



# PRESSUREGUARD<sup>®</sup> APM

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## OWNER'S MANUAL



PressureGuard<sup>®</sup> APM Bariatric



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## 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:



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

## **INTRODUCTIONPRESSUREGUARD<sup>®</sup> APM** **Alternating Pressure Mattresses**

**DESCRIPTION:** The system consists of a foam shell with a high-density foam topper serving as the support surface underneath the patient. The foam shell also includes contoured foam bolsters at the sides and ends of the mattress, providing added patient stability and positioning. The system also includes the unique Heel Slope<sup>™</sup> feature, designed to further reduce pressure for the sensitive heel area. Within the foam shell is housed the inflation system, consisting of air cylinders which run lengthwise within the mattress. The air Control Unit connects to the mattress at the patient foot-end.

**INDICATIONS FOR USE:** The PressureGuard<sup>®</sup> APM (Alternating Pressure Mattress) are powered, flotation therapy mattresses providing a pressure management surface for the prevention and treatment of pressure ulcers.

**MODES OF OPERATION:** The PressureGuard<sup>®</sup> APM Bariatric provides alternating pressure in a programmable cycle time.



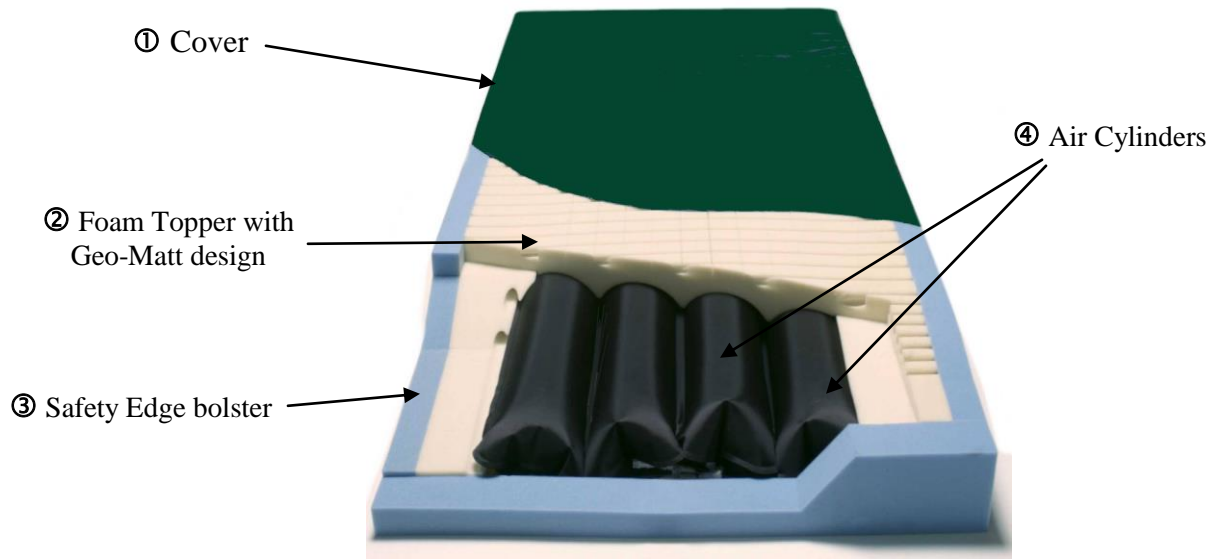
***WARNING - To reduce the risk of electrocution  
READ ALL INSTRUCTIONS BEFORE USING THIS UNIT.***

1. Always unplug this unit immediately after using.
2. Do not operate near water.
3. Do not place or store product where it can fall or be pulled into a tub or sink.
4. Do not place in or drop into water or other liquid.
5. Do not reach for a product that has fallen into water. Unplug immediately.
6. Use this unit only for its intended use as described in the operating instructions.
7. Never operate this product if it has a damaged cord or plug, if it is not working properly, if it has been dropped or damaged, or dropped into water. Contact Span-America Medical Systems, Inc., for return of Control Unit for examination and repair.
8. Keep the cord away from heated surfaces.
9. Never drop or insert any object into any opening or hose.
10. Do not use outdoors.



***WARNING: POSSIBLE EXPLOSION HAZARD IF USED IN THE PRESENCE OF  
FLAMMABLE ANESTHETICS.***

***RISQUE D'EXPLOSION NE PAS EMPLOYER PRES DE GAZ ANESTHESEQUES INFLAMMABLES.***



③ Model 7500  
Bariatric

## COMMON FEATURES

### All APM Models

<p>The air-cylinder inflation system and the foam shell work in concert to maintain low interface pressures throughout the surface, making the APM family of mattresses effective for prevention and treatment of pressure ulcers.</p>	
<p>Cover [Illustration item ①]</p>	<p>The bacteriostatic top fabric is fire resistant, fluidproof, tear resistant, cleanable, and replaceable. The pleated design allows full integration with the mattress's Geo-Matt style shear-relieving surface while minimizing hammocking.</p>
<p>Foam Topper: [Illustration item ②]</p>	<p>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 redistribute pressure, to reduce heat and moisture buildup on the skin, and to reduce shear to underlying tissues. This foam topper is 2" in height and includes the unique Heel Slope™ feature, designed to further reduce pressure for the sensitive heel area.</p>
<p>Safety Edge™ Bolsters [Illustration item ③]</p>	<p>The Safety Edge™ consists of contoured foam bolsters around the sides and ends of the mattress for added patient stability in sitting and lying down.</p>
<p>Air Cylinders: [Illustration item ④]</p>	<p>The inflation system consists of six urethane air cylinders, that run head to foot underneath the body and the foam topper. These cylinders perform the alternating pressure therapy, Cylinders inflate and deflate in a selectable cycle on the Bariatric Model 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 the alternating cycle.</p>
<p>Control Units:</p>	<p>⑧ Model 7500 – PressureGuard APM Bariatric Solutions</p>



## **DIRECTIONS FOR SET-UP**

1. Place the PressureGuard mattress on the bed frame with the air line connectors at the foot end of the bed. Hospital-grade models have a gray vinyl side that should be down on the bed frame, a green fabric side that should be face up toward the patient.
2. Hang the PressureGuard Control Unit unit on the end of the bed using the hanger, or place it on a stable horizontal surface.
3. Insert the connectors at the ends of the air lines into the corresponding connectors on the side of the mattress. Ensure that the air lines are not kinked, twisted, or compressed by the mattress or the bed frame. Push in securely until you hear a "click".
4. Connect the other ends of the air lines into the corresponding connectors on the Control Unit. they will click into place as they do on the side of the mattress (Bariatric Control Unit, model 7500).
5. Ensure that the ON/OFF switch on the Control Unit is in an OFF position. Plug the power cord into an electrical outlet. Switch the Control Unit to ON. The POWER ON light is now illuminated.
6. Allow the mattress 20 minutes to inflate fully before placing a patient on the surface.

## DIRECTIONS FOR USE OF 7500 CONTROL UNIT WITH PRESSUREGUARD APMBARIATRIC

1. Switch the power ON. The green “power on” indicator light on the switch will come on and the control unit will emit a beep.



2. CYCLE TIME and COMFORT LEVEL are both pre-set in the middle range. The control unit will default to these settings. Change settings as desired, for patient comfort. All settings are within therapeutic ranges, even the “softest” and “firmest” comfort levels.
3. ALARM RESET LIGHT: Indicates that factory pre-set inflation levels have not been reached. When the control unit is first turned on, the mattress should reach the preset level within approximately 30 minutes. If preset level cannot be reached within 30 minutes, the unit will continue inflating for an additional 15 minutes. If preset level still cannot be reached, the alarm will beep and the red LED will come on to signal a low pressure condition.

To mute the audible alarm, press ALARM RESET. The alarm LED will begin blinking and will remain blinking until correct inflation level is reached.

To reactivate the audible alarm, press ALARM RESET again.



**WARNING:** If the red ALARM RESET light indicating a low pressure condition does not turn off, check to see that all air line connections are securely and correctly installed. If no obvious connection problem can be corrected, contact local dealer, or call Span-America customer service at (800) 888-6752).

4. After proper inflation is indicated, and you have prepared the patient surface, place the patient on the system. Select the preferred mode of operation:
  - a. STATIC: This mode provides powered flotation, in which the system continually

adjusts as necessary to maintain patient support at the chosen comfort level. Caregiver may prefer this mode for transfers, dressing changes, feeding, and related activities.

- b. **ALTERNATING:** The mattress surface remains level and provides alternating pressure in one of four cycle time options – 20, 25, 30, or 35 minutes. Of the six cylinders in the APM Bariatric, two cylinders deflate at one time in the following pairs: 1 - 4, 2 - 5, and 3 - 6. One cycle consists of the relative deflation and re-inflation of one pair of cylinders. The pairs of cylinders deflate and inflate in the order shown.
- c. **AUTOFIRM:** Press the AUTOFIRM button to automatically inflate the mattress to the maximum level for 30 minutes. The pressure will return to the previously set level after 30 minutes. This may be used for patient transfers, for extended edge-of-bed sitting, or for CPR.

**POWER LOSS/PATIENT TRANSPORT:** In case of loss of power, or while transporting a patient on the mattress: disconnect the air lines from the Control Unit and push the Transport Cap in place on the ends of the airlines. This will seal the air in the mattress for days or weeks.

**AIR FILTER PREVENTIVE MAINTENANCE:** The air filter for the Control Unit should be checked routinely for signs of dirt or contamination. The frequency for cleaning depends on the air quality. The air filter is accessible from the back of the Control Unit and is covered by a removable tan colored cover. As the filter is white, the need to clean is obvious. Simply remove the cover, remove the filter, and hand wash using warm water and mild detergent. Rinse thoroughly and allow to air dry. Replace the filter and clip the cover back into place.

## GENERAL DIRECTIONS FOR USE OF ALL MATTRESS MODELS

**BED LINENS:** Seven-inch deep fitted sheets are recommended. Multiple layering of linens or underpads beneath the patient should be avoided for the prevention and treatment of pressure ulcers. For Safety Supreme version, it may be easier to use flat sheets, knitted stretch-fit sheets, or deep-pocket fitted sheets.



**CAUTION:** Be careful not to puncture the mattress with needles or sharp instruments. This may result in loss of integrity of the cover or internal air system. Regularly inspect the mattress cover for cuts, rips, cracks or tears. Do not use the mattress if the cover is damaged.

**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 various regulations from local, national and international government agencies, 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 assessment, we recommend that the bedrails be locked in the up position at all times.

**CPR:** The Standards for Life Support recommended by the American Heart Association for performing CPR recommend a hard level surface for performing CPR. This means moving the person to the floor if possible.

For performing CPR on the PressureGuard<sup>®</sup> APM

1. Place a crashboard beneath the patient.
2. Select AUTO FIRM.
3. Follow CPR procedures.

**STORAGE:** Always store the surface flat on a clean, level surface. Avoid storage of other equipment on top of the mattress. When removing the mattress from storage, always ensure the internal inflation system is aligned correctly prior to placing a patient on the surface.

**WARRANTY:** All PressureGuard<sup>®</sup> APM models are unconditionally guaranteed against failure due to manufacturing defects under normal use for 18 months.

**USE IN WOUND CARE:** Use of PressureGuard<sup>®</sup> APM models is only one element of care in the prevention and treatment of pressure ulcers. Frequent repositioning, proper care, routine skin assessment, wound treatment and proper nutrition are but a few of the elements required in the prevention and treatment of pressure ulcers. As there are many factors that may influence the development of a pressure ulcer for each individual, the ultimate responsibility in the prevention and treatment of pressure ulcers is with the health care professional.

## CLEANING and DISINFECTION All Models

Only the cover requires cleaning and maintenance. Disassembly of the support surface for maintenance of internal components of the Control Unit or mattress is not recommended.

Cover can be wiped clean with neutral suds and lukewarm water. Rinse and dry. For hard to clean spots, use standard liquid household/vinyl cleaners with a soft bristle brush.



**CAUTION: DO NOT USE HARSH CLEANERS OR SOLVENTS.**

For long-term incontinent applications, clean and disinfect cover daily. A scented cleaner/disinfectant is recommended. Iodophor type disinfectants (Betadine for example) 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](http://www.cdc.gov/ncidod/hip).

Disinfect mattress covers following contamination with bodily fluids and between patients. 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.

Allow cover fabrics to air dry (approximately 20 – 30 minutes) before use.



**WARNING:** If contamination is evident, quarantine the mattress and remove from service following infection control procedures.

## **SPECIFICATIONS**

<b>COVER:</b>	Bacteriostatic, flame resistant, fluidproof, tear resistant
<b>FOAM:</b>	High-density open-cell polyurethane. Conforms to NFPA 101 small scale and Cal TB# 117. .
<b>AIR CYLINDERS:</b>	Urethane and/or Fabric Coated PVC
<b>ELECTRICAL:</b>	All control units 120 V, 60 H. All control units UL listed. Bariatric units also conform to UL 60601-1 and CAN/CSA C22.2 NO. 601.1
<b>SURFACE SIZES:</b>	80”L X 42”W - Bariatric 80”L X 48”W - Bariatric 80”L X 54”W - Bariatric
<b>MATTRESS HEIGHT:</b>	7” for all models
<b>WEIGHT LIMIT</b>	750 lbs. for bariatric models
<b>CYCLE TIME:</b>	Programmable cycles for Bariatric
<b>PLACEMENT</b>	All mattresses can be placed directly on a hospital bed frame or standard bed frame or box spring.
<b>WARRANTY:</b>	18 months, not pro-rated, against manufacturing defects.

## ORDERING INFORMATION

<b>Product Name</b>	<b>Catalog Number</b>	<b>Mattress Size</b>
PressureGuard APM Bariatric	AP8042-29	80”L X 42”W X 7”H
with 7500 Control Unit	AP8048-29	80”L X 48”W X 7”H
	AP8054-29	80”L X 54”W X 7”H
	AP8442-29	84”L X 42”W X 7”H
	AP8448-29	84”L X 48”W X 7”H
	AP8454-29	84”L X 54”W X 7”H
Replacement Air Systems		
For 80”/84” x 42”	P09371	
For 80”/84” x 48	P09372	
For 80” /84”x 54”	P09373	
7500 control unit only (Bariatric)	7500	
Replacement Airlines only		
APM Bariatric	P02674	

All Models comply with 2000NFPA 101 (life Safety Code), Cal TB # 127 and 16 C FR 1632 and 1633.

Call Customer Service (800-888-6752) for information on coverlets, transport bags, and other available accessories.









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



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