Four-Post Lift Rack

MODEL L441 AND L444





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1. FOR YOUR SAFETY

1.1 Introduction

DANGER, WARNING, CAUTION, SAFETY INSTRUCTIONS, and other decals have been attached to the equipment for your information and your safety.

Please read and follow these decal instructions to prevent equipment damage and/or personal injury.

If any decal shown in this manual has been removed, is missing, or cannot be read completely for any reason, contact your local service representative for a replacement decal(s).

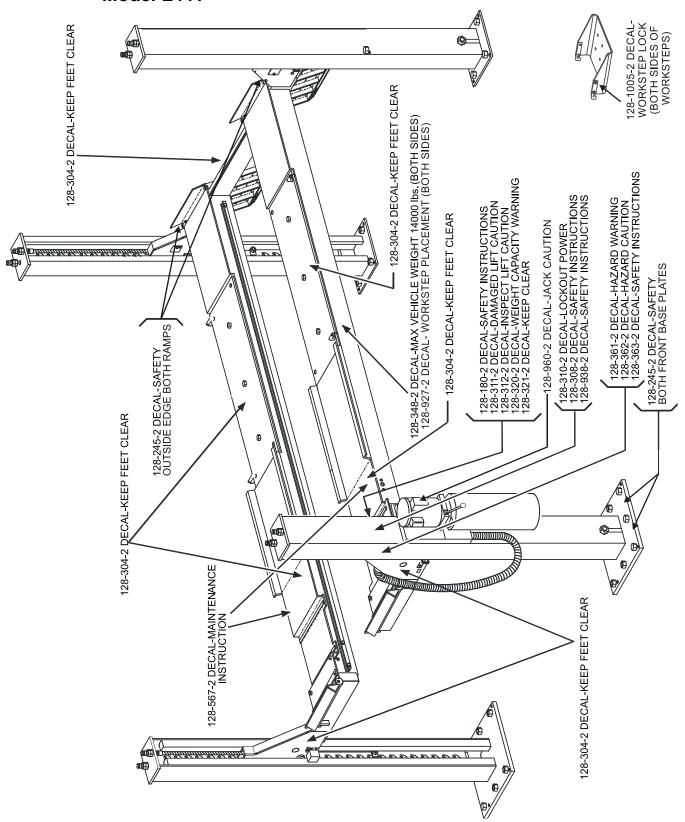
Or call: Hunter Engineering Company at 1-800-448-6848.

A new warning label kit, 20-1157-1 for the L441, or 20-1158-1 for the L444, may be ordered free of charge. The kit will contain all the decals described in the lists below. Please verify which model of lift rack before ordering the decal kit.

Decal List

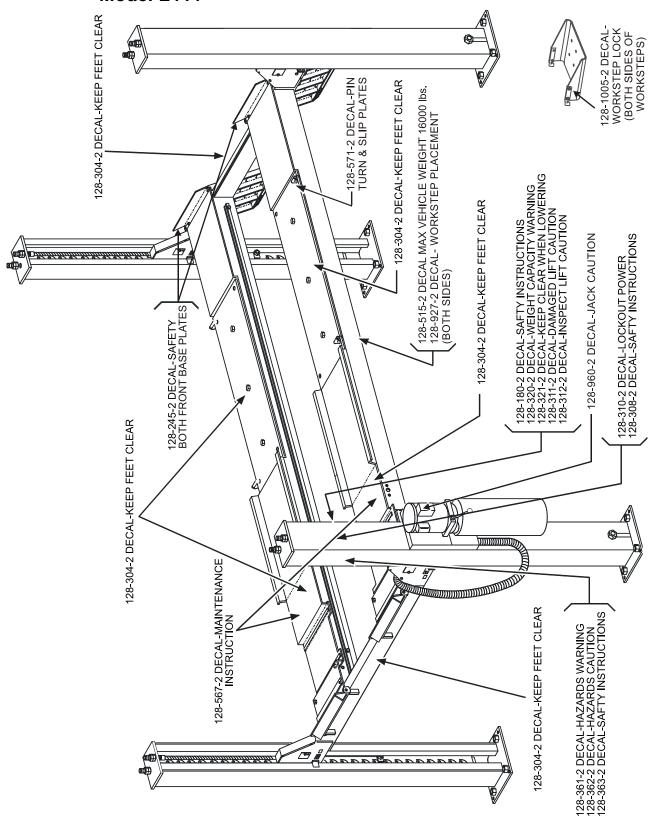
101		
<u>L441</u>		<u>L444</u>
Max Vehicle Weight 18,000 lb.	128-1197-2	Max Vehicle Weight 18,000 lb.
Safety Instructions	128-180-2	Safety Instructions
Keep Feet Clear, Caution	128-304-2	Keep Feet Clear, Caution
Safety Instructions	128-308-2	Safety Instructions
Lockout Power, Danger	128-310-2	Lockout Power, Danger
Damaged Lift, Caution	128-311-2	Damaged Lift, Caution
Inspect Lift, Caution	128-312-2	Inspect Lift, Caution
Weight Capacity, Warning	128-320-2	Weight Capacity, Warning
Keep Clear When Lowering	128-321-2	Keep Clear When Lowering
Hazards Warning	128-361-2	Hazards Warning
Hazards Caution	128-362-2	Hazards Caution
Safety Instructions	128-363-2	Safety Instructions
Caustic Cleaners	128-567-2	Caustic Cleaners
Pin Turn & Slip Plates	128-571-2	Pin Turn & Slip Plates
Safety Instructions	128-960-2	Lift/Jack Caution
Lift/Jack Caution	128-927-2	Workstep Placement Warning
Workstep Placement Warning	128-1005-2	Workstep Lock Warning
Workstep Lock Warning		
	Max Vehicle Weight 18,000 lb. Safety Instructions Keep Feet Clear, Caution Safety Instructions Lockout Power, Danger Damaged Lift, Caution Inspect Lift, Caution Weight Capacity, Warning Keep Clear When Lowering Hazards Warning Hazards Caution Safety Instructions Caustic Cleaners Pin Turn & Slip Plates Safety Instructions Lift/Jack Caution Workstep Placement Warning	Max Vehicle Weight 18,000 lb. Safety Instructions Keep Feet Clear, Caution Safety Instructions Lockout Power, Danger Damaged Lift, Caution Inspect Lift, Caution Weight Capacity, Warning Hazards Warning Hazards Caution Safety Instructions 128-312-2 Hazards Caution 128-362-2 Safety Instructions 128-363-2 Caustic Cleaners Pin Turn & Slip Plates Safety Instructions 128-960-2 Lift/Jack Caution 128-1005-2 Weight Capacement Warning

Model L441



L441 Warning / Operation Label Placement Diagram

Model L444



L444 Warning / Operation Label Placement Diagram

SAFETY INSTRUCTIONS

- 1. Do NOT raise or lower lift with vehicle supported on jacks.
- 2. Always set brake and chock left rear wheel before operating lift.
- 3. Do NOT exceed weight capacity.
- 4. Be sure that operating area is free of obstructions and personnel.
- 5. Do NOT operate lift with covers removed.

128-308-2

128-308-2

SAFETY INSTRUCTIONS

Read operation manual before use.
For FREE OPERATION MANUAL write:
Hunter Engineering Company
11250 Hunter Drive
Bridgeton, MO 63044

128-180-2

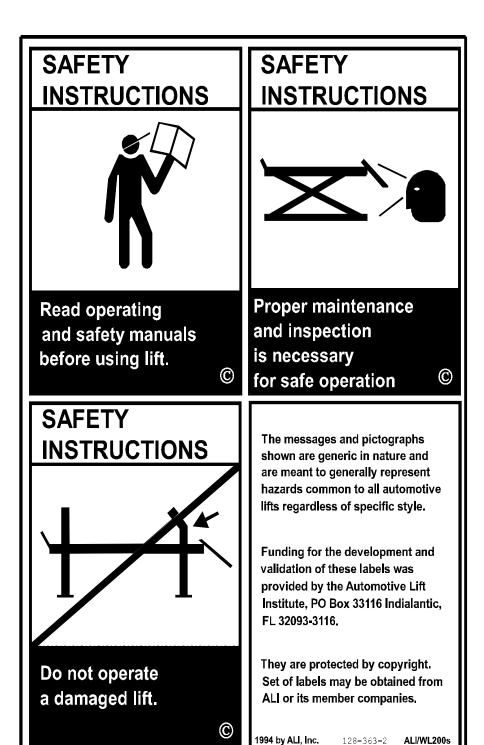
128-180-2

SAFETY INSTRUCTIONS

THE TOTAL LIFTED LOAD FOR TWO JACKS MUST NOT EXCEED THE RATED CAPACITY OF THE LIFT.

128-938-2

128-938-2



128-363-2

IMPORTANT

ALWAYS PIN TURN PLATES AND SLIP PLATES BEFORE DRIVING ON OR OFF LIFT. 128-571-2

128-571-2

Dangers



128-310-2

Warnings









128-361-2



128-927-2

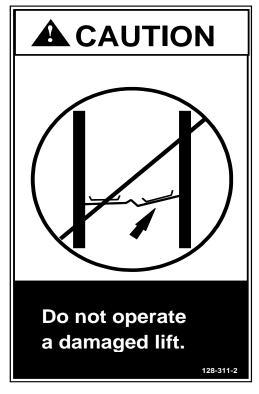


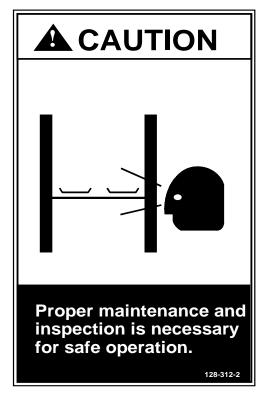
128-1005-2



128-960-2

Cautions





128-311-2 128-312-2



128-362-2

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128-304-2

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128-567-2



WEIGHT CAPACITY 18,000 LBS. 9,000 LBS. PER AXLE

128 1197 2

128-1197-2

2. SPECIFICATIONS

2.1 Lift Capabilities

Specifications	L441	L444
Maximum Load Capacity:	18,000 lb. (8164 kg)	18,000 lb. (8164 kg)
Operating Hydraulic Pressure	3500 psi (max. @ full capacity) 24132 kpa (max. @ full capacity)	3500 psi (max. @ full capacity) 24132 kpa (max. @ full capacity)
Maximum Lifting Height:	75 inches (1905 mm)	75 inches (1905 mm)
Overall Height:	98 inches (2489 mm)	98 inches (2489 mm)
Tread Width:		
Minimum Inside Tires:	40 inches (1016 mm)	40 inches (1016 mm)
Maximum Outside Tires:	85 inches (2159 mm)	85 inches (2159 mm)
Lifting Speed:	64 seconds	64 seconds
Lowering Speed:	40 seconds	40 seconds
Motor:	3 HP, 60 Hz,	3 HP, 60 Hz,
	208-230 VAC	208-230 VAC
Electrical Requirements:	208-230 VAC	208-230 VAC
	1 phase, 60 Hz, 26A	1 phase, 60 Hz, 26A
Maximum Wheelbase:		
General Service:	193 inches (4902 mm)	227 inches (5766 mm)
2-Wheel Alignment:	177 inches (4496 mm)	211 inches (5359 mm)
4-Wheel Alignment:	158 inches (4013 mm)	158 inches (4013 mm)
Minimum Wheelbase:		
4-Wheel Alignment:	88 inches (2235 mm)	88 inches (2235 mm)
Capacity vs. Wheelbase		
	Below 158 inches (4013 mm) 12,000 lb. (5443 kg)	Below 158 inches (4013 mm) 12,000 lb. (5443 kg)
	158 - 178 inches (4013 - 4521 mm) 16,000 lb. (7257 kg)	158 – 178 inches (4013 – 4521 mm) 16,000 lb. (7257 kg)
	Above 178 inches (4521 mm) 18,000 lb. (8165 kg)	Above 178 inches (4521 mm) 18,000 lb. (8165 kg)

3. GETTING STARTED

3.1 Operator Responsibilities

Read and thoroughly familiarize yourself with these instructions before operating the lift.

The operator shall operate the automotive lift only after proper instruction or trained as outlined below (see Operator Training).

The operator shall use all applicable safety features provided on the automotive lift, and operate the lift in accordance with the instructions furnished with the lift.

The operator of the lift shall be responsible for maintaining the cleanliness and orderliness of the lift and its surroundings so the lift may be safely operated in accordance with the instructional and safety materials furnished with the lift.

The lift owner or employer shall take all appropriate steps to follow the recommended inspection procedures, but in no event shall the lift operator fail to inspect or take notice of the procedures in the tables in Section 5. All procedures shall be completed within the time frame noted in the table.

3.2 Operator Qualifications

To avoid personal injury, only qualified personnel with a clear understanding of lift operations should be allowed to operate and perform maintenance on this equipment.

The operator must be capable of reading and understanding all of the provided instructions and the Automotive Lift Institute publication, "Lifting It Right," "Safety Tips," and "Warning Labels."

If inspection of the equipment results in components requiring replacement, contact your factory **Authorized Service Representative**. Call 1-800-448-6848 for the phone number of your local **Authorized Service Representative**.

3.3 Operator Training

The owner or employer shall ensure that operators of automotive lifts are instructed in the safe use of the lift using all of the provided instructions and the Automotive Lift Institute publication: "Lifting It Right," "Safety Tips," and "Warning Labels."

The owner or employer shall display these materials in a conspicuous location in the lift area.

The owner or employer shall appropriately document operating training.

A Maintenance/Training documentation form has been provided in the Appendix.

4. DETAILED OPERATION INSTRUCTIONS

4.1 Preparation

Lift Operation Safety Rules

Read and familiarize yourself with these instructions before operating lift.

Do not try to operate an improperly functioning lift.

Do not attempt to use a lift for any purposes other than lifting vehicles.

Properly chock vehicle before operating lift.

Make sure lift is clear of personnel and obstructions before operating. Do not operate a lift with anyone on or under the lift structure.

Watch lift and vehicle when operating.

Do not operate a lift with anyone in the vehicle.

Always set lift on safety lock latches before working on the vehicle.

Do not operate the vehicle while it is raised on the lift.

Do not operate a lift if the vehicle to be lifted is supported on jacks or any other auxiliary devices.

Do not install or use any unauthorized lifting devices or accessories.

Perform regular maintenance in accordance with instructions in Section Five.

NOTE:	It is advisable to use a second person as a "spotter" to give visual assistance to the driver when approaching and driving onto and off the runways.
	-

ACAUTION: For safety, proper chocking of vehicle wheels is necessary to prevent the vehicle from rolling while positioned on elevated runways.

4.2 Chocking Procedure

Read and thoroughly familiarize yourself with these instructions before operating the lift

Adjust the turning angle gauges (with lock pins installed) to match the tread width of the vehicle.

Drive the vehicle onto the rack, place the transmission in PARK, and SET the emergency brake.

Place a wheel chock, 22-442-2, at the front and rear of the left rear wheel.



LEFT REAR WHEEL SHOWN

Leave the wheel chocks in place while elevating the lift, performing service operations on the vehicle, and while lowering the lift.

After lowering the lift, remove the wheel chocks from the front and rear of the left rear tire before moving the vehicle.

4.3 Using the Workstep

The lift is supplied with portable worksteps that fits into the side of the rack through specially designed cutouts.

When using a workstep, always ensure the workstep is fully engaged and locked into the cutout in the side of the runway.

Always use two hands to install the workstep as follows:

Align the workstep hanger brackets with the cutouts in side of lift rack. Push the workstep forward and down until the locks "snap" into place.

Note the photos below:



Correct Installation, Fully Inserted - The workstep hanger brackets have been fully inserted through the cross-cutout and is locked in place.



Improper Installation, Partially Inserted - The workstep is only partially through the cutouts. The yellow decal indicates the workstep is not locked onto the side of the runway. In this unsafe condition, the step can easily be pulled out of the runway. Push step forward and down until locked.



Do not use a workstep that is improperly installed. If the yellow decal indicates the workstep is not locked, the step can pull out. Resulting injuries from falling are possible.

Check the stability of the workstep by pushing down on the stepping surface before standing on it.

When using the workstep, always use a safe, sturdy, OSHA-approved two-rung stepladder, as intermediate steps to mount the workstep.



If using more than one portable workstep on one side of the lift do not attempt to step across or jump from one step to another. Serious injury could result from improper usage of the worksteps.

To remove workstep, simultaneously pull back tabs to disengage locks.

4.4 Lift Operation

Raising the Lift

Check the lift and immediate area for obstructions and remove any that are found.

Verify that the turnplates and runway slip plates are locked in place.

WARNING:

Do NOT operate lift with jacks in use. Serious injury may result if the lift is raised or lowered with a vehicle supported by jacks.

Activate "RAISE" switch. The pump will begin to operate, raising the lift.

NOTE:

To place the lift at alignment height, raise the runways so the striped decal on the front of the runway is just above the striped decal on the right front post.

Release "RAISE" switch when lift reaches desired height.

The pump will shut off and the lift will stop.

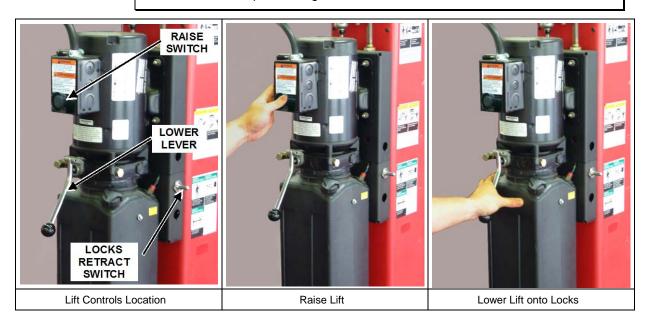
Press and hold "lower" lever as shown below until lift lowers and all four corners are at the same level.

If one or more corners of the runways continue to descend after another corner has stopped, release the "LOWER" lever. Press and hold "RAISE" button to raise the lift slightly higher. Wait 3 seconds after releasing "RAISE" button then press and hold "LOWER" lever.



A CAUTION:

Ensure mechanical locks are fully engaged before proceeding to service the vehicle.



Lowering the Lift

Remove all obstacles from under rack and runways. Insure swing air jacks are in the stowed position.

Make sure vehicle is resting firmly on runways with chocks in front of and behind left rear wheel.

MARNING: Do NOT operate lift with jacks in use. Serious injury may result if the lift is raised or lowered with a vehicle supported by jacks.

A CAUTION:

Ensure the jacks are in the stored position, before completely lowering the lift.

Activate "RAISE" switch to slightly raise runways and remove load from locks.

Press and hold "LOCKS RETRACT" switch.

Continue to hold "LOCKS RETRACT" switch and press and hold "LOWER" lever.

If lift is being lowered to a different working height, release the "LOWER" lever and "LOCKS RETRACT" switch when at the new height. Wait at least 3 seconds after releasing "LOCKS RETRACT" switch then depress and hold "LOWER" lever until lift lowers and all four corners are at the same level.

If one or more corners of the runways continue to descend after another corner has stopped, release the "LOWER" lever. Press and hold "RAISE" button to raise the lift slightly higher. Wait 3 seconds after releasing "RAISE" button then press and hold "LOWER" lever.

Completely lower lift.

Release "LOWER" lever and "LOCKS RETRACT" switch.

Remove wheel chocks.

Before removing vehicle from lowered lift, verify that the turnplates and runway slip plates are locked in place. Use lock pins if optional PowerSlide feature is not present.

Carefully drive the vehicle off runways.



Unlock and Lock Slip Plates with PowerSlide® Slip Plates (Optional Feature)

Controls for the PowerSlide® slip plates are located either on the side of the power unit mount (-PS models) or on the console (-IS models).



Switch near power unit (-PS models)



Buttons on Console (-IS models)

For lifts without a console (-PS models):

Locate the "PowerSlide" switch on the right side of the power unit mount, just below the "lock release" switch.

With the lift at alignment height, flip the switch in the "down" position to unlock the slip plates.

Flip the switch in the "up" position to lock the slip plates.

For console units (-IS models):

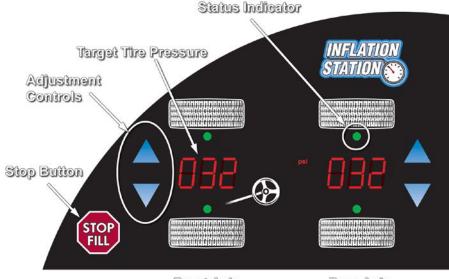
With the lift at alignment height, press the image of the free slip plate or the locked slip plate to control the status of slip plates.

The status of slip plate is indicated by the glowing green LED located next to the image of the free slip plate or the locked slip plate.

NOTE: Have slip plates locked when not performing an alignment.

Inflation Station (Optional Feature)

Keypad controls for the Inflation Station system are located in the lower-middle section of the control panel.



Front Axla

Rear Axle

Tire Pressure Adjustment

NOTE: Inflation station provides pressure adjustment for inflated

tires. Initial tire pressure must be at least 8 PSI (0.6 bar).

Connect the air line(s) to the vehicle.



Use the adjustment control arrows on either side of the pressure displays to set the desired tire pressure for each axle.

Each tire has a LED indicator to provide status information:

RED – Air line disconnected during adjustment.

YELLOW - Tire pressure currently adjusting.

GREEN – Tire pressure is adjusted correctly.

After each status indicator has turned green, the air lines may be removed from the vehicle.

The "Stop Fill" button may be pressed at any time to immediately stop tire pressure adjustments.

4.5 Auxiliary Jacks

Refer to jack operation instructions if your lift is so equipped.

The total lifted load of the jacks must not exceed the lift capacity.

Do not operate the lift when jacks are in use.

A WARNING:

Do NOT operate lift with jacks in use. Serious injury may result if the lift is raised or lowered with a vehicle supported by jacks.

A CAUTION:

The jacks **can not** be located closer than 60 inches of each other. Damage to lift, jack or vehicle shifting may occur.

Always fold jacks into the stowed position before lowering the lift.

A CAUTION:

Ensure the jacks are in the stored position, before completely lowering the lift.

5. REGULAR MAINTENANCE

5.1 Corrosion



Wire ropes are a high wear item and must be inspected regularly to prevent failure. They <u>MUST</u> be replaced at the first sign of any symptoms listed below. The complete set <u>MUST</u> be replaced every 20,000 cycles or every six years unless earlier replacement is indicated by the required service inspections (see the maintenance schedule following).

The best preventive maintenance against wire rope corrosion is to keep the wire ropes well lubricated. The oil prevents moisture from entering into the wire rope strands. Once salt and moisture have penetrated into the core of the wire rope they are very difficult to displace and corrosion will begin immediately. The best method to prevent early replacement of wire ropes is to keep them well oiled.

The following are specific signs to look for when inspecting wire ropes for corrosion:

- More than surface rust on exterior of the wire rope is unacceptable. In other
 words, if you can't remove the rust easily with a wire brush, it's too deep and the
 wire rope should be replaced.
- Any pitting of the wire rope indicates unacceptable amounts of corrosion. The wire rope should be replaced.
- Loss of flexibility of the wire rope is unacceptable. This can be checked with the lift raised and set on the locks. If found, the wire rope should be replaced.
- If any wires are broken, the wire rope should be replaced.
- Any "necking" or reduction in cross sectional area of the wire rope indicates a
 problem and the wire rope should be replaced.

NOTE:

If an area of the wire rope has no lubricant on its surface, the wire rope is rust bound and should be replaced. Once the wire rope has lost oil protection, moisture has already entered the core and is nearly impossible to remove.

5.2 Maintenance Schedule

NOTE: For lockout / tagout instructions, refer to ANSI Z244.1.

Maintenance is to be performed by shop employee or trained lift service personnel.

Worn, damaged or broken parts need replaced with parts approved by the original equipment manufacturer or with parts meeting original manufacturer specifications.

MAINTENANCE	PERFORM THE FOLLOWING MAINTENANCE
SCHEDULE	
	Check that the operating procedures, safety tips and generic safety material are accessible to the operator.
	Check that all safety warning labels are accessible and readable.
	Take notice of the rated load capacity of the lift.
	Check for proper operation of the lift controls.
	Check auxiliary locks at all four posts for free rotation and ensure they properly line up with lock ladder.
	Check the air lock at all four posts for free movement and ensure they are properly lined up with the lock ladder.
	KEEP LOCK AREA CLEAN AND FREE OF DEBRIS AT ALL TIMES.
	Check the hydraulic cylinder, power unit, hydraulic lines and fittings, air lines and fittings, and air cylinders for leaks. Any leak must be repaired immediately.
	Check the floor near the base of each post for cracks or loose concrete around the lag bolts. If any flaws are found, stop using the lift immediately. This is an indication of an unsafe condition and the concrete will have to be replaced.
Daily	Check for unusual noises, sudden movements, erratic operation or evidence of chips or filings during use.
	Check all four lifting wire ropes for damage or wear. If any signs of severe corrosion, broken or damaged strands, wire rope elongation, reduced cable diameter, or any other changes in appearance as compared to a normal wire rope are found, the lift must be taken out of service and the wire rope(s) must be replaced prior to further use.
	Fully lower the lift and check the portion of the wire ropes running vertically inside each post. Pay close attention to the portion of the wire rope that enters the threaded stud at the top of each post. Broken strands indicate signs of fatigue and if found the wire rope(s) must be replaced prior to further use.
	Raise the runway just enough for observation and set on the mechanical locks. Inspect the wire ropes by looking through cutouts in the bottom of the runways. Note: Use a trouble light for better visibility.
	Raise the runways to several intermediate locations and set on the mechanical locks. Inspect the wire ropes by looking through cutouts in the bottom of the runways, and inside the inspection door on the rear beam. Note: Use a trouble light for better visibility.
	Fully raise the runways and set on mechanical locks. Inspect the wire ropes by looking through cutouts in the bottom of the runways, and inside the inspection door inside the rear beam. Note: Use a trouble light for better visibility.
	Check all sheaves for wear or damage. Look for cracks, worn surfaces, or abnormal play or looseness as they rotate around mounting shafts. Check that all sheave mounting shaft retaining bolts are tight.
	Check for any fluid loss from the hydraulic system. NOTE: When adding hydraulic fluid, the lift MUST be lowered completely.

MAINTENANCE SCHEDULE	PERFORM THE FOLLOWING MAINTENANCE			
Weekly	Check the turning angle gauges and rear slip plates for smooth and easy operation. Clean by blowing out with clean, dry compressed air. Disassembly is not required. DO NOT lubricate turning angle plates or slip plates. (CAUTION: Always wear eye protection when using compressed air).			
	Check anchor bolts on each post for tightness. Torque to 100-110 ft-lb.			
	Check and lubricate rear ramp pivots with SAE 30 oil.			
	Check wire ropes for damage and lubricate with a thin oil (SAE 5W-30). Note: Do not use used motor oils. They contain contaminants that will break down factory applied lubricants. Also, do not use oils containing a solvent base (solvent cutback oils). They also will break down factory applied lubricants. Replace wire ropes immediately if any signs of wire rope damage is found.			
	Inspect entire lift for loose, damaged, or broken bolts. Replace as necessary.			
Monthly	Check columns and runways for corrosion. Corrosive agents, solvents, and road salts can greatly reduce the life of the lift in a very short period of time. If these types of agents are spilled or splashed onto the lift, immediately rinse area thoroughly with water. If they come in contact with the wire ropes, wash the wire ropes immediately with water and relubricate with a thin oil.			
	Check the power unit reservoir oil level. Add oil if necessary (use Hunter's specially filtered DEXRON III transmission fluid, 148-128-2). NOTE: Oil must be checked and filled when the lift is in its fully lowered position. Remove air breather cap and oil full level screw located at the top of the reservoir. Fill reservoir with oil until the oil begins to drip from full level screw hole. Replace air breather cap and oil full level screw. If the oil level is found to be low, determine the source of the oil loss and repair immediately.			
	Notes about corrosion: The best preventive maintenance against wire rope corrosion is to keep the wire ropes well lubricated. The oil prevents moisture from entering into the wire rope strands. Once salt and moisture have penetrated into the core of the wire rope it is very difficult to displace and corrosion will begin immediately.			

MAINTENANCE SCHEDULE	PERFORM THE FOLLOWING MAINTENANCE
Annually	The entire lift should be inspected yearly (more frequently for severe use applications) by your factory authorized service representative.
Every Two Years	Change hydraulic fluid. Use 4 gallons (15 liters) of Hunter's specially filtered DEXRON III transmission fluid, 148-128-2. NOTE: Oil must be filled when the lift is in its fully lowered position.
	Drain fluid from reservoir by dropping pump reservoir with the lift lowered completely.
	Clean any metal particles that may be on the magnetic.

NOTE: The suggested maintenance above is for normal working conditions. Equipment exposed to unusually dirty or harsh corrosive conditions such as heavy winter road salt may require more frequent maintenance and service.

If any of the conditions described above are observed before, during, or after operation of the lift, the operator shall stop using the lift and report the condition to the supervisor, employer or owner. The lift shall not be used until the cause of the problem has been determined and the appropriate repairs have been made by qualified automotive lift personnel.

6. POWER FAILURE PROCEDURE

6.1 Procedure to Lower Rack in the Event of a Power Failure

NOTE: Approximately 80 psi of air pressure must be available for the following procedures.

If rack is NOT on the locks

Press and hold the "LOCKS RETRACT" switch.

Press and hold the "LOWER" lever until the rack touches the ground.

If rack is on the locks

Turn nuts on the top of cables clockwise several turns. Use vice grips to prevent cable from turning.

Press and hold the "LOCKS RETRACT" switch.

Press and hold the "LOWER" lever until the rack touches the ground.

Call local Hunter service representative to re-level the lift on cables and to lock down cable jam nuts.

ACAUTION: Do not operate lift again until cables are fully adjusted and nuts and jam nuts are properly locked in place.

7. TROUBLESHOOTING

7.1 Troubleshooting Chart

PROBLEM	POSSIBLE CAUSE	SOLUTION	
Lift does not operate.	Circuit breaker or fuse blown in shop power panel.	Locate shop power panel and restore power. If overload repeats due to lift operation, contact factory service representative.	
	Hydraulic system malfunction.	Contact factory service representative.	
"RAISE" button depressed, motor runs but lift will not rise to full height.	Low hydraulic fluid reservoir.	Lower lift, check hydraulic fluid level, and fill. Determine reason for low hydraulic fluid level.	
	Overhead obstruction to vehicle.	Lower lift and remove obstruction.	
	Voltage supply low.	Contact factory service representative.	
	Hydraulic system malfunction.	Contact factory service representative.	
"RAISE" button depressed, motor runs, lift does not move.	Vehicle is beyond 18,000 lb. capacity.	Do not attempt to raise vehicles in excess of lift capacities.	
	Electrical/Hydraulic control malfunction.	Contact factory service representative.	
Runways continue to rise after "Raise" button is released.	Electrical control malfunction.	Turn circuit breaker "Off" at shop power panel. Contact factory service representative.	
Locks do not retract.	One or more locks still engaged on the lock ladder.	Raise lift more before pressing "LOCKS RETRACT" switch.	
	Air control malfunction.	Check air supply and hoses.	
	Leak in the air circuit.	Check air circuit and repair any leaks. Contact factory service representative.	

Troubleshooting (continued)

PROBLEM	POSSIBLE CAUSE	SOLUTION	
"Lower" sequence started; lift raises but then does not lower.	One or more locks still engaged on the lock ladder.	Raise lift more before pressing "LOCKS RETRACT" switch.	
lower.	Air control malfunction.	Check air supply and hoses.	
	Velocity fuse tripped.	Contact factory service representative.	
	Electrical/Hydraulic control malfunction.	Contact factory service representative.	
Lift continues to descend after "LOWER" lever is released.	2-way valve ("LOWER" lever) stuck open.	Operate "LOWER" lever again. Contact factory service representative.	

APPENDIX

Maintenance and Training Documentation

A thorough record of each maintenance/training procedure must be prepared by the owner/employer. Use the following documentation sheet.

NOTE: Make several copies of this documentation sheet before beginning entries are made.

Type of Maintenance/ Training	Date Performed	Performed By (Initials)	Type of Maintenance/ Training	Date Performed	Performed By (Initials)