

To avoid personal injury or damage to bed, please 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" & 80" Full Electric with Pedal Lock Caster System & Grid Decks = ZG58174



Basic American Medical Products 336 Trowbridge Drive Fond du Lac, WI 54937

For Zenith 5000 Bed Service Parts please contact our Customer Service Department at 1-800-365-2338

> **GF Health Products, Inc.** 2935A Northwest Parkway Atlanta, GA 30360 www.grahamfield.com

To order a Zenith 5000 Bed please contact a Graham Field Sales Representative at 1-800-554-9215

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.

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





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Consult Accompanying Documents

Safe Working Load

Double Insulated

Protected Grounded Device

Type B Equipment & 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 lbs.



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 when performing any 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 adaptors 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 Pendant Cord 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, rehabilitational 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 <u>evenly distributed over the</u> <u>sleeping surface of the bed</u>. DO NOT allow the patient to lay, sit, or lean in such a way that their entire body weight is placed <u>only</u> 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, storage, and transport within a temperature range of -40° C to $+60^{\circ}$ C. It has a water-resistance rating of IPX6 and <u>IS NOT</u> to be power-washed or submersed.



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, please 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.



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 & 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 <u>www.fda.gov</u>.



Regular maintenance of the Long Term Bed is necessary to ensure continuing proper and safe operation. Please 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		<u> </u>	
Make sure all parts/components are included (Please see "Unpacking The Bed").	Х		
Check all bed components for obvious damage.	Х		
Inspect the power supply cord for any cuts and/or damage.	Х		
Check to see all actuator/motor cords are routed and connected properly to the control box.	Х		
Mechanical Inspection of Assemblies	- 1	1	
Inspect all welds on the sleeping surface, frame, and base assemblies for stress fractures.			Х
Inspect all fasteners for wear and looseness.			Х
IMPORTANT: Lubricate all pivot points, actuator/motor clevis pins, and control arm clevis pins as needed. White Lithium Grease is recommended.			Х
Mechanical Inspection of Casters & Pedal Locking Mechanism	I		
Check the pedal locking mechanism to make sure it engages and disengages properly.		Х	
Check the bottom foot pads on the foot end casters, making sure they are clean of debris and undamaged. Replace if needed.		Х	
Check all casters to ensure that they roll properly and are unobstructed.		Х	
Electrical Inspection of Control Box, Pendant, and Staff Control			
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 pendant cord for any chafing, cuts, or wear.		Х	
Check all 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 cords 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. Please 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 STORAGE AND RFI INFORMATION

Operating Conditions

Operation of the bed is based on the following conditions: Ambient Temperature of $\pm 10^{\circ}$ C to $\pm 40^{\circ}$ C; Relative Humidity of 30% to 75% (Non-condensing); Atmospheric Pressure of 700hPa to 1060hPa; and a Splash Protection of IEC 60529.

Storage

Storage of the bed is based on the following conditions: Ambient Temperature of -10°C to 70°C; Relative Humidity of 10% to 100%; and an Atmospheric Pressure of 500hPa to 1060hPa.

Radio Frequency Interference (RFI)

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.





SECTION A

ZENITH 5000

Bed Set-up Instructions



and connected

properly to the

control box.

ZENITH SERIES

UNPACKING THE BED

- Make sure all parts/components are included.
- · Check all bed components for obvious damage.
- Inspect the Power Supply Cord for any cuts and/ or damage.

· Check to see all actuator/motor cables are routed

2



- 1. Large Foam Block
- 2. Large Cable Tie CUT
- 3. Notched 2 x 4 Board
- 4. Foam Wrapping
- 5. End Caps with Foam
- 6. Notched Leg Foam
- 7. Small Cable Tie CUT 12. Cable Tie on Bundle

<u>KEEP</u>

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

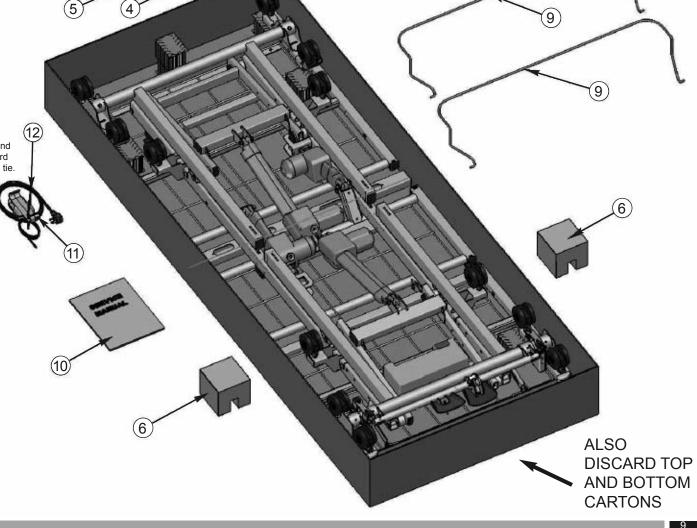
NOTE:

END OF POWER CABLE IS COILED FOR SHIPPING AND TIED, WITH CABLE TIE, TO GRID WIRE ALONG WITH PENDANT, PENDANT CABLE & HOLSTER.

PLEASE CUT AND DISCARD CABLE TIE AROUND CABLES WHEN YOU UN-PACK THE BED.

(12) Cut and

discard cable tie



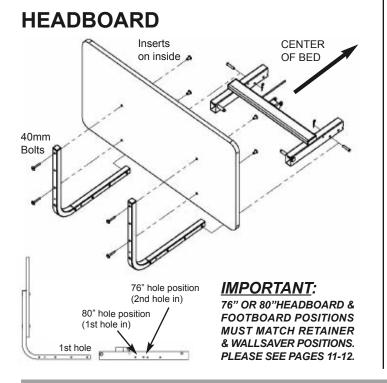




HEAD- AND FOOTBOARD ASSEMBLY

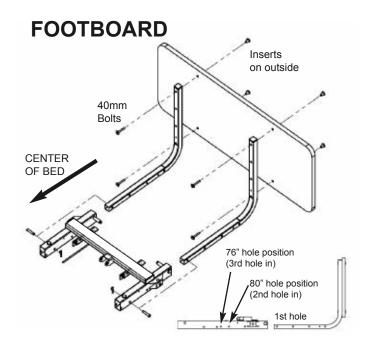
1. HEADBOARD INSTALLATION

- The headboard comes with four pre-installed inserts consider this the <u>inside</u> of the board.
- Position 2 mounting tubes on the outside of the headboard with "L" facing inward.
- Align the top hole of the mounting tubes with the top holes in the headboard.
- Insert a 40mm hex drive bolt through each of the top holes and bottom holes and screw into each insert. Tighten with the Hex Allen wrench included in the kit.
- Slide the "L" portions of the Mounting tubes into the hollow ends of the main frame rails, at the head deck end.
- FOR 80" BEDS: Slide the mounting tubes in until the first tube hole lines up with the first rail hole. See sample below.
- FOR 76" BEDS: Slide the mounting tubes in until the first tube hole lines up with the second rail hole. See sample below.



2. FOOTBOARD INSTALLATION

- The footboard comes with four pre-installed inserts consider this the <u>outside</u> of the board.
- Position 2 mounting tubes on the inside of the footboard with "L" facing outward.
- Align the top hole of the mounting tubes with the top holes in the footboard.
- Insert a 40mm hex drive bolt through each of the top holes and bottom holes and screw into each insert. Tighten with the Hex Allen wrench included in the kit.
- Slide the "L" portions of the Mounting tubes into the hollow ends of the main frame rails, at the foot deck end.
- FOR 80" BEDS: Slide the mounting tubes in until the first tube hole lines up with the second rail hole. See sample below.
- FOR 76" BEDS: Slide the mounting tubes in until the first tube hole lines up with the third rail hole. See sample below.

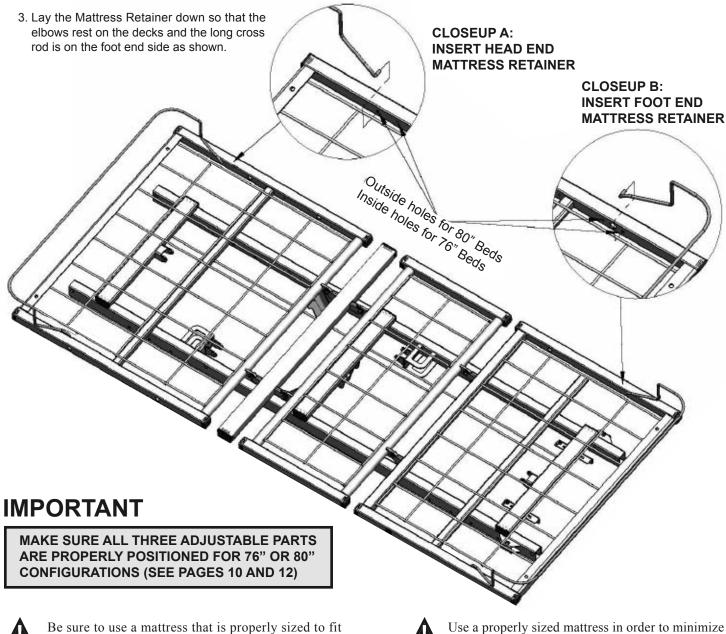


NOTE: The first hole at the foot end is reserved for attaching the Optional 4" pan extension.



STANDARD MATTRESS RETAINER INSTALLATION (Using 2 Retainers 999-0844-124)

- 1. Determine if you need to position your bed in an 80" or 76" configuration (80" outside holes; 76" inside holes see Closeups A & 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 Closeups A & B).
- 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 Closeups A & B).
- 5. 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.



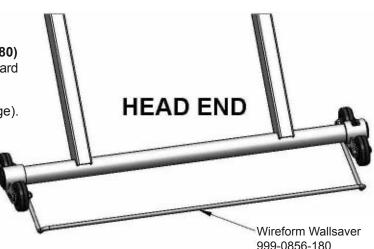
Be sure to use a mattress that is properly sized to fit the sleep deck, which will remain centered on the deck relative to State and Federal Guidelines. Use of an improperly fitted mattress could result in injury or death. Use a properly sized mattress in order to minimize the gap between the side of the mattress and assist devices. This gap must be small enough to prevent resident/patient from getting his/her head or neck caught in this location.



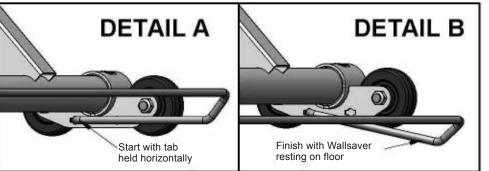
STANDARD WIREFORM WALLSAVER INSTALLATION

WALLSAVER ASSEMBLY

- 1. Position the Wireform Wallsaver (Part 999-0856-180) with bent end facing upward and tab ends facing inward as shown at right.
- 2. Determine the position desired (See bottom of page).
- 3. Gently squeeze the tab ends of the wallsaver inward toward the center of the wallsaver and, holding the tabs parallel with the slots in the caster bases (See DETAIL A), slide the tabs into the slots while letting the wallsaver gently expand outward.
- 4. Turn the wallsaver downward until it rests on the floor (See Detail B).



999-0856-180 Bend faces upward

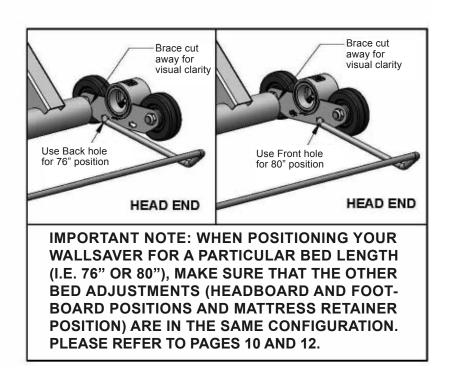


WALLSAVER REMOVAL

- 1. To remove or move the Wireform 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

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





Staff Control

Assembly

FOOT

END

PLUGGING IN THE OPTIONAL FOOTBOARD NURSE/STAFF CONTROL

STEP 1 - ATTACHING THE FOOTBOARD

You can order an optional Staff Control for the Zenith 5000 which includes a Staff Control Assembly and Shroud Cover pre-installed to the Footboard at the manufacturing facility.

Phillips Screws attach Shroud

& Staff Control Assembly from

inside of board

Cable Tie Staff

Control Cables to right Mounting

Shroud (Cable Cover)

Tube

To attach the Footboard assembly (with Staff Control) to the main frame rails, please see the instructions on Page 10 of this manual.

STEP 2 - CONNECTING THE CABLES Please refer to DETAIL A shown below.

- a. At the foot end, unplug the Black Staff Control cable from the end of the Pendant Cable. (Cables were attached for shipping.)
- b. Insert the phone jack plug on the male end of the staff control cable into the cylindrical plug of the Black Control Cable that extends out the foot end. *Make sure the phone jack is positioned properly inside the cable.*
- e. Insert the Pendant Cable plug (*extending out the foot end with phone jack*) into the cylindrical plug of the female staff control cable. *Make sure the phone plug is seated properly inside the female plug.*
- f. Screw on the round lock cap onto the Staff Control's female plug and short Black Control Cable plug. (see DETAIL B).

SEE PAGE 10 OF THIS MANUAL FOR PROPER ASSEMBLY OF ELBOW MOUNTING BRACKETS (TUBES) & FOOTBOARD

Footboard

with cutout

Loop Male Staff Control Cable and cable tie through mounting tube hole with Female Staff Control Cable

> Female end of Staff Control Cable plugs into Pendant Cable

> Pendant Cable at foot end - WHITE (Normally plugged into short, black Control Cable.)

> Male end of Staff Control Cable plugs into short Black Control Cable

Short Black Control Cable running from Control Box



DETAIL B: MAKE SURE LOCK END CAPS ARE SCREWED ON SECURELY

DETAIL A: CLOSEUP OF STAFF CONTROL CABLE CONNECTION



ZENITH 5000 PENDANT/HAND CONTROLLER OPERATION

The hand controller comes standard on the Zenith 5000 series and can be plugged into either side of the bed. The plug features a lock-on cap. A pendant holster for attaching to optional assist devices is also provided.



HAND 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 & FOOT DECK ANGLE UP BUTTON				
6	KNEE & FOOT DECK ANGLE DOWN BUTTON				

Pendant Holster 999-0791-000 comes standard with the Zenith 5000 bed.



HAND PENDANT Part #999-0775-305 (Bed comes shipped with Alligator Clip attached to pendant cable. To order a replacement pendant, please see page 25.) The Pendant cable has a phone jack connector.

NOTE:

THE ZENITH 5000 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).

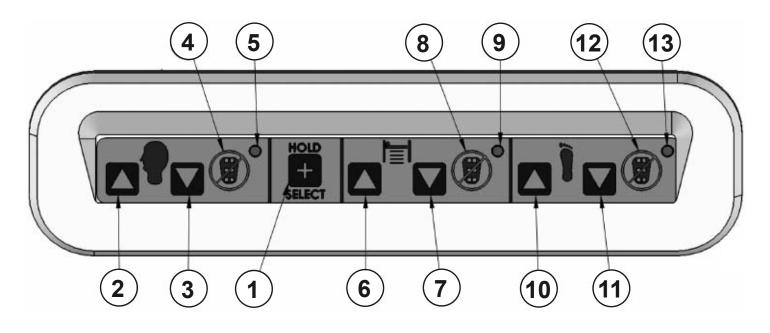
IN ORDER TO MAXIMIZE THE EASE OF USE, AS WELL AS THE LONGEVITY OF THE ZENITH BED, THE MICRO-PROCESSOR CONTROLLED CONTROL SYSTEM MONITORS ALL HANDSET AND NURSE CONTROL INPUTS. IT IS INTENDED FOR USE BY THE PATIENT TO MAXIMIZE COMFORT OR BY THE CAREGIVER FOR REPOSITIONING.

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 CAN WAIT FOR TWO (2) SECONDS BEFORE OPERATING THE BED AGAIN.



BED OPERATIONS FOR OPTIONAL NURSE/STAFF CONTROL PANEL

When you purchase your boards directly from our company, you have the option of ordering a Nurse/Staff Control Assembly which would come pre-installed into the footboard at the manufacturing facility. Operations are listed below.



SELECT/HOLD BUTTON 1 2 HEAD/BACK UP BUTTON 3 HEAD/BACK DOWN BUTTON 4 HEAD/BACK LOCKOUT BUTTON 5 HEAD/BACK LOCKOUT LIGHT HI/LO (HORZ.) UP BUTTON 6 HI/LO (HORZ.) DOWN BUTTON 7 8 HI/LO (HORZ.) LOCKOUT BUTTON 9 HI/LO (HORZ.) LOCKOUT LIGHT 10 FOOT/KNEE UP BUTTON 11 FOOT/KNEE DOWN BUTTON FOOT/KNEE LOCKOUT BUTTON 12 13 FOOT/KNEE LOCKOUT LIGHT

HEAD/BACK FUNCTIONS

- 1. To raise the head/back deck to upright angle press Select #1 & #2
- 2. To lower the head/back deck to horizontal press Select #1 & #3
- 3. To lockout the head/back pendant function press Select #1 & #4 Lockout light #5 will glow.
- 4. To unlock the head/back pendant function press Select #1 & #4 Lockout light #5 will go out.

HI/LO FUNCTIONS

- 5. To raise the bed horizontally (HI/LO Up) press Select #1 & #6
- 6. To lower the bed horizontally (HI/LO Down) press Select #1 & #7
- 7. To lockout the HI/LO pendant function press Select #1 & #8 Lockout light #9 will glow.
- 8. To unlock the head/back pendant function press Select #1 & #8 Lockout light #9 will go out.

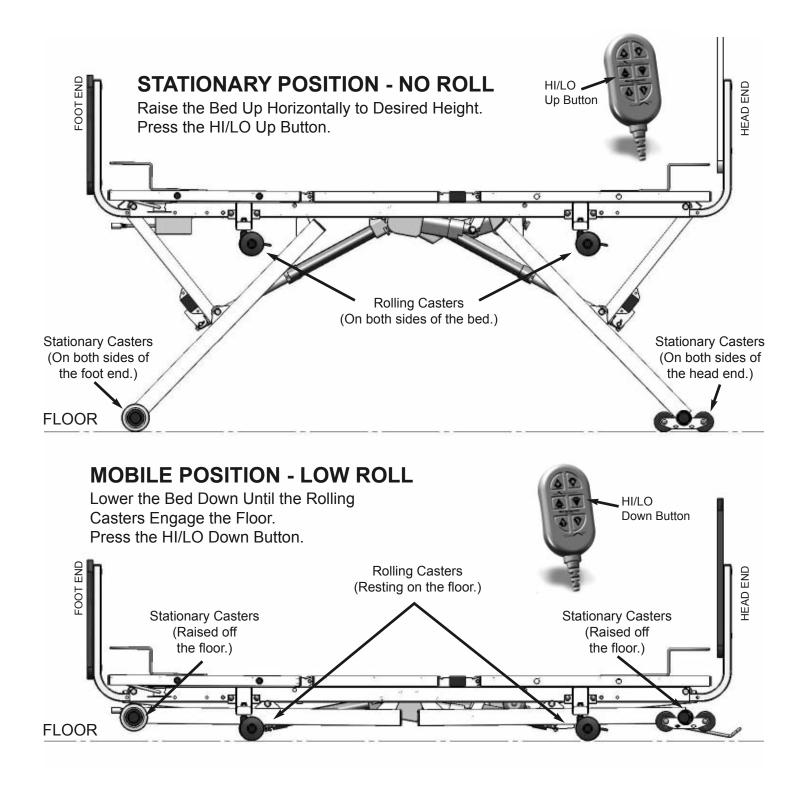
FOOT/KNEE FUNCTIONS

- 9. To raise foot/knee decks to upright angle press Select #1 & #10
- 10.To lower foot/knee decks to horizontal press Select #1 & #11
- 11.To lockout the foot/knee pendant function press Select #1 & #12 Lockout light #13 will glow.
- 12.To unlock the head/back pendant function press Select #1 & #12 Lockout light #13 will go out.



BED OPERATIONS - STATIONARY/LOW ROLL POSITIONING

The Zenith 5000 is sold as a "Low Roll" bed giving 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 wheels raise off the floor and the rolling casters contact the floor surface for easy mobility.







SECTION B

ASSIST DEVICES

Model ZG58174

GF Health Products, Inc. - www.grahamfield.com

Zenith 5000 Service Manual 999-0856-190B - MAY 2013

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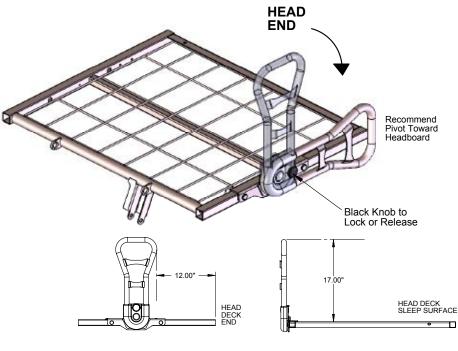
OPTIONAL PIVOT ASSIST BAR INSTALLATION & OPERATION KIT ZA85400 - (Sample shows bar positioned on left side of bed)

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

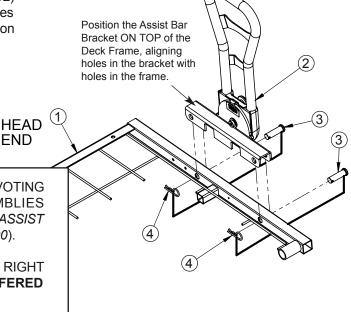
PLEASE ORDER KIT # ZA85400. KIT INCLUDES ONE PIVOTING ASSIST BAR ASSEMBLY AND TWO LANYARD ASSEMBLIES WITH CLEVIS PINS AND HAIR PIN CLIPS. (*A STATIONARY ASSIST BAR IS ALSO AVAILABLE AS AN OPTION - KIT # ZA85000*).

THE ASSIST BAR CAN BE POSITIONED ON EITHER THE RIGHT SIDE OR LEFT SIDE OF THE HEAD DECK. **IT IS NOT OFFERED FOR THE FOOT END OF THE BED**.

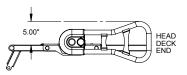
PIVOTING ASSIST BAR OPERATION



FOR OPTIMUM SAFETY, MAKE SURE FINGERS ARE CLEAR OF THE SIDES OR UNDERNEATH THE PIVOTING ASSEMBLY WHEN POSITIONING THE ASSIST BAR UP OR DOWN. PLEASE MAKE SURE THE PIVOTING ASSIST BAR IS ALWAYS IN THE FULL, VERTICAL, LOCKED POSITION WHEN-EVER RESIDENT/PATIENT IS LEFT UNATTENDED.



- 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.
- 2. To set the assist bar back 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 THERA-PEUTIC BENEFITS OUTWEIGH THE RISK OF ENTRAPMENT.

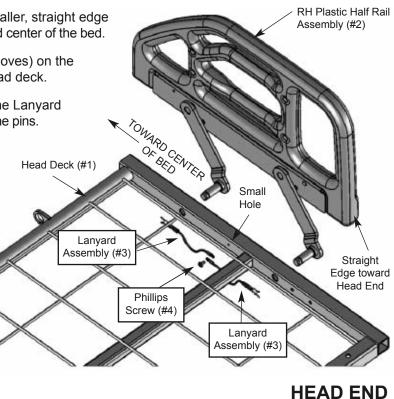


OPTIONAL PLASTIC HALF RAIL INSTALLATION & OPERATION KIT ZA84200 - (Sample shows rail positioned on right side of bed)

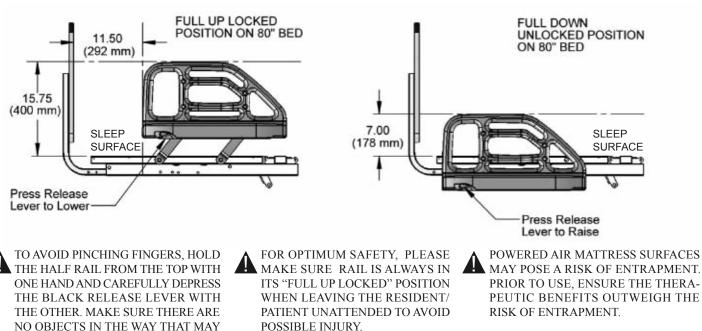
- 1. Position the Plastic Half Rail (#2) as shown, with the taller, straight edge toward the head end of the bed and arms angled toward center of the bed.
- 2. From the outside, insert the two welded pins (with grooves) on the rail arms into the two large holes in the side of the head deck.
- 3. From the inside, insert the metal hair pin clip end of the Lanyard Assembly (#3) onto the exposed grooves at the end of the pins.
- 4. 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 threaded Phillips Screw (#4).

PLEASE ORDER PLASTIC RAIL KIT #ZA84200, WHICH INCLUDES A RIGHT-HAND AND LEFT-HAND HALF RAIL, FOUR LANYARD ASSEMBLIES, AND 2 PHILLIPS SCREWS (OR 2 OPTIONAL HEX HEAD SCREWS). ORDER BAG # 999-0842-905 FOR JUST THE REPLACEMENT HARDWARE.

THE PLASTIC RAIL CAN BE POSITIONED ON EITHER THE HEAD OR FOOT DECKS FOR 80" BEDS. THEY SHOULD ONLY BE PUT ON THE HEAD END FOR 76" BEDS.



PLASTIC HALF RAIL OPERATION

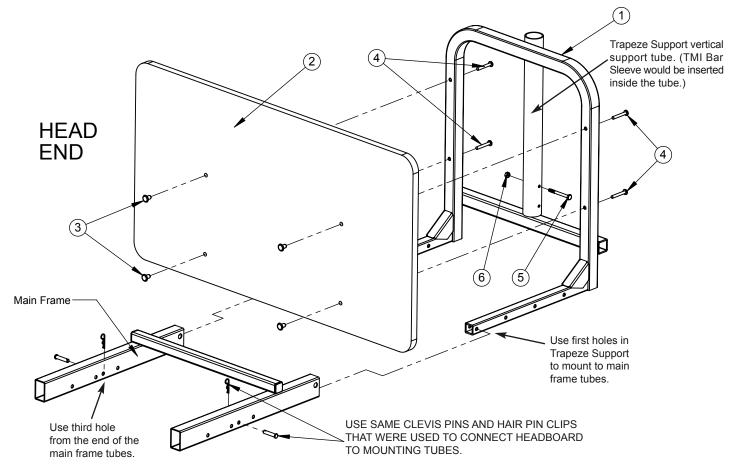


THE RAIL.

HINDER THE FULL MOVEMENT OF



OPTIONAL TRAPEZE SUPPORT INSTALLATION (The Trapeze Support is attached to the head section of the bed.) Please Order Kit Number ZA79000



- Begin by removing 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 Allen Head Bolts that hold the board to the tubes (these will be replaced with the longer Phillips Head Pan Screws from the trapeze adaptor hardware bag). Do not remove the (4) four 1/4-20 inserts (#3) from the board. They will be used again 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 holes in the Trapeze tubes must line up with the third hole from the end in the main frame tubes as shown.

- Insert the 1/4-20 x 2.50" Carriage Bolt (#5) into the vertical support as shown and fasten with a 1/4-20 Hex Head 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.
- 6. OPTIONAL FOR TMI TRAPEZE BAR WITH SLEEVE: Insert the Sleeve into the vertical support with the slot on the bottom. Rotate the sleeve until it falls into place over the carriage bolt you inserted in Step 4. This will lock it into the proper position. (NOTE: The top of the Sleeve should sit flush with the top of the vertical support on the Trapeze Support Adaptor.)



SECTION C

Mechanical & Electrical Information



ZENITH 5000 MECHANICS

NOTE: All dimensions are in a range of +/- .25 inches

• Overall Bed Length (with brds & wallsaver) 82"/86"
• Overall Bed Width (with boards) 36.00"
• Maximum Height* 30.00"
• Minimum Height* 8.00"
• Maximum Head/Back Deck Angle
• Maximum Knee/Foot Deck Angle
 Maximum Safe Working Load
• Mass of bed (without assist devices or boards) = 204 lbs.

* Bed height calculated from floor surface to top of sleep deck.

ZENITH 5000 ELECTRICAL

TYPICAL ZENITH 5000 BED IDENTIFICATION LABELS with Grounded Electrical Cable

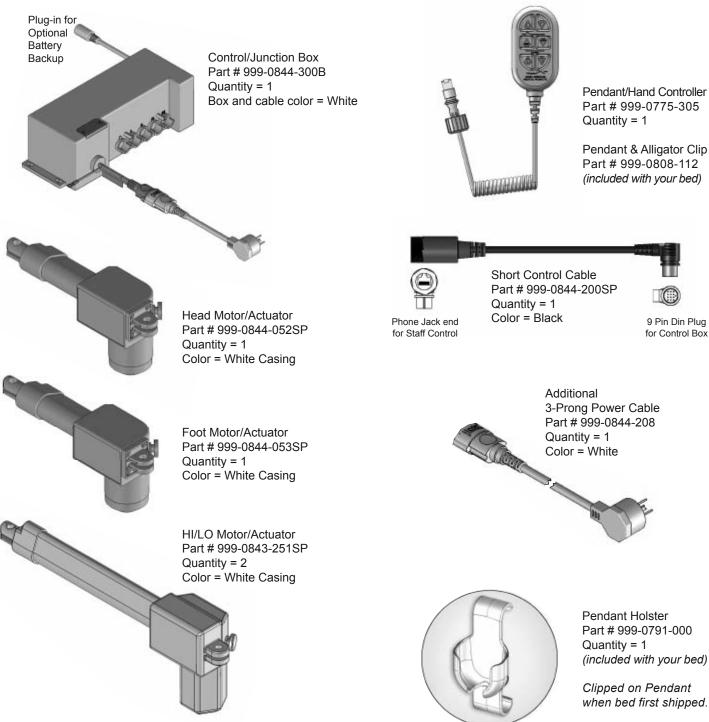


Bed labels are an important part of identifying the bed's make and model when ordering replacement parts. The Serial Number is essential if you are claiming parts or service under warranty. These helpful labels can be located on the main frame rails, immediately below the sleep decks on either side of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

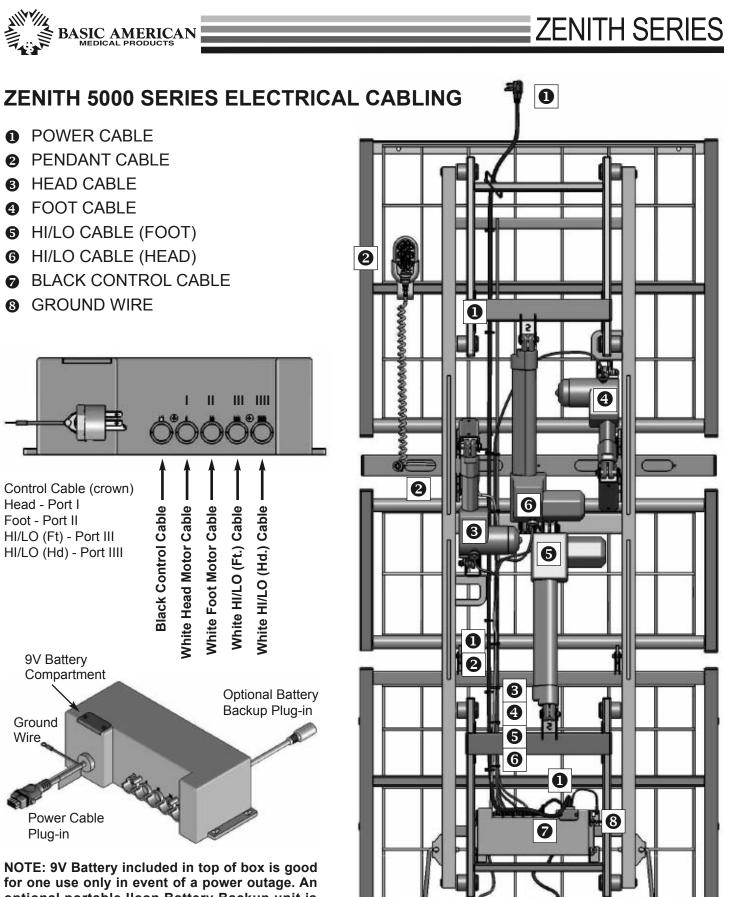
Please have this IMPORTANT information ready when calling our customer service or technical support staff at 800-365-2338; it will allow us to better assist you and quickly answer your questions and concerns.



ZENITH 5000 SERIES ELECTRICAL COMPONENTS



DO NOT use unauthorized parts, accessories, or adaptors 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 when performing any maintenance on the bed.



for one use only in event of a power outage. An optional portable llcon Battery Backup unit is recommended for longer periods where power is not available. Contact your sales representative for more information.

24



SECTION D

SERVICE/REPLACEMENT PARTS



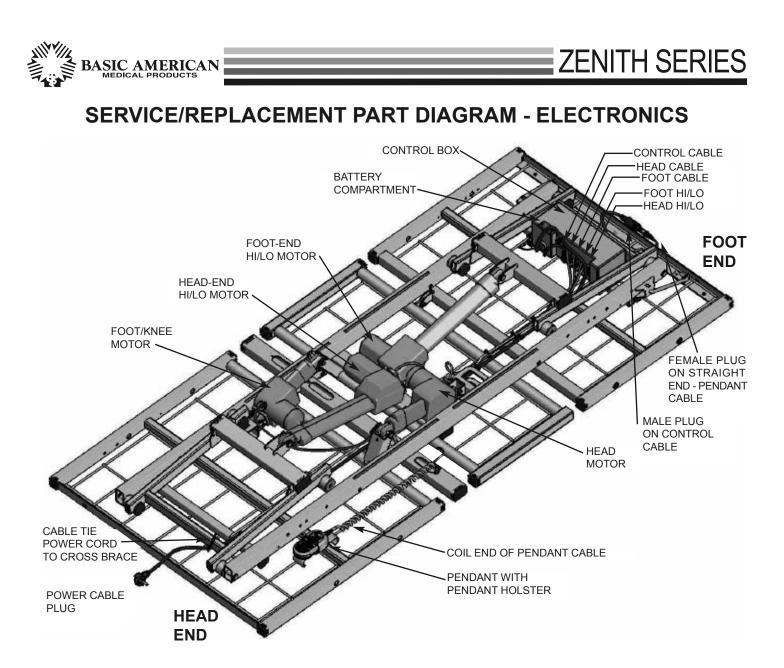
SERVICE/REPLACEMENT PART RECORD (Page 1)

		DECKING			
Part Number		Description	QTY	Order Date	Price
999-0844-920SP	Head	d/Back Deck & Hardware Pack	1 Deck		
999-0844-930SP	OR	- Foot Deck & Hardware Pack	1 Deck		
999-0844-940SP	OR -	- Knee Deck & Hardware Pack	1 Deck		
	Deck H	lardware 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)			
F	1	Installation Instruction Sheet			
		MOTORS (ACTUATORS	5)		
Part Number		Description	QTY	Order Date	Price
999-0843-251SP	HI/LO Moto	or (Cable attached) & Hardware Pack	1 Motor		
999-0844-052SP	OR - Head M	otor (Cable attached) & Hardware Pack	1 Motor		
999-0844-053SP	OR - Foot Mo	otor (Cable attached) & Hardware Pack	1 Motor		
	Motor	Hardware Pack- INCLUDES	1 Pkg		
	2	12mm Retaining Rings			
Soporato	2	Hair Pin Clips			
Separate Hardware Pack	2	Snap Rings			
999-0844-991	8	Standard Cable Ties			
-	1	Installation Instruction Sheet			
		CONTROL BOX & POWER CA	ABLES		
Part Number		Description	QTY	Order Date	Price
999-0844-300SP	Linak Control E	Box Service Pack (includes control cable)	1 Kit		
	Se	rvice Pack - INCLUDES			
	1	Adaptor Control Cable 999-0844-200			
Separate	1	Ground Screw			
Hardware Pack - 999-0844-992	8	Standard Cable Ties			
	1	Installation Instruction Sheet			
999-0844-300b	Linak (Control Box (includes 9V battery)	1 Box		
999-0844-208	Detach	nable Ilcon 3-Prong Power Cable	1 Cable		



SERVICE/REPLACEMENT PART RECORD (Page 2)

		PENDANT/HAND CONTRO	LLER		
Part Number		Description	QTY	Order Date	Price
999-0808-305	Penda	ant/Hand Controller (Std. Model)	1 Pendant		
999-0791-000	Penda	int Holster (Std. for all pendants)	1 Holster		
		SHORT BLACK CONTROL	CABLE		
Part Number		Description	QTY	Order Date	Price
999-0844-200SP	Black Control Cable Kit				
	Control C	able Service Pack - INCLUDES	1 Pkg		
No Separate	2	Standard Cable Ties			
Hardware Pack	1	Installation Instruction Sheet	1		
		STAFF CONTROL			
Part Number		Description	QTY	Order Date	Price
999-0775-901	Sw	itch Pad with Bezel & Cables	1 Unit		
ZL788000	Staff Con	trol Service Pack - INCLUDES	1 Pkg		
	1	Switch Pad with Bezel & Cables			
PLEASE SEE PAGE 13	1	Shroud (Cable Cover)			
FOR	6	#6 Phillips Head Truss Screws			
INSTALLATION INSTRUCTIONS	3	4" Nylon Cable Tie			
	1	Installation Instruction Sheet			
		CAPS & PLUGS			
Part Number		Description	QTY	Order Date	Price
	NOTE	: CAPS & PLUGS CAN ONLY BE PURCHA	SED IN SETS	OF 12	
100-4200-004PK	1.25	5" 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" 2	k 2.00" Rectangular Caps Pack	12/pkg		
100-4700-021PK	.75" x	1.50" Rectangular Caps Pack	12/pkg		
100-4700-018PK	1.25" 2	x 2.00" Rectangular Caps Pack	12/pkg		
100-4715-011PK	1.50" Round	End Caps Pack (cover arm bearings)	12/pkg		
999-0775-001PK	Half Mod	on End Caps Pack (caster bases)	12/pkg		
100-4762-002PK	5/8" Round	Plugs Pack (both sides of foot deck)	12/pkg		
100-4738-005PK3/8" Round Plugs (on main frame rails - foot end)			12/pkg		
	FOR G	ENERAL CAP/PLUG DIAGRAMS PLEASE	SEE PAGES 3	32 & 33	

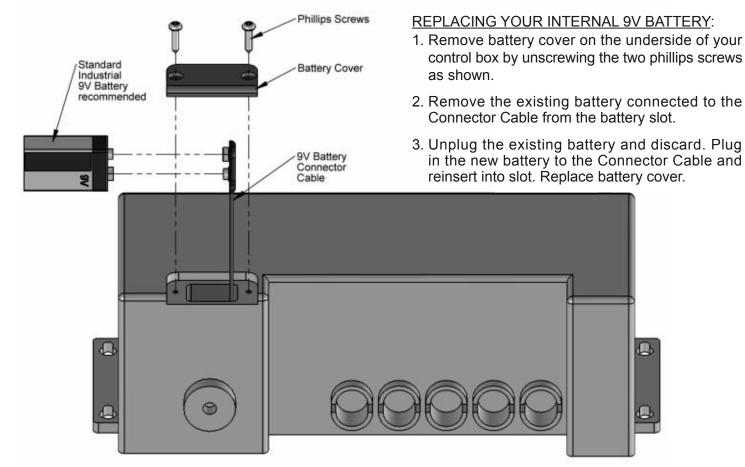


- 1. TO ORDER A REPLACEMENT HI/LO MOTOR USE SERVICE PACK 999-0843-251SP (Includes motor, mounting hardware & installation instruction sheet).
- 4. TO ORDER A REPLACEMENT CONTROL BOX PLEASE USE 999-0844-300B (Includes control box, detachable power cord, control cable, ground wire screw, cable ties, &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

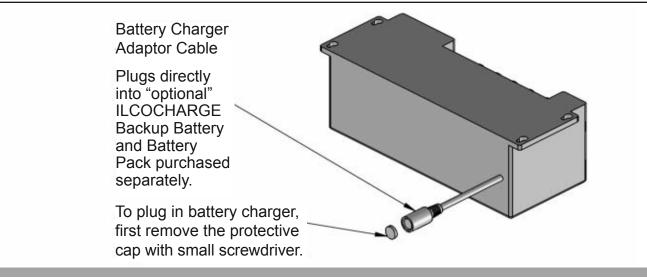
WHEN ORDERING REPLACEMENT PARTS WITH CUSTOMER SERVICE, PLEASE HAVE THE BED SERIAL NUMBER AVAILABLE TO CONFIRM WHETHER THE PART IS COVERED UNDER WARRANTY. (SEE PAGE 22 FOR LOCATION OF SERIAL NUMBER ID LABEL.)



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



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





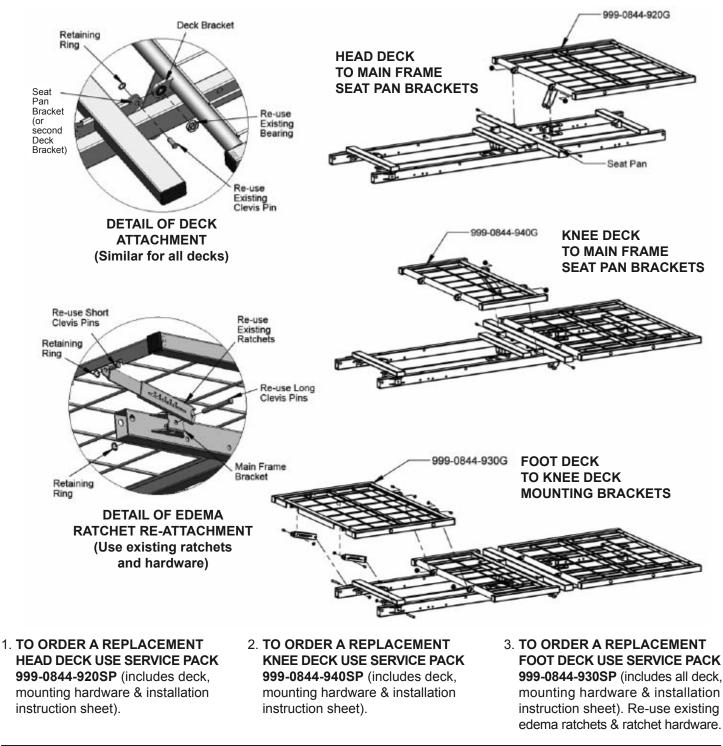
SECTION E

FRAMING SERVICE PARTS

For All Zenith 5000 Bed Models



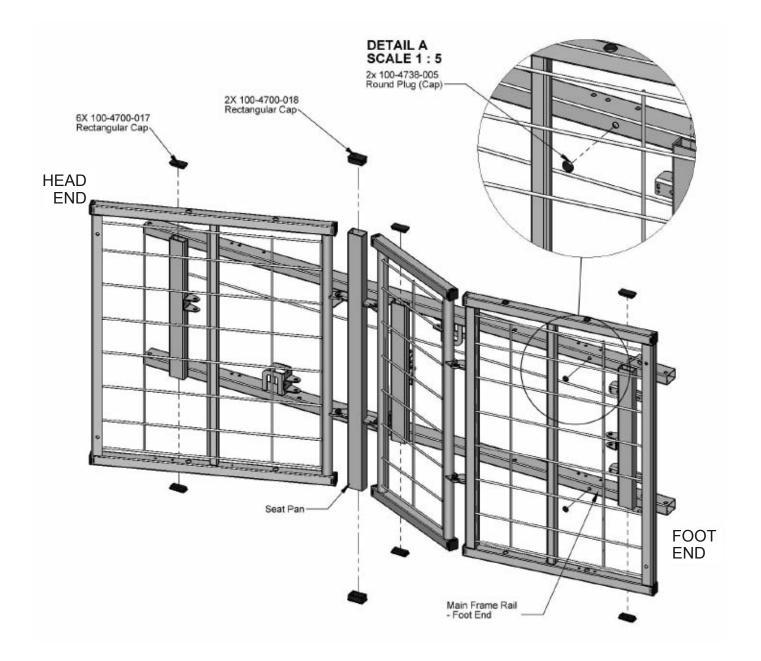
SERVICE/REPLACEMENT PART DIAGRAM - DECKING



WHEN ORDERING REPLACEMENT PARTS WITH CUSTOMER SERVICE, PLEASE HAVE THE BED SERIAL NUMBER AVAILABLE TO CONFIRM WHETHER THE PART IS COVERED UNDER WARRANTY. (SEE PAGE 22 FOR LOCATION OF SERIAL NUMBER ID LABEL.)



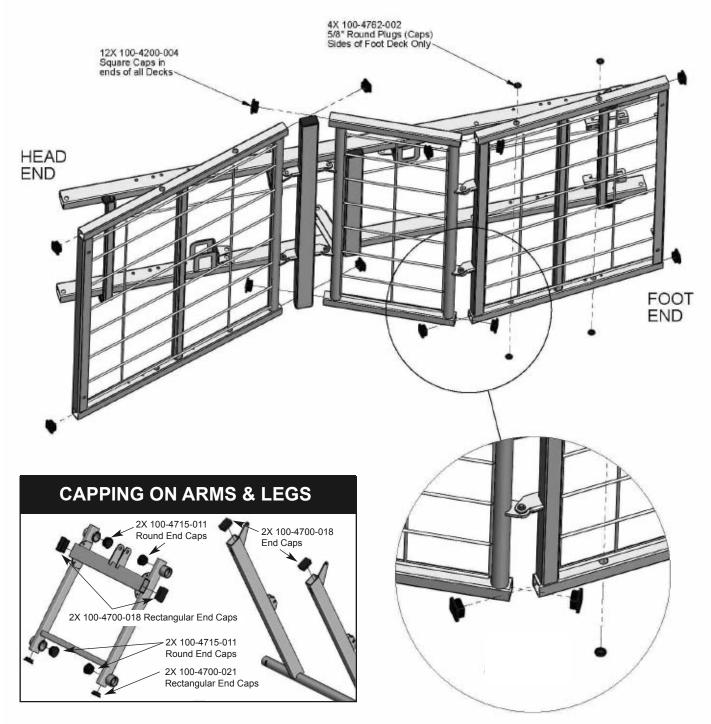
SERVICE/REPLACEMENT PART DIAGRAM -MAIN FRAME CAPPING



CAPS OR PLUGS ARE NOT COVERED UNDER WARRANTY (PACKS OF 12 CAN BE ORDERED IN THE EVENT YOU DAMAGE OR LOSE ANY CAPS/PLUGS ON THE BED - SEE BOTTOM OF PAGE 27 FOR ORDER NUMBERS)



SERVICE/REPLACEMENT PART DIAGRAM -CAPPING ON HEAD, KNEE, AND FOOT DECKS



CAPS OR PLUGS ARE NOT COVERED UNDER WARRANTY (PACKS OF 12 CAN BE ORDERED IN THE EVENT YOU DAMAGE OR LOSE ANY CAPS/PLUGS ON THE BED - SEE BOTTOM OF PAGE 27 FOR ORDER NUMBERS)





SECTION E

TROUBLESHOOTING All ZENITH 5000 Models

GF Health Products, Inc. - www.grahamfield.com



ZENITH 5000 ELECTRONIC TROUBLESHOOTING QUICK REFERENCE

The Zenith 5000 Series beds use a 4-motor system with ILCON electronics.

NO POWER

- 1. Check Outlet.
- 2. Unplug Power Cord and Check following . . .
 - a. Check Power Cord for damage or pinching.
 - b. Check short black, Control Box Cable for damage or pinching.
 - c. If any cables are damaged, replace immediately.

PENDANT NOT WORKING (BUT STAFF CONTROL WORKS)

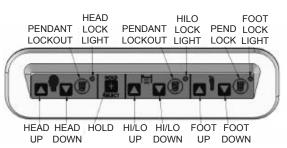
- 1. Are functions locked out on Staff Control?
- 2. Check all Pendant and T-Cable connections.
- 3. Unplug Power Cord.
- 4. Unplug Hand Pendant from T-Cable.
- 5. Plug Hand Pendant directly into short, black Control Box Cable and test.
 - a. If Pendant works, replace T-Cable.
 - b. If Pendant does not work, unplug from short, black Control Cable; unplug short, black Control Cable from Control Box; replug Pendant directly into the Control Box. Replug Power Cord and test.
 - c. If Pendant works from the Control Box, replace the Control Cable. (Please refer to page 27 in this Service Manual for replacement part #.)

6.6



STAFF CONTROL NOT WORKING (LIGHTS BLINKING)

- 1. Check all Staff Control connections.
- 2. Unplug Power Cord.
- 3. Unplug Staff Control Cable from short, black Control Box Cable.
- 4. Unplug Hand Pendant from T-Cable.
- 5. Plug Hand Pendant directly into short, black Control Box Cable and test.
 - a. If Pendant works, replace Staff Control Assembly. (Please *refer to page 27 in this Service Manual for replacement part #.*)
 - b. If Pendant does not work, unplug from short, black Control Cable; unplug short, black Control Cable from Control Box; and replug the Pendant directly into the Control Box and test.
 - c. If Pendant works from the Control Box, replace the short, black Control Box Cable. (Please *refer to Page 27 in this Service Manual for replacement part #.*)





ALWAYS UNPLUG THE POWER CORD BEFORE DOING ANY ELECTRICAL WORK ON THE BED. IF 3-PRONG POWER CORD IS DAMAGED, REPLACE IMMEDIATELY!



ZENITH 5000 ELECTRONIC TROUBLESHOOTING QUICK REFERENCE

HEAD OR FOOT MOTOR MALFUNCTIONING (DECK DOES NOT GO UP AND/OR DOWN)

- 1. Check All Motor Cable Connections.
- 2. Check Motor Condition Cracked Housing, Scratches, Bent Shaft, etc.
- 3. Is Function Locked Out on Staff Control?
- 4. HI/LO & Foot Works, But Head Does Not . . .
 - a. Unplug Power Cord.
 - b. Remove Cord Guard at Control Box.
 - c. Switch Head & Foot Motor Cables at the Control Box.
 - d. Replug Power Cord and Test.
- 5. HI/LO & Head Works, But Foot Does Not . . .
 - a. Unplug Power Cord.
 - b. Remove Cord Guard at Control Box.
 - c. Switch Foot & Head Motor Cables at the Control Box.
 - d. Replug Power Cord and Test.
- 6. Motor Grinding Loudly Replace Motor.

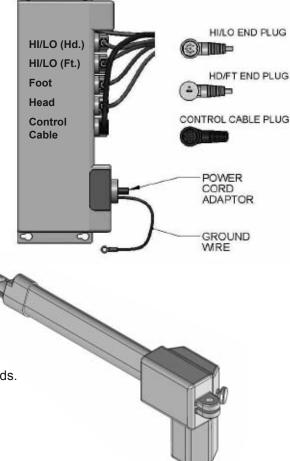


HI/LO MOTOR MALFUNCTIONING (ENTIRE BED DOES NOT GO UP AND/OR DOWN)

- 1. Check All Motor Cable Connections.
- 2. Check Motor Condition Cracked Housing, Scratches, Bent Shaft, etc.
- 3. Is Function Locked Out on Staff Control?
- 4. Head & Foot Motor Works, But HI/LO Does Not . . .
- a. Unplug Power Cord.
 - b. Remove Cord Guard at Control Box.
 - c. Switch HI/LO Cables at the Control Box.
 - d. Replug Power Cord and Test.
- 5. HI/LO Motors Need to be Re-aligned (Power Surge, Outage,

or Replacement) . . .

- a. Unplug Power Cord.
- b. Remove Cord Guard at Control Box.
- c. Unplug short, black Control Cable from Control Box (leave staff control attached).
- d. Unplug Pendant from T-Cable.
- e. Plug Pendant directly into Control Box Port.
- f. Replug Power Cord.
- g. Press the HI/LO Down button until the bed is all the way down (may take a number of attempts).
- h. Once down, press and hold the Down HI/LO button for 15-20 seconds.
- i. Test Up and Down Functions (repeat steps g & h if necessary).
- j. Unplug Power Plug and replug Pendant into T-Cable and Control Cable into Control Box.
- k. Replug Power Cord and test.





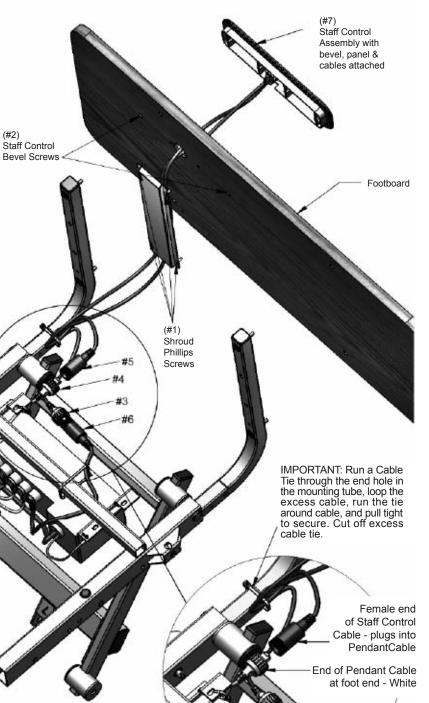
TROUBLESHOOTING/REPLACING THE STAFF CONTROL

1. REMOVING AND REPLACING THE STAFF CONTROL ASSEMBLY

- a. UNPLUG THE POWER CORD FROM THE WALL OUTLET.
- b. Unscrew the four Phillips Screws (#1) that attach the Shroud (cable cover) to the footboard and set aside.
- c. At the foot end of the bed, unscrew the retaining cap connecting the Pendant Cable (#4) to the first Staff Control Cable (#5) and unplug the two cables.
- d. At the foot end of the bed, unscrew the retaining cap connecting the short, black Control Cable (#6) to the second Staff Control Cable (#3) and unplug the two cables.
- e. Unscrew the two remaining Phillips Screws (#2) from the inside of the footboard that attach the Staff Control Assembly bevel to the board. Set aside screws for later re-assembly.
- f. Remove the OLD Staff Control Assembly and feed the old cables out through the large hole.
- g. Feed the cables of the NEW Staff Control Assembly from the outside through the large hole and insert the bevel into the cutout on the outside of the footboard.
- h. Secure the Staff Control by re-inserting the two Phillips Screws (#2) you removed in Step (e).
- Re-position the Shroud on the inside of the footboard and secure with the four Phillips Screws (#1) you removed in Step (b).
- j. Plug the Pendant Cable (#4) into the Staff Control Cable (#5) and the Control Cable (#6) into the Staff Control Cable (#3) making sure the phone jack plugs are seated correctly into the Staff Control Cable plugs. Screw on the retaining caps to secure.

IMPORTANT:

Run a Cable Tie through the large end hole on the right-hand footboard mounting tube. Loop the excess Staff Control Cable. Run the cable tie around the cable and pull tight to secure. Cut off any excess Cable Tie.



Male end of Staff Control Cable - plugs into short Black Control Cable

> Short Black Control Cable running from Control Box

CABLE CONNECTION CLOSEUP

BASIC AMERICAN MEDICAL PRODUCTS	
NOTES:	

GF Health Products, Inc. - www.grahamfield.com



LONG TERM CARE BEDS LIMITED WARRANTY

Products manufactured by Basic American Medical Products are warranted to the original purchaser to be free of defects in material and workmanship for the warranty period listed below commencing from the date of shipment.

	Zenith9000 APS*	Zenith9000* Zenith7000* Zenith5000*	Matrix II	Liberty	Eze-Lok	Flex	Bariatric
Frame	15 years	15 years	15 years	15 years	15 years	15 years	15 years
Motors and Control Box	5 years	5 years	3 years	3 years	n/a	n/a	2 years
Non-specified electronics	3 years	3 years	3 years	3 years	n/a	n/a	2 years
Bed mounted accessories and unspecified components	2 years	2 years	2 years	2 years	2 years	2 years	2 years
Headboards and Footboards	1 year	1 year	1 year	1 year	1 year	1 year	1 year

February 2013

* includes all 230V and Slide-Wide bed models

- This warranty does not apply to damage resulting from abuse, accident, negligence, misuse, unsuitable environmental conditions, improper cleaning, or caused by unauthorized alteration, repair, maintenance, assembly, or installation.
- The beds should be used only for their intended purpose and maintained according to the service manual provided with the bed.
- Basic American's liability shall not exceed the original purchase price.
- Any repair work or replacement shall not exceed the warranty duration.
- Basic American Medical Products will, at its option, repair or replace defective product or parts, provided that the replacement or return has been previously authorized by Basic American or one of its divisions under the terms of this warranty.

If you have questions regarding a bed's warranty, please contact Basic American Medical Products at 1-800-365-2338.



336 Trowbridge Dr. • Fond du Lac, WI 54937 Customer Service: 1.800.365.2338 • Fax: 920.929.8213 www.grahamfield.com

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