# **O**Joerns

## User-Service Manual Joerns<sup>®</sup> Support Surface FlapCair

To avoid injury, read user's manual before using.



## **Important Precautions**

**Important Notice:** The equipment must be installed and operated in the manner for which it was intended. Facility staff/user is responsible for reading and understanding the product user manual and contacting Joerns Healthcare if anything in this manual is unclear. Joerns will not be held responsible for any injuries resulting from failure to comply with the instructions and precautions in this manual.

▲ Warning: Joerns Healthcare's specialty support surfaces are designed as mattress replacement systems. The risk of entrapment may occur when the equipment is placed on bed frames that leave gaps of even a few inches between the mattress and the headboard, footboard, and bed or side rails. The equipment is NOT to be used when such gaps are present.

Facility staff/user is responsible for ensuring that all mattresses properly fit the bed frames. Joerns is not responsible for the placement of its equipment on bed frames that leave gaps between the mattress and the headboard, footboard or bed or side rails which present a risk of harm to patients.

▲ Warning: An optimal bed system assessment should be conducted on each patient by a qualified clinician or medical provider to ensure maximum safety of the patient. The assessment should be conducted within the context of and in compliance with the state and federal guidelines related to the use of restraints and bed system entrapment guidance, including the *Clinical Guidance for the Assessment and Implementation of Side Rails* published by the Hospital Bed Safety Workgroup of the U.S. Food and Drug Administration. Further information can be obtained at the following web address: http://www.fda.gov/cdrh/ beds/.

When using the mattress system, always ensure that the patient is positioned properly within the confines of the bed. Do not let any extremities protrude over the side or between the bed rails when the mattress is being used.

▲ Danger: Explosion Hazard: Do not use in the presence of flammable anesthetics. Do not use in the presence of smoking materials or open flame. Air flowing through the air mattress will support combustion.

- ▲ Danger: To reduce the risk of shock, adhere to the following instructions. Failure to do so could result in personal injury or equipment damage.
  - Immediately after using the FlapCair, unplug it from its power source.
  - Do not place or store the product where it can fall or be pulled into a tub or sink.
  - Do not place or drop the product into water or other liquid.
  - Do not remove the back of the control unit. Refer servicing to Joerns Healthcare.
- ▲ Warning: To reduce the risk of burns, shock, fire, or personal injury, adhere to the following instructions. Failure to do so could result in personal injury or equipment damage.
  - 1. Use this product only for its intended purpose as described in this manual. Only use attachments and/or accessories that are recommended by the manufacturer.
  - 2. If this product has a damaged power cord or plug, is not working properly, has been dropped or damaged, or has been dropped into water, do not operate it. For examination and repair, return the product to Joerns.
  - 3. Keep the control unit and power cord away from heated surfaces, e.g. space heaters.
  - 4. Never block the air openings of the product. Do not place the control unit on a surface, such as a bed or couch, where the air opening and/or filter compartment, located on the back of the control unit, may be blocked. Keep the air openings free of lint and hair.
  - 5. Never drop or insert any object into any opening or hose.
  - 6. Do not spill food or liquids onto the control unit. If a spillage does occur, turn off the unit, disconnect it from its power supply and allow at least 24 hours for drying.
  - 7. Do not use the product outdoors, or where aerosol-spray products are used.
  - 8. Plug this product only into a properly grounded outlet. Refer to "Grounding Instructions".
  - 9. Ensure nothing is placed on the power cord and ensure it is not located where it can be stepped on or tripped over.
  - 10. Do not attempt to service the control unit. Please call Joerns Healthcare for any service requests.
  - 11. The therapy pad (top cover) of this product is not air permeable and may present a suffocation risk. It is the responsibility of the caregiver to ensure that the patient can use this product safely.

## Save These Instructions for Future Reference

#### Bed System Entrapment Information

Although essential in the practice of long-term care, bedside rails, in recent years, have also been a subject of regulatory review and evolution in design and use.

That focus includes not only the challenge of achieving an appropriate balance between resident security and unnecessary restraint, but also the additional safety issue of entrapment.

The U.S. Food and Drug Administration (FDA), working with our company and other industry representatives has addressed the potential danger of entrapment with new safety guidelines for medical beds. These guidelines recommend dimensional limits for critical gaps and spaces between bed system components.

Entrapment zones involve the relationship of components often directly assembled by the healthcare facility rather than the manufacturer. Therefore, compliance is the responsibility of the facility.

As the leading manufacturer of long-term care beds and a frontrunner in addressing this critical issue, Joerns Healthcare can offer you the expertise, assistance and products to bring your facility into compliance.

#### Joerns<sup>,</sup> Compliance Solutions

Matching the right bed components in order to meet regulatory guidelines can be complex.

That is why Joerns offers a wide array of compliance options. We assist customers in selecting compliant accessories recommended for their specific bed model.

#### Creating a Safer Care Environment

While the guidelines apply to all healthcare settings, (hospitals, nursing homes and at home), long-term care facilities have particular exposure since serious entrapment events typically involve frail, elderly or dementia patients.

#### For More Information

To learn more about compliance options with Joerns products, visit our website at www.joerns.com, or contact our Customer Care reps at 800-826-0270 and ask for free informational publications.

To learn more about entrapment zones, assessment methods and guidelines concerning entrapment, contact Joerns Healthcare at 800-826-0270 or consult the FDA website: http://www.fda.gov/ MedicalDevices/ProductsandMedicalProcedures/ GeneralHospitalDevicesandSupplies/HospitalBeds/ default.htm.

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## Introduction

The FlapCair, provided by Joerns Healthcare, is a unique therapy system that provides pressure relief by combining low air loss with pulsation. Low air loss therapy has been demonstrated to reduce the risk of pressure ulcers as well as being a valuable aid in the treatment of pressure ulcers. The pulsation feature may provide additional patient comfort and enhance the function of the lymphatic system.

The FlapCair mattress replacement system is suitable for the care and prevention of all stages of pressure ulcers, for patients who have been assessed to be at risk from the complications of immobility, and for patients with healing grafts and flap sites. Our unique cellular system allows caregivers to provide super flotation zones to provide extra relief to these sites.

Joerns FlapCair is the first true low air loss mattress to take pressure relief to the next level with 160 individual therapy cells instead of the industry standard of 20. More air cells mean a more flexible surface area to evenly distribute the patient's weight. The patient's weight is evenly distributed over a substantial surface area resulting in low average interface pressures. The caregiver has the flexibility to provide additional pressure reduction on any part of the patient's body by simply closing off the air supply to any of the 160 cellsthereby "floating" the wound or surgical site. FlapCair is truly customizable to meet the needs of your patient.

▲ Warning: The risk of entrapment can arise when equipment is placed on bed frames that leave gaps of even a few inches between the mattress and the headboard, footboard, and bed or side rails. The equipment is NOT to be used when such gaps are present. See "Important Precautions" section of this manual.

The FlapCair is quiet, comfortable and simple enough for single caregiver installation, featuring rapid inflation in just five minutes or less. The user-friendly controls allow for easy adjustment of patient comfort.

Additionally, low friction and low shear materials, together with average interface pressures well below capillary closure levels, means that the FlapCair meets the comfort and clinical requirements of your patients up to 350 lbs.

We have ensured that the FlapCair addresses the four key areas in the treatment of compromised skin: pressure relief, moisture control, and reduction in both friction and shearing forces.

#### **Moisture Control**

Patients are at risk for skin maceration if excess moisture is permitted to accumulate beneath the patient. This may be due to perspiration, incontinence or wound drainage.

On the FlapCair, moisture is controlled via the specially treated breathable, fluid-proof, urethane coated nylon therapy pad. The moisture vapor permeable fabric of the therapy pad allows a sufficient amount of air to circulate beneath the pad and wick away excess moisture.

#### Shear and Friction Reduction

Shearing occurs when the skin is stationary in relation to the support surface, while the underlying tissues and vessels are stretched and damaged. When a patient's skin rubs against another surface, the result is friction. The top surface of the FlapCair therapy pad is constructed from a very smooth nylon fabric with low friction and low shear properties to protect the patient's skin from these damaging forces.

## Indications for Use

**Note:** The selection of a pressure-relieving surface needs to be based on each individual patient's clinical condition, diagnosis and/or co-morbidities. The choice and use of a support surface is one factor in a holistic program of wound care and treatment.

#### Spinal Cord Injury

The FlapCair is not recommended for use by patients with unstable spinal fractures. Advice should be obtained from the appropriate physician before using the FlapCair system for these patients.

#### **Pressure Relief**

Pressure Ulcers	Flaps
Grafts	Rehabilitation
Neurology	Dermatology
Burns	Amputations

#### Pain Management

AIDS Oncology Arthritis

The FlapCair provides distribution of weight over a wide surface area, which relieves pressure against bony prominences and provides a soft, gentle therapy surface to lie on. For patients experiencing severe pain and discomfort due to pressure and/or positioning limitations, consider the FlapCair as an adjunct to pain management interventions.

**Note:** Pressure relief and pain management are conditions and diagnoses for which the FlapCair may be indicated. Occasionally, there are orthopedic and neurological patients that require body positioning to be maintained in specific alignment. The use of the FlapCair for these patients should be considered on an individual basis and discussed with the attending physician.

## Features

The FlapCair is comprised of two components:

- · Therapy control unit
- Therapy mattress system

#### **Therapy Control Unit Features**

- True low air loss
- Three modes of operation *Autofirm, Pulsate* and *Therapy* 
  - *Autofirm* mode provides maximum air inflation designed to assist both patients and caregivers during patient transfer and treatment.
  - *Pulsate* mode oscillates the air throughout the mattress every 30 seconds provides increased patient comfort.
  - *Therapy* mode provides eight comfort control settings to maximize patient compliance and promote healing.
- Patient position sensor optimizes support for seated occupants (Fowler boost)
- Closed loop pressure sensor control system eliminates concerns of changes in mattress interface pressure due to ambient temperature and pressure changes.
- Quick disconnect hose feature allows for rapid attach and CPR deflate at the control unit.
- Compact lightweight control unit is quiet, robust and powerful, with a reusable air filter and integrated carrying handle for portability.
- Crisp, easy to read graphics for intuitive set up and therapy control.
- Automatic panel lock out to avoid unwanted or accidental adjustments.
- Specially designed enclosure for low noise and durability.
- Integrated swing out hanging brackets for fixing to most bed types.

#### Therapy Mattress System Features

- 160 individual therapy cells help to evenly distribute the patient's weight and maximize pressure relief. Modular cell design mattress for ease of cleaning, re-assembly and cost effective service.
- Six-inch deep therapy cells are constructed of highly durable, polyurethane film to provide adequate support and prevent bottoming out for most patients within weight limit.
- Customizable pressure relief- caregiver can close off individual cells to reduce the pressure on specific areas of the patient's body that are a concern (wounds or surgical sites) thereby "floating" the wound or surgical site.
- Lower two-inch therapy support cell provides additional therapeutic support and remains inflated for up to 12 hours in the event of a power failure.
- Integrated low-pressure heel section provides lower interface pressures for high-risk patients.
- Lower mattress therapy enclosure is constructed from 100% heavy weight 1680 Denier nylon with 1.5 oz Urethane coating and incorporates bed attachment loops for stability.
- Maximum weight capacity of 350 lbs.
- Anti-kink, easy clean air supply hose set.

#### **Therapy Pads**

Many healthcare facilities are facing the challenge of infection control. Joerns's quilted therapy covers are treated with an antimicrobial to protect the therapy pad itself from the growth of mold, mildew and bacteria.

#### Key features and benefits:

- Treated with a highly effective bacteriostat agent to inhibit the growth of bacterial and fungus.
- Constructed from a very smooth nylon fabric with low friction and low shear properties to protect the patient's skin from damaging friction/shearing forces.
- Breathable, moisture vapor permeable fabric allows air to circulate beneath the pad and wicks away excess moisture. This keeps your patient dry and helps to prevent skin maceration.
- Two-way stretch therapy pad is designed for optimal comfort, moisture vapor transfer, stain resistance and ease of laundering.

## Grounding Instructions

Warning: Use a properly grounded, three-prong, 120V AC outlet for this product. Failure to use a grounded outlet could result in personal injury or damage to equipment or house wiring, including risk of fire. A qualified electrician should be contacted to correct the wiring and ensure a properly grounded outlet.

Before installing this product, have the electrical system checked to make sure the electrical circuits and the electrical service are properly grounded.

Having a three-prong outlet does not necessarily mean it is grounded. Sometimes two-prong outlets are replaced with a three-prong type even though there is no ground wire.

There is always a chance of a loose connection or poor installation of a ground wire that causes the loss of proper ground at the outlet. Inadequate grounding at electrical outlets can occur even if there is a ground wire. Wires can become loose over time at the connection to the outlet.

**Note:** To install new wires on a circuit requires a qualified electrician.

#### How to Determine if Your Outlet has the **Proper Grounding**

Most hardware stores sell circuit testers (Figure 1) that can be used to test an outlet for proper grounding. The tester plugs into an outlet and by observing the indicator lights you can determine if the outlet is properly grounded. For a higher level of assurance, an electrician should be requested to thoroughly test the electrical system with more reliable equipment.

If repair or replacement of the cord or plug is necessary, please contact Joerns for assistance.

## Setup

**A**Warning: For important precautions please see page two.

- **A**Caution: Do not place the control unit on the floor. Position the power cord to keep personnel from tripping over it.
  - Remove the existing mattress from the bed.
  - Unroll the mattress with the hose connection at the foot end of the bed and the therapy cells facing up. Secure the ten (10) straps on the mattress securely to the movable part of the bed frame.

- If the therapy pad is not already on the mattress, place it on the mattress. Attach the zippered cover to the mattress surround.
- · Hang the control unit on the foot of the bed facing away from the bed. Attach the hose connector marked CPR to the control unit.
- · Plug in the control unit and the vellow Standby light will illuminate. Press the *Power* button. The control unit will start and the green light will illuminate. Keep the control unit ON while the patient is on the mattress. Fully inflate the mattress by

selecting Autofirm. When the

mattress is fully inflated, select



- the Therapy mode, and place the Figure 1
- patient on the mattress. Select the appropriate Comfort Adjust level to prevent bottoming out (i.e., providing greater than one inch of air between the patient's sacral area/ buttocks and the lower safety mattress) as outlined below:
  - 1. Begin by placing the head of the bed in the appropriate position based on the patient's clinical condition.
  - 2. Select the highest or most firm Comfort Adjust setting.
  - Hand Check: Place a hand with three (3) fingers 3. (if head of bed at  $30^{\circ}$  or higher) or four (4) fingers (if head of bed lower than 30°) stacked vertically beneath the cells of the mattress and above the safety mattress directly between the lowest point of the patient's sacral area/buttocks. The

smallest finger should be resting on the safety mattress.

- 4. Sequentially reduce the Comfort Adjust setting to the firmness level where the height of the three (3) or four (4) fingers can slide with minimal resistance between the patient's sacral area/buttocks and the lower safety mattress. This is the proper Comfort Adjust setting for the patient to assure proper inflation of the air cells and prevent bottoming out of the mattress.
- 5. Document the patient's Comfort Adjust setting for future reference, and re-evaluate with the Hand Check as the patient's condition warrants.
- The CairRails risk management side air bolsters can be inflated or deflated as required. Locate the turn valve on the hose assembly between the mattress and the control unit. Next, inflate/deflate the CairRails by moving the turn valve to the up (inflate) or down (deflate) position.

Note: When inflating or deflating CairRails it is recommended that the support surface be in Autofirm mode.

#### To Create Super Flotation Zones

The cells can be decreased in height or diameter to reduce the pressure in the desired area. To reduce the height compress the cell and clasp strap around material as detailed below. To reduce the diameter, which results in a shorter cell, place the strap around the outside of the cell and tighten as desired (Figures 2-4).

Cell fixation method:

- Determine cells that need to be closed off.
- Locate the straps stored in the foot section of the mattress by footboard.
- Using the strap to secure cell in position desired.
- Position the patient on the surface, ensuring that the wound site is placed over the super flotation zone.
- Ensure the strap buckle is positioned under the air cell away from the patient.

**Note:** Patients that are mobile will need to be monitored to ensure they remain in the correct position to float the wound.

## Operation

**Warning:** For important precautions please see page two.

▲ Caution: The patient's head should be positioned in the center of the top section of the mattress. When using the mattress system always ensure that the patient is positioned properly within the confines of the bed. Do not let any extremities protrude over the side or between the bed rails when the mattress is being used.

Patient Comfort Controls and Monitoring (Figure 5)

#### **Power Switch**

The power switch is used to turn the power on and off.

#### Standby

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The unit starts up in *Standby*. Press the *Power* button to inflate the mattress. When the *Standby* light is on, it may also indicate that there has been a power interruption and the therapy control unit is ready to be turned back on. Press the *Power* button and reset the preferred mode of therapy and comfort level.



Figure 2



Figure 3 Eliminate cell by securing vertically



Figure 4 Reduce cell by securing around cell

#### **Position Sensor**

Patient *Position Sensor* (Fowler boost) will be illuminated when the head of the bead is elevated by more than 30 degrees.

#### Modes

#### Autofirm

Autofirm mode provides maximum air inflation designed to assist both patients and caregivers during patient transfer and treatment. The unit will automatically return to the mode it was in prior to Autofirm (either Pulsate or Therapy) in approximately 12 minutes.

#### Therapy Modes: Therapy and Alternating

- *Pulsate*: *Pulsate* will slightly decrease the pressure in all cushions every 30 seconds, which some patients find comfortable.
- *Therapy*: The unit starts in the *Therapy* mode, which is the standard low air loss therapy.

#### **Comfort Adjust**

The *Comfort Adjust* function is located on the right side of the control panel. The FlapCair can be customized to meet individual patient needs within a therapeutic window. See "Setup" section for further information. This function will not work in *Autofirm* mode.

#### Lockout

This feature is to prevent any unauthorized changes to the patient settings. To unlock and make adjustments to the settings press both up and down comfort arrows at the same time to disengage the *Lockout* function. The *Lockout* function will return in approximately five minutes.

**Note:** The unit is designed to lock out all the adjustment controls after the patient has been positioned correctly. In approximately five minutes after the last button push the power on light begins to flash indicating *Lockout* is enabled.

## **Additional Features**

#### ▲ Warning: A possible fire hazard exists. This product is suitable for use with oxygen administering equipment of the nasal, mask, or half bed-length, tent-type only. To prevent personal injury or equipment damage, ensure that the oxygen tent does not extend below the mattress.



## CPR

The hose connection at the control unit is marked *CPR*. Disconnect the hose from the control unit. Deflation times will vary based on patient weight and profile. To resume therapy, reattach the hose to the control unit.

#### Transport

To transport the patient in bed, turn the control unit off. Unplug the power cord from the outlet. Do not disconnect the hose connection at the control unit. The lower support cell will prevent the patient from bottoming out for up to 12 hours.

#### **Power Failure**

The FlapCair control unit has an advanced power failure notification alarm and Comfort Adjust setting memory capability. Upon power failure the control unit will flash a red Alarm light on the keypad and sound an audible signal every two (2) seconds for up to twenty (20) minutes. The power interruption feature keeps the current settings in memory based on the frequency of use and level of battery charge. The Alarm Reset will turn off audible and visual alarm.

#### Power Interruption (Brown out)

In the event of a brief power interruption, up to twenty (20) minutes, the Flapcair control unit will automatically restart and reset to the previous Comfort Adjust settings. The power interruption feature keeps the current settings in memory based on the frequency of use and level of battery charge.

#### **Power Loss**

In the event of a power failure in excess of twenty (20) minutes, the control unit's stand by light will be illuminated after power restoration. Press the Power button and reset the preferred mode and comfort level as described in the "Operation" section.

#### Safety cell

In the event of a power failure, the lower support cells should remain inflated for up to 12 hours as long as the control unit remains connected. In case of an extended power failure, transfer the patient to a hospital mattress or other surface.

#### CairRails

Integrated CairRails risk management air bolsters offer a bilateral side bolster solution designed to address healthcare's growing concerns of liability in relation to patient falls and entrapment. CairRails are being recognized by some of the nations leading healthcare systems for improving their patient safety and risk management programs.

CairRails are recommended for patients requiring additional support during patient care and transfer. CairRails can help reduce costs while ensuring optimal clinical outcomes and increasing patient safety.

**Note:** When inflating CairRails, it is recommended that the control unit be in *Autofirm* mode to achieve optimal results.

#### **Features and Benefits**

- A bilateral side air bolster solution which can enhance your facilities entrapment/risk management program.
- Easy to engage *Ready Valve* for instant inflation and deflation.
- Transfer friendly-deflate for ease of assisted transfer or when bolsters are not required.
- Unique contoured design allows ease of ingress/ egress, while providing additional protection, comfort and supports patient compliance.
- Designed to fit on most key Joerns therapeutic support surfaces.
- Promotes maximum independence by allowing caregiver to decide when added protection is required.

**Note:** CairRails are meant to provide a documentable and functional intervention for the risk management issues of falls and entrapment but in no way guarantee the prevention of falls or entrapment occurrences.

#### **Optional Accessories**

• Additional therapy pads - available for purchase

## Troubleshooting

#### Therapy Surface is Not Inflating

- Ensure the hose connection from the therapy mattress system (mattress) to the control unit is securely connected.
- Ensure that the control unit is plugged into an AC outlet.
- Ensure that the power is not on *Standby*. If on *Standby*, press the *Power* button.
- Ensure that all air cells are connected to the internal mattress manifold.

#### Unable to Change Therapy Mode or Adjust Comfort Control

Make sure the *Lockout* function is disabled. To disable, press the up and down *Comfort Adjust* arrows simultaneously.

## **Nursing Procedures**

#### **Recommended Linen**

Special linens are not necessary for the FlapCair. There is no need for a bottom sheet as the therapy pad should be covering the therapy cells at all times. The patient should never be lying directly on the therapy cells. Upon the patient specific needs the following linens may be utilized:

- Draw or slide sheet to aid in positioning and to further minimize friction and shearing.
- Incontinence barrier pad for patients incontinent of urine and/or stool, and patients with heavily draining wounds.
- Add top sheet, blanket and/or bedspread as needed for patient comfort.
- Keep the amount of padding between the patient and bed to a minimum for optimum performance.

#### Changing the Therapy Pad

- Place the therapy pad over the therapy cells, fitting the corner of the cushions into the corner of the therapy pad. (Similar to a fitted sheet.)
- Zip the therapy pad along each side of the mattress tub.

#### **Patient Positioning and Comfort**

#### **General Repositioning**

Patients should be turned and repositioned per individual turning schedule or per facility policy. It may be helpful to activate the *Autofirm* mode to achieve a firm surface for repositioning purposes. The unit will automatically return to the mode it was in prior to *Autofirm* in approximately 12 minutes or you can manually return to therapy mode once patient has been repositioned.

Unless counter indicated, it is desirable to keep the head of the bed in the low position to provide optimal pressure relief and minimize the risk of shearing injuries.

If using super flotation zones, always ensure wound site is placed appropriately to ensure maximum pressure relief.

#### **Elevating Patient into Sitting Position**

The special properties of the FlapCair, therapy pad reduce the opportunity for shear and friction that may occur when raising the head of other beds. As with any surface, sliding can be expected, therefore patients should be repositioned after elevation. The knee gatch or foot of the bed may be elevated first, to help prevent the patient from sliding when the head of the bed is elevated.

#### Incontinence

Moisture against the skin surface leads to maceration, or softening of the tissues. To prevent maceration, we recommend you use an incontinence barrier pad to absorb the excess moisture.

In the event of incontinence or excess drainage on the therapy pad, you should wipe off the excess fluid from the bed surface.

## Safety Information

#### **Patient Migration**

Specialty bed products are designed to reduce/ relieve pressure and the shearing/friction forces on the patient's skin. The risk of gradual movement and/ or sinking into hazardous positions of entrapment and/ or inadvertent bed exit may be increased due to the nature of these products.

#### Traction

With any traction or unstable fractures, maintain physician-directed angle of articulation and guard against risks of patient migration or inadvertent deflation of patient surface.

#### Skin Care

Monitor skin conditions regularly, particularly in areas where incontinence and drainage occur or collect, and consider adjunct or alternative therapies for high acuity patients. Early intervention may be essential to preventing serious skin breakdown.

#### **Bed Height**

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

## Cleaning

- Warning: Unplug the control unit from its power source. Failure to do so could result in personal injury or equipment damage.
- Warning: Do not expose the unit to excessive moisture that would allow for liquid pooling. Personal injury or equipment damage could occur.
- ▲ Caution: Do not use harsh cleansers/detergents, such as scouring pads and heavy-duty grease removers, or solvents, such as acetone. Equipment damage could occur.

#### **Control Unit**

Wipe off dust. If necessary, clean the housing exterior with a disinfectant solution or a mild detergent and a damp cloth. Then wipe dry.

#### **General Cleaning**

If there is no visible soilage with possible body fluids, we recommend that you clean the mattress system with a mild detergent and warm water. If disinfection is desired, you may use a combination cleanser/ disinfectant as explained in "Disinfecting" section.

- Patient care equipment that does not come in contact with mucous membranes or non-contact skin requires low-level disinfection. Wiping surfaces with a properly prepared detergent or disinfectant carries out low level disinfecting.
- Processing of dirty patient care equipment should take place in a designated area away from clean or sterile supplies and food preparation areas.
- Detergent/disinfectants should not be mixed with other germicides or detergents. Using the proper dilution insures the most effective killing power of the disinfectant.
- Wash hands often and well, including after removal of gloves.
- Patient care equipment that is used in isolation areas should be disinfected in accordance with all internal policies and procedures regarding such equipment.

#### Disinfecting

When there is visible soilage and between patients, we recommend that you disinfect the unit and mattress with a tuberculocidal disinfectant. Disinfectant should be registered with the Environmental Protection Agency (EPA).

- Use rubber gloves and eye protection.
- Prepare detergent/disinfectant (registered by EPA as hospital disinfectant) solution according to instructions on label for correct use-dilution.
- With support surface deflated, thoroughly wipe down entire mattress, as air cells will lie flat. Be sure to reach all areas underneath and in-between air cells. Allow to air dry.
- If dust or other soiling has accumulated along air hoses, remove using swabs moistened with detergent/disinfectant as necessary. Allow all components to air dry. Wrap mattress in plastic and return to storage area.
- Thoroughly wipe down outside of control unit and allow to air dry. Cover with plastic and return to storage area.
- Remove gloves and dispose; wash hands.

#### Therapy Pad

The therapy pad can be wiped down with a disinfectant solution or a mild detergent with a damp cloth. If heavily soiled, the therapy pad can be laundered in a washer and dryer with warm water (no more than 120° Fahrenheit). A non-bleach detergent should be used sparingly. Wipe dry or allow to air dry.

#### **Steam Cleaning**

Do not use any steam cleaning device on the unit. Excessive moisture can damage mechanisms in this unit.

#### **Filter Cleaning**

Check the air filter on the rear of the unit regularly for buildup of dust/dirt. If buildup is visible turn off the control unit and disconnect the power cord from the wall outlet. Remove the filter by grasping the filter pulling outward. Replace with the second supplied filter. Ensure the replaced filter covers the entire filter region.

Hand-wash the removed filter in warm soapy water and allow to air dry. When dry, store the filter in a safe place for the next filter maintenance.

## Maintenance

▲ Warning: Only facility-authorized personnel trained by Joerns should perform preventative maintenance. Preventative maintenance performed by unauthorized personnel could result in personal injury or equipment damage. Any maintenance done without Joerns's authorization will invalidate any warranties on this product.

## Storage and Care

When the product is not in use, properly store the power cord. Failure to do so could result in personal injury.

**Note:** Clean the FlapCair as described in the previous section prior to storage.

#### **Control Unit**

The power cord may be wrapped around the unit for convenience. Wrap the unit in a plastic bag for dust resistance then store the unit in an area appropriate for an electronic medical device.

#### Support Surface

Gently roll up the support surface, expelling any residual air, for temporary storage. The mattress should be wrapped in plastic and/or a clean bag for storage.

## System Specifications

#### Weight:

Control Unit:.....10 lbs (4.5 kg) Mattress:......29.5 lbs (13.4 kg) Maximum Weight Capacity:...350 lbs (159 kg)

#### Dimensions:

Control Unit 7.25" (18 cm) W x 11.5" (29 cm) H x 5.5" (14 cm) D

Mattress: 36" (91 cm) W x 80" (203 cm) L x 8" (20 cm) D

#### **Electrical Specifications:**

**USA** 120V AC, 60 Hz, 5A **Environmental Conditions:** 

**Operating Conditions:** Ambient temperature: +10°C to +40°C Relative humidity: 30% to 75% non-condensing

**Storage And Shipping Conditions:** Ambient temperature: 10°C to +40°C Relative humidity: 10% to 100%

Agency Approvals:

 UL Classified Medical Equipment No. 60601-1 Can/ CSA C22.2 No.601.1

UL Classification refers to the power unit only, not the complete mattress replacement system.

## **Call for Assistance**

If you have any questions or require service on a Joerns product, please call Joerns Healthcare at 800.826.0270.

\* Mattress weight capacity only; total weight must not exceed bed frame manufacturers' specified load capacity.

## Joerns Healthcare Warranty Program

for Joerns® FlapCair Support Surface

Joerns Healthcare warrants the FlapCair mattress to be sold free from defects in workmanship and materials, under normal and proper use, for a period of two (2) years on the mattress, and one (1) year on the cover and electromechanical mattress components (compressors, valves, printed circuit boards, hoses, and couplers). Damages arising from improper use will not be covered by this warranty.

Improper use is defined as, but not limited to, those caused by:

- Burns
- · Use of improper chemical agents
- · Needle punctures, cuts, or abrasions
- · Excessive loads
- Staining
- · Negligent or excessive usage
- Improper maintenance, handling and/or cleaning
- Failure to use in the manner indicated in the FlapCair user manual

Any modification, repair or alteration done to the FlapCair that was not authorized in writing by Joerns Healthcare will void this warranty.

Damage caused by use in unsuitable environmental conditions, abuse or failure to maintain the product in accordance with user and service instructions is not covered.

This warranty is extended to the original purchaser of the equipment.

## Parts

Joerns's FlapCair contain various parts that wear from normal use. Joerns Healthcare's obligation under this warranty is limited to supplying replacement parts, servicing or replacing, at its option, any product which is found by Joerns to be defective. When requested by Joerns, parts must be returned for inspection at the customer's expense. Credit will be issued only after inspection.

#### Service

Most service requests can be handled by the facility Maintenance Department with assistance from the Joerns Healthcare Product Service Department.

Most parts requested can be shipped next day air at the customer's expense.

Should a technician be required, one will be provided by Joerns Healthcare, at our discretion. Only the Joerns Healthcare Product Service Department can dispatch authorized technicians.

#### Manufactured by:

Joerns Healthcare, LLC 2100 Design Rd. Ste 100 Arlington, TX 76014

Post Acute, Acute, HomeCare 2430 Whitehall Park Dr. Ste 100 Charlotte, NC 28273 (P) 800.826.0270 (F) 800.457.8827 VA/Government 19748 Dearborn Street Chatsworth, CA 91311 (P) 800.966.6662 (F) 800.232.9796

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