SP016, SP020

Standard SP016 Capacity 16,000 lbs. (7,258 kg.) / 4000 lbs. (1,814 kg.) per Arm
Standard SP020 Capacity 20,000 lbs. (9,072 kg.) / 5000 lbs. (2,268 kg.) per Arm

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INSTALLER: Please return this booklet to literature package and give to lift owner/operator.
SAFETY INSTRUCTIONS

• **Daily** inspect your lift. Never operate if it malfunctions or if it has broken or damaged parts. Use only qualified lift service personnel and genuine Rotary parts to make repairs.

• **Thoroughly** train all employees in use and care of lift, using manufacturer's instructions and “Lifting It Right” and “Safety Tips” supplied with the lift.

• **Never** allow unauthorized or untrained persons to position vehicle or operate lift.

• **Prohibit** unauthorized persons from being in shop area while lift is in use.

• **Do Not** permit anyone on lift or inside vehicle when it is either being raised or lowered.

• **Always** keep area around lift free of tools, debris, grease, and oil.

• **Never** overload lift. Capacity of lift is shown on nameplate affixed to the lift.

• **Do Not** stand in front of the lift or vehicle while it is being positioned in lift bay.

• **Do Not** hit or run over lift arms or adapters. This could damage lift or vehicle. Before driving vehicle into lift bay, position arms and adapters to provide unobstructed entrance onto lift.

• **Load** vehicle on lift carefully. Position lift adapters to contact at the vehicle manufacturer’s recommended lift points. Raise lift until adapters contact vehicle. Check adapters for secure contact with vehicle. Raise lift to desired working height.

• **Do Not** go under vehicle if locking latches are not engaged.

• **Do Not** block open or override self-closing lift controls; they are designed to return to the “Off” or Neutral position when released.

• **Do Not** remove or disable arm restraints.

• **Remain** clear of lift when raising or lowering vehicle.

• **Always** use safety stands when removing or installing heavy components.

• **Avoid** excessive rocking of vehicle while on lift.

• **Clear** area if vehicle is in danger of falling.

• **Remove** tool trays, stands, etc. before lowering lift.

• **Release** locking latches before attempting to lower lift.

• **Position** lift arms and adapters to provide an unobstructed exit before removing vehicle from lift area.
OWNER/EMPLOYER RESPONSIBILITIES

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/SM07-1, ALI Lifting it Right safety manual; ALI/ST-05 ALI Safety Tips card; ANSI/ALI ALOIM-2008, 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.

- Shall establish procedures to periodically inspect the lift in accordance with the lift manufacturer's instructions or ANSI/ALI ALOIM-2008, 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.

- Shall establish procedures to periodically maintain the lift in accordance with the lift manufacturer's instructions or ANSI/ALI ALOIM-2008, 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.

- Shall maintain the periodic inspection and maintenance records recommended by the manufacturer or ANSI/ALI ALOIM-2008, American National Standard for Automotive Lifts-Safety Requirements for Operation, Inspection and Maintenance.


- Shall provide necessary lockout/tagout means for energy sources per ANSI Z244.1-2003 (R2008), Safety Requirements for the Lockout/Tagout of Energy Sources, before beginning any lift repairs.

- Shall not modify the lift in any manner without the prior written consent of the manufacturer.
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.

**Important** Always lift the vehicle using all four adapters. **Never** raise just one end, one corner, or one side of vehicle.

1. Lift must be fully lowered and service bay clear of all personnel before the vehicle is brought on lift. Swing arms out to full drive-thru position.

2. Spot vehicle over lift with left front wheel in proper spotting dish position, see "positioning vehicle Fig 1."

3. Loading: Swing arms under vehicle and position adapters at vehicle manufacturer’s recommended lift points, Fig. 2. Use optional adapter extensions for under body clearance when required.

4. To Raise Lift:
   A. Push RAISE switch on power unit, Fig. 3.
   B. Stop before making contact with vehicle. Check arm restraint pins for engagement. If required, slightly move arm to allow restraint gear and pawl to mesh. DO NOT hammer pin down as this will damage the restraint gear teeth.
   C. Raise vehicle until tires clear the floor.
   D. Stop and check adapters for secure contact at vehicle manufacturer’s recommended lift points.
   E. Continue to raise to desired height only if vehicle is secure on lift.
   F. **Do not** go under vehicle if all four adapters are not in secure contact at vehicle manufacturer’s recommended lift points.
   G. Repeat complete spotting, loading and raising procedures if required.
   H. Lower lift onto locking latches.

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### Operating Instructions

Surface Mounted Frame Engaging Lifts

**Warning**

- Lift to be used by trained operator only.
- Use vehicle manufacturer’s lift points.
- Lift must be fully lowered and service bay clear of all personnel before the vehicle is brought on lift. Swing arms out to full drive-thru position.
- Spot vehicle over lift with left front wheel in proper spotting dish position, see "positioning vehicle Fig 1."

**Caution**

- Always lift the vehicle using all four adapters. **Never** raise just one end, one corner, or one side of vehicle.
- The overhead switch bar will contact the highest point on the vehicle.

**Safety Instructions**

- Authorized personnel only in lift area.
- Clear area if vehicle is in danger of falling.

**Warning**

- Clear area if vehicle is in danger of falling.
- **Do not** go under vehicle if all four adapters are not in secure contact at vehicle manufacturer’s recommended lift points.
- **Do not** go under vehicle if locking latches are not engaged.

Before attempting to lift pickup trucks or other truck frame vehicles, be sure that:

A. Vehicle frame is strong enough to support it’s weight and has not been weakened by modification or corrosion.

B. Vehicle individual axle weight does not exceed one-half lift capacity.

C. Adapters are in secure contact with frame at vehicle manufacturers recommended lift points.

D. Vehicle is stable on lift and neither front nor “tail” heavy.

E. The overhead switch bar will contact the highest point on the vehicle.

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**Note:** Allow 2 seconds between motor starts. Failure to comply may cause motor burnout.

**Warning**

- Adapter extensions are furnished in 5" & 10" increments. The stack-up height should not exceed 15". Use adapter extension combination to keep vehicle as level as possible while it is being supported by the lift.

*Maximum operation pressure is:
- 2538 psi for SPO15 Sprinter (31A0 Series)
- 2103 psi for SPO15 Sprinter (3A0 Series)
- 2500 psi for SPO16 Standard
- 2650 psi for SPO20 Standard

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5. While Using Lift:
A. Avoid excessive rocking of vehicle while on lift.
B. Always use safety stands as needed or when removing or installing heavy components.

6. To Lower Lift:
A. Remove all tools or other objects from lift area.
B. Raise lift off locking latches.
C. Push AIR LATCH release handle fully and hold.
D. Push LOWERING valve handle to lower.

Note: The AIR LATCH release toggle and LOWERING valve handle are deadman-type design. Each must be held down to lower lift. Do Not override self-closing lift controls.

7. Remain clear of lift when lowering vehicle. Observe pinch point warning decals.

8. Remove adapters from under vehicle and swing arms to full drive-thru position before moving vehicle.

9. If lift is not operating properly, Do Not use until adjustment or repairs are made by qualified lift service personnel.

Positioning the vehicle
For longer wheel base vehicles, position the vehicle on the forward spotting dish. For shorter wheel bases, position the vehicle on the rear spotting dish. Due to varying centers of gravity within different vehicle classes, use the dishes as guides only and locate the arms beneath the vehicle pickup points. Always position vehicle with its center of gravity in line with the lift columns. Slightly raise the vehicle and check for stability. Do this by pushing up and down on the front and rear bumpers. The vehicle should sit firmly on all pickup points. If necessary, relocate arms and/or vehicle to attain a stable condition. Also refer to the ALI Safety Manual included with the lift.

Typical Lift Points

Fig. 1

Fig. 3
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.

- **Always** keep bolts tight. Check periodically.
- **Always** keep lift components clean.
- **Always** if oil leakage is observed, call local service representative.
- **Always** if electrical problems develop, call local service representative.
- **Daily**: Check cables and sheaves for wear. Observe for frayed cable strands. Wipe cables with a rag to detect hard to see small broken cable strands. Replace cables showing any broken strands. Replace worn parts as required with genuine Rotary parts.
- **Daily**: Inspect adapters for damage or excessive wear.
- **Monthly**: Check equalizer cable tension. Adjust per lift installation instructions. If there are no more threads available for adjustment, replace the cable. Do not use washers to stand off the nut to use previously used threads.
- **Monthly**: Lubricate locking latch shafts. Push air latch toggle several times for oil to penetrate joints.
- **Every 3 Months**: Check anchor bolts for tightness. Anchors should be torqued to 90 ft/lbs.
- **Semi-Annually**: Lubricate arm pins with lubricating oil unless lubricating with grease.
- **Semi-Annually**: Check fluid level of lift power unit and refill if required per lift installation instructions. Lubricate slider tracks with TUFOIL™ if difficulties are noticed while picking up heavier vehicles. Lubricate arm pins (recommended motor oil wt. 32).

**WARNING**
Clear area if vehicle is in danger of falling.

**WARNING**
Remain clear of lift when raising or lowering vehicle.

**CAUTION**
Position vehicle with center of gravity midway between adapters.

**CAUTION**
Use vehicle manufacturer’s lift points.

**CAUTION**
Use height extenders when necessary to ensure good contact.

**CAUTION**
Auxiliary adapters may reduce load capacity.

**WARNING**
Do not override self-closing lift controls.

**WARNING**
Keep feet clear of lift while lowering.

**CAUTION**
Lift to be used by trained operator only.

**CAUTION**
Always use safety stands when removing or installing heavy components.

**WARNING**
Do not operate a damaged lift.

**CAUTION**
Use height extenders when necessary to ensure good contact.

**CAUTION**
Auxiliary adapters may reduce load capacity.

**WARNING**
Remain clear of lift when raising or lowering vehicle.

**WARNING**
Avoid excessive rocking of vehicle while on lift.

**CAUTION**
Lift to be used by trained operator only.

**CAUTION**
Use vehicle manufacturer’s lift points.

**CAUTION**
Always use safety stands when removing or installing heavy components.

**WARNING**
Do not override self-closing lift controls.

**WARNING**
Keep feet clear of lift while lowering.

**CAUTION**
Lift to be used by trained operator only.

**CAUTION**
Use vehicle manufacturer’s lift points.

**CAUTION**
Always use safety stands when removing or installing heavy components.

**WARNING**
Remain clear of lift when raising or lowering vehicle.

**WARNING**
Avoid excessive rocking of vehicle while on lift.

**CAUTION**
Lift to be used by trained operator only.

**CAUTION**
Use vehicle manufacturer’s lift points.

**CAUTION**
Always use safety stands when removing or installing heavy components.

**WARNING**
Do not override self-closing lift controls.

**WARNING**
Keep feet clear of lift while lowering.

**CAUTION**
Lift to be used by trained operator only.

**CAUTION**
Use vehicle manufacturer’s lift points.

**CAUTION**
Always use safety stands when removing or installing heavy components.

**WARNING**
Remain clear of lift when raising or lowering vehicle.

**WARNING**
Avoid excessive rocking of vehicle while on lift.

**CAUTION**
Lift to be used by trained operator only.

**CAUTION**
Use vehicle manufacturer’s lift points.

**CAUTION**
Always use safety stands when removing or installing heavy components.

**WARNING**
Do not override self-closing lift controls.
<table>
<thead>
<tr>
<th>Trouble</th>
<th>Cause</th>
<th>Remedy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Motor does not run.</td>
<td>1. Blown fuse or circuit breaker.</td>
<td>1. Replace blown fuse or reset circuit breaker.</td>
</tr>
<tr>
<td></td>
<td>2. Incorrect voltage to motor.</td>
<td>2. Supply correct voltage to motor.</td>
</tr>
<tr>
<td></td>
<td>3. Bad wiring connections.</td>
<td>3. Repair and insulate all connections.</td>
</tr>
<tr>
<td></td>
<td>4. Motor up switch burned out.</td>
<td>4. Replace switch.</td>
</tr>
<tr>
<td></td>
<td>5. Overhead limit switch burned out.</td>
<td>5. Replace switch.</td>
</tr>
<tr>
<td>Motor runs but will not raise lift.</td>
<td>1. Open lowering valve.</td>
<td>1. Repair or replace lowering valve.</td>
</tr>
<tr>
<td></td>
<td>2. Pump sucking air.</td>
<td>2. Tighten all suction line fittings.</td>
</tr>
<tr>
<td></td>
<td>3. Suction stub off pump.</td>
<td>3. Replace suction stub.</td>
</tr>
<tr>
<td></td>
<td>4. Low oil level.</td>
<td>4. Fill tank with Dexron III ATF.</td>
</tr>
<tr>
<td>Motor runs—raises unloaded lift but will not raise vehicle.</td>
<td>1. Motor running on low voltage.</td>
<td>1. Supply correct voltage to motor.</td>
</tr>
<tr>
<td></td>
<td>2. Debris in lowering valve.</td>
<td>2. Clean lowering valve.</td>
</tr>
<tr>
<td></td>
<td>3. Improper relief valve adjustment.</td>
<td>3. Replace relief valve cartridge.</td>
</tr>
<tr>
<td></td>
<td>4. Overloading lift.</td>
<td>4. Check vehicle weight and/or balance vehicle weight on lift.</td>
</tr>
<tr>
<td>Lift slowly settles down.</td>
<td>1. Debris in check valve seat.</td>
<td>1. Clean check valve.</td>
</tr>
<tr>
<td></td>
<td>2. Debris in lowering valve seat.</td>
<td>2. Clean lowering valve.</td>
</tr>
<tr>
<td></td>
<td>3. External oil leaks.</td>
<td>3. Repair external leaks.</td>
</tr>
<tr>
<td>Slow lifting speed or oil blowing out filler breather cap.</td>
<td>1. Air mixed with oil.</td>
<td>1. Change oil to Dexron III ATF.</td>
</tr>
<tr>
<td></td>
<td>2. Air mixed with oil suction.</td>
<td>2. Tighten all suction line fittings.</td>
</tr>
<tr>
<td></td>
<td>3. Oil return tube loose.</td>
<td>3. Reinstall oil return tube.</td>
</tr>
<tr>
<td></td>
<td>4. Slider blocks need lubricating.</td>
<td>4. Lubricate with light lithium grease.</td>
</tr>
<tr>
<td>Lift going up unlevel.</td>
<td>1. <strong>Equalizer cables out of adjustment.</strong></td>
<td>1. Adjust equalizer cables to correct tension.</td>
</tr>
<tr>
<td></td>
<td>2. Lift installed on unlevel floor.</td>
<td>2. Shim lift to level columns (Not to exceed ( \frac{1}{2} )”). If over ( \frac{1}{2} )” break out floor and level per lift installation instructions.</td>
</tr>
<tr>
<td></td>
<td>1. Holes drilled oversize.</td>
<td></td>
</tr>
<tr>
<td>Anchors will not stay tight.</td>
<td>2. Concrete floor thickness or holding strength not sufficient.</td>
<td>1. Relocate lift using a new bit to drill holes.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2. Break out old concrete and repour new pads for lift per lift installation instruction.</td>
</tr>
<tr>
<td>Locking latches do not engage.</td>
<td>1. Latch shafts rusted. (Usually occurs on outside installations or in high humidity areas such as vehicle wash bays.)</td>
<td>1. Remove covers, oil latch mechanism. Depress latch release handle several times to allow oil to coat shaft.</td>
</tr>
<tr>
<td></td>
<td>2. Latch spring broken.</td>
<td>2. Replace broken spring.</td>
</tr>
<tr>
<td></td>
<td>3. Air valve stuck open.</td>
<td>3. Cycle toggle, replace valve if necessary.</td>
</tr>
<tr>
<td>Locking latches do not disengage.</td>
<td>1. No air supply.</td>
<td>1. Check tubing and compressor.</td>
</tr>
<tr>
<td></td>
<td>2. Air valve stuck closed.</td>
<td>2. Cycle toggle, replace valve if necessary.</td>
</tr>
<tr>
<td></td>
<td>3. Air leak.</td>
<td>3. Check tubing.</td>
</tr>
<tr>
<td>Lift will not raise off of latches.</td>
<td>1. Motor, pump, or cylinder failure.</td>
<td>1. Contact lift manufacturer’s Customer Service.</td>
</tr>
</tbody>
</table>
LIFT LOCKOUT/TAGOUT PROCEDURE

Purpose

This procedure establishes the minimum requirements for the lockout of energy that could cause injury to personnel by the operation of lifts in need of repair or being serviced. All employees shall comply with this procedure.

Responsibility

The responsibility for assuring that this procedure is followed is binding upon all employees and service personnel from outside service companies (i.e., Authorized Rotary Installers, contactors, etc.). All employees shall be instructed in the safety significance of the lockout procedure by the facility owner/manager. Each new or transferred employee along with visiting outside service personnel shall be instructed by the owner/manager (or assigned designee) in the purpose and use of the lockout procedure.

Preparation

Employees authorized to perform lockout shall ensure that the appropriate energy isolating device (i.e., circuit breaker, fuse, disconnect, etc.) is identified for the lift being locked out. Other such devices for other equipment may be located in close proximity of the appropriate energy isolating device. If the identity of the device is in question, see the shop supervisor for resolution. Assure that proper authorization is received prior to performing the lockout procedure.

Sequence of Lockout Procedure

1) Notify all affected employees that a lockout is being performed and the reason for it.
2) Unload the subject lift. Shut it down and assure the disconnect switch is “OFF” if one is provided on the lift.
3) The authorized lockout person operates the main energy isolation device removing power to the subject lift.
   • If this is a lockable device, the authorized lockout person places the assigned padlock on the device to prevent its unintentional reactivation. An appropriate tag is applied stating the person’s name, at least 3” x 6” in size, an easily noticeably color, and states not to operate device or remove tag.
   • If this device is a non-lockable circuit breaker or fuse, replace with a “dummy” device and tag it appropriately as mentioned above.
4) Attempt to operate lift to assure the lockout is working. Be sure to return any switches to the “OFF” position.
5) The equipment is now locked out and ready for the required maintenance or service.

Restoring Equipment to Service

1) Assure the work on the lift is complete and the area is clear of tools, vehicles, and personnel.
2) At this point, the authorized person can remove the lock (or dummy circuit breaker or fuse) & tag and activate the energy isolating device so that the lift may again be placed into operation.

Rules for Using Lockout Procedure

Use the Lockout Procedure whenever the lift is being repaired or serviced, waiting for repair when current operation could cause possible injury to personnel, or for any other situation when unintentional operation could injure personnel. No attempt shall be made to operate the lift when the energy isolating device is locked out.
Lift is not intended for outdoor use and has an operating ambient temperature range of 41º-104ºF (5º-40ºC).

<table>
<thead>
<tr>
<th>Item</th>
<th>Capacity</th>
<th>Part Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Air/Electric Utility Box</td>
<td></td>
<td>FA5911</td>
</tr>
<tr>
<td>Air/Electric Utility Box Without FRL</td>
<td></td>
<td>FA5910</td>
</tr>
<tr>
<td>Filter/Regulator/Lubricator (FRL)</td>
<td></td>
<td>FA5166</td>
</tr>
</tbody>
</table>
Trained Operators and Regular Maintenance Ensures Satisfactory Performance of Your Rotary Lift.

Replacement Parts: See installers package for parts breakdown sheet. Order Genuine Rotary replacement parts from your nearest Authorized Parts Distributor.

Maintenance Assistance: Contact your local Rotary distributor.

Should further assistance be required, contact Rotary Lift, at one of the phone numbers listed below.