

DESCRIPTION

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FEATURES

- Hydraulic cylinder located in the fixed platform and is thus perfectly protected
- High resistance galvanised and pre-stretched lifting cable
- Adjustable parking ratchet rails ensure the platforms and cross members horizontal
- Automatic spring loaded in the event of cable breakage and ensures complete stability during parking
- Electric remote-controller.
- Hydraulic two-level 2t scissor jack (Option)
- Detachable align platforms (Option)

SPECIFICATIONS


Maximum Capacity	Main: 4,000kg Jack: 2,000kg
Maximum Height	Main: 1,800mm Jack: 510mm
Operation Method	Control panel and/or Wired remote control type
Power & Motor Voltage	230V 50Hz 1Ph
Lifting Time 2,000kg	Approximately 50 seconds
Lifting Time Unloaded	Approximately 30 seconds
Lowering Time 2,000kg	Approximately 35 seconds
Lowering Time Unloaded	Approximately 35 seconds
Total Weight	1,600kg










2. 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.







	Make sure you follow the instructions, otherwise critical injury or death can occur.
	Make sure you follow the instructions, otherwise critical injury or damage can occur.
	Make sure you follow the instructions; otherwise, injury or damage can occur.
	The terms are described to enhance the understanding of the equipment.
	Information to use the equipment efficiently.
	Precautions or check points for the use of the equipment.
	Please refer to the page

Danger





<p>Do not come under the vehicle during operation.</p> <p>► This can cause injury or death.</p> 	<p>Evacuate to a safe place instantly in the event that the vehicle tips.</p> <p>► This can cause injury or death.</p> 	<p>Do not overload the rated capacity.</p> <p>► This can cause injury or death.</p> 	<p>*Not following the instructions can lead to a critical accident involving your life. Make sure you follow the instructions.</p>
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Warning





Warning before using the equipment

<p>Only trained personnel may operate the equipment. Inexperience can cause accidents.</p> 	<p>Position the vehicle to make sure that it is balanced front and rear, right and left (otherwise the vehicle may fall off).</p> 	<p>Do not operate damaged equipment (a critical accident could occur – contact your supplier)</p> 	<p>After that a vehicle is placed on the lift make sure that the hand brake is applied. Passenger transport is forbidden.</p> 
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2. DANGER / WARNING / CAUTION

Warning while operating			
<p>Allow no unauthorized persons in the work area.</p> 	<p>Before lowering the lift, check that there are no obstructions under the vehicle or the lift arms.</p> 	<p>When the vehicle is lifted, do not rock it as this may dislodge it.</p> 	<p>Do not lift a vehicle using one pair of arms only.</p> 

Warning while operating			
<p>To avoid injury, keep your feet clear of the arms and carriages.</p> 	<p>Before going under the lift, make sure that the safety pawls are engaged.</p> 	<p>To avoid being electrocuted, disconnect the main power before opening the control panel.</p> 	<p>Do not modify the control panel or the safety functions as this may impair their function.</p> 

Warning when operating		Warning before using the equipment	
<p>Do not rock the vehicle when lifted. Do not use a high pressure cleaner as the vehicle lower part.</p> 	<p>Read and fully understand the manual before using the lift</p> 	<p>Check the safety devices to see that they are clean and operable.</p> 	<p>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.</p> 

3. CHECKLIST BEFORE INSTALLING

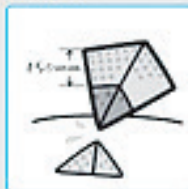


The lift should be installed by skilled engineers either from appointed representatives. Failure to observe this makes the lift warranty invalid. If the lift is to be moved to another site at a later date, it must be reinstalled by skilled engineers either from appointed representatives.

Checklist before installing

Installation site

The site must be flat and horizontal. The floor must have minimum 150mm depth of reinforced concrete.



Surface load under the posts must be minimum 25N/m².



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°C to 50°C. Do not operate under freezing conditions.



Vehicle access to the lift must be safe and easy.



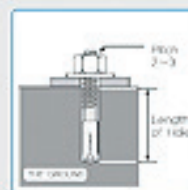
There must be a safe working distance of minimum 1m between the lift and the wall or any fixed object.



Installation site

-Hoist to be installed in dry location.
-If hoist is installed in a Pit sufficient drainage should be allowed to keep hoist dry.
-If hoist gets does get wet make sure all electrical wiring is dried before operation as 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.



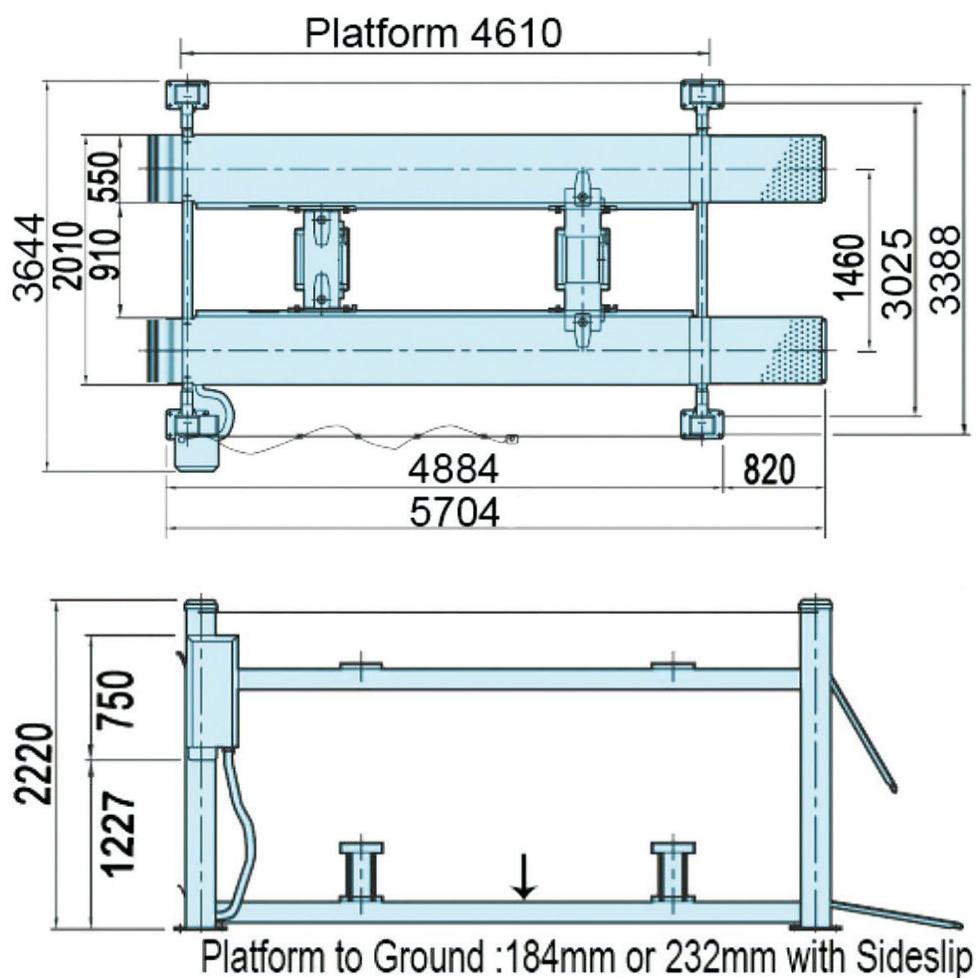
Skilled engineers sale representative agency shall install the lift, otherwise a failure may occur.



4. PLACE OF INSTALLATION (LAYOUT)

Checkpoints before selecting the place of installation

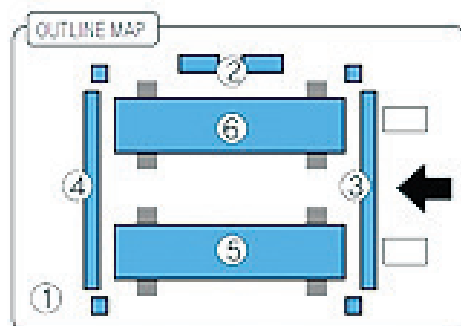
- Distance from the wall or any fixed object
- Drive on direction
- Position of power post and slave posts
- Ceiling height



5. INSTALLATION

■ Placing lift on the installation location

- Place the main parts on the appropriate position in reference to the following outline diagram.

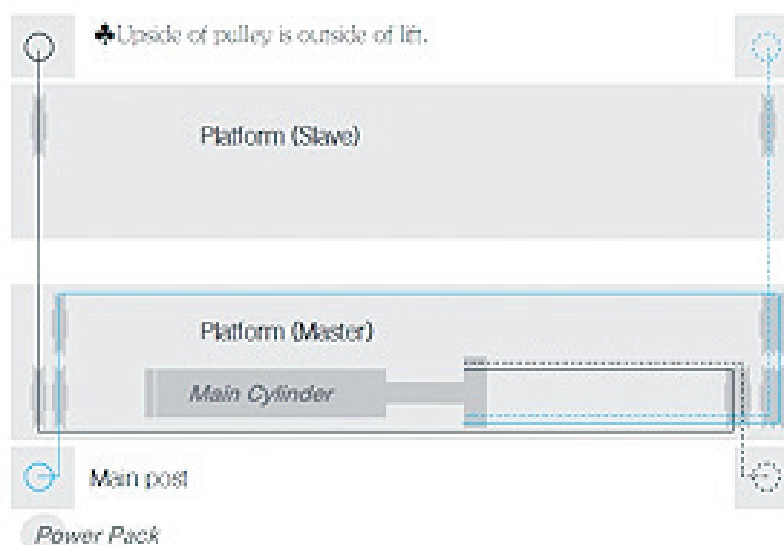


1 Order of part placement

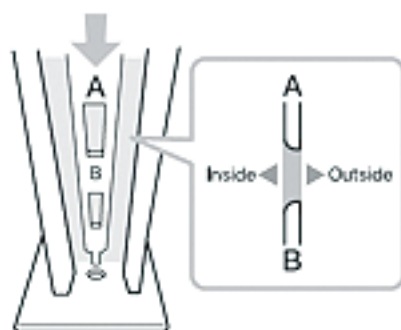
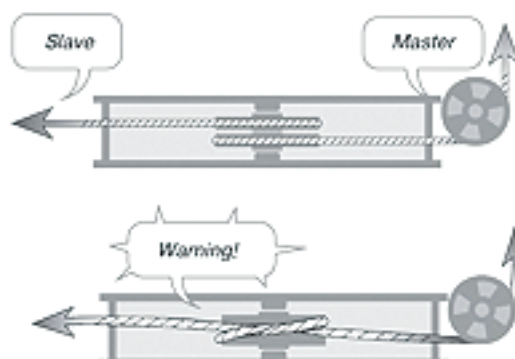
- ① Post
 - a. Master(1) – Place the posts standing against the wall on the appropriate position of (1) on the outline diagram.
 - b. Slave (3) – Place the posts lying on the appropriate position of (2) of the outline diagram.
- ② Jack (2) – Move a jack by two people to the designated position.
- ③ Support beam for plate – Place support of drop plate on (3), and support for front stopper on (4).
- ④ Place lockrail, ramp, drop plate and stopper.
- ⑤ Plate – Place drive (driver's seat) plate on (5) and driven (next to driver's seat) plate on (6).
- ※ Make the interval of 900mm between plates in consideration of width of the jack.
 - (1) Make sure to put plate on wooden bar. (Size of wooden bar : 120×120×700(H)) in order to provide convenience of the work, pull out the jack hydraulic hose from drive plate, place it on the main body.

■ Wire diagram

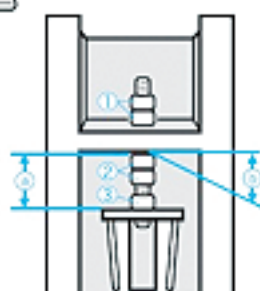
- Please refer to this diagram for connecting the wire.



5. INSTALLATION



① 55~60mm
② 3mm



■ Assembling post 1

► Assemble the post with support beam

1 Assembling lockrail

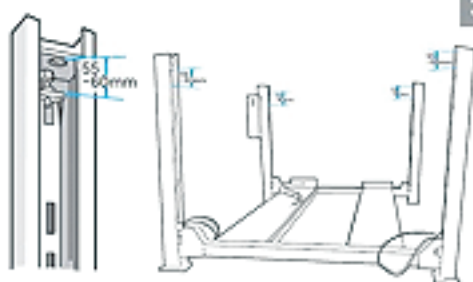
Put the lockrails to support beam for plate

2 Assemble the lock rail 2 - (upside)

Fasten two ① nuts (16mm). As shown in the figure, fasten the upper nut clockwise and the lower nut counterclockwise, maintaining the space to the lockrail for 55mm~60mm. Fasten two ② nuts (11.5mm), each to opposite direction, maintaining 2~3 threads (3mm) between the nuts. Fix ③ nut tight to the lockrail.

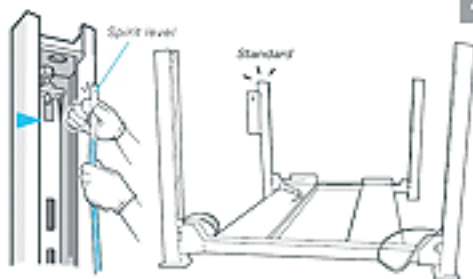
3 Assemble the lock rail 3 - (4 post)

Set up 4 posts, maintaining the space of 55~60mm between fixing plate of the top of the post and lockrail upper bracket.



4 Make leveling of 4 post

Based on the lower part of the top hole of the lockrail (No.1) of the reference post (the highest post), measure the height of the remaining 3 posts (No. 2, 3 and 4), and measure the length.
※ It is required to match the heights of the 4 posts.




5. INSTALLATION

■ Fixation horizon of the base.

► After adjusts horizon of the product precisely, fix up using anchor bolt.

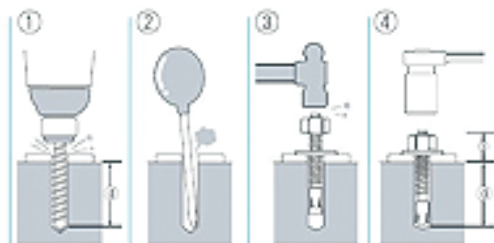
④ Water level ⑤ Weight ⑥ Liner



1 Adjustment the horizon of the base.
After measure the horizontal status, lay down the lie. (in case of precise adjustment, use 'a' bolt.)

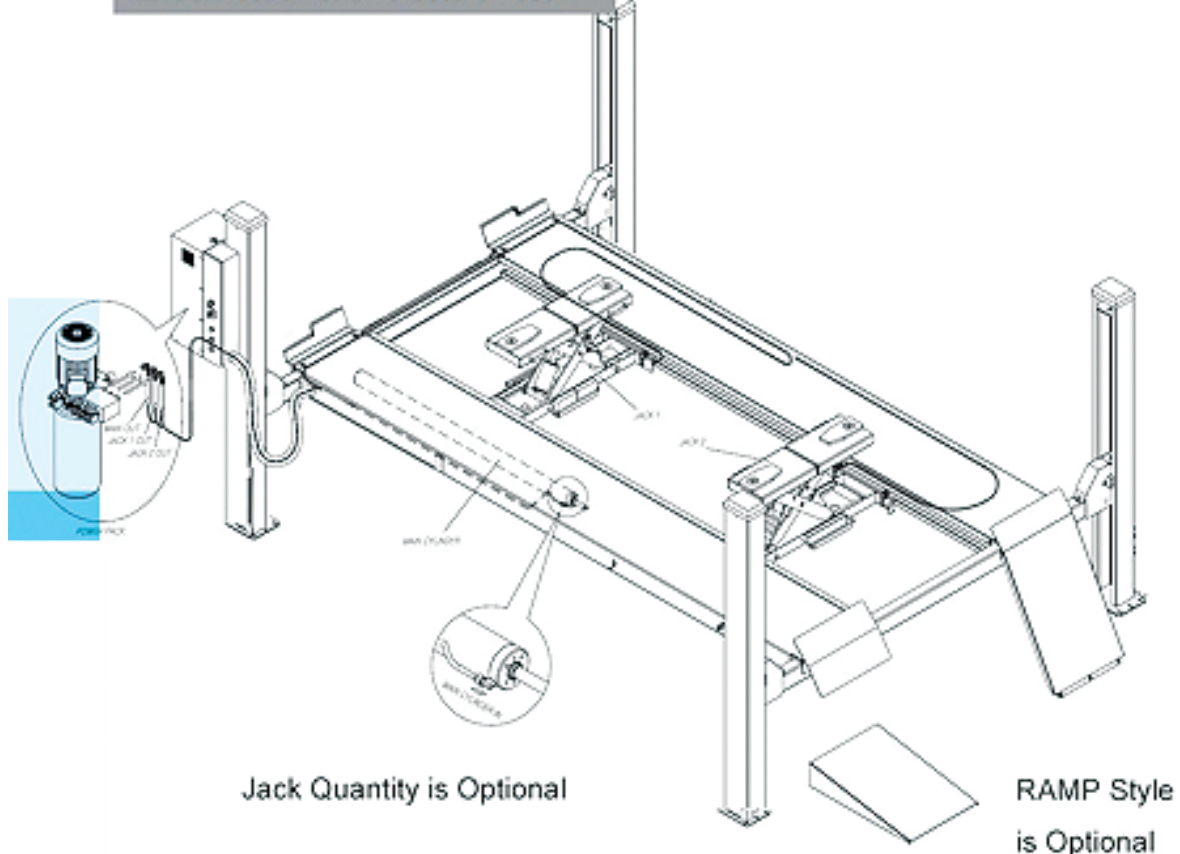
2 Fixation of base (anchor)
After adjusts horizon, fix up the base platform using anchor.

—Put the weight and check the verticality and level of 4 points.



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 : 125Nm/700kg.cm

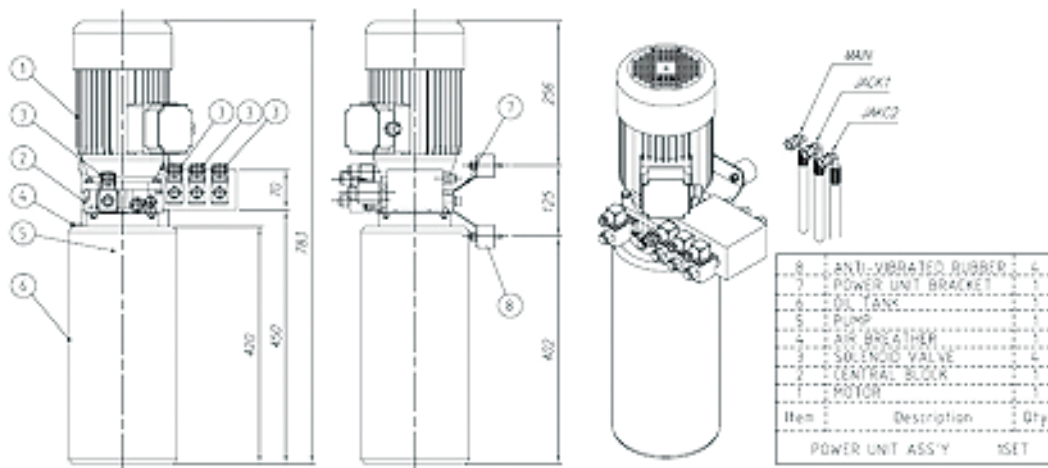
■ Connection of oil pressure hose



5. INSTALLATION

■ Connection of oil pressure hose

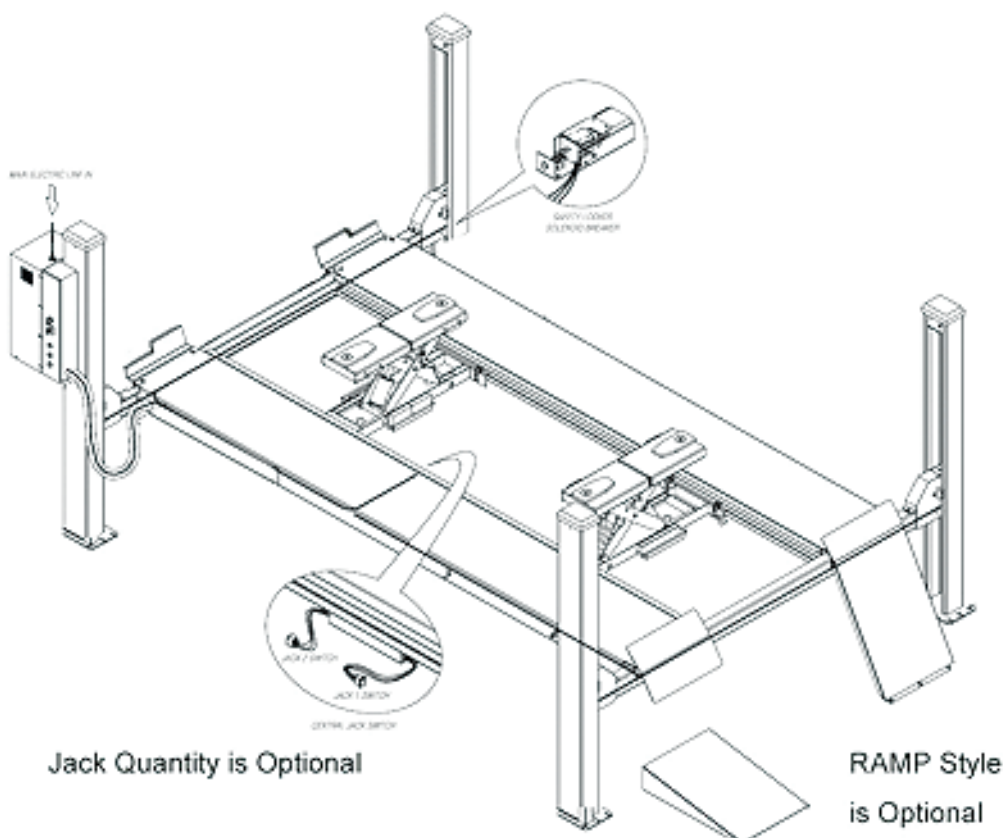
▶ Connect oil pressure hose by referring oil pressure line diagram. (Refer to part list oil pressure circuit)



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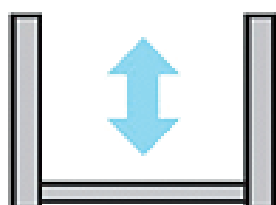
The manual Pictures are for reference only. Actual products are subject to the specific kind prevail.

■ Connection of electronic line



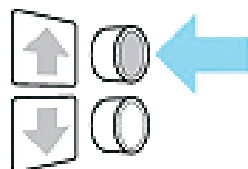
6. CHECK POINTS BEFORE OPERATION

Before loading the lift, check the following points.



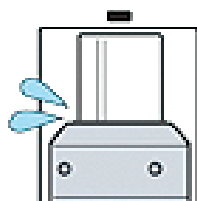
■ Test operation

► Operate ascent and descent 2-3 times under no load condition.



■ Switch operation

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



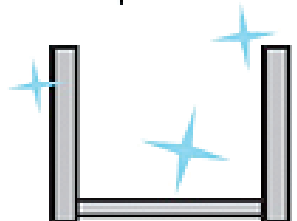
■ Hydraulic check

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



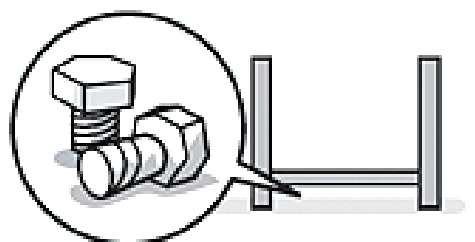
■ Mechanical check

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



■ Exterior check

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

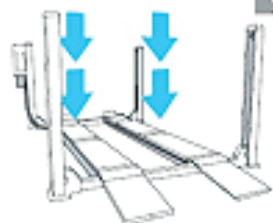


■ Cleanliness

► 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.

7. OPERATION



1 Prior to use

Check that the platforms are parked at floor level by using the descent button. Check that the auxiliary lift is at the down position.

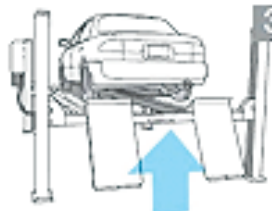


2 Prior to vehicle entry

Check that the position of the righthand (movable) platform is suitable for the majority of the vehicles to be lifted. Fix the platform at this position with the bolts provided.

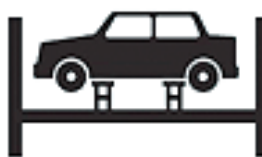


- After you drive into the lift, hold the side break.
- After you drive into the lift, get out of the car.



3 Ascent

Operate the ascent button until platforms reach the chosen work height. park on the relevant ratchet holes.



4 Auxiliary lift operation

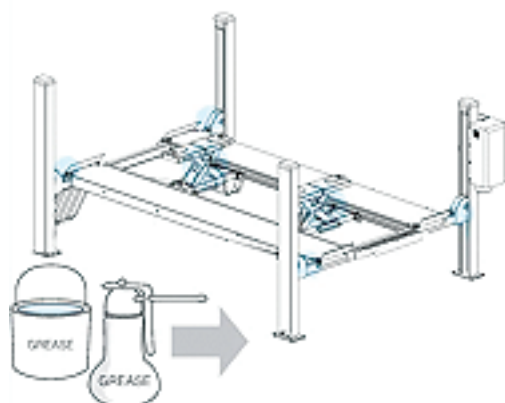
Raise the auxiliary lift app. 50mm to allow adjustment of the rear extensions. Position the rubber blocks provided under the vehicle pick-up points. Again, operate the auxiliary lift ascent button to raise the vehicle to the required work height.



5 Vehicle repair

Perform the necessary repairs and/or maintenance on the vehicle. After completion, lower the auxiliary lift. As soon as the vehicle load is firmly on the platforms, stop the descent of the auxiliary lift, remove the rubber pads, push in the extensions, and lower to bottom position. Lower main lift.

8. EQUIPMENT MAINTENANCE AND SERVICE

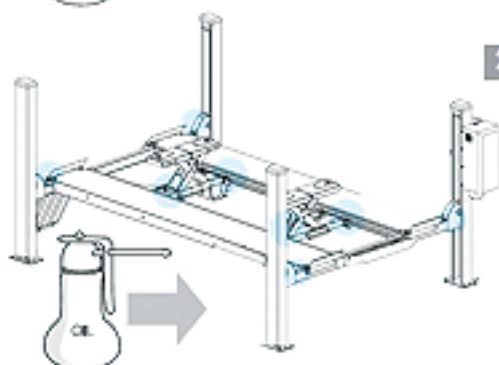


Lubrication

- 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)
- Auxiliary lift slide rubbing surface



2 Injecting oil

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



Cleanliness

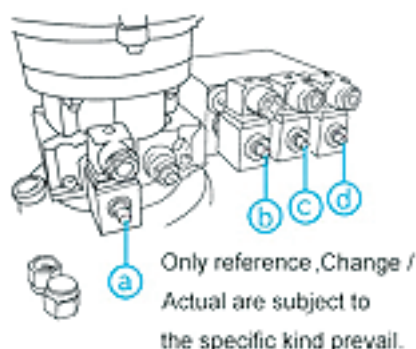
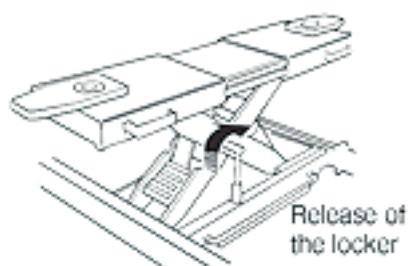
- Check the working area under and around the lift for cleanliness. Check visibly if any nuts or bolts are loose or missing. Replace and retighten as necessary.



Safety devices

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

9. MAINTENANCE



Turn the emergency cock lever very slowly to ensure that descent speed is slow and safe, especially if there is a vehicle on the lift.

Emergency descent

1 How to descend the lift manually in emergency

It is necessary

- ① when a blackout or the hydraulic circuit failure occurs
- ② When the lift cannot descend as specified in the troubleshooting

Preparation before operating

- ① Remove any object under the lift.
- ② Turn off the main power switch and panel power switch.
- ③ Manually release the locker
In case of locking state, releases the locker while another hydraulic device is lifting the locker 30 mm high. .
- ④ After taking to pieces in manually, put the supports between lockers.



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.

Operation procedure of manual descent

•Remove the cover of the powerpack.
Remove the solenoid valve hexagon cap (19mm) in the middle of the pump manifold. Turn the emergency cock lever (a) very slowly anti-clockwise. Too much movement will increase descent speed too much.

Steps after completing the operation

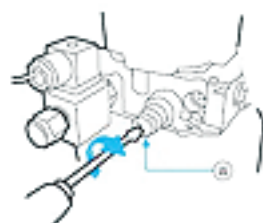
Turn the lever clockwise and lock it securely when the lift reaches bottom position. Replace and refit the hexagon cap. Request after sales service to check the lift.

9. MAINTENANCE

2 Powerpack pressure



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

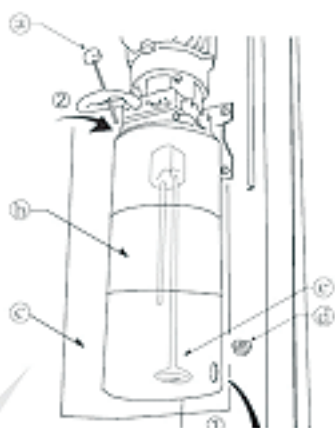
Open the control panel and install a pressure gauge in the pump manifold as shown. The pressure adjusting screw (a) is sealed by the factory. Remove the seal and adjust the pressure with a screwdriver. This should be done while pressing the ascent button at the same time.

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.



Only reference, Change /

- a) Cap of the oil tank
- b) Oil tank
- c) Cover of the hydraulic unit
- d) Oil nozzle cap
- e) Pump filter

Actual are subject to the specific kind prevail.



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.

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10. TROUBLE SHOOTING

SYMPTOMS		CHECKPOINT	CORRECTIVE ACTION TO BE TAKEN
Hydraulic Cylinder and its Units	The abnormal noise at motor	1. Rated capacity is exceeded 2. Pressure is low 3. Shortage of hydraulic oil	1. Operate within rated capacity 2. Adjust pressure screw 3. Let air out of the hydraulic unit after supplying the oil
	Hydraulic oil is lowered	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 a foreign substance is in the cylinder	Change oil
	The lift will not move up	Check if the oil is leaking or the hydraulic pump is damaged	Contact the customer service department
	The lift will not move down	Check if the valve is properly operating	Contact the customer service department
	The fitting parts are rusted	Check if the grease is not sufficiently injecting	Inject the grease every month
Electric Devices	Motor is not operating and/ or there is an abnormal noise whilst the motor is running	1. Check if the motor is damaged 2. Check if the fuse is faulty 3. Check if the push button is damaged 4. Check if the upper limit is operating 5. Check if the wiring gauge is proper 5. Check if the input power is less than 200V	1. Replace the motor (Request A/S) 2. Replace the fuse 3. Replace the push button (Request A/S) 4. Re-operate after lowering the lift 5. Replace the cable 5. Increase the input power capacity
	Fuse is snapped	1. Check the magnetic contactor 2. Check the capacity of the circuit breaker 1. Check if the wiring is damaged	1. Replacement (Request A/S) 2. Replacement (Request A/S) 3. Replace the damaged wire
	Motor is operating but the lift is not moving up	1. Check if the rotating direction of the motor is correct 2. Check if the hydraulic lines are damaged	1. Re-operate after changing the phase connection 2. Refer to the check points for the hydraulic cylinder and units

11. 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
	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 pulley	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