

## User-Service Manual Joerns® Model Bari10A Bariatric Bed

To avoid injury, read user's manual before using bed.



## Important Precautions

- ▲ Warning: Possible Injury Or Death. This product is intended for use as an adjustable mattress platform that articulates for resident/patient comfort with adjustable height for resident/patient and caregiver convenience. Use of this product in a manner for which it was not designed could result in unproven or unsafe configuration, potentially resulting in injury or death.
- ♠Warning: Possible Injury. Before adjusting bed, ensure that area under and near bed perimeter is free of people and obstructions. Failure to do so could result in injury.
- Warning: Possible Injury. Keep bed in lowest position except when providing care (bathing, clothing changes, etc.). Bed should be at lowest convenient height for entry or exit. Failure to do so could result in injury.
- Warning: Possible Injury Or Death. Floor locks increase bed stability and resident/patient safety. Floor and caster swivel locks must be locked prior to any resident/patient transfer or resident/patient use of the bed. Failure to do so could result in injury or death.
  - Warning: Possible Injury Or Death. Residents/ patients may become entangled in pendant cord. Patients with reduced mental acuity should not be allowed access to pendant. Unsupervised use of pendant could result in injury or death.
  - Warning: Possible Injury Or Death. Bed safe working load is 1050 pounds. This is total weight counting resident/patient, mattress, bedding and any other equipment or persons likely to be on bed. Do not exceed 1050-pound safe working load. Exceeding the safe working load could result in property damage, injury or death.
  - Warning: Possible Fire Hazard. Use nasal mask or ½ bed tent oxygen administering equipment. Oxygen tent should not extend below Mattress Support Platform. Pendant should not be placed in an oxygen-enriched environment such as an oxygen tent. Use of electrical circuits in an oxygen-enriched environment could result in a fire hazard.

- warning: Possible Shock Hazard. Unplug power cord from wall outlet before performing any maintenance, cleaning, or service to the bed. Failure to do so could result in injury or death. Note: In case of unexpected movement, unplug bed from any outlet.
- Warning: Possible Shock Hazard. Injury may result from improper routing of the power cord. Always follow the proper factory-installed routing configuration. Failure to do so could result in injury or death.
- Warning: Possible Injury Or Death. Use a mattress that is properly sized to fit Mattress Support Platform, which will remain centered on Mattress Support Platform relative to State and Federal guidelines. Length and width should match Mattress Support Platform. Use of an improperly fitted mattress could result in injury or death.
- Warning: Possible Injury Or Death. If a resident/
  patient's mental or physical condition could lead to
  resident/patient entrapment, the Mattress Support
  Platform should be left in the flat position when
  unattended. Failure to do so could result in injury or
  death.
- Warning: Possible Injury Or Death. Use a properly sized mattress in order to minimize the gap between the side of mattress and Side Rails/Assist Devices. This gap must be small enough to prevent resident/ patient from getting his/her head or neck caught in this location. Make sure that raising or lowering bed, or articulating the sleep surface, does not create any hazardous gaps. Excessive gaps may result in injury or death.
- Warning: Possible Injury Or Death. Do not use any Side Rails/Assist Devices until you verify it is locked in place. Failure to lock assist devices may result in injury or death.
- Warning: Possible Injury Or Death. Do not use any replacement parts not manufactured, marketed, or provided by Joerns Healthcare on any Joerns bed. Use of unapproved replacement parts may result in injury or death.

▲ Warning: Possible Injury Or Death. If using accessories not manufactured, marketed, or provided by Joerns Healthcare for Joerns<sup>®</sup> beds, consult with the manufacturer for compatibility and limitations prior to use. Failure to do so may result in injury or death.

▲ Warning: Possible Shock Hazard. Bed power cord has hospital-grade, 3-pronged grounded plug. Grounding reliability can only be achieved when equipment is connected to an equivalent receptacle marked hospital-grade. If external grounding conductor is in doubt, operate bed from backup battery. Failure to do so could result in injury.

▲ Warning: Possible Equipment Damage Or Injury To Staff Members. Service and repair must only be performed by qualified, authorized Joerns Healthcare Technical Support personnel (call 800-966-6662).

★Warning: Explosion Hazard. Do not use in the presence of flammable anesthetics, gas or vapors. Failure to heed this warning could result in equipment damage, injury or death.

**Caution:** Stay clear of underneath the bed when adjusting or moving the bed.

**Caution:** Mattress Support Platform is not grounded, nor does it have a potential equalization connection point. To prevent injury to resident/patient connected to intravascular or intercardial medical equipment, alternate measure must be implemented to equalize the potential between Mattress Support Platform and medical equipment.

■ Warning: To reduce the risk of injury, ensure the sleep surface is horizontal and in the lowest position with the siderails fully raised and locked when moving the bed with a resident/patient in it. For best maneuverability performance, push the bed from the head end.

To avoid injury to the resident/patient and/or user, do not attempt to move the bed laterally with the steer mode engaged. The steer wheel can not swivel.

**Caution:** To avoid damage to the siderail mechanisms, do not move the bed using the siderails. Use the push/pull handles integrated to the end panels to move the bed.

Caution: Before transporting bed, unplug bed from power source, route Power Cord around Cord storage hooks on bed frame below Head Panel and hang Pendant Cord from Foot Panel. Failure to do so could result in Power Cord, Pendant Cord or bed damage, thereby creating a potential hazard. Failure to do so could result in Power cord, Pendant Cord or bed damage, thereby creating a potential hazard.

**Caution:** Particular precaution must be considered during exposure to strong emission source such as High Frequency surgical equipment and similar devices. Do not route High Frequency cables on or near device. If in doubt, contact a qualified technician.

When assessing the risk for entrapment, you need to consider your bed, mattress, Head/Foot Panels, Side Rails/Assist Device and other accessories, as a system. It is also extremely important to review the resident/patient's physical and mental condition and initiate an appropriate individual care plan to address entrapment risk. All Joerns bed systems are evaluated for compliance to the FDA/CDRH "Hospital Bed System Dimensional and Assessment Guidance to Reduce Entrapment." For more information, call Customer Care, 800-826-0270.

#### **Save These Instructions**

**Thank you** and congratulations for choosing the Joerns Bari10A bed. Joerns beds are developed with safety, comfort and convenience of both resident/patients and caregivers in mind.

Advanced ergonomic design will provide years of reliable service in your facility.

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#### **Bed System Entrapment Information**

In recent years, bedside rails have been a subject of regulatory review and evolution in design and use.

That focus includes not only the challenge of achieving an appropriate balance between resident security and unnecessary restraint, but also the additional safety issue of entrapment.

The U.S. Food and Drug Administration (FDA), working with our company and other industry representatives has addressed the potential danger of entrapment with new safety guidelines for medical beds. These guidelines recommend dimensional limits for critical gaps and spaces between bed system components.

Entrapment zones involve the relationship of components often directly assembled by the healthcare facility rather than the manufacturer. Therefore, compliance is the responsibility of the facility.

As the leading manufacturer of long-term care beds and a frontrunner in addressing this critical issue, Joerns Healthcare can offer you the expertise, assistance and products to bring your facility into compliance.

#### Joerns Compliance Solutions

Matching the right bed components in order to meet regulatory guidelines can be complex.

That's why Joerns offers a wide array of compliance options. We assist customers in selecting compliant accessories recommended for their specific bed model.

#### For More Information

To learn more about compliance options with Joerns products, visit our website at www.joerns.com, or contact our Customer Care reps at 800-826-0270 and ask for free informational publications.

To learn more about entrapment zones, assessment methods, and guidelines concerning entrapment, contact Joerns Healthcare at 800-826-0270 or consult the FDA website: www.fda.gov/cdrh/beds

## Features and Specifications

#### Joerns® Bari10A Standard Features

- Fully articulated Mattress Support Platform with independent back and knee movement, up/down adjustments, Trendelenburg and Reverse Trendelenburg positioning.
- 36" wide Mattress Support Platform sections easily expand to 48" wide.
- 80"(expandable to 88") Mattress Support Platform. Integrated foot end extension section extends an extra 8" length for taller residents/patients.
- 18-3/4" to 33-3/4" Travel Range
- Integrated Scale System for resident/patient weight monitoring
- · Head and Foot End Side Rails/Assist Devices
- Side Rails on Head and Foot sections fold down for easy resident/patient access.
- Pendant Control for all bed functions with separate Selective Lock-Out to override functions.
- Emergency Manual Release for Mattress Support Platform
- · Emergency Battery Backup System
- Integrated Trapeze Mounts
- · Quiet DC Motors
- · Welded Steel Tubular Frame
- Pan-Style Mattress Support Platform
- · Wide Stable Base
- SoftTone Frame Color
- Heavy-Duty Casters
- CenterLine Caster Locks
- Bed Angle Indicators

#### **Electrical Specifications**

Scale System

Power: 9V DC (6 Alkaline D Cells)

**Actuators** 

Power: 115 VAC North American

Frequency: 60 Hz Current Rating: 6.0 Amps

Classification: Class 1, Type B

Mode of Operation: 10% Maximum duty cycle Circuit Protection: Auto reset current sensors **Note:** Actuators operate on a 24V DC system with

an integral battery backup.

#### Classifications

UL 60601-1 CAN/CSA C22.2 NO.601.1 IEC 60601-2-38 CAN/CSA C22.2 NO 601.2.38

#### **Environmental Conditions**

#### **Operating Conditions**

Ambient Temperature: +20°C to +30°C Relative Humidity: 10% to 95% Non-Condensing Atmospheric Pressure: 700 hPa to 1060 hPa Protected Against Splashing Water IPX4

#### Storage and Shipping Conditions

Ambient Temperature: -30°C to +50°C Relative Relative Humidity: 10% to 95% Non-Condensing Atmospheric Pressure: 500 hPa to 1060 hPa

#### **Accessories And Options**

Joerns Mattresses, IV Rod, Floor Mat

#### **Bed Identification Numbers**

When ordering parts or when contacting our Customer Care Department, please include the bed's model and serial numbers, found on the identification label. The identification label is located on bed frame under the sleep deck foot section.

#### **Mechanical Specifications**

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Description:	Dimensions:	
Overall Bed	Minimum 39"x 90"	
	Maximum 52"x 98"	
Mattress Support Platform.	Minimum 36"x 80"	
	Maximum 48"x 88"	
Bed Frame Weight	700 lbs	
Maximum Back		
Section Angle	65° to horizontal	
Maximum Knee		
Section Angle	35° to horizontal	
Maximum Knee		
to Leg Angle	45°	
Maximum Height Mattress		
Support Surface	33-3/4" Above Floor	
Minimum Height Mattress		
Support Surface	18-3/4" Above Floor	
Safe Working Load	1050 lbs	

## Assembly

#### Installation Of Head And Foot Panels

- Insert Head and Foot Panel support rods into their respective receptacles in the frame (Figure 1). Note: Scale System Display located on outside of Foot Panel must face away from bed (Figure 1).
- Connect Scale System quick-release electrical connector from the bed to Foot Panel rear bottom fixed connector (Figure 2). Note: This is a quarter-turn fastener. Check to insure it is firmly secured.
- Power Cord supplies power to bed's Actuator System. Plug Power Cord into grounded hospital-grade receptacle (115VAC, 15 amps).
   Note: To achieve optimum Actuator System battery life, keep the bed plugged in at all times.
- Power cord is the main disconnect device. To disconnect the mains, unplug Power Cord. Control Backup Battery powers the Actuators when cord is unplugged.
- 5. Whenever bed is cleaned or serviced, it should be unplugged from wall power. Selective Function Lockout should be set to **Lock** for all functions to keep bed from accidentally operating using battery backup. **Note:** To avoid electric shock, always plug bed into properly grounded hospital-grade receptacle.
- 6. Actuator battery backup is **not** userserviceable. If service is required, contact Joerns Healthcare Technical Support at 800-966-6662.

#### **Lockout Control**

 Activate Selective Function Lockout on bed Frame, to keep resident/patient from operating Actuators with Pendant. See Selective Function Lockout instructions on Page 8.

#### ▲ Warning: Possible Injury Or Death. Use Selective Function lockout to deactivate bed when resident/patient movement or inadvertent activation of bed functions by resident/patient or staff member could result in personal injury.

#### Head/Foot Panel Removal

- Head/Foot Panels remove easily. Replace by simply lifting straight up or pushing straight down (Figure 1). Caution: Disconnect Foot Panel Scale System Cable before removing Foot Panel (Figure 2).
- Head/Foot Panel pins fit tightly in respective frame receptacles. This may cause binding during removal and replacement.
- 3. To minimize binding, grasp Head Panel or Foot Panel at both lower corners and lift/push evenly.

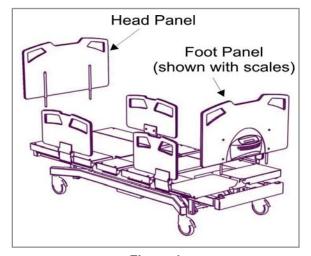


Figure 1



Figure 2

### **Bed Operation**

#### **Initial Start Up**

 After positioning bed, always lock all casters. Bed must reach proper operating temperature before plugging Power Cord into grounded hospital-grade receptacle. Caution: It is critically important to lock all four casters individually to prevent unintended bed movement.

#### Resident/patient Transfer

 Lock Casters and make sure Mattress Support Platform is in non-extended position (narrow). Lower Side Rails and lower resident/patient in carefully controlled manner, onto bed.
 Caution: It is critically important to lock all four casters individually to prevent unintended bed movement.

## **Emergency Manual Mattress Support Platform Release**

- The quickest way to lower all Mattress Support Platform parts is to power down with Pendantcontrolled Actuators. **Note:** To lower bed in case of power and battery backup failure, use Emergency Manual Mattress Support Platform Release to lower Head and Foot Mattress Support Platform sections (Figure 3).
- To return Mattress Support Platform to flat position in case of power and battery backup failure, rotate Emergency Manual Mattress Support Platform Release Lever Up. Hold Emergency Release handle Up until Mattress Support Platform lowers to desired position. Release handle if you need to stop descent.

#### **Pendant Control Operation**

- Your Bari10A bed comes standard with Pendant Control (Figure 4). Resident/patient and staff can use the Pendant to adjust all Mattress Support Platform sections to desired positions.
- 2. Pendant has raised push buttons with graphics and may be hooked on rails or panels for convenient resident/patient and staff access.



Figure 3

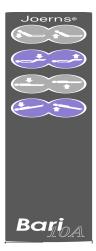


Figure 4



#### **Selective Function Lockout**

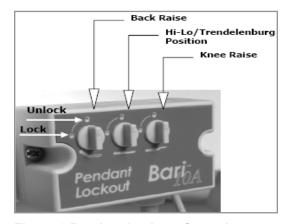
- Selective Function Lockout switch box is located on bed frame Side Rail near Foot Panel (Figure 5). Three switches on box allow for certain Pendant functions to lock out separately (Figure 6).
- 2. Lockout is intended for use by caregiver when limiting bed positions for specific resident/patient care.
- 3. To lock/unlock functions, rotate switch until it clicks into position.

#### Side Rails/Assist Devices

- Bari10A has one Head end Side Rail and one Foot end Side Rail on both sides of bed (Figure 7).
- 2. Side Rails are attached and operated by Latch Hinge mechanism.
- 3. Pull bottom of Latch Hinge outwards to lower Side Rails (Figure 8). **Note:** Latch Hinge locks Side Rail only in **up** position.
- 4. Lower Side Rails gently.



Figure 5



#### **Figure 6-Pendant Lockout Operation**

- Rotate Switch to Lock/Unlock Back Raise Function
- 2. Rotate Switch to Lock/Unlock Hi-Lo/ Trendelenburg Function
- Rotate Switch to Lock/Unlock Knee Raise Function



Figure 7

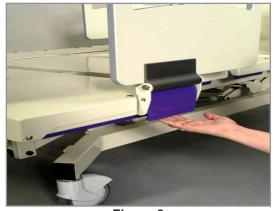


Figure 8

#### **Casters**

- 1. All (4) Casters securely lock bed in place.
- 2. All Casters have full swivel/rotation locking in any position.
- Simply push Caster Lock Lever (Figure 9)
   down to lock and up to unlock (Figure 10).
   Caution: It is critically important to lock all four casters individually to prevent unintended bed movement.

#### Steer Pedal (optional)

A bed equipped with this option has a fifth wheel activated by lateral brake/steer pedals on either side of the bed. The fifth wheel helps in guiding the bed along a straight line and helps the bed pivot around corners.

▲ Warning: To reduce the risk of injury, ensure the sleep surface is horizontal and in the lowest position with the siderails fully raised and locked when moving the bed with a resident/patient in it. For best maneuverability performance, push the bed from the head end.

▲ Warning: 5th wheel must be disengaged to use scale.

To avoid injury to the resident/patient and/or user, do not attempt to move the bed laterally with the steer mode engaged. The steer wheel can not swivel.

**Caution:** To avoid damage to the siderail mechanisms, do not move the bed using the siderails. Use the push/pull handles integrated to the end panels to move the bed.

#### **Steer Pedal Operation (Figure 11)**

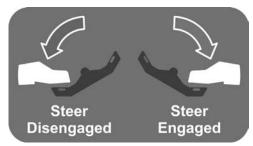
To engage the steer wheel, fully depress the side of the pedal identified with a green label and represented by the ENGAGE green arrow. To disengage the steer wheel, fully depress the side of the pedal identified with a red label and represented by the DISENGAGE red arrow.



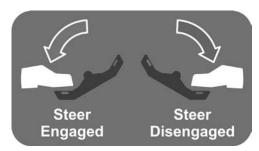
Figure 9



Figure 10



Left Side from foot of bed



Right Side from foot of bed

Figure 11

## Mattress Support Platform Width Extenders

- 1. The four Mattress Support Platform (MSP) sections each have a 6" Width Extender on both sides of the bed (Figure 12).
- Release Width Extender by pulling latch handle along the bottom edge of each MSP section (Figure 13). Note: Width Extenders lock in either full open or full closed position and should only be used in these positions. Side Rails move with the Width Extenders.

**Caution:** Extend all four sections on each side **prior** to adjusting bed position or Side Rails.

▲ Warning: Use Width Extenders only after the resident/patient is safely positioned in the bed. Failure to do so could result in injury.

#### Mattress Support Platform Length Extender

- 1. Mattress Support Platform (MSP) Foot Section has an 8" Length Extender, as does the foot end of the bed frame. (Figure 14).
- 2. Both MSP Length Extender and the Frame Length Extender latch in the normal and extended positions.
- 3. Using the MSP Length Extender is a two-step process:
  - a. Slide the Frame Extender out first, by pulling out the latch knob on the side of the bed frame (Figure 14). Begin carefully sliding the extender out and release the latch knob as soon as the extender starts to slide so that it will automatically latch again at the extended position. Slowly pull the extender out until the latch pin clicks into its detent.
  - b. Reach under the center of the MSP Foot Section and locate the MSP Extender latch knob (Figure 15). Pull the knob out to unlatch the Foot Section Extender. Begin carefully sliding the extender and release the latch knob as soon as the extender starts to slide so that it will automatically latch again at the extended position. Slowly pull the extender out until the latch pin clicks into its detent.

▲ Warning: Possible Equipment Damage. Do not slide Frame Length Extender past its detent. Damage to the scale cable will result.

▲ Warning: Possible Equipment Damage. Prior to use of the MSP Length Extender, the Frame Length Extender must be fully extended and latched. Failure to do so will result in scale connector damage.



Figure 12



Figure 13

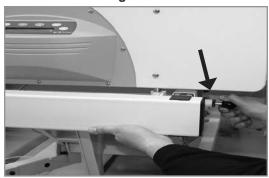


Figure 14 - Arrow indicates Length Extension Latch



Figure 15 - Photo taken from angle underneath bed

#### **Bed Movement/Transport**

- Follow these general guidelines when moving bed (specific patient's needs may necessitate such requirements).
  - a. Fully lower all Mattress Support Platform sections.
  - b. If extended, retract Mattress Support
     Platform width extensions on both sides.
     Note: This may require removing
     mattress sections.
  - c. If extended, retract Mattress Support Platform Foot extension.
  - d. Latch all Side Rails in up position.
  - e. Required: Place an attendant at each bed end.
  - f. Caution: Before transporting bed, unplug bed from power source, wrap Power Cord around Cord storage hooks below head Panel, hang Pendant Cord from Foot Panel, and route Pendant Cord inside Side Rails (Figure 16). Failure to do so could result in Pendant Cord, Power Cord or bed damage, thereby creating a potential hazard. Insure Pendant Cable and Power Cord are off floor and away from Casters.
  - g. Unlock Casters.
  - h. Deploy 5th Wheel if equipped with optional Steer Petal
  - i. Apply even push/pull force on Head Panel and Foot Panel handholds (Figure 17). When bed movement/transport is completed:
    - Always apply Caster Locks.
       Caution: It is critically important to lock all four casters individually to prevent unintended bed movement.
    - Always plug bed back into power outlet so that it is continuously charging.

### Accessories

#### **Mattress**

- 1. Bari10A Bed may be equipped with BariMatt 1000 6.5" foam mattress (Figure 18, p.12).
- 2. Mattress designed as separate sections, which fit together on Mattress Support Platform in different arrangements: narrow, sides extended or, length extended. **Important:** Patient's risk for pressure ulceration determines which mattress should be used. Assessment of risk for pressure ulceration is important to avoid injury to patient, and should only be determined by qualified professionals.

Note: International standards require distance from top of mattress (un-compressed) to top of Side Rails to be a minimum of 220 mm (8.66 inches). If mattress is thicker than 6.5" (Example: If a professional recommends an air flotation system to treat pressure ulceration), bed/mattress system would not comply with International standards. A professional can assess if clinical benefits outweigh the risk of not meeting standards.

 Mattress User Manual (Figure 18 p.12) describes Mattress assembly and usage requirements.

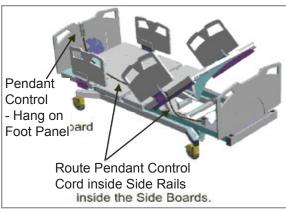
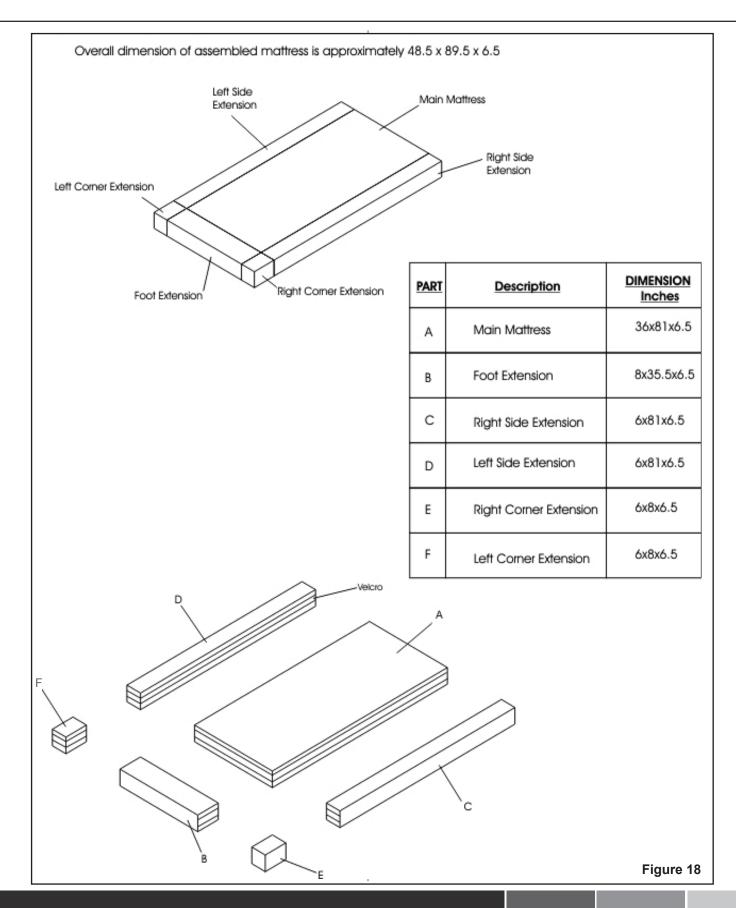


Figure 16



Figure 17



## Scale System

Bari10A bed is equipped with Scale System, fully integrated within Foot Panel (Figure 19).

#### Scale System Features (Figure 20)

- Resident/patient's weight is displayed on a 16-character dot matrix liquid crystal display with LED backlighting.
- Resident/patient's weight may be viewed in both pounds and kilograms by pushing Weight Mode button when displayed with resolution of 0.1-Lb/Kg (100 grams).
- Monitor resident/patient's weight relative to zero by using Weight Change Mode button to observe variations in weight.
- 4. Freeze/Resume mode button provides customized ability to adjust resident/patient's comfort by adding or removing pillow or blanket or ancillary equipment, without affecting resident/patient's displayed weight.

#### **Maximum Weight Capacity**

Do not exceed rated safe working load capacity of bed (1050 pounds).

#### Accuracy

0.5% of resident/patient weight or 0.5 lb, whichever is greater, from 250 to 1050 lbs, while bed is in flat position.

#### **Auto Power Down (APD)**

Scale System will automatically power down in 60 seconds to conserve battery life.

#### **Averaging**

Automatic Digital Filter samples weight data to filter motion.

#### **Power Supply**

(6) "D" Cell Alkaline Batteries.

#### **Environmental Conditions**

#### **Operating Conditions**

Ambient Temperature: +20°C to 30°C

Relative Humidity: 10% to 95% Non-Condensing

#### **Storage and Shipping Conditions**

Ambient Temperature: -30°C to +50°C

Relative Humidity: 10% to 95% Non-Condensing

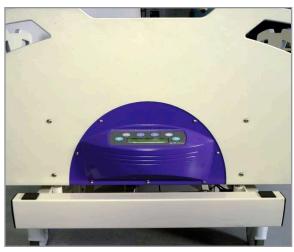


Figure 19



Figure 20

**Caution:** 5th Wheel must be disengaged to obtain an accurate resident/patient weight.

# Scale System Functions and Weighing Procedures

**Caution:** 5th Wheel must be disengaged to obtain an accurate resident/patient weight.

#### 0.0 Zero

With all bed linens in place and without resident/ patient in bed, press **Zero** button. Displayed message will read "PLEASE WAIT - HANDS OFF". Be sure nothing touches weight-sensitive portion of integrated Scale System while performing zeroing function. In a few seconds, display will indicate "WEIGHT = 0.0 LB".

#### Lb/Kg

Weight data may be viewed in either **pounds** or **kilograms**. Pressing this button allows you to switch between display modes quickly and easily. Both modes will display resident/patient's weight within 0.1 units of resolution (0.1 Lb. or 0.1 Kg.).

#### Freeze/Resume

Freeze/Resume mode button provides customized ability to adjust resident/patient's comfort by adding/ removing a pillow or blanket or ancillary equipment, without affecting resident/patient's displayed weight.

Press Freeze/Resume button. The display will read "FREEZE = (resident/patient's weight)." Make all necessary adjustments to bed or resident/patient. When done, press Freeze/Resume button again to resume normal weighing.

#### Weight Change Mode

This mode is used to monitor resident/patient's weight changes. **Note:** To enable this function initially, press **Weight Change Mode** button with resident/patient in bed and then press **Zero** button to zero out weight. Display will read "WT CHG = (resident/patient weight)". Any variation in weight will now be viewed as a "+" or "-" figure relative to **zero**.



Figure 21

#### Weight Mode

If display shuts off before you can view weight data, simply press the **On** button to refresh display and view resident/patient's weight. Display will indicate "WEIGHT = XXX.X LB" (or KG).

**Caution**: After initialization process is complete and Scale System is still in **Weight Change Mode**, **do not** press **Zero** button **again**, or you will lose all stored resident/patient's weight history.

Pressing **Weight Mode** button will switch back to the **Weight Mode** allowing you to view resident/patient's total weight again.

Caution: If you do not press Freeze/Resume button before adding/removing items from bed, the weight of those items will be reflected in the displayed weight, which will be hard to adjust back to the correct stored weight.

**Note:** You can correct any weight discrepancy described above, by using **Weight Mode** (for increases) and **Weight Change Mode** (for decreases) buttons, to manually adjust displayed weight reading. You will need to know the weight of added/removed items to add/subtract from total weight.

If Freeze/Resume mode is left unattended for more than three minutes, display will read "LEFT IN FREEZE - REFER TO MANUAL." You must press Freeze/Resume button to exit this mode.

#### On

Button refreshes display or initiates power for scale use.

## Scale System Calibration (Figure 22)

#### **Periodic Calibration Check**

- Important: Following calibration procedure should only be performed by qualified maintenance personnel.
- 2. Load cell has no user serviceable components. **Do not** tamper with for any reason.
- Re-calibration is generally not required, but should be verified periodically to ensure accuracy. Joerns Healthcare recommends checking calibration check once every 12 months, or as your maintenance policy requires.

#### **Electrostatic Discharge (ESD)**

Integrated circuits and semiconductors on printed circuit boards may be damaged by electrostatic discharge (ESD). Be sure to use proper handling precautions at all times.

#### **Calibration Procedure**

**Note:** Make sure nothing is in contact with Scale System during this procedure. Be sure to remove your hands from Scale System when noting displayed calibration results.

- 1. Disengage 5th Wheel if equipped with optional steer pedal.
- 2. Press Freeze/Resume button.
- When display indicates "FREEZE = (weight)", press and hold Lb/Kg button. Display will read "CAL" as right hand digit counts down to enter CAL MODE.
- 4. When CAL MODE is shown, press **Zero** button to zero the display.
- 5. Place known calibrated weight onto weighing surface and compare it to displayed reading.
- Press Weight Mode button for (+) corrections and Weight Change Mode button for (-) corrections to displayed weight. Displayed value should be within 0.5% of calibrated weight, plus or minus one digit.



Figure 22

- 7. Remove weight and re-zero. Repeat steps #4, #5 and #6, until results are satisfactory.
- 8. When adjustments are completed:
  - a. Press **on** button to **abort** your changes and exit the CAL mode, **(or)**
  - Press Freeze button to save all changes and exit CAL mode.

#### **Calibration Tolerance Table**

Low Limit	Applied Load (lbs)	High Limit
248.7	250	251.4
497.4	500	502.6
746.2	750	753.9
994.9	1000	1005.1

## Scale System Care and Maintenance

#### Cleaning

- 1. Mild soap/water recommended for general cleaning/disinfecting.
- 2. Exercise caution when cleaning LED electronics display window.

#### Storage

Remove batteries if storing this equipment for periods longer than three months.



Figure 23

#### **Battery Replacement**

- If Scale System batteries need replacement, display will indicate "CHANGE BATTERIES." Remove Battery Cover from Foot Panel to access Scale System batteries (Figure 23). Then, remove all six batteries (dispose used alkaline batteries per local codes), and replace with alkaline D cell batteries.
- 2. Printed circuit board vulnerable to electrostatic discharge (ESD). Avoid touching circuit board when changing batteries. Battery orientation is illustrated on battery holder.

## Cleaning, Inspection and Maintenance

▲ Warning: Disconnect Bari10A Power Cord from wall outlet before cleaning.

▲ Warning: Do not use power wash or high pressure cleaner on any Bari10A part.

- ▲ Warning: Lock all four Casters when cleaning, inspecting or performing any maintenance of the Bari10A. Lower all Mattress Support Platform sections unless necessary for positioning for service access. Place all Selective Function Lockout switches in locked position. Disconnect Power and Pendant Cords. Caution: It is critically important to lock all four casters individually.
  - To achieve maximum usage and longest life for your Bari10A bed, follow all warnings and cautions within this manual and maintain your bed with care, as outlined below. The maintenance required will be dictated by your bed's usage and care, which should be inspected every six months.
  - 2. To optimize bed longevity:
    - a. Keep bed clean.
    - Observe bed usage and operation and report any discrepancies or problems to Joerns Healthcare Technical Support at 800-966-6662.
    - c. Check for loose bolts, nuts or pins, and report problems. After a week of use, check all bolts for any looseness, and make sure all pins are in their normal location and fastened.

- d. Check structural parts for any cracking (especially welds), bending or hole enlargement.
- e. Check wiring for proper connections and damage (fraying, kinking or deterioration). Report any damage to Joerns Healthcare Technical Support at 800-966-6662.
- f. Check Actuators for correct mounting at attachment points and insure all related pins are mounted securely and properly to frame. Actuators are not serviceable.

If any discrepancies are noted during inspection, they must be corrected before continuing bed usage. Major service and repair must only be performed by authorized Joerns Healthcare Technical Support, which you may contact at 800-966-6662.

#### **General Cleaning**

- 1. For low level disinfecting, wipe surfaces with a properly prepared detergent/disinfectant.
- 2. Do not use abrasive cleaners. Use damp rag only when cleaning around electrical connectors and components.
- Actuator surfaces must be cleaned of dust and dirt regularly. Do not attempt to clean exposed piston rods. Never spray directly on Actuator with high-pressure cleaners.

#### **Storage**

- 1. Store in a clean dry area.
- Plug bed Power Cord into grounded hospitalgrade electrical outlet. Actuator Control System backup batteries maintain the longest life if kept charged and are not allowed to fully discharge.
- Failure to keep Bari10A bed plugged in, will discharge backup batteries and shorten their life.
- If storing bed for periods longer than three months, remove all Scale System batteries.

## Lubrication Servicing

#### **Recommended Lubricants**

- 1. Oil: Use 3-In-One® oil or equivalent.
- 2. **Grease:** Use Super Lube® synthetic grease or equivalent.

#### **Oiling Points**

- 1. Keep pins and bolts oiled (sample indicated by arrows in Figure 24).
- 2. Oil hinge points (sample indicated by arrows in Figure 25).

## **Grease Points For Mattress Support Platform**

1. Grease Side and Foot Extensions (sample indicated by arrows in Figure 26 & 27).

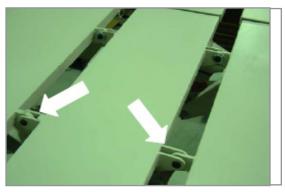


Figure 24



Figure 25



Figure 26



Figure 27



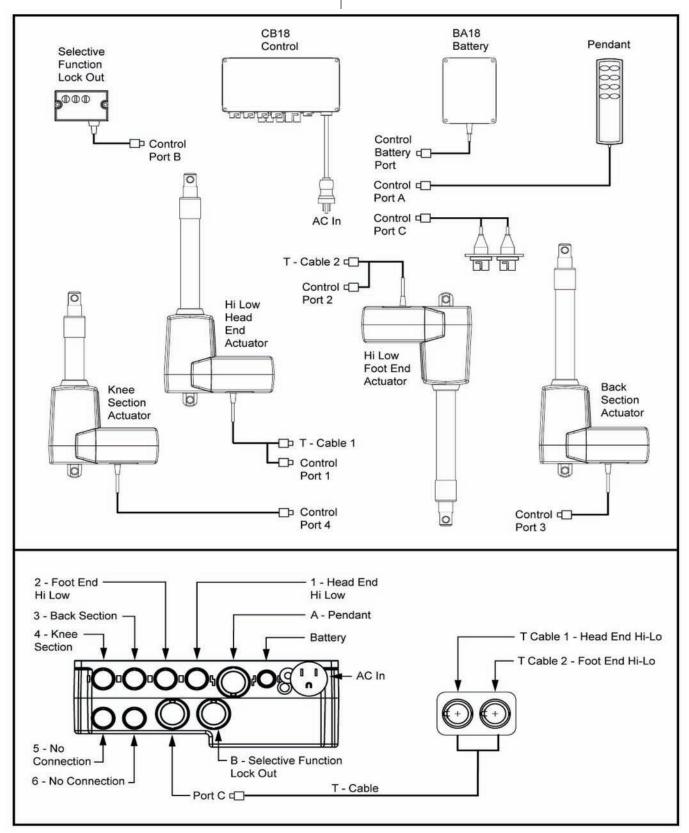
## Bari10A Bed Troubleshooting

### **Pendant Control Troubleshooting**

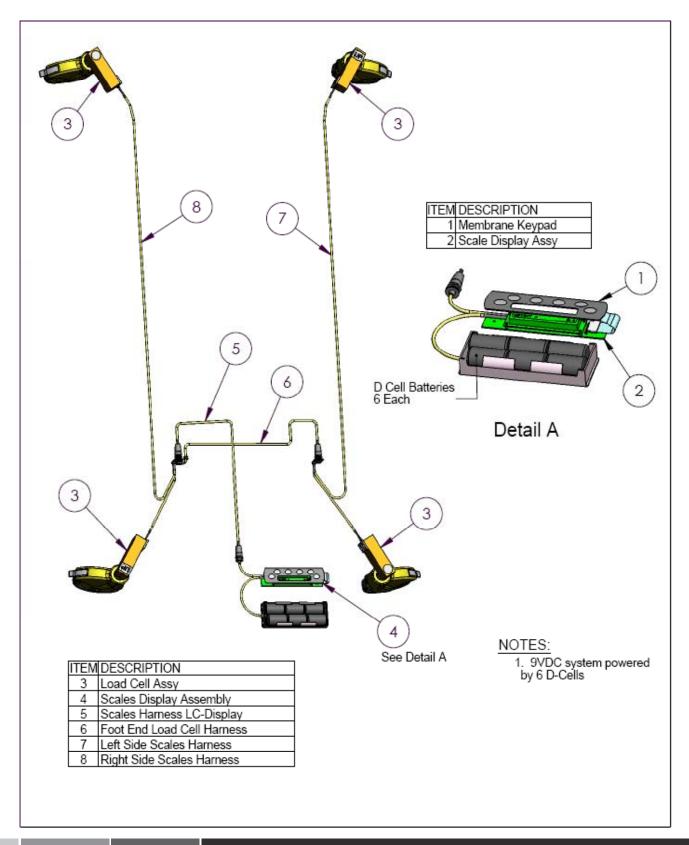
Problem	Solution
If adjustment does not occur when Pendant button is pushed	<ol> <li>Adjustment may be locked. Check Selective Funtion Lockout.</li> <li>Adjustment may already be at maximum level.</li> <li>Bed is not plugged into wall power outlet and battery has discharged. Plug bed into wall outlet.</li> <li>Pendant cord may be damaged. Check cord for damage. If cord is damaged, discontinue bed usage until cord is replaced.</li> </ol>
If Adjustment Only partially occurs, stops and beeps	<ol> <li>Battery may be low. Plug bed into power source.</li> <li>Bed may be overloaded or constrained from moving. Determine load and check for obstructions.</li> <li>If beeping occurs while raising or lowering bed, Hi-Low Actuators may have lost synchronization. Lower bed to lowest position. Release Bed Down button. Press and hold Bed Down button for five seconds to recalibrate synchronization. If problems persist, contact Joerns Healthcare Technical Support at 800-966-6662.</li> </ol>

Problem	Possible Cause	What to Do	
Bed movement with all casters locked.	Braking mechanisms may be worn on one or more casters.	Remove bed from use and contact     Joerns Healthcare Technical Support     at 800-966-6662.	
Scale System display is blank after On button is pushed.	<ol> <li>Batteries are dead.</li> <li>Unit is defective.</li> </ol>	<ol> <li>Replace all six batteries</li> <li>Contact Joerns Healthcare Technical Support at 800-966-6662.</li> </ol>	
Scale System gives suspect readings.	<ol> <li>Scale System cable         is disconnected.</li> <li>Scale System may need calibration.</li> <li>5th Wheel is engaged.</li> </ol>	<ol> <li>Reattach cable.</li> <li>Refer to Page 13 of this Manual.</li> <li>Disengage 5th Wheel.</li> </ol>	
Mattress Support Platform sections do not extend.	Latch handles not fully disengaged.     Binding	1. While actuating the latch handle, try to extend the mattress support platform extension. Refer to page 9 of this manual.  2. Wider support platform sections may require two hands to apply equal pull force. Contact Joerns Healthcare Technical Support at 800-966-6662.	
Mattress Support Platform sections do not articulate.	<ol> <li>Pendant Control operation.</li> <li>Selective function lockout may have been activated.</li> <li>Unit may be defective or damaged.</li> </ol>	<ol> <li>Refer to Pendant Control Troubleshooting on page 18.</li> <li>Refer to page 8 of this manual, Selective Function Lockout.</li> <li>Remove bed from use and contact Joerns Healthcare Technical Support at 800-966-6662.</li> </ol>	
Actuator piston rod will only move inwards and not outwards.	Unit may be defective or damaged.     Possible synchronization problems.	Remove bed from use and contact     Joerns Healthcare Technical Support     at 800-966-6662.	
Actuator motor makes sound, but piston rod does not move.	Unit may be defective or damaged.	Remove bed from use and contact     Joerns Healthcare Technical Support     at 800-966-6662.	
Actuator runs too slowly or does not give full force.	Unit is receiving insufficient power or, is defective. Not plugged in and running on batteries	Remove bed from use and contact     Joerns Healthcare Technical Support     at 800-966-6662.	

## Appendix A - Actuator Wiring Diagram



## Appendix B - Scale System Wiring Diagram





Notes:	

Notes:	

#### Bari10A Model

## Joerns Healthcare Warranty Program for all Joerns® Bari10A Beds

Joerns Bari10A beds are guaranteed for a period of one year from the date of delivery, against defects in materials and workmanship, under normal use and service.

This one-year warranty includes all mechanical and electrical components.

Steel structural components on beds are covered under warranty for a period of 10 years from the date of delivery.

Welds are covered under warranty<sup>1</sup> for the lifetime of the product.

Damage caused by use in unsuitable environmental conditions, abuse or failure to maintain the product in accordance with user and service instructions is not covered.

Any alteration, modification, or repair unless performed by or authorized in writing by Joerns Healthcare, will void this warranty.

#### **Parts**

Joerns beds contain various parts that wear from normal use. These parts, such as DC batteries, are not covered under the one-year warranty but are covered for 90 days after date of delivery. Joerns Healthcare's obligation under this warranty is limited to supplying replacement parts, servicing or replacing, at its option, any product which is found by Joerns Healthcare to be defective.

Warranty replacement parts are covered by the terms of this warranty until the product's original one-year warranty period expires.

When requested by Joerns Healthcare, parts must be returned for inspection at the customer's expense. Credit will be issued only after inspection.

### Service

Most service requests can be handled by the facility Maintenance Department with assistance from the Joerns Healthcare Product Service Department.

Most parts requested can be shipped next day air at the customer's expense.

Should a technician be required, one will be provided by Joerns Healthcare, at our discretion. Only the Joerns Healthcare Product Service Department can dispatch authorized technicians.

This warranty is extended to the original purchaser of the equipment.

<sup>1</sup> Intended product lifetime is 15 years.

