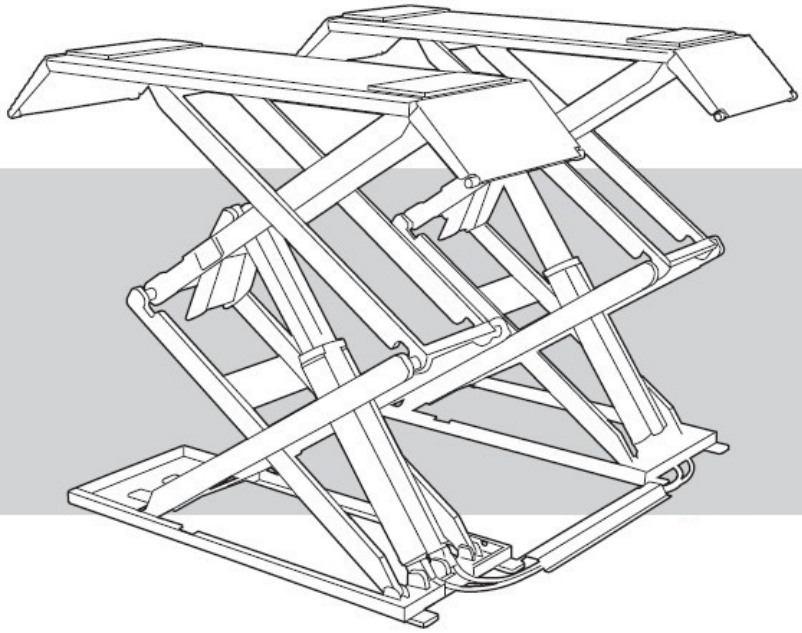
+++ HYCLCB3000 Double scissor lift 3000kg 220V CE+++

DOUBLE SCISSORS LIFT

Installation/Operation & Maintenance Manual



Notice:

•The manual Pictures are for reference only. Actual products are subject to the specific kind prevail .

•The Specification in this manual may change without prior notice

•Any part of this manual cannot be reproduced without prior approval.

•Please read this manual before you get started.

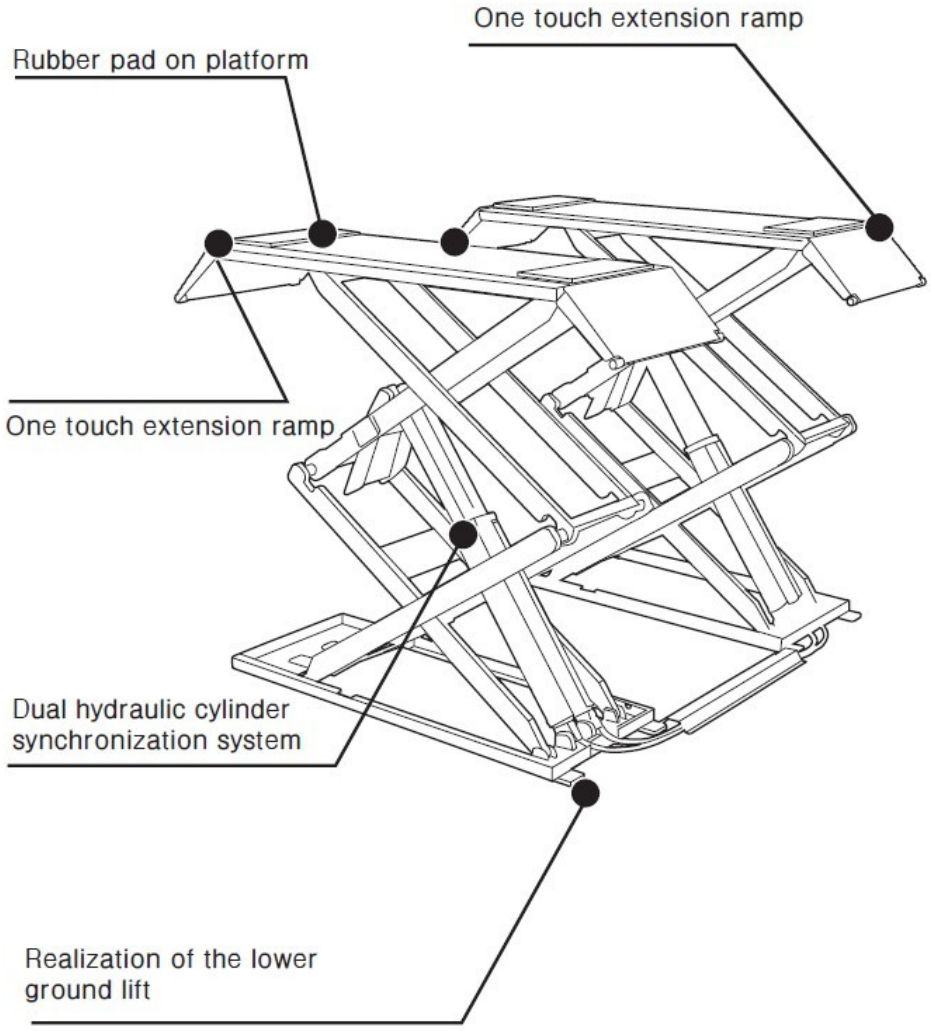
•You must read and understand the precautions for safety to protect your safety and any damage to your property.

NOTE TO THE USER

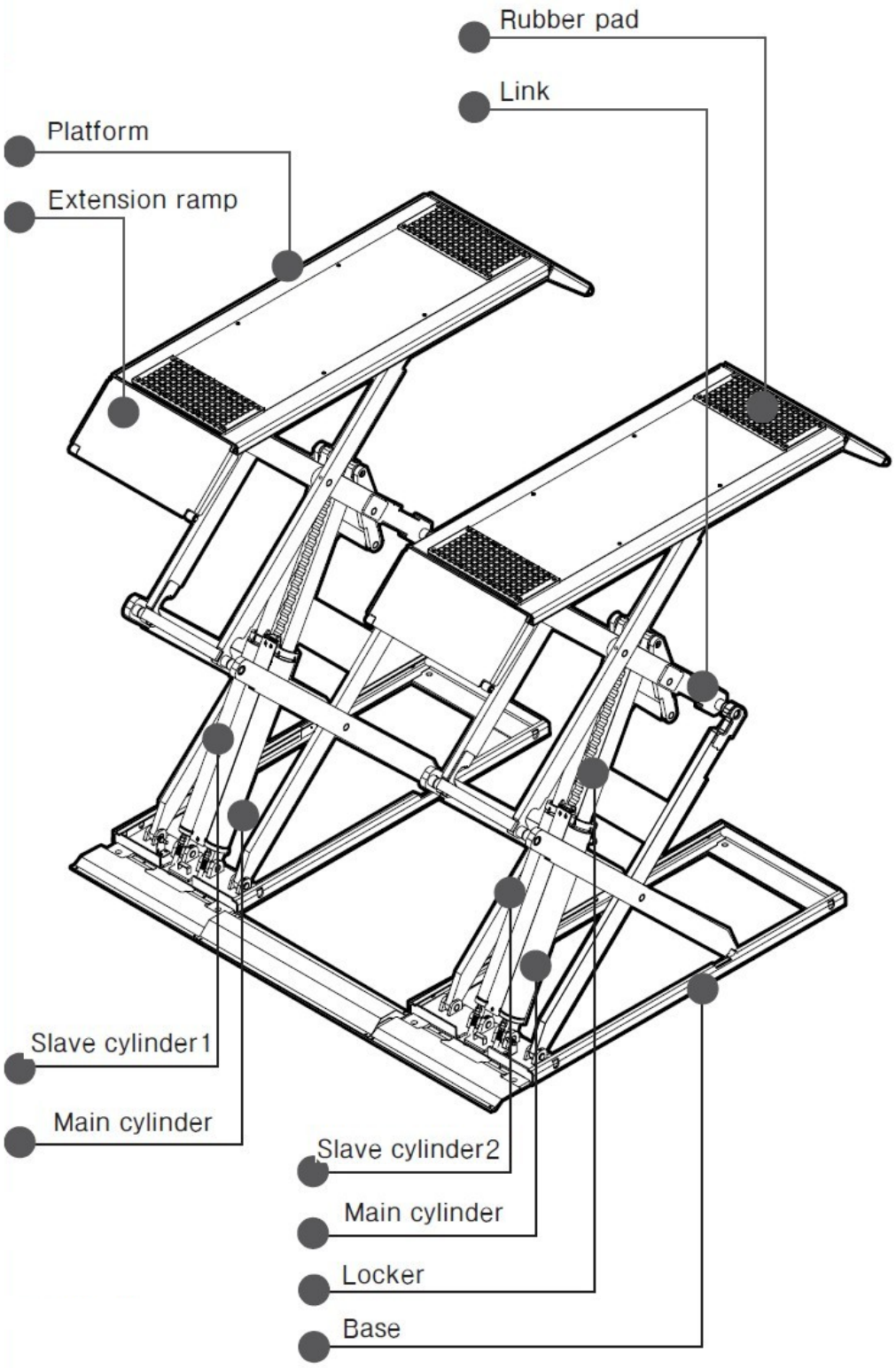
Thank you for purchasing
Please read this instruction carefully for safe and proper use of the car lift, and keep it handy for future reference.

- As for the assurance of safety in design and construction of car lift, read this Manual first.
- Please make sure that this Manual is delivered to end users for their implementation of safety.
- Don't use the car lift in a potentially explosive atmosphere.

INTRODUCTION 1



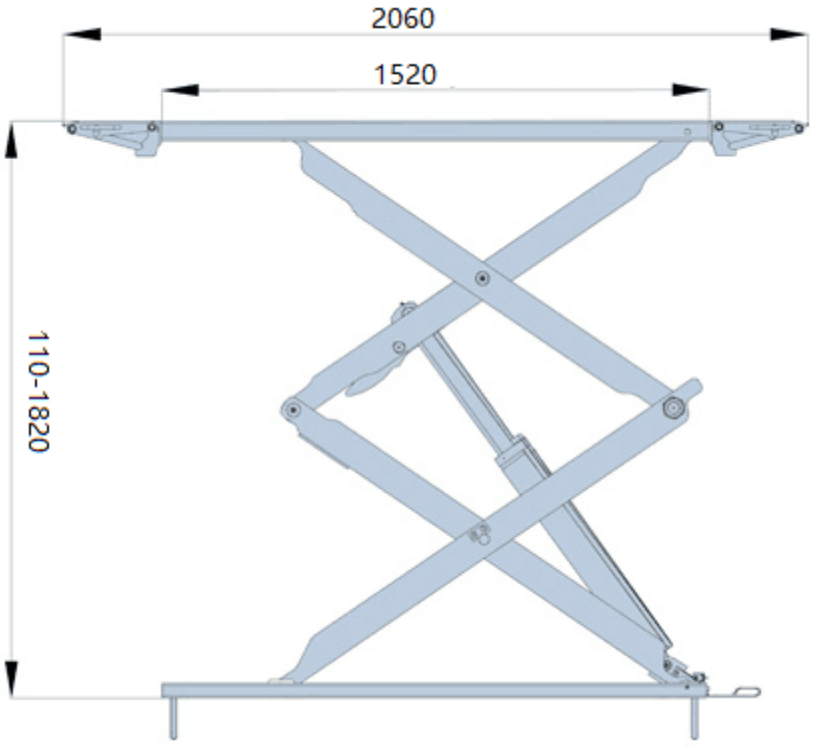
INTRODUCTION 2

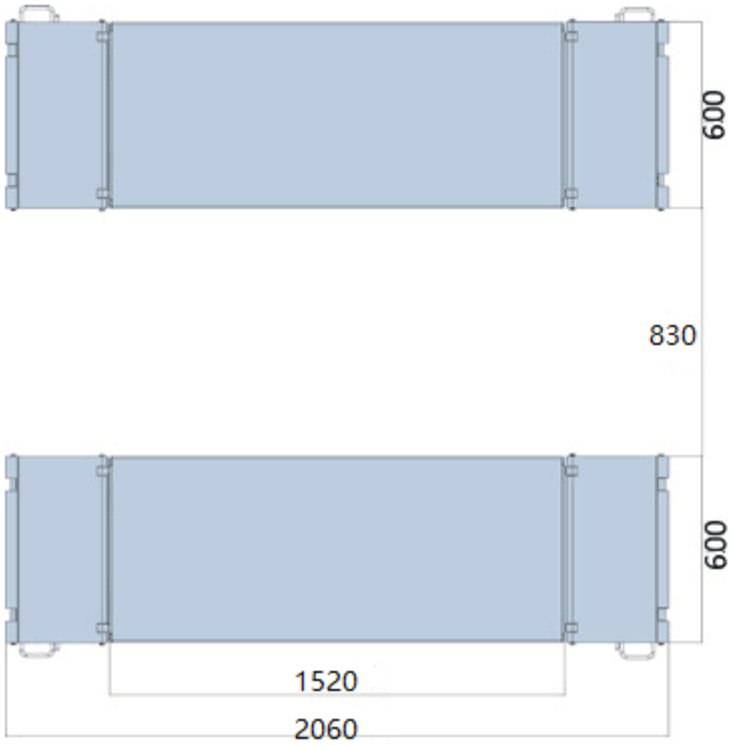


Technical data

Rated load capacity	3000KG
Full rise height	1820mm
Full lowered height	110mm
Full rise time with load	≤50s
Full lowering time with load	≤30s
Hydraulic pressure	22-24MPa
Pneumatic pressure	6-8kg/cm²

DIMENSIONAL DRAWING





Danger/warning/caution

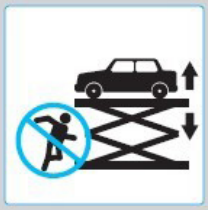
Rules for illustrations in the Manual.

These are the rules for the illustrations in the manual. Make sure that you read them and understand them.

Danger	Make sure you follow the instructions, otherwise critical injuries can occur.
Warning	Make sure you follow the instructions, otherwise critical injury or damage can occur.
Caution	Make sure you follow the instructions; otherwise, injury or damage can occur
Tip	The terms are described to enhance the understanding of the equipment.
Point	Information to use the equipment efficiently.
Stop!	Precautions or check points for the use of the equipment.
	Please refer to the page

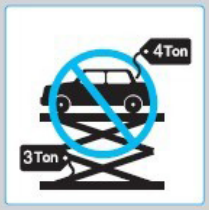
Danger

Do not come under the vehicle during operation.
▶It may cause severe injuries.



Evacuate to a safe place instantly in the event that the vehicle tips.
▶It may cause severe injuries.

Do not overload the rated capacity.
▶It may cause severe injuries.



※Not following the instructions can lead to a critical accident involving your life. Make sure you follow the instructions.

Warning

Warning before using the equipment

Only trained personnel may operate the equipment. Inexperience can cause accidents.

Position the vehicle to make sure that it is balanced front and rear, right and left(otherwise the vehicle may fall off).

Do not operate damaged equipment(a critical accident could occur – contact your supplier)

After a vehicle is placed on the lift make sure that the hand brake is applied. Passenger transport is forbidden.

Warning

Warning while operating

Allow no unauthorized persons in the work area.

Before lowering the lift, check that there are no obstructions under the vehicle or the lift arms.

When the vehicle is lifted, do not rock it as this may dislodge it.

Do not lift a vehicle using one pair of arms only.

Warning

Warning while operating

To avoid injury, keep your feet clear of the arms and carriages.

Before going under the lift, make sure that the safety pawls are engaged.

To avoid being electrocuted, disconnect the main power before opening the control panel.

Do not modify the control panel or the safety functions as this may impair their function.

Caution

Warning when operatingoperating

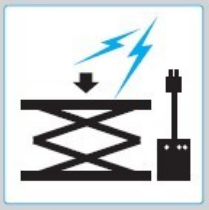
Do not rock the vehicle when lifted. Do not use a high pressure cleaner as the vehicle lower part.

Read and fully understand the manual before using the lift

Warning before using the equipment

Check the safety devices to see that they are clean and operable.

If the lift is idle for a long time, disconnect the main power supply. In the event of thunder storm. disconnect the main power supply.



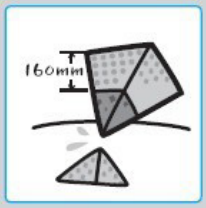
Caution

The lift should be installed by skilled engineers either or appointed representatives. Failure to observe this makes the lift warranty invalid. If the lift is to be moved to another site at a later date, it must be reinstalled by skilled engineers either from appointed representatives.

Checklist before installing

Installation site

The site must be flat and horizontal. The floor must have minimum 160mm depth of reinforced concrete.

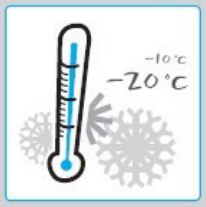


Surface load under the posts must be minimum 25N/㎟.

To maintain the warranty, the lift is intended for indoor installation only. In the event that it is installed outside it should be protected from snow and rain. Outdoor installation makes the warranty invalid.

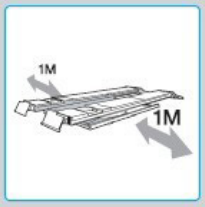
Installation site

Ambient temperature −10℃ to 50℃. Do not operate under freezing conditions.



Vehicle access to the lift must be safe and easy.

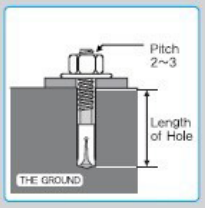
There must be a safe working distance of minimum 1m between the lift and the wall or any fixed object.



Installation site

- Hoist to be installed in dry location.
- If hoist is installed in a sufficient fit, the drainage should allow to keep hoist dry.
- If hoist gets wet make sure all electrical wiring is dried before operation as it could cause electric shock or damage to PCB.

To ensure that the anchor is secure, the hole for an anchor bolt must be more than 2/3 of the bolt length.

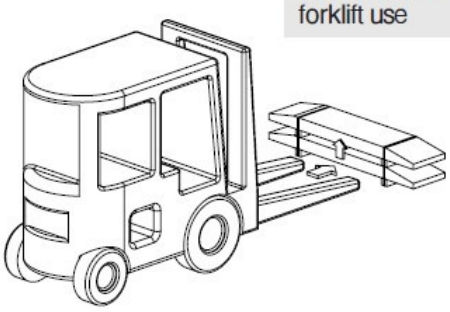


Skilled engineers sale representative agency shall install the lift, otherwise a failure may occur.

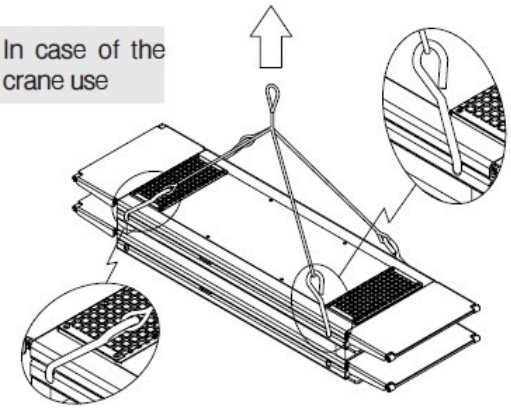
Landing down the product at the place to be installed

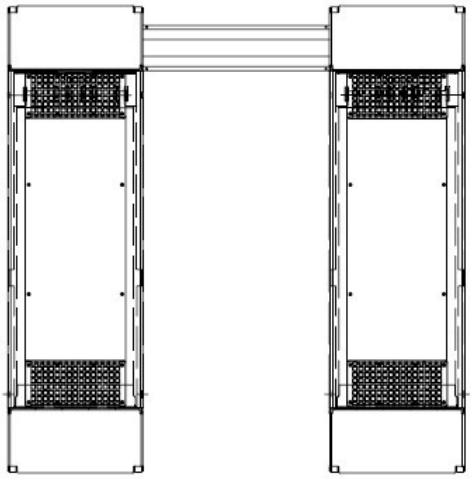
▶Place the lift main body at the place to be installed referring to layout document.
▶Fixing the product after checking the caution notes.

In case of the forklift use



In case of the crane use





■Fixing the base with anchor bolt

▶Fix the 8pcs Anchor bolt of the base plate and 2pcs Anchor bolt of the control panel after supporting lift using liner.

■Fixation horizon of the base

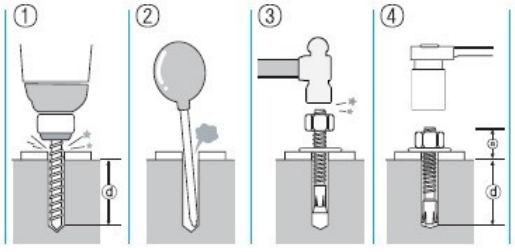
▶After adjusting horizon of the product precisely, fix up using anchor bolt.

1 Adjust the level of the base

After measuring the horizontal status, lay down the lie.

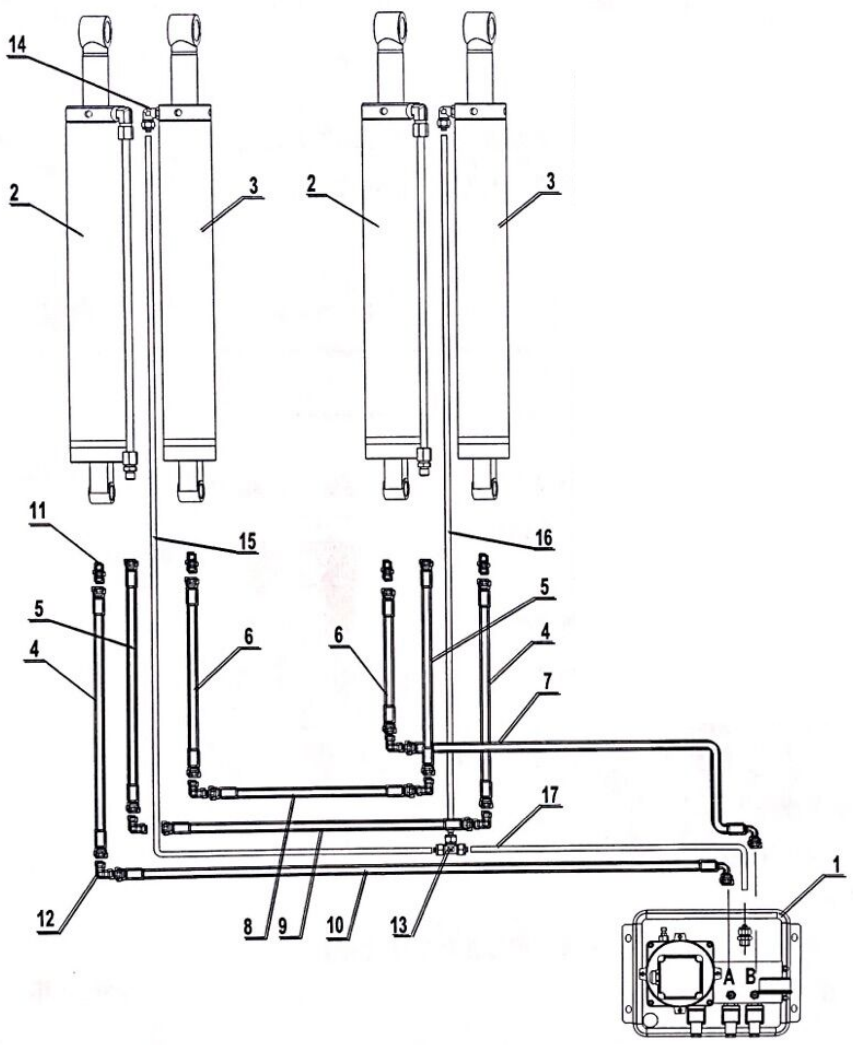
2 Fixation of base (anchor)

After adjusting the level, fix up the base platform using anchor.



Anchor bolt installation.
(1)Drill a hole (d: hole depth)
(2)Clean the inside of the hole
(3)Put the anchor bolt into the hole and hammer in until it reaches the bottom of the hole
(4)Tighten the bolt with a spanner.
(a:35~45mm)
- Torque : 80~100N.m

Hydraulic connection



Number	Name	Quantity
1	Power unit	1
2	Main cylinder	2
3	Vice cylinder	2
4	Polyurethane hose assembly	1+1
5	Polyurethane hose assembly	1+1
6	Polyurethane hose assembly	1+1
7	Hose assembly	1
8	Hose assembly	1
9	Hose assembly	1
10	Hose assembly	1
11	1BT-04SP	4
12	1B9-04SP	6
13	Fast tee Φ10	1
14	Φ10-1/4	2
15	Φ10*Φ6.5*2300C	1
16	Φ10*Φ6.5*900C	1
17	Φ10*Φ6.5*3000C	1

Start testing

Make sure that all people and other items are not in the work area.

So that the supply voltage of the electrical system is equal to the voltage of the control box of the lift.

Ensure that the control cabinet is powered on.

Fuel tank (about 15 liters more than once).

Turn on the power to turn on the main power switch.

Check that the direction of rotation of the motor is the same as on the label. If the same is the same, when the push button is pressed, the oil in the tank is reduced; if there is no reduction, exchange the position.

Lifting machine charge and exhaust adjustment: In the case of no load, press the up button to the main fuel tank, while the two tables will slowly rise, reach the upper limit position after the lift will stop working, then need Colleagues press the release button, then the two tables will continue to rise, rising a little, the main cylinder of the hydraulic oil will be through the main fuel tank between the tubing to the auxiliary fuel tank automatically fill the fuel tank, The oil return pipe at the upper end of the cylinder is automatically returned to the tank, and the return pipe is transparent and easy to observe. After the oil return pipes of the two auxiliary tanks are kept in the oil for about 30 seconds, in order to fully vent, release the rising button, Automatically down some, and will automatically be in the two stands equal height position. And then press the drop button, the two tables down to the height limit required below the height, then the automatic leveling process is completed, enter the normal use of the operation of the state. The initial installation of the use of the above-mentioned operation should be repeated up and down 2-3 times, the purpose for the full exhaust.

After a period of use, if you find that the two tables are not in the same horizontal position, you can re-adjust the method as described above.

Testing and inspection

Mechanical inspection: the platform and the bottom of the lock on the slide position with lubricating oil.

With 8 feet bolts minimum size 16mm, so that the lift fixed to the ground.

Check if the bolts are tightened.

Wipe all the parts of the machine clean.

Electrical check: Connect as shown.

Make the lift connected to the ground.

Check the following devices, limit switches.

Hydraulic system detection: check the oil in the mailbox to meet the work needs, check no leakage, and check the cylinder action.

Set and debug

- No load detection: So that the lift to carry out two or three movements to check; lift to reach the maximum height, the correct operation of the maximum height limit switch, the correct operation of the drop limit.

	**WARNING: Please follow the instructions carefully to avoid damage to the lift.**

- Load detection: check the oil line is leaking, the foot assembly is solid, all above normal can be tested, with the locomotive experiment, but the first time not to lift too high, should gradually increase the height, load 3000kg run 2-3 times, No abnormal noise and leakage, and lifting time and lifting height are in line with technical parameters, the end of the test. If the two tables are not in the same plane, please refer to the previous relevant operational procedures, the machine will be adjusted to a steady state. After the normal test, can be put into normal use.
- Check the screw: After loading the test, please check the machine's screws, nuts are tightened.

Limit switch commissioning

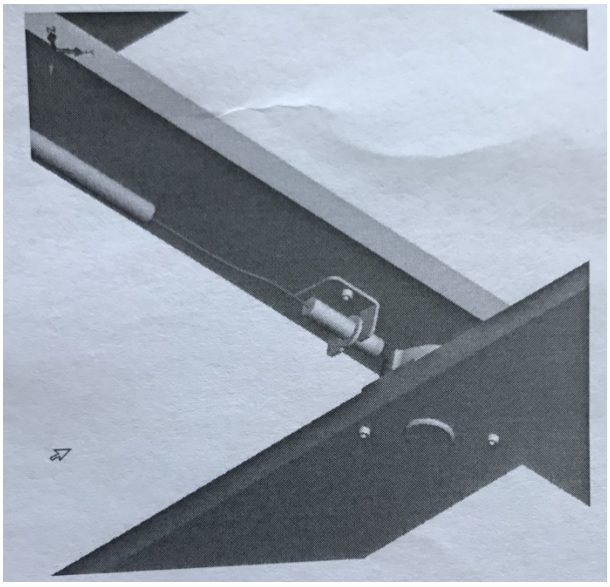
	**Only professionals can operate, incorrect use of the limit switch will cause damage to the lift, person and other items.**

The limit switch needs to be adjusted during the installation of the lift. If the function of the limit switch is not adjusted, it is necessary to follow the following methods to debug.

Raise the lift to 1820mm.

Loosen the rear ring adjustment screw to adjust the limit ring to the desired height.

Tighten the screws.

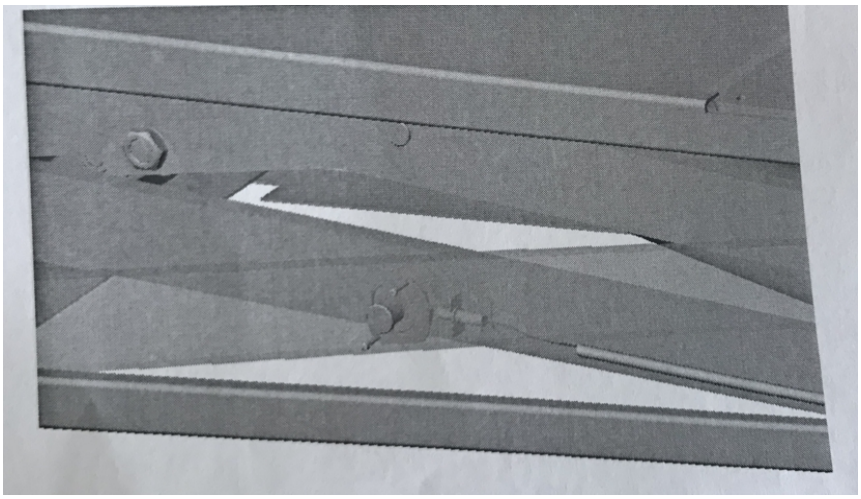


Adjust the safety height limit switch:

Raise the lift to 400mm.

Loosen the rear of the limit ring to adjust the screw to adjust the height required for the retaining ring.

Tighten the screws.



Use and operation

Main power switch: The lift circuit is energized.

Rising button: press the up button, the motor is running, the electromagnetic hydraulic control valve is activated, and the lift rises and reaches the lift limit.

Drop button: press the drop button, the electromagnetic hydraulic valve is activated, the lift down to a safe height and then stop falling; release the button and then press again, a few seconds after the electromagnetic hydraulic valve open, lift down.

1. Car positioning

Place the car on the center of the platform to adjust the telescopic plate

Place the pad on the lift position indicated by the car manufacturer

2. lift up

Turn on the main power switch, press the up button to lift the car to the desired height.

Stand upright

When the lift is upright, rise to the desired position, release the button, the lift automatically stops.

Drop down

Press the drop button

At a safety height above 400mm, its weight and weight of the car make the lift down.

Make sure the work area is safe, nobody and other items, press the drop button again.

5. Manual and emergency descent

If the power failure and control box damage, you can follow the following methods to lift the lift to the original position.

Turn off the main power switch

Open the control cabinet cover

Rotate (counterclockwise rotation) Safety solenoid valve Gold color manual knob

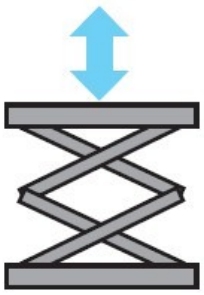
Unscrew (counterclockwise gradually) Decrease the solenoid valve Gold hand knob, you can lift the lift.

Down to complete the customer in time to tighten the manual knob (clockwise), or normal power supply, the lift can not rise.

	**WARNING: Manual drop after the end, and returned to normal operating state, if the manual drop valve is opened, the lift can not rise.**

Check points before operation

Before loading the lift, check the following points.



■ Test operation

▶Operate ascent and descent 2~3 times under no load condition.

■ Switch operation

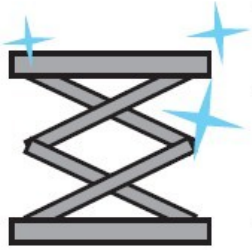
▶Check that the ascent and descent push buttons are working correctly.

■ Hydraulic check

▶Check if there are no hydraulic leaks from either cylinders, pipes, or hose joins.

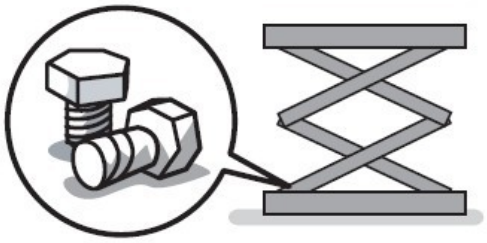
■ Mechanical check

▶Check the tightness of all nuts, bolts, etc.



■ Exterior check

▶Check the exterior of the lift to ensure that there is no obvious damage.



■ Cleanliness

▶Check every day that the lift is clean and that the work area is clean and free from debris or obstructions.

Inspect the lift everyday to operate the lift safely for a long time.

Equipment maintenance and service

■ Lubrication

▶Periodic grease and oil injection maintain the product to be safe.

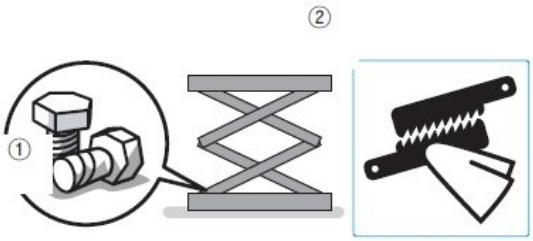
▶Grease or oil should be applied every 2 or 3 months to the parts shown below.

1 Injecting grease

▶Inject enough grease at shaft of auxiliary lift and roller. (2~3 month period)

2 Injecting oil

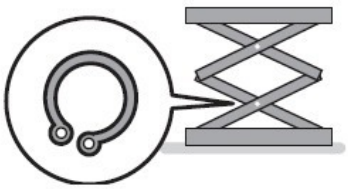
▶Location of injecting lubricating oil
- Paints the lubricant oil to the rubbing surface, base platform every 2~3 month.



■ Cleanliness

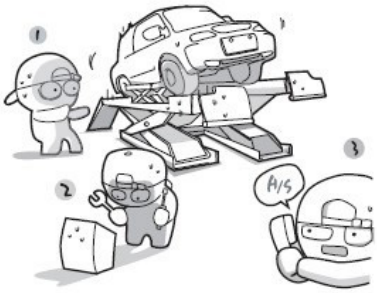
①Check the working area under and around the lift for cleanliness. Check visibly if any nuts or bolts are loose or missing. Replace and retighten as necessary.

②Safety devices
Check the area around the safety devices for cleanliness and any obstruction.



■ Check the snap-ring of the link axis

▶Check the existence of the inside and outside of the link axis.



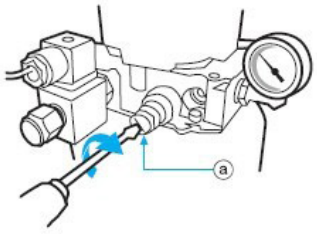
Danger

This situation is potentially very dangerous.
This operation should not be undertaken by unskilled staff. Therefore, if in any doubt, call your lift supplier immediately for after sales service.

2 Powerpack pressure

Danger

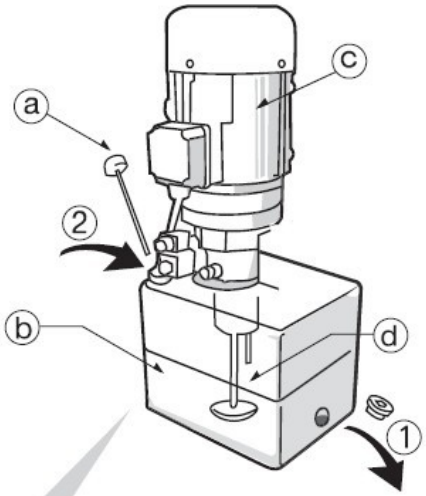
The pressure is set by the factory.
The lift may be damaged if the operator increases the pressure.
If the equipment does not lift the rated capacity, contact your lift supplier for engineer assistance.



Information for the authorized service engineer only

Open the control panel and install a pressure gauge in the pump manifold as shown. The pressure adjusting screw (a) is sealed by the factory.
Remove the seal and adjust the pressure with a screwdriver. This should be done while pressing the ascent button at the same time and with the lift loaded with the full rated capacity.

Proper pressure by 275kgf/㎠



ⓐ Cap of the oil tank
ⓑ Oil tank
ⓒ Cover of the hydraulic unit
ⓓ Oil nozzle cap

① Oil injection
② Oil discharge

3 Oil change

Oil should be changed 3 months after installation and thereafter annually.

Oil change procedure

① Remove the cover of the hydraulic unit.
② Remove the oil filter cap and dipstick.Carefully remove the oil drain plug and allow the oil to discharge into a suitable container.
③ Refit the drain plug and tighten.
④ Refill the oil tank with new oil.
⑤ Check with the dipstick that the level is correct, raise and lower the lift and recheck that the level is still correct.

Tip

At the annual oil change, after having drained the oil tank, remove the oil tank from the pump and check the condition of the pump filter.
Clean or replace as necessary.
Replace tank and follow the above procedure.

Troubleshooting

Symptoms		Check point	Corrective Action to be taken
Hydraulic Cylinder and its units	The abnormal noise at motor is hearable.	1. Rated capacity is exceeded. 2. Relief pressure is low. 3. Shortage of hydraulic oil.	1. Operate within rated capacity. 2. Adjust to relif pressure (275 bar) 3. Let air out of the hydraulic unit after supplying the oil.
	Hydraulic Oil is leaking.	1. Defect in hydraulic hoses. 2. Leakage from connecting parts. 3. Bad cylinder packing.	1. Replace the hydraulic hose. 2. Tighten the connection. 3. Request A/S.
	Oil is contaminated.	Check if water or foregin substance comes into the cylinder.	Exchange oil (annually) (Hydraulic oil : 32CST/12liter)
	The lift is not moving up.	Check if the oil is leaked or hydraulic pump are damaged.	Contact customer service department.
	The lift is not lowered.	Check if the value is properly operated.	Contact customer service department.
	The fitting parts is rusted.	Check if the grease is not sufficiently injected.	Inject the grease every 1 month.
Electric Devices	Motor is not operating and the abnormal noise at motor is hearable.	1. Check if the motor is damaged. 2. Check if the fuse is opened. 3. Check if the push button is damaged. 4. Check if the upper limit is operated. 5. Check if wiring gauge is proper. 6. Check if the input power less than 200V is supplied.	1 Replace the motor (Request A/S). 2. Replace the fuse after solving trouble. 3. Replace the push button (Request A/S). 4. Re-operate after lowering the lift. 5. Replace to the cable with over 3.5mm2 diameter. 6. Increase the input power capacity.
	Fuse is snapped	1. Check the Contact of magnetic contactor. 2. Check the capacity of circuit breaker. 3. Check if the wire is damaged.	1. Replacement (Request A/S). 2. Replacement (Request A/S). 3. Replacement after checking.
	Motor is operating but lift is not moving up.	1. Check if the rotating direction of motor is correct. 2. Check if hydraulic lines is damaged.	1. Re-operate after changing the phase connection. 2. Refer to check points for hydraulic cylinder and unit.

Check list and periodic maintenance

Inspection period	Points to be checked	Items to be checked	Inspection method	Action to be taken	Replacement period
1 week	Rubber Support for adjustment	Abrasion and deformation	Visual	Replacement	1 year
	Magnetic contactor	Damage of contact	Measurement	Replacement	2 year
3 months	Wire Rope	Abrasion, deformation and Breaking of wire	Visual	Replacement	2 year
			2 months (Use over 20 times per one day)		6 months (Use over 20 times per one day)
	Post Guide	Abrasion	Visual	Replacement	4 year
	DU bush	Abrasion	Visual	Replacement	4 year
	Axle for wire pulley	Noise and abrasion	Visual	Replacement	5 year
	Wire pully	Abrasion	Visual	Replacement	5 year
6 months	Electrical components	Damage of components	Measurement	Replacement	3 year
	Hydraulic Oil	Shortage of oil	Visual	Replacement	1 year
1 year	Piston Seal Kit	Oil leak or deformation	Visual	Replacement	3 year
	Load Seal Kit	Oil leak or deformation	Visual	Replacement	3 year