

# ICCI Bed Rails and Accessories



## Assembly, Installation and Operating Instructions

Part No. 6801A, 6803A, 6808A, 6815A, 6816A, IH5748A, IHRAILTS-DLX

Yes, you can.

### SAVE THESE INSTRUCTIONS

*NOTE: Check all parts for shipping damage before using. In case of damage, DO NOT use the equipment. Contact the Dealer/Carrier for further instructions.*

## Safety Summary

### WARNING

**DO NOT** use this product or any available optional equipment without first completely reading and understanding these instructions and any additional instructional material such as owner's manuals, service manuals or instruction sheets supplied with this product or optional equipment. If you are unable to understand the warnings, cautions or instructions, contact a healthcare professional, dealer or technical personnel before attempting to use this equipment - otherwise, injury or damage may occur.

These bed rails are intended to prevent an individual from inadvertently rolling out of bed. **DO NOT** use for restraint purposes.

**DO NOT** use the bed rails as push handles for moving the bed.

**ALWAYS** test to make sure that the bed rails are properly and securely in place before using.

Although bed rails are not rated to any specific weight limitation, the bed rails may become deformed or broken if excessive side pressure is exerted on the bed rails. This bed rail is not an assist rail for getting into or out of bed. **DO NOT** use the bed rails as push handles when moving the bed.

### ACCESSORIES WARNING

Invacare products are specifically designed and manufactured for use in conjunction with Invacare accessories. Accessories designed by other manufacturers have not been tested by Invacare and are not recommended for use with Invacare products.

### ENTRAPMENT WARNING

Proper patient assessment and monitoring, and proper maintenance and use of equipment is required to reduce the risk of entrapment. Variations in bed rail dimensions, and mattress thickness, size or density could increase the risk of entrapment. Visit the FDA website at <http://www.fda.gov> to learn about the risks of entrapment.

Review "A Guide to Bed Safety", published by the Hospital Bed Safety Workgroup.

Refer to the bed owner's manuals for additional product and safety information.

Mattress **MUST** fit bed frame and bed rails and/or positioning device snugly to reduce the risk of entrapment.

After any adjustments, repair or bed service and before use, make sure all attaching hardware is tightened securely. Rails and/or positioning devices with dimensions different from the original equipment supplied or specified by the bed manufacturer may not be interchangeable and may result in entrapment or other injury.

## Installing/Using the Epoxy Bed Rails

*NOTE: For this procedure, refer to FIGURE 1.*

### Installing 6801A and 6808A Bed Rails

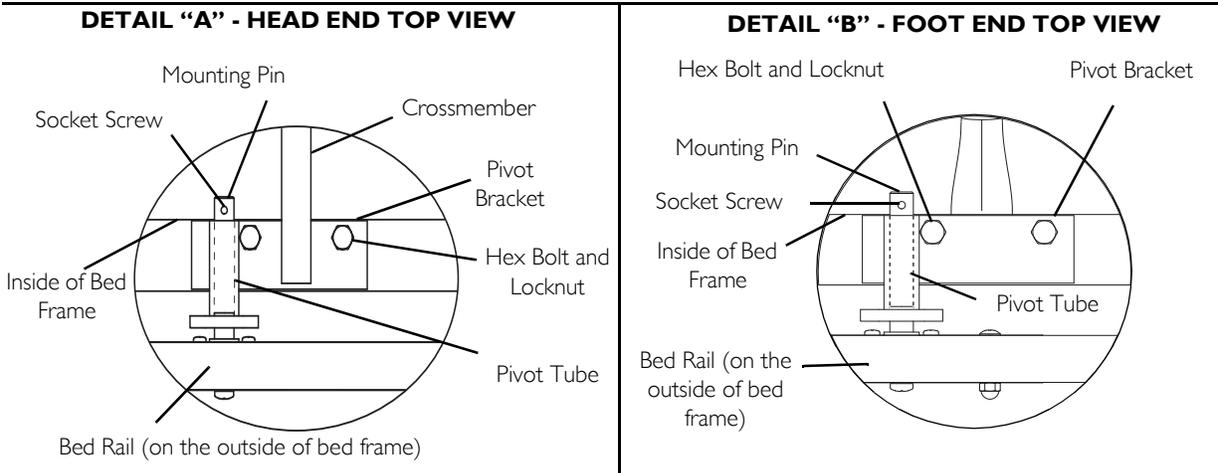
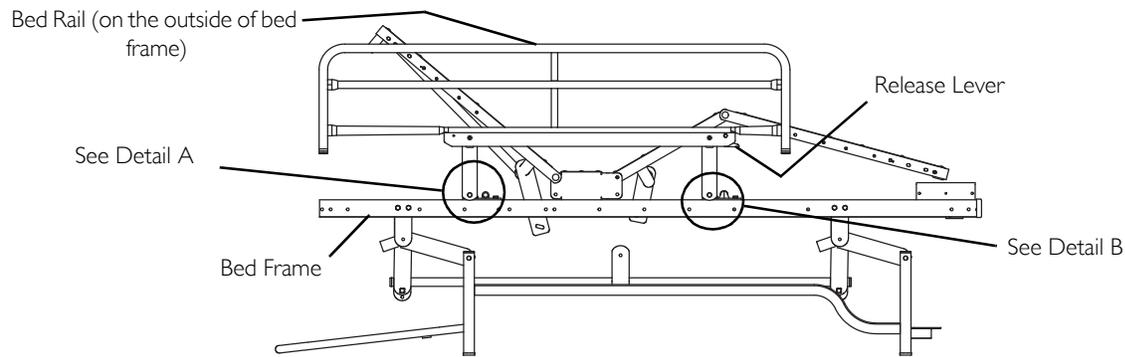
1. Position the pivot brackets on the bed frame as shown in Details "A" and "B" of FIGURE 1.
2. Loosely attach the pivot brackets to the bed frame with the hex bolts and locknuts.

*NOTE: DO NOT tighten the hex bolts and locknuts at this time.*

3. Slide the mounting pins of the bed rails through the pivot tubes.

*NOTE: Make sure the release lever on the bed rail is pointing towards the foot end of the bed.*

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**FIGURE I** Installing 6801A and 6808A Bed Rails

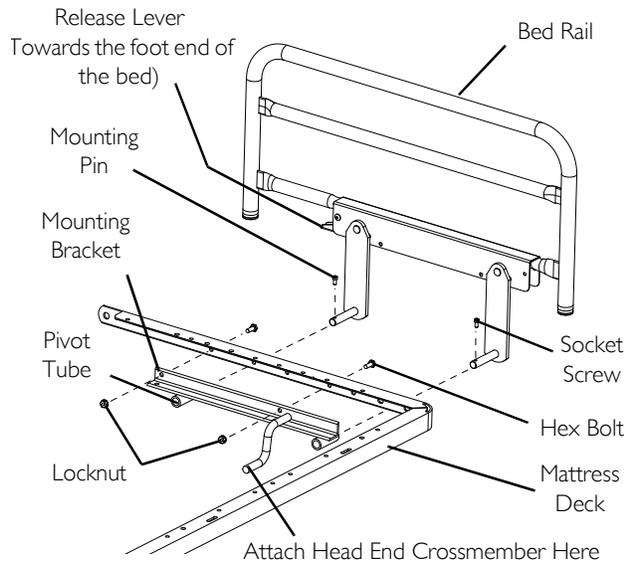
4. Install a socket screw into the head end and foot end mounting pins and tighten securely.
5. Securely tighten the hex bolts and locknuts that secure the pivot brackets to the bed frame.
6. Repeat STEPS 3-6 for the opposite bed rail.

**Installing 6815A, 6816A and 6803A Bed Rails**

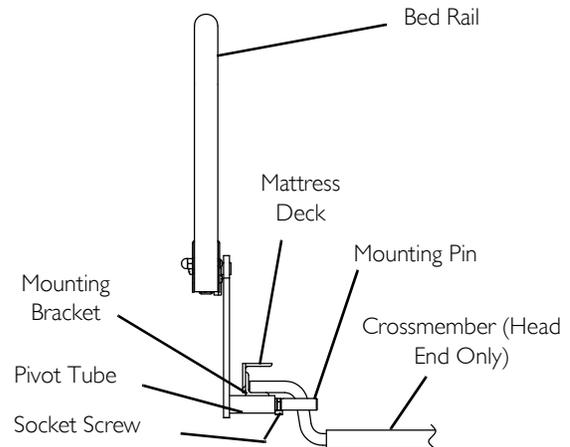
*NOTE: For this procedure, refer to FIGURE 2.*

1. When installing bed rails 6815A, 6816A or 6803A on a bed used with an 80-inch mattress, the head board mounting brackets **MUST** be adjusted. Refer to Changing the Head Board Mounting Position on page 6.
2. Raise the mattress deck to which the bed rail will be attached.
3. Locate the proper mounting holes on the bed to install the bed rails. Refer to Detail "B" of FIGURE 2.
4. Position the mounting bracket on the mattress deck. Refer to Detail "B" of FIGURE 2.
5. Secure the mounting bracket to the mattress deck with the two hex bolts and locknuts.
6. Install the bed rail to the mounting bracket by sliding the mounting pin of the bed rail through the pivot tube.

*NOTE: Ensure that the release lever is pointing towards the foot end of the bed.*



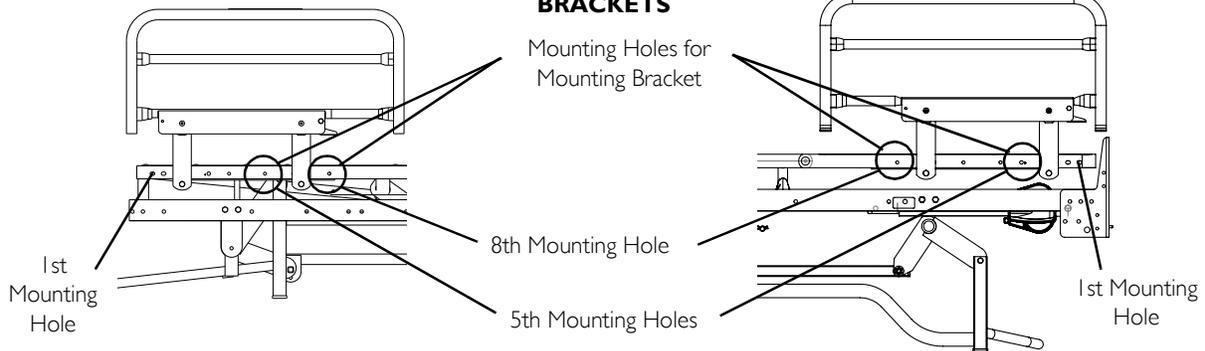
**DETAIL "A" - SIDE VIEW OF BED RAIL**



**Head End**

**DETAIL "B" - MOUNTING HOLE LOCATION FOR MOUNTING BRACKETS**

**Foot End**



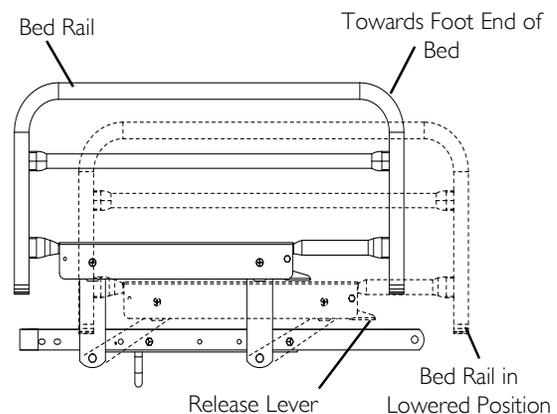
**FIGURE 2** Installing 6815A, 6816A and 6803A Bed Rails

7. Secure the bed rail to the mounting bracket with the two socket screws.
8. Head End Mounting Bracket Only - Position the crossmember between the two bed rails as shown in Detail "A" of FIGURE 2 on page 3.
9. Repeat STEPS 3-7 to install the other bed rail on the opposite side.

**Using the Epoxy Bed Rails**

NOTE: For this procedure, refer to FIGURE 3.

1. Perform one of the following:
  - Raising - Pull up on the bed rails while rotating towards the head end of the bed until the bed rail locks into place.
  - Lowering - Pull up on the release lever and push down on the bed rail while rotating towards the foot end of the bed until the bed rail lowers into place.



**FIGURE 3** Using the Epoxy Bed Rails (Head End)

## Installing/Using Nylasar Bed Rails

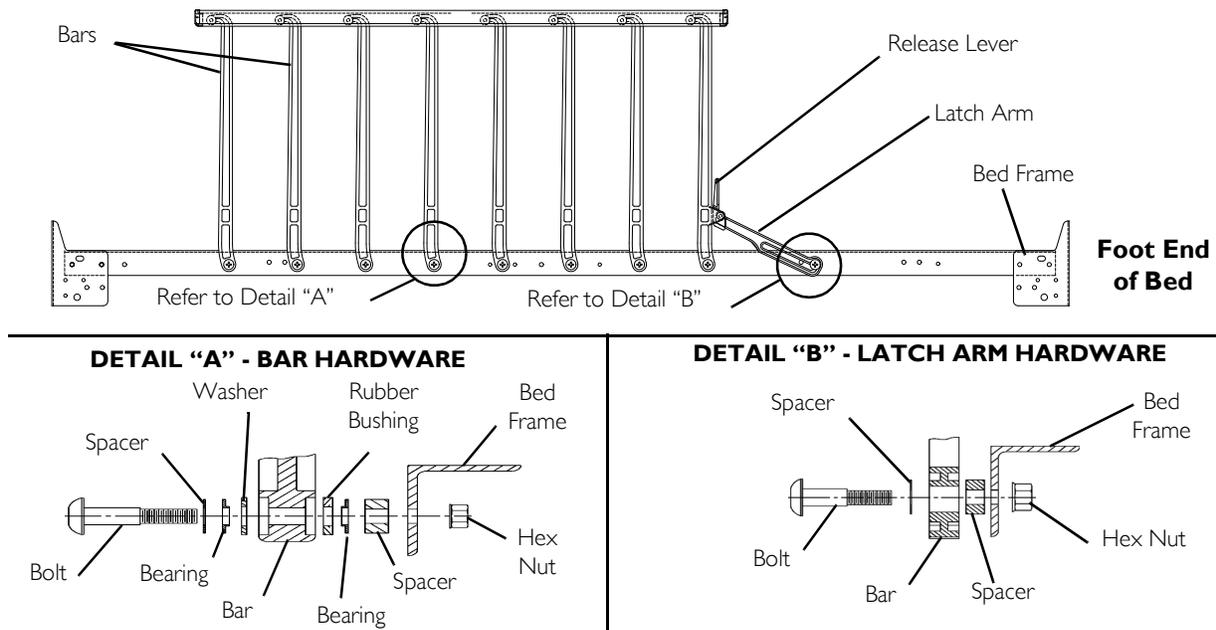
*NOTE: The hardware shown in FIGURE 4 on page 4 is already assembled to the bars and latch arms before shipment. It is not necessary to remove the hardware from the bolt or to remove the bolt from the bars or latch arms. Holding the bolt in place while removing the hex nuts will prevent the hardware from becoming disassembled. In case of disassembly, refer to FIGURE 4 on page 4 for the correct placement of the hardware.*

### Installing the IH5748A Bed Rails

*NOTE: For this procedure, refer to FIGURE 4 on page 4.*

*NOTE: Invacare recommends two people perform the following installation procedure. One person should hold the bed rail up against the bed and one person should attach the rail to the bed.*

1. Position the bed rail on the bed frame with the release lever towards the foot end of the bed.
2. Loosen and remove the hex nut from the latch arm at the foot end of the bed (Detail "B").
3. Carefully push the bolt through the mounting hole in the bed frame (Detail "B").
4. Loosely install the hex nut on the bolt to secure the latch arm to the bed frame (Detail "B").
5. Loosen and remove the hex nut from the bar closest to the latch arm (Detail "A").
6. Carefully push the bolt through the corresponding mounting hole in the bed frame (Detail "A").
7. Loosely install the hex nut on the bolt to secure the bar to the bed frame (Detail "A").
8. Repeat STEPS 5-7 for the remaining bars.
9. Securely tighten all bolts and hex nuts securing the bars and the foot end latch arm to the bed frame. Torque to 100-150 inch-pounds.

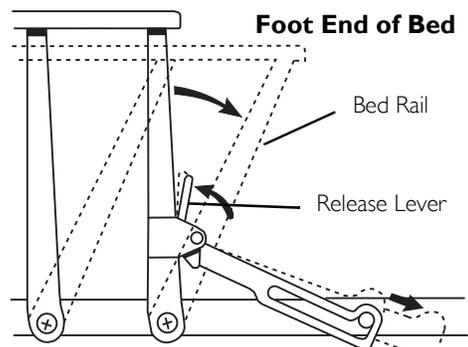


**FIGURE 4** Installing/Using Nylasar Bed Rails - Installing the IH5748A Bed Rails

### Using the IH5748A Bed Rails

*NOTE: For this procedure, refer to FIGURE 5.*

1. Perform one of the following:
  - Raising - Lift up on the bed rail until the rail locks into place.
  - Lowering - Press in on the release lever and push down on the rail.



**FIGURE 5** Using the IH5748A Bed Rails

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## Installing/Using the Carroll Assist Rail<sup>®</sup> and Carroll Assist Bar

### Installing/Using IHRAILAB-DL and IHRAILAE-DLX

For instruction involving installation and use of the Carroll Assist Rails and Carroll Assist Bar, refer to the instruction sheet included with the rails.

### Installing/Using the ThinkSoft<sup>®</sup> Positioning Device

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#### **⚠ WARNING**

**DO NOT** use this product or any available optional equipment without first completely reading and understanding these instructions and any additional instructional material such as owner's manuals, service manuals or instruction sheets supplied with this product or optional equipment. If you are unable to understand the warnings, cautions or instructions, contact a healthcare professional, dealer or technical personnel before attempting to use this equipment - otherwise, injury or damage may occur.

This device is intended to provide a grip surface to a bed occupant to position themselves.

**DO NOT** use for restraint purposes.

**DO NOT** use this device as a push handle for moving the bed.

**ALWAYS** test to make sure that this device is properly and securely in place before using.

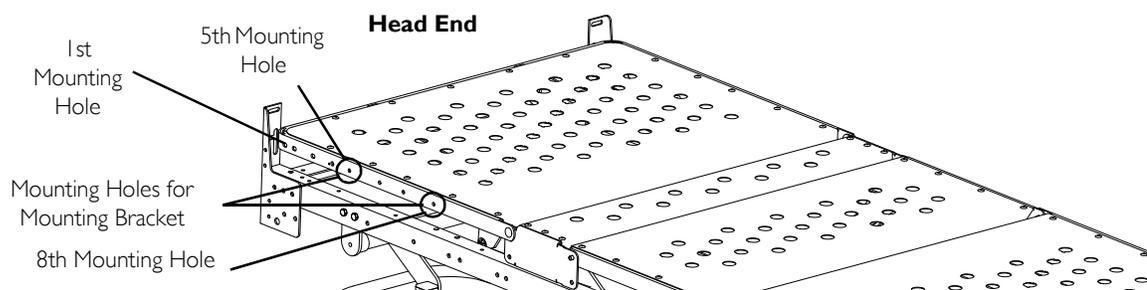
**Although this device is not rated to any specific weight limitation, this device may become deformed or broken if excessive side pressure is exerted on this device.**

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### Installing the IHRAILTS-DLX Positioning Device

*NOTE: For this procedure, refer to FIGURE 6 and FIGURE 7.*

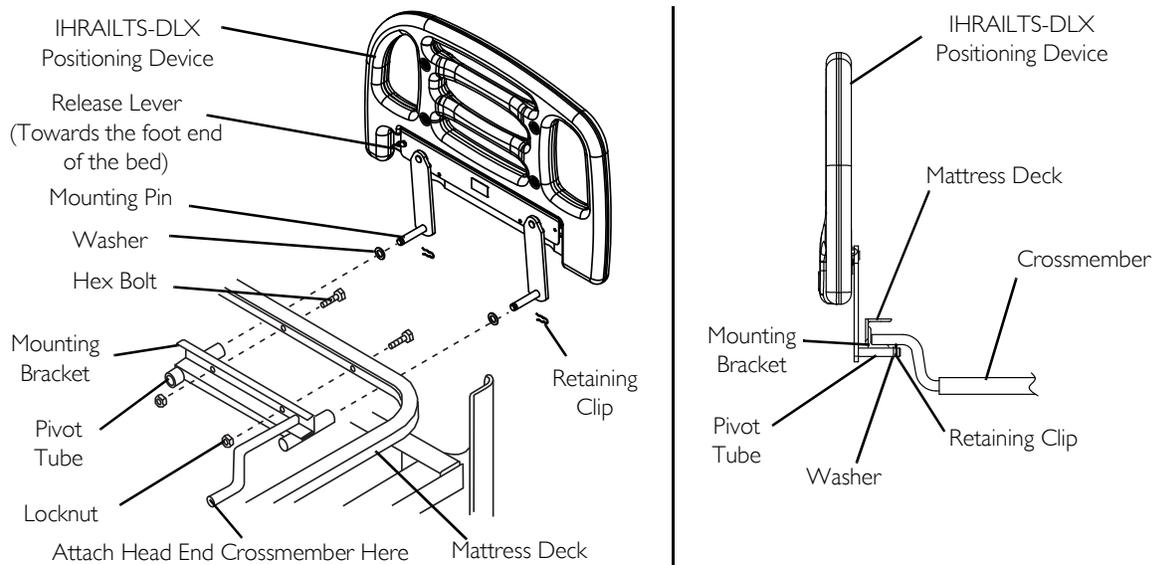
1. When installing the positioning device IHRAILTS - DLX on a bed used with an 80-inch mattress, the head board mounting brackets and mattress keepers **MUST** be adjusted. Refer to [Changing the Head Board Mounting Position](#) and [Changing the Mounting Position of the Mattress Keepers](#) on page 7.
2. Raise the mattress deck to which the positioning device will be attached.
3. Locate the proper mounting holes on the bed to install the positioning device (FIGURE 6).



**FIGURE 6** Mounting Holes for Mounting Bracket

4. Position the mounting bracket on the mattress deck (FIGURE 7).
  5. Secure the mounting bracket to the mattress deck with the two hex bolts and locknuts (FIGURE 7).
  6. Install the positioning device into the mounting bracket by sliding the mounting pin of the bed rail through the pivot tube (FIGURE 7).
  7. Secure positioning device in place with two retaining clips (FIGURE 7).
- NOTE: Ensure that the release lever is pointing towards the foot end of the bed.*
8. Slide the nylon washer over the end of the mounting pins (FIGURE 7).
  9. Snap retaining clips into grooves on the end of the mounting pins (FIGURE 7).
  10. Head End Mounting Bracket Only - Position the crossmember between the two bed rails (FIGURE 7).

*NOTE: Repeat STEPS 3-9 to install the other positioning device on the opposite side.*

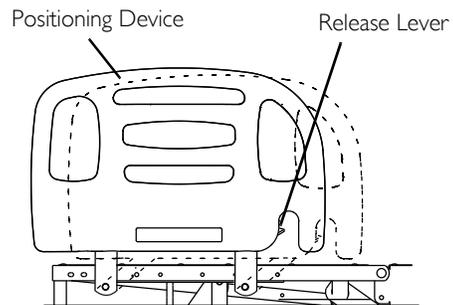


**FIGURE 7** Installing the IHRAILTS-DLX Positioning Device

### Using the IHRAILTS-DLX Positioning Device

*NOTE: For this procedure, refer to FIGURE 8.*

1. Perform one of the following:
  - Raising - Pull up on the positioning device while rotating towards the head end of the bed until the positioning device locks into place.
  - Lowering - Pull up on the release lever and push down on the positioning device while rotating towards the foot end of the bed until the positioning device lowers into place.



**FIGURE 8** Using the IHRAILTS-DLX Positioning Device

### Changing the Head Board Mounting Position

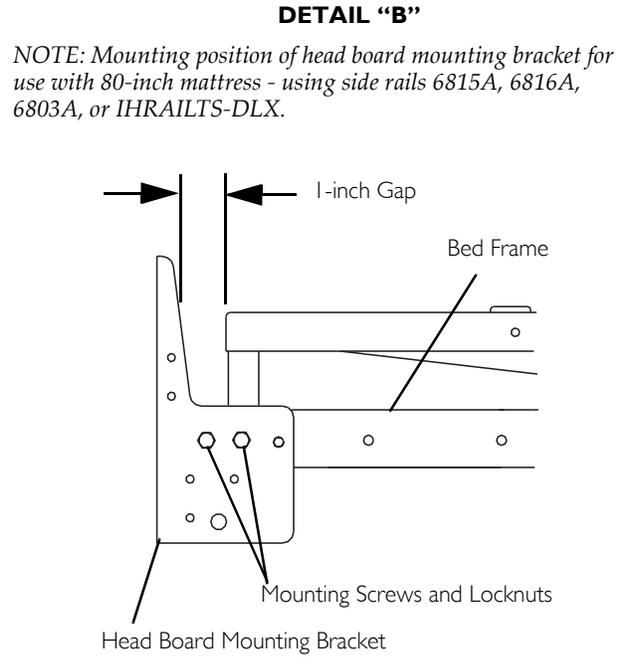
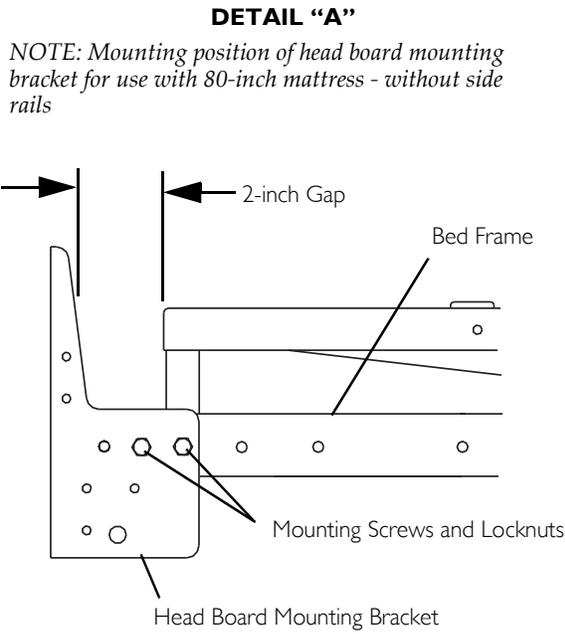
*NOTE: For this procedure, refer to FIGURE 9.*

*NOTE: When using bed rails 6815A, 6816A, 6803A or IHRAILTS - DLX in conjunction with an 80-inch mattress, the head board mounting brackets MUST be adjusted.*

1. Remove the two mounting screws that secure head board mounting bracket to the bed frame. See Detail "A".
2. Secure the head board mounting bracket to the bed frame as shown in Detail "B" using two mounting screws and locknuts. Securely tighten.

*NOTE: Ensure mounting brackets are perpendicular to the floor.*

3. Repeat STEPS 1-2 to install remaining head board mounting brackets.



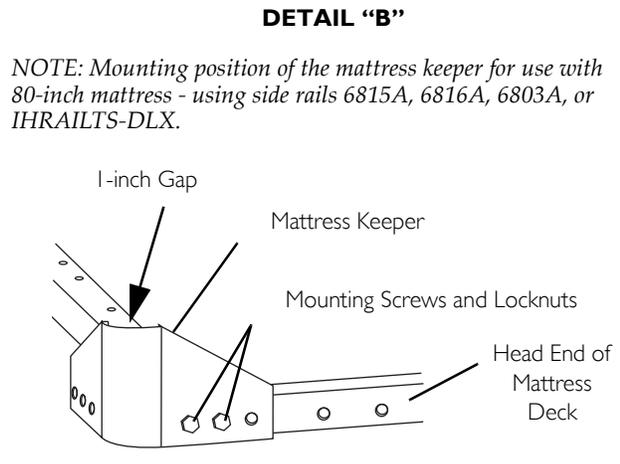
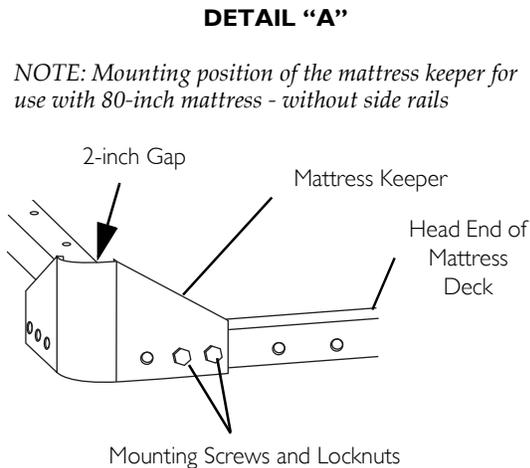
**FIGURE 9** Changing the Head Board Mounting Position

### Changing the Mounting Position of the Mattress Keepers

*NOTE: For this procedure, refer to FIGURE 10 on page 7.*

*NOTE: When using bed rails 6815A, 6816A, 6803A or IHRAILTS\_DLX in conjunction with an 80-inch mattress, the mattress keepers on the head end of the mattress deck MUST be adjusted.*

1. Remove the two mounting screws that secure the mattress keeper to the head end of the mattress deck. See Detail "A".
2. Secure the mattress keeper to the head end of the mattress deck as shown in Detail "B" using two mounting screws and locknuts. Securely tighten.
3. Repeat STEPS 1-2 to adjust the remaining mattress keeper on the head end of the mattress deck.



**FIGURE 10** Changing the Mounting Position of the Mattress Keepers

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# APPENDIX

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## SPECIAL NOTE

For your convenience, the January 2008 version of the FDA's bed safety guidelines are provided in this section. The information from the FDA's brochure, published by Hospital Bed Safety Workgroup, is reproduced verbatim, the latest revision of which is available at <http://www.fda.gov>.

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## A Guide to Bed Safety Bed Rails in Hospitals, Nursing Homes and Home Health Care: The Facts

### Bed Rail Entrapment Statistics

Today there are about 2.5 million hospital and nursing home beds in use in the United States. Between 1985 and 2005, 691 incidents of patients\* caught, trapped, entangled, or strangled in beds with rails were reported to the U.S. Food and Drug Administration. Of these reports, 413 people died, 120 had a nonfatal injury, and 158 were not injured because staff intervened. Most patients were frail, elderly or confused.

*\*NOTE: In this brochure, the term patient refers to a resident of a nursing home, any individual receiving services in a home care setting, or patients in hospitals.*

### Patient Safety

Patients who have problems with memory, sleeping, incontinence, pain, uncontrolled body movement, or who get out of bed and walk unsafely without assistance, must be carefully assessed for the best ways to keep them from harm, such as falling. Assessment by the patient's health care team will help to determine how best to keep the patient safe. Historically, physical restraints (such as vests, ankle or wrist restraints) were used to try to keep patients safe in health care facilities. In recent years, the health care community has recognized that physically restraining patients can be dangerous. Although not indicated for this use, bed rails are sometimes used as restraints. Regulatory agencies, health care organizations, product manufacturers and advocacy groups encourage hospitals, nursing homes and home care providers to assess patients' needs and to provide safe care without restraints.

### The Benefits and Risks of Bed Rails

Potential benefits of bed rails include:

- Aiding in turning and repositioning within the bed.
- Providing a hand-hold for getting into or out of bed.
- Providing a feeling of comfort and security.
- Reducing the risk of patients falling out of bed when being transported.
- Providing easy access to bed controls and personal care items.

Potential risks of bed rails may include:

- Strangling, suffocating, bodily injury or death when patients or part of their body are caught between rails or between the bed rails and mattress.
- More serious injuries from falls when patients climb over rails.
- Skin bruising, cuts, and scrapes.
- Inducing agitated behavior when bed rails are used as a restraint.
- Feeling isolated or unnecessarily restricted.
- Preventing patients, who are able to get out of bed, from performing routine activities such as going to the bathroom or retrieving something from a closet.

### Meeting Patients' Needs for Safety

Most patients can be in bed safely without bed rails. Consider the following:

- Use beds that can be raised and lowered close to the floor to accommodate both patient and health care worker needs.
- Keep the bed in the lowest position with wheels locked.
- When the patient is at risk of falling out of bed, place mats next to the bed, as long as this does not create a greater risk of accident.
- Use transfer or mobility aids.
- Monitor patients frequently.
- Anticipate the reasons patients get out of bed such as hunger, thirst, going to the bathroom, restlessness and pain; meet these needs by offering food and fluids, scheduling ample toileting, and providing calming interventions and pain relief.

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When bed rails are used, perform an on-going assessment of the patient's physical and mental status; closely monitor high-risk patients. Consider the following:

- Lower one or more sections of the bed rail, such as the foot rail.
- Use a proper size mattress or mattress with raised foam edges to prevent patients from being trapped between the mattress and rail.
- Reduce the gaps between the mattress and side rails.

### **Which Ways of Reducing Risks are Best?**

A process that requires ongoing patient evaluation and monitoring will result in optimizing bed safety. Many patients go through a period of adjustment to become comfortable with new options. Patients and their families should talk to their health care planning team to find out which options are best for them.

### **Patient or Family Concerns About Bed Rail Use**

If patients or family ask about using bed rails, health care providers should:

- Encourage patients or family to talk to their health care planning team to determine whether or not bed rails are indicated.
- Reassure patients and their families that in many cases the patient can sleep safely without bed rails.
- Reassess the need for using bed rails on a frequent, regular basis.

To report an adverse event or medical device problem, please call FDA's MedWatch Reporting Program at 1-800-FDA-1088.

For additional copies of the brochure, see the FDA's website at <http://www.fda.gov/cdrh/beds/>

For more information about this brochure, contact Beryl Goldman at 610-335-1280 or by e-mail at [bgoldman@kendaloutreach.org](mailto:bgoldman@kendaloutreach.org). She has volunteered to answer questions.

For information regarding a specific hospital bed, contact the bed manufacturer directly.

### **Developed by the Hospital Bed Safety Workgroup**

Participating Organizations:

- AARP
- ABA Tort and Insurance Practice Section
- American Association of Homes and Services for the Aging
- American Health Care Association
- American Medical Directors Association
- American Nurses Association
- American Society for Healthcare Engineering of the American Hospital Association
- American Society for Healthcare Risk Management
- Basic American Metal Products
- Beverly Enterprises, Inc.
- Care Providers of Minnesota
- Carroll Healthcare
- DePaul College of Law
- ECRI
- Evangelical Lutheran Good Samaritan Society
- Hill-Rom Co., Inc.
- Joint Commission on Accreditation of Healthcare Organizations
- Medical Devices Bureau, Health Canada
- National Association for Home Care
- National Citizens' Coalition for Nursing Home Reform
- National Patient Safety Foundation
- RN+ Systems
- Stryker Medical
- Sunrise Medical, Inc.
- The Jewish Home and Hospital
- Untie the Elderly, The Kendal Corporation
- U.S. Food and Drug Administration

*Updated January 2008*

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# NOTES

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## **LIMITED WARRANTY**

**PLEASE NOTE: THE WARRANTY BELOW HAS BEEN DRAFTED TO COMPLY WITH FEDERAL LAW APPLICABLE TO PRODUCTS MANUFACTURED AFTER JULY 4, 1975.**

This warranty is extended only to the original purchaser who purchases this product when new and unused from Invacare Continuing Care, Inc. or a dealer. This warranty is not extended to any other person or entity and is not transferable or assignable to any subsequent purchaser or owner. Coverage under this warranty will end upon any such subsequent sale or other transfer of title to any other person.

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

ICCI warrants this product when purchased new and unused to be free from defects in materials and workmanship for a period of one year from date of purchase from ICCI or a dealer, with a copy of the seller's invoice required for coverage under this warranty. If within such warranty periods any such product shall be proven to be defective, such product shall be repaired or replaced, at ICCI's option. This warranty does not include any labor or shipping charges incurred in replacement part installation or repair of any such product. ICCI's sole obligation and your exclusive remedy under this warranty shall be limited to such repair and/or replacement.

For warranty service, please contact the dealer from whom you purchased your ICCI product. In the event you do not receive satisfactory warranty service, please write directly to ICCI at the address on the back cover, provide dealer's name, address, and the date of purchase, indicate nature of the defect and, if the product is serialized, indicate the serial number. Do not return products to our factory without our prior consent.

**LIMITATIONS AND EXCLUSIONS: THE FOREGOING WARRANTY SHALL NOT APPLY TO SERIAL NUMBERED PRODUCTS IF THE SERIAL NUMBER HAS BEEN REMOVED OR DEFACED, PRODUCTS SUBJECTED TO NEGLIGENCE, ACCIDENT, IMPROPER OPERATION, MAINTENANCE OR STORAGE, PRODUCTS MODIFIED WITHOUT ICCI'S EXPRESS WRITTEN CONSENT (INCLUDING, BUT NOT LIMITED TO, MODIFICATION THROUGH THE USE OF UNAUTHORIZED PARTS OR ATTACHMENTS; PRODUCTS DAMAGED BY REASON OF REPAIRS MADE TO ANY COMPONENT WITHOUT THE SPECIFIC CONSENT OF ICCI, OR TO A PRODUCT DAMAGED BY CIRCUMSTANCES BEYOND ICCI'S CONTROL, AND SUCH EVALUATION WILL BE SOLELY DETERMINED BY ICCI. THE WARRANTY SHALL NOT APPLY TO NORMAL WEAR AND TEAR OR FAILURE TO ADHERE TO THE PRODUCT INSTRUCTIONS.**

**THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IN LIEU OF ANY OTHER WARRANTIES WHATSOEVER, WHETHER EXPRESS OR IMPLIED, INCLUDING THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, AND THE SOLE REMEDY FOR VIOLATIONS OF ANY WARRANTY WHATSOEVER, SHALL BE LIMITED TO REPAIR OR REPLACEMENT OF THE DEFECTIVE PRODUCT PURSUANT TO THE TERMS CONTAINED HEREIN. THE APPLICATION OF ANY IMPLIED WARRANTY WHATSOEVER SHALL NOT EXTEND BEYOND THE DURATION OF THE EXPRESS WARRANTY PROVIDED HEREIN. ICCI SHALL NOT BE LIABLE FOR ANY CONSEQUENTIAL OR INCIDENTAL DAMAGES WHATSOEVER. SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGE, OR LIMITATION OF HOW LONG AN IMPLIED WARRANTY LASTS, SO THE ABOVE EXCLUSION AND LIMITATION MAY NOT BE APPLICABLE.**

**THIS WARRANTY SHALL BE EXTENDED TO COMPLY WITH STATE/PROVINCIAL LAWS AND REQUIREMENTS.**



**Yes, you can.**

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