



World Leader in Lift Systems

Models: SM88-300 SERIES

OWNER'S MANUAL

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ATTENTION!!!

READ ALL MANUALS THOROUGHLY

BEFORE

INSTALLING, OPERATING,
OR MAINTAINING
THE LIFT

THE OWNER/EMPLOYER:

- **The Owner/Employer shall** ensure that lift operators are qualified and that they are trained in the safe use and operation of the lift using the manufacturer's operating instructions; ALI/SM 93-1, ALI Lifting it Right safety manual; ALI/ST-90 ALI Safety Tips card; ANSI/ALI ALOIM-2000, American National Standard for Automotive Lifts-Safety Requirements for Operation, Inspection and Maintenance; ALI/WL Series, ALI Uniform Warning Label Decals/Placards; and in the case of frame engaging lifts, ALI/LP-GUIDE, Vehicle Lifting Points/Quick Reference Guide for Frame Engaging Lifts.
- **The Owner/Employer shall** establish procedures to periodically inspect the lift in accordance with the lift manufacturer's instructions or ANSI/ALI ALOIM-2000, American National Standard for Automotive Lifts-Safety Requirements for Operation, Inspection and Maintenance; and **The Employer Shall** ensure that lift inspectors are qualified and that they are adequately trained in the inspection of the lift.
- **The Owner/Employer shall** establish procedures to periodically maintain the lift in accordance with the lift manufacturer's instructions or ANSI/ALI ALOIM-2000, American National Standard for Automotive Lifts-Safety Requirements for Operation, Inspection and Maintenance; and **The Employer Shall** ensure that lift maintenance personnel are qualified and that they are adequately trained in the maintenance of the lift.
- **The Owner/Employer shall** maintain the periodic inspection and maintenance records recommended by the manufacturer or ANSI/ALI ALOIM-2000, American National Standard for Automotive Lifts-Safety Requirements for Operation, Inspection and Maintenance.
- **The Owner/Employer shall** display the lift manufacturer's operating instructions; ALI/SM 93-1, ALI Lifting it Right safety manual; ALI/ST-90 ALI Safety Tips card; ANSI/ALI ALOIM-2000, American National Standard for Automotive Lifts-Safety Requirements for Operation, Inspection and Maintenance; and in the case of frame engaging lifts, ALI/LP-GUIDE, Vehicle Lifting Points/Quick Reference Guide for Frame Engaging Lifts; in a conspicuous location in the lift area convenient to the operator.
- **The Owner/Employer shall** 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.
- **The Owner/Employer shall** not modify the lift in any manner without the prior written consent of the manufacturer.

SAFETY INSTRUCTIONS

- **Never** allow unauthorized or untrained persons to operate lift or rolling jacks.
- **Shop Policy** should prohibit customers or non-authorized persons from being in shop area while lift is in use.
- **Thoroughly** train all employees in the use and care of lift and rolling jacks.
- **Be Sure** no one is standing in front or behind lift while vehicle is being driven onto or backed off the lift.
- **DO NOT** allow rear tires or portion of vehicle to interfere with ramp/chocks.
- **Be Sure** front wheel stops are in raised position before driving vehicle onto lift.
- **Never** allow front wheels to strike the front wheel stops.
- **DO NOT** permit employees or customers on lift when it is either being raised or lowered.
- **Always** stand clear of lift when raising or lowering and observe "Pinch Points" Warning.
- **Never** overload lift: capacity of lift is 4,000 kg. (2680 kg. per axle).
CAPACITY SHOULD NOT BE EXCEEDED.
- **Always** engage parking brake and use the rear wheel chocks to keep the vehicle from rolling freely on the runways.
- **Always** lower lift on locks before working on vehicle.
- **Keep** area around lift clean of tools, debris, grease, and oil.
- **Always** keep runway clean.
- **Replace** all caution, warning, or safety related decals on the lift when unable to read or missing.
- **For Rolling Jack Safety Instructions** see Rolling Jack Installation, Operation and Maintenance Instructions in the rolling jack box.

OPERATING INSTRUCTIONS

⚠ WARNING To avoid personal injury and/or property damage, permit only trained personnel to operate lift.

After reviewing these instructions, get familiar with lift controls by running the lift through a few cycles before loading vehicle on lift.

Observe and heed SAFETY and WARNING labels on the lift.

1. **Loading:** Lift must be fully lowered and no one in service bay while the vehicle is brought on lift.
2. If lift is equipped with rolling jacks, jacks must be fully lowered and the rear jack pushed toward center of lift to provide under car clearance.
3. Drive vehicle onto lift and stop when vehicle's front wheels are centered on turning radius gauges. On lifts not used for wheel alignment, stop vehicle when it contacts the front wheel stops. At all times, be sure rear wheels are forward of the ramp/chocks and the ramp/chocks will clear tires when the lift is raised, Fig. 1. Driver and passengers must exit before raising.
4. Place triangular wheel chocks on each side of one of the rear tires, Fig. 1.
5. **To Raise Lift:** Push the "RAISE" button on the power unit. Release button at desired height, Fig. 2.
6. For Rolling Jack Operating Instructions see Rolling Jack Installation, Operation and Maintenance Instructions in the rolling jack shipping carton.
7. **Before Lowering Lift:** Be sure no one is in the lift area and that all tools, tool trays, etc. have been removed from under the lift and vehicle.

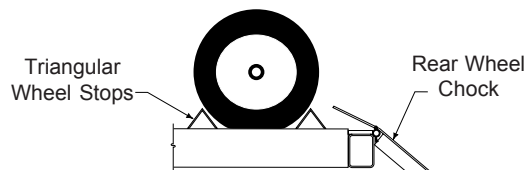


Fig. 1

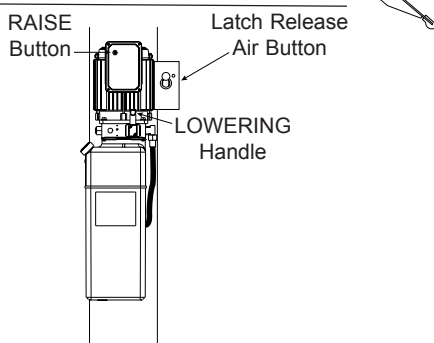


Fig. 2

⚠ WARNING The runways, ramps and connecting yokes at each end of lift are designed to rest on the floor when fully lowered. Observe pinch point warning decals, Fig. 3.

8. Repeat Step 2.
 9. **To Lower Lift:** If lift has been resting on the locking latches, lift must be raised high enough for all four latches to clear the latch plate slots inside the columns.
 10. Actuate the latch release valve on the power unit column to disengage all four locking latches, Fig. 2. Hold actuator in until lift has fully lowered.
- Note:** If actuator on air valve is released, the latches will automatically reset to the engaged position.
11. Push the lowering handle on the power unit to lower lift, Fig. 2. Lowering speed can be controlled by the force applied to the lowering handle.
 12. Observe lift and vehicle to be sure lift is level while being lowered. If not, **STOP** repeat Steps 10 through 13.
 13. Fully lower lift, remove the triangular wheel chocks and check to be sure area is clear before removing vehicle from lift, Fig. 1.
 14. If your lift is not operating properly, **DO NOT** use until adjustments or repairs have been made by qualified lift service personnel.

⚠ WARNING Keep hands clear of yoke ends while the lift is being raised or lowered, Fig. 3.

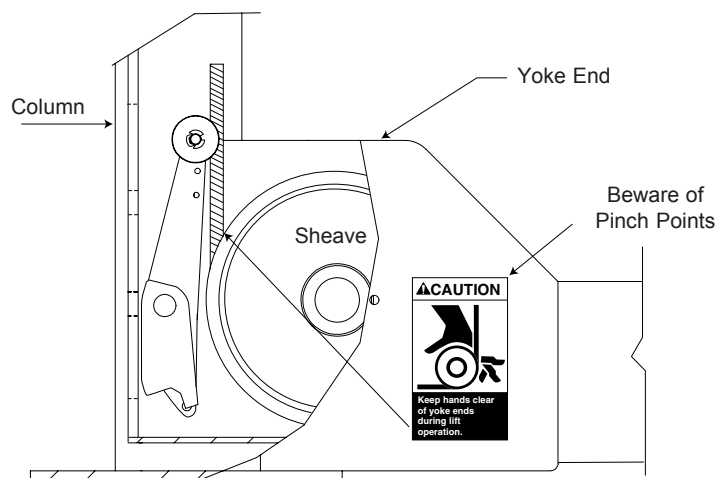


Fig. 3

MAINTENANCE INSTRUCTIONS

⚠ WARNING If you are not completely familiar with automotive lift maintenance procedures, **STOP**. Contact factory for instructions.

To Avoid Personal Injury, permit only qualified lift service personnel to perform maintenance on this equipment.

- **Periodically:** Check all column, lift/runway attaching bolts for tightness.
- **Always** raise lift when cleaning floor area with solvents and/or cleaning compounds.
- **Daily:** Check cables and sheaves for wear. There is a portion of the right side cables that cannot be viewed except thru the access hole in the middle of the yokes.
- **Daily:** Inspect front wheel stops and ramp/chocks for damage or excessive wear. Replace as required with genuine Rotary parts.
- **Daily:** Check locking latch operation and reset. Adjust per instructions or repair if required with genuine Rotary parts.
- **Weekly:** Clean foreign debris from rear wheel slip plates and turning radius gauges by blowing out with shop air. **DO NOT GREASE BALL BEARINGS.**
- **Weekly:** Check torque on the column anchor bolts per specifications .

- **Monthly:** Check cable. Adjust per instructions.
- **Monthly:** Check level of runway. Adjust per instructions.
- **Monthly:** Lubricate Guide on each turning radius with a dry film lubricant. Clean and lubricate more often as conditions warrant.

IMPORTANT

- **Semi-Annually:** Check fluid level of lift power unit and refill if required. If fluid is required, inspect all fittings, hoses and seals. Repair as required.
- **Semi-Annually:** Lubricate front wheel stop and ramp/chock hinge pins.

Cable adjustment should be checked by a Rotary Authorized Installer after the first 50 loaded lift cycles and after 300 loaded lift cycles.

- **For Rolling Jack Maintenance Instructions** see Rolling Jack Installation, Operation and Maintenance Instructions in the rolling jack box.

TROUBLE SHOOTING

Trouble	Cause	Remedy
Motor does not run.	<ol style="list-style-type: none"> 1. Check fuse or circuit breaker. 2. Check for correct voltage to motor. 3. Inspect all wiring connections. 4. Switch burned out. 5. Motor windings burned out. 	<ol style="list-style-type: none"> 1. Replace blown fuse or reset circuit breaker. 2. Supply correct voltage to motor. 3. Repair and insulate all connections. 4. Replace switch. 5. Replace motor.
Motor runs but will not raise lift.	<ol style="list-style-type: none"> 1. Open lowering valve. 2. Pump sucking air. 3. Suction stub off pump. 4. Low fluid level. 	<ol style="list-style-type: none"> 1. Repair or replace lowering valve. 2. Tighten all suction line fittings. 3. Replace suction stub. 4. Fill tank with Dexron III ATF.
Motor runs—raises unloaded lift but will not raise vehicle.	<ol style="list-style-type: none"> 1. Motor running on low voltage. 2. Trash in lowering valve. 3. Improper relief valve adjustment. 4. Overloading lift. 	<ol style="list-style-type: none"> 1. Supply correct voltage to motor. 2. Clean lowering valve. 3. Replace relief valve cartridge. 4. Check vehicle weight and/or balance vehicle weight on lifts.
Lift slowly settles down.	<ol style="list-style-type: none"> 1. Trash in check valve seat. 2. Trash in lowering valve seat. 3. External fluid leaks. 	<ol style="list-style-type: none"> 1. Clean check valve. 2. Clean lowering valve. 3. Repair external leaks.
Slow lifting speed or fluid blowing out filler breather cap.	<ol style="list-style-type: none"> 1. Air mixed with fluid. 2. Air mixed with fluid suction. 3. Fluid return tube loose. 	<ol style="list-style-type: none"> 1. Change hydraulic fluid to Dexron III ATF. 2. Tighten all suction line fittings. 3. Reinstall fluid return tube.
Lift going up unlevel.	<ol style="list-style-type: none"> 1. Cables out of adjustment. 2. Lift installed on unlevel floor. 	<ol style="list-style-type: none"> 1. Adjust slack out of cable. 2. Shim lift to level columns (Not to exceed 1/2" per column). <p>Note: Shim thickness of 2" is possible by using optional shim kit #FC5393. Contact your authorized Rotary Parts Distributor for ordering information.</p>
Lift stops short of full rise or chatters.	Low on fluid.	Check fluid level and bleed cylinder. If fluid is required inspect all fittings, hoses, and seals. Repair as required. Clean power unit pickup stub filter.
Anchors will not stay tight.	<ol style="list-style-type: none"> 1. Holes drilled oversize. 2. Concrete floor thickness or holding strength not sufficient. 	<ol style="list-style-type: none"> 1. Use a fast setting cement to pour into oversize holes and reset anchors -or- relocate lift using a new bit to drill holes. 2. Break out old concrete and repour new pads for lift.
Lift will not lower.	<ol style="list-style-type: none"> 1. Insufficient air supply to lift. 2. Latches out of adjustment. 	<ol style="list-style-type: none"> 1. Check air pressure. Air supply to lift should be between: min. 100 p.s.i. and max. 120 p.s.i. Check all lines and fittings for leaks or crimps. Repair or replace as required. 2. Check latches

Notes:

Certificate of Compliance

Rotary Lift is authorized to apply ETL & cETL Listing Marks/Labels to this AC Motor. Authorization: ETL Report No. J98007541-003, FAM -UL73. This ETL test certifies that this AC Motor complies with Underwriters Laboratories, Inc. standard ANSI/UL 73, 8th Edition & CSA standard C22.2 No. 68-92.




SV0021 A Rev. 6/9/99

Installer: Please return this booklet to literature package and

GIVE TO LIFT OWNER/OPERATOR.

Trained Operators and Regular Maintenance Ensures Satisfactory Performance of Your Rotary Lift.

Contact Your Nearest Authorized Rotary Parts Distributor for Genuine Rotary Replacement Parts. See Literature Package for Parts Breakdown.

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