

INSTRUCTIONS FOR USE

AtmosAir

Mattress Replacement System

AtmosAir with SAT 4000 series

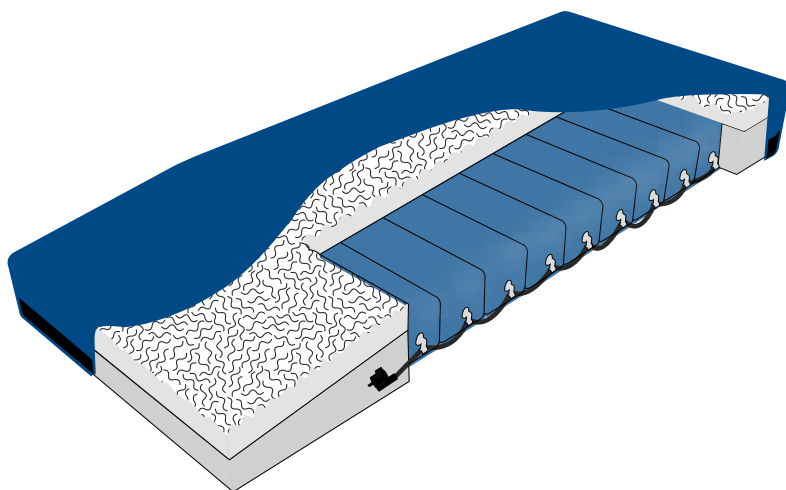
AtmosAir with SAT 9000 series

AtmosAir with SAT APod 25 series

AtmosAir with SAT T-series

AtmosAir with SAT V-series

AtmosAir with SAT M-series



WARNING

To avoid injury, always read this *Instructions for Use* and accompanied documents before using the product.



Mandatory to read the *Instructions for Use*.

® and ™ are trademarks belonging to the Arjo group of companies

© Arjo 2019. SAT™ (Self Adjusting Technology™) is a trademark of MPTI, Ltd. Total Care and VersaCare are trademarks of Hill-Rom and / or its affiliates.

As our policy is one of continuous improvement, we reserve the right to modify designs without prior notice. The content of this publication may not be copied either whole or in part without the consent of Arjo.

DISCLAIMER OF WARRANTY AND LIMITATION OF REMEDY

ARJO HEREBY DISCLAIMS ALL EXPRESS OR IMPLIED WARRANTIES, INCLUDING WITHOUT LIMITATION ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, ON THE ARJO PRODUCT(S) DESCRIBED IN THIS PUBLICATION. ANY WRITTEN WARRANTY OFFERED BY ARJO SHALL BE EXPRESSLY SET FORTH IN THIS PUBLICATION OR INCLUDED WITH THE PRODUCT. UNDER NO CIRCUMSTANCES SHALL ARJO BE LIABLE FOR ANY INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES AND EXPENSES, INCLUDING DAMAGES OR INJURY TO PERSON OR PROPERTY, DUE IN WHOLE OR IN PART TO THE USE OF THE PRODUCT OTHER THAN THOSE FOR WHICH DISCLAIMER OF WARRANTY OR LIMITATION OF LIABILITY IS EXPRESSLY PROHIBITED BY SPECIFIC, APPLICABLE LAW. NO PERSON HAS THE AUTHORITY TO BIND ARJO TO ANY REPRESENTATION OR WARRANTY EXCEPT AS SPECIFICALLY SET FORTH IN THIS PARAGRAPH.

Descriptions or specifications in Arjo printed matter, including this publication, are meant solely to generally describe the product at the time of manufacture and do not constitute any express warranties except as set forth in the written limited warranty included in this publication or with this product. Information in this publication may be subject to change at any time. Contact Arjo for updates.

Important Information For Users

In order for Arjo products to perform properly, Arjo recommends the following conditions. Failure to comply with these conditions will void any applicable warranties.

- Use this product only in accordance with these instructions and applicable product labeling.
- Assembly, operations, extensions, re-adjustments, modifications, technical maintenance or repairs must be performed by qualified personnel authorized by Arjo. Contact Arjo for information regarding maintenance and repair.
- If applicable, ensure the electrical installation of the room complies with the appropriate national / local electrical wiring standards.

Specific indications, contraindications, warnings, precautions and safety information exist for Arjo's therapeutic support systems. 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.

Intentionally left blank

Table Of Contents

Introduction.....	3
Indications	3
Contraindications.....	3
Risks and Precautions.....	3
Safety Information	4
Serious Incident	5
Mattress Installation.....	6
<i>AtmosAir</i> with SAT 4000, 9000 (all models), <i>APod 25</i> (all models), T-Series* (all models).....	6
<i>AtmosAir</i> with SAT V-Series*.....	7
<i>AtmosAir</i> with SAT M-Series*.....	8
<i>AtmosAir</i> Pump Installation	9
LED Indicators.....	10
Patient Placement and Nursing Care.....	11
Alternating Pressure / Rotation Adjustment.....	11
CPR.....	12
Transport Mode	12
Skin Care.....	12
Incontinence / Drainage	12
General Operation.....	12
Care and Cleaning.....	13
Fire Barrier	13
Cover Cleaning Options	13
Cleaning <i>AtmosAir</i> Pump and Tubes (A and AR models)	14
Preventive Maintenance Schedule.....	15
Daily Cleaning	15
Weekly Cleaning.....	15
Inspection / System Check-Out	15
Troubleshooting	16
Parts Diagram - <i>AtmosAir</i> with SAT 4000.....	17
Parts Diagram - <i>AtmosAir</i> with SAT 9000 and T-Series	18
Parts Diagram - <i>AtmosAir</i> with SAT <i>APod 25</i> Series	19
Parts Diagram - <i>AtmosAir</i> with SAT M-Series and V-Series	20
Parts Diagram - <i>AtmosAir</i> Pump	21
Replacement Parts	22
Specifications	26
Electromagnetic Compatibility.....	27
Symbols Used.....	30
Customer Contact Information.....	31

Intentionally left blank

Introduction

It is recommended that all sections of this User Guide be read prior to product use.

Carefully review the **Contraindications, Safety Information and Risks and Precautions** sections prior to placing a patient on any AtmosAir™ with SAT™ Mattress Replacement System (MRS).

Caregivers should review this information with the patient and the patient's family and / or legal guardian. Save this User Guide in an easily accessible location for quick reference.

This User Guide is comprised of the following *AtmosAir* MRS models / series:

- *AtmosAir* with SAT 4000 Series (non powered, indicates pump not available)
- *AtmosAir* with SAT 9000 Series (non powered)
- *AtmosAir* with SAT 9000A Series (powered with alternating pressure)
- *AtmosAir* with SAT 9000AR Series (powered with alternating pressure and rotation)
- *AtmosAir* with SAT APod 25 Series (non powered)
- *AtmosAir* with SAT APod 25 A Series (powered with alternating pressure)
- *AtmosAir* with SAT APod 25 AR Series (powered with alternating pressure and rotation)
- *AtmosAir* with SAT T-Series (non powered)
- *AtmosAir* with SAT T-Series A (powered with alternating pressure)
- *AtmosAir* with SAT T-Series AR (powered with alternating pressure and rotation)
- *AtmosAir* with SAT V-Series (non powered)
- *AtmosAir* with SAT M-Series (non powered)

The *AtmosAir* MRS comes in a wide variety of lengths and widths to support various customer requirements. Contact an Arjo representative for additional product information.

Indications

- *AtmosAir* MRS are intended to treat and prevent pressure ulcers.

Contraindications

- Unstable vertebral fracture
- Cervical and skeletal traction

Risks and Precautions

Transfer – Standard precautions should be taken during patient transfer.

Rotation (AR models) – Prior to engaging rotation ensure that bed frame has side rails and that all side rails are fully engaged in full upright and locked position.

If using **Alternating Pressure** with addition of the pump (**A models**) then a local risk assessment should be undertaken to review if use of side rails is required.

Ensure pump hoses are properly connected to appropriate side of mattress for the desired function (see **Pump Installation**).

WARNING: Incorrect connection of pump hoses can increase risk of potential patient falls.

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

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.**

Oxygen Use – DANGER: Risk of explosion if the *AtmosAir* Pump is used in the presence of flammable anesthetics. Use of this product's pump in an oxygen-enriched environment may produce potential of fire hazard. This equipment is not suitable for use in the presence of a flammable anesthetic mixture with air or with oxygen or nitrous oxide. Unplug and do not use pump when using oxygen-administering equipment other than the nasal mask or half-bed-length tent type.

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

Safety Information

Patient Entrance / Exit – Caregiver should always aid patient in exiting the bed. 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.

Turning - CAUTION: Prior to engaging turn feature, ensure that bed frame has side rails and that all side rails are in their full up and locked position.

Brakes – Caster brakes should always be locked once the bed is in position. Verify wheels are locked before any patient transfer to or from the bed.

Bed Height – To minimize risk of falls or injury, the bed should always be in the lowest practical position when the patient is unattended.

Bed Frame – Always use a standard healthcare bed frame with this mattress, with any safeguards or protocols that may be appropriate. Bed frame and side rails (if used) must be properly sized relative to the mattress to help minimize any gaps that might entrap a patient's head or body. It is recommended that bed and side rails (if used) comply with all applicable regulations and protocols.

CPR – Level the bed and disconnect pump (if present). Lower side rails and initiate CPR per facility protocols. Consider use of backboard if indicated. After CPR remove backboard, if used, reconnect pump, if present, raise siderails and reconfigure bed and accessories as in initial placement.

Head of Bed Elevation – Keep head of bed as low as possible to help prevent patient migration.

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.



CAUTION: 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.

I.V. and Drainage Tubes – I.V. and drainage tubes should always have slack for alternating pressure or rotation and other patient movements.

Skin Care – Monitor skin conditions regularly and consider adjunct or alternative therapies for high acuity patients. Give extra attention to any possible pressure points and locations where moisture or incontinence may occur or collect. Early intervention may be essential to preventing skin breakdown.

Fluids – Avoid spilling fluids on pump controls. If spills do occur, clean fluid from pump wearing rubber gloves or while unit is unplugged 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.

Avoid Fire Hazards – To minimize risk of fire, connect the bed's power cord directly into a wall-mounted outlet. Do not use extension cords or multiple outlet strips. In the US, review and follow FDA's Safety Tips for Preventing Hospital Bed Fires.

No Smoking in Bed – Smoking in bed can be dangerous. To avoid the risk of fire, smoking in bed should never be allowed.

Power Cord – Position power cord to avoid a tripping hazard and / or damage to the 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 possibly produce risk of fire or electric shock.

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

Fire Barrier Contact – Care should be taken with regards to the fire barrier when the cover is removed. It is recommended that Personal Protective Equipment (PPE) is used during handling of the mattress with the fire barrier exposed to avoid contact with loose particles. To ensure optimal product performance, avoid over-handling of the fire barrier and handle with care. If the fire barrier becomes damaged or soiled it should be replaced.

End of Life Disposal –

- Fabric material used on the mattresses or any other textiles, polymers or plastic materials etc. should be sorted as combustible waste.
- Mattresses at the end of life should be disposed of as waste according to the national or local requirements which may be landfill or combustion.
- Pump units have electrical and electronic components should be disassembled and recycled per Waste of Electrical and Electronic Equipment (WEEE) or in accordance with local or national regulation.

Serious Incident

If a serious incident occurs in relation to this medical device, affecting the user, or the patient then the user or patient should report the serious incident to the medical device manufacturer or the distributor. In the European Union, the user should also report the serious incident to the Competent Authority in the member state where they are located.

Preparation for Use



For information concerning the bed frame refer to the manufacturers' User Guide.

1. Open shipping container(s).



Do not use sharp instruments to open boxes. Damage to mattress could result.

2. Remove *AtmosAir* with SAT MRS from plastic protective cover.



The mattress cover may appear wrinkled when unpacked. To remove wrinkles, allow mattress up to 24 hours to accommodate; see Troubleshooting for more information. Wrinkles will not affect inflation or function, so mattress may be used immediately if needed.

3. Check mattress surface for tears or cracking; do not use if tears or cracks are present.
4. If re-installing mattress onto a new frame or for a new patient, check mattress surface for staining and soiling; clean and / or disinfect as required (see **Care and Cleaning**).
5. Level bed and lock brakes.
6. Remove existing mattress from bed frame.

Mattress Installation

AtmosAir with SAT 4000, 9000 (all models), *APod 25* (all models), T-Series* (all models)

1. Position mattress on bed frame with logo facing up and product information tags at foot end of bed.



Magnets are integrated on the *AtmosAir* T-Series bottom cover to help keep the mattress in place during foot section extension / retraction.

2. Ensure there are no gaps between mattress and bed frame or side rails.



Always use a standard healthcare bed frame with safeguards or protocols that may be appropriate. Frame and side rails must be properly sized relative to the mattress to help minimize any gaps that might entrap a patient's head or body.

* T-Series is compatible for use with the Hill-Rom Total Care™ bed frame.

AtmosAir with SAT V-Series*

V-Series mattress on VersaCare™ Frame

1. Position mattress on bed frame with logo facing up and product information tags at foot end of bed.
2. Slide locking bar located in pocket on underside of headend of mattress to one side, as shown at right (Figure 1).

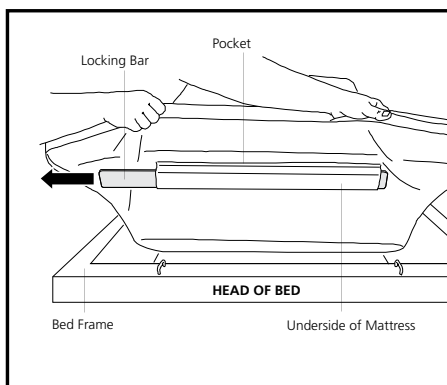


Figure 1

3. Slip end of locking bar into slot on head-end of bed frame, as shown below (Figures 2 and 3).
4. Slip other end of locking bar into other slot on head-end of bed frame, as shown below (Figure 4).

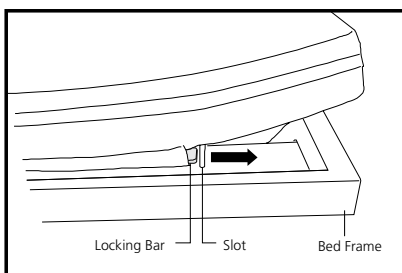


Figure 2

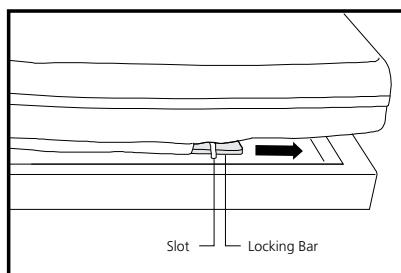


Figure 3

5. Repeat steps 2 through 4 to secure foot-end of mattress.



Foot-end locking bar may need to be flexed slightly to slip into foot-end slots.



Magnets are integrated on the AtmosAir V-Series bottom cover to help keep the mattress in place during foot section extension / retraction.

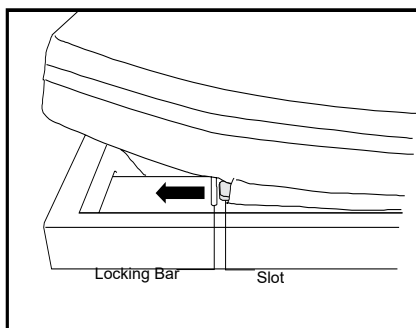


Figure 4

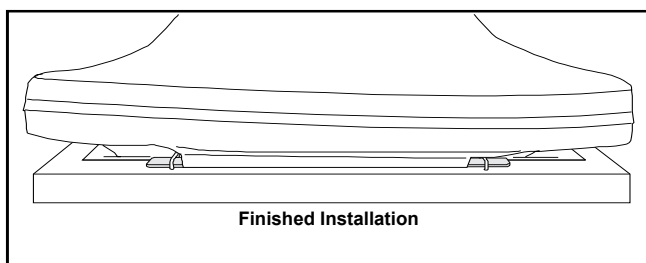


Figure 5



When removing the *AtmosAir* with SAT V-Series, be sure to disengage locking bar and magnets before removing from bed frame.

AtmosAir* with SAT M-Series

M-Series mattress installation on Multicare frame

1. Position mattress on bed frame with logo facing up and product information tags at foot end of bed.
2. Use the two buckled straps located on both sides of the mattress and fasten around knee bar to secure the *AtmosAir* with SAT M-Series MRS to the bed frame (Figure 6).
3. Ensure there are no gaps between mattress and bed frame or side rails.



Figure 6



CAUTION – When using the cardiac chair function, patient must be monitored to ensure against unintended migration (sliding to the foot-end and / or unintentional bed exit).



Always use a standard healthcare bed frame with safeguards or protocols that may be appropriate. Frame and side rails must be properly sized relative to the mattress to help minimize any gaps that might entrap a patient's head or body.

* M-Series is compatible for use with the Linet Multicare bed frame.

AtmosAir Pump Installation

Pump installation steps for A and AR models:

1. Place pump on a solid stationary surface or suspend on end of bed frame with built-in hanger.
2. Attach pump hoses to mattress, as shown at right (Figure 7):

A Models (alternating pressure):

- Attach **blue** hoses to the mattress connectors on the **patient left side** (marked with **BLUE tag**) of the mattress for **alternating pressure**.

AR Models (alternating pressure / rotation):

- Attach **blue** hoses to the mattress connectors on the **patient left side** (marked with **BLUE tag**) of the mattress for **alternating pressure**.
 - Attach **red** hoses to the mattress connectors on the **patient right side** (marked with **RED tag**) of the mattress for **rotation**.
3. Ensure air hoses are not kinked and will not be pinched by any articulated bed mechanisms.
 4. Attach hose connectors to the pump.
 5. Plug pump unit into a properly-grounded wall outlet.
 6. Verify power to this outlet is not controlled by a wall switch.
 7. Switch pump on.

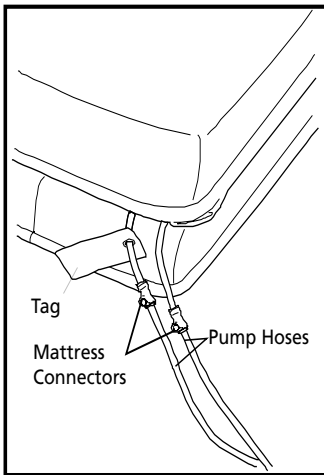


Figure 7 120V

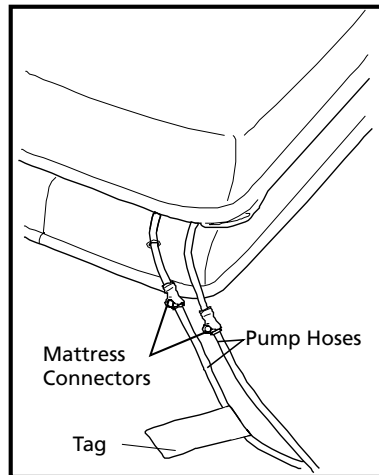
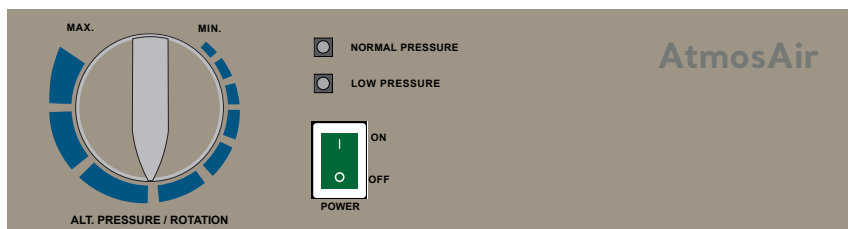


Figure 7a 230V

LED Indicators

1. Green LED is lit when the pressure is at the set level
2. Yellow LED is lit when pressure is below the set level. Check connections.



Patient Placement and Nursing Care

It is recommended that all sections of this User Guide be read prior to product use. Carefully review the **Contraindications**, **Safety Information** and **Risks and Precautions** sections prior to placing a patient on any *AtmosAir* MRS.

1. Transfer patient following all applicable safety rules and institution protocols.
2. Center patient side-to-side and head-to-foot on *AtmosAir* MRS surface.
3. Ensure all sections of the mattress fully support the patient.



Mattress handles are for mattress transport only.

Alternating Pressure / Rotation Adjustment

The *AtmosAir* with SAT 9000, APod 25 and T-Series models provide alternating pressure and / or rotation. The level of alternating pressure or rotation can be adjusted for patient comfort.



Prior to engaging alternating pressure or rotation, ensure that bed frame has side rails and that all side rails are fully engaged in full upright and locked position. Observe patient during initial turning cycles to ensure proper patient placement



Ensure pump hoses are properly connected to appropriate side of mattress for the desired function (see Pump Installation).

- Rotate the control knob on the pump clockwise to increase the intensity of alternating pressure relief or the level of rotation.
- Rotate the control knob on the pump counter-clockwise to reduce the intensity of alternating pressure relief or the level of rotation.



The *AtmosAir* MRS DOES NOT provide a Nurse Hold function.

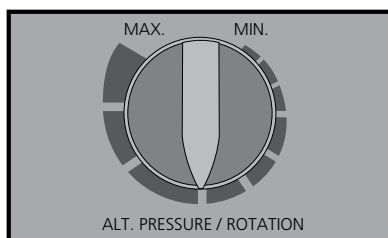


Figure 8 (120V)

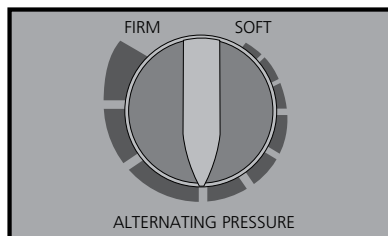


Figure 8a (230V)

CPR

1. Level bed.
2. Disconnect hoses from pump to level mattress (for A and AR models), as shown at right (Figure 9).
3. Lower or remove side rail on caregiver's side if necessary.
4. Begin CPR as per facility protocol. Consider use of backboard if indicated.
5. After CPR is performed:
 - Remove backboard if used.
 - Reconnect pump hoses to mattress (for A and AR models).
 - Raise or install side rail as necessary.
 - Reconfigure bed and accessories as in initial placement.

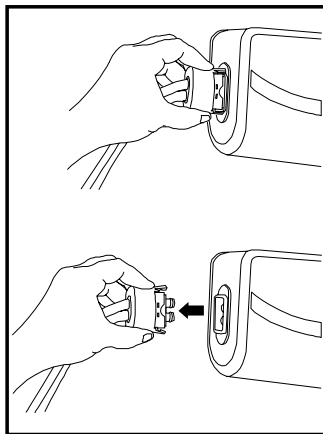


Figure 9

Transport Mode

When disconnected from the pump, the *AtmosAir* 9000A MRS will operate as a reactive surface with the full operation of the SAT system. For transport, there are two options:

1. Disconnect the tube assembly from the mattress. Valves will close off as soon as the tube assembly is disconnected.
2. Disconnect the tube assembly from the pump and securely place the transport cap on the tube assembly to maintain a seal.

Skin Care

- Remove excess moisture and keep skin dry and clean.
- Check patient's skin regularly, particularly in areas where incontinence and drainage occur.
- Ensure linens under patient are not wrinkled.

Incontinence / Drainage

- Use moisture-impermeable underpads for incontinent patients.
- Wipe surface clean and replace bed linens as required (see **Care and Cleaning**).

General Operation

Avoid contact of sharp instruments with the *AtmosAir* MRS. Punctures, cuts and tears may prevent proper inflation and air pressure maintenance.



Figure 10

Care and Cleaning

The following processes is recommended, but should be adapted to comply with local institution protocols. If you are uncertain, you should seek advice from your local Infection Control Specialist.

The *AtmosAir* MRS should be routinely decontaminated between patients and at regular intervals while in use.



If a powered *AtmosAir* MRS, ensure power cord is unplugged from wall outlet before performing care and cleaning.



Do not use Phenol-based solutions or abrasive compounds or pads on the cover during decontamination process as these will damage the surface coating. Do not boil or autoclave the cover. Avoid immersing electrical parts in water during the cleaning process. Do not spray cleaning solution directly onto the pump.



Covers should be wiped down immediately after it has been exposed to fluids or spills.

Fire Barrier

Care should be taken with regards to the fire barrier when the cover is removed. It is recommended that Personal Protective Equipment (PPE) is used during handling of the mattress with the fire barrier exposed to avoid contact with loose particles. To ensure optimal product performance, avoid over-handling of the fire barrier and handle with care. Fire barrier should be replaced if soiled or damaged.

Cover Cleaning Options

Sewn *AtmosAir* MRS (Top cover can not be removed from base)

1. If a powered MRS, unplug pump before cleaning.
2. Remove or push bed linens to center of mattress.



The sewn *AtmosAir* MRS cover is cleaned by wipe down methods only. Do not launder as damage to the base may occur.

3. Wipe and rinse any soiling from the mattress surface and base. Use 1000 ppm chlorine or 70% alcohol.
4. Rinse with a wet towel to remove chemicals.
5. After wipe down, dry surface with towel.
6. Ensure bed linens are refitted and not wrinkled under patient.
7. Clean pump and tubes (if needed) by wiping with a damp cloth.

RF Welded *AtmosAir* MRS (Detachable top cover)

1. If a powered MRS, unplug pump before cleaning.
2. Push bed linens to center of mattress to wipe down, remove to launder top cover or wipe down as described below.



The RF Welded *AtmosAir* MRS has a detachable top cover that can be laundered. However the base is cleaned by wipe down methods only. Do not launder base or fire barrier as damage may occur.

3. Wipe and rinse any soiling from the mattress surface and base. Use 1000 ppm chlorine or 70% alcohol.
4. Rinse with a wet towel to remove chemicals.
5. After wipe down, dry surface with towel.
6. Ensure bed linens are refitted and not wrinkled under patient.
7. Clean pump and tubes (if needed) by wiping with a damp cloth.

Laundering Detachable Top Cover

1. Unzip the top cover from the base for laundering. Do not launder base as damage may occur.
2. Recommended wash temperature for top cover is 60° C (140° F) for 15 minutes.
3. Maximum wash temperature is 95° C (203° F) for 15 minutes.
4. Tumble dry at 60° C (140° F) or air dry.
5. Maximum drying temperature 80° C (176° F).

Cleaning *AtmosAir* Pump and Tubes (A and AR models)

1. Ensure pump is unplugged.
2. Wipe surface of pump and tubes with coarse cloth using an approved disinfectant germicide mixed to manufacturer's instructions. **Do not flood any part of the pump with cleaning solution.**



Avoid spilling fluids on pump controls. If spills do occur, clean fluid from pump wearing rubber gloves or while unit is unplugged 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.

3. Wipe off excess solution.
4. Disinfect pump and tubes with a chlorine solution (mixed according to the instructions in the **Care and Cleaning** section). Using a clean cloth, wring out excess solution until cloth is damp. Wipe pump surface and tubes with damp cloth.
5. Allow to air dry.

Preventive Maintenance Schedule

Preventive maintenance for the *AtmosAir* MRS consists of regular cleaning (see **Care and Cleaning**) 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. After wipe down, dry surface with a towel.

Weekly Cleaning

The pump and hoses of A and AR models should be cleaned weekly.

Inspection / System Check-Out

Check each of the following before placing the *AtmosAir* 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.

For A and AR models:

1. Ensure air inlet hoses and connectors on mattress and pump are clean and undamaged.
2. Ensure pump and power cord are clean and undamaged.
3. Ensure pump hanger brackets are secure and operate correctly.
4. Ensure power switch and comfort control knob both operate correctly.
5. Attach pump to the red **rotation** hoses and power on to ensure that the mattress surface tilts and there are no air leaks.
6. Attach pump to the blue **alternating pressure** hoses and power on to ensure there are no air leaks.

Troubleshooting

Do not attempt troubleshooting outside this guide or where the solution recommends to contact Arjo. 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
Green lamp on pump does not light when power switch is set to the ON position.	Power cord may be unplugged.	Plug in power cord.
	Wall outlet may be controlled by a wall switch.	Plug power cord into different wall outlet.
	Circuit breaker for wall switch may be tripped or blown.	Reset circuit breaker or replace fuse.
	Power cord or power switch may be damaged.	Contact Arjo for assistance.
Mattress inflates only to one side when in rotation mode.	Tubing not connected properly.	Ensure red hoses are connected to hoses marked with red tag for rotation.
	Tubing kinked.	Check tubing inside mattress for kinks.
	Tubing disconnected.	Check tubing inside mattress for possible disconnect.
	Hole in rotation bladder.	Check deflated rotation bladder for holes.
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.	Internal components have not accommodated to environment. This does not affect inflation or function.	Let mattress accommodate for 24 hours. If problem continues, contact Arjo for assistance.
Mattress is not firm.	Tubing not connected properly.	Check tubing inside mattress for loose connectors.
	Tubing kinked.	Check tubing inside mattress for possible kinks.
	Tubing disconnected.	Check tubing inside mattress for possible disconnect.
	Holes in or damaged to SAT system.	Check SAT system for holes or damage, or contact Arjo for assistance.

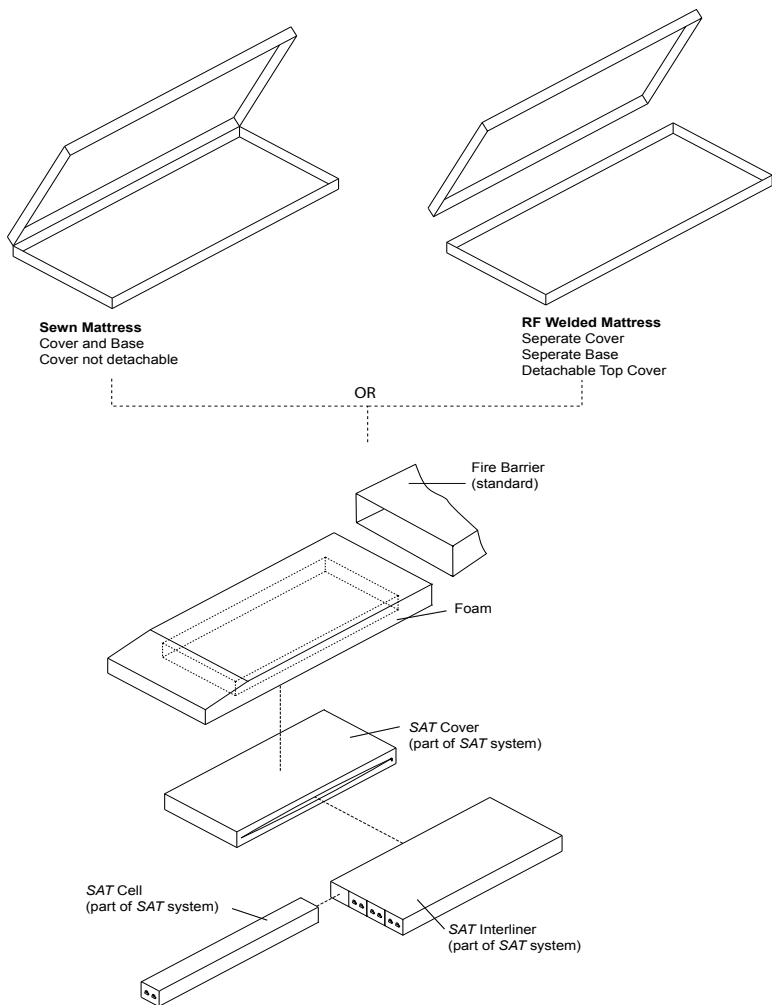
Parts Diagram - AtmosAir with SAT 4000

All hoses were removed to improve diagram readability.

The fire barrier is a sleeve that fits over the foam and SAT assemblies.



The SAT Cover, SAT Cells, SAT Interliner and rotation bladders (for A and AR models) are all part of the integrated SAT System and cannot be ordered separately. See Replacement Parts for a complete list of SAT Systems.



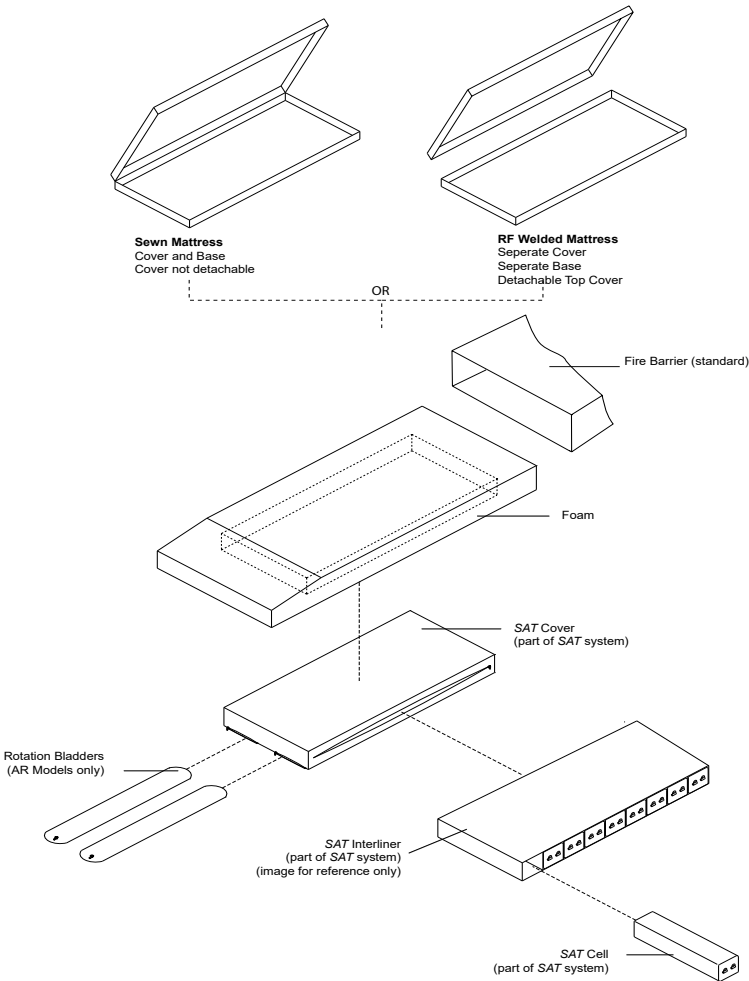
Parts Diagram - *AtmosAir* with SAT 9000 and T-Series

All hoses were removed to improve diagram readability.

The fire barrier is a sleeve that fits over the foam and SAT assemblies.



The SAT Cover, SAT Cells, SAT Interliner and rotation bladders (for A and AR models) are all part of the integrated SAT System and cannot be ordered separately. See Replacement Parts for a complete list of SAT Systems.



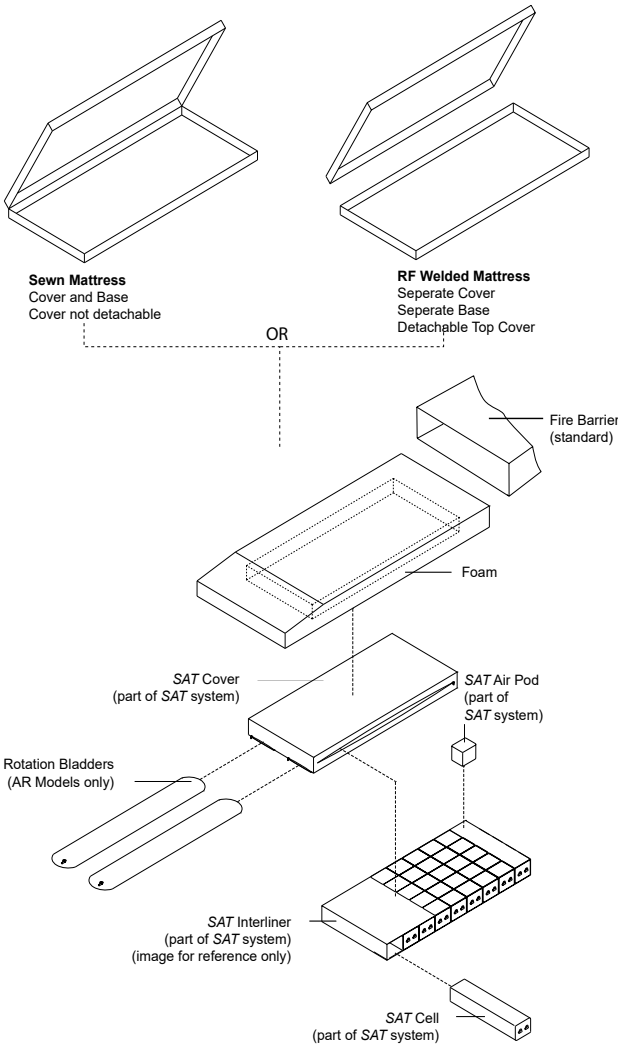
Parts Diagram - *AtmosAir* with *SAT APod 25* Series

All hoses were removed to improve diagram readability.

The Fire Barrier is a sleeve that fits over the foam and SAT assemblies.



The *SAT* Cover, *SAT* Cells, *SAT* Interliner, *SAT* Air Pods and rotation bladders (for A and AR models) are all part of the integrated *SAT* System and cannot be ordered separately. See Replacement Parts for a complete list of *SAT* Systems.



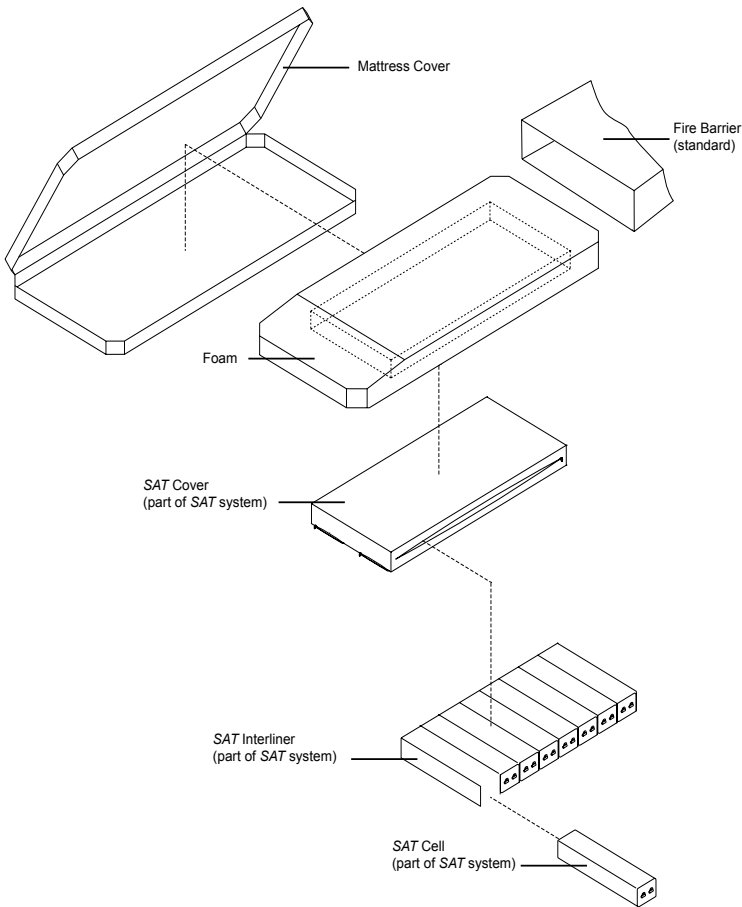
Parts Diagram - *AtmosAir* with SAT M-Series and V-Series

All hoses were removed to improve diagram readability.

The fire barrier is a sleeve that fits over the foam and SAT assemblies.



The SAT Cover, SAT Cells, SAT Interliner are all part of the integrated SAT System and cannot be ordered separately. See Replacement Parts for a complete list of SAT Systems.

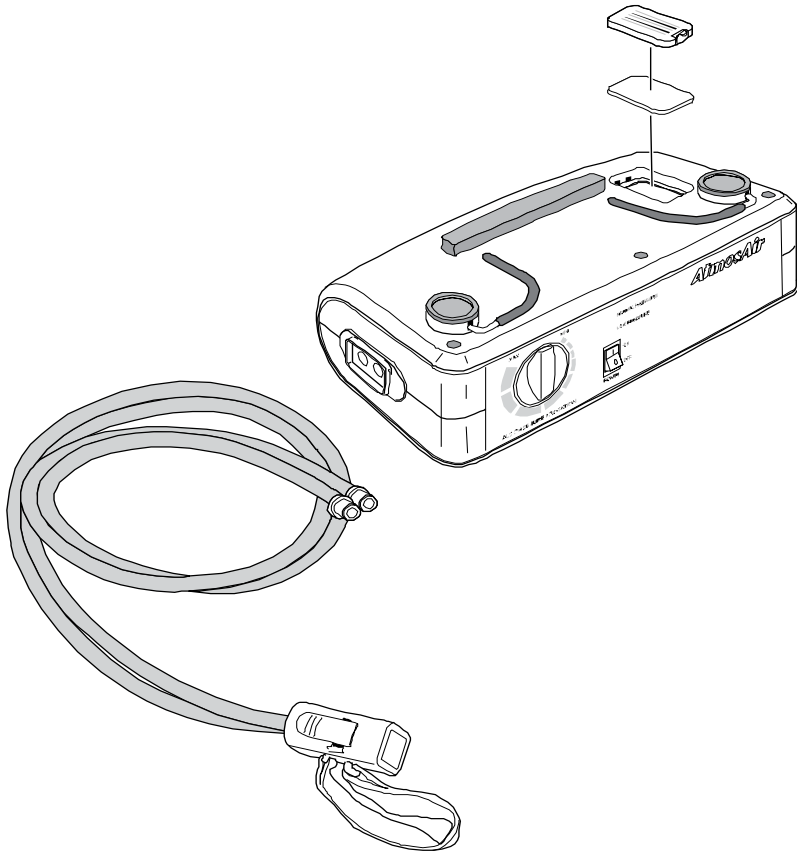


Parts Diagram - *AtmosAir* Pump

(A and AR models)



See Replacement Parts for a complete list of parts that may be ordered for the *AtmosAir* Pump, as well as entire pump systems.



Replacement Parts

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

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

ATMOSAIR MATTRESS COMPONENTS

AtmosAir Foam Shells

PART TYPE.....	CATALOG NUMBER
4000 / 9000 Foam Shell	KA4/9FS(SIZE)
APod 25 Foam Shell.....	25PFS(SIZE)
T-Series Foam Shell	KA9FSTC
V-Series Foam Shell.....	KVFS3584
M-Series Foam Shell	416119
M-Series Orthopedic Foam Shell	416397

AtmosAir with SAT System

PART TYPE.....	CATALOG NUMBER
4000 SAT System.....	KA4SAT
9000 SAT System.....	KA9SAT
9000A SAT System.....	KA9ASAT
9000AR SAT System.....	KA9ARSAT
APod 25 SAT	25PSAT
APod 25A SAT.....	25PASAT
APod 25AR SAT	25PARSAT
V-Series SAT System	KVSAT
M-Series SAT System	416116
T-Series SAT System	KA9-T-SAT
T-Series SAT System A	KA9A-T-SAT
T-Series SAT System AR.....	KA9AR-T-SAT

AtmosAir Fire Barrier Lining

PART TYPE.....	CATALOG NUMBER
<i>AtmosAir</i> Fire Barrier Lining (standard on all models).....	KA4/9-FBL

RF Welded *AtmosAir* Fire Barrier Lining (Standard on all *AtmosAir* RF Welded mattresses (all models)),..... *AtmosAir*-FBL

ATMOSAIR MATTRESS COVERS

AtmosAir Model 4000 Mattress

PART TYPE.....	CATALOG NUMBER
Complete Cover, Soflux™ Top, Non-Skid Bottom.....	A4CSOVB (WWWLL)NXS
Complete Cover, Soflux Top, Vinyl Gray Bottom.....	A4CSOVG (WWWLL)NXS
Complete Cover, Reliant IS ² ™ Top, Non-Skid Bottom.....	A4CRLNB (WWWLL)TXS
Complete Cover, Barrier Flex 1 Top, Non-Skid Bottom.....	A4CBFNB(WWWLL)PXS
Complete Cover, Barrier Flex 1 Top, Non-Skid Bottom, No Handles.....	A4CBFNH(WWWLL)PXS
Complete Cover, Barrier Flex 1 Top, Vinyl Gray Bottom.....	A4CBFVG(WWWLL)PXS
Complete Cover, Barrier Flex 1 Top, Vinyl Gray Bottom, No Handles.....	A4CBFVH(WWWLL)PXS
Complete Cover, Reliant IS ² Top, Vinyl Gray Bottom.....	A4CRLVG (WWWLL)TXS
Complete Cover, Reliant IS ² , RF Welded Top, Non-Skid PU Bottom, No Handles.....	A4CRFPN(WWWLL)TXS
Complete Cover, Reliant IS ² , RF Welded Top, Non-Skid PU Bottom, With Handles.....	A4CRFPU(WWWLL)TXS
Top Cover, Reliant IS ² , RF Welded.....	A4CRFX(X) (WWWLL)TXS
Base Cover, PU Non-skid Bottom, No Handles.....	A4CXXPN(WWWLL)XXS
Base Cover, PU Non-skid Bottom, With Handles.....	A4CXXPU(WWWLL)XXS

AtmosAir Model 9000 Mattress

PART TYPE.....	CATALOG NUMBER
Complete Cover, Soflux Top, Non-Skid Bottom.....	A9CSOVB(WWWLL)NXS
Complete Cover, Soflux Top, Non-Skid Bottom, No Handles.....	A9CSOVBH(WWWLL)NXS
Complete Cover, Soflux Top, Vinyl Gray Bottom.....	A9CSOVG(WWWLL)NXS
Complete Cover, Soflux Top, Vinyl Gray Bottom, No Handles.....	A9CSOVH(WWWLL)NXS
Complete Cover, Reliant IS ² Top, Non-Skid Bottom.....	A9CRLNB(WWWLL)TXS
Complete Cover, Reliant IS ² Top, Vinyl Gray Bottom.....	A9CRLVG(WWWLL)TXS
Complete Cover, Barrier Flex 1 Top, Non-Skid Bottom.....	A9CBFNB(WWWLL)PXS
Complete Cover, Barrier Flex 1 Top, Non-Skid Bottom, No Handles.....	A9CBFNH(WWWLL)PXS
Complete Cover, Barrier Flex 1 Top, Vinyl Gray Bottom.....	A9CBFVG(WWWLL)PXS
Complete Cover, Barrier Flex 1 Top, Vinyl Gray Bottom, No Handles.....	A9CBFVH(WWWLL)PXS
Complete Cover, Reliant IS ² , RF Welded Top, Non-Skid PU Bottom, No Handles.....	A9CRFPN(WWWLL)TXS
Complete Cover, Reliant IS ² , RF Welded Top, Non-Skid PU Bottom, With Handles.....	A9CRFPU(WWWLL)TXS
Complete Cover, Premium RF, Welded Top, Non-Skid PU Bottom, No Handles.....	A9CPRPN(WWWLL)NXS
Complete Cover, Premium RF, Welded Top, Non-Skid PU Bottom, with Handles.....	A9CPRPU(WWWLL)NXS
Top Cover, Reliant IS ² , RF Welded.....	A9CRFX(X) (WWWLL)TXS
Top Cover, Premium, RF Welded.....	A9CPRXX(WWWLL)NXS
Base Cover, PU Non-skid Bottom, No Handles.....	A9CXXPN(WWWLL)XXS
Base Cover, PU Non-skid Bottom, With Handles.....	A9CXXPU(WWWLL)XXS

AtmosAir Model 9000A Mattress with Alternating Pressure

PART TYPE.....	CATALOG NUMBER
Complete Cover, Reliant IS ² , RF Welded Top, Non-Skid PU Bottom, No Handles.....	AXCRFPN(WWWLL)TXS
Complete Cover, Reliant IS ² , RF Welded Top, Non-Skid PU Bottom, With Handles.....	AXCRFPU(WWWLL)TXS
Complete Cover, Premium, RF Welded Top, Non-Skid PU Bottom, No Handles.....	AXCPRPN(WWWLL)NXS
Complete Cover, Premium, RF Welded Top, Non-Skid PU Bottom, with Handles.....	AXCPRPU(WWWLL)NXS
Complete Cover, Soflux Top, Non-Skid Bottom.....	AXCSOVB(WWWLL)NXS
Complete Cover, Soflux Top, Vinyl Gray Bottom.....	AXCSOVG(WWWLL)NXS
Complete Cover, Reliant IS ² Top, Non-Skid Bottom.....	AXCRLNB(WWWLL)TXS
Complete Cover, Reliant IS ² Top, Vinyl Gray Bottom.....	AXCRLVG(WWWLL)TXS

Top Cover, <i>Reliant IS²</i> , RF Welded	AXCRFX(XXXWWWLL)TXS
Top Cover, Premium, RF Welded	AXCPRXX(XXXWWWLL)NXS
Base Cover, PU Non-skid Bottom, No Handles	AXCXXPN(XXXWWWLL)XXS
Base Cover, PU Non-skid Bottom, With Handles	AXCXXPU(XXXWWWLL)XXS

AtmosAir Model 9000A

Mattress with Alternating Pressure and Rotation

PART TYPE	CATALOG NUMBER
Complete Cover, <i>Reliant IS²</i> , RF Welded Top, Non-Skid PU Bottom, No Handles	ARCRFPN(XXXWWWLL)TXS
Complete Cover, <i>Reliant IS²</i> , RF Welded Top, Non-Skid PU Bottom, With Handles	ARCRFPU(XXXWWWLL)TXS
Complete Cover, Premium, RF Welded Top, Non-Skid PU Bottom, No Handles	ARCRPN(XXXWWWLL)NXS
Complete Cover, Premium RF Welded Top, Non-Skid PU Bottom, with Handles	ARCRPU(XXXWWWLL)NXS
Complete Cover, <i>Soflux</i> Top, Non-Skid Bottom	ARCSNB(XXXWWWLL)NXS
Complete Cover, <i>Soflux</i> Top, Vinyl Gray Bottom	ARCSOVG(XXXWWWLL)NXS
Complete Cover, <i>Reliant IS²</i> Top, Non-Skid Bottom	ARCRLNB(XXXWWWLL)TXS
Complete Cover, <i>Reliant IS²</i> Top, Vinyl Gray Bottom	ARCRLVG(XXXWWWLL)TXS
Top Cover, <i>Reliant IS²</i> , RF Welded	AXCRFX(XXXWWWLL)TXS
Top Cover, Premium RF Welded	AXCPRXX(XXXWWWLL)NXS
Base Cover, PU Non-Skid Bottom, No Handles	AXCXXPN(XXXWWWLL)XXS
Base Cover, PU Non-Skid Bottom, With Handles	AXCXXPU(XXXWWWLL)XXS

AtmosAir Model APod 25 Mattress

PART TYPE	CATALOG NUMBER
Complete Cover, Premium, RF Welded Top, Non-Skid PU Bottom, No Handles	ADCRPN(XXXWWWLL)NXS
Complete Cover, Premium, RF Welded Top, Non-Skid PU Bottom, With Handles	ADCRPU(XXXWWWLL)NXS
Complete Cover, <i>Soflux</i> Top, Non-Skid Bottom	ADCSNB(XXXWWWLL)NXS
Complete Cover, <i>Soflux</i> Top, Vinyl Gray Bottom	ADCSOVG(XXXWWWLL)NXS
Complete Cover, <i>Reliant IS²</i> Top, Non-Skid Bottom	ADCRLNB(XXXWWWLL)TXS
Complete Cover, <i>Reliant IS²</i> Top, Vinyl Gray Bottom	ADCRLVG(XXXWWWLL)TXS
Top Cover, <i>Reliant IS²</i> , RF Welded	ADCRFX(XXXWWWLL)TXS
Top Cover, Premium, RF Welded	ADCRPN(XXXWWWLL)NXS
Base Cover, PU Non-Skid Bottom, No Handles	ADCXXPN(XXXWWWLL)XXS
Base Cover, PU Non-Skid Bottom, With Handles	ADCXXPU(XXXWWWLL)XXS

AtmosAir Model APod 25 A Mattress with Alternating Pressure

PART TYPE	CATALOG NUMBER
Complete Cover, Premium RF Welded Top, Non-Skid PU Bottom, No Handles	DXCRPN(XXXWWWLL)NXS
Complete Cover, Premium RF Welded Top, Non-Skid PU Bottom, With Handles	DXCRPU(XXXWWWLL)NXS
Complete Cover, <i>Soflux</i> Top, Non-Skid Bottom	DXCSNB(XXXWWWLL)NXS
Complete Cover, <i>Soflux</i> Top, Vinyl Gray Bottom	DXCSOVG(XXXWWWLL)NXS
Complete Cover, <i>Reliant IS²</i> Top, Non-Skid Bottom	DXCRLNB(XXXWWWLL)TXS
Complete Cover, <i>Reliant IS²</i> Top, Vinyl Gray Bottom	DXCRLVG(XXXWWWLL)TXS
Top Cover, <i>Reliant IS²</i> , RF Welded	DXCRFX(XXXWWWLL)TXS
Top Cover, Premium, RF Welded	DXCPRXX(XXXWWWLL)NXS
Base Cover, PU Non-Skid Bottom, No Handles	DXCXXPN(XXXWWWLL)XXS
Base Cover, PU Non-Skid Bottom, With Handles	DXCXXPU(XXXWWWLL)XXS

AtmosAir Model APod 25 AR Mattress with Alternating Pressure and Rotation

PART TYPE	CATALOG NUMBER
Complete Cover, Premium, RF Welded Top, Non-Skid PU Bottom, No Handles	DRCPN(XXXWWWLL)NXS
Complete Cover, Premium, RF Welded Top, Non-Skid PU Bottom, With Handles	DRCPU(XXXWWWLL)NXS

Complete Cover, <i>Soflux</i> Top, Non-Skid Bottom	DRCSONB(WWWLL)NXS
Complete Cover, <i>Soflux</i> Top, Vinyl Gray Bottom	DRC SOVG(WWWLL)NXS
Complete Cover, <i>Reliant IS²</i> Top, Non-Skid Bottom	DRCRLNB(WWWLL)TXS
Complete Cover, <i>Reliant IS²</i> Top, Vinyl Gray Bottom	DRCRLVG(WWWLL)TXS
Top Cover, <i>Reliant IS²</i> , RF Welded	DRCRFXX(WWWLL)TXS
Top Cover, Premium, RF Welded	DRCPRXX(WWWLL)NXS
Base Cover, PU Non-Skid Bottom, No Handles	DRCXXPN(WWWLL)XXS
Base Cover, PU Non-Skid Bottom, With Handles	DRCXXP(U)WWLL)XXS

AtmosAir - T-Series

PART TYPE	CATALOG NUMBER
T-Series Mattress - Complete Cover, <i>Soflux</i> top and Non-Skid base	ATCSONB34079NXS
T-Series Mattress - Complete Cover, <i>Reliant IS²</i> top and Non-Skid base	ATCRLNB34079TXS
T-Series A Mattress with Alternating Pressure - Complete Cover, <i>Soflux</i> top and Non-Skid base	TXCSONB34079NXS
T-Series A Mattress with Alternating Pressure - Complete Cover, <i>Reliant IS²</i> top and Non-Skid base	TXCRLNB34079TXS

AtmosAir - V-Series

PART TYPE	CATALOG NUMBER
V-Series Mattress - Complete Cover, <i>Soflux</i> top and Vinyl Gray base	AVC SOVG35084NXS
V-Series Mattress - Complete Cover, <i>Reliant IS²</i> top and Vinyl Gray base	AVCRLVG35084TXS

AtmosAir - M-Series

PART TYPE	CATALOG NUMBER
M-Series Mattress - Complete Cover, <i>Soflux</i> top and Non-Skid base	AMCSONB36085NXS
M-Series Orthopedic - Complete Cover, <i>Soflux</i> top and Non-Skid base	OMCSONB36085NXS

ATMOSAIR PUMPS

AtmosAir Standard Pumps (A and AR Models only)

PART TYPE	CATALOG NUMBER
<i>AtmosAir</i> EZ Care Pump only, Current Version	KA9PUMP
<i>AtmosAir</i> Harness / Tubing / Connectors (no pump)	KA9PUMPASMBLY
<i>AtmosAir</i> EZ Care Pump Filter	KA9EZPMPFILTER
<i>AtmosAir</i> EZ Care Pump Filter Cap	KA9EZPMPFILCAP
<i>AtmosAir</i> Elite Pump Filter, compatible with older pump version	KA9PUMPFILTER
<i>AtmosAir</i> Elite Pump Filter Cap, compatible with older pump version	KA9PUMPFILCAP

ATMOSAIR LITERATURE

PART TYPE	CATALOG NUMBER
<i>AtmosAir</i> MRS User Guide	407384-AH

Specifications

Specifications subject to change without notice.

Mattresses

Maximum Recommended Patient Weight*	500 lb (227 kg)
Weight (based on 35 in x 80 in x 7 in MRS, other sizes will vary)	
<i>AtmosAir</i> with SAT 4000 MRS.....	30 lb (14 kg)
<i>AtmosAir</i> with SAT 9000 MRS.....	33 lb (15 kg)
<i>AtmosAir</i> with SAT 9000A and 9000AR MRS.....	40 lb (18 kg)
<i>AtmosAir</i> with SAT APod 25 MRS.....	33 lb (15 kg)
<i>AtmosAir</i> with SAT APod 25A and APod 25AR.....	40 lb (18 kg)
<i>AtmosAir</i> with SAT T-Series MRS.....	33 lb (15 kg)
<i>AtmosAir</i> with SAT T-Series A and AR MRS.....	40 lb (15 kg)
<i>AtmosAir</i> with SAT V-Series MRS.....	33 lb (15 kg)
<i>AtmosAir</i> M-Series MRS.....	40 lb (18 kg)

Dimensions (varies depending on model)**

Minimum Length.....	75 in (190.5 cm)
Maximum Length.....	84 in (213 cm)
Minimum Width.....	32 in (81.5 cm)
Maximum Width.....	38 in (96.5 cm)
Height.....	7 in (17.5 cm)

Pump 120V

Weight5 lb (2.5 kg)
Dimensions	10.25 in (26 cm) L x 4.5 in (11.5 cm) W x 3.75 in (9.5 cm) H
Electrical:	
Volts.....	120 VAC
Frequency.....	60 Hz
Max Amps.....	0.075 Amps
Power Cord.....	12 ft
Output.....	7 liters per minute
Cycle Time.....	10 minutes

Pump 230V

Weight5 lb (2.5 kg)
Dimensions	10.25 in (26 cm) L x 4.5 in (11.5 cm) W x 3.75 in (9.5 cm) H
Electrical:	
Volts.....	230 VAC
Frequency.....	50 Hz
Amps.....	1 Amps
Power Cord.....	12 ft
Output.....	6 liters per minute
Cycle Time.....	12 minutes

* Patient weight capacity may vary depending on frame use. Please consult frame manufacturer.

** Additional sizes are available. Contact Arjo for more information. *AtmosAir* 4000 and 9000 Series up to 42 in (106.7 cm) with *Reliant IS²* cover and *AtmosAir* 9000 with Premium cover.

Electromagnetic Compatibility

This section pertains only to A and AR models.

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

Portable and mobile RF communications equipment can effect medical electrical equipment.

Radios, cell phones and similar devices may affect this equipment and should be kept at least 6.5 ft (2 m) / 10.8 ft (3.3m) for the UK away from the equipment.

Medical electrical equipment needs special precautions regarding EMC and needs to be installed and put into service according to the EMC information in the following tables.

The following tables document compliance levels and guidance from the IEC 60601-1-2; 2007 Standard, for the electromagnetic environment in which the *AtmosAir* MRS should be used in a clinical environment.

Guidance and manufacturer's declaration - electromagnetic emissions			
The <i>AtmosAir</i> MRS is intended for use in the electromagnetic environment specified below. The customer or user of the <i>AtmosAir</i> MRS should assure that it is used in such an environment.			
Emission test	Compliance		Electromagnetic environment
RF emissions CISPR 11	US	UK	The <i>AtmosAir</i> MRS 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.
	Group 1	Group 1	
RF emissions CISPR 11	Class B	Class B	
Harmonic emissions IEC 61000-3-2	Class B	Class B	
Voltage fluctuations / flicker emissions IEC 61000-3-3	yes	yes	

Guidance and manufacturer's declaration - electromagnetic immunity				
The <i>AtmosAir</i> MRS is intended for use in the electromagnetic environment specified below. The customer or user of the <i>AtmosAir</i> MRS 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	In accordance with IEC 60601-1-2:2007, floors are covered with synthetic material, the relative humidity should be at least 30%
Electrical fast transient / burst IEC 61000-4-4	120VAC Pump (US)	±1 kV	±1kV	N/A
	230VAC Pump (UKI)	±2 kV	±2 kV	
Surge IEC 61000-4-5		1 kV line(s) to Line(s) 2 kV line(s) to Earth	1 kV line(s) to Line(s) 2 kV line(s) to Earth	N/A
Voltage dips, short interruptions and voltage variations on power supply input lines IEC 61000-4-11		5% half cycle 40% for 5 cycle 70% for 25 cycle 5% for 5 seconds	5% half cycle 40% 5 cycles 70% 25 cycles 5% for 5 seconds	N/A
Power frequency (50Hz/60Hz)magnetic field IEC 61000-4-8		3 A/M	3 A/M	Power frequency magnetic fields should be at levels characteristic of a typical location in a typical commercial or hospital environment.
NOTE: U, is the a.c. mains voltage prior to application of the test level.				

Recommended separation distances between portable and mobile RF communications equipment and the *AtmosAir* MRS

The *AtmosAir* MRS is intended for use in an electromagnetic environment in which radiated RF disturbances are controlled. The customer or the user of the *AtmosAir* MRS can help prevent electromagnetic interference by maintaining a minimum distance between portable and mobile RF communications equipment (transmitters) and the *AtmosAir* MRS 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 meters		
	150 kHz to 80 MHz not applicable	80 MHz to 800 MHz $d = \left[\frac{3.5}{E_1} \right] \sqrt{P}$	800 MHz to 2.5 GHz $d = \left[\frac{7}{E_1} \right] \sqrt{P}$
0.01	N/A	0.12	0.23
0.1	N/A	0.37	0.74
1	N/A	1.2	2.3
10	N/A	3.7	7.4
100	N/A	12	23


For transmitters rated at a maximum output power not listed above, the recommended separate 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 surfaces, objects and people.

Guidance and manufacturer's declaration - electromagnetic immunity

The *AtmosAir* MRS is intended for use in an electromagnetic environment specified below. The customer or user of the *AtmosAir* MRS should assure that it is used in such an environment.

Immunity Test	IEC 60601 Test Level	Compliance Level	Electromagnetic Environment Guidance
Conducted RF IEC 61000-4-6	3Vrms 150K - 80 MHz	3 Vrms 150K - 80 MHz	Portable and mobile RF communications equipment should be used no closer to any part of the <i>AtmosAir</i> MRS, including cables, than the recommended separation distance calculated from the equation application to the frequency of the transmitter. Recommended Separation Distance Battery Operated Device
Radiated RF IEC 61000-4-3	3 Vrms 80 MHz - 2.5 GHz	3 Vrms 80 MHz - 2.5 GHz	$d = \left[\frac{3.5}{E_1} \right] \sqrt{P}$ 80 MHz to 800 MHz $d = \left[\frac{7}{E_1} \right] \sqrt{P}$ 800 MHz to 2.5 GHz Where P is the maximum output power rating of the transmitter in watts (W) according to the transmitter manufacturer and is the recommended separation distance in metres (m). Field strengths from fixed RF transmitters, as determined by an electromagnetic site survey (see note a) should be less than the compliance level in each frequency range (see note b). 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 *AtmosAir* MRS is used exceeds the applicable RF compliance level above, the *AtmosAir* MRS should be observed to verify normal operation. If abnormal performance is observed, additional measures may be necessary, such as re-orienting or relocating the *AtmosAir* MRS.

b) Over the frequency range 150kHz, field strengths should be less than [V1] V/m.



***AtmosAir* products listed in this User Guide may or may not be applicable to CE markings. To verify applicable CE marking for a particular model / series, refer to that product's mattress tags.**

Symbols Used



Indicates the product is a Medical Device according to EU Medical Device Regulation 2017/745



Important Operational Information



Foot End



Warning of possible hazard to system, patient or staff



Consult User Guide



Power



Manufacturer



Safe Working Load



Max 95°C
15 min.

Wash at 60°C, 95°C Max for 15 minutes

IPX0

Protection from ingress of fluids



Type BF Applied Part



Possible electrical shock hazard



Attention - See User Guide



On



Off



CE marking indicating conformity with European Community harmonised legislation. Figures indicate Notified Body supervision.



Wipe down Only



Tumble Dry at 60°C, 80°C Max



Do Not Iron



Use Solution diluted to 1000ppm of available chlorine



Serial Number



The operator must read this document (this instruction for use) before use. Note: the symbol is blue on the product label.



Do not use Phenol-based cleaning solutions



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



Customer Contact Information

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

Intentionally left blank

Intentionally left blank

AUSTRALIA
Arjo Australia Pty Ltd
78, Forsyth Street
O'Connor
AU-6163 Western Australia
Tel: +61 89337 4111
Free: +1 800 072 040
Fax: +61 89337 9077

BELGIQUE / BELGIË
Arjo NV/SA
Evenbroekveld 16
BE-9420 ERPE-MERE
Tél/Tel: +32 (0) 53 60 73 80
Fax: +32 (0) 53 60 73 81
E-mail: info.belgium@arjo.be

BRASIL
Arjo Brasil Equipamentos Médicos Ltda
Rua Marina Ciufuli Zanfelice, 329 PB02
Galpão - Lapa
São Paulo – SP – Brasil
CEP: 05040-000
Phone: 55-11-3588-5088
E-mail: vendas.latam@arjo.com
E-mail: servicios.latam@arjo.com

CANADA
Arjo Canada Inc.
90 Matheson Boulevard West
Suite 300
CA-MISSISSAUGA, ON, L5R 3R3
Tel/Tél: +1 905 238 7880
Free: +1 800 665 4831 Institutional
Free: +1 800 868 0441 Home Care
Fax: +1 905 238 7881
E-mail: info.canada@arjo.com

ČESKÁ REPUBLIKA
Arjo Czech Republic s.r.o.
Na Strži 1702/65
140 00 Praha
Czech Republic
Phone No: +420225092307
e-mail: info.cz@arjo.com

DANMARK
Arjo A/S
Vassingerødvej 52
DK-3540 LYNGBE
Tel: +45 49 13 84 86
Fax: +45 49 13 84 87
E-mail:
dk_kundeservice@arjo.com

DEUTSCHLAND
Arjo GmbH
Peter-Sander-Strasse 10
DE-55252 MAINZ-KASTEL
Tel: +49 (0) 6134 186 0
Fax: +49 (0) 6134 186 160
E-mail: info-de@arjo.com

ESPAÑA
Arjo Ibérica S.L.
Parque Empresarial Rivas Futura, C/
Marie Curie 5
Edificio Alfa Planta 6 oficina 6.1.-62
ES-28521 Rivas Vacia, MADRID
Tel: +34 93 583 11 20
Fax: +34 93 583 11 22
E-mail: info.es@arjo.com

FRANCE
Arjo SAS
2 Avenue Alcide de Gasperi
CS 70133
FR-59436 RONCQ CEDEX
Tél: +33 (0) 3 20 28 13 13
Fax: +33 (0) 3 20 28 13 14
E-mail: info.france@arjo.com

HONG KONG
Arjo Hong Kong Limited
Room 411-414, 4/F,
Manhattan Centre,
8 Kwai Cheong Road,
Kwai Chung, N.T.,
HONG KONG
Tel: +852 2960 7600
Fax: +852 2960 1711

ITALIA
Arjo Italia S.p.A.
Via Giacomo Peroni 400-402
IT-00131 ROMA
Tel: +39 (0) 6 87426211
Fax: +39 (0) 6 87426222
E-mail: Italy.promo@arjo.com

MIDDLE EAST
Arjo Middle East FZ-LLC
Office 908, 9th Floor,
HQ Building, North Tower,
Dubai Science Park,
Al Barsha South
P.O Box 11488, Dubai,
United Arab Emirates
Direct +971 487 48053
Fax +971 487 48072
Email: Info.ME@arjo.com

NETHERLAND
Arjo BV
Biezenwei 21
4004 MB TIEL
Postbus 6116
4000 HC TIEL
Tel: +31 (0) 344 64 08 00
Fax: +31 (0) 344 64 08 85
E-mail: info.nl@arjo.com

NEW ZEALAND
Arjo Ltd
34 Vestey Drive
Mount Wellington
NZ-AUCKLAND 1060
Tel: +64 (0) 9 573 5344
Free Call: 0800 000 151
Fax: +64 (0) 9 573 5384
E-mail: nz.info@Arjo.com

NORGE
Arjo Norway AS
Olaf Helset's vei 5
N-0694 OSLO
Tel: +47 22 08 00 50
Faks: +47 22 08 00 51
E-mail: no.kundeservice@arjo.com

ÖSTERREICH
Arjo GmbH
Lemböckgasse 49 / Stiege A / 4.OG
A-1230 Wien
Tel: +43 1 8 66 56
Fax: +43 1 866 56 7000

POLSKA
Arjo Polska Sp. z o.o.
ul. Ks Piotra Wawrzyniaka 2
PL-62-052 KOMORNIKI (Poznań)
Tel: +48 61 662 15 50
Fax: +48 61 662 15 90
E-mail: arjo@arjo.com

PORTUGAL
Arjo em Portugal
MAQUET Portugal, Lda.
(Distribuidor Exclusivo)
Rua Poeta Bocage n.º 2 - 2.G
PT-1600-233 Lisboa
Tel: +351 214 189 815
Fax: +351 214 177 413
E-mail: Portugal@arjo.com

SUISSE / SCHWEIZ
Arjo AG
Fabrikstrasse 8
Postfach
CH-4614 HÄGENDORF
Tél/Tel: +41 (0) 61 337 97 77
Fax: +41 (0) 61 311 97 42

SUOMI
Arjo Scandinavia AB
Riihitontuntie 7 C
02200 Espoo
Finland
Puh: +358 9 6824 1260
E-mail:
Asiakaspalvelu.finland@arjo.com

SVERIGE
Arjo International HQ
Hans Michelsensgatan 10
SE-211 20 MALMÖ
Tel: +46 (0) 10 494 7760
Fax: +46 (0) 10 494 7761
E-mail: kundservice@arjo.com

UNITED KINGDOM
Arjo UK and Ireland
Houghton Hall Park
Houghton Regis
UK-DUNSTABLE LU5 5XF
Tel: +44 (0) 1582 745 700
Fax: +44 (0) 1582 745 745
E-mail: sales.admin@arjo.com

USA
Arjo Inc.
2349 W Lake Street Suite 250
US-Addison, IL 60101
Tel: +1 630 307 2756
Free: +1 800 323 1245 Institutional
Free: +1 800 868 0441 Home Care
Fax: +1 630 307 6195
E-mail: us.info@arjo.com

JAPAN
Arjo Japan K.K.
東京都港区虎ノ門三丁目7番8号 ラ
ンディック第2虎ノ門ビル9階
電話: +81 (0)3-6435-6401

Address page - REV 24: 04/2019

At Arjo, we are committed to improving the everyday lives of people affected by reduced mobility and age-related health challenges. With products and solutions that ensure ergonomic patient handling, personal hygiene, disinfection, diagnostics, and the effective prevention of pressure ulcers and venous thromboembolism, we help professionals across care environments to continually raise the standard of safe and dignified care. Everything we do, we do with people in mind.



ArjoHuntleigh AB
Hans Michelsensgatan 10
211 20 Malmö, Sweden
www.arjo.com

arjo

CE
2797