

## **9,000 lb. (4091 kg) Closed Front 4-Post Lifts**

**LSS4P9PLXLAL – Quatro-Stacker XL**

## **8,000 lb. (3636 kg) Closed Front 4-Post Lifts**

**LSS4P8PLDXAL – Quatro-Stacker Regular Version**

**LSS4P8PLDWAL – Quatro-Stacker Wide Version**

**LSS4P8PLDTAL – Quatro-Stacker Tall Version**

**(Minimum wheelbase 110" at rated capacity)**

# **Installation / Operation & Service Parts Manual**

**READ the Manual Thoroughly Before  
Installing, Operating, Servicing, or  
Maintaining the Lift**

**Lift Superstore**

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[www.liftsuperstore.com](http://www.liftsuperstore.com)

**REV: May., 2023**

Your new lift will provide years of dependable service if installed, operated and maintained properly. **Follow all safety, installation, operation, and maintenance instructions in this manual before installing and operating the lift. In addition, follow all safety and other information included on and with the lift before operating the lift. Keep this manual in a secure place for future reference, training and service part identification.**

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## **CAUTION**

**It is the shop owner's responsibility** to provide a satisfactory installation area for the lift. Lift should only be installed on level concrete floors with no more than 3° of slope and with a minimum of 4 inches (102mm) and 3000 psi (20.7MPa) concrete that has been aged a minimum of 30 days. Please consult a qualified individual if any doubt exists concerning proper installation and subsequent safe operation of the lift. Do not install the lift on asphalt or outdoors. Failure to comply with these minimum standards could result in personal injury or death.

Prior to installation, **it is the shop owner's responsibility** to provide constant electrical power in the correct voltage, phase, etc., and all wiring for electrical hook-up of the lift. The shop owner must ensure that the electrical installation conforms to local building and safety codes. Where required, the shop owner will provide an electrical isolation switch located in close proximity to the lift. This switch will have an emergency stop capability and isolate electrical power from the lift for servicing requirements.

**It is the shop owner's responsibility** to provide necessary lockout/tagout means for energy sources per ANSI Z244.1-1982 (R1993), Safety Requirements for the Lockout/Tagout of Energy Sources, before beginning any lift repairs.

Hydraulic oil will be supplied by either the shop owner or the installer. ISO 32 hydraulic oil (10W non detergent) must be used to fill the reservoir tank before operating the lift.

**It is the shop owner's responsibility to train all operators in lift operation and lift safety.**

# **1. UNLOADING PROCEDURE & LIFT PACKAGE CONTENTS**

## **For your information:**

All lift components are packaged together in one module held together by steel frames  
Optional accessories (rolling jacks and turnplates) are packaged separately.

## **UNPACKING PROCEDURE:**

When the lift arrives on site:

1. If possible have lift unloaded in the installation area and on two 4"x 4" x 24" Wooden Blocks (required for unpacking).
2. Check for freight damage and report immediately to the trucking company who delivered the lift.
3. Check for missing parts and report immediately to the factory 1-877-799-LIFT(5438) or (289) 291-3335

## **Main Components include:**

Columns – 4 pc  
Runway Assemblies – 2 pc  
Crossmembers – 2 pc (1 front – 1 rear)  
Powerpack – 1 pc  
Accessories (see list below)

## **Accessory includes:**

Lifting Cables - 4  
Hydraulic Hose – 1 pc  
Approach Ramps – 2pc  
Wheel Stops - 2  
WL 200 Series Safety Information Label Kit  
ALI - "Lifting It Right " Manual  
Automotive Lift Safety Tips Hang Card  
Automotive Lift, Operation, Inspection and Maintenance Manual  
Owner's Manual

**Hardware Box includes:** Fittings, bolts, washers, nuts, shims, and anchor bolts, etc.

## **2. WARRANTY & SAFETY**

**Warranty:** The four post lift models identified in this manual have the following warranty from date of purchase:

**Structural Components - 5 year**

**Hydraulic and Other Components - 2 year**

The above items are warranted to be free of defects in material and workmanship to the original owner of the lift as follows: This warranty does not extend to defects caused by ordinary wear, misuse, abuse, improper maintenance, shipping damage or where repairs have been attempted or made by anyone other than the manufacturer or a manufacturer certified technician. This warranty is exclusive and in lieu of all other warranties express or implied. In no event shall the manufacturer be liable for special, incidental or consequential damages for any breach or delay in performance of the warranty. The manufacturer reserves the right to change specifications, designs or add improvements to its product line without incurring any obligation to make such changes to products sold previously.

## **IMPORTANT SAFETY INSTRUCTIONS**

When using your garage equipment, basic safety precautions should always be followed, including the following:

1. Read all instructions
2. Care must be taken as burns can result from touching hot parts
3. Do not operate equipment with a damaged cord or if equipment has been dropped or damaged – until it has been examined by a qualified service person
4. Do not let a cord hang over the edge of the table, bench, or counter or come in contact with hot manifolds or moving fan blades
5. Let equipment cool completely before putting away. Loop cord loosely around equipment when storing
6. To reduce risk of fire, do not operate equipment in the vicinity of open containers of flammable liquids (gasoline)
7. Adequate ventilation should be provided when working on operating internal combustion engines
8. Keep hair, loose clothing, fingers, and all parts of body away from moving parts
9. To reduce the risk of electric shock, do not use on wet surfaces or expose to rain
10. Use only as directed in this manual. Use only manufacturer's recommended attachments
11. ALWAYS WEAR SAFETY GLASSES. Everyday eyeglasses only have impact resistant lenses, they are not safety glasses

## **SAVE THESE INSTRUCTIONS**

Basic common sense safety precautions should always be followed when installing, operating and maintaining the lift as a risk of fire, electric shock, injury or death may be present.

**In addition:**

1. Read and follow all safety instructions and decals included with the lift. Read and follow all safety instructions in this manual. Read and follow the ALI "Lifting It Right" manual (included with the lift). Always use the "Vehicle Lifting Points" reference guide when lifting a vehicle. Insure all materials stay up to date »» [www.autolift.org/](http://www.autolift.org/)
2. Only trained and authorized personnel should position a vehicle and operate the lift.
3. Inspect the lift daily. Do not operate if potential problems have been identified or lift malfunctions. Do not operate if lift has damaged or broken components. Never walk or work under the lift unless all safety locks are completely engaged.
4. Never overload the lift. The hydraulic system on this lift is not designed to be a load holding device. Mechanical safety locks must be engaged before proceeding under the lift for vehicle servicing or lift maintenance. Never override operating controls. This is unsafe and will void the warranty.
5. Before driving a vehicle onto the lift, insure that the lift and lift area is clear of all debris and that all oil and grease has been cleaned from runway surfaces.
6. Always chock wheels and set parking brake before lifting vehicle.
7. When using a jack(s) to raise a vehicle, position jack lifting pads to contact vehicle manufacturers recommended lifting points. Raise jack slowly until all pads contact the vehicle. Confirm that the vehicle is stable on the jack(s) before raising to desired working height.
8. Important: Removal or installation of heavier parts can change the vehicle's center of gravity on the jack(s) resulting in a critical load shift. The vehicle may then be unstable. Plan ahead for this possibility to insure continued safety and refer to the vehicle manufacturer's service manual for recommended procedures.
9. Always keep the lift area free of obstructions and debris. Grease and oil spills should be cleaned up immediately.
10. Never raise a vehicle on the lift with passengers inside. Before lowering, check the lift and lift area and remove all obstructions. Before removing vehicle from the lift or lift area, confirm an unobstructed exit.
11. 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-ENERGIZED UNTIL ALL MAINTENANCE AND/OR INSTALLATION PROCEDURES ARE COMPLETED (ANSI 244.1).

## Safety Instruction and Information Decal Kit (included with the lift)

### Automotive Lift Institute, Inc.

<p><b>CAUTION</b></p> <p>Lift to be used by trained operator ONLY.</p>	<p><b>CAUTION</b></p> <p>Authorized personnel only in lift area.</p>
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The messages and pictographs shown are generic in nature and are meant to generally represent hazards common to all automotive lifts regardless of specific style.

Funding for the development and validation of these labels was provided by the Automotive Lift Institute, PO Box 85 Cortland, NY 13045.

Replacement label sets may be obtained from the original lift manufacturer and ALI's member companies. They are protected by copyright.

[www.autolift.org](http://www.autolift.org) ©1992 by ALI, Inc. ALIWL200s

<p><b>SAFETY INSTRUCTIONS</b></p> <p>Read operating and safety manuals before using lift.</p>	<p><b>SAFETY INSTRUCTIONS</b></p> <p>Proper maintenance and inspection is necessary for safe operation.</p>
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### WL200 Series Label Kit

<p><b>WARNING</b></p> <p>Clear area if vehicle is in danger of falling.</p>	<p><b>WARNING</b></p> <p>Remain clear of lift when raising or lowering vehicle.</p>
<p><b>WARNING</b></p> <p>Keep clear of pinch points when lift is moving.</p>	<p><b>WARNING</b></p> <p>Keep feet clear of lift while lowering.</p>
<p><b>WARNING</b></p> <p>Do not override self-closing lift controls.</p>	<p><b>WARNING</b></p> <p>Check wheel to prevent vehicle movement.</p>

The messages and pictographs shown are generic in nature and are meant to generally represent hazards common to all automotive lifts regardless of specific style.

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**Review all safety information daily with all lift operators**

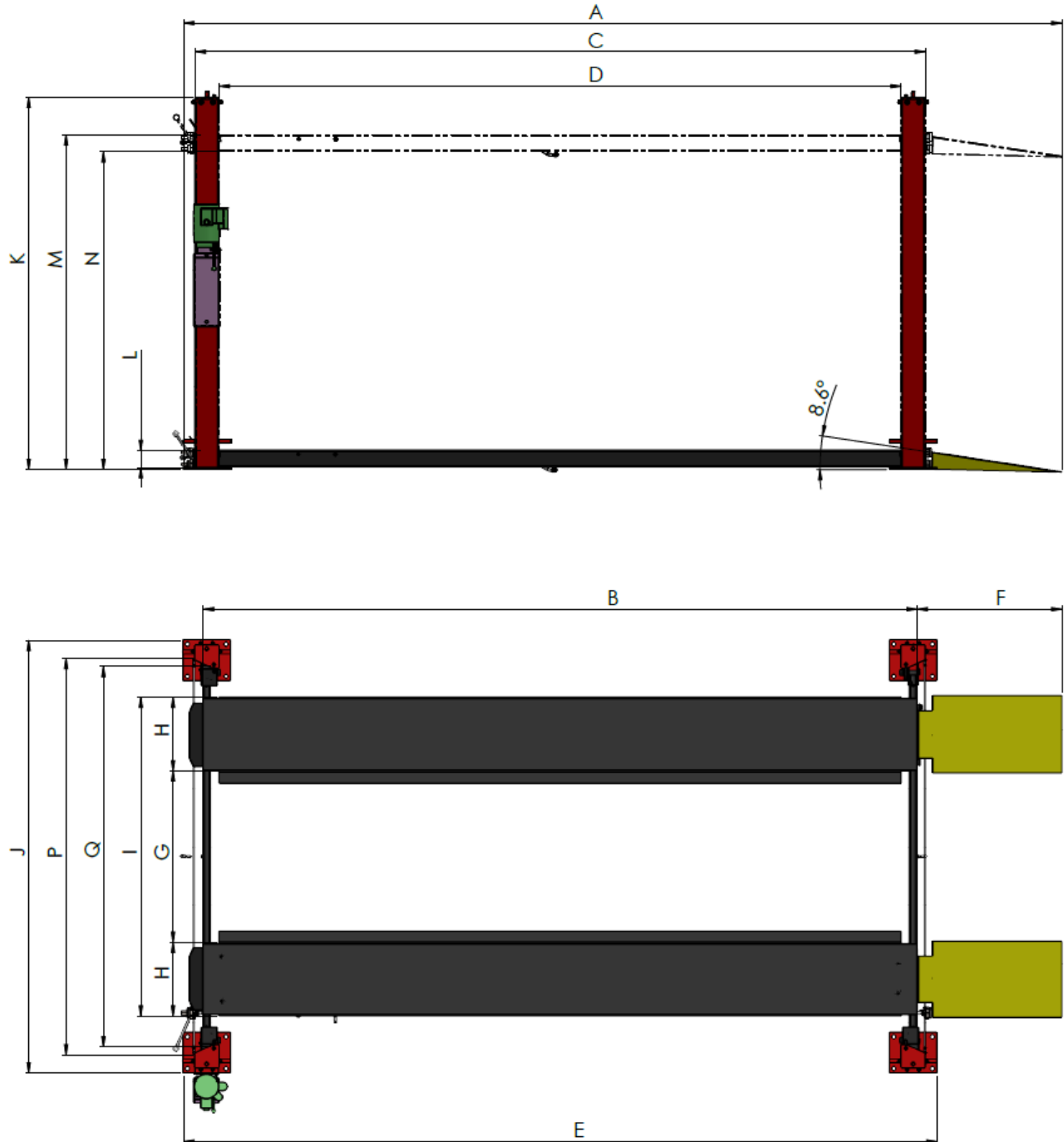


### IMPORTANT :

**Insure Safety Instruction Decals and Hang Card are affixed to the lift immediately following installation and before the lift is used**

**LIFT SAFETY AND LIFT MAINTENANCE MUST BE PART OF YOUR DAILY ROUTINE**

#### 4. GENERAL REQUIREMENTS & LIFT SPECIFICATIONS



**9,000 lb. (4091 kg) Capacity - 4,500 lbs. (2045.5 kg) each Runway**  
**8,000 lb. (3636 kg) Capacity - 4,000 lbs. (1818 kg) each Runway**

Model Number	<i><b>LSS4P8PLDXAL</b></i>	<i><b>LSS4P8PLDWAL</b></i>	<i><b>LSS4P8PLDTAL</b></i>	<i><b>LSS4P9PLDXAL</b></i>
Feature	<i><b>8K REGULAR</b></i>	<i><b>8K WIDE VERSION</b></i>	<i><b>8K TALL VERSION</b></i>	<i><b>9K REGULAR</b></i>
Capacity	8,000 lb.	8,000 lb.	8,000 lb.	9,000 lb.
A - Overall Length with Ramps	207"		222-1/4"	
B - Runway Length	165-1/4"		180-1/2"	
C - Front to Rear Outside Columns	169-1/2"		184-1/2"	
D - F/R Inside Columns	157-1/4"		172-1/2"	
E - F/R Outside Column Baseplates	175-1/2"		190-1/2"	
F - Approach Ramp Length	36-1/2"		36-1/2"	
G - Width Between Runways	37-1/2"	43-1/2"	37-1/2"	43-1/2"
H - Runway Width	18-3/4"		18-3/4"	
I - Width Outside Runways	74-3/4"	80-3/4"	74-3/4"	80-3/4"
J - Overall Width (w/o Power Unit)	103-1/2"	109-1/2"	103-1/2"	109-1/2"
K - Column Height	86-1/4"		94-1/4"	
L - Runway Height	4-1/4"		4-1/4"	
M - Lifting Height	4 3/4" ~ 77 1/4"		4 3/4" ~ 84 3/4"	
N - Max. Clearance (Under Runway)	72-1/4" (1835mm)		80" (2032mm)	
P - Drive Thru Clearance ((Vehicle under Runway)	94-1/2"	100-1/4"	94-1/2"	100-1/4"
Q - Drive Thru Clearance (Vehicle on Runway)	90-1/4"	96-1/4"	90-1/4"	96-1/4"
Accessories Included	Caster wheels, 3 steel drip/drain trays and 1 steel jacking tray, 4 removable wheel stops, steel approach ramps			
ALI Approved Mechanical Locking System	Adjustable lock ladder & auto engaging cable break system			
Shipping Weight	1600 lb.	1750 lb.	1800 lb.	1850 lb.

**A constant supply of 230V 1PH 60Hz 20A electrical power is required for this lift.**

Ongoing design modifications and quality improvements may change specifications listed in this manual without notice



## **4. TOOLS REQUIRED & PRE INSTALLATION PROCEDURES**

### **TOOLS REQUIRED**

- ✓ 30ft. measuring tape, chalk line and chalk, 2 x 4 ft. level (laser level also suggested)
- ✓ Wooden blocks, Step Ladder
- ✓ Work stands - 4 (runway set-up and installation)
- ✓ Metric and SAE wrenches sets, ratchet sets and Allen key sets
- ✓ Crow bar, hammer and screwdrivers
- ✓ Rotary hammer drill c/w  $\frac{3}{4}$  inch diameter masonry drill bit
- ✓ 3 Gallon of Hydraulic Oil (ISO 32)

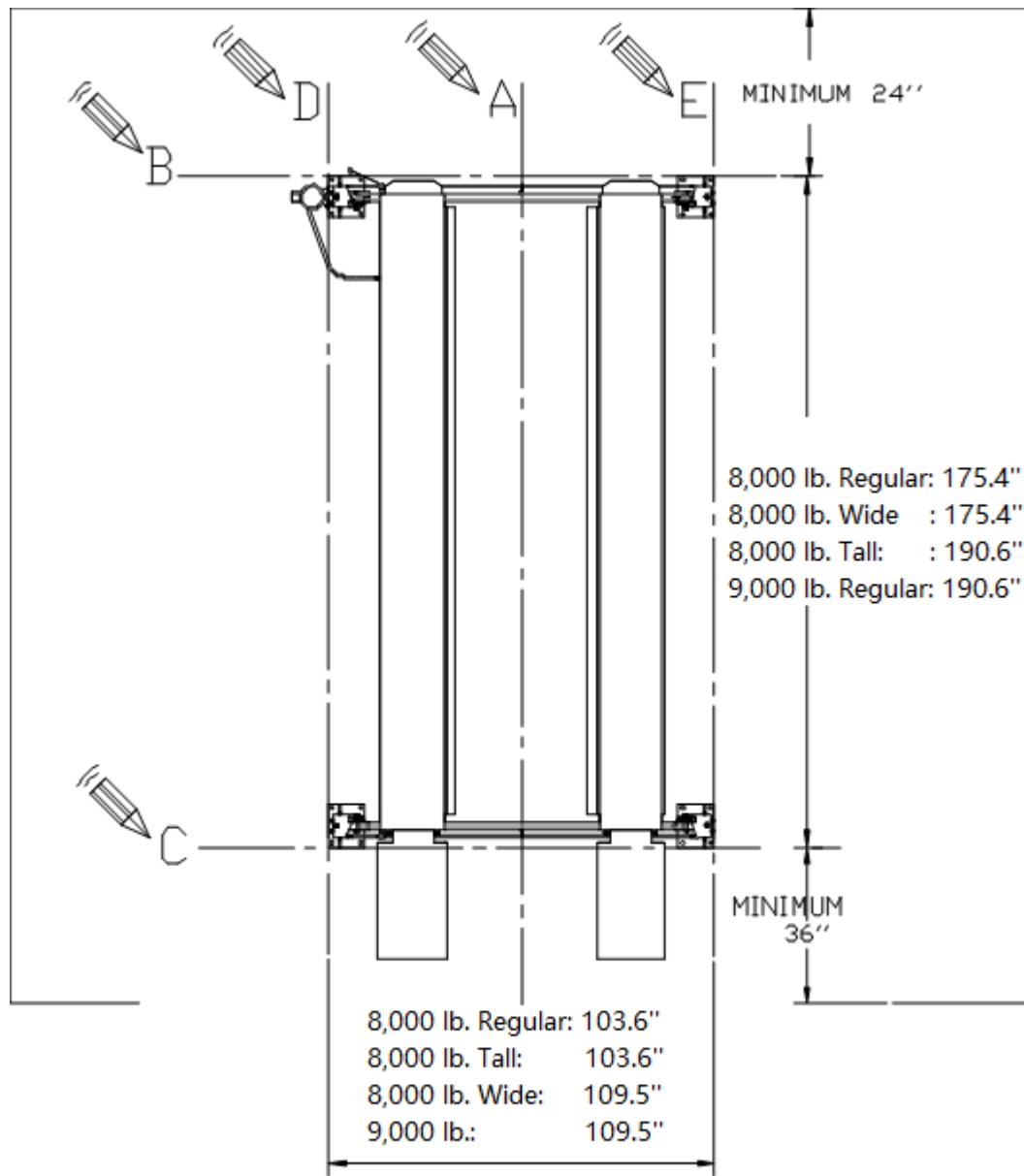
### **PRE-INSTALLATION PROCEDURE**

Before proceeding with installation, read the installation manual and insure all instructions are fully understood and all component parts listed on page 3 are accounted for.

Identify bay center line near the front and mark the floor. Also mark center of the bay entrance. Connect these two points with a chalk line "A". Refer to diagram on the next page for minimum clearance from bay entrance door and draw a second chalk line "C" at 90° to the centerline "A". Measure 175.4" (8000lb lift) or 190.6" (9000lb lift) from line "C" and mark front baseplate line "B". Make sure "B" is perpendicular to "A" and has enough (24") clearance to the front obstacles, e.g. wall and any other equipment. Refer to diagram and draw line "D" and "E" symmetrically to "A". Distance between "D" and "E" is 103.6" (8000lb lift) or 109.5" (9000lb lift). "D" and "E" shall both be perpendicular to "B" and "C". Line "B", "C", "D" and "E" are baseplate outlines. **These locations will be used to initially position each column, however, the 4 most critical measurements will be inside column to inside column measurements confirmed later in the installation process.**

Confirm that the column baseplate locations you have marked are a minimum distance of 6 inches from any floor seam. Do not install if floor has cracks or deterioration that could affect lift stability. The shop/lift owner is responsible for confirming there are no obstructions in the installation area like floor drains, under floor piping or electrical conduit that could be damaged or prevent safe lift installation and secure lift anchoring. Check ceiling for beams or heating ducts and walls for protruding structures, etc. (overhead clearance must be the height of both vehicles added together plus 8"). Insure that the lift can be safely installed in the position you have marked out on the bay floor.

**INSTALLATION NOTE: Installation Step #20/#21 require at least 60" of clearance to allow the installer to insert the required linkages. If room does not permit, the lift should be assembled in a temporary position, and using the wheel dollies provided with the lift, moved into final position after Step #21**



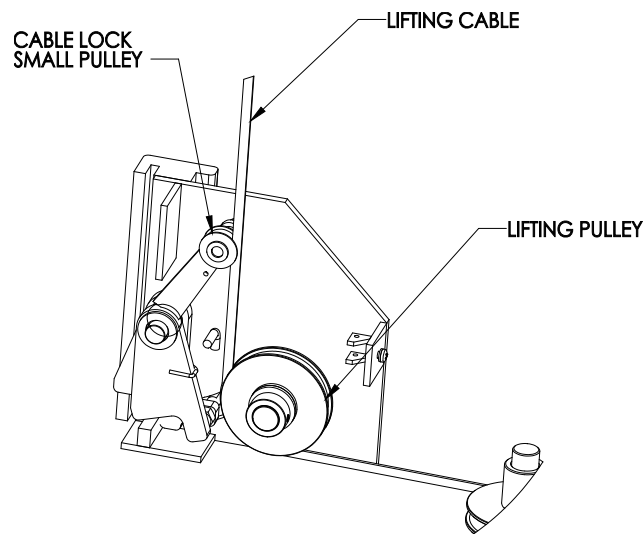
BAY ENTRANCE

## **5. INSTALLATION PROCEDURE**

**Insure the lift installation complies with ANSI/ALI/ALIS, Safety Requirements for installation and Service of Automotive Lifts.**

1. Remove protective wrapping from the lift and clear installation area of packaging materials. Place two wooden blocks under the lift to enable fork lift or other access and to allow for removal of shipping frames. Unbolt steel shipping frames and remove from installation area. Take adequate precautions when working with runways, columns and other components.
2. Find the end of the hose that is mounted to the cylinder and tighten the elbow that attaches the hose to the side of the runway using the nut. Check the fitting at the cylinder bottom and make sure it is tight.
3. Pull or push the plate on the end of the cylinder to make the cylinder rod out of the cylinder by about 40". Make sure that the 1/2" plate is threaded tight against the cylinder rod. Also, be sure that the 1/4" plate is on the rod and hand tighten the lock nut on the rod.
4. Unbolt the top runway (with cylinder underneath) from the shipping frame. Secure runway with a hoist if necessary. Place the runway in the bay with the hydraulic fitting facing toward the outside. Ensure the hydraulic fitting is near the power side column position.
5. Unbolt the four Vertical Columns from the shipping frame and place the column with the power unit mounting bracket at the far left corner from the bay entrance. Stand these Vertical Columns on their base plate by following the pre installation diagram (pg. 8). Ensure each Vertical Column Top Plate has the longer side, with the hole, oriented towards the inside of the lift layout ( see Diagram#8)
6. Unpack the bottom runway (no cylinder). Place the two crossbeam at each end of the lift with the pulley facing inside. Remove the shipping brackets from the bottom runway and turn over placing the runway in the bay next to the other runway with the "L" shaped edges facing each other.
7. Remove the top plates, and slide each crossbeam into the front or rear two columns.
8. Unpack the Lock Ladders from the package and slide them into the precut slot on the slider (item # 15, diagram #7) inside each column. After removing the top nut from the lock ladder and now you are ready to install the top plates on to the columns (see diagram #3).
9. Secure top cap and lock ladder assemblies together with washer and nut. Position the crossbeams at the third lowest locking position on all columns.

10. Square the lift by following pre installation diagram. Confirm the baseplates distances. Measure diagonal distance between front driver side column and rear passenger side. Compare this distance to the other baseplates diagonal distance. This should be within 1/2" to allow some forgiveness to bolt on runways.
11. Lift the runways onto the cross beam and bolt them in place using the 20mm holes towards the outside of the crossbeams. The four drop-in ramp plates will be used with the spacer side facing the lift and through bolted from the outside of the cross rail, through the runway using M18 bolts provided with washers, lock washers and nuts.
12. **Cable installation:** Lay out all cables and measure from end to end and compare with diagram #5 for the correct cable positions.
13. Route the cables by starting with the pulley at the end of the crossbeam and work way back to the cylinder. Ensure the cable runs inside the small upper pulley in the crossbeam. (see diagram below for cable lock pulley relative position to cable).



14. Secure each of the four cables in the wire rope anchor located at the shaft end of the hydraulic cylinder.
15. Run the threaded cable ends into the holes in the top plates of the columns and secure with washers and nuts. At this stage only hand-tighten as final adjustments will be needed. Tighten the nylock nut on the end of the cylinder at this time.
16. **Hydraulic assembly** - Refer diagram #1, locate 5/16" Bolt and Washers (item 25 and 27), and mount the power unit on the mounting bracket on the power-side column.
17. Refer diagram #1, attach the elbow fitting on the power unit's P-port. Do not over tighten. Install the hose (item 17) to the fitting on the side of the runway and connect opposite end to the elbow fitting on the power unit.
18. **Safety release assembly** – The single point safety lock release assembly is a system of connecting rods and linkage that disengage the four lock latches. Refer Diagram #4 and locate the required items.

19. Slip spacer (item 3 in diagram #4) over threaded end of handle rod (item 6 in diagram #4) and insert rod into hole on crossbeam near power column.
20. Slip another spacer over threaded end of T-rod (item 9 in diagram #4) and insert end into hole located on the rear crossbeam. Run rod through rod guides located under the deck.
21. Locate connecting rod (item 10 in diagram #4) and the two connectors (item 1 in diagram #4). Install the rod in between by following diagram #4. Make sure the rod is in rod guides under the deck. Adjust connectors to take the slack out of the rods. The rods should remain free enough to move with no slack. Do not tighten connectors or lock nuts at this time.
22. Locate the two long rods (item 5 in diagram #4) and remove one end from each rod and slide off the eye bolt (item 4 in diagram #1). Install the eye bolt on the middle of each crossbeam with the M10 nuts.
23. Attach short rods (item 7 in diagram #4) on the T shape lock on the bottom of the T and hand tighten. Slide long rod through the eye bolt and attach on end to the top side of the T. Install the other sides of the rods on each safety lock lever (see item 8 in diagram #7). Do the same on the other crossbeam. Before tightening, ensure each of the T-rods are oriented in a vertical manner. Tighten all jam nuts.
24. Tighten the jam nuts on the handle rod and the T rod.
25. Finally, adjust and tighten the rod connectors under the deck, and tighten the jam nuts against the connectors.
26. Fill oil tank with three gallons of ISO32 hydraulic oil. Install breather (black) on top of the oil tank, and put cap (red) on the bottom of tank (**DO NOT DRILL OIL TANK**).
27. **Final adjustments:** Check all cables and make sure they are all in their pulleys. Press up button on the power Unit and let fluid pump into the cylinder. Once the lift is raised off the locks, release the up button and pull the safety lock release handle to disengage all locks and then lower the lift with the lowering lever on the power unit (locks must be disengaged while lowering). Keep holding decent lever for seconds after the lift reaches its bottom position to let air escape.
28. Raise the lift up by about 10". Measure the height of the crossbeam at each column to determine the highest point. Adjust the cable on the highest point column until at least 3 threads pass through the nylock nut. Then adjust the other three cables to match this height to ensure the runways are level.
29. Raise the lift until you hear each column lock "click" into position. Using the down lever only, allow the runways to sit into the locks. Measure each corner of the runways and adjust the lock ladder accordingly to ensure level.
30. **Operate the lift with a vehicle.** Raise and lower the lift three times. Confirm all the operational functions, equalizing cables and safety lock work well.

### **NOTE:**

**This lift does not require bolting to the floor, but if you choose the option to anchor the lift to the floor please follow the detailed instructions and criteria below.**

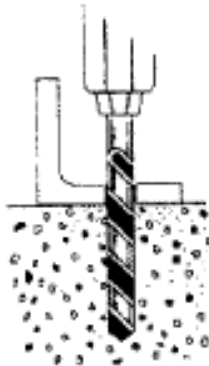
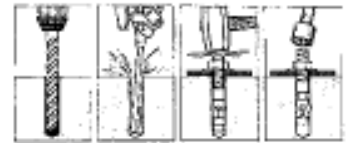
### **FOUNDATION and ANCHORING REQUIREMENTS:**

**Lift should only be installed on level concrete floors with no more than 3° of slope and a minimum of 4 inches (102mm) and 3000 psi (20.7MPa) concrete that has been aged a minimum of 30 days. A qualified person should be consulted to address seismic loads and other local requirements.  
Do not install the lift on asphalt or outdoors.**

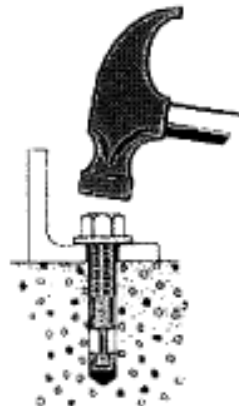
**Maintain a 6" minimum distance from any slab edge or seam. Hole depth should be a minimum of 4".**

**When use shims, MAKE SURE shim thickness does not exceed 1/2" when using the anchors with the lift.**

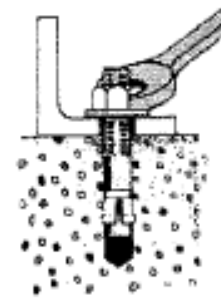
# Wedge Anchor Installation



**1.**  
Drill hole in concrete (hole diameter same as thread diameter) maximum depth of hole could be any depth beyond minimum recommended depth. Clean the hole with compressed air.



**2.**  
Drive wedge anchor into drilled hole through fixture so that nuts is flush with fixture



**3.**  
Tighten nut until wrench resistance is felt (approximately 3 to 4 turns of the nut after first resistance) anchorage is now complete

## MORE HELPFUL INSTRUCTIONS

1. Always wear safety glasses.
2. Follow the drill manufacturer's safety instructions.
3. Use only solid carbide-tipped bits meeting the ANSI B94-12 tip diameter as shown below in bottom Table.
4. Drill the hole perpendicular to the work surface. To assure full holding power, do not ream the hole or allow the drill to wobble.
5. Drill the hole as deep as the full length of the anchor, but not close then two anchor diameters to the bottom (opposite surface of the concrete)
6. Clean the hole using compressed air and a wire brush. A clean hole is necessary for proper performance.
7. Assemble the washer and nut on the anchor so the nut is recessed slightly below the head of the anchor.
8. Tap the anchor through the fixture (must be 1/8" larger than diameter of the anchor) and into the hole making sure the nut and washer rest solidly against the fixture or tap the anchor into the hole and then place bracket over the anchor.
9. Tighten the nut with a torque wrench to proper torque according to the table
10. If spinning occurs, pull up on the anchor using the claw end of a hammer and then torque.

## DRILL TOLERANCE – ANSI B-94-12 AND TORQUE REQUIREMENT

Anchor Diameter	Minimum	Maximum	Torque Range
1/4"	.260"	.268"	5-10ft-lbs
3/8"	.390"	.398"	25-30ft-lbs
1/2"	.520"	.530"	50-60ft-lbs
5/8"	.650"	.660"	75-90ft-lbs
3/4"	.775"	.787"	150-175ft-lbs
7/8"	.905"	.917"	200-250ft-lbs
1"	1.030"	1.042"	250-300ft-lbs
1 1/4"	1.285"	1.300"	400-450ft-lbs

Wedge-All Dia (in)	1/4	3/8	1/2	5/8	3/4	7/8	1	1 1/4	1 1/2
Bit Size (in)	1/4	3/8	1/2	5/8	3/4	7/8	1	1 1/4	1 1/2
Fixture Hole (in)	5/16	7/16	9/16	11/16	7/8	1	1 1/8	1 3/8	1 5/8
Wrench Size (in)	7/16	9/16	3/4	15/16	1 1/8	1 5/16	1 1/2	1 7/8	2 1/4

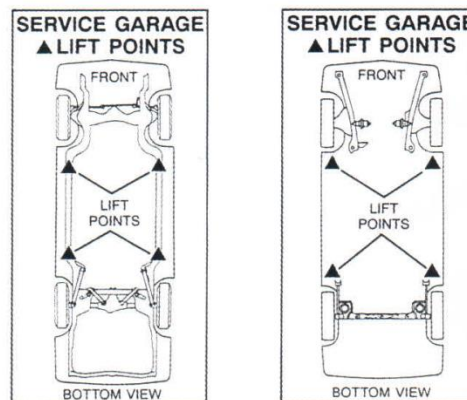
## **6. Operating Instructions & Lift Maintenance**

**Insure this manual along with all operation, inspection and maintenance instructions are delivered to the owner/user/employer**

**LIFT OPERATION:** Before lifting a vehicle, ensure all operators are qualified, have been trained and are following all safety instructions. Read and follow the ALI "Lifting It Right" manual included with the lift. **Always** use the "Vehicle Lifting Points" reference guide when lifting a vehicle. Insure all materials stay up to date >>> [www.autolift.org/](http://www.autolift.org/) (see example of SAE J2184 standard below)

Ensure that every vehicle will be securely positioned on the lift. When using air/hydraulic rolling jacks, always use vehicle manufacturer's recommended lifting points (see picture below).

**Never allow anyone under the lift when raising or lowering. Always ensure mechanical safety locks are completely engaged on all four columns before proceeding under the lift or a vehicle.**



Typical Label Drawings  
Reprinted with permission from SAE J2184  
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Controls on the powerpack and crossbeam perform the following functions:

**Push button on power unit:** raises the lift.

**Safety Release Handle:** retracts or releases safety locks at all four columns. This handle (along with the "DOWN HANDLE") must be pressed and held during the entire lowering procedure.

**Down handle on power unit:** lowers the lift.

**Note:** Before lowering the lift you should raise it slightly to remove pressure from safety locks allowing them to disengage completely.



## **PRE-OPERATION CHECK LIST**

### **Trained Lift Operator**

- ✓ All lift operators must be fully trained and qualified to safely and effectively operate the lift described and covered in this manual.

### **Absence of All Obstructions**

- ✓ The total work area must be free of any and all obstructions and be generally clean of oil and debris.

### **Visual Inspections**

- ✓ Every lift operator must thoroughly inspect the lift noting any problem area. An inspection of the floor area and anchor bolts must also be completed. Report any questionable item.

### **"No Load" Performance Check**

- ✓ All mechanical safety locks are operating properly and consistently
- ✓ No External Fluid Leaks
- ✓ No Lift "Bleed Down".
- ✓ Effortless and Simultaneous Movement
- ✓ Level Lifting
- ✓ All Controls Function Properly
- ✓ Safety Mechanisms all functional

### **Previous Operator's Report**

- ✓ Verify with previous operator and/or supervisor that there is no problem with the lift. If any problem has been reported, insure all necessary repairs have been completed.

## **LIFT OPERATION with a TYPICAL VEHICLE**

### **Lift Operation**

- ✓ Perform pre-operation check list item by item
- ✓ Ensure lift is completely lowered
- ✓ Position vehicle on the lift

### **Caution**

- ✓ Avoid sudden "starts and stops" during loading and unloading of vehicle

### **To Load a Typical Vehicle**

- ✓ Position vehicle on the lift runways by using the approaching ramp. Make sure the center of gravity is located evenly between the columns. The individual axle weight should not exceed 50% of the lift capacity.
- ✓ Set vehicle parking brake and chock tires.
- ✓ Make sure vehicle is neither front nor rear heavy.

### **To Raise the Lift**

- ✓ Insert runway stops before raising the lift.
- ✓ Push up button to raise the lift by about 10".
- ✓ Check for the vehicle movement and weight distribution. Raise to desired height if secure.
- ✓ Press "DOWN" handle to lower lift on to the mechanical safeties.
- ✓ **DO NOT WORK UNDER A LIFT THAT IS NOT IN THE LOCK POSITION.**

### **To Lower the Lift**

- ✓ Inspect the lifting area to ensure all personnel and debris have been cleared away.
- ✓ Raise the lift slightly and disengage all safety locks by pulling the safety release handle.
- ✓ Press the lowering lever on the power unit to begin lowering. Safety locks must be all disengaged during the lowering.
- ✓ Lower lift completely to the floor. Remove runway stops, carefully drive off the vehicle from the lift runways.

## **MAINTENANCE INSTRUCTIONS**

**Maintenance is to be performed by factory trained lift service personnel only.**

**Important:** Regularly inspect the hydraulic pressure developed upon the rated capacity, and make sure the pressure doesn't exceed the operating pressure (2000 psi for 9000lb lift and 1800 psi for 8000lb lift).

**The following is a minimum maintenance schedule:**

### **DAILY:**

- ✓ Raise and lower the lift (with no vehicle) at the beginning of each shift to verify the runways are level, safety locks are engaging, and the lift is operating properly.
- ✓ Check all hydraulic fittings and lines for damage and leaks. Check electrical wiring for damage.
- ✓ Check all moving parts for uneven or excessive wear. Repair or replace all damaged, worn, or broken components immediately.
- ✓ Clean all debris from the base frame area
- ✓ Remove oil/grease on runways and rolling jack lift pads.

### **WEEKLY:**

- ✓ Check hydraulic fluid in reservoir and top up if required.
- ✓ Check cables, cable pulleys and lifting cylinder.

### **MONTHLY:**

- ✓ Check that all anchor bolts are torqued to minimum 75 ft-lbs (102Nm).
- ✓ Clean and lubricate moving parts.

### **EVERY YEAR:**

- ✓ Have a certified lift technician inspect and certify all aspects of the lift.

### **EVERY TWO YEARS:**

- ✓ Change and replace hydraulic oil in cylinders and powerpack reservoir.

### **LUBRICATION:**

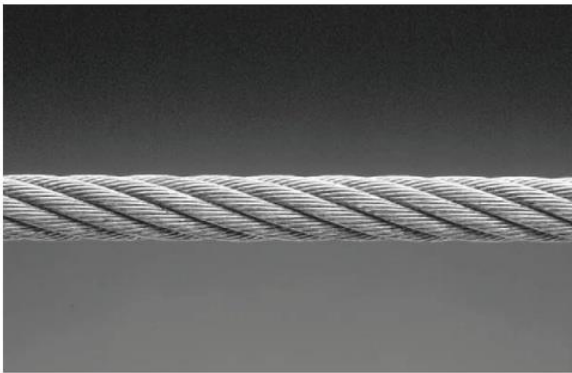
- ✓ Refer diagram #10 for lubrication points.
- ✓ Where grease is required use a multi-purpose lithium grease.
- ✓ Where lubricating oil is required use a SAE 30 oil.
- ✓ Where hydraulic oil is required use ISO 32 hydraulic oil (10W non detergent).

**The following criteria will determine when a lifting cable is no longer acceptable for service:**

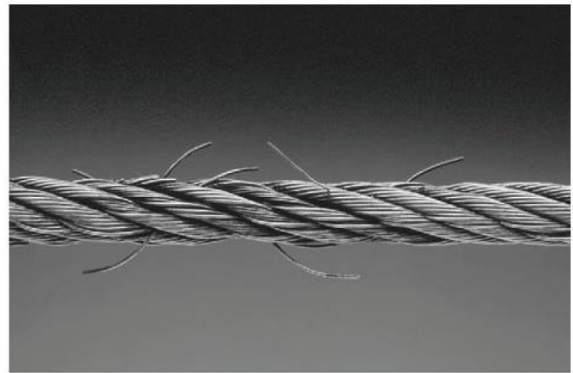
- 12 randomly distributed broken wires in one lay or four broken wires in one strand in one lay in running ropes
- one outer wire broken at the contact point with the core of the rope, which has worked its way out of the rope structure and protrudes or loops out from the rope structure
- wear of one-third the original diameter of outside individual wires
- kinking, crushing, bird caging, or any other damage resulting in distortion of the rope structure
- evidence of heat damage from any cause
- reduction from nominal diameter greater than those listed in the following table:

<b>Rope Diameter (inch)</b>	<b>Max. allowable reduction (inch)</b>
Less than or equal to 5/16"	1/64"
More than 5/16" to 1/2"	1/32"
More than 1/2" to 3/4"	3/64"

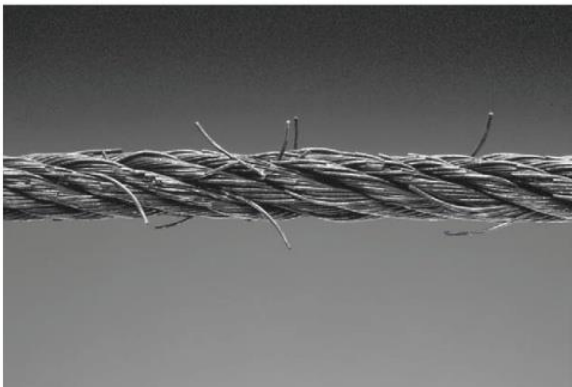
If any of the cable is as shown in the following pictures, do not use.



Typical Good Cable



Cable With Broken Wires



Cable With Severe Corrosion



Cable With Necking

**Note:** Attention shall be given to end connections. Upon development of two broken wires adjacent to socket end connections, the rope shall be resocketed or replaced. Resocketing shall not be attempted if the resulting rope length will be insufficient for proper operation.

## **CABLE ADJUSTMENT**

### **Initial adjustment**

Adjust cable with lift fully lowered. Loosen jam nut and tighten nut on cable stud on top of column until crossbeam end is raised 1/4" and back off nut one turn. Retighten jam nut. Repeat for all four cables.

### **Final adjustment**

1. Load a typical vehicle on lift.
2. Raise lift to full height and then lower lift onto top latch position.
3. Starting with the right front column, use a straight edge to mark the position of the crossbeam bottom on the column.
4. Raise lift to full height again and mark second position. If gap between two marks is less than 2", adjust locking latch bar to reach clearance of 2". Repeat for the other three columns.
5. Adjust locking latch bar by adjusting nut so that the bottom of the top-most locking slot is at least 2" below locking latch. After adjustment, tighten jam nut underneath column top plate.
6. If the entire 2" clearance cannot be attained by adjusting the locking latch bar, adjust the cable. Turn cable adjusting nut to raise the locking latch 2" above bottom of latch bar slot. Then tighten cable jam nut.
7. Lower lift and remove vehicle. Raise the lift to full height. Listen and watch as the first locking latch clicks into place. Synchronize the other three columns with this column by adjusting their cables so all four latches click at the same time. Tighten jam nuts.

When adjusting cables, always leave **at least** 1/4" showing between nut and stud end. Latches may not click in at the same time when vehicle is being raised. They should be close. **Be sure** all four corners have passed the locking latch bar slot before lowering lift on locking latches.

## **7. TROUBLESHOOTING**

The following are suggestions to consider if you have problems with the lift. Please call a qualified lift technician and/or a qualified electrician for further clarification and information.

<b>Problem</b>	<b>Possible Causes</b>	<b>Solution</b>
Lift Will Not Raise or Lower	<ol style="list-style-type: none"> <li>1. Blown fuse or circuit breaker</li> <li>2. Incorrect voltage to motor</li> <li>3. Bad wiring connections</li> <li>4. "UP" switch burned out</li> <li>5. Motor windings burned out</li> </ol>	<ol style="list-style-type: none"> <li>1. Replace fuse or reset/replace circuit breaker</li> <li>2. Supply correct voltage to motor</li> <li>3. Repair and insulate all connections</li> <li>4. Replace switch</li> <li>5. Replace motor</li> </ol>
Lift Will Not Raise	<ol style="list-style-type: none"> <li>1. Air in oil or low oil level</li> <li>2. Lowering Valve leaks</li> <li>3. Motor runs backward</li> <li>4. Pump damaged</li> <li>5. Pump will not prime</li> <li>6. Relief Valve leaks</li> <li>7. Voltage to motor incorrect</li> <li>8. Lift overloaded</li> </ol>	<ol style="list-style-type: none"> <li>1. Check fluid level, oil seal, bleed system</li> <li>2. Clean valve or replace</li> <li>3. Check for correct wiring</li> <li>4. Repair or replace pump</li> <li>5. Check fluid level and pick-up tube - replace pump</li> <li>6. Clean Relief Valve (replace if necessary)</li> <li>7. Supply correct voltage to motor</li> <li>8. Verify that loaded vehicle weight does not exceed rated lift capacity</li> </ol>
Lift Will Not Lower	<ol style="list-style-type: none"> <li>1. Mechanical locks are engaged</li> <li>2. Obstruction under lift or in glide block tracks</li> </ol>	<ol style="list-style-type: none"> <li>1. Raise unit slightly and disengage mechanical locks</li> <li>2. Carefully remove obstruction - clean glide block tracks</li> </ol>
Lift Will Not Hold Pressure	<ol style="list-style-type: none"> <li>1. Contamination in system</li> <li>2. Internal Cylinder leaks</li> <li>3. Lowering Valve leaks</li> <li>4. Check Valve leaks</li> <li>5. External leaks</li> </ol>	<ol style="list-style-type: none"> <li>1. Check oil level - bleed cylinders - remove contamination - replace oil seal</li> <li>2. Check fitting, replace cylinder</li> <li>3. Contaminated fluid, handle binds, clean valves</li> <li>4. Clean check valve (replace if necessary)</li> <li>5. Check all fittings and repair leaks</li> </ol>
Lift Will Not Raise A Vehicle	<ol style="list-style-type: none"> <li>1. Low hydraulic fluid</li> <li>2. Malfunction of pressure relief valve</li> <li>3. Insufficient electrical voltage</li> <li>4. Lift overload</li> <li>5. Motor is running backwards</li> <li>6. Air in hydraulic oil</li> <li>7. Pump will not prime</li> <li>8. Pump is damaged</li> <li>9. Faulty lowering valve</li> </ol>	<ol style="list-style-type: none"> <li>1. Lower lift. Using ISO grade 32 hydraulic oil, fill the powerpack reservoir to 1" below the top</li> <li>2. Clean pressure relief valve. if problem continues, call a service technician</li> <li>3. Confirm a 208/230 volt power supply to the lift</li> <li>4. Check that vehicle weight is evenly distributed and does not exceed rated capacity.</li> <li>5. Confirm proper motor rotation - rewire if required</li> <li>6. Check oil seal and bleed hydraulic system</li> <li>7. Check hydraulic oil level and pick-up tube. Replace pump if required</li> <li>8. Repair or replace pump</li> <li>9. Clean or replace valve</li> </ol>

<b>Problem</b>	<b>Possible Causes</b>	<b>Solutions</b>
Slow Drift Down	<ol style="list-style-type: none"> <li>1. Mechanical safety locks not engaged</li> <li>2. Powerpack lowering valve contamination</li> <li>3. Hydraulic system leaks</li> </ol>	<ol style="list-style-type: none"> <li>1. Raise lift to engage all safety locks then lower lift and confirm all safety locks are engaged</li> <li>2. Back flush powerpack by opening manual over-right valve. Engage "up" switch and down lever at the same time and run approximately 10 seconds</li> <li>3. Check cylinder and all fittings for any hydraulic oil leak</li> </ol>
Lift Going Up Out of Level	<ol style="list-style-type: none"> <li>1. Lift installed on un-level floor</li> <li>2. Cable(s) out of adjustment</li> </ol>	<ol style="list-style-type: none"> <li>1. Reinstall on level surface</li> <li>2. re-adjust cables - Call service technician if problem persists</li> </ol>
Anchors Will Not Stay Tight	<ol style="list-style-type: none"> <li>1. Holes drilled oversize</li> <li>2. Concrete floor thickness or holding strength not sufficient</li> </ol>	<ol style="list-style-type: none"> <li>1. Relocate lift using the correct bit to drill holes</li> <li>2. Break out old concrete and re-pour new foundation per lift installation instruction</li> </ol>

Call factory for technical assistance if lift becomes inoperative in the raised position, and the maximum operating hydraulic pressure developed upon lifting the rated capacity.

**Replace all worn or broken parts and components only with manufacturer approved/supplied parts and components**

**Replacement parts may be purchased from your local lift supplier or the manufacturer at: 1-877-799-LIFT (5438) or (289) 291-3335**

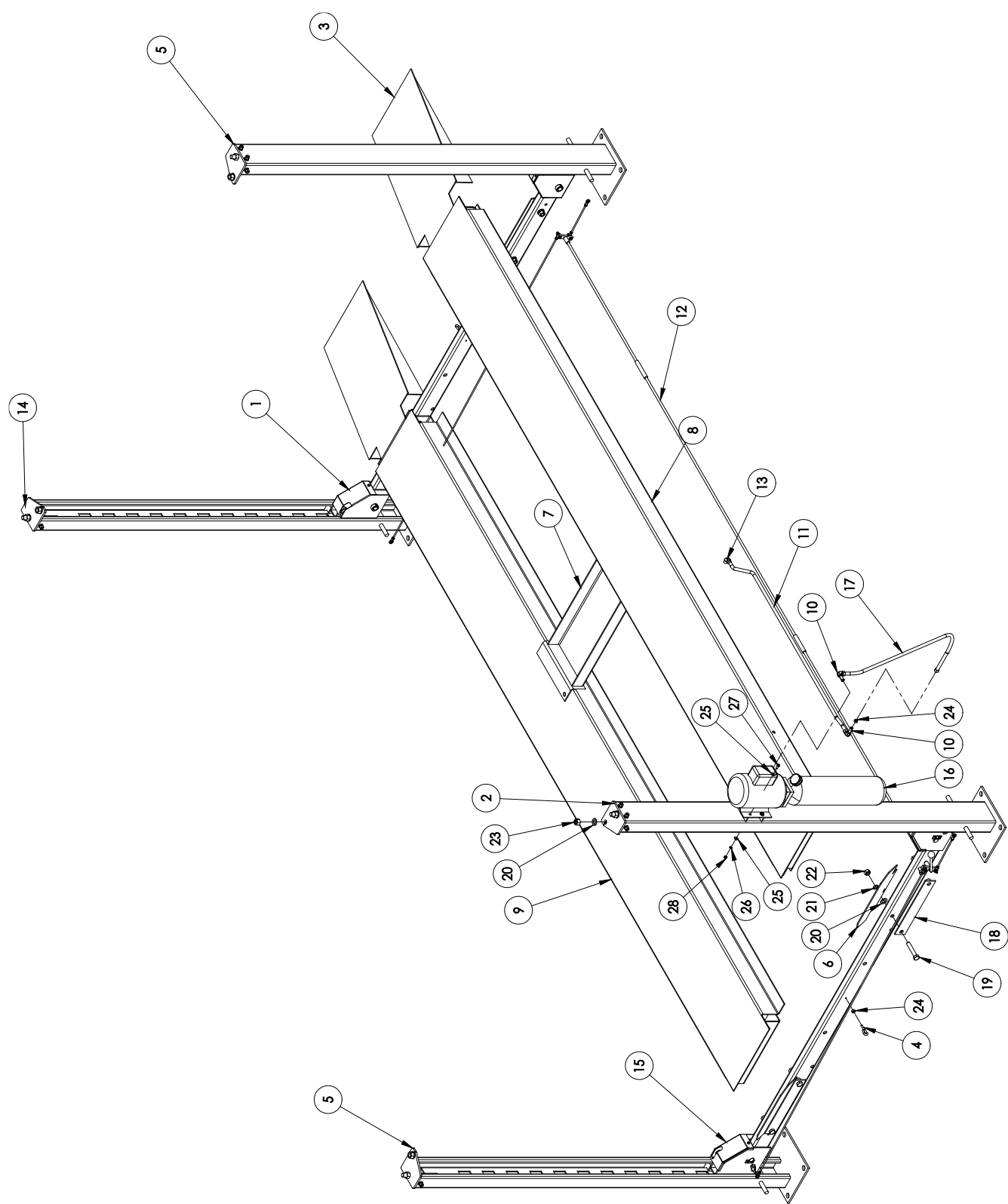
## **8. LIFT ILLUSTRATIONS & PARTS LISTS**

The diagrams listed below, along with related parts lists, will assist you when installing and servicing this lift. Please ensure these lift diagrams and parts lists are kept in a secure place for quick reference.

Diagram #1 - Lift Assembly	page 25
Diagram #2 - Caster Wheel Frame	page 27
Diagram #3 - Tower Assembly	page 28
Diagram #4 - Safety Release Assembly	page 29
Diagram #5 - Lifting Cable Routing	page 31
Diagram #6 - Diver Side Runway Assembly	page 32
Diagram #7 – Crossbeam Assembly	page 34
Diagram #8 - Safety Instruction	page 36
Diagram #9 – Lubrication Points	page 37
Diagram #10 – Power Unit Wiring Diagram	page 38



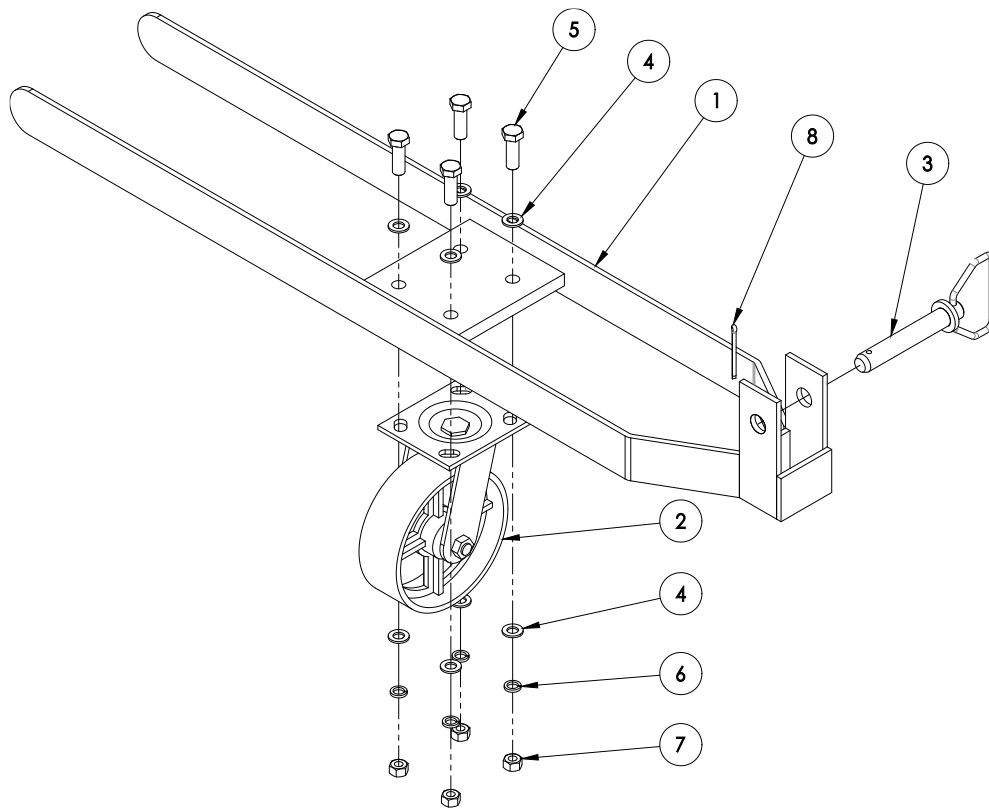
**Diagram #1: LIFT ASSEMBLY**



ITEM NO.	PART NUMBER		DESCRIPTION	QTY.
1, 15	①③	44080004	CROSSBEAM ASSEMBLY	2
	②④	44090004		
2	①②	44080002	TOWER ASSEMBLY (POWER SIDE)	1
	③④	44090002		
3		24090012	RAMP	2
4		14090074	SAFETY RELEASE BAR HOOK	2
5	①②	44080001	TOWER ASSEMBLY (FRONT PASSENGER SIDE & REAR DRIVER SIDE)	2
	③④	44090001		
6		14090063	WHEEL STOP	4
7	①③	24080015	JACK TRAY	1
	②④	24090015		
8	①②	44090003	DRIVER SIDE DECK	1
	③④	44080003		
9	①②	24090007	PASSENGER SIDE DECK	1
	③④	24080007		
10		34090009	HYDRAULIC ELBOW FITTING	2
11	①②	34080015	HYDRAULIC HOSE	1
	③④	34090007		
12	①	44080010	SAFETY RELEASE ASSEMBLY (Complete Set)	1
	②	44080010W		
	③	44080010T		
	④	44090010		
13		34090011	CYLINDER ELBOW FITTING	1
14	①②	44080009	TOWER ASSEMBLY (REAR PASSENGER SIDE)	1
	③④	44090009		
16		34090010	POWER PACK	1
17		34090008	HYDRAULIC HOSE	1
18		24090013	WHEEL STOP HOLDING PLATE	4
19		3C000172	M18X100 HEX BOLT	8
20		3C000101	20MM PLAIN WASHER	12
21		3C000173	18MM SPRING LOCK	8
22		3C000174	M18 NUT	8
23		3C000100	3/4 UNF NUT	4
24		3C000104	M10 NUT	3
25		3C000143	5/16" FLAT WASHER	8
26		3C000000	5/16" SPRING LOCK WASHER	4
27		3C000001	5/16" HEX BOLT	4
28		3C000145	5/16" HEX BOLT	4

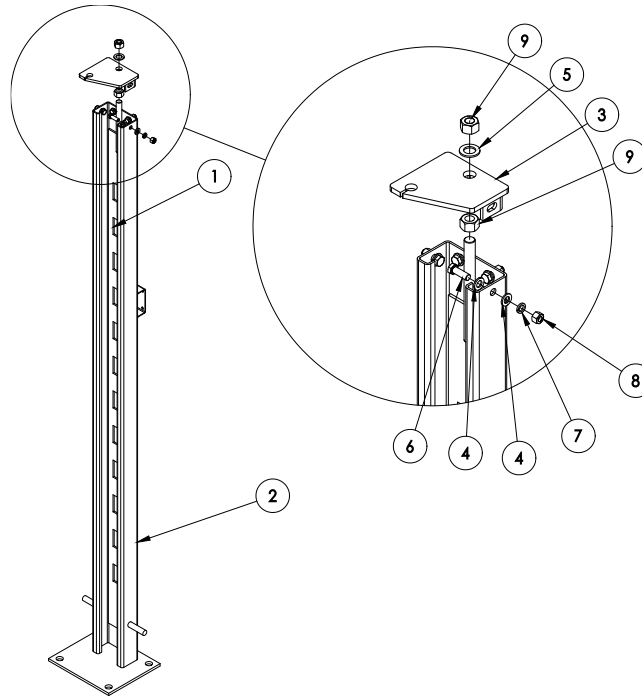
① : 8,000 lb. Regular    ② : 8,000 lb. Wide    ③ : 8,000 lb. Tall    ④ : 9,000 lb.

## **Diagram #2: CASTER WHEEL FRAME (44090006)**



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	24090014	WHEEL BRACKET WELD.	4
2	34090005	WHEEL ASSEMBLY	4
3	44090077	WHEEL SUPPORT SHAFT	4
4	3C000076	10MM PLAIN WASHER	32
5	3C000156	M12X35 BOLT	16
6	3C000067	10MM SPRING LOCK WASHER	16
7	3C000104	M10 NUT	16
8	3C000168	4X50MM SPLIT PIN	4

### **Diagram #3: Tower Assembly**



FRONT DRIVER SIDE:

ITEM NO.	PART NUMBER		DESCRIPTION	QTY.
1	①②	24080005	SAFETY LADDER WELDMENT	4
	③④	24090005		
2	①②	24080001	POWER SIDE TOWER WELD.	1
	③④	24090001		
3		24090003	TOP PLATE WELDMENT A	2
4		3C000054	12mm PLAIN WASHER	32
5		3C000101	20mm PLAIN WASHER	4
6		3C000156	M12X35 BOLT	16
7		3C000055	12mm SPRING LOCK WASHER	16
8		3C000157	M12 NUT	16
9		3C000100	M20 NUT	8

REAR DRIVER SIDE:

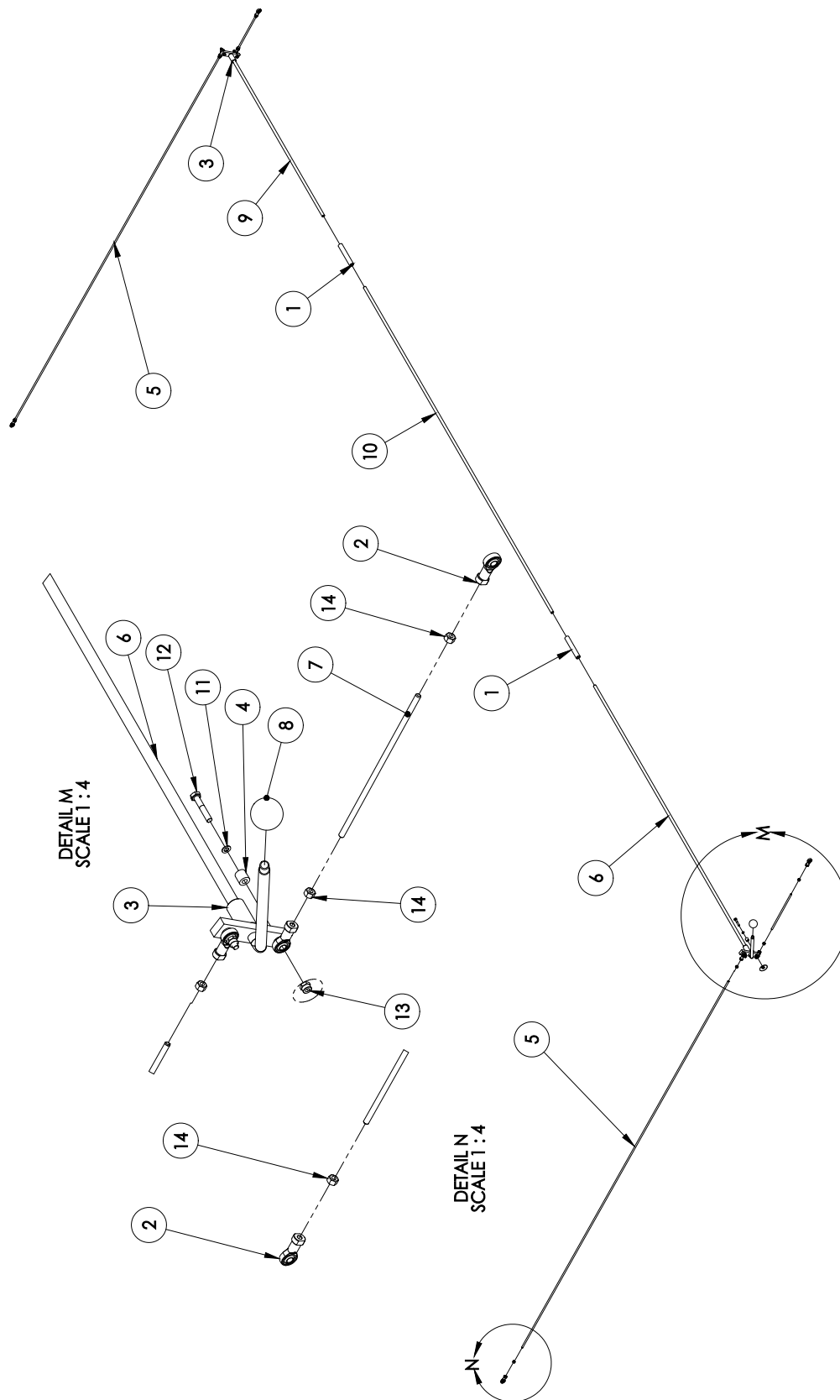
ITEM NO.	PART NUMBER		DESCRIPTION	QTY.
2	①②	24080002	TOWER NON POWERSIDE WELD.	3
	③④	24090002		

FRONT PASSENGER SIDE & REAR DRIVER SIDE:

ITEM NO.	PART NUMBER		DESCRIPTION	QTY.
3		24090004	TOP PLATE WELDMENT B	2

① : 8,000 lb. Regular    ② : 8,000 lb. Wide    ③ : 8,000 lb. Tall    ④ : 9,000 lb.

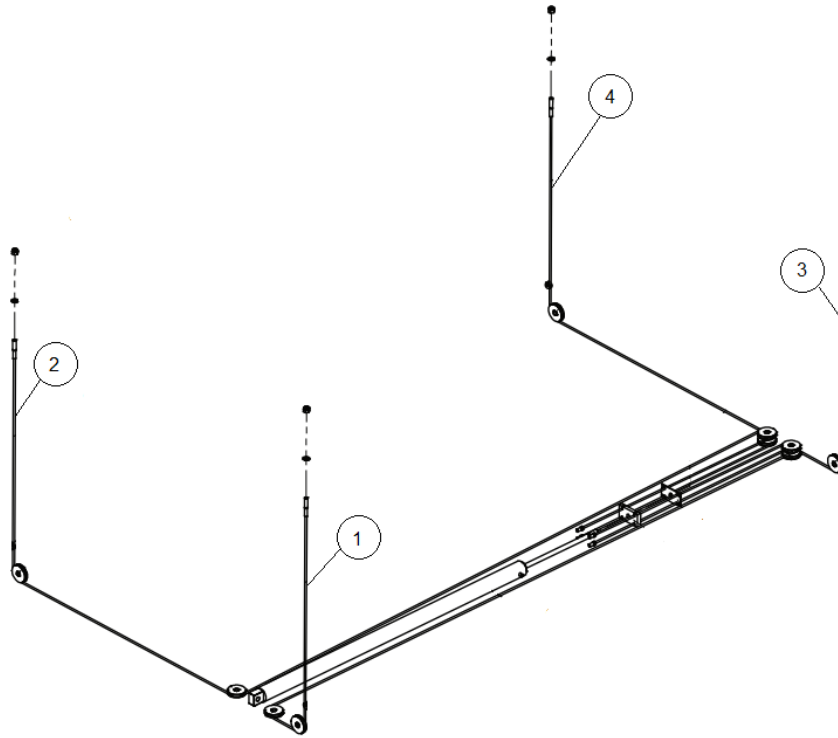
**Diagram #4: Safety Release Assembly**



ITEM NO.	PART NUMBER		DESCRIPTION	QTY.
1		14090078	CONNECTOR	2
2		34090006	LEVER JOINT SI6TK M6	8
3		14090081	COVER PIPE	2
4		14090085	LEVER BUSHING	4
5	①③	14080083	SAFETY RELEASE BAR	2
	②④	14090083		
6		44090008	SAFETY RELEASE BAR W/ LEVER	1
7		14090084	SAFETY RELEASE BAR	2
8		14090086	PLASTIC HANDLE BALL	1
9		24090016	SAFETY RELEASE BAR WELD.	1
10	①②	14080077	SAFETY RELEASE BAR	1
	③④	14090077		
11		3C000169	6MM WASHER	4
12		3C000169	M6X35 HEX BOLT	4
13		3C000169	M6 NYLON NUT	4
14		3C000175	M6 NUT	8

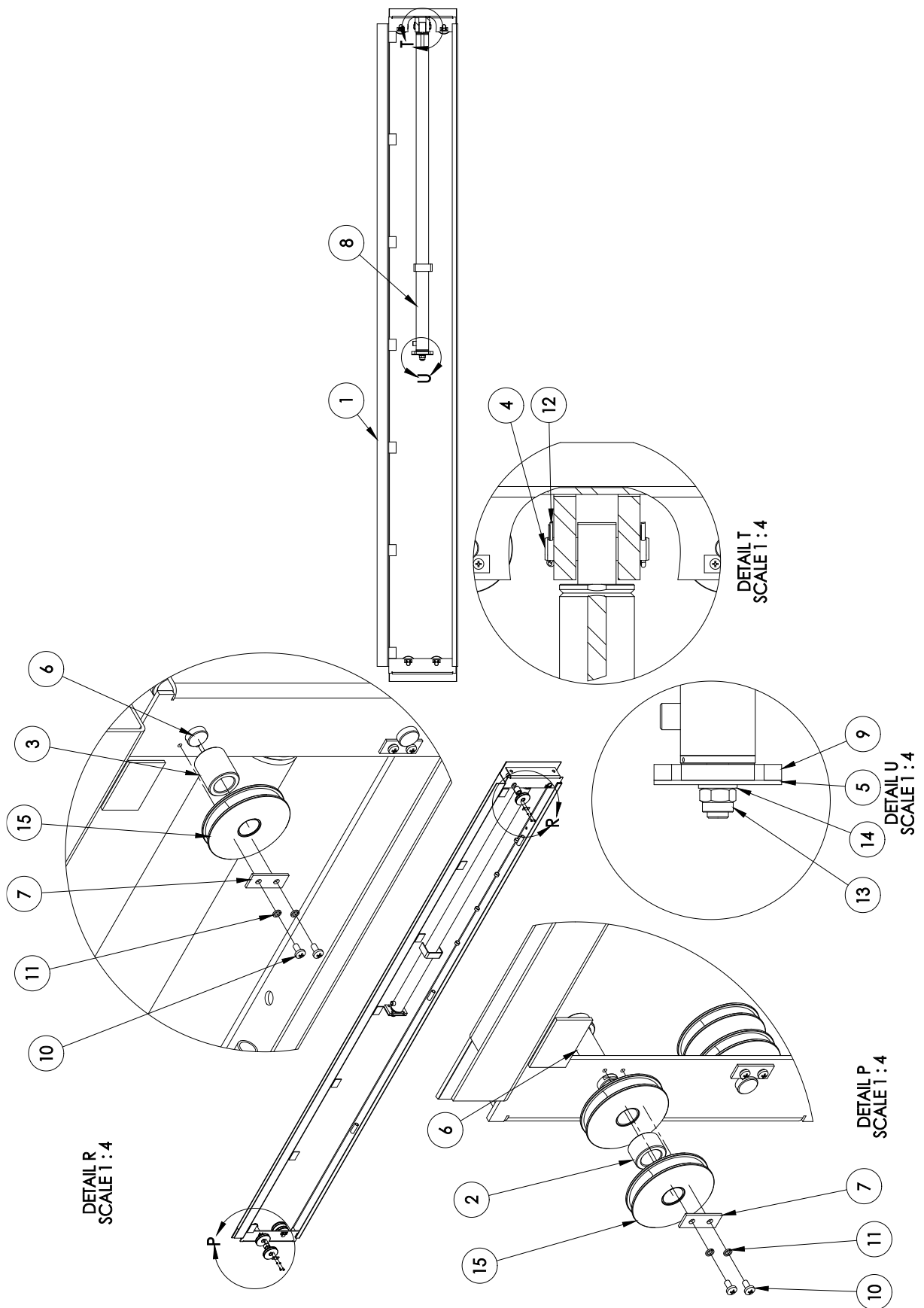
① : 8,000 lb. Regular    ② : 8,000 lb. Wide    ③ : 8,000 lb. Tall    ④ : 9,000 lb.

**Diagram #5: Lifting Cable Routing**



ITEM NO.	PART NUMBER	CABLE LENGTH	QTY
<b>8,000 lb. Regular</b>			
1	34081001	266.5"	1
2	34081002	323"	1
3	34081003	107"	1
4	34081004	161.5"	1
<b>8,000 lb. Wide</b>			
1	34081001	266.5"	1
2	34081005	329"	1
3	34081003	107"	1
4	34081006	167.5"	1
<b>8,000 lb. Tall</b>			
1	34091001	289"	1
2	34091005	345"	1
3	34091003	115"	1
4	34091006	170.5"	1
<b>9,000 lb.</b>			
1	34091001	289"	1
2	34091002	351"	1
3	34091003	115"	1
4	34091004	176.5"	1

**Diagram #6: Driver (left) Side Runway Assembly**

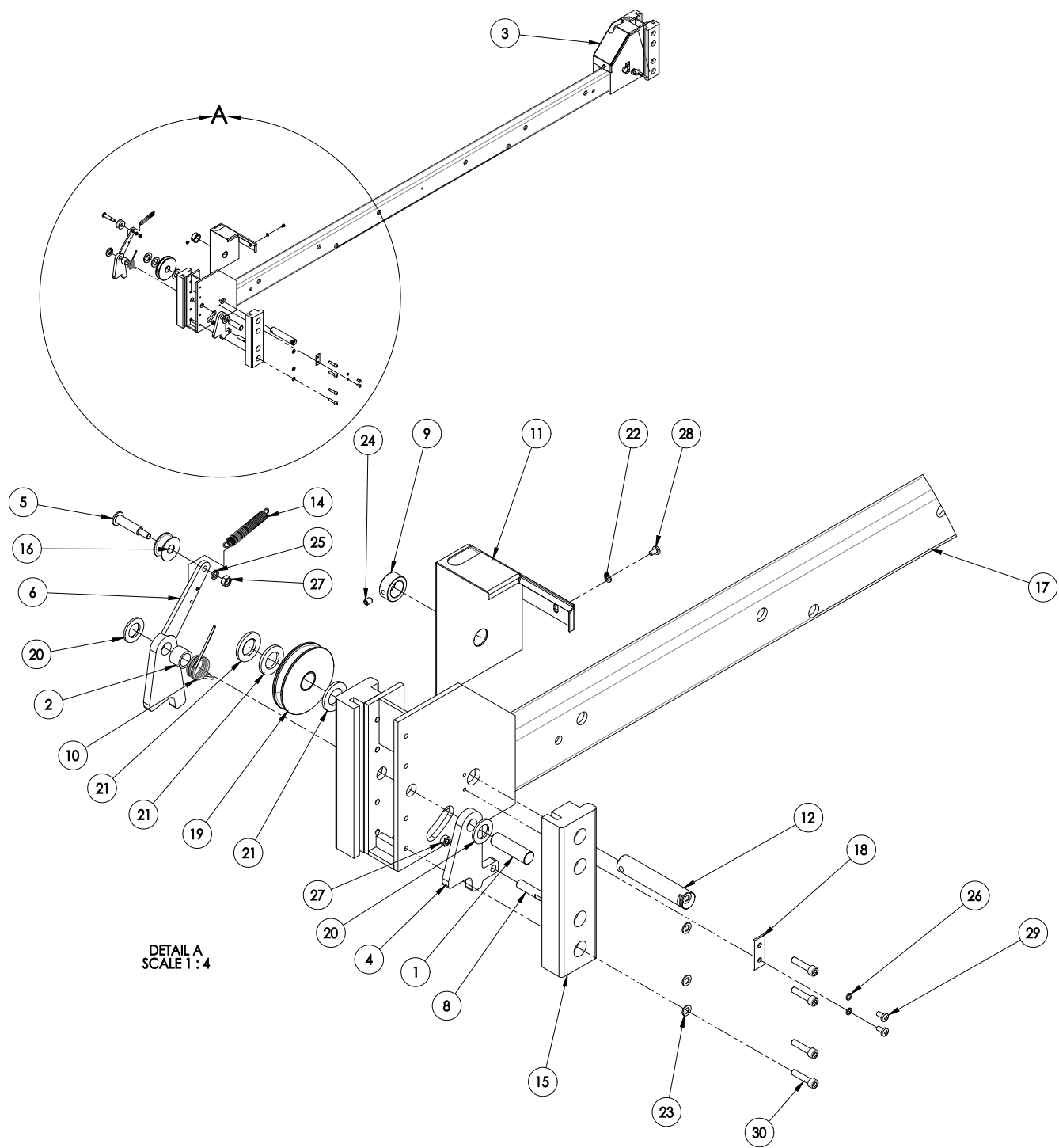




ITEM NO.	PART NUMBER		DESCRIPTION	QTY.
1	①②	24080006	MAIN DECK WELDMENT	1
	③④	24090006		
2		14090087	PULLEY SPACER(SHORT)	2
3		14090088	PULLEY SPACER(LONG)	2
4		14090089	CYLINDER FIX PIN	1
5		14090090	CABLE PLATE	1
6		14090092	PULLEY SHAFT	4
7		14090049	SHAFT CLIP	4
8	①②	44080011	CYLINDER	1
	③④	44090011		
9		14090091	CABLE PLATE(THICK)	1
10		3C000159	M6X12 SCREW	8
11		3C000163	6MM SPRING LOCK WASHER	8
12		3C000160	SPLIT PIN	2
13		3C000161	CYLINDER NYLOCK NUT	1
14		3C000162	24MM PLAIN WASHER	1
15		44090012	PULLEY W/ BUSHING	10

① : 8,000 lb. Regular    ② : 8,000 lb. Wide    ③ : 8,000 lb. Tall    ④ : 9,000 lb.

**Diagram #7: Crossbeam Assembly**



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	14090045	LOCK SHAFT	4
2	14090056	SAFETY LOCK SPACER	4
3	14090042	COVER A	2
4	14090048	SAFETY LOCK	4
5	24090010	SPINDLE	4
6	24090011	LOCKING BLOCK B	2
7	24090009	LOCKING BLOCK A (NOT SHOWN, ON THE OTHER SIDE)	2
8	14090053	SAFETY RELEASE LEVER	4
9	14090054	BOSS	4
10	14090057	TORSION SPRING B	2
11	14090043	COVER B	2
12	14090046	PULLEY SHAFT	4
13	14090058	TORSION SPRING A (ON THE OPP. SIDE)	2
14	14090059	SPRING	4
15	14090044	SLIDER	4
16	14090047	CABLE SAFETY WHEEL	4
17	①③ 24080008	CROSSBEAM WELDMENT	2
	②④ 24090008		
18	14090049	SHAFT CLIP	4
19	44090012	PULLEY W/ BUSHING	10
20	3C000101	20MM PLAIN WASHER	8
21	3C000162	24MM PLAIN WASHER	12
22	3C000107	6MM PLAIN WASHER	4
23	3C000164	8MM PLAIN WASHER	32
24	3C000166	M8X12 SET SCREW	4
25	3C000167	8MM LOCK WASHER	8
26	3C000163	6MM SPRING LOCK WASHER	8
27	3C000061	M8 NUT	8
28	3C000111	M6X10 SCREW	4
29	3C000159	M6X12 SCREW	8
30	3C000165	M8X35 SOCKET BOLT	32

① : 8,000 lb. Regular    ② : 8,000 lb. Wide    ③ : 8,000 lb. Tall    ④ : 9,000 lb.

# Diagram #8: SAFETY INSTRUCTIONS

Automotive Lift Institute, Inc.

WL200 Series Label Kit

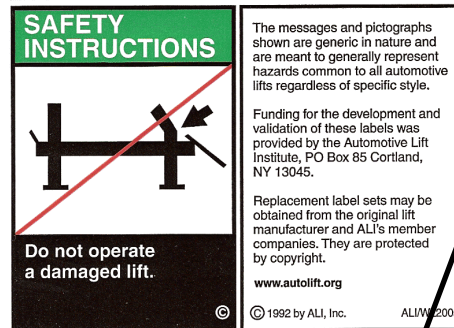


The messages and pictographs shown are generic in nature and are meant to generally represent hazards common to all automotive lifts regardless of specific style.

Funding for the development and validation of these labels was provided by the Automotive Lift Institute, PO Box 85 Cortland, NY 13045.

Replacement label sets may be obtained from the original lift manufacturer and ALI's member companies. They are protected by copyright.

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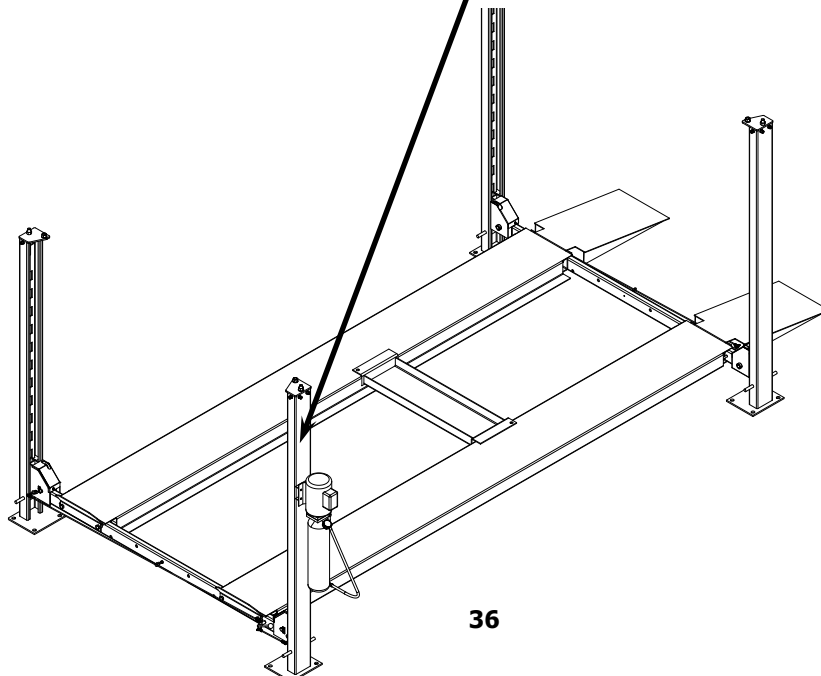


The messages and pictographs shown are generic in nature and are meant to generally represent hazards common to all automotive lifts regardless of specific style.

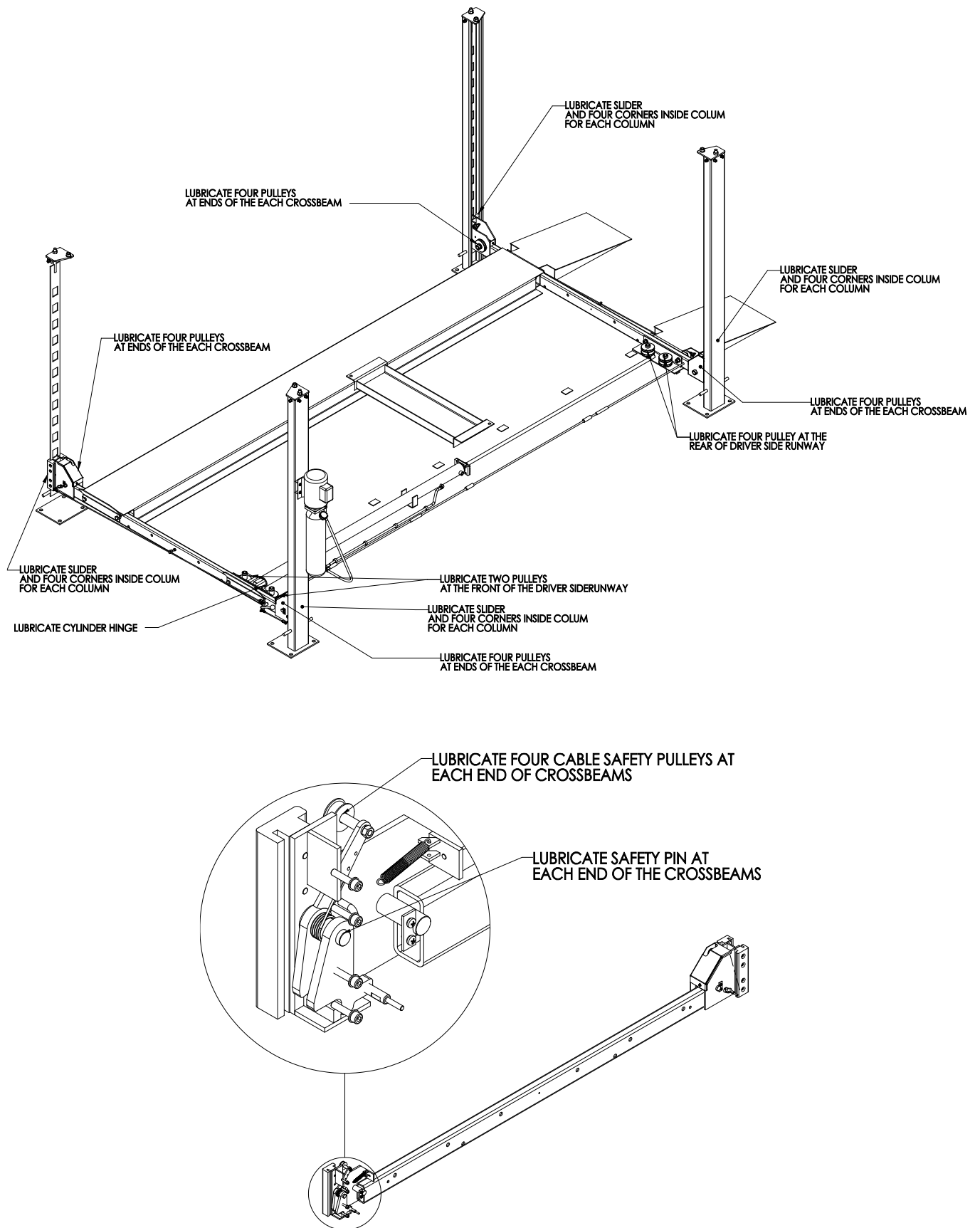
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Replacement label sets may be obtained from the original lift manufacturer and ALI's member companies. They are protected by copyright.

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## **Diagram #9: Lubrication Points**



### **Diagram #10: Power Unit Wiring Diagram**

