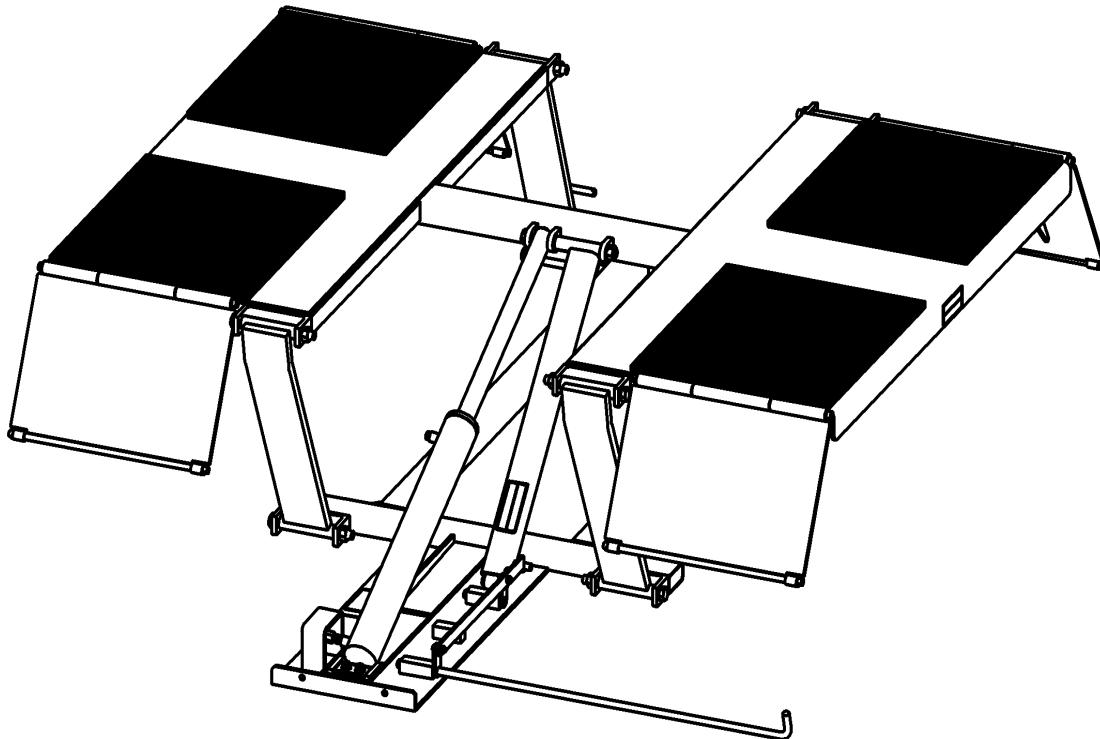




# INSTALLATION, OPERATION & MAINTENANCE MANUAL

## Multi-Purpose Surface Mounted Lift



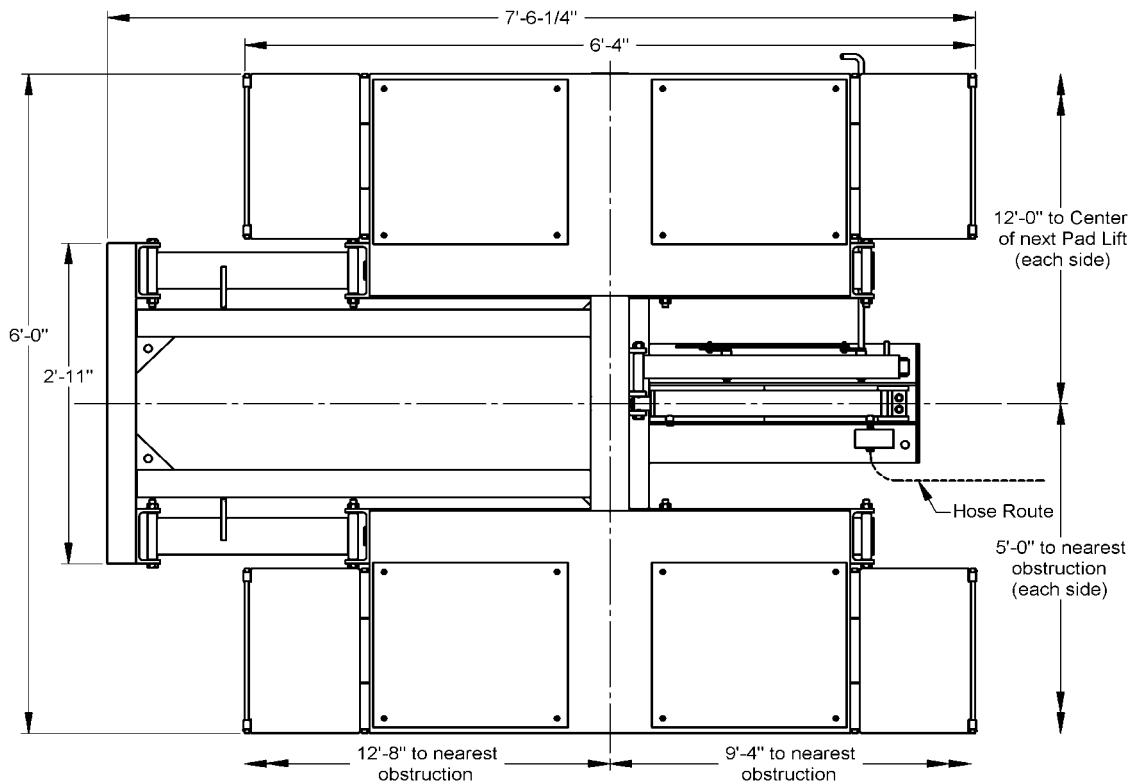
### Model 67000

200 Cabel Street, P.O. Box 3944  
email: [sales@challengerlifts.com](mailto:sales@challengerlifts.com)

Louisville, Kentucky 40201-3944  
web site: [www.challengerlifts.com](http://www.challengerlifts.com)

**Office: 800-648-5438 / 502-625-0700 Fax: 502-587-1933**

**IMPORTANT: READ THIS MANUAL COMPLETELY BEFORE  
INSTALLING or OPERATING LIFT**



## General Specifications

Maximum Capacity .....	6000 U.S. Pounds
Lowered Height .....	4 1/4 inches
Raised Height .....	26 inches
Locking Bar Height .....	13 1/2", 18 1/2", 21 1/4"
Overall Width .....	72 inches
Overall Length .....	90 1/4 inches
Rearward Movement .....	13 inches
Motor .....	1 Hp, 115 Volt, 1 phase, 60 Hz

## BEFORE YOU BEGIN

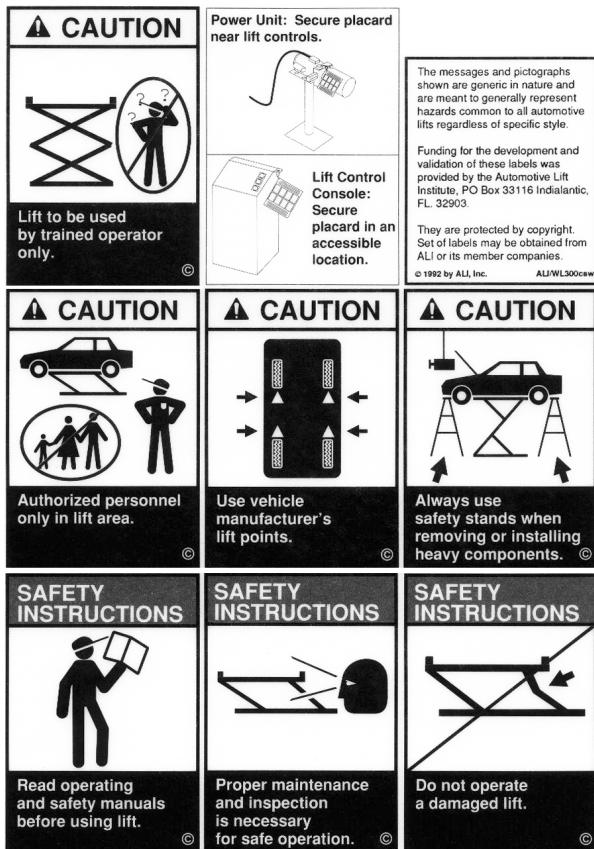
**Safety Notices and Decals**

For your safety, and the safety of others, read and understand all of the safety notices and decals included here.

**Read entire manual before assembling, installing, operating, or servicing this equipment.**

**Proper maintenance and inspection is necessary for safe operation.**

**DO NOT operate a damaged lift.**



Safety decals similar to those shown here are found on a property installed lift. Be sure that all safety decals have been correctly installed on the lift. Verify that all authorized operators know the location of these decals and fully understand their meaning. Replace worn, faded, or damaged decals promptly.

**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 documents 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.



**WARNING** Do not attempt to raise a vehicle on the lift until the lift has been correctly installed and adjusted as described in this manual.

## Receiving

The shipment should be thoroughly inspected as soon as it is received. The signed bill of lading is acknowledgement by the carrier of receipt in good condition of shipment covered by our invoice.

If any of the goods called for on this bill of lading are shorted or damaged, do not accept them until the carrier makes a notation on the freight bill of the shorted or damaged goods. Do this for your own protection.

**NOTIFY *Challenger Lifts* AT ONCE** if any hidden loss or damage is discovered after receipt

**IT IS DIFFICULT TO COLLECT FOR LOSS OR DAMAGE AFTER YOU HAVE GIVEN THE CARRIER A CLEAR RECEIPT.**

File your claim with ***Challenger Lifts*** promptly. Support your claim with copies of the bill of lading, freight bill, and photographs, if available.

## Flooring

Be certain you have the proper concrete floor to properly handle the loaded lift. Floor should be in generally good condition with no large cracks, spalling or deterioration. Minimum requirements for concrete are 4 inches minimum depth, with steel reinforcement, 3500 psi, cured for 28 days per local commercial practice. Floor should be level within 3/8 inch over the installation area. No anchors should be installed within 8 inches of any crack, edge, or expansion joint. If these conditions cannot be met, pads can be poured to accommodate the lift. Pad must be minimum of 8 ft x 8 ft x 1 ft minimum thickness, 3000 psi steel reinforced mechanically attached to existing floor.



Failure by purchaser to provide the recommended mounting surface could result in unsatisfactory lift performance, property damage, or personal injury.

## Vertical Clearance

Check the height of the area where the lift is to be installed. Clearance should be calculated based on the full raised height of the lift plus the height of the tallest vehicle you intend to service.



Failure by purchaser to provide adequate clearance could result in unsatisfactory lift performance, property damage, or personal injury.

## Electrical Requirements

For lift installation and operation, it is necessary to have a 115V single phase 60 cycle dedicated 30 amp circuit breaker or 30 amp time delay circuit breaker.

## Tools Required for Installation

1. Concrete hammer drill.
2.  $\frac{3}{4}$  inch solid drill bit with carbide tip to ANSI Standard B94.12-1977.
3. Wrenches: 7/16,  $\frac{1}{2}$ , 9/16, 15/16, 1 1/8 inch
4. Ratchet drive with the following sockets: 7/16,  $\frac{1}{2}$ , 9/16, 1 1/8 inch
5. Hammer
6. Funnel
7. Torque wrench: 150 to 250 foot pounds
8. Adjustable wrenches: 8 and 12 inch

## General Anchor Bolt Instructions

1. The anchor bolts must be installed at least 8 inches from any crack, edge, or expansion joint.
2. Use a concrete hammer drill with a  $\frac{3}{4}$  inch carbide tip. Tip diameter to ANSI Standard B94.12-1977 (.775 to .787).
3. Do not use excessively worn bits or bits which have been incorrectly sharpened.
4. Keep the drill in a perpendicular line while drilling.
5. Let the drill do the work. Do not apply excessive pressure.
6. Lift the drill up and down to remove dust and reduce binding.
7. Drill the hole through the floor or to a depth of 5 inches minimum. Drill completely through floor is possible.
8. Vacuum the dust from the hole. This increases the holding power of the anchor bolts.
9. Insert the assembled anchor bolt into the hole.
10. Tighten the bolt securely, and torque to 150 foot pounds after installation is complete.

NOTE: Anchor bolt holes are designed for a tight fit. Using the lift frame as a template will slightly enlarge the holes, allowing for proper tolerances once the anchor bolt is installed.

## Installation

1. Locate the pad lift on a level concrete floor with adequate space on all sides as shown in Fig. 1. Minimum floor thickness is 4". Minimum floor strength is 3500 psi.

**WARNING DO NOT** install on asphalt or other similar unstable surface.

**NOTE:**  
The pad lift can be installed with the cylinder end pointing towards the front or rear of bay. **Be aware of pad lift clearances according to installation option chosen.**

**NOTE:**  
At full rise, the lift will move the vehicle **rearward** 13" as shown in Fig. 2.

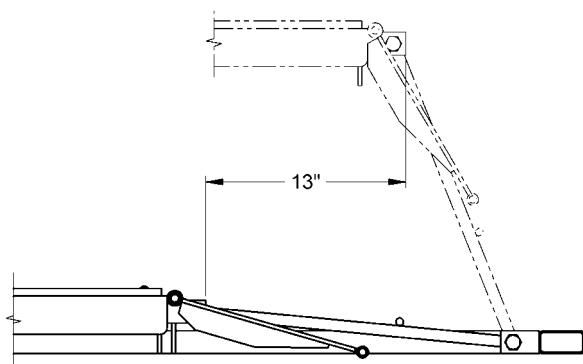


Fig. 2 Rearward Movement

2. Anchoring the lift, there are (5) 13/16" diameter holes provided in the base frame. The holes are sized for 3/4" anchor bolts. Use the holes as a template when drilling into floor.

**NOTE:**

The pad lift frame must not be twisted, bent or otherwise misaligned by unlevel floors when anchoring. This will cause damage to the lift. Maximum out-of-level is 1/4" between all anchor points. If this is exceeded, it must be shimmed at that anchor point.

**CAUTION** If lift is to be used in a paint booth, the electrical power unit **MUST** be mounted outside the booth.

## Power Unit

1. Mount the power unit to the stand with 5/16 x 1/2 inch screws and whiz lock nuts. Set the stand next to the lift on the side where it is to be positioned. Connect the end of the hydraulic hose with the 90 degree elbow to the pressure port on the power unit. Tighten securely to prevent leaking.

The power unit may also be mounted 18" above the floor on a wall. Purchase the appropriate mounting hardware to match the wall construction. 5/16 inch anchors or toggle bolts are recommended.

**NOTE:** It is recommended that the power unit be installed on the drivers side of the lift to reduce the trips made around the vehicle by the operator.

**NOTE:** Never run the hose under the lift. The hose may be crimped or cut by the lift frame and/or pads.

2. Fill the reservoir with 6 quarts clean 10wt anti-foam, anti-rust hydraulic oil or Dexron III ATF. **DO NOT USE OILS WITH DETERGENTS.**
3. Place the open end of the hose into a clean bucket.
4. Cycle the power unit (2 seconds on, 2 seconds off) until the hose expels a steady stream of fluid.
5. Connect the hose to the port on the cylinder.
6. Actuate the power unit and raise the lift fully, then lower the lift to the floor. Repeat 3 to 4 times.
7. Drill the anchor holes and install the anchor bolts.

## Electrical

For lift installation and operation, it is necessary to have a 115V single phase circuit breaker or 30 amp time delay circuit breaker.

**NOTE:**

Use separate, single phase, 25 amp. circuit with time delay fuse or circuit breaker.

**CAUTION** The power unit operates at high pressure.

Raise and lower lift a few times and check hose and fittings for leaks and tighten if required.

Check for binding, misalignment or damage. Correct any unusual condition before raising vehicle.

## Operation Procedure

**The Owner/Employer shall** insure that the 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 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/AILOIM-2000, American National Standard for Automotive Lifts-Safety Requirements for Operation, Inspection and Maintenance; and the employer shall insure that the lift inspectors are qualified and 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/AILOIM-2000, American National Standard for Automotive Lifts-Safety Requirements for Operation, Inspection and Maintenance; and the employer shall insure that the lift maintenance personnel are qualified and they are adequately trained in the inspection of the lift.

**The Owner/Employer shall** maintain the periodic inspection and maintenance records recommended by the lift manufacturer or ANSI/AILOIM-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 case of frame engaging lift, 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.

## OPERATING INSTRUCTIONS

### NOTE:

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

### Loading Vehicle

1. Be sure lift is fully lowered and service bay is clear of all personnel before the vehicle is driven on to lift.
2. Position vehicle over lift having equal distance from front tire to end of front ramps and rear tire to end of rear ramps. Vehicle must also be centered side to side.



**WARNING** Lift is designed to raise complete vehicle. **NEVER** use to raise just one end or Side of vehicle.

### NOTE:

Some vehicles may have the manufacturer's recommended lift points identified by triangle shape marks located on its undercarriage. Also, there may be a label located on the right front door lock face showing specific vehicle lift points. If the vehicles lift points are not identified, refer to the service garage lift points shown in Fig. 4. **ALWAYS** follow the operating instructions supplied with the lift.

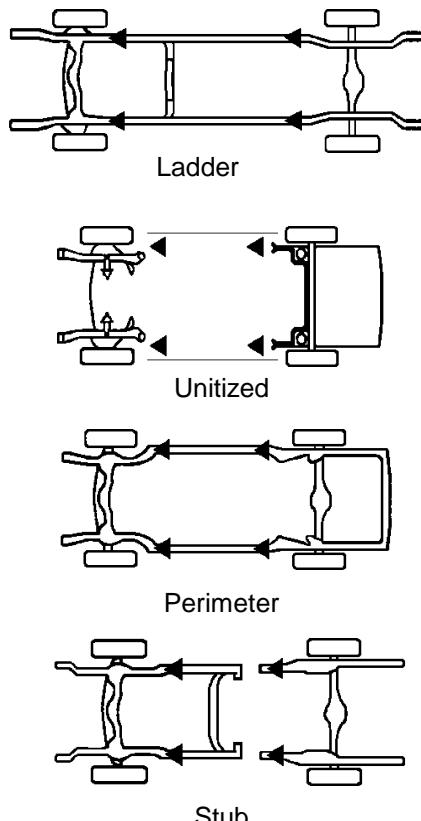


Fig 4 Service Garage Lift Points



**CAUTION** Most specialty or modified vehicles cannot be raised on a frame engaging or pad lift. Contact vehicle manufacturer for raising or jacking details.

3. Before lifting the vehicle be sure that:
  - A. Individual axle weight of vehicle does not exceed one-half lift capacity. See safety instructions (capacity).
  - B. Spacer pads are in secure contact with frame at vehicle manufacturer's recommended lift points.
  - C. Vehicle is stable on lift and neither front nor rear heavy.
  - D. Use optional 3" spacer pads if additional height between lift and vehicle is required to clear underbody parts as shown in Fig. 5.

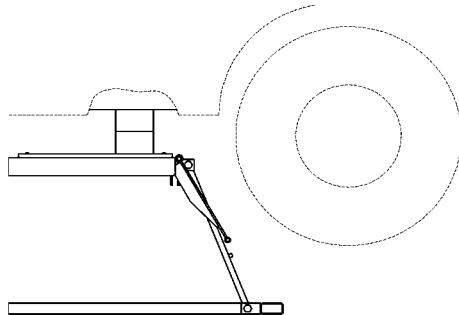


Fig 5 Optional 3" Spacer Pads



**CAUTION** Always use minimum number of spacer pads to clear obstruction. Spacer pads should never be stacked more than (2) pads high in any combination.



**CAUTION** With some vehicles, the removal (or installation) of heavy components may cause a critical shift in balance and result in vehicle instability. Refer to the vehicle manufacturer's service manual for recommended procedures when performing these services.

### Raising Vehicle

4. To raise lift:
  - A. Actuate **RAISE** switch on electric power unit.
  - B. Raise vehicle until tires clear floor.
  - C. Stop and check spacer pads for secure contact at manufacturer's recommended lift points.
  - D. Continue to raise to desired height **ONLY** if vehicle is secure on lift.
  - E. If spacer pads are not in secure contact, lower vehicle and repeat steps A through D.

5. To lower lift:

- Stand clear of lift and vehicle when lowering. Observe pinch point warning decals.
- A. Remove all tools or other objects from lift area.
- B. Rotate lock bar handle counter clockwise so the lock bar is above stops.
- C. Push **LOWERING** valve handle to lower lift.



**CAUTION** Lowering handle must be held down to continue to lower lift. DO NOT override self-closing lift controls.

6. Before moving vehicle, remove any spacer pads and be sure lift is at the fully lowered position.

### NOTE:

The lock bar will reset automatically only when the lift is fully lowered. If during the lowering process the lift is stopped before it gets to the fully lowered position. The lock bar **MUST** be reset by rotating the lock bar handle clockwise.

## MAINTENANCE

### NOTE:

To avoid personal injury, permit only qualified personnel to perform maintenance on this lift.

See repair parts breakdown for replacement parts.

**ALWAYS:** Keep all bolts tight. Check periodically.

**ALWAYS:** Keep lift clean. Raise lift when cleaning floor area.

**DAILY:** Inspect spacer pads for damage or excessive wear.

**DAILY:** Check lock bar handle and release mechanism for damage or binding.

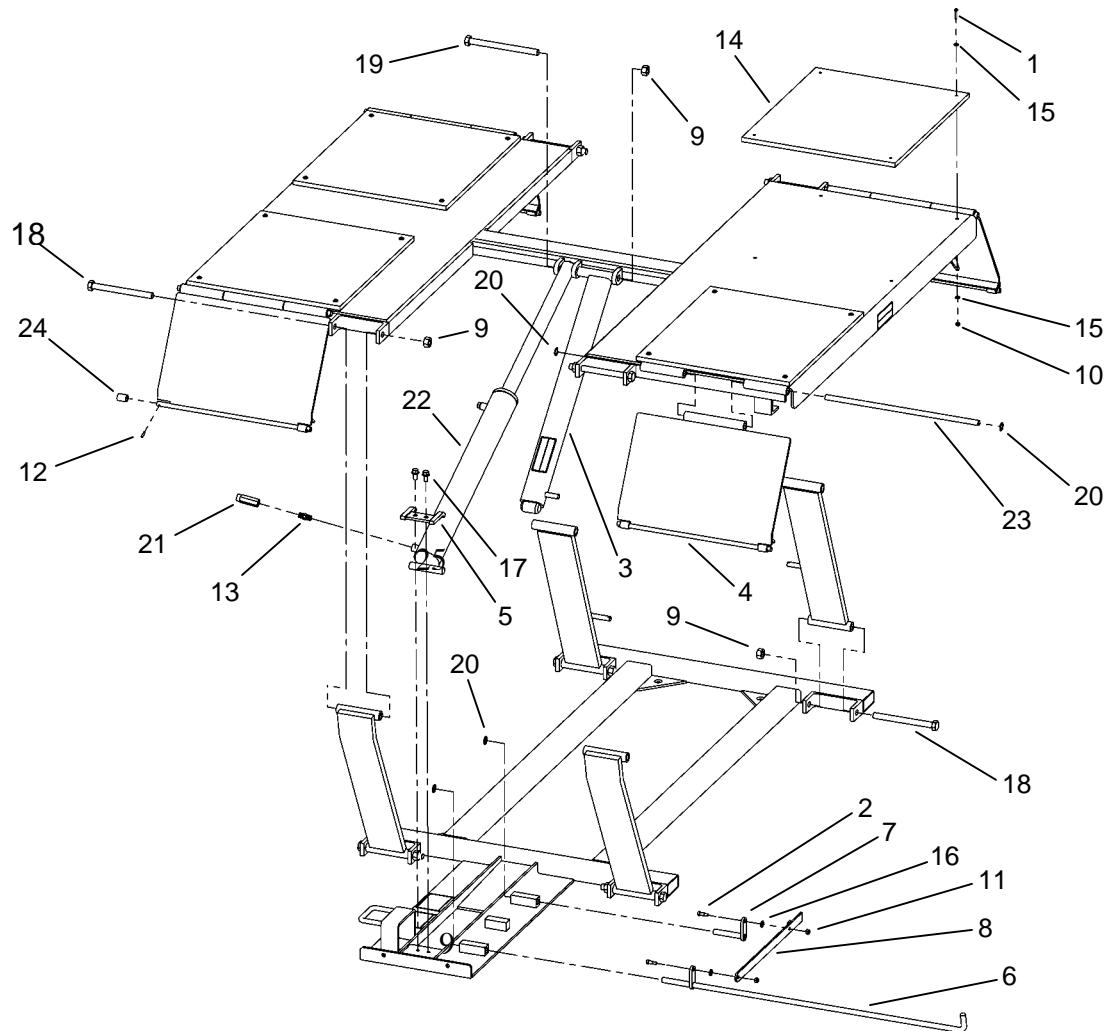
**WEEKLY:** Inspect all lift parts for signs of damage due to improper use.

**MONTHLY:** Lubricate lock bar pivot bolt and lock bar handle pivot points.

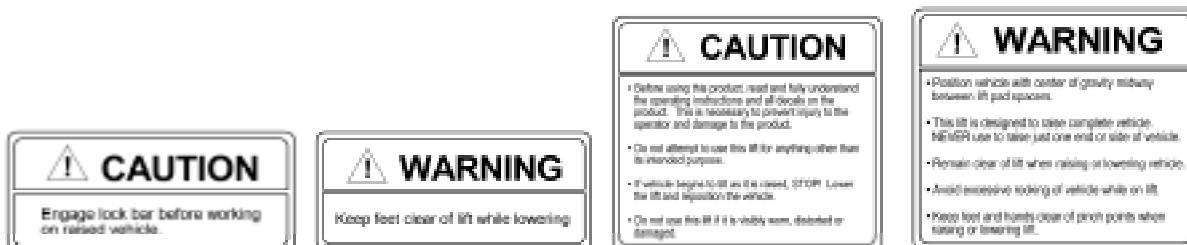
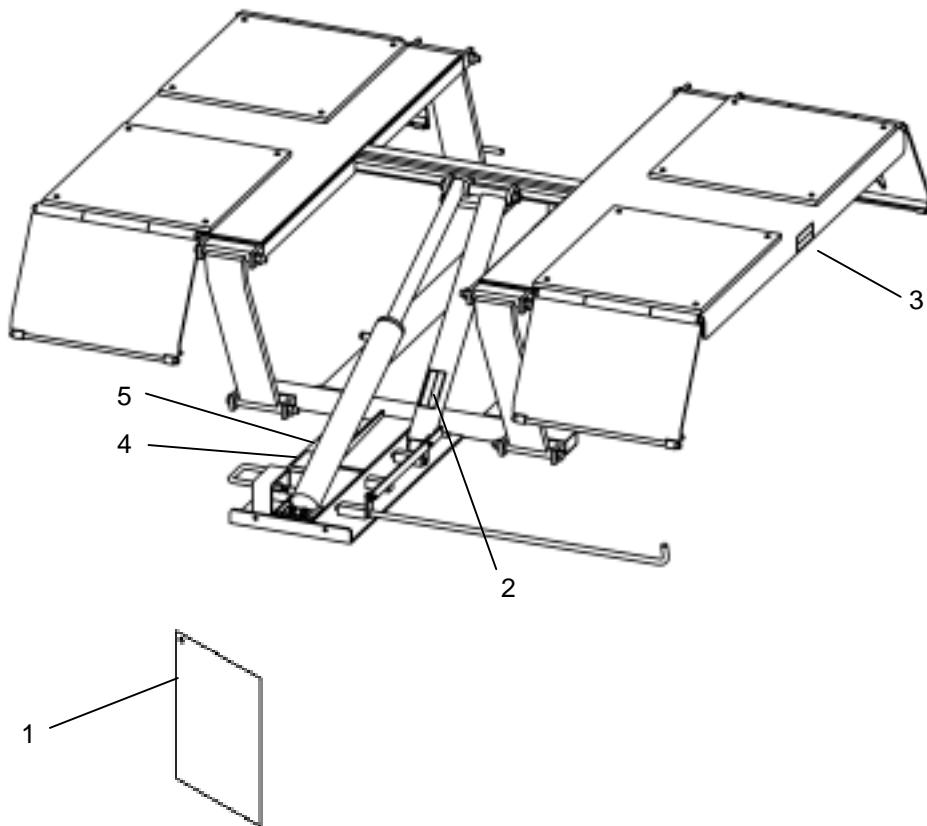
**MONTHLY:** Lubricate all hinge joints if there are signs of rusting.

**SEMI-ANNUALLY:** Check fluid level of lift power unit and refill if required. Use only Dexron III ATF or 10wt anti-foam, anti-rust hydraulic oil. If fluid is required, inspect hose and connections and cylinder seals. Repair as required.

Model 67000 Installation, Operation & Maintenance



ITEM	QTY	PART NO.	DESCRIPTION
1	16	028-161	#10-24 X 1 Pan Head Machine Screw
2	2	028-333	5/16 X 1/2 Shoulder Screw
3	1	03-0320	Lock Bar
4	4	03-0321	Ramp
5	1	03-0322	Cylinder Retainer
6	1	03-0323	Lock Release
7	1	03-0324	Lock Pivot
8	1	03-0325	Lock Release Bar
9	9	055-020	5/8-11 Bi-Way Hex Lock Nut
10	16	055-127	#10-24 Hex Nylock Nut
11	2	055-160	1/4-20 Hex Nylock Nut
12	8	061-181	3/16 X 3/4 Spring Pin
13	1	096-210	1/4 NPT Hex Nipple
14	4	10-0020	Rubber Pad
15	32	108-024	#10 SAE Washer
16	2	108-123	5/16 SAE Washer
17	2	50-0065	3/8-16 X 3/4 Hex Head Ser Flange Screw
18	8	50-0097	5/8-11 X 7 Hex Head Cap Screw, GR 8
19	1	50-0098	5/8-11 X 8 Hex Head Cap Screw, GR 8
20	10	54-0040	9/16 Retaining Ring (Push-On)
21	1	60-0065	Flow Control Valve
22	1	63-0018	Lift Cylinder
23	4	73-0767	Pivot Rod
24	8	74-0182	Roller Tube
25	5	31058	Anchor Bolt, 3/4" dia x 5 1 1/2" lg (not shown)



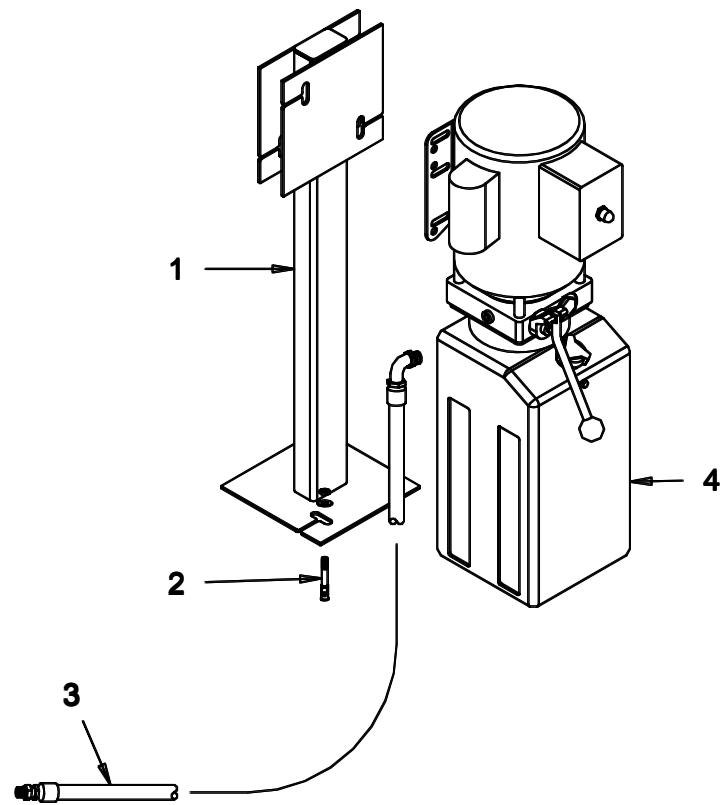
80-0147

80-0148

80-0150

80-0151

ITEM	QTY	PART NO.	DESCRIPTION
1	1	80-0145	Instruction Placard
2	1	80-0147	Caution Decal
3	2	80-0148	Warning Decal
4	1	80-0150	Caution Decal
5	1	80-0151	Warning Decal



ITEM	QTY	PART NO.	DESCRIPTION
1	1	485389	Power Unit Stand
2	1	427932	Anchor Bolt, 3/8 x 2 1/4" lg
3	2	67004/67004-30	Hydraulic Hose 20'lg / Hydraulic Hose 30'lg
4	1	428730	AC., Power Unit 60Hz