

PowerStak PPS2600-101AS PPS2600-125AS













Model: Serial Number: Date placed in service:

PRESTO LIFTS INC.

2 Hampshire Street, Suite 102 Foxborough, MA 02035 800.343.9322 | Fax 888.788.6496 service@prestolifts.com www.PrestoLifts.com

Ownerual



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	Introduction	6			
1.1	Responsibilities of Owner and Users	6			
1.2	Responsibilities of Operators				
2	SAFETY	10			
2.1	Safety Alert Symbols	10			
2.2	2.2 Signal Words				
2.3	2.3 Safety Devices				
2.3	.1 Electro-Magnetic Brake	13			
2.3	.2 Emergency Stop Control Button (E-STOP)	13			
2.3	3 , 1				
3	LABELING	14			
3.1	Label Locations	14			
3.2	Label Part Numbers and Images	15			
4	RECOMMENDED CONSIDERATIONS - LOCKOUT/TAGOUT PROCEDURES (LOTO)	18			
4.1	General				
4.1 4.2	General Best Practices	18			
		18			
4.2	Best Practices	18 18 18			
4.2	Best Practices	18 18 18 19			
4.2 4.3 5	Best Practices Additional Resources INITIAL SETUP.	18 18 18 19 20			
4.2 4.3 5 5.1	Best Practices Additional Resources INITIAL SETUP Machine Inspection	18 18 18 19 20 21			
4.2 4.3 5 5.1 5.2	Best Practices Additional Resources INITIAL SETUP Machine Inspection Removing from Pallet	18 18 18 19 20 21 21			
4.2 4.3 5 5.1 5.2 5.3	Best Practices Additional Resources INITIAL SETUP Machine Inspection Removing from Pallet Completing Battery Connections	18 18 19 20 21 21 22			
4.2 4.3 5 5.1 5.2 5.3 5.4	Best Practices Additional Resources INITIAL SETUP Machine Inspection Removing from Pallet Completing Battery Connections Key Components General Stacker Setup	18 18 19 20 21 21 22 27			
4.2 4.3 5 5.1 5.2 5.3 5.4 5.5	Best Practices Additional Resources INITIAL SETUP Machine Inspection Removing from Pallet Completing Battery Connections Key Components General Stacker Setup 1 Turning On/Off	18 18 19 20 21 21 22 27 27			
4.2 4.3 5 5.1 5.2 5.3 5.4 5.5 5.5	Best Practices Additional Resources INITIAL SETUP Machine Inspection Removing from Pallet Completing Battery Connections Key Components General Stacker Setup 1 Turning On/Off 2 Locking/Unlocking Controls	18 18 19 20 21 21 22 27 27 27			

		00
5.5.5	Charging the Batteries	
5.5.6	Critical Procedure for Proper Wheel Traction	
5.5.7	Counterbalance Caster Wheel vs. Drive Wheel	
	esting	32
5.6.1	Operator Handle/Steering Arm Range of Operation	32
5.6.2	Operator Handle/Steering Arm Return to Home Postion	33
5.6.3	E-STOP Operation	33
5.6.4	Password Keypad and LCD Panel	34
5.6.5	Raising and Lowering	34
5.6.6	Traveling Forward and Reverse	35
5.6.7	Horn	35
5.6.8	Turtle Speed	35
5.6.9	Slow Speed	36
5.6.10	Electric Brake	36
5.6.11	Auto-Reverse Belly Bump Switch	37
6 O	PERATION	38
	PERATION urning the Stacker On/Off	
6.1 Tu		39
6.1 Tu	urning the Stacker On/Off	39
6.1 Tu 6.2 Lo 6.3 Ra	urning the Stacker On/Off	
6.1 Tu 6.2 Lo 6.3 Ra 6.4 Er	urning the Stacker On/Off ocking/Unlocking Controls	
6.1 Tu 6.2 Lo 6.3 Ra 6.4 Er	urning the Stacker On/Off ocking/Unlocking Controls aising and Lowering the Forks ngaging Pallets	
6.1 Tu 6.2 Lo 6.3 Ra 6.4 Er 6.5 Tr	urning the Stacker On/Off Docking/Unlocking Controls aising and Lowering the Forks Ingaging Pallets Pavel Function	
6.1 Tu 6.2 Lo 6.3 Ra 6.4 Er 6.5 Tr 6.5.1	urning the Stacker On/Off cocking/Unlocking Controls aising and Lowering the Forks ngaging Pallets avel Function Horn	
6.1 Tu 6.2 Lo 6.3 Ra 6.4 Er 6.5 Tr 6.5.1 6.5.2	urning the Stacker On/Off ocking/Unlocking Controls aising and Lowering the Forks ngaging Pallets ravel Function Horn Turtle Speed	
6.1 Tu 6.2 Lo 6.3 Ra 6.4 Er 6.5 Tr 6.5.1 6.5.2 6.5.3	urning the Stacker On/Off cocking/Unlocking Controls aising and Lowering the Forks ngaging Pallets ravel Function Horn Turtle Speed Slow Speed	39404141414142
6.1 Tu 6.2 Lo 6.3 Ra 6.4 Er 6.5 Tr 6.5.1 6.5.2 6.5.3 6.5.4 6.5.5	urning the Stacker On/Off cocking/Unlocking Controls aising and Lowering the Forks ngaging Pallets ravel Function Horn Turtle Speed Slow Speed Electric Brake	39404141414242
6.1 Tu 6.2 Lo 6.3 Ra 6.4 Er 6.5 Tr 6.5.1 6.5.2 6.5.3 6.5.4 6.5.5 6.6 Er	urning the Stacker On/Off cocking/Unlocking Controls aising and Lowering the Forks ngaging Pallets ravel Function Horn Turtle Speed Slow Speed Electric Brake Auto-Reversing Belly Bump Switch	39404141414242
6.1 Tu 6.2 Lo 6.3 Ra 6.4 Er 6.5 Tr 6.5.1 6.5.2 6.5.3 6.5.4 6.5.5 6.6 Er 6.7 Cl	urning the Stacker On/Off cocking/Unlocking Controls aising and Lowering the Forks ngaging Pallets ravel Function Horn Turtle Speed Slow Speed Electric Brake Auto-Reversing Belly Bump Switch ngaging the Emergency Stop	394041414142424242
6.1 Tu 6.2 Lo 6.3 Ra 6.4 Er 6.5 Tr 6.5.1 6.5.2 6.5.3 6.5.4 6.5.5 6.6 Er 6.7 Cl	urning the Stacker On/Off cocking/Unlocking Controls aising and Lowering the Forks ngaging Pallets ravel Function Horn Turtle Speed Slow Speed. Electric Brake Auto-Reversing Belly Bump Switch ngaging the Emergency Stop harging the Batteries	39404141414242424242



6.8.3 Functional Inspection (Disengage E-STOP, Enable Controls)	4
7 MAINTENANCE & REPAIR	5
7.1 Relieving Hydraulic System Pressure	6
7.2 Down Valve Cleaning4	6
7.3 Battery Maintenance	7
7.3.1 Preparing to Charge the Batteries	8
7.3.2 Warnings and Battery Information	8
7.4 Battery Charger Operation4	8
7.5 Periodic Maintenance	0
7.5.1 Weekly5	0
7.5.2 Monthly	0
7.6 Ordering Replacement Parts5	
8 TROUBLESHOOTING	2
9 STRUCTURAL PARTS DIAGRAMS	6
9.1 Body Assembly (A391-1L)	6
9.2 Mast Assembly (A391-3H)	7
9.3 Cylinder Assembly (A391-4D)5	8
9.4 Drive Wheel Assembly (A392-2E)5	9
9.5 Steering Assembly (A392-1G)	0
9.6 Handle Assembly (A392-4F)	1
9.7 Carriage & Fork Assembly (A391-2H)6	2
10 ELECTRICAL6	3
10.1 Wiring Diagram	3
10.2 Controller Assembly (A393-1D)	4
11 HYDRAULICS6	5
11.1 Hydraulic Fluid6	5
11.2 Hydraulic System (A394-1G)	5
11.3 Hydraulic Power Unit (A394-4B)	6
11.4 Hydraulic Schematic	
12 WARRANTY & CONTACT INFORMATION	8

	TI: 1.1.1 (
△WARNING Cancer and Reproductive Harm - www.P65Warnings.ca.gov	This label (part # 10095524) is required by California Law. For more information visit: www.P65Warnings.ca.gov

1 Introduction

This manual attempts to provide all of the information necessary for the safe and proper installation, operation and maintenance of Presto Lifts Inc. battery operated, Power Stak. It is important that all personnel involved with the installation, maintenance or operator of the stacker read this manual. Additional manuals are available upon request or at www.PrestoLifts. com. Each Presto stacker is equipped with nameplate, serial number and model identifications. Please refer to these numbers when ordering parts or requesting further information. The Presto stackers are designed for lifting, lowering and positioning a wide variety of loads. Where unique situations arise which are not covered in this manual, contact Preso Lifts for further instructions.

The battery operated stackers are designed for in-plant/non-hazardous locations only. They can be used in an 8' or larger aisle. These units are not for personnel lifting.

NOTICE

This machine is designed for powered travel and should not be manually moved by applying force to the operator handle/steering arm. The operator handle/steering arm should only be moved side to side when the machine is under power. The operator handle/steering arm should be lowered to the drive position and power, Forward or Reverse, is engaged by moving the thumb wheel in the direction of desired travel then the steering arm can be moved side to side for directional steering. Pushing or pulling on the operator handle/steering arm when the unit is not powered can lead to damage and/or breakage.

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 forks.
- 2. Lower forks 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.



PAGE 6 OF 68 **uline.com** 0925 IH-12198VND

- 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:

- 7. Trained in accordance with the manufacturer's operating manual.
- 8. Made aware of the responsibilities of operators as outlined in the **Responsibilities of Operators** section of this manual.
- 9. 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.

PAGE 7 OF 68 **uline.com** 0925 IH-12198VND

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:

- 10. Operating and emergency controls
- 11. Safety devices
- 12. Hydraulic system leaks
- 13. Electrical cables and wiring harness
- 14. Loose or missing parts
- 15. Nameplates, precautionary and instructional markings and/or labeling
- 16. Guarding system
- 17. 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:

- 18. Read and understand the manufacturer's operating instruction(s) and user's safety rules or have them explained.
- 19. 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:

- 20. Bumps, floor obstructions, and uneven surfaces
- 21. Overhead obstructions and electrical hazards
- 22. Presence of unauthorized persons
- 23. 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:

- 24. **Guarding system** Guarding shall be installed and positioned, and access gates or openings shall be secured per the manufacturer's instructions (If applicable).
- 25. **Distribution of load** The load and its distribution load center on the forks shall be in accordance with the manufacturer's rated capacity for that specific configuration.
- 26. **Maintaining overhead clearance** The operator shall ensure that adequate clearance is maintained from overhead obstructions and energized electrical conductors and parts.
- 27. **Point of Operation** The operator shall not place any part of their body under the forks.
- 28. **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.
- 29. **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.

PAGE 8 OF 68 **uline.com** 0925 IH-12198VND

- 30. **Capacity limitation** Rated capacity load center shall not be exceeded when loads are transferred to the forks and load center.
- 31. **Work area** The operator shall ensure the area surrounding the machine is clear of personnel and equipment before lowering the forks.
- 32. **Securing the machine** The operator shall comply with the means and procedures provided to protect against use by an unauthorized person(s).
- 33. Altering safety devices Safety devices shall not be altered or disabled.
- 34. **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.
- 35. **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.
- 36. **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.

PAGE 9 OF 68 **uline.com** 0925 IH-12198VND

2 SAFETY

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

All operators of this machine must be trained, by their employer, in accordance with OSHA standard 1910.178 29QFR-7-1-06 before being permitted to operate this machine.

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

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

⚠ WARNING

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).

DO NOT OPERATE THESE LIFTS WITHOUT CAREFULLY READING THIS MANUAL. In order to provide for the safe operation of these stackers, Presto Lifts Inc. has identified certain hazards that may occur during the maintenance and use of these lifts. For safety reasons these units are designed to be serviced or repaired in the fully lowered position. If performed properly, this will greatly reduce the possibility of injury.

When servicing the unit:

- 1. The machine should be in "OFF" position.
- 2. E-stop should be depressed.
- 3. Disconnect the batteries at the terminals.

▲ DANGER

DO NOT use this stacker until you have been trained and authorized to do so.

DO NOT operate until you have read all warnings and instructions.

DO NOT operate until you have checked the conditions of the stacker: lift systems, forks, chains, and cables.

DO NOT use if any part is damaged, worn or not working properly.

All personnel must stand clear of the lift while in motion.

Do not stand in front of the stacker while it is in motion.

Do not stand, sit or climb on the stacker.

Never ride on the stacker or allow anyone else to ride.

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

Never stand on or under the forks or allow anyone else to stand on or under them.

Do not perform any repair work on the stacker if there is a load on the forks.

Do not perform any repair work if the forks are in the raised position.

DO NOT use for lifting or carrying people.

▲ DANGER

Keep the stacker under control at all times. Perform all stacker movements smoothly and operate at a speed that allows you to stop safely and give you enough time to react quickly if an emergency occurs. Be even more careful on slippery or uneven surfaces. Do not run over objects on the floor.

Tip-overs and falls are very serious accidents; you can be crushed or even killed. To prevent injury, know where you are at all times and follow the rules of safe stacker operation.

Be careful when working around docks, dock boards and trailers. Stay away from the edge of docks and ramps. Check to make sure the wheels of truck or trailers are chocked.

DO NOT use on ramps or inclines. Only on smooth, not slick level surfaces.

DO NOT travel with forks in an elevated position. Travel with the load or forks close to the ground. Watch for overhead obstructions.

Watch your hands and feet. A foot or hand caught between the stacker and a fixed object will be crushed or even cut off.

DO NOT operate when parts of anyone's body may be close to the mast structure or any moving parts.

Keep your hands and feet away from all moving parts such as masts, chains, forks or wheels.

Always be alert to the area around you and watch where you are walking. Be careful that you don't get pinned or crushed between the stacker and a fixed object such as a wall or post.

If traveling forks first, keep both hands on the operator handle and be careful when changing direction of travel. Keep your feet clear of the stacker.

DO NOT exceed load center or load weight capacities (check capacity plate).

DO NOT handle unbalanced, unstable, or loosely stacked loads.

Before you leave the stacker, be sure to lower the forks to their lowest point (2-3/4" off the floor). Shut off the stacker by engaging the E-STOP.

NOTICE

DO NOT alter or modify this stacker in any way.

DO NOT drop loads on forks.

2.3 Safety Devices

2.3.1 Electro-Magnetic Brake

Your stacker is equipped with an electro-magnetic brake. The brake is applied when the operator handle/steering arm is in its vertical position between 70-90 degrees and lowered position between 30-0 degrees. The brake will be released when you pull down the operator handle/steering arm at any point between 70-30 degrees. When parked, the operator handle/steering arm will spring back to the full vertical position and simulatenously engage the brake. When not in use, always fully lower the forks.

2.3.2 Emergency Stop Control Button (E-STOP)

To suspend all movement of the stacker, engage the E-STOP by pressing the E-STOP pushbutton on the cover. This will disable all controls and prevent the motors from turning on and the down valve from being energized. Disengage the E-STOP by pulling the E-STOP pushbutton up to enable the controls again.

When the machine is not in use, fully lower the forks and engage the E-STOP (Press Down).

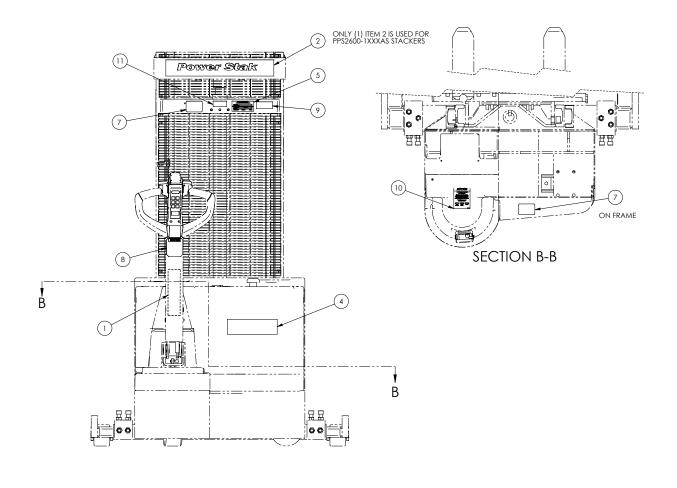
2.3.3 Auto-Reversing Belly Bump Switch

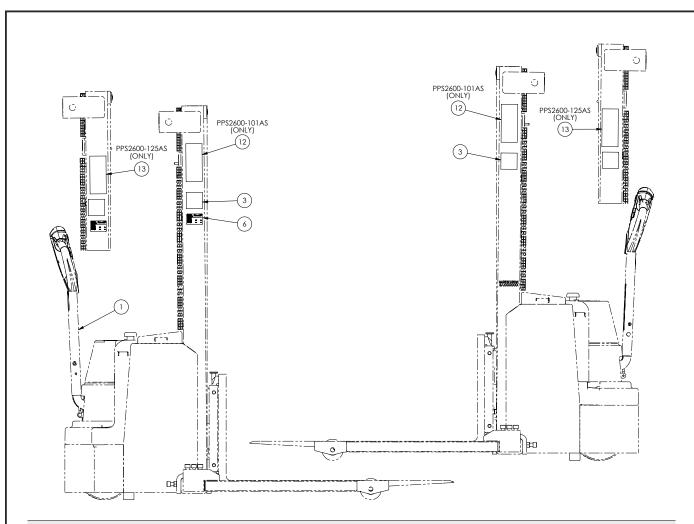
At the end of the operator handle there is a large, red auto-reversing belly bump switch that is designed to protect the operator from injury. When the operator runs the stacker backwards, and the end of the operator handle comes in contact with the operator's body (or if the switch is pressed), the stacker will automatically reverse direction and travel away from the operator (approximately an inch). If this happens, immediately release your hands from the butterfly control and put the operator handle/steering arm up to its vertical position or down to its lowest position to engage the brake. The auto-reversing belly bump switch will automatically resumes its original position after being activated.

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.

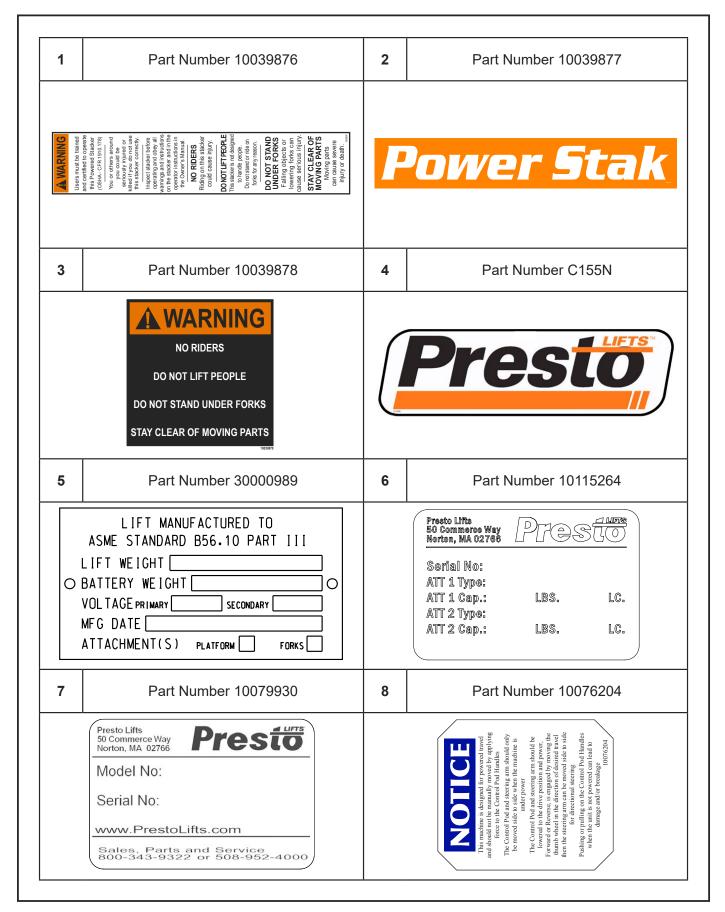
3.1 Label Locations

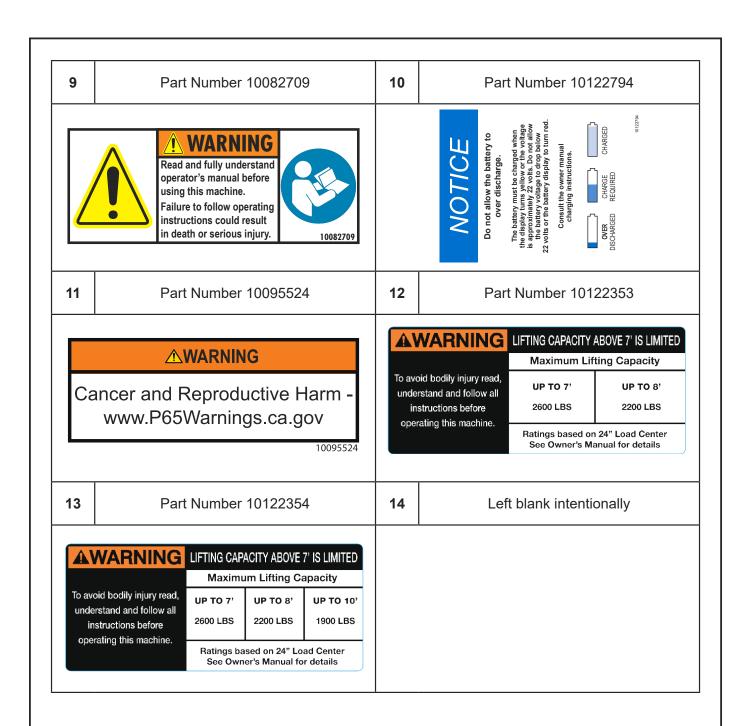




3.2 Label Part Numbers and Images

Item No.	Qty	U/M	Descriptions for Stacker Labels	Part No.
1	1	EA	LD DCL 2.25X8.50 ! WARNING USERS MUST	10039876
2	2	EA	LD DCL 3.00X20.00 POWER STAK	10039877
3	2	EA	LD DCL 3.00X3.00 NO RIDERS	10039878
4	1	EA	LD DCL 12.00X3.00 PRESTO ALPHA	C155N
5	1	EA	LD TAG 3.50X1.87 ASME STANDARD B56.10	30000989
6	1	EA	LD DCL 2.00X3.00 PRESTO CAPACITY BLANK	10115264
7	2	EA	LD DCL 2.00X3.00 PRESTO SERIAL ID BLANK	10079930
8	1	EA	LD DCL 3.00X3.50 NOTICE: THIS MACHINE I	10076204
9	1	EA	LD DCL 1.50X3.00 READ AND FULLY UNDERSTA	10082709
10	1	EA	LD DCL 4.00X3.00 NOTICE BATTERY DISCHARG	10122794
11	1	EA	LD WARNING CANCER AND REPRODUCTIVE	10095524
12	2	EA	LD LBL 3.00X7.00 DANGER	10122353
13	2	EA	LD LBL 3.00X7.00 DANGER	10122354





PAGE 17 OF 68 **uline.com** 0925 IH-12198VND

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 electrical, hydraulic, 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 INITIAL SETUP

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

Confirm house power matches the AC charger power indicated on the stacker and on the order documents and review the **Wiring Diagram** section for more information.

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

▲ DANGER

High voltage can cause severe injury or death. When necessary, disconnect and lockout electrical power (AC Charger) & negative (first) then positive (second) battery terminals before performing setup, 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 resolved. See Recommended Considerations - Lockout/Tagout Procedures (LOTO) and Electrical sections for more information.

Pressurized fluids can penetrate skin and cause severe injury or death. Always use proper personal protective equipment when installing, troubleshooting, repairing or maintaining pressurized systems. Relieve hydraulic system pressure before performing any maintenance on the hydraulic system. The hydraulic system pressure is at its lowest when the forks are their lowest point (2-3/4" off the floor), and the DOWN button is held for an additional 5 seconds after. Treat all lines as if pressurized and open any necessary fitting slowly and do not completely disconnect until all pressure has been relieved.

Electric motors can create sparking, do not install in an area where flammable materials are present.

All electrical components and the hydraulic power unit must be protected from wet and/or very dirty environments.

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 forks unless the machine is unloaded and secured against lowering using approved temporary support.

Do not change the hydraulic power unit relief valve setting. It has been set at the factory for the stacker and should not require any adjustment.



⚠ WARNING

Gradeability: 10% unloaded, 6% loaded.

Contact Presto Lifts Customer Service when in doubt about setting up this stacker.

Verify the area around the stacker is clear of debris and/or personnel before setting up.

This stacker must be located and operated in an area protected from rain and moisture. It is not designed for use on asphalt pavement, but on substantially firm, smooth, even, and prepared surfaces such as unfinished concrete.

This machine must be located and operated on a solid, level (or within the gradeability specification) 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.

Wiring Diagram can be found in the Electrical section.

Hydraulic schematics, arrangements, and specifications can be found in the Hydraulics section.

5.1 Machine Inspection

Each of the Presto stackers is shipped out on a pallet or skid. Upon receipt of the stacker, remove the shipping material and inspect it completely to determine if there is any shipping damage and that the stacker is complete. This stacker left our factory in new condition. It has been inspected and weight tested to assure all performance standards have been met. If damage is apparent, a freight claim must be filed with the freight company. Do not use the stacker if any damage is found.

With the stacker forks in a lowered position, check the following:

- Check for signs of damage especially to the battery cover and the back panel cover that houses the batteries, battery charger, AC controller and hydraulic power unit.
- Remove the battery cover.
- · Remove the back panel cover.
 - 1. Push in the E-STOP button and unscrew the red knob by turning CCW and remove.
 - 2. Remove the two back panel cover screws.
 - 3. Lift off the back panel cover.



- Inspect for any bent or damaged parts.
- Check all electrical and hydraulic connections for tightness.
- Re-install the back panel cover, screws and E-STOP button.

On the front of this manual, write down the model number, serial number, and date the stacker 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.

5.2 Removing from Pallet

Prior to removing the unit from the pallet or skid, ensure all tie down straps and packaging are removed. With an overhead hoist or forklift, carefully pick up the unit taking into consideration the center of gravity of the unit. If you choose to pick the unit with an overhead hoist, use a nylon sling and hoist with a minimum of 2,000-lb. capacity. The nylon sling will not do any damage to the steel construction of stacker. The holes at the top of the mast sides may be used for this purpose. Pick the unit up. On conventional masts use the top cross-member of the stacker. On narrow masts the cover must be removed to access lifting equipment. Be careful of the stacker swinging once fully lifted off the pallet or skid. Have all personnel completely cleared from the area.

Pick the unit up approximately six inches above the pallet or skid. Once raised, remove the pallet or skid from below the lift. Do not move the lift around in the air. Lower the stacker onto the floor.

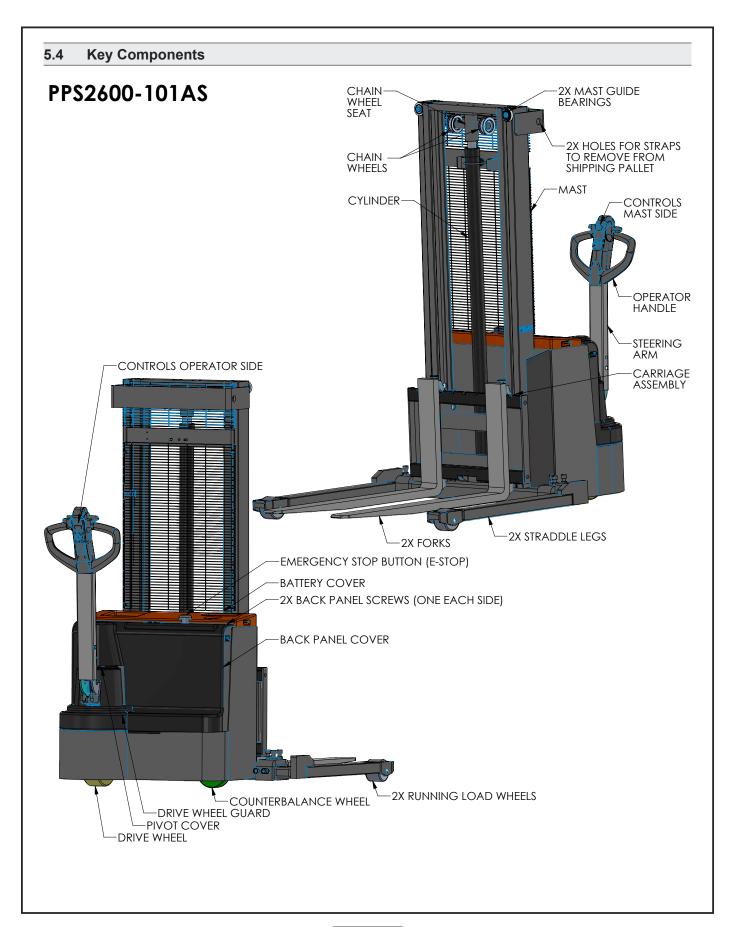
5.3 Completing Battery Connections

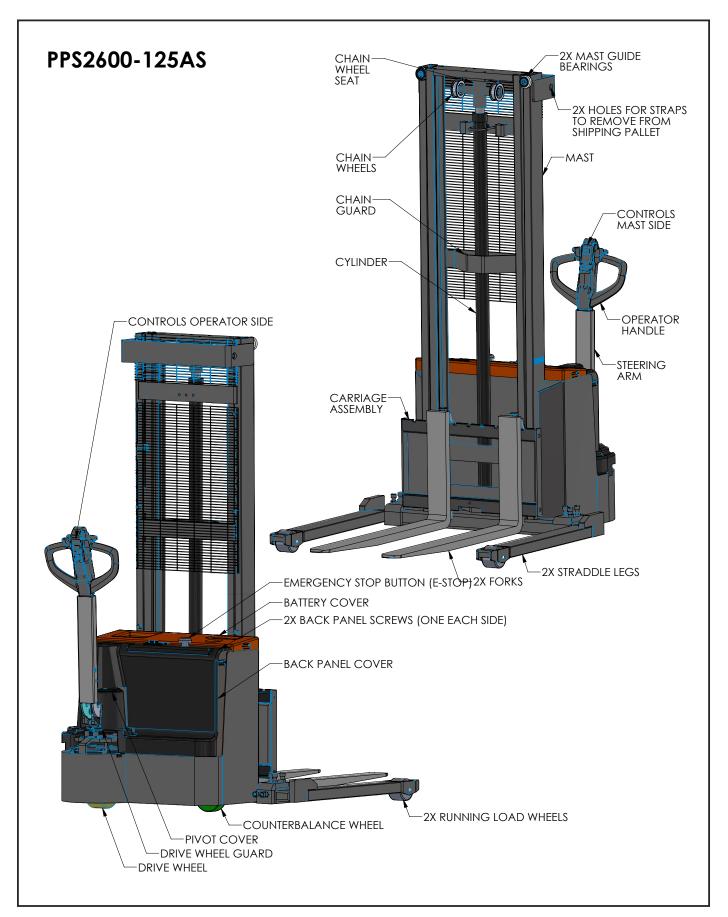


Prior to leaving the factory, two battery leads in the battery section have been disconnected. To provide power to the machine, these leads will need to be reconnected.

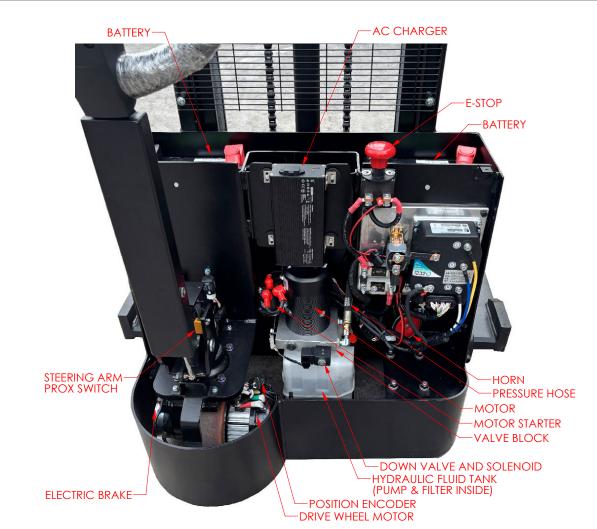
Once the machine has been removed from the pallet with the E-STOP still engaged (pressed down), lift the battery cover off (if not already done) and place aside. Connect the positive battery terminal (red cable) on the right battery first, then connect the negative terminal (black cable) on the left battery last. Replace the battery cover.

PAGE 21 OF 68 **uline.com** 0925 IH-12198VND



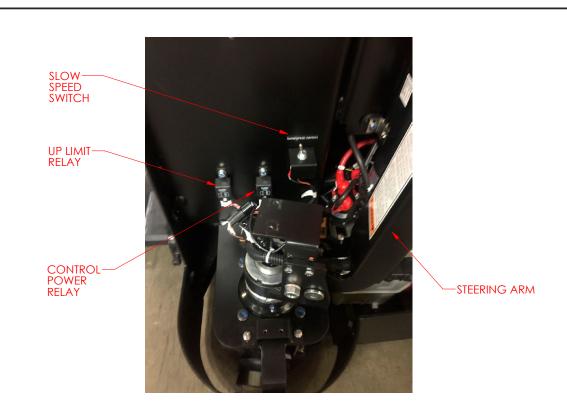






PIVOT COVER, DRIVE WHEEL GUARD & BACK PANEL COVER REMOVED





PIVOT COVER, DRIVE WHEEL GUARD & BACK PANEL COVER REMOVED



AC CHARGER INPUT─

CHARGER STATUS LIGHTS

RED FLASHING = BATTERY REVERSED POLARITY RED ON = CHARGER ERROR (VOLTAGE<10V)

YELLOW FLASH = NO BATTERY CONNECTED YELLOW ON = NORMAL CHARGING

GREEN FLASH = 80% CHARGED GREEN ON = FULLY CHARGED

5.5 General Stacker Setup

5.5.1 Turning On/Off

To turn the machine on, disengage the red E-STOP button (pull up). The LCD panel on the operator handle will illuminate with "Please unlock", the battery status, and the hours meter. To turn the machine off, engage the red E-STOP button (press down). When the E-STOP is engaged, the LCD panel will turn off and the machine is functionally unable to operate.

5.5.2 Locking/Unlocking Controls

To lock the controls, just press the OFF button. The display will look like the left most image below. To unlock the controls, press the 4-digit password and then the ON button as shown in the middle image below. Once the controls are unlocked, the battery voltage and the accumulated hours of on time will be displayed as shown in the right most image below.







5.5.3 Initially Setting the Controls Password

The factory default password is 1234. On the initial receipt of the stacker, you may turn on access to the controls by pressing 1 - 2 - 3 - 4, then ON. The controls should now be ready to control the machine.







To initially change the password from 1 - 2 - 3 - 4:

- 1. Press OFF.
- 2. Press 3 2 3 2.
- 3. Press ON.
- 4. O_0000 appears on the bottom of the LCD panel.
- 5. Enter the old password 1 2 3 4 (as shipped from the factory).
- 6. Press ON.







- 7. n 0000 appears on the bottom of the LCD panel.
- 8. Press the 4 digits desired for the new password.
- 9. Press ON.
- 10. C_PASS appears on the bottom of the LCD panel with the new password.

5.5.4 Resetting the Controls Password

In the previous section, the password was changed from the factory default to one selected by the user. The change to a subsequent password, you will need to know the existing password. If the previous password is not known, contact Presto Customer Service for assistance.







To change an existing password from ? - ? - ? - ?:

- 1. Press OFF.
- 2. Press 3 2 3 2.
- 3. Press ON.
- 4. O 0000 appears on the bottom of the LCD panel.
- 5. Enter the old password ? ? ? ? (as previously programmed by the user).
- 6. Press ON.







- 7. n_0000 appears on the bottom of the LCD panel.
- 8. Press the 4 digits desired for the new password.
- 9. Press ON.
- 10. C PASS appears on the bottom of the LCD panel with the new password.

5.5.5 Charging the Batteries

Charge the batteries. Refer to the **Battery Maintenance** and **Battery Charger Operation** sections in **Maintenance & Repair** prior to charging.

5.5.6 Critical Procedure for Proper Wheel Traction

Proper drive wheel traction is obtained for the PowerStak straddle unit by using this procedure. All PowerStak Models are designed and intended to operate on an unfinished concrete floor surface. If any PowerStak is operated on smooth or polished concrete, sealed concrete, epoxy sealed floor, linoleum or other smooth surfaces, drive wheel traction performance may be affected; If traction issues are encountered, rubber drive wheels are available through special order. Please contact Presto Lifts Parts Department. When any PowerStak is operated on a wet, oily, powdery, sandy or non-uniform liquid or granular surface, drive wheel traction performance will be affected and loss of traction will occur.

NOTICE

Straddle legs must be adjusted and secured in accordance with these procedures.

Setup Procedure for Straddle Legs:

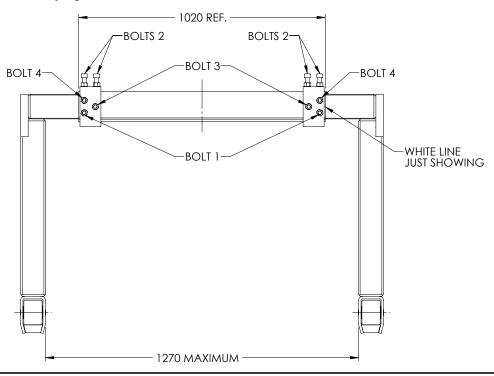
- 1. PowerStak unit located on flat, clean uniform surface, unloaded, forks at their lowest point, 2-3/4" off the floor.
- 2. Determine the desired/required straddle width dimension (2 inches greater than pallet width, 1" on each side of the pallet or load, up to a maximum of 49-5/8 inches inside width).
- 3. Be sure to fully loosen all bolts before moving stabilizing legs. A 14mm allen wrench is required for the bolts. Adjust one stabilizer leg at a time using a pry bar, pinch bar, rubber mallet etc. move the straddle leg out from the base tube to the desired position. Do not move too far, see picture below, if the ½ wide painted White Line is visible the leg is pulled out too far; Maximum movement 5 for each leg for 2600 pound units.
- 4. Adjust second Straddle Leg using a pry bar, pinch bar, rubber mallet etc. move the straddle leg out from inside the base tube to the desired straddle width position.

NOTICE

Straddle Legs must be symmetrically adjusted, both legs adjusted to the same extended dimension.

Setup Procedure for PowerStak Straddle Legs with Five Bolts:

- 5. Back off all bolts.
- 6. Tighten Bolt 1 to 85 foot pounds.
- 7. Tighten Bolt 2 (two each) to 85 foot pounds.
- 8. Tighten Bolt 3 to 85 foot pounds.
- 9. Tighten Bolt 4 to 25 foot pounds NOT 85 foot pounds!
- 10. Securely tighten all lock nuts.



NOTICE

When adjusted correctly, the white line cannot be seen.



5.5.7 Counterbalance Caster Wheel vs. Drive Wheel

During normal operation of this stacker, the drive wheel and the two outrigger load wheels are the three primary wheels contacting the floor. The purpose of the counterbalance caster wheel is to provide additional support should the stacker need it when handling offset loads or when traversing across uneven floor surfaces. As a general rule, this wheel should not need adjustment. As the drive wheel wears down, the spring of the counterbalance caster wheel will compress to keep balance. When the spring of the caster wheel is compressed to its limit, and the height on both sides becomes uneven, the drive wheel tire must be replaced.



5.6 Testing

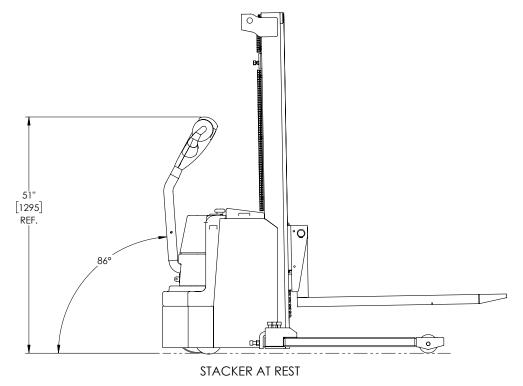
Prior to doing any testing on this stacker, review and understand the operation procedures in the **Operation** section for overall functionality of the machine. Ensure all personnel are clear of the testing area. Also make sure to review all the key components illustrated earlier in this section.

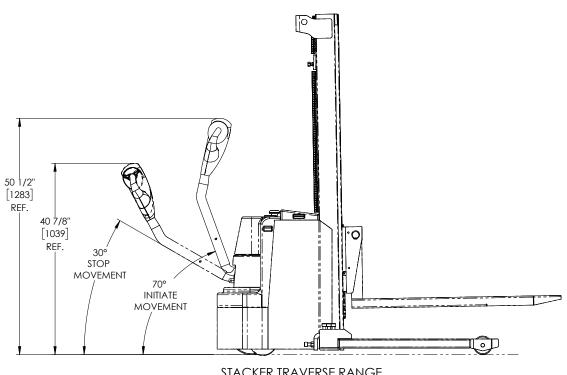
△ CAUTION

Ensure all personnel are clear of the testing area prior to using these procedures.

5.6.1 Operator Handle/Steering Arm Range of Operation

The following two images represent the range of expected operation while the operator handle/ steering arm are at their respective angles from the floor. Raise the forks when the stacker is at rest, when the steering arm is more at a 90 degree angle, or perpendicular to the floor. To travel forward or backward, keep the operator handle/steering arm between 70 degrees and 30 degrees.





STACKER TRAVERSE RANGE

5.6.2 Operator Handle/Steering Arm Return to Home Postion

Lower the operator handle/steering arm to between 30 degrees and 70 degrees. Let go of the operator handle and confirm that it returns to its home position (more of a 90 degree angle).

5.6.3 E-STOP Operation

Besides its purpose to shut down the machine in an emergency situation, it is also used to power the machine on and off. When the E-STOP is disengaged, the machine is on and the hour meter is running. Though the machine is on, no controls should be able to be used until the password has been entered on the keypad. See Password Keypad and LCD Panel section. Test the function of the E-STOP button.

- 1. Engage (press down) the E-STOP button. There should be no visible display of power on the operator handle LCD panel.
- 2. Disengage (pull up) the E-STOP button. An immediate display of power should illuminate on the operator handle LCD panel.
- 3. Ensure the operator handle/steering arm position is all the way up. During normal operation, this should spring to this position anyway when released by the operator.
- 4. Press the UP control and try raising the forks. No motor sound or movement should occur.
- 5. Press the HORN button. No sound should occur.
- 6. Press the AUTO-REVERSING belly bump switch. Nothing should happen.
- 7. Work the thumb controls back and forth to attemp moving the machine forward or backward. No motor sound or movement should occur.

- 8. Position the operator handle/steering arm approximately 1/3 of the way down toward the floor.
- 9. Repeat steps 4 through 7.
- 10. Other functions of the E-STOP will be tested in the following sub-sections.

5.6.4 Password Keypad and LCD Panel

With the E-STOP disengaged, test to ensure the password entered enables the controls. Refer to the **Setting or Resetting Controls Password** section if necessary.

- 1. Enter the 4-digit password.
- 2. Press ON.
- 3. LCD Display should change and the controls should now be enabled.
- 4. Press OFF.
- 5. LCD Display should change and the controls should now be disabled.
- 6. Engage E-STOP.
- 7. LCD Display should turn off.

5.6.5 Raising and Lowering

With the operator handle/steering arm in its vertical position, the E-STOP disengaged, and the controls enabled, test to ensure the forks move up and down.

- 1. Press the UP control on each side separately. The motor should turn on and the forks should begin to raise. Continue to raise as high as the forks will go. An upper limit switch should turn off the motor and the forks should stop raising without releasing the UP control.
- 2. Release the UP control.
- 3. Press the DOWN control on each side separately. The forks should begin to lower. Continue to lower until the forks reach the their lowest point (2-3/4" off the floor).
- 4. Release the DOWN control.
- 5. Test the E-STOP during raising by repeating step 1 and somewhere between the floor and fully raised height, engage the E-STOP. Movement should stop.
- 6. Disengage the E-STOP.
- 7. It is necessary to re-enter the password and press ON again to return to normal operation after disengaging the E-STOP.
- 8. Test the E-STOP during lowering by repeating step 3 and somewhere between the floor and fully lowered height, engage the E-STOP. Movement should stop.
- 9. Disengage the E-STOP.
- 10. It is necessary to re-enter the password and press ON again to return to normal operation after disengaging the E-STOP.

PAGE 34 OF 68 **uline.com** 0925 IH-12198VND

5.6.6 Traveling Forward and Reverse

With the forks in their lowest position, the operator handle/steering arm in an operating position (between 30 and 70 degrees, the E-STOP disengaged, and the controls enabled, test to ensure appropriate movement of normal speed.

- 1. Fully work both right hand and left hand thumb controls to engage forward or reverse movement of the stacker. The drive wheel motor should power up and the stacker should move in the direction that thumb controls are pointed towards. Note the speed at which the stacker moves.
- 2. Turn the machine as desired by steering accordingly.
- 3. Test the E-STOP function while traveling. These next steps may work best with two people.
- 4. Work thumb controls to engage forward movement of the stacker.
- 5. Have someone else engage the E-STOP while you are moving the stacker forward. The stacker should come to a stop.
- 6. Disengage the E-STOP.
- 7. It is necessary to re-enter the password and press ON again to return to normal operation after disengaging the E-STOP.
- 8. Repeat steps 4 through 7 while engaging reverse movement of the stacker.
- 9. Return the operator handle/steering arm to its vertical position.

5.6.7 Horn

Press the HORN button to ensure it operates.

5.6.8 Turtle Speed

Press the driving mode button to change the mode from normal speed to turtle speed. The LCD display should indicate a green turtle in the top left corner when this mode is set. The forward or reverse speed is limited to approximately 50% of full speed.

- 1. Fully work both right hand and left hand thumb controls to engage forward or reverse movement of the stacker. The drive wheel motor should power up and the stacker should move in the direction that thumb controls are pointed towards. Note the speed at which the stacker moves.
- 2. Turn the machine as desired by steering accordingly.
- 3. Test the E-STOP function while traveling. These next steps may work best with two people.
- 4. Work thumb controls to engage forward movement of the stacker.
- 5. Have someone else engage the E-STOP while you are moving the stacker forward. The stacker should come to a stop.
- 6. Disengage the E-STOP.
- 7. It is necessary to re-enter the password and press ON again to return to normal operation after disengaging the E-STOP.

PAGE 35 OF 68 **uline.com** 0925 IH-12198VND

- 8. Repeat steps 4 through 7 while engaging reverse movement of the stacker.
- 9. Return the operator handle/steering arm to its vertical position.
- 10. To return to nomal speed, just press the driving mode button again to change the mode from turtle speed back to normal speed. The LCD display previously indicating a green turtle in the top left corner, should be black again when this mode is reset.

5.6.9 Slow Speed

This feature is not configured into the operator handle. To access the slow speed toggle switch, it will be necessary to remove the back panel cover. Refer to the **Machine Inspection** section. To turn on slow speed, just turn the toggle switch at the bottom of the steering arm on (toward the hydraulic motor). The forward or reverse speed is limited to between normal speed and turtle speed. The LCD display will not be affected during this function. Turn the toggle switch to off (away from the hydraulic motor) to return to normal operation.

5.6.10 Electric Brake

When at rest with the operator handle/steering arm are positioned nearly vertical or nearly horizontal, the electric brake is engaged. With the forks in their lowest position, the operator handle/steering arm in an operating position (between 30 and 70 degrees, the E-STOP disengaged, the controls enabled, and the driving mode at normal speed, test to ensure the electric brake stops the machine while it is moving forward or backward. Work thumb controls to engage forward movement of the stacker. The drive wheel motor should power up and the stacker should move foward.

- 1. Simultaneously bring the operator handle/steering arm to a vertical position while releasing the thumb controls. The stacker should come to an immediate stop.
- 2. Repeat steps 1 and 2 while engaging reverse movement of the stacker.
- 3. Repeat steps 1 through 3 but with the operator handle/steering arm being lowered to a near horizontal position.
- 4. Press the driving mode button to change the mode from normal speed to turtle speed. The LCD display should indicate a green turtle in the top left corner when this mode is set. Repeat steps 1 through 4.
- 5. After these steps have been successfully completed, return the operator handle/steering arm to its vertical position.
- 6. Press the driving mode button to change back from turtle speed to normal speed.

PAGE 36 OF 68 **uline.com** 0925 IH-12198VND

5.6.11 Auto-Reverse Belly Bump Switch

At the end of the operator handle there is a large, red auto-reversing belly bump switch that is designed to protect the operator from injury. When the operator runs the stacker backwards and the end of the operator handle comes in contact with the operator's body, the stacker will automatically reverse direction and travel away from the operator (approximately an inch).

With the forks in their lowest position, the operator handle/steering arm in an operating position (between 30 and 70 degrees, the E-STOP disengaged, the controls/steering arm enabled, and the driving mode at normal speed, test to ensure the auto-reverse belly bump switch stops and reverses the machine while it is moving backward.

- 1. Work thumb controls to engage reverse movement of the stacker. The drive wheel motor should power up and the stacker should move backward.
- 2. Simultaneously press in the belly bump switch with one hand while releasing the thumb controls with the other. The stacker should quickly jolt forward away from the operator and come to a stop.
- 3. The belly bump switch should automatically resume its original position after activation.
- 4. Press the driving mode button to change the mode from normal speed to turtle speed. The LCD display should indicate a green turtle in the top left corner when this mode is set. Repeat steps 1 through 3.
- 5. After these steps have been successfully completed, return the operator handle/steering arm to its vertical position.
- 6. Press the driving mode button to change back from turtle speed to normal speed.
- 7. Testing is now complete.

6 OPERATION

▲ DANGER

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

Do not use this stacker if it is not operating properly, or appears unsafe in any way.

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

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 forks unless the machine is unloaded and secured against lowering using approved temporary support.

DO NOT use on ramps or inclines. Only on smooth, not slick level surfaces.

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

Gradeability: 10% unloaded, 6% loaded.

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

This stacker must be located and operated in an area protected from rain and moisture. It is not designed for use on asphalt pavement, but on substantially firm, smooth, even, and prepared surfaces such as unfinished concrete.

Always keep charger cord clear of foot and vehicle traffic.

Do not load or unload the machine while moving.

When not in use, lower the forks to their lowest point (2-3/4" off the floor) and engage the E-STOP (press down).

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. Report concerns to the appropriate personnel.

6.1 Turning the Stacker On/Off

The stacker is turned on by disengaging the E-STOP button on the cover by pulling it up. The LCD panel will turn on waiting for the password to be entered.

As this stacker does not need a key, a four number password must be entered before pressing the ON button to enable the controls.

At anytime, press the OFF to disable the controls to the stacker.



CONTROLS OPERATOR SIDE HANDLE ARM RAISED

When the machine is not in use, lower the forks and engage the E-STOP (Press Down).

NOTICE

The hour meter provides an indication of how many hours the machine has been powered up, not actually used. When the E-STOP is disengaged (Pulled Up), the hour meter is actually running.

6.2 Locking/Unlocking Controls

To lock the controls, just press the OFF button. The display will look like the left most image below. To unlock the controls, press the 4-digit password and then the ON button as shown in the middle image below. Once the controls are unlocked, the battery voltage and the accumulated hours of on time will be displayed as shown in the right most image below.







6.3 Raising and Lowering the Forks

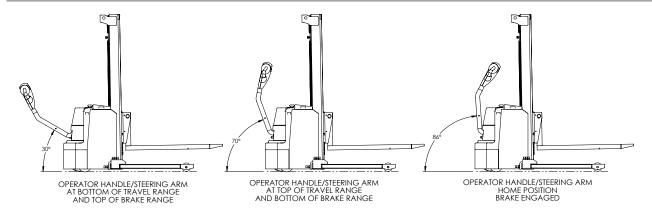
With the steering arm down, there are controls accessible from the left or right side of the operator handle. When operating, always make sure the load being lifted is within the loading capacity and load center of your stacker and the load has been stacked safely on the pallet.



6.4 Engaging Pallets

Always ensure that when entering a pallet, the forks are in the fully lowered position and that the straddle legs align outside of the pallet. When lifting pallets that are short, make sure that if the forks project through the end of the pallet, the tips of forks do not engage the next pallet that may be directly behind the pallet that you are lifting, as damage to that pallet/load and/or overloading the capacity of the stacker could occur.

6.5 Travel Function



To travel along the floor, rotate either of the thumb traverse controls on the upper part of the operator handle. With the operator handle/steering arm in the lowered position and rotating these controls toward the forks, the stacker travels forward. When rotating these controls toward the operator, the stacker travels backward. Always make sure the stacker clears any obstruction when traveling, and that your path of travel is clear of people. Never carry loads above the loading capacity and center of gravity load rating of the stacker. When traveling with or without a load, the forks should be as low as possible. The speed of the stacker is increased by the degree of the rotation in either direction; it functions like a throttle. When you release your hand from the controls, the stacker will automatically resume the neutral position and the speed of the stacker will slow down and come to a stop.

6.5.1 Horn

Press the horn button to activate an audible signal anytime while travelling along the floor.

6.5.2 Turtle Speed

Press the driving mode button to change the mode from normal speed to turtle speed. The LCD display should indicate a green turtle in the top left corner when this mode is set. When the thumb traverse controls are engaged forward (toward the forks) or reverse (toward the operator), the forward or reverse speed is limited to approximately 50% of full speed. The operator can engage the thumb traverse control with the right hand or the left hand. The reverse operation is also controlled with either hand. Turtle speed will be maintained until the driving mode button is pressed again. To return to nomal speed, just press the driving mode button again to change the mode from turtle speed back to normal speed. The LCD display previously indicating a green turtle in the top left corner, should be black again when this mode is reset.

6.5.3 Slow Speed

This feature is not configured into the operator handle. To turn on slow speed, just turn the toggle switch at the bottom of the steering arm on. The forward or reverse speed is limited to between normal speed and turtle speed. The LCD display will not be affected during this function. Turn the toggle switch to off to return to normal operation.

6.5.4 Electric Brake

Your stacker is equipped with an electric magnetic brake. The brake is applied when the operator handle/steering arm is in its vertical position between 70-86 degrees and lowered position between 10-30 degrees. The brake could be released when you pull down the operator handle/steering arm at any point between 70-30 degrees. Always make sure the brake is released before operating the stacker. When the stacker is running, you could brake the stacker by raising the operator handle/steering arm to its vertical position or lowering the operator handle/steering arm to its lowest position. Or, to turn the thumb traverse controls in the opposite direction, the change in direction of the motor will slow down, stop, and reverse the direction of stacker. When parked, the operator handle/steering arm will spring back to the full vertical position with the brake applied. Put the forks in the lowered position.

6.5.5 Auto-Reversing Belly Bump Switch

At the end of the operator handle there is a large, red auto-reversing belly bump switch that is designed to protect the operator from injury. When the operator runs the stacker backwards and the end of the operator handle comes in contact with the operator's body, the stacker will automatically reverse direction and travel an inch or so away from the operator. If this occurs, immediately release your hands from the thumb traverse controls and put the operator handle/ steering arm up to its vertical position to set the electric brake on. This switch will automatically return to its original position after being activated.

6.6 Engaging the Emergency Stop

To suspend all movement of or shut down the stacker, engage the E-STOP by pressing the E-STOP pushbutton on the cover. This will disable all controls and prevent the motor from turning on and the down valve from being energized. Disengage the E-STOP by pulling the E-STOP pushbutton up to power up the keypad and after entering the password, enable the controls again.

When the machine is not in use, lower the forks and engage the E-STOP (Press Down).

NOTICE

The hour meter provides an indication of how many hours the machine has been powered up, not actually used. When the E-STOP is disengaged (Pulled Up), the hour meter is actually running.

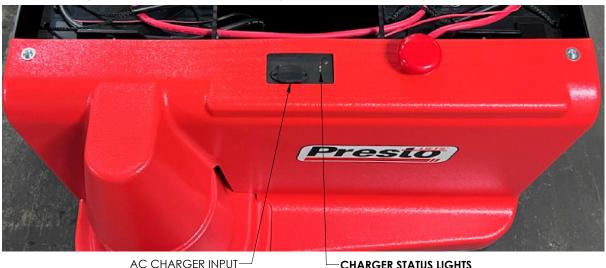
6.7 **Charging the Batteries**

Locate the stacker near a 115v grounded outlet where the AC charger cord will reach without an extension cord.

⚠ CAUTION

This charger is set for charging AGM batteries only. Do not replace existing batteries with any other type of battery if continuing to use this charger.

- 1. Lower the forks.
- 2. Engage the E-STOP. The LCD panel on the operator handle should power off.
- 3. Plug the appropriate end of the AC charger cord into the AC charger input on the cover.
- 4. Plug the other end of the AC charger cord into the 115v grounded outlet.



CHARGER STATUS LIGHTS

RED FLASHING = BATTERY REVERSED POLARITY RED ON = CHARGER ERROR (VOLTAGE<10V)

YELLOW FLASH = NO BATTERY CONNECTED YELLOW ON = NORMAL CHARGING

GREEN FLASH = 80% CHARGED GREEN ON = FULLY CHARGED

- 5. Charge the batteries until the charger status lights indicate fully charged. (Approximately 6 to 8 hours)
- 6. Once the batteries are fully charged, the charger may remain plugged in until ready to
- 7. Disconnect the AC charger cord from the 115v grounded outlet and then disconnect the cord from the machine and store for future use.

⚠CAUTION

Do not disengage the E-STOP until the AC charger cord is fully disconnected.

Also see **Battery Maintenance** in the **Maintenance & Repair** section.

6.8 Daily Operator Check List

Add this page to a log book and check off each item below as it is completed each day.

6.8.1 Charge Condition / Battery Check List (Engage E-STOP)

S	M	Т	W	Т	F	S	Item	
							Check LCD display on operator handle (Battery Voltage and Indicator) – Be sure unit is showing proper level before operating unit.	
							Check to be sure Charging Cord is unplugged and properly stowed before operating unit.	
							Inspect Battery Wire Connections – All connections should be tight with No Corrosion (white powder) showing at the Battery Terminals.	
							Inspect Battery Cover – There should be no cracks or visible damage to the battery cover, tie downs, terminals, etc.	
							Inspect Battery Charger to ensure it is not loose or damaged and that wires leading to it are well connected and undamaged.	

6.8.2 Walk Around Inspection (Engage E-STOP)

S	M	Т	W	Т	F	S	Item
							Check general condition of Stacker (loose or broken parts, oil, dangling wires, dents, cracked covers etc.).
							Check metal frame, mast, carriage and front load supports for cracked welds, worn or flat rollers, loose or disconnected chain and assemblies, loose pins, missing snap rings, damaged load wheels, and loose or missing hardware – bolts, nuts washers etc.
							Check HPU, cylinders, fluid reservoir, fittings & hoses for hydraulic leaks.
							Check cylinder ram for nicks or other damage.
							Make sure all precautionary labeling is in place and legible.

6.8.3 Functional Inspection (Disengage E-STOP, Enable Controls)

S	M	Т	W	Т	F	S	Item
							Check Drive – Forward and Reverse Function.
							Check Lift – Up and Down Function.
							Check Function for Belly Button Reverse.
							Check Horn Function.
							Check Brake Function.

DO NOT USE OR OPERATE STACKER IF ANY FUNCTION IS NOT OPERATING PROPERLY OR IF STACKER APPEARS UNSAFE IN ANY WAY! REPORT CONCERNS TO SUPERVISOR IMMEDIATELY!

OPERATOR IDS	DATE	
OPERATOR IDS	DATE	
OPERATOR IDS	DATE	



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.

Do not use this stacker if it is not operating properly, or appears unsafe in any way.

Maintenance to be performed with the forks fully lowered.

High voltage can cause severe injury or death. When necessary, disconnect and lockout electrical power (AC Charger) & negative (first) then positive (second) battery terminals before performing setup, 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 resolved. See Recommended Considerations - Lockout/Tagout Procedures (LOTO) and Electrical sections for more information.

Pressurized fluids can penetrate skin and cause severe injury or death. Always use proper personal protective equipment when installing, troubleshooting, repairing or maintaining pressurized systems. Relieve hydraulic system pressure before performing any maintenance on the hydraulic system. The hydraulic system pressure is at its lowest when the forks are their lowest point (2-3/4" off the floor), and the DOWN button is held for an additional 5 seconds after. Treat all lines as if pressurized and open any necessary fitting slowly and do not completely disconnect until all pressure has been relieved.

All electrical components and the hydraulic power unit must be protected from wet and/or dirty environments.

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 forks unless the machine is unloaded and secured against lowering using a temporary and appropriate means of support.

Do not change the hydraulic power unit relief valve setting. It has been set at the factory for this stacker and should not require any adjustment.

Contact Presto Lifts Customer Service when in doubt about servicing this stacker.

⚠ CAUTION

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

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

Always keep charger cord clear of foot and vehicle traffic.

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

This stacker must be located and operated in an area protected from rain and moisture. It is not designed for use on asphalt pavement, but on substantially firm, smooth, even, and prepared surfaces such as unfinished concrete.

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

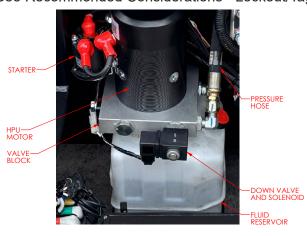
7.1 Relieving Hydraulic System Pressure

Using the down control, lower forks to their lowest point (2-3/4" off the floor). Keep pressing the down control for another 5 seconds. The hydraulic system pressure is now relieved.

7.2 Down Valve Cleaning

Before removing the down valve for cleaning or replacement, relieve the hydraulic system pressure. See previous section.

Disconnect power. See Recommended Considerations - Lockout/Tagout Procedures (LOTO).



HPU WITH BACK PANEL COVER REMOVED

Place a receptacle directly beneath the valve block to capture any spilled hydraulic fluid before loosening up the down valve.

Loosen and remove the solenoid, then the valve stem.

Re-install cleaned or install replacement valve and solenoid.

Check fluid level in reservoir and add if necessary.

Reconnect power.

Raise and lower the forks a few times to bleed out any air bubbles that exist in the system.

7.3 Battery Maintenance

This is a 24VDC powered stacker. Two 12VDC batteries are connected in series to provide a 24VDC powered system. Therefore two 12VDC batteries are being charged anytime the charger is being operated. While the E-STOP is disengaged, the LCD panel on the operator handle will provide the current status of the battery charge as shown in the image below. During the charging process, this display will not be illuminating. The LEDs next to the AC charger cord input receptacle will provide an indication of the condition of the battery charging process.

NOTICE

The battery image in the graphic below should be green from approximately 23.1 to 25.5 volts, yellow from approximately 21.7 to 23 volts, and red from approximately 21.3 to 21.6 volts.

Do not allow the battery voltage to go below 21.3 volts - charging will be necessary.



▲ DANGER

Always engage the E-STOP (press in) before charging, exchanging, or replacing the batteries.

Never alter the AC cord or plug provided. If it will not fit outlet, have proper outlet installed by a qualified electrician. Improper connection can result in a risk of an electric shock.

7.3.1 Preparing to Charge the Batteries

Always engage the E-STOP (press in) before charging, exchanging, or replacing the batteries. Be sure the area around the stacker is well ventilated while the batteries are being charged. Inspect to ensure the battery terminals, connections and wiring connections are clean and free of corrosion. When cleaning any of these components, wear a face shield or other suitable protective eye wear. Once the AC charger cord is connected to both the stacker and the 115v AC grounded wall outlet, ensure there are no trip hazards.

7.3.2 Warnings and Battery Information

Avoid use of open flame near batteries. At temperatures around freezing point, battery capacity is reduced by 30%. The battery terminals, connections and wiring should be clean and free of corrosion. When cleaning any of these components, wear a face shield or other suitable protective eye wear. Read, understand, and follow all battery and battery manufacturer's specific precautions while working with and/or charging batteries.

7.4 Battery Charger Operation

Before beginning the charging process, ensure that the stacker is close enough to a 115v AC grounded wall outlet without adding an extension cord to the cord charger cord provided with the stacker. The image below is shown without the battery cover installed, though it is not necessary to take the cover off to charge the batteries.



- 1. Lower the forks and engage the E-STOP. The LCD display panel on the handle should be off.
- 2. If desired, remove the battery cover.
- 3. If desired, release the back panel cover by removing the E-STOP button (simply turning counter clockwise until it releases), then removing the two screws on each side of the image above. Then pull off the cover.

△ CAUTION

This charger is set for charging AGM batteries only. Do not replace existing batteries with any other type of battery if continuing to use this charger.

It is not necessary to remove either the battery cover or the back panel cover in order to charge the batteries.

4. Plug the AC charger cord into the stacker AC charger cord input receptacle.



- 5. Connect the other end of the AC charger cord to the 115v AC grounded wall outlet.
- 6. The red/yellow/green LED display directly adjacent to the AC charger cord input receptacle will provide the status of the battery charging process.
 - Flashing Red Battery Reversed Polarity
 - Solid Red Charger Error
 - · Flashing Yellow No Battery Connected
 - Solid Yellow Normal Charging
 - Flashing Green 80% Charged
 - Sold Green Fully Charged
- 7. Plan on 6 to 8 hours to completely charge the batteries, but depending on their status when the charging process was initiated, it may take less time.
- 8. Once the green LED light is on and no longer flashing, the charging process is complete.
- 9. Disconnect the AC charger cord from the 115v AC grounded wall outlet.
- 10. Disconnect the other end of the AC charger cord from the stacker.
- 11. Place charger cord in storage until the next time it is needed.
- 12. Replace the battery and back panel covers if removed in earlier step.
- 13. Disengage E-STOP when ready to use the stacker.

7.5 Periodic Maintenance

7.5.1 Weekly

- Inspect the machine for damage. Check for bent, dented, or broken parts.
- Check the lift system for binding or excessive movement in the forks. Check for quiet and smooth operation of the lift cylinder. Check all moving parts and linkages.
- Check the hydraulic system for leaks. Check hydraulic fluid level.
- · Check wheels and casters for wear and/or damage. Ensure they turn smoothly.
- Inspect lift chain and assemblies. Check to see they are all in place and not loose.
- Inspect forks. Check for bending and/or cracks.
- Inspect the brake. Verify the brake works correctly.
- Inspect all electrical wiring for loose connections or damage.
- · Verify all precautionary labeling is in place and legible.

7.5.2 Monthly

- Clean battery terminals and battery compartment.
- Clean and inspect the hydraulic cylinder for leaks or damage.
- Lubricate the chain with a rust inhibitive lubricant (light machine oil).
- Check chain tension. The chain should be tight enough that when in lowered position there is no slack in the chain, which could allow the chain to slip off the chain roller assembly.
- Inspect the frame assembly for damage or wear.
- Clean and lubricate all roller bearings, cam followers, and all moving parts.
- Clean and inspect all welds.
- Check wheels for wear or damage.
- Inspect the nameplates. Verify they are legible.
- Check battery, motor, controllers, limit switches, electrical conductors and connections.

7.6 Ordering Replacement Parts

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.

8 TROUBLESHOOTING

When attempting to inspect/troubleshoot and/or repair electrical, hydraulic or structural problems, keep in mind the following:

▲ DANGER

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

High voltage can cause severe injury or death. When necessary, disconnect and lockout electrical power (AC Charger) & negative (first) then positive (second) battery terminals before performing setup, 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 resolved. See Recommended Considerations - Lockout/Tagout Procedures (LOTO) and Electrical sections for more information.

Pressurized fluids can penetrate skin and cause severe injury or death. Always use proper personal protective equipment when installing, troubleshooting, repairing or maintaining pressurized systems. Relieve hydraulic system pressure before performing any maintenance on the hydraulic system. The hydraulic system pressure is at its lowest when the forks are their lowest point (2-3/4" off the floor), and the DOWN button is held for an additional 5 seconds after. Treat all lines as if pressurized and open any necessary fitting slowly and do not completely disconnect until all pressure has been relieved.

All electrical components and the hydraulic power unit must be protected from wet and/or dirty environments.

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 forks unless the machine is unloaded and secured against lowering using approved temporary support.

Do not change the hydraulic power unit relief valve setting. It has been set at the factory for this stacker and should not require any adjustment.

Contact Customer Service when in doubt about servicing this stacker.



△ CAUTION

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

Always keep power and control cords clear of foot and vehicle traffic.

For any hydraulic fluid losses, see Replacing Hydraulic Fluid and Hydraulic Fluid sections.

Symptom	Possible Cause	Recommended Action / Notes				
Fault Code indicated on the LCD Display		Review AC Controller fault code translator by scanning the QR code. Contact Presto Lifts Customer Service for assistance if necessary.				
	E-STOP Engaged	Disengage E-STOP				
	Loose or dirty battery connections	Inspect and tighten or clean as necessary.				
	Dead batteries	Determine if voltage is registering on the LCD panel and charge if necessary.				
	Blown fuse	Check all 3 fuses and replace as necessary. FU1 is the HPU motor fuse (200A), FU2 is the Drive Wheel motor fuse (150A), FU3 is the control power fuse (10A).				
No power		Inspect wiring from fuse to lift switch in handle.				
	Faulty or damaged wiring	Inspect wiring from battery positive terminal to pump contactor to pump motor.				
		Inspect wiring from lift switch to solenoid.				
	Faulty control switch	Check electrical diagram and determine voltage at switch.				
	Faulty contactor switch	Check electrical diagram and determine voltage at switch.				

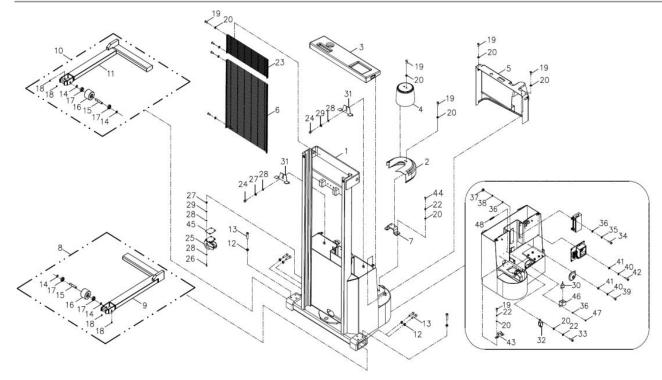
0925 IH-12198VND

Symptom	Possible Cause	Recommended Action / Notes			
		Inspect wiring from fuse to lift switch in handle.			
	Faulty or damaged wiring	Inspect wiring from battery positive terminal to pump contactor to pump motor.			
		Inspect wiring from lift switch to solenoid.			
	Faulty lift switch	Check electrical diagram and determine voltage at switch.			
	Faulty UP switch	Check electrical diagram and determine voltage at switch.			
		Pump check valve may be stuck open.			
Forks will	Low hydraulic pressure	Faulty solenoid valve.			
not raise	Faulty lift contactor	Check electrical diagram and determine voltage at swite			
	Blown fuse	Check fuses and replace as necessary. FU1 is the HPU motor fuse (200A), FU3 is the control power fuse (10A).			
	Chain or roller bound	Inspect both chain and chain assembly. Make sure nothing is damaged or bound up. Resolve as necessary.			
	Oil level low, or leakage	Check the oil level, and check for loose fittings and for leaks. If leaks are found, determine cause and repair accordingly. Add fluid as needed.			
	Load weight over rated capacity of stacker	Weigh load, if over 2,600 lbs. remove some of the load until no heavier than 2,600 lbs.			
	Dead batteries or low voltage	Determine if voltage is registering on the LCD panel and charge if necessary.			
	Oil level low, or leakage	Check the oil level, and check for loose fittings and for leaks. If leaks are found, determine cause and repair accordingly. Add fluid as needed.			
Forks raise	Down valve energized	Ensure down valve is not energized when the motor is running.			
too slowly	Fluid filter clogged	Clean or replace filter.			
	Chain, carriage or roller bound	Inspect both chain and chain assembly. Make sure nothing is damaged or bound up. Resolve as necessary.			

Symptom	Possible Cause	Recommended Action / Notes
Forks will not	Oil level low, or leakage	Check the oil level, and check for loose fittings and for leaks. If leaks are found, determine cause and repair accordingly. Add fluid as needed.
stay elevated (Drifts down)	Down valve energized	Ensure down valve is not energized when the controls are not being pressed.
	Down valve partially open, dirty	Remove down valve and clean.
	Chain or roller bound	Inspect both chain and chain assembly. Make sure nothing is damaged or bound up. Resolve as necessary.
Forks will not	Down valve not energized	Ensure down valve is energized when the down control is being pressed.
lower	Obstruction beneath forks	Remove obstruction accordingly.
	Faulty DOWN switch	Check electrical diagram and determine voltage at switch.
Forks lower too slowly	Down valve partially clogged	Remove down valve and clean. See Down Valve Cleaning and Relieving Hydraulic System Pressure sections.
	Drive motor not powered	Check electrical diagram and determine voltage at motor.
		Drive wheel may be getting worn out. Check for wear and replace if necessary.
	,	Drive wheel may not be correct type for surface being traveled on. Contact Presto Lifts Customer Service.
		Floor may have water or something else on it preventing good resistance for the drive wheel. Clean or dry floor as needed.
Stacker will	Drive wheel not getting enough traction	See Critical Procedure for Proper Wheel Traction section.
not traverse forward or reverse		DO NOT use on ramps or inclines greater than the gradeability limits. Only on smooth, not slick level surfaces.
		Ensure the grade traveling on is no more than 10% while unloaded, or no more than 6% while loaded.
		It is not designed for use on asphalt pavement, but on substantially firm, smooth, even, and prepared surfaces.
	Electric wheel brake locked	Make sure handle and steering arm is at appropriate position (between 30 and 70 degrees) before attempting to traverse forward or reverse.
	Faulty thumb control switch	Check electrical diagram and controller fault codes.

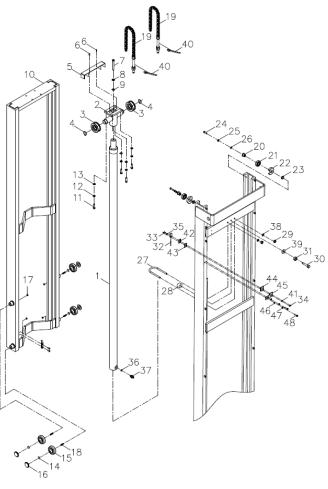
9 STRUCTURAL PARTS DIAGRAMS

9.1 Body Assembly (A391-1L)



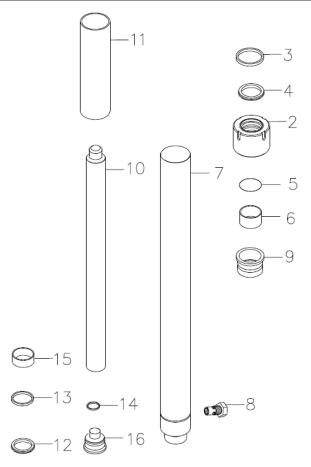
No.	Part		No.	Part	No.	Part
1	Car Body Assembly		18	Hex Socket Head Bolt	35	Rubber Washer
2	Drive Wheel Guard		19	Button Head Sock Scrw	36	Washer
3	Cover		20	Washer	37	Hex Nuts
4	Pivot Cover		21		38	Spring Washer
5	Cover - Rear		22	Spring Washer	39	Button Head Sock Scrw
6	Mesh - Lower Mast		23	Mesh - Upper Mast	40	Spring Washer
7	Base Plate Holder		24	Hex Head Bolt	41	Washer
8	Straddle Leg LH Assy		25	Running Wheel	42	Wire Crimping Plate
9	Left Leg		26	Hex Head Bolt	43	Hex Head Bolt
10	Straddle Leg RH Assy		27	Hex Nuts	44	Spacer
11	Right Leg		28	Washer	45	Plate
12	Hex Nuts		29	Spring Washer	46	Half Rnd Hd Cross Bolt
13	Hex Socket Head Bolt		30	Slow Switch Line Grp	47	Sticker
14	Spacer		31	Battery Holder	48	Hex Head Bolt
15	Front Wheel Mnt Spdl		32	Relay	49	Washer
16	Running Wheel (Outrig)		33	Hex Head Bolt	50	Spring Washer
17	Bearing		34	Hex Head Bolt	51	Plate

9.2 Mast Assembly (A391-3H)



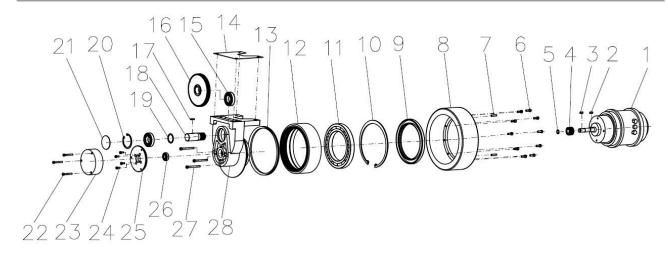
No.	Part		No.	Part	No.	Part
1	Cylinder		17	Hex Nuts	33	Hex Socket Head Bolt
2	Reversion		18	Hex Socket Head Bolt	34	Hex Nuts
3	Wheel		19	Chain Assembly	35	Washer
4	Snap Ring		20	Spindle	36	"O" Ring
5	Chain Wheel Cover		21	Bearing	37	Connector
6	Spring Pin		22	Dust Guard	38	Washer
7	Hex Socket Head Bolt		23	Spacer	39	Washer
8	Spring Washer		24	Hex Socket Head Bolt	40	Cotter Pin
9	Washer		25	Spring Washer	41	Spring Washer
10	Inner Mast Sub Assbly		26	Washer	42	Plate Lock
11	Hex Head Bolt		27	U Bolt	43	Plate Lock
12	Spring Washer		28	Rubber Spacer	44	Plate Lock
13	Washer		29	Hex Nuts	45	Plate Lock
14	Washer		30	Bolt	46	Washer
15	Roller		31	Hex Nuts	47	Spring Washer
16	Block		32	Prox Switch Assembly	48	Hex Head Bolt

9.3 Cylinder Assembly (A391-4D)



No.	Part	No.	Part
1	Lifting Cylinder	9	Wear Ring
2	Cover	10	Road Assembly
3	Dust Seal	11	Cover
4	Ring Seal	12	U-Ring
5	O-Ring	13	Catch
6	Bearing	14	Snap Ring
7	Cylinder Block	15	Wear Ring
8	Relief Valve	16	Piston

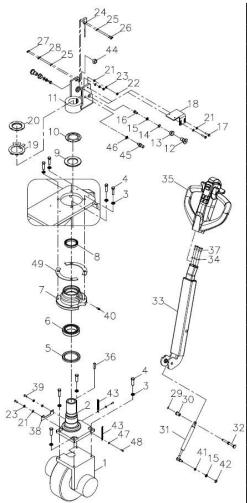
9.4 Drive Wheel Assembly (A392-2E)



No.	Part	No.	Part	No.	Part
1	Motor - 1 KW AC	11 Bearing		20	Circlip
2	Key	12	Gear - Ring	21	Dust Cover
3	Key	13	Seal	22	Screw
4	Gear - Small	14	Gasket	23	Brake
5	Circlip	15	Bearing	24	Screw
6	Screw	16	Gear - Large	25	Flange
7	Pin	17	Key	26	Bearing
8	Tire	18	Gear Shaft	27	Screw
9	Ring	19	Spacer	28	Casing
10	Circlip				

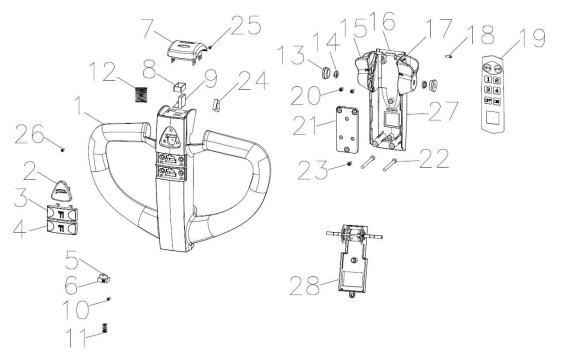
9.5 Steering Assembly (A392-1G)

No.	Part						
1	Wheel Assbly - Drive						
2	Shaft Assembly						
3	Spring Washer						
4	Hex Head Bolt						
5	Oil Seal						
6	Bearing						
7	Rotary Shaft Seat						
8	Bearing						
9	Bearing Retaining Ring						
10	Large Lock Nut						
11	Connection Seat						
12	Pivot Bolt						
13	Sleeve Spindle						
14	Washer						
15	Spring Washer						
16	Hex Head Bolt						
17	Hex Head Bolt						
18	Pivot Cover Holder						
19	Washer						
20	Small Lock Nut						
21	Washer						
22	Nut						
23	Spring Washer						
24	Prox Switch Assembly						
25	Washer						



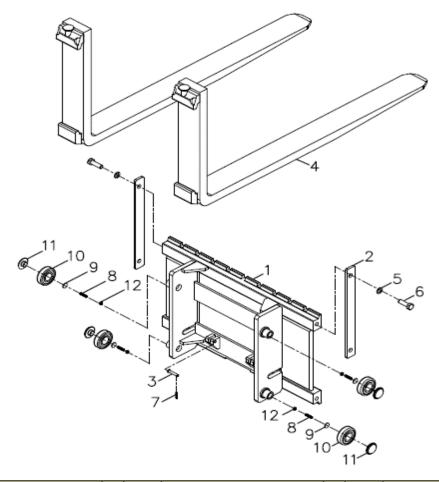
No.	Part
26	Button Head Sock Scrw
27	Hex Nuts
28	Spring Washer
29	Snap Ring
30	Sleeve Spindle
31	Air Spring
32	Pins
33	Steering Arm
34	Washer
35	Control Pod Assembly
36	Key
37	Button Head Sock Scrw
38	Wiring Protecting Hood
39	Hex Head Bolt
40	Grease Nipple
42	Washer
43	Bind Band
44	Hex Nuts
45	Limit Blocks
46	Spring Washer
47	Spring Washer
48	Button Head Sock Scrw
49	Spacer 1
49	Spacer 2

9.6 Handle Assembly (A392-4F)

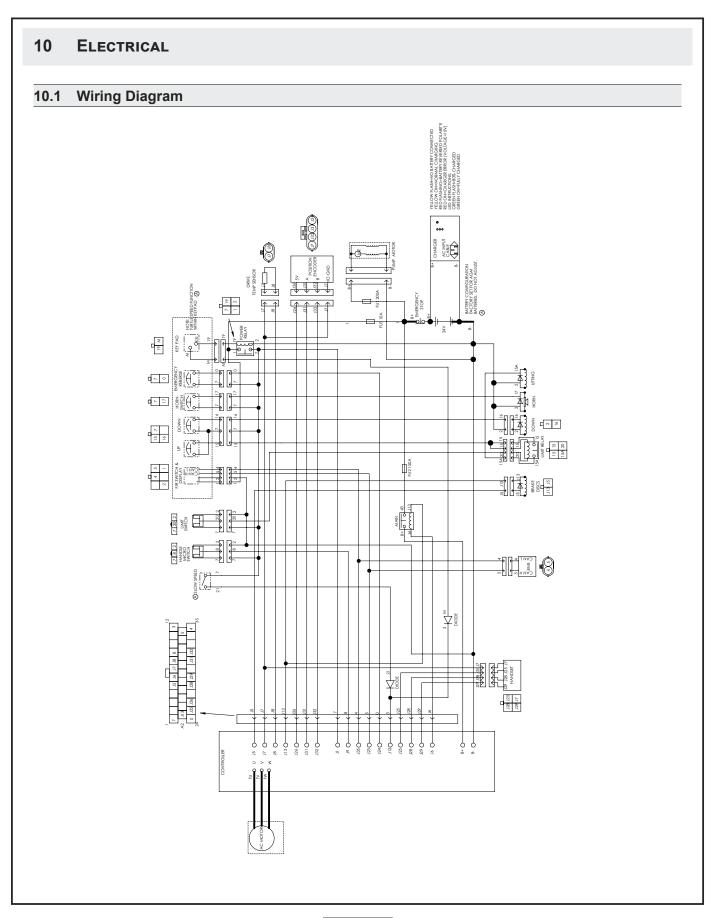


No.	Part	No.	Part	No.	Part
1	Handle Head Body	11	Spring, Switch	20	Bolt
2	Button - Horn	12	Spring, Belly	21	Mounting Plate
3	Button - Lowering	13	Plastic Bearing	22	Hex Sock Ctrk Hd Bolt
4	Button - Lifting	14	Plastic Bearing	23	Bolt
5	Switch Mounting Base	15	Handle Knob	24	Switch - Micro, Belly
6	Switch - Micro	16	Bottom Cover	25	Self-Tapping Screw
7	Button - Belly	17	Handle Knob	26	Self-Tapping Screw
8	Button Protector Sleeve	18	Half Rnd Hd Cross Bolt	27	Protective Cover
9	Button Bracket	19	Handle Display Panel	28	Accelerator / BDI
10	Self-Tapping Screw				

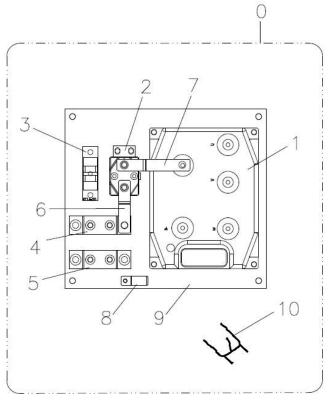
9.7 Carriage & Fork Assembly (A391-2H)



No.	Part	No.	Part	No.	Part
1	Carrier Sub Assembly	5	Spring Washer	9	Washer
2	Cover	6	Hex Head Bolt	10	Bearing - Carriage
3	Pin	7	Cotter Pin	11	Rotary Wheel
4	Fork - Forged	8	Hex Socket Head Bolt	12	Hex Nuts



10.2 Controller Assembly (A393-1D)



No.	Part	No.	Part
0	Controller Assembly	6	Copper Joint Rod
1	Controller	7	Copper Joint Rod
2	Contactor	8	Plate
3	10A Fuse (FU3)	9	Aluminum Plate
4	150A Fuse (FU2)	10	Wiring Harness
5	200A Fuse (FU1)		

11 HYDRAULICS

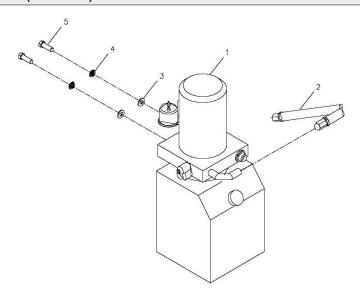
11.1 Hydraulic Fluid

Presto Lifts supplies the unit with Citgo AW 32 oil or equivalent.

NOTICE

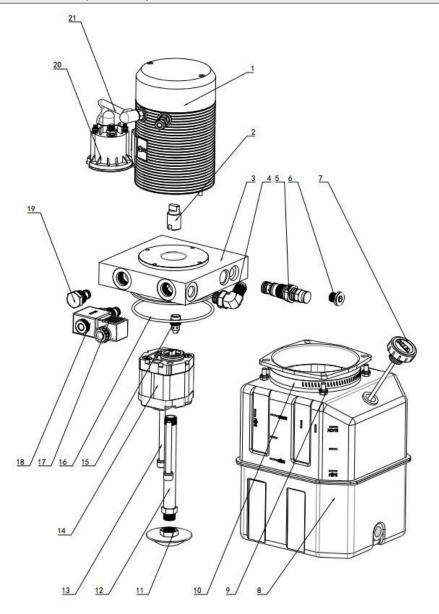
When replacing or adding fluid, do so when forks are at their lowest point (2-3/4" off the floor) and use the markings on the fluid reservoir to determine the appropriate level to fill to.

11.2 Hydraulic System (A394-1G)

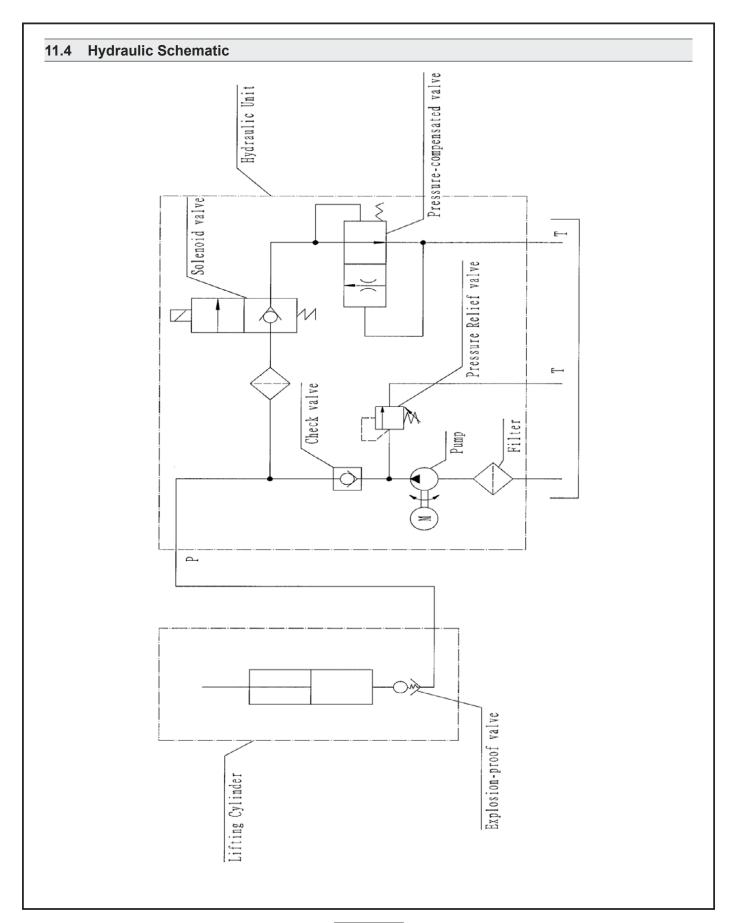


No.	Part	No.	Part
1	Hydraulic Assembly	4	Spring Washer
2	Pressure Hose	5	Hex Head Bolt
3	Washer		

11.3 Hydraulic Power Unit (A394-4B)



No.	Part		No.	No. Part		No.	Part
1	DC Motor		8	Plastic Oil Tank		15	Pressure Comp Valve
2	Coupling		9	Screw		16	O-Ring
3	Valve Block		10	Clamp		17	Solenoid Valve
4	Direct Current Pipe Jnt		11	Oil Filter		18	Coil
5	Relief Valve		12	Suction Oil Hose		19	Unilateral Valve
6	Iron Plug		13	Hex Sock Hd Cap Scrw		20	Starting Switch
7	Oil Tank Cover		14	Gear Pump		21	Flexible Connct Wire



12 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.

Presto Lifts Inc., 2 Hampshire Street, Suite 102, Foxborough, MA 02035 800.343.9322 | Fax: 888.788.6496 service@prestolifts.com www.PrestoLifts.com



To view a copy of the Terms and Conditions of Sale, go to: https://PrestoLifts.com (Find in About Us pull down menu)



PAGE 68 OF 68 **uline.com** 0925 IH-12198VND