

ZENITH SERIES



To avoid personal injury or damage to the bed, read all sections pertaining to the bed model before use.

ETL/UL/CSA APPROVED UL 60601-1 IEC 60601-2-38 CSA 22.2 601.1

#### This service manual covers the following Zenith Models:

76" and 80" Full Electric with Low Roll Only and Grid Decks = ZG58174



#### **Basic American Medical Products**

336 Trowbridge Drive Fond du Lac, WI 54937

For Zenith 5000 Bed service parts, contact our Customer Service Department at 770-368-4700

> Manufactured by: **GF Health Products, Inc.** 2935 Northeast Parkway Atlanta, GA 30360 www.grahamfield.com

> > Made in the USA

To order a Zenith 5000 bed, contact a GF Health Products, Inc. sales representative at 770-368-4700

#### **IMPORTANT NOTICE**

GF Health Products, Inc. is not responsible for typographical errors.

All illustrations, specifications, packaging, and warranties contained in this Service Manual are based on the latest product information available at the time of printing.

The most current product information can be found online at www.grahamfield.com.

Check all parts for shipping damage and test before using.
In case of damage, DO NOT USE.



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#### **LABEL SYMBOL DEFINITIONS**



Consult Accompanying Documents



Safe Working Load



Double Insulated



Protected Grounded Device



Type B Equipment and Applied Parts



#### IMPORTANT SAFETY AND WARNING INFORMATION



This product is a variable height, adjustable mattress platform, which will provide comfort and convenience for residents/patients and caregivers in long term care settings.



The MAXIMUM SAFE WORKING LOAD for the Zenith 5000 Bed with weight evenly distributed, including bedding, resident/patient, support surface, and all accessories, is 500 lb.



NEVER operate the bed if a Power Cord or Plug is damaged or not working properly. Contact qualified Service Personnel for examination and repair. Always unplug the Power Cord before performing maintenance on the bed.



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



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



When operating the HI/LO, Knee, or Back Functions of the bed, ALWAYS ensure that 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 rails when performing these functions.



DO NOT lower the bed when objects are beneath it. Failure to inspect under the bed can result in damage to property or personal injury.



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 make sure all electrical cords DO NOT get tangled around the bed, side rails, or legs during transport or normal operation of the bed.



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



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



Beds manufactured by Basic American Medical Products are designed for use within an institutional healthcare environment (i.e. assisted living, skilled nursing, transitional care, rehabilitation care, etc.).



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 as 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.



NEVER permit more than one (1) person on/in the bed at any time.



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 sections 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.



Risk of entanglement or injury may occur if the mattress used with mattress retainers does not fill the entire width between stops or which compresses to less than 1.50 inches under user's weight.



Mattress must be properly sized to fit the mattress support platform and must remain centered on the support platform relative to State and Federal guidelines. Recommended minimum dimensions of mattress is 35 inches wide and 6 inches deep. Length should match the mattress support platform. Use of an improperly fitted mattress could result in injury or death.



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



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.



#### IMPORTANT SAFETY AND WARNING INFORMATION



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 - make sure that 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.



Notice for California Customers - California Proposition 65 WARNING: This product contains a chemical known to the State of California to cause cancer and reproductive or developmental harm.



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 make sure the cables are free from any 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 your service manual's electrical section for proper cable routing.

#### 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 layout 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 Basic American Medical Products 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 Basic American Medical Products 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 Zenith 5000 bed and accessories listed in this manual 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.



#### **RECOMMENDED MAINTENANCE**

Regular maintenance of the Long Term Bed is necessary to ensure continuing proper and safe operation. Read and observe the following recommended maintenance schedule.

	RECOMMENDED INSPECTION PERIODS		
ITEM	Inspect on Receipt	Every 3 Months	Every 6 Months
Maintenance Inspection of All Components at Receipt of Shipment			
Make sure all parts/components are included (see "Unpacking The Bed").	Х		
Check all bed components for obvious damage.	Х		
Inspect the power cord for any cuts and/or damage.	Х		
Check to see all actuator/motor cables are routed and connected properly to the control box.	Х		
Mechanical Inspection of Assemblies			
Inspect all welds on the sleeping surface, frame, and base assemblies for stress fractures.			Х
Inspect all fasteners for wear and looseness.			Х
Mechanical Inspection of Casters and Pedal Locking Mechanism			
Check the stationary foot pads on both the head end and foot end for any damage or wear. Replace if needed.		Х	
Check all rolling casters to ensure that they roll properly and are unobstructed.		Х	
Electrical Inspection of Control Box and Hand Control Pendant			
Check the external power cord that plugs into the control box for any chafing, cuts, or wear. Replace if damaged.		Х	
Make sure all attaching hardware is securely tightened.		Х	
Check all electrical connections for any wear or fractures.		Х	
Check the external backup battery (if you have one). Replace if needed.		Х	
Check the hand control pendant cable for any chafing, cuts, or wear.		Х	
Check all hand control pendant functions - check to make sure each button and associated function work properly (i.e. head section rises when the HEAD UP button is activated).		Х	
Electrical Inspection of Actuators/Motors			
Check the actuator/motor cables for any chafing, cuts, or wear.		Х	
Check the range of movement on all motors to ensure they do not bind in the Full Up or Full Down positions.		Х	



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.



#### WARNING!

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

#### 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.

#### **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.

#### **ENVIRONMENTAL SPECIFICATIONS AND RFI INFORMATION**

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

STORAGE AND TRANSPORT CONDITIONS		
Temperature	-40°C to 70°C	
Relative Humidity	10% to 100%	
Atmospheric Pressure	500 to 1060 hPa	

#### **RFI (RADIO FREQUENCY INTERFERENCE)**

RFI influences most electronic equipment. Caution should be exercised with regard to the use of portable communications equipment in the area around such equipment. If RFI causes erratic behavior, shut the bed off immediately. Leave it off while the transmission is in progress.

#### **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.



#### **SECTION A: BED SETUP INSTRUCTIONS**

#### **UNPACKING THE BED**

- Make sure all parts/components are included.
- Check all bed components for obvious

Check to see all actuator/motor

Inspect the Power Cord for any cuts and/or damage.

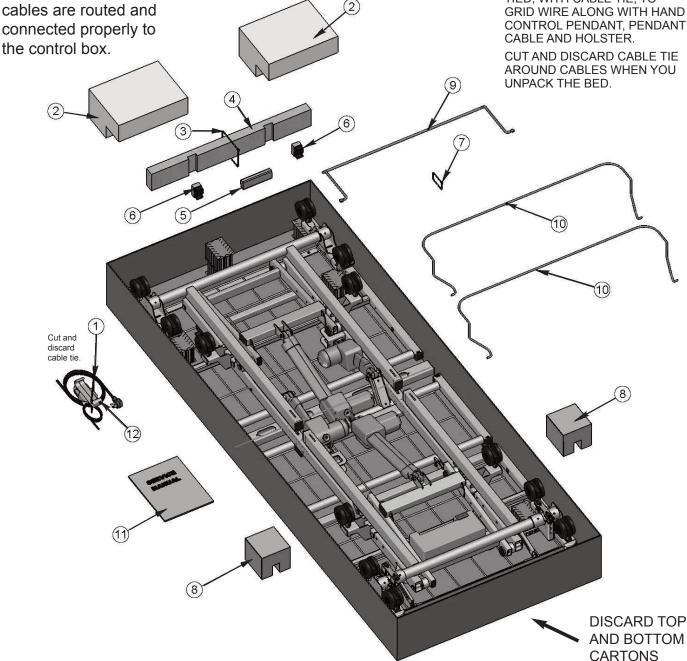
#### **DISCARD**

- 1. Cable Tie on Bundle
- 2. Large Foam Block
- 3. Large Cable Tie CUT
- 4. Notched 2 x 4 Board
- 5. Foam Wrapping
- 6. End Caps with Foam
- 7. Small Cable Tie CUT
- Notched Leg Foam

- 9. Wireform Wallsaver
- 10. Two Mattress Retainers
- 11. Service Manual/Documents
- 12. Power Cord, Hand Control Pendant, and Pendant Holster Bundle

#### NOTE:

END OF POWER CABLE IS COILED FOR SHIPPING AND TIED, WITH CABLE TIE, TO





#### HEADBOARD AND FOOTBOARD ASSEMBLY

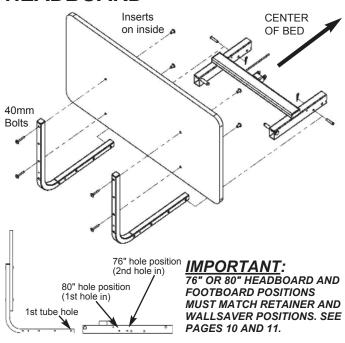
#### 1. HEADBOARD INSTALLATION

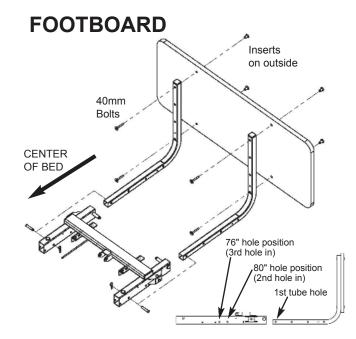
- The headboard comes with four pre-installed inserts - consider this the inside of the headboard.
- Position two mounting tubes on the outside of the headboard with "L" facing inward.
- Align the mounting tube top holes with the headboard top holes.
- Insert a 40mm long socket head cap screw through each of the top holes and bottom holes and screw into each insert. Tighten with the hex key included in the kit.
- At the head deck end, slide the mounting tube "L" portions into the main frame rail hollow ends.
- FOR 80" BEDS: Slide the mounting tubes in until the first tube hole aligns with the first rail hole. See illustration below.
- FOR 76" BEDS: Slide the mounting tubes in until the first tube hole aligns with the second rail hole. See illustration below.

#### 2. FOOTBOARD INSTALLATION

- The footboard comes with four pre-installed inserts - consider this the outside of the footboard.
- Position two mounting tubes on the inside of the footboard with "L" facing inward.
- Align the mounting tube top holes with the footboard top holes.
- Insert a 40mm long socket head cap screw through each of the top holes and bottom holes and screw into each insert. Tighten with the hex key included in the kit.
- At the foot deck end, slide the mounting tube "L" portions into the main frame rails hollow ends.
- FOR 80" BEDS: Slide the mounting tubes in until the first tube hole aligns with the second rail hole. See illustration below.
- FOR 76" BEDS: Slide the mounting tubes in until the first tube hole aligns with the third rail hole. See illustration below.

#### **HEADBOARD**



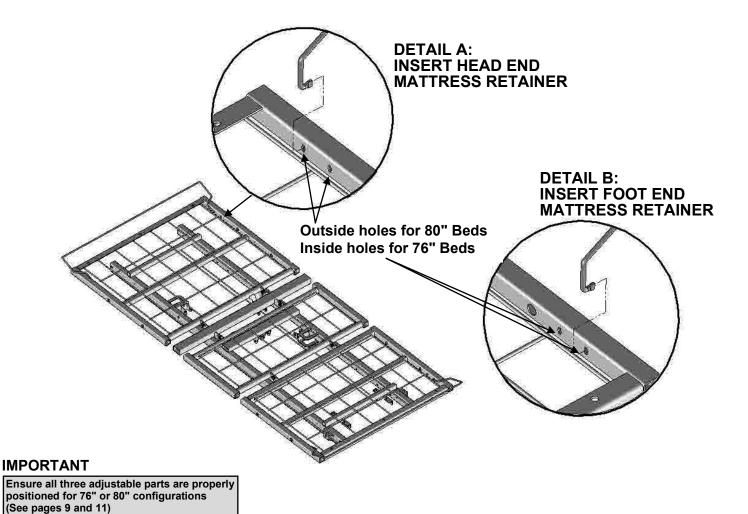


NOTE: The 1st hole at the foot end is reserved for attaching the Optional 4" pan extension.



## STANDARD MATTRESS RETAINER INSTALLATION (USING 2 RETAINERS 999-0844-124SP)

- Determine if you need to position your bed in an 80" or 76" configuration (80" outside holes; 76" inside holes - see Details A and B).
- 2. On the foot end, carefully squeeze the Mattress Retainer ends inward, toward the center of the retainer, and insert the ends into the proper holes (see Details A and B).
- 3 Lay the Mattress Retainer down so that the elbows rest on the decks and the long cross rod is on the foot end side as shown.
- 4. On the head end, carefully squeeze the Mattress Retainer ends inward, toward the center of the retainer, and insert the ends into the proper holes (see Details A and B).
- Lay the Mattress Retainer down so that the elbows rest on the decks and the long cross rod is on the foot end side as shown.



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Be sure to use a mattress that is properly sized to fit the sleep deck, which will remain centered on the deck relative to State and Federal Guidelines. Use of an improperly fitted mattress could result in injury or death.



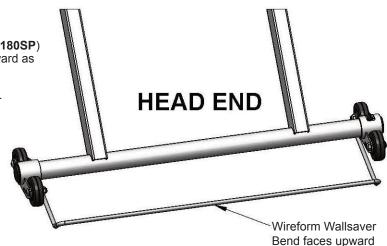
Use a properly sized mattress in order to minimize the gap between the side of the mattress and assist devices. This gap must be small enough to prevent resident/patient from getting their head or neck caught in this location.

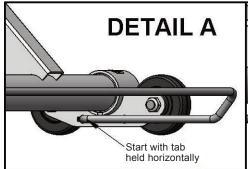


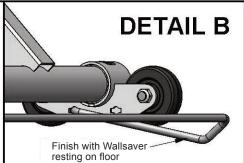
#### STANDARD WIREFORM WALLSAVER INSTALLATION

#### WALLSAVER ASSEMBLY

- Position the Wireform Wallsaver (Part no. 999-0856-180SP) with bent end facing upward and tab ends facing inward as shown at right.
- 2. Determine the position desired (see bottom of page).
- Gently squeeze the wallsaver tab ends inward toward the center of the wallsaver and, holding the tabs parallel with the caster base holes (see DETAIL A), slide the tabs into the holes while letting the wallsaver gently expand outward.
- 4. Turn the wallsaver downward until it rests on the floor (See Detail B).





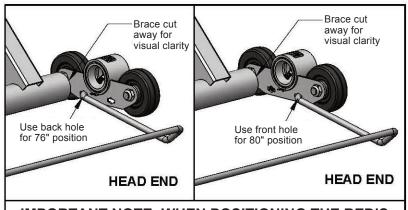


#### WALLSAVER REMOVAL

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

#### **WALLSAVER POSITIONS**

- 1. The Zenith 5000 wallsaver features two standard positions for easy bed/mattress length reconfigurations 76" and 80".
- For 76" beds, position the wallsaver ends in the BACK caster base holes (toward the foot end). For 76" beds using an optional Trapeze unit, position the wallsaver ends in the FRONT caster base holes (toward the head end.)
- For 80" beds, position the wallsaver ends in the FRONT caster base holes (toward the head end).



IMPORTANT NOTE: WHEN POSITIONING THE BED'S WALLSAVER FOR A PARTICULAR BED LENGTH (I.E. 76" OR 80"), ENSURE THE OTHER BED ADJUSTMENTS (HEADBOARD AND FOOTBOARD POSITIONS AND MATTRESS RETAINER POSITION) ARE IN THE SAME CONFIGURATION. REFER TO PAGES 9 AND 10.



#### **BED OPERATION - HAND CONTROL PENDANT**

The Hand Control Pendant comes standard on the Zenith 5000 series.

The plug features a lock-on cap.

A pendant holster for attaching to optional





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

The Hand Control Pendant Holster 999-0791-000SP comes standard with the Zenith 5000 bed.



HAND CONTROL PENDANT

The Zenith 5000 bed comes with Alligator Clip attached to Hand Control Pendant Cable.
To order a replacement Hand Control Pendant, see page 21.





#### NOTE:

THE ZENITH 5000 HAND CONTROL PENDANT CABLE RUNS ALONG THE SEAT PAN, THEN DOWN TOWARD THE CONTROL BOX, AND PLUGS INTO A SMALL BLACK CONTROL CABLE WHICH PLUGS DIRECTLY INTO THE CONTROL BOX.

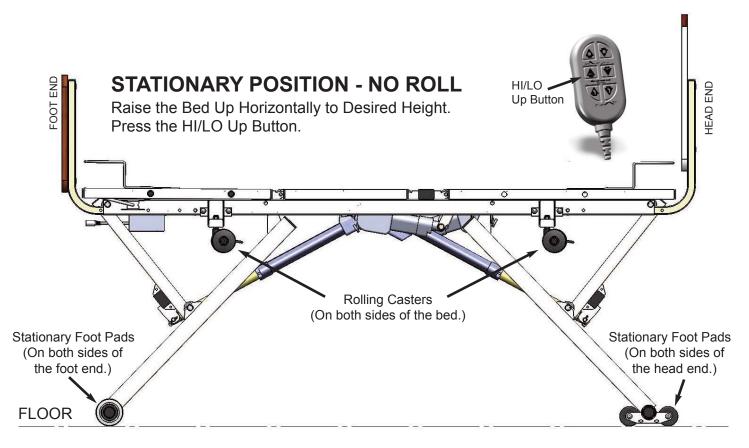
IN ORDER TO MAXIMIZE THE EASE OF USE AS WELL AS MAINTAIN THE LONGEVITY OF THE ZENITH 5000 BED, THE MICROPROCESSOR-CONTROLLED CONTROL SYSTEM MONITORS ALL HAND CONTROL PENDANT INPUTS. THE HAND CONTROL PENDANT IS INTENDED FOR USE BY THE PATIENT TO MAXIMIZE COMFORT OR BY THE CAREGIVER FOR REPOSITIONING.

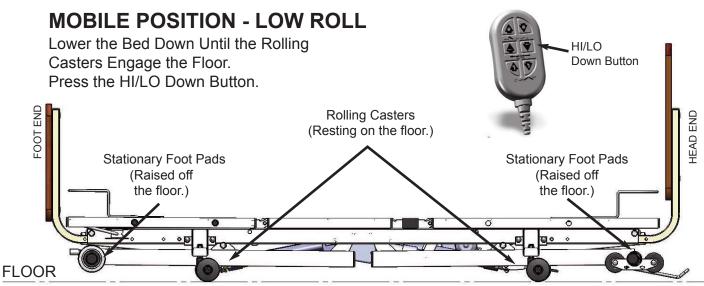
TO DETER MISUSE BY A PATIENT, IF THE SYSTEM DETECTS REPEATED BUTTON OPERATIONS, IT WILL BLOCK THE NEXT SIGNALS TO ENSURE THE WELLBEING OF THE PATIENT AND TO PROTECT THE SYSTEM. SHOULD THIS OCCUR, THE USER WILL NOTICE A TWO (2) SECOND DELAY WHEN DEPRESSING A FUNCTION, OR MUST WAIT FOR TWO SECONDS BEFORE OPERATING THE BED AGAIN.



#### **BED OPERATION - STATIONARY/LOW ROLL POSITIONING**

The Zenith 5000 is sold as a "Low Roll" bed to give the user the option of placing it in a stationary (non-moving) position or lowering it into a "low roll" position. This is accomplished by lowering the bed until the stationary foot pads rise off the floor and the rolling casters contact the floor surface for easy mobility.







# SECTION B: ASSIST DEVICES OPTIONAL PIVOTING ASSIST BAR INSTALLATION AND OPERATION KIT ZA85400 - (ILLUSTRATION SHOWS BAR POSITIONED ON LEFT SIDE OF BED)

- At the head end of the bed, position the Pivoting Assist Bar (#2) bracket over the Head Deck (#1) frame and align the two Assist Bar bracket holes with the two frame rail holes on either side of the head deck.
- 2. From the outside, insert the Clevis Pins (#3) through the pivot bracket and deck frame holes.
- 3. From the inside, insert a Hair Pin Clip (#4) through each of the clevis pin small holes.

# he two Assist either side of Position the Assist Bar Bracket ON TOP of the Deck Frame, aligning holes in the bracket with holes in the frame. HEAD END SEMBLY NS AND TIONED ON

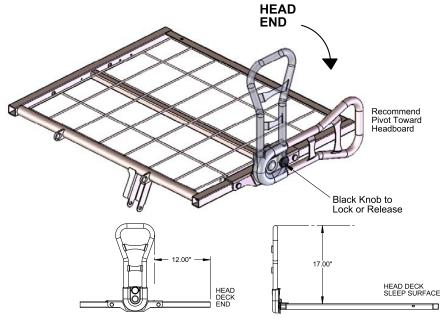
#### ORDER KIT # ZA85400.

THE KIT INCLUDES ONE PIVOTING ASSIST BAR ASSEMBLY AND TWO LANYARD ASSEMBLIES WITH CLEVIS PINS AND HAIR PIN CLIPS. (A STATIONARY ASSIST BAR IS ALSO AVAILABLE AS AN OPTION - KIT # ZA85000)

THE PIVOTING AND FIXED ASSIST BARS CAN BE POSITIONED ON EITHER THE RIGHT OR LEFT SIDE OF THE HEAD DECK.

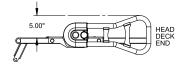
ASSIST BARS ARE NOT INTENDED FOR USE AT THE FOOT END OF THE BED.

#### PIVOTING ASSIST BAR OPERATION



- TO AVOID PINCHING FINGERS, ENSURE FINGERS ARE CLEAR OF SIDES OR UNDERSIDES OF THE PIVOTING ASSEMBLY WHEN POSITIONING THE ASSIST BAR UP OR DOWN.
- TO AVOID PERSONAL INJURY, ENSURE THE PIVOTING ASSIST BAR IS ALWAYS IN THE FULL, VERTICAL, LOCKED POSITION WHENEVER RESIDENT/PATIENT IS LEFT UNATTENDED.

- 1. To release the pivoting assist bar from its vertical lock position, hold onto the top of the bar with one hand and slightly pull out the black knob on the outside of the pivot assembly with the other hand to release the locking mechanism. For ease of patient access, it is recommended that you pivot the rail toward the headboard until it stops and rests in place.
- To return the assist bar to its upright locked position, grab the top of the assist bar with one hand and pivot the assembly upward until the black knob mechanism snaps into place, locking the assist bar vertically.



POWERED AIR MATTRESS SURFACES MAY POSE A RISK OF ENTRAPMENT. PRIOR TO USE, ENSURE THE THERAPEUTIC BENEFITS OUTWEIGH THE RISK OF ENTRAPMENT.

RH Plastic Half Rail

Assembly (#2)



## OPTIONAL PLASTIC HALF RAIL INSTALLATION AND OPERATION KIT ZA84200 - (ILLUSTRATION SHOWS RAIL POSITIONED ON RIGHT SIDE OF BED)

1. Position the Plastic Half Rail (#2) as shown, with the taller, straight edge toward the head end of the bed and arms angled toward the center of the bed.

2. From the outside, insert the two welded grooved pins on the rail arms into the two large holes in the side of the head deck.

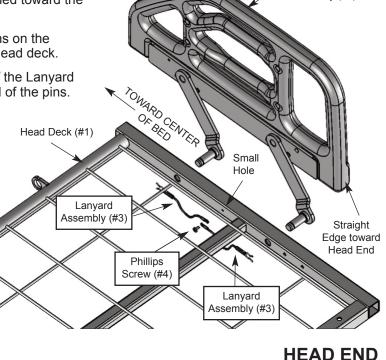
3. From the inside, install the metal hair pin clip end of the Lanyard Assembly (#3) onto the exposed grooves at the end of the pins.

 Position the other terminal end of the Lanyard Assemblies (#3) over the small hole on the inside of the deck frame. Secure with a small Phillips Screw (#4).

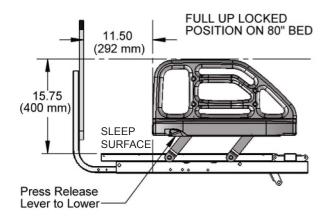
#### ORDER PLASTIC RAIL KIT #ZA84200,

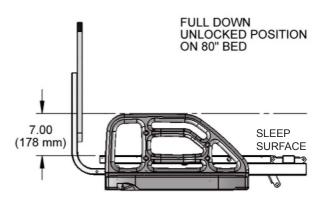
WHICH INCLUDES A RIGHT AND LEFT HALF RAIL, FOUR LANYARD ASSEMBLIES, AND TWO PHILLIPS SCREWS (OR TWO OPTIONAL HEX HEAD SCREWS). ORDER BAG #999-0842-905 FOR JUST THE REPLACEMENT HARDWARE.

THE PLASTIC RAIL CAN BE INSTALLED ON EITHER THE HEAD OR FOOT END OF 80" BEDS. IT SHOULD ONLY BE INSTALLED ON THE HEAD END OF 76" BEDS.



#### PLASTIC HALF RAIL OPERATION





A

TO AVOID PINCHING FINGERS, HOLD THE HALF RAIL FROM THE TOP WITH ONE HAND AND CAREFULLY DEPRESS THE BLACK RELEASE LEVER WITH THE OTHER. ENSURE THERE ARE NO OBJECTS IN THE WAY THAT MAY HINDER THE FULL MOVEMENT OF THE RAIL.

A

TO AVOID PERSONAL INJURY, ENSURE THE HALF RAIL IS ALWAYS IN THE FULL UP LOCKED POSITION WHENEVER RESIDENT/PATIENT IS LEFT UNATTENDED.

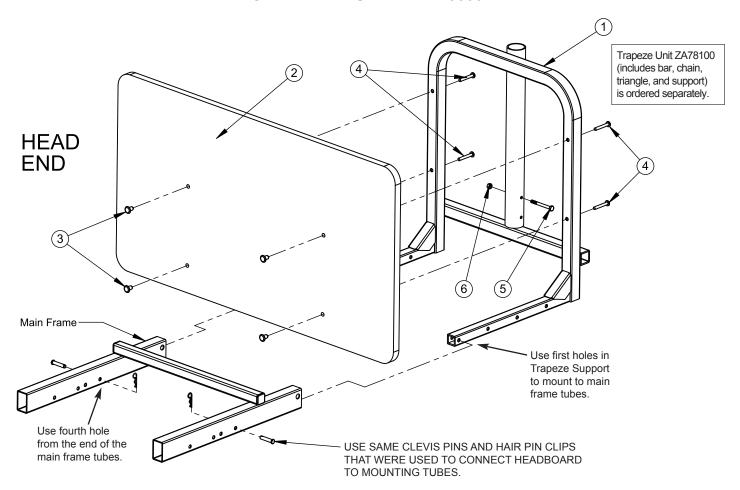


POWERED AIR MATTRESS SURFACES MAY POSE A RISK OF ENTRAPMENT. PRIOR TO USE, ENSURE THE THERAPEUTIC BENEFITS OUTWEIGH THE RISK OF ENTRAPMENT.



#### OPTIONAL TRAPEZE SUPPORT INSTALLATION

(THE TRAPEZE SUPPORT IS ATTACHED TO THE HEAD SECTION OF THE BED.)
ORDER KIT NUMBER ZA79000



- Remove the headboard panel assembly (#2), if previously assembled to the bed, by pulling out the two Clevis Pins and two Hair Pin Clips that attach the main frame tubes to the headboard's mounting tubes. Set all pins aside for later use.
- 2. Detach the headboard panel from the mounting tubes by unscrewing the four 40mm long Socket Head Cap Screws that fasten the board to the tubes (these will be replaced with the longer Phillips Head Pan Screws from the trapeze adapter hardware bag). Do not remove the four 1/4-20 inserts (#3) from the board. They will be reused to mount the board to the trapeze support.
- 3. Assemble the Trapeze Support (#1) to the main frame tubes using the two Clevis Pins and Hair Pin Clips you removed in Step 1. The first hole in the Trapeze tubes must line up with the fourth hole from the end in the main frame tubes as shown; the main frame shown is for 80" deck.

- 4. Insert the 1/4-20 x 2.50" Carriage Bolt (#5) into the vertical support as shown and fasten with a 1/4-20 Lock Nut (#6). Both parts should be in the hardware bag.
- 5. Assemble the headboard to the inside of the Trapeze Support so that the side of the headboard with the inserts is facing away from the Trapeze Support. From the outside, insert the (4) four 1/4-20 x 1.75" long Machine Screws (#4) from the hardware bag through the holes in the Trapeze Support, screwing them into the inserts in the headboard.



#### SECTION C: MECHANICAL AND ELECTRICAL INFORMATION

#### **ZENITH 5000 MECHANICS**

#### NOTE: All dimensions are ±.25 inches

•	Overall Bed Length (with boards and wallsaver) . 82"/86"
•	Overall Bed Width (with boards) 36.00"
•	Maximum Height*30.00"
•	Minimum Height* 7.95"
•	Maximum Head/Back Deck Angle
•	Maximum Knee/Foot Deck Angle
•	Maximum Safe Working Load 500 lb WITH WEIGHT EVENLY DISTRIBUTED - includes bedding, resident, support surface, and all accessories

- Mass of bed (without assist devices or boards) = 204 lb
  - \* Bed height calculated from floor surface to top of sleep deck.

#### **ZENITH 5000 ELECTRICAL**

•	Power/Frequency
•	Output Rating
•	Overall Movement Draw 4.50 Amps
•	Power (Electrical) Cord #18 AWG 3 Conductor
•	Mode of Operations 10% Max. Duty Cycle (2 minutes on/18 minutes off)
•	Internal Battery Backup 9V Battery
	Pack and Charger can be purchased separately as an accessory.

## TYPICAL ZENITH 5000 BED IDENTIFICATION LABELS WITH GROUNDED ELECTRICAL CABLE



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 770-368-4700; it will allow us to better assist you and quickly answer

your questions and concerns.

Bed labels are an important part of

when ordering replacement parts.

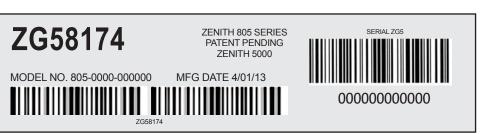
identifying the bed's make and model

The Serial Number is essential if you

are claiming parts or service under

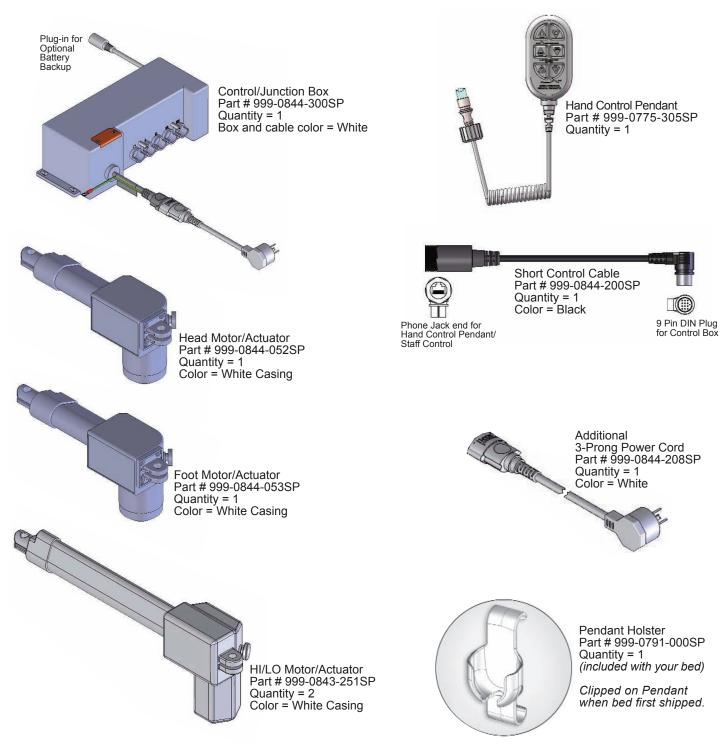
warranty. These helpful labels can

be located on the main frame rails,





#### **ZENITH 5000 SERIES ELECTRICAL COMPONENTS**





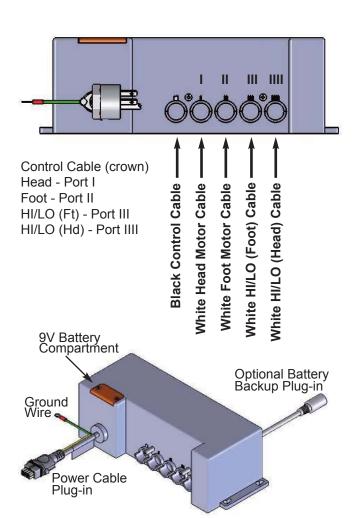
DO NOT use unauthorized parts, accessories, or adapters other than those specified/authorized by GF Health Products, Inc. DO NOT open assemblies such as the Actuators, Hand Control, or Control Box. If unauthorized personnel perform work on these components, the manufacturer's warranty becomes void. NEVER operate the bed if a Power Cord or Plug is damaged or not working properly. Contact qualified Service Personnel for examination and repair.

ALWAYS UNPLUG THE POWER CORD BEFORE PERFORMING MAINTENANCE ON THE BED.

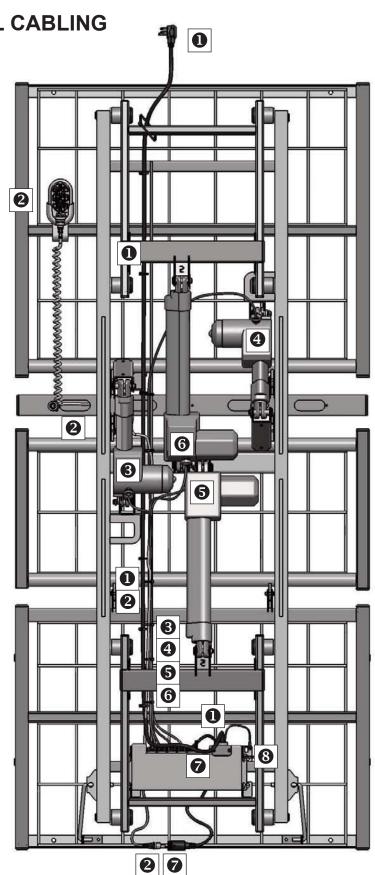


### ZENITH 5000 SERIES ELECTRICAL CABLING

- POWER CORD
- AND CONTROL PENDANT CABLE
- **3** HEAD MOTOR CABLE
- 4 FOOT MOTOR CABLE
- HI/LO CABLE (FOOT)
- 6 HI/LO CABLE (HEAD)
- BLACK CONTROL CABLE
- GROUND WIRE



NOTE: 9V Battery included in top of box is only good for one lowering and flattening of the bed in the event of a power outage. You will need to replace it after each single use. An optional portable Ilcon Battery Backup unit is recommended for longer periods where power is not available. Contact your sales representative for more information.





## SECTION D: SERVICE/REPLACEMENT PARTS SERVICE/REPLACEMENT PART RECORD (Page 1)

		DECKING			
Part Number	Description		QTY	Order Date	Price
999-0844-920SP	Head/Back Deck and Hardware Pack		1 Deck		
999-0844-930SP	OR -	Foot Deck and Hardware Pack	1 Deck		
999-0844-940SP	OR -	Knee Deck and Hardware Pack	1 Deck		
	Deck I	Hardware Pack - INCLUDES	1 Pkg		
	4	Clevis Pins			
Separate	5	5/16" Retaining Rings (Deck Brackets)			
Hardware Pack - 999-0844-990	2	12mm Retaining Ring (Cntrl Arms to Decks)			
	1	Installation Instruction Sheet			
		MOTORS (ACTUATORS	5)		
Part Number		Description	QTY	Order Date	Price
999-0843-251SP	HI/LO Moto	r (Cable attached) and Hardware Pack	1 Motor		
999-0844-052SP	OR - Head Mo	otor (Cable attached) and Hardware Pack	1 Motor		
999-0844-053SP	OR - Foot Motor (Cable attached) and Hardware Pack		1 Motor		
	Motor Hardware Pack- INCLUDES		1 Pkg		
	2	12mm Retaining Rings			
Separate	2	Hair Pin Clips			
Hardware Pack	2	Snap Rings			
999-0844-991	8	Standard Cable Ties			
	1	Installation Instruction Sheet			
		CONTROL BOX AND POWER	CABLES		
Part Number		Description	QTY	Order Date	Price
999-0844-300SP	Control Box	Service Pack (includes control cable)	1 Kit		
	Se	Service Pack - INCLUDES			
	1	Adapter Control Cable 999-0844-200			
Separate Hardware Pack	1	Ground Screw			
999-0844-992	8	Standard Cable Ties			
	1	Installation Instruction Sheet			
999-0844-300B	Cor	Control Box (includes 9V battery)			
999-0844-208	Detachable Ilcon 3-Prong Power Cable		1 Cable		

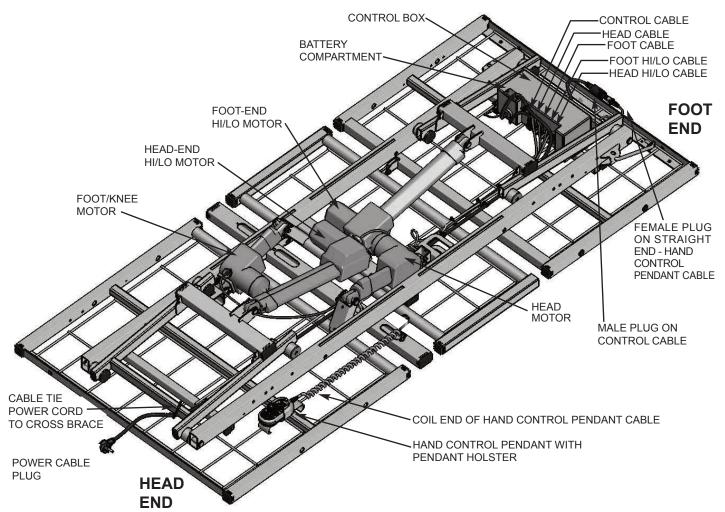


#### SERVICE/REPLACEMENT PART RECORD (Page 2)

		HAND CONTROL PENDA	NT		
Part Number		Description	QTY	Order Date	Price
999-0775-305SP	Hand	Control Pendant (Standard Model)	1 Pendant		
999-0791-000SP	Pendar	nt Holster (Standard for all pendants)	1 Holster		
		SHORT BLACK CONTROL	CABLE		
Part Number		Description	QTY	Order Date	Price
999-0844-200SP		Black Control Cable Kit	1 Pack		
	Control C	able Service Pack - INCLUDES	1 Pkg		
No Separate	2	Standard Cable Ties			
Hardware Pack	1	Installation Instruction Sheet			
		CAPS AND PLUGS	3		
Part Number		Description	QTY	Order Date	Price
NOTE: CAPS AND PLUGS CAN ONLY BE PURCHASED IN SETS OF 12					
100-4200-004PK	1.25" x 1.25" Square Caps Pack		12/pkg		
100-4700-015PK	1.00" x 1.00" Square Caps Pack (arm ends)		12/pkg		
100-4700-017PK	1.00"	1.00" x 2.00" Rectangular Caps Pack			
100-4700-021PK	.75" x	.75" x 1.50" Rectangular Caps Pack			
100-4700-018PK	1.25"	1.25" x 2.00" Rectangular Caps Pack			
100-4715-011PK	1.50" Round End Caps Pack (cover arm bearings)		12/pkg		
999-0775-001PK	Half Moon End Caps Pack (caster bases)		12/pkg		
100-4762-002PK	5/8" Round Plugs Pack (both sides of foot deck)		12/pkg		
100-4738-005PK	3/8" Round Plugs (on main frame rails - foot end)		12/pkg		
	FOR	GENERAL CAP/PLUG DIAGRAMS SEE PA	GES 25 AND 2	26.	



#### SERVICE/REPLACEMENT PART DIAGRAM - ELECTRONICS

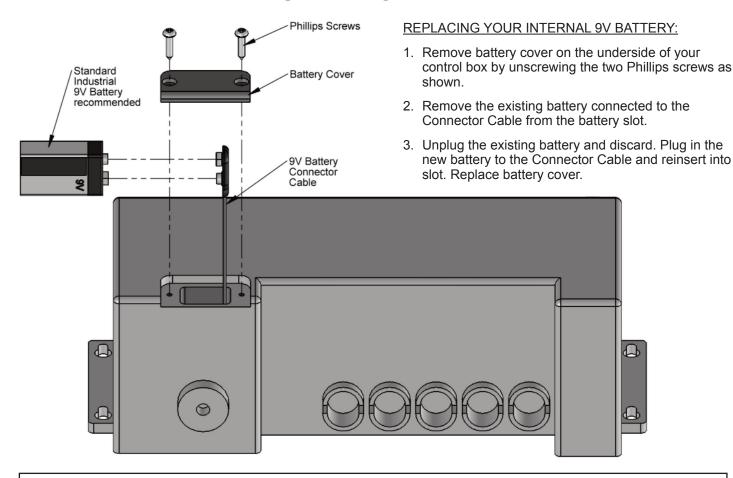


- TO ORDER A REPLACEMENT HI/LO MOTOR USE SERVICE PACK 999-0843-251SP (Includes motor, mounting hardware, and installation instruction sheet).
- TO ORDER A REPLACEMENT CONTROL BOX USE PART NO.
   999-0844-300SP (Includes control box, detachable power cord, control cable, ground wire screw, cable ties, and installation instruction sheet).
- TO ORDER A REPLACEMENT HEAD MOTOR USE SERVICE PACK 999-0844-052SP (Includes motor, mounting hardware, and installation instruction sheet).
- TO ORDER A REPLACEMENT HAND CONTROL PENDANT USE PART NO. 999-0775-305SP. TO ORDER A NEW PENDANT HOLSTER USE PART NO. 999-0791-000SP.
- TO ORDER A REPLACEMENT FOOT MOTOR USE SERVICE PACK 999-0844-053SP (Includes motor, mounting hardware, and installation instruction sheet).
- TO ORDER A REPLACEMENT CONTROL CABLE USE PART NO. 999-0844-200SP (Includes cable, two (2) cable ties, and installation instruction sheet).

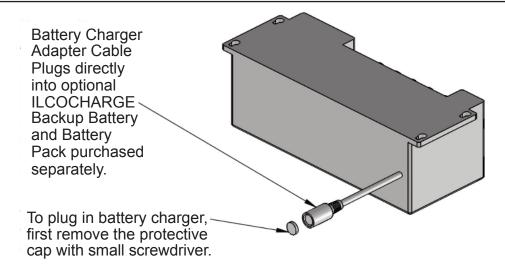
WHEN ORDERING REPLACEMENT PARTS WITH CUSTOMER SERVICE,
HAVE THE BED SERIAL NUMBER AVAILABLE
TO CONFIRM WHETHER THE PART IS COVERED UNDER WARRANTY.
(SEE PAGE 17 FOR LOCATION OF SERIAL NUMBER ID LABEL.)



## REPLACEMENT OF 9V BATTERY AND OPTIONAL BATTERY BACKUP CHARGER AND BATTERY PACK

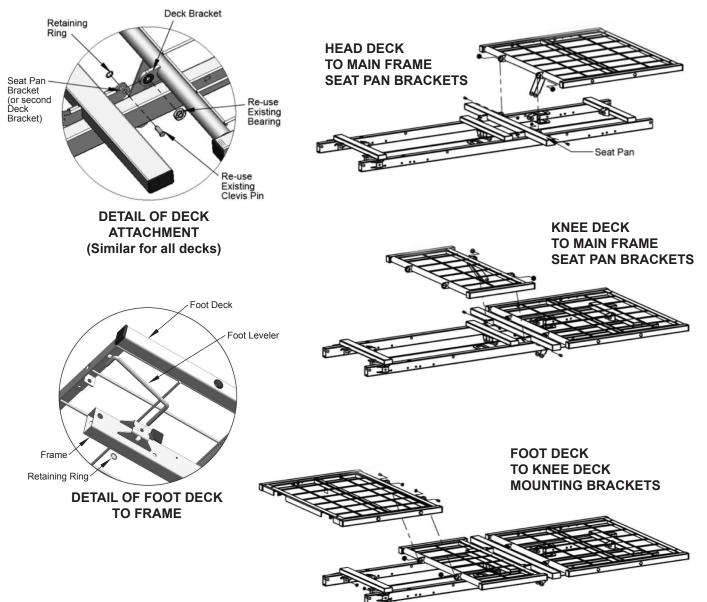


NOTE: THE 9V BATTERY INCLUDED WITH YOUR CONTROL BOX IS ONLY GOOD FOR ONE LOWERING AND FLATTENING OF THE BED IN THE EVENT OF A POWER OUTAGE. YOU WILL NEED TO REPLACE AFTER EACH SINGLE USE. A STRONGER BATTERY PACK IS AVAILABLE AS A SEPARATE PURCHASE. ORDER WITH BACKUP CHARGER.





#### SECTION E: DECK/MECHANICAL SERVICE PARTS FOR ALL ZENITH 5000 BED MODELS SERVICE/REPLACEMENT PARTS DIAGRAM - DECKING

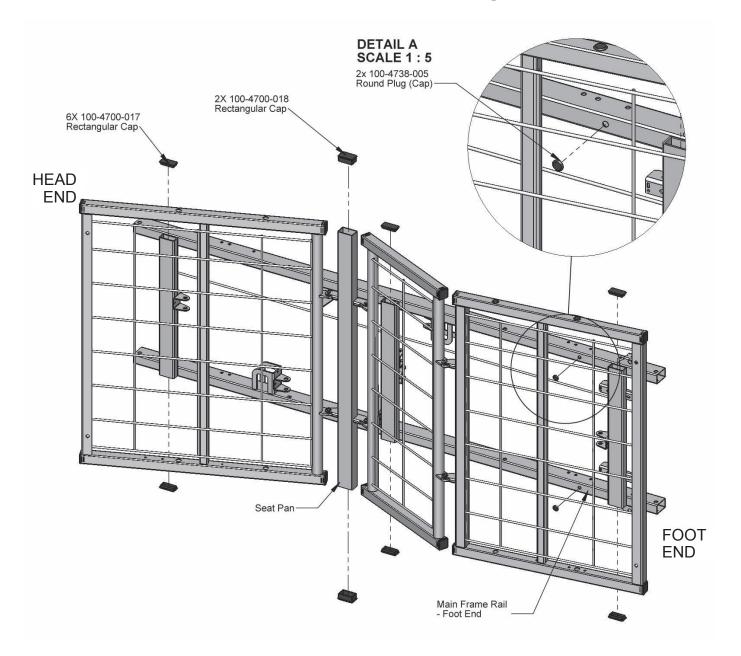


- TO ORDER A REPLACEMENT HEAD DECK USE SERVICE PACK 999-0844-920SP (includes deck, mounting hardware, and installation instruction sheet).
- TO ORDER A REPLACEMENT KNEE DECK USE SERVICE PACK 999-0844-940SP (includes deck, mounting hardware, and installation instruction sheet).
- TO ORDER A REPLACEMENT FOOT DECK USE SERVICE PACK 999-0844-930SP (includes deck, mounting hardware, and installation instruction sheet).

WHEN ORDERING REPLACEMENT PARTS FROM CUSTOMER SERVICE, HAVE THE BED SERIAL NUMBER AVAILABLE TO CONFIRM WHETHER THE PART IS COVERED UNDER WARRANTY. (SEE PAGE 17 FOR LOCATION OF SERIAL NUMBER ID LABEL.)



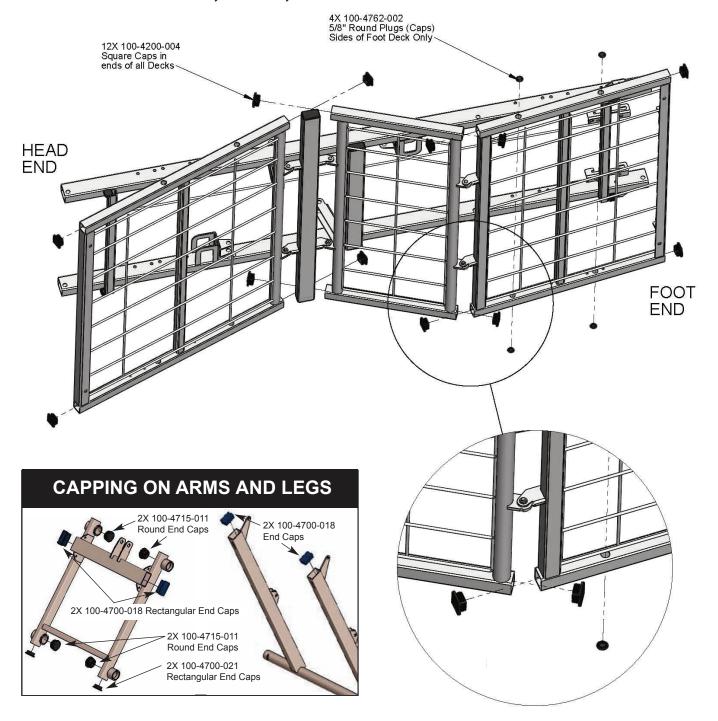
## SERVICE/REPLACEMENT PARTS DIAGRAM - MAIN FRAME CAPPING



CAPS AND PLUGS ARE NOT COVERED UNDER WARRANTY
(PACKS OF 12 CAN BE ORDERED IN THE EVENT YOU DAMAGE OR LOSE
ANY BED CAPS OR PLUGS - SEE BOTTOM OF PAGE 21 FOR ORDER NUMBERS)



## SERVICE/REPLACEMENT PARTS DIAGRAM - HEAD, KNEE, AND FOOT DECK CAPPING



CAPS AND PLUGS ARE NOT COVERED UNDER WARRANTY
(PACKS OF 12 CAN BE ORDERED IN THE EVENT YOU DAMAGE OR LOSE
ANY BED CAPS OR PLUGS - SEE BOTTOM OF PAGE 21 FOR ORDER NUMBERS)



## SECTION F: TROUBLESHOOTING ALL ZENITH 5000 BED MODELS

#### ZENITH 5000 ELECTRONIC TROUBLESHOOTING QUICK REFERENCE

To troubleshoot the Zenith 5000 Series Bed, follow the steps below in the order shown to determine the cause of the problem and appropriate component replacement:

#### HEAD, FOOT, OR HI/LO MOTOR DOES NOT GO UP AND/OR DOWN:

- 1. Verify that there is power in the wall outlet.
- Inspect all cables for pinched or damaged insulation. Check all motor and power cable connections.
- 3. Inspect motor condition inspect for cracked housing, scratches, bent shaft, etc.
- If you have another known good hand control pendant, switch out the pendant and retest all functions. If the problem continues, continue with the Troubleshooting steps below.

## HEAD OR FOOT MOTOR DOES NOT FUNCTION:

- Unplug bed power cord. Switch head and foot motor cable plug positions at control box.
- 2. Plug in bed power cord and retest. If same function does not work, replace that motor.
- If opposite motor now doesn't work, replace control box.



## HEAD AND FOOT DECK FUNCTION PROPERLY, BUT ONE OR BOTH HI/LO MOTORS DOES NOT:

This may occur if for some reason the system has lost the known position of one or both of the HI/LO motors. If so, it will need to be resynchronized to correct it. When this happens, one or both HI/LO motors may run in very small amounts if at all. To correct for lost position:

- 1. Unplug bed power cord for 15 seconds and then plug it back in.
- 2. Press Hand Control Pendant buttons only in the following specific sequence:
  - a. Press and hold the HI/LO DOWN button for 15 seconds. This will put the electronics into *resynchronize* mode.
  - b. Push the HI/LO DOWN button and hold it for 5 seconds; it will likely lower only a small amount.
  - c. Release the HI/LO DOWN button for 5 seconds.
  - d. Press the HI/LO DOWN button again for 5 seconds and repeat at 5 second intervals until HI/LO motors have lowered the bed completely to the lowest position.
  - e. If HI/LO motors do not move, simultaneously press and hold the HI/LO DOWN and FOOT DOWN buttons until HI/LO motors have lowered bed completely to the lowest position.

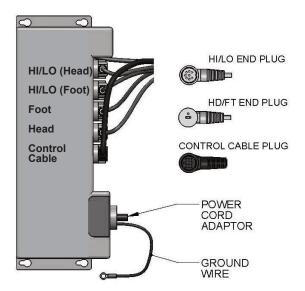
Note that pressing and releasing the buttons too quickly will cause malfunction, and if any other buttons are pressed, the system will leave the resynchronize mode and you will need to start the sequence over.

- 3. Once you believe the bed is all the way down, repeat steps 1 and 2 above.
  - a. If either Hi/LO motor moves, repeat step 2 above until no further movement occurs.

- b. If no further movement occurs, the system should now be back in a known position and the HI/LO UP/DOWN functions should work properly.
- 4. If HI/LO problem still continues:
  - a. Unplug bed power cord.
  - Unplug the two HI/LO Motor Cables at the control box and replug them into the control box opposite their original locations (see control box diagram below for correct plug locations).
  - c. Plug in bed power cord and retest.
- If the same HI/LO motor moves and the other still does not, replace the HI/LO motor that does not move.

If only the opposite HI/LO motor moves, replace the control box. In either case, the HI/LO function will need to be resynchronized when the replacement component has been installed.

If the problem continues, contact Technical Support at 770-368-4700.





#### 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 component is warranted by a third party, 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 to GF's customer service team within the applicable warranty period and which, upon examination by GF or its authorized representative, prove to be a warranty item. This limited warranty is not transferable.

The warranted components and time period are set forth below:

Main Frame and welds: . . . . . . . . fifteen years
Control Box and Actuator Motors: . . . . five years
Hand Control Pendant and Cabling . . . . three years
Headboard and Footboard . . . . . one year
All other durable components not listed above: . . six months

Subsequent service parts under warranty until the original warranty set forth above expires, or for one year, whichever is greater.

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**

This limited warranty shall only apply to defects that are reported to the Distributor from whom the Customer purchased the product within the applicable warranty period. If there is not a Distributor, you must contact GF directly by calling 770-368-4700, sending a fax request to 770-368-2386, or by e-mailing a request to cs@grahamfield.com. Specific directions will be provided by the Customer Service Representative. Failure to abide by the specific directions will result in denial of the warranty claim.

#### **EXCLUSIONS**

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: casters, filters, fuses, gaskets, lubricants, and charts:
- 4) Accessories or parts not provided by GF;
- 5) 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;
- 6) Any labor or shipping charges incurred in the replacement part installation or repair;
- 7) Costs and expenses of regular maintenance and cleaning; and
- 8) 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.

The warranties contained herein 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, contact a GF Customer Service Representative.

#### NOTES:

- 1) Additional terms and conditions may apply.
- 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.

GF Health Products, Inc. 2935 Northeast Parkway Atlanta, GA 30360 Phone 770-368-4700 Fax 770-368-2386 www.grahamfield.com

If you have questions regarding a bed's warranty, contact Basic American Medical Products at 770-368-4700.



## ZENITH SERIES

NOTES:	
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www.grahamfield.com

GF Health Products, Inc. 2935 Northeast Parkway Atlanta, Georgia 30360

Customer Service: phone 770-368-4700, fax 770-368-2386

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