

Table of Contents

1. INTRODUCTION.....	4
1.1. INTENDED USE.....	4
1.2. WARNING.....	4
1.3. DISCONTINUE USE.....	4
1.4. INDICATIONS FOR USE.....	4
1.5. CONTRAINDICATIONS	4
1.6. PRECAUTIONS.....	5
2. SAFETY.....	5
3. INSTALLATION.....	6
3.1. GROUNDING INSTRUCTIONS.....	6
3.2. FEATURES.....	7
3.2.1. MAIN CONTROL PANEL.....	7
3.2.2. REMOTE HAND CONTROL.....	7
3.2.3. FILTER SHEET AND COVER SHEET.....	7
3.2.4. AIR PILLOW / WEDGE CUSHIONS.....	7
3.2.5. BEADS	7
3.2.6. SIDERAILS.....	8
3.2.7. ORTHOPEDIC EQUIPMENT USED IN CONJUNCTION W/ FLUIDAIR™	8
3.2.7.1 PATIENT LIFTER.....	8
4. OPERATING INSTRUCTIONS FOR STARTING THE FLUIDAIR.....	8
4.1. PREPARATION FOR PATIENT PLACEMENT.....	8
4.1.1. PLUG POWER CORD.....	8
4.1.2. TURNING ON FLUIDAIR™.....	8
4.1.3. SETTING THE FLUIDIZATION LEVEL.....	9
4.1.4. SETTING TEMPERATURE.....	9
4.1.5. LOCK OUT SETTING.....	9
4.1.6. UTILIZING A DRAW SHEET FOR PATIENT POSITIONING.....	9
5. PATIENT PLACEMENT.....	9
5.1. PATIENT TRANSFER TO THE FLUIDAIR™ BED.....	9
5.2. COMPLETION PATIENT PLACEMENT.....	9
5.3. TURNING THE PATIENT.....	10
5.4. PATIENT BATHING.....	10
5.5. BEDPAN PLACEMENT.....	11
5.6. BEDPAN REMOVAL.....	11
5.7. SKIN CARE.....	11
5.8. INCONTINENCE AND DRAINAGE.....	12
5.9. CPR.....	12
6. CARE AND CLEANING.....	12
6.1. IN-HOME CLEANING.....	12
6.2. DAILY PREVENTIVE MAINTENANCE.....	13
6.3. WEEKLY PREVENTIVE MAINTENANCE.....	13

INTRODUCTION

The FluidAir™ Air-Fluidized Therapy Bed provides superior pressure reduction for patients that are experience pressure ulcers and enable to heal their wounds. The bed is designed to operate in home and institutional settings that have adequate floor structure and support.

The FluidAir™ bed provides Air-Fluidized Therapy by supporting the patient on a surface of fluidized microsphere (beads). A large volume of air is forced upward through the bead mass causing the beads to behave similar to a fluid, helping to reduce interface pressures.

The fluidization level of the beads and temperature of the air flowing upward through the bead mass can be adjusted to meet individual patient needs. Fluidization and temperature can be controlled at the main control panel or the patient remote control.

Patient head elevation is provided by air filled pillows.

1.1. *Intended Use*

If you are not trained on the operation of the unit, please read this entire manual. For best results, follow the procedures explained here.

1.2. *Warning*

Only the patient should lie on the unit. The presence of others on the unit could result in patient injury, personal injury or equipment damage.

When the service technician installs the unit, he or she will set up the device according to the patient's height and weight. The unit is set up solely for the patient; others should not lie on the unit.

1.3. *Discontinue Use*

If for any reason the patient no longer requires the unit, unplug the device and contact the phone number listed at the foot of the bed.

1.4. *Indications for Use*

The FluidAir™ is design to treat patients with the following indications:

- ⊙ Pressure ulcers
- ⊙ Skin flaps and grafts
- ⊙ Burns
- ⊙ Limited mobility/non-ambulatory
- ⊙ Pain associated with cancer

1.5. Contraindications

The FluidAir™ is contraindicated for patients with the following conditions:

- Unstable Spinal Cord Injury
- Cervical Traction

1.6. Precautions

Pulmonary and Renal Functions- All patients undergoing treatment on the FluidAir™ bed should be turned at least once every two hours to promote normal pulmonary, cardiovascular and renal functions.
Caregiver Assistance – Patients with little or no motor of the head and neck, as well as patients with tracheostomies or other life supporting line require the presence of a Caregiver.

2. Safety

- Close supervision is necessary when this product is used by or near children or invalids.
- Unplug Bed – Always unplug the bed immediately after use
- Fluid Spills – Avoid spilling fluids on bed controls. If spills do occur, clean fluids while bed is unplugged while wearing rubber gloves to avoid any possibility of shock. Once fluid is removed, check operation of components affected by the spill.
- Use – Use this bed only as described in this manual. Do not use attachments not recommended by the manufacturer.
- If this bed has a damaged power cord or plug, is not working properly, has been dropped or damaged, do not operate it. Call the service number located on the bed immediately for service repair.
- Power Cord – Keep Power Cord away from heated surfaces.
- Smoking – Do not smoke while in the bed
- Air intake – Never block air going into the air intake at the bottom of the blower assembly.
- Side Rails – Side rails are designed for the patient's safety. The decision whether and how to use Side Rails lies with the patient and the facility. It is recommended that Side Rails be locked in the full upright position when the patient is unattended. Make sure that the patient knows how to get out of the bed safely (and, if necessary, how to release the Side Rails) in case of fire or other emergency.
- Temperature – Recommended room temperature is 80 degrees or lower in a well-ventilated room. Higher room temperatures or poorly ventilated rooms may cause the blower assembly to overheat and shut down, suspending fluidization.
- Microsphere Spills – Microspheres (beads) spilled on the floor may be slippery. Any beads on the floor or other exposed surfaces should be wiped up immediately with a damp mop or cloth. After contact with the beads, always wash your hands and avoid rubbing your eyes. If the beads contact the eyes, wash out eyes immediately.
- Filter Sheet Condition and Microsphere Containment – The filter sheets are the essential components in containing beads within the Fluidization Tank. The following guidelines should be observed to ensure filter sheet integrity:

- Do not use filter sheets as *draw* sheets
 - Do not pin or clip items to filter sheets.
 - Objects with sharp edges that must be brought into contact with the filter sheets during patient care should be covered. If an object with sharp edges cannot be covered it should not be used on the surface of the bed
 - Inspect filter sheets regularly for damage, signs of excessive wear or any other evidence of un-serviceability. In situations where the patient is particularly active on the bed surface there is a much greater potential for rips, tears or premature wear.---If damage is detected call 800-849-2716 for servicing
 - Verify that there is sufficient slack in the filter and the Cover sheet to allow patient to be moved freely in any direction
 - Ensure Cover sheet and filter sheets are not wrinkled under patient. Periodically pull both sheets upward to promote better airflow.
- o Liquids – Do not allow large amounts of liquid, such as water, urine, or topical dressing solutions get into the beads.
 - o Lock-Out Mode – Fluidization Lock-Out should be used at the Caregiver's discretion to ensure against unintentional deactivation of fluidization by the hand remote control. Air flow adjustment from the Main Control Panel will remain available.
 - o Avoid Strains – Extra care should be taken when moving patients to and from the bed to avoid strains. Ensure that all Caregivers who will be assisting the patient to and from the bed are physically capable of doing so.
 - o Placement in the home – Some structures, including, but not limited to some wood flooring and mobile home flooring, may not provide adequate support for such a load. In situations where the floor, or its underlying support may pose support questions, it is recommended that the flooring structure be inspected to ensure adequate support for the bed.
 - o Maximum Recommended Patient Weight – Patient weight should not exceed 250 lbs.
 - o Dehydration and Electrolyte Imbalance – Do not leave patient on the bed without a Cover sheet. Air flowing past the patient without Cover Sheet installed may cause an increase in evaporative fluid loss and an increased potential for dehydration and electrolyte imbalance. Fluid intake and output should be carefully monitored and fluid replacements adjusted as necessary.

3. Installation

WARNING: Setting up the Bed

When the service technician installs the unit, he or she will set up the bed according to the patient's height and weight. The unit is set up solely for the patient; others should not lie on the unit. The presence of others on the unit could result in patient injury, personal injury or equipment damage.

3.1. Grounding Instructions

WARNING: When using this product in the home, use a properly grounded, three-prong, 120 volt outlet. Failure to ground properly could result in personal injury, fire or house wiring.

SHOCK HAZARD: Position the power cord to keep people from tripping over it. When the

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

This product must be grounded. In the event of an electrical short circuit, the grounding reduces the risk of electric shock by providing an escape wire for the electric current. This product is equipped with a grounded power cord and a grounded plug. The plug must be plugged into an outlet that is properly grounded.

3.2. Features

3.2.1. Main Control Panel

The main control panel at the foot of the bed contains the main buttons for operating the bed.

Fluidization Control – Allows user to control the blower speed (full throttle is recommended at most times)

Temperature Control – Allows the user to control temperature range from 80 to 100 degrees

Lock-Out mode – Press this Fluidization Lock-Out mode to disable the fluidization on/off button on the remote hand control, as required

Note: Fluidization Lock-Out mode should be used at the caregiver's discretion to ensure against unintentional deactivation of fluidization from the Remote Hand Control.

3.2.2. Remote Hand Control

Inflate/Deflate Air Pillows with ON/OFF Button

On/Off Control – activates or inactivates fluidization

3.2.3. Filter Sheets and Cover Sheet

Filter sheets (there are two) are the front line barrier between the microsphere beads and the patient. The cover sheet then is placed directly on the filter sheet and is the surface that the patient lies on. Do not pin or clamp items to the filter or cover sheets. Also, cigarette burns, tears caused by sharp objects and pinholes can cause bead leaks. Patient injury, personal injury or equipment damage could occur if beads were to leak through filter and cover sheets.

3.2.4. Air Pillows and Wedge Cushions

The Air Pillows provide upper chest elevation and are controlled with the included Hand Controller. Additionally, Slant Wedge Cushions can be provided on demand. The Wedge Cushion pillowcase can be washed with regular detergent to provide adequate hygiene.

3.2.5. Beads

When the FluidAir™ bed is operating the beads become fluid-like and conform to the shape of the patient's body to help relieve pressure. The FluidAir™ bed handles limited amounts of fluids passing through the filter sheet. To contain drainage, use absorbent material or breathable underpads without plastic backing. Excessive incontinence and bodily fluid saturates the beads and hinders fluidization.

Petroleum-based topical ointments and silver compounds ruin the coating on the beads and permanently destroy their fluidizing properties. Take care when utilizing these types of products.

3.2.6. Side Rails

The side rails are intended to be a reminder to the patient of the unit's edges, not a patient-restraining device. Keep the side rail in the up locked position when the patient is in the bed.

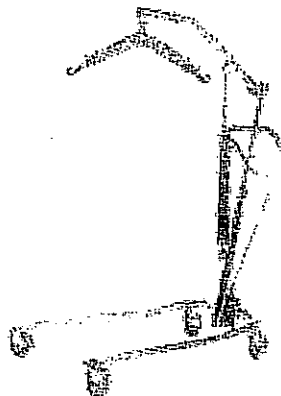
3.2.7. Drainage bag holder

A drainage bag holder is provided on the side of the FluidAir™ for patients with foley catheters.

3.2.8. Orthopedic Equipment Used in Conjunction with the FluidAir™

3.2.8.1. Patient Lifter

The FluidAir™ bed was designed to work in concert with hydraulic patient lifters that will allow the Caregiver to move the patient from the bed to a chair, wheelchair, etc. with a minimal amount of effort. Patient Lifts are a great way to protect the Caregivers back when transferring the patient to other locations within the home.



4. Operating Instructions for Starting the Fluid Air

4.1. Preparation For Patient Placement

1. Plug Power Cord into a properly grounded 115 VAC, 15 AMP wall outlet.
-NOTE: Do not use a wall outlet controlled by a wall switch
2. Press the Air On switch on Main Control to turn the FluidAir™ on.
3. Turn Air adjust knob on the Main Control Panel to the Max position.
4. Set Temperature Adjustment on Main Control Panel halfway between Min. and Max. position. Min.= 80° Max.= 100°
5. Determine if you wish to Lock-Out the Patient Remote Hand Control by depressing Lock-Out mode in the ON or OFF position
6. Utilize a draw sheet over the green Gore-Tex® sheets to assist in positioning the patient.

5. Patient Placement

5.1. Patient transfer to the FluidAir™ Bed

- Inspect the floor around the bed to verify no beads have spilled.
- Set the Fluidization level on Main Control Panel to a comfortable position to create a firmer surface.
- Lower the Side Rails.
- Place pillow or slant wedge toward the head of the bed.
- Before placing the patient on the bed, lay a flat bed sheet on the unit. Do not tie the flat bed sheet down or tuck it in.
- Transfer patient in accordance with safety rules.
- Center patient in middle on support surface. Patient's waist should be just below the base of the pillow or slant wedge.
- Verify there is sufficient slack in the cover and filter sheets to allow patient to be moved freely in any direction. Pulling the sheets too tight can create shear forces for the patient.
- Ensure that Cover and Filter sheets are not wrinkled under patient. Periodically pull both sheets upward to promote better airflow.
- Position the Foley Bag Holder as required.
- Raise the Side Rails.

5.2. Completion of Patient Placement

- Verify patient is fluidized on the surface properly. Gently rock patient from side to side.
- Ensure the Cover and Filter sheets are not wrinkled under patient.
- Press Fluidization Lock-Out mode on the Main Control Panel to disable the Patient Remote Hand Control, as required

Note: Fluidization Lock-Out should be used at the caregiver's discretion to ensure against unintentional deactivation of fluidization from the Remote Hand Control.

- Ensure air intake (located at the bottom of the blower) is not blocked by a blanket or other object. The bed has a thermal cutoff that will automatically deactivate the blowers at intervals if the air intake is blocked.

5.3. Turning the patient in the Unit

- As close to the patient as possible, gather up one side of the flat bed sheet under the patient in both hands.
- Pull or slide the patient toward your side of the unit.
- Lift the flat bed sheet to log roll the patient onto his or her side.
- To keep the patient in position, turn the Fluidization down as low as possible. The firmer surface will allow you to control the patient's position.

5.4. Patient Bathing

- Lower Side Rails on Caregiver's side.
- Bathe and rinse patient's anterior.
- Log roll patient into side-lying position.
- Set the Fluidization level on the Main Control Panel to a comfortable position to create a fluidized surface.
- Bathe and rinse patient's exposed side and posterior.
- Partially remove Cover Sheet to expose Filter Sheet below.
- Wipe Filter Sheet to remove any soiling, residue or stray beads.
- Install and wipe Cover Sheet
- Dry Cover Sheet with a towel. Remaining moisture will evaporate rapidly with air flow during fluidization
- Set the fluidization level to a Max position to increase fluidization and assist in log rolling patient.
- Repeat Steps 3 through 9 for the opposite side.
- Return patient to supine position in center of bed.

- Raise and lock Side Rails.
- Set the Fluidization level to maximum

5.5. Bedpan Placement

- Lower Side Rails on Caregiver's side.
- Position bedpan parallel to patient's buttocks.
- Log roll patient toward opposite Side Rail.
- Push bedpan down into patient support surface and slide bedpan underneath patient.
- Keep one hand on bedpan and log roll patient onto bedpan.
- Set the Fluidization level to Max position to increase fluidization and create a fluidized surface.
- Raise and lock Side Rails.

5.6. Bedpan Removal

- Lower Side Rails on Caregiver's side.
- Set the Fluidization level to the previous position prior to bedpan placement.
- Grasp bedpan firmly with one hand and log roll patient to opposite side with other hand.
- Clean patient's posterior. Push bedpan down into surface and remove bedpan.
- Return patient to a supine position in center of bed.
- Raise and lock Side Rails.

5.7. Skin Care

- Remove excess moisture and keep skin dry and clean.
- Check patient's skin regularly, particularly areas where incontinence and drainage occur.
- Maintain proper fluidization. When properly fluidized, patient can be moved freely across bed surface in any direction.
- Ensure Cover Sheet and Filter Sheets are not wrinkled under patient. Ensure Cover and Filter Sheets are not pulled tightly at head, foot, or patient's sides.

5.8. Incontinence and Drainage

- Use breathable underpads whenever possible.

- Note: Dri-Flo® breathable underpads are recommended for incontinent patients. Do not use plastic backed underpads. Plastic may tend to block moisture vapor transmission and air flow from support surface.
- Watch for incontinence or drainage and provide appropriate skin care follow each episode.
- Wipe Cover Sheet clean or replace as required.

5.9. CPR

- Press Air Off/On switch on the Main Control Panel to the OFF position to deactivate air flow.
- Note: Deactivating air flow will cause the patient to sink into the tank approximately one to two inches and create a firmer patient support surface.
- Lower Side Rails.
- Begin CPR.
- Note: After CPR is performed and patient is clinically stable:
 - Raise Side Rails
 - Turn on the Air Off/On switch on the Main Control Panel to position to activate air flow.
 - Adjust Head Elevation to a desired position.
 - Ensure Cover and Filter Sheets are not wrinkled under the patient. Ensure Cover and Filter Sheets are not pulled tightly at the head, foot or patient's sides, to prevent shear forces.

6. Care and Cleaning

6.1. In-Home Cleaning

1. Machine wash the Cover Sheet with mild powdered or liquid detergent that is colorfast. Do not add Clorox to wash water when laundering the Cover Sheet unless it is physician recommended. Consult your physician if there are specific infection control concerns. Set wash machine for Warm Wash, using the longest cycle, and Cold Water rinse.

2. Spray heavily soiled areas with stain-removing prewash spray.

3. After washing is complete, place the Cover Sheet into dryer. Tumble dry on Low Heat. Do not use High Heat.

- a. To Remove Cover Sheet for Laundering
 - Pull Cover Sheet edges from around tank rim on patient right side
 - Log roll patient to other side of bed.
 - Gather Cover Sheet into a tight roll and press into support surface beneath patient.
 - Log roll patient to other side of bed.
 - Pull Cover Sheet from beneath patient.
- b. Installing a clean Cover Sheet
 - Install Cover Sheet over tank rim on patient left side.

- Log roll patient to right side of bed.
- Gather Cover Sheet into a tight roll and press into support surface beneath patient.
- Log roll patient to left side of bed.
- Install Cover Sheet over tank rim. Pull Cover Sheet from beneath patient.

6.2. *Preventive Maintenance – is performed by Service Technicians.*

6.3. *Daily Preventive Maintenance*

- Wipe Cover Sheet and Filter Sheets with mild soap and water solution
Note: *Cover and Filter Sheets can be wiped down when the patient is being bathed using bath water.*

6.4. *Weekly Preventive Maintenance*

- Launder Cover Sheet at once weekly, depending on soiling.
- Wipe down Hand Control, Main Control, and Tub Assembly.

6.5. *Quarterly Preventive Maintenance –is performed by Service Technicians.*

Authorized FluidAir™ service engineers shall perform quarterly Preventive Maintenance.

The Preventative Maintenance schedule and tasks **MUST** be followed to ensure proper operation of the system.

- Replace (2) interior filters located in the Blower Assembly
- Replace (1) exterior filter located beneath the Blower Assembly
- Check fluidization
- Check operation of hand controller and control panel
- Inspect filter sheets to ensure they are preventing beads from escaping.