Invacare® Bariatric Bed



en **Model BAR750** User Manual



© 2016 Invacare® Corporation
All rights reserved. Republication, duplication or modification in whole or in part is prohibited without prior written permission from Invacare. Trademarks are identified by ™ and ®. All trademarks are owned by or licensed to Invacare Corporation or its subsidiaries unless otherwise noted.

Making Life's Experiences Possible is a trademark in the U.S.A.

Contents

I Ge	neral
1.1	Symbols
1.2	Intended Use 4
2 O v	erview
2.1	Label Locations
2.2	BAR 750 Bariatric Bed Specifications
3 Saf	ety
3.1	General Guidelines
3.2	Disposal
4 Set	up
4.1	Receiving
4.2	Unpacking
4.3	Inspecting
4.4	Assembling the Bed
4.5	Adjusting the Bed
4.6	Inspecting the Assembled Bed
4.7	Storing the Bed
5 O p	eration
5. I	Operating the Bariatric Bed 21
5.2	Steering the Bed
5.3	Adjusting the Bed Rail
6 Ma	intenance
6. l	Service Life
6.2	Wear and Tear
6.3	Cleaning the Bed
6.4	Maintenance and Cleaning Checklist 28
7 Tro	oubleshooting
7.1	Troubleshooting: Electrical

7.2	Troubleshooting: Mechanical	3 I
Wa	rranty	32
8. I	Limited Warranty	32

l General

I.I Symbols

Signal words are used in this manual and apply to hazards or unsafe practices which could result in personal injury or property damage. See the information below for definitions of the signal words.



DANGER!

 Danger indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.



WARNING!

 Warning indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.



CAUTION!

 Caution indicates a potentially hazardous situation which, if not avoided, may result in property damage or minor injury or both.



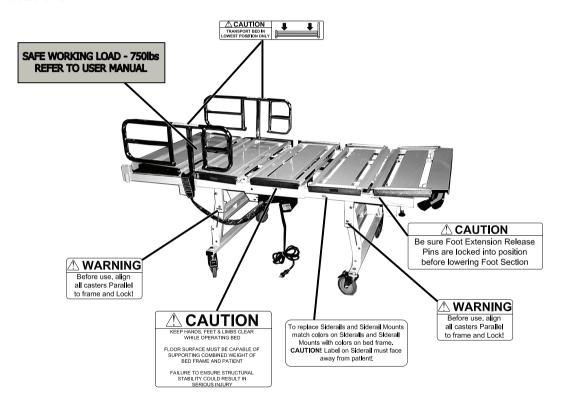
Gives useful tips, recommendations and information for efficient, trouble-free use.

1.2 Intended Use

The bed is intended to be used as a mattress support system. The bed allows for articulation of the head and foot sections to provide different positions for the patient. It is intended to be used in home care and long term care facilities.

2 Overview

2.1 Label Locations



The same labels are located on the opposite side of the bed.

1143215-B-01

2.2 BAR 750 Bariatric Bed Specifications

MAXIMUM OVERALL WIDTH:	48 inches (121.9 cm)
WIDTH EXTENDER:	39 inches (99 cm)
	42 inches (106.6 cm)
	48 inches (121.9 cm)
MAXIMUM OVERALL LENGTH:	88 inches (223.5 cm) ± 2 inches with 80 inch (203.2 cm) deck
(WITH HEADBOARD AND FOOTBOARD)	96 inches (243.8 cm) ± 2 inches with 88 inch (223.5 cm) deck
CASTERS:	5 inches (12.7 cm)
BACK ANGLE:	5°-60°
SHIPPING WEIGHT:	440 lbs (without trapeze)
WEIGHT LIMITATION:	750 lbs (Including accessories, mattress, occupant and any other objects positioned on the bed)

For household/residential or public occupancy use per UL 962.

Bed is NOT for hospital use and was not designed to meet hospital standards.

Only use bed indoors.



WARNING!

Risk of Injury or Damage

The weight limit of the occupant of the bed CANNOT exceed 675 pounds. To avoid injury and/or damage from bed collapse:

 The TOTAL weight limit of the bed (including accessories, mattress, occupant and any other objects positioned on the bed) cannot exceed 750 pounds (Safe Working Load).



WARNING!

Risk of Injury or Damage

Patients that weigh less than 350 pounds have an increased risk of entrapment. To avoid injury or damage from entrapment:

 Patients that weigh less than 350 pounds should not use the BAR 750 Bariatric Bed.

3 Safety

3.1 General Guidelines



DANGER!

Risk of Death, Injury or Damage

Improper use of this product may cause injury or damage.

- If you are unable to understand the warnings, cautions or instructions, contact a health care professional, dealer or technical personnel before attempting to use this equipment.
- 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 user manuals, service manuals or instruction sheets supplied with this product or optional equipment.

Continued use of the product with damaged parts could lead to the product malfunctioning, causing injury to the user and/or caregiver.

 Check ALL product components and carton for damage, and test components before use. DO NOT use product if components are damaged or if product is not working properly. Contact a qualified technician or Invacare for repair.

To avoid injury or product damage:

 Set-up and Assembly instructions MUST be performed by qualified technicians only. "Qualified Technician Only" sections are marked accordingly.



THE INFORMATION CONTAINED IN THIS DOCUMENT IS SUBJECT TO CHANGE WITHOUT NOTICE.



DANGER!

Risk of Death, Injury or Damage

Lighted cigarettes can cause a fire or other related hazards resulting in death, injury, or damage.

- Do not smoke while using this product.
- Do not allow others to smoke near this product.



DANGER!

Risk of Death, Injury or Damage

Bed accessories designed by other manufacturers have NOT been tested by Invacare. Use of non-Invacare bed accessories may result in injury or death.

 Use ONLY Invacare rails, mattresses, bed extenders and other accessories with Invacare bed products.



DANGER!

Risk of Injury or Death

To reduce the risk of electrical shock:

 Always unplug the product from the electrical outlet before cleaning.



Risk of Death, Injury or Damage

To reduce the risk of shock:

- Unplug from the outlet before servicing.
- Close supervision is necessary when the product is used by, or near children and/or disabled persons.
- Use this product only for its intended use as described in these instructions. DO NOT use attachments not recommended by the manufacturer.
- If liquid is spilled in or around the product, unplug before cleaning. Clean up the spill and allow the product or the area around the product to dry thoroughly before using the controls again.



DANGER!

Risk of Death, Injury or Damage

To avoid shock, product damage and personal injury:

- DO NOT use outdoors.
- Connect this product to a properly grounded outlet only. Refer to 5.1 Operation, page 21.
- DO NOT place video equipment such as televisions or computer monitors on product.

Operating Information



DANGER!

Risk of Death, Injury or Damage

To avoid injury or damage when operating product:

- After any adjustments, repair or service and before use, make sure all attaching hardware is tightened securely.
- Close supervision is necessary when the product is used near children or pets OR when this product is operated by or near people with physical/mental disabilities. Physically challenged individuals who cannot prevent themselves from rolling/climbing out of the product may require alternative safe means of restraint.
- The product is not designed to be used as a patient transport. When transporting a patient, use an approved patient transport. Otherwise, injury or damage may result.



WARNING!

Risk of Injury or Damage

To avoid injury or damage when operating/moving bed:

- ALWAYS ensure that the individual utilizing the bed is positioned properly within the confines of the bed.
 DO NOT let any extremities protrude over the side or between the bed rails when performing these functions.
- Be aware of potential pinch points when operating bed rails or other accessories.
- Make sure head and foot springs/sections are connected securely to the bed ends before use.
- The bed is equipped with locking casters. Before using the bed, test the wheel locks to ensure casters lock correctly. When transferring into or out of the bed, ALWAYS lock the casters. Even with casters properly locked, some flooring surfaces (such as tile or wood,) will allow the bed to move under some conditions. Using the bed on these types of surfaces MUST be evaluated by the care provider. DO NOT transfer occupant if bed is not stable. Otherwise, injury and/or damage may occur.
- DO NOT move product with locking casters in LOCKED position.



DANGER!

Risk of Death, Injury or Damage

To avoid pinching, crush and collapse hazards from bed deck contact with objects under the bed:

 DO NOT place any objects or let any individual underneath the bed or in between the raised bed frame components at any time.

To avoid choking from small detachable parts contained underneath the bed:

 Closely supervise children, pets, or people with physical/mental disabilities.



Refer to the **Bed Rail Entrapment Risk Notification Guide** at www.invacare.com for additional safety information.



DANGER!

Risk of Death, Injury or Damage

Patient entrapment from the use of bed side rails may cause injury or death. To avoid patient entrapment:

- The Invacare mattress MUST fit firmly against the bed frame AND bed side rails to prevent patient entrapment. Follow the manufacturer's instructions. Monitor patient frequently. Read and understand the user manual prior to using the Invacare bed and bed rails. User manuals are available at www.invacare.com or your dealer.
- After any adjustments, repair or service and before use, make sure all attaching hardware is tightened securely.
- Mattress platform, bed ends, pendant and accessories are applied parts.



Risk of Death, Injury or Damage

Conditions such as restlessness, mental deterioration and dementia or seizure disorders (uncontrolled body movement), sleeping problems, and incontinence can significantly impact a patient's risk of entrapment. Pediatric patients or patients with small body size may also have an increased risk of entrapment.

- Monitor patients with these conditions frequently.
- Place the mattress deck in the flat position when left unattended.



WARNING!

Risk of Injury or Adverse Health Consequences

Fall hazard exists due to bed height.

- Always leave bed in lowest height when unattended.

Replacement Parts/Accessories



DANGER!

Risk of Death, Injury or Damage

To avoid fire hazards and tubing entanglement:

- Use masked or nasal type oxygen administering equipment only in conjunction with the manual/electric bed. The use of any other type of oxygen administering equipment can result in a fire hazard.
- When using nasal or masked type oxygen administering equipment, the oxygen or air tubing MUST be routed and secured properly to ensure that the tubing does not become entangled and/or severed during normal operation of manual/electric bed.
- Do not use this bed in Active Treatment "Ether Environments."



DANGER!

Risk of Death, Injury or Damage

To avoid fire hazards, injury or damage:

DO NOT use product with flammable gases.
 Explosion may occur.



WARNING!

Risk of Injury or Damage

To avoid injury or damage from misuse or entrapment:

- Read and understand the instructions or label provided with mattress.
- If you do not understand the instructions or if instructions are missing, contact the mattress manufacturer.



DANGER!

Risk of Death, Injury or Damage

To avoid entrapment, product damage and/or personal injury:

- Invacare recommends that the mattress be centered on the bed frame. Otherwise, individuals may become trapped between the bed rail and the bed frame.
- ALWAYS test to make sure that the side rails are properly and securely in place before using.
 Otherwise, injury or damage may occur.



Risk of Injury or Adverse Health Consequences

Fall hazards exist due to the use of non-Invacare mattresses. Non-Invacare mattresses are potentially incompatible with Invacare beds.

 To avoid injury, ensure that only Invacare mattresses are used with Invacare beds at all times.



DANGER!

Risk of Death or Injury

An increased risk of patient entrapment may occur over time due to mattress compression.

 Periodically monitor gaps between the bed, mattress, and/or bed rail. Where gaps occur, patient entrapment is possible and the mattress should be replaced.



DANGER!

Risk of Death, Injury or Damage

To avoid entrapment, product damage and/or personal injury:

- When used with a manual/electric bed, the bed rails DO NOT fall under any weight limitations. Bed rails can be deformed or broken if excessive side pressure is exerted on the bed rails. These bed rails are used for the purpose of preventing an individual from inadvertently rolling out of bed. The bed rails are not intended nor may be used for restraint purposes. If an individual is capable of injuring himself/herself, a physician or a health care professional should be consulted for alternative means of safe restraint.
- After raising/lowering the head/foot end of the electric bed, check the distance between the bottom of the bed rail and the mattress. If there is excessive distance between the bottom of the bed rail and the mattress in which individuals may become entangled, adjust the height of the bed rail (if applicable), or provide alternative means of patient protection.
- DO NOT use the side rails as push handles for moving the electric bed.
- Replacement mattresses and bed side rails with dimensions different from the original equipment supplied or specified by the bed frame manufacturer are not interchangeable. Variations in bed side rail design, width and thickness or firmness of the mattress could cause/contribute to entrapment.

1143215-B-01



Risk of Death, Injury or Damage

To avoid injury or damage from misuse or entrapment:

- 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 located at www.invacare.com. Use the link located under each bed rail product entry to access this bed safety guide.
- Refer to the user manuals for beds and rails for additional product and safety information.
- Patient entrapment from the use of bed side rails may cause injury or death. The Invacare mattress MUST fit firmly against the bed frame AND bed side rails to prevent patient entrapment. Follow the manufacturer's instructions. Monitor patient frequently. Read and understand the User Manual prior to using this equipment. Invacare manuals are available at www.invacare.com or your dealer.
- An increased risk of patient entrapment may occur over time due to mattress compression. Periodically monitor gaps between the bed, mattress, and/or bed rail. Where gaps occur, patient entrapment is possible and the mattress should be replaced.

Electrical



WARNING!

Risk of Death, Injury or Damage

Shock hazards and risk of fire exist due to use of improper extension cord and use of three prong adapters.

- To avoid injury or product damage, when using an extension cord, use only a UL approved three prong extension cord having at least 16 AWG (American Wire Gauge) wire and the same or higher electrical rating as the product being connected.
- DO NOT use three prong to two prong adapters.



WARNING!

Risk of Injury or Damage

To avoid product damage and personal injury:

 Disconnect pendant when not in use and store out of reach of children.

12 1143215-B-01

Grounding Information



WARNING!

Risk of Shock Injury

Electric beds are equipped with three prong (grounding) plugs for protection against possible shock hazards. Where a two prong wall receptacle is encountered, it is the personal responsibility and obligation of the customer to contact a qualified electrician and have the two prong receptacle replaced with a properly grounded three prong wall receptacle in accordance with the National Electrical Code.

- If you must use an extension cord, use only a three prong extension cord having the same or higher electrical rating as the product being connected. DO NOT, under any circumstances, cut or remove the round grounding prong from any plug used with or for Invacare products.
- Junction box MUST be securely connected to the bed with metal screws and the spacer provided for proper grounding. Otherwise, electrical shock may occur.



WARNING!

Risk of Injury or Damage

To avoid injury or damage from improper grounding or using damaged parts:

- DO NOT operate the product if the cord or outlet is damaged.
- DO NOT operate the product if any motor has malfunctioned or is damaged in any manner.

Radio Frequency Interference



Use of portable and mobile RF communications equipment can affect medical electrical equipment.



WARNING!

Risk of Product Damage

Electronic equipment may be influenced by Radio Frequency Interference (RFI).

- Caution should be exercised with regard to the use of portable communications equipment in the area around such equipment.
- If RFI causes erratic behavior, unplug the product immediately. Leave unplugged while transmission is in progress.



WARNING!

Risk of Product Damage

The use of accessories, transducers, cords and cables other than those specified by the manufacturer, may result in increased emissions or decreased immunity of this bed.

 This product should not be used adjacent to or stacked with other equipment and that if adjacent or stacked use is necessary, this product should be observed to verify normal operation in the configuration in which it will be used.

1143215-B-01

Weight Limitations



DANGER!

Risk of Death, Injury or Damage

To avoid bed collapse and resulting injury or damage:

- The weight limit of the occupant of the bed CANNOT exceed 675 pounds. The TOTAL weight limit of the bed (including accessories, mattress, occupant and any other objects positioned on the bed) cannot exceed 750 pounds (Safe Working Load).
- NEVER permit more than one person on the bed at any time.
- Body weight should be evenly distributed over the surface of the bed. DO NOT lay, sit or lean in such a way that your entire body weight is placed only on raised head or foot sections of the bed. This includes when repositioning or transferring in or out of bed.

3.2 Disposal

Follow local governing ordinances and recycling plans regarding disposal of the product or components normally used in operation. The product does not generate waste or residue in operation. Any accessories not part of the product MUST be handled in accordance with the individual product marking for disposal.

This product has been supplied from an environmentally aware manufacturer that complies with the Waste Electrical and Electronic Equipment (WEEE) Directive 2012/19/EC.

This product may contain substances that could be harmful to the environment if disposed of in places (landfills) that are not appropriate according to legislation.

Please be environmentally responsible and recycle this product through your recycling facility at its end of life.

4 Setup

4.1 Receiving



WARNING!

Risk of Injury or Damage

- "Qualified Technician Only" sections are marked accordingly.
- Set-up and Assembly instructions MUST be performed by qualified technicians only.
- 1. Count cartons before signing shipping papers.
- Designate someone at the facility to receive and inspect all merchandise. Use the master order acknowledgment to check off items as they are received.
- Compare the number of cartons shipped with the number of cartons actually received and note such on the consignee copy of the freight bill. Make sure to have the truck driver sign the copy acknowledging the count.
- 4. If shortage occurs, IMMEDIATELY contact Invacare Customer Service department at (800) 333-6900.

4.2 Unpacking



DANGER!

Risk of Injury or Damage

Continued use of the product with damaged parts could lead to the bed malfunctioning, causing injury to the user and/or caregiver.

 Check ALL product components and carton for damage, and test components before use. In case of damage or if the product is not working properly, contact a qualified technician or Invacare for repair.



WARNING!

Risk of Injury or Damage

To avoid damage or personal injury:

- DO NOT plug the power cord into a power source until assembly is complete.
- DO NOT attempt to operate product controls prior to completion of assembly.
- I. Remove any loose packing from the cartons.
- 2. Carefully remove all components from the cartons.

1143215-B-01

4.3 Inspecting



DANGER!

Risk of Injury or Damage

To avoid injury or damage, inspect the following and contact a qualified technician or Invacare if any of the following issues are present:

- Pendant covering is cracked or damaged.
- Power cord or plug have cuts or damage.
- Motor cables have cuts or damage.
- Junction box or connectors are damaged.



DANGER!

Risk of Injury or Damage

To avoid injury or damage:

 Ensure that the connectors are plugged into the junction box and fit properly.

4.4 Assembling the Bed



DANGER!

Risk of Death, Injury or Damage

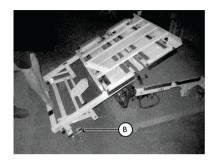
To avoid serious injury or product damage from tripping, entanglement and/or pinched, or severed cords:

- Ensure that all cord(s) are routed and secured properly.
- Keep all moving parts, including the main frame, mattress deck, and all drive shafts, free of obstruction (i.e. blankets/sheets, tubing, wiring, cords, etc.) during operation of the product.
- Do not roll the product over the power or pendant cord.
- 1. Remove packing bands A from the bed.

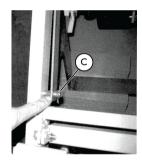


- 2. Grasp castor mount ® on head-end section of bed.
- 3. Pull section up and flip it over until wheels touch the floor.

 Grasp the back-rest of head-end section and rotate it until the section rests on the frame section already on floor.

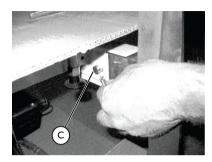


Locate two clevis pins © (one each side of bed) on backrest of head-end section which connect shipping brace to bed.

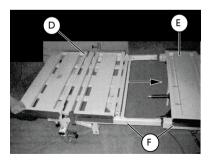


- 6. Remove the clevis pin from the bed and packing brace.
- 7. Repeat STEP 6 and 7 for the other side.
 - $\mathring{\parallel}$ Save clevis pins to assemble the bed.
- 8. Pull the head-end section from the shipping bracket.

Remove the clevis pin © securing the shipping bracket to foot-end section from each side of the foot-end section.

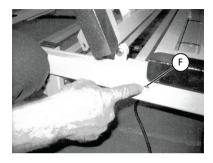


- Remove shipping bracket and two cardboard support blocks from foot-end bed section.
- 11. Unlock the casters on the foot-end section.
- 12. Place power supply cord and handset on top of the bed.
- 13. Carefully roll the foot-end section off the pallet.
- 14. Slide head-end section © into foot-end section © until the side frame holes © line up.

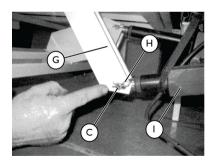


1143215-B-01

15. From the outside of the bed, insert a clevis pin into each side frame hole F. Secure clevis pins using rue rings on inside of frame.

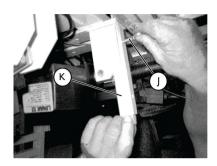


16. Secure the actuators 1 to the frame section 6 using two small clevis pins 6 and two hairpin clips H.



17. Using the hand control, raise the bed to its full height.

18. Remove lock-pin ${\mathbin{\textcircled{\textcircled{1}}}}$ from support leg ${\mathbin{\textcircled{\textcircled{0}}}}$ located under foot-end section.

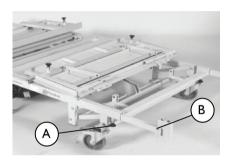


- 19. Push support leg up and re-insert lock-pin.
- 20. Install the headboard posts in the inward most sockets provided at the head end with the board closest to the mattress.
- 21. Install the footboard posts in the inward most sockets provided at the foot end with the board closest to the mattress.

18 1143215-B-01

4.5 Adjusting the Bed

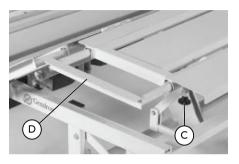
Adjusting Length



- 2. Pull the length extender ® out six inches.
- Release the knob and push the extender in until the knob locks into place.
 - An audible click will be heard.
- 4. If necessary, repeat STEPS I to 3 for the foot section.

Adjusting Width

I. Pull down on the release knob $\ \ \, \ \ \,$ located under the side of the bed.

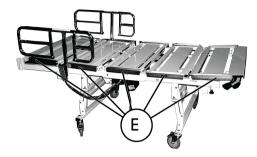


- 2. Slide the width extender © to one of the three desired widths.
- Release the knob and push in the extender until the knob locks into place.
 - $\hat{\parallel}$ An audible click will be heard.

1143215-B-01

Repeat STEPS I to 3 for the other four side sections

on that side of the bed.



5. Repeat STEPS I to 4 for the other side of the bed.

4.6 Inspecting the Assembled Bed

Examine each item carefully for scratches, nicks, dents or any other apparent damage.

- Check all parts for shipping damage. In case of shipping damage, DO NOT use. Contact Dealer/Carrier for further instruction.
- Inspect the power supply cord and cables for cuts or damage to the cord and/or plug.
- 2. Inspect the junction box for any damage to the connectors.
- Ensure that the motor plugs are plugged into the junction box and fit properly.
- 4. Do a careful inspection of the bed. Look underneath the bed to make sure there is nothing stored there. This area MUST be kept clear to avoid any interference with bed parts, which move during operation.
- 5. Lock the casters. Refer to the Steering the Bed section.

- 6. Plug the power cord into a 120 volt grounded socket with a capacity of at least 15 amperes. Using the handset, cycle the bed through all of its operations. Make sure that everyone (including you) is clear of the bed during these operations. Ensure that:
 - a. All power bed operations work smoothly and stop in any desired position.
 - Bed height, angle of the leg lift and backrest can be adjusted properly.
- 7. Position the side rails, be sure they slide up and down properly.
- 8. When you are satisfied that the bed is operating properly, instruct all personnel who may be involved in the bed operation.

4.7 Storing the Bed



WARNING!

Risk of Injury or Damage

To avoid product damage and personal injury:

- DO NOT place other objects on top of the cartons.



WARNING!

Risk of Injury or Damage

To avoid product damage and personal injury:

 Disconnect pendant when not in use and store out of reach of children.

If bed is not being assembled immediately, retain the cartons and packaging for storage until ready for assembly.

Store the Invacare bed in a dry area.

5 Operation

5.I Operating the Bariatric Bed



WARNING!

Risk of Injury or Damage

To avoid electrical damage, product damage, shock and/or personal injury:

- DO NOT unplug power cord from junction box.
- When bed is not to be used for an extended period, unplug electric bed from the wall outlet.
- Keep all bed components and accessories a minimum of 12 inches away from hot or heated surfaces.
- After the product has been assembled and before use, always test to make sure that all sections of the product are properly and securely in place. If any problems arise during the test, recheck all electrical connections and mechanical hook ups and then retest. If the product is not working properly, contact a qualified technician or Invacare for repair.



WARNING!

Risk of Injury or Damage

To avoid unintentionally pressing the pendant buttons and causing injury or damage:

- DO NOT place pendant under or between objects.



WARNING!

Risk of Injury or Damage

A safety feature of this product includes protection against overheating caused by excessive or extended periods of operation. Depending on the duration, this includes multiple or repeated adjustments or the use of multiple functions at one time.

- To ensure trouble free operation, ALWAYS allow a slight pause between multiple adjustments and avoid pressing more than one function button at a time. If thermal protection activation should occur, the product will not respond to pendant commands. Given this situation, release the pendant button and allow the product to sit for several minutes. This will allow the protection function time to reset and restore product function. Depending on severity of the initial overheating, this could take up to 30 minutes.

If any problems arise during the test, recheck all electrical connections and mechanical hook ups.

A three-function pendant is used for all bed operations which:

- · Raise and lower the head section
- · Raise and lower the foot section
- Raise and lower the entire bed

Raising and Lowering



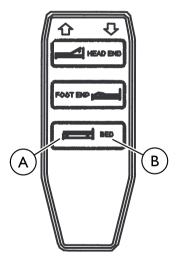
DANGER!

Risk of Death, Injury or Damage

Pendant malfunction may cause injury or damage.

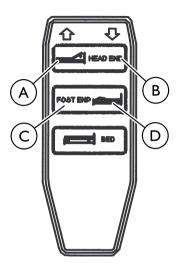
 Unplug bed from electrical outlet and contact qualified technician or Invacare for repair if any malfunction is detected.

Entire Bed



- 1. To raise the entire bed, press the Bed Up button A.
- 2. To lower entire bed, press the Bed Down button ®.

Head and Foot Sections



- 1. To raise the head of the bed, press the Head Up button (A).
- 2. To lower the head of the bed, press the Head Down button ®.
- 3. To raise the foot of the bed, press the Foot Up button \mathbb{C} .
- 4. To lower the foot of the bed, press the Foot Down button D.

Upright Back Position



WARNING!

Risk of Injury or Damage

To avoid injury or damage when operating/moving bed:

- ALWAYS ensure that the individual utilizing the bed is positioned properly within the confines of the bed.
 DO NOT let any extremities protrude over the side or between the bed rails when performing these functions.
- The bed is equipped with locking casters. Before using the bed, test the wheellocks to ensure casters lock correctly. When transferring into or out of the bed, ALWAYS lock the casters. Even with casters properly locked, some flooring surfaces (such as tile or wood) will allow the bed to move under some conditions. Using the bed on these types of surfaces MUST be evaluated by the care provider. DO NOT transfer occupant if bed is not stable. Otherwise, injury and/or damage may occur.
- Raise the head section to the upright back position.
 - The backrest stops at any angle between five degrees (horizontal) position and an upright position of about 60 degrees.

5.2 Steering the Bed

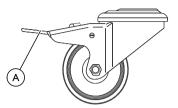
The bed can be steered in two modes, with the steering locked or with all four casters able to move independently. The two casters on the head end are the "steer" control type.

Locking the Casters

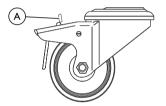
The steering lock function allows you to easily steer the bed in a straight line.

- Lower the bed to the lowest position. Refer to Operating the Bariatric Bed section.
- At the head end of the bed, step down on the front of either caster pedal until it clicks.
 - $\ddot{\parallel}$ DO NOT lock the other steering caster.
- Move the bed in a straight line about three feet backward or forward to lock.
 - This action will keep the caster from swiveling and allow better forward and backward movement. The bed can now be moved with greater stability.
- 4. Push the bed from the foot end.
 - Ensure that all four casters are locked and that the bed does not move before transferring. The locking function holds the bed motionless when the bed is parked. DO NOT transfer the occupant if the bed is not stable.

DETAIL "A" — UNLOCKED



DETAIL "B" — LOCKED



Unlocking the Casters

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

1. Step down on the back of the control pedal (A) on each caster.

5.3 Adjusting the Bed Rail



DANGER!

Risk of Death, Injury or Damage

To avoid entrapment, damage, and/or personal injury:

- These bed rails are intended to prevent an individual from inadvertently rolling out of bed. Do not use for restraint purposes.
- Use ONLY Invacare rails with Invacare products.
- DO NOT use the bed rails as push handles when moving the bed.



WARNING!

Risk of Injury or Damage

To avoid personal injury or damage from misuse:

 Bed rail IS NOT an assist rail for getting into or out of bed.

24 1143215-B-01



Risk of Death, Injury or Adverse Health Consequences

Fall hazard exists due to incorrect installation of bed rails

 To avoid injury, ensure that the Invacare bed rails are installed correctly and securely attached to the bed while entering or exiting.

Fall hazard exists due to use of non-Invacare bed rails. Non-Invacare bed rails are potentially incompatible with Invacare beds.

 To avoid injury, ensure that only Invacare bed rails are used with Invacare beds at all times.

Fall hazard exists due to use of non-Invacare mattresses. Non-Invacare mattresses are potentially incompatible with Invacare beds.

 To avoid injury, ensure that only Invacare mattresses are used with Invacare beds at all times.



DANGER!

Risk of Death, Injury or Damage

To avoid entrapment, product damage and/or personal injury:

- When used with a manual/electric bed, the bed rails DO NOT fall under any weight limitations. Bed rails can be deformed or broken if excessive side pressure is exerted on the bed rails. These bed rails are used for the purpose of preventing an individual from inadvertently rolling out of bed. The bed rails are not intended nor may be used for restraint purposes. If an individual is capable of injuring himself/herself, a physician or a health care professional should be consulted for alternative means of safe restraint.
- After raising/lowering the head/foot end of the electric bed, check the distance between the bottom of the bed rail and the mattress. If there is excessive distance between the bottom of the bed rail and the mattress in which individuals may become entangled, adjust the height of the bed rail (if applicable), or provide alternative means of patient protection.
- DO NOT use the side rails as push handles for moving the electric bed.
- Replacement mattresses and bed side rails with dimensions different from the original equipment supplied or specified by the bed frame manufacturer are not interchangeable. Variations in bed side rail design, width and thickness or firmness of the mattress could cause/contribute to entrapment.



Risk of Death, Injury or Damage

Patient entrapment from the use of bed side rails may cause injury or death. To avoid patient entrapment:

- The Invacare mattress MUST fit firmly against the bed frame AND bed side rails to prevent patient entrapment. Follow the manufacturer's instructions. Monitor patient frequently. Read and understand the user manual prior to using the Invacare bed and bed rails. User manuals are available at www.invacare.com or your dealer.
- After any adjustments, repair or service and before use, make sure all attaching hardware is tightened securely.

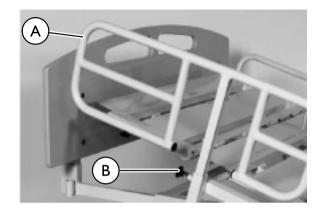


DANGER!

Risk of Death, Injury or Damage

To avoid entrapment, product damage and/or personal injury:

- Invacare recommends that the mattress be centered on the bed frame. Otherwise, individuals may become trapped between the bed rail and the bed frame.
- ALWAYS test to make sure that the side rails are properly and securely in place before using. Otherwise, injury or damage may occur.
- Head end side rails are located on each side of the bed. Side rails have a three-position vertical adjustment.



- 2. Pull bed rail up or down as required.
- 3. Allow the release knob to spring back into locked position.

6 Maintenance

6.1 Service Life

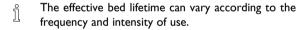


WARNING!

Risk of Injury or Damage

Use of the product beyond this time period may cause product damage and injury.

- This product has an expected lifetime of seven
 (7) years when used in accordance with safety instructions, maintenance intervals and correct use stated in this manual.
- Perform all maintenance according to the recommended schedule in this manual.



6.2 Wear and Tear

Normal wear and tear items and components include, but are not limited to the items in the table:

Wear and Tear Items

Hand Pendants

Casters —tread wear, brake levers

Invacare reserves the right to ask for any item back that has an alleged defect in workmanship. See the Warranty that shipped with the product for specific warranty information.

6.3 Cleaning the Bed

Washing the Bed Ends



DANGER!

Risk of Death, Injury or Damage

To avoid damage to electric controls:

- If a liquid is spilled in or around the electric bed, unplug the electric bed before cleaning.
- Clean up the spill and allow the electric bed or the area around the electric bed to dry thoroughly before using the electric controls again.



WARNING!

Risk of Injury or Damage

Grease may leak from the gearbox and cause injury or damage from falling or fire.

- Follow the maintenance instructions in this manual.
- Routinely inspect the gearbox for grease leakage.

If the gearbox is leaking grease:

- Stop use immediately.
- Keep the product away from sparks, flame, and open heat sources.
- Contact your dealer or Invacare for repair.



WARNING!

Risk of Injury or Damage

To avoid product damage or injury from malfunction:

- Clean the product according to the instructions.
- The product may be damaged from multiple or excessive cleaning.

- 1. Stand or prop each bed end in an upright position on its legs.
- Using a mild soap/detergent and soft bristle brush or sponge, scrub all exterior surfaces.
- Using a hose and nozzle attachment, rinse bed ends thoroughly with plain cold or warm water.
 - Do not exceed a water temperature of 110° F.

 Use household tap pressure. DO NOT use pressure washers or steam cleaners.
- Tip bed end from side to side to allow any collected or trapped water to drain.
- 5. Thoroughly towel dry bed end and all components.
- 6. Repeat drying process until all components are dry.
 - $^{\circ}$ Ensure that the bed end is completely dry before storing.

Cleaning the Head and Foot Sections

- Unplug the power cord of electric beds before performing maintenance.
- 2. Wipe down the bed with disinfectant. Allow it to dry completely.

6.4 Maintenance and Cleaning Checklist

Invacare recommends the following maintenance/cleaning procedures be conducted initially, between users, or as needed. This form is provided as a guide to help with documentation.



WARNING!

Risk of Injury or Damage

To avoid injury or damage from misuse:

- Read all guidelines, warnings and cautions before performing any repairs/maintenance on the bed.
- All repair and maintenance on the bed should be performed by a qualified technician.

Cleaning and Disinfecting Bed

- Unplug the power cord of electric beds before performing maintenance.
- ☐ Wipe down with disinfectant. Allow to dry completely.

Mechanical Inspection and Maintenance

- Inspect all bed components (i.e. rails, clevis pins, hitch pins, etc.) for damage or excessive wear and replace as necessary.
 Visually examine all welds for cracks.
 Inspect the head and foot spring sections for bending, warping or damage.
 Check drive shaft and drive shaft connections for bending, damage or excessive wear.
 Inspect pull tubes and mounting hardware for bending, damage or excessive wear.
 Inspect all bolts and rivets to ensure that they are securely
- ☐ Check casters to ensure they lock, if applicable, and roll properly.

In addition, dealers should inspect bed ends for proper operation:

I. Adjust bed ends to the lowest position.

tightened and functioning properly.

- 2. Remove bed ends from head or foot spring.
- 3. Remove bed end caps and plastic cover.
- 4. Inspect cables and pulleys for wear.
- Inspect Acme screws for lubrication. Apply a light lithium based grease if necessary.
- 6. Reinstall the plastic cover and end caps.

Electrical Inspection and Maintenance

- Inspect all electrical bed components for damage or excessive wear (i.e., cracked or broken housings, or worn components).
 Check pendant, power and motor cords for chafing, cuts or excessive wear.
 Make sure all plugs are fully attached and free of damage.
 Check all functions:
 - I. Head raises and lowers properly.
 - 2. Foot raises and lowers properly.
 - 3. Bed ends raise and lower properly.

In addition dealers should inspect all electrical bed components:

- Chafing
- Nicks in the insulation
- Missing insulation
- Exposed internal wiring or conductors
- Signs of pinching or crushing
- Broken or deformed connectors
 - If these conditions are present, the bed MUST not be used until the damaged component/wiring is replaced. Modification or other forms or repair including electrical or similar tape MUST NEVER be used.

PASS/FAIL

- PASS: Bed and all components have passed all of the preceding inspection criteria, and the bed is ready for placement into a client's home.
- ☐ FAIL: Bed, or any component, has failed any of the preceding inspection criteria. Tag the bed or component with a complete description of the failure(s) and have the bed serviced.

7 Troubleshooting

7.1 Troubleshooting: Electrical

SYMPTOM	PROBABLE CAUSE	SOLUTION
Bed section does not move.	End of stroke reached.	Operate opposite button.
	No power to unit.	Ensure power cord is plugged into power source.
Bed functions do not operate.	Pendant not functioning.	Ensure Pendant correctly connected to junction box under the bed.
201 (a.)(a.)(a.)		Ensure Pendant cable is not entangled/pinched.
	Fuse or breaker blown.	Check fuse/breaker box.
	Motors are not functioning.	Call Invacare.
Green power on light does not illuminate.	Electrical power cord is not properly plugged into the control module.	Check the power cord for breaks.
Power cord is plugged in, but no functions	Bad handset.	Handset needs to be replaced. Contact Invacare.
operate.	Bad control module.	Control module needs to be replaced. Contact Invacare.
Head/Foot section does not stop moving.	Pendant	Check for depressed/stuck buttons. If button is stuck, call dealer for repair.

SYMPTOM	PROBABLE CAUSE	SOLUTION
	Bad control module.	ISOLATE THE PROBLEM:
	Bad handset.	Interchange connections on control module so that problem actuator is plugged into an actuator connection on the control module that is working satisfactorily. If problem actuator now operates "OK", but actuator that was operating "OK" now has a problem, either the control module or handset is faulty. Replace as required.
One actuator does not work.	Bad actuator motor.	
Actuator does not function properly, or does not function at all.	Defective wiring.	Check wiring between control and actuator. Reverse wires.
not function at all.	Defective actuator motor.	Replace actuator.
Bed is not grounded.	Unit is not grounded between power cord and frame or between power cord and wall receptacle.	Check ground (GREEN) wire between frame and power cord.

7.2 Troubleshooting: Mechanical

SYMPTOM	PROBABLE CAUSE	SOLUTIONS
Bed does not stay in place.	Locking casters not locked.	Lock casters. Refer to Steering the Bed.
Pressing function on Pendant results in motion other than that intended.	Motor cable connections to junction box incorrect.	Verify connections. Refer to Set-Up.

8 Warranty

8.1 Limited Warranty



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 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.

Invacare warrants the mechanical and electrical components of 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 Invacare or a dealer, with a copy of the seller's invoice required for coverage under this warranty. Invacare warrants all welds of this product when purchased new and unused to be free from defects in materials and workmanship for a period of five years from date of purchase from Invacare 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 Invacare's option. This warranty does not include any labor or shipping charges incurred in replacement part installation or repair of any such product. Invacare'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 Invacare product. In the event you do not receive satisfactory warranty service, please write directly to Invacare 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 INVACARE'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 INVACARE, OR TO A PRODUCT DAMAGED BY CIRCUMSTANCES BEYOND INVACARE'S CONTROL, AND SUCH EVALUATION WILL BE SOLELY DETERMINED BY INVACARE. 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. INVACARE 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.

Notes

Notes

Notes

Invacare Corporation

USA

One Invacare Way

Elyria, Ohio USA

44035

800-333-6900



1143215-B-01 2016-08-11

www.invacare.com

Canada

570 Matheson Blvd E. Unit 8

Mississauga Ontario

L4Z 4G4 Canada

800-668-5324

Product Distributed by Invacare



Yes, you can:

Making Life's Experiences Possible™