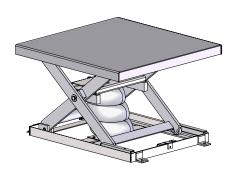


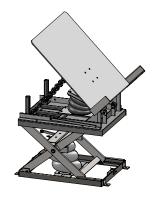
Pneumatic Lift Tables Presto - AX, AXR, AXS, AXT & AT Series ECOA - AL Series











| Model: | |
|-------------------------|--|
| Serial Number: | |
| Date placed in service: | |

PRESTO LIFTS INC.

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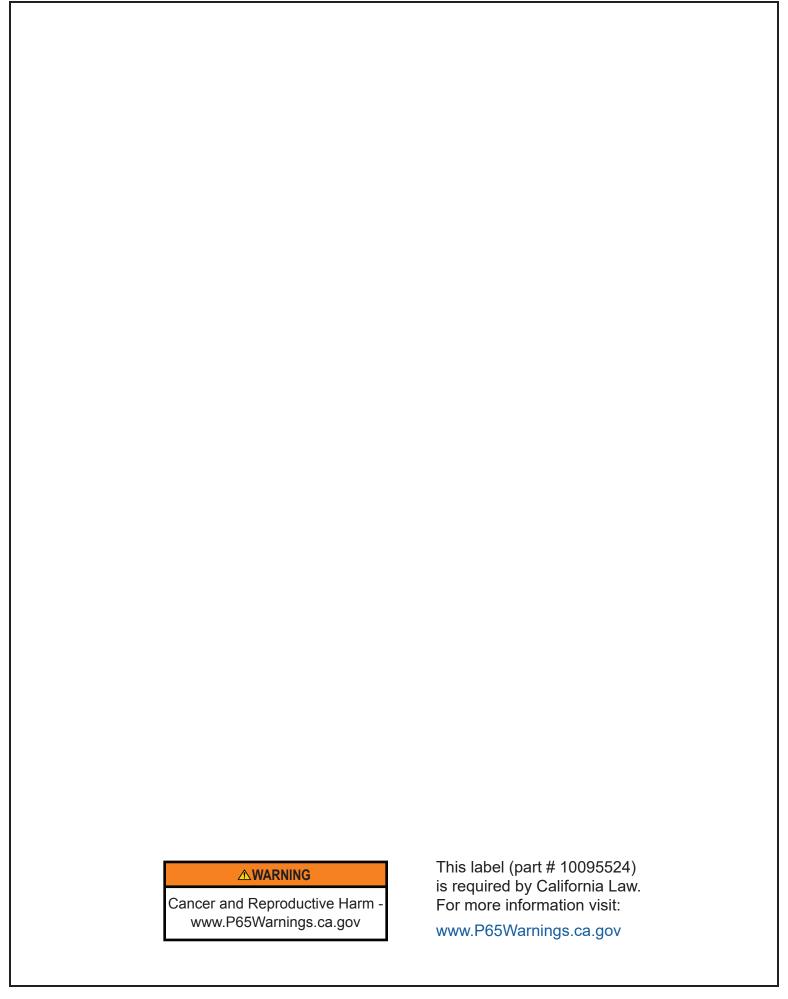
Contents

If viewing this manual electronically, just left click any section below to immediately view that area.

To get back to the table of contents, just click in area to the outside of the left border.

| 1 | INTRODUCTION5 |
|------------|--|
| 1.1 | Responsibilities of Owner and Users |
| 1.2 | Responsibilities of Operators |
| 2 | SAFETY |
| 2.1 | Safety Devices |
| 2.1 | .1 Maintenance Device |
| 2.2 | Safety Alert Symbols 9 |
| 2.3 | Signal Words9 |
| 3 | LABELING |
| 3.1 | Label Part Numbers, Images and Locations |
| 4 | RECOMMENDED CONSIDERATIONS - LOCKOUT/TAGOUT PROCEDURES (LOTO) 14 |
| 4.1 | General |
| 4.2 | Best Practices |
| 4.3 | Additional Resources |
| 5 | INSTALLATION |
| 5.1 | Machine Inspection |
| 5.2 | Installing Machine |
| 5.2 | .1 Floor Installation |
| 5.2 | .2 Pit Mounted Installation |
| 5.3 | Pneumatics - Lift Only |
| 5.4 | Pneumatics - Lift and Turntable with Rotational Positioning Lock (If equipped) |
| 5.5 | Testing the Lift with no Load |
| 6 | OPERATION21 |
| 6.1 | Method of Operation |
| | |
| 6.2 | Operation Procedures 22 |
| 6.2 6.2 | |

| 7 MAINTENANCE & REPAIR |
|--|
| 7.1 Engaging Maintenance Device |
| 7.1.1 Maintenance Device Installation |
| 7.1.2 Maintenance Device Removal |
| 7.2 Routine Inspection and Maintenance |
| 7.3 Troubleshooting Maintenance 28 |
| 7.4 Removal and Installation of Air Stroke Actuator |
| 7.5 Removal and Installation of Hand/Foot Control |
| 7.6 Representative Top Level Drawing - AX Series |
| 7.7 Representative Top Level Drawing - AXR Series |
| 7.8 Representative Top Level Drawing - AXS Series |
| 7.9 Representative Top Level Drawing - AXT Series |
| 7.10 Representative Top Level Drawing - AT Series |
| 7.11 Ordering Replacement Parts |
| 7.11.1 Quality Issues |
| 7.11.2 General |
| 7.11.3 Pneumatic Components Replacement |
| 7.11.4 Turntable Positioning Lock Components Replacement |
| 7.11.5 Mechanical Components Replacement |
| 7.12 Tech Sheet No. S-13 |
| 8 PNEUMATIC SCHEMATIC |
| 9 WARRANTY & CONTACT INFORMATION |



1 Introduction

1.1 Responsibilities of Owner and Users

Basic Principles - Owners/users shall apply sound principles of safety, training, inspection, maintenance to the expected operating environment. It shall be the responsibility of the owner/user to advise the manufacturer where deflection may be critical to the application.

Manuals - Owners/users shall keep and maintain a copy of the operating and maintenance manual(s) and ensure its availability to operating and maintenance personnel.

Inspection and Maintenance - It shall be the responsibility of the users to inspect and maintain the machine as required to ensure proper operation. The frequency of inspection and maintenance shall be based upon the manufacturer's recommendations and be compatible with operating conditions and the severity of the operating environment. Machinery that is not in proper operating condition shall be immediately removed from service until repaired. Maintenance and repairs shall be made by a qualified person and the repairs shall be in conformance with the manufacturer's recommendations.

Maintenance Safety Precautions - Before adjustments and repairs are started on the machine, the following precautions shall be taken as applicable:

- 1. Remove the load from the platform.
- 2. Lower platform to the full down position.
- 3. Relieve system pressure from all circuits before loosening or removing any components.
- 4. All controls in the "off" position and all operating features secured from inadvertent motion by brakes, blocks, or other means.
- 5. Disconnect power and follow established owner/user lockout/tag out policies.
- 6. Follow precautions and directions as specified by the manufacturer.

Replacement Parts - When parts or components are replaced, they shall be replaced with parts or components approved by the original manufacturer.

Maintenance Training - The user shall ensure only qualified personnel inspect and maintain the machine in accordance with the manufacturer's recommendations.

Operator Training - An owner/user, who directs or authorizes an individual to operate the machine shall ensure that the individual has been:

- 1. Trained in accordance with the manufacturer's operating manual.
- 2. Made aware of the responsibilities of operators as outlined in section 1.4 of this manual.
- 3. Retrained, if necessary, based on the owners/user's observation and evaluation of the operator.

Modifications and additions shall not be performed without the manufacturer's prior written approval. Where such authorization is granted, capacity, operation, and maintenance instruction plates, tags, or decals shall be changed accordingly.

1.2 Responsibilities of Operators

Basic Principles - Operators shall apply sound principles of safety and good judgment in the application, and operation of the machine with consideration given to its intended use and expected operating environment. Since the operator is in direct control of the machine, conformance with good safety practices is the responsibility of the operator. The operator shall make decisions on the use and operation with due consideration for the fact that his or her own safety as well as the safety of other personnel on or near the machine is dependent on those decisions.

General Training - Only personnel who have received general instructions regarding the inspection, application, and operation of machine, including recognition and avoidance of hazards associated with their operation, shall operate the machine. Such topics covered shall include, but not necessarily be limited to, the following issues and requirements:

- 1. A pre-start inspection
- 2. Responsibilities associated with problems or malfunctions affecting the operation of the machine
- 3. Factors affecting stability
- 4. The purpose of placards and decals
- 5. Workplace inspection
- 6. Safety rules and regulations
- 7. Authorization to operate
- 8. Operator warnings and instructions
- 9. Actual operation of the machine. Under the direction of a qualified person, the trainee shall operate the machine for a sufficient period of time to demonstrate proficiency in actual operation of the machine.

Pre-start Inspection - Before use each day or at the beginning of each shift, the machine shall be given a visual inspection and functional test including but not limited to the following:

- 1. Operating and emergency controls
- 2. Safety devices
- 3. Hydraulic system leaks
- 4. Electrical cables and wiring harness
- 5. Loose or missing parts
- Nameplates, precautionary and instructional markings and/or labeling
- 7. Guarding system
- 8. Items specified by the manufacturer

Problem or Malfunctions - Any problems or malfunctions that affect the safety of operations shall be repaired prior to the use of the machine.

Before Operations - The operator shall:

- 1. Read and understand the manufacturer's operating instruction(s) and user's safety rules or have them explained.
- 2. Understand all labels, warnings, and instructions displayed on the machine or have them explained.

6

Workplace Inspections - Before the machine is used and during use, the operator shall check the area in which the machine is to be used for possible hazards such as, but not limited to:

- 1. Bumps, floor obstructions, and uneven surfaces
- 2. Overhead obstructions and electrical hazards
- 3. Presence of unauthorized persons
- 4. Other possible unsafe conditions as noted in the operating manual.

Operator Warnings and Instructions - The operator shall ensure the operation of the machine is in compliance with the following:

- 1. **Guarding system** Guarding shall be installed and positioned, and access gates or openings shall be secured per the manufacturer's instructions (If applicable).
- 2. **Distribution of load** The load and its distribution on the platform shall be in accordance with the manufacturer's rated capacity for that specific configuration.
- 3. **Maintaining overhead clearance** The operator shall ensure that adequate clearance is maintained from overhead obstructions and energized electrical conductors and parts.
- 4. **Point of Operation -** The operator shall not place any part of their body under the platform.
- 5. **Precaution for moving equipment** When other moving equipment or vehicles are present, special precautions shall be taken to comply with the safety standards established for the workplace.
- 6. **Reporting problems or malfunctions** The operator shall immediately report to a supervisor any problem(s) or malfunction(s) that become evident during operation. The operator shall ensure all problems and malfunctions that affect the safety of operations are repaired prior to continued use.
- 7. **Capacity limitation** Rated capacity shall not be exceeded when loads are transferred to the platform.
- 8. **Work area** The operator shall ensure the area surrounding the machine is clear of personnel and equipment before lowering the platform.
- 9. **Securing the machine** The operator shall comply with the means and procedures provided to protect against use by an unauthorized person(s).
- 10. Altering safety devices Safety devices shall not be altered or disabled.
- 11. **Modifications** or alterations of the machine or the fabrication and attaching of frameworks or the mounting of attachments to the machine or the guarding system shall only be accomplished with prior written permission of the manufacturer.
- 12. **Assistance to the operator** If an operator encounters any suspected malfunction or any hazard or potentially unsafe condition relating to capacity, intended use, or safe operation, the operator shall cease operation of the machine and request further instruction from the owner/user.
- 13. **Problems or malfunctions** Any problem(s) or malfunction(s) that affect the safety of operations shall be repaired prior to the use of the machine.

7

2 SAFETY

All personnel installing, operating, and maintaining this machine shall read and understand this manual. For questions or concerns contact the manufacturer.

This machine shall be installed, operated, and maintained by trained and/or qualified personnel only.

Do not perform any repair work on a lift with a load on the platform or with the table in a raised position.

All personnel must stand clear of the lift when the lift is in motion.

Do not put hands or feet under lift table.

Do not perform any repair or maintenance work with the lift in an open position without securing it first with proper maintenance device.

Do not place a load on a moving lift.

Do not stand, sit or climb on the lift at any time.

Place a load in the center of the lift and be sure that the load is secured properly.

Do not use the lift on soft, uneven or unstable surfaces.

Do not exceed the load capacity rating on the data plate.

2.1 Safety Devices

2.1.1 Maintenance Device

Any time it is necessary to maintain or repair this machine and the platform is required to be in a raised position, the maintenance device shall be engaged. The maintenance device will be referenced several times throughout this manual and its use should be thoroughly understood before working on this machine. See **Engaging Maintenance Device** in the **Maintenance & Repair** section.

2.2 Safety Alert Symbols









A symbol that indicates a hazard. It is composed of an equilateral triangle surrounding an exclamation mark. The safety alert symbol is only used on hazard alerting signs. It is not used on safety notice and safety instructions signs.

A – For use with **DANGER** signal word; (safety white triangle, safety red exclamation mark, safety red background)

B – For use with **WARNING** signal word; (safety black triangle, safety orange exclamation mark)

C – For use with **CAUTION** signal word; (safety black triangle, safety yellow exclamation mark)

D – For use with **DANGER, WARNING**, **or CAUTION** signal words; (**D** is a safety yellow triangle with a safety black border and safety black exclamation mark;

2.3 Signal Words

▲ DANGER

DANGER Indicates a hazardous situation that, if not avoided, will result in death or serious injury.

MARNING

WARNING Indicates a hazardous situation that, if not avoided, could result in death or serious injury.

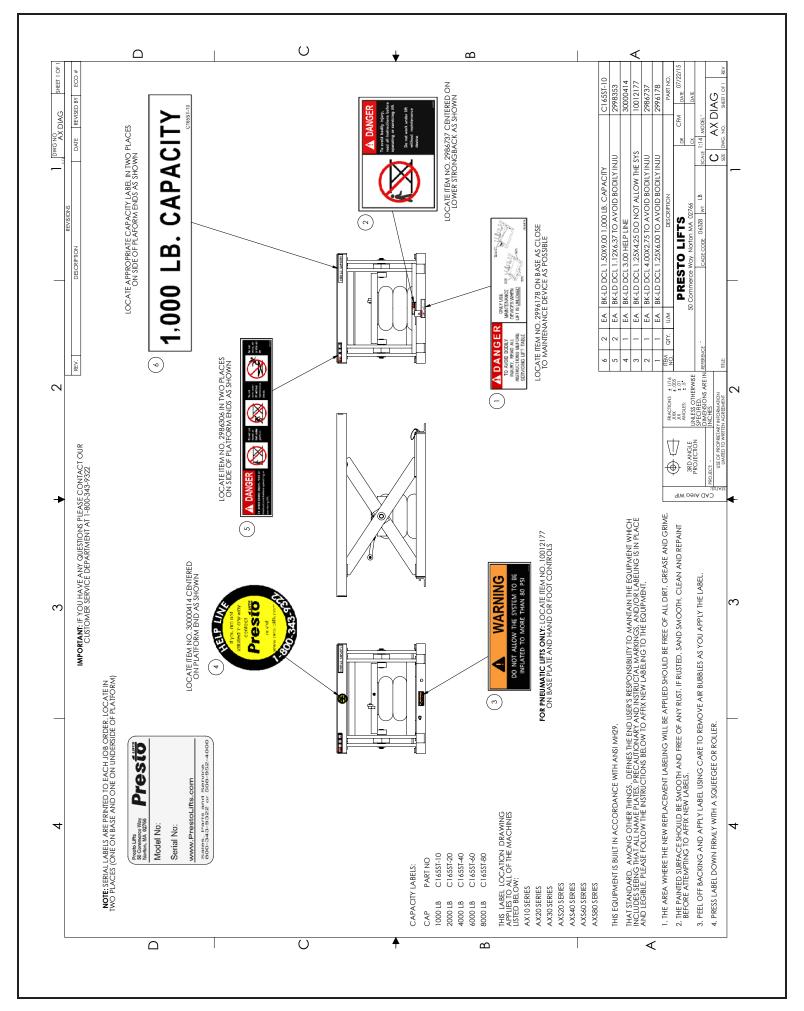
⚠ CAUTION

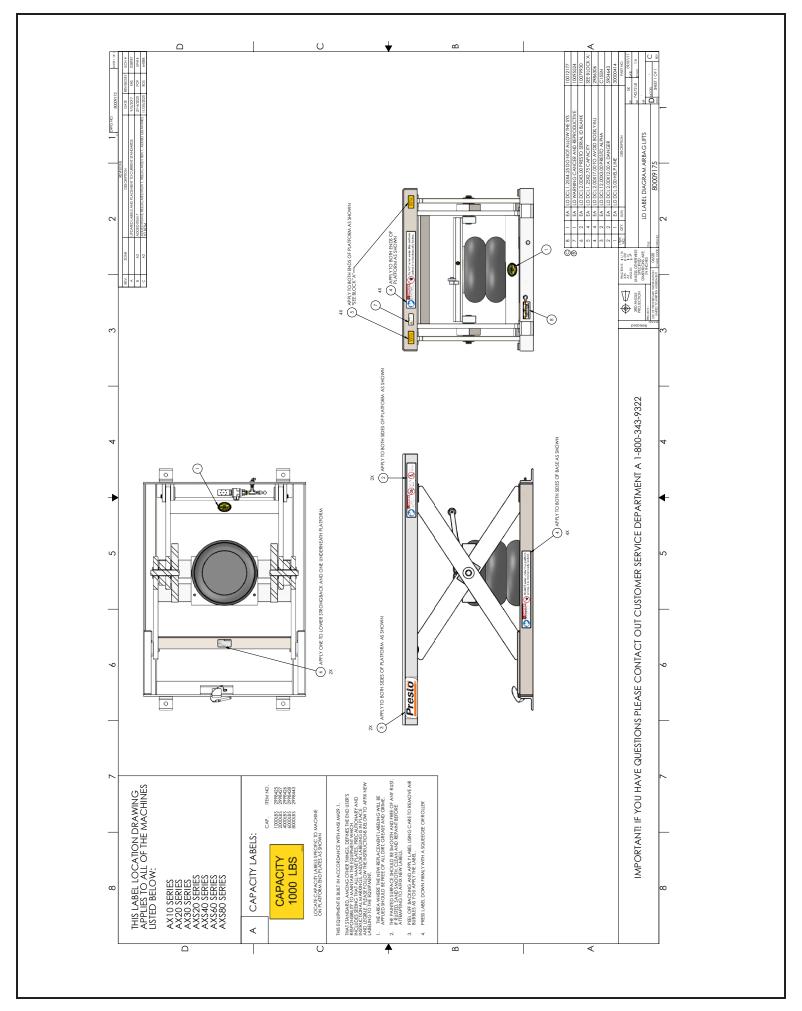
CAUTION Indicates a hazardous situation that, if not avoided, could result in minor or moderate injury.

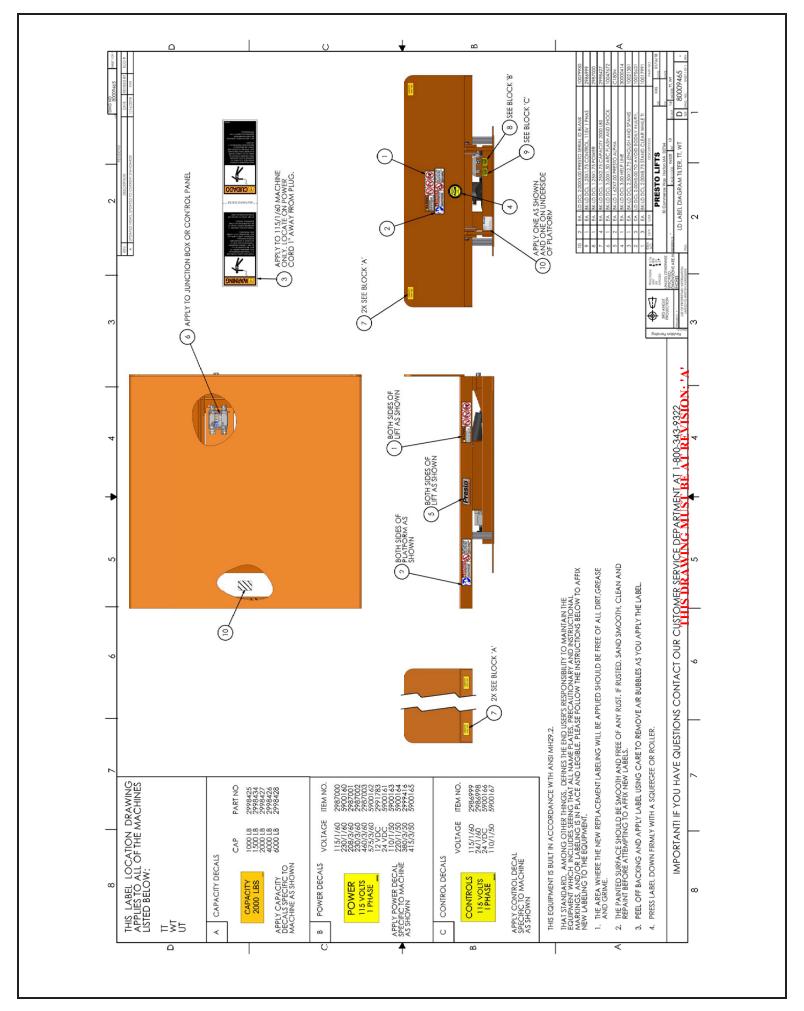
NOTICE

NOTICE Indicates information considered important, but not hazard-related (e.g., messages relating to property damage).

| 3 | LABELING |
|-----|--|
| | This machine has labeling to indicate potential hazards this machine may pose when operating and/or maintaining the machine. All labels must be legible. If any label is missing, damaged, or otherwise illegible contact the manufacturer for replacement labels. |
| 3.1 | Label Part Numbers, Images and Locations |
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4 RECOMMENDED CONSIDERATIONS - LOCKOUT/TAGOUT PROCEDURES (LOTO)

4.1 General

While following local codes and procedures for safely operating, maintaining, and repairing industrial equipment, it is necessary for authorized personnel to also review owner manuals for more detailed instruction on how to avoid potential hazards. Regarding your Presto Lifts equipment, consider the following information as you operate, maintain and make repairs.

- 1. Prepare and train for controlling any pneumatic, gravitational or structural (e.g. compressed spring) hazardous energy source of the machine and the perimeter around the machine.
- 2. Review and follow your company's and/or local governing authority's lockout/tagout procedures before continuing.
- 3. Maintain your company's and/or local governing authority's lockout/tagout status until all repairs can be completed as desired.

It is important that before returning your equipment to operating status, all personnel in the affected area are made aware and are allowed ample time to react to the repaired machine being brought back online.

4.2 Best Practices

- 1. Keep your plan simple and user focused. If it's understood, it will be more easily followed.
- 2. Be consistent in labeling and in procedures described.
- 3. Expect accountability with safety training and enforcement of all requirements.
- 4. Verify that all energy sources have been controlled.

4.3 Additional Resources

Scan below for some other useful information regarding establishing LOTO procedures.







5 INSTALLATION

Before Installation, read and understand this manual. **Only authorized, trained and qualified personnel shall install this machine.** Remove all packaging and inspect the machine for damage and/or missing components. Contact the manufacturer if damage is found or components are missing.

Confirm house air power matches the primary power indicated on the lift table and on the order documents.

The owner/ installer is responsible for ensuring all codes and ordinances are met and any necessary permits are obtained prior to installation.

▲ DANGER

In the event of a malfunction, disconnect and do not return to service until the cause of the malfunction has been determined and remedied. See Recommended Considerations - Lockout/Tagout Procedures (LOTO) for more information.

Pressurized air can penetrate skin and cause severe injury or death. Always use proper personal protective equipment when installing, troubleshooting, repairing or maintaining pressurized systems. Relieve pneumatic system pressure before performing any maintenance. Treat all lines as if pressurized and open any necessary fitting slowly and do not completely disconnect until all pressure has been relieved.

Pinch points and Crush Hazards exist when installing and operating the machine. Do not enter under any equipment while the machine is moving. Keep hands, feet, and loose clothing away from moving equipment.

Never enter beneath the platform unless the machine is unloaded and secured against lowering using the maintenance device. See Engaging Maintenance Device section.

Personnel are not permitted on the platform unless ANSI MH29.1 compliant personnel guarding is provided. Guarding must be installed and operational before use including all handrails, personnel gates & equipment gates.

All emergency stop devices shall clearly identify to which machine they belong.

The lift is equipped with a tamperproof pressure regulator. The regulator has been factory preset and no attempt should be made to alter the setting. Resetting of the regulator or replacement with a component not supplied by Presto Lifts will void warranty and could result in serious bodily injury.

Contact Customer Service when in doubt about installing this lift table.

⚠ CAUTION

Verify the area around the machine is clear of debris and/or personnel before installing.

This machine must be located and operated indoors and in an area protected from rain and moisture, unless specifically designed to do so.

This machine must be located and operated on a solid, level surface capable of supporting the machine and its maximum rated capacity.

Fork trucks or other lifting devices used for moving this machine must be capable of lifting the maximum weight provided in the shipping documents.

A substantial number of feature and function combinations exist when custom equipment is provided by a manufacturer. Images illustrated throughout this manual are only representative samples of designs that may or may not exist in the machine this general manual was provided for. When questioning whether any part of this manual applies specifically to your machine, you may contact customer service with your order number and/or the serial number for your machine, and we will provide the specific drawing(s) that combined with this manual will provide sufficient information to install, test, operate and maintain the equipment.

If included, all lifting eyes on the platform used to position the machine must be removed before operating the machine or the machine may be damaged.

5.1 Machine Inspection

Remove the shipping material and unskid the machine. Inspect the shipping materials and machine for damage. Do not continue if damage is found. Contact customer service for assistance if damage is discovered.

Check the following with the lift in the collapsed position:

- 1. Check for signs of damage, especially to the Airstroke Actuator™ and pneumatic components.
- 2. Check all connections and nuts/bolts for tightness.
- 3. Check base frames for flatness and for bent or damaged metal parts.

△ CAUTION

Do not operate the lift before performing the installation procedures specified in the Installing Machine section. Severe damage to the lift may occur.

On the front of this manual, write down the model number, serial number, and date the lift is placed in service. If this information is not available initially, you can find the model number and serial number on the serial number plate on the machine. Once the maintenance device has been engaged, the serial number plate will be accessible to view.

5.2 Installing Machine

5.2.1 Floor Installation

- 1. Make sure that the floor in the installation area is flat, stable, relatively smooth and free from dirt, obstacles or surface defects.
- 2. Place the lift in the exact operating position.

⚠ CAUTION

When moving the lift *never* attempt to pick it up by the platform. The lift should be picked up only by the base frame only. The use of a spreader strap/sling is suggested. If the lift has lifting eyebolts, attach a chain spreader and raise the lift from a center position. Be sure that the eye bolts are secured in place with locking nuts prior to lifting.

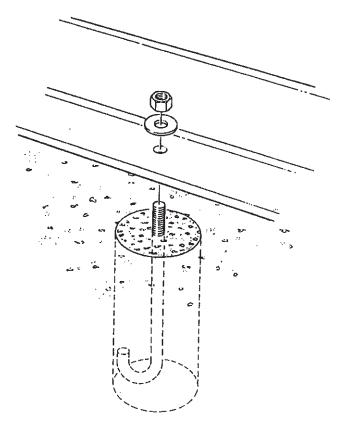
3. Make sure that the complete base of the lift is in contact with the floor. In order to provide complete contact with the floor, the base may be shimmed or grouted.

⚠ CAUTION

Do not spot shim. The complete base must be in contact with the floor or shims.

Machine base lag anchors need to be sized for a minimum of 5000# pull-out force for each lag.

4. The lift frame must be anchored to the floor using four 3/4" diameter bolts, washers and nuts.



5. Locate and lag down hand control stand or foot control so as to provide easy access. Do not obstruct the operator's work area. Make pneumatic connections according to the information contained in the following and **Pneumatics** sections.

△ CAUTION

Not lagging the lift base will result in structural damage to the lift.

5.2.2 Pit Mounted Installation

- 1. Build pit to standard pit dimensions, paying careful attention to raceway, clearance and height requirements.
- 2. The remaining steps are the same as required for floor installation.

⚠ WARNING

Do not install lifts in pits unless they have an approved bevel edge top and fully exhausting pneumatic circuit.

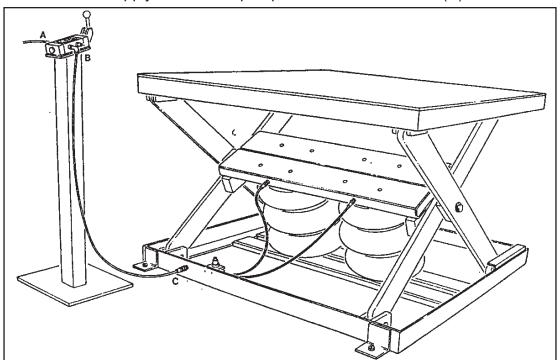
5.3 Pneumatics - Lift Only

AX/AXR/AXS/AT and AL Scissor Lifts are designed for normal factory environments. Consult the distributor for unusual applications. If your lift is equipped with a turntable positioning lock, refer to next section.

⚠ CAUTION

All pneumatic connections should be performed by qualified authorized service personnel.

- 1. The lift requires a minimum of 80 PSI, 15 CFM, and clean dry air to function correctly.
- 2. Be certain that supply line is turned off and residual air has been purged from the line.
- 3. The lift is shipped with the control line attached to the control valve (B) and detached from the lift base. Route the control line safely to the base and make the connection (C).
- 4. Connect the supply line to the open port of the control valve (A).



5. Open the air supply and check the entire circuit for leaks. Secure as needed.

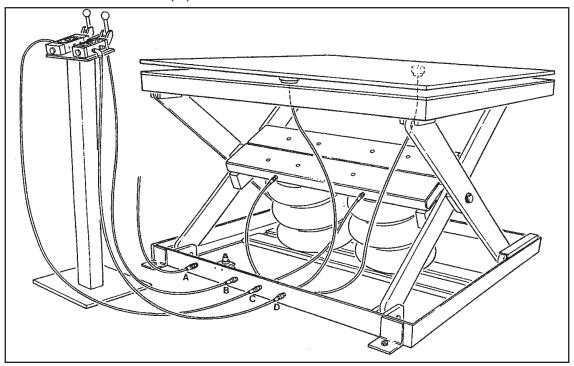
MARNING

The lift is equipped with a tamperproof pressure regulator. The regulator has been factory preset and no attempt should be made to alter the setting. Resetting of the regulator or replacement with a component not supplied by Presto Lifts will void warranty and could result in serious bodily injury.

5.4 Pneumatics - Lift and Turntable with Rotational Positioning Lock (If equipped)

The initial pneumatic connections differ from a standard lift and are specified below. All other installation, safety and use instructions should be observed.

- 1. Connect incoming air supply to inlet (A).
- 2. Connect supply line (B).
- 3. Connect control line (C) lifting.
- 4. Connect control line (D) lock.



5.5 Testing the Lift with no Load

 Before testing the lift, clear the area of any loose material. Be sure the lift has no obstruction above it or on any side. Using the controls provided, briefly operate the lift (5-10 seconds). If the lift begins to rise and functions properly, continue to the full upright position.

△ CAUTION

If the lift does not rise immediately, or there is any operational problem, stop it immediately. Refer to the troubleshooting section and correct the problem before continuing.

2. After raising the lift completely, lower the lift completely. It should lower slowly and smoothly. If satisfied with the lift's operation, raise and lower the lift and stop at different levels in order to familiarize yourself with the lift's operation.

6 OPERATION

▲ DANGER

Only authorized, trained and qualified personnel shall operate this machine. Personnel operating this machine must read and understand this manual.

In the event of a malfunction, disconnect and lock-out the machine. Do not return to service until the cause of the malfunction has been determined and remedied.

Pinch points and Crush Hazards exist when operating the machine. Do not enter under any equipment while the machine is moving. Keep hands, feet, and loose clothing away from moving equipment.

Never enter beneath the platform unless the machine is unloaded and secured against lowering using the maintenance device. See Engaging Maintenance Device section.

Personnel are not permitted on the platform unless ANSI MH29.1 compliant personnel guarding is provided. Guarding must be installed and operational before use including all handrails, personnel gates & equipment gates.

Loads that may shift during operating must be secured before operating.

Verify the area around the machine is clear of debris and/ or personnel before operating.

This machine must be operated only indoors on substantially firm, smooth, even, and prepared surfaces.

Always keep pneumatic lines clear of foot and vehicle traffic.

During operation, operator must be in view of the machine at all times.

Do not load or unload the machine while moving.

If included, all lifting eyes on the platform used to position the machine must be removed before operating the machine or the machine may be damaged.

This machine is to be operated by trained and/or qualified personnel only.

Before operating this machine, read and understand this manual. Inspect the machine for excessive wear and/ or damage. If excessive wear or damage is found, remove the machine from service and contact maintenance personnel. Do not operate this machine until all necessary repairs are completed. Inspect all precautionary labeling. If any label is missing or illegible contact the manufacturer for replacement labels. Ensure area is free of debris.

Before each shift, inspect the machine for signs of wear or damage. Verify all precautionary labeling is legible. Report concerns to the appropriate personnel.

6.1 Method of Operation

After raising the lift completely, lower the lift completely. It should lower slowly and smoothly. If satisfied with the lift's operation, raise and lower the lift and stop at different levels in order to familiarize yourself with the lift's operation.

⚠ CAUTION

Do not maintain the control valve in the open position if the lift does not move or it has reached its up or down limits. Damage to the pneumatic system may result.

6.2 Operation Procedures

In order to operate the lift, follow these operating procedures:

⚠ WARNING

Obey all warning labels.

Do not stand, sit or climb onto the lift.

If the lift fails to move or exhibits strange movement or sound, stop immediately. Do not operate the lift until it has been checked and repaired.

Load the lift only in the collapsed position.

Do not load or unload a moving lift.

- 1. Read and understand all the instructions before operating. If the lift has modifications or accessories, read and understand their functions.
- 2. Load the lift correctly. Refer to the attached nameplate for load capacity information.
 - Load the lift only in the fully lowered position.
 - Do not load or unload the lift while it is moving.
 - Do not exceed the maximum rated load (note that load capacity is reduced due to side or end loading).
 - Place load in the center of table.
 - If the load is unstable or may become unstable, fasten it into position.

3. Operate the lift.

- To raise the lift, activate the hand control valve to the "up" position. Hold the valve open until the lift reaches the desired position or the lift reaches its full extension. The valve is spring-loaded and will return to center (closed) when the lever is released.
- To lower the lift, activate the hand control valve to the down position. Hold the valve open until the lift descends to the desired height or the lift reaches its fully lowered position. Move the valve briefly to the up position to stop downward movement.
- 4. Wait until the lift has come to a complete stop before unloading the lift.
- 5. Stand clear of the lift when operating in order to avoid injury.

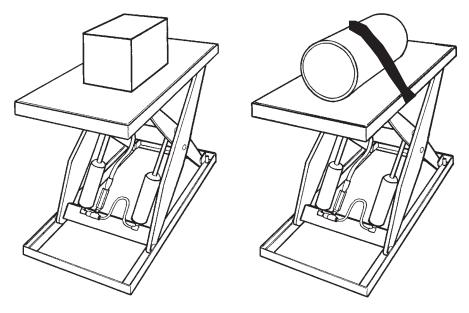
6.2.1 Turntable with Pneumatic Rotational Positioning Lock

The lock is designed for holding the turntable in place; it is not designed to stop or brake a rotating load.

- 1. Manually rotate the turntable to the desired position.
- 2. With the turntable at rest, activate the lock control valve to the "on" position. This will lock the table in place.
- 3. Moving the control valve to "off" will release the lock and allow the turntable to rotate.

6.3 Loading

Loads must not exceed the specified load center and capacity. Loads must be uniformly distributed and secured. Uneven and excess loading will cause accelerated wear and may lead to premature failure. See **Tech Sheet No. S-13** for detailed information.



7 MAINTENANCE & REPAIR

▲ DANGER

Only authorized, trained, and qualified personnel shall maintain/troubleshoot/repair this machine. Personnel operating this machine must read and understand this manual.

When necessary, disconnect and lockout the air supply before performing installation, maintenance, troubleshooting or repair. In the event of a malfunction, disconnect and do not return to service until the cause of the malfunction has been determined and remedied. See Recommended Considerations - Lockout/Tagout Procedures (LOTO) for more information.

Pressurized air can penetrate skin and cause severe injury or death. Always use proper personal protective equipment when installing, troubleshooting, repairing or maintaining pressurized systems. Relieve pneumatic system pressure before performing any maintenance on the system. Treat all lines as if pressurized and open any necessary fitting slowly and do not completely disconnect until all pressure has been relieved.

Pinch points and Crush Hazards exist when maintaining, repairing, troubleshooting and operating the machine. Do not enter under any equipment while the machine is moving. Keep hands, feet, and loose clothing away from moving equipment.

Never enter beneath the platform unless the machine is unloaded and secured against lowering using the maintenance device. See Engaging Maintenance Device section.

Personnel are not permitted on the platform unless ANSI MH29.1 compliant personnel guarding is provided. Guarding must be installed and operational before use including all handrails, personnel gates & equipment gates.

The lift is equipped with a tamperproof pressure regulator. The regulator has been factory preset and no attempt should be made to alter the setting. Resetting of the regulator or replacement with a component not supplied by Presto Lifts will void warranty and could result in serious bodily injury.

Contact Customer Service when in doubt about servicing this lift table.

Verify the area around the machine is clear of debris and/ or personnel before troubleshooting, repairing or maintaining.

⚠ CAUTION

Failure to perform required inspections and maintenance along with replacing worn consumable items such as bushings and rollers will lead to shortened lift table life. Failures resulting from lack of inspection, maintenance and consumable parts replacement will not be covered under warranty.

Always keep air lines clear of foot and vehicle traffic.

If damage or excessive wear is found, remove the machine from service until the machine is repaired.

Verify the area around the machine is clear of debris and/ or personnel before operating.

This machine must be operated only indoors on substantially firm, smooth, even, and prepared surfaces.

A substantial number of feature and function combinations exist when custom equipment is provided by a manufacturer. Images illustrated throughout this manual are only representative samples of designs that may or may not exist in the machine this general manual was provided for. When questioning whether any part of this manual applies specifically to your machine, you may contact customer service with your order number and/or the serial number for your machine, and we will provide the specific drawing(s) that combined with this manual will provide sufficient information to install, test, operate and maintain the equipment.

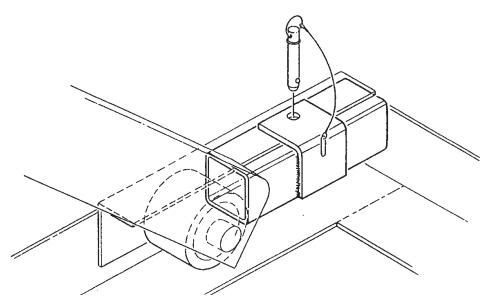
If included, all lifting eyes must be removed from the platform top before attempting to operate the machine or the machine will be damaged.

Inspect the machine for signs of wear or damage. Verify all precautionary labeling is legible.

Generally, the AX/AXR/AXS/AXT/AT and AL Series of pneumatic scissor lifts will require little maintenance. However, routine maintenance and inspection will minimize cost of repairs and hazardous conditions.

7.1 Engaging Maintenance Device

The AX, AXR, AXS, AXT, AT Series and the AL Scissors Lifts are designed to be maintained and serviced in a raised position. Maintenance devices are provided for locking the lift in a raised position.



7.1.1 Maintenance Device Installation

- 1. Completely remove any load from the lift platform.
- 2. Raise the lift to its full height.
- 3. Remove the maintenance device from its storage position when not in use and locate it into place and insert the locking pin.
- 4. Lower the lift until the leg roller comes in contact with the maintenance device.
- 5. Check that the maintenance device is securely in place.
- 6. Release all air pressure from the lift. The maintenance device is now supporting the lift.

7.1.2 Maintenance Device Removal

- 1. Raise the lift to its full height.
- 2. Remove the locking pin and the maintenance device and return it to its storage position.
- 3. Lower the lift.

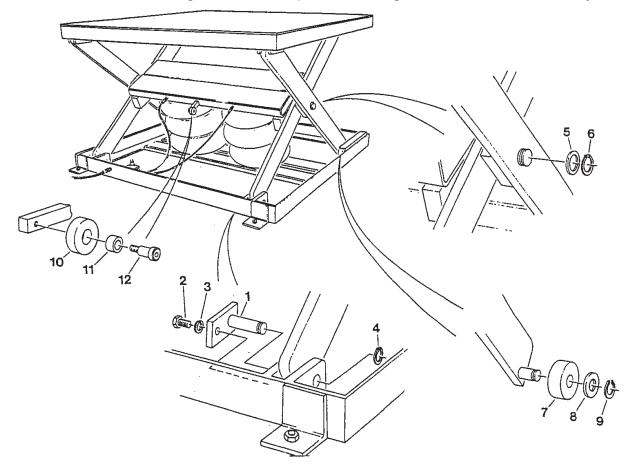
7.2 Routine Inspection and Maintenance

All routine inspection maintenance should be performed on a monthly basis.

⚠ WARNING

The maintenance device and pin must be installed on the lift while maintenance is being performed. Contact Presto-ECOA Lifts for the recommended parts, if the yellow maintenance device is not available.

- 1. With the lift unloaded and in the fully raised position, check the pneumatic system for leaks.
 - Check all fittings, lines and components for escaping air.
 - In addition to listening for an audible hissing, perform a soap bubble test.
 - If a leak exists, repair immediately.
- 2. Inspect the following:
 - · Check snap ring and shield on rollers. Replace if damaged.
- 3. Check Air Stroke Actuator™ for any signs of wear, chafing, nicks, splits, etc. Replace as specified in **Removal and Installation of Air Stroke Actuator** section.
- 4. Check rollers for signs of wear. Replace if damaged. Clear roller track of any debris.



- 5. Check roller snap ring and shield. Replace if damaged.
- 6. Tighten all visible nuts and bolts.
- 7. Bearings on all lifts are permanently lubricated and do not require servicing.

- 8. Check all lag anchors to make sure they are tight.
- 9. Rotate the turntable (if equipped) by hand to be sure the table rotates freely without binding or unusual sounds.
- 10. Inspect for loose/ damaged connections and nuts/bolts.

7.3 Troubleshooting Maintenance

All servicing should be done by qualified personnel who have read and understand all of the information provided in the Operating, Installation and Maintenance sections of this manual.

LIFT MOVING SLOWLY OR NOT AT ALL

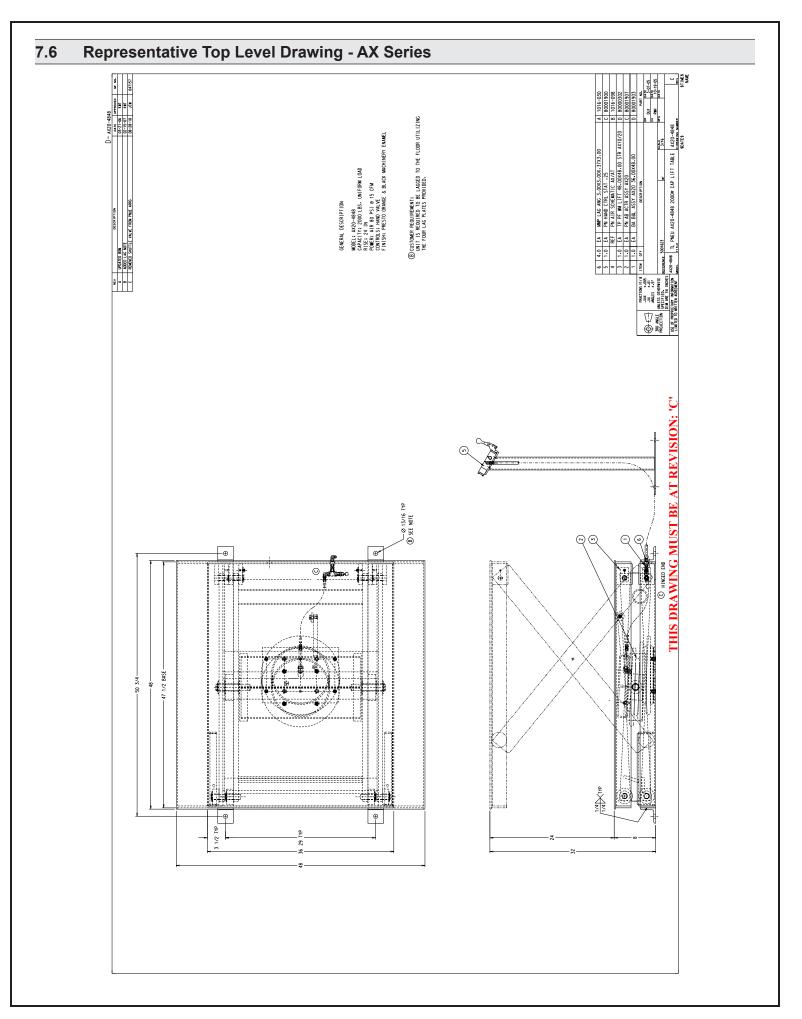
- Check for obstructions.
- 2. Check for incoming air supply. Both PSI and CFM.
- 3. Check circuit for air leaks, loose connection, damaged hose, etc. Listen for air escaping.
- 4. Is lift overloaded? Check capacity.
- 5. Check control valve for sticking or jamming, repair or replace.

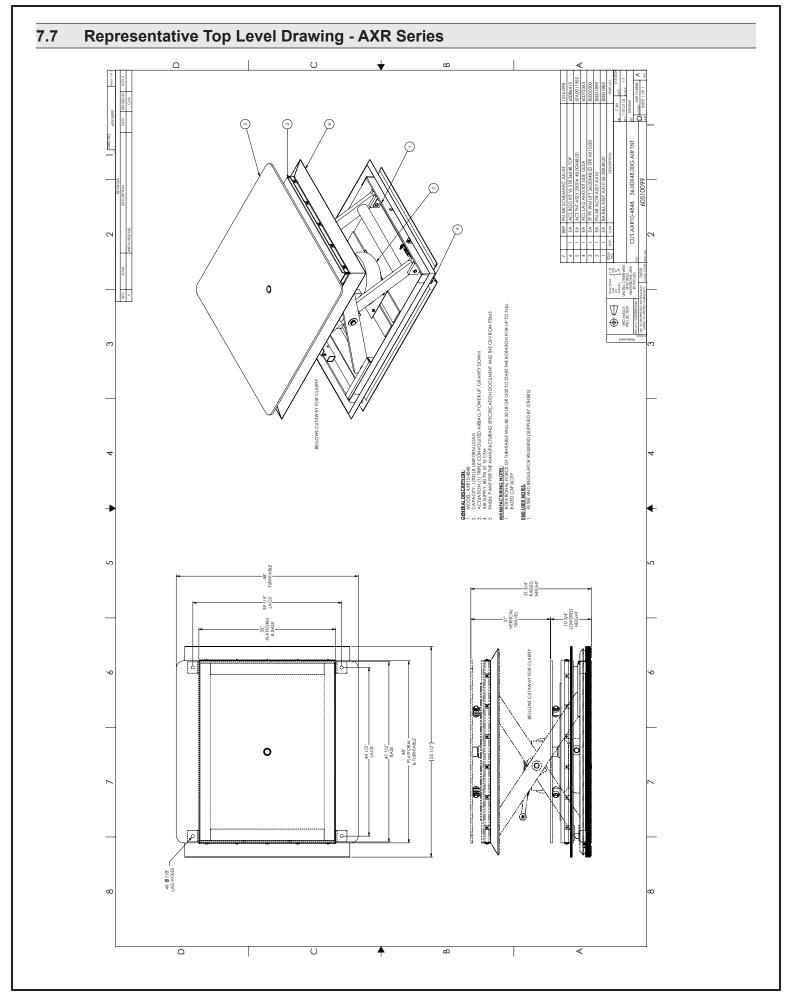
7.4 Removal and Installation of Air Stroke Actuator

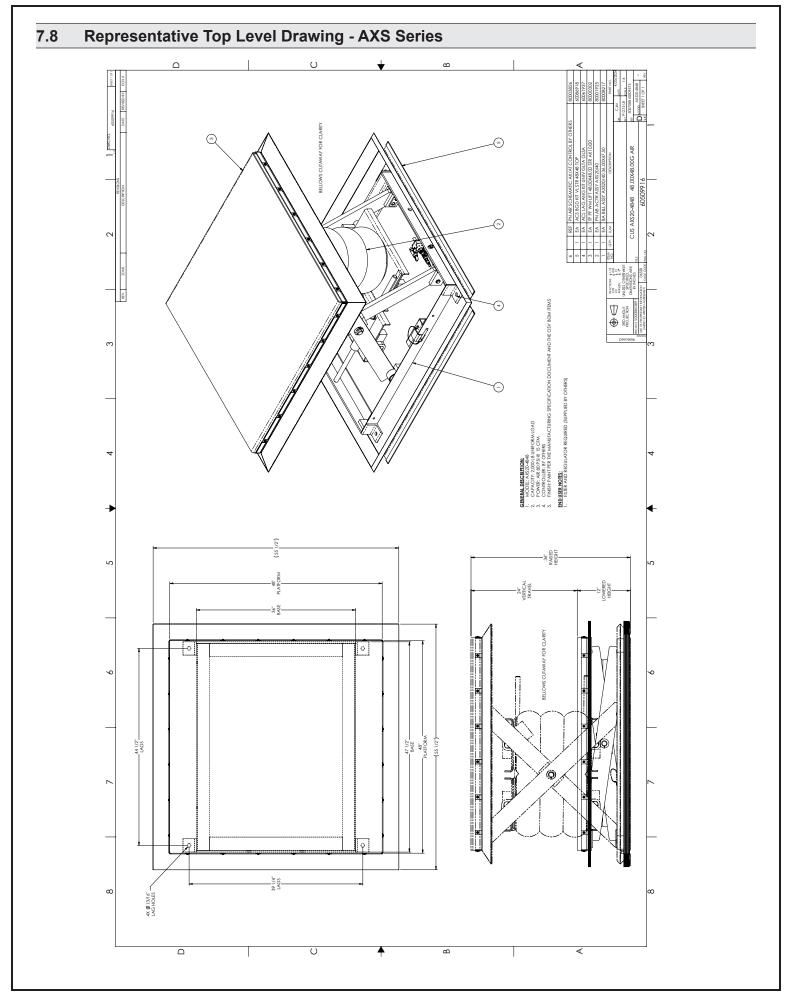
- Engage the maintenance device and be sure air supply is locked out. See Engaging Maintenance Device and Recommended Considerations - Lockout/Tagout Procedures (LOTO) sections.
- 2. Remove the braided hose (20) and brass nipple (19).
- 3. Remove the four 3/8-16 nuts (25) with a 9/16 deep socket. The Actuator will collapse as the last nut is removed.
- 4. Remove the four 3/8-16 hex head bolts (22) and washers (21). The Actuator will become free of the lift and may be removed.
- 5. Remove the four 3/8-16 (26) hex head bolts and lock washers (23) holding the plate (28) to the Actuator.
- 6. Unscrew the elbow (6).
- 7. Finally remove the four studs (24) from the Actuator end plates.
- 8. Installation is the reverse of removal. Be sure to use a Teflon sealant on all pneumatic connections. Pump must be replaced.

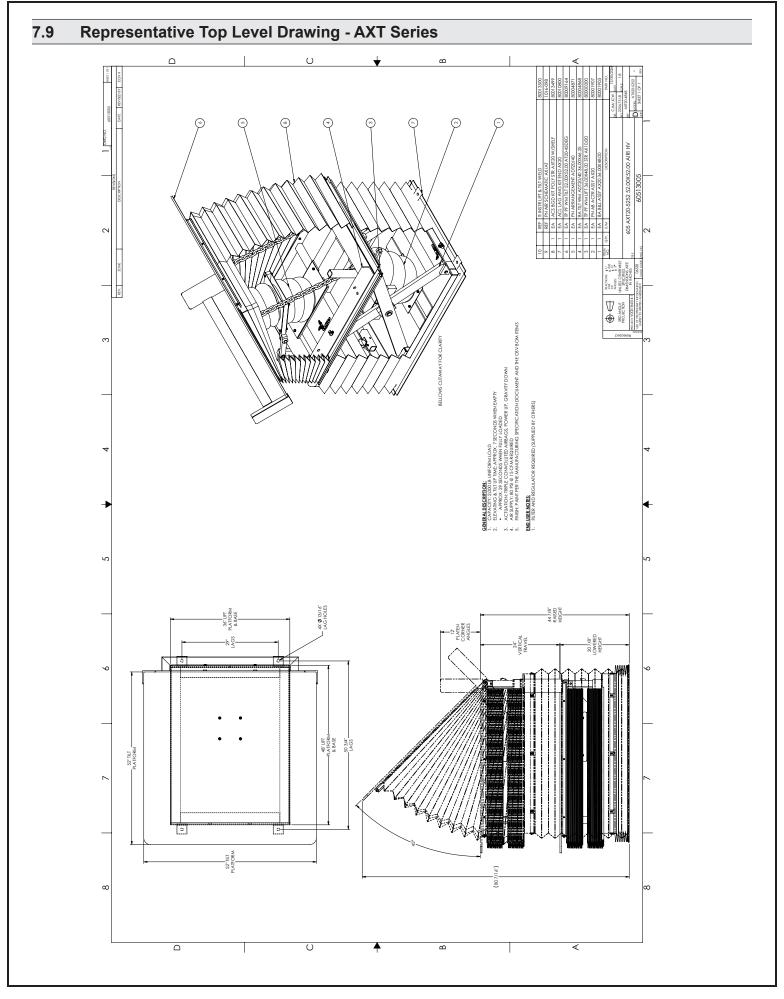
7.5 Removal and Installation of Hand/Foot Control

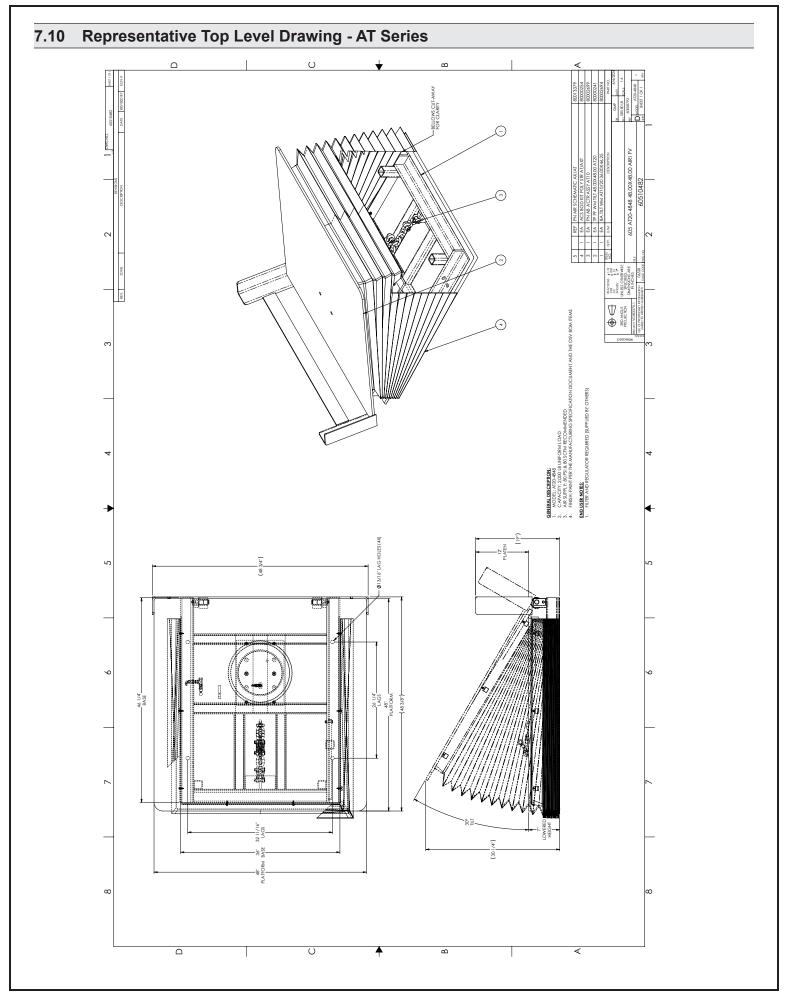
- Engage the maintenance device and be sure air supply is locked out. See Engaging Maintenance Device and Recommended Considerations - Lockout/Tagout Procedures (LOTO) sections.
- 2. Disconnect hose (8) and supply line.
- 3. Remove [2] plugs (5), [1] muffler (4), elbow (6).
- 4. Remove (2) securing nuts/bolts and remove valve from stand if a hand valve.
- 5. Installation is the reverse of removal. Be sure to use Teflon sealant on all NPT pneumatic connections.











7.11 Ordering Replacement Parts

Standard parts may be returned with a 20% restocking fee or \$35.00 net, whichever is greater. Modified or custom-engineered parts are not returnable. Unfortunately, due to potentially concealed damage, all sales of electrical assemblies are final.

7.11.1 Quality Issues

Should you feel there is a quality problem, please contact the seller to ask questions and gather information on how to rectify the issue. Presto-ECOA Lift reserves the right to determine potential credits, as a result of factory defects, based on its inspection of the merchandise.

7.11.2 General

All products shipped from our factory have passed Quality Assurance inspection and testing. The carrier of choice has signed for, and accepted the product in new working condition. The customer should inspect to ensure it is not received damaged, has no concealed damage or is not incomplete. Parts orders are determined to be complete based upon Presto-ECOA inspection sheets and carrier shipping weights.

Presto Lifts has carefully chosen the components in your lift to be the best available for the purpose. Replacement parts should be identical to the original equipment. Presto Lifts will not be responsible for equipment failures resulting from the use of incorrect replacement parts or from unauthorized modifications of the machine.

Presto Lifts will gladly supply you with replacement parts for your Presto Lifts machine. With your order, please include the model number and the serial number of the lift. You can find these numbers on the name plate. When you are ordering parts for a cylinder, also include the cylinder number. This is stamped on the base of the cylinder housing.

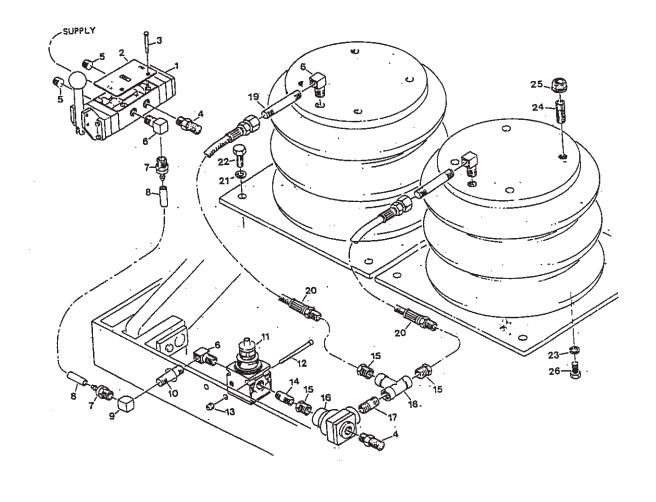
To order replacement parts, please call the Parts Department.

- Parts are shipped subject to the following terms:
- FOB factory
- Returns only with the approval of our parts department.
- Payment net 30 days (except parts covered by warranty).
- Freight collects (except parts covered by warranty).
- The warranty for repair parts is 30 days from date of shipment.

Parts replaced under warranty are on a "charge-credit" basis. We will invoice you when we ship the replacement part, then credit you when you return the worn or damaged part, and we verify that it is covered by our warranty. Labor is not covered under warranty for Parts orders.

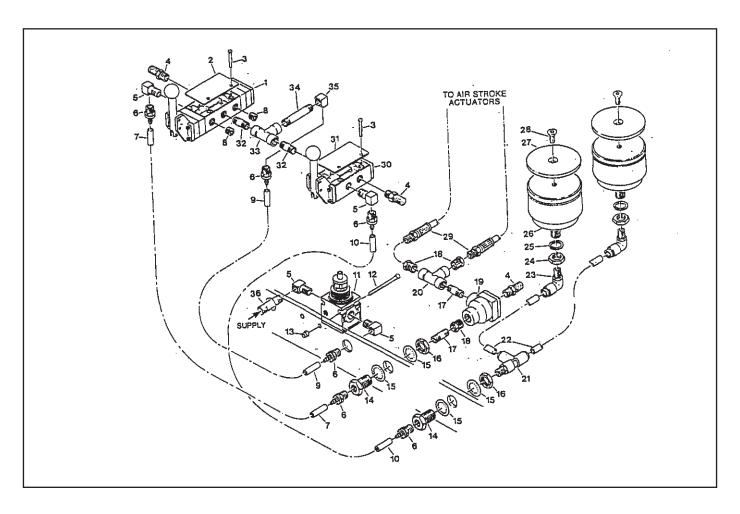
7.11.3 Pneumatic Components Replacement

| Location | Description | AX10 | AX20 | AX40 | | Location | Description | AX10 | AX20 | AX40 |
|----------|-----------------|------|------|------|---|----------|--------------------|------|------|------|
| 1 | Pneumatic Valve | 1 | 1 | 1 | | 14,17 | Nipple, Brass | 1 | 1 | 1 |
| 2 | Nameplate | 1 | 1 | 1 | 1 | 15 | Reducer | 2 | 2 | 3 |
| 3 | Screw | 2 | 2 | 2 | 1 | 16 | Quick Exhaust | 1 | 1 | 1 |
| 4 | Muffler | 2 | 2 | 2 | 1 | 18 | Tee Female | - | - | 1 |
| 5 | Plug-Oil Tank | 2 | 2 | 2 | 1 | 19 | 3" Brass Nipple | - | 1 | 2 |
| 6 | Elbow, Street | 3 | 3 | 4 | 1 | 20 | SS Hose Assy. | 1 | 1 | 2 |
| 7 | Fitting | 2 | 2 | 2 |] | 23 | Washer, Lock | 8 | 8 | 16 |
| 8 | Hose | 1 | 1 | 1 |] | 24 | Screw | 4 | 4 | 8 |
| 9 | Elbow | 1 | 1 | 1 | 1 | 25 | Nut, Self Lock | 4 | 4 | 8 |
| 10 | Nipple, Brass | 1 | 1 | 1 |] | 26 | Screw 3/8" - 16x | 8 | 8 | 16 |
| 11 | Regulator | 1 | 1 | 1 |] | 27 | Airstroke Actuator | - | 1 | 2 |
| 12 | Screw | 2 | 2 | 2 | | 27 | Airstroke Actuator | 1 | - | - |
| 13 | Nut, Machine | 2 | 2 | 2 | | 28 | Sub Plate Air | 1 | 1 | 2 |



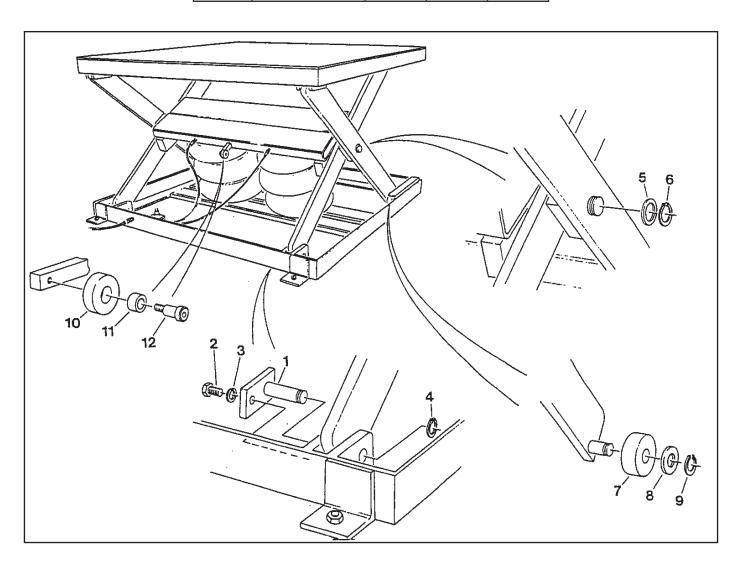
7.11.4 Turntable Positioning Lock Components Replacement

| Location | Description | AXR10 | AXR20 | AXR40 | | Location | Description | AXR10 | AXR20 | AXR40 |
|----------|-------------------|-------|-------|-------|---|----------|---------------------|-------|-------|-------|
| 1 | Pneumatic Valve | 1 | 1 | 1 | | 19 | Quick Exhaust | 1 | 1 | 1 |
| 2 | Nameplate | 1 | 1 | 1 | 1 | 20 | Female Fitting 3/8" | 1 | 1 | 2 |
| 3 | Screw | 2 | 2 | 2 |] | 21 | Tee Male | 1 | 1 | 1 |
| 4 | Muffler | 2 | 2 | 2 |] | 22 | Tubing | 2 | 2 | 2 |
| 5 | Elbow, Street | 3 | 3 | 4 |] | 23 | Elbow, 90 degree | 2 | 2 | 2 |
| 6 | Fitting | 2 | 2 | 2 | | 24 | Nut, 5/8" | 2 | 2 | 2 |
| 7 | Hose | 1 | 1 | 1 | 1 | 25 | Washer, Lock | 2 | 2 | 2 |
| 8 | Plug | 2 | 2 | 2 | 1 | 26 | Air Positioner | 2 | 2 | 2 |
| 10 | Hose | 1 | 1 | 1 | | 27 | Pad Positioning | 2 | 2 | 2 |
| 11 | Regulator | 1 | 1 | 1 | 1 | 28 | Screw | 2 | 2 | 2 |
| 12 | Screw | 2 | 2 | 2 |] | 29 | SS Hose Assembly | 1 | 1 | 1 |
| 13 | Nut, Machine | 2 | 2 | 2 |] | 30 | Valve, Hand 2 Pts. | 1 | 1 | 1 |
| 14 | Bulkhead Fitting | 2 | 2 | 2 |] | 31 | Nameplate | 1 | 1 | 1 |
| 15 | Bulkhead Fitting | 4 | 4 | 4 | | 32 | Brass Nipple 1/4" | 2 | 2 | 2 |
| 16 | Bulkhead Fitting | 2 | 2 | 2 | | 33 | Female Tee 1/4" | 1 | 1 | 1 |
| 17 | Brass Nipple 3/8" | 1 | 1 | 1 | | 35 | El-Female | 1 | 1 | 1 |
| 18 | Reducer | 2 | 2 | 3 | | 36 | Brass Nipple | 2 | 2 | 2 |



7.11.5 Mechanical Components Replacement

| Location | Description | AXR10 | AXR20 | AXR40 |
|----------|---------------------|-------|-------|-------|
| 1 | Pin Retain Assembly | 4 | 4 | 4 |
| 2 | Screw 1/4" | 4 | 4 | 4 |
| 3 | Washer, Lock | 4 | 4 | 4 |
| 4 | Ring, External | 4 | 4 | 4 |
| 5 | Spacer | 2 | 2 | 2 |
| 6 | Retaining Ring | 2 | 2 | 2 |
| 7 | Roller | 4 | 4 | 4 |
| 8 | Washer, 1" ID | 4 | 4 | 4 |
| 9 | Rings, Lock | 1 | 1 | 1 |
| 10 | Bearing, Radial | 1 | 1 | 1 |
| 11 | Bronz, Center | 1 | 1 | 1 |
| 12 | Screw, Shoulder | 1 | 1 | 1 |



TECH SHEET

Technical Tips To Help You And Your Customers

STRUCTURAL

TECH SHEET NO. S-13

DATE ISSUED 12/29/98 DATE REVISED 04/6/15

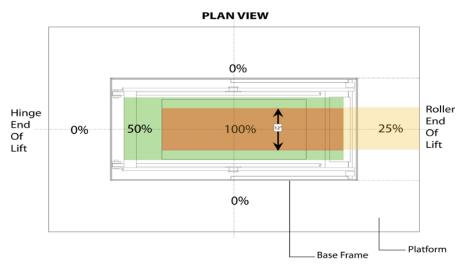
UNDERSTANDING OFF-CENTER LOADING

End and side axle load ratings on scissors lifts are static ratings. The ratings are based on the lift sustaining the load while the lift is static (not moving). The ratings are <u>not</u> intended to be applied to a lift that is dynamic [raising or lowering]. This paper deals with the considerations of off-center or eccentric loads that are on the lift <u>while it is moving</u>.

Scissors lifts react poorly to eccentric or off-center loads that are on the platform while the lift is moving. The enormous stresses introduced into the legs by off-center loads will dramatically shorten the life of the components and the condition will raise the long-term maintenance costs. It is somewhat comparable to loading all the passengers on one side of a bus and driving 100,000 miles. All the components on loaded side will wear at a <a href="https://link.piperscience.org/link.piperscience.or

Off-center loads to the side* of the platform are much more of a problem than loads on the end** of the platform. This is because of the nature of the scissors leg assembly. The load on the ends of the legs puts them in bending and the legs proportionately share the load. Side loads also create bending, but the load is <u>not</u> shared and any resulting give or deflection in the leg assembly, <u>relative to the opposite leg assembly</u>, causes the entire leg set to track and run out-of-square.

Understand that all loads, regardless of their overall size or shape, have a c/g (center of gravity). Where that c/g is positioned is critical. Therefore, wherever possible, loads (c/g) should be centered over the baseframe both in width and in length. When eccentric loads are absolutely unavoidable, they should be limited to no more than the values shown on the chart below.



This chart illustrates the extreme limits of where a load's c/g could be placed on a lift.

The percentages indicate how much of the lift's rated capacity could in that zone.

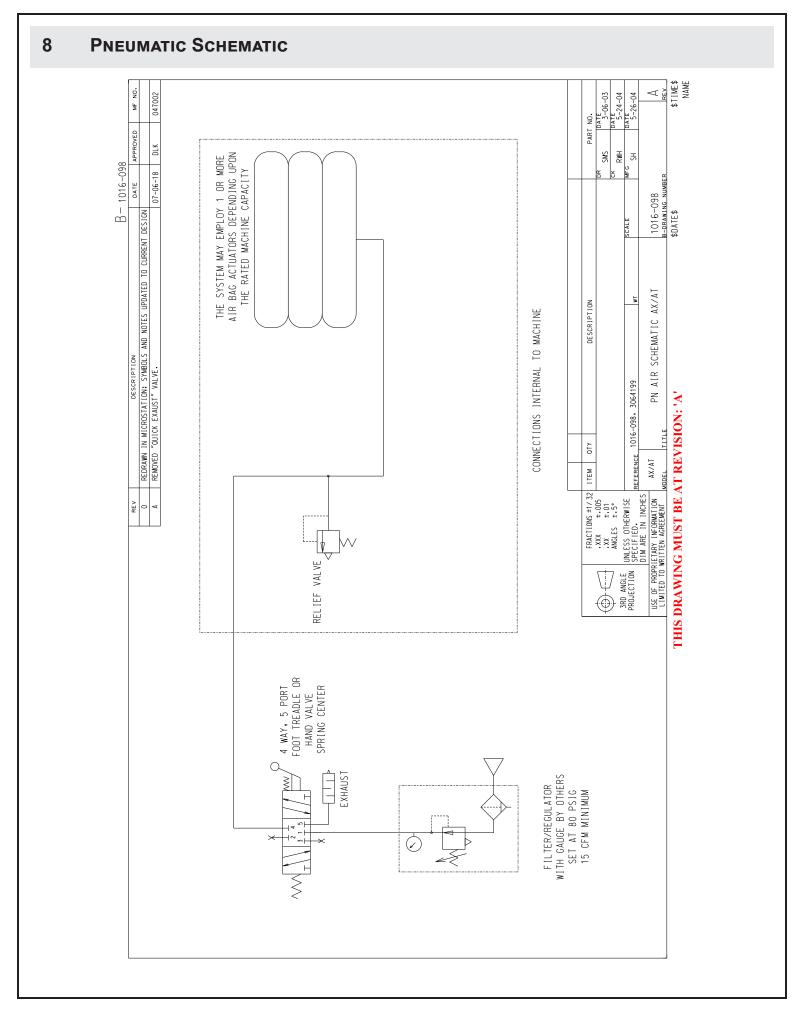
For example, if a lift had a 2,000 lbs. lifting capacity rating, the c/g of a 2,000 lbs. load must remain in the darkest shaded area. If the c/g of a load were to be placed in the 25% shaded area the maximum load must be reduced to 500 lbs. (25% of 2,000 = 500).

Many times an off-center load can be "equalized" by a simple counterweight. For example, the offset weight of the drive on a powered roller conveyor can be equalized or centered over the baseframe of the lift with a counterweight attached to the lift platform.

Our foremost concern with any application is the safety of personnel working around the lifting equipment. We also want the lift to provide long service and require little maintenance. These are values synonymous with the Presto Lifts name. Eccentric load conditions must be reviewed by Presto Lifts prior to the quotation/sale.

39

- * The side of the lift platform is the edge that is parallel to the scissors legs.
- ** The end of the lift platform is the edge that is perpendicular to the scissors legs.



9 WARRANTY & CONTACT INFORMATION

Presto Lifts warrants this product to be free from defects in material or workmanship for the duration of the warranty period. Warranty periods vary and begin on the date of shipment. For specific warranty information, contact Presto Lifts with the machine's serial number.

Any claim for breach of this warranty must be received in writing by Presto Lifts within the warranty period. Warranties shall not cover failure or defective operation, caused by misuse, misapplication, negligence or accident, exceeding recommended capacities, or any alteration or repair of the item purchased which has not been authorized by Presto Lifts. Except as set forth herein, Presto Lifts makes no other warranties, express or implied, including THE WARRANTIES OF MERCHANTABILITY AND OF FITNESS FOR A PARTICULAR PURPOSE, all of which ARE HEREBY EXCLUDED.

Presto Lifts meets the labeling requirements of California's Proposition 65. Presto Lifts makes no warranty or representation with respect to the compliance of any product with other State or local safety or product standard codes and any failure to comply with such codes shall not be considered a defect of material or workmanship under this warranty. Presto Lifts shall not be liable for any direct or consequential damages arising out of such non-compliance.

Presto Lifts' obligations under any warranty or for any other damages which may arise under any sale, agreement, or contract, are limited to the replacement or repair of defective components at its factory or another location at Presto Lifts' discretion. This is buyer's sole remedy under any such warranty, sale, agreement, or contract. Presto Lifts will not be liable for consequential, incidental, exemplary, or punitive damages of any kind resulting from a breach of any warranty that it has provided or for breach of any term of any sale, agreement, or contract. Any warranty may be altered only in writing by Presto Lifts.

All commodities, software, or technology purchased from Presto Lifts are subject to the export and re-export control laws and regulations of the United States, including but not limited to the Export Administration Regulations ("EAR") and Department of the Treasury Office of Foreign Asset Controls ("OFAC") Regulations. Presto Lifts expects all distributors and customers to comply with these laws and regulations. Without limiting the foregoing, the distributor/customer cannot, without proper authorization from the applicable United States Government Agency, export, re-export, or transfer any commodity, software, or technology purchased from Presto Lifts, either directly or indirectly, to any entity, country, or national of any country in breach of such laws and regulations. Furthermore, Presto Lifts expects that the distributor/customer shall indemnify and hold harmless Presto Lifts from and against any claim, proceeding, action, fine, loss, cost and damages arising out of or relating to any noncompliance with export control regulations by distributor/customer, and distributor/customer are expected to compensate Presto Lifts for all losses and expenses resulting thereof, unless such noncompliance was clearly not caused by fault of the distributor/customer.

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