# User/Service Manual for Joerns® Easy Care® 2003DC Model B684DC





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 patient comfort, and adjusts in height for patient and caregiver convenience. Use of this product in a way it was not designed for could result in an unproven or unsafe configuration, potentially resulting in injury or death.



**WARNING: POSSIBLE INJURY.** Before adjusting bed, check that the area under and near the perimeter of the bed is free of people and obstructions. Failure to do so could result in injury.



**WARNING: POSSIBLE INJURY.** Keep bed in lowest position except for providing care (bathing, clothing changes, etc.). Bed should be at the 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 safety. Make sure any floor/caster locks are engaged before attempting any resident transfers. Failure to do so could result in injury or death.



**WARNING: POSSIBLE INJURY OR DEATH.** Residents may become entangled in the pendant cord. Those residents with reduced mental acuity should not be allowed access to the pendant. Failure to do so could result in injury or death.



**WARNING: POSSIBLE INJURY OR DEATH.** Bed weight capacity is 500 pounds evenly distributed. This is the total weight of the resident, mattress, bedding and any other equipment or persons likely to be on the bed. Do not exceed the 500 pound capacity, or use water mattresses that allow water to flow to the end of the bed when the head or foot sections are articulated. Failure to do so could result in injury or death.



**WARNING: POSSIBLE INJURY OR DEATH.** Do not roll bed over abrupt thresholds with resident in bed. Damage to the caster system may occur causing the bed to stop suddenly. Failure to do so could result in injury or death.



**WARNING: POSSIBLE FIRE HAZARD.** Use nasal mask or ½ bed tent oxygen administering equipment. Oxygen tent should not extend below mattress deck. Pendant should not be placed in an oxygen enriched environment such as an oxygen tent. Failure to do so 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.



**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 the mattress deck and will remain centered on the mattress deck relative to State and Federal guidelines. Sunrise Medical recommends the use of a mattress with minimum dimensions of 35" in width, 6" in height, and length to match the mattress deck. 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 the mattress and assist devices and/or side rails. This gap must be small enough to prevent a resident from getting his or her head or neck caught in this location. Make sure that raising or lowering the bed, or articulating the sleep surface does not create any hazardous gaps. Failure to do so could result in injury or death.



**WARNING: POSSIBLE INJURY OR DEATH.** Properly locate the mounting brackets for the assist devices or side rails. The gap between the head/foot board and the assist device or side rail must be small enough or large enough to prevent a resident from getting his or her head or neck caught in this location (see the assist device or side rail installation instructions for more information). If multiple assist devices are used, position them such that the gap between them is large enough for the trunk and hips to easily pass through. Make sure that raising or lowering the bed, or articulating the sleep surface does not create any hazardous gaps. Failure to do so could result in injury or death.



**WARNING: POSSIBLE INJURY OR DEATH.** Do not use an assist device or side rails if any openings within it will allow a resident to get his or her head or neck lodged within these openings. Failure to do so could result in injury or death.



WARNING: POSSIBLE INJURY OR DEATH. Do not use any Joerns assist device until you have verified that it is locked in place. Failure to do so could result in injury or death.



WARNING: POSSIBLE INJURY OR DEATH. Do not use any replacement parts not manufactured, marketed, or provided by Sunrise Medical on any Joerns bed.



**WARNING: POSSIBLE INJURY OR DEATH.** If using accessories not manufactured, marketed, or provided by Sunrise Medical for Joerns beds, consult the accessory manufacturer for compatibility and limitations prior to use.

This product is only one part of your healthcare bed system. Proper combinations of mattress, head/foot boards and assist devices are needed to minimize the risk of entrapment. For more information, contact your Joerns representative.

## SAVE THESE INSTRUCTIONS

Thank you and congratulations for choosing the Joerns® Easy Care® 2003DC bed.

The Joerns Easy Care 2003DC bed was developed to provide comfort and ease of operation for patients and caregivers. Its dependable design will provide years of trouble-free operation. The 2003DC is uniquely suited for use in health care institutions and alternate care settings.

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## **Bed System Entrapment Information**

Although essential in the practice of long-term care, bed side rails, in recent years, have also 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 together with Sunrise Medical and other industry representatives has addressed the potential danger of entrapment with new safety guidelines for medical beds. The guidelines recommend dimensional limits for critical gaps and spaces between bed system components.

The entrapment zones involve the relationship of components often assembled by the healthcare facility rather than a manufacturer. 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 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 will assist customers in selecting compliant accessories recommended for their model beds.

#### Creating a Safer Care Environment

While the guidelines apply to all healthcare settings hospitals, nursing homes and at home – long-term care facilities have particular exposure in that serious entrapment events typically involve frail, elderly or dementia patients.

#### For More Information

To learn more about compliance options with Joerns products, contact **Joerns Customer Care (800-826-0270)** or your Joerns account manager and ask for free informational publications.

To learn more about entrapment zones, assessment methods, and guidelines concerning entrapment, contact Sunrise Medical, Long-Term Care Division, or the FDA.

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## Features and Specifications for Your Joerns Easy Care 2003DC Bed

## Joerns Easy Care Standard Features

76" or 80" sleep surface Whisper-Quiet DC Motors Grid Sleep Surface Brown or SoftTone Frame Color

#### **Mechanical Specifications**

Dimensions:	76" bed	: 81.5″L x 35.0″W x 14.5″H	
	80" bed	: 85.5″L x 35.0″W x 14.5″H	
Weight:		200 lbs.	
Maximum Back Angle:		65° to horizontal	
Maximum Knee Angle:		35° to horizontal	
Maximum Knee to Leg Angle:		45°	
Maximum Height Mattress			
Support Surface Above Floor:		25" (23" with XL option)	
Minimum Height Mat	tress		
Support Surface Above Floor:		14.5" (12.5" with XL option)	

## **Environmental Conditions**

#### **Operating Conditions:**

Ambient Temperature:+10C to +40CRelative Humidity:30% to 75% Non-CondensingAtmospheric Pressure:700 hPa to 1060 hPaProtected Against Water IPX1

#### Storage and Shipping Conditions:

Ambient Temperature:-40C tcRelative Humidity:10% toAtmospheric Pressure:500 hPa

-40C to +70C 10% to 100% 500 hPa to 1060 hPa

## **Electrical Specifications**

Circuit Protection:

Mode of Operation:

108-132 VAC 60 Hz 1.6 Amps (110-120V Unit) Class 2, Type B (Double Insulated) 250V, F1.6A (110-120V Unit) 10% Maximum duty cycle

## Accessories and Options

76", 80" and 84" Mattresses Pan Sleep Surface F14AC or F14SC Vari-Care 1/2 Length Assist Devices 3/4 or Full Length Vari-Care Side Rails F025 Assist Handle Casters - 2 or 4 locking Griplock Bed Panels Staff Control 4" Extender **Baseboard Bumper** Trapeze Adapter IV Rod Floor Mat Mattress Side Stops Push Bar

Emergency Battery Backup System

- Battery Backup 24V
- Battery Charger 24V
- Wall Mounting Bracket for Charger

## **Bed Identification Numbers**

When ordering parts, or when contacting our Customer Care Department, please include the Model and Serial Numbers of the bed, found on the identification label.

The identification label is located on the frame of the bed under the foot section of the sleep deck.

## **Bed Weight Capacity**

The Joerns Easy Care 2003DC bed has a maximum capacity of 500 pounds distributed evenly on the sleep surface, and a normal working load of 300 pounds. This is the total weight of the resident, mattress, bedding, accessories and other medical equipment in use. Do not use water mattresses that allow water to flow to the foot end when the head is raised.

## Assembly of Your Joerns Bed

#### Installation of Head and Foot Panels (for

more information refer to Bed Panel Installation Sheet)

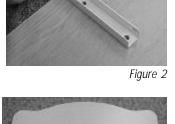
Tools required: Phillips head screwdriver

#### Head Panel Installation:

- The head panel is the larger of the two panels and has a sticker on the back side.
- Place panel on ground with sticker side down (four holes should be visible).
- The head panel brackets are the longer of the two sizes (fig. 1)
- Install the head panel brackets with the four short screws 2). Do not tighten screws until after brackets onto the bed.



provided. The open side of the bracket should face up (fig. fitting the mounting



- Completed head panel (fig. 3).
- Go to final assembly step below.

#### Foot Panel Installation:

Frame-Mounted Foot Panel

- The foot panel is the smaller of the two panels and has a sticker on the back side.
- Place panel on ground with sticker side up (four holes should be visible).
- The foot panel brackets are the shorter of the two sizes (fig. 4).
- Install the foot panel brackets with the four long screws provided. The



open side of the brackets

should face down towards the panel (fig. 5). Do not tighten the screws until after fitting the mounting brackets onto the bed.

- Completed foot panel (fig. 6).
- Go to final assembly step below.



Figure 5



Figure 6

#### Final Assembly Step for Head Panel and Frame Mounted Foot Panel

- Insert the head panel as shown with the mounting hardware facing towards the outside of the bed (fig. 7).
- Install the foot panel as shown with the mounting hardware facing toward the bed (fig. 8).
- Tighten all eight screws with the panels in place.



Figure 7



Figure 8

#### Installation Instructions for Staff Control Panel (optional)

- 1. Mount foot panel on bed as per previous instructions.
- 2. Plug patch cord and pendant into proper sockets on foot panel as shown (figure 9).
- 2. Cord will plug into socket 2 on control box (figure 13).



Figure 9

Figure 3

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## Operation of Your Joerns Bed

#### **Operation of the Electronic Controls**

Your Joerns Easy Care 2003DC bed comes with the standard snap-in pendant control or the optional staff control and snap-in pendant.

The removable snap-in pendant is used as both the standard pendant, and in combination with the staff control option. The pendant is gray in color and has raised, high-contrast buttons and graphics. It snaps into the assist device for convenient resident and staff access (fig. 10).

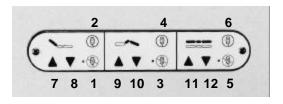


Figure 11

#### Pendant Lockout Operation 1 - Push button to lockout Head

- 2 Push button to unlock Head
- 3 Push button to lockout Knee
- 4 Push button to unlock Knee 5 - Push button to lockout Hi/Lo
- 6 Push button to unlock Hi/Lo
- **Bed Operation** 7 - Push button to raise Head 8 - Push button to <u>lower</u> Head 9 - Push button to raise Knee 10 - Push button to lower Knee 11 - Push button to raise Bed
- 12 Push button to lower Bed

#### Head Operation

1 - Push button to raise Head 2 - Push button to lower Head

#### Knee Operation

- 3 Push button to raise Knee
- 4 Push button to lower Knee

#### **Bed Height Operation**

- 5 Push button to raise Bed
- 6 Push button to lower Bed



Figure 10

#### Staff Control Panel Operation (optional)

The Staff Control Panel allows the caregiver to individually lockout all functions of the snap-in pendant. The caregiver can also operate the bed from this panel without walking to the side of the bed. To lockout a function, press the "no pendant" (fig. 11 - No. 1, 3, 5) graphic on the panel. The illuminated red LED indicates that the function is now locked out. To unlock the function, press the "pendant" (fig. 11 - No. 2, 4, 6) graphic on the panel. The red LED is no longer illuminated, signaling that the pendant can operate that function.

#### Cleaning of Your Joerns Bed

**CAUTION:** Possible damage to electrical parts, and/or shock hazard.

Clean all electrical components (motors, control box, pendant and cords) on your Joerns bed with a damp, well-wrung out cloth. Excess water in or on electrical parts could damage these components. Do not submerge the pendant in liquid.

Your Joerns bed has a durable, baked-on epoxy finish that is easily cleaned with a mild solution of antiseptic cleaner and warm water. Read and follow all label instructions on the cleaning products.

Wood veneer surfaces should be maintained by cleaning with furniture polish or lemon oil. Laminate surfaces should be maintained by cleaning with a disinfectant spray.

## Maintenance of Your Joerns Bed

**Maintenance/Inspection Information:** Visually inspect the bed and accessories for broken welds or cracks, and check for loose hardware on a monthly basis. If any broken welds or cracks are found, remove the bed from service immediately and replace the affected part(s). Contact Sunrise Medical Technical Service for assistance, if necessary. Any loose hardware should be tightened.

## Servicing

#### of Your Joerns Bed



**WARNING: POSSIBLE SHOCK HAZARD.** Unplug power cord from wall outlet before performing any maintenance or service to the power box.

#### Motor and Control Box Information

Cord and Socket Identification (fig. 12)

- A. Pendant/Staff Control
- 1. Not Used
- 2. Head Motor
- 3. Knee Motor
- 4. Emergency Battery Pack (sold separately)

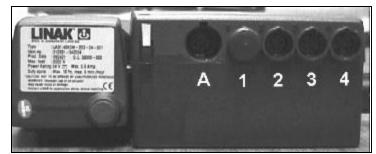


Figure 12

#### Motor and Control Box Troubleshooting

Any loss of electrical function should be investigated with the following steps:

- 1. Make sure that all cords are plugged in, including pendant, staff control cords and AC Power.
- 2. There is a protection feature built into the motors and control box to prevent overheating. If the bed was operating continuously, the motors may stop functioning for a short period of time to allow them to cool. Full function will resume in less than 15 minutes.
- 3. Switch the pendant with a new one or from a bed that is functioning normally.
- 4. If these steps fail to resolve the problem, call the technical support hotline at the number shown on the back cover of this manual.

#### To Remove Motor

Recommended Tools: Screwdriver, hammer, masking tape, zip ties

- 1. Identify motor to be replaced.
- 2. Tip bed on its side (to replace high/low motor).
- 4. Unplug motor cord.
- 5. The motor is held in place by two pins. Remove the lock ring on each pin with a screwdriver.
- 6. Slide pins out of holes. If necessary, use the hammer to tap out the pins.
- 7. Motors may now be replaced.
- 8. To reassemble bed, reverse the previous steps, making note of the following two important items:
- · Assemble pin and locks as originally installed.

#### Accessories for Your Joerns Bed

Sunrise Medical offers a number of accessories for the Easy Care 2003DC bed, including:

- Mattress Side Stop
- Bed Transport Bar
- 4-inch extension

## Important Warnings

#### All Accessories

WARNING: POSSIBLE INJURY OR DEATH. Injury or death may result from improper use of bed accessories (assist devices, trapeze devices, etc.) Consult the accessory manufacturer for compatibility, proper installation and use instructions.

#### Mattress Side Stop

WARNING: POSSIBLE INJURY. Sitting on or sliding over the mattress side stop can cause injury to the skin when used with a mattress that compresses to less than 2.0 inches under load.

WARNING: POSSIBLE INJURY. Make sure that the mattress fills the entire width between the side stops. Failure to do so could result in injury.

#### **Bed Transport Bar**

WARNING: POSSIBLE INJURY. The bed transport bar must be used according to installation and 4 user instructions. Improper use could cause it to disconnect, resulting in a fall or loss of control of the bed.

#### **4-inch Extension**



WARNING: POSSIBLE INJURY OR DEATH. Use a mattress long enough so that the gap between the mattress and the head/foot board is small enough to prevent a resident from getting his or her head or neck caught in these locations. Failure to do so could result in injury or death.

#### Trapeze Adapter



WARNING: POSSIBLE INJURY OR DEATH. Improper installation of the trapeze adapter could alter the position of or dislodge the headboard, increasing the risk of injury or suffocation.



WARNING: POSSIBLE INJURY OR DEATH. Follow the manufacturer's directions when installing a trapeze bar. Improper installation of a trapeze bar on the trapeze adapter could cause the trapeze bar to disconnect or otherwise fail, resulting in injury or death.



WARNING: POSSIBLE INJURY OR DEATH. Make sure there is a minimum of 1 inch clearance between the bottom of the trapeze bar and the floor when the bed is in its lowest position. Failure to do so could damage the floor and/or cause the bed to become unstable, resulting in injury or death.

- Trapeze Adapter
- Battery Back-up

#### Mattress Side Stops

 The mattress side stop is designed to help keep the mattress from sliding laterally on the mattress deck. This option can be installed in combination with the assist devices. Please read the important warnings related to this



option and follow all of the instructions below prior to use.

- 2. Install the mattress side stop according to the supplied instructions (contact Sunrise Medical to acquire instructions if necessary).
- Replace the mattress and check that the mattress fills the width between stops. Also, check that the mattress will not compress to less than 2.0" in height under the user's load, especially when sitting on or sliding over the stop.

#### Push Bar

1. The push bar is designed to make it easier to move the B684DC beds. *Remember that the B684DC bed is not designed to be used as a resident transport device.* Please read the important warnings related to this option and follow all of the instructions below prior to use.



- Install the push bar according to the supplied instructions (contact Sunrise Medical to acquire instructions if necessary).
- 3. When using the push bar to move beds, take care to push down and forward on the push bar handle. Pushing up or attempting to use the push bar to lift the bed to overcome thresholds may cause it to disconnect from the bed, resulting in a loss of control of the bed.

4. Extra care should be taken when moving the bed on any slope. Moving the bed on a slope requires two people, one at each end of the bed. Never use the push bar to move a bed on a slope that exceeds the ANSI and/or ADA requirements for accessibility.

#### 4-Inch Extension

 The 4-inch extension is designed to extend the bed deck approximately four inches. This allows the use of an 84" mattress on an 80" deck or an 80" mattress on a 76" deck. Please read the important warnings related to this option and follow all of the instructions below prior to use.



- 2. Install the 4" extension according to the supplied instructions (contact Sunrise Medical to acquire instructions if necessary).
- 3. Check to make sure that the increase in overall length does not produce a hazard to safety or accessibility in the room.
- 4. Place the new mattress against the mattress stop and check that the mattress covers the entire length of the deck.

#### Trapeze Adapter

 The trapeze adapter is designed to allow for the attachment of a trapeze system to the B684DC bed. Please read the important warnings related to this option and follow all of the instructions below prior to use.



- 2. Install the trapeze adapter according to the supplied instructions (contact Sunrise Medical to acquire instructions if necessary).
- 3. Install the trapeze assembly onto the trapeze adapter according to the trapeze manufacturer's instructions.

- 4. Articulate the bed from its highest through its lowest position to assure proper clearance and operation. When the bed is in it's lowest position, there should be a minimum of one inch clearance from the bottom of the trapeze to the floor. (Due to its low operating height some trapeze systems may not be suitable for use with the B675 bed)
- 5. Adjustment and use of a trapeze should be done in accordance with the instructions of a healthcare professional (doctor or therapist).
- 6. Do not exceed maximum loading condition (see installation instructions).

#### Battery Back-up

Battery Backup includes:

•Charger with power cord #12160300

- •Battery with cable
- •Wall mount bracket #12160301

#### Charger

Simply mount the battery charger in a central location convenient to care giving staff. Plug the charger into any standard wall socket (110 V; 50-60 Hz.). Insert the battery in the charger.

Green light -- indicates main power is ON

Yellow light -- indicates battery is charging

After approximately 4 hours of charging, the yellow light goes off and the battery will be fully charged.

#### To Power the B684DC bed:

- 1. Locate the motor control box, under the sleep surface near the foot of the bed.
- 2. Referencing the illustration on page 8 of this manual, locate the socket labeled
  - "1 Emergency Battery Pack"
- 3. Insert the battery's plug into the emergency battery pack socket.
- 4. Operate the bed using pendant or staff control, as applicable.



**Caution:** Keep the batteries fully charged. Place the batteries on the charger whenever not in use. The charger will not allow the batteries to "overcharge".

**Caution:** Never run the batteries completely flat.



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**Caution:** Never store the batteries for long periods without regular charging throughout the storage period.

**Caution:** Never leave the batteries in the charger with the main power off.

**Warning:** Always ensure that the main power to the charger is switched off before connecting or disconnecting the charger to or from the bed.

## SUNRISE MEDICAL PRODUCT ASSURANCE

Joerns beds are guaranteed for a period of 2 years from the date of delivery against defects in materials and workmanship under normal use and service. This warranty includes all mechanical and electrical components.

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

Damage caused by use in unsuitable environmental conditions 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 Sunrise Medical 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 2-year warranty but are covered for 90 days after date of delivery.

Sunrise Medical's obligation under this warranty is limited to supplying replacement parts, servicing, or replacing, at its option, any product which is found by Sunrise Medical to be defective. Warranty replacement parts are covered by the terms of this warranty until the product's original warranty period expires.

When requested by Sunrise Medical, 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 Sunrise Medical Product Service Department. Most parts requested can be shipped FedEx next day air at the customer's expense. Should a technician be required, at our discretion, one will be provided by Sunrise Medical. Only the Sunrise Medical Product Service Department can dispatch authorized technicians.

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

# Warranty

for all Joerns beds

Customer Care 800.826.0270

Technical Support Hotline 888.528.8799

> Technical Support Fax 715.341.3603



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