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# AtmosAir

## Mattress Replacement System

### User Guide

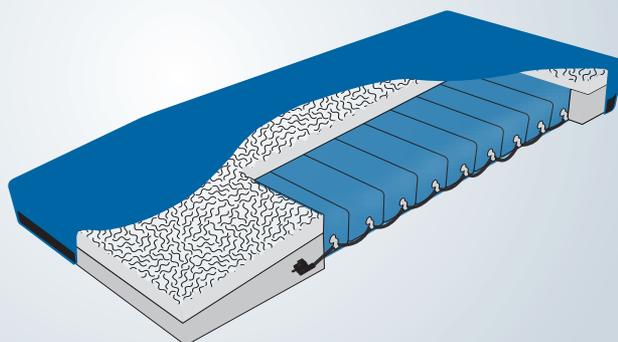
### Instructions for Use

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**ARJOHUNTLEIGH**  
GETINGE GROUP

AtmosAir with SAT 4000 Series

AtmosAir with SAT 9000 Series



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### Important Information For Users

In order for ArjoHuntleigh products to perform properly, ArjoHuntleigh 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 ArjoHuntleigh. Contact ArjoHuntleigh 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 ArjoHuntleigh's 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.**

# Table Of Contents

<b>Introduction.....</b>	<b>3</b>
Indications.....	3
Contraindications.....	3
Risks and Precautions.....	3
Safety Information.....	3
<b>Preparation for Use.....</b>	<b>5</b>
<b>Mattress Installation.....</b>	<b>5</b>
<i>AtmosAir</i> with SAT 4000 and 9000.....	5
<b>Patient Placement and Nursing Care.....</b>	<b>6</b>
Skin Care.....	6
Incontinence / Drainage.....	6
General Operation.....	6
<b>Care and Cleaning.....</b>	<b>7</b>
Cover Cleaning Options.....	7
<b>Preventive Maintenance Schedule.....</b>	<b>7</b>
Daily Cleaning.....	7
Inspection / System Check-Out.....	7
<b>Troubleshooting.....</b>	<b>8</b>
<b>Parts Diagram - <i>AtmosAir</i> with SAT 4000.....</b>	<b>9</b>
<b>Parts Diagram - <i>AtmosAir</i> with SAT 9000.....</b>	<b>10</b>
<b>Replacement Parts.....</b>	<b>11</b>
<b>Specifications.....</b>	<b>12</b>
<b>Symbols Used.....</b>	<b>13</b>
<b>Customer Contact Information.....</b>	<b>15</b>

# 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
- *AtmosAir* with SAT 9000 Series

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

## Indications

- for prevention or treatment of skin breakdown

## Contraindications

- unstable vertebral fracture
- cervical and skeletal traction

## Risks and Precautions

**Transfer** – Standard precautions should be taken during patient transfer.

**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.**

## 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.

**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.

**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.

**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.

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

**Disposal** – At the end of useful life, dispose of waste according to local requirements or contact the manufacturer for advice.

## 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 and 9000

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

## 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.

### 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.



***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.***

### Cover Cleaning Options

1. Remove or push bed linens to center of mattress.



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

2. Wipe and rinse any soiling from the mattress surface and base. Use 1000 ppm chlorine or 70% alcohol.
3. Dry surface with towel.
4. Ensure bed linens are refitted and not wrinkled under patient.

## 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.

### 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.

## Troubleshooting

Do not attempt troubleshooting outside this guide or where the solution recommends to contact ArjoHuntleigh. 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.	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.
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 ArjoHuntleigh for assistance.

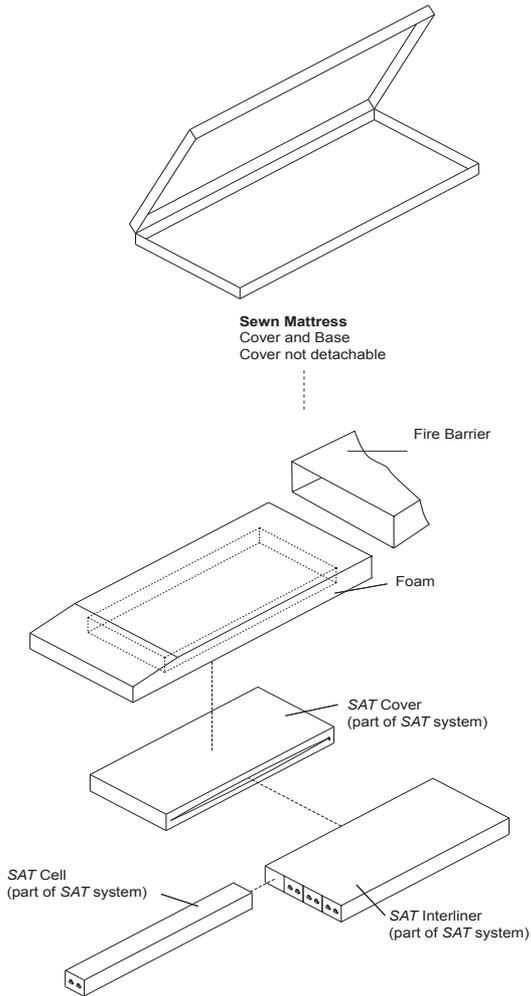
# Parts Diagram - *AtmosAir* with SAT 4000

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 and 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.



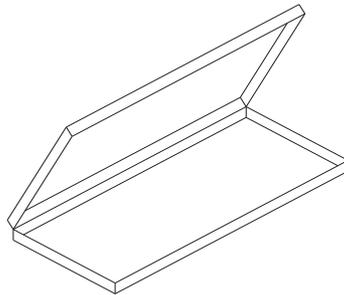
# Parts Diagram - *AtmosAir* with SAT 9000

All hoses were removed to improve diagram readability.

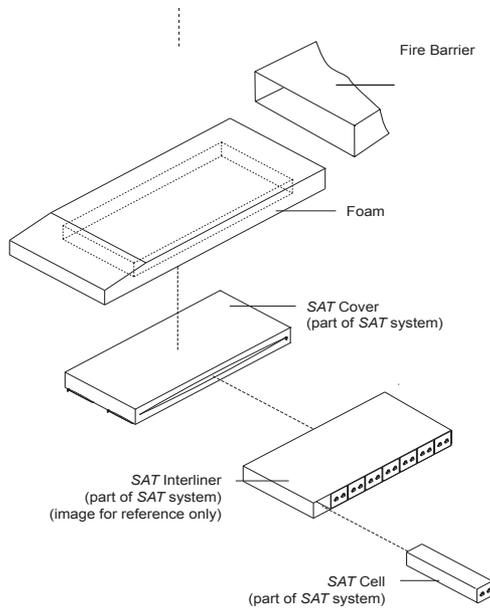
The fire barrier is a sleeve that fits over the foam and SAT assemblies.



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



**Sewn Mattress**  
Cover and Base  
Cover not detachable



# Replacement Parts

Do not attempt troubleshooting, maintenance or parts replacement outside this manual or where the solution recommends contacting ArjoHuntleigh. 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 or additional spare parts that are not on this list, please contact your local ArjoHuntleigh representative. In the US call ArjoHuntleigh at 1-800-343-0974 for additional assistance.

## ATMOSAIR MATTRESS COMPONENTS

### *AtmosAir* Foam Shells

PART TYPE.....	CATALOG NUMBER
4000 / 9000 Foam Shell.....	KA4/9FS(SIZE)

### *AtmosAir* with SAT System

PART TYPE.....	CATALOG NUMBER
4000 SAT System (Fits mattresses 32-38 in wide, 75-84 in length).....	KA4SAT
9000 SAT System (Fits mattresses 32-38 in wide, 75-84 in length), .....	KA9SAT

### *AtmosAir* Fire Barrier Lining

PART TYPE.....	CATALOG NUMBER
<i>AtmosAir</i> Fire Barrier Lining.....	<i>AtmosAir</i> -FBL

## ATMOSAIR MATTRESS COVERS

### *AtmosAir* Model 4000 Mattress

PART TYPE.....	CATALOG NUMBER
Complete Cover, Reliant IS <sup>2</sup> ™ Top, Non-Skid Bottom .....	KA4C(SIZE)

### *AtmosAir* Model 9000 Mattress

PART TYPE.....	CATALOG NUMBER
Complete Cover, Reliant IS <sup>2</sup> Top, Non-Skid Bottom .....	KA9CRENB(SIZE)

## ATMOSAIR LITERATURE

PART TYPE.....	CATALOG NUMBER
<i>AtmosAir</i> MRS User Guide .....	416230-JP

# 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)**

*AtmosAir* with SAT 4000 MRS.....30 lb (14 kg)

*AtmosAir* with SAT 9000 MRS.....33 lb (15 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)

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

\*\* Additional sizes are available. Contact ArjoHuntleigh for more information.

## Symbols Used



Important Operational Information



Foot End



Warning of possible hazard to system, patient or staff



Consult User Guide



Manufacturer



Safe Working Load



Do Not Iron



Use Solution diluted to 1000ppm of available chlorine



Attention - See User Guide



Conforms with the Medical Device Directive (93/42/EEC) and has been subject to the conformity procedures laid down in the council directive



Wipe down Only



Do not use Phenol-based cleaning solutions



***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.**