

Rotary Lift

Trouble Shooting Guide

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IN THE EVENT A PROBLEM IS ENCOUNTERED THAT IS NOT COVERED IN THIS GUIDE, PLEASE CONTACT ROTARY LIFT CUSTOMER SERVICE AT **1-800-445-5438**.

TROUBLE SHOOTING
Surface Lifts
(POWER UNIT SECTION)

Trouble	Cause	Remedy
Electric 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. Micro switch burned out. 5. Overhead limit switch burned out. 6. 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 micro switch. 5. Replace micro switch. 6. Replace motor.
Electric motor runs but will not raise lift.	<ol style="list-style-type: none"> 1. Motor runs in reverse rotation. 2. Plugged suction screen. 3. Open Lowering valve. 4. Pump sucking air. Due to: <ol style="list-style-type: none"> A) Pump shaft seal is worn. B) Pump shaft is corroded. C) Loose or cracked suction stub or line. 5. Low oil level. 6. Pump not priming P500 before sn#12044 (8-13-86 thru 9-14-88) P502 sn#12044-#15612 (9-14-88 thru 1-20-89) P502 units after sn#15613 (after 1-20-89) 	<ol style="list-style-type: none"> 1. Change motor rotation. 2. Replace or clean suction screen. 3. Repair or replace lowering valve. 4. Tighten all suction line fittings. <ol style="list-style-type: none"> A) Replace pump shaft seal. B) Replace pump. C) Repair or replace. 5. Fill tank with Dexron III ATF. 6. Clean or replace load delay valve. <p>Loosen lowering valve cartridge a couple of turns - start motor-tighten valve.</p> <p>Loosen bleed screw on pump end head 1/2 turn -start motor- tighten bleed screw.</p>
Electric motor runs-raises unloaded 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. External oil leaks. 2. Trash in lowering valve seat. 3. Trash in check valve seat. 	<ol style="list-style-type: none"> 1. Repair external leaks. 2. Clean or replace lowering valve. 3. Clean or replace check valve.
Slow lifting speed or oil blowing out filler breather cap.	<ol style="list-style-type: none"> 1. Air mixed with oil. 2. Oil return tube loose. 3. Oil by-passing 4. System overfilled. 5. Obstruction in return filter cavity. (P500 series) 	<ol style="list-style-type: none"> 1. a. Change oil to Dexron III ATF. b. Tighten all suction line fittings. 2. Reinstall return tube. 3. Replace relief valve and/ or O-rings on pressure side of pump. 4. Bleed cylinders and check oil level. Remove excess oil. 5. Remove obstruction and replace filter. (P500 series)
Power unit noisy	<ol style="list-style-type: none"> 1. Sucking air and oil. (Foamy oil causing cavitation) 2. Power unit loose on column. 3. Worn motor coupling. 4. Plugged suction filter 5. Fan cover or motor damage. (3 Phase only) 	<ol style="list-style-type: none"> 1. Change out old oil with new Dexron III ATF. 2. Tighten mounting bolts 3. Replace motor coupling. 4. Clean or replace filter. 5. Replace or repair.

Lift stop short of full rise.

1. Low on fluid.
2. Suction line too short or has hole in it.

1. Add oil.
2. Replace suction line.

(GENERAL TWO POST SECTION)

Lift going up unlevel.	<ol style="list-style-type: none"> 1. Equalizer cables out of adjustment. 2. Lift installed on unlevel floor. 	<ol style="list-style-type: none"> 1. Adjust equalizer cables to correct tension. 2. Shim lift to level columns (Not to exceed 1/2").
Anchors will not stay tight.	<ol style="list-style-type: none"> 1. Holes drilled oversize. 2. Concrete floor thickness or holding strength not sufficient. 3. Anchors not torqued correctly. 	<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. 3. Torque bolts to correct spec.
Locking latches do not engage.	<ol style="list-style-type: none"> 1. Latch pivot pins rusted. (Usually occurs on outside installations or in high humidity areas such as vehicle wash bays.) 2. Tension spring broken. 3. Latch cable needs adjustment. 	<ol style="list-style-type: none"> 1. Remove covers, oil latch mechanism. Activate latch mechanism several times with latch handle to allow oil to penetrate. 2. Replace broken spring. 3. Adjust clamp at cable end.
Lift chatters on the way up.	<ol style="list-style-type: none"> 1. Air in system. 	<ol style="list-style-type: none"> 1. Bleed cylinders.
Slow lowering speed.	<ol style="list-style-type: none"> 1. Plugged cylinder orifice. 2. Lowering valve (screen) plugged. 3. Wrong weight of fluid. 4. Pinched or collapsed line. (Restriction in line.) 5. Foreign object in carriage column. 	<ol style="list-style-type: none"> 1. Remove cylinder bleeder screw and clear orifice. 2. Remove and clean lowering valve. 3. Replace fluid with Dexron III ATF. 4. Replace and/or clean lines. 5. Remove foreign object.
Lift will not lower.	<ol style="list-style-type: none"> 1. Latches engaging. 2. Plugged cylinder orifice. 3. Vehicle off center loaded. 4. Foreign object in carriage column. 	<ol style="list-style-type: none"> 1. Adjust or replace latches. 2. Loosen cylinder bleeder or crack a line to lower lift. Then clear cylinder orifice. 3. Make sure spotting dish in located properly and is being used. 4. Remove foreign object.
Broken Equalizer cable.	<ol style="list-style-type: none"> 1. Corrosion or fatigue. 	<ol style="list-style-type: none"> 1. Replace cable.
When raising lift, adapter wants to move from pick up point.	<ol style="list-style-type: none"> 1. Column out of plumb. 	<ol style="list-style-type: none"> 1. Plumb columns.
Arm drooping. (Arm dragging on floor.)	<ol style="list-style-type: none"> 1. Lift out of plumb. 2. Unlevel floor. 3. Worn arm pins. 4. Worn arm or carriage holes. 5. Worn carriage slide blocks. 6. Bent arm. (Overloaded) 	<ol style="list-style-type: none"> 1. Plumb columns. 2. Replace floor or shim columns. 3. Replace arm pins. 4. Replace parts. 5. Replace slide blocks. 6. Replace arm. Also check damage to carriage.

TROUBLE SHOOTING

(GENERAL 4-POST SECTION)

Trouble	Cause	Remedy
Lift will not lower.	<ol style="list-style-type: none">1. Latches not adjusted properly.2. Leak in air line to latches.3. Insufficient air pressure.4. Sticking air latch cylinder.5. Bent slack cable latch.6. Air switch not releasing.7. Cable and/or sheave bound up.8. Worn or broken latch part.	<ol style="list-style-type: none">1. Adjust latches.2. Repair air line.3. Adjust air pressure (90 to 150psi.)4. Replace air cylinder. (Check for moisture in lines.)5. Replace latch.6. Replace air switch.7. Replace sheave and/or cable.8. Repair or replace parts.
Oil leaking out breather on cylinder.	<ol style="list-style-type: none">1. Leaking seal.	<ol style="list-style-type: none">1. Replace seal or cylinder. (Note: A small amount of weepage is normal.)
Latches will not engage on the way up.	<ol style="list-style-type: none">1. Column out of plumb.2. Latches out of adjustment.3. Too much tolerance between latch and columns.	<ol style="list-style-type: none">1. Plumb column.2. Adjust latches.3. Reinstall columns.
Lift chattering and/or vibrating.	<ol style="list-style-type: none">1. Worn sheaves and/or pins.	<ol style="list-style-type: none">1. Replace parts.

TROUBLE SHOOTING

Semi and Full Hydraulic Lift

Trouble	Cause	Remedy
Lift won't raise at all.	<ol style="list-style-type: none"> 1. Low oil control stuck. 2. Air pressure not getting to lift. 3. Worn or broken control valve component. 	<ol style="list-style-type: none"> 1. Remove, replace low oil control or add oil. 2. Check compressor, valves and/or filters. 3. Replace valve and/or parts.
Lift raises slow or won't raise load.	<ol style="list-style-type: none"> 1. Insufficient air pressure. 2. Compressor tank too small. 3. Compressor tank full of water. 4. Restriction or pipe line too small. 5. Oil too heavy in viscosity. 6. Air valve not working properly. (Plugged screen or worn rocker) 7. Load greater than lift capacity. 8. Air supply line from compressor to lift too small. 	<ol style="list-style-type: none"> 1. Check air compressor. 2. Check specifications. 3. Drain tank. 4. Check pipe and size. 5. Check and/or change oil. 6. Check intake side of valve, then exhaust. 7. Weigh vehicle, check specifications. 8. Replace piping with correct size.
Lift lowers slow.	<ol style="list-style-type: none"> 1. Clogged exhaust muffler. 2. Restriction in air line or exhaust valve. 3. Oil too heavy viscosity. 4. Restriction in air/oil line. 	<ol style="list-style-type: none"> 1. Clean or replace. 2. Check air line, size and air valve. 3. Change to proper oil. 4. Inspect and remove restriction.
Lift raises slowly with air valve closed.	<ol style="list-style-type: none"> 1. Leak in air valve. 	<ol style="list-style-type: none"> 1. Check intake port, repair or replace.
Lift creeps down with air valve closed. (Semi Hydraulic)	<ol style="list-style-type: none"> 1. Leak in air valve. 2. Air leak in fill plug. 3. Air leak in line from valve to cylinder. Air leak in outer casing. 4. Leak at manual air bleed screw. 	<ol style="list-style-type: none"> 1. Check exhaust port, repair or replace. 2. Apply soapy water and watch for bubbles after letting air into system. 3. Check thoroughly first to be sure, then repair or replace. 4. Tighten or replace.
Lift "jumping" or "dropping".	<ol style="list-style-type: none"> 1. Low on oil. 2. Air pockets in system. 3. Low oil control not seated. 	<ol style="list-style-type: none"> 1. Locate and repair source of oil loss. Add oil. 2. Add oil and bleed air from system. 3. Remove and check float.
Oil blows out exhaust muffler.	<ol style="list-style-type: none"> 1. Low on oil. 2. Too much oil. (Plus water in oil from air line.) 3. Improper grade of oil. (Foaming) 4. Leak in interior air line. 5. Baffle tube in tank out of position. 6. Lift not raised to full rise often enough to allow automatic bleeder to operate. (Semi-Hyd.) 7. Check disk on bottom of plunger broken apart. 	<ol style="list-style-type: none"> 1. Locate and repair source of oil loss. Add oil. 2. Check level, siphon excess. (Install water trap near control valve.) 3. Change oil. 4. Replace lift. 5. Center and reseat tube. 6. Daily raise the lift to full rise or manually bleed the lift. 7. Install replacement check disk JX189 or replace plunger.
Lift raises vehicle but stops short of full rise.	<ol style="list-style-type: none"> 1. Low oil control float shuts off due to low oil condition. 	<ol style="list-style-type: none"> 1. Locate and repair source of oil loss. Add oil.

Lift "chatters" going up or down.

1. Check position of wheel chocks, off center loading.
2. Vehicle positioned incorrectly over lift.
3. Bind at Non-Rotator, or Safety leg.
5. Jacks out of plumb.
6. Water contaminated or old oil in jack.
7. No ballast in plunger. (Full Hydraulic only)
8. Vehicle weight exceeds capacity of lift.
9. Main air line, incorrect size, and/or too many elbows.
10. Oil line too small.
11. Improper operation, oil valve blocked open, using air valve to raise lift.

1. Wheel spotter incorrectly installed, install correctly.
2. Spot vehicle properly.
3. Check alignment, and condition. Disconnect, raise and lower lift observing condition.
5. Re plumb lift.
6. Replace oil.
7. Add ballast to plunger.
8. Check wt. of vehicle.
9. Correct main line
10. Oil lines should be 1 1/4" min.
11. Follow operation instructions from owners packet.

Scratches on plunger.

1. Foreign matter in packing.

1. Remove, replace packing, clean and polish plunger.

Oil leaking at seal.

1. Seal lip cut or damaged.
2. Manual bleeder plug loose.
3. Packing gland bolts loose.
4. Gland bolts bottoming out on concrete or debris.
5. Wrong gland bolts. If bolts are too long gland will not tighten.
6. Cracked gland.
7. Scored plunger.
8. Small pin hole in plunger.

1. Replace seal.
2. Tighten or replace bleeder plug.
3. Torque bolts to 50 ft. lbs.
4. Remove bolts and clean holes.
5. Correct specification of gland bolts are 1/2"-13 x 1 1/4"lg. Gd 5.
6. Replace gland.
7. Sand scores with emery cloth or replace plungers.
8. Replace plunger.

Lift will not lower after weight is off of lift.

1. No ballast in plunger.
2. Debris in outer pipe.
3. Inner pipe bent.
4. Inner pipe binding with superstructure or outer pipe.

1. Add ballast to plunger.
2. Clean out outer pipe.
3. Replace inner pipe.
4. Adjust alignment of inner pipe.

TROUBLE SHOOTING

Inground Side by Side Lifts

Trouble	Cause	Remedy
Chattering lift.	<ol style="list-style-type: none"> 1. Piston not plumb. 2. Piston wobble due to bearing wear. 3. The stroke on one jack is off. Or one jack installed higher than the other. 4. Equalizer vertical beam shorter on one side. 5. Bent or broken equalizer. 6. Equalizer rollers or slides not adjusted properly. 7. See trouble shooting on inground Hydraulic lifts. (page 5) 	<ol style="list-style-type: none"> 1. Check plumbness and correct. 2. Install JG629 Bearing kit. 3. Shim between equalizer and superstructure of the jack that tops out first until both jacks top out and lower the same. 4. Same as #3. 5. Replace equalizer. 6. Adjust rollers or sliders. Max. of 1/16" clearance.
Chattering lift. (Rack & Pinion)	<ol style="list-style-type: none"> 1. Keys missing in gear or not in line on shaft, due to twisted shaft. 2. Lift lock or rack bars binding. 3. Worn rack bars and/or gears. 4. Lift equalizing system not adjusted. 	<ol style="list-style-type: none"> 1. Replace parts as needed. 2. Adjust and/or shim. 3. Replace parts as needed. 4. Shim between rack bars and superstructure.
Lift will not lower to floor.	<ol style="list-style-type: none"> 1. Foreign object in equalizer box. 2. Equalizer frame is distorted. 3. Damaged equalizer housing. 	<ol style="list-style-type: none"> 1. Clean out equalizer. 2. Replace equalizer. 3. Repair or replace as required.
Lift lock not engaging.	<ol style="list-style-type: none"> 1. Rusted up. 2. Rack & Pinion latch out of adjustment. 3. Trip plate on Rack & Pinion style hoist bent, missing or out of align with latch. 	<ol style="list-style-type: none"> 1. Lubricate or replace latches 2. Adjust latch by loosening adjusting bolts, then reposition lock pawl. 3. Replace or reposition trip plate.

TROUBLE SHOOTING

Inground Electric-Oil Hydraulic Lifts

Trouble	Cause	Remedy
Lift won't raise at all.	<ol style="list-style-type: none"> 1. Stuck intake foot valve. 2. Foreign matter clogging intake screen. 3. Wrong motor rotation. 	<ol style="list-style-type: none"> 1. Remove intake pipe & inspect & correct or replace foot valve. 2. Remove intake pipe & clean. 3. Match motor and pump rotation.
Lift raises slow or won't raise load.	<ol style="list-style-type: none"> 1. Motor not running to proper RPM. 2. Wrong electric motor. 3. Pressure relief valve set too low. 4. Vehicle heavier than lift rated capacity. 5. Restriction or pipe line too small. 6. Oil valves not working properly. 7. Incorrect oil viscosity. 8. Foreign matter clogging intake screen. 9. Improper positioning of up/down valve stem. 	<ol style="list-style-type: none"> 1. Check wiring and voltage 2. Check specifications. 3. Adapt pressure gauge, check operating pressure with valves closed and with them open, raising vehicle. 4. Weigh vehicle at each axle, check specifications. 5. Check pipe size and specifications. 6. Check valves and handle operation. 7. Change to proper oil. 8. Remove intake pipe and clean. 9. Re-set valve stem
Motor stops, blown circuit breaker when lift reaches full stroke.	<ol style="list-style-type: none"> 1. By-pass valve not opening. 2. Relief pressure set to high. 3. Incorrect voltage to motor. 4. Excessive amperage draw by motor. 	<ol style="list-style-type: none"> 1. Replace pressure relief valve. 2. Adjust relief valve. 3. Check voltage. 4. Check wire size to amperage requirements.
Power unit making excessive noise.	<ol style="list-style-type: none"> 1. Coupling alignment. 2. Pump cavitating (sucking air). 3. Foot valve plugged. 4. Relief valve making excessive noise. 5. Pump shaft bushings tight. 	<ol style="list-style-type: none"> 1. Re-adjust. 2. Check suction side of pump air leaks. 3. Clean screen and/ or foot valve. 4. Clean and/or replace. 5. Replace pump.

TROUBLE SHOOTING

Front Movable Plunger Lifts

Trouble	Cause	Remedy
Front piston hard to move.	<ol style="list-style-type: none"> 1. Dirt under cover plates. 2. Cover plate binding. 3. Worn axles or wheels. 4. Bow in front frame. 	<ol style="list-style-type: none"> 1. Clean 2. Check alignment & clearances. 3. Replace or service. 4. Straighten or replace.
Front piston will not move when using ratchet assembly.	<ol style="list-style-type: none"> 1. Broken ratchet chain. 2. Sheared key on sprocket. 3. Broken guide pin and/or spring. 4. Ratchet dog worn. 5. Ratchet wheel worn. 	<ol style="list-style-type: none"> 1. Replace or repair chain. 2. Replace key. 3. Replace parts as needed. 4. Replace ratchet dog. 5. Replace wheel.
Front piston will not move when using hydraulic drive.	<ol style="list-style-type: none"> 1. Hoses routed incorrectly from control valve to hydraulic motor. 2. Broken drive chain or worn drive sprocket. 3. Sheared key. 4. Broken ratchet chain. 5. Bad hydraulic drive motor. 6. Bad directional control valve. 	<ol style="list-style-type: none"> 1. Re install hoses to correct ports. 2. Replace parts. 3. Replace key. 4. Replace or repair chain. 5. Replace motor. 6. Replace valve.
Air lock not engaging.	<ol style="list-style-type: none"> 1. Rusted or dirty latch. 2. Air cylinder sticking. May be caused by water in air line. 3. Air valve not exhausting. 	<ol style="list-style-type: none"> 1. Clean or replace. 2. Clean or replace. 3. Replace valve.
Air lock not releasing.	<ol style="list-style-type: none"> 1. Air valve not opening. 2. Leak in air line. 3. Low air pressure. 4. Rusted or dirty latch. 	<ol style="list-style-type: none"> 1. Replace air valve. 2. Repair air line. 3. Check and adjust pressure. Requires 75 to 90 psi. 4. Clean or replace.
One or more posts drift down.	<ol style="list-style-type: none"> 1. Internal leak at valve. 2. External leak in system. 	<ol style="list-style-type: none"> 1. Replace core or valve. 2. Check system for leaks.

TROUBLE SHOOTING S.M.A.R.T. LIFT

Trouble	Cause	Remedy
Electric 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. Micro 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 micro switch. 5. Replace motor.
Electric motor runs but will not raise.	<ol style="list-style-type: none"> 1. Plugged suction screen. 2. Bypassing lowering valve. 3. Bypassing check valve. 4. Bypassing relief valve. 5. Pump sucking air. Due to: <ol style="list-style-type: none"> A) Pump shaft seal is worn. B) Pump shaft is corroded. C) Loose or cracked suction stub or line. 6. Low oil level. 7. Motor running on low voltage. 8. Overloading lift. 9. External oil leak. 	<ol style="list-style-type: none"> 1. Replace or clean suction screen. 2. Clean or replace lowering valve. 3. Clean or replace check valve. 4. Clean or replace relief valve. 5. Tighten all suction line fittings. <ol style="list-style-type: none"> A) Replace pump shaft seal. B) Replace pump. C) Repair or replace. 6. Fill tank with Dexron II ATF. 7. Supply correct voltage to motor. 8. Check vehicle weight and/or balance vehicle weight on lifts. 9. Repair external leaks.
Lift slowly settles down.	<ol style="list-style-type: none"> 1. External oil leaks. 2. Trash in lowering valve seat. 3. Trash in check valve seat. 	<ol style="list-style-type: none"> 1. Repair external leaks. 2. Clean or replace lowering valve. 3. Clean or replace lowering valve.
Slow lifting speed or oil blowing out filler breather cap.	<ol style="list-style-type: none"> 1. Air mixed with oil. 2. Oil return tube loose. 3. Oil by-passing. 4. System overfilled. 5. Restriction in cylinder orifice. 	<ol style="list-style-type: none"> 1. a. Change oil to Dexron II ATF. b. Tighten all suction line fittings. 2. Reinstall return tube. 3. Replace relief valve and/or O-rings on pressure side of pump. 4. Bleed cylinders and check oil level. Remove excess oil. 5. Remove cylinder bleed screw and clear orifice.
Power unit noisy.	<ol style="list-style-type: none"> 1. Sucking air and oil. (Foamy oil causing cavitation) 2. Power unit loose on support. 3. Worn motor coupling. 4. Plugged suction filter. 5. Fan cover or motor damage. 	<ol style="list-style-type: none"> 1. Change out old oil with new Dexron II ATF. 2. Tighten mounting bolts. 3. Replace motor coupling. 4. Clean or replace filter. 5. Replace or repair.
Lift stop short of full rise.	<ol style="list-style-type: none"> 1. Low on fluid. 2. Suction line too short or has hole in it. 	<ol style="list-style-type: none"> 1. Add oil. 2. Replace suction line.
Lift will not Lower.	<ol style="list-style-type: none"> 1. Latch engaging. 2. Worn or broken latch part. 	<ol style="list-style-type: none"> 1. Adjust or replace latches. 2. Repair or replace parts.

	<ul style="list-style-type: none"> 3. Leak in air line to latch. 4. Insufficient air pressure. 5. Sticking air latch cylinder. 	<ul style="list-style-type: none"> 3. Repair air line. 4. Adjust air pressure (90 to 150psi.) 5. Replace air cylinder. (Check for moisture in lines.)
	<ul style="list-style-type: none"> 6. Air switch not releasing. 7. Plugged cylinder orifice. 	<ul style="list-style-type: none"> 6. Replace air switch. 7. Remove cylinder bleeder screw and clear orifice.
	<ul style="list-style-type: none"> 8. Vehicle off center loaded. 	<ul style="list-style-type: none"> 8. Make sure spotting dish is located properly and is being used.
	<ul style="list-style-type: none"> 9. O-ring in guide barrel binding. 	<ul style="list-style-type: none"> 9. Pull guide barrel and replace or realign o-ring.
	<ul style="list-style-type: none"> 10. Jacks not plumb, binding with guide barrels. 	<ul style="list-style-type: none"> 10. Loosen guide barrel and plumb jack.
Locking latch does not engage.	<ul style="list-style-type: none"> 1. Air cylinder sticking. 2. Lock dog will not pivot. 	<ul style="list-style-type: none"> 1. Replace air cylinder. 2. Lubricate pivot pin or replace parts.
Lift chatters.	<ul style="list-style-type: none"> 1. Vehicle off center loaded. 2. Guide assembly is dry. 3. Air in system. 4. Bearing wear. 5. Jacks not plumb. 	<ul style="list-style-type: none"> 1. Make sure spotting dish is located properly and is being used. 2. Grease guide assembly. 3. Bleed cylinders. 4. Replace bearings. 5. Make sure jacks are on 57 1/2" centers.
Arm drooping or higher than other arms.	<ul style="list-style-type: none"> 1. Lift out of plumb. 2. Top of jack is unlevel. 3. Unlevel floor. 4. Worn arm pins. 5. Worn arm. 6. Bent arm. (Overloaded) 	<ul style="list-style-type: none"> 1. Plumb jacks. 2. Shim or debur top of jack. 3. Correct floor. 4. Replace arm pins. 5. Replace arm. 6. Replace arm.

TROUBLE SHOOTING

Rolling Jack

Trouble	Cause	Remedy
Pump will not start when air switch is depressed, or pump starts but stalls under load.	<ol style="list-style-type: none"> 1. Insufficient air supply at pump. 2. Plugged air filter. 3. Grommet stuck in bore. 4. Bad air Motor. 	<ol style="list-style-type: none"> 1. Pump requires 90-120 psi of air 9 CFM to run. Locate and correct leak or restriction. 2. Remove and install a new filter. 3. Replace air motor DA658.900SR. 4. Repair or replace air motor.
Pump runs but lift will not raise after contacting load.	<ol style="list-style-type: none"> 1. Lift loaded beyond capacity. 2. Wrong pump installed on lift. 3. Release mechanism damaged or missing parts. 	<ol style="list-style-type: none"> 1. Use lift only to rated capacity. 2. Verify pressure rating of pump. 3. Replace damaged or missing parts.
Oil blowing out rear cover of air motor.	<ol style="list-style-type: none"> 1. Pump piston seal leaking. 	<ol style="list-style-type: none"> 1. Replace parts.
Pump runs but will not raise to full height.	<ol style="list-style-type: none"> 1. Pump low on oil. 	<ol style="list-style-type: none"> 1. Lower lift and check oil level. Fill with Dexron III ATF. Locate and repair leak.
Lift drifts down - will not hold.	<ol style="list-style-type: none"> 1. Release mechanism damaged or parts missing. 2. External leakage. 3. Internal Leakage. 	<ol style="list-style-type: none"> 1. Replace damaged or missing parts. 2. Locate leak and repair. Refill reservoir. 3. Replace or clean lowering valve.
Lift lowers slow or not at all.	<ol style="list-style-type: none"> 1. Lift locking latch not released. 2. Release mechanism damaged. 3. Return flow of oil restricted or blocked. 4. Internal flow restrictor is plugged. 	<ol style="list-style-type: none"> 1. Release locking latch. 2. Replace damaged or missing parts. 3. Eliminate blockage. ! WARNING ! If rolling jack in the raised position, be sure to activate the locking device prior to attempting to service unit. Failure to do so may cause lift to drop. 4. Disassemble and clear restrictor.
Reservoir separates from pump.	<ol style="list-style-type: none"> 1. Reservoir overfilled. Fluid added when jack was in raised position. 	<ol style="list-style-type: none"> 1. Replace with new reservoir. Refill system per instructions.

TROUBLE SHOOTING

Laser System

Trouble	Cause	Remedy
No light beam from Laser. (Or weak beam)	<ol style="list-style-type: none"> 1. Burnt out or broken bulb. 2. Transformer not working. (Transformer style only) 3. Laser drive is bad. (Transformer style only) 4. Weak batteries. (Battery style only) 5. Break in leads. 	<ol style="list-style-type: none"> 1. Replace bulb (diode) 2. Check transformer voltage and replace if incorrect. Should be 12V. 3. Check out put voltage and replace if incorrect. Should be 600V. 4. Replace batteries. 5. Check leads and repair or replace.
Off center steering wheel.	<ol style="list-style-type: none"> 1. Laser toe gauges need calibration. 2. Run-out compensation was done incorrectly. 3. Bent wheel clamp. 4. Solid Rear axle is shifted. 5. Vehicle has front wheel setback. 6. Some vehicles require engine to be running while adjusting toe. 	<ol style="list-style-type: none"> 1. Re-calibrate toe gauges. 2. Re Check Wheel Run-out. 3. Replace wheel clamp. 4. Re-align rear axle. 5. Check front wheel setback. 6. Adjust with engine running.
Toe gauges giving off electrical shocks.	<ol style="list-style-type: none"> 1. Short in wiring, or incorrectly wired. 	<ol style="list-style-type: none"> 1. Check wiring and repair.
Toe gauges will not stay level.	<ol style="list-style-type: none"> 1. Worn Bearings and/or washers on wheel clamp. 	<ol style="list-style-type: none"> 1. Replace bearing and/or washers.
Digital caster camber gauge is reading incorrectly.	<ol style="list-style-type: none"> 1. Unit out of calibration. 	<ol style="list-style-type: none"> 2. Send back to factory for re-calibration.

MAINTENANCE PROCEDURES

WARNING: If you are not completely familiar with automotive lift maintenance procedures...STOP: contact factory for instructions.

TO AVOID PERSONAL INJURY, permit only qualified personnel to perform maintenance on this equipment.

TWO POST SURFACE LIFTS

Always: Keep bolts tight. Check periodically.

Keep lift components clean.

If oil leakage is observed, call local service representative.

If electrical problems develop, call local service representative.

Daily: Check Cables and sheaves for wear. Replace worn parts as required.

Inspect adapters for damage or excessive wear. Replace as required.

Monthly: Check equalizer cable tension. Adjust per lift installation instructions.

Lubricate locking latch shafts. Push latch handle several times for oil to penetrate joints.

Check anchor bolts for tightness. Anchors should be torqued to 90ft/lbs.

Quarterly: Check fluid level of lift power unit and re-fill if required per lift installation instructions.

FOUR POST SURFACE LIFTS

(Reference: 4-Post Lifting System Inspection and Maintenance Guide - Form 1-214)

Always: Raise lift when cleaning floor area with solvents and/or cleaner compounds.

Daily: Check cables and sheaves for wear. Replace worn parts as required.

Inspect wheel chocks for damage or excessive wear. Replace as required.

Monthly: Check all column, lift/runway attaching bolts for tightness.

Check cable tension. Adjust per instructions.

Quarterly: Lubricate chock and ramp shafts.

Check Fluid level of lift power unit and re-fill if required. If fluid is required, inspect all pipe hoses, fittings and seals. Repair as required.

INGROUND LIFTS

Always: Keep locking latch free and oiled.

Keep all bolts tight.

Keep superstructure and support pads clean.

Keep lift area and trench clean.

Daily: Drain air compressor tank to eliminate accumulation of water. (Do not rely on automatic drain.)

Excessive water is harmful to lift system.

Monthly: Lubricate pivot points and sliding surfaces of lift superstructure.

ALIGNMENT RACKS AND ACCESSORIES

Daily: Inspect rolling jack adapters for damage or excessive wear. Replace parts as required.

Inspect wheel chocks for damage or excessive wear. Replace parts as required.

Weekly: Clean rear wheel slip plates of accumulated dirt. Clean more often as conditions warrant.

Monthly: Check level of runways. Adjust per instructions.

Lubricate rolling jack pins and rollers in scissors mechanism.

Quarterly: Disassemble turning radius gauges; clean roller bearing (solvent); coat bearings with chassis lube, and reassemble. Clean more often as conditions warrant.

PREFACE

Rotary lifts are designed and manufactured to provide the reliability required for their intended use and also simplify field service when it is required.

The key to the reliability of any mechanical device is periodic maintenance. A simple routine maintenance program will definitely increase its life and efficiency and may reveal sources of potential trouble.

This guide has been prepared by Rotary lift to assist you.....keep it handy for ready reference. It is purposely general in nature, but at the same time will reveal the source of most malfunctions when applied.

