BariMaxx Active Therapy System User Manual

ARJOHUNTLEIGH GETINGE GROUP



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- The electrical installation of the room must comply with the appropriate electrical wiring standards.
- The product must be used in accordance with its User Guide and all applicable product labeling.

IMPORTANT INFORMATION FOR USERS

Specific indications, contraindications, warnings, precautions and safety information exist for ArjoHuntleigh's therapeutic support surface products. It is important for users to read and familiarize themselves with these instructions and to consult the treating physician prior to patient placement and product use. Individual patient conditions may vary.

NOTICE

This product has been configured from the manufacturer to meet specific voltage requirements. Refer to the product information label for specific voltage.

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Introduction

The BariMaxx[™] Active Therapy System is a patient support system designed for bariatric patients. The product provides flexible patient positioning, integrated scales and an AtmosAir[™] Fit with SAT[™] Mattress Replacement System (MRS).

Indications

The intended use for the *BariMaxx* Active Therapy System is for a total weight up to 455 kg (1000 lb), including accessories, and patients at risk for pressure ulcer formation and requiring daily weight monitoring.

Contraindication

The *BariMaxx* Active Therapy System is contraindicated for patients with a total weight in excess of 455 kg (1000 lb) including accessories.

Maximum Recommended Patient Weight

Total patient weight should not exceed 455 kg (1000 lb), including accessories. The use of accessories on the bed may decrease the patient weight capacity of the bed. Contact ArjoHuntleigh for questions concerning the use of accessories.

Risks and Precautions

Electromagnetic Interference - Although this equipment conforms with the intent of the directive 89 / 336 / EEC in relation to electromagnetic compatibility, all electrical equipment may produce interference. If interference is suspected, move equipment away from sensitive devices or contact the manufacturer.

Patient Migration - Specialty surfaces have different shear and support characteristics than conventional surfaces and may increase the risk of patient movement, sinking and / or migration into hazardous positions of entrapment and / or inadvertent bed exit. Monitor patients frequently to guard against patient entrapment.

Shock Hazard - Electrical shock hazard; do not remove covers. Refer to qualified service personnel.

Side Rails and Restraints - WARNING: Use of restraints, including side rails, can be critical to patient safety. Serious injury (potential entrapment) or death can result from the use or non-use (potential patient falls) of side rails or other restraints. **See related Safety Information**.

Skeletal Traction or Unstable Fracture (if not contraindicated) - With skeletal traction, unstable pelvic fracture or any other unstable fracture (to the extent not contraindicated), maintain physician directed angle.

Transfer - Precaution should be taken during patient transfer, including the locking of caster brakes and caster steering. See **Patient Transfer** section in the **Patient Placement** chapter of this guide.

Safety Information

Ambulatory Patient Entrance / Exit - Caregiver should always aid patient in entering and exiting the bed. Lower patient surface completely during assisted patient entrance / exit.

Avoid Fire Hazards - To minimize the risk of fire, connect power cord directly into a wall-mounted outlet. Do not use extension cords or multiple outlet strips.

Avoid Strains - Extra care should be taken when moving patients to and from the bed to avoid caregiver muscle strains. Make sure any caregivers who will be assisting the patient to and from the bed are physically capable of doing so. Always use a transfer device, when available.

Batteries - Bed contains batteries and must be plugged in and set to the on (1) position when not in service and / or transport. Inspect batteries monthly. Batteries more than 28 months old from the date of manufacture should be replaced in pairs. Install a battery history label on battery cover with proposed date of next battery replacement. Apply label in a visible location so that all information is displayed.

Bed Height - To minimize the risks of falls or injury, the bed should always be in the lowest practical position when the patient is unattended. Make sure area under and around bed frame is clear of objects, persons and parts of body before adjusting height.

Bed Exit Alarm - Activation of the bed exit alarm is recommended whenever the patient is unattended. Be sure to reactivate the bed exit alarm each time the patient returns to bed.

Bed Expansions - Extensions and side rails should always be locked in place whenever expanded or retracted

Blank Display - If main control panel remains blank, call for service immediately.

Brakes - Lock all steer casters in line and set all caster brakes before transferring patient.

Disposal - At the end of useful life, dispose of waste according to local requirements or contact the manufacturer for advice. There may be special requirements for disposal of batteries and leaded foam (if present in this product).

Foot Expansion - Should always be locked in place whenever retracted.

Fluids- Avoid spilling fluids on bed controls. If spills do occur, unplug the bed, clean fluid from controls wearing rubber gloves to avoid any possibility of shock. Once fluid is removed, check operation of components in area of spill.



Fluids remaining on controls can cause corrosion, which may cause components to fail or operate erratically, possibly producing potential hazards for patient and staff.

General Protocols - Follow all applicable safety rules and institution protocols, concerning patient and caregiver safety.

Hand Control Lock - The lock-out function should be used at caregiver's discretion to ensure against unintentional or unauthorized operation of bed functions.

Moving Parts - Keep all equipment, tubes and lines, loose clothing, hair and parts of the body away from moving parts and pinch points.

Oxygen Use - Ensure that the hand control is not contained in an oxygen enriched environment. Possible fire hazard when bed is used with oxygen administering equipment other than the nasal prongs, mask or half bed length tent type. Oxygen tent should not extend below mattress support level.

Power Cord - Ensure power cord is kept free from all pinch points and moving parts and is not trapped under casters. Improper handling of the power cord can cause damage to the cord, which may produce risk of fire or electric shock.

Scale Readings - Scales / patient weights are for reference only. Scale readings should not be relied upon for medication dosage.

Side Rails / Patient Restraints - Whether and how to use side rails or restraints is a decision that should be based on each patient's needs and should be made by the patient and the patient's family, physician and caregivers, with facility protocols in mind. Caregivers should assess risks and benefits of side rail restraint use (including entrapment and patient falls from bed) in conjunction with individual patient needs, and should discuss use or non-use with patient and / or family. Consider not only the clinical and other needs of the patient but also the risks of fatal or serious injury from falling out of bed and from patient entrapment in or around the side rails, restraints or other accessories. In the US, for a description of entrapment hazards, vulnerable patient profile and guidance to further reduce entrapment risks, refer to FDA's Hospital Bed System Dimensional and Assessment Guidance To Reduce Entrapment. Outside the US, consult the local Competent Authority or Government Agency for Medical Device Safety for specific local guidance. Consult a caregiver and carefully consider the use of bolsters, positioning aids or floor pads, especially with confused, restless or agitated patients. It is recommended that side rails (if used) be locked in the full upright position when the patient is unattended. Make sure a capable patient knows how to get out of bed safely (and, if necessary, how to release the side rails) in case of fire or other emergency. Monitor patients frequently to guard against patient entrapment.

When selecting a standard mattress, ensure the distance between top of side rails (if used) and top of mattress (without compression) is at least 8.66 in (220 mm) to help prevent inadvertent bed exit or falls. Consider individual patient size, position relative to the top of the side rail) and patient condition in assessing fall risk. It is recommended that electrically operated beds conform to IEC 60601-2-38. Medical Electrical Equipment Part 2: Particular requirements for the safety of electrically operated hospital bed.



To help prevent inadvertent bed exit or falls, ensure the distance between top of side rails (if used) and top of mattress (without compression) is approximately 4.5 in / 11.4 cm or greater. Consider individual patient size, position (relative to the top of the side rail) and patient condition in assessing fall risk.

Skin Care - Monitor skin conditions regularly, especially at bony prominences and in areas where incontinence and drainage occur or collect, and consider adjunct or alternative therapies for high acuity patients. It is recommended that skin pressure points be assessed at least every two hours. Early intervention may be essential to preventing serious skin breakdown.

Transfer Board - If a mechanical lift device is not available, a transfer board should always be used when transferring a patient to and from the *BariMaxx* Active Therapy System.

Patient Placement

It is recommended that all sections of this guide be reviewed prior to product use. Carefully read the **Risks and Precautions** and **Safety Information** sections in the **Introduction** chapter of this guide prior to operating the *BariMaxx* Active Therapy System.

Preparation for Patient Placement

- 1. Verify bed is positioned in the specific room location requested by caregiver.
- 2. Lock caster wheels and caster brakes in place.
- 3. Plug power cord into a properly grounded wall outlet.



Do not use a wall outlet that is controlled by a wall switch.

4. Press on / off rocker switch to on (I) position.



Ensure rocker switch is in the on position. If rocker switch is turned off, bed will operate only on battery power even if the bed is plugged in. When battery power runs low, the bed will stop functioning. Main Control Panel will stay lit up even when battery power is too low to articulate bed.

5. Set up bed options using the Menu, Next, Select, and Hold buttons as follows:









- Press MENU on main control panel to activate the Menu function
- Press NEXT to enter BED EXIT menu.
- Press SELECT to edit bed exit settings
- Press NEXT until display reads BED EXIT 10%
- Press HOLD to save changes
- Press MENU and then NEXT twice until display reads ON TIME
- Press SELECT to edit ON TIME settings
- Press NEXT until display reads ON TIME 2 min
- Press HOLD to save changes
- Press MENU and then NEXT three times until display reads UNITS
- Press SELECT to edit UNITS settings
- Pres NEXT to select UNITS KG (units can be KG or LB)
- Press HOLD to save changes
- Press MENU and SELECT until display reads LANGUAGE.
- Press SELECT to edit LANGUAGE settings to desired language.
- Press HOLD to save changes.
- Press MENU and then NEXT four times until display reads BACKLIGHT
- Press SELECT to edit BACKLIGHT settings (intensity ranges from 1 10 with 10 being the brightest)
- Press NEXT until display reads BACKLIGHT 6
- Press HOLD to save changes
- 6. Adjust bed height to optimize caregiver / patient safety during patient transfer.

Patient Transfer to the BariMaxx Active Therapy System

- 1. Ensure brakes on both surfaces are locked.
- 2. Lower side rails.
- 3. Transfer patient, following applicable safety rules and institutional protocols. Use transfer device when available.
- 4. Center patient from side-to-side on mattress.
- 5. Ensure bed linens under patient are not wrinkled.

Completion of Patient Placement

- Raise and lock all side rails, if using. If used, review the Risks and Precautions and Safety Information sections in the Introduction chapter of this guide.
- 2. Adjust head and foot sections of bed for patient comfort.



When the head section is raised, the foot section should also be raised (if not medically contraindicated) to prevent patient migration toward the foot end of the hed.

- 3. Perform initial patient weighing.
- 4. Ensure brakes are locked.
- 5. Adjust bed height to lowest level.
- 6. Set Lock-outs.
- 7. Set Bed Exit Alarm.

Nursing Care

It is recommended that all sections of this guide be reviewed prior to product use. Carefully read the **Risks and Precautions** and **Safety Information** sections in the **Introduction** chapter of this guide prior to performing nursing care for a patient on the *BariMaxx* Active Therapy System.

CPR

- 1. Press and hold CPR button on control panel until bed is level and in lowest position.
- 2. Lower side rails.
- 3. Begin CPR. Follow institution CPR guidelines.
- 4. After CPR is performed and patient is clinically stable:
 - Raise and lock side rails, if using (see **Safety Information** section of this guide).
 - Reconfigure bed and accessories as in initial placement or as required.



Manual CPR

- Locate and lift the release lever located at the headend of the bed.
- 2. Lower side rails.



WARNING - Head of bed (if elevated) will drop abruptly to the fully down position when CPR handle is activated. To reduce the risk of injury, stand clear when activating the CPR handle.

- 3. Begin CPR. Follow institution CPR guidelines.
- 4. After CPR is performed and patient is clinically stable:
 - Raise and lock side rails, if using (see **Safety Information** section of this guide).
 - Reconfigure bed and accessories as in initial placement or as required.



Skin Care

- 1. Remove excess moisture and keep skin dry and clean.
- Monitor skin conditions regularly, especially at bony prominences and areas where
 moisture or incontinence may occur or collect, and consider adjunct or alternative
 therapies for high acuity patients. Early intervention may be essential to preventing
 serious skin breakdown.
- 3. Ensure linens under patient are not wrinkled.

Incontinence / Drainage

- 1. Use moisture impermeable underpads for incontinent patients.
- 2. Watch for incontinence or drainage and provide appropriate skin care following each episode.
- Wipe mattress clean and replace bed linens as required. See Care and Cleaning instructions, if needed.

Bedpan Placement

- 1. Adjust bed as needed for bedpan placement.
- Ensure brakes are locked.
- Lower side rails as needed.
- 4. Roll patient toward opposite side rails.
- 5. Position bedpan underneath patient.
- 6. Roll patient onto bedpan, keeping one hand on bedpan.
- Raise and lock side rails.
- 8. Adjust head and foot of bed for patient comfort.

Bedpan Removal

- 1. Adjust bed as needed for bedpan removal.
- 2. Ensure brakes are locked.
- 3. Lower side rails.
- 4. Roll patient toward opposite side rails, keeping one hand on bed pan.
- 5. Remove bedpan from underneath patient.
- 6. Clean patient's posterior and any soiling on linens or mattress.
- 7. Return patient to supine position on mattress.
- 8. Raise and lock side rails, if using (see **Safety Information** section of this guide).
- 9. Adjust head and foot of bed for patient comfort.

Patient Transfer to the BariMaxx Active Therapy System



Refer to the **Patient Placement** section of this guide if the patient is being transferred to the *BariMaxx* Active Therapy System for initial placement.

- 1. Adjust bed height to optimize caregiver / patient safety during patient transfer.
- 2. Ensure brakes on both surfaces are locked.
- Lower all side rails.
- 4. Transfer patient, following applicable safety rules and institutional protocols. Use transfer device when available.
- 5. Center patient side-to-side on mattress.
- 6. Ensure bed linens under patient are not wrinkled.
- 7. Raise side rails, if using (see **Safety Information** section of this guide).
- 8. Adjust head and foot of bed for patient comfort.

Patient Transfer from the BariMaxx Active Therapy System

- Lower patient surface completely to optimize caregiver / patient safety during patient transfer.
- 2. Ensure brakes on both surfaces are locked.
- Lower side rails.
- 4. Place a transfer board between beds if necessary.
- 5. Transfer patient from bed, following all applicable safety rules and institutional protocols.

Repositioning Patient Using a Bed Sheet

- 1. Adjust bed as needed for patient repositioning.
- 2. Ensure brakes are locked.
- Lower all side rails.
- 4. Take position on each side of patient (at least two people will be needed, possibly more depending on weight being lifted). Ensure bed sheet will hold the weight being moved. Roll edges of bed sheet on each side of patient to get a firm grip.



It may be necessary to press the Trend button or Reverse Trend button on the hand control, as required, to assist in patient repositioning.

- 5. Use sheet to position and assist patient in achieving proper position on bed. Follow all applicable safety rules and institution protocols.
- 6. Ensure linens under patient are not wrinkled.
- 7. Raise and lock side rails, if using (see **Safety Information** section of this guide).

Patient Bathing

- 1. Adjust bed as needed for patient bathing.
- 2 Ensure brakes are locked
- 3 Lower side rails as needed
- 4. Bathe patient according to institutional protocols. During bathing:
 - Wipe, rinse and dry mattress surface and side rail covers.
 - Change bed linens as needed.



Avoid spilling fluids on any part of the main control panel or hand control. Fluids remaining on electronic controls can cause corrosion, which may cause the electronic components to fail. Component failures may cause the bed to operate erratically, possibly producing potential hazards to patient and caregiver.

- 5. Reposition patient as needed.
- 6. Ensure bed linens under patient are not wrinkled.
- 7. Raise and lock side rails, if using (see **Safety Information** section of this guide).
- 8. Adjust head and foot of bed for patient comfort.

Head Height Adjustment

Adjust head end of bed to create an upper body support angle from 0° to approximately 60°. Use the main control panel or the hand control to change the angle of the head section.



When the head section is raised, the foot section should also be raised to prevent patient migration toward the foot-end of the bed, and patient comfort.

- Press head up button to raise head section.
- Press head down button on hand control to lower head section.





Bed Height Adjustment from the Floor

Height of bed can be adjusted from approximately 44 cm to 66 cm (17 in to 26 in) from the floor. Use the main control panel or hand control to change the height of the bed surface.

- 1. Press bed up button to raise bed surface height.
- 2. Press bed down button to lower bed surface height.



Knee Adjustment

Knee section of the bed can be adjusted from 0° to approximately 30°. Use the main control panel or hand control to change the angles of the leg and foot surfaces.

- 1. Press knee up button to raise knee section.
- 2. Press knee down button to lower knee section.





Trendelenburg / Reverse Trendelenburg Adjustment

The bed surface can be adjusted to a Trendelenburg maximum angle of 12° and a Reverse Trendelenburg maximum angle of 8°.



Care and Cleaning

The following are the ArjoHuntleigh recommended daily and weekly cleaning and infection control procedures for the *BariMaxx* Active Therapy System while in use. If this product is to be purchased, or utilized for long term rentals, it is recommended that ArjoHuntleigh be contacted for recommended infection control procedures to be utilized by the facility.

It is recommended that all sections of this guide be reviewed prior to product use. Carefully read the **Risks and Precautions** and **Safety Information** sections in the **Introduction** chapter of this guide prior to performing cleaning procedures on the *BariMaxx* Active Therapy System.

General Instructions

- Do not clean with solvents or alcohol.
- Do not launder (machine-wash) any AtmosAir surface or mattress components.
- For regular cleaning, use a mild detergent with water on a non-abrasive cloth.
- To disinfect, use only approved disinfectants diluted in accordance with manufacturer's instructions.
- When blood and / or body fluids are present, use the following throughout all cleaning procedures:
 - disposable, powder-free latex or latex-free gloves
 - protective clothing, including disposable or reusable impervious apron or gown
 - protective eyewear and face shield, as necessary

Daily Care and Cleaning

Daily care and cleaning consists of wiping down the surface and side rail covers (as needed) during patient bathing. The patient does not need to be removed from the bed when performing daily cleaning. See the patient bathing section for proper procedure.

Weekly Care and Cleaning

In addition to daily care and cleaning, the following items should be wiped down weekly: *BariMaxx* Active Therapy System frame, side rails and pads, hand control, headboard, footboard, nurse control panel and any accessories that may be in use on the bed.



Avoid spilling fluids on any part of the main control panel or hand control. Fluids remaining on electronic controls can cause corrosion, which may cause the electronic components to fail. Component failures may cause the bed to operate erratically, possibly producing potential hazards to patient and caregiver.





Operating Instructions

This section contains instructions for setting and adjusting functions of the *BariMaxx* Active Therapy System.

It is recommended that all sections of this manual be reviewed prior to product use. Carefully read the **Risks and Precautions** and **Safety Information** in the **Introduction** chapter of this guide prior to operating the *BariMaxx* Active Therapy System.

Power-Up Procedure

1. Plug power cord into a properly grounded wall outlet.



Do not use a wall outlet that is controlled by a wall switch.



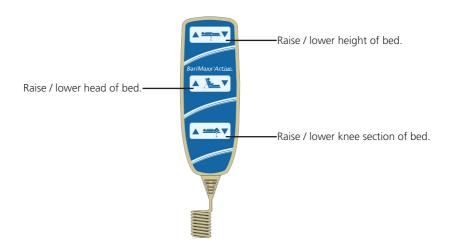
2. Press on / off rocker switch to on (1) position.



Ensure rocker switch is in the on position. If rocker switch is turned off, bed will operate only on battery power even if the bed is plugged in. When battery power runs low, the bed will stop functioning. Main Control Panel will stay lit up even when battery power is too low to articulate bed.

Hand Control

The hand control allows the patient to adjust bed positions as described below:



Main Control Panel

The Main Control Panel is located at the foot end of the bed, in the middle of the footboard. It is the caregiver's primary point of interface for controlling bed functions.





Weigh: Press to cancel changes and exit Menu mode.



Weight Mode: Press to view patient weight. Press and hold to set weight scale display to zero (wait until countdown 3-2-1 has completed and display disappears before releasing).



Weight Change Mode: Press to view patient's weight changes (+ / -). Press and hold to set weight change display to zero (wait until countdown 3-2-1 has completed and display disappears before releasing).



Hold: Press and hold to freeze patient weight to allow for adding blankets, pillows or other accessories without changing the patient's weight display (wait until countdown 4-3-2-1 has completed and display disappears before releasing). When in Hold Wt mode, press again to release. Press to accept changes in Menu mode.



Next: Press to scroll through Menu. In Hold mode, press to make manual adjustments to individual digits of patient's weight. Press Hold to save adjustment and exit Menu mode



Select: Press to make manual corrections to patient's weight value when in Hold mode. While in the Menu mode, press to edit the selected item.



Bed Exit Alarm: Press to Enable / Disable bed exit alarm.



Hand Control Lock-Out: Press and hold approximately five seconds to lock (alarm will sound). When locked, LED will illuminate.



Menu: Press to activate scale system and access bed set-up options: BED EXIT, ON TIME, UNITS and BACKLIGHT settings.

- BED EXIT ALARM: Set at On or Off. When on, the alarm sensitivity can be adjusted to only go off if the scale senses a weight change that is a certain percentage below the weight of the patient. This percentage can be adjusted in increments up to 40%.
- ON TIME function: Set up how long the display will remain on before going into sleep mode. In sleep mode the scale is still on, but the display is turned off for patient privacy. Pressing the Weigh button will wake the display.
- UNITS: May be set in kilograms or pounds.
- BACKLIGHT: Intensity of backlight brightness ranging from 1-10 with 10 being the brightest.



CPR: Press and hold to lower bed head section to completely flat position for CPR (Bed Up / Down, Knee and Trend positions adjust accordingly).



Cardiac Chair: Press and hold to adjust head section and knee sections to Cardiac Chair position (50° - 70° head and 20° - 30° knee)



Head Up / Head Down: Press to raise / lower head of bed.



Bed Up / Bed Down: Press to raise / lower height of bed.



Knee Up / Knee Down: Press to raise / lower knee section of bed.



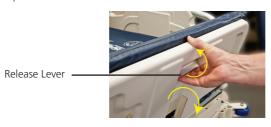
Trend / Reverse Trend: Press to position bed into Trendelenburg / Reverse Trendelenburg.

Lock Out Hand Control

- Press the hand control lock button on the main control panel to lock out the hand control.
- 2. Press and hold the hand control lock button for five seconds on the main control panel again to unlock the hand control.

Side Rail Operation

1. Squeeze and lift the release lever.



- 2. Swing side rail out and down to lower.
- 3. Reverse steps to raise side rail.
- 4. Always ensure rail is securely latched.



When using side rails, see the **Risks and Precautions** and **Safety Information** sections in the **Introduction** chapter of this guide.

Battery Backup

Battery backup is intended to allow bed functionality during patient transfer within the facility. It is not intended for normal / prolonged usage.

Expanding the BariMaxx Active Therapy System

The patient surface of the *BariMaxx* Active Therapy System can be expanded to accommodate different patients. These expansions are located on both sides and at the foot end of the bed frame.

Side Expansions

All eight expansions must be fully extended to accommodate mattress inserts.

1. Squeeze and hold handles on each side expansion.



Expansion Handle

- 2. Pull the expansion out until it stops and is locked in place.
- 3. Release the handle.
- 4. Slip bolsters into the sleeves on the side of the mattress.
- 5. Orient the inserts with the buckles and zippers toward the mattress.





When bolsters are not in use, tuck bolster sleeves under mattress.

- 6. Connect the four female buckles on the underside of inserts to the four male buckles on the underside of the mattress.
- 7. Zip the mattress to the mattress inserts.

Foot Extension

1. Locate extension handles at foot end of bed, identified by two extension labels.





- 2. Grasp both extension handles.
- 3. Squeeze the extension release handle (on the right side).
- 4. Pull out on both handles until the extension stops and is locked in place.
- 5. Insert mattress stop in gap as shown at right.



6. Locate slot on the underside of the foot extension insert as shown at right.



 Line up slot on insert with the mattress stop and place the cushion so that the mattress and insert are flush.



Caster Operation

Steer-Lock Casters

The *BariMaxx* Active Therapy System is equipped with steer-lock casters at the foot end, which allow the bed to be steered from that end



Before patient transfer to or from the *BariMaxx* Active Therapy System, all brakes and steer locks should be engaged.

To operate caster steering:

- 1. Push steer-lock tab down with foot to lock steering.
- 2. Raise steer-lock tab with foot to unlock steering.
- 3. Caster should swivel freely when bed is moved.



Caster Brakes

All four casters are equipped with brakes. To operate caster brake:

- 1. Push red end of brake lever down fully with foot to lock brakes.
- Push green end of brake lever down fully with foot to unlock brakes.

Power-Down Procedure (For Transport Only)

- 1. Press rocker switch to off (O) position.
- 2. Unplug power cord from wall outlet.

Bed Storage Procedure

- 1. Press rocker switch to on (I) position.
- 2. Plug power cord into wall outlet to preserve battery life.

Trapeze System

The *BariMaxx* Active Trapeze System is an overhead rail system with a suspended handle to aid patients in repositioning, sitting, exiting and entering the bed. For information on this Trapeze System (P/N 312311) contact your authorized ArjoHuntleigh representative or see the **Customer Contact Information** section of this guide. Please refer to the Trapeze Installation Instruction Sheet (P/N 312217) for detailed assembly instructions.



Safety Information

- Always follow facility protocols when using an overhead patient assist system.
- When properly installed, this assembly is designed to support patients weighing up to 455 kg (1000 lb). However, do not place more than 295 kg (650 lb) static weight directly on trapeze handle.

Adjustment of Trapeze Handle

Horizontal Adjustment



It is recommended that a minimum of two users make horizontal adjustment.

- 1. Lift up on the trapeze assembly (handle and chains) evenly until both pins are free.
- 2. Reposition the assembly along the horizontal rails as needed to accommodate patient.
- 3. Lower the pins into the rail, making sure the assembly is perpendicular to both rails.

Vertical (length) Adjustment

- 1. Release chain from pear-shaped ring on chain support.
- 2. Shorten or lengthen chain links to desired length.
- 3. Reconnect pear-shaped ring on chain support.
- 4. Repeat on other side, making sure handle hangs evenly.



Access chain links should be at the top of the chain length.

Cleaning



See the Care and Cleaning section of this guide for cleaning instructions.

Disconnect the trapeze assembly from vertical support assembly for proper cleaning.

Preventive Maintenance Schedule

Preventive Maintenance for the *AtmosAir* Fit MRS consists of regular cleaning (see **Care and Cleaning** section of this guide) and an overall system check-out to be performed at the intervals described below.

All components must be cleaned, disinfected and inspected after each patient's use and before use by a new patient. Always use standard precautions, treating all used equipment as contaminated. Institutions should follow local protocols for cleaning and disinfection.

Daily Cleaning

The cover should be wiped daily with a mild soap and water solution.

Inspection / System Check-Out

Check each of the following before placing the *AtmosAir* Fit MRS with a new patient:

- 1. Check mattress surface for tears or cracking; do not use if tears or cracks are present.
- 2. Ensure mattress is free of stains and is not overly faded.

Troubleshooting

It is recommended that all sections of this manual be reviewed before troubleshooting any *AtmosAir* Fit MRS.

Do not attempt troubleshooting outside this manual or where the remedy recommends to contact a ArjoHuntleigh service representative. Any unauthorized service, modification, alteration or misuse may lead to serious injury and / or product damage and will void all applicable warranties.

Symptom	Possible Cause	Solution
Mattress too firm upon arrival.	Difference in altitude not sufficient to open valves.	Apply weight to mattress to open valves.
Mattress cover too wrinkled upon removal from shipping container. Mattress does not inflate or is	Internal components have not accommodated to environment. This does not affect inflation or function.	Let mattress accommodate for 24 hours. If problem continues, contact ArjoHuntleigh for assistance.
not firm.	Tubing not connected properly.	Check tubing inside mattress for loose connectors.
	Tubing kinked.	Check tubing inside mattress
	Tubing disconnected.	Check tubing inside mattress for
	Holes in or damage to SAT.	possible disconnect. Check <i>SAT</i> for holes or damage, or contact ArjoHuntleigh for assistance.

Replacement Parts

Do not attempt troubleshooting, maintenance or parts replacement outside this manual or where the remedy recommends contacting an ArjoHuntleigh service representative. Any unauthorized service, modification, alteration or misuse may lead to serious injury and / or product damage and will void all applicable warranties.

Replaceable AtmosAir Fit MRS components are listed below. For more information such as pricing or additional spare parts that are not on this list, please contact your local ArjoHuntleigh sales representative.

AtmosAir Fit MRS Side Bolsters

PART TYPE	PART NUMBER
Integrated side bolster built into foam shell to keep patients centered. Must be ordered with foam shell at point of purchase.	312489

AtmosAir Fit MRS Mattress	
PART TYPE	PART NUMBER
Mattress	312492
AtmosAir Fit MRS Mattress Covers	
PART TYPE	PART NUMBER
AtmosAir Fit Replacement Cover	312494
AtmosAir Fit MRS Literature	
PART TYPE	PART NUMBER

AtmosAir Fit Mattress Replacement System with SAT Technology 407411-AH User Manual

Specifications*

Frame:



When using accessories on the *BariMaxx* Active Therapy System, the additional weight of the items should be considered with regard to maximum weight capacity of the bed.

,	
Bed Weight (includes mattress, side rails, head and foot boards) Bed Height (minimum / maximum, from floor to mattress support surface) Bed Width (overall, side rails retracted) Bed Width (overall, side rails expanded) Bed Length (foot extension retracted) Bed Length (foot extension expanded)	44 cm - 66 cm (17 in - 26 in)
Mattress:	
Weight	25.4 kg (56 lb)
Weight (with bolsters)	36.3 kg (80 lb)
Length	203.2 cm (80 in)

 Length (with foot extension)
 224 cm (88 in)

 Width
 91.44 cm (36 in)

 Width (with both side bolsters)
 121.92 cm (48 in)

 Height
 19 cm (7.50 in)

Electrical:	
Electrical.	

Voltage	230 VAC
Frequency	
Ampere Rating	10 Amp
Maximum Electrical Leakage	<100 Microamps
Power Cord Length	

Trapeze:

Weight	35 kg (77	7 lb)	

Environmental Conditions

Storage / Operating Conditions:

Temperature Range	10°C	(50°F) to 40°C (104°F)

Shipping Conditions:

Temperature Range	15°C	. (5°F) to 60°(_ี (1401	F)
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^{*}Specifications subject to change without notice.

Classification

Equipment is not suitable for use in the presence of a flammable anesthetic mixture with air, oxygen or nitrous oxide.

The BariMaxx Active Therapy System complies with the following international standards:

IEC: 60601-1; 60601-1-2 and 60601-2-38

Class I Type B Equipment

Mode of operation: Continuous

IPX4

Battery Type: VRLA (Valve Regulated Lead Acid) 12V, 1.2Ah. Two batteries per bed.

Duty Cycle: 10% maximum two minutes / 18 minutes



Under maximum load (455 kg / 1000 lb) actuators should not operate more than two minutes within any 20 minute period. Risk of control box being overheated and damaged resulting in reduction of product life if exceeded.

Electromagnetic Emissions Information

Guidance and manufacturer's declaration-electromagnetic emissions

The BariMaxx Active Therapy System is intended for use in the electromagnetic environment specified below.

The customer or the user of the BariMaxx Active Therapy System should assure that it is used in such an environment.

** *				
Emission test	Compliance	Electromagnetic environment-guidance		
RF emissions CISPR 11	Group 1	The BariMaxx Active Therapy System uses RF energy only for its internal function. Therefore, its RF emissions are very low and are not likely to cause any interference in nearby electronic equipment.		
RF emissions CISPR 11	Class A	The BariMaxx Active Therapy System is suitable for use in all establishments, including domestic establishments and those directly connected to the public low-voltage power supply network that supplies buildings used for domestic purposes.		
Harmonic emissions IEC 61000-3-2	Class A			
Voltage fluctuations /flicker emissions IEC 61000-3-3	Compliance			

Guidance and manufacturer's declaration-electromagnetic immunity

The BariMaxx Active Therapy System is intended for use in the electromagnetic environment specified below. The customer or the user of the BariMaxx Active Therapy System should assure that it is used in such an environment.

Immunity test IEC 60601 test level		Compliance level	Electromagnetic environment-guidance
Electrostatic discharge (ESD) IEC 61000-4-2	± 6 kV contact ± 8 kV air	± 6 kV contact ± 8 kV air	Floors should be wood, concrete or ceramic tile. If floors are covered with synthetic material, the relative humidity should be at least 30%.
Electrical fast transient / burst IEC 61000-4-4	± 2kV for power supply lines ± 1kV for input / output lines	± 2kV for power supply lines ± 1kV for input / output lines	Mains power quality should be that of a typical commercial or hospital environment.
Surge IEC 61000-4-5	± 1kV differential mode ± 2kV common mode	± 1kV differential mode ± 2kV common mode	Mains power quality should be that of a typical commercial or hospital environment.
Voltage Dips, short interruptions and voltage variations on power supply input lines IEC 61000-4-11	<5% UT(>95% dip in UT) for 0,5 cycle 40% UT(60% dip in UT) for 5 cycles 70% UT(30% dip in UT) for 25 cycles <5% UT(>95% dip in UT) for 5 s	<5% UT(>95% dip in UT) for 0,5 cycle 40% UT(60% dip in UT) for 5 cycles 70% UT(30% dip in UT) for 25 cycles <5% UT(>95% dip in UT) for 5 s	Mains power quality should be that of a typical commercial or hospital environment. If the user of the BariMaxx Active Therapy System requires continued operation during power mains interruptions, it is recommended that the BariMaxx Active Therapy System be powered from an uninterruptible power supply or a battery.
Power frequency (50 / 60 Hz) magnetic field IEC 61000-4-8	3 A/m	3 A/m	The BariMaxx Active Therapy System contains no devices susceptible to magnetic fields.

NOTE UT is the a.c. mains voltage prior to application of the test level.

Guidance and manufacturer's declaration-electromagnetic immunity

The BariMaxx Active Therapy System is intended for use in the electromagnetic environment specified below.

The customer or the user of the BariMaxx Active Therapy System should assure that is used in such and environment.

Immunity test	IEC 60601 test level	Compliance level	Electromagnetic environment-guidance
			Portable and mobile RF communications equipment should be used no closer to any part of the <i>BariMaxx</i> Active Therapy System including cables, than the recommended separation distance calculated from the equation applicable to the frequency of the transmitter. Recommended separation distance:
Conducted RF IEC 61000-4-6	3 Vrms 150 KHz to 80 MHz	3 Vrms	d = 1,2 √P
Radiated RF IEC 61000-4-3	3 V/m 80MHz to 2,5 GHz	3 V/m	d = 1,2 \sqrt{P} 80MHz to 800 MHz d = 2,3 \sqrt{P} 800MHz to 2,5 GHz Where P is the maximum output power rating of the transmitter in watts (W) according to the transmitter manufacturer and d is the recommended separation distance in metres (m). Field strengths from fixed RF transmitters, as determined by an electromagnetic site survey, a should be less than the compliance level in each frequency range. Interference may occur in the vicinity of equipment marked with the following symbol:

NOTE 1 At 80 MHz and 800 MHz, the higher frequency range applies.

NOTE 2 These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects and people.

- a Field strengths from fixed transmitters, such as base stations for radio (cellular/cordless) telephones and land mobile radios, amateur radio, AM and FM radio broadcast and TV broadcast cannot be predicted theoretically with accuracy. To assess the electromagnetic environment due to fixed RF transmitters, an electromagnetic site survey should be considered. If the measured field strength in the location in which the BariMaxx Active should be observed to verify normal operation. If abnormal performance is observed, additional measures my be necessary, such as re-orienting or relocating the BariMaxx Active Therapy System.
- b Over the frequency range 150 kHz to 80 MHz, field strengths should be less than 3 V/m.

Recommended separation distance between portable and mobile RF communications equipment and the *BariMaxx* Active Therapy System

The BariMaxx Active Therapy System is intended for use in an electromagnetic environment in which radiated RF disturbances are controlled. The customer or the user of the BariMaxx Active Therapy System can help prevent electromagnetic interference by maintaining a minimum distance between portable and mobile RF communications equipment (transmitters) and the BariMaxx Active Therapy System as recommended below, according to the maximum output power of the communications equipment.

Rated maximum output power of transmitter W	Separation distance according to frequency of transmitter m			
	150 kHz to 80 MHz d =1,2√P	80 MHz to 800 MHz d =1,2√P	800 MHz to 2,5 GHz d =2,3√P	
0,01	0,12	0,12	0,23	
0,1	0,38	0,38	0,73	
1	1,2	1,2	2,3	
10	3,8	3,8	7,3	
100	12	12	23	

For transmitters rated at a maximum output power not listed above, the recommended separation distance d in metres (m) can be estimated using the equation applicable to the frequency of the transmitter, where p is the maximum output power rating of the transmitter in watts (W) according to the transmitter manufacturer.

NOTE 1 At 80 MHz and 800 MHz, the separation distance for the higher frequency range applies.

NOTE 2 These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects and people.

Symbols Used

User Guide



Warning of possible hazard to system, patient or staff



Important operational information

Mattress Overlay



Foot End



Maximum patient weight



Attention, Consult Accompanying Documents

Bed Frame



Manufacturer



Alternating Current



Refer to Instructions for Use



Conforms with the Waste Electrical and Electronic Equipment Directive (2002 / 96 / EC). At the end of useful life, dispose of all waste according to local requirements, or contact your local ArjoHuntleigh representative for advice.



Type B Applied Part



Warning of possible electrical hazard.



The BariMaxx Active Therapy System conforms to the Medical Devices Directive

IPX4 Protected against ingress of liquids

Customer Contact Information

For questions regarding this product, supplies, maintenance or additional information about ArjoHuntleigh products and service, please contact ArjoHuntleigh or an ArjoHuntleigh authorized representative or visit: www.ArjoHuntleigh.com.

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ArjoHuntleigh focuses on patient handling and hygiene, disinfection, DVT prevention, medical beds, therapeutic surfaces and diagnostics.



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