

# ConvaQuip Bariatric Bed

ALL Models: 5500B, 5500VB and 5500SVB Series

## Owner's Operation Manual



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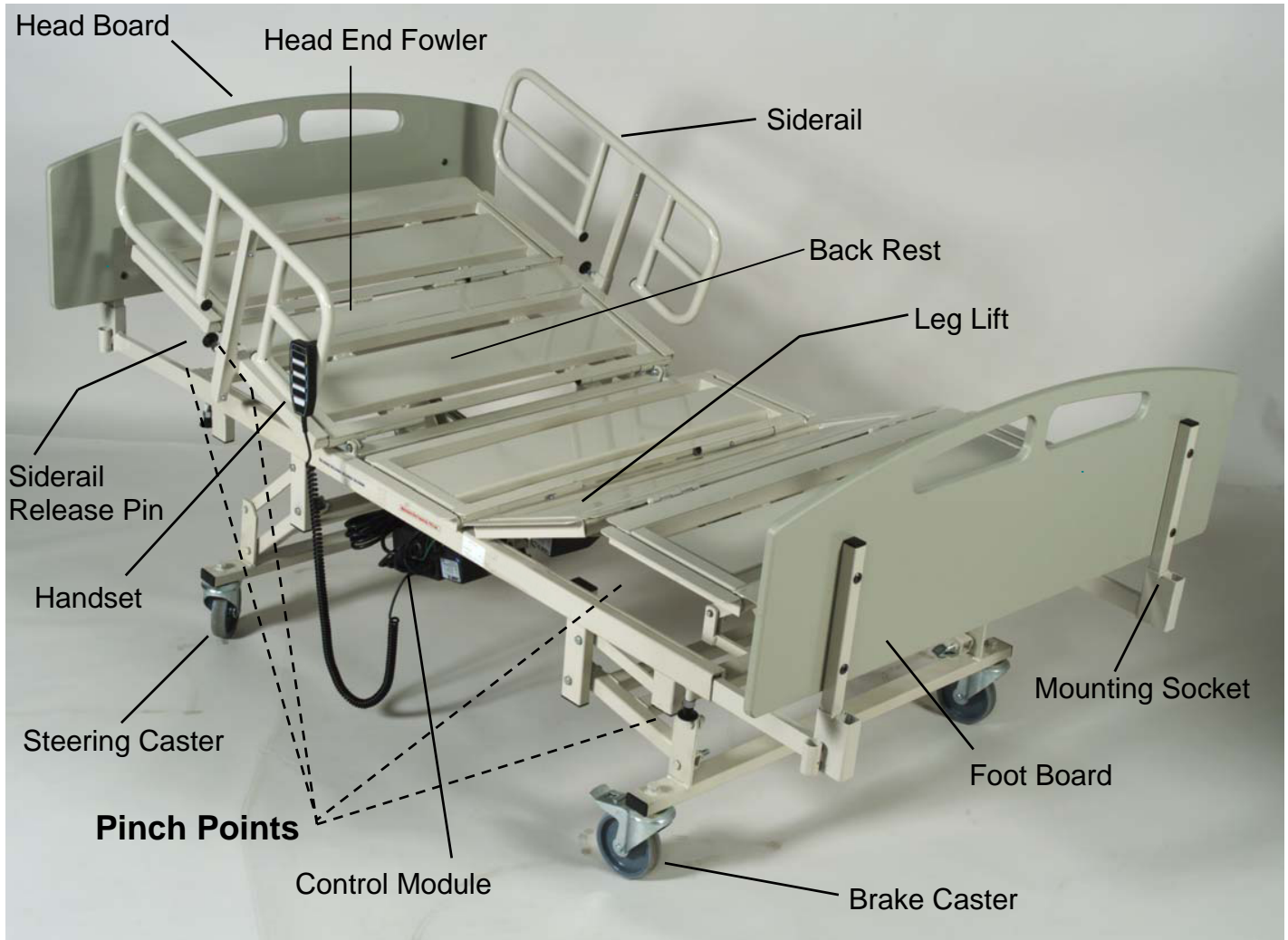
# BARIATRIC BED

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# BARIATRIC BED

## Parts List



### Warning, Pinch points

Keep fingers, arms, legs, and objects clear of bed when any mechanism is in motion. Make sure all persons and objects are clear of the bed when raising or lowering.



## Safety Notes



### Warnings and Cautions

You must heed the following warnings and cautions. Failure to observe these safety precautions may result in personal injury or mechanical failure. Read all instructions carefully before using the bed.

- Always raise the side rails whenever the patient is lying on the bed in the supine position.
- Always raise the side rails whenever the patient is lying on the bed in the supine position
- Always lock all casters and align parallel to the patient before use. (see pg 14)
- Take special care to lock the casters securely when reclining or inclining the bed or when transferring the patient to or from the bed.
- Place bed in level position when transferring the patient to or from the bed.
- Do not confuse the head end and foot end of the bed when placing the patient in the supine position.
- The mattress should be sufficiently wide enough to prevent any part of the patient's body from falling between the side rails and the mattress.
- **Make sure all persons and objects are clear of the bed when raising or lowering the bed. Do not place arms or head into frame while operating.**
- **Moving parts. Watch for pinch points. Keep fingers, arms, legs, and objects clear of bed when any mechanism is in motion.**
- Keep all objects out from under the bed. Certain parts under the bed raise and lower when the bed is in motion. Make sure there is nothing under the bed to interfere with proper bed operations.
- Do not allow the patient to sit on the bed when it is in the highest position. Lower the bed to the lowest position before allowing patient to sit on the bed.
- The Trendelenburg position should only be attempted when the patient has been secured in the bed with both side rails up.
- Do not move the bed using the side rails. Use the provided slots in the Head board and Foot board if two people are moving the patient. Use the provided slots in the Foot board (when the steering castors are locked properly) if one person is moving the patient. (see pg 12)

## Safety Notes



### Warnings and Cautions

You must heed the following warnings and cautions. Failure to observe these safety precautions may result in personal injury or mechanical failure. Read all instructions carefully before using the bed.

**Weight Limit:** Never exceed the weight limit of your bed (combined weight of user and items on bed.) Exceeding weight limit may cause bed to fail. The capacity is on the head end Fowler's label and on the serial number label.

- **Power Requirements:** Electrical hazard may occur if device is plugged into inadequate power supply. A power source of 110 to 120 VAC 50 to 60 Hertz with a capacity of at least 15 Amperes must be available to operate the bed. A three wire grounded receptacle must be supplied. AGFCI is recommended. (Max Current Drawn by the bed is 9 Amperes)
- **Battery Back-up:** The systems battery automatically charges when the power cord is plugged into an electric outlet. If electrical power is lost, the battery maintains a charge to allow the bed to be operated. However, if the power is off and the bed is operated for an extended time, the battery will lose its charge, the actuators will not function and the bed cannot be raised or lowered
- Do not service this device without first unplugging the power cord and battery. Caution: Bed sections can move even with power cord unplugged, because of backup battery
- Make sure the control module and the handset cords are properly positioned before operating the bed. Do not allow either of these cords to get caught in the moving members of the bed
- Do not operate this device if the power cord or any of the cords between the control module and the associated parts are cut, frayed for loosely connected
- Do not use a bed with any missing or damaged parts

Never disassemble or remodel your Bariatric bed. If problems are found, contact ConvaQuip customer service at 1-800-637-8436 or your local authorized ConvaQuip dealer.

# BARIATRIC BED

## Intended Use & Product Description

**3-Function & 5-Function Beds** are designed for bariatric patients. The bed is ideal for short term use in clinics, hospitals, and rehab centers; and long term use in nursing care centers. It is intended for all age groups with varying medical and physical conditions. Total weight capacity of the bed is shown on page 18.

### THREE 3-FUNCTIONS

1) Raise and lower head    2) Lift and lower leg and foot section    3) Elevate bed height

### FIVE 5-FUNCTIONS

1) Raise and lower head    2) Lift and lower leg and foot section    3) Elevate bed height  
4) Trendelenburg    5) Reverse trendelenburg

Note: Cardiochair positioning attainable by pressing head and foot raise buttons simultaneously, then, reverse trendelenburg button to lower the foot end of the bed.

- Power functions are powered by 24-volt DC electric actuators.
- Electrical Power: 115 volt AC power transformer converts system to 24-volt DC. Electrical actuators, handset, transformer, and battery backup meet CE, UL, ETL & CSA listing.
- Power plug: Three-prong hospital type plug, grounding meets NFPA standards.
- Construction: Constructed entirely of steel, solid frame, powder coat painted.
- Frame: Expandable frame allows the bed to accommodate either 39 inch, 48 inch or 54" wide support surfaces. The bed surface adjusts to allow it to fit through a 42-inch door opening. (on width expandable beds)
- Side Rails: Head end, three position, drop down style.
- Foot End Side Rails (optional): three position, drop down style.
- Casters: Heavy Duty Five (5) inch casters. Two individual locking-type (foot end) and two steer type (head end)
- Accessory sockets: One IV socket and one square socket on each corner of bed.
- Trapeze (optional): 500 lb capacity, mounts to head and foot end of bed.
- Weigh Scale (optional): 1000 lb capacity
- Delivery: Bed will collapse to about 62" long x 39" wide (on solid frame width expandable models)

# BARIATRIC BED

## Function & Basic Operation

The **Three-Function Bed** has electric drive actuators to operate the back rest, the leg lift, and to raise and lower the bed. To control the positioning on these beds use the 6-button, 3-function handset, part number HB43 (not shown). These beds do not have the trendelenburg or reverse trendelenburg feature.

The **Five-Function Bed** has electric drive actuators to operate the back rest, the leg lift, raise and lower the bed, and to operate the trendelenburg / reverse trendelenburg feature. To control the positioning on these beds use the 8-button, 5-function handset, part number HB44, (shown below).

Supplied with each bed is a battery that can be used to adjust the bed in case of power failure.

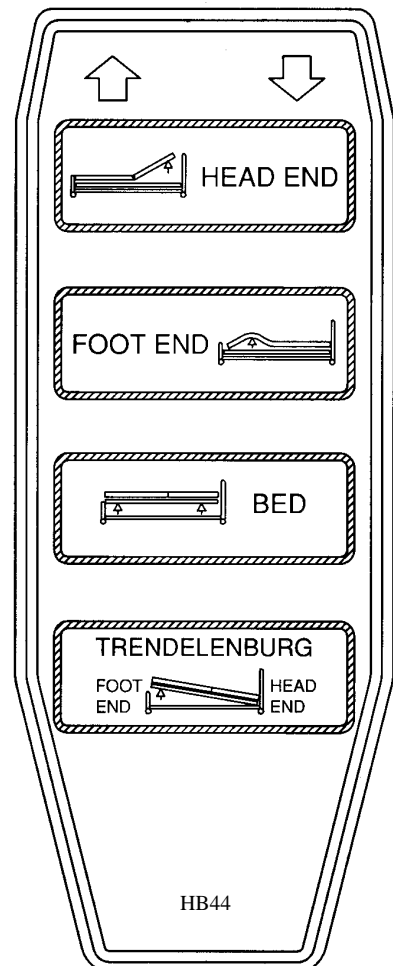
**HEAD UP ↑ and HEAD DOWN ↓** buttons  
raise and lower backrest (head end)

**The FOOT UP ↑ and FOOT DOWN ↓** buttons  
raise and lower knee and leg sections

**The BED UP ↑ and BED DOWN ↓** buttons  
raise and lower the bed

**REVERSE TRENDELENBURG (DOWN) ↓** button  
raise foot end and lower head end of bed maximum angle is about 16 degrees

**TRENDELENBURG UP ↑** button  
raise head end and lower foot end of bed maximum angle is about 16 degrees





## BARIATRIC BED

### Setup Instructions for Split Frame Beds

First unpack bed and orient bed as shown below.



Second, on the side of the bed frame with the actuators there will be a support leg to hold that half up, slide the other frame into the channel as shown in the picture below.

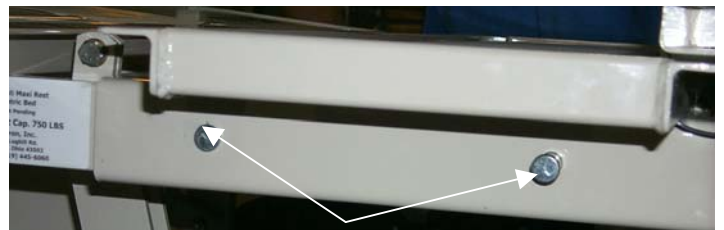




## BARIATRIC BED

# Setup Instructions for Split Frame Beds

Continue pulling the frame together until holes in the 2 frames are in line and (4) ½" pins can be inserted. Retain pins with Rue rings.



To insert Rue rings onto pins, simply push into pins as shown and the ring will snap into place. To remove Rue rings, push with thumb as shown and pull ring out of pin.



## BARIATRIC BED

### Setup Instructions for Split Frame Beds

Remove plastic straps and unfold foot section. Attach foot section to bed frame links with (2) ½" clevis pins and (2) rue rings.



Attach bed lift actuator and backrest actuator each with (1) 3/8" clevis pin and (1) hairpin.



# BARIATRIC BED

## Assembly Instructions

1. The Control Module is located under the bed, see page 2. The handset plugs into the control module, make sure it is securely fastened. It should snap in place. If it becomes necessary to unplug the handset remove plastic retainer strip then gently remove the plug from the control module.
2. Install the headboard posts in the inward most sockets provided at the head end with the board closest to the mattress. See page 2.
3. Install the footboard posts in the inward most sockets provided at the foot end with the board closest to the mattress. See page 2
4. If the bed is a model that has a scale, mount the readout on the footboard with bracket provided, see page 2. Connect the cable between the bed and the readout. The cable connector has six (6) prongs. Make sure cable is properly connected to readout.
5. If your bed has a trapeze, install as shown on page 11.

### **Perform the following checks before using the bed:**

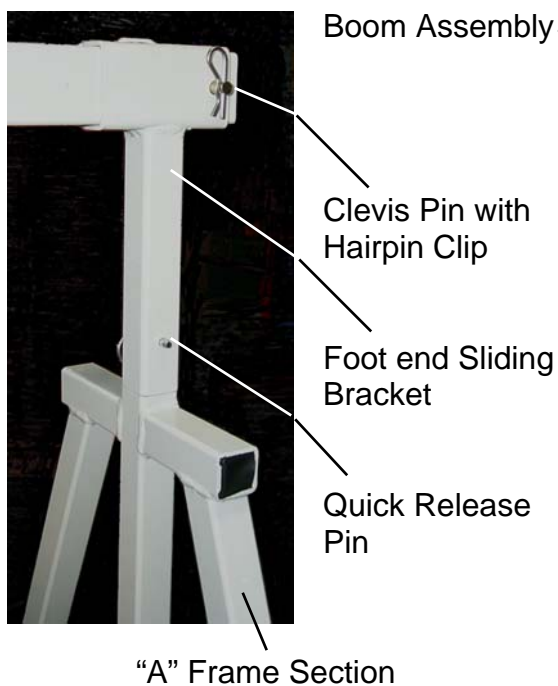
1. Do a careful walk around inspection of the bed. Look underneath the bed to make sure there is nothing stored there. This area must be kept clear to avoid any interference with bed parts, which move during operation.
2. Lock the casters (two individual lock and two steering control type casters) rotate steering casters until they lock in place.
3. Plug the power cord into a 115 volt grounded socket with a capacity of at least 15 amperes. Using the handset, cycle the bed through all of its operations. (see pg 6) Make sure that everyone (including you) is clear of the bed during these operations. See that:
  - a) All power bed operations work smoothly and stop in any desired position.
  - b) Bed height, angle of the leg lift and backrest can be adjusted properly.
  - c) Trendelenburg operates smoothly and can be stopped in any desired position. (on HB 44 handsets)
4. Position the side rails, be sure they slide up and down properly
5. When you are satisfied that the bed is operating properly, instruct all personnel who may be involved in the bed operation.

If problems are found, contact ConvaQuip customer service at 800-637-8436 or your authorized ConvaQuip dealer.

# BARIATRIC BED

## Trapeze Assembly

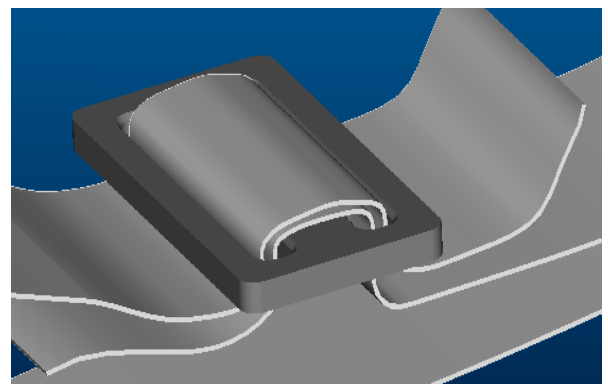
Slide the two (2) "A" Frame sections into the square sockets at head & foot end.  
Assemble the sliding Bracket (foot end) onto Boom as shown below.  
Slide boom assembly onto "A" Frame at head end and then foot end.  
Secure trapeze frame with pins and clips.



Assemble trapeze bar and strap over boom and adjust to desired height.

**Caution:** Thread strap through buckle with at least 2 inches of strap left on either end of the buckle as shown. Threading in any other way may cause the strap to fail.

**Warning:** Torn or frayed straps must be replaced immediately.



### Warning

Failure to set up properly may result in damage to the trapeze and cause personal injury to the user and/or attendant.

# BARIATRIC BED

## Operating the bed

### Steering the bed

The Bed can be steered in two modes, with the steering locked or with all four casters able to move independently. The two casters on the head end are the “steer” control type.

#### Head end: Using the steering lock function

The steering lock function allows you to easily steer the bed in a straight line.

At the head end of the bed, step down on the front of either caster pedal until it clicks, then move the bed in a straight line about 3 feet backward or forward to lock. This action will keep the caster from swiveling and allow better forward and backward movement. The bed can now be moved with greater stability. Push the bed from the foot end. Do not lock the other steering caster.

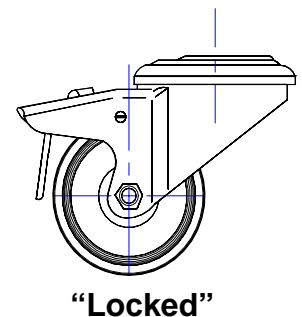
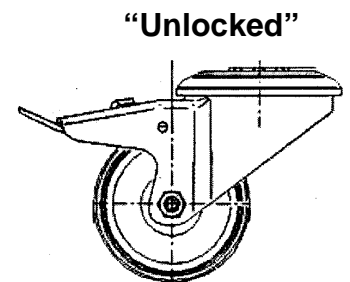
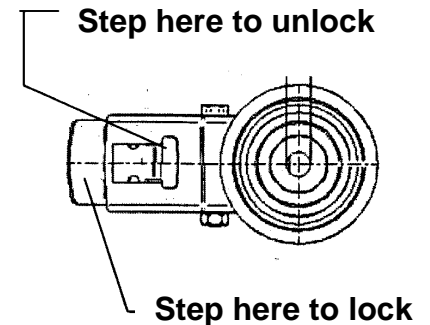
#### Using the 4-caster free function

To allow the bed to be rolled alongside a stretcher, unlock all four casters.

To unlock, step down on the back of the control pedal on each caster as shown in the illustration.

#### Locking the Casters

The locking function holds the bed motionless when the bed is parked. Lock all casters when transferring the patient to and from a bed. Casters are the individually locking type. For stability when parking the bed, the casters should be positioned as shown on page 14.



#### CAUTION

The caster is not designed to stop a bed that is in motion. Do not operate the caster control pedal while moving the bed, otherwise an injury or accident may occur.

# BARIATRIC BED

## Operating the bed

### Upright Back Position (Fowler)

The Backrest stops at any angle between the flat (horizontal) position and an upright position of about 48 degrees.



#### Warning

Before operating the backrest always ensure that casters are locked. Otherwise an accident or injury may occur.

### SIDERAIL ADJUSTMENT

Head end side rails are located on each side of the bed. Side rails have a 3-position vertical adjustment.

To raise or lower side rail, grab top section of rail with one hand while pulling the Release Knob with the other hand. Pull side rail up or down as required. Allow the Release Knob to spring back into locked position.



#### Warning

Make sure side rails are securely locked into position. Otherwise Injury or accident may occur.



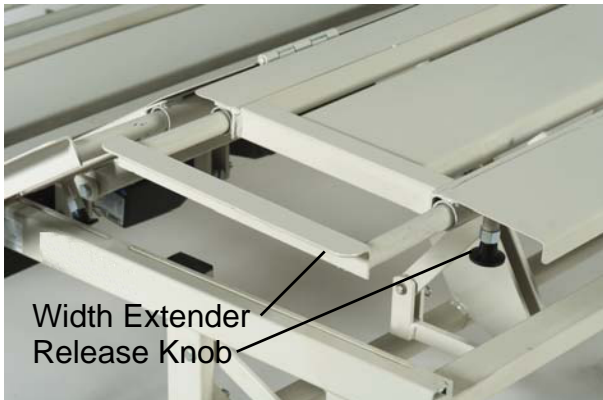
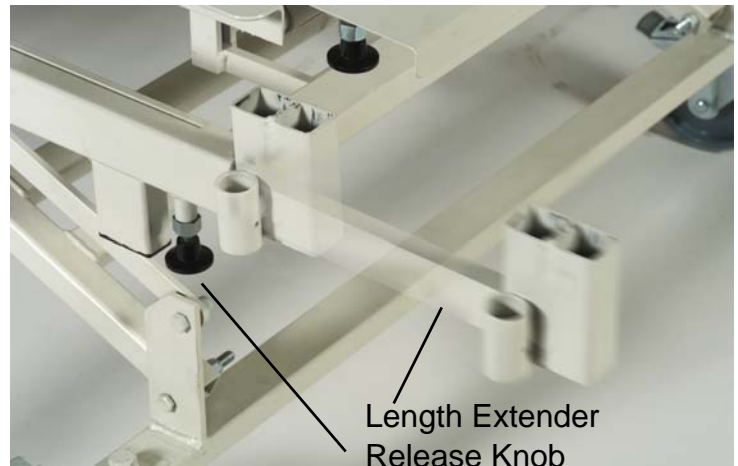
# BARIATRIC BED

## Bed width & length adjustment

### INCREASE AND DECREASE BED WIDTH & LENGTH (1)

A Release Knob is located under each bed section and at head & foot end of bed.

**Bed Length Extenders** increase bed length 6" at foot end. On one side at a time, pull Release Knob down and pull footboard out enough to release pin, then pull footboard and length extender away from bed six inches. Allow the release knob to spring back into locked position.



**Bed Width Extenders:** To increase bed width from 39" to 48" or 54", pull Release Knob down and at the same time slide bed width extender in or out 4 1/2". Allow the release knob to spring back into locked position. There are five (5) sections on each side of bed. Repeat procedure on all sections.

### DECREASING BED LENGTH FOR TRANSPORT (2)

To reduce the overall length of the bed, backrest and foot sections can be folded.



Fold **Backrest Section** by pulling out on the Release Knob located under left side of backrest and at the same time swing backrest up.

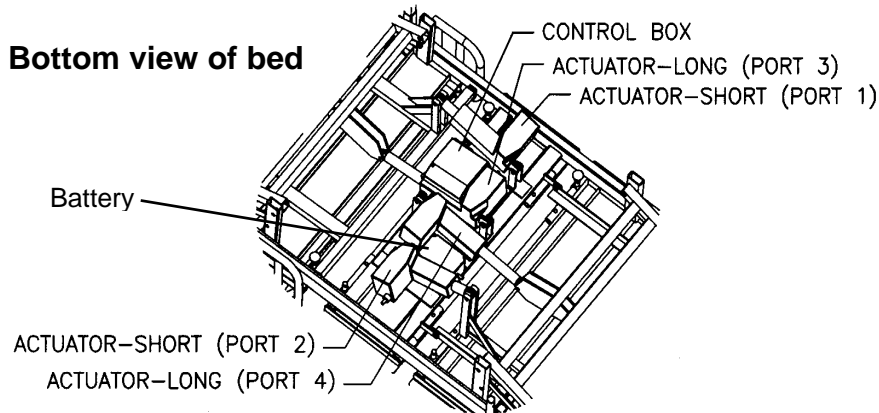
Fold **Footrest Section** by disconnecting the two (2) Quick Release pivot pins at the foot end. To reassemble fold footrest section down, retain with pins and hairspring clips. Always lower the bed to its lowest position which is against the "stops" before. Transporting the bed

- (1) Feature available on width adjustable models only.
- (2) Feature available on solid frame models only.



# BARIATRIC BED

## Actuators, control & handset



### LINEAR ACTUATORS

The bed is equipped with 24V DC Linear Actuators Designed with built in travel limit switches. Each actuator is equipped with quick release pivot pins (3/8" x 2") on both ends. If disassembled retain pivot pins and hairpin clip.

### CONTROL MODULE

The Control Module is designed to control all actuators in the system. The Control Box mounts directly on one of the actuators as shown. Retain with screw (8-32 x 1 1/2").

### HANDSET

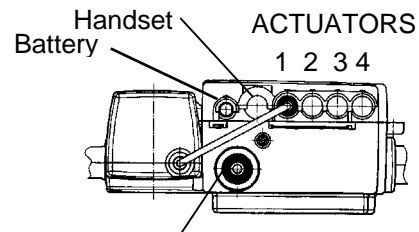
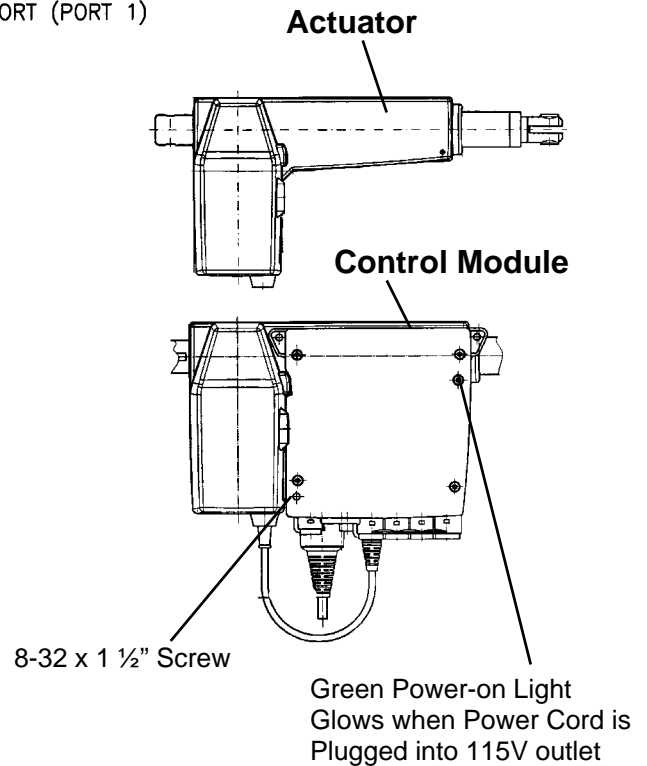
The Handset is used to control all actuator functions. When not in use, Handset hooks on the top of the siderail.

### BATTERY BOX

Each bed is equipped with a 24V DC battery for use when power cord is disconnected or power is lost.

### NOTE:

Before removing connectors from control module, remove plastic retainer strip. The retainer strip must be reassembled after connectors are plugged back in. Assure that all connectors are fully plugged in.



Power Cord w/Green Ground Wire

### CONTROL MODULE WIRING DIAGRAM

### GROUND WIRE

Green wire from power cord connects to bed frame. Secure with screw and star washer.

## BARIATRIC BED

### Diagnostic & Repair

PROBLEM	CAUSE	SOLUTION
<b>No functions operate</b>	No power to unit	Check power cord. Is it plugged into receptacle?
<b>Green Power-on light does not glow</b>	Electrical power cords not properly plugged into control module	Check cords for breaks.
<b>Power cord plugged in but no functions operate</b>	Bad handset	Check for power to receptacle. Replace handset.
	Bad control module	Replace control module.
<b>Three actuators operate "OK" one actuator will not operate</b>	Bad control module	<b><u>ISOLATE THE PROBLEM</u></b> Interchange connections on control module so that problem actuator is plugged into an actuator connection on the control module that is working satisfactorily. If problem actuator now operates "OK" but actuator that was operating "OK" now has a problem, either the control module or handset is faulty. Replace as required.
	Bad handset	
	Bad actuator motor	
<b>Actuator will not function properly Or not at all</b>	Defective wiring	Check wiring between control and actuator. Reverse wires.
	Defective Actuator Motor	Replace actuator
<b>Battery will not charge</b>	Defective wiring	Check wiring between control module and battery
	Defective battery	Replace battery
<b>Problem with Scale</b>	Defective cable or scale	See Operator's Manual MAN1235
<b>Bed not grounded</b>	Unit is not grounded between power cord and frame or between power cord and wall receptacle	Check ground (green wire) between frame and power cord  Is power cord plugged into a grounded wall receptacle?

# BARIATRIC BED

## Cleaning & Maintenance

**Warning:** Before cleaning any portion of bed, disconnect power cord from the wall outlet. Do not use a power washer to clean bed.

**Caution:** Before using any cleaning product, test it on the underside of the bed. Never use any volatile or flammable fluid (thinner, gasoline, etc.) that could cause discoloration or deterioration.

### CLEANING

Use mild soap and water or a nonabrasive hospital-grade detergent disinfectant to clean the bed. Wet a cloth with the cleaning product and wring dry. Then gently wipe off the bed. Use caution when cleaning around the electrical connections to prevent shock to the person or damage to the electrical components.

### PERIODIC INSPECTION AND MAINTENANCE

The amount of maintenance required by the bed will be dictated by its use.

Depending upon usage, inspect the bed after one to two weeks of usage and then at a minimum of every six months.

Before two weeks and then every six months minimum thereafter

1. Check all the bolts to be sure that none have worked loose.
2. Check that all pins are in their locked position and securely fastened.
3. Check all welds.
4. Check all electrical connections for tightness

Every six months minimum

5. Lubricate all slides and pivot points with FDA approved light grease every 6 months.
6. Check all electrical wiring for any frays, kinks and or deterioration.
7. Lock and steer castors operate properly.

**ANY DISCRPANCIES NOTED DURING INSPECTION MUST BE CORRECTED BEFORE USING THE BED.**

# BARIATRIC BED

## Specifications

**Product name: ConvaQuip Bariatric Bed**

**Models: 5548B, 5548SB, 5539-48VB, & 5539-48SVB**

**Models: 5539-48SVB & 5539-54SVB**

**Models: 5539-54VB**

**750 LB. CAPACITY**

**1000 LB. CAPACITY**

**1100 LB. CAPACITY**

### Dimensions:

**Overall width** 41" All Variable width Models (any bed with a V in the model number)  
(with bed sections and side rails slid in, will pass through 42" door)  
52" Models: 5548B/750-3, 5548SB/750-3

**Overall Length** 96" with headboard and footboard installed

<b>Models</b>	<b>Pan Width</b>	<b>Pan Length</b>
Any model with 39-48	adjusts from 39" to 48"	length extends from 80" to 88"
Any model with 39-54	adjusts from 39" to 48" to 54"	length extends from 80" to 88"
5548B/750-3	48"	80"
5548SB/750-3	48"	80"

**Mattress Pan Height** Above floor, adjusts from 15" to 29"  
(with scale 16" to 30")

**Weight** 440 Pounds without Trapeze

**Back angle** 0 to 48 degrees

**Trendelenburg angle** 0 to 16 degrees

**Reverse** 0 to 16 degrees

Note:

All Dimensions are approximate.

S - Indicates split frame models

V – Indicates variable width frame

B – Battery Backup

## BARIATRIC BED

### Warranty

**Defective parts will be repaired or replaced by the company or its appointed agent. The warranty does not cover damage caused by misuse or negligence, nor does it cover defects or damages by use of unauthorized parts or service by an unauthorized person.**

ConvaQuip, Inc. warrants the bed frame to be free from defects in materials and workmanship for a period of five (5) years from date of purchase. Wear items including, but not limited to: casters, actuators, control module, handset, battery, power cord, cables, release cables, bearings, pins, release knob, scale, sliders, mattress, and trapeze are warranted to be free of defects in material and workmanship for a period of one (1) year. If within such warranty period any such products shall be proven to be defective, such product shall be repaired or replaced, at the company's option. This warranty does not include any labor or shipping charges incurred in replacement part installation or repair of any such product. The company's sole obligation and your exclusive remedy under this warranty shall be limited to such repair and/or replacement.

This warranty gives you specific legal rights, and you may also have other rights that vary from state to state.

For warranty service please contact ConvaQuip, Inc. Return authorization is required. Do not return products without our prior consent.

**FREIGHT DAMAGE:** The carrier who delivers merchandise to your door is responsible for loss and damages. Acceptance of the shipment by you is acknowledgment that all articles delivered were in good condition and properly packed. Therefore, all claims for loss or damage must be filed immediately with the freight carrier. Then notify us. We will mark our records accordingly. After settling claim, damaged merchandise will be picked up by the freight carrier and returned. Should you need assistance with the claim, call customer service at (800) 637-8436.

**RETURN GOODS:** Call customer service at (800) 637-8436

Do not return merchandise without prior authorization. All correspondence relating to this warranty must indicate Model and Serial number and be addressed to:



**ConvaQuip, Ind., Inc.**

**P.O. Box 3417  
Abilene, TX 79604-3417  
Toll Free (800)-637-8436**

[www.convaquip.com](http://www.convaquip.com)

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