

LF1050 PATIENT LIFT



OWNER'S MANUAL

LF1050-INS-LABRevA05
© Graham-Field Health Products 2005

**IMPORTANT: READ THIS MANUAL BEFORE
OPERATING YOUR PATIENT LIFT**

CONTENTS

INTRODUCTION	4
SPECIAL NOTES	4
SAFETY PRECAUTIONS	5-6
FEATURES	7
HANDLING PROCEDURES	7
ASSEMBLY INSTRUCTIONS	8
OPERATING INSTRUCTIONS	9-11
CARE AND MAINTENANCE	12
MAINTENANCE SCHEDULE	13
TROUBLESHOOTING	14
SPECIFICATIONS	15
LIMITED WARRANTY	16-17

INTRODUCTION

Congratulations on your purchase of a Lumex patient lift. The following pages will provide you with important safety and operating instructions on the use of patient lifts, slings, and accessories, as well as maintenance and warranty information. Read this manual carefully before operating your patient lift and refer to it as often as needed. Consult your Lumex dealer and/or healthcare professional with any questions or concerns regarding safe and effective techniques for operating your patient lift.

DO NOT attempt any transfer without prior approval of the patient's healthcare provider. With their assistance, select the sling that best serves the needs, abilities, comfort and safety of the person being lifted. It is important that you use correct slings adapted to the body shape and weight and ability of the patient and the specific type of transfer needed.

Upon receipt of the patient lift, and prior to each use, inspect it closely to ensure that nothing is damaged, there are no loose or broken parts, that all patient lift parts are in the proper place, etc. Immediately replace any worn or broken components. Your patient lift should receive maintenance on a regular schedule and should be inspected daily for proper operation. Contact your Lumex dealer for service and repairs.

Before lifting anyone, thoroughly read the instructions in this manual. Observe a team of trained experts perform the lifting procedures. The operator should practice the entire lifting procedure several times with proper supervision and a capable individual acting as patient. It is extremely important to know how a patient will feel in the patient lift. We suggest that the operator try all the various lifting slings and equipment until the operator is confident with how the patient lift operates. The lifting procedures should be explained to the patient before the actual lifting. Remember that safety requires the constant attention of the lift occupant and the operator. Use extreme care when operating a patient lift.

This guide covers the use of the LF1050 Patient Lift. Keep in mind that the basic safety procedures included in this manual are to be used as a guide only. Again, consult your healthcare professionals for their recommendations and never hesitate to ask for their assistance.

Note: Before attempting to assemble the patient lift, refer to the section titled "ASSEMBLY INSTRUCTIONS" contained elsewhere in this manual. Contact your Lumex dealer if additional assistance is needed.

SPECIAL NOTES

⚠ Warning: Do not operate this equipment without first reading and understanding this manual. If you are unable to understand the warnings, cautions and instructions, contact your dealer or a healthcare professional before attempting to use this equipment. Failure to do so may result in serious injury or damage to your patient lift.

MAINTENANCE

Maintenance **MUST** be performed by qualified personnel **ONLY**.

⚠ Warning: Warning notices as used in this manual apply to hazards or unsafe practices which could result in personal injury.

Caution: Caution notices as used in this manual apply to hazards or unsafe practices that could result in property damage.

Note: Notes highlight procedures and contain information which assist the operator in understanding the information contained in this manual.

Note: The information contained in this document is based on the latest product information available at the time of publication. Graham-Field reserves the right to make changes at any time without notice.

Note: In this manual, the person being lifted is referred to as the “patient” or “occupant” and the person operating the patient lift is called the “operator” or “attendant”.

SAVE THESE INSTRUCTIONS AND KEEP WITH PATIENT LIFT AT ALL TIMES.

SAFETY PRECAUTIONS

IMPORTANT: Before using patient lift, please read and adhere to the following safety precautions and warnings. Failure to do so could result in serious injury or damage to your patient lift.

Always consult your healthcare professional to determine safe methods most suitable for your individual abilities. Protect yourself, your attendant and patient lift by having it serviced regularly. If

you experience any malfunction, contact your Lumex dealer immediately, as a hazardous condition could result, causing personal injury or damage to your patient lift.

Periodic inspection, adjustment and replacement of worn parts are necessary to provide years of excellent service.

Warnings

⚠ Warning: Check all parts for shipping damage before using. In case of damage, DO NOT USE the equipment. Contact the carrier or your authorized Lumex dealer for further instructions.

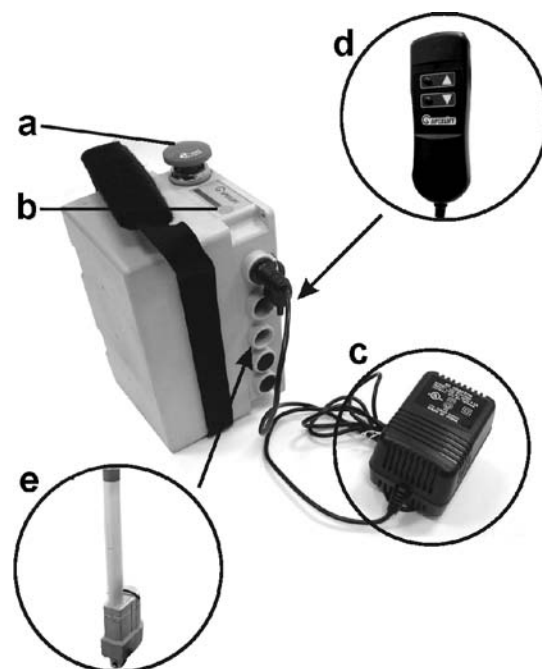
⚠ Warning: Patient lift may tip over if used incorrectly. Read and adhere to the operating instructions prior to lifting anyone.

-
- ⚠ **Warning:** The LF1050 Patient Lift should be used solely for transferring a patient from one object (beds, bathtubs, toilets, etc.) to another. The lift should not be used for transporting or moving any patient from one location to another location.
 - ⚠ **Warning:** Always keep the patient being lifted centered over the base and facing the caregiver operating the lifter.
 - ⚠ **Warning:** Do not lock the brakes or block the wheels when lifting. The casters must be FREE to roll to allow the patient lift to stabilize itself when the patient is initially lifted from a chair, bed, or any stationary object.
 - ⚠ **Warning:** Do not roll casters over any object while the user is in the sling.
 - ⚠ **Warning:** To ensure stability while transferring a patient, the patient lift legs should be locked in the maximum open position.
 - ⚠ **Warning:** Use only Lumex slings specially designed for the LF1050 Patient Lift.
 - ⚠ **Warning:** Do not put anything (e.g. cushion, pad, etc.....) between the user and the sling. This may cause user to slide out of the sling and cause injury.
 - ⚠ **Warning:** Replace any worn or broken parts immediately! Torn, cut, frayed, or broken slings can fail, resulting in personal injury. Use slings that are only in good condition.
 - ⚠ **Warning:** Service and repair of the LF1050 Patient Lift should be performed only by an authorized Lumex dealer. Graham-Field is not responsible for any consequence resulting from any unauthorized service or repair.
 - ⚠ **Warning:** Do not exceed the maximum weight allowed, 400 pounds.
 - ⚠ **Warning:** Unauthorized modification of your patient lift or the use of non-Lumex replacement parts may change the structure of the lift and could create a hazardous condition, which may result in serious injury and will void the warranty.
 - ⚠ **Warning:** The electronics and actuator contain no serviceable components. If service is required, the unit must be returned to the factory for repair. DO NOT attempt to open the electronics or actuator or obtain local service; this will void the warranty and may result in damage to the unit. Consult your Lumex Dealer for further information.
 - ⚠ **Warning:** Do not attempt to transfer a patient without prior approval of the person's healthcare provider.
 - ⚠ **Warning:** Lumex specifically disclaims responsibility for any bodily injury or property damage which may occur during any use which does not comply with federal, state or local laws or ordinances.

FEATURES



1. Boom
2. Spreader Bar
3. Actuator
4. Mast
5. Base



- a. Emergency Stop Button
- b. Battery Testing Button
- c. Charger Plug-in
- d. Handset Plug-in
- e. Actuator Plug-in

HANDLING PROCEDURES

SHIPPING AND TRANSPORTATION INSTRUCTIONS

If the patient lift is to be reshipped by common carrier, it should be packed in the same carton/s in which it was received.

Unpacking

1. Check for any obvious damage to the carton or its contents. If damage is evident, notify the carrier or your authorized Lumex Dealer.
2. Remove all loose packing from the carton.
3. Carefully remove all the components from the carton.

Note: Unless the patient lift is to be used immediately, retain boxes, containers and packing material for use in storing until use of patient lift is required.

Inspection

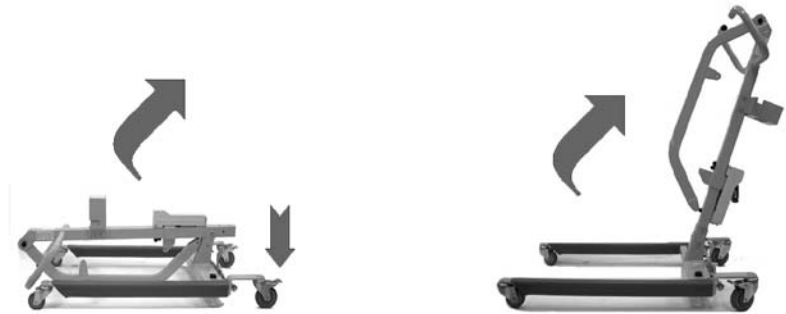
1. Examine the exterior of the patient lift for nicks, dents, scratches or other damage.
2. Inspect all components.

Storage

1. Store the repackaged patient lift in a dry area.
2. DO NOT place other objects on top of the repackaged patient lift.

ASSEMBLY INSTRUCTIONS

⚠ **Warning:** The lift is heavy. Therefore, avoid injury and **DO NOT** attempt to remove the lift from the box without assistance.



1. Raise Mast from base



2. Engage the brakes. Remove the bolts from the bottom of the mast and base. Pull the Mast, Boom and Spreader Bar to an upright position. Re-insert the bolts into the holes at bottom of the mast and tighten the nuts.



3. Attach the Control Box Hanging Bracket to the Mast and tighten the nuts.



4. Place the control box inside the bracket.





b. Attach the top of the Actuator to the bracket on the Boom and insert pin.

6. Attach the spreader bar to the boom and insert pin.



7. Insert the Actuator plug into the Control Box.



8. Insert the pendant plug into the Control Box.

NOTE: Prior to using the LF1050, charge the batteries overnight. (CHARGE FOR AT LEAST 10 HOURS BUT NOT MORE THAN 12 HOURS)

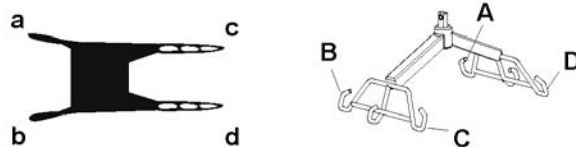
OPERATING INSTRUCTIONS

Preparation Before Lifting

1. Turn on the power by twisting the RED RESET BUTTON clockwise.
Turn off the power by pressing the RESET button.
2. Press the UP or DOWN button on the hand control once. Check if the battery indicator lights are on. To proceed with lifting, make sure there is at least one green light. Batteries are fully charged when three (3) green lights are shown.
3. After the battery indicator lights go out, push the UP button and the DOWN button on the hand control and ensure that the lift is operating correctly.
4. Position the base of lift around or under the object.
5. Widen the base.

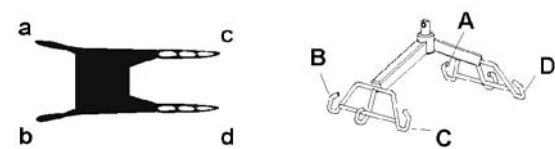
Lift and Transfer From Bed

1. User/patient should be in the center of the bed.
2. Position user onto his/her side by rolling user towards you.
3. Roll the sling in half, approximately. The handle on the back section should face outward when the sling is fitted.
4. Position the sling under the user/patient so the commode aperture aligns with the base of the spine and top of the sling close to the neck.
5. Roll user onto the opposite side and position him/her on the flat section of the sling. This will allow you to unroll the remainder of the sling from the other side of the user.
6. Once the sling has been positioned centrally, feed the leg sections under the thighs and draw them up between the thighs.
7. Raise the head of the bed if this function is available.
8. Move the lift slowly towards the user and position the spreader bar over the user's/patient's chest.
9. Attach Loop A of the sling to Hook A on Spreader Bar; attach Loop B to Hook B; attach Loop C to Hook C; attach Loop D to Hook D.
10. Lift the user above the bed by using the hand control.
11. Pull lift away from bed. Position user over the wheelchair or chair then lower the patient onto the surface.



Note: Reverse the above procedures when returning the user/patient to bed.

Transfer From Wheelchair

1. Grasp the sling at each corner of the "U" shape of the commode aperture.
 2. The sling should be fitted with the handle on the back section facing outward.
 3. Help the user lean forward slightly, then slide the sling down between the chair and the user's back.
 4. Position the commode aperture where the buttocks meets the seat.
 5. Position the sling equally around both sides of the body.
 6. Draw the leg sections to the front along the length of the user's thigh.
 7. Check the sling's central positioning by comparing the lengths of the leg sections when they are drawn forward.
 8. Reposition the sling if the leg sections are not equal in length.
 9. Feed the leg sections under the thighs.
 10. From between the legs, gently pull the leg section up the inner thigh.
 11. Feed as much material as possible under and between the thighs. Ensure the leg sections are positioned midway under the thighs to provide good support and greater comfort.
 12. Move the lift slowly towards the user and position the spreader bar over the user's chest.
- 
- The diagram consists of two parts. On the left, a black silhouette of a sling is shown with four loops labeled 'a' (top left), 'b' (bottom left), 'c' (top right), and 'd' (bottom right). On the right, a line drawing of a spreader bar is shown with four hooks labeled 'A' (top), 'B' (left), 'C' (right), and 'D' (bottom). A small 'a' is also visible near hook A, indicating where the sling loop connects.
13. Attach Loop a of sling to Hook A on Spreader Bar; attach Loop b to Hook B; attach Loop c to Hook C; attach Loop d to Hook D.
 14. Lift patient above the wheelchair by using the hand control.
 15. Pull lift away from wheelchair. Position patient over bed and lower patient onto it.
- Note: Reverse the above procedures when returning the user/patient to a wheelchair.*
- ⚠ Warning: Use ONLY Lumex slings/products with Lumex equipment.**

CHECKING THE BATTERY

1. Check batteries by pressing the Battery Testing Button (blue circle with a battery sign) on the control box.
2. Batteries are fully charged when all lights on the Battery Indicator are "ON".
3. Charge batteries when Indicator shows only one "GREEN" light.
4. Do not use the lift when no "GREEN" light is shown. Charge the batteries immediately.
5. Replace batteries when frequent charging is needed. (Reorder #: DPL650BAT)

CHARGING THE BATTERIES

1. Ensure the power is switched "ON" (the red "RESET" button should be up).
2. Insert charging plug into charging port on the control box.
3. Plug charger to power supply.
4. All lights of battery indicator should be "ON" while charging.

5. It takes approximately 2-3 hours to fully charge the batteries from one green light.
6. It takes approximately 7-9 hours to fully charge the batteries from the red light.
7. Do not leave the batteries on charging for an extended period of time. This will shorten the life of the batteries.
8. Do not let the batteries run down to the last red light. This might shorten the life of the batteries or damage the batteries.
9. Unplug the charger first before using the lift. THE LF1050 PATIENT LIFT WILL NOT OPERATE WHILE CHARGING.

IMPORTANT NOTES ON CHARGING

1. Push lift to charging location and charge the batteries with the charger provided. Avoid unplugging hand control and motor from control box. Frequent plug/unplug of the hand control and motor into/from the control box may damage the control box.
2. Do not charge batteries over 12 hours.

Know What The Battery Indicator Lights Are Telling You

Red	Amber	Green	Green	Green	
ON	ON	ON	ON	ON	FULLY CHARGED
ON	ON	ON	OFF	OFF	NEEDS CHARGE
ON	ON/OFF	OFF	OFF	OFF	CHARGE IMMEDIATELY. DON'T USE THE LIFT
OFF	OFF	OFF	OFF	OFF	BAD BATTERIES OR BAD CONNECTION

Warning Buzzers

The control box has a buzzer that provides you with information on the status of the batteries and the lift. To stop the buzzer, push down the RESET button or press the Battery Indicator.

BUZZER TYPE	INDICATION	NOTE
2 beeps/sec	Low Battery (red / amber lights on)	Charge batteries immediately
3 beeps/sec	Low Battery (red light on)	Charge batteries immediately
6 beeps/sec	Very Low Battery (no light on)	Charge batteries immediately
3 beeps every other second	Bad Battery (no light on)	Replace batteries
3 long beeps	Overloaded. Batteries are charged but lift does not lift.	Exceeded maximum load capacity

CARE AND MAINTENANCE

Proper care and maintenance is essential to keeping your Lumex patient lift in a safe operating condition.

In addition to inspecting the unit before each use, periodic maintenance checks should be done. The lift should be thoroughly inspected by a person qualified to recognize any signs of wear and tear, and looseness of bolts or parts. Replace any worn parts immediately.

We further recommend that this unit be serviced periodically as needed by an authorized dealer.

⚠ Warning: It is extremely important that the patient lift be inspected before each use. Ensure that all hardware and accessories are secure and that the actuator is functioning properly. Failure to do so could result in patient / attendant injury or damage to your patient lift. Torn, cut, frayed or broken slings can fail, resulting in serious injury. Only use slings in good condition. Inspect before each use. Destroy and discard old, worn and unusable slings.

When you believe a component or part is not functioning properly, immediately contact your authorized Lumex dealer, as a potentially hazardous condition could exist.

Before each use

Before each use of the patient lift, ensure that:

- All nuts and bolts are tight
- The lift moves freely (with caster brakes off)
- Rear caster brakes operate properly
- Base adjustment mechanism operates easily

Lubrication

Under normal use, your Lumex patient lift was designed with minimum maintenance in mind; however, a six (6) month check and lubrication should ensure that your patient lift will remain in peak operating condition. The casters **MUST** roll and swivel freely. Lightweight waterproof grease (such as automobile lubricant) should be applied to

the ball bearings of the casters every six (6) months. Apply grease more frequently if the casters are exposed to periods of excess moisture. Lubricate all pivot points with lightweight oil. Clean patient lift of all excess oil and grease.

Before use of the patient lift, and every month thereafter, place a drop of oil on the following areas:

- The point where mast and boom connect
- Caster axles
- The point where actuator and boom connect

Cleaning

Regular cleaning is recommended. A soft cloth, dampened with water and a mild NON-ABRASIVE detergent (household cleaner, soapy water, or hospital grade disinfectant) is all that is needed to clean your patient lift. Automobile wax or furniture polish will help maintain the finish over a long period of time.

DO NOT wash under water pressure or steam clean.

Checking for damage and wear

It is extremely important to frequently check the areas of the patient lift that are under a great deal of stress for damage and wear. These areas include slings, spreader bars, spreader bar suspension and mounting hardware, pump mounting hardware and all pivot points. Inspect for signs of cracking, fraying, deformation, and any loose components. Replace any defective parts immediately, and make certain that the patient lift is not used until repairs are made. Contact your authorized Lumex dealer for replacement parts.

Care of sling

Lumex slings are easy to use. They are washable at 150° F. The slings can be dried by using a dryer on LOW heat or by hanging.

Note: Slings should not be bleached!

MAINTENANCE SCHEDULE

Note: Only qualified persons should service and repair your Lumex patient lift. Regular maintenance of your patient lift is necessary to ensure continuing proper and safe operation. Read and observe the following recommended maintenance schedule:

Item	Inspect initially	Inspect/adjust daily	Inspect/adjust monthly	Inspect/adjust every 6 months
Base, Casters, and Foot Pedal				
Ensure that base is level (all four wheels touch the floor)	x		x	x
Ensure that bolts and nuts are tight	x	x	x	
Ensure that casters swivel and roll freely	x	x	x	
Apply a light grease to caster ball bearings				x
Check rubber parts of casters for deflection	x		x	
Check welding joints for rust and crack			x	
Base Adjustments				
Ensure that base opens and closes smoothly	x	x	x	x
Ensure that base locks securely in three positions	x	x	x	
Ensure that locking knob is in place and operating properly	x	x	x	
Inspect all base hardware for wear			x	
Mast				
Ensure that mast is fully engaged and locked into mast sleeve	x		x	
Inspect mast for bends or deflections			x	
Inspect all mast hardware for wear			x	x
Boom				
Inspect boom for bends or deflections	x		x	
Ensure that boom is centered between the base legs	x		x	x
Inspect all boom hardware for wear			x	
Inspect sling hooks for wear or deflections			x	x
Check connections between boom and mast for improper connection, looseness, or wear		x	x	
Slings				
Inspect slings and straps for wear or damage	x	x		
Inspect metal/plastic parts for wear or damage	x	x		
Lubrication with light oil				
Lubricate all pivot points				x
Lubricate top and bottom of actuator mounting				x
Cleaning				
Clean with mild non-abrasive detergent				x
Electronics and actuator				
Ensure that battery is charged	x	x		
Inspect for proper up / down operation	x	x		
Ensure that mounting hardware is tight	x		x	
Inspect mounting hardware for wear			x	
Ensure that control box is firmly affixed to the mast	x		x	
Ensure the actuator connecting cable is tight	x		x	

TROUBLESHOOTING

⚠ **Warning: If you experience a problem with your lift and are unable to service it yourself, contact your Lumex dealer.**

Symptom	Possible Cause	Action
Control box is not responding and relay is not clicking	Battery discharged Battery charger defective Battery defective Hand control defective	Charge battery Replace battery charger Replace battery Replace hand control
Actuator does not run, but relay is clicking	Actuator plug not properly seated Actuator defective Control box defective	Push actuator plug firmly into control box Replace actuator Replace control box
Actuator goes up or down, but not both	Hand control defective Control box defective	Replace hand control Replace control box
Cannot lift patient up and battery indicator shows no GREEN light	Battery discharged	Charge the batteries
Lift does not work and the battery indicator shows full charge		Check the connection between the actuator and the control box Check connection between Pendant & control box
Lift does not work and the battery indicator shows no light		Make sure the emergency stop button is released Check the connection of the batteries in control box
“Stops-and-Runs” while lifting or lowering patient		Check socket for pendant plug-in Check pendant cable
Battery Indicator shows no light when charger is connected to power supply		Check the emergency stop button is released. Check charger plug for damage. Check charger cable for damage.
Lift does not work. Battery indicator shows full charge. Notice “click” sound from control box when UP or DOWN button on hand control was pressed.		Actuator problem.

SPECIFICATIONS

Note: All dimensions given in inches unless otherwise specified.

LF1050 PATIENT LIFT

Base width

Open: 43"

Closed: 26"

Base height

(Clearance): 6"

Overall base length

50"

Lifting height range

Note: As measured from sling hooks.

Minimum: 27"

Maximum: 71"

Range: 35"

Mast height

50"

Weight capacity

400 lbs.

Rear locking caster size

4" diameter

Front caster size

4" diameter

Lifting mechanism

24 DC actuator

Battery charger

AC 110V / 220V to DC 24V 1 amp

LIMITED WARRANTY

NOTE: The warranty below has been drafted to comply with the Federal Law applicable to products manufactured after July 4, 1975. This warranty is extended only to the original purchaser/consumer or dealer/non-consumer who does not buy for resale and to no other purchaser or transferee.

Graham-Field warrants the LF1050 Patient Lift against defects in materials and workmanship as listed below:

PRODUCT	WARRANTY PERIOD
Frame / Parts	1 Year
Electric Motor	1 Year

The warranty period for the consumer commences on the first date a product is delivered to consumer by seller/dealer. If the product is rented or leased, the warranty period commences on the invoice date from Graham-Field. A copy of the invoice showing date of purchase must be provided. Without a proof of purchase date, warranty coverage shall commence upon Graham-Field's invoice date to the dealer/purchaser.

If within the warranty period, the product or component part is proven to Graham-Field's satisfaction to be defective, Graham-Field shall provide, at its option, one of the following: (1) repair or replacement of any defective or non conforming part or product, or (2) a refund of the original purchase price, less depreciation. **GRAHAM-FIELD'S SOLE OBLIGATION AND YOUR EXCLUSIVE REMEDY UNDER THIS**

WARRANTY SHALL BE LIMITED TO SUCH REPAIR, REPLACEMENT AND/OR REFUND. This warranty does not include any labor charges incurred in replacement part(s) installation. Freight charges to the manufacturer are at the expense of the consumer or purchaser, and will not be reimbursed.

LIMITATIONS AND EXCLUSIONS: The foregoing warranty shall not apply to serial numbered products if the serial number has been removed or defaced. Products subjected to negligence, abuse, misuse, improper operation, improper maintenance, improper cleaning, improper storage, or damages beyond Graham-Field's control are not covered by this warranty, and that evaluation will be solely determined by Graham-Field. This warranty shall not apply to problems arising from normal wear and tear or failure to follow instructions. This warranty shall also not apply to products modified without Graham-Field's express written consent; nor will it apply if parts are not manufactured by Graham-Field, or if parts not complying with original equipment specifications are added to a Graham-Field product, or if the product or part is serviced by an entity not authorized by Graham-Field.

THE FOREGOING WARRANTY IS EXCLUSIVE AND IN LIEU OF ALL OTHER EXPRESSED WARRANTIES AND IMPLIED WARRANTIES, INCLUDING BUT NOT LIMITED TO THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, AND SHALL NOT EXTEND BEYOND THE DURATION OF THE EXPRESSED WARRANTY PROVIDED HEREIN, AND THE REMEDY FOR VIOLATIONS OF ANY IMPLIED WARRANTY SHALL BE LIMITED TO THE REPAIR OR REPLACEMENT OF THE DEFECTIVE PRODUCT OR PART PURSUANT TO THE TERMS CONTAINED HEREIN.

GRAHAM-FIELD SHALL NOT BE LIABLE FOR ANY CONSEQUENTIAL OR INCIDENTAL DAMAGES WHATSOEVER.

This warranty gives you specific legal rights and you may also have other legal rights, which vary from state to state (province to province). Some states (provinces) do not allow the exclusion or limitation of incidental or consequential damages, or limitation on how long an implied warranty lasts, so the aforementioned exclusion and limitation may not apply to you.

U.S.A., Corporate Headquarters:

Graham-Field Health Products
2935 Northeast Parkway
Atlanta, Georgia 30360
telephone: 800-347-5678, 770-447-1609
fax: 800-726-0601, 678-291-3232



<http://www.grahamfield.com>