



# Lift Stik

PLS53-150P PLS53-150W

# **Installation, Operation and Service Manual**

Model Number
Serial #
<b>Date Placed in Service</b>

IMPORTANT: READ CAREFULLY
BEFORE INSTALLING OR OPERATING LIFT

Part orders are subject to a \$50 minimum charge.

This manual was current at the time of printing. To obtain the latest, most updated version, please contact the Customer Service Department or go to our website: www.PrestoLifts.com -- you will find a complete list of current Owner's Manuals to print.

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#### SECTION 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. Lift Stik. 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 of the Presto Lift Inc. stackers is equipped with nameplate, serial number and model identifications. Please refer to these numbers when ordering parts or requesting further information.

The Presto Lifts Inc. stackers are designed for lifting, lowering and positioning a wide variety of loads. WHERE UNIQUE SITUATIONS ARISE, WHICH ARE NOT COVRED IN THIS MANUAL, CALL PRESTO LIFTS FOR FURTHER INSTRUCTIONS.

The battery-operated stackers are designed for in-plant/non-hazardous locations only. These units are not for personnel lifting. All equipment is manually propelled and powered vertical travel.

#### **Responsibility of Owners and Users**

#### **Inspection and Maintenance**

The device shall be inspected and maintained in proper working order in accordance with Presto's owner's manual.

#### **Removal from Service**

Any device not in safe operating condition such as, but not limited to, excessive leakage, missing rollers, pins, or fasteners, any bent or cracked structural members, cut or frayed electric, hydraulic, or pneumatic lines, damaged or malfunctioning controls or safety devices, etc. shall be removed from service until it is repaired to the original manufacturer's standards.

#### **Repairs**

All repairs shall be made by qualified personnel in conformance with Presto's instructions.

#### **Operators**

Only trained personnel and authorized personnel shall be permitted to operate PowerStak.

#### **Before Operation**

Before using the device, the operator shall have:

- Read and/or had explained, and understood, the manufacturer's operating instructions and safety rules.
- Inspected the device for proper operation and condition. Any suspect item shall be carefully examined and a determination made by a qualified person as to whether it constitutes a hazard. All items not in conformance with Presto's specification shall be corrected before further use of the Lift Stik.

#### **During Operation**

The device shall only be used in accordance with this owner's manual.

- Do not overload.
- Ensure that all safety devices are operational and in place.

#### **Modifications or Alterations**

Modifications or alterations to any Presto industrial positioning equipment shall be made only with written permission from Presto.

#### SAFETY ALERT SYMBOLS AND SIGNAL WORDS

The safety of all persons operating, maintaining, repairing, or in the vicinity of this equipment is of paramount concern. This is a powerful machine with moving parts, and is capable of causing personal injury if proper precautions are not taken. Therefore, throughout this manual, certain hazards have been identified which may occur in the use of the machine, and there are appropriate instructions or precautions which should be taken to avoid these hazards. In some cases, there are consequences which may occur if instructions or precautions are not followed. Below are the symbols and signal words along with their definitions referenced from ANSI Z535.4 - Product Safety Signs and Labels.

#### **Safety Alert Symbols**

These are the safety alert symbols. They are used to alert you to potential physical injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.



For use with DANGER signal word

(Red Background)



For use with WARNING signal word

(Orange Background)



For use with CAUTION signal word

(Yellow Background)

#### **Signal Words**

The meaning of different signal words as defined by ANSI Standard Z535.4 indicates the relative seriousness of the hazardous situation.



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



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



CAUTION, used with the safety alert symbol, indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.



NOTICE is used to address practices not related to personal injury.



SAFETY INSTRUCTIONS (or equivalent) signs indicate safetyrelated instructions or procedures.

## SAFETY

The battery-operated stackers are very powerful lifts capable of doing large amounts of work.

DO NOT INSTALL OR 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 installation, maintenance and use of these lifts. For safety reasons these units are designed to be serviced or repaired in the collapsed position. If performed properly, this will greatly reduce the possibility of injury.

### **AWARNING**

The following guidelines should be used when using a lifter:

Under no circustances should the lifter lift above the weight capacity.

The lifter must not be used to lift people. There must be only one person in constact with the lifter while it is being operated.

There should be no body parts near the slide on the tower or other lifting eqiupmet when the lifter is being opprated.

There must be no people or body parts below the load.

The lifter must be operated on a firm level surface when lifting or transporting loads.

When maying a load, the load should be low.

When moving a load, the load should be lowered to a low position and secured so that it cannot slide.

When leaving or storing the lifter, ensure that the sled is lowered completely, and that the lifter is free of any load or cargo.

The load's center of gravity should be behind the front wheels of the uspport legs.

The lifter should only be cleaned by wiping with a damp cloth, otherwise water may enter into the contacts and control panel.

The timing belt should be replaced every 8 years.

## SECTION 3 INSTALLATION

#### A. INSPECTION:

Upon receipt of the stacker, inspect the equipment completely to determine if there is any shipping damage, and that the lift is complete. Presto Lifts Inc. tests and inspects every piece of equipment prior to shipment. If damage is apparent, a freight claim must be filed with the freight company. Do not use the lift if there appears to be any damage. With the lift in a collapsed position, check the following:

- 1 Check for signs of damage especially to the back cabinet that houses the battery and power pack.
- 2 Check base frame for dimensions and structural integrity.
- 3 Inspect for any bent or damaged metal parts.

## SECTION 4 OPERATION

#### A. OPERATING INSTRUCTIONS:

- 1. To raise lift, push "Lift" button.
- 2. To lower lift, push "Lower" button.
- 3. Whenever the control handle is released, the lift stops.

AUTHORIZED OPERATORS SHOULD READ AND UNDERSTAND ALL INSTRUCTIONS, PRE-CAUTIONS AND WARNINGS. IMPROPER USE OF THIS LIFT COULD RESULT IN INJURY AND/OR DAMAGE TO LOAD AND EQUIPMENT.

- 1 Inspect the lift for damaged or worn parts. *Do not* use if not in safe operating condition.
- 2 Use lift on hard level surfaces only.
- 3 Make sure load is evenly distributed, not loose or unstable, and is as far back on platform or forks as possible. *Do not* pick up loads on tips or forks or edge of platform.
- 4 For fork models, adjust forks to the maximum practical width. Pick up loads on both forks (not one).

- 5 Do not overload. Check load center and load weight capacities on manufacturer's nameplate.
- 6 Make sure travel and work area is clear of obstructions.
- 7 Check overhead clearance before lifting loads or transporting.
- 8 Make sure floor lock pad is in firm contact with floor before lifting load, lowering load or using as a workstation.
- 9 Brace or block lift when sliding loads on or off platform or forks.

## B. DAILY OPERATIONS MAINTENANCE CHECKS:

#### 1. Battery

- A. Check for corroded and loose terminals.
   A white powder substance will be present if there is any existing corrosion.
- B. Visually inspect for any cracks or damage to the casing.
- C. Check for loose battery tie-downs.

#### 2. Charger

- A. Inspect wire connections.
- B. Check power cord for nicks/damage.
- C. Check charger for proper mounting.

#### 3. Frame Assembly

- A. Check wheel lock.
- B. Check chain roller assembly connections.
- C. Check for any worn or damaged parts.

## OPERATOR INSTRUCTIONS

### **AWARNING**

- **DO NOT** use this lift until you have been trained and authorized to do so.
- **DO NOT** operate until you have read all warnings and instructions.
- **DO NOT** exceed load center or load weight capacities
- **DO NOT** operate until you have checked the conditions of the truck: lift systems, forks, chains, cables and floor lock.
- **DO NOT** use if any part is damaged, worn or not working properly.
- **DO NOT** use on ramps or inclines. Only smooth level surfaces.
- **DO NOT** use for lifting or carrying people.
- **DO NOT** handle unbalanced, unstable or loosely stacked loads.
- **DO NOT** travel with forks or platform in an elevated position.
- **DO NOT** handle high-unsecured loads that could fall backwards.
- **DO NOT** allow people to stand or pass under forks or platform with or without load.
- **DO NOT** operate when parts of anyone's body may be close to mast structure or any moving parts.
- **DO NOT** drop loads on platform or forks.
- **DO NOT** alter or modify this lift in any way.

#### A. PREPARATION FOR USE

This lift left our factory in perfect condition. It has been inspected and tested to assure performance standards have been met.

Visually inspect lift for damage. Check for attachments and accessories that may have been ordered. If there is any damage or missing parts, report it to your carrier and your Presto Lifts dealer immediately.

Remove all metal/plastic bands, cardboard and other material used for shipping purposes.

Check to see if chains are in place, the wheel lock is in working order, and that the lift system is in working order.

Connect battery cable. Check cables and wires on battery charger as well as battery.

#### **B. OPERATIONS**

#### **PRECAUTIONS:**

AUTHORIZED OPERATORS SHOULD READ AND UNDERSTAND ALL INSTRUCTIONS, PRECAUTIONS AND WARNINGS. IMPROPER USE OF THIS LIFT TRUCK COULD RESULT IN INJURY AND/ OR DAMAGE TO LOAD AND EQUIPMENT.

Inspect the lift for damaged or worn parts. Do not use if not in safe operating condition.

Use lift on hard level surfaces only.

Make sure load is evenly distributed (not loose or unstable), and is as far back on forks as possible. Do not pick up loads on tips of forks or edge of platform.

Adjust forks to the maximum practical width. Pick up loads on both forks (not one).

Do not overload: Check load center and load weight capacities on manufacturers name plate.

Make sure travel and work area is clear of obstructions

Check overhead clearance before lifting loads or transporting.

Make sure floor lock or pad is secured to floor before lifting, lowering or using as a workstation.

Brace or block lift when sliding loads on or off platform or forks.

#### SECTION 5

### **BATTERY MAINTENANCE**

#### A. PREPARING TO CHARGE A BATTERY

- 1. Be sure area around lift and the battery is well ventilated while battery is being charged.
- 2. The battery terminals, connections and wiring including the plug in the battery box and charger connections should be clean and free of corrosion. When cleaning any of these components wear a face shield or other suitable protective eyewear.
- 3. Do not operate charger in a closed area or restrict ventilation in any way.
- 4. For a sealed battery (a battery without cell caps) carefully follow the manufacturer's recharging instructions that are provided with the battery. If you do not have a copy of these instructions or the instructions for the battery charger they are available free of charge by calling Presto Lifts @ 1-800-343-9322.
- 5. Read, understand and follow all battery and battery charger manufacturer's specific precautions while working with and/or charging batteries.

## B. PRECAUTIONS FOR GROUNDING AND AC POWER CORD CONNECTION

Charger should be grounded to reduce risk of electric shock. Charger is equipped with an electric cord having an equipment-grounding conductor and grounding plug. The plug must be plugged into an outlet that is properly installed and grounded in accordance with all local codes and ordinances.

#### **A** DANGER

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.

## D. BATTERY CHARGER CONNECTION PRECAUTIONS

#### **A**CAUTION

Connect and disconnect the DC output plug (or clips) only when the AC cord is disconnected from the electric outlet. Never allow clips to touch each other.

1. When hooking up the charger, attach the plug into the twist-lock receptacle on the side of the battery box or connect the clips directly to the battery on units that are not pre-wired with a plug on the side of the battery box.

FOR UNITS <u>NOT</u> EQUIPPED WITH A TWIST-LOCK, PREWIRED CHARGER PLUG FOLLOW THESE ADDITIONAL PRECAUTIONS

- 1. Check polarity of battery posts. POSITIVE (POS, P, +) battery post usually has larger diameter than NEGATIVE (NEG, N, -) battery post.
- 2. Determine which post of battery is grounded (connected) to the chassis of the machine. Connect the NEGATIVE (Black) clip from the battery charger to the machine chassis as far away from the battery as possible.
- 3. The POSITIVE (red or white) clip from the battery charger to the POSITIVE (POS, P, +) post of the battery.
- 4. When making each connection, twist or rock clip back and forth several times to make a good connection and to reduce the risk of a clip slipping off and creating a spark. Do not twist or rock clip on the battery after the second clip connection is made.
- 5. When disconnecting the charger, disconnect AC cord from the electrical outlet before removing any clips from battery or chassis.

IF THESE INSTRUCTIONS ARE NOT CLEAR OR IF THERE ARE ANY QUESTIONS PLEASE CONTACT PRESTO LIFTS INC.



#### **SAFETY SYSTEMS**

The lifter is equipped with the following safety systems:

- Free-running ball bearings that eliminate the risk of crushing when lowering.
- Electronic control panel that disconnects the lifting feature if the load is greater than the lifter's capacity or if the load is unevenly distributed (this does not prevent overloading when the lifter is not lifting).

#### **APPLICATION**

The platform may only be used for lifting and handling goods.

#### **OPERATING THE LIFTER**

The lifter is operated using the Commander located on the lifter's control panel. This is used to operate the lifting and lowering function.

The lifter will lift as long as the Commander is turned clockwise.

The lifter will lower as long as the Commander is turned anticlockwise.



#### **BATTERIES AND CHARGER**

The lifter is charged with the enclosed charger, which is connected to the 230V charging plug on the lifter. The charger should be connected daily as total discharge can damage the battery or shorten its life.

The charger automatically charges the batteries and switches off when the batteries are fully charged.

The lifter is functionally charged after approx. 4 - 5 hours and fully charged after approx. 8 hours.

# 1 LED: Red = charge, Green = maintenance charging

# 2 LED: Green = wrongly connected



#### DESIGN

The masts, handlebars, legs and covers are made of anodized aluminium (red and neutral).

The slides are made of electro-galvanized steel.

#### **RESIDUAL RISKS**

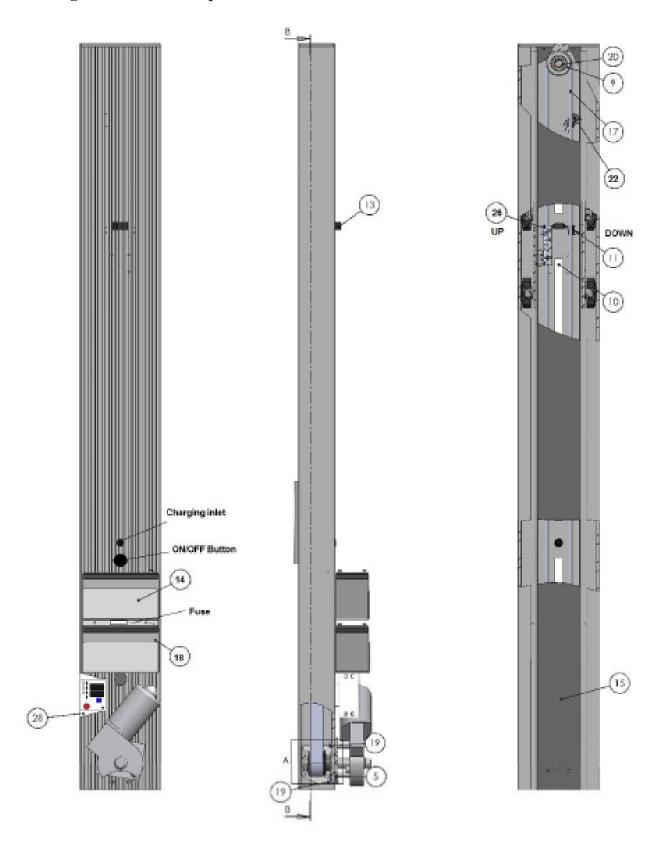
There are residual risks due to extraordinary wear, material or product failure, and the sudden onset of defects on the lifter; e.g. a faulty wheel bearing as a result of a heavy collision.

#### **TROUBLESHOOTING**

FAULT TYPE	CHECK THE FOLLOWING	RESOLVED BY
The belt cracks (the timing belt jumps onto the gear sprocket)	Is the belt slack?	Tighten the belt with the two screws at the top of the mast.
	Is the belt worn?	Replace the belt
The belt squeaks (the belt is skewed)	Is the belt running skewed in the track on the top sprocket?	Adjust the screw at the top of the mast, on the side to which the belt is skewed.
	Is the belt worn?	Replace the belt
The slide jerks	Is there dirt in the mast on which the slide runs?	Remove the dirt and wipe with alcohol.
	Is there dirt on the slide wheels?	Remove the dirt or replace the wheels.
The lifter does not respond	Check whether the item being lifted is heavier than the lifter's capacity	Remove the item
	Check the main fuse	Replace the main fuse (below the top cover screen on the legs)
	Check that the batteries are charged and not defective	Connect the charger and try to lift with the charger attached (with no load). If it rises, recharge the batteries. If this does not work replace the batteries
The lifter works very slowly	Check the voltage of the batteries	Connect the charger

#### SECTION 6

## **Testing Electronic Components**



#### Lifter Does Not Go Up or Down

Take off the load of the platform. Press the ON button. Connect charger and press the H-Commander (or the activator 13). If it starts to work a little bit in both directions, it is most likely the fuse has broken or the batteries are worn down. Replace fuse located behind the white distance block. Check batteries and replace if needed. If the test with charger is successful, the charger is working properly. See below for a full test of the charger.



#### **UP or DOWN Function Doesn't Work**







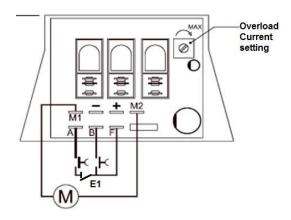


If UP doesn't work it is most likely a failure at the contact arm of the top limit switch (22) or the UP-switch (26). Down switch is pos 11. Take off the front cover and put a wire across the top limit switch connections. Press UP button and if it works you can replace the top limit switch using a hexagon key 2,5mm. Make sure the wires are connected to the NC pins 1 & 4. Contact arm with roller shall be mounted in the middle position.

#### **Testing Relay and Motor**

Measure 24V DC on +/-. If voltage is between 24V and 26V the batteries are okay. Measure if you have the same voltage on F. (Your black measuring pin must be on minus -). If the micro switches are okay you can use the H-commander to activate the relay.

You should hear the clicking from relay in both directions. If the relay clicks but the motor does not move please check connection to the motor. Measure on M1 and M2 and you shall



read 24V DC changing direction when you press the up or down button. If you have the changing 24 V DC it is most likely the motor or the wires to the motor are broken.

#### **Testing Charger**





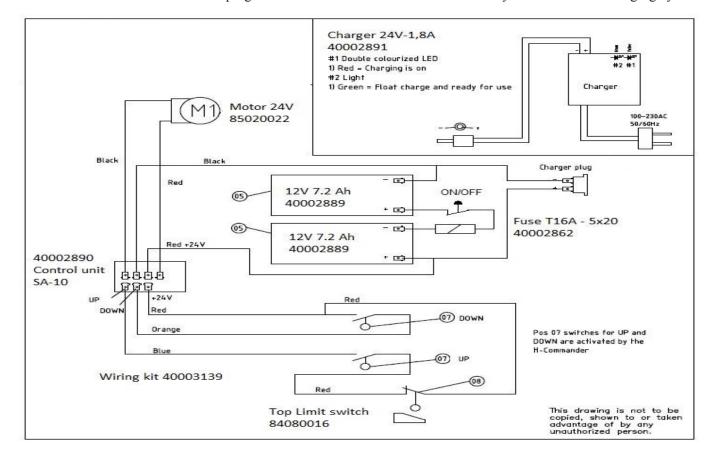




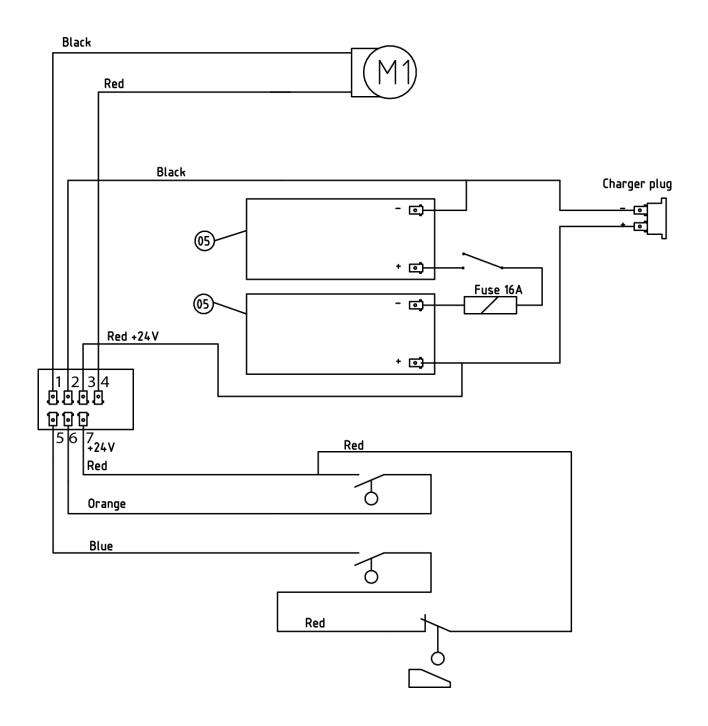
Take off front cover of the mast and locate the back side of charger inlet. Connect the charger. Led # 2 will shortly turn green and then go off. Led #1 will turn red to indicate the charger is in step 1 (Bulk charging). Measure DC voltage on the plug. While charger is at step 1 the voltage shall be increasing slowly reading about 26-29V DC. When charger goes green the voltage will drop below 27,4VDC.

If the charger **immediately goes green on LED#2** and stays green the fuse is most likely broken or the wires to batteries are not connected. Voltage at the plug will read 27,4-27,6V DC. If batteries and fuse are fine and the voltage is NOT increasing at step 1 the charger must be replaced.

Note that the charger has a "memory" of the status of the batteries as long as it is connected to the plug. It shall be turned off and disconnected from plug for at least 30 seconds to reset this memory and start a new charging cycle.



### **Electrical Diagram**



PRESTO OWNER'S MANUAL

**Ordering Replacement Parts** 

Presto Lifts has carefully chosen the components in your unit 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 to the unit.

Presto Lifts can supply all replacement parts for your lift. With your order, please include the model

number and the serial number of the unit. You can find these numbers on the name plate. This plate

is located within the cabinet, or the angle iron cylinder cross support.

To order replacement parts, please call the Presto Parts Department. Parts are shipped subject to the

following terms:

FOB factory

• Returns only with the approval of our parts department.

• Credit cards preferred (except parts covered by warranty).

• Freight collect for truck (except parts covered by warranty).

• Freight - prepaid and invoice for small parcel shipments (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.

Presto Lifts Parts Department

50 Commerce Way

Norton, MA 02766

Telephone: 800-343-9322

FAX: 888-788-6496

Email: Service@PrestoLifts.com

www.PrestoLifts.com

#### **PARTS**

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

#### **QUALITY ISSUES**

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

#### **GENERAL**

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

## **Presto Lifts Limited Warranty Policy**

Presto Lifts warrants all of its products against defects in the welded structural frame and, if applicable, scissor legs from faulty material and workmanship for a period of five (5) years from the date of invoice.

All batteries and battery chargers have a limited warranty against defects in faulty material and workmanship for a ninety (90) day period from the date of invoice through Presto Lifts. All other components have a limited warranty against defects in faulty material and workmanship for a two (2) year period from the date of invoice and a 30 day limited warranty on labor. Please note that prior authorization from Presto Lifts is required on all warranty work.

There are no implied warranties of any kind, more specifically, there are no warranties of merchantability or fitness for any particular purpose. Presto Lifts' sole warranty shall be as set forth in this limited warranty.

Presto Lifts will elect to repair or replace a defective component without charge, if any components should become defective within the limited warranty period. Proof of purchase is required for warranty. The charge for shipping the defective component is the responsibility of the buyer and must be accompanied with an RMA number. The shipping charge to return the component to the buyer is the responsibility of Presto Lifts, Inc.

This limited warranty does not cover labor expense for removal or reinstallation of components after thirty days. This limited warranty shall not cover, among other things: damages resulting from foreign matter or water, failure to provide reasonable and necessary maintenance, and if applicable, use of product while charger is plugged into an AC outlet, or failure to follow operating instructions. The limited warranty is not valid for damage resulting from negligence, accident, unreasonable use, abuse or misuse, exceeding data plate capacities or altering the product without Presto Lifts authorization.

Presto Lifts expressly disclaims and excludes any liability for consequential, incidental, indirect or punitive damages or financial loss to people or property resulting from any breach of warranty or the operation or failure of this product.

Presto Lifts makes no representation that this product complies with local, state, or federal safety/ product standards codes. Should this product fail to comply in any way with those codes, it shall not be considered a defect of materials or workmanship. Presto Lifts shall not be held liable for any damages resulting from noncompliance. It is the dealer's responsibility to exercise this limited warranty. This limited warranty is provided to the original purchaser (defined as the original end user) and is nontransferable. This constitutes the complete and final agreement involving Presto Lifts and limited warranty obligations for products.