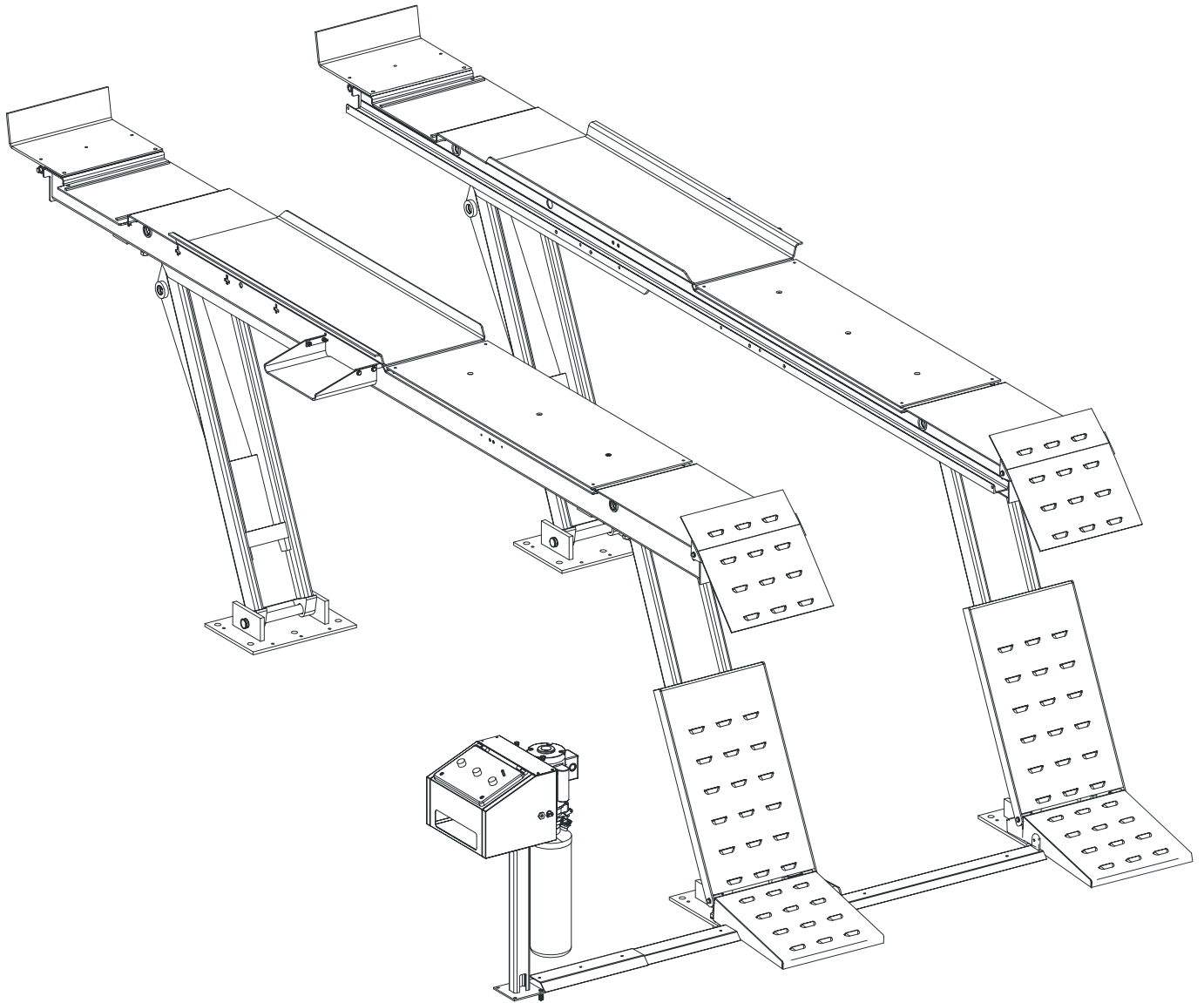


OPERATION INSTRUCTIONS

Parallel Lift Rack

MODEL RM



Contents

- 1. For Your Safety 1**
 - 1.1 Warning/Instruction Decal Placement 1
 - Decal List 1
 - Model RM Parallel Lift Rack 2
 - Safety Instructions 3
 - Safety Warning Labels 4
 - Dangers 6
 - Cautions 7
 - 1.2 Control Panel 8
- 2. Lift Specifications 9**
 - 2.1 Lift Capabilities 9
- 3. Getting Started 11**
 - 3.1 Operator Responsibilities 11
 - 3.2 Operator Qualifications 11
 - 3.3 Operator Training 11
- 4. Detailed Operation Information 13**
 - 4.1 Preparation 13
 - Lift Operation Safety Rules 13
 - 4.2 Chocking the Wheels 14
 - 4.3 Lift Operation 14
 - Raising the Lift 14
 - Lowering the Lift 15
 - 4.4 Using the Worksteps 16
- 5. Regular Maintenance 17**
 - 5.1 Maintenance Schedule 17
- 6. Troubleshooting 19**
 - 6.1 Troubleshooting Chart 19
- Appendix 21**
 - Maintenance/Training Documentation 21

1. For Your Safety

1.1 Warning/Instruction Decal Placement

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

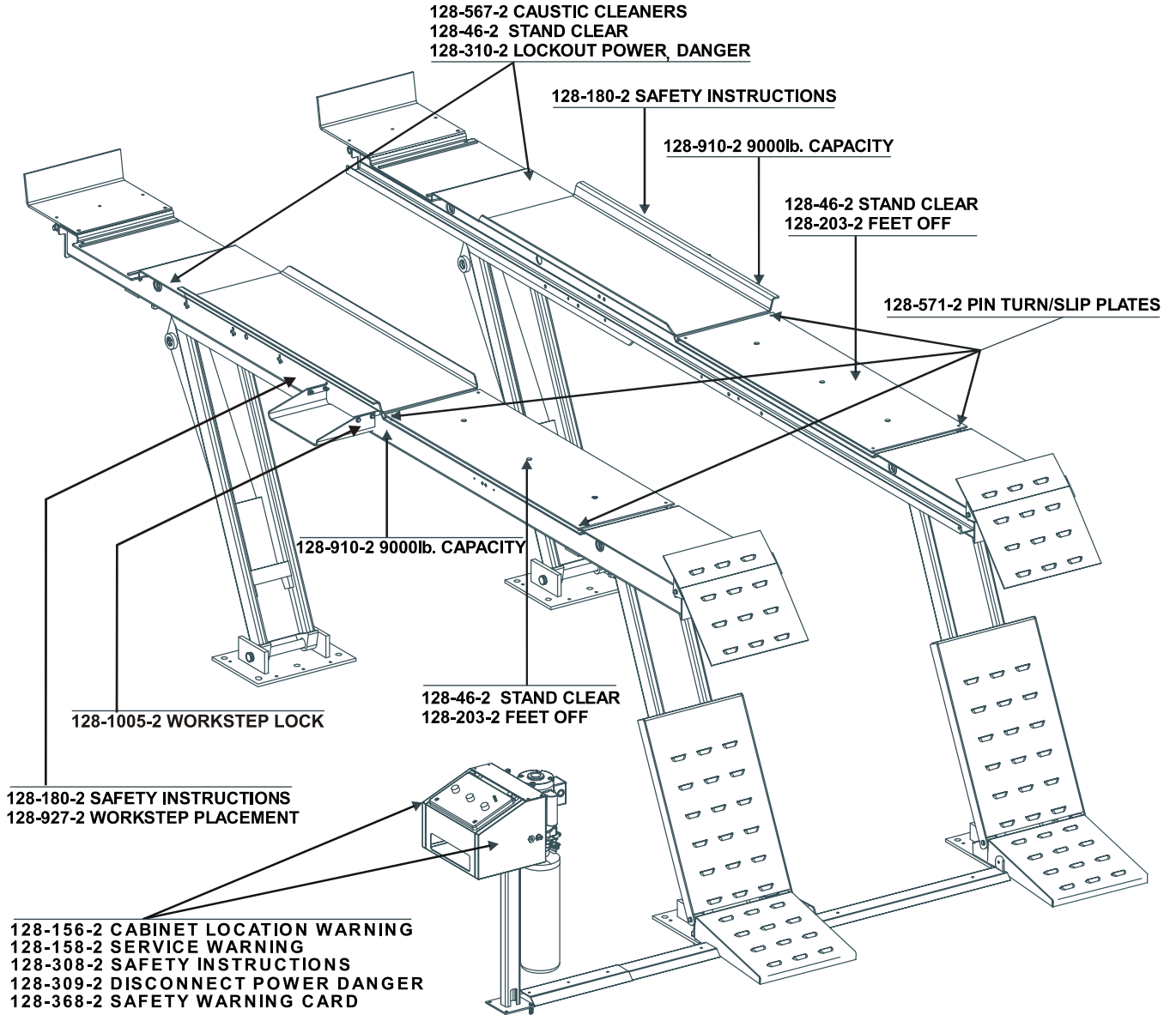
Read and follow the decal instructions to prevent equipment damage and/or personal injury.

If any decal shown in this manual has been removed, is missing, or cannot be read, 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, 20-1486-1 for the RM Parallel Lift Rack, may be ordered free of charge. The kit will contain all the decals listed.

Decal List

128-46-2	Stand Clear
128-156-2	Cabinet Location Warning
128-158-2	Service Warning
128-180-2	Safety Instructions
128-203-2	Feet Off
128-308-2	Safety Instructions
128-309-2	Disconnect Power, Danger
128-310-2	Lockout Power, Danger
128-368-2	Safety Warning Card
128-567-2	Caustic Cleaners
128-571-2	Pin Turn/Slip Plates
128-910-2	9000 lb. Capacity
128-927-2	Workstep Placement
128-1005-2	Workstep Lock

Model RM Parallel Lift Rack



Warning / Operation Label Location Diagram

Safety Instructions

SAFETY INSTRUCTIONS

1. Do not exceed weight capacity.
2. Always position vehicle so that front wheels are centered on turn plates.
3. Always set vehicle parking brake and chock wheels before operating lift.
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

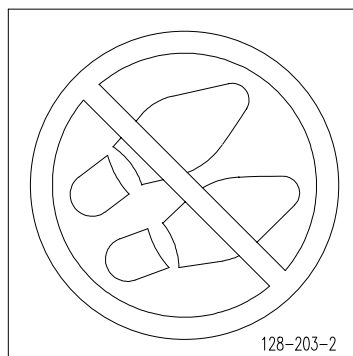
128-180-2

128-180-2

S T A N D C L E A R
W H E N L O W E R I N G R A C K

128-46-2

128-46-2



128-203-2

128-203-2

Safety Warning Labels

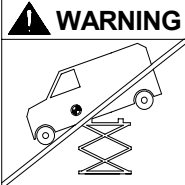
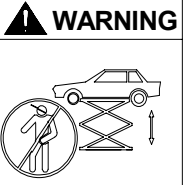
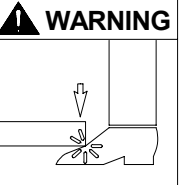


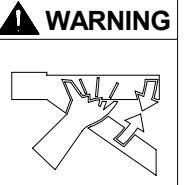
SAFETY WARNING LABELS FOR HINGED FRAME ENGAGING LIFTS
Lift Owner/User Responsibilities:

A. This Safety Warning placard SHALL be displayed in a conspicuous location in the lift area.

B. Use one of the mounting arrangements illustrated on back of this placard.

C. These Safety Warning labels supplement other documentations supplied with the lift.


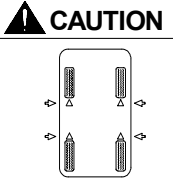
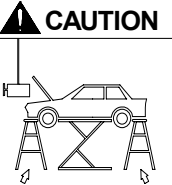



D. Be certain all lift operators read and understand these labels, operating instructions and other safety related information supplied with the lift.

		
Position vehicle with center of gravity midway between adapters.	Remain clear of lift when raising or lowering vehicle.	Keep feet clear of lift while lowering.
		
Clear area if vehicle is in danger of falling.	Avoid excessive rocking of vehicle while on lift.	Keep clear of pinch points when lift is moving.


CAUTION
 Power Unit: Secure placard near lift controls.
 Lift to be used by trained operator only.

lift Control Console:
 Secure placard in an accessible location.

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 33116 in Tallahassee, FL 32309-3116. They are protected by copyright. Set of labels may be obtained from ALI or its member companies.
 128-368-2 ALI/MLI/2004cc

		
Authorized personnel only in lift area.	Use vehicle manufacturer's lift points.	Always use safety stands when removing or installing heavy components.
SAFETY INSTRUCTIONS 	SAFETY INSTRUCTIONS 	SAFETY INSTRUCTIONS 
Read operating and safety manuals before using lift.	Proper maintenance and inspection is necessary for safe operation.	Do not operate a damaged lift.

128-368-2

 WARNING - THIS INSTRUMENT CABINET HAS INTERNAL ARCHING OR SPARKING PARTS WHICH SHOULD NOT BE EXPOSED TO FLAMMABLE VAPORS. TO REDUCE THE RISK OF EXPLOSION, IT SHOULD NOT BE LOCATED IN A RECESSED AREA OR BELOW GARAGE FLOOR	ATTENTION - NE PAS UTILISER AU NIVEAU INFÉRIEUR À CELUI DU PLANCHER DU GARAGE OU DU SOL
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128-156-2

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

128-571-2



128-927-2



128-1005-2

Dangers

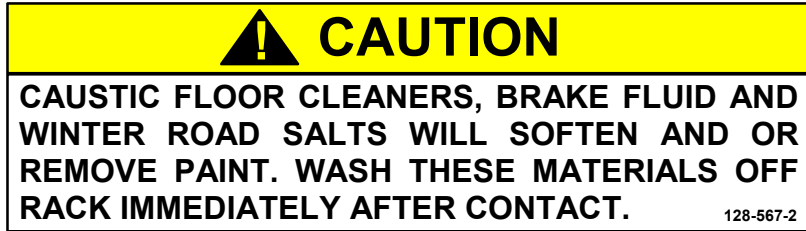


128-309-2



128-310-2

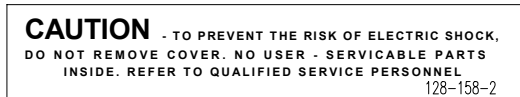
Cautions



128-567-2

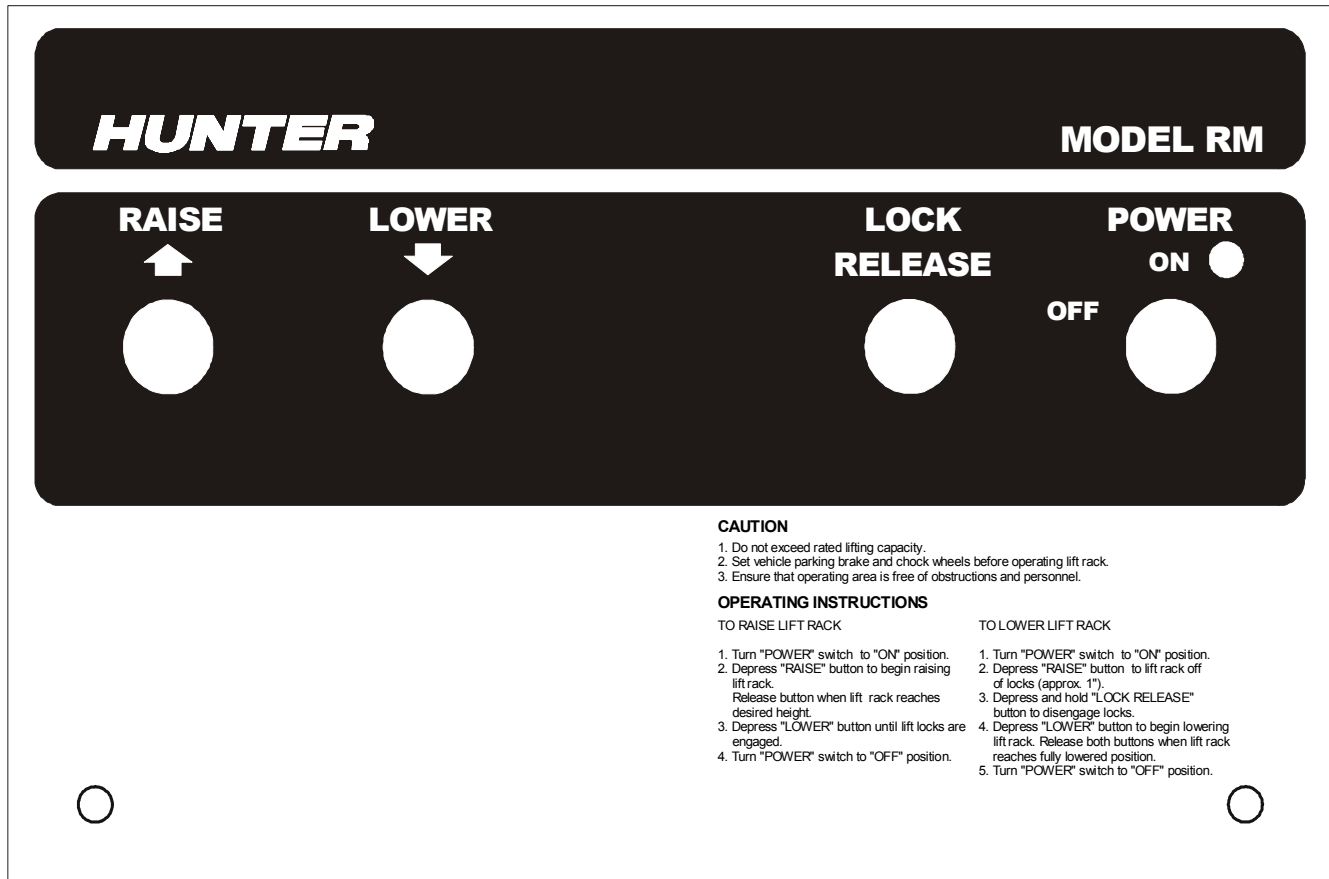


128-910-2



128-158-2

1.2 Control Panel



2. Lift Specifications

2.1 Lift Capabilities

Maximum Lifting Weight:	9000 lb. (4082 kg)
Maximum Lifting Height:	64 inches (1626 mm)
Alignment Height:	All Lock Positions
Lifting Speed:	40 seconds
Lowering Speed:	35 seconds
Tread Width:	
Minimum Inside Tires:	40 inches (1016 mm)
Maximum Outside Tires:	79 inches (2006 mm)
Maximum Wheel Base:	
Standard Runway	
4–Wheel Alignment:	138 inches (3505 mm)
2–Wheel Alignment:	159 inches (4039 mm)
General Service:	173 inches (4394 mm)
Runway with Extensions	
4–Wheel Alignment:	164 inches (4166 mm)
2–Wheel Alignment:	187 inches (4750 mm)
General Service:	200 inches (5080 mm)

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 being properly instructed or trained as outlined in Section 3.3.

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 maintenance tables in Section Five. 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 finds components requiring replacement, contact your factory 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 Label."

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 Information

4.1 Preparation

Lift Operation Safety Rules

Read and familiarize yourself with these instructions before operating lift.

Do not operate an improperly functioning lift.

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

Be sure that distance from door to rear of vehicle is at least 38-3/4 inches (984 mm).

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.

Press "LOWER" button to engage the 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 by 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.
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⚠ CAUTION:	For safety, proper chocking of vehicle wheels is very important to prevent the vehicle from rolling while positioned on elevated runways.
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4.2 Chocking the Wheels

Adjust the turn plates (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

Check to ensure that the rear of the vehicle does not extend past the yellow/black mark on the ramp.

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 tire before moving the vehicle.

4.3 Lift Operation

NOTE: Leveling legs MUST be used while performing an alignment on a RM lift equipped with runway extensions.
--

Raising the Lift

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

Verify that the turn plate and runway slip plate lock pins are installed.

Check the rear of the vehicle for clearance.

CAUTION: Runways move to the rear as they rise. Observe the rear of the vehicle as the lift rises to avoid hitting any obstructions.

Turn the "POWER" switch ON.

The "POWER" switch "ON" light will illuminate.

Depress and hold the "RAISE" button.

The pump will begin to operate, raising the lift.

⚠ CAUTION: Listen for the sound of the mechanical locks passing over their detents. If the sound is not heard, release the “RAISE” button and refer to the troubleshooting section of this manual.

Release the “RAISE” button when the lift reaches the desired height.

The pump will shut off and the lift will stop.

Press and hold the “LOWER” button until the lift lowers and the mechanical locks engage.

Turn the “POWER” switch OFF.

Lowering the Lift

Remove all obstacles from under the rack and runways.

Be certain the vehicle is resting firmly on the runways with chocks in front of, and behind, left rear wheel.

Verify that the turn plate and runway slip plate lock pins are installed.

Turn the “POWER” switch ON.

Depress and hold the “RAISE” button until the lift rises off the locks (approximately 1 inch).

⚠ CAUTION: Ensure the optional leveling legs, if so equipped, are pivoted into the horizontal storage position.

Depress and hold the “LOCK RELEASE” button to disengage the locks.

While continuing to hold the “LOCK RELEASE” button, depress the “LOWER” button until the lift reaches the desired height.

Release both buttons when the lift reaches the desired height.

Depress and hold the “LOWER” button until the mechanical locks engage.

If the lift is being lowered completely, ensure the lift rack is resting on all floor stops before removing the wheel chocks.

Turn the “POWER” switch OFF.

Remove all wheel chocks.

Carefully drive the vehicle off the runways.

4.4 Using the Worksteps

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

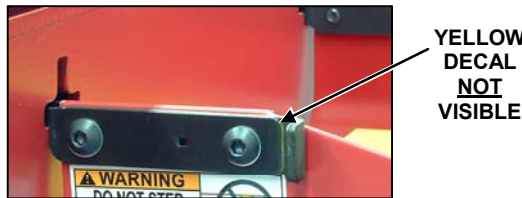
When using a workstep, always ensure the workstep is fully engaged and locked into the cutout in the side of the runway.

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.

⚠ CAUTION: 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.

⚠ CAUTION: 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.

5. Regular Maintenance

5.1 Maintenance Schedule

MAINTENANCE SCHEDULE	PERFORM THE FOLLOWING MAINTENANCE
DAILY	<p>Check the mechanical lock mechanism in each runway.</p> <p>Clean any debris from the locks.</p> <p>Keep lock area clean and free of debris at all times.</p> <p>Check the hydraulic cylinders, hoses, and fittings for leaks. Leaks MUST be corrected immediately.</p> <p>Check condition of hoses. Worn or frayed hoses MUST be replaced immediately.</p> <p>Check the fluid level in the tank with the lift lowered completely. When adding hydraulic fluid (Dexron III), the lift MUST be lowered completely.</p> <p>Check and lubricate rear ramp pivots with SAE 30 oil.</p> <p>Check base plate anchor bolts for tightness.</p>
WEEKLY	<p>Check the turn plates and rear slip plates for smooth and easy operation.</p> <p>Clean by blowing out with compressed air. Disassembly is NOT required. (CAUTION: Always wear eye protection when using compressed air)</p> <p>Do NOT lubricate turn plates or slip plates.</p>
EVERY TWO YEARS	<p>Change hydraulic fluid. Use 3-1/2 gallons (13.25 liters) of Dexron III transmission fluid.</p> <p>During each fluid change, replace the filter located on suction line, clean any metal particles on the magnet located on return line, and remove any sediment from bottom of reservoir.</p>

6. Troubleshooting

6.1 Troubleshooting Chart

PROBLEM	POSSIBLE CAUSE	SOLUTION
Lift does not operate (LED is not flashing).	<p>“POWER” switch in OFF position.</p> <p>Circuit breaker or fuse blown in shop power panel.</p> <p>Self-test failure.</p> <p>Electrical malfunction in control console.</p> <p>Hydraulic system malfunction.</p>	<p>Rotate switch to the ON position.</p> <p>Locate shop power panel and restore power.</p> <p>If overload repeats due to lift operation, contact factory service representative.</p> <p>Contact factory service representative.</p> <p>Contact factory service representative.</p> <p>Contact factory service representative.</p>
“RAISE” button depressed, motor runs but lift will not rise to full height.	<p>Low hydraulic fluid level in reservoir.</p> <p>Overhead obstruction to vehicle.</p> <p>Voltage supply is low.</p> <p>Hydraulic system malfunction.</p>	<p>Lower lift.</p> <p>Turn OFF shop power.</p> <p>Check hydraulic fluid level and fill. Determine reason for low hydraulic fluid level.</p> <p>Lower lift and remove obstruction.</p> <p>Contact factory service representative.</p> <p>Contact factory service representative.</p>
“RAISE” button depressed, motor runs but lift does not move.	<p>Vehicle is beyond capacity - 9,000 lb. (4082 kg)</p> <p>Electrical/Hydraulic control malfunction.</p>	<p>Do not attempt to lift vehicles in excess of 9,000 lb. (4082 kg)</p> <p>Contact factory service representative.</p>
Runways continue to rise after “RAISE” button is released.	Electrical control malfunction.	<p>Turn the “POWER” switch OFF.</p> <p>Turn OFF shop power.</p> <p>Contact factory service representative.</p>
“RAISE” button depressed, but no sound of mechanical locks passing over detents.	Lock mechanism binding.	Clean and lubricate lock mechanism pivot points. If condition remains, contact factory service representative.
Safety ratchet not fully engaged.	Misalignment of ratchets.	Contact factory service representative.
“LOWER” button depressed, lift does not move.	<p>Mechanical locks engaged.</p> <p>Hydraulic system malfunction.</p>	<p>Raise the lift off the locks. Press and hold the “LOCK RELEASE” and “LOWER” buttons to lower the lift.</p> <p>Contact factory service representative.</p>

Troubleshooting (continued)

PROBLEM	POSSIBLE CAUSE	SOLUTION
Lift will not raise or lower. LED flashes twice (Error code 2), pauses and repeats 5 times.	The Lift has exceeded maximum allowed out-of-level limit.	Let the error code clear (The error code will clear after 6 flash cycles). Depress the "RAISE" or "LOWER" button to allow the lift to try to correct the out-of-level condition.
Lift will not raise or lower. LED flashes three times (Error code 3), pauses and repeats.	The lift did not correct the out-of-level condition after reporting an error code 2 above.	Turn "POWER" switch OFF and back ON. Let error code 2 clear, then lower the lift onto the same locks or the floor to regain level condition.
Lift will not raise or lower. LED flashes four times (Error code 4), pauses and repeats.	The lift did not correct the out-of-level condition after reporting an error code 2 above.	Turn "POWER" switch OFF and back ON. Let error code 2 clear, then lower the lift onto the same locks or the floor to regain level condition.
Lift will not raise or lower. LED flashes five times (Error code 5), pauses and repeats.	Sensor calibration error or lost sensor signal.	Contact factory service representative.
Lift will not raise or lower. LED flashes six times (Error code 6), pauses and repeats.	Control board is not properly calibrated.	Contact factory service representative.
"LOWER" button depressed, lift lowers slightly, then stops.	Locks not completely disengaged. Velocity fuse tripped. Electrical/Hydraulic control malfunction.	Raise the lift slightly then press the "LOCK RELEASE" button and the "LOWER" button simultaneously. Contact factory service representative. Contact factory service representative.
Lift stops operating.	Two buttons pressed simultaneously. Button pressed at power up. Exceeded expected operational time.	Turn "POWER" switch OFF and back ON. Turn "POWER" switch OFF and back ON. Do not attempt to continually operate pump with lift in fully elevated position. Do not attempt to lift vehicles in excess of 9,000 lb. (4082 kg)

Appendix

Maintenance/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)