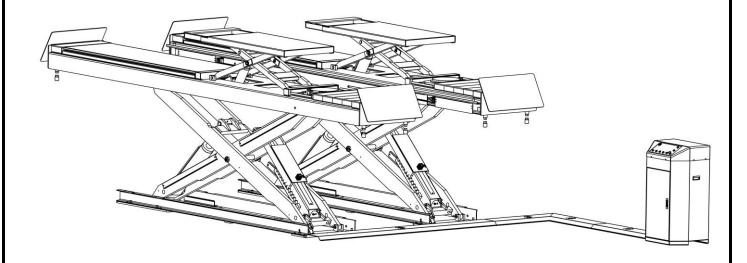
### Model No. EE-HX6BWF

Long platform scissor lift, Heavy Duty Electrical Levelling Pneumatic Controlled Slip Plate Lifting Capacity 6000kg Installation, Operation and Parts Manual





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

DATE: 31/07/2018

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

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

#### Liability

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

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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.



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## **SAFETY NOTES**

#### 1.1 Operation of lifting platforms

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

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

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

#### 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 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.

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, level and dry and not slippery, 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 grease.

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.

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Attention: For environment protection, please dispose the disused oil in a proper way.



#### 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.





#### 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 was dismantled into 3 parts for transportation

Name	Packed by	Dimension(mm)	Weight(kg)	Quantity
Control cabinet	Wooden case	700*560*1300	170	1
Power side platform	Carton with wooden base	5580*900*550	2300	1
The secondary platform	Carton with wooden base	5580*900*550	2300	1
Drive-on ramp (optional)	Bubbled film	1100*750*400	156	2

The packs must be kept in a covered and protected area in a temperature range 0f -10 $^{\circ}$ C to +40 $^{\circ}$ 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.

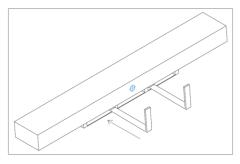
If stacking is unavoidable, use all appropriate precautions:

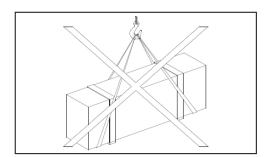
- -never stack to more than 2 meters in height.
- -never make stacks of single packs. Always stack pairs of packs in a cross pattern so that the base is bigger and the resulting stack is more stable. Once the stack is complete, restrain it using straps, ropes or other suitable methods.

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. The center of gravity and lashing points are marked on the packaging. Never attempt to hoist or transport the unit using lifting slings.





#### Opening the packs

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

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

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

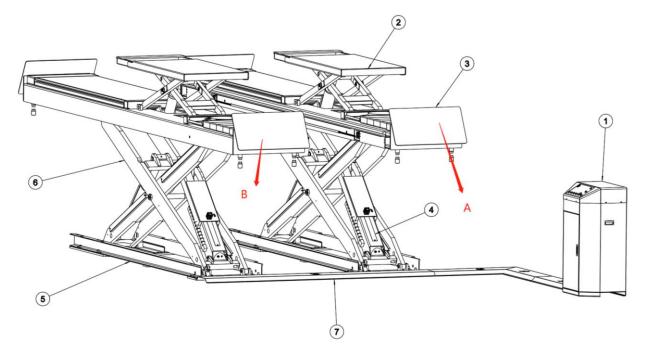


## **PRODUCT DESCRIPTIONS**

#### 3.1 General descriptions

This is heavy duty wheel support vehicle lift with auxiliary wheel free lifting device. It is preferably for recessed mounting and is mainly composed by two lifting platforms and a set of operation unit. Being hydraulically powered, the gear pump works to make oil in the pump push upwards the pistons of oil cylinders. Thus, scissor brackets of the lift rise accordingly. With mechanical safety locking system, no sudden collapse will occur in case of hydraulic failure. In addition, there are safety designs like 24V operating voltage of control box and limit switch, low-height alarming buzzer, anti-surge valves consider fully the users' safety.

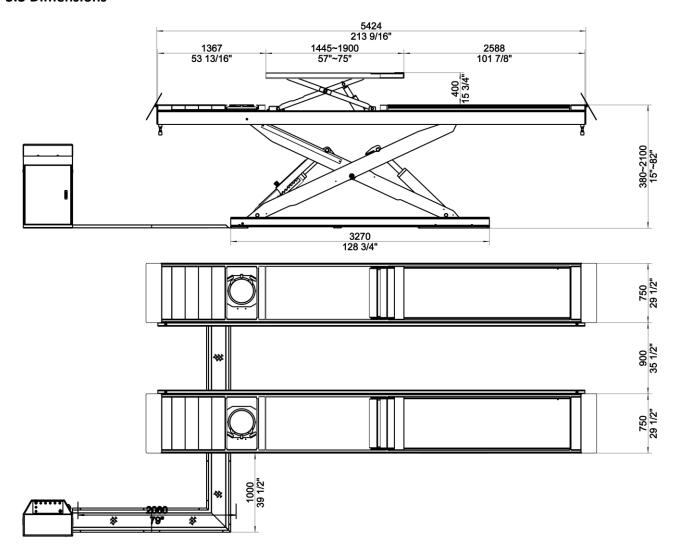
#### 3.2 Construction of the lift



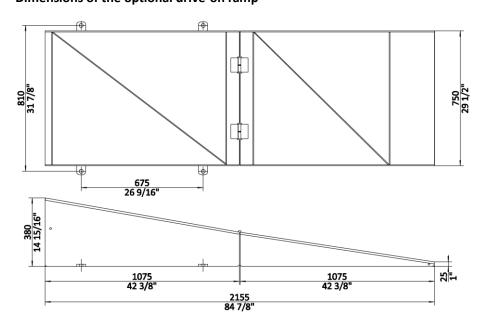
- 1.24 V safety control unit
- 2. Auxiliary wheel free lifting platform
- 3. Wheel-support platform
- 4. Mechanical safety locking unit
- 5. Base frame
- 6. Support arm
- 7. Oil hose cover



#### 3.3 Dimensions

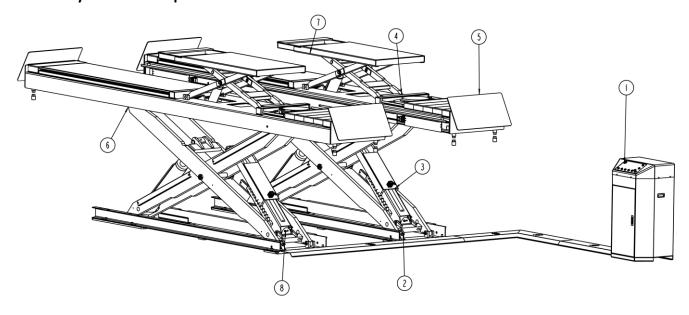


#### Dimensions of the optional drive-on ramp





## 3.4 Safety device descriptions



NO.	Safety device	Function
1.	24V safe control voltage	Safety voltage for operator
2	Restrictive valve	Slow down the descent speed of lifting platform in case there is leakage in the hydraulic circuit.
3	Mechanical safety locking unit for lifting platform	Hold the lifting platform in case there is leakage in the hydraulic circuit.
4	Max height limit switch for wheel free lifting platform	Stop rising at a maximum height of 450mm above lifting platform.
5	Wheel retainer	Prevent wheels of the lifted vehicle from rolling off the lifting platform.
6	Tip-up protection for lifting platforms	Protect lifting platform from tipping-up, in case of unbalanced load distribution.
7	Tip-up protection for wheel free jack	Protect auxiliary lift from tipping-up, in case of unbalanced load distribution.
8	Max height limit switch for main lifting platform	Stop rising at maximum lifting height.



#### 3.5 Technical data

Rated capacity(kg)	6000
Full raised height (mm)	2100
Initial height (mm)	380
Full raised time (with rated load)	Approx.70s
Full lowered time (with rated load)	Approx.50s
Hydraulic working pressure ( MPa )	26
Pneumatic working pressure (bar)	6-8
Rated capacity of the secondary lift (kg)	4000
Full raised height of the secondary lift (mm)	400
Oil tank volume (L)	46

## INSTALLATION INSTRUCTIONS

#### 4.1 Preparations before installation

#### 4.1.1 Space requirements.

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

#### 4.1.2 Foundations and connections

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

- Construction of the foundation following consultation with the manufacturer's customer service or an authorized service agent.
- Routing of the wiring to the installation location. The user must provide fuse protection for the connection. Requirements for power supply cable of the installation site: at least 2.5mm<sup>2</sup> wire core for 3Ph power and 4.0mm<sup>2</sup> wire core for 1Ph power. Attention: electrical system connection must be done by licensed technicians.
- 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.
- Routing of the compressed air connection to the installation location.

#### 4.1.3 Foundations preparations (see Annex 1, floor plan)

C25/30 concrete base with a minimum thickness of 200mm.

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

Newly built concrete ground must be older than 20days.



#### 4.1.4 Tools and equipment needed for installation

Tool Description	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		1
Socket spanner	D24mm	1
Levelling device		1
Hammer	10 pounds	1
Truck lift	Capacity more than 2500 kg	1
Lifting strap	Capacity, 1000 kg	2
Lifting strap	Capacity, 2000 kg	1
Torque spanner	MD400	1

#### 4.1.5 Checking parts

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.

S/N	Description	Specification	Qty
1	Lifting platform	HX6BWF	2
2	Control cabinet	/	1
3	Expansion bolt	M18*160	16
4	Rubber pad	38*120*100	4
5	Pneumatic hose	8mm	2m
6	Installation manual		1
7	Key		1
8	Oil tank label		1

#### 4.2 Installation attentions

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

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- 4.2.2 All bolts should be firmly screwed up.
- 4.2.3 Do not place any vehicle on the lift in the case of trial running.

#### 4.3 General Installation Steps

#### ONLY TRAINED AND QUALIFIED INSTALLERS CAN PERFORM LIFT INSTALLATION DUTIES.

#### Step 1: Dismantle the package of the lifting platforms.

Remove the carton and packing films wrapped on the platform.



WARNING!: Take off oil hose protectors when cut off the packing strips.

WARNING! : Avoid scratching the painting surface and hoses.

#### Step 2: Place the lifting platform at expected installation site with a forklift and lifting straps.

Raise the platform by using a forklift and 2 lifting straps until the mechanical lock is engaged. Dismantle the bolts that fix the platform and its wooden package and then hoist the platform onto the expected installation site.

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

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

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

#### Step 4: Connect hydraulic oil hoses.

Connect the oil hoses fittings to the power unit as per the diagram for oil hose connection. Annex 3.

Attention: Connect as per the marks on the hoses and do not contaminate the hydraulic components during the connection.

It must be taken adequate care that all fittings are securely tightened.

Severe leaking will occur if the hose fittings are not properly tightened.

#### Step 5: Connect the electrical system.

Refer to electrical connection diagram before making the connection.

Attention: electrical system connection must be done by qualified electricians.

Connect the wire connectors for rising and lowering limit switches. Connect the power supply cable to 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: Connect the pneumatic release system

Refer to Annex 4.

Screw torque for pneumatic hose connector is 20Nm.

External compressed air shall be prepared by the end user before installation. Pneumatic pressure 6-8 bar.

Do not contaminate the hoses during the connection.

Set the pneumatic pressure between 6-8 bars.

Push upward the button indicated in the following fig and turn the button until the hand of the pressure meter points to the NUMBER "6"

Push the button down thereafter.



It is suggested to add ISO VG32 mechanical oil into the oil tank.

Adjust the oil dipping quantity using the button on top of the oil cup.







#### Step 7: Fill with hydraulic oil.

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

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

Pour 39 liters hydraulic oil into the oil reservoir.

Add more oil after running the lift for several cycles until the lift can rise to the maximum lifting 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 8: Levelling

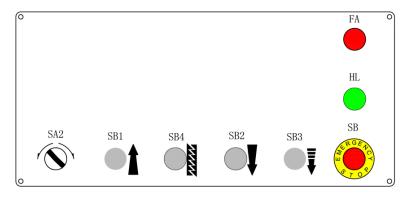
Check the connection of the hydraulic and electrical system before levelling operation.

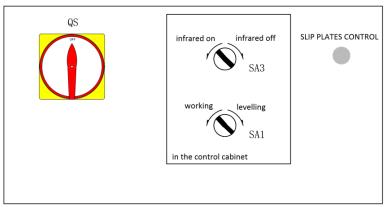
Review 5.4 operation instructions and get familiar with lift controls.

Refer to 5.2 and turn off the infrared sensor switch (SA3) before levelling operation.

WARNING!: Level the platforms before connecting max height limit switch because if not, platforms may not rise to the highest position. The operator needs to know clear which levelling valve controls which platform. This could be judged by the way that the oil hose was connected or by trial raising or lowering.

Please refer to 5.2-Descriptions of control panel to familiar with the function of all control buttons before start levelling.





#### Level platforms of the main lift

- 1) Connect the power supply and turn on the Main Switch. Turn selection switch (SA2) on control panel to the main lift.
- 2) Turn the selection switch (SA1) in the control unit to "WORKING" mode and push the "UP" button for 30 seconds. Normally at least one of the platforms will rise at this movement. (In the case the machine is equipped with three phase power supply and the motor works but the platform does not move upwards after the "UP" button has been pressed for 30 seconds, the operators needs to change the phase order of the motor's wiring)
- 3) Turn the selection switch (SA1) to "LEVELLING" mode and push "UP" or "DOWN" button to adjust the height of the secondary platform until it reaches the same height as the main platform.



Turn the selection switch to "WORKING" mode and push the "UP" and "DOWN" button to check the synchronization of the two platforms. If synchronization is still not achieved, repeat the above levelling steps until synchronization reached.

#### Level the auxiliary wheel free lift

- 1) Turn selection switch (SA2) on control panel to the wheel free lift. Turn the selection switch (SA1) to "LEVELLING" mode.
- 2) Push UP button until both platform of the wheel free lift go utmost top to drive air out of cylinders.
- 3) Push DOWN I, until jacks lower to the lowest position.

Turn the selection switch (SA1) to "WORKING" mode. PRESS UP BUTTON TO CHECK. THE wheel free lifting platforms SHOULD BE SYNCHRONIZED BY THIS STEP.

Repeat the above levelling steps until synchronization reached.

#### Step 7: Fix base frames with expansion bolts.

- 1) Before anchoring, it is necessary to check again the position for each base plates by referring to the dimension scheme as well as the corresponding installation requirements.
- 2) Drill holes using D18 carbide tipped masonry drill bit. Make sure to drill vertically down.
- 3) Clean the hole and check again the position of the posts to ensure they are correctly positioned.
- 4) Use a spirit level to check the vertical alignment of the two adjacent base plates.
- 5) Impact and drive anchoring bolt into hole until nut and washer contact base.
- 6) Tighten the nut with torque wrench to 80Nm.

#### 4.4 Items to be checked after installation.

S/N	Check items	YES	NO
1	Screw torque of expansion bolts : 80-100Nm;	٧	
2	Rising speed ≥20mm/s;	٧	
3	Noise with rated load ≤75dB(A);	٧	
4	Grounding resistance: not bigger than $4\Omega$ ;	٧	
5	Height difference of the two carriages ≤5mm;	٧	
6	Mechanical safe locking unit is robust and synchronized when running with rated load;	٧	
7	If the control button works as "hold to run"?	٧	
8	If limit switches work well?	٧	
9	If grounding wire is connected?	٧	
10	If rising and lowering smoothly?	٧	
11	If there is no abnormal notice during running with rated load?	٧	
12	If there is no oil leakage when running with rated load?	٧	
13	If expansion bolts, nuts or circlips are well secured?	٧	
14	If the max lifting height is 1720mm (above ground)?	٧	
15	If Safety advices, name plate and logos are clear?	٧	

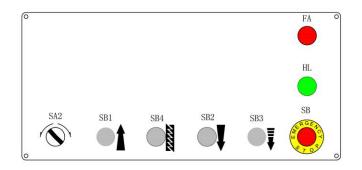


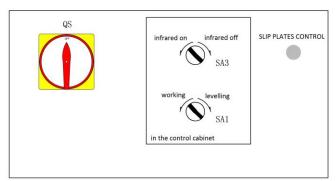
## **OPERATION INSTRUCTIONS**

#### 5.1 Precautions

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

#### 5.2 Descriptions of control panel

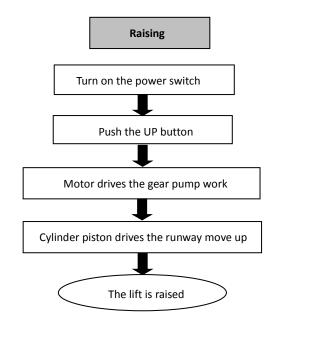


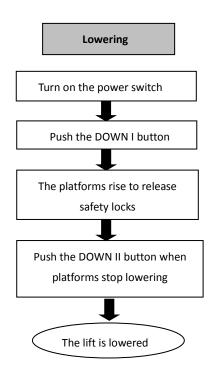


POS.	Description	Function
FA	Alarm buzzer	Safety warning
SB1	UP button	Control the rising movement
SB2	DOWN button	Control the initial lowering movement
SB3	DOWN button	Control the final lowering movement
SB4	LOCK button	Engage the safety locks
SB	Emergency stop	Stop power in emergency cases
HL	Power indicator	Show if power is on
QS	Main switch	Power on /off
SA1	Selection switch	Control working or levelling mode
SA2	Selection switch	Select Main lift or wheel free jack
SA3	Selection switch	Control the mode of infrared on or off
	Slip plates control	Select locked or free mode of slip plates



#### 5.3 Flow chart for operation





#### 5.4 Operation instructions

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

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.

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 lifting platform. Always lift the vehicle using all four adapters. Never raise just one end, one corner or one side of vehicle.

Turn SA1 to WORKING mode and SA3 to INFRARED ON before normal use. The normal users are not allowed to open the door of control cabinet.

#### Use the Main Lift

#### Raise the lift

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

- 1. Turn on the main power switch.
- 2. Drive and park the vehicle midway between two platforms. Make sure the vehicle is correctly positioned and secured against rolling.
- 3. Push the "UP" button to raise the vehicle a bit off the ground and check again if the vehicle is in a safe position.
- 4. Having raised the vehicle to the expected height, push the "Safety Lock" button to ensure the mechanical safety lock is engaged. Check again the stability before performing maintenance or repair work.

#### Lower the lift

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

- 1. Push the DOWNI button to lower the lifting platform. It will stop lowering at safety height.
- 2. Push DOWN II button to continue lowering the platforms which accompanies with safety alarming buzz.
- 3. After the lifting platform is fully lowered, remove rubber pads and other tools to provide an unobstructed exit for moving vehicle from the lift area.

4. Drive the vehicle away.

Attention: In the case the desynchronisation of the two platforms are unacceptable (about 6CM difference) during lifting or lowering process, the synchronization protection device will be activated to stop any raising or lowering movement. In this case the normal operator needs to ask professional help from maintenance operator to restore the lift to normal working condition.

#### What can be done to restore to the normal working status?

Open the door of the control cabinet;

Turn SA3 to OFF mode;

PUSH DOWN I and DOWN II button to fully lower the platform;

Level until both platforms are synchronized. (Refer to Step 8: Levelling)

Turn SA3 to ON mode.

#### **Use the Auxiliary Wheel Free Lift**

Rated capacity: 4000KG

#### Raising

- 1. Turn the selection switch (SA2) on the control panel to auxiliary "Wheel free lift".
- 2. Place rubber pads under the pick-up points of vehicle. When it is necessary to use the platform extensions, push "UP" button to raise platforms of the jack a bit over the platforms of main lift and pull out the extensions.
- 3. Push "UP" button and check again if the rubber pads are directly under the pick-up points of the vehicle, when they are going very close to the vehicle's chassis.
- 4. Keep on pushing "UP" button until reaches to the expected height. Full rise of the jack is 450mm over the platform of main lift.

#### Lowering

Attention: in case the platform extensions of the "wheel free jack" are used, the operator needs to retract both extensions when the four wheels of vehicle have enough contact with the main lifting platforms.

- 1. Turn the selection switch (SA2) on the control panel to auxiliary "Wheel Lift".
- 2. Push "DOWN I" button on the control panel to lower the jack.
- 3. Take away rubber pads.



## **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. The troubles will be judged and solved much faster if you could provide us more details or pictures of the trouble.

TROUBLES	CAUSES	SOLUTIONS	
	Loose wire connection	Check and make a good connection.	
Motor does not run and will not raise.	Burnt motor.	Replace it.	
will flot raise.	Damaged limit switch or its wire connection is loose.	Adjust or replace the limit switch.	
	The motor run reversely.	Check the wire connection.	
	Relief valve is not well screwed up or jammed.	Clean or make adjustment	
Motor runs but will not	Damaged gear pump.	Replace it.	
raise.	Too low oil level.	Add oil.	
	The hose connection is loose.	Tighten it.	
	The cushion valve is not well screwed up or jammed.	Clean or make adjustment	
	The oil hose leaks.	Check or replace it.	
Platforms go down	Untightened oil cylinder.	Replace the seal.	
slowly after being	The non-return valve leaks.	Clean or replace it.	
raised.	Solenoid valve fails to work well.	Clean or replace it.	
	Unloading valve leaks.	Check and adjust the tightness.	
	Jammed oil filter	Clean or replace it.	
	Too low oil level.	Add oil.	
Raising too slow.	The relief valve is not adjusted to the right position.	Make adjustment.	
	Too hot hydraulic oil ( above 45°) .	Change the oil.	
	Abraded seal of the cylinder	Replace the seal.	
	Jammed throttle valve	Clean or replace it.	
Lauranina kao alamba	Dirty hydraulic oil	Clean or replace it.	
Lowering too slowly.	Jammed relief valve	Clean or replace it.	
	Jammed oil hose	Clean it.	



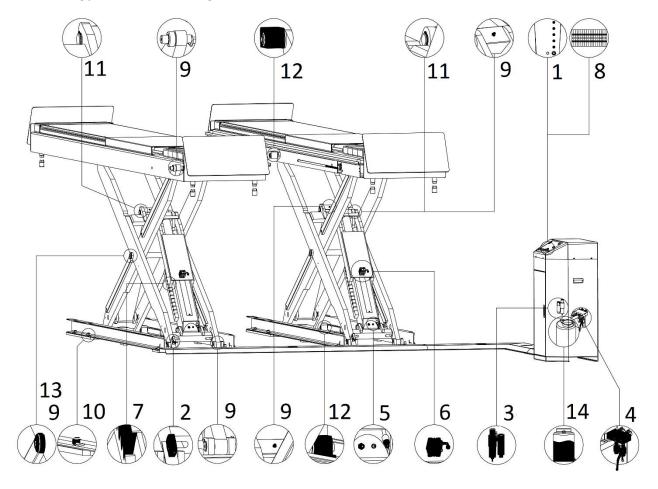
## **MAINTENANCE**

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

Following are requirements for routine maintenance.

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

Lubricated moving parts with NO.1 lithium grease before use.



S/N	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	Max height limit switch	Push the UP button, inspect and ensure the lifting platform stops rising at maximum lifting height.	Every day
3	Pneumatic filter	Listen and inspect the filter to ensure no leakage. Inspect and ensure the water level is below its max limit mark and the oil level is above the minimum limit mark.	Every day
4	Hydraulic block and valves	Inspect if the valves leak or not. Clean or change the valve if any leakage.	Every day
5	Oil hoses and connectors	Inspect to ensure no leakage before using the lift.	Every day
6	Pneumatic hoses and connectors	Inspect to ensure no leakage before using the lift.	Every day



S/N	Components	Methods	Period
7	Mechanical safety catch	Check if both mechanical catches can engage and disengage effectively and synchronously by pushing control buttons.	Every day
	Running synchronization	Check the synchronization of both lifting platforms. Ensure both platforms ascend and descend synchronously.	Every day
8	Terminals in the control unit	Open the control unit, inspect the wire terminals and screw firmly if any terminals become loose.	Every 3 months
9	Joint shafts	Add grease into the oil cups.	Every 3 months
10	Anchored expansion bolts	Check with torque spanner. For M18 bolt, the torque is no less than 80N.m	Every 3 months
13	Self-locking nut	Check with torque spanner. The torque should be no less than 330N.m.	Every 3 months
	Whole Lift	Running the lift for several cycles with and without rated load.  The lift can run steadily and smoothly with no abnormal noise.	Every 3 months
14	Hydraulic oil	Change the oil 6 months after initial use and once per year thereafter. Inspect the hydraulic oil and change the oil if the oil becomes black or there is dirt in the oil tank.	Every year

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



#### Annex 1, Floor Plan

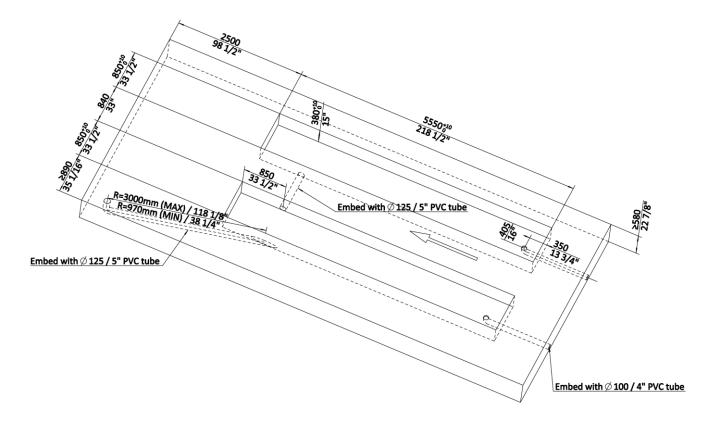
#### Requirements:

C25-C30 concrete base with a minimum thickness of 250mm.

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

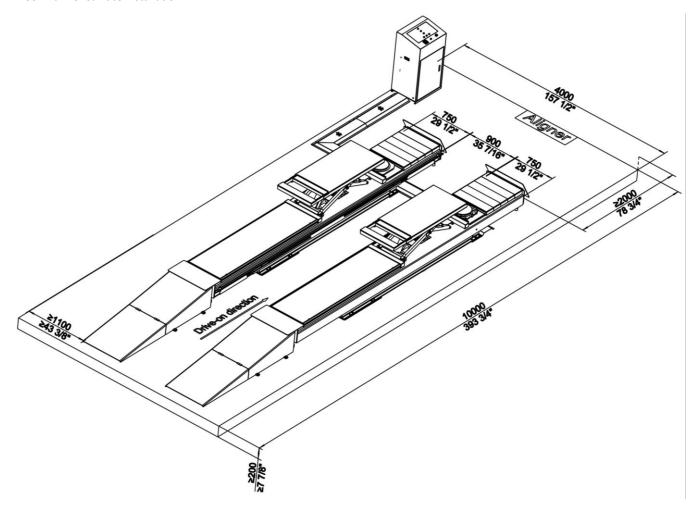
Newly built concrete ground must be older than 20days.

#### Floor Plan for recessed installation



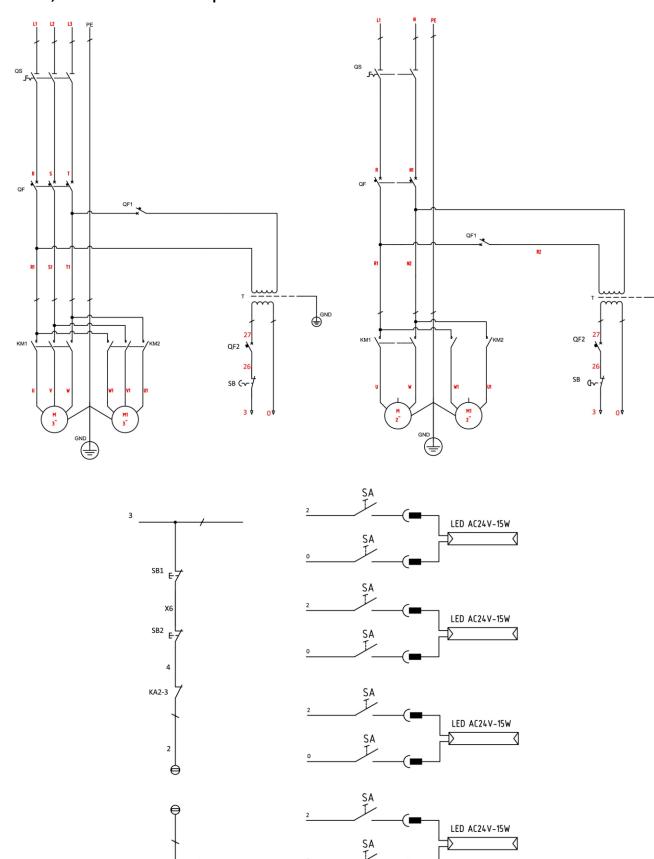


#### Floor Plan for surface installation

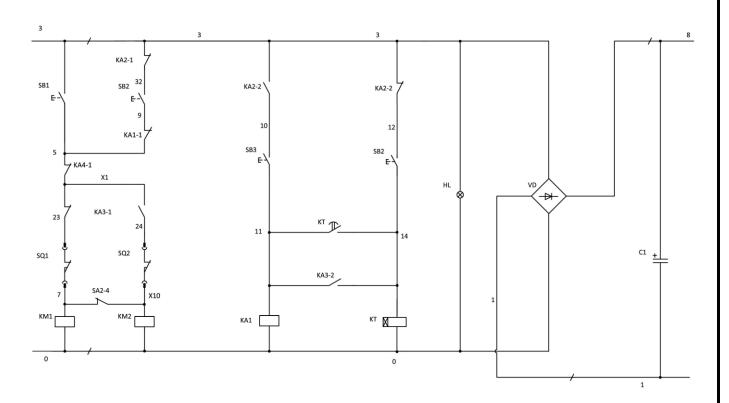


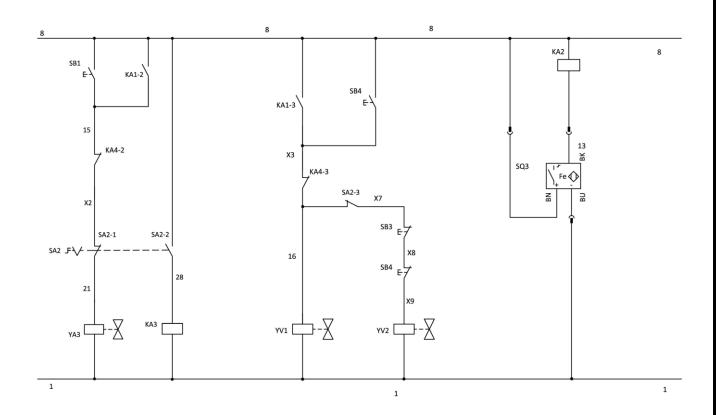


## Annex 2, Electrical schemes and parts list

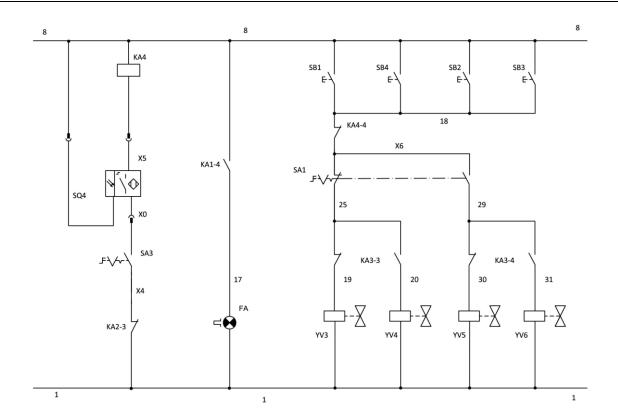


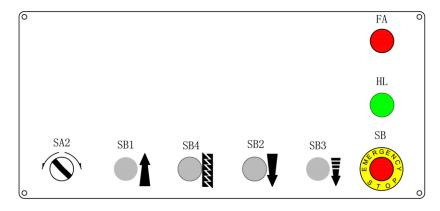


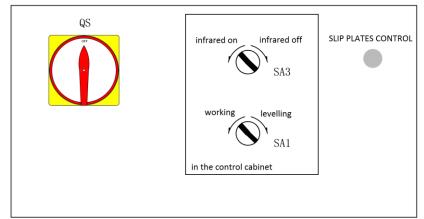




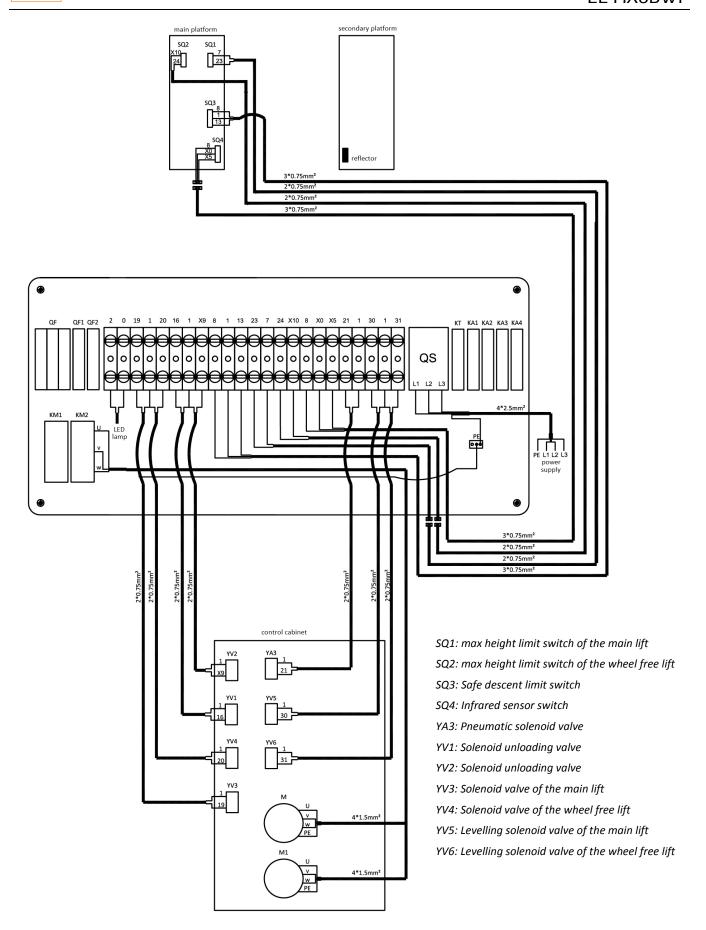














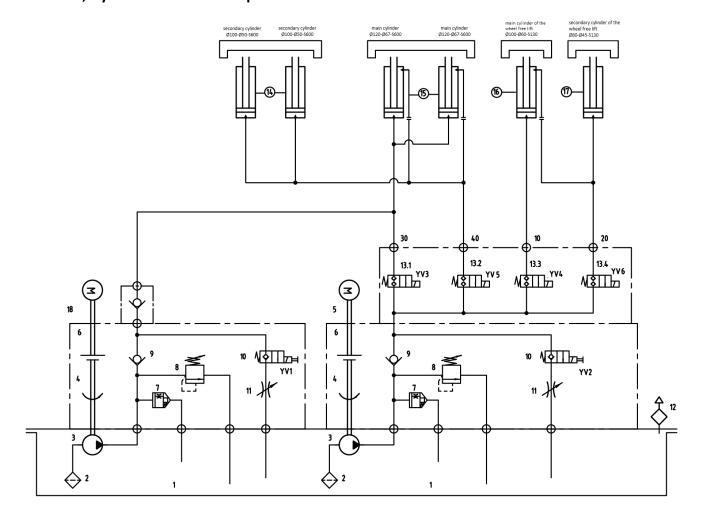
POS.	Code	Description	Qty
T	320101128	Transformer ( 380V400V415V-24V)	1
	320101127	Transformer ( 220V230V240V-24V)	1
SQ1	320301003	Limit switch	1
SQ2	320301011	Limit switch	1
SQ3	320302002	Proximity switch	1
SA1,SA3	320303019	Selection switch	2
SA2	320303021	Selection switch	1
QS	320304001	Power switch	1
SQ4	320306025	Photoelectric switch	1
SB1;SB2;SB3;SB4	320401044	Pushbutton	4
SB	320402002	Emergency stop	1
	320503002	Ground terminal	1
	320505006	Wire terminal	23
	320505011	Chip	2
KA2;KA3;KA4	320601001	Relay	3
KA1	320601002	Relay	1
	320601011	Relay holder	4
	320601018	Relay feet fixer	8
KT	320602009	Integrated time relay	1
QF	320801003	Circuit breaker(3Ph)	1
	320802002	Circuit breaker(1Ph)	1
QF1	320803001	Circuit breaker	1
QF2	320803005	Circuit breaker	1
KM1,KM2	320901001	AC contactor (3Ph)	2
	320901011	AC contactor (1Ph)	2
HL	321201001	Indicating lamp	1
FA	321202001	Alarm buzzer	1
YV1	330308006	Solenoid unloading valve	1
YV2	330308006	Solenoid unloading valve	1
YV3	330308008	Solenoid valve of the main lift	1
YV4	330308008	Solenoid valve of the wheel free lift	1
YV5	330308008	Levelling solenoid valve of the main lift	1
YV6	330308008	Levelling solenoid valve of the wheel free lift	1
YA3	310401001	Pneumatic solenoid valve	1

NOTE: For power supply of other voltages, the transformer is different. Please check with our customers service people when order spare parts.

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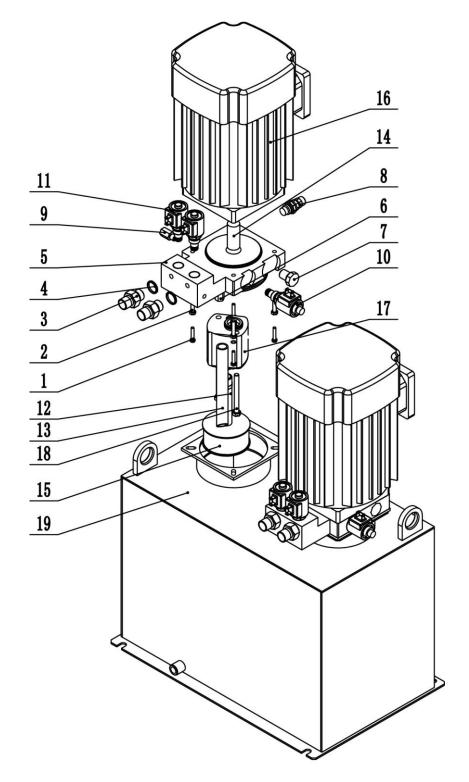


#### Annex 3, Hydraulic schemes and parts list



- 1. Oil tank 2.0il sucking filter 3.Gear pump 4.Coupling 5.Motor
- 6. Hydraulic block 7.Cushoin valve 8.Relief valve 9.Non-return valve
- 10. Solenoid unloading valve 11. Restrictive valve 12. Oil tank cover
- 13.1 Solenoid valve
- 13.2 Solenoid valve
- 13.3 Solenoid valve
- 13.4 Solenoid valve
- 14. Secondary cylinder of the main lift
- 15. Main cylinder of the main lift 16.Main cylinder of the auxiliary lift
- 17. Secondary cylinder of the auxiliary lift 18. Composite hydraulic block





POS.	Code	Description	Specification	Qty
1	201103001	Hex head full swivel screw	M5*25	8
2	202109064	Screw	M6*30	8
3	207103019	Bonded washer	M14	4
4	310101028	Shift connector	G1/4,M14x1.5,M14x1.5	4
5	330101008	Hydraulic block	YF-06	2



POS.	Code	Description	Specification	Qty
6	330301001	Cushion valve	HZYF-C1	2
7	330302001	Non-return valve	DYF-C	2
8	330304001	Relief valve	EYF-C	2
9	330305002	Restrictive valve		2
10	330308006	Solenoid unloading valve	DHF06-220H/DC24	2
11	330308008	Solenoid valve	Solenoid valve DHF06-228H/DC24	
12	330401002	Oil sucking tube YX-BL=230		2
13	330402001	Oil back tube YH-D		2
14	330404001	Coupling YL-A		2
15	330403001	Oil sucking filter	YG-C	2
16	320201011	Motor	220V-2.2KW -1PH-60HZ-2P	2
	320201017	Motor	220V-2.2KW -3PH-60HZ-2P	2
	320201004	Motor	380V-2.2KW-3PH-50HZ-2P	2
	320201005	Motor	400V-2.2KW-3PH-50HZ-2P	2
	320201006	Motor	415V-2.2KW -3PH-50HZ-2P	2
17	330201005B	Gear pump (3Ph,2.2kW)	CBK-F225/CBK-2.5F	2
	320201308B	Gear pump (1Ph,2.2kW)	CBK-F216-G	2
18	202109038	Hex socket cylinder head screw	M8*75	4
19	614060002	Oil reservoir	LX35E.PD -DKG01-HPU-TNK01	1

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

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

#### **SEAL RINGS FOR CYLINDERS OF THE MAIN LIFT**

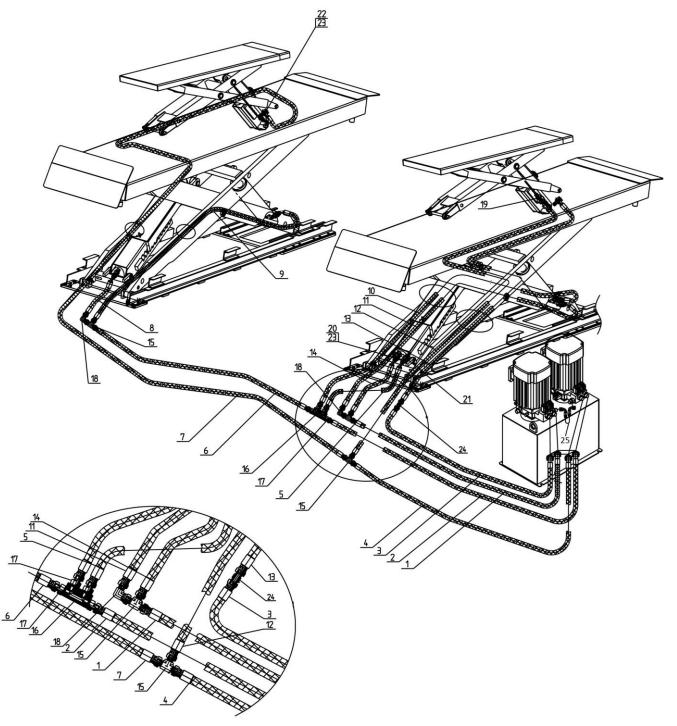
POS.	Code	Description	Specification	Qty	Note
1	207103009	Composite seal ring for piston	KGD120*95*22.4*6.35	1	Main
2	207102004	Y sear ring for piston rod	SD67*77*6	1	Main
3	207105018	Dust proof ring for piston rod	DH67	1	Main
1	207103010	Composite seal ring for piston	KGD100*75*22.4*6.35	1	Secondary
2	207105007	Dust proof ring for piston rod	DHS50 (50*58*6)	1	Secondary

#### SEAL RINGS FOR CYLINDERS OF WHEEL FREE LIFT

POS.	Code	Description	Specification	Qty	Note
1	207103010	Composite seal ring for piston	KGD100*75*22.4*6.35	1	Main
2	207102005	Y sear ring for piston rod	SD60*70*6	1	Main
3	207105009	Dust proof ring for piston rod	BHS60	1	Main
1	207103011	Composite seal ring for piston	KGD80*60*22.4*6.35	1	Secondary
2	207105008	Dust proof ring for piston rod	DHS45 (45*53*6)	1	Secondary

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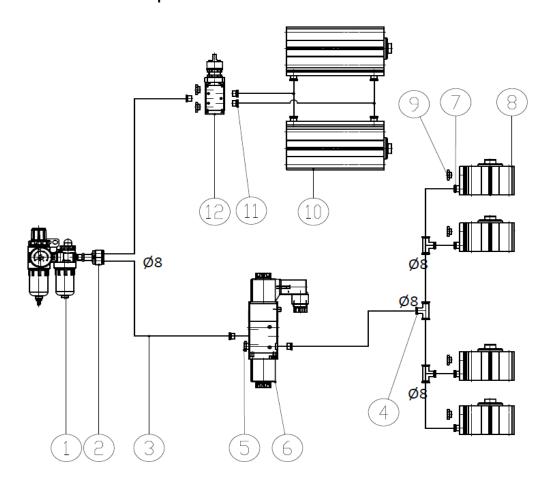
POS.	Code	Name	Specification	Qty
1	624001873	Rubber oil hose	L=4200, one straight connector, one single bending connector	1
2	624001902	Rubber oil hose	er oil hose L=4250,both straight connectors	
3	624001061	Rubber oil hose	L=4200,both straight connectors	1
4	624001061	Rubber oil hose	L=4200,both straight connectors	1
5	624001881	Rubber oil hose	L=550,one straight connector , one single bending connector	1
6	624001882	Rubber oil hose	L=1700,both straight connectors	1
7	624001887	Rubber oil hose	L=7800,one straight connector , one single bending connector	1



POS.	Code	Name	Specification	Qty
8	624001883	Rubber oil hose	L=500,one straight connector , one single bending connector	1
9	624001885	Rubber oil hose	L=3800,one straight connector , one single bending connector	1
10	624001884	Rubber oil hose	L=650,both straight connectors	1
11	624001885	Rubber oil hose	L=3800,one straight connector , one single bending connector	
12	624002125	Rubber oil hose	L=5900, one straight connector , one single bending connector	
13	624001889	Rubber oil hose	L=5950,one straight connector , one single bending connector	
14	624001883	Rubber oil hose	L=500,one straight connector , one single bending connector	1
15	410210181	Three way connector	6603B-A9-B7	3
16	410250271	Four way connector	6604B-A29	1
17	615019005	Tube connector B	6501-A4-B16	3
18	310102035	Adjustable right angle connector	EW-G1/4SR-G1/4 I60	2
19	310101010	Straight connector	G1/4G1/4	1
20	330305009	Straight connector with throttle valve	BDPF-G14-G14-I60	4
21	615019005	Pipe connector B	6501-A4-B16	6
19	310101010	Straight connector	G1/4G1/4	1
23	207103019	Bonded washer	M14	11
24	410210191	Straight connector	6603B-A9-B8	1
25	624001901	Rubber oil hose	L=220,both straight connectors,	1



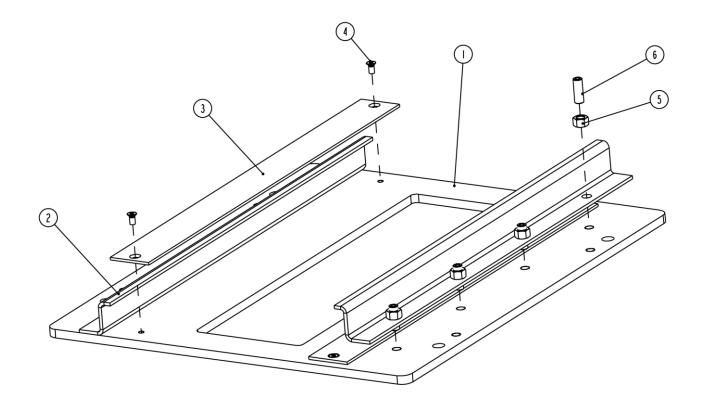
## Annex 4, Pneumatic schemes and parts list



POS.	Code	Description	Specification	Qty
1	321004006	Air filter combination	AFC2000-M	1
2	310103008	Three way bending connector	PX8-M14S	1
3	123010201	Air hose	D=8	1
4	310103006	Three way quick pneumatic connector	KLE-8	1
5	310201002	Silencer	SLM02R1/4 (M12)	3
6	310401001	Pneumatic solenoid valve	3V210-08DC24V	1
7	310102024	Quick bending pneumatic connector	KLL8-01	4
8	310501005	Pneumatic cylinder	CQ2B32*30D	4
9	310201003	Silencer	SLM01 R1/8 (M8)	3
10	310501018	Pneumatic cylinder	SU-50*100-LB	2
11	310101015	Quick straight connector	KLC8-02	7
12	330301002	Manual pneumatic valve	4L210-08	1

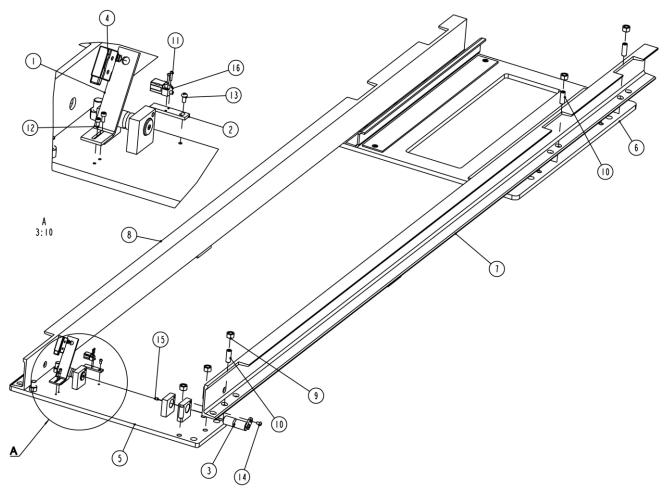


## Annex 5, Mechanically exploded drawings and parts list



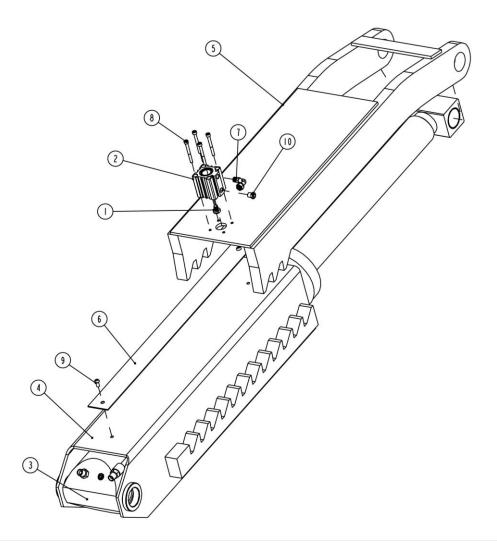
POS.	CODE	Description	Specification	Qty
1	410601010	Base frame B	HX6-A1-B2-C1	1
2	410601020	Slider base plate	HX6-A1-B2-C2	2
3	410601030	Slider pad plate	HX6-A1-B2-C3	2
4	202111008	Hex socket flat head screw	M10X15-GBT70_3	4
5	203101009	Hex nut M16	M16-GB6170	8
6	202205002	Set screw with flat point	M16X50-GB77	8





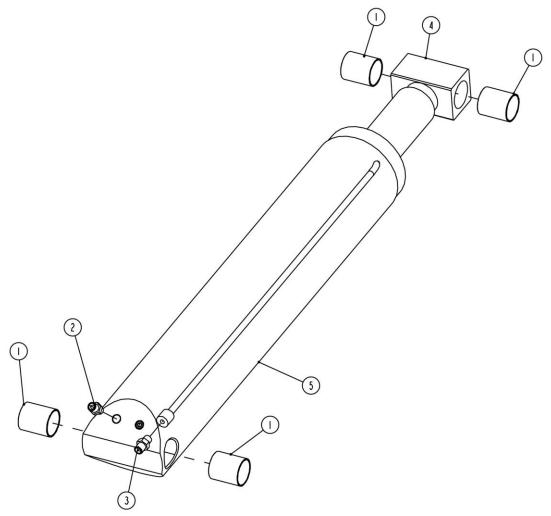
POS.	CODE	Description	Specification	Qty
1	410254273	Holder for limit switch	6604V2-A1-B2	1
2	410250013	Plate for downside limit switch	6604V2-A1-B3	1
3	612026006	Shaft for support bracket A	6605-A12	2
4	320301003	Limit switch	LJW1-Z-15GQ-B(CNTD-CM-1307)	1
5	614060010	Base frame A	HX6-A1-B1	1
6	615060020	Large base frame	HX6-A1-B2	1
7	614060020	Connection slot steel A	HX6-A1-B3	1
8	614060030	Connection slot steel A	HX6-A1-B4	1
9	203101009	Hex nut	M16-GB6170	10
10	202205002	Set screw with flat point	M16X50-GB77	10
11	202101002	Cross socket cap head screw	M3X15-GB818	2
12	202109027	Hex socket cylinder head screw	M8X12-GB70_1	2
13	202109027	Cross socket button head screw	M8X12-GB70_2	3
14	202110004	Hex socket button head screw	M8X12_GB70_2	2
15	208106002	Oil cup M8	M8YP_GB7940_4	2
16	320302002	Proximity limit switch	PL05-N/1.8M	1





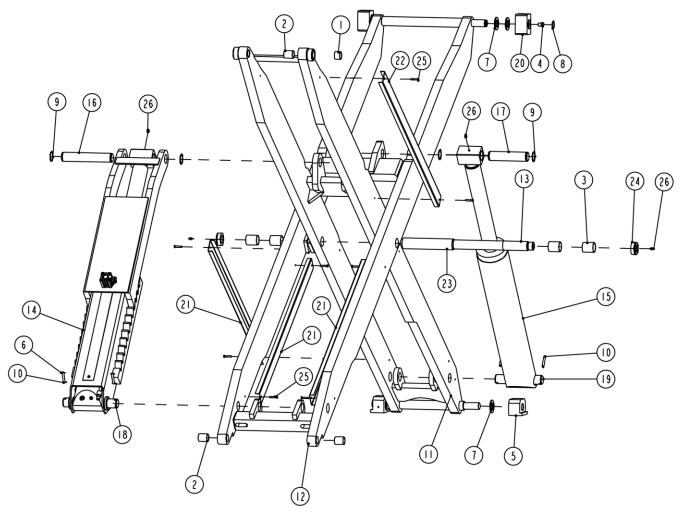
POS.	CODE	Description	Specification	Qty
1	<b>4</b> 20420010	Adjustable head	66035-A03-B09	1
2	310501005	Pneumatic cylinder	ACQ-32X30D	1
3	615060050	Main oil cylinder	HX6-A2-B5	1
4	614060060	Sheath of mechanical safety lock	HX6-A2-B4-C2	1
5	614060070	Larger side plate	HX6-A2-B4-C3	1
6	410600041	Stainless steel plate	HX6-A2-B4-C4	1
7	310102024	Quick bending pneumatic cylinder	KLL8-01	1
8	202109015	Hex socket cylinder head screw	M5X50-GB70	4
9	202101027	Cross socket cap head screw	M6X8-GB818	2
10	310201003	Silencer	PSV1_8	1





POS.	CODE	Description	Specification	Qty
1	205101060	Lubrication bearing	4050-SF-2X	4
2	330305009	Straight connector with throttle valve	BDPF-G14-G14-160	2
3	615019005	Tube connector B	EEB-QJT-001	1
4	410266021	Three way oil cylinder connector	HX6-A2-B4-C1	1
5	615026703	Main oil cylinder	HX6-MMCYL	1

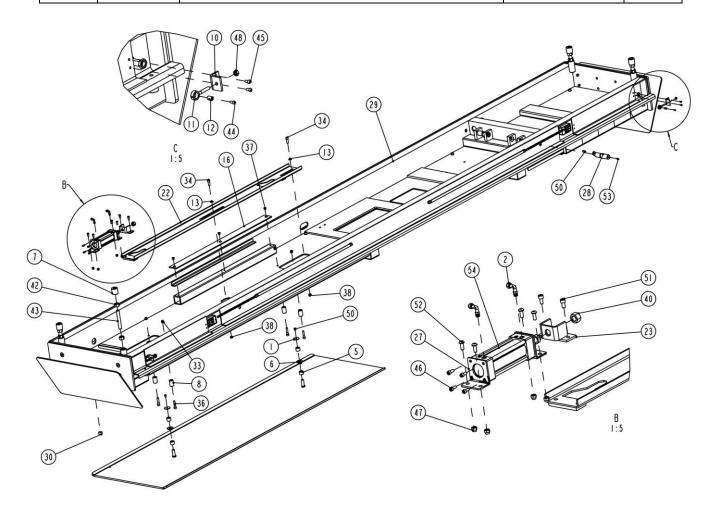




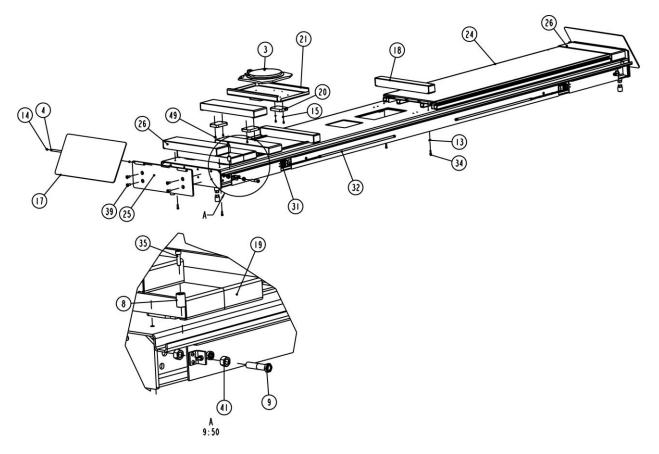
POS.	CODE	Description	Specification	Qty
1	205101018	Lubrication bearing	3025-SF-2X	2
2	205101055	Lubrication bearing	3040-SF-2X	4
3	205101060	Lubrication bearing	4050-SF-2X	4
4	420250090	Small padding block	6604V2-A3-B5	2
5	420260030B	Base slider	6605B-A6-B2-C2	2
6	208101024	Cotter pin	D2X12-GB91	8
7	204101015	Flat washer	D30-GB95	6
8	204301011	Circlip	D30-GB894_1	2
9	204301014	Circlip	D40-GB894_1	6
10	208101023	Pin (with hole)	D8x55-GB880	4
11	614060040	Inside support scissor bracket	HX6-A2-B1	1
12	614060050	Outside support scissor bracket	HX6-A2-B2	1
13	410266011	Middle shaft	HX6-A2-B3	1
14	615060040	Mechanical safety latch assembly	HX6-A2-B4	1
15	615060050	Main oil cylinder	HX6-A2-B5	1
16	410266041	Upside shaft for oil cylinder	HX6-A2-B6	1



POS.	CODE	Description	Specification	Qty
17	410266031	Upside shaft for auxiliary cylinder	HX6-A2-B7	1
18	410266051	Downside shaft for oil cylinder	HX6-A2-B8	1
19	410266071	Downside shaft for auxiliary cylinder	HX6-A2-B9	1
20	420261010	Platform slider	HX6-A2-B10	2
21	410601050	Oil hose slot A	HX6-A2-B11	3
22	410601060	Oil hose slot B	HX6-A2-B13	2
23	410266120	Middle shaft spacer	HX6-A2-B14	1
24	203103017	Hex locking nut	M36X3	2
25	202111021	Hex socket flat head screw	M6X35-GB70-3	10
26	208106001	Straight oil cup	M8YB_GB9740_1	4





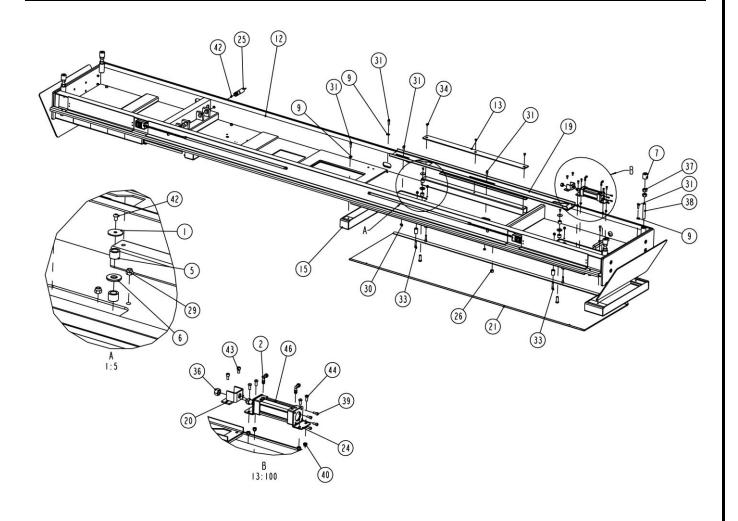


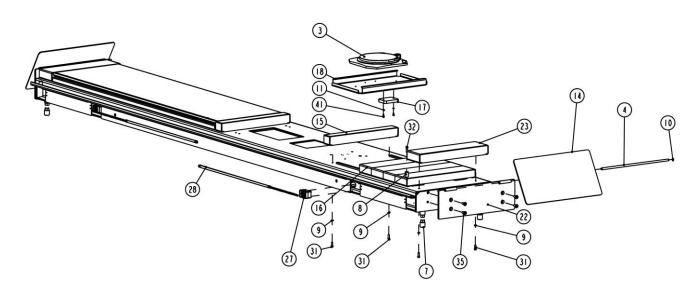
POS.	CODE	Description	Specification	Qty
1	204104001	Large washer	М8Ф40*Ф8.4*2.5	2
2	310102024	Bending connector	KLL8-01	2
3	615027049	Turntable	400*400	1
4	410195071	Shaft for guiding plate	65012-A5-B1-C4	2
5	420250010	Nylon sheath	6604-A1-B3	4
6	410250011	Washer	6604B-A1-B5	2
7	420260010	Adjustable nylon block	6605-A1-B8	4
8	420260040	Limit block	6605B-A21	6
9	410260141	Connection rod	6605B-A30	1
10	410260131	Support plate	6605B-A22-B1	2
11	612026001	Pulling rod assembly	6605B-A22-B2	2
12	410280381	Small shaft	6605B-A22-B3	2
13	204101006	Flat C washer	D10-GB95	10
14	204301004	Circlip D15	D15-GB894_2	2
15	204101005	Flat washer D8	D8-GB95	8
16	410600064B	Padding plate of the UP slider	HX6-A3-B3	2
17	614060090	Small ramp	HX6-A3-B4	2
18	614060100	80 fixed box	HX6-A3-B5	2
19	614060110	Вох	HX6-A3-B6	4



POS.	CODE	Description	Specification	Qty
20	420261020	Slider	HX6-A3-B7	12
21	410601070	Tray for turntable	HX6-A3-B8	1
22	614060120	assembly for slip plate going back to middle position	HX6-A3-B9	1
23	614060130	Transmission bar for pneumatic cylinders	HX6-A3-B10	1
24	614060140	Slip plate assembly	HX6-A3-B11	1
25	614060230	Ramp assembly	HX6-A3-B12	2
26	614060150	Fixed bot (176)	HX6-A3-B14	2
27	410600141	Installation holder for pneumatic cylinder	HX6-A3-B15	2
28	612060002	Support shaft for lifting platform	HX6-A3-B16	2
29	614060170B	Platform B	HX6-A3B-B1	1
30	208105004	Heavy duty directional ball	KSM-15	52
31	320305002	Rocker switch	CBSN-310	2
32	321201021C	LED lamp	LED	2
33	203103002	Hex locking nut	M10-GB889	4
34	202109043	Hex socket cylinder head screw	M10X30-GB70	10
35	202109044	Hex socket cylinder head screw	M10X35-GB70	2
36	202109097	Hex socket cylinder head screw	M10X45-GB70	4
37	202111008	Hex socket flat head screw	M10X8-GBT70_3	6
38	203101006	Hex nut	M10_GB6170	2
39	202109061	Hex socket flat head screw	M14X35-GB70_3	8
40	203101009	Hex nut	M16-GB6170	1
41	203101011	Hex nut	M18-GB6170	2
42	203101012	Hex nut	M20-GB6170	8
43	202205005	Hex socket flat head set screw	M20X140-GB77	4
44	202101021	Hex socket cap head screw	M5*10	4
45	202110003	Cross socket button head screw	M6X12-GB818	4
46	202109020	Hex socket cylinder head screw	M6X15-GB70	8
47	203103006	Hex locking nut	M8-GB889	4
48	203103006	Hex nut	M8-GB6170	2
49	202109027	Hex socket cylinder head screw	M8X12-GB70	24
50	202110004	Hex socket button head screw	M8X12_GB70_2	4
51	202109028	Hex socket cylinder head screw	M8X16_GB70	2
52	202110005	Hex socket button head screw	M8X20_GB70_2	4
53	208106002	Oil cup	M8YP_GB7940_4	2
54	310501018	Pneumatic cylinder	SU-50X100	1





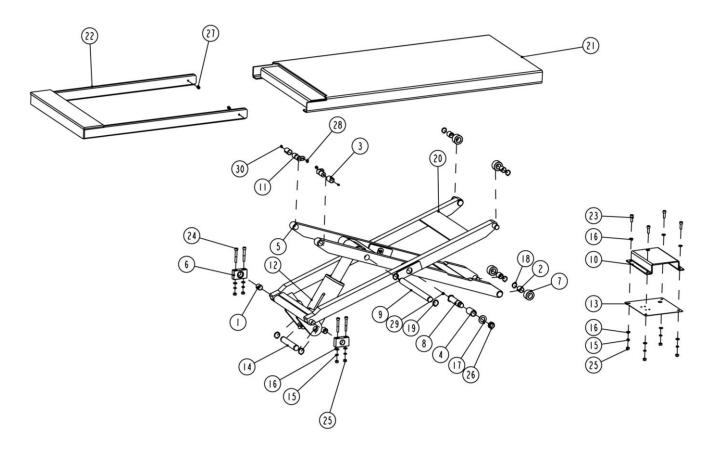




POS.	CODE	Description	Specification	Qty
1	204104001	Large washer	М8Ф40*Ф8.4*2.5	2
2	310102024	Bending connector	KLL8-01	2
3	615027049	Turntable	400*400	1
4	410195071	Shaft of the guiding plate	65012-A5-B1-C4	2
5	420250010	Nylon sheath	6604-A1-B3	4
6	410250011	Washer	6604B-A1-B5	2
7	420260010	Nylon slider	6605-A1-B8	4
8	420260040	Limit block	6605B-A21	6
9	204101006	Flat washer	D10-GB95	8
10	204301004	Circlip D15	D15-GB894_2	4
11	204101005	Flat washer D8	D8-GB95	8
12	614060080B	Platform A	HX6-A3-B1	1
13	410600064B	Padding plate of the UP slider	HX6-A3-B3	2
14	614060090	Small ramp	HX6-A3-B4	2
15	614060100	80 fixed box	HX6-A3-B5	2
16	614060110	Вох	HX6-A3-B6	4
17	420261020	Slider	HX6-A3-B7	12
18	410601070	Tray for turntable	HX6-A3-B8	1
19	614060120	assembly for slip plate going back to middle position	HX6-A3-B9	1
20	614060130	Transmission bar for pneumatic cylinders	HX6-A3-B10	1
21	614060140	Slip plate assembly	HX6-A3-B11	1
22	614060230	Ramp assembly	HX6-A3-B12	2
23	614060150	165 fixed box	HX6-A3-B14	2
24	410600140	Installation bracket for pneumatic cylinder	HX6-A3-B15	2
25	612060002	Shaft for support bracket B	HX6-A3-B16	2
26	208105004	Heavy duty directional ball	KSM-15	52
27	320305002	Rocker switch	CBSN-310	2
28	321201021C	LED lamp	LED	2
29	203103002	Hex locking nut	M10-GB889	4
30	203101006	Hex nut	M10-GB6170	2
31	202109043	Hex socket cylinder head screw	M10X30-GB70	10
32	202109044	Hex socket cylinder head screw	M10X35-GB70	2
33	202109097	Hex socket cylinder head screw	M10X45-GB70	4
34	202111008	Hex socket flat head screw	M10X8-GBT70_3	6
35	202109061	Hex socket flat head screw	M14X35-GB70_3	8
36	203101009	Hex nut	M16-GB6170	1
37	203101012	Hex nut	M20-GB6170	8
38	202205005	Hex socket flat head set screw	M20X140-GB77	4



POS.	CODE	Description	Specification	Qty
39	202109020	Hex socket cylinder head screw	M6X15-GB70	8
40	203103006	Hex locking nut	M8-GB889	4
41	202109027	Hex socket cylinder head screw	M8X12-GB70	24
42	202110004	Hex socket button head screw	M8X12_GB70_2	4
43	202109028	Hex socket cylinder head screw	M8X16-GB70	2
44	202110005	Hex socket button head screw	M8X20_GB70_2	4
45	208106002	Oil cup M8	M8YP_GB7940_4	2
46	310501018	Pneumatic cylinder	SU-50X100	1

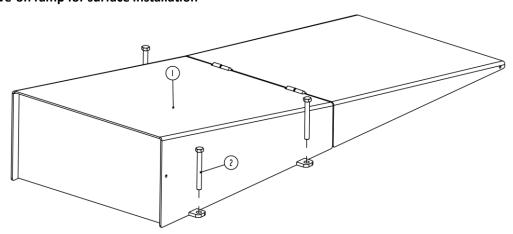


POS.	CODE	Description	Specification	Qty
1	205103003	Flange screw	2525_SF-1X	2
2	205101012	Lubrication bearing	2530_SF-1X	4
3	205101094	Lubrication bearing	2540_SF-2X	2
4	205101025	Lubrication bearing	3058_SF-2X	2
5	614027270B	Inside connection rod A for auxiliary lift	6435BWF-C05	1
6	410276701	Downside support holder for auxiliary lift	6435BWF-C03-20	2
7	410276711B	Wheel	6435BWF-C03-21	4
8	410276721C	Middle pivot shaft	6435BWF-C03-22	2
9	410276731	Pivot shaft for piston rod	6435BWF-C03-23	1



POS.	CODE	Description	Specification	Qty
10	410276813	Limit switch for auxiliary switch	6435BWF-C11-1	1
11	612019504	Shaft for support holder	65012-A1-B5	2
12	615026701	Main cylinder for auxiliary lift	HX6-SMCYL	1
	615026702	Secondary cylinder for auxiliary lift	HX6-SSCYL	1
13	410254430C	Wearing plate	6604V2-A7-B4	1
14	410254541	Downside shaft for cylinder of auxiliary lift	6604V2-A7-B7	1
15	204201005	Spring washer	D10_GB93	8
16	204101015	Flat washer	D10_GB95	12
17	204101012	Flat washer	D24-GB95	2
18	204301009	Circlip	D25-GB894_1	4
19	204301011	Circlip	D30-GB894_1	4
20	614060180	Outside support scissor bracket of auxiliary lift	HX6-A4-B1	1
21	614060190	Platform assembly for auxiliary lift	HX6-A4-B2	1
22	614060200	Platform extension for auxiliary lift	HX6-A4-B3	1
23	202109043	Hex socket cylinder head screw	M10X30_GB70	4
24	202109080	Hex socket cylinder head screw	M10X70_GB70	4
25	203101006	Hex nut	M10_GB6170	8
26	203103018	Hex locking nut	M24ZS	2
27	202109027	Hex socket cylinder head screw	M8X12-GB70	2
28	202110004	Hex socket button head screw	M8X12_GB70_2	2
29	208106001	Straight oil cup	M8X1_GB7940_1	2
30	208106002	Oil cup M8	M8YP_GB7940_4	2

### Optional drive-on ramp for surface installation



POS.	CODE	Description	Specification	Qty
1	615060170	Drive-on ramp assembly	HX6-A29	2
2	201201007	Expansion bolt	M18*160	8

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