

ADVANCE LIFTS

Installation, Operation and Maintenance Manual for the Following Equipment:

MODEL SL-P



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Introduction

Congratulations, the equipment that you have purchased is of the highest quality available. Your Advance Lift will provide you years of trouble free service in return for the minimal maintenance described in this manual.

Please be sure that no individual is allowed to operate the unit until they have been fully familiarized with the operating instructions in this manual. Also, insure that at least one person at the lift site is familiar with the maintenance section of this manual and is assigned responsibility for doing the maintenance on a regular basis.

Please note that the lift has a metallic data sticker attached to it that contains information such as the model number, capacities, and serial number. Do not remove this data sticker. Be sure that no operator ever exceeds the capacities shown on the data sticker or they may cause damage to the unit or injure personnel.

The Advance Lifts Model SL-P is a pneumatic palletizer that will automatically adjust the unit height depending on the amount of air pressure in the system and the weight placed on the turntable. The unit can be utilized in two ways, palletizing and de-palletizing. Adding or removing air will allow you to adjust the load of the unit.

Specifications

Load Capacity.....	4500lbs (Max)
Turntable Diameter.....	43" inches
Base Frame Dimensions.....	23.75" x 47.9" inches
Lowered Height.....	10.5" inches
Travel.....	20" inches
Raised Height.....	30.5" inches
Net Weight.....	450lbs

Responsibilities of Owners/Users

Inspection and Maintenance: The unit shall be inspected and maintained in proper working order in accordance with this manual and safe operating practice.

Removal from Service: Any unit not in safe operating condition shall be removed from service until it is repaired to the original manufacturer's standards.

Repairs: Authorized personnel in conformance with the manufacturer's instructions shall make all repairs.

Operators: Only trained and authorized personnel shall be permitted to operate the unit. They must understand to be alert to hazards during all operations (see page 5).

Before Operation: Before using the unit, the operator shall have:

1. Read and understood the manufacturer's operating instructions and warnings, or been trained by a qualified person.
2. Inspected the unit for proper operation and condition. Any suspect item shall be carefully examined and a determination made by a qualified person as to whether it constitutes a hazard. All unsafe items shall be corrected before further use of the unit.

During Operations: The unit shall be used only in accordance with its intended use and within the manufacturer's limitations and rules:

1. Do not overload the unit.
2. Insure that all protective devices are operational and in place.
3. Insure that all personnel near the operating unit understand to stand back so that no body parts can be pinched by the mechanism or platform and any items that may fall off the unit will not strike them.

Modifications or Alterations: Modifications or alteration of Advance Lifts products shall be made only with written permission from Advance Lifts Inc. in conformance with all applicable provisions and shall be at least as safe as the equipment was before modification. These changes shall also satisfy recommendations of the original equipment manufacturer for the particular application of the unit.

Warning Labels

Advance Lifts uses the following labels on our products to identify the severity of the hazards associated with this product. (Figure 1).

DANGER! Immediate hazard which will result in severe personal injury or death.

WARNING! Hazard or unsafe practice which could result in severe personal injury or death.

CAUTION! Hazard or unsafe practice which could result in minor personal injury or property damage.

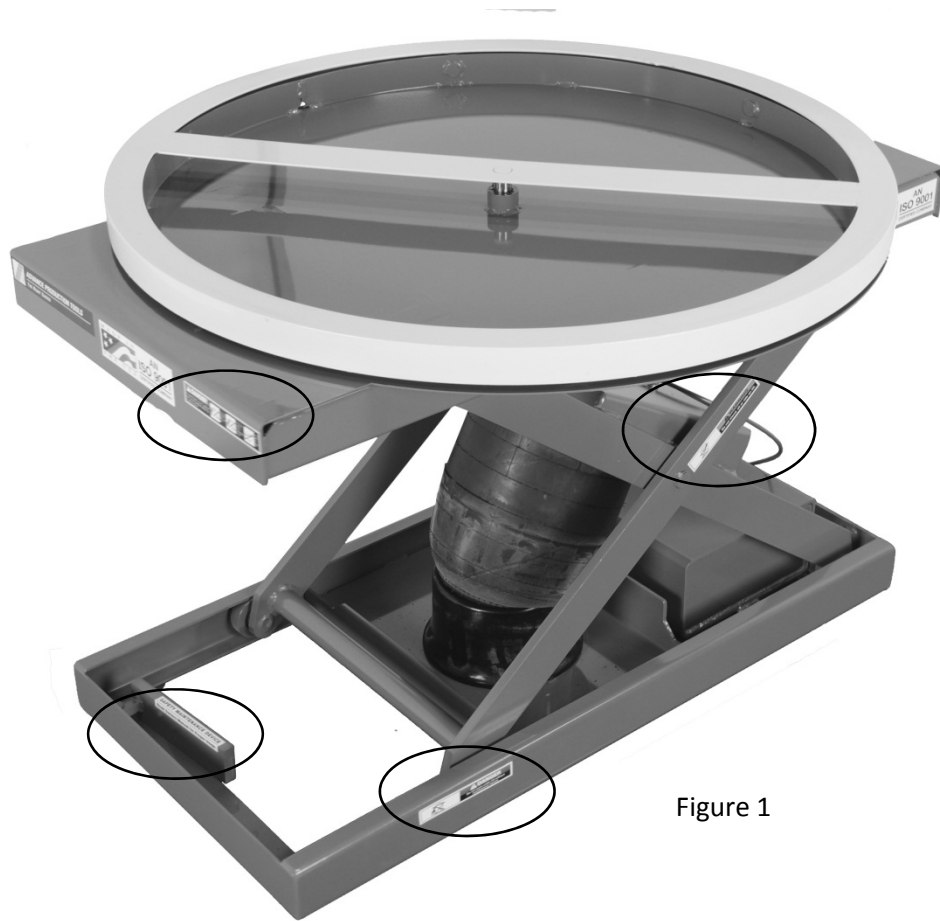


Figure 1

Installation Instructions

1. The unit is shipped fully assembled with no air pressure in the system.
2. Using a forklift, straddle the platform with the forks to lift and maneuver the unit. (Figure 2.) This can be done with the shipping bands on or off.



 WARNING
Do not put air into the system until the unit is in place and the shipping bands are cut. Putting air into the system before the shipping bands are cut may cause the platform to spring up uncontrollably causing injury or damage to the equipment.



Figure 2

3. The unit must be placed on a clean, flat, smooth and level surface.
4. Be certain the base frame is sitting firmly on the floor and that the unit does not rock or tip. Shim any area that is not in complete contact with the surface.
5. If you have any questions concerning the installation, call Advance Lifts at 800-843-3625.

 WARNING
The unit must be installed on a level surface. The base frame of the unit must sit securely on the floor and the floor must be level. If the base frame is not fully supported the unit may not function as expected or product could fall off the platform causing damage or injury.

Using the Maintenance Device

Warning! Always use the maintenance device for any service or maintenance. Never go or reach under the unit unless the maintenance device is securely in place and all air is removed from system. Never use the device with a load on the platform.

1. Remove any loads from the platform.
2. Figure 3 shows the maintenance device in the stored position.
3. Figure 4 shows the maintenance device in use.
4. To engage the maintenance device, there must be enough air in the system to allow the device to swing out fully, as shown in figure 4.
5. Once the device is in position, any air remaining in the system must be released so that the units' weight is fully supported by the device. See page 6.

WARNING
Do not reach under unit or perform any maintenance under the unit without maintenance device in place. Failure to do so could result in serious injury.

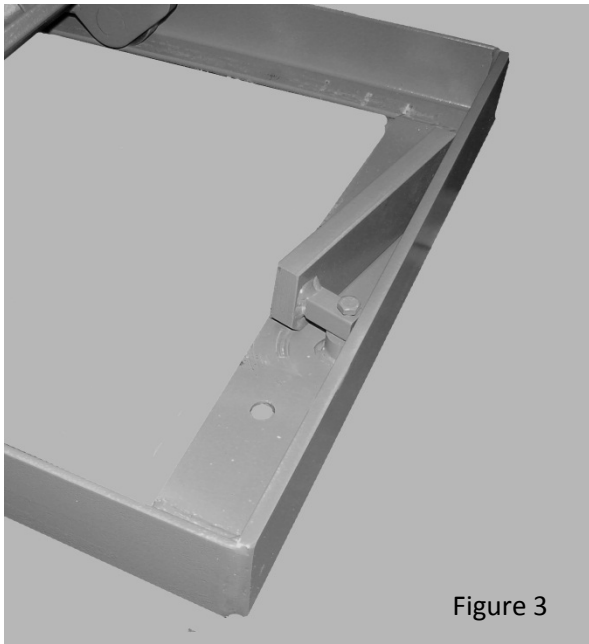


Figure 3

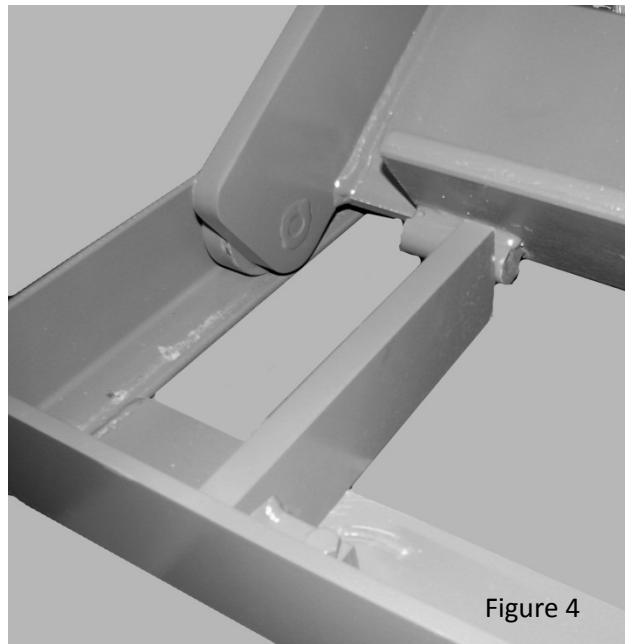
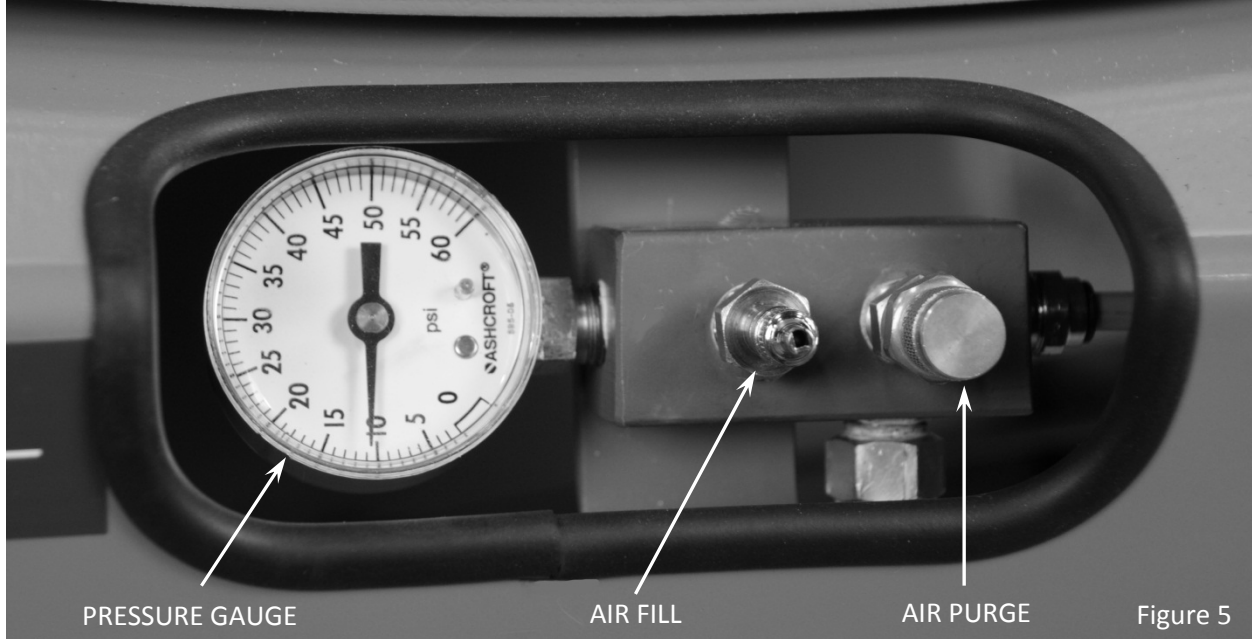


Figure 4

WARNING
Never attempt to use the maintenance device with a load on the platform. Never place a load on the platform when the maintenance device is engaged. Serious injury or property damage could occur.

DANGER
All air must be removed from system to properly engage the maintenance device. Failure to remove all the air could cause the device to disengage causing serious injury or death.

Air Valve



Valve description:

1. Pressure Gauge: use to monitor system air pressure.
2. Air Fill Valve: use to add air to the system.
3. Air Purge Valve: use to remove air from the system.

Approximate Load vs. Psi Amounts to Fully Lower Platform:

6.5 Psi	0-500lbs
25 Psi	500-2000lbs
35 Psi	2000-4500lbs

⚠ WARNING

Do not Sit, Stand or Ride on equipment. Do not operate equipment if someone is sitting, standing or riding on the equipment. Damage or injury may result.


⚠ WARNING


Always keep hands and feet clear of the scissors legs to avoid shear and crushing hazards. Never put hands or feet under the platform during operation or severe injury could occur.

Operating Instructions

Loading Unit Manually


1. Place empty pallet, centered on turntable.
2. Refer to the “Approximate Load vs. Psi amount to Fully Lower Platform” list above to determine the amount of air pressure required to lower the unit as product is added or if the full weight of a load is known, set pressure accordingly.
3. Begin adding load starting in the center of the pallet and working your way out.
4. Use the load or pallet to rotate the unit, not the turntable ring.
5. Continue adding load until the pallet is full.


 WARNING
Keep back when rotating a pallet on the unit. When the pallet turns, portions of the load may strike you. Avoid rotating the unit if others are in the area. Damage or injury may result.

 WARNING
Always center the load and keep the load centered through all loading or unloading procedures. Off center loads have a greater potential of falling and they may damage the unit or cause injury.

Removing Loads Manually

1. Place a fully loaded pallet onto the center of the platform.
2. Slowly lower the load onto the platform until the unit lowers fully and the load is stabilized.
3. Slowly back the forklift away being certain the load does not shift.
4. If the unit is not fully lowered after load is applied, slowly remove air from the system until the unit is fully lowered. This should be the optimal air pressure setting for the load.
5. Begin removing the top-level boxes. Rotate the load to evenly remove product from the pallet.

 WARNING
Make certain that the pallet is structurally sound, do not operate the unit if the pallet is broken or damaged. Nails, screws or broken boards can get wedged in the unit causing the rotation to stop suddenly and possibly shifting the load unexpectedly which may cause damage or injury.

 WARNING
Care must be taken when adding a load to the unit. As weight is added to the unit the unit will begin to drop, make certain that you have lowered the pallet fully before attempting to remove the forks. Not following this warning may cause the load to fall, damage the unit or cause injury.

Operating Cautions:

1. Do not overload the unit. See page 7 for load information.
2. Make certain all pallets are in good condition. Damaged pallets can interfere with turntable rotation causing loads to shift suddenly.
3. Never stand or sit on unit.
4. Stand clear of rotating loads.
5. Do not rotate load with excessive speed or loads may fall off the unit.

Note: Determining the ideal initial pressure settings is straightforward. If a softer response is desired, let a small amount of out of the system. If a stiffer response is desired, simply add a small amount of air.

The SL-P palletizer is a captive air system that may lose air over time therefore, it may be necessary to add air to the system from time to time.

Operating Instructions (continued)

Fork Lift Loading

1. Center the load over the turntable surface before lowering it onto unit.
2. Lower the load slowly until the weight of the load is fully supported by the unit.
3. Be certain that the load is fully supported before removing the forks.

 **WARNING**

Do not drop loads onto unit. Lower loads slowly to allow the air spring to compress evenly. Dropping loads may cause damage to the equipment or load.

Unloading with a Fork Lift

1. Rotate the pallet to align with forks.
2. Insert the forks fully into the pallet taking care not to hit the rotating ring with forklift.
3. Raise the pallet fully off the unit before moving the load.
4. Make certain the load is clear of the unit before moving the forklift.

 **WARNING**

Care must be taken when removing a load from the unit. Make certain the load is raised clear of the unit before attempting to back away from the unit. Not following this warning may cause the load to fall, damage the unit or cause injury.

Moving the Unit

1. Remove any loads before attempting to move the unit.
2. Straddle each side of the platform with the forklift forks.
3. The unit can now be lifted with the forks.

 **WARNING**

It is unsafe to move the unit with a load on the platform. Not following this warning may cause the load to fall, damage to the unit or cause injury.

Maintenance

Before Each Use

1. Visually inspect the unit for defects, excessive wear, stress cracks and loose/missing parts.
2. Spin the rotating ring to be certain of smooth movement.

Do not operate the unit if the rollers are sticking or if any other maintenance condition arises without consulting your maintenance department or Advance Lifts.

Warranty

For a period of one year from date of shipment from the Company's plant, the Company agrees to replace or repair, free of charge, any defective parts, material or workmanship on new equipment.

Company authorization must be obtained prior to the commencement of any work. The Company reserves the right of choice between effecting repairs in the field or at the company's plant. The Company further reserves the right of final determination in all warranty considerations. Evidence of overloading, abuse or field modifications of units without Company approval shall void this warranty. No contingent liabilities' accepted.

Damage incurred in transport is the responsibility of the carrier and is not covered by this warranty. Any damage detected upon receipt of equipment should be immediately reported to the carrier. If you need assistance, contact Advance Lifts.

SPARE PARTS LIST

MECHANICAL:

ROLLER WHEEL	023-878
ROLLER WHEEL PIN	A-17958
WHEEL PIN CLIP	001-876
MAIN AXLE PIN	A-9993
MAIN AXLE PIN CLIP	001-876
PLATFORM PIN	A-17712
BASE FRAME PIN	A-13548
BASE FRAME PIN CLIP	001-876
TURNTABLE WHEEL	021-794
TURNTABLE WHEEL CLIP	001-876

AIR COMPONENTS

PRESSURE GAUGE	048-741
SCHRADER VALVE	048-238
PURGE VALVE	048-676
RELIEF VALVE	048-238
AIR SPRING	048-311