24	203102003	Hex nut	M10x1-GB6172_1	1
25	330305015	Restrictive valve	YBZ-E2D3I1/1-11A	2
26	330304010	Relief valve	DANRV-08-50	1
27	330301003	Cushion valve	HCF-Z1/4	1
28	330402001	Oil-back pipe	YH-D	1
29	330401005	Oil-sucking pipe	XYGN-L293	1
30	330403003	Filter	YBZ-E2D3I1/1-10	1

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

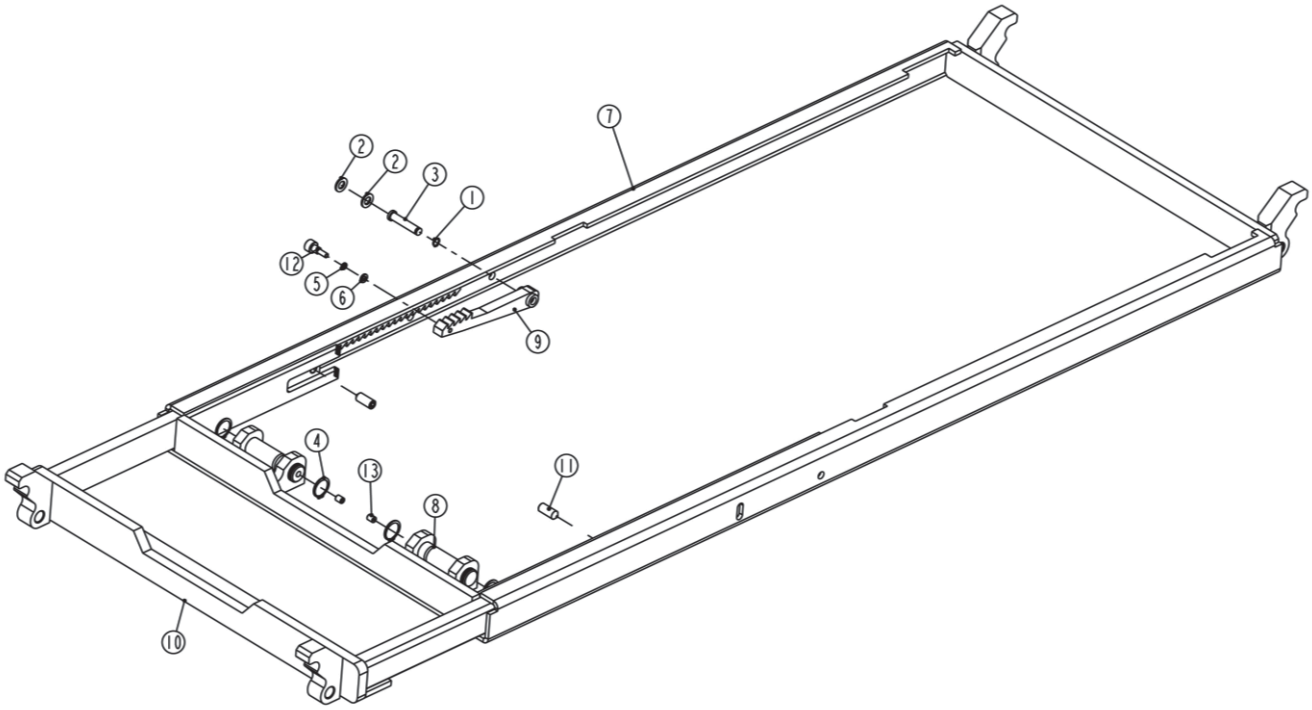
Please check with our customers service people when order spare parts.

Annex 3, Mechanically exploded drawings and parts list



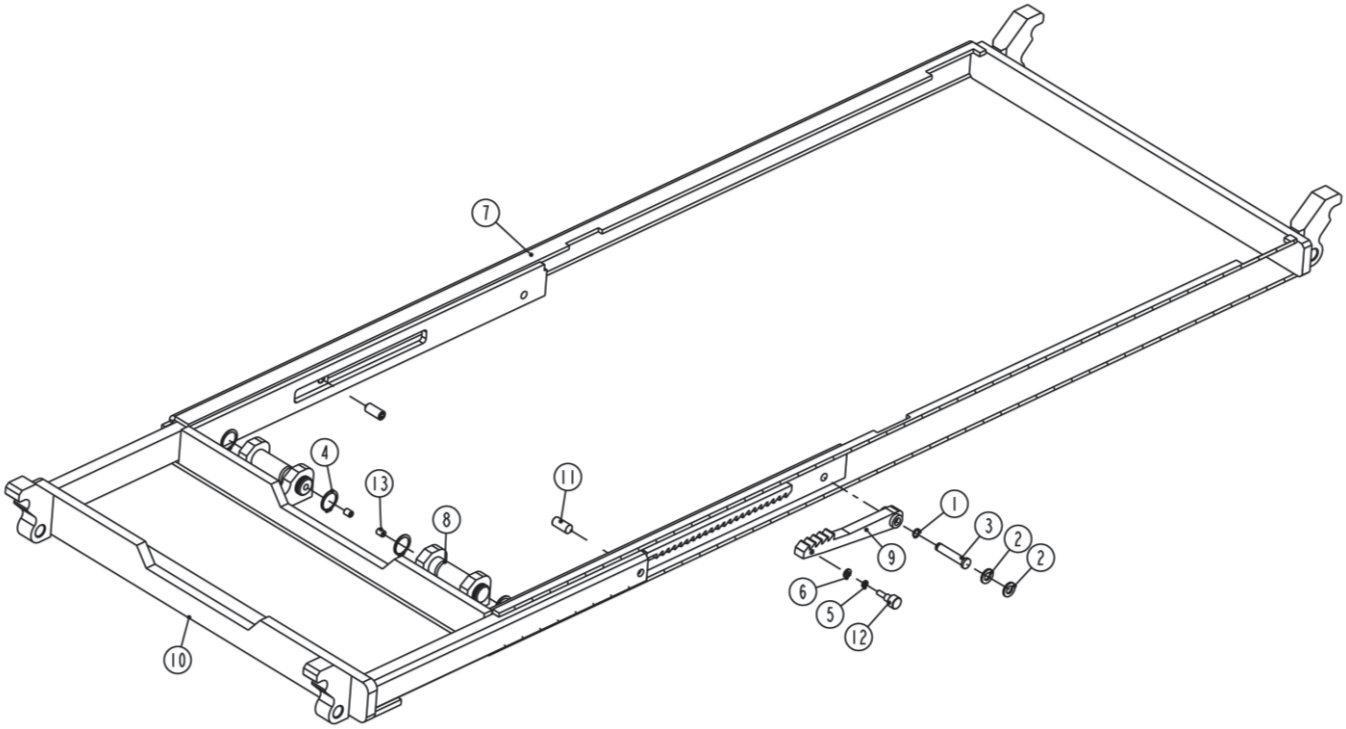
Pos.	Code	Description	Specification	Qty
1	410190023	Hose cover A	6501-A9	2
2	410190033	Hose cover B	6501-A10	1
3	410190043	Hose cover C	6501-A11	1
4	615068677	Base frame assembly	LS35-A1	1
5	615068680	Support platform A assembly	LS35-A3	1
6	615068681	Start-up plate assembly	LS35-A4	2
7	615068682	Oil cylinder assembly	LS35-A5	2
8	615068683	Ramp A assembly	LS35-A6	2
9	615068684	Ramp B assembly	LS35-A7	2
10	410911859	Hose cover 2	LS35-A11	1
11	615068717	Scissor bracket B	LS35-A2BN	1
12	615068716	Scissor bracket A	LS35-A2N	1
13	121010103	Plastic expansion tube	M10X40	20
14	202301008	Cross socket cap head tapping screw	ST48X35C_GB845	20
15	615068751	Support platform B assembly	LS35-A8	1

Support platform B assembly

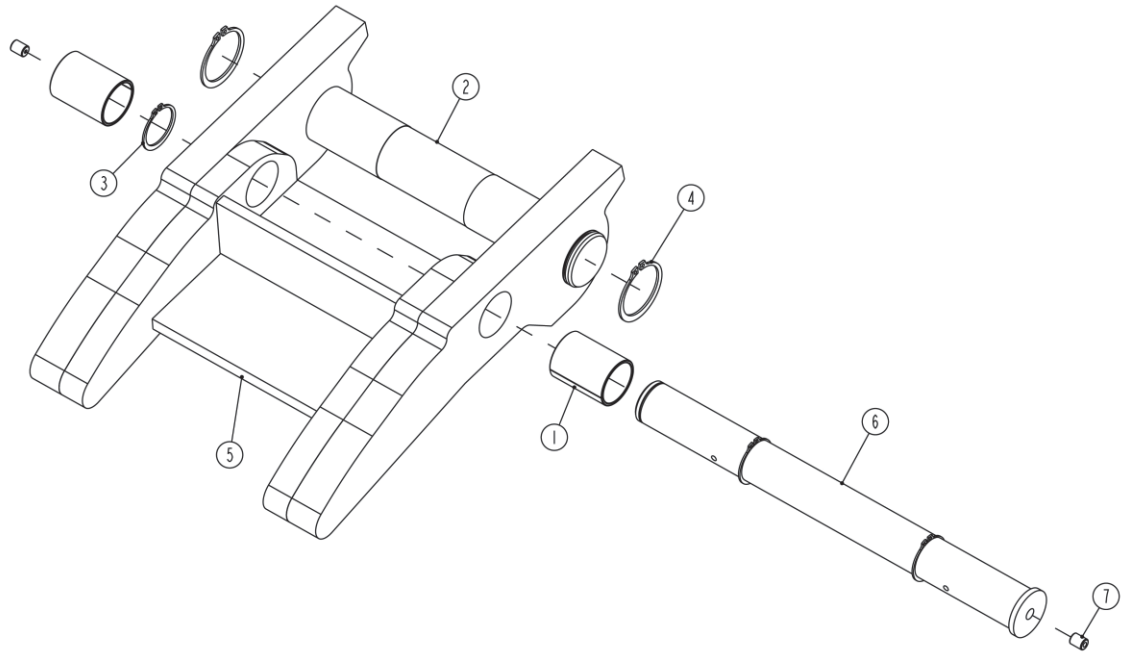


Pos.	Code	Description	Specification	Qty
1	204301001	Circlip	D10-GB894_1	1
2	204101006	Flat washer	D10-GB95	2
3	206104005	Shaft with single circlip	D10X50	1
4	204301009	Circlip	D25-GB894_2	4
5	204201003	Spring washer	D6-GB93	1
6	204101004	Flat washer	D6-GB95	1
7	614901779	Welded platform assembly	LS35-A3-B1	1
8	410911838	Up support shaft	LS35-A3-B3	2
9	612901890	Flexible ratchet	LS35-A3-B4	1
10	614901892	Welded extendable bracket B assembly	LS35-A3-B7	1
11	**206106001**	**Cylindrical pin**	**M12X25-GB878**	**2**
12	202209003	Knob for disengaging the two ratchets	M6X15-D16X20	1
13	208106002	Pressed oil cup	M8YP-JB9740_4	2

Support platform A assembly

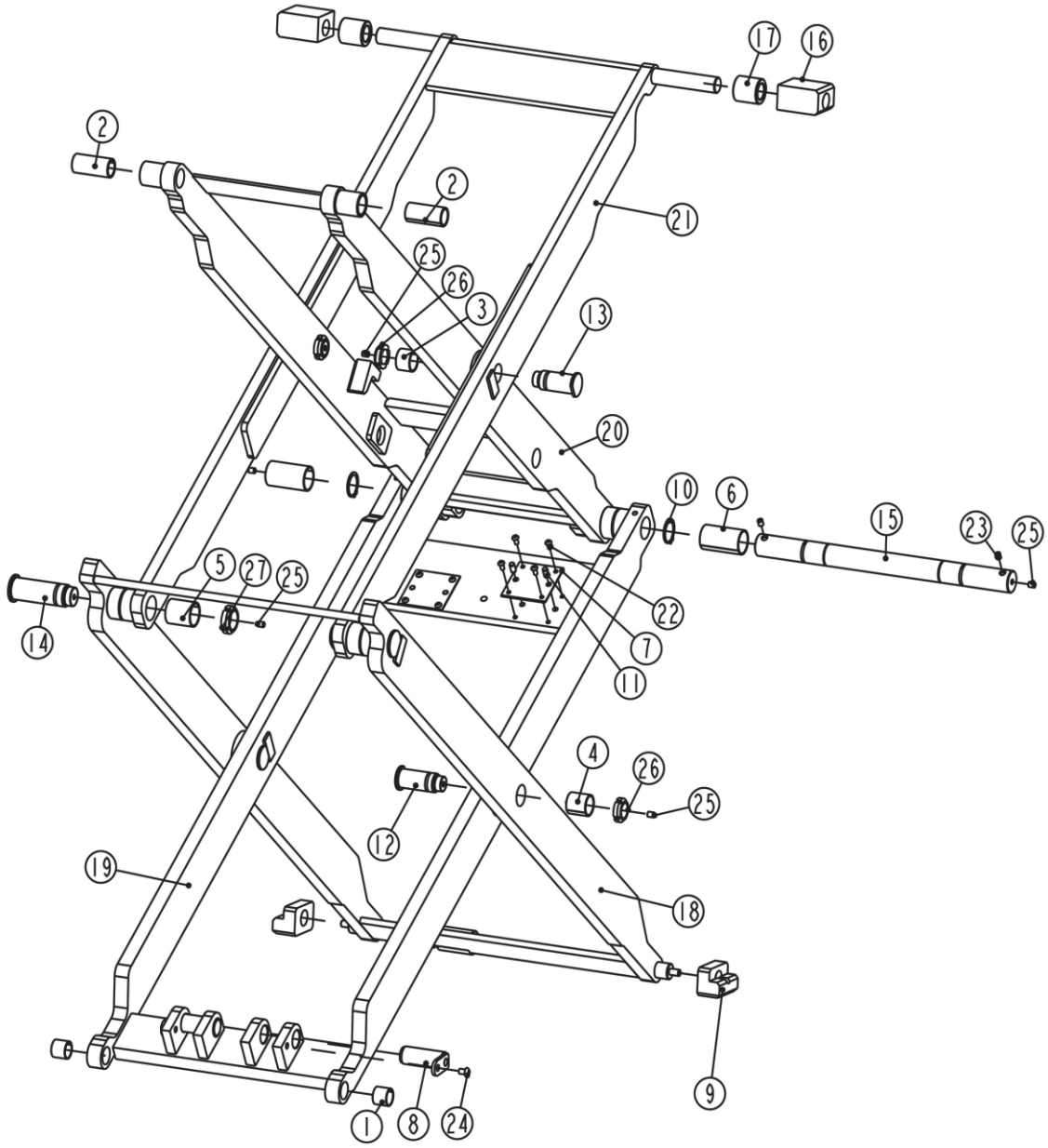


Pos.	Code	Description	Specification	Qty
1	204301001	Circlip	D10-GB894_1	1
2	204101006	Flat washer	D10-GB95	2
3	206104005	Shaft with single circlip	D10X50	1
4	204301009	Circlip	D25-GB894_2	4
5	204201003	Spring washer	D6-GB93	1
6	204101004	Flat washer	D6-GB95	1
7	614901779	Welded platform assembly	LS35-A3-B1	1
8	410911838	Up support shaft	LS35-A3-B3	2
9	612901890	Flexible ratchet	LS35-A3-B4	1
10	614901891	Welded extendable bracket A assembly	LS35-A8-B2	1
11	**206106001**	**Cylindrical pin**	**M12X25-GB878**	**2**
12	202209003	Knob for disengaging the two ratchets	M6X15-D16X20	1
13	208106002	Pressed oil cup	M8YP-JB9740_4	2



Pos.	Code	Description	Specification	Qty
1	205101022	Bearing	3045-SF-1X	2
2	410195131C	Shaft of oil cylinder	65012-A3-B1	1
3	204301011	Circlip D30	D30-GB894_2	3
4	204301014	Circlip D40	D40-GB894_2	2
5	614901783	Start plate assembly	LS35-A4-B1	1
6	410911834	Start plate shaft	LS35-A4-B2	1
7	208106002	Pressed oil cup M8	M8YP-JB9740_4	2

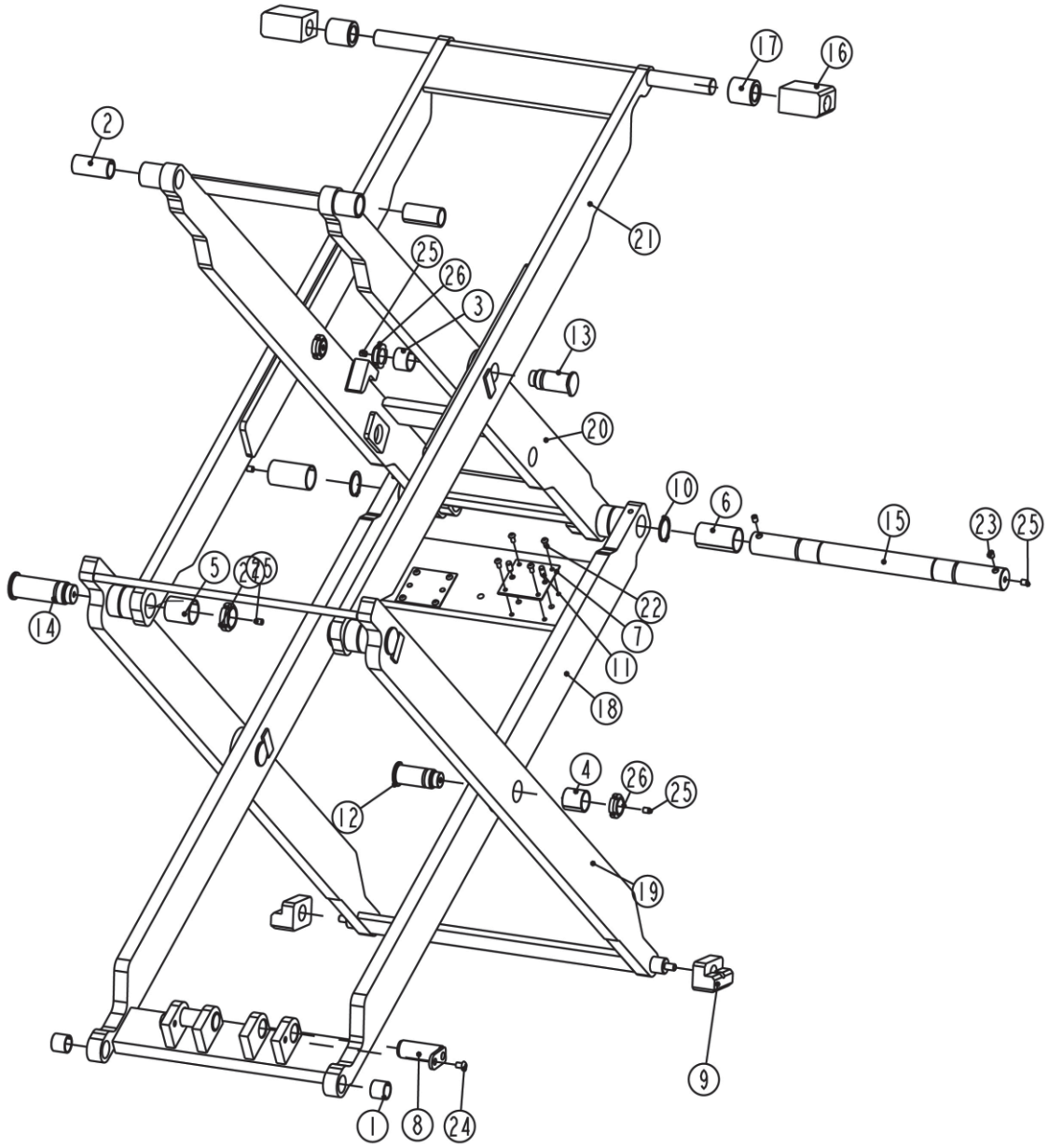
Scissor bracket B



Pos.	Code	Description	Specification	Qty
1	205101050	Bearing	2525-SF-2X	2
2	205101110	Bearing	253065-SF-1X	2
3	205101018	Bearing	3025-SF-2X	2
4	205102001	Bearing	3035-SF-2X	2
5	**205102002**	**Bearing**	**3545-SF-2X**	**2**
6	**205102004**	**Bearing**	**3570-SF-2X**	**2**
7	410195581C	Padding plate	65012-A2-B14	2
8	612019008B	Oil cylinder shaft welded assembly	65012-A4-B9	2
9	420194020	Downside slider	65A40-A2-B16	2
10	204301012	Circlip D35	D35-GB894_2	2

Pos.	Code	Description	Specification	Qty
11	206101013	Post pin	D8X16-GB119_2	4
12	410911843	Middle shaft of downside arm	LS35-A2-B5	2
13	410911842	Middle shaft of upside arm	LS35-A2-B6	2
14	410911841	Joint shaft 2	LS35-A2-B7	2
15	410911840	Joint shaft 1	LS35-A2-B8	1
16	420680162	Upside slider	LS35-A2-B11	2
17	420680161	Spacing sheath of upside slider	LS35-A2-B12	2
18	614901853	Downside outer arm	LS35-A2BN-B2	1
19	614901849	Downside inner arm	LS35-A2N-B1	1
20	614901851	Upside inner arm	LS35-A2N-B3	1
21	614901852	Upside outer arm	LS35-A2N-B4	1
22	202110003	Hex socket flat head screw	M6X12-GB70_2	8
23	202206007	Hex socket locking screw	M8X12-GB78	2
24	202110004	Hex socket flat head screw	M8X12-GB70_2	2
25	208106002	Pressed oil cup M8	M8YP-JB9740_4	8
26	203204108	Nylon-loop locking nut	YLM-M24	4
27	203204109	Nylon-loop locking nut	YLM-M30	2

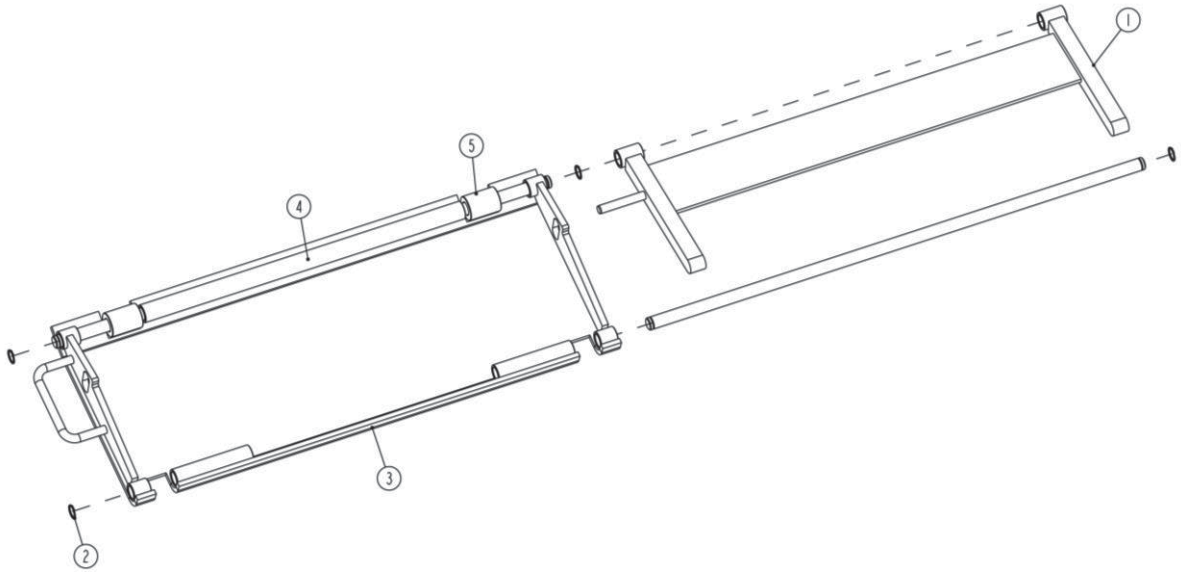
Scissor bracket A



Pos.	Code	Description	Specification	Qty
1	205101050	Bearing	2525-SF-2X	2
2	205101110	Bearing	253065-SF-1X	2
3	205101018	Bearing	3025-SF-2X	2
4	205102001	Bearing	3035-SF-2X	2
5	**205102002**	**Bearing**	**3545-SF-2X**	**2**
6	**205102004**	**Bearing**	**3570-SF-2X**	**2**
7	410195581C	Padding plate	65012-A2-B14	2
8	612019008B	Oil cylinder shaft assembly	65012-A4-B9	2
9	420194020	Downside slider	65A40-A2-B16	2
10	204301012	Circlip D35	D35-GB894_2	2

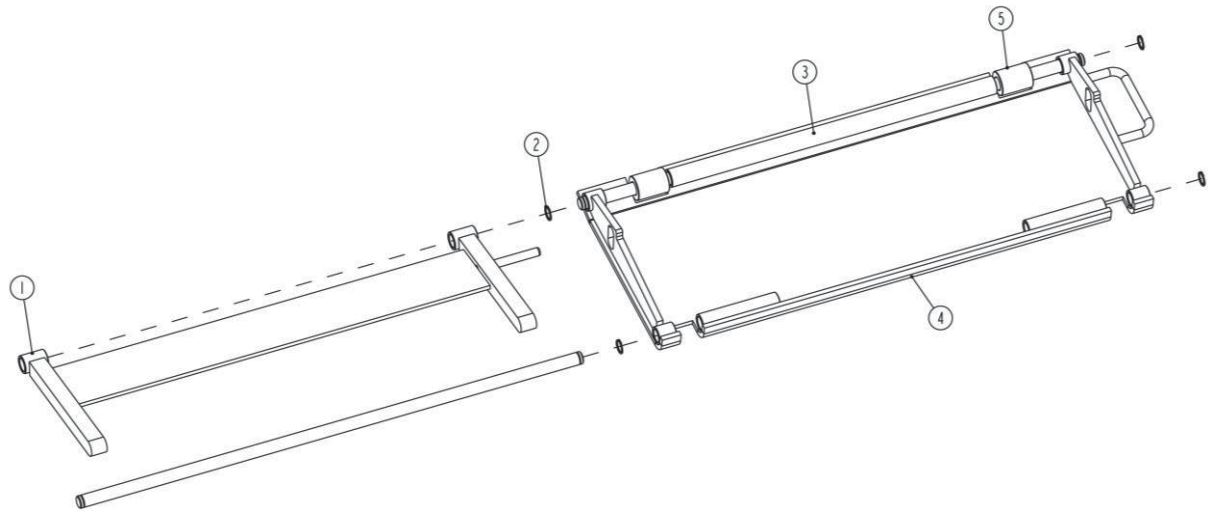
Pos.	Code	Description	Specification	Qty
11	206101013	Post pin	D8X16-GB119_2	4
12	410911843	Middle shaft of downside arm	LS35-A2-B5	2
13	410911842	Middle shaft of upside arm	LS35-A2-B6	2
14	410911841	Joint shaft 2	LS35-A2-B7	2
15	410911840	Joint shaft 1	LS35-A2-B8	1
16	420680162	Upside slider	LS35-A2-B11	2
17	420680161	Spacing sheath of upside slider	LS35-A2-B12	2
18	614901849	Downside inner arm	LS35-A2N-B1	1
19	614901850	Downside outer arm	LS35-A2N-B2	1
20	614901851	Upside inner arm	LS35-A2N-B3	1
21	614901852	Upside outer arm	LS35-A2N-B4	1
22	202110003	Hex socket flat head screw	M6X12-GB70_2	8
23	202206007	Hex socket locking screw	M8X12-GB78	2
24	202110004	Hex socket flat head screw	M8X12-GB70_2	2
25	208106002	Pressed oil cup M8	M8YP-JB9740_4	8
26	203204108	Nylon-loop locking nut	YLM-M24	4
27	203204109	Nylon-loop locking nut	YLM-M30	2

Ramp A assembly

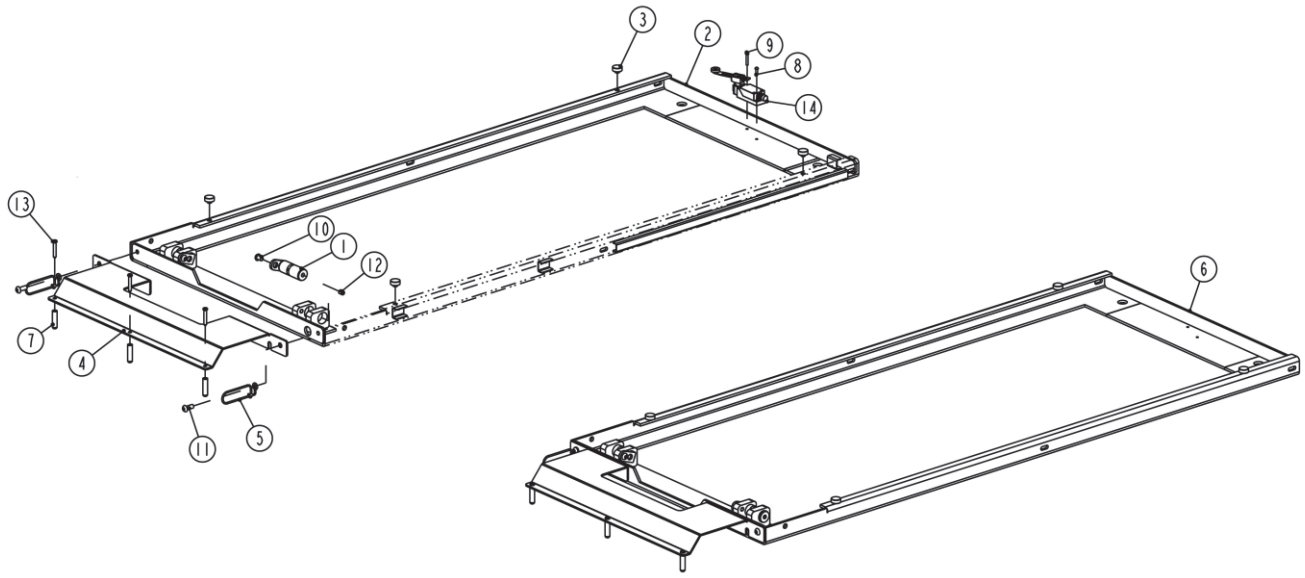


Pos.	Code	Description	Specification	Qty
1	614019507	Supporting rod	65012-A5-B1-C6	1
2	204301004	Circlip D15	D15-GB894_1	4
3	614901781	Ramp A	LS35-A6-B1	1
4	410911831	Rolling wheel shaft	LS35-A6-B2	2
5	420180010	Small rolling wheel	MR30-A22-B5	2

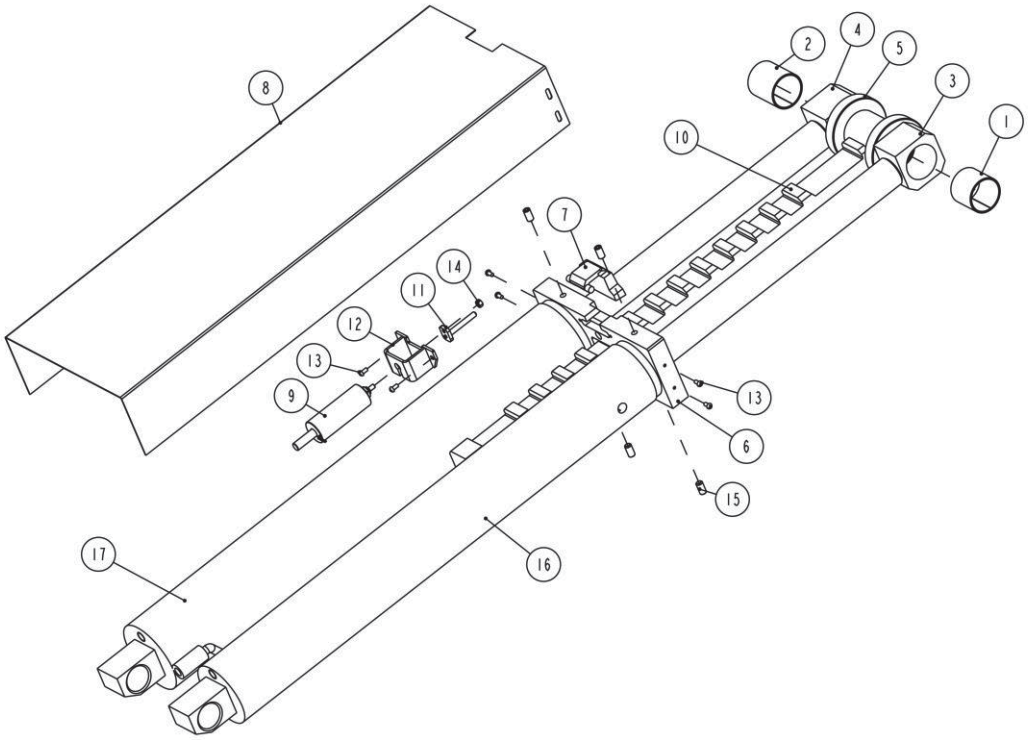
Ramp B assembly



Pos.	Code	Description	Specification	Qty
1	614019507	Supporting rod	65012-A5-B1-C6	1
2	204301004	Circlip	D15-GB894_1	2
3	410911831	Rolling wheel shaft	LS35-A6-B2	3
4	614901782	Ramp B	LS35-A7-B1	4
5	420180010	Small rolling wheel	MR30-A22-B5	5



Pos.	Code	Description	Specification	Qty
1	612019504	Shaft of base frame	65012-A1-B5	4
2	614901777	Base frame A	LS35-A1-B1	1
3	420680207	Nylon padding block	LS35-A1-B6	8
3	**420680207B**	**Nylon padding block (Replace 420680207 since June 7th, 2025)**	**LS35-A1-B6**	**8**
4	410911857	Hose cover 1	LS35-A10	2
5	410911860	Fixer for oil hose	LS35-A12	3
6	614901778	Base frame B	LS35-A1B-B1	1
7	121010103	Plastic expansion tube	M10X40	6
8	202101009	Cross socket cap head screw	M4X14-GB818	1
9	202101010	Cross socket cap head screw	M4X25-GB818	1
10	202110004	Hex socket button head screw	M8X12-GB70_2	4
11	202110005	Hex socket button head screw	M8X20-GB70_2	4
12	208106002	Pressed oil cup M8	M8YP-JB9740_4	4
13	202301008	Cross socket cap head tapping screw	ST48X35C_GB845	6
14	320301011	Limit switch TZ-8108	TZ-8108	1



Pos.	Code	Description	Specification	Qty
1	205101035	Bearing	4040-SF-2X	1
2	205101060	Bearing	4050-SF-2X	1
3	410190151	Connection B for oil cylinder	6501-A4-B1	1
4	410190141B	Connection A for oil cylinder	6501-A4-B11	1
5	410190111	Rolling wheel	6501-A4-B12	2
6	410195431D	Oil cylinder flange	65012-A4-B3	1
7	410193121	Mechanical safety block	65012-A4-B5	1
8	410190093B	Oil cylinder protective cover	65012-A4-B14	1
9	330310181	Electromagnet	DCT	1
9	**330310181B**	**Electromagnet (Replace 330310181 since May 13th, 2025)**	**DCT_B**	**1**
10	612019600	Mechanical safety teeth	LS35-A5-B1	1
11	612019610	Pushing rod welded assembly	LS35-A5-B6	1
12	612901815	Electromagnet holder welded assembly	LS35-A5-B4_B	1
12	**612901815B**	**Electromagnet holder welded assembly (Replace 612901815 since May 13th, 2025)**	**LS35-A5-B4_B**	**1**
13	202101007	Cross socket cap head screw	M4X8-GB818	6
14	203101003	Hex nut	M5-GB6170	1
15	202207002	Hex socket locking screw	M8X16-GB80	4
16	625000023	Slave cylinder	YG70_4-80-38-550	1
17	625000022	Master cylinder	YG80-92-38-550	1