

LUMEX[®]

A Graham-Field Brand

ALTERNATING PRESSURE PUMP AND MATTRESS OVERLAY SYSTEM



MODEL 14025 USER MANUAL

Important: Do not operate the Mattress Overlay System without first reading and understanding this manual! Save this manual for future use.

Info: The most current version of this manual can be found online at www.grahamfield.com

14025-INS-LAB-RevB11

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INTRODUCTION

Use this manual for initial setup and operation of the Lumex Model 14025 Alternating Pressure Pump and Mattress Overlay System. Read all instructions before using the mattress overlay system, and save this manual for future reference.

INTENDED USE

This product is intended to reduce the incidence of pressure ulcers while optimizing patient comfort. It is also useful for the following purposes:

- Individual home care setting and long term care of those suffering from pressure ulcers.
- Pain management as prescribed by a physician.

EQUIPMENT SYMBOLS

	"BF"symbol: Indicates that this product is in accordance with the degree of protection against electric shock for type BF equipment.
	Grounding terminal
	Attention! Read the instructions!
	Disposal of Electrical & Electronic Equipment (WEEE): Do not treat this product as household waste. For more detailed information with regard to returning and recycling this product, please consult your local city office, household waste disposal service, or GF authorized distributor.

TEST STANDARDS

This product has been tested and successfully approved with the following standards:

For U.S.A.	UL 1431
For Europe	EN 60601-1
	EN 60601-1-2
	EN 55011 Class B
	EN 61000-3-2
	EN 61000-3-3
	IEC 801-2
	IEC 801-3
	IEC 801-4
	IEC 801-5

IMPORTANT SAFETY PRECAUTIONS

The safety statements presented in this chapter refer to the basic safety information that should be observed by those using this Mattress Overlay System. There are additional safety statements in other chapters or sections, which may be the same as or similar to the following, or specific to the operations.

- ⚠ **DANGER:** Indicates an imminent hazard situation that, if not avoided, will result in death or serious injury.
- ⚠ **WARNING:** Indicates a potential hazard situation or unsafe practice that, if not avoided, could result in death or serious injury.
- ⚠ **CAUTION:** Indicates a potential hazard or unsafe practice that, if not avoided, could result in minor or moderate personal injury.
- ▲ **NOTICE:** Indicates a potential hazard or unsafe practice that, if not avoided, could result in product or property damage.

Info: Provides application recommendations or other useful information to ensure that you get the most from your product.

DANGER

To reduce the risk of electrocution:

- ⚠ **DANGER:** Always unplug this product immediately after use.
- ⚠ **DANGER:** Do not use this product while bathing.
- ⚠ **DANGER:** Do not place or store this product where it can fall or be pulled into a tub or sink.
- ⚠ **DANGER:** Do not place this product in or drop into water or other liquid.
- ⚠ **DANGER:** Do not reach for a product that has fallen into water. Unplug it *immediately*.

WARNING

To reduce the risk of burns, electrocution, fire, or personal injury:

- ⚠ WARNING: Do not leave this product unattended when plugged in.**
- ⚠ WARNING: Always use close supervision when this product is used by, on, or near children or those who require close supervision.**
- ⚠ WARNING: Use this product only as intended and described in this manual. Do not use attachments or accessories not recommended by GF Health Products, Inc..**
- ⚠ WARNING: Never operate this product if:
 - a) It has a damaged cord or plug.
 - b) It is not working properly.
 - c) It has been dropped or damaged.
 - d) It has been dropped into water.**

Return the product to your GF authorized distributor.

- ⚠ WARNING: Keep the cord away from heated surfaces.**
- ⚠ WARNING: Never block the air openings of this product or place it on a soft surface, such as a bed or couch, where the openings may be blocked. Keep the air opening free of lint, hair, and other similar particles.**
- ⚠ WARNING: Never drop or insert any object into any opening or hose.**
- ⚠ WARNING: Do not use this product in the presence of flammable anesthesia, or where oxygen or nitrous oxide is being administered.**
- ⚠ WARNING: Connect this product *only* to a properly grounded power outlet.**
- ⚠ WARNING: Maximum patient weight capacity for this product is 265 lb (120 kg).**

⚠ WARNING: Patient entrapment with bed side rails may cause injury or death. The bed frame and its components, including the mattress, bed side rails, head and foot board, bedding, and any accessories added to the bed, can all affect the risk of entrapment. Thorough patient assessment and monitoring are necessary to reduce the risk of entrapment, including establishing whether the use of a bed rail is in the best interest of the patient. Read and understand the User Manual before using this equipment. GF Health Products, Inc. product manuals are available online at www.grahamfield.com.

Visit the FDA's Bed Safety page at www.fda.gov to learn more about the risks of entrapment. It is the responsibility of the facility and provider to be in compliance with these guidelines. Refer to user manuals for beds and rails for additional product safety information.

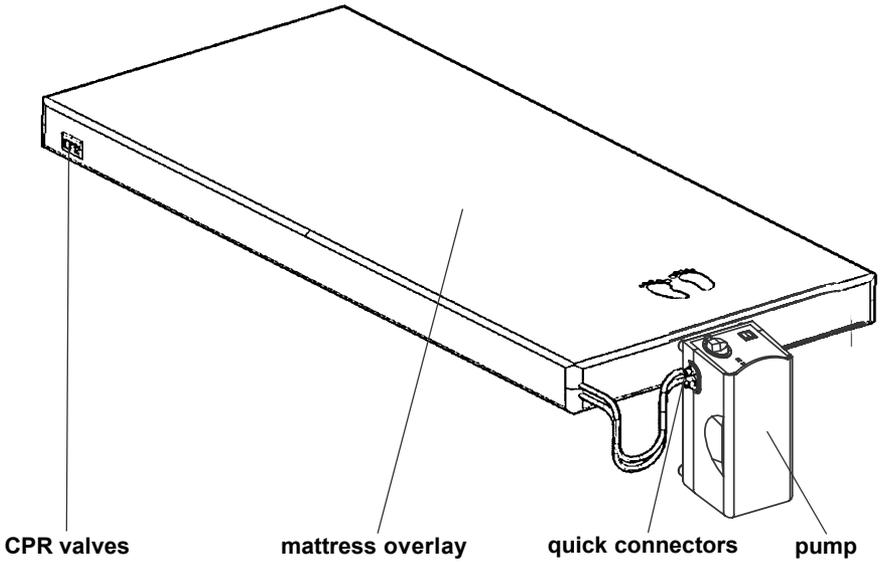
After any adjustment, repair or service, and before use, ensure all attaching hardware is securely tightened. Bed rails with dimensions different than the original equipment specified by the bed manufacturer may not be interchangeable and may result in entrapment or other injury.

NOTICE

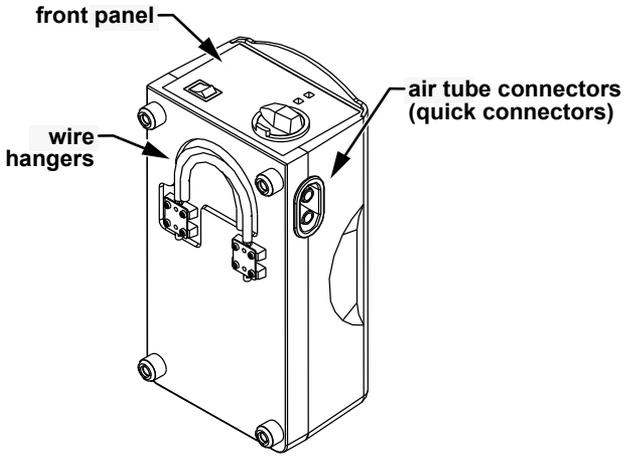
- ▲ NOTICE: Ensure the pump unit is suitable for local power voltage.**
- ▲ NOTICE: The pump can be used only with the accompanying mattress. Do not use it for any other purpose.**

PRODUCT DESCRIPTION

PUMP AND MATTRESS OVERLAY SYSTEM

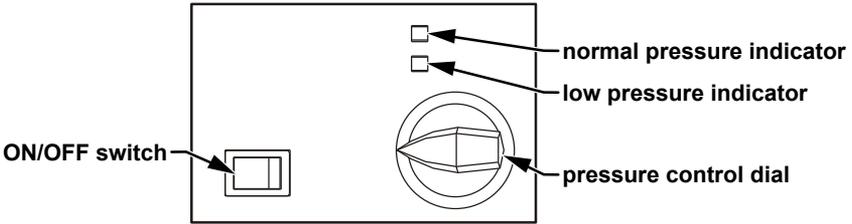


PUMP



pump

Pump Front Panel



pump front panel

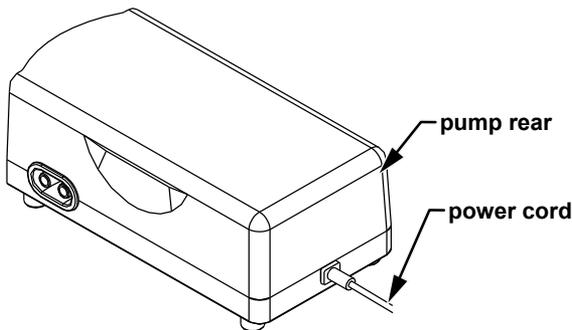
Front panel pressure control dial: The pressure control dial controls the air pressure output. To increase pressure, turn the dial clockwise. To decrease pressure, turn the dial counter-clockwise.

ON/OFF switch: The ON/OFF switch turns the main power on and off.

Normal pressure indicator: When the normal pressure indicator (green LED) illuminates, pressure inside mattress overlay has reached the preset pressure setting.

Low pressure indicator: When the low pressure indicator (yellow LED) illuminates, pressure inside mattress overlay is below normal. Please refer to **TROUBLESHOOTING**.

Pump Rear



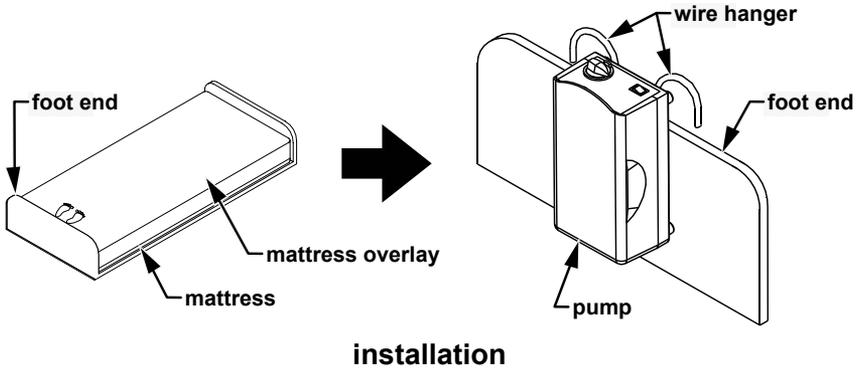
pump

INSTALLATION

UNPACKING

Unpack the box to inspect for any damage which may have occurred during shipment. If there is any damage, please contact your authorized distributor immediately.

PUMP AND MATTRESS OVERLAY INSTALLATION



1. Remove all sheets, blankets, and pillows from the bed.
 2. Place the mattress overlay on top of the mattress with the foot end oriented as shown above. Tuck overlay's mattress extensions under the mattress to secure overlay to mattress.
 3. Fold open the wire hangers on the back of the pump as shown above.
 4. Use the hangers to hang the pump on the bed's foot end, as shown above; adjust the hangers to place the pump in the most upright position (or place the pump on a flat surface easily accessible to the caregiver and/or doctor).
- ▲ **NOTICE: Place the pump in a position where the caregiver and/or doctor can access it easily.**
5. Connect mattress overlay's quick connectors to pump. Ensure connectors are secure before continuing.

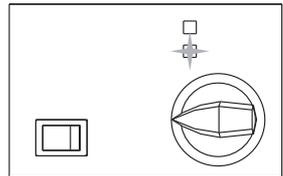
- ▲ **NOTICE:** Check to ensure the air hoses are not kinked or tucked under mattress or overlay.
- ▲ **NOTICE:** Locate all cords so that they will not be stepped on, tripped over, or otherwise subjected to damage or stress.
- ⚠ **WARNING:** Do not use a household extension cord if the electrical cord does not reach the power outlet. Use of an improper extension cord could result in fire and electric shock. If an extension cord must be used, use a three conductor cord with ground, properly wired, in good electrical condition, and keep it as short as possible.
- ⚠ **WARNING:** This device—which **MUST** be grounded—is equipped with a cord that has a grounding wire with a grounding plug. The plug must be plugged into an outlet that is properly installed and grounded.
- ▲ **NOTICE:** Ensure the pump unit is suitable for the local power voltage.
- 6. Plug the power cord into a properly grounded electrical outlet.
- ▲ **NOTICE:** Use the pump only with the mattress overlay recommended by the manufacturer. Do not use it for any other purpose.

OPERATION

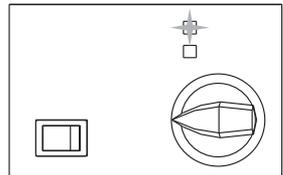
1. Turn the power switch to the ON position.
2. Adjust the pressure adjust knob to the maximum position.

Info: Always set the pressure adjust knob to the maximum position for the quickest inflation at set-up; the mattress overlay can then be adjusted to the desired pressure.

3. The pump will begin delivering air into the mattress overlay. While the mattress is filling, the low pressure indicator (yellow LED) will illuminate.



4. When the selected pressure level is reached, the low pressure indicator will de-illuminate, and the normal pressure indicator (green LED) will automatically illuminate.



5. Replace all sheets, blankets, and pillows on the bed.

PRESSURE ADJUSTMENT

Generally, a lighter patient will need a lower (softer) setting while a heavier patient will need a higher (firmer) setting, but pressure adjustment must ultimately be based on the patient's *weight distribution*. A short, stocky person may be the same weight as a tall, thin person, but their settings will not be the same. The mattress should be firm enough to support the patient, yet soft enough so the patient will sink down to eliminate pressure points. Test the pressure by placing three fingers below the mattress under the patient's buttock area; your fingers should just fit. If the fit is too loose, decrease the setting. If your fingers do not fit well, increase the setting two notches firmer. Wait ten minutes and then check again. You should only have to adjust this setting one time per patient. Please consult your physician for an appropriate setting.

Low Pressure Fault Condition

Info: When abnormal low pressure occurs (not during setup, while the mattress overlay is filling), the low pressure indicator (yellow LED) will illuminate. Ensure all connectors are connected properly and that they are correctly installed per instructions. The low pressure indicator will illuminate until the low pressure fault condition is resolved, at which time the low pressure indicator will de-illuminate and the normal pressure indicator will illuminate.

- ▲ **NOTICE: If the pressure level is consistently low, check for leakage in tubes and/or connecting hoses. If necessary, replace any damaged hoses. Contact your GF authorized distributor for repair.**

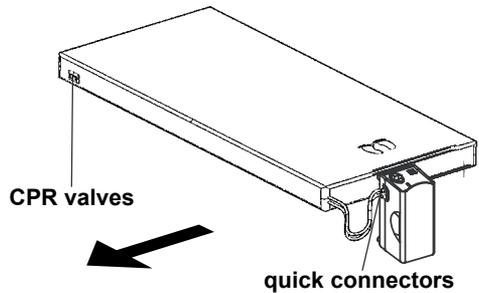
QUICK DISCONNECT

Pull the power plug from the wall connector to disconnect the device quickly.

CPR FUNCTION

If CPR must be performed on the patient while the mattress is in use, to immediately deflate the mattress, either:

1. Pull the CPR valves from the mattress in the location of the arrow shown at right, or
2. Disconnect the quick connector from the pump in the location of the arrow shown at right.



MAINTENANCE

CLEANING

Perform the following cleaning procedures before use and as necessary thereafter.

Pump

Wipe the pump with a clean, damp cloth and mild detergent, and keep it away from dust. Air dry.

- ▲ **NOTICE: Do not use corrosive or powdered cleansers to clean the pump.**
- ▲ **NOTICE: Do not immerse or soak the pump.**
- ▲ **NOTICE: Do not clean with phenolic products.**

Mattress Overlay

Wipe the mattress overlay with a clean, damp cloth and mild detergent. The mattress overlay may also be cleaned using a 10% solution of sodium hypochlorite (bleach) diluted in water. Air dry thoroughly before use.

- ▲ **NOTICE: Do not clean with phenolic products.**
- ▲ **NOTICE: After cleaning, air dry the mattress overlay without direct exposure to sunlight.**

GENERAL MAINTENANCE

1. Check power cord and plug for abrasion or excessive wear.
2. Check mattress overlay for signs of wear or damage. Ensure air tubes are firmly secured to pump connectors.
3. Check the air hoses for kinks or breaks. For replacement, please contact your GF authorized distributor.

STORAGE

1. To store, lay the mattress overlay out flat and upside down.
2. Roll from the head end toward the foot end.
3. Store mattress overlay and pump in a dust-free environment with no exposure to direct sunlight.

TROUBLESHOOTING

Problem	Solution
Power is not ON	<ul style="list-style-type: none">• Ensure the power cord is connected to main power.
Low pressure indicator is illuminated	<ul style="list-style-type: none">• Ensure connections between air hose connectors and pump are tightly secured.• Ensure all tubing / hose connections along mattress overlay are tightly secured.• Ensure CPR valves are sealed.• Ensure there are no air cell leaks.
Patient is bottoming out	<ul style="list-style-type: none">• Pressure setting could be inadequate for the patient; adjust pressure to higher level and wait for a few minutes.
Mattress overlay is not secured	<ul style="list-style-type: none">• Ensure all the snap buttons are securely fastened.• Ensure the mattress overlay extension sheets are tucked under the mattress.
No air produced from some air outlets of the air tube connector	<ul style="list-style-type: none">• This is normal during alternating mode. Air outlets take turns producing air during preset cycle time.

Info: If the above information does not answer your questions, please contact your GF authorized distributor for further assistance.

SPECIFICATIONS

Info: Specifications are subject to change without notice.

PUMP

Item		Specification
Power Supply (See rating label on product)		120V AC, 60 Hz, 1A
Pump Unit Dimensions		10" x 5.1" x 3.7" (25.4cm x 13cm x 9.5cm)
Weight		3.5 lb. (1.6 kg)
Environment	Temperature	Operation: 50°F to 104°F (10°C to 40°C) Storage: 5°F to 122°F (-15°C to 50°C) Shipping: 5°F to 158°F (-15°C to 70°C)
	Humidity	Operation: 10% to 90% RH, non-condensing Storage: 10% to 90% RH, non-condensing Shipping: 10% to 90% RH, non-condensing
Classification		<ul style="list-style-type: none"> • Class I, Type BF, IPX0 • Applied part: Air Mattress • Not suitable for use in the presence of a flammable anesthetic mixture (No AP or APG protection)

MATTRESS OVERLAY

Item	Specification
Dimensions (L x W x H)	78.7" x 35.4" x 5" (200cm x 90cm x 12.7cm)
Weight	11 lb. (5.0 kg)
Pressure Range (mmHg)	40 ~ 90

WARRANTY

GF Health Products, Inc. warrants the Lumex Model 14025 Alternating Pressure Pump and Mattress Overlay System for a period of one year for defects in workmanship and materials. If a product is deemed to be under warranty, GF Health Products, Inc. shall provide, at its option, (1) replacement of any defective part or product or (2) a credit of the original selling price made to GF Health Products, Inc.'s initial customer. The warranty does not include any labor charges incurred in replacement part(s) installation or any associated freight or shipping charges to GF Health Products, Inc.

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