OWNER'S MANUAL
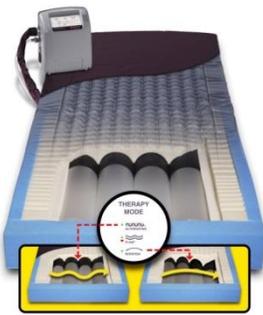
PressureGuard®
EASY AIR®
Series

PressureGuard®
EASY AIR®

PressureGuard®
EASY AIR® LR

PressureGuard®
EASY AIR® XL

SPAN
better science. better care.

Span-America Medical Systems, Inc.
800-888-6752
www.spanamerica.com

TABLE OF CONTENTS

DOCUMENT SYMBOLS

This manual contains different typefaces and symbols to make the content easier to read and understand:

• Standard text – used for regular information.

• **Boldface text –** stresses a word or phrase.

• **NOTE:** - sets apart special information or important instruction clarification.

• The symbol below identifies a WARNING or CAUTION:

- A WARNING identifies situations or actions that may have an effect on patient or user safety. Ignoring a warning could cause patient or user injury.

- A CAUTION points out special procedures or precautions that persons must obey to avoid equipment damage.

• The symbol below identifies an ELECTRICAL SHOCK HAZARD WARNING:

• The symbol below identifies ALTERNATING CURRENT:

• The symbol below identifies TYPE B APPLIED PART:

INTRODUCTION
PRESSUREGUARD EASY AIR® Standard, XL and LR Models

WARNING: *READ ALL INSTRUCTIONS BEFORE USING THIS UNIT.*

INDICATIONS FOR USE: The PressureGuard Easy Air is a unique powered, flotation therapy mattress providing 1) a pressure management surface for the prevention and treatment of pressure ulcers, and 2) low air loss for the removal of excess perspiration and body heat. It is intended for use on any standard hospital bed frame.

DESCRIPTION: The system consists of a two-part low air loss system of cover and coverlet, a foam shell, air cylinder inflation system, and a control-unit housing a blower and a compressor. The foam shell has a high-density foam topper, a patented Safety Edge™ contoured foam bolster around the perimeter and ends of the mattress for added patient stability and positioning, and the unique Heel Slope™ feature designed to further reduce pressure for the sensitive heel area. The air-cylinder inflation system is housed within the foam shell, and consists of air-cylinders oriented lengthwise within the mattress. The control unit connects to the mattress at the patient foot-end.

MODES OF OPERATION: On all versions of the PressureGuard Easy Air, the air flow for low air loss can be turned ON or OFF. Standard Easy Air and Easy Air XL (bariatric) versions provide choice of two therapy modes of operation, FLOAT or ALTERNATING. Easy Air LR version provides choice of three therapy modes of operation, FLOAT, ALTERNATING, or ROTATION.

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

READ ALL INSTRUCTIONS BEFORE USING THIS UNIT.

1. Use this unit only for its intended use and with recognized accessories which are described in the operating instructions; use of other accessories or materials may degrade minimum safety level.

2. Never operate the product's powered control unit if it has a damaged cord or plug, is not working properly, has been dropped or damaged, or has been exposed to water. Contact Span-America Medical Systems, Inc. for examination and repair.

3. Keep the cord away from heated surfaces. Discontinue use if power cord is damaged or worn.

4. Never drop or insert any object into any opening or hose. Keep away from sharp objects.

5. Do not use outdoors.

6. Do not place or store product where it can fall or be pulled into a tub or sink.

7. Do not place in or drop into water or other liquid.

8. Do not reach for a product that has fallen into water. Unplug immediately.

9. Possible explosion hazard if used in the immediate proximity of flammable gases (risk of explosion).

10. Use only original spare parts and consumables.

11. Plug this product into a correctly grounded outlet only.

12. Before cleaning, unplug unit from its power source. Failure to do so could result in personal injury or equipment damage.

13. Do not use harsh cleansers, solvents, or detergents. Do not expose the unit to excessive moisture. Equipment damage could occur.

Warning: This product contains/may contain chemicals known to the state of California to cause cancer and/or birth defects or other reproductive harm.

**We believe the PressureGuard Easy Air sets a new standard for
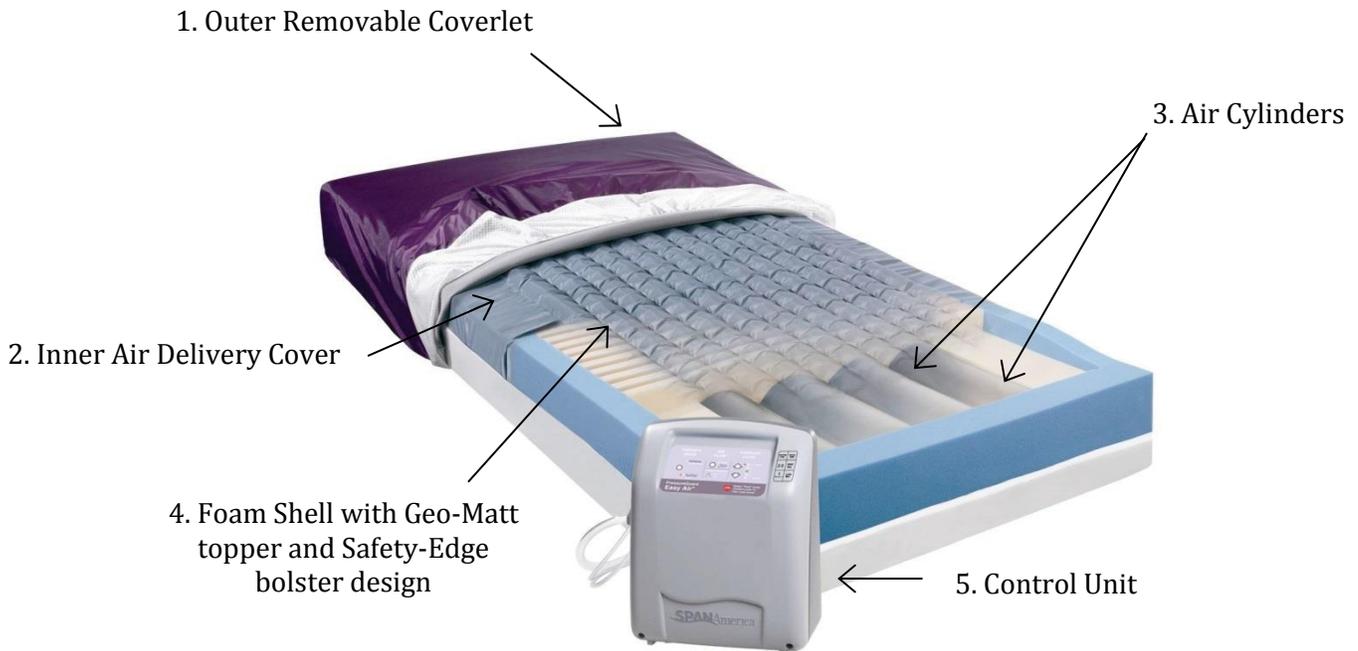low air loss mattress systems.**

Thank you for choosing Span-America!

PRODUCT DESCRIPTION

Span-America's patented use of non-collapsible "air diffusion matrix" fabric in both the inner air delivery cover and the outer removable coverlet maintains an air pathway underneath the user, thus transporting moisture vapor away from the user's skin. Both the inner air-delivery cover and the outer removable coverlet are bacteriostatic, flame resistant and fluid proof. Since they do not allow fluids to penetrate the surface to the mattress, maintenance is minimal. The air-cylinder inflation system and the foam shell work in concert to maintain low interface pressures throughout the surface, making the Easy Air effective for treatment of pressure ulcers by preventing further tissue breakdown.

Close-up illustrations of the Outer Removable Coverlet and the Inner Air-Delivery Cover, and an explanation of the Science behind the design are found on page 9.

Illustration of individual parts of the PressureGuard Easy Air:

1. Outer Removable Coverlet

3. Air Cylinders

2. Inner Air Delivery Cover

4. Foam Shell with Geo-Matt topper and Safety-Edge bolster design

5. Control Unit

ILLUSTRATION DESCRIPTIONS

1. Outer Removable Coverlet:	The purple-colored coverlet is fluid proof, cleanable and flame resistant. It can be replaced if damaged or worn. The outer coverlet is highly vapor permeable (4500 grams/meter^2/24 hours) and fluid-proof. Both of its fabrics (smooth top fabric and the crush-proof air diffusion matrix fabric) are bacteriostatic. Coverlet can be routinely wiped clean and disinfected in place, or can be removed and machine laundered according to directions in this manual.
2. Inner Air-Delivery Cover	The gray, multi-layered cover serves as a barrier, protecting the inside of the mattress from both fluids and vapors, while supplying air to the microenvironment between the cover and coverlet. Unlike the purple removable coverlet, it is intended to remain on the mattress at all times. It can be cleaned and disinfected in place using standard hospital, medical grade products. The air delivery cover is a greenish gray urethane coated fabric with a welded pattern and air holes designed to deliver air flow to the top of the mattress to flow underneath the patient in the removal of moisture from the patient's skin.
3. Air Cylinders	The inflation system consists of air cylinders that run lengthwise underneath the body. Unlike typical low air loss systems, the cylinder inflation system does not lose air from the inflation system for "low air loss", and can be programmed to perform either Flotation or Alternating Pressure; in the LR model they can also perform Lateral Rotation. The cycles and inflation levels are designed to provide and maintain low interface pressures throughout the mattress, and to redistribute peak interface pressure points during all Therapy Modes.
4. Foam Shell	The Geo-Matt® style foam topper is a high density, medical grade foam. The unique geometric design consists of over 800 individual cells, each of which acts individually to customize patient comfort, support, and pressure reduction and redistribution. This foam topper is 1.5" in height and includes the unique Heel Slope™ feature, designed to further reduce pressure for the sensitive heel area. The patented Safety Edge™ consists of contoured foam bolsters around the perimeter and ends of the mattress for added patient stability and positioning.
5. Control Unit	The quiet, energy efficient control unit houses both a high volume air blower and a lower volume air compressor. The blower component provides air for the low air loss function through the cover/coverlet, while the compressor component provides air to the air-cylinder inflation system. The filters on the control unit need to be cleaned regularly.

THE SCIENCE BEHIND EASY AIR LOW AIR LOSS DESIGN

Easy Air's exclusive "Air Diffusion Matrix" design maximizes removal of excess moisture (i.e., perspiration) from the user's skin. Moisture passes in vapor form down through the cover, where a continuous air current takes it away before it can re-form as liquid.

The Air Diffusion Matrix fabric is not collapsible, ensuring a pathway for a constant flow of air beneath the patient. Compare to typical low air loss designs that cause the patient's body to press the cover directly onto the air holes, closing off the flow of air beneath the patient.

**Outer Removable <u>Coverlet</u>
and
Inner Air-Delivery <u>Cover</u>**

Outer coverlet
- vapor-permeable, yet fluid-proof
- Air Diffusion Matrix™ layer outperforms typical batting
- wipes clean in place with standard hospital-grade cleaners
- machine launderable

Coverlet

Cover

Mattress

"Air Diffusion Matrix" fabric
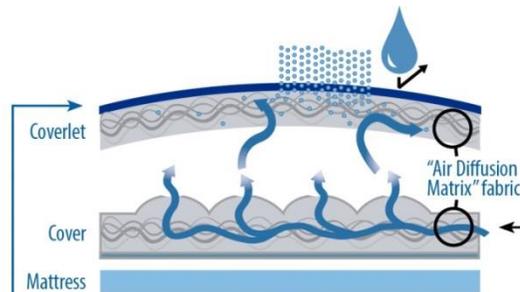
Inner air delivery cover
- dedicated air supply
- continuous airflow through Air Diffusion Matrix™ layer
- sweeps away moisture vapor before it can re-form as a liquid
- reduces maceration, especially effective at the sacrum
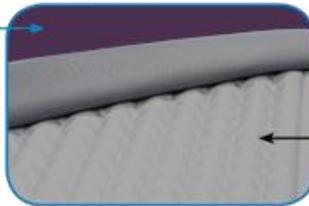
MATTRESS AND CONTROL UNIT SET-UP DIRECTIONS

1. Place the mattress on a standard hospital bed frame or on a box spring, with the purple coverlet facing up, and the connector access at the foot-end of the bed, to the patient's right. Note that the connector access is on the inner gray top surface air delivery cover, which should also be facing up, under the purple coverlet.

2. Hang the air-control unit on the foot-end of the bed or place on the floor as desired. Avoid blocking vent holes for filter on the back of the control unit housing.

3. Plug the power cable into the connector module on the air-control unit (on lower lefthand side when facing the control unit) and plug the opposite end into the wall outlet.

Always plug the power cable securely into the wall outlet. Make sure the wall-mounted outlet will accommodate a heavy duty or hospital-grade plug and that the outlet is in good working order. The plug of the power cord should fit tightly into the wall outlet. The plug body, the wall outlet, and the wall plate should not be cracked or chipped. The plug blades should be securely retained in the plug body. The ground pin of the plug should be intact and secure.

Do not connect the power cord to an extension cord or to a multiple outlet strip. If the use of extension cords or multiple outlet strips cannot be avoided, use only heavy duty or hospital-grade connectors that are approved by the facility engineering department. Multiple outlet strips should be mounted on a fixed object to reduce the risk of liquid spills and physical damage. In addition, if multiple-receptacle outlet boxes are used, they also should be protected from the risk of liquid spills and physical damage. All extension cords and multiple outlet strips should be tagged and inspected routinely.

Do not cover the power cord with a rug or carpet. Rugs or carpets can prevent normal air flow, which can lead to greater heat built-up. Place the cord in a low or no traffic area. Check to be sure the motion of the bed does not interfere with the bed's power cord or plug.

Never thread power cords through mechanical parts of the bed or bed rails where normal bed movement may damage or cut the cord.

Note: If the pump is quickly restarted after a power interruption, you may encounter fluctuating power indicated by blinking lights. Turn power off. Wait at least 5 seconds before restarting.

4. Connect the air lines extending from the mattress into place on the side of control unit.

   - Air Delivery Line: The large diameter air line delivers a high volume air flow to the top layer of mattress. For all models, click the male fitting of the large diameter air line into place in the female air outlet on the side of the control unit. To disconnect, press grey button on the outlet. This will release and eject the air line.

Attaching main air delivery line

- Support Cylinder Air lines: The small diameter air lines deliver lower volume air flow to the support cylinders inside the mattress. On Standard model, click in place the two separate male elbow fittings, which are interchangeable. Verify secure connection with two clicks. On the LR model (four fittings mounted into one connection plate.) and XL (six fittings mounted into one connection plate) models, click connectors into place in appropriate fittings on side of control unit. Verify secure connection with "click" for both metal connectors.

- To disconnect: On standard unit, press silver release button located on each air line connector. On LR and XL versions, use thumb and forefinger to press concurrently the two silver release buttons located on the uppermost left and lowermost right connectors. This will release and eject the air line connector plate.

Easy Air Standard Model
(model 8000)

Attaching support cylinder connection plate on Easy Air LR
(model 8200)

Attaching support cylinder connection plate
On Easy Air XL (model 8300)

 Never thread air lines through mechanical parts of the bed or bed rails where raising, lowering, or gatching of the bed may damage the air lines or the control unit itself. Check to be sure the routing of the air lines or the motion of the bed does not impede air flow by crimping the air lines.

ELECTROMAGNETIC OR OTHER INTERFERENCE

This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to other devices in the vicinity. However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to other devices, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving device.
- Increase the separation between the equipment.
- Connect the equipment into an outlet on a circuit different from that to which the other device(s) are connected.
- Consult the manufacturer for help.

CONTROL UNIT SETTINGS

1. Turn unit ON at the switch provided on the lower left-hand side of the air-control unit.

2. Select the desired **THERAPY MODE**.

    - For Standard and XL models, select **FLOAT** or **ALTERNATING** as desired.

    - For LR model, select **FLOAT** or **ALTERNATING** or **ROTATION**.

3. **AIR FLOW** - Select OFF or ON as desired. Air flow ON is recommended where prevention of skin maceration is desired.

4. **LOCKOUT –** This feature can be used to eliminate accidental or unintended changes to the control unit settings. To engage, press LOCKOUT firmly and hold for three to four seconds until indicator light turns on. To disengage, press LOCKOUT again and hold firmly for 3-4 seconds until light turns off, indicating that the control unit settings are again unlocked and can be adjusted as desired.

5. **COMFORT LEVEL:**   For best possible pressure management, maximize immersion and envelopment by initially setting the "COMFORT LEVEL" on the control panel to the softest selection appropriate for the patient, in accordance with the stated weight limits:

    Easy Air, Easy Air LR:

COMFORT LEVEL	WEIGHT LIMIT
2-5	500 lbs.
1 "Max. Immerse"	120 lbs.

Easy Air/Easy Air LR P10501

- For patients up to 120 lbs., begin with level 1 ("Max. Immerse").
- For patients weighing more than 120 lbs. (up to 500 lbs.) begin with Level 2.
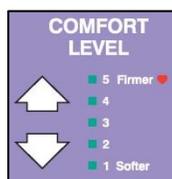
Adjust for user comfort as desired, using up and down arrow buttons.

    Easy Air XL:

- Because it is not necessary for bariatric patient, the XL model does not include "Max. Immerse" setting. Begin in lowest setting and adjust for comfort.

NOTE: Allow the mattress to inflate for about 20 minutes before putting a patient on it.

DIRECTIONS FOR USE
PRESSUREGUARD EASY AIR® STANDARD MODEL

1. Immediately after the control unit is switched ON, all lights on the control panel will illuminate for 1-2 seconds while the system performs a self check. If correct system air pressure is not reached within 60 seconds, the amber **LOW PRESSURE** indicator will illuminate. LOW PRESSURE indicator will remain until being replaced by the green NORMAL PRESSURE indicator, signaling that the mattress is ready for patient use. If NORMAL PRESSURE indicator does not illuminate within 20 minutes of power up, contact Span-America for assistance.

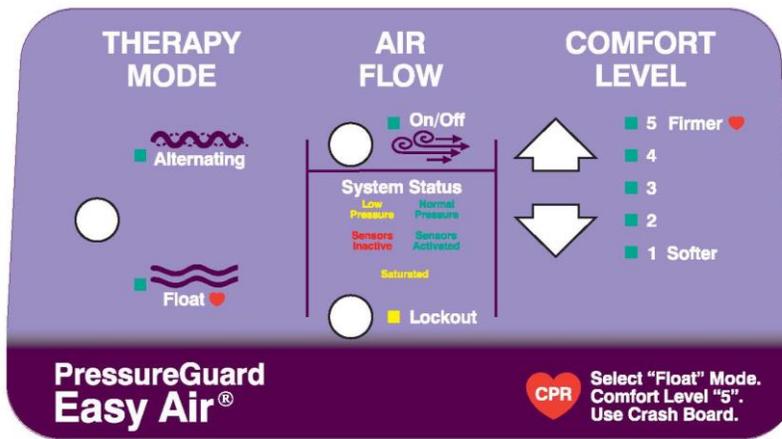2. Select the preferred mode of operation by pressing the toggle button under **THERAPY MODE** on the control unit's front panel. Select:

   ALTERNATING: Air cylinders 1 and 3 deflate while 2 and 4 inflate. Pairs will go through one complete alternation cycle every 15 minutes.

<div align="center">OR</div>

   FLOAT evenly inflates all 4 air cylinders, providing powered flotation.

3. Press the **AIR FLOW** toggle button to select **AIR FLOW ON** or **OFF** as preferred. **AIR FLOW** is ON when light is illuminated, and OFF when light is not illuminated.

4. In normal operation, the green **NORMAL PRESSURE** indicator should be illuminated. If the amber **LOW PRESSURE** indicator illuminates, verify air lines are not crimped or kinked preventing proper air flow and that all air line connections are secure. If the problem is not resolved, remove the patient from the surface and discontinue use. For assistance, contact Span-America at 800-888-6752 8:00 AM – 5:00 PM EST Monday through Friday.

5. Set **COMFORT LEVEL** as described on page 11.

DIRECTIONS FOR USE
PRESSUREGUARD EASY AIR® XL MODEL

1. Immediately after the control unit is switched **ON**, all lights on the control panel will illuminate for 1-2 seconds while the system performs a self check. If correct system air pressure is not reached within 60 seconds, the amber **LOW PRESSURE** indicator will illuminate. LOW PRESSURE indicator will remain until being replaced by the green NORMAL PRESSURE indicator, indicating that the mattress is ready for patient use. If NORMAL PRESSURE indicator does not illuminate within 20 minutes of power up, contact Span-America for assistance.

2. Select the preferred mode of operation by pressing the toggle button under **THERAPY MODE** on the control unit's front panel. Select:

   ALTERNATING: The six cylinders work in pairs. Air cylinders 1 and 4 deflate, then 2 and 5, then 3 and 6. Pairs will go through one complete deflation/inflation cycle every 22 minutes.

   <div align="center">OR</div>

   FLOAT evenly inflates all 6 air cylinders, providing powered flotation.

3. Press the **AIR FLOW** toggle button to select **AIR FLOW ON** or **OFF** as preferred. **AIR FLOW** is ON when light is illuminated, and OFF when light is not illuminated.

4. In normal operation, the green **NORMAL PRESSURE** indicator should be illuminated. If the amber **LOW PRESSURE** indicator illuminates, verify air lines are not crimped or kinked preventing proper air flow and that all air line connections are secure. If the problem is not resolved, remove the patient from the surface and discontinue use. For assistance, contact Span-America at 800-888-6752 8:00 AM – 5:00 PM EST Monday through Friday.

5. On the XL model, the **COMFORT LEVEL** is not intended to be set according to the individual user's specific weight. Instead, for best possible immersion and pressure distribution, begin with the softest setting, setting 1. If user expresses discomfort, level can be adjusted as desired to accommodate comfort.

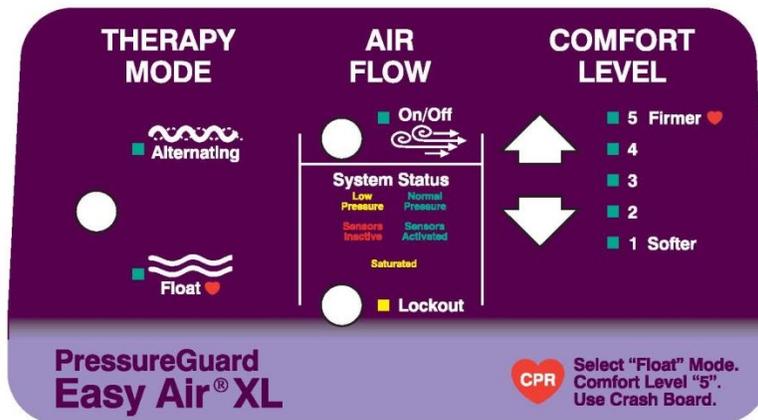# DIRECTIONS FOR USE
# PRESSUREGUARD EASY AIR® LR MODEL

1. Immediately after the control unit is switched **ON**, all lights on the control panel will illuminate for 1-2 seconds while the system performs a self check. If correct system air pressure is not reached within 60 seconds, the amber **LOW PRESSURE** indicator will illuminate. LOW PRESSURE indicator will remain until being replaced by the green NORMAL PRESSURE indicator, indicating that the mattress is ready for patient use. If NORMAL PRESSURE indicator does not illuminate within 20 minutes of power up, contact Span-America for assistance.

2. Select the preferred mode of operation by pressing the toggle button under **THERAPY MODE** on the control unit's front panel.

    ALTERNATING: Air cylinders 1 and 3 deflate while 2 and 4 inflate. Pairs will go through one complete alternation cycle every 15 minutes.

    FLOAT: Stops the alternating or rotating movement of the mattress and evenly inflates all four air cylinders. The **FLOAT** indicator light will illuminate and the mattress will achieve uniform support with no movement within five minutes.

    ROTATION: Air cylinders 1 and 2 inflate while 3 and 4 deflate, gently rolling the patient laterally. Cycles complete every 15 minutes, rotating the patient from side to side, approximately 20 degrees in each direction.

3. Press the **AIR FLOW** toggle button to select **AIR FLOW ON** or **OFF** as preferred. **AIR FLOW** is ON when light is illuminated, and OFF when light is not illuminated.

4. In normal operation, the green **NORMAL PRESSURE** indicator should be illuminated. If the amber **LOW PRESSURE** indicator illuminates, verify air lines are not crimped or kinked preventing proper air flow and that all air line connections are secure. If the problem is not resolved, remove the patient from the surface and discontinue use. For assistance, contact Span-America at 800-888-6752 8:00 AM – 5:00 PM EST Monday through Friday.

5. Set **COMFORT LEVEL** as described on page 11.
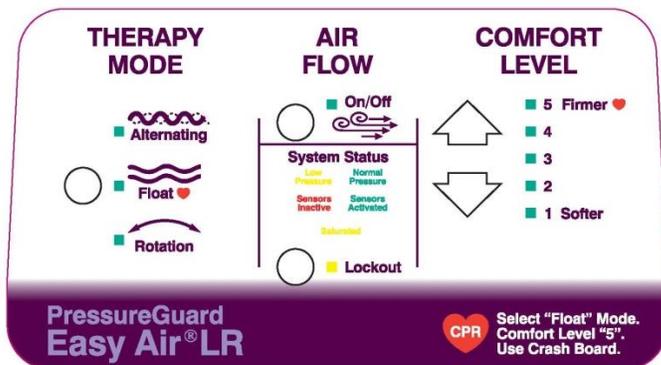
GENERAL DIRECTIONS FOR USE OF ALL EASY-AIR MODELS

ELEVATING HEAD OF BED (HOB): All support surfaces using air as a support medium are designed for distributing pressures over the body in a flat, horizontal position. Bending the support surface and the body at the midpoint when elevating the HOB concentrates the body weight over the center of the surface, stressing that small area. This extreme change in dynamics creates a challenge for all air support surfaces. Maximum pressure management benefits are realized between zero and 30 degrees HOB elevation. Beyond 30 degrees, the amplitude of the changes in the air cylinders begins to decrease in proportion to the increased elevation of the HOB. Although the Easy Air will maintain its support and therapeutic capabilities up to and including 70 degrees HOB, for maximum benefit we recommend that any pressure management surface be used with the head of the bed elevated as little as possible, and for limited periods at a time.

BED RAILS: Due to concerns over the possibility of patient entrapment, Span-America recognizes that the use of rails of any length is a matter currently addressed by federal and state laws/guidelines, and by individual facility protocol. It is the responsibility of the facility to be in compliance with these laws, which typically require that decisions on the use of bed rails of any type are based on assessment of the physical and mental status of each patient individually. If bedrails are needed by the patient to prevent fall-related injury, as determined by this facility assessment, we recommend that the bedrails be locked in the up position at all times. We do not require use of bedrails with the Easy Air mattress unless the patient is deemed to be safer with them than without them.

CPR (Cardiopulmonary Resuscitation): The face plate of all Easy Air models indicates recommended settings for CPR. The standard for life support recommended by the American Heart Association recommends a hard level surface such as a crashboard, or moving the person to the floor if possible.

For performing CPR on all PressureGuard Easy Air Models: 1) Select the FLOAT Mode; 2) Select the firmest COMFORT LEVEL; 3) Place a crash board underneath the user; 4) Follow standard CPR procedures.

PATIENT TRANSPORT: The patient can remain on the mattress while the mattress and bed frame are being moved, with proper safety precautions taken. Unplug the power connector from the wall receptacle. The inflation of the mattress will be maintained and the air will equalize in the air cylinders.

⚠️ **CAUTION: DO NOT MOVE PATIENT ON MATTRESS ONLY.**
Mattress should not be used alone for patient transport.

POWER LOSS: If power is lost, **DO NOT UNPLUG** the control unit, and **DO NOT DISCONNECT** the air lines from the control unit. The air-cylinder system will equalize pressure in the support cylinders, and maintain inflation for days or weeks, functioning as a non-powered air flotation mattress. All models will restart to the exact therapy mode and air flow mode programmed in before power was lost or turned off. As a safety measure, comfort level will reset to setting "2" upon power up (see Comfort Level page 13). Allow approximately 5 minutes after power is restored to achieve normal therapy mode functions upon power up.

BED LINENS: Seven-inch deep fitted sheets are recommended.

INCONTINENCE PADS: Pads specifically designed for use with low air loss mattresses are recommended.

SERVICE: Return the control unit for repair or service to Span-America Medical Systems. Repairs to be performed by manufacturer only. Call 800-888-6752, 8 am – 5 pm EST M-F.

ENVIRONMENTAL CONDITIONS FOR USE:

- Indoor Use
- Altitude up to 2000 meters
- Temperature 5° C to 40° C
- Maximum relative humidity 80% for temperatures up to 31° C, decreasing linearly by 50% relative humidity at 40° C
- Mains Supply Voltage Fluctuation up to 10 +/-% of the nominal voltage
- Overvoltage Category II
- Pollution Degree 2

STORAGE AND TRANSPORTATION

Store the mattresses in a clean, dry place. Once the mattress is removed from the box, store flat on a clean surface. When removing mattress from storage, always ensure the internal inflation system is aligned correctly prior to placing a patient on the surface. Avoid temperature extremes (below freezing or above 120ºF). Allow to acclimate to room temperature before use. Do no stack more than 10 high. Do not stack other equipment on top of the mattresses.

Store the controllers in a clean, dry place, protected from accidental damage or falls. Avoid temperature extremes (below freezing or above 120ºF).   Do not stack other equipment on top of the controller. For transportation, secure to prevent damage or falls. For shipment, use box and packaging as provided by the manufacturer.

CLEANING: Clean and disinfect mattress covers following contamination with bodily fluids and between patients. Both the inner cover and the removable coverlet can be cleaned in place by wiping with neutral suds and lukewarm water. Rinse and allow to air dry for approximately 20-30 minutes before use. For hard to clean spots, use liquid cleaner with soft sponge in the concentration recommended by the manufacturer. DO NOT USE HARSH CLEANERS OR SOLVENTS.

If desired, removable coverlet can be machine-laundered using cold or warm water and a cold rinse cycle. Begin wash cycle, add detergent, allow to agitate for two minutes, then place coverlet in washer. Tumble dry using low heat or no heat, or allow to air dry.

⚠️ **CAUTION: USE OF HIGH HEAT IN WASHING OR DRYING WILL DESTROY THE COVERLET.**

For long-term incontinent applications, clean and disinfect cover daily. A scented cleaner/disinfectant is recommended. Iodophor type disinfectants (e.g. Betadine) will stain the fabric.

For disinfection, phenolic or quaternary type disinfectants are recommended. Disinfectants should be hospital grade (tuberculocidal). Follow manufacturer's instructions for use concentrations, contact times and rinsing.

Contamination with blood on the fabric can be disinfected with a 1:10 dilution of household bleach (5.25% sodium hypochlorite) as recommended by the CDC. The use of bleach at improper dilutions may result in fabric discoloration and fluid pass-through.

Where surveillance and epidemiology indicate ongoing transmission of *C. difficile,* an EPA registered hypochlorite-based disinfectant is recommended. Follow the manufacturer's instructions for use concentrations, contact times and rinsing. Generic sources of hypochlorite (e.g. household chlorine

bleach) may also be used. Prepare the disinfection solution fresh daily at a 1:10 dilution. Improper dilutions may result in ineffectiveness and higher than recommended concentrations will damage the fabric.

Note: Alcohol-based disinfectants are not effective against *C. difficile* and should not be used to disinfect environmental services. For further information relative to this organism and infection control in the healthcare setting, please refer to www.cdc.gov/ncidod/hip.

Do not puncture the mattress with needles or sharp instruments. This may result in loss of integrity of the mattress air system or top surface low air loss bladder, and will void the warranty. Inspect the covers and zipper area for signs of damage, puncture, or wear that could result in fluid pass-through. If the cover is stained, soiled, or torn, inspect the internal components for signs of contamination. If contamination is evident, quarantine the mattress and remove from service following infection control procedures.

If required, the air control unit can be cleaned and disinfected.

Turn unit off and unplug from wall before cleaning. [Note: The mattress will maintain air with the unit unplugged. The unit will resume previous setting when powered back up].

Wipe down with using damp sponge or cloth that has been thoroughly wrung out to remove excess liquid. Do not allow liquids to penetrate the user panel.

For cleaning, use neutral suds and lukewarm water. For disinfection, phenolic or quaternary type disinfectants are recommended. Disinfectants should be hospital grade (tuberculocidal). Follow manufacturer's instructions for concentrations and contact times.

PREVENTIVE MAINTENANCE

FILTER MAINTENANCE

- The control unit contains a high volume air blower that requires filtered air for proper operation.
- The two-part filter system is located on the bottom rear of the unit.
  - The larger outer filter is designed to be removed, cleaned, and re-used. [Fig. 1 & 2]
  - The smaller inner filter is located directly beneath the larger removable filter [Figure 3]. THE SMALLER FILTER IS NOT TO BE REMOVED. It is designed to be cleaned in place, from outside of the unit.

⚠️ CAUTION: For maximum effectiveness, and to prolong the life of the unit, cleaning of the two-part filter system should be performed at least once every 180 days of use. If the control unit is used in an area with high concentration of dust or cigarette smoke, the filter should be cleaned as frequently as once every 30 or 60 days for maximum operation.

TO CLEAN THE TWO-PART FILTER SYSTEM

1. Turn unit **OFF**. Remove the four screws on the filter housing plate, which is found at the bottom rear of the control unit [Figure 1].

Figure 1   **Figure 2**

2. With plate off, pull filter out [Figure 2].

3. Wash filter using mild soap and water. Pat dry with towel.

NOTE: If filter is damaged or cannot be easily cleaned, it should be discarded and replaced with a new filter, Span-America part number P02549.

4. DO NOT REMOVE THE SMALL FILTER. [Figure 3] Vacuum out any dust or particles from the small filter using a standard vacuum cleaner with a brush attachment.

Figure 3

5. Put the large filter back into position in the control unit.

6. Reattach the housing plate.

ROUTINE INSPECTION OF POWER CORDS AND SAFETY TIPS TO PREVENT FIRES

1. Assure that the electrical resistance of the safety ground conductor and the level of leakage current (line conductor-to-safety ground and neutral conductor-to-safety ground) meet applicable standards for resistivity and leakage current. Protection afforded by the ground pin is negated if the receptacle is not properly grounded. If you have questions about the adequacy of your facility's building wiring, contact qualified electrician or consult the code authority in your jurisdiction.

2. Check all electrical outlets, including accessory outlets for cleanliness, physical integrity and functionality. The IEEE standard 602-1996, section 4.2.2 advises that hospital-grade outlets be used and that they should be mounted with the ground pin or neutral blade up to assure that any metal that may drop between the plug and the wall will most likely contact an unenergized blade.

3. Check the power cord to assure that contact pins are straight and secure.

4. Routinely inspect the power cord for damage sustained from crushing, pinching, shearing, cutting, or from being worn through. They can be damaged by bed movement, deterioration from use or aging, or human or equipment traffic. The cord's insulation should be intact and there should be no evidence of bulging, stretching, crimping, cracking, or discoloration, especially at the ends, where the cord is attached to the plug body and the control unit.

5. Regularly inspect as parts of the bed frame, motor, mattress and controller, and the floor beneath and near the bed for build-up of dust and lint.

6. Inspect the cover of the control panel to assure that the covering is not cracked or damaged, allowing liquids or other conductive material to penetrate to the switches.

7. Report any unusual sounds, burning odors, or anything unusual to maintenance personnel. Discontinue use of the power cord immediately and contact Span-America Medical Systems, Inc. for replacement.

MATTRESS

Inspect the covers and zipper area for signs of damage, puncture, or wear that could result in fluid pass-through. If the cover is stained, soiled, or torn, inspect the internal components for signs of contamination. If contamination is evident, quarantine the mattress and remove from service following infection control procedures.

You may use the Preventive Maintenance Log provided on the last page of this manual to monitor and document regular inspection and maintenance of your PressureGuard Easy Air Systems.

SPECIFICATIONS

OUTER REMOVABLE COVERLET :	Bacteriostatic High Moisture-Vapor Transport Rate Fluid proof Meets Cal 117 Bacteriostatic
INNER AIR-DELIVERY COVER:	Fluid proof Meets Cal 117
FOAM:	High-density open-cell polyurethane
AIR CYLINDERS:	Urethane
FLAMMABILITY:	Foam conforms to Cal TB # 117. Mattress conforms to NFPA 101 small scale (ASTM E 1590), 16 CFR 1632.4 and FCC 16 CFR 1633.
AIR-CONTROL UNIT:	Voltage: 120 V Frequency: 60 Hertz Max. Current: 1.0 Amp Leakage Current: < 250 Microamps Listing: Conforms to UL 60601-1 and IEC 60601-1-2 [a]
PERFORMANCE:	Provides pressure management in the prevention and treatment of pressure ulcers. The surface is designed to prevent bottoming out for patients weighing up to 500 lbs. The low air loss feature reduces excessive perspiration and body heat by transporting moisture vapors away from the patient's skin.
OPERATING MODES:	Air Flow: Select from OFF or ON (all models)
	Therapy Mode: Select from FLOAT or ALTERNATE (all models) or ROTATION (LR model only).
MATTRESS HEIGHT:	7"
WARRANTY:	2-years, non-prorated

WEIGHT LIMIT:		
	Standard version:	500 lbs (standard version)
	LR version:	500 lbs. in FLOAT or ALTERNATE mode, 350 lbs effective limit for ROTATION mode
	XL version:	1000 lbs

(a)   Use of main power cords other than that supplied with product by Span-America (P02337) may affect EMC compliance with UL regulations. Power cords other than recommended by manufacturer or at lengths other than supplied length may increase Emissions or Decrease Immunity.

ORDERING INFORMATION

Systems include mattress with removable coverlet, inner cover and control unit.

Version: PressureGuard Easy Air (Standard) System low air loss with alternating pressure.

Control Unit 8000

System #	Mattress Size	Mattress Only	Removable Coverlet Only	Inner Cover	Replacement Inflation System
L7535 -29	75"L x 35"W x 7"H	LM7535-29	CLT-L7535	C1-L7535-29	P02410
L7835-29	78"L x 35"W x 7"H	LM7835-29	CLT-L7835	C1-L7835-29	P02411
L8035-29	80"L x 35"W x 7"H	LM8035-29	CLT-L8035	C1-L8035-29	P02411
L8435-29	84"L x 35"W x 7"H	LM8435-29	CLT-L8435	C1-L8435-29	P02411
L8032-29	80"L x 32"W x 7"H	LM8032 -29	CLT-L8032	C1-L8032-29	P02411
L8039-29	80"L x 39" W x 7"H	LM8039-29	CLT-L8039	C1-L8039-29	P02411

Version: PressureGuard Easy Air LR system low air loss with alternating pressure, lateral rotation.
Control Unit 8200

System #	Mattress Size	Mattress Only	Removable Coverlet Only	Inner Cover	Replacement Inflation System
L7535LR-29	75"L x 35"W x 7"H	LM7535LR-29	CLT-L7535LR	C1-L7535-29	P09275
L8035LR-29	80"L x 35"W x 7"H	LM8035LR-29	CLT-L8035LR	C1-L8035-29	P09138
L8435LR-29	84"L x 35"W x 7"H	LM8435LR-29	CLT-L8435LR	C1-L8435-29	P09138
L8039LR-29	80"L x 39"W x 7"H	LM8039LR-29	CLT-L8039LR	C1-L8039-29	P09138
L8053LR-29	80"L x 53"W x 7"H	LM8053LR-29	CLT-L8053LR	C1-L8053-29	P09463

Version: Pressure Guard Easy Air XL Bariatric low air loss.
Control unit 8300

System #	Mattress Size	Mattress Only	Removable Coverlet Only	Inner Cover	Replacement Inflation System
L8042XL-29	80"L x 42"W x 7"H	LM8042XL-29	CLT-L8042XL	C1-L8042-29	P09136
L8048XL-29	80"L x 48"W x 7"H	LM8048XL-29	CLT-L8048XL	C1-L8048-29	P09136
L8053XL-29	80"L x 53"W x 7"H	LM8053XL-29	CLT-L8042XL	C1-L8053-29	P09136
L8442XL-29	84"L x 42"W x 7"H	LM8442XL-29	CLT-L8442XL	C1-L8442-29	P09136
L8448XL-29	84"L x 48"W x 7"H	LM8448XL-29	CLT-L8448XL	C1-L8448-29	P09136
L8453XL-29	84"L x 53"W x 7"H	LM8453XL-29	CLT-L8453XL	C1-L8453-29	P09136

Items not shown below:

Filter replacement   P02549 (package of 12 filters)

Fuse replacement   P09531   1 Amp/ 250 V slo blo
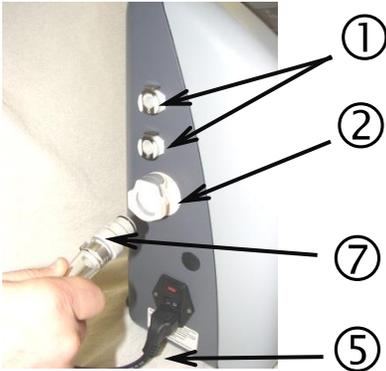
8000 Easy Air Standard Model
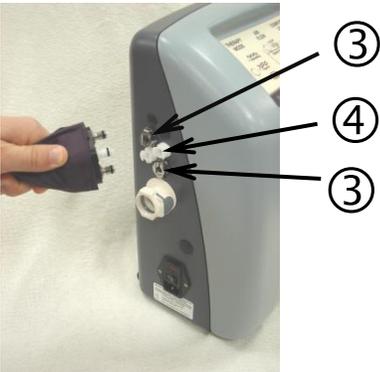
8200 Easy Air LR
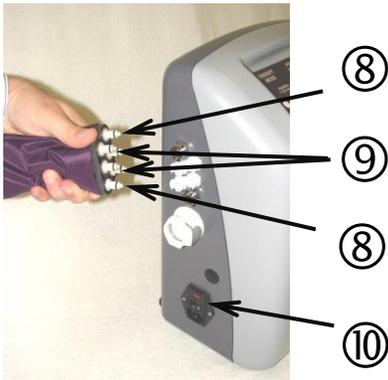
8300 Easy Air XL

		Parts List
①	P02376	Small, Female, (8000 model only, requires 2 each)
②	P09533	Large Female, (all models requires 1 each)
③	P09313	Small, Female, Metal (8200 & 8300 models requires 2 each)
④	P02813	Small, Female, while plastic, (8200 model requires 2 each), (8300 model requires 4 each)
⑤	P02337	Power cord, (all models requires 1 each)
⑩	P09532	Power Module
Mattress End		
⑥	P02404	Small, Male Elbow, (8000 model requires 2 each) (not shown)
⑦	P02374	Large, Male, (all models requires 1 each)
⑧	P09312	Small, Male, metal (8200 and 8300 models require 2 each)
⑨	P02800	Small, Male, white plastic (8200 model requires 2 each), (8300 model requires 4 each)

TROUBLE SHOOTING GUIDE

Problem	Possible Cause	Solution
System will not power up. **Note:** **Always plug power supply into properly grounded receptacle.**	The system is not plugged in.	Plug power cord into wall receptacle.
	There is no power at outlet.	Restore power.
	Power cord is damaged.	Call for service.
	Blown fuse.	Call for service.
Patient not turning/alternating properly.	System is not turned ON.	Plug power cord into wall receptacle.
	Patient not centered on mattress.	Reposition the patient.
	Patient has severe contractures.	Turning can be difficult to observe in patients with severe contractures. Observe someone without contractures lying on the bed for 30 minutes (2 cycles) to confirm turning is functioning properly.
	Head of bed is elevated or knees are gatched.	The degree of patient turn achieved is reduced with elevation of the head of the bed or gatching of the knees. Adjust each as necessary to meet patient needs while maximizing turn angle.
	Patient exceeds weight limit.	Call Span-America for assistance with product selection.
Mattress not inflating or patient reports a sinking feeling.	Control Unit is not turned on.	Turn control unit on.
	Airlines not connected.	Ensure secure connection of airlines at control unit and mattress.
	Airlines or quick disconnect connectors are damaged.	Call for replacement.
	Head of bed elevated.	Lower head of bed and allow air to equalize. Return head of bed to elevated position that is comfortable for patient.
	Defective controller (mattress fills without patient, sinks with patient weight).	Call for service.
Low pressure indicator illuminated.	Airlines not connected.	Disconnect and reconnect airlines to verify they have all locked into place.
	Airlines or quick disconnect connectors are damaged.	Call for replacement.
	Leaking inflation system.	Call for replacement. To replace, turn mattress upside down and unzip cover. Remove inflation system, install new system, zip cover and restore mattress to upright position.

Problem	Possible Cause	Solution
Blower running without Airflow LED illuminated.	Airflow LED burned out.	Call for service.
	Airflow triggered by accidentally pressing more than one button simultaneously on overlay.	Press blower button or reset control unit. Call for service if problem not resolved.
Single or multiple LED indicators not Illuminating.	LED indicators burned out.	Call for service.
	Simultaneous pressing of more than one button on overlay.	Press any single button or reset control unit. Call for service if problem not resolved.
Inability to change modes or comfort level settings.	Central processor malfunction.	Reset control unit by turning off, then back on. Call for service if problem not resolved.
	Simultaneous pressing of more than one button on overlay. See lockout instructions on page 10.	Press any single button or reset control unit. Call for service if problem not resolved.
		Press lockout button for 3 seconds to disable.
All LED indicators repeatedly flashing or not illuminated while control unit is running	Simultaneous pressing more than one button on overlay.	Reset control unit by turning off, then back on. Call for service if problem not resolved.
	Central processor malfunction.	Reset control unit by turning off, than back on. Call for service if problem not resolved.
Interference produced to electronic equipment/devices in surrounding area.	Electromagnetic interference caused by the unintentional emission of electromagnetic waves of energy. These waves are transmitted through the air at various frequencies which may produce interference such as abnormal functioning to nearby electronic equipment.	Determine if emissions are causing the interference by turning the equipment off and on. If the interference in the affected device subsides when control unit is off, proceed with the following steps. a) Reorient or relocate the affected device. b) Increase the distance between the equipment. c) Connect the equipment into an outlet on a circuit different than that of the affected device. d) Consult the field service technician or manufacturer of the affected device.
Blower not operating.	Airflow not on.	Turn on airflow. Call for service if problem not resolved.
Cover billowing	Weld failure in top of mattress cover.	Turn Air Flow off, call Span-America for replacement cover.
Technical Service: (800) 888-6752		

PressureGuard Easy Air Preventive Maintenance and Repair Log

Date	Air Filter	Power Cord	Mattress	Repair
Manufacturer: Span-America **Date Purchased:**		**Serial #:**		**C=Cleaned OK=Okay** **R=Repaired/Replaced**

THIS PRODUCT IS PROTECTED BY ONE OR MORE OF THE FOLLOWING U.S. PATENTS:
6,782,574   6,223,369   6,848,138   7,296,315

SPANAmerica

Innovative Solutions.

SPAN-AMERICA MEDICAL SYSTEMS, INC.
Greenville, SC 29615
800-888-6752

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