15 years of continuous research, testing and development — the most technically advanced lift on the market today.

YL-550E

6000KG 6.0 TONNE BASE PLATE CAR HOIST

Installation and operation manual

RECEIVING

Ensure shipment is thoroughly inspected as soon as received. The signed Bill of Lading is acknowledgement by the shipping carrier as receipt that this product as listed on invoice is in good condition for shipment. For your protection: if any goods listed on this Bill of Lading are missing or damaged, do not accept goods until the shipping carrier makes a notation on the freight bill of the missing or damaged goods.

BE SAFE

Your hoist was designed and built with safety in mind. To increase your overall safety operate with proper training and thoughtful operation. DO NOT operate or repair this equipment without reading this manual and the important safety instructions included throughout. Ensure ALL USERS read and understand this manual.

KEEP THIS OPERATION MANUAL NEAR THE MACHINE AT ALL TIMES. ENSURE ALL USERS READ THIS MANUAL.

IMPORTANT SAFETY INSTRUCTIONS — KEEP THESE INSTRUCTIONS ON HAND. PLEASE READ THE ENTIRE CONTENTS OF THIS MANUAL PRIOR TO INSTALLATION AND OPERATION. BY PROCEEDING WITH LIFT INSTALLATION AND OPERATION YOU AGREE THAT YOU FULLY UNDERSTAND THE FULL CONTENT OF THIS MANUAL. FORWARD THIS MANUAL TO ALL OPERATORS. FAILURE TO OPERATE THIS EQUIPMENT AS DIRECTED MAY CAUSE INJURY OR DEATH.

IMPORTANT NOTICE

Do not attempt to install this lift if you have not been trained on basic automotive lift installation procedures. Never attempt to lift components without proper lifting tools such as a forklift or crane. Stay clear of any moving parts that can fall and cause injury. These instructions must be followed to ensure proper installation and operation of your lift. Failure to comply with these instructions can result in serious bodily harm and void the product warranty. The manufacturer assumes no liability for loss or damage of any kind, expressed or implied, resulting from improper installation or use of this product.

DEFINITIONS OF HAZARD LEVELS

Identify the hazard levels used in this manual with the following definitions and signal words:

⚠ DANGER

It Means: Immediate hazards which will result in severe personal injury or death.

⚠ WARNING

It Means: Hazards or unsafe practices which could result in severe personal injury or death.

⚠ CAUTION

It Means: Hazards or unsafe practices which may result in minor personal injury, product or property damage.

OWNER'S RESPONSIBILITY

• Follow all installation and operation instructions.

• Make sure installation conforms to all applicable local, state, and federal codes, rules and regulations (electrical codes and safety regulations for automotive lifts).

• Carefully check the lift for correct initial function.

• Read and follow the safety instructions. Keep them readily available for machine operators.

• Make certain all operators are properly trained, know how to safely and correctly operate the unit, and are properly supervised.

• Allow unit operation only with all parts in place and operating safely.

• Carefully inspect the unit on a regular basis and perform all maintenance as required.

• Service and maintain the unit only with authorised or approved replacement parts.

• Keep all instructions permanently with the unit and all decals on the unit clean and visible.

BEFORE YOU BEGIN

Receiving: the shipment should be thoroughly inspected as soon as it is received. The signed bill of lading is acknowledgement by the carrier that the shipment has been delivered in good condition. If any of the goods called for on this bill of lading are shorted or damaged, do not accept them until the carrier makes a notation on the freight bill of the shorted or damaged goods. Do this for your own protection.

NOTIFY THE CARRIER AT ONCE if any hidden loss or damage is discovered after receipt and request the carrier to make an inspection. It is difficult to collect for loss or damage after you have given the carrier a clear receipt — file your claim with the carrier promptly and support it with copies of the bill of lading, freight bill, invoice and photographs if available.

MENTION OF NO RESPONSIBILITY

1. Please check whether the content of articles is in accordance with the list when the customer accepts the equipment. Please check if your equipment is damaged or lost during transportation while you receive it from the transport company.

2. Please check carefully if the packaging is loose when you receive the equipment and disassemble it, to avoid damaging the equipment and injuring any person.

3. Please engage skilled workers and use the proper tools to disassemble the equipment, otherwise the user is responsible for any injury to persons and damage to the equipment.

4. You should read the manual carefully before you operate this equipment and your operation must be in accordance with this manual. Otherwise, the user is responsible for the injury and damage caused by this.

5. We have already put safety first during designing and manufacturing. You must also put safety first when you operate and maintain this equipment.

6. The operator must be trained strictly and must have a high sense of responsibility.

7. Prohibit operating the lift beyond its rated capacity (overload).

8. When you receive the equipment, please fill in the 'product warranty card' and post the card to our company in order to protect your rights and interests.

PRODUCT WARRANTY

What is not covered under this warranty:

a. Any failure that results from the purchaser's abuse, neglect or failure to operate, maintain or service the product in accordance with instructions provided in the owner's manual(s) supplied.

b. Any damage caused by overloading the lift beyond rated capacity.

c. Items or service normally required to maintain the product, i.e. lubricants, oil, etc.

d. Items considered general wear parts such as rubber pads, lifting cables, etc. unless the wear or failure is a direct result of a manufacturer defect in material and/or workmanship.

e. Any component damaged in shipment, or any failure caused by installing or operating the lift under conditions not in accordance with installation and operation guidelines, or damage caused by contact with tools or surroundings.

f. Motor or pump failure caused by rain, excessive humidity, corrosive environments or other contaminants.

g. Rusted components due to improper maintenance or corrosive environments.

h. Cosmetic defects that do not interfere with product functionality.

i. Damage due to incorrect voltage or improper wiring.

j. Any incidental, indirect, or consequential loss, damage or expense that may result from any defect, failure or malfunction of the product.

k. All electrical components (excluding the power unit) are guaranteed for one year.

NOTE

Every effort has been taken to ensure complete and accurate instructions have been included in this manual, however possible product updates, revisions and/or changes may occur post publication. We reserve the right to change specifications without incurring any obligation for equipment previously or subsequently sold. No responsibility is taken for typographical errors.

CONTENTS

ANNOUNCEMENTS FOR SAFE OPERATION

(You must read all of this content)

1. Please read the manual and learn about the safety cautions before you use the equipment.

2. Be careful of your hands and feet; keep them away from the equipment to avoid harm.

3. Keep the environment tidy and clean — a messy workshop will cause accidents.

4. Check the work environment of the equipment. Do not expose it to rain or use it in a wet environment; there must be good ventilation and lighting.

5. The operator must be trained strictly. Do not allow untrained persons to touch or operate the lift.

6. Use the lift according to the regulations. We are not responsible for matters caused by parts which are not from our company.

7. Protect the safety unlock mechanism carefully. Check that the safety unlock is reliable before operating.

8. Please keep clear when the vehicle is being raised or lowered.

9. There must be enough space in the workspace to keep clear if the automobile on the lift becomes dangerous.

10. The lift must be in the mechanical lock position when you service the automobile.

11. Operators must have labour protection and should wear work shoes with ferrous protection.

12. To protect the operator from electric shock, the earth wire of the motor must be reliable.

13. Notice: there will be a spark when the switch is turned on and off during lift operation, so the lift cannot be operated in a workspace where flammable gas is present!

14. Notice: you must cut the power supply before maintaining the electrical equipment of the power unit.

15. A clean environment and good equipment maintenance are necessary. Correct lubrication and maintenance will help keep the equipment reliable. The control handle and buttons must be kept clean and dry and free of oil dirt.

16. The operator must keep a clear mind while working and must put safety first.

17. Check for any damaged parts or components. Pay attention to the synchronous condition between the main support arm and the branch support arm — stop operating immediately if anything abnormal is found, then examine and remove the fault.

18. Do not disassemble any parts or components related to safety. Otherwise, operation of the lift is prohibited.

19. Please check carefully that every part is normal and safe (especially that the support pad is in the correct position and condition).

20. Do not allow any obstacles that would stop the support arm from lowering when operating the lift.

21. When the lift rises to the highest limit, the mechanical safety hook must be in position and secure (there must be an audible click).

22. When the lift rises to the highest limit, the operator should release the rising control button.

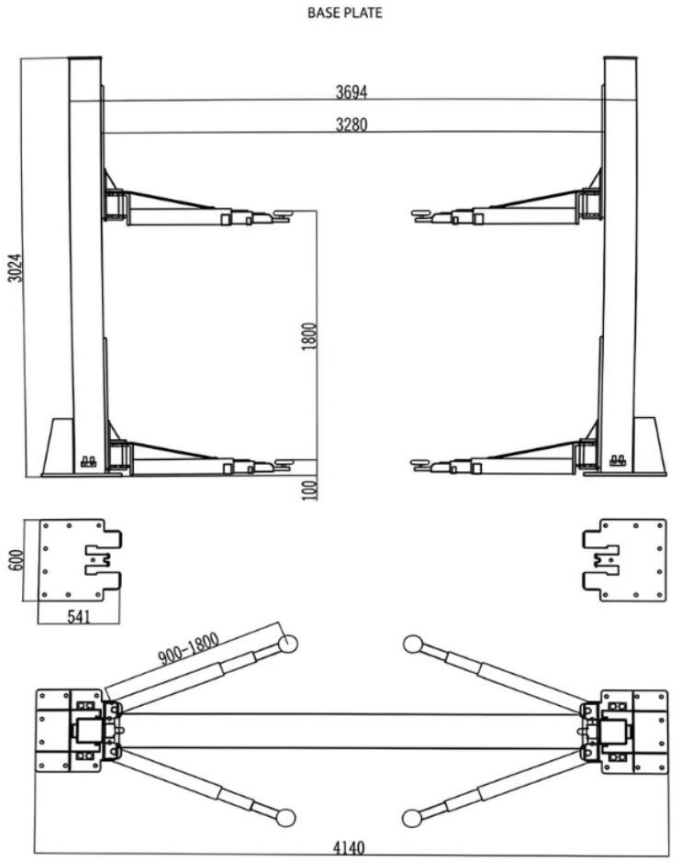
MACHINE PARAMETERS

• Compact design, minimises lift wear parts and breakdown ratio.
• Dual hydraulic cylinders, designed and manufactured to standard.
• Self-lubricating UHMW polyethylene sliders and bronze bushings.
• Single-point safety release and dual safety design.

Model	YL-550E — Two-post Base Plate Hoist
Lift Capacity	6000 KG
Net Weight	1050 KG
Overall Height	3024 mm
Overall Width	4140 mm
Power	2.2 KW
Voltage	240V 50Hz Single Phase

YL-550E DIMENSIONS

YL-550E DIMENSIONS



CHECK PARTS BEFORE ASSEMBLY

Model: YL-550E — Install Screw List

Model：YL-550E

install screw list

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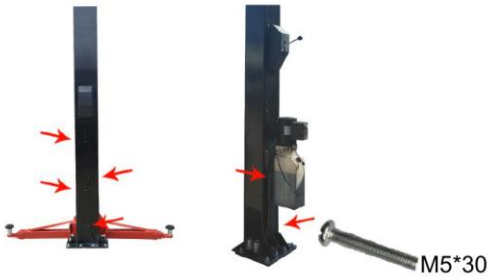
<td> 
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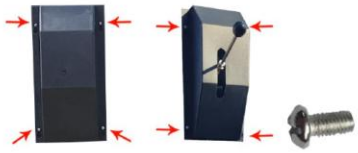
<td> 
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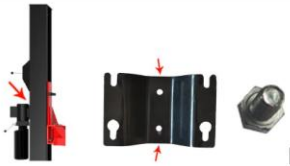
<td> 
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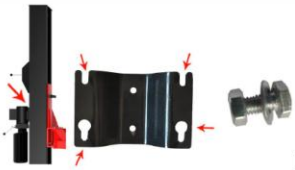
<td> 
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M4*10
total 3 pc</td>
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TOOLS REQUIRED

- Impact bit
- Drill (20mm)
- Hammer
- Levelling instrument (300mm)
- Spanner with crossing groove (8mm–24mm)
- Angle ruler / adjustable spanner (350mm)
- Crow bar
- Tailor’s chalk line and chalk
- Flat head screwdriver and crossing groove head screwdriver
- Tape measure (5m)
- Sharp-nose pliers

Rotary Hammer Drill (3/4in /19mm)

Carpenter's Chalk

Hammer

Screw Drivers

Level Bar

Tape Measure (25ft)

Crescent Wrench (12")

Pliers

Ratchet Spanner With Socket (28#)

Allen Head Wrench (6#)

Wrench set
(10#, 13#, 14#, 15#, 17#, 19#, 24#, 27#)

Vise Grips

STEPS OF INSTALLATION

Step 1: Choose Installation Site

Check the following before installation:

1. Workplace: good building construction, enough work space, no obstacles to stop working.

2. The place where installing the equipment should have no unsafe elements, such as leakage of rain, moisture, or flammable/explosive materials.

3. Foundation of equipment: the installation should coincide with the basement/foundation drawings.

Step 2: Basement / Ground

1. The basement of the equipment must have the strength which fits the requirement, otherwise the lift will crush the ground, causing damage to the equipment and injury or death to people.

2. The installation basement must assure certain levelness; the tolerance is not allowed to exceed 5mm (tolerance within this range can be adjusted using washers).

3. Do not install the lift on pitched ground or other non-concrete ground (there must be a solid and reliable basement).

4. Do not install the lift on ground with cracks or junk concrete.

5. Prohibit installing the lift on the second floor or higher without the approval of an architect.

6. The motor of the power unit should be protected by security arrangement. Do not install the lift outdoors to avoid problems with the motor in rainy conditions.

7. Construct according to the basement drawing provided.

8. The lift must be installed on a concrete base where the compressive strength is not lower than 200kg/cm², and the thickness of the concrete basement is not lower than 300mm (strength not lower than 250 class). The just-finished concrete basement must be solidified and kept for over 28 days.

Step 3: The Layout of Equipment Installation

1. Confirm the position of the lift installation first.

2. Confirm the position of the power unit — there must be enough space for the power unit column installation.

3. Draw up the position of the baseboard of the column with chalk after confirmation, to assure the tolerance is within 3mm to avoid affecting the installation of the lift.

4. Draw up the outline of the baseboard with chalk after confirming the position (refer to the specifications).

5. Check carefully to assure the layout is correct.

6. Put the two columns in their own positions first before installing and connecting the lift, and further check the position. Attention: when erecting the column, ensure there is enough space with no obstacles and no impact on the maintenance working space (recommend choosing 4000mm x 7000mm).

Step 4: Install the Master Column

(column with basement of power unit)

1. Check the dimension of the foot margin before installation to assure the baseboard of the column aligns with the tailor's chalk line.

2. Use the holes on the baseboard of the column as a template to drill holes in the concrete ground (the drill must be perpendicular to the ground). Ensure the drilling depth (about 160mm); do not freely chamber or swing the electric drill.

3. Clean the dust from the hole after drilling and check that the baseboard of the column is within the range of the tailor's chalk line.

4. Knock the foundation bolt into the hole (screw the nut onto the bolt — do not knock the bolt and nut directly) until the washer contacts the baseboard.

5. If the column is not perpendicular to the ground, adjust the gap with a thin washer. Once the foundation bolt is tightened, the column should be perpendicular to the ground.

6. Screw the nut with a spanner once the column is perpendicular to the ground, but do not fully tighten yet.

Step 5: Install Slave Post

Install the slave column in the position where the lineation is finished. (This step is the same as for the master column.) Screw the foundation bolts of the master column and the slave column tightly and check the verticality of the columns again at the same time; otherwise adjust the verticality with the appropriate washer until it meets the requirement.

NOTICE FOR USING THE POWER UNIT

1. Do not start up the pump if there isn't any oil in it, to avoid destroying the gear pump.

2. The electrical equipment must be kept dry; damage caused by liquid such as water, acid or detergent is not covered by the guarantee.

3. Damage caused by incorrect connection is not covered by the guarantee.

4. Use a dedicated air switch or fuse for the power unit.

5. For 200–240V, a 25A fuse is used for single phase.

6. For 380–440V, a 15A fuse is used for three phases.

⚠ WARNING

There is an electric spark in the electric circuit when the power unit starts, so the power unit cannot be used in places where flammable gas is present.

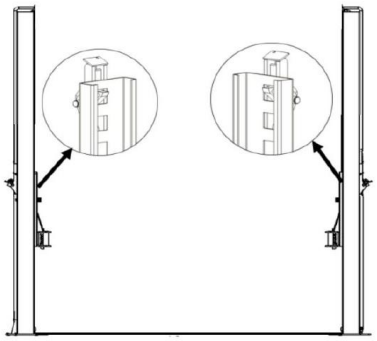
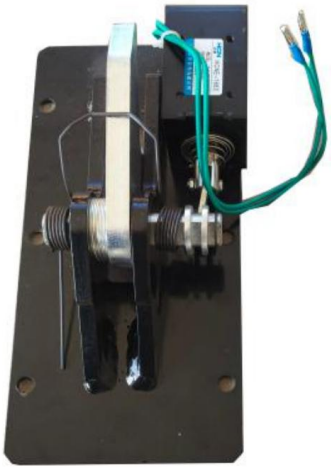
CONNECTING THE POWER SUPPLY TO THE CONTROL UNIT

Connect the power supply from the motor in the column to the control unit as shown in the following illustration.

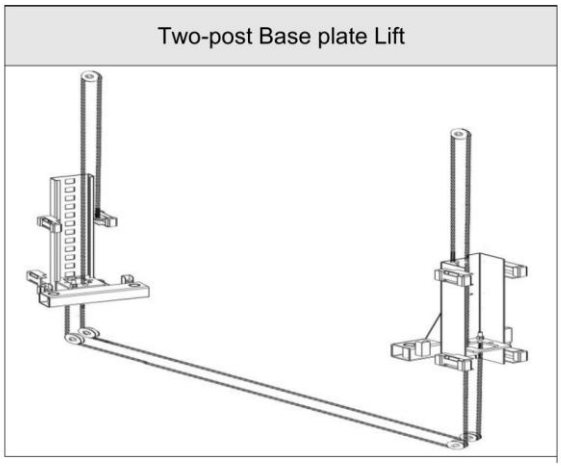
SAFETY LOCKING SYSTEM

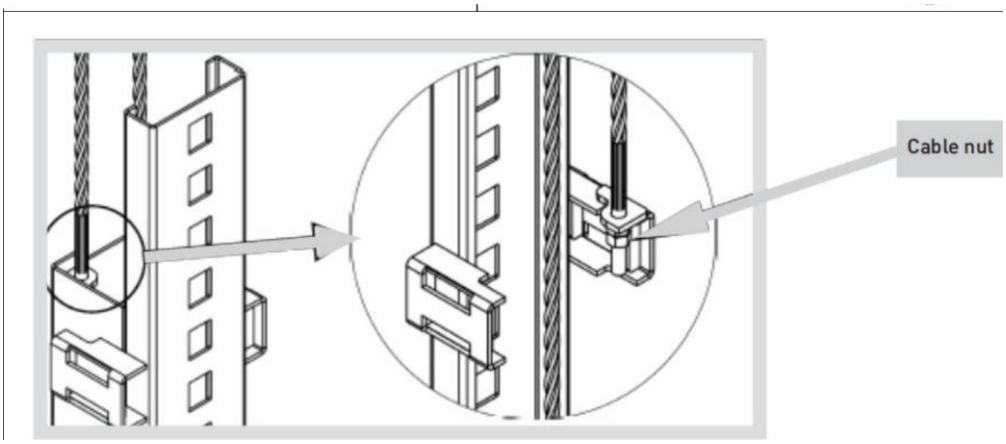
Two-post Base Plate Lift

safety locking system

Two-post Base plate Lift



STEEL CABLES ASSEMBLE





1. Adjust Synchronising Cables

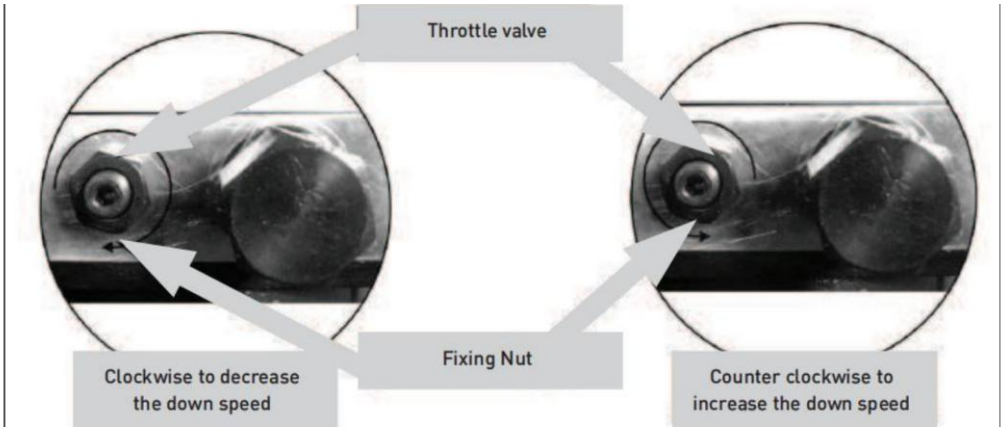
Carriages must be on the first set of locks. Use vise grips to hold the cable fitting while using a wrench to tighten the cable nut. Make sure the two cables have the same tension so the carriages lift at the same time.

If the carriages do not synchronise when lifting, please read below:

a. Press the UP button to lift the carriages to the position where the first safety lock of one carriage is higher than the safety lock on the column. Lower the lift until the lower of the two carriages makes contact with the safety lock on the column.

b. Loosen the safety lock cable. Release the safety lock on the side where the carriage is in the higher position — the other side's safety lock should be engaged at this time. Then lower the lift; the side with the carriage in the lower position remains locked in place while the higher side is unlocked. Continue lowering until the higher carriage is level with the lower carriage.

c. Loosen the jam nut on the higher carriage's synchronising cable and tighten the tension nut until the synchronising cable has the same tension as the other synchronising cable. Tighten the jam nut and safety cable.



2. Adjust the Lower Speed

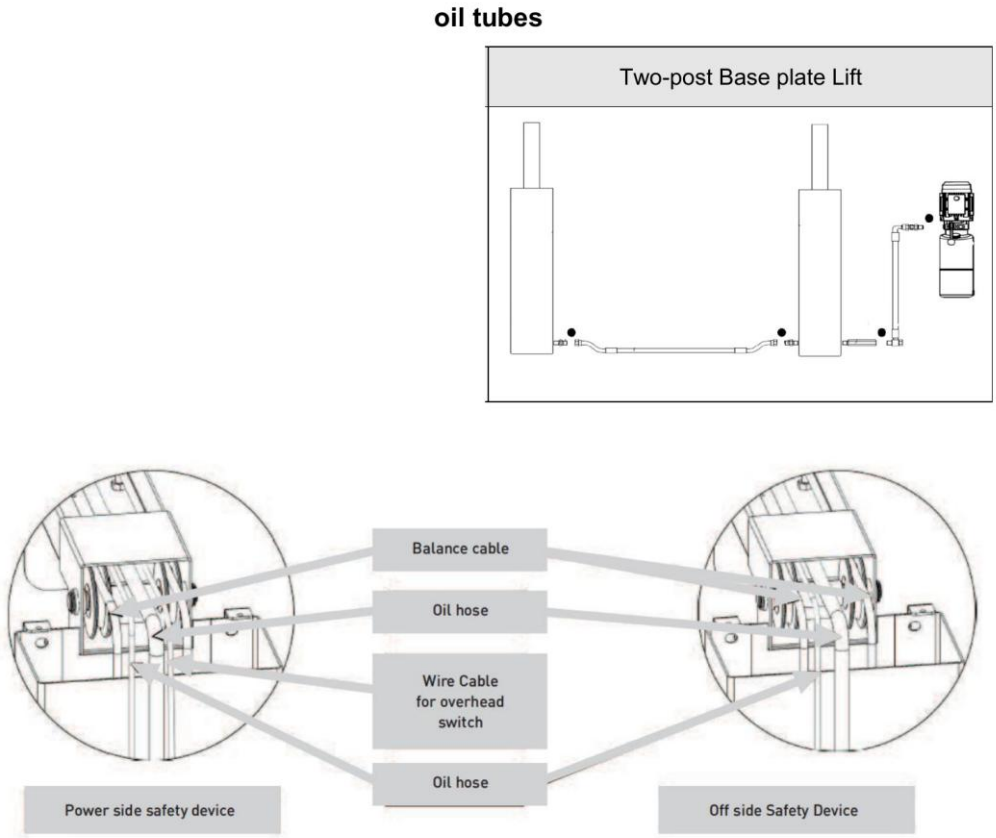
You can adjust the lowering speed of the lift if needed. Loosen the locking nut on the throttle valve and turn the throttle valve clockwise to decrease the lowering speed, or counterclockwise to increase the lowering speed. Do not forget to tighten the locking nut after the lowering speed adjustment has been done.

⚠ DANGER

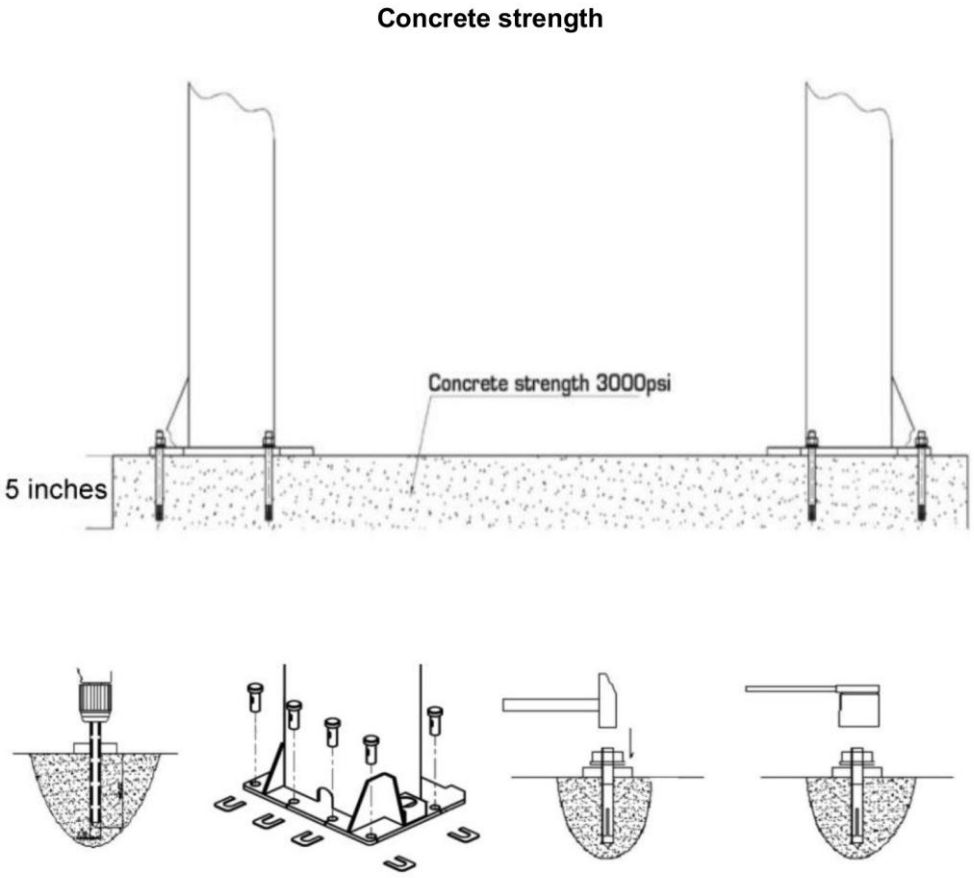
Do not perform any maintenance or installation of any components without first ensuring that electrical power has been disconnected at the source or panel, and cannot be re-energised until all maintenance and/or installation procedures are completed.

OIL TUBES

Two-post Base Plate Lift — oil hose, balance cable and safety-device routing between the power-side and off-side columns.



SPECIFICATIONS OF CONCRETE



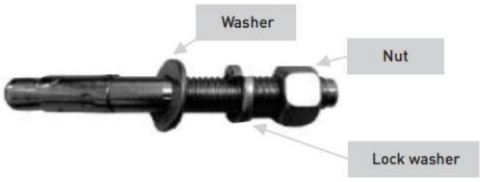
INSTALL THE LIFT ARMS

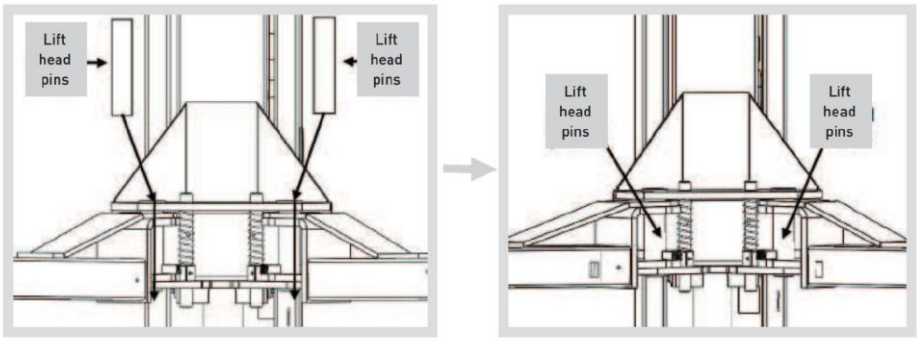
Install Inner Arm

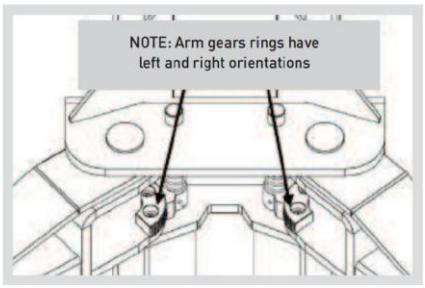
1. Place the appropriate lift arm assembly in the lift heads.

2. Install the lift head pins into the lift head and through the holes in the arm assembly.

3. Each arm restraint gear can be oriented in a left or right configuration on the arms. Each arm and arm restraint gear must be positioned in the proper location in the lift head.



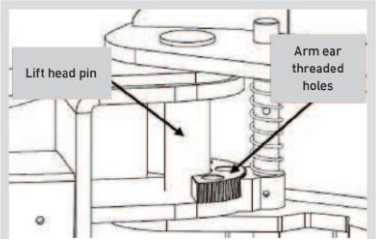


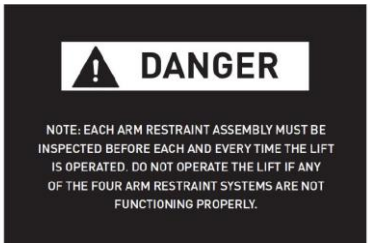


4. Place each gear ring against the lift head pin and align the holes in the gear ring with the threaded holes in the arm ears. Ensure that the teeth on the gear ring mesh smoothly with the teeth on the gears of the lift head.

5. Verify the operation of the arm restraints by pulling up on the arm restraint pin. Pivot the arms back and forth and test the operation of the arm restraint pin in various positions.

6. Ensure that the arms do not move when a force of approximately 100 pounds or less is applied laterally to the fully extended arms.





⚠ DANGER

Each arm restraint assembly must be inspected before every time the lift is operated. Do not operate the lift if any of the four arm restraint systems are not functioning properly.

EXHAUST AND DEBUG

1. You need to exhaust and debug the system when you finish the lift installation.

2. Fill the oil tank with enough oil (not too full) and press the down-up button after connecting the electric power — the lift will rise and the hydraulic cylinder will work.

3. Make the lift continue to rise to the highest position, then stop pressing the button to avoid damaging the power unit.

4. Wait 10 seconds after rising to the highest position.

5. Pull out the lock-release steel wire rope and press the down-handle on the power unit to lower the lift.

6. If there is any jumping or unbalanced movement when the lift descends, adjust the balance wire rope repeatedly; the car can be driven onto the lift once balance is guaranteed.

7. Start the motor and press the up-down button — the lift will rise; a slight ‘jump’ phenomenon from the cylinder is normal.

MAINTENANCE

1. Check that the support arm operates normally every shift.

2. Check that the bolts and hinge pins have not become loose every shift; tighten them if they are loose.

3. Check that the safety device is reliable every shift.

4. Lubricate the slider in the column and the entire axle chain every week (as needed).

5. Check that the foundation bolts are not loose, and tighten them if they are.

6. Check that the column is not deformed and remains perpendicular to the ground at regular intervals.

7. Check that the telescopic boom turns flexibly and works reliably every shift.

8. Check whether the support pad is worn at regular intervals and replace it if needed.

9. Change the hydraulic oil every 500 working hours of the lift. You can change the oil once every 1 to 1.5 years if the lift is not used or used infrequently.

SAFE LIFT OPERATION & TYPICAL LIFTING POINTS

⚠ WARNING

WHEN LOWERING THE LIFT PAY CAREFUL ATTENTION THAT ALL PERSONNEL AND OBJECTS ARE KEPT CLEAR. ALWAYS KEEP A VISUAL LINE OF SITE ON THE LIFT AT ALL TIMES. ALWAYS MAKE SURE THAT ALL LOCKS ARE DISENGAGED. IF ONE OF THE LOCKS INADVERTENTLY LOCKS ON DESCENT THE LIFT AND/OR VEHICLE MAY DISRUPT CAUSING PERSONAL INJURY OR DEATH.

- **ALWAYS REMOVE** tool trays, stands, etc before lowering lift.
- **ALWAYS RELEASE** safety locks before attempting to lower lift.
- **ALWAYS POSITION** the lift arms and adapters to provide an unobstructed exit before removing vehicle from lift area **TO RAISE THE LIFT.**

⚠ WARNING

TO AVOID PERSONAL INJURY AND/OR PROPERTY DAMAGE, PERMIT ONLY TRAINED PERSONNEL TO OPERATE LIFT. AFTER REVIEWING THESE INSTRUCTIONS, PRACTICE USING LIFT CONTROLS BY RUNNING THE LIFT THROUGH A FEW UNLOADED CYCLES BEFORE LOADING VEHICLE ON LIFT. ALWAYS LIFT THE VEHICLE USING ALL FOUR ADAPTERS. NEVER RAISE JUST ONE END, ONE CORNER, OR ONE SIDE OF VEHICLE.

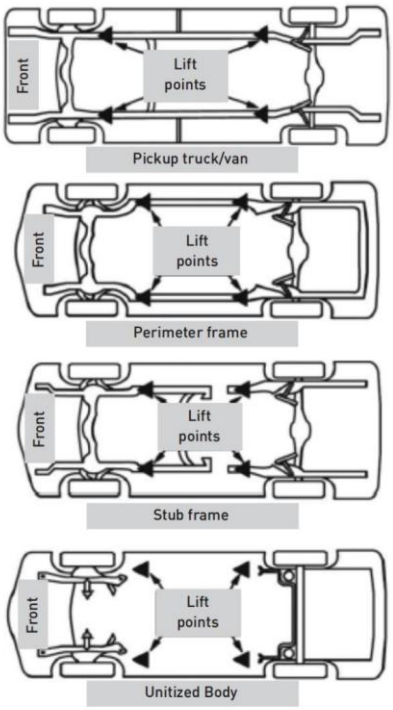
1. Before Loading: Lift must be fully lowered and service bay clear of all personnel before the vehicle is brought on lift with the swing arms set to the full drive-thru position.
2. Loading: Swing arms under vehicle and position adapters at vehicle manufacturer's recommended lift points. Use height extenders or optional frame cradle adapters when necessary to ensure good contact.
3. Some vehicles may have the manufacturer's Service Garage Lift Point locations identified by triangle shape marks on the undercarriage (reference ANSI/SAE J2184- 1992). Also, there may be a label located on the right front door jamb area showing specific vehicle lift points.

⚠ WARNING

MANY SPECIALTY OR MODIFIED VEHICLES CANNOT BE RAISED ON A TWO-POST FRAME ENGAG ING LIFT. CONTACT VEHICLE MANUFACTURER FOR RAISING OR JACKING DETAILS

- Position vehicle for proper weight distribution arms under vehicle to allow adapters to contact at the manufacturer's recommended pick up points.

TYPICAL LIFTING POINTS



- Push the RAISE button or rotate the control switch on the power unit

NOTE: ALLOW (2) SECONDS BETWEEN MOTOR STARTS. FAILURE TO COMPLY MAY CAUSE MOTOR BURNOUT.

- Stop before making contact with vehicle. Check arm restraint pins for engagement. If required, slightly move arm to allow restraint gear and pawl to mesh. DO NOT hammer arm restraint pin down as this will damage the restraint gear teeth.
- Raise vehicle until tires clear the floor.
- Stop and check adapters for secure contact at vehicle manufacturer's recommended lift points.
- Continue to raise to desired height only if vehicle is secure on lift.
- DO NOT go near or under a raised vehicle if all four adapters are not in secure contact with vehicle at vehicle manufacturer's recommended lift points.
- Repeat entire loading and raising procedures if required.
- Lower lift onto safety locks.

TROUBLESHOOTING GUIDE

1. The lift doesn’t work

Possible Failure	Reason and Resolution
There is air in the oil.	Deflate according to the exhaust and debug procedure.
High oil viscosity caused by oil solidification or working temperature too low.	Let the high-viscosity oil out and refuel with regular oil.
The hydraulic oil is leaking.	Check that each pipe connector is tightened up. If the oil seal on the cylinder is deformed or warped, replace it.
The motor runs in reverse.	Check the connection against the circuit diagram.
The motor doesn’t work.	Something is wrong with the motor — replace it. Also check for lack of phase, a failed line, wrong voltage, or a broken fuse.

2. The lift doesn’t work when it is on load

Possible Failure	Reason and Resolution
The hydraulic oil is leaking.	The pipe connector has become loose — tighten it again. If there is leakage in the cylinder oil seal, replace the cylinder.
The motor voltage is wrong.	Install a pressure regulation system.
The load exceeds the lift capability.	Check the lift capability (do not operate over the rated capacity).

3. The lift doesn’t lift off, or lifts too slowly

Possible Failure	Reason and Resolution
The lift is locked.	Raise the lift, then unlock and press the down button.
The viscosity of the hydraulic oil is too high.	Change to regular oil.
The insert valve is blocked.	Separate the valve parts and clean them.
The pipe parts are blocked.	Unscrew the pipe connector, then check and clean the blocked section.

4. Oil leakage outside

Possible Failure	Reason and Resolution
Joint of pipe connector is loose.	Retighten the pipe connector.
Oil leaks from the air hole.	Replace the seal if there is a sealing failure in the hydraulic cylinder.
Oil is too much and flows from the container.	Decrease the oil quantity appropriately.

5. The sound is uncommon

Possible Failure	Reason and Resolution
Air in oil.	Resolve as in the section above.
Overload.	Check the lifting capacity (do not overload).
Bolts of the motor are loose.	Tighten the bolts.
Lubricant oil is short in the rolling position.	Refuel with lubricant oil.