SKINGUARD® MATTRESS SERIES
OWNER'S MANUAL

Please read this manual before using this product. Do not discard.
Save for future reference. This manual must be given to the user of this product.

A FDA registered company. Products are FDA listed.

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FDA Registered Company
California FDA Registered Company
Medicare Coded (SADMERC)
Health Canada Medical Device Licensed
ISO 13485 Certified Company
Medical Device Electrical Safety Tested
SGS Fire Safety Tested

MADE IN USA

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DANGER:

♦ EXPLOSION HAZARD♦
DO NOT USE CONTROL UNIT IN THE PRESENCE OF FLAMMABLE ANESTHETICS OR AN OXYGEN TENT

NOTE: Warning / Caution notices used in this manual apply to hazards or unsafe practices which could result in personal injury or property damage if it is not avoided.

Caution:

Do not use in the presence of smoking materials or open flame. Air flowing through air mattress will support combustion.

Risk of electrical shock. Do not remove control unit cover.

Refer servicing to qualified service personnel.

Equipment should only be connected to a properly grounded three-pronged wall outlet using the 14 foot (427 cm) hospital grade power cord provided with the product.

Warning:

CONTRAINDICATIONS:
ALWAYS consult the patient's physician before using the SkinGuard® Mattress System.

Never drop or insert objects into any opening of the control unit.

Please read this manual before operating the SkinGuard® Mattress System.

If you are unable to understand this manual, please contact your dealer or the manufacturer before attempting to use this equipment. Otherwise personal injury or property damage may result.

NOTE: INFORMATION CONTAINED IN THIS OPERATING INSTRUCTION OWNER'S MANUAL IS SUBJECT TO CHANGE WITHOUT PRIOR NOTICE.

SAFETY INSTRUCTIONS

 Always consult the patient's physician before using the SkinGuard® Mattress System.

 To avoid damaging and before operating your SkinGuard® control unit, be certain the AC power available at your location matches the power requirements printed on the product identification label on the back of the unit.

 To avoid electric shock, always plug the power cord of the control unit into a properly grounded power source.

 Do not insert items into any openings of the control unit. Doing so may cause fire or electrical shock by shorting internal components.

 Do not spill liquids or food on or into the control unit. In the event of any spillage, immediately turn off the control unit and disconnect it from the power source. Return the control unit for servicing to a factory authorized service center.

 Care should be taken such that the controls on the footboard of the bed frames are not obstructed by the SkinGuard® control unit.

 Care should be taken such that the control unit is not blocked and kept away from any heat source or radiators during the operation of the unit.

 Care should be taken such that the power cord of the control unit is not pinched, or has any objects placed on it. Make certain it is not located where it can be stepped on or tripped over.

 Do not attempt to service the control unit except as explained in this operating instruction manual. Contact factory for servicing instructions. Always follow operating and service instructions closely.

 Do not place the patient directly on the mattress without the top sheet. The breathable 4-way stretch top sheet is water repellent; highly vapor permeable, antimicrobial, low friction and low shear, quilted and reusable.

 **WARNING**: Before opening the control unit enclosure, make sure the control unit is turned off and unplugged from its power source. The control unit enclosure should only be opened by a factory authorized qualified service technician.

 Smoking by the patient or anyone else around or on the SkinGuard® Mattress System is prohibited. SkinGuard® Mattress System uses room air for circulation through the mattress. Smoking will contaminate the system.

NOTICE TO PATIENT, PATIENT'S FAMILY AND/OR PRIMARY DAY-TO-DAY CAREGIVER

⚠ DO NOT use this product without first completely reading and understanding this Bed Rail Entrapment Risk Notification and any additional instructional material such as owner's manual, instruction sheets and on-product warnings supplied with this product. If you are unable to fully understand this Bed Rail Entrapment Risk Notification, the on-product warnings or any additional instructional materials, contact the patient's health care provider and/or your equipment provider before using this equipment. Failure to understand and comply with the information contained in this Bed Rail Entrapment Risk Notification can result in serious injury or death.

Entrapment within the bed rail

Entrapment under the bed rail

Entrapment between the bed rail and mattress

Entrapment between the head or foot board and the end of the mattress

Entrapment under the bed rail at the ends of the bed rail

Entrapment between split bed rails

Entrapment between the end of the rail and the side edge of the headboard or foot board

⚠ RISK OF ENTRAPMENT

Bed Rail Entrapment is a known risk in the use of bed's equipped with bed rails.

Every patient is unique. Only the patient's medical care provider is familiar with the patient's unique medical condition and needs. Only the patient's medical care provider and/or the dealer from whom you obtained this equipment, upon proper assessment of the patient's medical condition and needs, can evaluate whether this equipment is appropriate for use by any particular patient and assist the patient, the patient's family and/or the patient's primary day-to-day caregiver in assessing the Risk of Entrapment.

Proper patient assessment, equipment selection, frequent patient monitoring, and compliance with instructions, warnings and this Bed Rail Entrapment Risk Notification is essential to reduce the risk of entrapment.

Accessories have been developed in the industry to reduce the openings in existing bed systems that could cause entrapment. Any modification through the use of accessories must be used in conjunction with proper patient assessment prior to intervention. For a full discussion on this topic, see the Hospital Bed Safety Workgroup's "A Guide for Modifying Bed Systems and Using Accessories to Reduce Risk of Entrapment" found at http://www.fda.gov.

Conditions such as restlessness, mental deterioration and dementia or seizure disorders (uncontrolled body movement), sleeping problems, and incontinence can significantly impact a patient's risk of entrapment, Pediatric patients or patients with small body size may also have an increased risk of entrapment.

- Bed rails are intended to prevent an individual from inadvertently rolling out of bed, provide assistance to a patient when repositioning and to provide a sense of security. NEVER use bed rails for restraint purposes where "restraint" means preventing or hindering the patient within the bed from exiting the bed as they wish. Use of rails as a means of restraint significantly increases a patient's risk of entrapment.
- Bed rails are intended to be used as a pair in a bed system. When in use, both side rails must be in the up position, except when the patient is entering or exiting the bed. Use with one side rail up and one side rail down could create an increased risk of entrapment.
- Bed rails and/or their mountings should not be used if they are bent or otherwise deformed. Bent or deformed bed rails and/or bed rail mountings increase gaps and increase the risk of entrapment. DO NOT place pressure upon bed rails while moving the bed. Although bed rails are not rated to any specific patient weight limitation, the bed rails or their mountings may become deformed or broken if excessive side pressure is exerted on the bed rails.
- Mattress overlays or active therapeutic support surfaces (TSS), which support the patient on an air mattress or specialized foam layer, may present an increased risk of entrapment for some patients. The benefit of TSS product use must be weighed against the potential increased risk of entrapment. The risk judgment must be performed by a medical professional.

The U.S. Food and Drug Administration in partnership with the U.S. Department of Veterans Affairs, Health Canada's Medical Devices Bureau and representatives from national health care organizations and provider groups, patient advocacy groups, and medical bed and equipment manufacturers including the Hospital Bed Safety Workgroup, a collection of experts from the United States FDA, health care professionals and manufacturers of hospital beds, published guidelines regarding body part dimensions as they relate to a bed system's safety. These guidelines, **"Hospital Bed System Dimension and Assessment Guidance to Reduce Entrapment"** contain additional information on the risk of entrapment. Visit the FDA website at *http://www.fda.gov* and search for "bed rail entrapment" to learn about the risk of entrapment or to view the FDA guidelines document.

The above statements are not intended to be a complete or comprehensive list of all risks of entrapment. KAP Medical recommends that whenever bed products are used that the patient, the patient's family and/or the patient's primary day-to-day caregiver discuss entrapment risks with the patient's medical care provider.

MANUFACTURER'S LIABILITY

KAP Medical's original warranty on the SkinGuard® Mattress System will remain in effect during the warranty period provided any changes, readjustments, or repairs have been carried out by a factory authorized service center or a technician of KAP Medical or whenever the control unit and mattress system has been used according to the following operating instructions.

KAP Medical's liability under the warranty is the repair or replacement provided and, in no event, shall KAP Medical's liability exceed the purchase price paid by the customer for the product. Under no circumstances shall KAP Medical be liable for any loss, direct, indirect, incidental, or special damages arising out of or in connection with the use of this product.

TECHNICAL SPECIFICATIONS

ELECTRICAL SPECIFICATIONS

Note: The control unit power inlet is used as the means of isolating the equipment from the supply mains on all poles simultaneously.

	U.S. / INTL.	
Input Voltage AC:	90 ~ 264 VAC	
Input Frequency:	60 / 50 Hz	
Maximum Power Consumption:		
SkinGuard® & SkinGuard® Turn	180 W ± 30 W	
SkinGuard Float®	40 W ± 30 W	
Circuit Protection:		
SkinGuard® & SkinGuard® Turn	Dual fused, 250V, 5A Fast blow fuse(s), std. fuses.	
SkinGuard Float®	Dual fused, 250V, 1A Slow blow fuse(s), std. fuses.	
Fuse Type:		
SkinGuard® & SkinGuard® Turn	Bussmann S500-5-R	
SkinGuard Float®	Bussmann GMD-1-R	
Breaking Capacity: (BRK. CAP.)		
SkinGuard® & SkinGuard® Turn	(BRK. CAP.) @125 VAC is 10kA	@250 VAC is 200A
SkinGuard Float®	(BRK. CAP.) @125 VAC is 10kA	@250 VAC is 35A
Mode Of Operation:	Continuous	

PERFORMANCE SPECIFICATIONS

Weight Capacity:

Standard Mattress: 500 Lb. (226 Kg.) maximum.
Bariatric Mattress: 1000 Lb. (455 Kg.) maximum.
Mattress Overlay: 250 Lb. (113 kg.) maximum.

	U.S. / INTL.
Pressure Zones:	5
AP Zones:	2
Rotation Zones:	2
Max Flow:	
SkinGuard® & SkinGuard® Turn	1275 LPM (45 CFM)
SkinGuard Float®	42 ~ 52 LPM
Max Pressure:	35 ± 5 mmHg
Max Inflate Timer:	15 minutes
Support Surface Inflation Time:	
SkinGuard® & SkinGuard® Turn	Within 60 seconds
SkinGuard Float®	5 ~ 15 minutes

Patient Comfort Control Pressures

Soft Pressure:	6 ± 5 mmHg
Firm Pressure:	
SkinGuard® & SkinGuard® Turn	32 ± 5 mmHg
SkinGuard Float®	31 ± 5 mmHg
AP Cycle Time:	5, 10, 15, 20 min
Turn Time:	1-253 min
Turn Angle:	5-45 degrees

Patient Contact:
Control unit and mattress have **lead-free, mercury-free and latex-free** components.

MECHANICAL SPECIFICATION
Control Unit (A)

Dimensions, LxWxH:	12" x 5.5" x 10.5" (30cm x 14cm x 27cm)
Weight:	14 lbs. (6 Kg.)
Power Cord:	14 foot (427 cm) long hospital grade
Connection:	Single piece magnetic connector
Packaging:	1 piece per box
Air Filter:	Charcoal air filter with fire retardant

⚠ **Please see Page 32 for air filter cleaning instructions.**

Support Surface
Optional mattress with Kevlar lined fire barrier top sheet and mattress base available (CFR 1632 & CFR 1633 compliant).

Standard Support Surface
Air cushions: 70 denier urethane coated nylon, R.F. welded, liquid proof and washable. Cal.117 pass.
Base: Non-skid embossed PVC/nylon knit. Optional CFR 1632 & CFR 1633 compliant mattresses are available.
Top Sheet: DERMA-PLUSH urethane transfer coated polyester knit, low friction, low shear force producing, breathable, liquid resistant and highly vapor permeable. Cal. 117 pass.

Description	Inflated Dim. LxWxH	Weight
Overlay:	80"x36"x3" or 5"	8 lbs.
	(203x89x13cm)	3.6 Kg.
Standard Mattress:	80"x36"x8" or 10" high	23 lb.
	(203x89x20.5 or 25 cm)	10.5 Kg

Bariatric mattresses available in 39", 42", or 48" wide. (99cm, 107cm, or 122cm)

Packaging: 1 Piece per box

ENVIRONMENTAL SPECIFICATIONS
Operating Conditions:

Ambient Temperature:	40° ~ 104° F (10° ~ 40° C)
Relative Humidity:	30% ~ 75% Non-Condensing
Atmospheric Pressure:	700 hPa to 1060 hPa

Storage And Shipping Conditions:

Ambient Temperature:	-40° ~ 158° F (-40° ~ 70° C)
Relative Humidity:	10%~ 100%
Atmospheric Pressure:	500 hPa to 1060 hPa

Protection Against Harmful Ingress Of Liquids:
Ordinary Protection (IPXO)

Support Surface Sanitation:
Complete support surface is made of superior quality materials and is modular in construction. All components such as manifold, hose assembly, air cushions, top sheet, and base are interchangeable and can be easily cleaned or detached for laundry.

Disposal Requirements:
This equipment should be disposed of at your local Recycling Center (Non-hazardous waste) when it has reached the end of its service life.

SAFETY AGENCY APPROVALS

ETL Listed: 3rd Edition

Intertek
2003311

ETL LISTED
CONFORMS TO
IEC STD 60601-1
IEC STD 60601-1-2
EN STD 60601-1
ANSI/AAMI STD ES60601-1
CERTIFIED TO
CAN/CSA STD C22.2 NO. 60601-1

The standard for safety of Medical Electrical Equipment

Flame Resistance:
Unit components meet UL 94V-0. Mattress components pass California117.

Optional California TB 106, TB 129, 16 CFR 1632, 16 CFR 1633, BS 6607 (CRIB 5), BS 597-1, & BS-597-2 compliant mattresses lined with Kevlar fire barrier available (Kevlar lining based on flammability standard).

FDA REGISTRATION

FDA registered company as a manufacturer and as a contract manufacturer.

KAP Medical's quality system meets the requirements of:
FDA 21 CFR, PART 820 – QSR – Current Good Manufacturing Practices (cGMP) for medical devices and ISO 13485.

ISO 13485 certified company.
Medicare coded (SADMERC).

PATENTS

US & International Patents pending.

CERTIFICATE OF ORIGIN

All products are manufactured in Corona, CA, USA.

Made with Pride in the USA

MADE IN THE USA

EXPLANATION OF SYMBOLS

(not all symbols are used on each model)

SYMBOLS	NAME	EXPLANATION
	POWER	Turns the unit On / Off.
	SOFT / FIRM	Up and Down keys adjust patient comfort pressures levels.
	ADJUST SETTINGS	Adjust Up or Down keys to set various therapy times and patient settings.
	MODE / SELECT	Select between Therapy, Alternating Pressure, Static, Pulse, Multi, and Fowler modes (depending on model).
	STATIC	Mattress will be maintained at a constant desired patient comfort pressure level.
	AP TIMES	Selects Alternating Pressure therapy and sets Alternating Pressure times (5, 10, 15, & 20 minutes).
	PULSE	The pressure in each air cell will be increased by 40% for 30 seconds and then reduced to the prior pressure setting for 30 seconds. This cycle will continue every minute as long as pulsation is enabled.
	MAX INFLATE	Inflates mattress rapidly (15 minute timer).
	LOW AIR LOSS / MAX INFLATE	Select between Low Air Loss and Max Inflate modes.
	PATIENT SETUP	Set patient's height and weight.
	TURN	Selects Turn mode.
	PAUSE	Pauses turn therapy cycle time.
	FOWLER	Increases air pressure in the mattress during fowler position to avoid patient bottoming out.
	ALARM SILENCE	Mutes the audio alarm.

	LOCK	Locks out all control unit functions to prevent tampering of patient settings.
	POWER FAIL / LOW PRESSURE	In the event of power failure or if the hose is disconnected an audio/visual alarm will sound.
Flashing "L" "P"	LOW PRESSURE	In the event of Low Pressure or if the hose is disconnected, an audio/visual alarm will sound.
	Indicates the point of attachment of the equipment to earth (grounding point).	
	Attention: Instructs end user / care giver / operator to refer to the manual.	
	Indicates that the degree of protection against electrical shock is TYPE BF.	
	Not for use in presence of flammable anesthetics.	
	Consult Instructions for Use	
	Waste electrical and electronic equipment (recycle).	
	Risk of electrical shock. Do not remove back cover.	
	No Sharp Objects	
	Low Heat Setting	
	Do Not Dry Clean	
	Do Not Bleach	
	No Open Flames	
	Normal Cycle	
	Do Not Iron	
	Latex-Free	
SN	Serial Number	
	Date of Manufacture	
	Manufacturer	

SkinGuard® Overview

SkinGuard® Mattress System:

The SkinGuard® Mattress System is a 5-zone alternating pressure and true low air loss system used to provide pressure reduction. It consists of a control unit, which is used to inflate an overlay or a mattress replacement system. The control unit is designed to provide continuous static or alternating pressure or pulsation therapy or turning therapy with true low air loss at required patient comfort levels. The ABS/PVC blend enclosure houses a high capacity output air blower or air pump, a quick disconnect magnetic connector or quick disconnect connectors, alternating pressure valve, micro-controller with pressure sensors, and auto fowler receiver. The micro controller controls all of the above components, and provides desired patient comfort pressure and therapies.

An overlay system is comprised of a durable zippered PVC/nylon knit base and top sheet which houses a urethane-coated nylon durable 5" inflated air pad in the form of 10 to 20 fixed air cushions with hose assembly. The mattress replacement system is comprised of a durable PVC/nylon knit base with a safety 2" convoluted air base, 5" or 8" (inflated) detachable air cushions, and covered with a vapor permeable, water proof, low friction and low shear DERMA-PLUSH urethane transfer coated polyester knit top sheet with zipper or straps to fasten the top sheet to the mattress base. The complete mattress system has 10 straps in several areas so it can be easily fastened to any size hospital bed.

SkinGuard® System Features

Control Unit: ***(not all features available with each model)***

- High-capacity air output 1275 LPM (45 CFM) or 42~52 LPM and quiet operating control unit. Max Inflate Mode inflates the SkinGuard® and SkinGuard® Turn mattresses within 60 seconds depending on the size of the mattress – SkinGuard® Float between 5~15 minutes depending on the size of the mattress.
- Equipped with a 15-minute Max Inflate timer.

- State of the art micro-controller technology unit for accurate patient comfort pressure values.
- Front panel has power switch.
- Comfort control keys to set comfort levels.
- 10 levels of patient comfort level control.
- Static (non-alternating) mode.
- AP (Alternating Pressure) mode.
- Pulse Mode.
- Turn Mode (applicable model).
- Integrated handle/hanger for easy carrying and hanging of the control unit from the footboard of the bed.
- 14' foot (427 cm) long detachable 16 AWG hospital grade power cord.
- Durable single piece coupling for quick connection and disconnection (CPR deflation).
- Control unit has short circuit / over voltage protection with dual fuse not shown in picture.
- Power Fail LED flashes to indicate power outage.
- Low Pressure "L" "P" flashes on display panel to indicate low pressure.
- Lock Switch to lock out all control functions.

Support Surface (Mattress/Overlay): *(not all features available with each model)*

SKINGUARD®

SKINGUARD® FLOAT

SKINGUARD® TURN

- Self-contained mattress replacement system / mattress overlay system with easily detachable components for cleaning.
- Detachable urethane-coated, 70 denier nylon taffeta, flame retardant / water repellent, mildew resistant, low friction and low shear, 5" or 8" high (inflated) detachable lateral tubular air cushions (20); overlay pad has 10 to 20 fixed air cushions.
- Detachable zippered or strapped highly breathable DERMA-PLUSH urethane transfer coated polyester knit, flame retardant / water repellent, highly vapor permeable, anti-microbial, low friction and low shear quilted reusable top sheet.

- 2" convoluted safety air pad enclosed in the base to support the patient in the event of loss of air pressure in the mattress (not included on overlay mattress).
- The mattress has hose assembly with easy to use quick connect and disconnect coupling.
- The mattress can be disconnected from the unit by pulling the mattress hose connector straight out from the control unit magnetic connector.

- The mattress has a quick connector located at the foot end of the mattress. Lift the flap and connect an extra air cell to expand the length of the mattress (optional). When extra air cells are attached with the Air Cell Expansion Kit, installing the larger top sheet to cover the air cells is recommended.
- The mattress has a cable management pocket along the patient right side of the mattress. This easy access pocket provides convenience of protecting the power cable from accidental damage.
- The mattress includes a CPR Valve at the bottom of the mattress for rapid deflation.

Features	SkingGuard®	SkinGuard® Float	SkinGuard® Turn
Low Air-Loss	✓	✓	✓
Alternating Pressure	✓	✓	
Pulsation	✓		✓
Heel Zone Regulator	✓		
Continuous Lateral Rotation			✓

Standard Features for all Models

- Max Inflate with Time Out
- Lock Out
- Alarms
- CPR Deflate
- Five Pressure Zones
- Fowler Boost – Auto & Manual
- Custom Comfort Adjustment
- Air Pad Bottom Out Protection
- Breathable Low Shear/ Low Friction Top Sheet
- Cable Management System

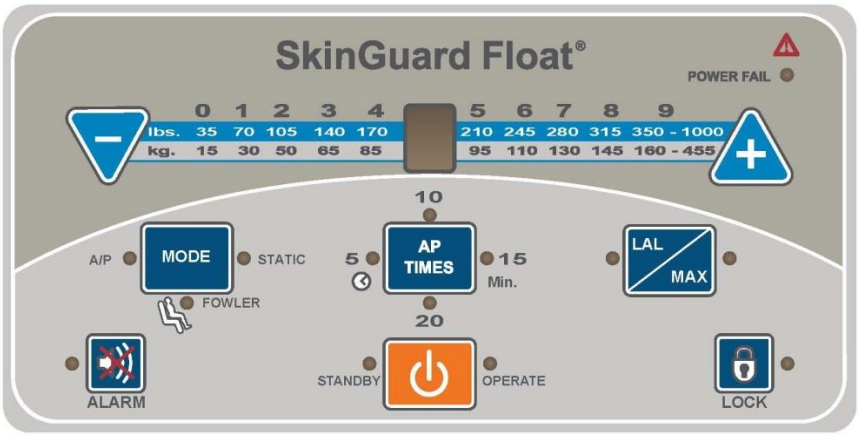
Mattress Options	SkingGuard®	SkinGuard® Float	SkinGuard® Turn
Standard 80"L x 36"W x 8"H, Optional 10" height	✓	✓	✓
Expandable Length Standard Mattress(1)	✓	✓	
Bariatric 80"L x widths: 39", 42", 48" x 10"H(2)	✓	✓	✓
Bariatric Expandable Mattress(3)	✓	✓	
Recessed Deck Mattress	✓	✓	✓
Side Bolsters	✓	✓	Standard
Overlay (3" and 5")		✓	
Foam Air Mattress Configuration Available		✓	

(1) Expandable Length Standard Mattress: Length expands from 80"/84"/88".
(2) Additional size options available for customer order
(3) Expandable Mattress: width expands from 36", 42", 48" and length expands from 80", 84", 88"

SkinGuard® Quick Reference Guide

SYMBOL	DESCRIPITON	EXPLANATION
	POWER	Press the POWER button to turn on/off the control unit. The Standby (amber) LED will turn off and the Operate (green) LED will turn on.
	ADJUST SETTINGS	Press the ADJUST SETTINGS Up/Down arrows to adjust the mattress pressure levels. The number selected (1 to 9) will be shown in the window. Use the weight settings guide as a reference/starting point.
	STATIC	Press the STATIC button (LED on) and the mattress will be maintained at a constant desired patient comfort pressure level.
	AP TIMES	Press the AP TIMES button to activate Alternating Pressure Therapy Mode. To set the Alternating Pressure time, continue pressing the AP TIMES button until the LED is on next to the 5, 10, 15, or 20 minute mark on the label.
	PULSE	Press the PULSE button to activate Pulse Mode. The pressure in each air cell will be increased by 40% (not exceeding 32mmHg) for 30 seconds and then reduced to the prior pressure setting for 30 seconds. This cycle will continue every minute as long as pulsation is enabled.
	MAX INFLATE	Press the MAX INFLATE button (LED on) and the mattress will rapidly inflate. Beeps will occur every 3 minutes as a reminder Max Inflate is active. Max Inflate will deactivate after 15 minutes.
	FOWLER	Press the FOWLER button (LED on) to activate Fowler Mode. Fowler will increase the air pressure in the mattress during fowler position to avoid patient bottoming out. The LED will turn on when the Auto Fowler is activated.
	ALARM SILENCE	Press the ALARM SILENCE button (LED on) to mute the audio alarm.
	LOCK	Press and hold the LOCK button (LED on) and all control unit functions will be locked to prevent tampering of patient settings. Press and hold LOCK button to turn off (LED off).
	POWER FAIL	In the event of Power Failure, an audio/visual alarm will sound and display (LED on).
Flashing "L" "P"	LOW PRESSURE	In the event of Low Pressure or if the hose is disconnected, an audio/visual alarm will sound and Display "L" "P" in the window until correct pressure is re-established.

SkinGuard Float® Quick Reference Guide



SYMBOL	DESCRIPITON	EXPLANATION
	POWER	Press the POWER button to turn on/off the control unit. The Standby (amber) LED will turn off and the Operate (green) LED will turn on.
	ADJUST SETTINGS	Press the ADJUST SETTINGS Up/Down arrows to adjust the mattress pressure levels. The number selected (1 to 9) will be shown in the window. Use the weight settings guide as a reference/starting point.
	AP TIMES	Press the AP TIMES button to activate Alternating Pressure Therapy Mode. To set the Alternating Pressure time, continue pressing the AP TIMES button until the LED is on next to the 5, 10, 15, or 20 minute mark on the label.
	MODE	Press the MODE button until the LED is turned on near the desired mode description to active that mode. In STATIC mode, the mattress will be maintained at a constant desired patient comfort pressure level. In FOWLER mode, the mattress pressure will increase to avoid patient bottoming out in fowler position. In A/P mode, alternate air cushions will inflate to the patient comfort pressure while those cushions between the inflated air cushions will deflate 0% or 50% (factory set) of the set patient comfort pressure.
	LOW AIR LOSS / MAX INFLATE	Press the LAL / MAX INFLATE until the LED is turned on near the desired mode description to active that mode. In MAX INFLATE mode, the mattress will rapidly inflate. Beeps will occur every 3 minutes as a reminder Max Inflate is active. Max Inflate will deactivate after 15 minutes. In LAL mode, the unit will supply air into the low air loss section of the mattress or into the optional special multi-chamber air distribution layer in the top sheet.
	ALARM SILENCE	Press the ALARM SILENCE button (LED on) to mute the audio alarm.
	LOCK	Press and hold the LOCK button (LED on) and all control unit functions will be locked to prevent tampering of patient settings. Press and hold LOCK button to turn off (LED off).
	POWER FAIL	In the event of Power Failure, an audio/visual alarm will sound and display (LED on).
Flashing "L" "P"	LOW PRESSURE	In the event of Low Pressure or if the hose is disconnected, an audio/visual alarm will sound and Display "L" "P" in the window until correct pressure is re-established.

SkinGuard® Turn Quick Reference Guide

SYMBOL	DESCRIPITON	EXPLANATION
	POWER	Press the POWER button to turn on/off the control unit. The Standby (amber) LED will turn off and the Operate (green) LED will turn on.
	ADJUST SETTINGS	Press the ADJUST SETTINGS Up/Down arrows to adjust the menu settings. Follow specific menu instructions.
	SOFTER / FIRMER	Press the SOFTER/FIRMER arrows to adjust the patient comfort pressure levels.
	PATIENT SETUP	Press the PATIENT SETUP button to set patient's height and weight.
	MAX INFLATE	Press the MAX INFLATE button to activate Max Inflate Mode. In MAX INFLATE mode, the mattress will rapidly inflate. Beeps will occur every 3 minutes as a reminder Max Inflate is active. Max Inflate will deactivate after 15 minutes.
	SELECT	PRESS the SELECT button to choose between Therapy, Pulse, Multi, and Fowler (Upright) modes.
	TURN	Press the TURN button to select Turn Mode. Follow the instructions on the right side of the screen to adjust the Left Turn, Right Turn, Dwell time, Left Degree, and Right Degree of turn settings.
	PAUSE	Press the PAUSE button to pause the turn cycle therapy time. Press PAUSE again to reactivate turn cycle time.
	ALARM SILENCE	Press the ALARM SILENCE button (LED on) to mute the audio alarm.
	LOCK	Press and hold the LOCK button (LED on) and all control unit functions will be locked to prevent tampering of patient settings. Press and hold LOCK button to turn off (LED off).
	POWER FAIL	In the event of Power Failure, an audio/visual alarm will sound and display (LED on).
	LOW PRESSURE	In the event of Low Pressure or if the hose is disconnected, an audio/visual alarm will sound and display LOW PRESSURE in the window until correct pressure is re-established.

UNPACKING THE SYSTEM

⚠ **Note: When opening the large system box or the small control unit box, care should be taken such that the object used to open the box does not penetrate the box and damage the components inside.**

Components Supplied:

SkinGuard® System Box

1 Control Unit Box
1 Mattress

Control Unit Box

1 Control Unit
1 Operating Instruction Owner's Manual
1 Power Cord

Unpacking and Inspection

Before accepting and signing for your shipment, please inspect the box or boxes for external and internal damages. Verify that the number of boxes listed on the packing list matches the number of boxes received. Verify that no components are damaged or missing. Report any missing boxes, missing components, and/or damages to the transportation carrier immediately.

SYSTEM SETUP

PLEASE NOTE: *The SkinGuard® Mattress System (SkinGuard®, SkinGuard® Float and SkinGuard® Turn) must be installed on bed frames that are equipped with side rails. Please raise side rails on the bed and lock them in position after the patient is on the mattress. NEVER LEAVE PATIENT UNATTENDED ON MATTRESS SYSTEM WITH BED SIDE RAILS IN THE DOWN POSITION.*

1. Before using the SkinGuard® Mattress System, remove any other mattress or pad, etc., from the bed frame.

2. SkinGuard® Overlay system: When using an SkinGuard® Overlay Mattress, care should be taken such that the overlay is placed directly on an existing 3" to 5" foam mattress.

3. Overlay System: There are two elastic straps; one at the head and the other at the foot section. Two long straps on one side and two short straps with buckles on the other side of the overlay. Insert head and foot elastic straps around the foam mattress. Loop each long side strap around the foam mattress and fasten it securely to the foam mattress using the buckle.

4. SkinGuard® Mattress System: Unroll the SkinGuard® mattress onto the bed frame. Care should be taken such that the mattress is placed directly on the bed frame. Note: Make sure that the hose end of the mattress is towards the foot of the bed and the CPR Valve is closed.

5. SkinGuard® Mattress System: There are ten nylon black straps with buckles, two straps at the head of the mattress, two on the foot of the mattress, and three on the each side of the mattress shown. Loop each strap around the bed frame and fasten it securely to the bed frame using the buckle.

6. Extend the hanger on the back of the control unit and suspend the control unit from the footboard of the bed. If the bed you are using does not have a footboard, place the control unit on its base or on its back on a flat surface underneath the bed near the foot of the bed frame. Note: Ensure that the control unit is not covered and placed on the floor in such a manner that it is a hazard for flow of traffic or lowering of bed frame.

7. Uncoil the power cord and plug the cord into the appropriate AC power source, which is properly grounded. Run the power cord through the cable management pocket and plug it into the control unit. Press it in place. **Note**: Care should be taken such that the power cord of the control unit is not pinched or has any objects placed on it. Also ensure it is not located where it can be stepped on or tripped over. Make sure the control unit's power inlet connection is positioned to easily disconnect the power cord from the unit.

8. Connect the mating coupling body on the mattress or overlay pad hose assembly onto the magnet connector on the control unit and lock it into place.
   Note: Ensure the connector has a good connection by gently tugging on the connector. Ensure that the mattress or overlay pad hose is freely suspended without being pinched or kinked.

OPERATING INSTRUCTIONS

Make sure the mattress hose assembly is connected properly and secured to the control unit. Ensure the CPR Valve is closed. CPR valve is located at the foot-end of the mattress.

Note: not all functions apply to every model

SKINGUARD®

POWER 

- During initial power up (when power cord is plugged into the power source), the control unit will go through a system initialization routine for a few seconds and enter "STANDBY" (amber LED on) mode.
- If the unit is in STANDBY mode with amber LED on, press the POWER button to turn the control unit on.
- If the power comes on after a power outage, the control unit will go through its system initialization routine for few seconds and then resume the desired function.

MAX INFLATE 

- Press the MAX INFLATE button and the unit will rapidly inflate the mattress at maximum flow.
- The mattress will inflate to its normal size within 60 seconds (inflation time depends on the size of the mattress). In this mode the entire mattress will be pressurized to 35 ± 5 mmHg.
- During this mode a series of beeps will sound every 3 minutes as a reminder that Max Inflate Mode has been activated.

PATIENT COMFORT CONTROL LEVEL 

- Pressing the (-+) buttons will decrease or increase the pressure setting. The patient comfort pressure ranges from SOFT 6 ± 5 mmHg (0) to FIRM 32 ± 5 mmHg (9). Depending on the desired patient comfort level, the micro-controller / sensors will set appropriate air pressure and maintain the desired pressure in the mattress.

RECOMMENDED PRESSURE SETTINGS

  - For extra firm support during patient ingress/egress, patient wound care, patient turning, or patient cleaning, it is recommended to set the mattress pressure to MAX INFLATE.

STATIC (THERAPY) 

- To set Static Mode, press the STATIC button; LED lights up.
- In Static Mode, the air cushions in the mattress will be maintained at a constant pressure and can be adjusted to the desired patient comfort control level.

ALTERNATING PRESSURE 

- To set Alternating Pressure Mode, press the AP TIMES button and select the desired time for the alternating pressure therapy; LED lights up. The AP times are 5, 10, 15, and 20 minutes.
- In the Alternating Pressure Mode, alternate air cushions will inflate to the patient comfort pressure while those cushions between the inflated air cushions will deflate 0% or 50% (factory set) of the set patient comfort pressure. An AP cycle will alternate these inflated and deflated air cushions, switching back and forth.

PULSE 

- To set Pulse Mode, press the PULSE button; LED lights up. For SkinGuard® Turn, press the SELECT button until the Pulse mode is displayed on the screen.
- The pressure in each air cell will be increased by 40% for 30 seconds and then reduced to the prior pressure setting for 30 seconds. This cycle will continue every minute as long as pulsation is enabled.

FOWLER 

- To activate Fowler Mode, press the FOWLER button; LED lights up. For SkinGuard® Turn, press the SELECT button until Upright is displayed on the screen.
- In this mode, pressures in the entire mattress will be increased to higher than the set comfort pressure level (not exceeding 32mmHg). This enables the patient in a fowler position to be supported without bottoming out.
- When the Auto Fowler is activated, the LED will light up.

LOW AIR LOSS 

- Continuous Low Air Loss relief is provided at all time when the SkinGuard® Mattress System is powered on.

LOCK OUT

- Control unit functions (including power) can be completely locked, preventing tampering of settings by pressing and holding the LOCK button until the light comes on (approximately 3~5 seconds). Press and hold the LOCK button to unlock.

ALARM SILENCE

- An audio-visual alarm is sounded in the event of power failure or when the hose is disconnected from the unit. Audio alarm can be muted by pressing alarm silence key.

POWER FAIL

- In the event of a power outage, the microprocessor will activate an audiovisual signal to alert the caregiver by flashing the amber "POWER FAIL" LED and the buzzer will turn on. Once the power is restored to the control unit, the audiovisual signal will cease and the unit will resume operating its set mode. During power outage the mattress will retain air as long as the mattress is connected to the control unit.

HEEL ZONE REGULATOR

- Heel Zone Pressure can be adjusted independently from the rest of the mattress zones, if desired. The Heel zone, which has four air cells, can be adjusted to four different pressure settings.
- To set the required pressure in the Heel Zone, turn the Heel Knob to the desired position. Match the SET NUMBER to the metal peg at the right of the Heel knob.

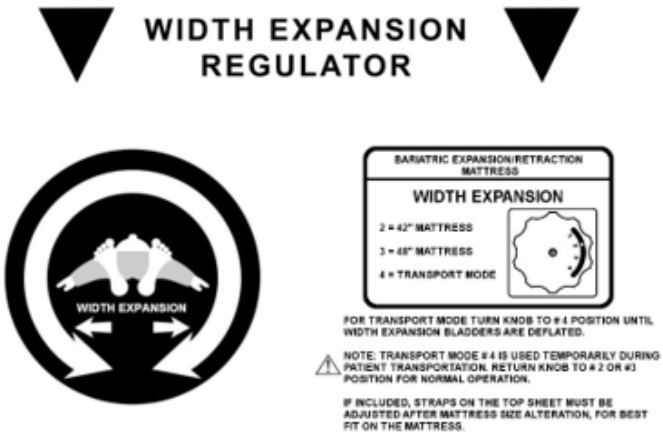
FIRM (1)	= 27 ± 4 mmHg
MEDIUM FIRM (2)	= 23 ± 4 mmHg
MEDIUM SOFT (3)	= 14 ± 4 mmHg
SOFT (4)	= 4 ± 2 mmHg

- The pressures shown above are for a mattress at the firmest Control Unit setting. Softer settings will result in correspondingly lower Heel Zone pressures.

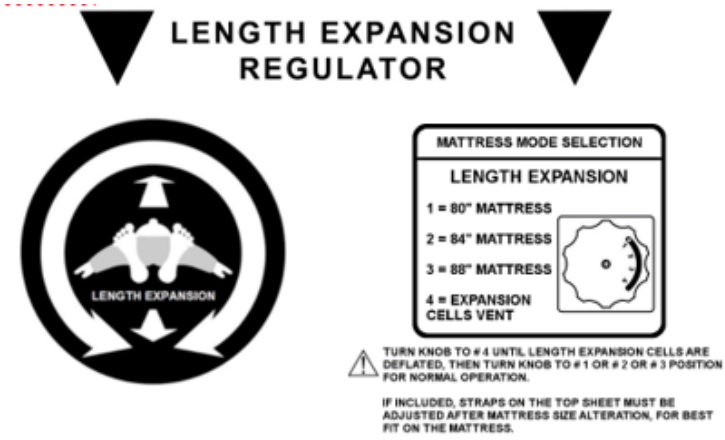
EXPANDABLE MATTRESS SYSTEM (XMS) / EXPANDABLE LENGTH MATTRESS SYSTEM (EL) (IF EQUIPPED)

Mattress has ability to expand in width from 36" (42", 48", and transport mode) and/or in length (80", 84" and 88") by using the mattress expansion regulator valves.

The Expandable Mattress System (XMS) has two (2) expansion valves; one located in the right and the other in the left side, foot end of the mattress. The width expansion regulator valve is located at the patient's right, foot end of the mattress and the length expansion regulator valve is located at the patient's left, foot end of the mattress. These valves allow the mattress to expand in width and length based on selected setting. If the Expandable Mattress System is an Expandable Length System, only the length expansion valve can be found on the mattress.



1. To inflate mattress to 42" in width, rotate the valve selector to position #2.
2. To inflate mattress to 48" in width, rotate the valve selector to position #3.
3. To inflate mattress to transport mode, rotate the valve selector to position #4
4. Position #1 on valve selector is not used.



1. To inflate mattress to 80" in length, rotate the valve selector to position #1.
2. To inflate mattress to 84" in length, rotate the valve selector to position #2.
3. To inflate mattress to 88" in length, rotate the valve selector to position #3.
4. For expansion cells vent, rotate the valve selector to position #4

To deflate the Expandable Mattress System (XMS) or Expandable Length Mattress System (EL), set the valve selector to position #4 on both expansion regulator valves and pull the hose (V) from the control unit flange connector.

When expanding or contracting the Expandable Mattress (XMS) and Expandable Length Mattress System (EL), make sure to tighten or loosen the straps accordingly to the mattress width.

EXPANSION AIR CELLS

- To increase the length of the mattress, obtain an air cell expansion kit and connect the male connector to the female connector on the exterior wall at the end of the mattress (see picture above).

- Use the straps and snaps to secure the expansion top sheet to the mattress.

LOW PRESSURE ("L" "P" flashing on display panel)

- In the event of hose disconnection, the microprocessor will activate an audiovisual signal to alert the caregiver either by flashing "L" "P" on the display panel and turning on the buzzer or displaying Low Pressure on the screen, flashing the amber "POWER FAIL" LED, and turning on the buzzer. Once the low pressure problem is stable, the audiovisual signal will cease and the unit will resume operating its set mode.

CPR FUNCTION

- To deflate the mattress / overlay pad or for a CPR procedure, disconnect the mattress hose from the control unit by pulling the mattress hose connector straight out from the control unit magnetic connector. The CPR Valve on the mattress can also be used for a CPR procedure by rotating the CPR Valve to the open position

PATIENT TRANSPORTATION

- To transport a patient without removing the patient off the bed, turn off the control unit, disconnect the power cord from the power source and roll it up on the control unit securely.

- The mattress will deflate within a few seconds after the control unit has been turned off.

- The mattress has a 2" safety air pad to provide support to the patient when the mattress is deflated. It is not recommended to keep the patient on the mattress for long periods of time when the mattress is deflated.

SKINGUARD® FLOAT

POWER 

- During initial power up (when power cord is plugged into the power source), the control unit will go through a system initialization routine for a few seconds and enter "STANDBY" (amber LED on) mode.
- If the unit is in STANDBY mode with amber LED on, press the POWER button to turn the control unit on.
- If the power comes on after a power outage, the control unit will go through its system initialization routine for few seconds and then resume the desired function.

MAX INFLATE 

- Press the LAL/MAX button until the LED light is turned on near the desired mode of MAX.
- The mattress will inflate to its normal size within 15 minutes (inflation time depends on the size of the mattress). In this mode the entire mattress will be pressurized to 35 ± 5 mmHg.
- During this mode a series of beeps will sound every 3 minutes as a reminder that Max Inflate Mode has been activated.

PATIENT COMFORT CONTROL LEVEL 

- Pressing the (-+) buttons will decrease or increase the pressure setting. The patient comfort pressure ranges from SOFT 6 ± 5 mmHg (0) to FIRM 32 ± 5 mmHg (9). Depending on the desired patient comfort level, the micro-controller / sensors will set appropriate air pressure and maintain the desired pressure in the mattress.

RECOMMENDED PRESSURE SETTINGS

  - For extra firm support during patient ingress/egress, patient wound care, patient turning, or patient cleaning, it is recommended to set the mattress pressure to MAX INFLATE

MODE / SELECT 

- The MODE / SELECT button is used to cycle between different modes, including Static, Alternating Pressure and Upright Fowler. Not all modes are available in each model.

ALTERNATING PRESSURE 

- To set Alternating Pressure Mode, press the AP TIMES button and select the desired time for the alternating pressure therapy; LED lights up. The AP times are 5, 10, 15, and 20 minutes.
- In the Alternating Pressure Mode, alternate air cushions will inflate to the patient comfort pressure while those cushions between the inflated air cushions will deflate 0% or 50% (factory set) of the set patient comfort pressure. An AP cycle will alternate these inflated and deflated air cushions, switching back and forth.

FOWLER 

- To activate Fowler Mode, press the Mode button until the LED light is turned on next to Fowler
- In this mode, pressures in the entire mattress will be increased to higher than the set comfort pressure level (not exceeding 32mmHg). This enables the patient in a fowler position to be supported without bottoming out.
- When the Auto Fowler is activated, the LED will light up.

LOW AIR LOSS 

- For the SkinGuard Float®, press the LAL / MAX INFLATE until the LED is turned on near the LAL description to active.

LOCK OUT 

- Control unit functions (including power) can be completely locked, preventing tampering of settings by pressing and holding the LOCK button until the light comes on (approximately 3~5 seconds). Press and hold the LOCK button to unlock.

ALARM SILENCE 

- An audio-visual alarm is sounded in the event of power failure or when the hose is disconnected from the unit. Audio alarm can be muted by pressing alarm silence key.

POWER FAIL 

- In the event of a power outage, the microprocessor will activate an audiovisual signal to alert the caregiver by flashing the amber "POWER FAIL" LED and the buzzer will turn on. Once the power is restored to the control unit, the audiovisual signal will cease and the unit will resume operating its set mode. During power outage the mattress will retain air as long as the mattress is connected to the control unit.

LOW PRESSURE ("L" "P" flashing on display panel)

- In the event of hose disconnection, the microprocessor will activate an audiovisual signal to alert the caregiver either by flashing "L" "P" on the display panel and turning on the buzzer or displaying Low Pressure on the screen, flashing the amber "POWER FAIL" LED, and turning on the buzzer. Once the low pressure problem is stable, the audiovisual signal will cease and the unit will resume operating its set mode

EXPANDABLE MATTRESS SYSTEM (XMS) / EXPANDABLE LENGTH MATTRESS SYSTEM (EL) (IF EQUIPPED)

Mattress has ability to expand in width from 36" (42", 48", and transport mode) and/or in length (80", 84" and 88") by using the mattress expansion regulator valves.

The Expandable Mattress System (XMS) has two (2) expansion valves; one located in the right and the other in the left side, foot end of the mattress. The width expansion regulator valve is located at the patient's right, foot end of the mattress and the length expansion regulator valve is located at the patient's left, foot end of the mattress. These valves allow the mattress to expand in width and length based on selected setting. If the Expandable Mattress System is an Expandable Length System, only the length expansion valve can be found on the mattress.

WIDTH EXPANSION REGULATOR

1. To inflate mattress to 42" in width, rotate the valve selector to position #2.
2. To inflate mattress to 48" in width, rotate the valve selector to position #3.
3. To inflate mattress to transport mode, rotate the valve selector to position #4
4. Position #1 on valve selector is not used.

LENGTH EXPANSION REGULATOR

1. To inflate mattress to 80" in length, rotate the valve selector to position #1.
2. To inflate mattress to 84" in length, rotate the valve selector to position #2.
3. To inflate mattress to 88" in length, rotate the valve selector to position #3.
4. For expansion cells vent, rotate the valve selector to position #4

To deflate the Expandable Mattress System (XMS) or Expandable Length Mattress System (EL), set the valve selector to position #4 on both expansion regulator valves and pull the hose (V) from the control unit flange connector.

When expanding or contracting the Expandable Mattress (XMS) and Expandable Length Mattress System (EL), make sure to tighten or loosen the straps accordingly to the mattress width.

EXPANSION AIR CELLS

- To increase the length of the mattress, obtain an air cell expansion kit and connect the male connector to the female connector on the exterior wall at the end of the mattress (see picture above).

- Use the straps and snaps to secure the expansion top sheet to the mattress.

CPR FUNCTION

- To deflate the mattress / overlay pad or for a CPR procedure, disconnect the mattress hose from the control unit by pulling the mattress hose connector straight out from the control unit magnetic connector.

The CPR Valve on the mattress can also be used for a CPR procedure by rotating the CPR Valve to the open position

- To deflate the FOAM AIR mattress for CPR procedure, disconnect the mattress deflate connector which is attached to the "DEFLATE" tag from the deflate valve. If connected to a control unit, press the quick release buttons on the connector coupling bodies and simultaneously pull the hose from the control unit flange connector.

PATIENT TRANSPORTATION

- To transport a patient without removing the patient off the bed, turn off the control unit, disconnect the power cord from the power source and roll it up on the control unit securely.

SKINGUARD® FLOAT CONVERTIBLE FOAM AIR MATTRESS AS A NON-POWERED MATTRESS

SKINGUARD® Float Convertible mattress can be used as a non-powered mattress without the control unit. Before using the mattress connect the control unit to the mattress and inflate the mattress by setting the control unit comfort level to 5. Once the control unit fills the mattress and the pressure stabilizes then turn the unit off and disconnect the hose assembly from the mattress and control unit and store the control unit and the hose assembly in a storage area.

SKINGUARD® FLOAT CONVERTIBLE FOAM AIR MATTRESS AS A POWERED MATTRESS

If need arises the SKINGUARD® FLOAT CONVERTIBLE foam air mattress can be converted into a powered mattress by simply connecting the control unit to the mattress using the hose assembly provided with the system. For operating instructions in powered mode please refer to **OPERATING INSTRUCTIONS ABOVE FOR SKINGUARD® FLOAT**

SKINGUARD® TURN

POWER 

- During initial power up (when power cord is plugged into the power source), the control unit will go through a system initialization routine for a few seconds and enter "STANDBY" (amber LED on) mode.
- If the unit is in STANDBY mode with amber LED on, press the POWER button to turn the control unit on.
- If the power comes on after a power outage, the control unit will go through its system initialization routine for few seconds and then resume the desired function.

MAX INFLATE 

- Press the MAX INFLATE button and the unit will rapidly inflate the mattress at maximum flow.
- The mattress will inflate to its normal size within 60 seconds (inflation time depends on the size of the mattress). In this mode the entire mattress will be pressurized to 35 ± 5 mmHg.

- During this mode a series of beeps will sound every 3 minutes as a reminder that Max Inflate Mode has been activated.

PATIENT COMFORT CONTROL LEVEL 

- Pressing the DOWN/UP arrows will decrease or increase the pressure setting. The patient comfort pressure ranges from SOFT 6 ± 5 mmHg (0) to FIRM 32 ± 5 mmHg (9). Depending on the desired patient comfort level, the micro-controller / sensors will set appropriate air pressure and maintain the desired pressure in the mattress.

RECOMMENDED PRESSURE SETTINGS

  - For extra firm support during patient ingress/egress, patient wound care, patient turning, or patient cleaning, it is recommended to set the mattress pressure to MAX INFLATE.

ADJUST SETTINGS  (SkinGuard® Turn only)

- When in specific function menus, use the ADJUST SETTINGS arrows to change the values of your desired settings. Follow instructions on the screen in each menu to select desired settings.

PATIENT SETUP  (SkinGuard® Turn only)

- To set the patient's height and weight, press the PATIENT SETUP button. In this menu, use the ADJUST SETTINGS arrows to enter the patient's weight and height. Use the SELECT button to accept the weight and height values. Once set, the mattress will inflate to the recommended comfort pressure level. This is a recommended pressure level and should be adjusted to patients desired comfort level.

MODE / SELECT 

- The Mode/Select button is used to cycle between different modes including Therapy, Pulse, Multi and Fowler. Desired mode will appear in the display screen

TURN  (SkinGuard® Turn only)

- To activate Turn therapy, press the TURN button. To adjust the turning cycle times and turning degrees, follow the instructions on the screen.

  - Use the ADJUST SETTINGS arrows to adjust the cycle time for the Left side, press the MAX INFLATE button to adjust the cycle time for the Right side, and MAX INFLATE button again to adjust the Dwell cycle time (no rotation). Press the PAUSE button to turn off a rotation function if desired.

- Press the TURN button to adjust the degree of rotation (angle). Degree of turn range is between 5-45 degrees. Use the ADJUST SETTINGS arrows to adjust the degree of rotation angle for the Left side, then press the MAX INFLATE button to adjust the Right side.

- Press TURN button to active the TURN mode based on the selected settings.

PAUSE 

- Press the PAUSE button to pause the turn cycle. Press it again to continue the turn cycle.

LOCK OUT 

- Control unit functions (including power) can be completely locked, preventing tampering of settings by pressing and holding the LOCK button until the light comes on (approximately 3~5 seconds). Press and hold the LOCK button to unlock.

ALARM SILENCE 

- An audio-visual alarm is sounded in the event of power failure or when the hose is disconnected from the unit. Audio alarm can be muted by pressing alarm silence key.

POWER FAIL 

- In the event of a power outage, the microprocessor will activate an audiovisual signal to alert the caregiver by flashing the amber "POWER FAIL" LED and the buzzer will turn on. Once the power is restored to the control unit, the audiovisual signal will cease and the unit will resume operating its set mode. During power outage the mattress will retain air as long as the mattress is connected to the control unit.

LOW PRESSURE  **"L" "P" flashing on display panel**

- In the event of hose disconnection, the microprocessor will activate an audiovisual signal to alert the caregiver either by flashing "L" "P" on the display panel and turning on the buzzer or displaying Low Pressure on the screen, flashing the amber "POWER FAIL" LED, and turning on the buzzer. Once the low pressure problem is stable, the audiovisual signal will cease and the unit will resume operating its set mode.

CPR FUNCTION

- To deflate the mattress / overlay pad or for a CPR procedure, disconnect the mattress hose from the control unit by pulling the mattress hose connector straight out from the control unit magnetic connector. The CPR Valve on the mattress can also be used for a CPR procedure by rotating the CPR Valve to the open position.

PATIENT TRANSPORTATION

- To transport a patient without removing the patient off the bed, turn off the control unit, disconnect the power cord from the power source and roll it up on the control unit securely.

UNIVERSAL MATTRESS SYSTEM (UMS)

SKINGUARD FLOAT UMS AND BARIATRIC SKINGUARD SYSTEMS

The Universal Mattress System (UMS) has ability to expand in height from 6" to 9" and length to 74", 78", 82" and 84" by connecting/disconnecting supplemental attached air cells. The UMS Mattress is supplied as an 84" mattress. To reduce the mattress size to an 80" mattress, unzip the air cell cover and unplug the very last air cell. This reduction process can be repeated to achieve a 76" mattress or a 72" mattress. There is no authorized reduction of the mattress size below a 74" mattress.

The Universal Mattress (UM) has a four (4) position valve located at the patient's right, foot end of the mattress. This valve and the associated supplemental bladders (at base of mattress) allow the UM mattress to be inflated. Follow instructions provided on the flap covering the valve.

PATIENT TRANSPORTATION ON AN UMS MATTRESS

- To transport a patient without removing the patient off the bed, turn off the control unit, disconnect the power cord from the power source and roll it up on the control unit securely.
- The mattress will deflate within a few seconds after the control unit has been turned off.
- The mattress has a 2" safety air pad to provide support to the patient when the mattress is deflated. It is not recommended to keep the patient on the mattress for long periods of time when the mattress is deflated.

CLEANING PROCEDURE

WARNING

CONTROL UNIT

♦ Before attempting to clean the control unit, turn off and disconnect the power cord from the power source. ♦

♦ DO NOT HEAT, STEAM AUTOCLAVE, OR IMMERSE THE CONTROL UNIT IN LIQUIDS ♦

1. Wear eye goggles and rubber gloves before starting cleaning procedure.
2. The following germicidal detergents / disinfectants are recommended by the EPA as hospital disinfectants.

   a. Johnson Wax, Virex 128, EPA Registration Number 47371-130-4822.

   b. Quaternary Detergent-Disinfectant by Airkem Professional Products, Division of Ecolab, Inc., Ecolab Center, St. Paul,

Minnesota. EPA registration number: EPA # 42964-5.

c. Hi-Tor Germicidal Detergent by Huntington Laboratories, Inc. Huntington, Indiana. EPA registration number: EPA # 303-91.

Note: A fresh spray bottle of disinfectant / detergent solution should be prepared daily to clean the control unit.

3. Prepare the required amount of disinfectant solution or mild detergent solution according to the instructions provided.

4. Pour required amount into a spray bottle.

5. Use a brush or cloth to wipe off dust. If necessary, spray the exterior of the front and back of control unit, power cord, and the cord plug with the prepared solution. Using a damp cloth, wipe down the sprayed surface cleanly. **Note: Do not spray excess amount of solution on the control unit**.

6. Once the control unit is clean, wipe the unit, the power cord, cord receptacle, and the cord plug with a clean dry cloth.

7. Place the control unit in a cool and dry area for an hour before operating or storing the unit. If the control unit is not used immediately, place the control unit in a plastic bag and store it in a storage area designated for medical electronic products.

8. After the cleaning operations are completed, remove and dispose the rubber gloves appropriately. Wash your hands thoroughly with antibacterial soap.

MATTRESS

The complete support surface of the mattress is made of superior quality materials and is modular in construction. All the components such as manifold, hose assembly, air cushions, top sheet, air pad cover, and mattress base are interchangeable and can be easily cleaned or detached for laundry.

1. Wear eye goggles and rubber gloves before starting the cleaning procedure.

2. Follow step 3 above to prepare disinfectant solution.

3. Use a damp cloth to wipe down the air cushions and the mattress base. Once the air cushions and the base are clean, wipe them down with a clean dry cloth.

4. Top sheet will require more frequent washing. Set wash cycle to heavy load with warm water. Once the water is full add manufacturer- suggested quantity of laundry detergent and/ or standard hospital disinfectants. If the air cushions or the top sheet becomes soiled with human waste or blood, clean immediately by wiping down. Use hospital recommended laundry detergent and/ or disinfectant per manufacturer's instructions. **Note: Use non-chlorine bleach detergent**.

5. Once the washing cycle is complete, shake cushions gently to remove excess water from inside the air cushions. Dry the cushions/top sheet on the lowest heat settings on the dryer until completely dry.

6. Leave the mattress to dry in a cool, dry area for an hour before using or storing. If the mattress is not used immediately, roll the mattress and insert it into a plastic bag and store it in a storage area.

7. After the cleaning operations are completed, remove and dispose of the rubber gloves appropriately. Wash your hands thoroughly with antibacterial soap.

SKINGUARD® FLOAT CONVERTIBLE FOAM AIR MATTRESS (FAM):

⚠ Note: The SKINGUARD® FLOAT CONVERTIBLE FOAM AIR MATTRESSES have a Kevlar fire retardant sleeve (sock) barrier inside the cover. Care should be taken if removing the cover for cleaning.

Before attempting to clean the mattress, remove the bedding from the mattress. The mattress cover (top sheet) can be cleaned following the steps below.

1. Wear eye goggles and protective gloves before starting the cleaning procedure.
2. Follow steps 2 through 4 in control unit cleaning procedure above to prepare disinfectant solution.
3. Clean the top and bottom mattress cover using the prepared disinfectant solution and refer to step 4 of the above Air Mattress cleaning instructions for washing instructions.
4. Wipe dry with a clean cloth and allow to air dry as needed

CARE AND STORAGE

1. When the control unit is not in use, turn off the unit, disconnect the power cord from the power source, and wrap the cord around the control unit. Secure the control unit and the power cord in a plastic bag and cable tie to keep the unit dust-free.

2. Roll the mattress and place it in a plastic bag and tie wrap the bag. Cover and store the Foam Air mattress in a flat position.

3. Store the control unit and the mattress in a storage area designated for medical electronic product storage.

TROUBLESHOOTING GUIDE

THE FOLLOWING INFORMATION IS FOR FACTORY AUTHORIZED SERVICE FACILITIES AND FACTORY QUALIFIED SERVICE PERSONNEL ONLY.

KAP Medical can provide technical support to factory qualified technical personnel. Contact KAP Medical service department for more information.

PROBLEM	CAUSE	SOLUTION
A. Mattress not inflating / Not alternating properly	1. Mattress hose disconnected	1. Connect hose connectors and lock them in place.
	2. Bolsters' deflate hose is not plugged.	2. Use the plug attached to the mattress to plug-in hose.
	3. Air hose kinked or split	3. Un-kink hose or replace split hose.
	4. Major leak in the air cushions or overlay pad	4. Replace leaking air cushions or overlay pad.
	5. Kinked or split manifold	5. Un-kink manifold or replace split Manifold.
	6. Has power and fuse is good, control unit does not come on	6. Send control unit back to factory for repair.
	7. Not alternating, AP valve malfunction	7. Send control unit back to factory for repair.
	8. Blower malfunction	8. Send control unit back to factory for repair.
B. No Power	1. Control Unit OFF	1. Check power source and turn unit on.
	2. Power cord disconnected	2. Connect cord to the power source.
	3. No power in the power source	3. Check power source has power and turn it "ON".
	4. Power outage	4. Wait until the power source has power.
	5. Blown fuse	5. Replace blown fuse with an equivalent fuse.
C. Auto Fowler Transmitter not working	1. Transmitter is Missing	1. Setup new Auto Fowler Transmitter with control unit***.**
	2. Transmitter is not setup with control unit	2. Setup Auto Fowler Transmitter with control unit***.**
	3. Transmitter is not responding	3. Confirm the LED on the Auto Fowler is **not** red. If the LED is red, battery is low and should be replaced with new battery (contact KAP Medical for spare battery). Or, setup new Auto Fowler Transmitter with control unit***.**

C. Auto Fowler Transmitter not working	4. New transmitter is not responding	4. Send Control Unit and Auto Fowler Transmitter back to factory for repair. *Follow setup instructions on page 21.

PREVENTIVE MAINTENANCE

NOTE: All preventive maintenance service, performance and electrical tests, or repairs should be performed only by factory authorized and qualified technical personnel.

FILTER: CLEAN FILTER EVERY 3 MONTHS OR WHENEVER DIRTY.

- Remove the 2 thumb screws from the filter grill and separate filter foam. Wash filter foam using soap and water, wash and replace filter back on the unit and fasten the thumb screws.

ACCESSORIES

SkinGuard® Control Unit only
SkinGuard® Mattress only
SkinGuard® Float Control Unit only
SkinGuard® Float Mattress only
SkinGuard® Turn Control Unit only
SkinGuard® Turn Mattress only
SkinGuard® Air Cell Expansion Kit
SkinGuard® Float Convertible Foam Air Mattress only

WARRANTY

KAP Medical warrants the SkinGuard® Mattress System for a period of TWO (2) years from the original date of purchase. KAP Medical standard warranty is extended to the original buyer purchasing the equipment directly from KAP Medical or through its authorized dealers. All warranty periods, where applicable, commence on the date of purchase from KAP Medical or its authorized dealers.

KAP Medical's sole obligation and liability under this warranty is limited to (at KAP Medical's option) the repair or replacement by KAP Medical's authorized personnel of any parts or assemblies, which upon test and examination by KAP Medical, prove to be defective. This equipment may be returned prepaid to KAP Medical after notification has been given and approval obtained for the return. Please call your KAP Medical sales representative or customer service at (866) 527-6331 to arrange for warranty services.

KAP Medical's liability under the warranty is the repair or replacement provided and, in no event, shall KAP Medical's liability exceed the purchase price paid by the customer for the product. Under no circumstances shall KAP Medical be liable for any loss, direct, indirect, incidental, or special damages arising out of or in connection with the use of this product.

The control unit warranty does not cover normal maintenance such as cleaning, periodic electrical tests, performance tests, and updating of equipment or parts thereof. This warranty shall be void and not apply if the control unit, including any of its parts, is modified without KAP Medical's written authorization, is attempted to be repaired by personnel not authorized by KAP Medical, is not maintained in accordance with the prescribed preventive maintenance schedule, is used with accessories or parts not authorized by KAP Medical, or is damaged due to misuse, mishandling, abuse, negligence, accident, fire, or inadequate packaging by owner for shipment of the control unit for service, upgrade, repair, retrofit, or product return.

All reasonable freight charges for valid factory approved warranty returns will be reimbursed. KAP Medical makes no guarantee of clinical results.

♦ THE WARRANTY STATED ABOVE (INCLUDING ITS LIMITATIONS) IS THE ONLY WARRANTY MADE BY KAP MEDICAL AND IS IN LIEU OF ALL OTHER WARRANTIES, WHETHER EXPRESSED OR IMPLIED, INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. KAP MEDICAL SHALL NOT BE LIABLE FOR CONSEQUENTIAL OR INCIDENTAL DAMAGES OF ANY KIND.

SkinGuard® Mattress System
Preventive Maintenance and Repair Log

UNIT SERIAL #: _____

MATTRESS SERIAL #: _____

AUTO FOWLER SERIAL #: _____

DATE PURCHASED: _____

C = cleaned
OK = okay
R = repaired/replaced (specify)

Date:	Air Filter:	Power Cord:	Mattress:	Repair: