



# BALANCED AIRE SELF ADJUSTING CONVERTIBLE MATTRESS REPLACEMENT SYSTEM

Non-Powered System — ITEM #'s BA9600-NP, BA9600-NP-84, BA9600-NP-42
Powered System — ITEM #'s BA9600-P, BA9600-P-84, BA9600-P-42, BA9600-P-KIT

Powered Systems Include:

Control Unit #14005E



or Control Unit # BA9600-PUMP



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## Introduction

This manual is intended to be used for the initial set up and proper maintenance of the Balanced Aire Self Adjusting Convertible Mattress. It is important that you read and review these instructions in their entirety and consult with your healthcare professional if there are any questions.

Carefully review the Indications and Risk and Precautions sections prior to placing a patient on any Balanced Aire Self Adjusting Convertible Mattress.

## Indications

The Balanced Aire Self-Adjusting Non-Powered Convertible mattress system (BA9600-NP) provides non-powered zoned pressure redistribution, and the Balanced Aire Powered Convertible mattress system (i.e. BA9600-P) provides alternating pressure therapy. Both are indicated for the prevention and treatment of any and all stage pressure ulcers when used in conjunction with a comprehensive pressure ulcer management plan.

The Balanced Aire Self Adjusting Convertible support surface consists of eight air cylinders that run laterally underneath the body and are contained in a foam cavity. On top of the air cells is a high density foam coupled with a 2.5" thick visco-elastic foam layer zoned for pressure redistribution. The heel section is sloped to further redistribute pressure for the sensitive heel areas. Both the self-adjusting air cylinders and the foam top surface aid in pressure redistribution and in maintaining low interface pressures throughout the surface.

## **Contraindications**

Patient conditions for which the application of pressure redistributing therapy is contraindicated are as follows:

Unstable spinal cord injuries

## **Risk 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 injury or death can result from the use (potential entrapment) or non-use (potential patient falls) of side rails or other restraints. Monitor patients frequently to guard against patient entrapment and/or falls.

**Patient Migration:** Specialty surfaces have different shear and support characteristics than conventional surfaces and may increase 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 and/or falls.

**Shock Hazard –DANGER!:** When used as powered system, do not remove control unit case cover. Risk for electrical shock may occur if control unit is disassembled. Refer to qualified service personnel.

Fluids: When used as a powered system, avoid spilling fluids on control unit. Fluids remaining on

controls can cause corrosion, which may cause components to fail or operate erratically, possibly producing potential hazards for patient and staff. If spills do occur, unplug the unit immediately and clean fluid from control unit wearing rubber gloves while it is unplugged to avoid any possib ility of shock. Once fluid is removed, check operation of components in area of spill.

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

Disposal: At the end of useful life, dispose of waste according to local requirements.

# **Preparation For Use**

- Open shipping container and check for damages which may have occurred en route. DO NOT USE SHARP INSTRUMENTS TO OPEN BOXES. DAMAGE TO MATTRESS COULD RESULT.
- 2. Remove Balanced Aire Self Adjusting Convertible Mattress from protective plastic cover. The mattress may appear wrinkled when unpacked. To remove wrinkles, allow mattress up to 24 hours to accommodate; see Troubleshooting table for more information. Wrinkles will not affect inflation or function. Mattress may be used immediately if needed
- Check mattresses surface for tears or cracking; do not use if tears or cracking are present. If any damages exist, please contact your local provider immediately.
- 4. If re-installing the Balanced Aire 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 section).
- 5. Level bed and lock brakes.
- 6. Remove existing mattress from bed frame.

#### Mattress Installation

- 1. Position mattress on bed frame with logo facing up and heel slope section aligned at the foot of the bed.
- 2. Ensure mattress is properly positioned with 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**

It is recommended that all sections of this manual be read prior to patient placement. Carefully review the **Contraindications**, **Risks and Precautions and Mattress Installation** sections prior to placing a patient on any Balanced Aire Self-Adjusting Convertible Mattress. The Balanced Aire Self Adjusting Convertible mattress ships as an open system (black connection tubes are unattached). The following are the instructions for using the system based on desired therapeutic function.

# To Use as a Static-Air System

- 1. Connect the male and female ends of the black tubing together to secure the air within the system.
- 2. Transfer patient following all applicable safety rules and institution protocols.

- Center patient side-to-side and head-to-foot on Balanced Aire Self Adjusting Convertible Mattress.
- 4. If the surface appears too firm for the patient, briefly disconnect the black tubes to allow for minimal evacuation of air. Once the comfort level is determined, quickly connect the tube ends together again.

# To Use as an Alternating System

- 1. Place control unit on a horizontal surface or suspend on the end of bed frame with built-in hanger.
- Connect control unit hoses to mattress. Attach black hoses to the mattress connectors on the patient left side (marked with BLACK tag) of the mattress for Alternating Pressure. Ensure air hoses are not kinked and will not be pinched by any articulated bed mechanisms.
- 3. Ensure Power switch is in the OFF position.
- 4. Plug control unit into a properly grounded wall outlet. (Verify power to this outlet is not controlled by a wall switch).
- 5. Press Power switch to the ON position. Air will begin to flow into mattress.
- 6. Rotate the comfort control knob on the control unit clockwise to increase the airflow for Alternating Therapy.
- Rotate the comfort control knob on the control unit counter-clockwise to reduce the airflow for Alternating Therapy.

Ensure control unit hoses are properly connected to mattress for the desired function.

## **BA9600-PUMP Instructions**

- 1. Check the control unit for any damages, dents or defects. Do not use the control unit if any defects are found and contact your provider.
- 2. Connect the hoses from the Balanced Aire mattress to the control unit, connecting each end of the tube to the corresponding connector.
- 3. Push the Power button on the side of the unit ON.
- 4. Adjust the dial on the control unit for firmness based on the desired comfort level.



# Converting Alternating Pressure To Static-Air Mode

- Turn off control unit.
- Remove male and female mattress hoses from control unit.
- Connect male and female mattress hoses together as quickly as possible.
- Air in alternating cylinders will level out providing a static air surface adjusting to the patient.

**NOTE-** If the tubes are left unattached, the Balanced Aire Convertible mattress will operate as an open air system with air going in and out based on patient movement and will function as a therapeutic foam mattress.

# Care and Cleaning

#### Washing and Disinfection

**General Guidance:** Because of the variety of laundry equipment, chemicals, and conditions in use, you should pre-test cleaning of the cover with your agent of choice to ensure compatibility.

**Routine Care:** Surface wipe with neutral detergent and lukewarm water. Rinse thoroughly with water and dry thoroughly.

**Machine Washing/Drying:** Wash at no higher than 120° F with neutral detergent. Tumble dry at low heat setting. Do not use bleach and make sure cover is thoroughly dry before placing back on the mattress core.

**Disinfection:** Surface wipe the cover with quaternary solution or 1:10 bleach/water mixture according to recommended protocols. Avoid over saturation and ensure the surface does not stay wet longer than the chemical manufacturer's guidelines for proper disinfecting. Wipe up excess disinfectant after the recommended kill time has elapsed. Thoroughly rinse the surface of the mattress with clean water using a clean cloth. Allow the surface to completely air dry prior to use. Phenolics may be used for the vinyl bottom of the cover only

**Storage:** When not in use, mattress should be stored flat in a controlled climate room.

## Cleaning Control Unit and Tubes \*

- 1. Ensure control unit is unplugged.
- 2. Wipe surface of control unit and tubes with coarse cloth using an approved disinfectant germicide mix and following the manufacturer's instructions for use.

Do not flood any part of the control unit with cleaning solution.

Avoid spilling solutions on control unit controls. If spills do occur, clean fluid from control unit 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 control unit and tubes with chlorine solution (mixed accordingly). Using a clean cloth, wring out excess solution until cloth is damp. Wipe control unit surface and tubes with damp cloth.

- 5. Allow to air dry.
- \* When used as a powered system

#### **Preventive Maintenance Schedule**

Preventive maintenance for the Balanced Aire Self Adjusting Competitor Mattress consists of regular cleaning and an overall system evaluation 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.

## Inspection/System Evaluation

Check each of the following before placing the Balanced Aire Self Adjusting Competitor Mattress 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.
- 3. Ensure air inlet hoses and connectors on mattress and control unit are clean and undamaged.
- 4. Ensure control unit and power cord are clean and undamaged.
- 5. Ensure control unit hanger brackets are secure and operate correctly.
- 6. Ensure OFF/ON Power switch and comfort control knob both operate correctly.
- 7. Attach control unit to the black Alternating Pressure hoses and power up to ensure there are no air leaks.

# **Troubleshooting**

It is recommended that all selections of this manual be reviewed before troubleshooting any Balanced Aire SelfAdjusting Convertible Mattress.

Do not to attempt troubleshooting beyond the scope of this manual or where the remedy recommends contacting a Drive DeVilbiss 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
Green lamp on control unit does not light	Power cord may be unplugged. Wall outlet may be controlled by a wall switch.	Plug in Power cord. Plug Power cord into different wall
when power switch is set to the ON posi- tion.	Circuit breaker for wall switch may be tripped or blown.	outlet.  Reset circuit breaker or replace fuse.
tion.	Power cord or power switch may be damaged.	Contact Drive DeVilbiss for assistance.
Mattress does not inflate or become firm; yellow LED re- mains on (does	Tubing not connected properly.	Ensure black hoses are connected to hoses marked with black tag for Alternating Pressure; check tubing inside mattress for loose connectors.
not change to green LED).	Tube kinked.	Check tubing inside mattress for kinks.
groon EED).	Tubing disconnected.	Check tubing inside mattress for possible disconnect.
	Holes in or damage to mattress.	Contact Drive DeVilbiss for assistance.
	Control unit may be damaged.	Contact Drive DeVilbiss for assistance.
Mattress cover too wrinkled upon removal from shipping container.	Internal components have not accommodated to environment. (This does not affect inflation or function).	Set unit up and allow to run for 24 hours, if problem persists, contact Drive DeVilbiss for assistance

# **Specifications**

For questions regarding this product, a replacement User Manual, other replacement parts, maintenance or additional information about DRIVE DEVILBISS products and services, contact your DRIVE DEVILBISS representative.

## **Balanced Aire Self Adjusting Convertible Mattress**

Item#	Dimensions	Weight of Mattress	Weight Capacity
BA9600-NP	35"W x 80"L x 7"H	40 lbs	500 lbs
BA9600-P**	35"W x 80"L x 7"H	40 lbs	500 lbs
BA9600-NP-84	35" W x 84"L x 7"H	43 lbs	500 lbs
BA9600-P-84**	35" W x 84"L x 7"H	43 lbs	500 lbs
BA9600-NP-42	42"W x 80"L x 7"H	52 lbs	750 lbs
BA9600-P-42**	42"W x 80"L x 7"H	52 lbs	750 lbs
BA9600-P-KIT*	35"W x 80"L x 7"H	40 lbs	500 lbs

<sup>\*\*</sup> Item #'s are for powered systems and include control unit #14005E

#### Control Unit #14005E

Pump	Specification
Power Supply	120V/60Hz
Air output:	4 liter/min.
Pressure range	45 mmHg – 110 mmHg
Cycle time	5 min
Power consumption	7W
Fuse	1A
Size	10.2" x 4.7" x 3"
Weight	3.1 lbs.

#### Control Unit #BA9600-PUMP

Pump	Specification
Power/Supply	120V/ 60 Hz, 1A
Air output	8 liter/min.
Pressure Range	30mmHg- 60mmHg(±10)
Cycle time	10 min.
Power consumption	7W
Fuse	250V, 1A
Size	11" (L) x 8" (W) x 4" (H
Weight	5 lbs

For any additional information, please contact your service representative directly, or

Drive DeVilbiss Healthcare 99 Seaview Boulevard Port Washington, NY 11050

(877) 224.0946 www.drivemedical.com

<sup>\*</sup> Item #'s are for powered systems and include control unit #BA9600-PUMP

#### WARRANTY

#### **Balanced Aire Self Adjusting Convertible Mattress**

#### Five/Three Warranty:

In connection with your purchase of a Balanced Aire Self Adjusting Convertible Mattress, DRIVE DEVILBISS warrants, to the original purchaser, against manufacturer's defects in material and/workmanship for a period of five (5) years from the date of purchase on the mattress and one (1) year from the date of purchase on the control unit under normal usage\* and so long as all applicable procedures\*\* are followed.

#### **Conditions and Limitations:**

Under this warranty, upon reasonable notice, DRIVE DEVILBISS will replace or repair defective parts or whole units Covered under this warranty as its sole option. No returns or replacements will be allowed without authorization from DRIVE DEVILBISS, Inc. This warranty applies to material/parts replacement costs and labor costs only and does not include shipping and handling costs or disposal fees.

This warranty does not extend to, nor cover:

- Patient wearables, such as, but not limited to, non-integrated Cover Sheet(s) and disposables used in conjunction with the mattress; or
- · Normal wear and tear: or
- Damage, including rust, corrosion or product failure due to causes beyond DRIVE DEVILBISS' control, such as, but not
  limited to abuse, theft, fire, flood, wind, lightening, freezing, power failure, power reduction, clogging of mattress pores
  due to tobacco smoke, unusual atmospheric conditions, foam deterioration due to exposure to moisture or other acts
  of God: or
- Damage to mattress or mattress handles through use of the mattress for patient transfer or transport.

DRIVE DEVILBISS reserves the right to make material changes to the product predicated upon availability of raw Materials of like quality.

Service beyond that described in the User Manual must be carried out by DRIVE DEVILBISS or such other entities as may be approved by DRIVE DEVILBISS in writing.

This warranty is VOID if:

- Proof of purchase cannot be made by the original purchaser:
- Adjustment, modification, maintenance, and/or repair beyond that described in the User Manual is carried out by entities not approved in writing by DRIVE DEVILBISS
- The electrical installation of the room does not comply with the appropriate national electrical wiring standards;
- The equipment is not used in accordance with the instructions and warnings enumerated in the User Manual.

This warranty is in no way to be construed as an extension of any periodic or preventive maintenance agreement, extended service agreement or in-service agreement entered into by the parties.

THE FORGOING BASIC WARRANTY MADE BY DRIVE DEVILBISS IS IN LIEU OF ALL OTHER WARRANTIES EXPRESSED OR IMPLIED, INCLUDING WITHOUT LIMITATION, ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. DRIVE DEVILBISS IS NOT LIABLE FOR CONSEQUENTIAL OR INCIDENTAL DAMAGES AND EXPENSES, INCLUDING DAMAGES TO PERSON OR PROPERTY, DUE IN WHOLE OR IN PART OF THE USE OF THIS PRODUCT EXCEPT AS OTHERWISE REQUIRED BY LAW.

- \* Normal usage does not include misuse, abuse, alteration, modification, burns, punctures, improper handling, harsh cleaning solutions or drying procedures not recommended by the manufacturer, solutions no properly diluted as per product instructions or caustic staining agents.
- \*\* Applicable procedures include, without limitation, those set out in the accompanying User Manual and other guidelines and Procedures provided by DRIVE DEVILBISS.

NOTE: To the extent any portion of this warranty is held invalid under federal law, such invalidity shall not affect the validity of the remaining portions of this warranty agreement, and the parties acknowledge that it is their intention that such provision (or portion thereof) shall be construed in a manner designed to effectuate the purpose of such provision to the maximum extent enforceable under applicable law. This warranty gives you specific legal rights and you may also have other rights which may vary from region to region.



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