

# HD-3WXL Series

## Continuous Degaussing System

### Operation and Installation Manual



[www.Garner-Products.com](http://www.Garner-Products.com)

(800) 624-1903  
10620 Industrial Ave., Suite 100  
Roseville, CA 95678

Manufactured in the U.S.A.

PN 4075-244H

## TABLE OF CONTENTS

GENERAL INFORMATION	1
MAGNETIC FIELDS	1
External Magnetic fields	1
PACE MAKER USERS	1
SPECIFICATIONS	2
INSPECTION	3
INSTALLATION	3
Power Requirements	3
Input Voltage Configuration	3
Power Plug	6
Fuse Block	6
Placement	6
Cooling	6
OPERATION	7
Controls and Indicators	7
POWER Button	7
LCD Display	7
Degaussing Instructions	7
Automatic Degaussing	7
Powering Up	7
Automatic Degaussing Steps	8
Automatic Degaussing Technical Detail	9
Degaussing Instructions for DLT Media	10
Error Codes	11
Charge Error	11
Door Open Error	11
Gauss Error	11
Overheat Error	11
Ejecting Media After an Error	11
PARTS LIST MODEL HD-3WXL	12
DECLARATION OF CONFORMITY	13
WARRANTY	14

## GENERAL INFORMATION

The Garner Products, Inc. Model **HD-3WXL** is a continuous duty capacitive discharge degausser. The HD-3WXL is designed to erase hard drives and tape cartridges that fit within the opening of the Media Entrance Door. The convenient media loading design accommodates many different types and sizes of media, without the need for adapters. Each erase cycle is measured and verified by internal diagnostics thus eliminating the possibility of a non-erasure. For security purposes, if an insufficient field is detected, the HD-3WXL will not release the media. For assistance from Garner Products, Inc. call (916) 784-0200.

## MAGNETIC FIELDS

### **EXTERNAL MAGNETIC FIELDS**

The **HD-3WXL** produces a single focused magnetic pulse lasting less than 1/20 of a second. The focused intensity of the degaussing coil allows the HD-3WXL to erase today's highest coercivity media while also limiting the magnetic field exposure to 1 second for every 20 pieces of media degaussed.

<u>Distance from side of degausser</u>	<u>Magnetic field</u>	<u>Duration of Field</u>
0" (0cm)	61 gauss	< 0.05 Second
6" (15cm)	6 gauss	< 0.05 Second
12" (30cm)	2 gauss	< 0.05 Second

**Note:** The testing room measured 0.4 gauss before degausser was plugged in.

Average Operational Distance (AOD) from user to the HD-3WXL is 12-18 inches (30-45 cm). According to the American Conference of Governmental Industrial Hygienists (ACGIH) Threshold Limit Values (2005) - Static Magnetic Fields, whole body exposure limits recommended for an 8 hour shift are 600 gauss. Because of the short duration of each pulse from an HD-3WXL (1/20<sup>th</sup> of a second) and the extremely small magnetic field outside of the HD-3WXL (<6 gauss, AOD), the total 8 hour whole body exposure is 0.004% of the recommended limit.

\*Pulse duration was rounded to ½ second per discharge for calculations to cover any buildup of magnetic fields generated before or after discharge.

### **PACE MAKER USERS**



## **WARNING**

**Due to stray magnetic fields, consult your physician before operating.**

## SPECIFICATIONS

<b>Power Supply (HD-3WXL):</b>	Selectable: 95~105, 105~115, 115~125, 215~225, 225~235 or 235~240, 50/60Hz.
<b>Power Consumption (HD-3WXL):</b>	100V: Under Standby 0.3A While charging 9.0A At the time of ERASE 0.6A 110V: Under Standby 0.25A While charging 8.5A At the time of ERASE 0.55A 120V: Under Standby 0.2A While charging 8.0A At the time of ERASE 0.5A 220V: Under Standby 0.17A While charging 4.5A At the time of ERASE 0.35A 230V: Under Standby 0.16A While charging 4.25A At the time of ERASE 0.325A 240V: Under Standby 0.15A While charging 4.0A At the time of ERASE 0.3A
<b>Degausser System:</b>	Capacitive Discharge
<b>Operating Time Duty Cycle:</b>	Continuous
<b>Erasing time:</b>	< 10 milliseconds
<b>Cycle time:</b>	9 seconds per cycle
<b>Magnetic Field:</b>	10,000 Oe Peak; 9,200 Oe measured in center
<b>Max. Media Size:</b>	6.75 in. (171mm)(W) x 4.5 in. (114mm)(H) x 1.8 in. (45.7mm)(D)
<b>Erasing Area Size:</b>	6.75 in. (171mm)(W) x 4.5 in. (114mm)(H) x 1.8 in. (45.7mm)(D)
<b>Media:</b>	2.5 type HDD, 3.5 type HDD, DLT, LTO, 3490 and more
<b>Temperature:</b>	41°F - 104°F (5°C - 40°C)
<b>Humidity:</b>	10%H - 40%H (without condensation)
<b>Weight:</b>	66 lbs. (30 Kg)
<b>Shipping:</b>	95 lbs. (43 Kg)
<b>Size:</b>	12.25 in. (31.1cm)(L) x 13.125 in. (33.3cm)(W) x 18.75 in. (47.6cm)(H), without slide 12.25 in. (31.1cm)(L) x 22.625 in. (57.5cm)(W) x 18.75 in. (47.6cm)(H), with slide
<b>Warranty:</b>	1 Year Factory Warranty Standard, Optional 3 Year Factory Warranty available.

## INSPECTION

Inspect the degausser for shipping damage as soon as it is unpacked. If the degausser or any accessories are damaged or fail to operate correctly, notify carrier and Garner Products, Inc. immediately. For assistance from Garner Products, Inc. call (916) 784-0200 or fax (916) 784-1425. For warranty information, please refer to the Warranty section inside this manual.

## INSTALLATION

### POWER REQUIREMENTS

Check the power specifications label located on the back of the degausser. It is important to ensure the correct power is applied to the degausser. Call Garner Products, Inc. if the voltage listed is not compatible with your voltage. International customers call 011 916 784-0200.



### Input Voltage Configuration

The HD-3WXL model is equipped with a voltage selection block allowing the HD-3WXL to be used in any country.



## WARNING

All trouble shooting and wiring checks must be performed by a qualified electrician or authorized plant personnel.

 <b>Line Voltage</b> 	<b>Terminal</b>
235 ~ 240 VAC	240 VAC
225 ~ 235 VAC	230 VAC
215 ~ 225 VAC	220 VAC
115 ~ 125 VAC	120 VAC
105 ~ 115 VAC	110 VAC
95 ~ 105 VAC	100 VAC

Line Voltage must be verified by a qualified electrician.

Disconnect ALL power from power mains before servicing or inspecting circuits.

Technical Support: 916-784-0200  
[www.Garner-Products.com](http://www.Garner-Products.com)

### Voltage Selection Panel

 **WARNING**  
Electrical Shock Hazard

All trouble shooting and wiring checks must be performed by a qualified electrician or authorized plant personnel.

Disconnect ALL power from power mains before servicing or inspecting circuits.



255-0148

To check or change the voltage configuration of the HD-3WXL, follow the steps listed below:

- 1) Read the Warning labels on the preceding page and on the HD-3WXL.



- 2) Remove the power cord from the back of the HD-3WXL.

- 3) Confirm and note the outlet voltage the HD-3WXL will plug into.



- 4) Loosen the (4) screws from the Voltage Selection Panel and remove the Voltage Selection Panel.



- 5) Using the Line Voltage Selection Reference label on the Voltage Selection Panel, confirm the correct jumper setting for the outlet voltage noted in Step 3.



- 6) To change the jumper position, pull the brown jumper wire from terminal on the upper side of the fuse block and move it to the corresponding terminal that matches your outlet voltage. (This photo shows the correct jumper setting for 120 VAC.)



Notice, this photo shows the correct jumper setting for 240 VAC.

### **Power Plug**

Plug the EIA connector attached to the supplied power cord into the receptacle on the back of the HD-3WXL.

### **Fuse Block**

Located behind the Voltage Selection Panel, on the back side of the HD-3WXL, are six separate fuses, one each for 100, 110, 120, 220, 230 & 240 VAC power. Only one fuse is used at a time. Therefore, for any voltage range [100, 110, 120 VAC] or [220, 230, 240 VAC], the two unused fuses from the same voltage range can be used as spares.

### **Placement**

The degausser must be placed on a flat, hard surface with a minimum 6 inch (15cm) space from any object that may interfere with the cooling fan exhaust located on the backside of the degausser. As a general rule, media not intending to be erased should be kept at least 2 ft (60cm) away from the degausser.

### **Cooling**

Forced air-cooling is used to maintain safe operating temperatures within the degausser. The air intake is located on the lower back panel and the exhaust is located on the upper back panel of the degausser. To ensure proper cooling, do not block the air-intake and maintain a minimum 6 inch (15cm) space from the back of the degausser to any obstacle.



## **OPERATION**

The **HD-3WXL** operation is automatically completed in one cycle or when the media has been released down the exit chute. **Note:** As a safeguard, the media will stay in the degaussing chamber until a successful erase sequence has been completed.

### **CONTROLS AND INDICATORS**

#### **POWER Button**

The POWER button is a toggle switch that will change states from on to off when pressed. When the POWER button is depressed, the power is on.

#### **LCD Display**

The LCD display gives status, automatic count, total count, software version, field strength, user instructions and fault messages.

### **DEGAUSSING INSTRUCTIONS**

The HD-3WXL media degausser operates automatically when media is inserted into the media door.

#### **Automatic Degaussing**

Sensors built into the Media Entrance Door sense that a hard drive has been inserted. The act of depositing media through the Media Entrance Door automatically initiates the degaussing process.

#### **Powering Up**

Press the POWER button ON. The HD-3WXL will go in to its power up sequence. The LCD display will show start up messages including firmware version and total count ending with "INSERT MEDIA SESSION = 0". Automatic Degaussing has now started.

**Automatic Degaussing Steps**

- Step 1:** Press POWER button ON.
- Step 2:** Wait for the LCD to display **“Insert Media”**.
- Step 3:** Insert media through the Media Entrance Door.
- Step 4:** Remove degaussed media from Media Slide.
- Step 5:** Repeat Steps 2,3 & 4.

The following information appears on the LCD Display from power-up through one automatic degaussing cycle:

Action	LCD Display	Description
<b>Step 1:</b> Press POWER button ON  <b>Step 2:</b> {Initial startup sequence.}	GARNER PRODUCTS, INC.	Displays Manufacturer.
	HD-3WXL DATA ELIMINATOR	Displays Degausser Model.
	FIRMWARE VER ##	Displays current firmware version.
	TOTAL #      --      ##	Displays total erasing cycles. Number on left indicates number of times the counter reached 50,000.
	Insert Media Session = 0	Ready for media to be placed in the Media Entrance Door.  Counter for erase cycles from power up.
<b>Step 3:</b> Insert media	Door Open	Indicates Media Entrance Door is open – this is normal when inserting media to be erased.
	Erase Cycle Initiated	Door has closed and the erase cycle has started.
	Charging >>>>>>>>>>>>>>>>>>>>	Displays capacitor charging status.
	-----== ==	Visual indicator of erasing field strength.
	Data Eliminated	Indicates power and erasing field strength was verified good and data has been eliminated.
	Media Released	Media gate has lowered and erased media will slide out.

## Automatic Degaussing Technical Detail

- 1) The LCD displays "Insert Media Session = #".
- 2) The media to be degaussed is inserted into the degaussing chamber through the Media Entrance Door. While the media is sliding into the degaussing chamber and the door is open, the LCD will display "Door Open".
- 3) The media slides into the degaussing chamber and stops when it contacts the media gate.
- 4) Sensors in the Media Entrance Door detect that media has been inserted and automatically initiate the degaussing process while displaying "**Erase Cycle Initiated**" and then displaying "**CHARGING >>>>**" on the LCD Screen.
- 5) The LCD will display the Field Strength Graph "-----==I==". The "I" in the graph represents the strength of the erasing field. The "====" portion of the graph represents the normal range for field strength level. The "I" within the "-----====" indicates where the erasing field strength measured. The position of the "I" can vary from cycle to cycle as it is based on the actual field strength.
- 6) If the field is in the normal range, the LCD will display "**DATA ELIMINATED**".
- 7) If the field is not in the normal range, the LCD will display "**ERASE FAILURE**". As an added measure of security, the media will remain inside the degaussing chamber until a successful degauss is performed or until the media is removed by following the instructions in this manual under "Ejecting Media after an Error".
- 8) The LCD will display "**MEDIA RELEASED**". The media gate will lower, allowing the erased media to exit the degaussing chamber via the Exit Slide located on the right side of the HD-3WXL.
- 9) The HD-3WXL's internal counter will advance one count and display the total number of media degaussed for the current session.

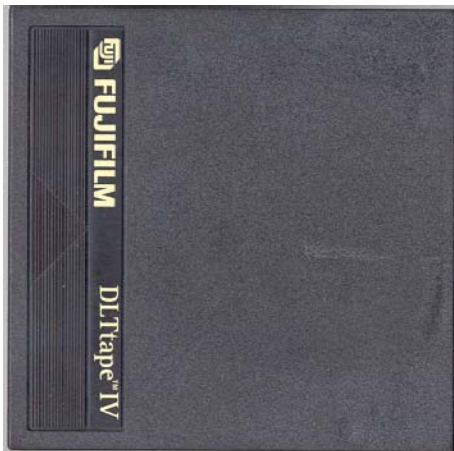
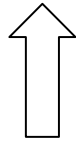
## DEGAUSSING INSTRUCTIONS FOR DLT MEDIA

The HD-3WXL allows DLT media to be erased in their plastic protective cases. Simply follow the degaussing instructions above for complete erasure.

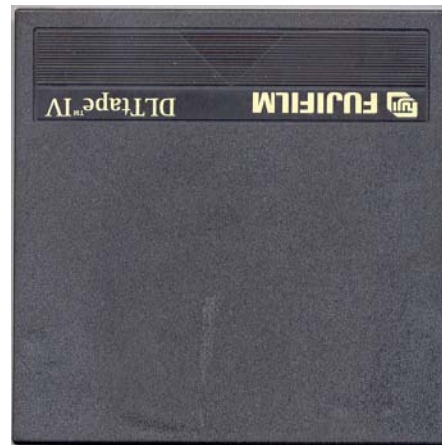
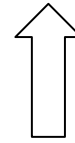
**Note: For DLT media that is to be re-used.**

Although the data is completely degaussed in one operation, a second pass rotated at 90 degrees is required to smooth out any magnetic fluctuation. Note: If the second pass is not completed, the tape drive may eject the tape and indicate that the tape needs cleaning. Performing a second pass of the DLT through the HD-3WXL at 90 degrees will correct this condition.

**First Pass**



**Second Pass**



## ERROR CODES

### Charge Error

The LCD displays “CHARGE ERROR”. This error indicates that the HD-3WXL failed to charge to the determined power level necessary to successfully erase the media in the degaussing chamber. **Note:** The media will stay in the degaussing chamber until a successful erase sequence has been completed.

**Action:** Turn off the HD-3WXL for one minute and restart. (Turning off the power to the HD-3WXL will clear the error.) If the error repeats, have the power mains checked and also check the HD-3WXL to make sure the power setting is set to match the power mains. If error persists, call customer support.

### Door Open Error

The LCD displays “DOOR OPEN”. This error indicates that the Media Entrance Door is not completely closed. The HD-3WXL checks to see if the Media Entrance Door is closed just before the media is to be erased. Once the door is closed, the HD-3WXL will automatically continue the erase function.

**Action:** Check Media Entrance Door for obstructions.

### Gauss Error

The LCD displays “GAUSS ERROR”. This error indicates the erasing field may not have been adequate to effectively erase the media in the degaussing chamber. Media will not be ejected.

**Action:** Turn off the HD-3WXL for approximately one minute. Turning off the power to the HD-3WXL will clear the error. Turn the HD3-WXL back on. To initiate the degauss cycle with media already in the degaussing chamber, push the Media Entrance Door open and let it close. The media in the degaussing chamber will be erased and only released with a successful degauss. has finished. If error persists, call customer support.

### Overheat Error

The LCD displays “OVERHEAT”. This error indicates the internal temperature has risen to a level that may be harmful to the HD-3WXL.

**Action:** When the HD-3WXL indicates an overheat error, it will inhibit any further operation until the HD-3WXL returns to an acceptable temperature. Leave the HD-3WXL powered on as the chassis fan will help reduce the heat inside the HD-3WXL. When the temperature is low enough, the HD-3WXL will return to normal operation. If this error persists, call customer support.

## EJECTING MEDIA AFTER AN ERROR

To retrieve media that has remained in the degaussing chamber due to an error:

**Step 1:** Turn the HD-3WXL OFF.

**Step 2:** Turn the HD-3WXL ON. (by pressing the POWER button).

## PARTS LIST MODEL HD-3WXL

<b>Part Number</b>	<b>Description</b>
1500-026	Capacitor, 33,000uF 200VDC
225-0033	Filter Assembly, HD-3WXL Series
225-0034	Fan Guard, internal HD-3WXL Series
250-0015	Handle, recessed pull
2825-029	Feet, Rubber
318-0136	Fuse Block, AC 15A 250V
3500-056	Motor, Fan HD-3WXL Series
3500-063	Gear motor, 12V 25RPM
356-0001	SS Relay, 240VAC 40A
398-0073	Cord, Power
3700-006	Display, 2x16 Serial LCD
4075-244F	Manual, operation HD-3WXL
4300-006	Fuse, 15A, 250V
4300-022	Fuse, 7.5A, 250V
4700-043	Surge Resistor
4800-009	SCR Module
4800-012	Zener Diode, 160V 50W
4800-017	Blocking Diode
5100-035	Switch, PB Illum Red on/mom
5100-037	Switch, PB Illum Yellow on/off
5100-036	Switch, PB Illum Green on/mom
5600-022	Transformer, toroidal
SA1400-219G	Media Transport Assy, HD-3WXL
SA1400-221G	Assy, front panel chassis
SA1400-220C	Media Entrance, HD-3WXL
SA1700-204G	PC Assy, Controller HD-3WXL
SA1700-208E	PC Assy, control panel
SA1800-101C	Coil, Assy 160W
SA2200-007F	Power Control Module
SA2200-008H	Module, base plate
SA2500-075F	Media Gate Assy.
SA2500-081B	Exit Slide Assy.

# DECLARATION OF CONFORMITY

## Declaration of Conformity

According to ISO/IEC Guide 22 and EN45014

Q544801WDCe.02.DoC Page 1 of 1

**Manufacturer's Name:** Garner Products, Inc.

**Manufacturer's Address:** 10620 Industrial Avenue, Suite 100  
Roseville, California 95678-5902 USA  
<http://www.garner-products.com>

**declares that the product**

Product Names: Continuous Degaussing System

Model Numbers: HD-3WXL

Product Options: All

**Conforms to the following Product Specifications**

Safety: EN 292-2: 1991  
EN 60204-1: 1998  
Reference: EN 61010-1: 1993

**Supplementary Information**

The product herewith complies with the requirements of the following Directives:

- the Low Voltage Directive (73/23/EEC)
- the Machinery Directive (89/392/EEC) and the Council Directives amending the Machinery Directive (91/368/EEC and 93/44/EEC)

01 June 2009

**For Compliance Information ONLY, contact:**

Australian Contact: Garner Products, Inc., Office of the Quality Manager, 10620 Industrial Avenue, Suite 100, Roseville, California 95678-5902 USA  
<http://www.garner-products.com>

European Contact: Garner Products, Inc., Office of the Quality Manager, 10620 Industrial Avenue, Suite 100, Roseville, California 95678-5902 USA  
<http://www.garner-products.com>

USA Contact: Garner Products, Inc., Office of the Quality Manager, 10620 Industrial Avenue, Suite 100, Roseville, California 95678-5902 USA  
<http://www.garner-products.com>

Evaluation Laboratory: Pulver Laboratories Inc., Office of the President, 320 North Santa Cruz Avenue, Los Gatos, California 95030-7243 USA  
<http://www.PulverLabs.com/>

PLISW.FRM, X4

**PULVER LABORATORIES INC.**  
ELECTROMAGNETIC SHIELDS



[www.PulverLabs.com](http://www.PulverLabs.com)  
Los Gatos, California 95030-7243

Fax 408.399.7001  
Voice 408.399.7000

## WARRANTY

### **GARNER PRODUCTS, INC. LIMITED WARRANTY AND WARRANTY RETURN POLICY**

**Garner Products, Inc.** ("Garner") warrants this Garner-branded product against defects in materials and workmanship under normal use for a period of ONE (1) YEAR from the date of purchase by the original end-user as evidenced by original end-user's packing slip or invoice ("Warranty Period"). If a defect arises and a valid claim is received within the Warranty Period, at its option, Garner will either: (1) repair the product, (2) exchange the product, or (3) request that end-user replace defective parts with new or refurbished user-installable parts that Garner provides in fulfillment of its warranty obligations. A replacement product or part, including a user-installable part that has been installed in accordance with instructions provided by Garner, assumes the remaining warranty of the original product or ninety (90) days from the date of replacement or repair, whichever provides longer coverage. Garner's obligation is limited to the cost of material and labor to repair or replace and does not include transportation expenses.

#### **LIMITATIONS**

This warranty does not apply: (a) to cosmetic damage, including but not limited to scratches, dents and broken plastic; (b) to normal wear; (c) to damage caused by accident, abuse, neglect, misuse, flood, fire, earthquake or other external causes; (d) to damage caused by operating the product outside the permitted or intended uses described by Garner; (e) to damage caused by service performed by anyone who is not a representative of Garner or a Garner authorized service provider; (f) to a product or part that has been modified to alter functionality or capability without the written permission of Garner; or (g) if any Garner serial number has been removed or defaced.

#### **DISCLAIMER**

TO THE EXTENT PERMITTED BY LAW, THIS WARRANTY AND REMEDIES SET FORTH ABOVE ARE EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES, REMEDIES AND CONDITIONS, WHETHER ORAL OR WRITTEN, STATUTORY, EXPRESS OR IMPLIED. AS PERMITTED BY APPLICABLE LAW, GARNER SPECIFICALLY DISCLAIMS ANY AND ALL STATUTORY OR IMPLIED WARRANTIES, INCLUDING, WITHOUT LIMITATION, WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND WARRANTIES AGAINST HIDDEN OR LATENT DEFECTS, IF GARNER CANNOT LAWFULLY DISCLAIM STATUTORY OR IMPLIED WARRANTIES, THEN TO THE EXTENT PERMITTED BY LAW. ALL SUCH WARRANTIES SHALL BE LIMITED IN DURATION TO THE DURATION OF THIS EXPRESS WARRANTY AND TO REPAIR OR REPLACEMENT SERVICE AS DETERMINED BY GARNER IN ITS SOLE DISCRETION. No Garner dealer, reseller, agent, or employee is authorized to make any modification, extension, or addition to this warranty. If any term is held to be illegal or unenforceable, the legality or enforceability of the remaining terms shall not be affected or impaired.

EXCEPT AS PROVIDED IN THIS WARRANTY AND TO THE EXTENT PERMITTED BY LAW, GARNER IS NOT RESPONSIBLE FOR DIRECT, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM ANY BREACH OF WARRANTY OR CONDITION, OR UNDER ANY OTHER LEGAL THEORY, INCLUDING BUT NOT LIMITED TO LOSS OF USE; LOSS OF REVENUE; LOSS OF ACTUAL OR ANTICIPATED PROFITS (INCLUDING LOSS OF PROFITS ON CONTRACTS); LOSS OF USE OF MONEY; LOSS OF BUSINESS; LOSS OF OPPORTUNITY; LOSS OF GOODWILL; LOSS OF REPUTATION; LOSS OF DAMAGE TO OR CORRUPTION OF DATA; OR ANY INDIRECT OR CONSEQUENTIAL LOSS OR DAMAGE HOWSOEVER CAUSED INCLUDING THE REPLACEMENT OF EQUIPMENT AND PROPERTY, ANY COSTS OF RECOVERING, PROGRAMMING, OR REPRODUCING ANY PROGRAM OR DATA STORED OR USED AND ANY FAILURE TO MAINTAIN THE CONFIDENTIALITY OF DATA. IN NO EVENT SHALL GARNER BE LIABLE FOR ANY CLAIMS, WHETHER ARISING FROM BREACH OF CONTRACT OR WARRANTY OR CLAIMS OF NEGLIGENCE OR NEGLIGENT MANUFACTURE, IN EXCESS OF THE PURCHASE PRICE.

#### **WARRANTY RETURN POLICY**

If a problem occurs with this product, contact Garner directly by **Email [info@garner-products.com](mailto:info@garner-products.com)** by **phone at (916) 784-0200** to obtain technical support and/or to get a Return Authorization Number (RA#). All returns must be specifically authorized by Garner prior to shipment and returned to Garner **FREIGHT PREPAID** with the RA# marked prominently near the shipping label. Securely package the product. It is end-user's responsibility to ensure the product is packaged properly to prevent damage during transit to Garner. Garner will provide product packaging to end-user at end-user's request and expense. Enclose proper documentation, including RA#, the return address, a name and phone number of the contact person, the serial number of the merchandise being returned and a description of the reason for the return. Omission of any of this information may delay service. Garner recommends end-user insure the shipment; otherwise end-user accepts the risk if product is lost or damaged in shipment.

Garner will pay to ship the repaired or replacement products to end-user's shipping dock if end-user's delivery address is in the United States (excluding Puerto Rico and U.S. possessions and territories); otherwise Garner will ship the product to end-user freight collect. Garner will select method for return shipment. Alternate shipment methods may be made at end-user's expense.