

SOUTHWORTH

PalletPal Order Picker Owner's Manual



Model: _____
Serial Number: _____
Date placed in
service: _____

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**This label (part # 10095524)
is required by California law.
For more information visit
www.P65Warnings.ca.gov.**

1. Introduction

1.1 Responsibilities of Owner and Users

Basic Principles - Owners and users shall apply sound principles of safety, training, inspection, maintenance, and 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. 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 manufacturers 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. Safety devices (if applicable)
2. Loose or missing parts
3. Nameplates, precautionary and instructional markings, and/or labeling
4. Guarding system (if applicable)
5. 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.

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. **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.
2. **Maintaining overhead clearance** - The operator shall ensure that adequate clearance is maintained from overhead obstructions and energized electrical conductors and parts.
3. **Point of Operation** - The operator shall not place any part of their body under the platform.
4. **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.
5. **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.
6. **Capacity limitation** - Rated capacity shall not be exceeded when loads are transferred to the machine.
7. **Work area** - The operator shall ensure the area surrounding the machine is clear of personnel and equipment before lowering the load enclosure.
8. **Securing the machine** - The operator shall comply with the means and procedures provided to protect against use by an unauthorized person(s).
9. **Altering safety devices** - Safety devices shall not be altered or disabled.
10. **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.
11. **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.
12. **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.

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.

2.1 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);

2.2 Signal Words



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



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



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

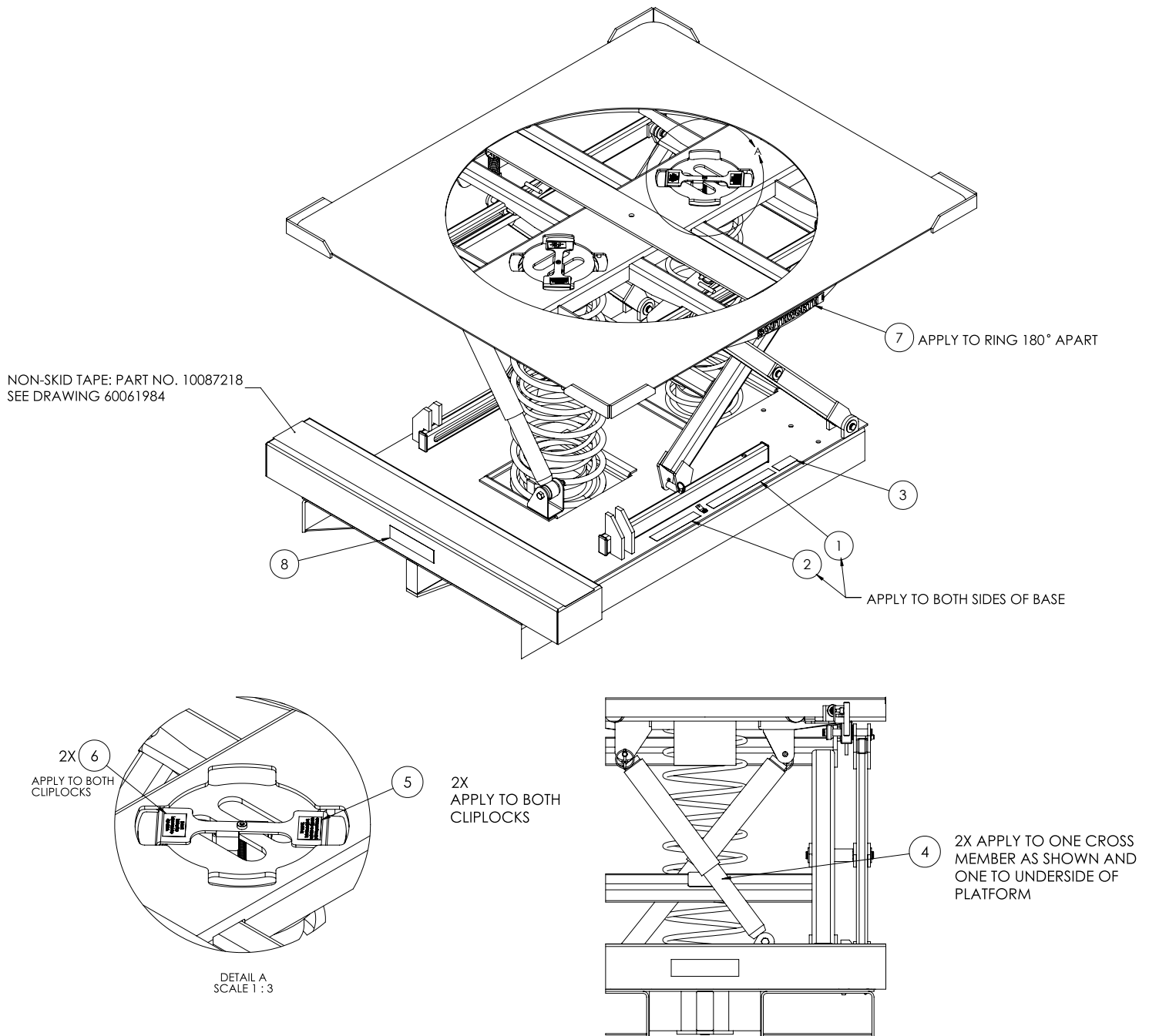


NOTICE Indicates information considered important, but not hazard-related (e.g., messages relating to property damage).

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 Placement Diagram



8	1	LD DCL 1.50X6.00 FORK ENTRY - LIFT HERE	10039033
7	2	BK-LD DCL 1.00X9.00 SOUTHWORTH	5900191
6	2	LD DCL 1.75X1.00 TO LOCK	10059853
5	2	LD DCL 1.75X1.00 TO UNLOCK	10059854
4	2	LD DCL 2.00X3.00 SOUTHWORTH SERIAL ID BL	10079929
3	1	LD WARNING CANCER AND REPRODUCTIVE	10095524
2	2	LD DCL 1.00X6.00 A DANGER TO AVOID BODIL	10089458
1	2	LD DCL 1.00X8.50 TO AVOID BODILY INJURY,	10089457
ITEM NO.	QTY.	DESCRIPTION	PART NO.

4. Setup

The PalletPal Order Picker is shipped with the springs installed. It may be necessary to remove springs to achieve a configuration appropriate for the intended load.



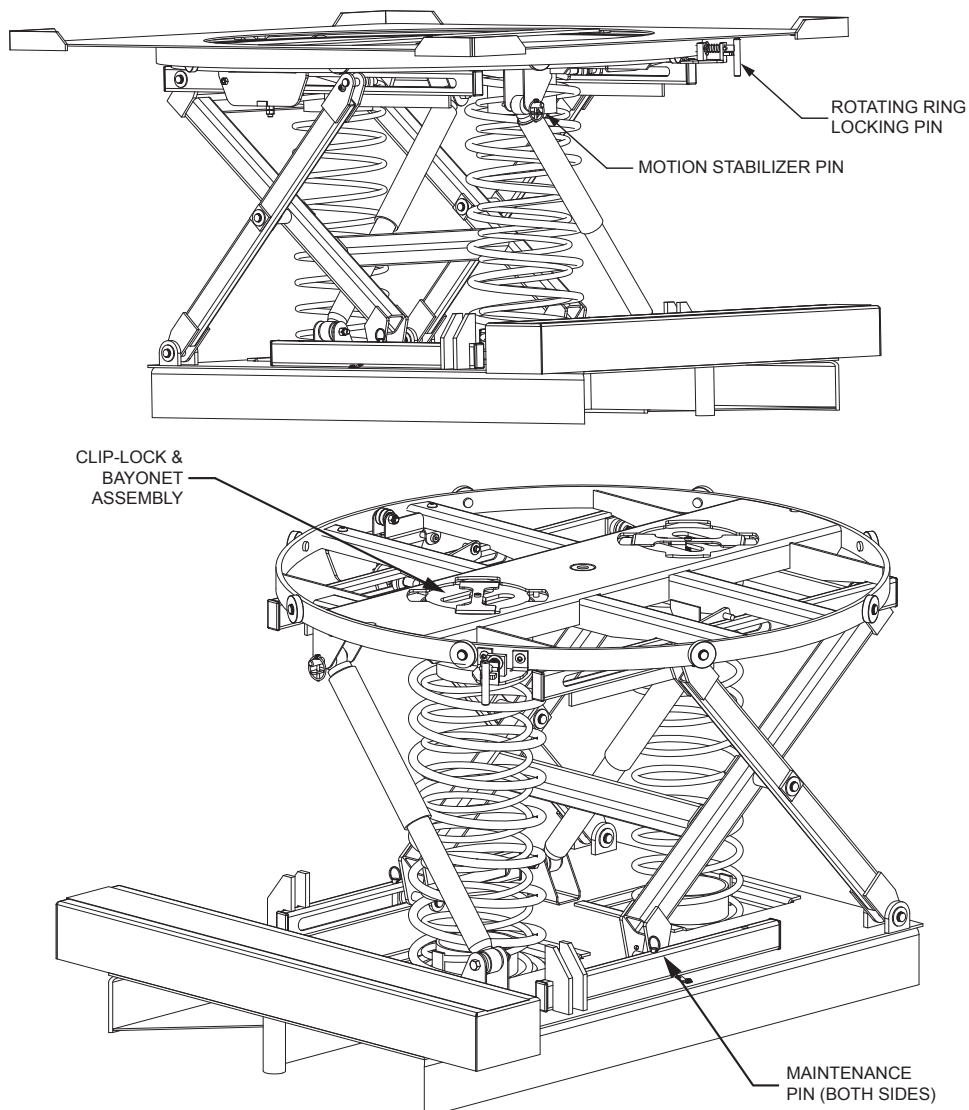
NOTICE

The platform is large and heavy. Two person lift is required.

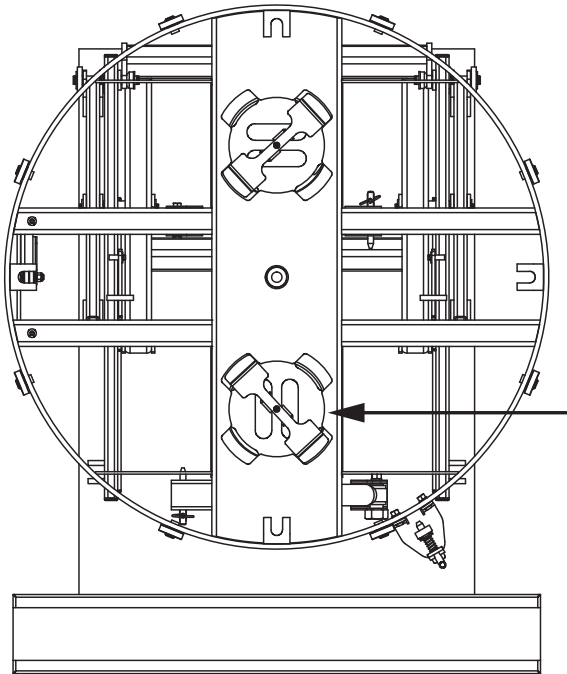
Take care not to lose or damage the center pivot washer when removing the platform.

4.1 Installing & Removing the White Springs

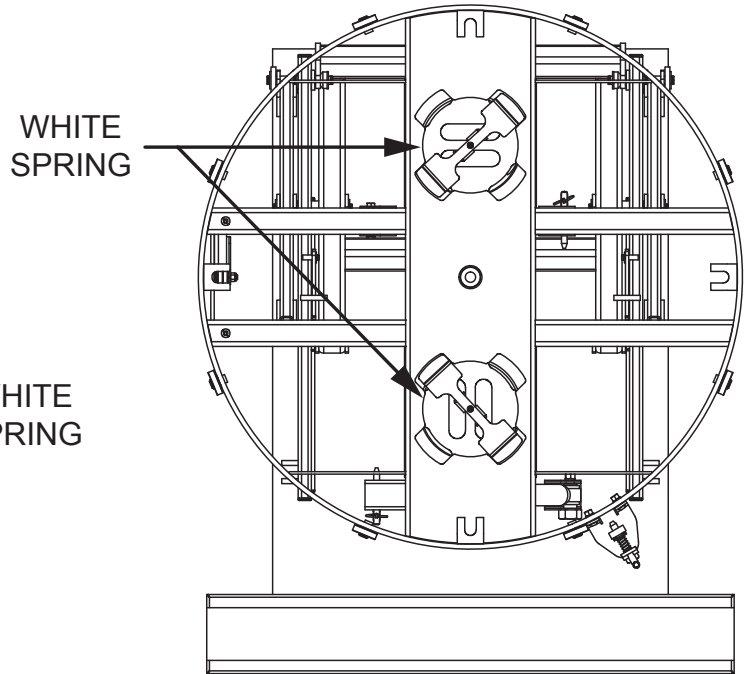
1. Release the rotating ring locking pin.
2. Remove the turntable by lifting straight up; set aside.
3. Insert the maintenance pins into the holes in the middle of the lower roller tracks, both sides.
4. Lift up on the black clip-lock located on the yellow bayonet and rotate the bayonet assembly counter-clockwise. Lift the assembly out and set aside.
5. Insert or remove the white spring through the bayonet opening.
6. Replace the bayonet.
7. Repeat steps five through seven for the second spring.



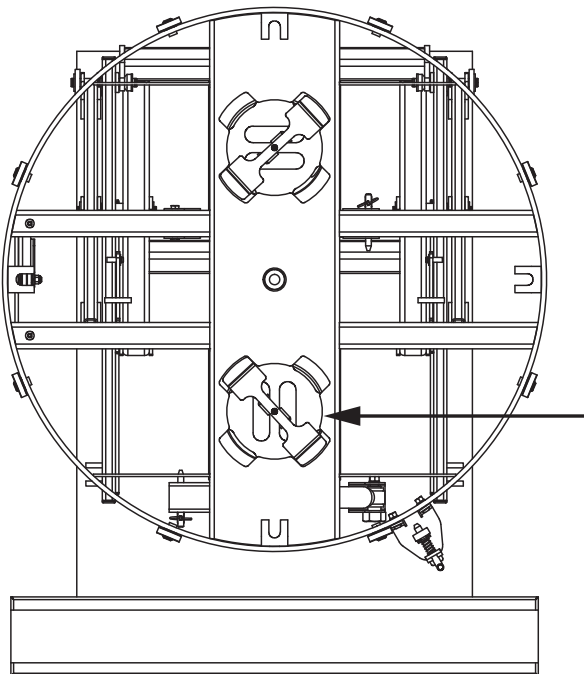
4.2 Spring Combinations



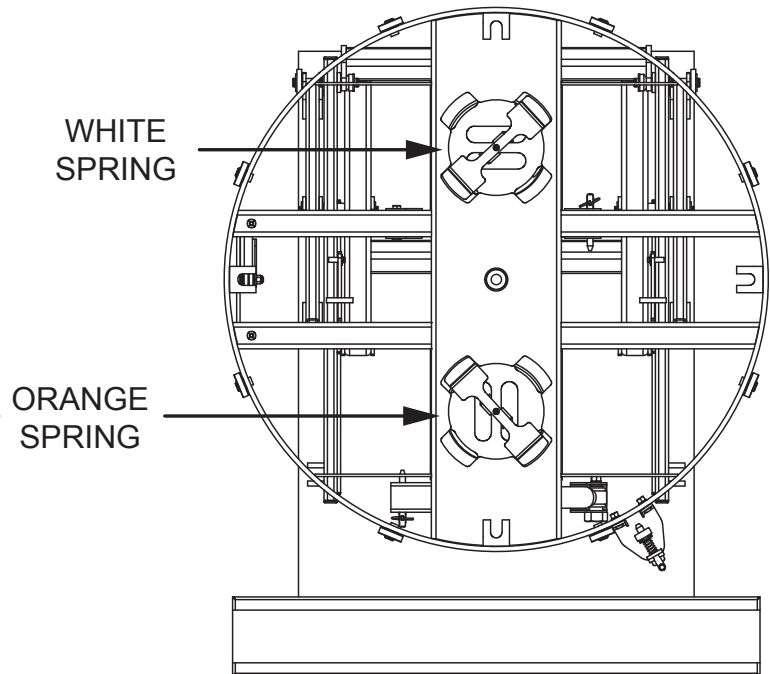
ONE WHITE SPRING
UP TO 500 LB.
(200 LB. TO FULLY COMPRESS)



TWO WHITE SPRINGS
UP TO 1,000 LB.
(500 LB. TO FULLY COMPRESS)



ONE ORANGE SPRING
UP TO 1,600 LB.
(800 LB. TO FULLY COMPRESS)



ONE ORANGE & ONE WHITE SPRING
UP TO 2,200 LB.
(1,100 LB. TO FULLY COMPRESS)

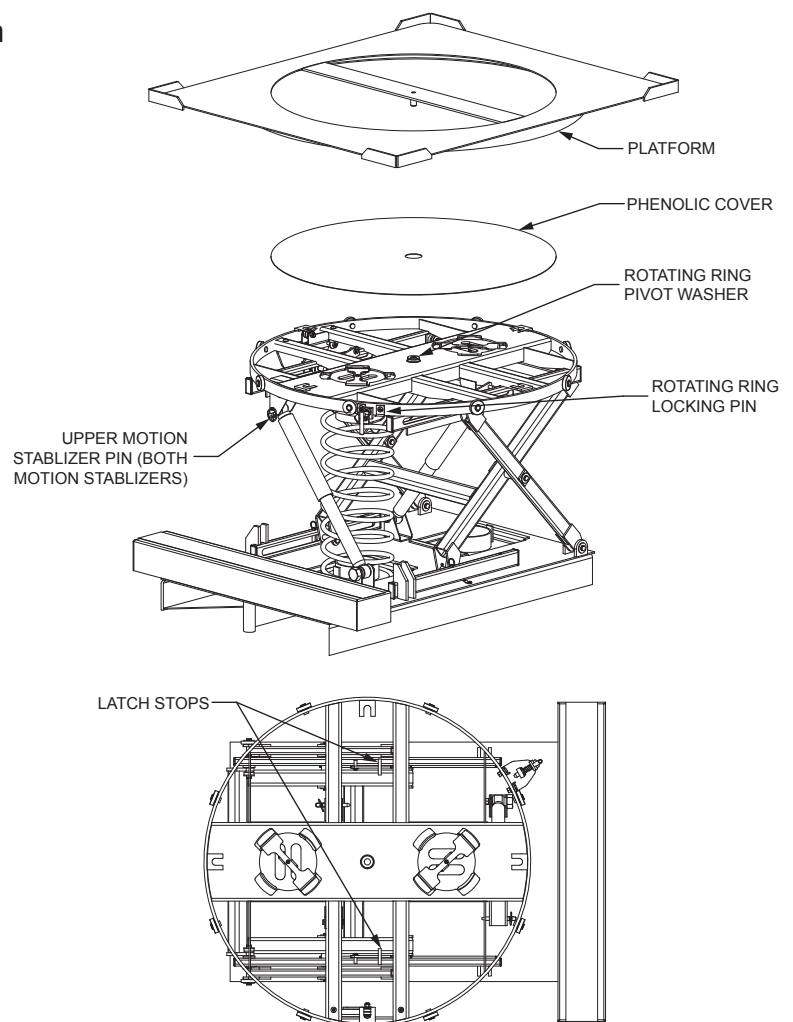
4.3 Removing the Orange Spring

1. Release the rotating ring locking pin.
2. Remove the platform by lifting it straight up off of the machine.

CAUTION The platform is large and heavy. Two person lift is required.

NOTICE Take care not to lose or damage the center pivot washer when removing the platform.

3. Remove the Phenolic Disc Cover by lifting it straight up off of the machine.
4. Remove the upper motion stabilizer pins from both motion stabilizers. Carefully lay the motion stabilizers on the base frame. Replace the pins into the bracket and secure to prevent them from being lost.
5. With two people, press down on the platform until the upper roller pins are no longer in contact with the latch stops. Continue to hold the platform down.
6. Lift and hold the latch stops (both sides).
7. Slowly and carefully allow the platform to raise until it reaches the fully raised position.
8. Insert the maintenance pins (both sides) into the holes located closest to the hinge end.
9. Grasp the spring by the second or third coil from the top. Compress the spring enough to tilt the top of the spring out of the spring pocket.
10. Remove the spring from the base frame.
11. With two people lift up on the platform enough so that the maintenance pins can be removed.
12. While one person continues to hold the platform elevated, remove the maintenance pins.
13. With two people, slowly and carefully lower the platform to the fully lowered position.



5. Operation

⚠ DANGER

To avoid death or serious injury:

- Do not enter under the platform unless the platform is secured against lowering.
- Do not sit, stand, or ride on the platform.
- Keep hands, feet, and loose clothing away from moving parts.
- Do not push/roll a load off the edge of the platform. This may cause the machine to rebound quickly and could lead to injury or damage to the machine.
- The platform should always be loaded and unloaded uniformly in even layers. Uneven loading can cause the load to become unstable and could lead to injury. Uneven loading can cause premature wear or damage to the machine.
- When rotating the load, do not grab the rotator ring or hands/fingers may be caught in the moving parts and you may be injured.

NOTICE

Do not drop load onto the platform or the machine may be damaged.

Do not use this machine with broken pallets. Boards and/or nails in broken pallets may catch on the platform frame and cause damage.

Do not exceed the rated capacity.

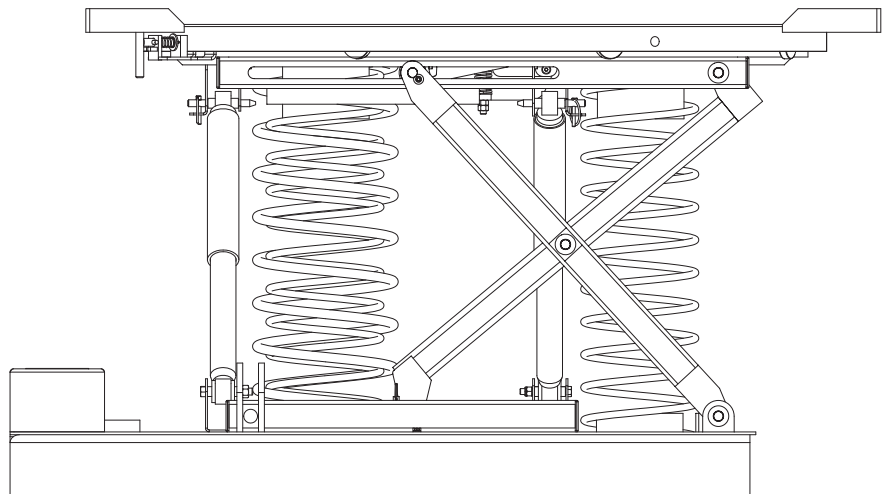
The platform should always be loaded and unloaded uniformly in even layers. Uneven loading and unloading may cause the load to become unstable and could lead to injury. Uneven loading can cause premature wear or damage to the machine.

5.1 Lifting the Machine

Insert forks of the order picker into the fork pockets. Forks are to be inserted into the step end of the base.

Verify the order picker clamp is properly clamped onto the wooden block and the machine is secure.

FORK ENTRY FROM STEP
SIDE OF BASE



5.2 Loading & Unloading

Manual Loading:

When manually loading, always load the pallet uniformly in even layers. As the pallet is loaded the platform will lower, maintaining the proper working height. Do not reach over the load. Instead, rotate the load by pushing or pulling on the pallet.

Manual Unloading:

When manually unloading, always unload the pallet uniformly in even layers. As the pallet is unloaded the platform will raise, maintaining the proper working height. Do not reach over the load. Instead, rotate the load by pushing or pulling on the pallet.

Loading with a fork truck or stacker:

When loading with a fork truck or stacker, lower the pallet onto the platform slowly until the springs are fully supporting the load or the springs are fully compressed. Only uniform loads should be placed on the platform.

Unloading with a fork truck or stacker:

When unloading with a fork truck or stacker raise the pallet off of the platform slowly until the springs are no longer supporting the load and the pallet is clear of the platform/turntable ring.

NOTICE

Do not drive the fork truck/stacker into the base frame or the machine may be damaged.

Do not slide the pallet onto/off of the platform or the machine may be damaged.

6. Maintenance & Repair



Do not enter under the platform unless the platform is secured against lowering.

Remove load before performing any maintenance.

All inspections may be performed with the springs installed. Springs must be removed before performing any repair requiring disassembly of the leg assembly.

See “Components” section for location of inspection points.

6.1 Periodic Maintenance

Before each use inspect the machine for damage or wear. If damage or wear is found remove the machine from service and repair before using.

6.1.1. Weekly

- Inspect upper and lower rollers, roller pins and bushings, and roller tracks. Replace as necessary.
- Inspect upper and lower hinge pins and bushings. Replace as necessary.
- Inspect motion stabilizers for signs of leaking and/or damage. Replace as necessary.
- Inspect center pins and bushings. Replace as necessary.
- Inspect rotator ring, rotator ring washer, and bearings. Ensure the rotator rings rotates smoothly without binding. Repair or replace bearings as necessary.
- Inspect base frame, platform, and leg set for wear or damage.
- Inspect wood block that is used to clamp the machine into the order picker. Block must be free of cracks, splintering, and large gouges. Replace as necessary. (Block not present on all machines).

6.1.2. Every Six Months

- Perform weekly maintenance
- Apply dry PTFE lubricant to all pivot points, rollers, and bearings.

6.2 Ordering Replacement Parts

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

Southworth offers replacement parts for your Southworth machine. With your order, please include the model number and the serial number of the machine.

To order replacement parts, please call the Parts Department. See Warranty & Contact Information section.

Parts are shipped subject to the following terms:

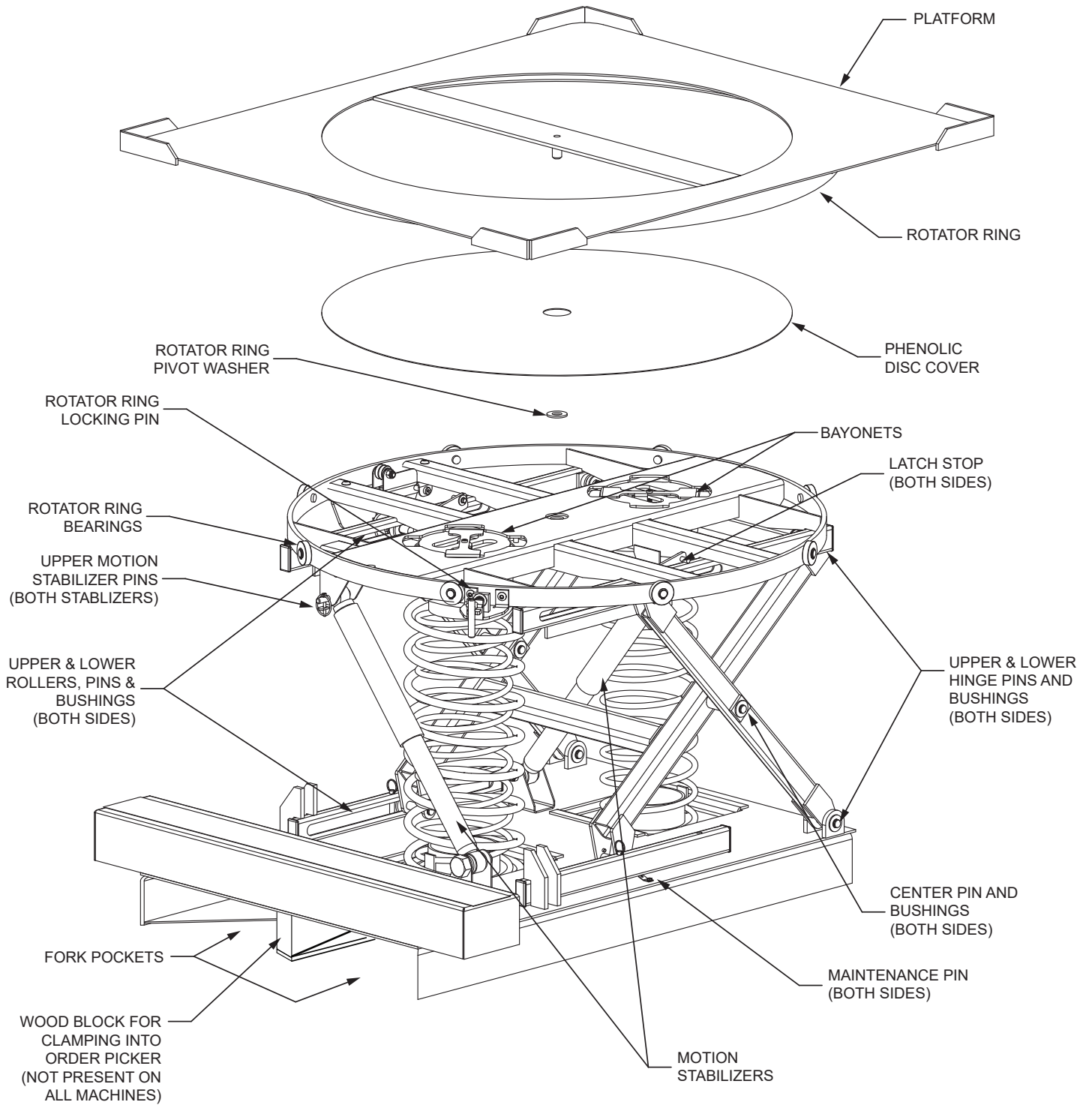
- FOB factory
- Returns only with the approval of our Parts Department.
- Payment net 30 days (except parts covered by warranty).
- Freight collect (except parts covered by warranty).
- The warranty for repair parts is 30 days from date of shipment.

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. Troubleshooting

Problem	Possible Cause	Check This
The unit lowers too easily (too early).	The spring combination may be too weak for the load.	Check the spring ratings. See Spring Selection Section.
The unit does not lower enough (too late).	The spring combination may be too strong for the load.	Check the spring ratings. See Spring Selection Section.
The top of the unit bounces.	The motion stabilizer may be damaged.	Check for leaks or dents. Replace if damaged.
Excessive "rumble" when the ring rotates	Wear or lack of lubrication to bearings under rotating ring.	Remove turntable, lubricate or replace bearings.
Uniform wear or metal flaking from underside of rotating ring.	Normal condition caused by work-hardening of metal.	No repair necessary. This will stop once the rotator ring wears in.

8. Components



9. Warranty & Contact Information

Southworth Products Corp. 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 Southworth Products with the machine's serial number.

Any claim for breach of this warranty must be received in writing by Southworth 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 Southworth. Except as set forth herein, Southworth 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.

Southworth's 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 Southworth's discretion. This is buyer's sole remedy under any such warranty, sale, agreement, or contract. Southworth 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 Southworth.

Southworth meets the labeling requirements of California's Proposition 65. Southworth 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. Southworth shall not be liable for any direct or consequential damages arising out of such non-compliance.

All commodities, software, or technology purchased from Southworth 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. Southworth 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 Southworth, either directly or indirectly, to any entity, country, or national of any country in breach of such laws and regulations. Furthermore, Southworth expects that the distributor/customer shall indemnify and hold harmless Southworth 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 Southworth for all losses and expenses resulting thereof, unless such noncompliance was clearly not caused by fault of the distributor/customer.

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