GENDRON™
by graham-field

REGENCY 800 SERIES
OPERATING MANUAL

SAVE THIS MANUAL FOR FUTURE USE.

FDA Recognized Standard:
ANSI/AAMI STD ES60601-1
Health Canada Recognized Standard:
CAN/CSA C22.2 No. 60601-1 (IEC 60601-1:20 12-Ed.3.1)
Includes International Standards:
IEC 60601-1, IEC 60601-1-2, IEC 60601-2-52
EMC Standard:
IEC 60601-1-2 Ed. 4.1

GD_999-0916-190-INS-LAB-RevA25

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These Instructions for Use cover the Regency Series with Standard and Advanced Positioning (APS), Standard Casters and Slide-W-I-D-E® Deck.

The Regency Series is designed for Adult Patient and Caregiver use.

To order Regency Series Bed service parts, contact a GF Health Products, Inc. customer service representative at 1-770-368-4700.

For a list of Regency Series bed service parts, visit www.grahamfield.com.

To order a Regency Series bed or accessories, contact a GF Health Products, Inc. sales representative at 1-770-368-4700.

IMPORTANT NOTICE: Check all parts for shipping damage and test before using. In case of damage, **DO NOT USE** — contact qualified service personnel for examination and repair.

INDICATIONS FOR USE

The Gendron Regency 800 Beds are intended for a healthcare professional to use in patient treatment, transport, or recovery. This product has an expected service life of ten years.

To ensure the basic safety of the patient, the bed is designed, tested, and evaluated to IEC Standard 60601-1 and in accordance with IEC 60601-2-52 wherein the essential performance in any single fault or combined fault condition is no unwanted movement of the bed when in use.
See also page 6 – Electromagnetic Compatibility (EMC) information.
The bed is tested and certified to IEC 60601-1-2 (Ed. 4.1) for EMC.

1 SIGNIFICANCE OF SAFETY STATEMENTS

Please note the following special statements, used throughout this manual, and their significance:

⚠ **DANGER: Indicates a potential hazard situation or unsafe practice that, if not avoided, will result in death or serious personal injury.**

⚠ **WARNING: Indicates a potential hazard situation or unsafe practice that, if not avoided, could result in death or serious personal injury.**

⚠ **CAUTION: Indicates a potential hazard situation or unsafe practice that, if not avoided, could result in minor or moderate personal injury.**

▲ **NOTICE: Indicates a potential hazard situation or unsafe practice that, if not avoided, could result in product or property damage.**

1.1 IMPORTANT SAFETY AND WARNING INFORMATION

NOTE: *This Bed is designed for use in nursing homes, in-home rehabilitation and geriatric facilities, Extended Care and Rehab Facilities, and Home Healthcare settings.*

⚠ **WARNING: This product is a variable height, adjustable mattress platform. The expected service life of this product is ten years. Beds manufactured by Gendron are designed for use within an institutional healthcare environment (i.e. assisted living, skilled nursing, transitional care, rehabilitation care, Environment (3), as defined in IEC60601-2-52 Safety Standard.).**

⚠ **WARNING: The maximum safe working load for the Regency 800 series bed, including bedding, resident / patient, support surface, and accessories, is 800 lb (363 kg), with WEIGHT EVENLY DISTRIBUTED, and maximum patient weight is 700 lb (317.5 kg). Accessory weights follow:**

ACCESSORIES	ACCESSORY WEIGHT
Headboard / Footboard (set)	Up to 34 lb (11.5 kg)
Mattress	Up to 40 lb (18.14 kg)
Trapeze Adapter	28 lb (12.7 kg)
Trapeze Bar Assembly	28 lb (12.7 kg)
Counter-Rotating Assists (set)	20 lb (8.6 kg)
Fixed Assist Bar	10 lb (4.5 kg)

⚠ **WARNING: To avoid risk of electric shock, this equipment must be connected to a supply mains with protective earth (i.e. a grounded outlet).**

⚠ **WARNING: DO NOT open assemblies such as the Actuators, Hand Control Pendant, or Control Box. If unauthorized personnel perform work on these components, the manufacturer's warranty becomes void.**

⚠ **WARNING: DO NOT use unauthorized parts, accessories, or adapters other than those specified / authorized by GF Health Products, Inc.**

⚠ **WARNING: When operating the HI/LO, Knee, or Back Functions of the bed, ALWAYS ensure the confined individual is positioned properly within the confines of the bed. DO NOT let any extremities protrude over the side or between the bed assist devices when performing these functions.**

⚠ **WARNING: The bed should be lowered to lowest position when resident is left unattended. DO NOT lower the bed when objects are beneath it. Failure to inspect under the bed can result in personal injury or property damage.**

⚠ **WARNING: The bed's Hand Control Pendant Cable MUST BE ROUTED AND SECURED PROPERLY to ensure it does not become entangled and eventually severed during use. Also ensure electrical cords DO NOT get tangled around the bed, side assist devices, or legs during transport or normal operation of the bed.**

⚠ **WARNING: When using nasal-type or masked-type administering equipment, all oxygen or air tubing MUST BE ROUTED AND SECURED PROPERLY to ensure the tubing does not become entangled and eventually severed during the normal operation of the bed.**

⚠ **WARNING: Keep all moving parts free of obstructions (i.e. blankets / sheets, heating blankets / pads, wiring, etc.).**

1.2 IMPORTANT SAFETY AND WARNING INFORMATION CONTINUED

⚠ **WARNING: DO NOT use the assist devices as push handles for moving the bed. Assist devices can be deformed or broken if excessive side pressure is exerted. Assist devices are not meant for patients considered high risks for entrapment (i.e. patients with pre-existing conditions such as confusion, restlessness, lack of muscle control, altered mental status, either organic or medicinal, or a combination thereof). Additional safety measures should be considered for such high-risk patients.**

⚠ **WARNING: NEVER permit more than one person on / in the bed at any time.**

⚠ **WARNING: Body weight should be evenly distributed over the sleeping surface of the bed. DO NOT allow the patient to lie, sit, or lean in such a way that their entire body weight is placed only on the raised head or foot section of the bed. This especially applies when repositioning or transferring a patient in or out of the bed. Increased risk may occur when the patient's size and / or weight are inappropriate for the bed's dimensions or weight capacity.**

⚠ **WARNING: Risk of entrapment or injury may occur if the mattress used DOES NOT fill the entire width between stops or which compresses to less than 1.50 inches under user's weight.**

⚠ **WARNING: Mattress must be properly sized to fit the correct selected width position (42 OR 48 inches) of the mattress support platform when patient is left unattended. Length and width should match the mattress support platform whenever bed is articulated. Use of an improperly fitted mattress could result in injury or death.**

⚠ **NOTICE: If mattress support platform is retracted to 39 inch position (for mobility only), the mattress will hang over the corner mattress retainers until the width position is re-adjusted to the corresponding width of the mattress.**

⚠ **IMPORTANT: Powered air mattress surfaces may pose a risk of entrapment. Prior to use, ensure the therapeutic benefits outweigh the risk of entrapment.**

⚠ **WARNING: The bed is intended for use within a temperature range of 10˚C to 40˚C. It has a water resistance rating of IPX4 and IS NOT to be power washed or submerged.** ***Note: The bed may be cleaned as needed using an appropriate dilution of mild soap and water.***

⚠ **WARNING: The head / back and knee / foot decks can be lifted freely by hand for easy cleaning access when patients are not in the bed. If you lift the head / back or knee / foot deck for any reason, take great care when lowering back down to the prone position - ensure all body parts are clear of the space between the deck and the bed prior to slowly lowering any deck manually. To avoid injury, DO NOT LET DECKS FALL FREELY FROM ANY ANGLE.**

⚠ **WARNING: ALWAYS position bed so that the power cord and plug are easily accessed.**

⚠ **WARNING: Proper routing and tie-off of electrical cabling, especially the power cord, is essential for proper operation and to ensure safety from electrical shock. In the event you are replacing any electrical cabling on your bed, you must ensure the cables are free from pinch points, obstructions, or stretched so tight that they may come loose or become damaged. In addition, cables should be tied off in such a way to secure them and keep them free from tangling on any part of the bed during normal operation. Refer to page 28 for proper cable routing.**

⚠ **WARNING: Using a headboard and footboard with a width that differs from the actual width of the bed sleep deck may increase the risk of entrapment.**

1.3 ELECTROMAGNETIC COMPATIBILITY (EMC) INFORMATION

⚠ **WARNING: Medical Electrical Equipment needs special precautions regarding EMC and needs to be installed and put into service according to the EMC information provided in this manual.**

⚠ **WARNING: Electronic equipment may be influenced by Radio Frequency (RFI). Caution should be exercised with regard to the use of portable communications in the area around such equipment. Portable RF communications equipment (including peripherals such as antenna cables and external antennas) should be used no closer than 30 cm (12 inches) to any part of the bed including specified bed cables. Degradation of the performance of the bed could result.**

⚠ **IF RFI causes erratic behavior, unplug the electric bed immediately. Leave unplugged while transmission is in progress.**

⚠ **WARNING: The use of accessories, transducers, and cables other than those specified by the manufacturer may result in increased emissions or decreased immunity of the bed. Gendron cables and accessories include motor cables, mains cable, pendant cables, back up battery and cable, USB port cable and UBL and cable.**

⚠ **WARNING: This bed should not be used adjacent to or stacked with other equipment. If adjacent or stacked use with other equipment is necessary, this bed and the other equipment should be observed to verify that they are operating normally.**

⚠ **WARNING: The EMISSIONS characteristics of this equipment make it suitable for use in industrial areas and hospitals (CISPR 11 class A). If it is used in a residential environment (for which CISPR 11 class B is usually required) this equipment might not offer adequate protection to radio frequency communication services. The user might need to take mitigation measures, such as relocating or re-orienting the equipment.**

1.4 ENTRAPMENT AND COMPLIANCE INFORMATION

On April 10, 2006, the FDA (U.S. Food and Drug Administration) released long-awaited guidelines for reducing the risk of bed entrapment: "Hospital Bed System Dimensional and Assessment Guidance to Reduce Entrapment". The new Guidance identifies potential entrapment areas and those body parts most at risk for entrapment; provides design criteria for manufacturers of new hospital/convalescent beds; recommends particular test methods to assess the conformance of existing hospital / convalescent bed systems; and answers frequently-asked questions about entrapment issues.

The new Guidance was a result of a long-standing collaboration between the FDA and the Hospital Bed Safety Workgroup (HBSW), formed in 1999. GF Health Products, Inc.'s Long Term Care Bed division: Basic American Medical Products, is an HBSW charter member. As a result of our commitment to product safety, **all our current long-term care beds have been strictly tested and conform to the new FDA Guidance**.

The guidelines set forth by the FDA Guidance lay out specific dimensional limitations on potentially injury-threatening gaps and spaces that can occur between bed system components, such as rails, when not properly installed. GF Health Products, Inc. and Gendron have conformed to these guidelines from a manufacturing aspect. However, entrapment issues can often arise when a healthcare provider / facility has not correctly assembled the components on a bed. It is essential that the provider / facility fully understand their responsibility in complying to the guidelines set forth by the FDA in order to avoid injury. To that end, we have provided the FDA's web address at right as a resource for understanding and following these guidelines for the safety of patients / residents.

It is also essential to have the correct bed components / accessories that correspond with the needs of the patient / resident and the particular bed you have purchased. Matching the correct bed component that correlates with the regulatory guidelines can be a daunting task. Our sales team at GF Health Products, Inc. and our friendly Customer Service Representatives at Gendron can help you sift through the wide array of compliance and bed options. We will help you determine which bed / bed-part is best for the patient's / resident's particular needs and help you with any compliance issues.

The Regency series bed and accessories listed in these instructions are in full compliance with FDA guidelines for reducing the risk of bed entrapment: *"Hospital Bed System Dimensional and Assessment Guidance to Reduce Entrapment".*

Details can be found at www.fda.gov.

2 RECOMMENDED MAINTENANCE

Regular maintenance of the Extended Care Bed is necessary to ensure continuing proper and safe operation. Read and observe the following recommended maintenance schedule.
An additional Maintenance Log page is available at the end of these instructions.

	RECOMMENDED INSPECTION PERIODS			MAINTENANCE		
ITEM	**Inspect on Receipt**	**Every 3 Months**	**Every 6 Months**	**Performed by**	**Date**	**Comments**
Maintenance Inspection of All Components at Receipt of Shipment						
Ensure all parts / components are included (see “Unpacking The Bed”).	X					
Check all bed components for obvious damage.	X					
Inspect the power cord for any cuts and / or damage.	X					
Check to see all actuator / motor cables are routed and connected properly to the control box.	X					
Mechanical Inspection of Assemblies						
Inspect all welds on the sleeping surface, frame, and base assemblies for stress fractures.			X			
Inspect all fasteners for wear and looseness.			X			
IMPORTANT: Lubricate all pivot points, actuator / motor clevis pins, and control arm clevis pins as needed. White Lithium Grease is recommended.			X			
Mechanical Inspection of Casters and Pedal Locking Mechanism						
Check the pedal locking mechanism to ensure it engages and disengages properly.		X				
Check the casters and stationary foot pads on both the head end and foot end for any damage, wear, or debris. Replace if needed.		X				
Check all rolling casters to ensure that they roll properly and are unobstructed.		X				
Electrical Inspection of Control Box, Hand Control Pendant, and Staff Control						
Check the external power cord that plugs into the control box for any chafing, cuts, or wear. Replace if damaged.		X				
Ensure all attaching hardware is securely tightened.		X				
Check all electrical connections for wear or fractures.		X				
Check the external backup battery (if you have one). Replace if needed.		X				
Check the hand control pendant cable for chafing, cuts, or wear.		X				
Check all hand control pendant functions - check to ensure each button and associated function work properly (i.e. head section rises when the HEAD UP button is activated).		X				
Electrical Inspection of Actuators / Motors						
Check the actuator / motor cables for any chafing, cuts, or wear.		X				
Check the range of movement on all motors to ensure they do not bind in the Full Up or Full Down positions.		X				

NOTE: *Periodic inspection, adjustment and replacement of worn parts are necessary to provide years of excellent service. Maintenance and / or service MUST be performed by qualified personnel ONLY who have been authorized by GF Health Products Inc.*

3 RECOMMENDED CLEANING AND DISINFECTION

⚠ **WARNING: Unplug the bed from the electrical outlet before servicing or cleaning.**

⚠ **WARNING: DO NOT steam clean or pressure wash any part of bed.**

⚠ **WARNING: DO NOT use corrosive or powdered cleansers to clean any part of bed.**

⚠ **WARNING: DO NOT immerse or soak any part of bed.**

3.1 CLEANING

Cleaning/Disinfecting the Metal Components and Mechanical Accessories

All metal parts of the bed have been covered with a baked-on epoxy coating.

- To remove dust from the frame: Carefully raise the head and foot sections of the bed and wipe the frame with a clean, soft cloth. If disinfection is required, wipe with a clean, soft cloth dampened with a hospital grade disinfectant ***diluted per manufacturer's directions***.
- To clean coated metal parts: Wipe with a clean, soft cloth dampened with mild detergent and warm water. If disinfection is required, wipe with a clean, soft cloth dampened with a hospital grade disinfectant ***diluted per manufacturer's directions***.
- To clean the mattress deck: Remove the mattress, then wipe mattress deck with a clean, soft cloth dampened with mild detergent and warm water. Allow to air dry before replacing mattress. If disinfection is required, wipe with a clean, soft cloth dampened with a hospital grade disinfectant ***diluted per manufacturer's directions***.

Cleaning the Hand Control Pendant and Electrical Components

Wipe the hand control pendant and electrical components' external surface only with a clean, soft cloth dampened with mild detergent and warm water. If disinfection is required, wipe with a clean, soft cloth dampened with a hospital grade disinfectant ***diluted per manufacturer's directions***. Air dry.

Cleaning the Mattress

Wipe with a damp cloth to remove any foreign material, then wipe with a clean, soft cloth dampened with mild detergent and warm water. If disinfection is required, wipe with a clean, soft cloth dampened with a hospital grade disinfectant ***diluted per manufacturer's directions***. Air dry.

4 MECHANICAL AND ELECTRICAL INFORMATION

REGENCY 800 SERIES-MECHANICAL		
Specification	NOTE: Dimensions are ±.5" or ±2°	**Regency 800**
Minimum Overall Bed Length (with boards and Wallsaver)	80" Deck	88.5"
	84" Deck	92.5"
	88" Deck	96.5"
Sleep Deck Width		42" - 48"
Bed Width Including Boards		42" - 48"
Maximum Height (floor to top of mattress support deck)		30"
Minimum Height (floor to top of mattress support deck)		9.25"
Maximum Head / Back Deck Angle		68°
Maximum Knee / Foot Deck Angle		25°
Maximum Trendelenburg / Reverse Trendelenburg Angle		14°
Maximum Safe Working Load (weight evenly distributed) - includes bedding, resident / patient, support surface, and accessories		800 lb (362.8 kg)
Bed Mass with Casters (without devices or boards)		360 lb (163.2 kg)
*Overall bed length may increase based on Wallsaver and Wallsaver position		
**Maximum Trendelenburg / Reverse Trendelenburg Angle tolerance is +1° / -2°		

REGENCY SERIES-ELECTRICAL	
Power / Frequency	100-240 Volt ~ / 50 / 60 hz
Output Rating	24Vdc
Maximum Amperage	4.7 Amps
Classification	Class 1, Type B
Power cord (Electrical)	#18 AWG 3 Conductor Type SJT
Mode of Operations	10% Max Duty Cycle (2 minutes on 18 minutes off)
*Battery Pack and Charger can be purchased separately as accessories.	

5 KEY TO SYMBOLS

The following symbols are used on Gendron product labels.

	Protective Earth
	General Warning Sign
	Manufacturer

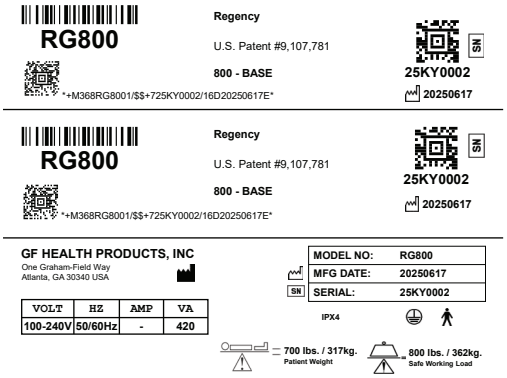
	Manufacturer Date
	Follow Instructions for Use
	Caution
SN	Serial Number

6 TYPICAL REGENCY SERIES BED IDENTIFICATION LABELS with Grounded Electrical Cable

6.1 IDENTIFICATION LABELS

Bed labels are an important part of identifying the bed's make and model when ordering replacement parts. The Serial Number is essential if you are claiming parts or service under warranty. These helpful labels can be located on the mainframe rails, immediately below the sleep decks on either side of the bed.

Have this IMPORTANT information ready when calling our Customer Service or Technical Support staff at 1-770-368-4700; it will allow us to better assist you and quickly answer your questions and concerns.



⚠ **WARNING: DO NOT modify this equipment without authorization from GF Health Products, Inc.**

NOTE: *For Regency Series Service Parts, Technical Assistance, and Information required to service or repair equipment, call our Customer Service Department at 1-770-368-4700. For a list of Regency Series bed service parts, visit www.grahamfield.com.*

NOTE: *The following warning labels have been placed on the bed to help protect you and the bed from damage. Do not remove any labels from the bed.*

WARNING!
DO NOT LOWER BED WHEN OBJECTS ARE BENEATH BED. FAILURE TO INSPECT UNDER BED CAN RESULT IN DAMAGE TO PROPERTY OR PERSONAL INJURY.

ATTENTION:
S'assurer de ne pas faire descendre le lit lorsque des objets se trouvent sous le lit. Ne pas inspecter le dessous du lit pourrait entrainer des dommages materiels et des risques de blessures.

CAUTION
THIS BED IS SUITABLE FOR USE ONLY WITH OXYGEN ADMINISTERING EQUIPMENT OF THE NASAL OR MASK TYPE OR A TENT COVERING ONLY THE UPPER HALF (HEAD END) OF THE BED. OXYGEN TENT CANOPIES SHOULD NOT EXTEND BELOW BED SPRING LEVEL. LOCK HAND CONTROL AT FOOT OF BED WHEN USING OXYGEN ADMINISTERING EQUIPMENT.

WARNING:
Incompatible mattresses can create hazards. Read Instructions for use.

ATTENTION:
Matelas incompatibles peuvent créer des dangers.
Lisez les Instructions d'utilisation.

WARNING!
DO NOT LOWER BED WHEN OBJECTS ARE BENEATH BED. FAILURE TO INSPECT UNDER BED CAN RESULT IN DAMAGE TO PROPERTY OR PERSONAL INJURY.

ATTENTION:
CE LIT PEUT ETRE UTILISE UNIQUEMENT AVEC UN EQUIPMENT DESTINE A L'ADMINISTRATION D'OXYGENE DE TYPE NASAL OU MASQUE OU AVEC UNE TENTE RECOUVRANT SEULEMENT LA MOTTIE AVENT (TETE) DU LIT. LES COTES DE LAS TENTE OXYGENE NE DOIVENT PAS SE PROLONGER PLUS DAS QUE LA SOMMIER DU LIT.

CAUTION ⚠
CONNECT TO SINGLE WHITE STAFF CONTROL CABLE ONLY. POTENTIAL DAMAGE TO THE STAFF CONTROL AND/OR BED ELECTRONICS MAY RESULT FROM CONNECTING TO OTHER INCOMPATIBLE ELECTRONICS

⚠ ATTENTION
CONNECTEZ LE CÂBLE DE COMMANDE DU PERSONNEL BLANC UNIQUEMENT. DES DOMMAGES POTENTIELS AU CONTRÔLE DU PERSONNEL ET / OU À L'ÉLECTRONIQUE DU LIT PEUVENT RÉSULTER DE LA CONNEXION À D'AUTRES ÉLECTRONIQUES INCOMPATIBLES

6.2 ENVIRONMENTAL SPECIFICATIONS AND RFI INFORMATION

OPERATING CONDITIONS	
Ambient Temperature	10°C to 40°C
Relative Humidity	30% to 75% Non-Condensing
Atmospheric Pressure	700 hPa to 1060 hPa
Protected Against Splashing Water	IPX4

STORAGE AND TRANSPORT CONDITIONS	
Temperature	-10°C to 50°C
Relative Humidity	20% to 90%
Atmospheric Pressure	700 hPa to 1060 hPa

6.3 DISPOSAL OF EQUIPMENT AND ACCESSORIES

Follow local governing ordinances and recycling plans regarding disposal of the device or components normally used in operation. The device does not generate waste or residue in operation. Any accessories not part of the device MUST be handled in accordance with the individual product marking for disposal.

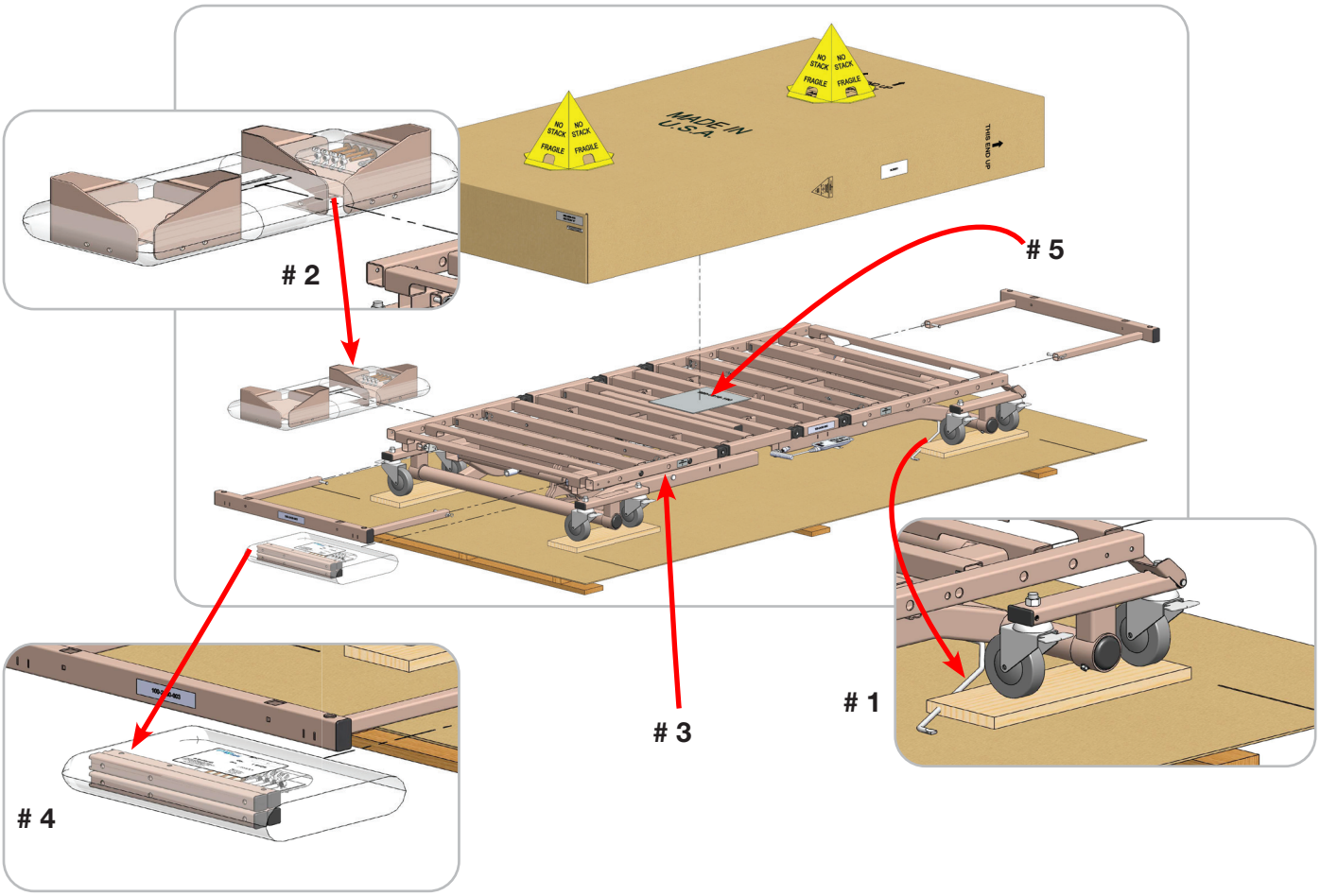
7 BED SETUP AND OPERATION INSTRUCTIONS

7.1 UNPACKING THE BED

- Ensure all parts/components are included.
- Check all bed components for obvious damage.
- Inspect the Power Cord for cuts or damage.
- Ensure all actuator/motor cables are routed and connected properly to the control box.

KEEP

1. Wire form Wallsaver
2. Mattress Retainers
3. Hand Control Pendant Holster
4. Board Mounting Kit (small bag)
5. Operating Manual



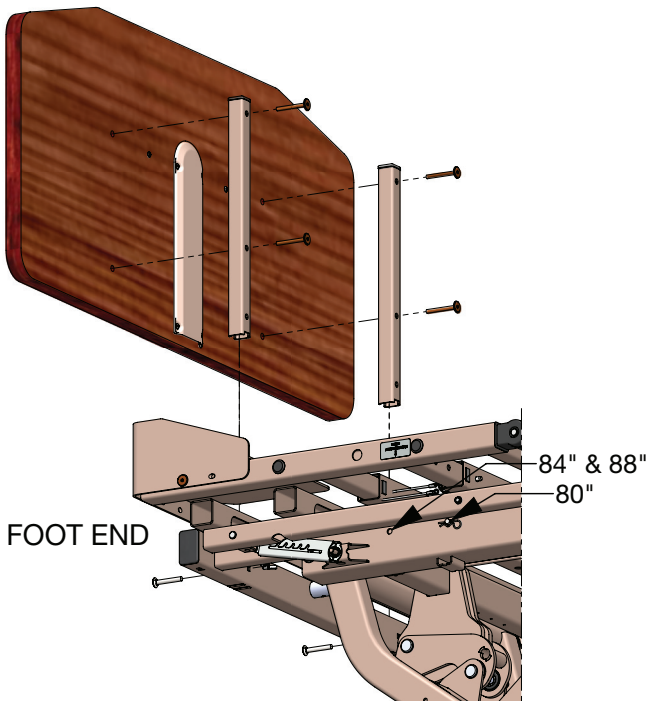
NOTE:
END OF POWER CABLE IS COILED FOR SHIPPING AND TIED, WITH CABLE TIE, TO GRID WIRE WITH HAND CONTROL PENDANT, PENDANT CABLE AND HOLSTER.

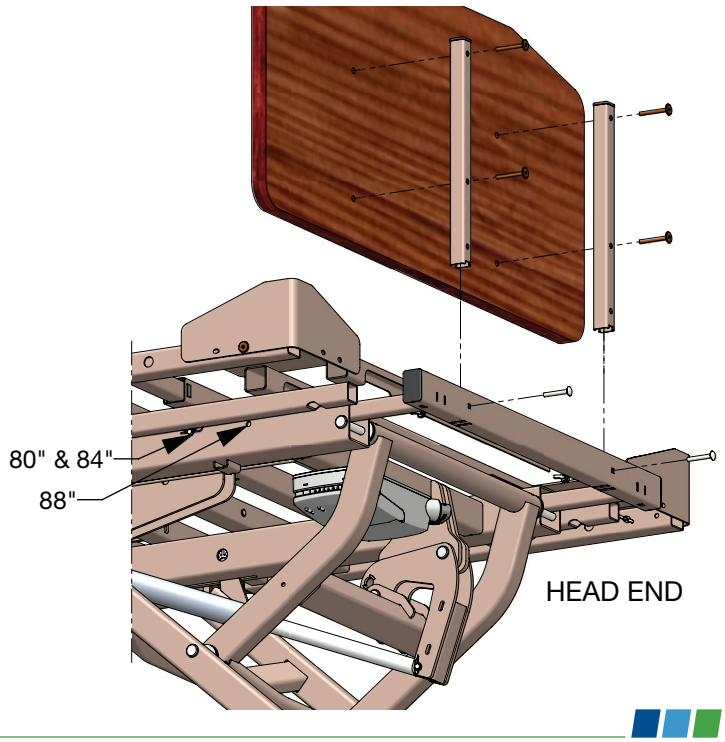
CUT AND DISCARD CABLE TIE AROUND CABLES WHEN YOU UNPACK THE BED.

7.2 HEADBOARD / FOOTBOARD - ASSEMBLY / INSTALLATION

HEADBOARD / FOOTBOARD INSTALLATION

1. The headboard has four pre-installed inserts on the inside surface and the footboard has four pre-installed inserts on the outside surface.
2. Position two mounting tubes on the headboard and footboard and align the mounting tube holes closest to the end cap with the holes in the boards.
3. Insert socket head cap screws from the Panel Mounting Kit through the mounting tube holes and into the boards. Hand tighten only.
4. The mounting brackets are pre-installed in the mainframe hollow ends at an 80" bed length.
5. To adjust the bed length, remove the clevis pins / hairpins and slide the mounting brackets to the corresponding holes in the mainframe.
   a. **FOR 80" BED LENGTH:** Position both the head end and foot end mounting brackets so the holes in the bracket align with the second holes in the mainframe rail (closest to the center of the bed).
   b. **FOR 84" BED LENGTH:** Position the head end mounting bracket so the holes in the mounting bracket align with the second rail holes, and position the foot end mounting bracket so the holes in the mounting bracket align with the first rail holes as shown below.
   c. **FOR 88" BED LENGTH:** Position the head end and foot end mounting bracket so the holes in the mounting bracket align with the first rail holes as shown below.
6. On both sides, insert the clevis pins / hairpins through the frame holes as shown, ensuring the pins extend completely through rails.
7. Insert the mounting tubes on the boards into the corresponding mounting bracket with the headboard mounting tubes facing the outside of the bed and the footboard mounting tubes facing the center of the bed as shown below.
8. Ensure the mounting tubes are fully seated in the bracket and secure the mounting tubes into the mounting brackets using the carriage bolts and wing nuts provided.
9. Tighten the four screws in each board with the hex key included in the kit.



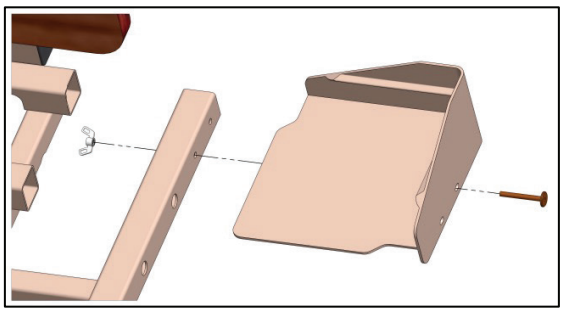


7.3 MATTRESS RETAINER INSTALLATION FOR OPTIONAL SLIDE-W-I-D-E DECK

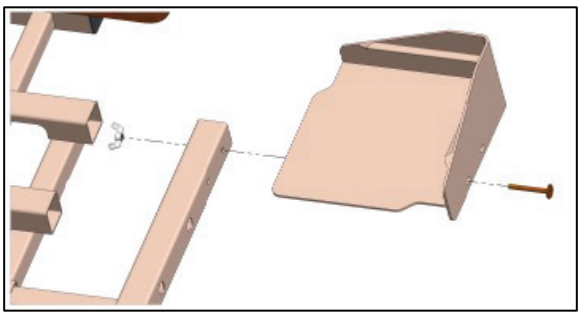
1. The Slide-W-I-D-E Expandable / Retractable Sleep Deck features two sets of Mattress Retainers that are positioned at all four of the bed's corners (Foot End and Head End).

▲ **NOTICE: Mattress Retainers come in sets of two (Foot End and Head End). Foot End retainers have a noticeably higher rib (protruding piece located inside elbow section of retainers). Foot End retainers MUST be placed in correct location to deter unwanted mattress movement.**

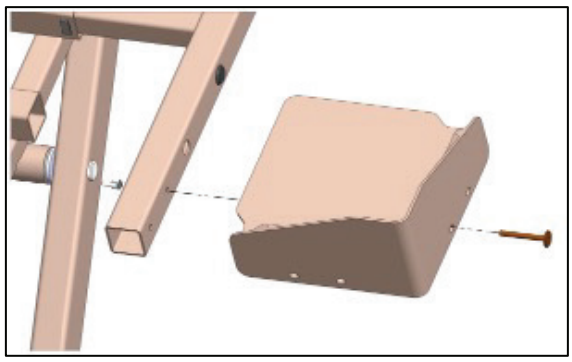
2. To install, position the mattress retainers above the sleep deck corners.
3. Insert a bolt through the appropriate holes in the mattress retainer and bed tube for the desired 80"- 84" - 88" bed length as shown below.
4. Secure the bolt using a wing nut.



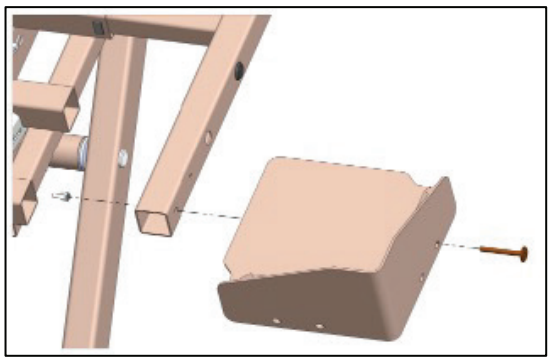
HEAD END 80" & 84" LENGTH



HEAD END 88" LENGTH



FOOT END 80" Length



FOOT END 84" & 88" LENGTH

7.4 STANDARD WIRE FORM WALLSAVER INSTALLATION

WALLSAVER ASSEMBLY

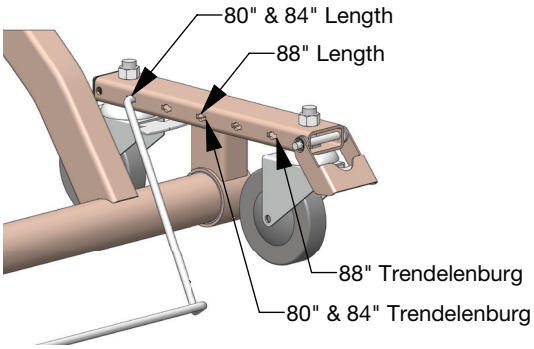
1. Position the Wire form Wallsaver with bent end facing upward and tab ends facing inward as shown above.
2. Determine the position desired (see **WALLSAVER POSITIONS** below).
3. Gently squeeze the Wallsaver tab ends inward toward the center of the Wallsaver and, holding the tabs parallel with the caster base slots, slide the tabs into the slots while letting the Wallsaver gently expand outward.
4. Turn the Wallsaver downward until it rests on the floor.

WALLSAVER REMOVAL

1. To remove or move the Wallsaver to a new position, raise the Wallsaver off the floor until the end tabs are horizontal.
2. Squeeze the ends toward the center of the Wallsaver until the end tabs slide out of the caster base slots.

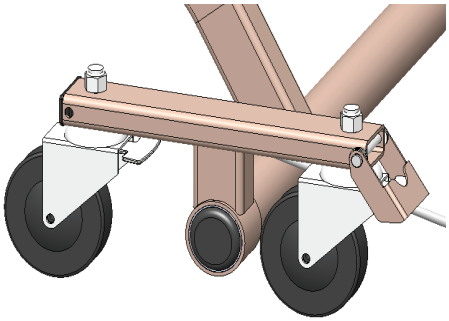
WALLSAVER POSITIONS

The Regency Wallsaver features multiple positions for easy bed/mattress length reconfigurations - 80" - 84" - 88".



7.5 CASTER LOCK AND FOOT LEVELER OPERATION

CASTER LOCKS

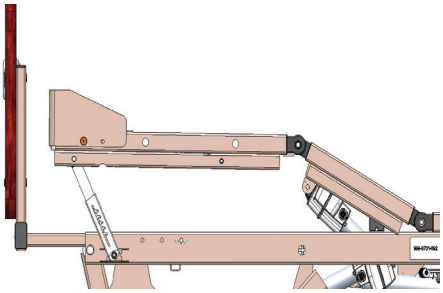


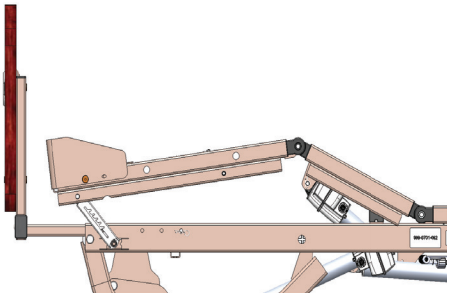
1. Swing Caster steering Bracket down over caster lock pedal (as shown) on either side of the bed to engage steering from the foot end of the bed while the head end tracks longitudinally with the bed (fixed for assisting straight-line mobility)
2. Lift Caster Steering Bracket to allow the bed to be moved laterally.
3. Apply remaining brake pedals located at both ends of the bed to achieve stable locked position for patients entering/exiting the bed.

⚠ **WARNING: ALWAYS ensure the caster brakes are locked when the patient is getting in and out of the bed.**

FOOT LEVELER

To raise Foot Deck, Lift Foot deck at footboard end by hand one click at a time to desired height, understanding that lifting all the way up resets the foot ratcheting mechanism to achieve going back down to lowest position.

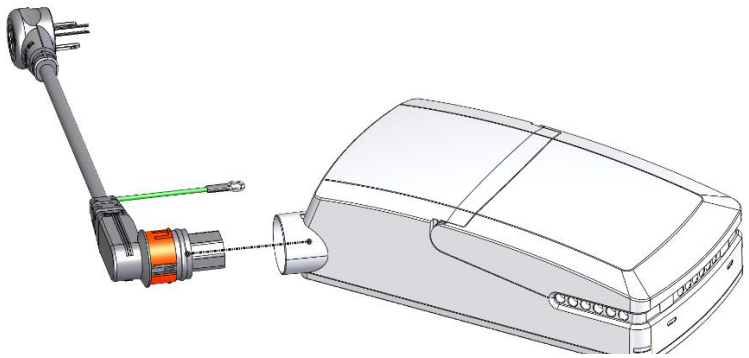




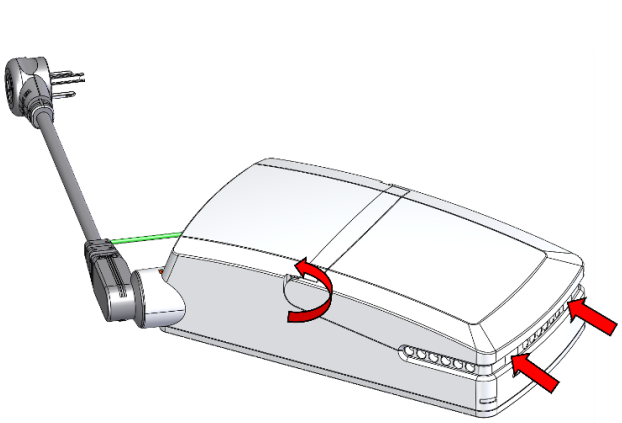
7.6 OPTIONAL BACKUP BATTERY & EXTERNAL CHARGER KIT

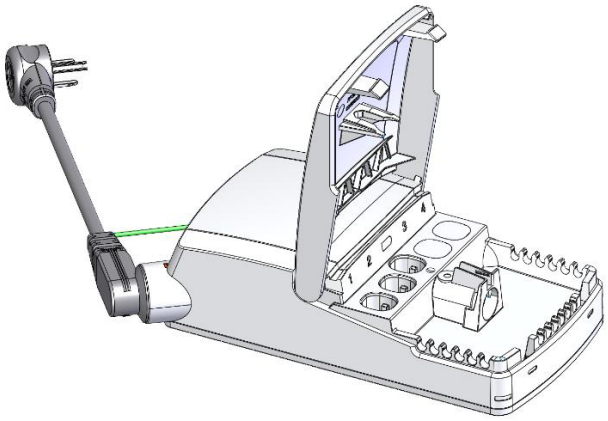
**See Instructions below for Charging an Optional Battery (ZA96100) with and Optional External Battery Charger (ZA96200):*

1. Plug one end of the power cord into the control box (as seen below) and the other end of the power cord into a wall outlet. Once power cord is plugged in a green light on the corner of the control box will indicate that the control box is getting power.

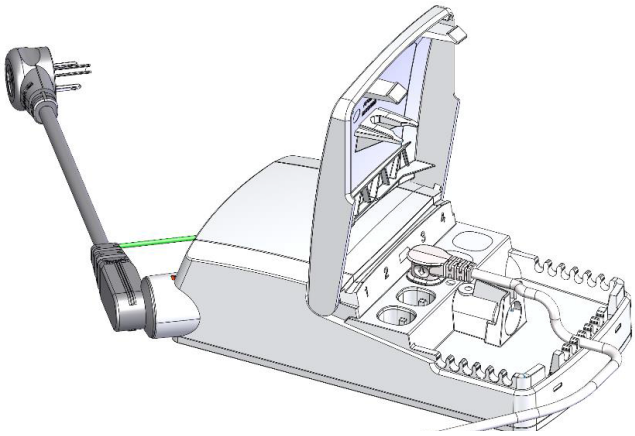


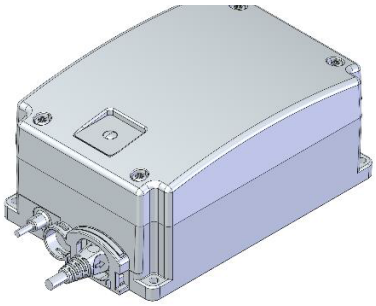
2. Open control box lid by pressing the 2 tabs on the box lid and pivot lid up.





3. Plug right-angle end of the battery cable into the battery port of the control box. Once the battery is plugged in, a solid yellow light on the battery will indicate that the battery is charging. When the light turns off the battery is fully charged and ready to use.





NOTE: *Battery and Battery cable not included in this kit (see ZA96100).*

7.7 BATTERY REPLACEMENT (if optional battery accessory is mounted to the bed)

1. Remove the mattress from bed.
2. Open control box cover using a flat head screwdriver (Fig 1).
3. Unplug the battery cable from the battery port and remove the cable from the cable lock on the outer edge of the control box (Fig 2).
4. Unstrap the hook and loop straps holding the battery cable to the bed (Fig 3).
5. On the patient left side of the bed, hold the battery from below the sleep deck while unscrewing the wing nuts (Fig 4). Remove the top bracket. The battery is now fully disconnected from the bed (Fig 5).
6. Follow instructions provided with battery replacement to install the new battery.

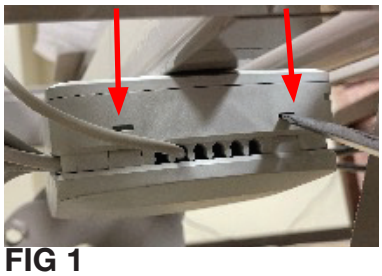


FIG 1

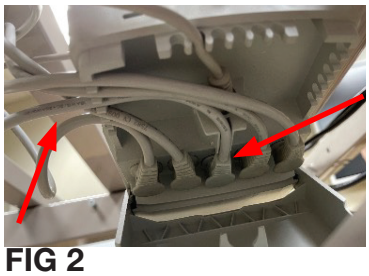


FIG 2

FIG 3

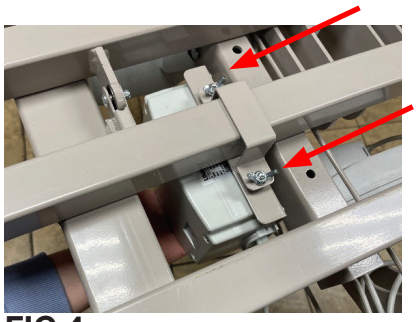


FIG 4

FIG 5

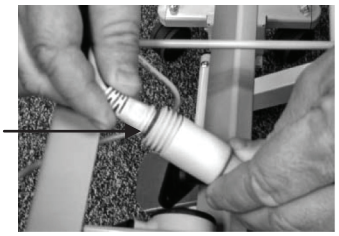
8 PLUGGING IN THE OPTIONAL FOOTBOARD STAFF CONTROL

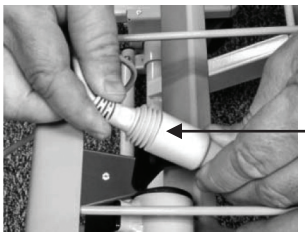
STEP 1 - ATTACHING THE FOOTBOARD

The Regency series bed features a footboard Staff Control; however, the footboard is ordered separately with your bed because of the variety of board styles available. If ordered at the same time as the bed, the Staff Control Assembly and Shroud Cover will be pre-installed to the Footboard at the factory.

DETAIL A:
Ensure lock end caps are screwed on securely

Improper Connection
(not completely seated)





Proper Connection
(completely seated)

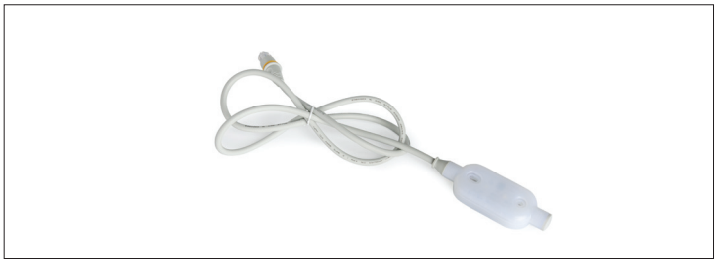
STEP 2 - CONNECTING THE CABLES: REFER TO DETAIL A ABOVE

⚠ **WARNING: CONNECT TO SINGLE WHITE STAFF CONTROL CABLE ONLY. POTENTIAL INJURY OR DAMAGE TO THE STAFF CONTROL AND / OR BED ELECTRONICS MAY RESULT FROM CONNECTING TO OTHER INCOMPATIBLE ELECTRONICS.**

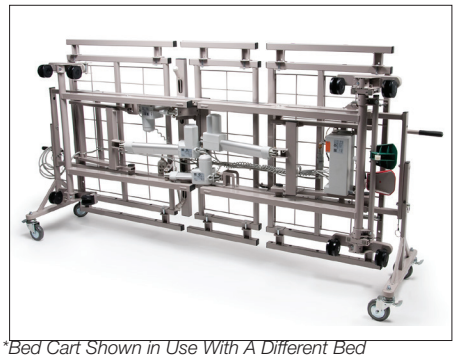
a. Insert the T-Cable end (extending out the foot end with phone jack) into the round plug, making sure the phone jack is seated correctly inside the female plug (arrow to arrow – see DETAIL A and photos above).
b. Screw on the round lock cap onto the Staff Control female plug to secure (See DETAIL A).

9 REGENCY 800 OPTIONAL ACCESSORIES

Backup Battery & Battery Charger	USB Phone Charger
 	
Backup Battery: ZA96100	ZA96300
Battery Charger: ZA96200	

Under-Bed-Light Kit

ZA90011

Advanced Positioning Hand Control with Trendelenburg / Reverse Trendelenburg	Standard Function Hand Control Pendant with Standard Positioning Only	Advanced Positioning Hand Control Pendant with Chair Position
		
ZA831306	999-0914-301SP	999-0914-305SP

1-Person Bed Transport Dolly (set)	
	 **Bed Cart Shown in Use With A Different Bed*
ZA89900 unassembled	ZA89900 assembled with bed

10 OPERATION OF OPTIONAL SLIDE-W-I-D-E 42" - 48" EXPANDABLE / RETRACTABLE SLEEP DECK

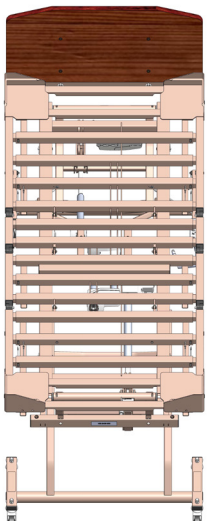
10.1 IMPORTANT SAFETY AND WARNING INFORMATION

⚠ **WARNING: Read and follow all instructions. Care must be taken when adjusting your Slide-W-I-D-E Expandable/Retractable Sleep Deck. To avoid possible injury, keep hands clear of deck ends when expanding or retracting, especially near the headboard or footboard. To avoid pinching, the deck should only be adjusted from the side. Assist devices and mattress should be removed prior to adjusting the deck.**

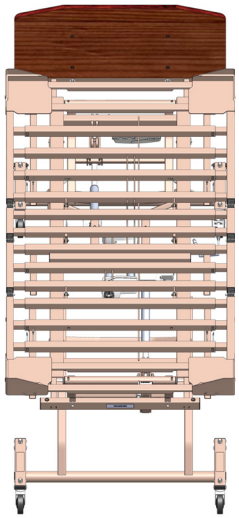
⚠ **WARNING: When expanding or retracting the deck, make sure to first remove the quick-release detent pins located on the underside of both sides of the foot deck and head deck. Make sure to re-insert the pins into the proper width holes before allowing patient into the bed to avoid injury to the patient and damage to the decks. Pins must be fully seated before any operation of the bed.**

⚠ **WARNING: Caregivers should be aware that the corners of the deck system may extend slightly past the headboard and footboard at the corners. Care should be taken to avoid these areas when moving around the bed.**

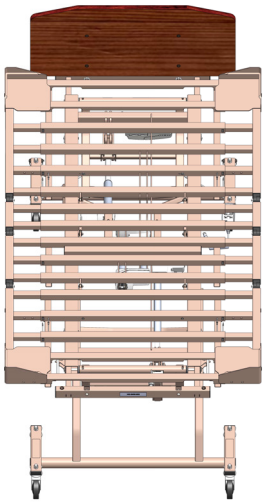
⚠ **WARNING: Patient body weight should be evenly distributed over the sleeping surface of the bed. DO NOT allow the patient to lie, sit, or lean in such a way that their entire body weight is placed only on the raised head or foot section, or only one side of the bed. This especially applies when repositioning or transferring a patient in or out of the bed. Increased risk may occur when the patient's size and / or weight are inappropriate for the bed's dimensions or weight capacity.**



39" Position
Fully Retracted
Mobile Position



42" Position



48" Position
Fully Expanded

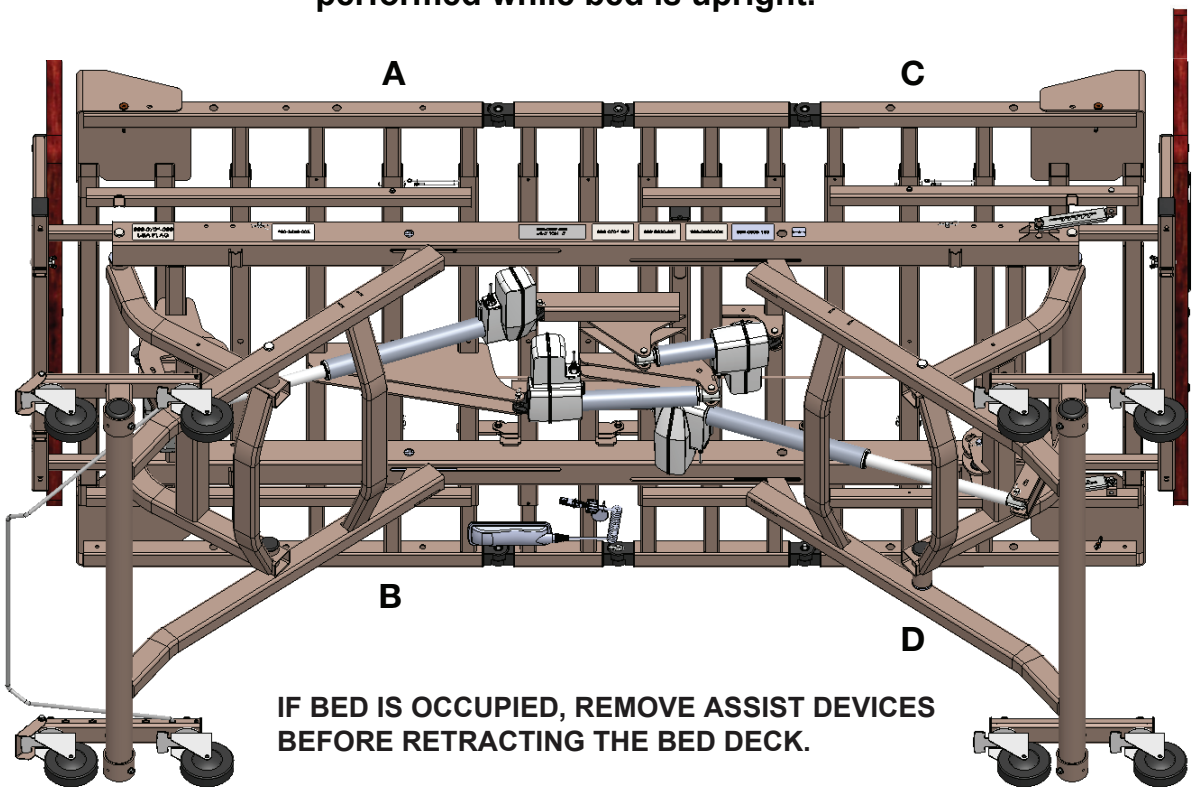
10.2 FEATURES

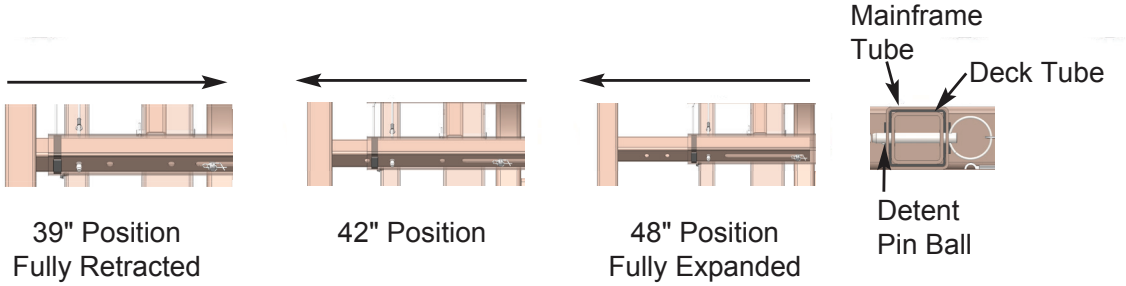
- Expandable/Retractable deck quickly and easily adjusts to 39", 42", and 48" with two quick-release ball-detent pins on each side.
- Deck Retracts to 39" width.
- All pins are attached to the bed with lanyards, eliminating lost parts.
- Deck can be articulated at the 42" or 48" width setting for standard operation.
- Headboards and footboards are available in 39", 42" and 48" widths (sold separately).

11 SLIDE-W-I-D-E SLEEP DECK POSITIONING

1. The Slide-W-I-D-E Expandable / Retractable Sleep Deck can be set to one of three widths: Fully Retracted = 39" (for minimum retracted mobility ONLY); Partly Expanded = 42"; and Fully Expanded = 48".
2. To adjust the deck position, first remove all four quick-release detent pins from the underside of both Head and Foot Decks by pulling out the pins by the small rings. Each detent pin is attached to a lanyard which is connected to a screw on the underside of the deck to prevent misplacement (see illustrations below).
3. Stand at the side of the bed and place your hands near the detent pin labels (your hands must be this widely spaced) and hold the entire left or right side of the expandable deck (not the ends). Pull the deck out toward you to expand, or push the deck inward toward center to retract. On the underside, align the desired hole position on the deck insert tubes with the single hole in the end of the mainframe cross tubes (see below).
4. **IMPORTANT:** *Reinsert the detent pin in all four locations (A - D), ensuring the ball at the end of the detent pin extends through the other side of all four mainframe position holes.*

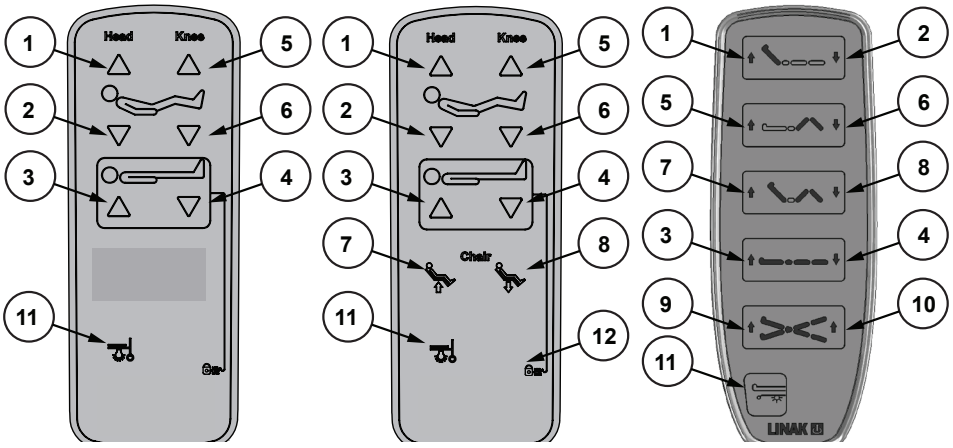
View of underside of bed is shown below for reference only. Sleep deck positioning is performed while bed is upright.





12 BED OPERATION

12.1 REGENCY SERIES HAND CONTROL PENDANT OPERATION



BUTTON	FUNCTION
1	HEAD DECK ANGLE UP
2	HEAD DECK ANGLE DOWN
3	HI/LO UP (RAISE ENTIRE BED)
4	HI/LO DOWN (LOWER ENTIRE BED)
5	KNEE AND FOOT DECK ANGLE UP
6	KNEE AND FOOT DECK ANGLE DOWN

BUTTON	FUNCTION
7	SET TO CHAIR POSITION
8	UNDO CHAIR POSITION
9	REVERSE TRENDELENBURG POSITION
10	TRENDELENBURG POSITION
11	OPTIONAL UNDERBED LIGHT
12	OPTIONAL HI/LO FUNCTION LOCKOUT

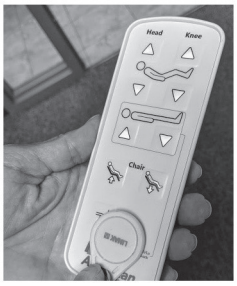
NOTE: *The Regency Series Hand Control Pendant can be plugged into the T-Cable plugs on either side of the bed for easy access. The opposite side of the T-Cable should always have the provided cap attached for safety.*

The two vertical ends of the double T-Cable run toward the foot end of the bed, with one vertical end plugging directly into the control box (or optional Underbed Light if your bed has that feature) and the other longer end runs along the tie rod and extends out the foot end and plugs into the Staff Control cable.

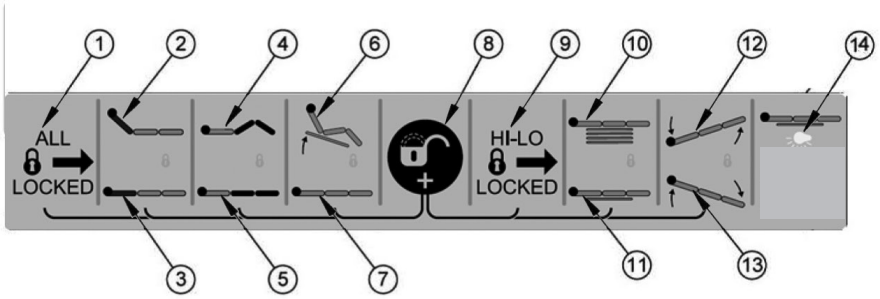
Optional HI/LO Function Lockout (Hand Control Pendant with Advanced Positioning *ONLY*, shown at above center)

A **Lockout Key**, shown at right, is used to activate/deactivate the HI/LO Function Lockout by holding it over the center bottom portion of the hand control as shown at center right. The Lockout LED indicator will turn on/off when activated/deactivated.

Lockout Key

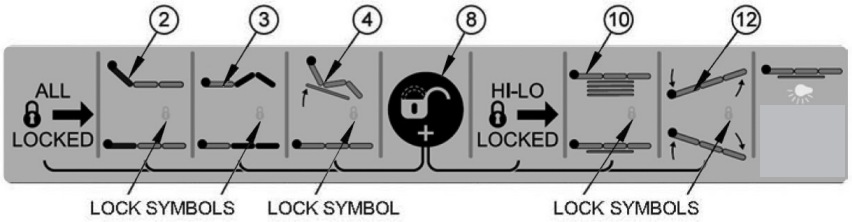


12.2 BED OPERATION - OPTIONAL STAFF CONTROL PANEL



Press "Underbed Light" button (#14) to turn underbed light on or off.

1	ALL LOCKED BUTTON
2	HEAD DECK UP BUTTON
3	HEAD DECK DOWN BUTTON
4	KNEE & FOOT DECK UP BUTTON
5	KNEE & FOOT DECK DOWN BUTTON
6	CHAIR POSITION BUTTON
7	UNDO CHAIR POSITION BUTTON
8	KEY LOCK/UNLOCK BUTTON
9	HI/LO (T/TR) LOCKED BUTTON
10	HI/LO UP BUTTON
11	HI/LO DOWN BUTTON
12	TRENDELENBURG
13	REVERSE TRENDELENBURG
14	UNDERBED LIGHT BUTTON



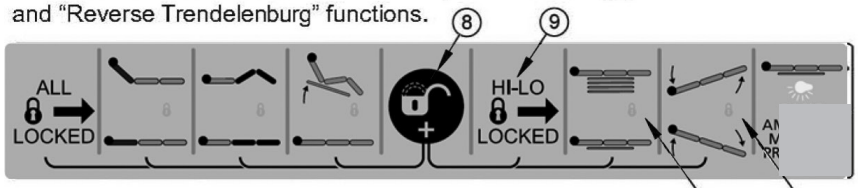
Press "Head", "Knee", or "Chair" and "Key" at the same time to unlock individual lock out functions.

LOCK OUT SINGLE FUNCTIONS

To individually lock out the "Head", "Knee", "Chair", and "HI/LO" functions, press the appropriate top icon (#2, 3, 4, 10, or 12) button and the "Key" button at the same time. An orange LED lock symbol will appear under the related icon.

To "Unlock" any of the individual functions, press the top icon (#2, 3, 4, 10, or 12) and the "Key" Button (#8) simultaneously. LED lights will not show up.

Press "HI/LO Locked" to lock out "HI/LO", "Trendelenburg", and "Reverse Trendelenburg" functions.

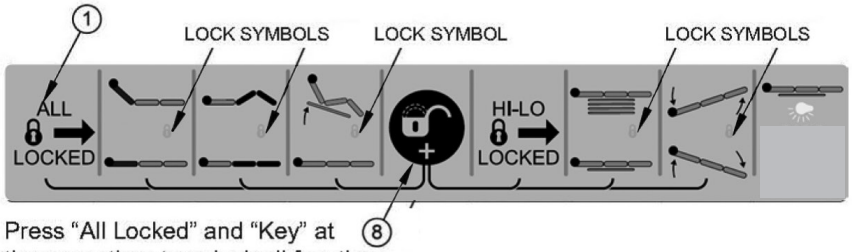


Press "HI/LO Locked" and "Key" at the same time to unlock all HI/LO lock out functions.

LOCK OUT HI/LO FUNCTIONS

To lock out the functions for raising and lowering the entire bed and tilting the bed for Trendelenburg positions, press the "HI/LO Locked" (#9) button. Orange LED lock symbols will appear under the HI/LO and Trendelenburg icons.

To "Unlock" all HI/LO functions, press the "HI/LO Locked" button (#9) and the "Key" button (#8) simultaneously. Orange LED lights will not show up.



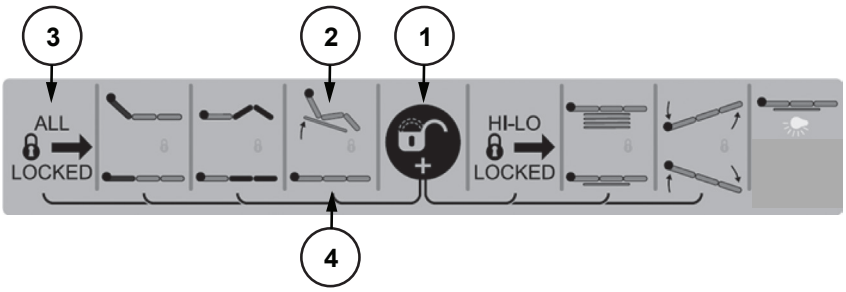
Press "All Locked" and "Key" at the same time to unlock all functions.

LOCK OUT EVERYTHING

To lock out all functions, press the "All Locked" button (#1). Orange LED lock symbols will appear under the "Head", "Knee", "Chair", "HI/LO", and "Trendelenburg/Reverse Trendelenburg" icons.

To "Unlock" all functions, press the "All Locked" button (#1) and the "Key" button (#8) simultaneously. Orange LED lights will not show up.

12.3 BED OPERATION - CHAIR POSITION



1. Ensure the Chair position on the Staff Control panel is not locked out *(orange lock icon*). To unlock, press Lock icon button #1 and Chair icon button #2 (or "All Locked" button #3) simultaneously.

2. To move the bed to Chair position *(foot and knee decks angled up, head deck angled up, and head of bed tilted up*), press Chair icon button #2.

To release the chair feature and return the bed to horizontal position, press Flat Bar icon #4.

HEAD END

FOOT END

The Chair feature can also be operated using the Hand Control Pendant.

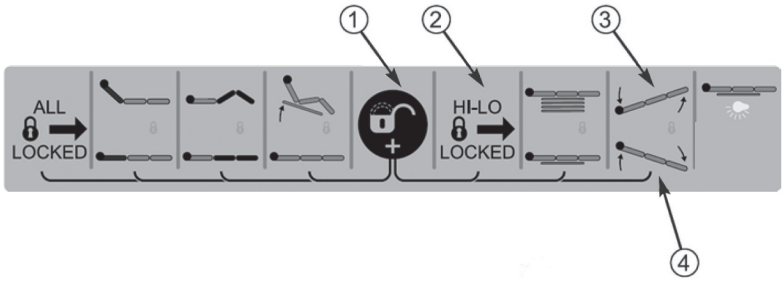
Chair position UP and DOWN buttons

SERIES WITH ADVANCED POSITIONING HAND CONTROL PENDANT

OPTIONAL ACCESSORY: SERIES WITH TRENDELENBURG / REVERSE TRENDELENBURG HAND CONTROL PENDANT

12.4 TRENDELENBURG / REVERSE TRENDELENBURG POSITION

1. Ensure the Staff Control HI/LO function is not locked out (orange lock icon). To unlock, simultaneously press Key 1 and HI/LO Locked button 2.
2. To move the bed to Trendelenburg position (foot end up), press button 3.
3. To move the bed to Reverse Trendelenburg position (head end up), press button 4.



TRENDELENBURG

HEAD END

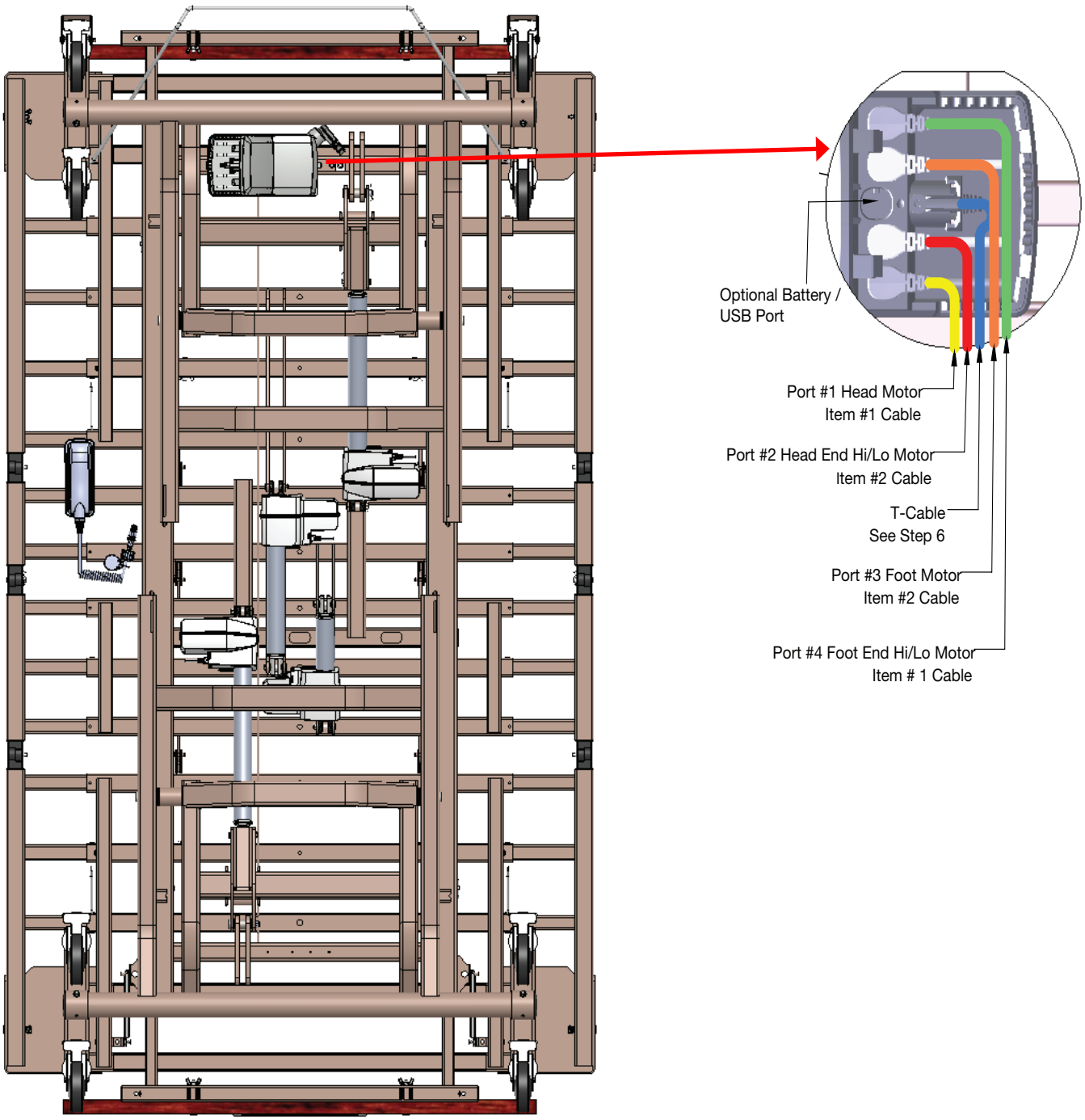
FOOT END

REVERSE TRENDELENBURG

HEAD END

FOOT END

12.5 REGENCY SERIES ELECTRICAL CABLING



13 TROUBLESHOOTING

13.1 NOTHING WORKS — NO POWER

1. Verify the outlet is supplying power.
2. Ensure the power cord is not pinched, frayed, or damaged in any way. Replace the Power Cord if damaged.
3. Ensure all power cord, T-Cable, Hand Control Pendant, and Control Box receptacles and plugs are seated and fully inserted.
4. Ensure the Staff Control does not have functions locked out.
5. Plug the Hand Control Pendant directly into the Control Box. If the bed works, replace the T-Cable.
6. Replace the Hand Control Pendant with a known good operating Pendant. If the bed works, replace the Hand Control Pendant.
7. If the bed still isn't functional after steps 1-6, replace the Control Box.
8. New Control Box installation will require motor Initialization.

NOTE: *Service Control Box Motor Initialization Procedure as well as detailed troubleshooting and service instruction can be found at www.grahamfield.com.*

13.2 AUDIBLE SYSTEM WARNING (INTERMITTENT BEEP)

NOTE: *A function that is faulty or has lost motor position will cause the Control Box to beep intermittently when the faulty function's Hand Control Pendant button is depressed. All buttons depressed after the error function will also be non-functional and will cause a Control Box beep. If equipped with a Staff Control, the staff icons will also flash to indicate a system error.*

When the Audible Beeping Error signal is heard:

1. On the Hand Control Pendant, simultaneously press and hold both the HI/LO UP and HI/LO DOWN buttons (the Control Box should start beeping) for approximately five seconds until beeping stops.
2. Reinitialize the motors by lowering the bed completely. In the following order, press the Hand Control Pendant buttons until the motors stop:
   a. ***HI/LO DOWN***
   b. ***HEAD DECK ANGLE DOWN***
   c. ***KNEE AND FOOT DECK ANGLE DOWN***
3. This lowering of the motors will reset the system and should resolve minor synchronization or position lost issues. Check the bed functionality.
4. If an audible error beep occurs during reset lowering of a function or while checking functionality, the function that initiated the beep is faulty.
5. After the faulty function initiates the beep, all other button functions will cause a beep and become non-functional.
6. To operate and use the other good functions, perform step 1 again to reset the system.
7. Reinitialize the motors as in Step 2 but only lower the motors that did not initiate the audible error beep.
8. These functions will operate normally until the faulty function button is pressed again.

NOTE: *If the issue is not resolved, go to www.grahamfield.com for more detailed troubleshooting and service instructions.*

13.3 KNEE DOESN'T LOWER, AUDIBLE SOLID BEEP WARNING

NOTE: *As a result of the bed's programmed capability to achieve APS positioning, the Knee Motor will not lower if the HI/LO motors are not level. This is a safety measure to prevent the patient from sliding out of bed while in Chair Position.*

The control box will emit a solid beep warning when attempting to lower the knee if this condition is present.

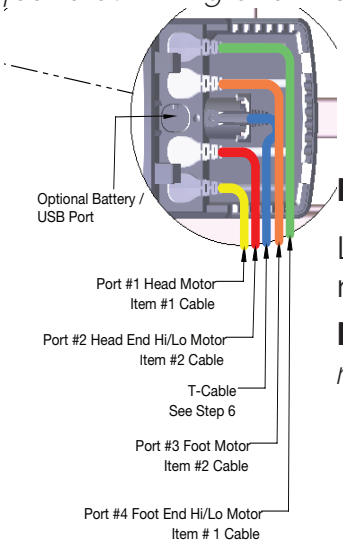
NOTE: *This condition can also happen with beds not equipped with APS positioning or if the frame appears to be visually level.*
If the solid beep is present when trying to lower the knee:

1. Return the bed frame to a level position by pressing the Hand Control Pendant **UNDO CHAIR** button until the bed is level. Continue holding the button down until the knee retracts.
2. If not equipped with chair function, or if step 1 did not resolve the issue, lower the bed completely: press the **HI/LO DOWN** button until the motors shut off.
3. Now lower the knee using the **KNEE AND FOOT DECK ANGLE** DOWN button.

NOTE: *If the issue is not resolved, go to www.grahamfield.com for more detailed troubleshooting and service instructions.*

13.4 GENERAL TROUBLESHOOTING QUICK REFERENCE

NOTE: *Advanced Service Troubleshooting Procedures, Flow Charts and Service Components can be found at www.grahamfield.com.*



Plugs and Receptacles:

Loose plug connections or incorrect plug positioning will result in erroneous or no system error signals and faulty operation.

NOTE: *Before troubleshooting, ensure all plugs are engaged fully in their receptacles and located in the correct ports.*

Motors

Test any motor by plugging it into a known good Control Box port.

Example: If the head motor is not functioning and the knee motor is functional, plug the head motor into the knee Control Box port and operate the head motor with the knee Pendant button. If the head motor operates, it is good. If not working in the good port, replace the head motor or motor cable.

Motor Cables

Motor cables are interchangeable. Test a motor cable by attaching it to a known good motor and known good Control Box port and operating it.

T-Cables

Test a T-Cable by unplugging it from the Control Box port and plugging the Hand Control Pendant directly into the Control Box. If the bed functions with the Hand Control Pendant, replace the T-Cable.

Hand Control Pendants

Test a Hand Control Pendant by replacing it with a known good Pendant. If the Bed now operates, replace the Hand Control Pendant.

Staff Controls

Test a Staff Control by replacing it with a known good Staff Control. If the Bed now operates, replace the Staff Control.

Control Box

Test a Control Box by replacing it with a known good Control Box. If the bed now operates, replace the Control Box. If a known good Control Box is not available, go to www.grahamfield.com for detailed Troubleshooting Procedures.

14 LIMITED WARRANTY

SCOPE OF WARRANTY

GF Health Products, Inc. ("GF") warrants to the original purchaser only that it will replace or repair components, at GF's sole discretion, that are defective in material or workmanship under normal use and service. All warranties are conditioned upon the proper use of the products strictly in accordance with good commercial practice and applicable GF instructions and manuals, including proper use and maintenance. To the extent that a third party warrants a component, GF conveys all of its rights under that warranty to the original purchaser, to the extent permitted.

This limited warranty shall only apply to defects that are reported in accordance with the provisions set forth in this warranty document, within the applicable warranty period and which, upon examination by GF or its authorized representative, prove to be a warranty item.

(See Obtaining Warranty Service below) This limited warranty is not transferable.

The warranted components and time periods are set forth below:

Mainframe and Welds:.....10 (ten) years
Control Box and Actuators:.....5 (five) years
Pendant Control and Cables:.....3 (three) years
Casters:.....1 (one) year
Headboard and Footboard:.....1 (one) year
All other durable parts not listed:.....2 (two) years

* Labor is not included in the warranty.

† Upholstery is only warranted on material supplied by GF.

‡ The warranty period is as designated above. If a part is replaced under warranty, the original warranty period will not be affected. All other replacement parts will be subject to the warranty period specified.

The applicable warranty period shall commence from date of shipment to the original customer, unless there is an expiration date on the component in which case the warranty shall expire on the earlier of warranty period or the expiration date.

OBTAINING WARRANTY SERVICE

Customers located in the United States who wish to report a warranty issue, must contact GF directly by calling 1.770.368.4700 or by e-mailing a request to cs@grahamfield.com. Customers located outside the United States must contact the Distributor from whom they purchased the products. In both cases, further directions will be provided once the initial contact is made. This limited warranty shall only apply to defects that are reported within the applicable warranty period. Failure to abide by the specific directions will result in denial of the warranty claim.

The warranty does not cover and GF shall not be liable for the following:

1. Defects, damage, or other conditions caused, in whole or in part, by misuse, abuse, negligence, alteration, accident, freight damage, tampering or failure to seek and obtain repair or replacement in a timely manner;
2. Products which are not installed, used, or properly cleaned and maintained as required in the official manual for the applicable product;
3. Products considered to be of a non-durable nature including, but not limited to: filters, fuses, gaskets, lubricants, and charts;
4. Accessories or parts not provided by GF;
5. Matching of color, grain or texture except to commercially acceptable standards;
6. Changes in color caused by natural or artificial light:
7. Charges by anyone for adjustments, repairs, replacement parts, installation or other work performed upon or in connection with such products which are not expressly authorized in writing, in advance, by GF;
8. Any labor or shipping charges incurred in the replacement part installation or repair;
9. Costs and expenses of regular maintenance and cleaning; and
10. Representations and warranties made by any person or entity other than GF.

ENTIRE WARRANTY, EXCLUSIVE REMEDY AND CONSEQUENTIAL DAMAGES DISCLAIMER

THIS WARRANTY IS GF'S ONLY WARRANTY AND IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED. GF MAKES NO IMPLIED WARRANTIES OF ANY KIND INCLUDING ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. IF ANY MODEL OR SAMPLE WAS SHOWN TO THE CUSTOMER, SUCH MODEL OR SAMPLE WAS USED MERELY TO ILLUSTRATE THE GENERAL TYPE AND QUALITY OF THE PRODUCT AND NOT TO REPRESENT THAT THE PRODUCT WOULD NECESSARILY CONFORM TO THE MODEL OR SAMPLE IN ALL RESPECTS. THIS WARRANTY IS LIMITED TO THE REPAIR OR REPLACEMENT OF THE DEFECTIVE PARTS. GF SHALL NOT BE LIABLE FOR AND HEREBY DISCLAIMS ANY DIRECT, SPECIAL, INDIRECT, INCIDENTAL, EXEMPLARY OR CONSEQUENTIAL DAMAGES, INCLUDING, BUT NOT LIMITED TO: DAMAGES FOR LOSS OF PROFITS OR INCOME, LOSS OF USE, DOWNTIME, COVER, OR EMPLOYEE OR INDEPENDENT CONTRACTOR WAGES, PAYMENTS AND BENEFITS. CERTAIN STATES MAY CONFER ADDITIONAL RIGHTS REGARDING WARRANTIES AND IN THOSE STATES GF'S LIABILITY AND THE LIABILITY OF GF'S SUPPLIERS, SHALL BE LIMITED TO THE FULLEST EXTENT PERMITTED BY LAW.

The warranties contained herein, together with GF's current Terms and Conditions, contain all the representations and warranties with respect to the subject matter of this document, and supersede all prior negotiations, agreements and understandings with respect thereto. The recipient of this document hereby acknowledges and represents that it has not relied on any representation, assertion, guarantee, warranty, collateral contract or other assurance, except those set out in this document.

For additional information on this product or this warranty, please contact a GF Customer Service Representative.

NOTES:

1. Additional terms and conditions may apply. See GF's General Terms and Conditions on its website: www.grahamfield.com.
2. Freight claims must be notated on the appropriate shipping documents and must be made with immediacy. International, federal and state regulations govern specific requirements for freight claims. Failure to abide by those regulations may result in a denial of the freight claim. GF will assist you in filing the freight claim.
3. Claims for any short shipment must be made within three (3) days of the invoice date.

If you have questions regarding a bed's warranty, contact Gendron at 1.770.368.4700.

15 APPENDIX

15.1 GUIDANCE AND MANUFACTURER'S DECLARATION - ELECTROMAGNETIC EMISSIONS

NOTE: The bed was tested for EMC, and was NOT found to effect the essential performance of the product.

The Gendron Regency Beds are intended for use in the electromagnetic environment specified below. The customer or the user of the Gendron Regency Beds should assure that they are used in such an environment.		
Emissions Test	**Compliance**	**Electromagnetic Environment — Guidance**
RF emissions CISPR 11	Group 1	The Gendron Regency Beds use RF energy only for their internal function. Therefore, their RF emissions are very low and are not likely to cause any interference in nearby electronic equipment. The Gendron Regency Beds are suitable for use in all establishments other than domestic and those directly connected to the public low-voltage power supply network that supplies buildings used for domestic purposes.
RF emissions CISPR 11	Class A	
Harmonic emissions IEC 61000-3-2	Class A	
Voltage fluctuations / flicker emissions IEC 61000-3-3	Complies	

15.2 ENCLOSURE PORT [1]

Phenomenon	Basic EMC standard or test method	IMMUNITY TEST LEVELS
		Professional healthcare facility environment
ELECTROSTATIC DISCHARGE	IEC 61000-4-2	± 8 kV contact ± 2 kV, ± 4 kV, ± 8 kV, ± 15 kV air
Radiated RF EM fields [a)]	IEC 61000-4-3	3 V/m [f)] 80 MHz – 2,7 GHz [b)] 80 % AM at 1 kHz [c)]
Proximity fields from RF wireless communications equipment	IEC 61000-4-3	See 8.10.
RATED power frequency magnetic fields [d)]	IEC 61000-4-8	30 A/m 50 Hz or 60 Hz
Proximity magnetic fields	IEC 61000-4-39	See 8.11.

a) The interface between the PATIENT physiological signal simulation, if used, and the ME EQUIPMENT or ME SYSTEM shall be located within 0,1 m of the vertical plane of the uniform field area in one orientation of the ME EQUIPMENT or ME SYSTEM.

b) ME EQUIPMENT and ME SYSTEMS that intentionally receive RF electromagnetic energy for the purpose of their operation shall be tested at the frequency of reception. Testing may be performed at other modulation frequencies identified by the RISK MANAGEMENT PROCESS. This test assesses the BASIC SAFETY and ESSENTIAL PERFORMANCE of an intentional receiver when an ambient signal is in the passband. It is understood that the receiver might not achieve normal reception during the test.

c) Testing may be performed at other modulation frequencies identified by the RISK MANAGEMENT PROCESS.

d) Applies only to ME EQUIPMENT and ME SYSTEMS with magnetically sensitive components or circuitry.

e) Void

f) Before modulation is applied.

15.3 ENCLOSURE PORT IMMUNITY TO RF WIRELESS COMMUNICATIONS EQUIPMENT [1]

Test frequency (MHz)	Band [a] (MHz)	Service [a]	Modulation	IMMUNITY TEST LEVEL (V/m)
385	380 to 390	TETRA 400	Pulse modulation [b] 18 Hz	27
450	430 to 470	GMRS 460, FRS 460	FM [c] ± 5 kHz deviation 1 kHz sine	28
710	704 to 787	LTE Band 13, 17	Pulse modulation [b] 217 Hz	9
745				
780				
810	800 to 960	GSM 800/900, TETRA 800, iDEN 820, CDMA 850, LTE Band 5	Pulse modulation [b] 18 Hz	28
870				
930				
1 720	1 700 to 1 990	GSM 1800; CDMA 1900; GSM 1900; DECT; LTE Band 1, 3, 4, 25; UMTS	Pulse modulation [b] 217 Hz	28
1 845				
1 970				
2 450	2 400 to 2 570	Bluetooth, WLAN, 802.11 b/g/n, RFID 2450, LTE Band 7	Pulse modulation [b] 217 Hz	28
5 240	5 100 to 5 800	WLAN 802.11 a/n	Pulse modulation [b] 217 Hz	9
5 500				
5 785				

If necessary to achieve the IMMUNITY TEST LEVEL, the distance between the transmitting antenna and the ME EQUIPMENT or ME SYSTEM may be reduced to 1 m. The 1 m test distance is permitted by IEC 61000-4-3.

[a] For some services, only the uplink frequencies are included.

[b] The carrier shall be modulated using a 50 % duty cycle square wave signal.

[c] As an alternative to FM modulation, the carrier may be pulse modulated using a 50 % duty cycle square wave signal at 18 Hz. While it does not represent actual modulation, it would be worst case.

15.4 ENCLOSURE PORT IMMUNITY TO PROXIMITY MAGNETIC FIELDS

Test frequency	Modulation	IMMUNITY TEST LEVEL (A/m)
30 kHz [a]	CW	8
134,2 kHz	Pulse modulation [b] 2,1 kHz	65 [c]
13,56 MHz	Pulse modulation [b] 50 kHz	7,5 [c]

[a] This test is applicable only to ME EQUIPMENT and ME SYSTEMS intended for use in the HOME HEALTHCARE ENVIRONMENT.

[b] The carrier shall be modulated using a 50 % duty cycle square wave signal.

[c] r.m.s., before modulation is applied.

15.5 INPUT AC POWER PORT [1]

Phenomenon	Basic EMC standard	IMMUNITY TEST LEVELS
		Professional healthcare facility environment
Electrical fast transients / bursts [l) o)]	IEC 61000-4-4	± 2 kV 100 kHz repetition frequency
Surges [b) j) o)] Line-to-line	IEC 61000-4-5	± 0,5 kV, ± 1 kV
Surges [b) j) k) o)] Line-to-ground	IEC 61000-4-5	± 0,5 kV, ± 1 kV, ± 2 kV
Conducted disturbances induced by RF fields [c) d) o)]	IEC 61000-4-6	3 V [m)] 0,15 MHz – 80 MHz 6 V [m)] in ISM bands between 0,15 MHz and 80 MHz [n)] 80 % AM at 1 kHz [e)]
Voltage dips [f) p) r)]	IEC 61000-4-11	0 % U_T; 0,5 cycle [g)] At 0°, 45°, 90°, 135°, 180°, 225°, 270° and 315° [q)]
		0 % U_T; 1 cycle and 70 % U_T; 25/30 cycles [h)] Single phase: at 0°
Voltage interruptions [f) i) o)]	IEC 61000-4-11	0 % U_T; 250/300 cycle [h)]

a) Void

b) All ME EQUIPMENT and ME SYSTEM cables are attached during the test.

c) Calibration for current injection clamps shall be performed in a 150 Ω system.

d) If the frequency stepping skips over an ISM or amateur band, as applicable, an additional test frequency shall be used in the ISM or amateur radio band. This applies to each ISM and amateur radio band within the specified frequency range.

e) Testing may be performed at other modulation frequencies identified by the RISK MANAGEMENT PROCESS.

f) ME EQUIPMENT and ME SYSTEMS with a d.c. power input intended for use with a.c.-to-d.c. converters shall be tested using a converter that meets the specifications of the MANUFACTURER of the ME EQUIPMENT or ME SYSTEM. The IMMUNITY TEST LEVELS are applied to the a.c. power input of the converter.

g) Applicable only to ME EQUIPMENT and ME SYSTEMS connected to single-phase a.c. mains.

h) E.g. 10/12 means 10 periods at 50 Hz or 12 periods at 60 Hz.

i) ME EQUIPMENT and ME SYSTEMS with RATED input current greater than 16 A / phase shall be interrupted once for 250/300 cycles at any angle and at all phases at the same time (if applicable). ME EQUIPMENT and ME SYSTEMS with battery backup shall resume line power operation after the test. For ME EQUIPMENT and ME SYSTEMS with RATED input current not exceeding 16 A, all phases shall be interrupted simultaneously.

15.5 CONTINUED

j) ME EQUIPMENT and ME SYSTEMS that do not have a surge protection device in the primary power circuit may be tested only at ± 2 kV line(s) to earth and ± 1 kV line(s) to line(s).

k) Not applicable to CLASS II ME EQUIPMENT and ME SYSTEMS.

l) Direct coupling shall be used.

m) r.m.s., before modulation is applied.

n) The ISM (industrial, scientific and medical) bands between 0,15 MHz and 80 MHz are 6,765 MHz to 6,795 MHz; 13,553 MHz to 13,567 MHz; 26,957 MHz to 27,283 MHz; and 40,66 MHz to 40,70 MHz. The amateur radio bands between 0,15 MHz and 80 MHz are 1,8 MHz to 2,0 MHz, 3,5 MHz to 4,0 MHz, 5,3 MHz to 5,4 MHz, 7 MHz to 7,3 MHz, 10,1 MHz to 10,15 MHz, 14 MHz to 14,2 MHz, 18,07 MHz to 18,17 MHz, 21,0 MHz to 21,4 MHz, 24,89 MHz to 24,99 MHz, 28,0 MHz to 29,7 MHz and 50,0 MHz to 54,0 MHz.

o) Applicable to ME EQUIPMENT and ME SYSTEMS with RATED input current less than or equal to 16 A / phase and ME EQUIPMENT and ME SYSTEMS with RATED input current greater than 16 A / phase.

p) Applicable to ME EQUIPMENT and ME SYSTEMS with RATED input current less than or equal to 16 A / phase.

q) At some phase angles, applying this test to ME EQUIPMENT with transformer mains power input might cause an overcurrent protection device to open. This can occur due to magnetic flux saturation of the transformer core after the voltage dip. If this occurs, the ME EQUIPMENT or ME SYSTEM shall provide BASIC SAFETY during and after the test.

r) For ME EQUIPMENT and ME SYSTEMS that have multiple voltage settings or auto ranging voltage capability, the test shall be performed at the power input voltage specified in Table 1.

15.6 PATIENT COUPLING PORT [1]

Phenomenon	Basic EMC standard	IMMUNITY TEST LEVELS
		Professional healthcare facility environment
ELECTROSTATIC DISCHARGE [c)]	IEC 61000-4-2	± 8 kV contact ± 2 kV, ± 4 kV, ± 8 kV, ± 15 kV air
Conducted disturbances induced by RF fields [a)]	IEC 61000-4-6	3 V [b)] 0,15 MHz – 80 MHz 6 V [b)] in ISM bands between 0,15 MHz and 80 MHz 80 % AM at 1 kHz

a) The following apply:

- All PATIENT-COUPLED cables shall be tested, either individually or bundled
- PATIENT-COUPLED cables shall be tested using a current clamp unless a current clamp is not suitable. In cases were a current clamp is not suitable, an EM clamp shall be used.
- No intentional decoupling device shall be used between the injection point and the PATIENT COUPLING POINT in any case.
- Testing may be performed at other modulation frequencies identified by the RISK MANAGEMENT PROCESS.
- Tubes that are intentionally filled with conductive liquids and intended to be connected to a PATIENT shall be considered to be PATIENT-COUPLED cables.
- If the frequency stepping skips over an ISM or amateur radio band, as applicable, an additional test frequency shall be used in the ISM or amateur radio band. This applies to each ISM and amateur radio band within the specified frequency range.
- The ISM (industrial, scientific and medical) bands between 0,15 MHz and 80 MHz are 6,765 MHz to 6,795 MHz; 13,553 MHz to 13,567 MHz; 26,957 MHz to 27,283 MHz; and 40,66 MHz to 40,70 MHz. The amateur radio bands between 0,15 MHz and 80 MHz are 1,8 MHz to 2,0 MHz, 3,5 MHz to 4,0 MHz, 5,3 MHz to 5,4 MHz, 7 MHz to 7,3 MHz, 10,1 MHz to 10,15 MHz, 14 MHz to 14,2 MHz, 18,07 MHz to 18,17 MHz, 21,0 MHz to 21,4 MHz, 24,89 MHz to 24,99 MHz, 28,0 MHz to 29,7 MHz and 50,0 MHz to 54,0 MHz.

b) r.m.s., before modulation is applied

c) Discharges shall be applied with no connection to an artificial hand and no connection to PATIENT simulation. PATIENT simulation may be connected after the test as needed in order to verify BASIC SAFETY and ESSENTIAL PERFORMANCE.

15.7 SIGNAL INPUT/OUTPUT PARTS PORT [1]

Phenomenon	Basic EMC standard	IMMUNITY TEST LEVELS
		Professional healthcare facility environment
ELECTROSTATIC DISCHARGE [e]	IEC 61000-4-2	± 8 kV contact ± 2 kV, ± 4 kV, ± 8 kV, ± 15 kV air
Electrical fast transients / bursts [b] [f]	IEC 61000-4-4	± 1 kV 100 kHz repetition frequency
Surges Line-to-ground [a]	IEC 61000-4-5	± 2 kV
Conducted disturbances induced by RF fields [d] [g] [j] [k]	IEC 61000-4-6	3 V [h] 0,15 MHz – 80 MHz 6 V [h] in ISM bands between 0,15 MHz and 80 MHz [i] 80 % AM at 1 kHz [c]

[a] This test applies only to output lines intended to connect directly to outdoor cables.

[b] SIP/SOPS whose maximum cable length is less than 3 m in length are excluded.

[c] Testing may be performed at other modulation frequencies identified by the RISK MANAGEMENT PROCESS.

[d] Calibration for current injection clamps shall be performed in a 150 Ω system.

[e] Connectors shall be tested per 8.3.2 and Table 4 of IEC 61000-4-2:2008. For insulated connector shells, perform air discharge testing to the connector shell and the pins using the rounded tip finger of the ESD generator, with the exception that the only connector pins that are tested are those that can be contacted or touched, under conditions of INTENDED USE, by the standard test finger shown in Figure 6 of the general standard, applied in a bent or straight position.

[f] Capacitive coupling shall be used.

[g] If the frequency stepping skips over an ISM or amateur radio band, as applicable, an additional test frequency shall be used in the ISM or amateur radio band. This applies to each ISM and amateur radio band within the specified frequency range.

[h] r.m.s., before modulation is applied.

[i] The ISM (industrial, scientific and medical) bands between 150 kHz and 80 MHz are 6,765 MHz to 6,795 MHz; 13,553 MHz to 13,567 MHz; 26,957 MHz to 27,283 MHz; and 40,66 MHz to 40,70 MHz. The amateur radio bands between 0,15 MHz and 80 MHz are 1,8 MHz to 2,0 MHz, 3,5 MHz to 4,0 MHz, 5,3 MHz to 5,4 MHz, 7 MHz to 7,3 MHz, 10,1 MHz to 10,15 MHz, 14 MHz to 14,2 MHz, 18,07 MHz to 18,17 MHz, 21,0 MHz to 21,4 MHz, 24,89 MHz to 24,99 MHz, 28,0 MHz to 29,7 MHz and 50,0 MHz to 54,0 MHz.

[j] See IEC 61000-4-6:2013, Annex B, for modified start frequency versus cable length and equipment size.

[k] SIP/SOPS whose maximum cable length is less than 1 m are excluded.

GENDRON™
by graham-field

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Made in USA

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