# Low Boy® 0 User Manual Sizewise Designed to heal Rev.: Doc. #: Rev. Date:

#### **Table of Contents**

Definition of Symbols
Manual Definitions
Warnings and Cautions
Important Safety Instructions
Device Information
Description of the SW Low Boy®9
Specifications
Unpacking and Set-Up Instructions
Unpacking/Parts Breakdown
Bed Set-Up12
Headboard and Footboard Set-Up 15
Side Rail Set-Up 15
Operating Instructions
Foot Controls
Hand Control
Operation of Bed
Proper Use of the Bed
Reaching or Leaning
Side Rails
Transfers
Features
Casters
Connection of Electrical Components
Emergency Battery Backup
Serial Number Location
48" Deck Wing Kit Installation
IV Pole
Trapeze Assembly
Seven Zones of Bed Rail Entrapment
Safety Tips
Electrical Leakage Test Point
Acceptable Levels of Leakage Current
Electromagnetic Compatibility (EMC)
Electromagnetic Interference (EMI) from Radio Wave Sources

General Safety	
Pinch Point	
Transport	
Cleaning Instructions	40
Laundry Instructions	
Optional Accessories	
Maintenance	
Fasteners	
Storage and Disposal	
Troubleshooting	
Warranty Information	49
Sizewise Rentals <sup>TM</sup> , LLC (Sizewise) Limited Warranty	
Manufacturer Disclaimer	50
User Assistance Information	51

# Definitions and Symbols

#### Definitions

Throughout this manual different type fonts and symbols are used to aid user readability and understanding of the content. Below are some examples.

Standard Text: Used for regular Information.Bold Face Text: Emphasizes a word or phrase.NOTE: Sets apart special information or important instruction clarification.

#### **Symbols**



**Electrical Shock Hazard Warning:** This symbol is intended to alert the user to the presence of electrical shock hazards. It's important to follow all instructions and special procedures to avoid electrical shock to the operator, care provider and/or patient.

**Warnings/Cautions:** This symbol is intended to alert the user to the presence of important operating, maintenance or servicing instructions. Disregarding a warning could result in patient and/or user injury as well as damage to equipment.

## **Marning/Attention**

Read and fully understand manual before operating. Failure to follow operating instructions could result in death or serious injury.



Lisez et comprenez entièrement le manuel avant utilisation. Le non-respect des instructions d'utilisation peut entraîner la mort ou des blessures graves.

#### Manufacturer's Label



Type B 🖍 🖁

Symbol for Type B applied parts indicating protection provided against electric shock.



The pinch point is spacing between movable parts of the device which, in positions of normal use fail to maintain a clearance of  $\leq 8$ mm or  $\geq 25$ mm.



Protective Earth Terminal Grounding symbol. It is placed at the equipment earthing point and is mandatory for all grounded equipment.



The hazards and warnings are indicated on the shipping container by this label.



**WARNING:** The bed is to be used in accordance with each facility's policies and procedures.

For user and patient safety, read and follow all warnings and instructions that apply to use of the SW Low Boy®. Before using this bed, the user must know what to do to ensure safety.

Put the patient at ease. The care provider should communicate with the patient by telling them what they are planning to do.

Work with the patient's doctor, nurse or therapist to learn safe methods best suited to the care provider's abilities and those of the patient.

Always use good posture and proper body mechanics. When possible use assistive safe patient handling devices, if necessary to manually lift or support the patient, bend knees slightly and keep back as upright and straight as possible.

#### **Important Safety Instructions**

• The bed is to be used in accordance with each facility's policies and procedures.

#### Specifications

• Exceeding the weight capacity and/or working load listed in the specifications could result in patient or user injury as well as damage to equipment or other property.

#### **Unpacking and Set-Up Instructions**

- Failure to follow the set-up instructions could result in patient or user injury as well as damage to equipment or other property.
- During set-up, DO NOT remove the shoulder bolt on the center joint of the frame. It allows one side of the frame to slide out when ready to lift the frame apart. Failure to follow this warning could result in patient or user injury as well as damage to equipment or other property.
- To avoid electrical shock when plugging this bed into the wall outlet, only use grounded or hospital grade outlets.
- Follow EMC guidelines and safety precautions when the bed is connected to powered source (see table of contents).
- Radio wave sources such as radio stations, TV stations, amateur radio (HAM) transmitters, two-way radios and cellular phones can affect this bed. Following the warnings listed for electromagnetic interference should reduce the chance of the bed's unintended movement that could result in serious injury.
- It is recommended to have the side rails upright at all times while the patient is in the bed. However, the ultimate decision lies with the medical personnel who are on site and can fully evaluate all factors.
- If the side rails are not secured in the proper place, entrapment to the patient may occur. Bed rail entrapment is a serious health risk that can result in serious injury or even death. Sizewise recommends the care provider be mindful of the FDA guidelines relevant to bed rail entrapment, as serious injury can result. These guidelines can be found on the FDA website. It is the care provider's ultimate decision whether or not to use bed rails with the patient.
- A fall may occur if side rail bolts are not secured properly or not in place causing harm to the patient and/or care provider.

#### **Operating Instructions**

- Once the bed is positioned correctly, lock casters. Failure to do this could result in patient and/or user injury as well as damage to equipment or other property.
- Electrical shock or malfunction may occur if the hand control cord is pinched or frayed. Keep the cord away from moving parts.
- Failure to heed the warnings pertaining to the operation of the bed could result in patient and/or user injury as well as damage to equipment or other property.
- Never work under the bed while it is in operation.
- Casters will move/roll when the bed is in motion. Stand clear of the bed frame before operating.
- Keep fingers and arms away from rotating parts when mechanisms are moving.
- Operating this bed with any part of the body in the frame can result in injury. Stand clear of the bed frame before operating.

- Stand clear of the bed during operation due to minimum floor clearance on all sides of the bed.
- The bed is for indoor use only. Only operate the bed on a flat surface.
- DO NOT use the bed near an open flame or an extreme heat source.
- This bed is not intended for use in high moisture areas (e.g. showers, pool therapy), or extreme temperature environments.
- Use only parts, accessories and adapters authorized by the manufacturer.
- DO NOT use the bed with any unintentionally missing or abnormal parts.
- Remove the hand control when the patient is unattended.
- Make sure all cords are properly positioned before operating the bed. Failure to do so could result in electrical shock and serious injury.
- Never work on a bed while it is plugged into an electrical outlet.
- DO NOT use the bed if the power cord is cut, frayed or loosely connected to the bed.
- The bed is an electrically powered mechanism. Electrical hazard may occur if the bed is plugged into inadequate power supply. Make sure the bed is plugged into a 120V grounded outlet.
- Never let fingers or other body parts come between moving parts when operating the bed. Doing so may cause a pinch or crush type injury.

#### **Proper Use of the Bed**

- Follow the instructions for assisting patients in and out of the bed to avoid a fall or injury to the patient and/or care provider.
- Reaching or leaning affects the patient's center of balance. Follow the instructions for patients reaching or leaning from the bed to avoid a fall or injury to the patient and/or care provider.
- It is recommended to have the side rails upright at all times while the patient is in the bed. However, the ultimate decision lies with the medical personnel who are on site and can fully evaluate all factors.
- An injury may occur if the side rail pins are not secured properly, or not in place, causing harm to the patient and/or care provider.
- If the side rails are not secured in the proper place, entrapment to the patient may occur. Bed rail entrapment is a serious health risk that can result in serious injury or even death. Sizewise recommends the care provider be mindful of the FDA guidelines relevant to bed rail entrapment, as serious injury can result. These guidelines can be found on the FDA website. It is the care provider's ultimate decision whether or not to use bed side rails with the patient.
- Never try to move the bed by the side rail. The side rails may come loose or break.
- Exceeding the 150 lb. (68 kg) weight capacity of the side rails could result in patient and/or user injury as well as damage to equipment or other property.
- Follow the instructions for transferring patients to avoid a fall or injury to the patient and/or care provider.

#### Features

- While the patient is in the bed, it is recommended to lock the casters to reduce risk of injury to the patient and/or care provider.
- To avoid and reduce risk of a tripping injury to the patient and/or care provider, align the casters with the bed.

- Failure to follow the provided battery specifications could result in patient and/or user injury as well as damage to equipment or other property.
- Failure to follow the set-up instructions could result in patient or user injury as well as damage to equipment or other property.
- If the weight capacity of the IV pole is exceeded, it could result in patient and/or user injury as well as damage to equipment or other property.
- If the weight capacity of the trapeze is exceeded, it could result in patient and/or user injury as well as damage to equipment or other property.
- Pay close attention to pinch points on the bed to avoid injury to the patient and/or care provider.

#### Seven Zones of Bed Rail Entrapment

• Bed rail entrapment is a serious health risk that can result in serious injury or even death. Sizewise recommends the care provider be mindful of the FDA guidelines relevant to bed rail entrapment, as serious injury can result. These guidelines can be found on the FDA website. When using an Air Therapy system the care provider is responsible for ensuring the mattress properly fits the bed frame. It is also the care provider's ultimate decision whether or not to use bed rails with the patient.

#### Safety Tips

- If the ground is not properly connected to the electrical leakage test point a false reading may occur.
- Medical equipment should not be used, stacked or located on or around equipment that may create electromagnetic interferences.
- Using other manufacturer's cables and accessories may affect EMC performance. Unauthorized use of these items will void warranty and could result in patient and/or user injury as well as damage to equipment or other property.
- The use of cables or accessories other than those for which the bed was designed or tested can significantly degrade emissions and immunity performance.
- Radio wave sources such as radio stations, TV stations, amateur radio (HAM) transmitters, two-way radios and cellular phones can affect this bed. Following the warnings listed for electromagnetic interference should reduce the chance of the bed's unintended movement that could result in serious injury.
- It is very important to read the information regarding the possible effects of electromagnetic interference on the SW Low Boy®.
- The bed is to be used in accordance with each facility's policies and procedures.
- Possible fire hazard when used with oxygen administering equipment other than the nasal, mask or 1/2 bed length type tent. Oxygen tent should not extend below the mattress support level. Lock hand control at foot of bed when using oxygen administering equipment.
- Electric shock may occur when plugging the bed into the wall outlet. Use ONLY grounded or hospital grade outlets.
- DO NOT use the bed if the power cord is cut, frayed or loosely connected to the bed.
- Pay close attention to pinch points on the bed to avoid injury to the patient and/or care provider.

- During transport, use caution so the bed does not tip or overbalance. Failure to do so could result in patient and/or user injury as well as damage to equipment or other property.
- The bed needs to be stored, transported and operated in a temperature range of -5°C to 45°C (23°F to 113°F).
- DO NOT expose the bed to humidity greater than 95%.

#### **Cleaning Instructions**

• Before cleaning the bed, be sure to disconnect it from the wall outlet (power source). Failure to do so could result in electrical shock and could result in patient and/or user injury as well as damage to equipment or other property.

#### Maintenance

- The bed requires regular maintenance to uphold performance and avoid premature wear, damage and injury.
- Never dispose of batteries in a fire because they may explode.
- Many of the screws and bolts used in the bed are special high-strength fasteners. Contact an authorized Sizewise technician to assist if finding the correct fasteners. If improper fasteners are used, they could result in patient and/or user injury as well as damage to equipment or other property.
- The bed needs to be stored, transported and operated in a temperature range of  $-5^{\circ}$ C to  $45^{\circ}$ C ( $23^{\circ}$ F to  $113^{\circ}$ F).
- DO NOT expose the bed to humidity greater than 95%.
- Do not attempt to install, perform maintenance, or use this product without first reading and understanding these instructions and accompanying documents such as, the User Manual, Technical Manual, and Work Instructions. If you do not understand these instructions, or the following applicable warnings and cautions, contact Sizewise at 1-800-814-9389.
- Do not attempt to install, repair, or remove the trapeze, single pole patient assist, or any other overhead components/devices while bed is occupied.
- Before positioning patient on bed, verify all components are secure after adjustments, repairs, or servicing of the trapeze, single pole patient assist, or any other overhead components/devices.
- Use only parts, accessories and adapters authorized by Sizewise.

#### Troubleshooting

• Only authorized personnel should engage in the troubleshooting process. Troubleshooting by unauthorized persons could result in personal injury or equipment damage.

## **Device Information**

#### **Description of the SW Low Boy®**

The SW Low Boy® is an electric bed. Its purpose is to assist the care provider by reducing the chance or fall or serious injury without the use of physical or chemical restraints. The positioning nature of this bed also provides care providers the convenience in attending to the patients. The frame is constructed entirely from metal and is adjustable in height from a low position of 7" (17.5 cm) to a high position of 30" (76 cm). The frame is designed to support a safe working load of up to 850 lbs. (385 kg). The bed comes standard with a headboard and footboard, a set of 2 side rails and full functioning hand control. At the foot of the bed is a lock out control panel for the hand control functions. Options include IV pole holder, clinically effective low air loss mattress and 2 additional side rails.



# **Specifications**

Ň	specifications
Quality Assurance Standards	CSA C22.2 No. 601.1
	IEC/EN 60601-2-38
	IEC/EN 60601-1
	IEC 60601-1-2
Degree of Protection Against Electric	Shock
Degree of Protection Against Ingress	of Water
6	
Electrical Rating	
6	230VAC 50/60Hz, 4 amps (non-US models)
	, . <u>.</u>
Duty Cycle	
	2 Min ON / 18 Min OFF Cycle (non-US models)
Battery Power	
Fuses	
	1
Overall Width – 35" / 89 cm	
39" / 99 cm	
48" / 122 cm (optio	nal wing kit) 50 5" / 128 5 cm
Overall Length	89 5"
Length	83 5"
Deck Low (without mattress)	
( , ,	
Deck High (without mattress)	
8	
Trendelenburg	
Reverse Trendelenburg	
Head Section	
Knee Section	54°
Foot Section	10°
	(Angles have $2^{\circ}$ +/- variance)
Bed Weight	
(Weight depends on options on the he	ed)
Ontional IV Pole Weight	$3 \ln (1 k \sigma)$
Ontional Traneze Weight	80 lbe / 26 kg

Weight Capacity -Bed	
Optional IV Pole	
Optional Trapeze	
(Exceeding these limits will void the warranty)	C



**WARNING:** Exceeding the weight capacity and/or working load listed in the specifications could result in patient or user injury as well as damage to equipment or other property.

# **Unpacking and Set-Up Instructions**

#### **Unpacking/Parts Breakdown**

Inspect for any signs of freight damage. If obvious damage is detected, contact the freight company and file a damage complaint. It may be necessary to take pictures of the damage. After visual inspection make sure all of the proper components have been received.

Items enclosed in the box:

Bed Headboard Footboard Posts (2) Headboard Posts (2) 3/16" Allen Screws (4) 1/2" Screw (8) Side Rails Mounts (2) Mattress Bar & Locking Pin Side Rails (2)



Tools required for assembly:

Phillips Screwdriver 3/16" Allen Wrench 2- 15/16" Wrench 1/2" Socket Wrench 2- 9/16" Wrench 7/16" Wrench

DO NOT discard any packing material until all components are accounted for and are in good condition.



**WARNING:** Failure to follow the set-up instructions could result in patient or user injury as well as damage to equipment or other property.

#### Bed Set-Up

1. Remove side rails from under the bed. Remove packaging wrapped around the side rails and inspect for damages.

The head section is placed upside down on the foot section. The headboard and footboard are placed between the two sections. Separate these pieces and inspect for damages.

Remove the two zip ties that are holding down the deck sections to the frame on each side of the bed.



2. To assemble the bed, place the head section and foot section facing each other.

To put the two sections together, lift up on the foot section and place on the shoulder bolt that is connected to the head section.



**WARNING:** During set-up, DO NOT remove the shoulder bolt on the center joint of the frame. It



allows one side of the frame to slide out when ready to lift the frame apart. Failure to follow this warning could result in patient or user injury as well as damage to equipment or other property.

- 3. Locate the 3 5/8" bolts, washers and nuts. Place the bolt and washer together, then insert through the head section and then through the foot section of the bed. Add the washer and Nylock nut to complete the bed frame assembly. Secure tightly using 15/16" wrenches.
- 4. Plug in power cord, foot control, hand control and battery cord into the appropriate outlets.





5. Plug in actuator cable to the appropriate marked outlets on the control box.



6. Attach the two sections with a 3/16" Allen wrench. Put the bolts in through the two sections with the washer between the two sections. Then secure the nuts tightly with the 9/16" wrench.



7. Attach the foot controls to the foot section of the bed. The bolts and nuts are attached to the foot bumper. Using a Phillips screwdriver and 7/16" wrench, remove bolts and place foot controls in place. Then secure the nuts tightly and plug the controls in.



8. Plug the bed into a 120V AC grounded outlet. At this point, the bed should be fully functional. Using the hand control, check the function of each button to make sure that the bed is functioning correctly. If for some reason the bed is not working, review these steps while checking the connections of the electrical components.



**WARNING:** To avoid electrical shock when plugging this bed into the wall outlet, only use grounded or hospital grade outlets.



**WARNING:** Follow EMC guidelines and safety precautions when the bed is connected to powered source (see table of contents).

Radio wave sources such as radio stations, TV stations, amateur radio (HAM) transmitters, two-way radios and cellular phones can affect this bed. Following the warnings listed for electromagnetic interference should reduce the chance of the bed's unintended movement that could result in serious injury.

#### Headboard and Footboard Set-Up

The longer posts are intended for the headboard. Locate the Phillips head screws (8) and the provided Allen wrench to attach the posts to the headboard and footboard.

To attach the posts to the headboard and footboard:

- 1. Put the screws through the two holes on each post.
- 2. Attach the post to the board using a Phillips screwdriver and the Allen wrench.

#### Side Rail Set-Up



**WARNING:** It is recommended to have the side rails upright at all times while the patient is in the bed. However, the ultimate decision lies with the medical personnel who are on site and can fully evaluate all factors.

The side rails are intended to fold down away from the center of the bed.





**WARNING:** If the side rails are not secured in the proper place, entrapment to the patient may occur. Bed rail entrapment is a serious health risk that can result in serious injury or even death. Sizewise recommends the care provider be mindful of the FDA guidelines relevant to bed rail entrapment, as serious injury can result. These guidelines can be found on the FDA website. It is the care provider's ultimate decision whether or not to use bed rails with the patient.



To attach the side rails to the bed:

- 1. Locate the side rail mounts. These are shipped inside a small box. Remove the three bolts and washers from the mount.
- 2. The holes on the bed deck have been pre-drilled to make the alignment of the mount easier to put in place. After putting the side mount in place, put the bolts and washers through the holes (A) then secure using a 1/2" socket wrench.
- 3. Slide side rail into mount (B) and secure underneath with the push pin (c) located underneath the bed.



**WARNING:** A fall may occur if side rail bolts are not secured properly or not in place causing harm to the patient and/or care provider.

# **Operating Instructions**

#### **Foot Controls**

The foot controls are located at the foot end of the bed. The controls have individual lock out functions as well as a master lock out switch. Locking out the specific function or all functions will disable the function on the hand control and foot controls. If a button is pushed while the function is locked out, a beep will sound for notification that an unauthorized operation has been selected.



The switches perform the following operations:

- A. Raises and lowers the head section
- B. Raises and lowers the bed
- C. Raises and lowers the foot section
- D. Operates Trendelenburg and Reverse Trendelenburg
- E. Master switch to disable all functions of the bed

#### Hand Control

These instructions are for the general functions of the bed; any special or unique functions will be referenced to in different sections of this manual.

Make sure that the bed is correctly positioned and connected to a grounded 120V AC outlet.



**WARNING:** Once the bed is positioned correctly, lock casters. Failure to do this could result in patient and/or user injury as well as damage to equipment or other property.



**WARNING:** Electrical shock or malfunction may occur if the hand control cord is pinched or frayed. Keep the cord away from moving parts.

The buttons perform the following operations:

- A. Raises the head section
- B. Lowers the head section
- C. Raises the bed
- D. Lowers the bed
- E. Latches the knees
- F. Lowers the knees
- G. Trendelenburg (feet higher than head)
- H. Reverse Trendelenburg (head higher than feet)



#### **Operation of Bed**



**WARNING:** Failure to heed the warnings pertaining to the operation of the bed could result in patient and/or user injury as well as damage to equipment or other property.

Never work under the bed while it is in operation.

Casters will move/roll when the bed is in motion. Stand clear of the bed frame before operating.

Keep fingers and arms away from rotating parts when mechanisms are moving.

Operating this bed with any part of the body in the frame can result in injury. Stand clear of the bed frame before operating.

Stand clear of the bed during operation due to minimum floor clearance on all sides of the bed.

The bed is for indoor use only. Only operate the bed on a flat surface.

DO NOT use the bed near an open flame or an extreme heat source.

This bed is not intended for use in high moisture areas (e.g. showers, pool therapy), or extreme temperature environments.

Use only parts, accessories and adapters authorized by the manufacturer.

DO NOT use the bed with any unintentionally missing or abnormal parts.

Remove the hand control when the patient is unattended.



**WARNING:** Make sure all cords are properly positioned before operating the bed. Failure to do so could result in electrical shock and serious injury.

Never work on a bed while it is plugged into an electrical outlet.

DO NOT use the bed if the power cord is cut, frayed or loosely connected to the bed.

The bed is an electrically powered mechanism. Electrical hazard may occur if the bed is plugged into inadequate power supply. Make sure the bed is plugged into a 120V grounded outlet.



**HAZARD:** Never let fingers or other body parts come between moving parts when operating the bed. Doing so may cause a pinch or crush type injury.

# **Proper Use of the Bed**



**WARNING:** Follow the instructions for assisting patients in and out of the bed to avoid a fall or injury to the patient and/or care provider.

To get in the bed, position the bed at the proper height by following these steps:

- 1. Lower the side rails as desired.
- 2. Have the patient stand next to the bed where he/she is planning to sit with the back of the patient's legs or buttocks next to the bed.
- 3. Using the hand control, raise or lower the entire bed, positioning the bed so the top of the mattress is even with the lower buttocks of the patient.
- 4. Have the patient sit on surface and recline comfortably.

To get out of the bed, position the bed at the proper height by following these steps:

- 1. Using the hand control raise or lower the entire bed.
- 2. Firmly plant feet on the ground.
- 3. Have patient slowly rise to standing position.

This will prevent the patient from "dropping" down onto the mattress, causing stress on the center joint of the bed.

It is not recommended to use the head or foot section functions to assist the patient in and out of the bed, damage to the bed may occur.

#### **Reaching or Leaning**



**WARNING:** Reaching or leaning affects the patient's center of balance. Follow the instructions for patients reaching or leaning from the bed to avoid a fall or injury to the patient and/or care provider.

Have the patient avoid reaching or leaning over the side of the bed. Have the patient ask for help or use a device to extend his/her reach.

Never allow the patient to reach with both hands. In doing so, the patient may not be able to catch himself or herself to prevent a fall.

If the patient must reach or lean from the bed, the patient should steady himself or herself by firmly grasping a side rail with one hand.

#### Side Rails

To Fold Down:

Push button as indicated in the picture (A) to fold down. The side rails rotate away from the center of the bed.

The side rails are designed to move with the bed as it is raised and lowered.



**WARNING:** It is recommended to have the side rails upright at all times while the patient is in the bed. However, the ultimate decision lies with the medical personnel who are on site and can fully evaluate all factors.



To Remove:

Pull pin as shown in picture (B) located underneath the bed. Then pull rail outward to remove (C). When putting the rail back onto the bed, be sure to secure it with the pull pin.







**WARNING:** An injury may occur if the side rail pins are not secured properly, or not in place, causing harm to the patient and/or care provider.





**WARNING:** If the side rails are not secured in the proper place, entrapment to the patient may occur. Bed rail entrapment is a serious health risk that can result in serious injury or even death. Sizewise recommends the care provider be mindful of the FDA guidelines relevant to bed rail entrapment, as serious injury can result. These guidelines can be found on the FDA website. It is the care provider's ultimate decision whether or not to use bed side rails with the patient.

Never try to move the bed by the side rail. The side rails may come loose or break.

The side rails are not designed to bear the full weight of the patient. The safe working load for each side rail has been determined to be 150 lbs. (68 kg).

The side rails were tested to 60601-2-38 (28.4.102 and 28.4.103). These rails also have been tested and comply with patient entrapment rules and regulations (23.101). See Safety Tips Section on Bed Entrapment (see table of contents).



**WARNING:** Exceeding the 150 lb. (68 kg) weight capacity of the side rails could result in patient and/or user injury as well as damage to equipment or other property.

#### **Transfers**



**WARNING:** Follow the instructions for transferring patients to avoid a fall or injury to the patient and/or care provider.

Transfers require good balance and agility and are very dangerous. The care provider should learn how to position the body and support himself or herself during a patient transfer.

The care provider should work with the patient's doctor, nurse or therapist to learn safe transfer methods.

Provide help to the patient until he or she knows what can cause a slip or fall and how to avoid doing so. Never let the patient maneuver into or out of the bed without assistance until it is confirmed that the patient can do so safely.

Position the bed at an elevation comfortable to the patient and/or care provider.

Bring the top deck to a flat position.

Lock brake and steer casters.

Lower the side rails.

Make sure the equipment the patient is being transferred to is stable and will not slide away from the patient and/or care provider during the transfer.

### Features

#### Casters

#### **Steer Casters**

At the foot section there are lock and steer casters. When locked the bed can still maneuver but the casters will not swivel, this makes them the steering casters. Press down on the pedal to lock and lift up on the pedal to unlock. When one pedal on the head section caster is pressed or lifted both head section casters will be activated.



#### **Locking Casters**

At the head section there are locking only casters. When locked, the bed cannot be moved. Press down on the pedal to lock and lift up on the pedal to unlock. When one pedal on the foot section caster is pressed or lifted, both head section casters will be activated.



WARNING: While the patient is in the bed, it is recommended to lock the casters to reduce risk of injury to the patient and/or care provider.

To avoid and reduce risk of a tripping injury to the patient and/or care provider, align the casters with the bed.

#### **Connection of Electrical Components**

Should it become necessary to remove any of the cables from the control box, the diagram below will assist in finding the appropriate cables.

The diagram also indicates the fuse placement. Use 4 amp time delay fuses if they need to be replaced.

- A. Main Power
- B. Ground Wire
- C. Battery Back-Up (if equipped)
- D. Hand Control
- E. Head Actuator
- F. Bed Head Actuator
- G. Bed Foot Actuator
- H. Foot Actuator
- L Foot Control Box



#### **Emergency Battery Backup**

In case of power failure the emergency battery backup will operate the bed. Use only in emergency situations, the battery backup is not designed for continuous use. The battery will recharge itself while the bed is plugged into a hospital grade or grounded outlet.

This bed is equipped with two 5 amp 12V sealed lead-acid (gel) batteries (total 24V). New batteries, or batteries stored for a long time, may take more time to charge. Keep the battery near room temperature when charging.

Nominal Voltage		12V
Rated Capacity (20 Hour Rate)		5Ah
Dimensions	Length	3.54 in (89.9 mm)
	Width	2.74 in (70.1 mm)
	Height	3.98 in (101.1 mm)
	Total Height	4.21 in (106.9 mm)
Approximate Weight		3.09 lbs. (1.4 kg)

Battery Characteristics:	Capacity*		20 Hour Rate (0.25A)	5Ah
	25°C (77°F)		10 Hour Rate (0.47A)	4.65Ah
			5 Hour Rate (0.85)	4.25Ah
			1 Hour Rate (3.00A)	3.00Ah
	Internal Re	esistance	Fully Charged Battery	Approx. 50
	(milliohms	3)	25°C (77°F)	
	Temperatu	re	40°C (104°F)	102%
	Dependenc	cy	25°C (77°F)	100%
	of Capacity		0°C (32°F)	85%
	(20 Hour Rate)		-15°C (5°F)	65%
	Self-Discharge		Residual Capacity After	91%
	25°C (77°F)		Standing 3 Months	
			Residual Capacity After	82%
			Standing 6 Months	
			Residual Capacity After	64%
			Standing 12 Months	
	Charge	Cycle Use	Initial Current	1.75A
	Method	(Repeating		or smaller
	(Constant	Use)	Control Voltage	14.5-14.9V

\*The above characteristics data are average values obtained within three charge/discharges cycles, not the minimum value.

Control Voltage

The specifications and characteristics of the battery are from the manufacturer's guidelines sheet. If the battery needs to be changed, follow the manufacturer's specifications listed in this section as well as the information listed in the Specifications section (see table of contents).

Float Use

Voltage)

13.6-13.8V



**WARNING:** Failure to follow the provided battery specifications could result in patient and/or user injury as well as damage to equipment or other property.

#### **Serial Number Location**

The bed has a manufacturer serial number, and a Sizewise Rentals LLC serial number. The serial numbers are located at the foot of the bed.



Serial Number

#### 48" Deck Wing Kit Installation

Items enclosed in the kit: 28.5" Wings (4) 9.5" Wings (4) End-Plates (16) Self-Tapping Torx Head Screws (32) 5/16" x 2" Button Head Socket Cap Screws 5/16" Nylon Lock Nuts

Tools required for assembly: #30 Torx Bit 3/16" Allen Wrench 1/2" Wrench

DO NOT discard any packing material until all components are accounted for and are in good condition.



**WARNING:** Failure to follow the set-up instructions could result in patient or user injury as well as damage to equipment or other property.

1. Remove black caps from the deck.



- 2. Slide wings onto deck. The wings should be placed on the deck so the mattress clip is on the bottom side of the wing.
- 3. Place end-plate on the ends of the wings.

4. Secure end-plate with the Self-Tapping Torx head screw using #30 Torx Bit.

5. Place the 5/16" Button Socket Head Cap Screws in the holes where the side rail mounts would be if the deck was 39".

6. Using a 3/16" Allen Wrench and 1/2" Wrench, place the side rail mounts on the bed. To mount, place side rail mount underneath bed while aligning the holes. Place bolts through holes as shown. Slide side rail into mount.











#### IV Pole

The IV pole can be placed in any of the four accessory attachment points on the bed. They are located at the four corners of the bed, two at the head section and two at the foot section. The weight capacity of the IV pole is rated at 50 lbs. (22 kg).





**WARNING:** If the weight capacity of the IV pole is exceeded, it could result in patient and/or user injury as well as damage to equipment or other property.

#### Trapeze Assembly

This trapeze is rated with an 850 lb. (385 kg) weight capacity.



**WARNING:** If the weight capacity of the trapeze is exceeded, it could result in patient and/or user injury as well as damage to equipment or other property.



**HAZARD:** Pay close attention to pinch points on the bed to avoid injury to the patient and/or care provider.



WARNING: Do not attempt to install, perform maintenance, or use this product without first reading and understanding these instructions and accompanying documents such as, the User Manual, Technical Manual, and Work Instructions. If you do not understand these instructions, or documents referenced, contact Sizewise at 1-800-814-9389.



WARNING: Do not attempt to install, repair, or remove the trapeze, single pole patient assist, or any other overhead components/devices while bed is occupied.



WARNING: Before positioning patient on bed, verify all components are secure after adjustments, repairs, or servicing of the trapeze, single pole patient assist, or any other overhead components/devices.



WARNING: Use only parts, accessories and adapters authorized by Sizewise.

Tools required for assembly: 2-9/16" wrenches



- 1. Attach the end posts into the appropriate brackets on the head and foot sections of the bed.
- 2. Place the overhead beam into the slots on top of each end post.



NOTE: Be sure to place the holes facing upward on the overhead beam.

3. Insert the four 3/8" bolts (2 on each side) and tighten the nuts using a 9/16 wrench.





- 4. Attach the sliding saddle to the overhead beam. Move the saddle until the pin is secured into one of the holes on the overhead beam.
- 5. Place the Clevis Pin through the sliding saddle, securing the chain between the two sides of the saddle, as shown in the picture.
- 6. After securing the trapeze bar, the saddle can be repositioned into the appropriate location without removing the Clevis Pin.



# Seven Zones of Bed Rail Entrapment

If the patient would have any clinical conditions that could result in risk of falling or improperly lying in bed, the bed should be left at its lowest setting and in flat position when not attended. Sizewise recommends the use of bed rails if they are available. There are seven zones of bed rail entrapment.



**WARNING:** Bed rail entrapment is a serious health risk that can result in serious injury or even death. Sizewise recommends the care provider be mindful of the FDA guidelines relevant to bed rail entrapment, as serious injury can result. These guidelines can be found on the FDA website. When using an Air Therapy system the care provider is responsible for ensuring the mattress properly fits the bed frame. It is also the care provider's ultimate decision whether or not to use bed rails with the patient.

Zone 1: Within the Rail



This bed complies with IEC 60601-2-38 standard for bed rail entrapment. Below are the specifications of that standard. This was taken from the 60601-2-38 Amend. 1 IEC 1999.



DESIGNATOR	DESCRIPTION DIMENSION			
А	Smallest dimension between elements inside	$e \leq 120 \text{ mm}$		
	the perimeter of the SIDE RAIL in its			
	raised/locked positions or perimeters created			
	between the SIDE RAIL and fixed parts of			
	the BED.			
В	Thickness of NORMAL USE mattress.	Specified by th	e manufacturer	
С	Height of the top edge of the SIDE RAIL	> 220	) mm	
	above the mattress (see B) without			
	compression.			
D	Distance between segmented SIDE RAIL	$\leq$ 65 mm		
	with the MATTRESS SUPPORT Or			
	PLATFORM in the flat position. > 235 mm			
E	Smallest dimension of any accessible	$\leq$ 65 mm		
	opening between the SIDE RAIL and the Or		Dr	
	MATTRESS SUPPORT PLATFORM in	> 235 mm		
	the flat position.			
F	Smallest dimension of any accessible	If D or $E >$	If D or $E \le 60$	
	opening between the SIDE RAIL and the 235 mm then mm th		mm then $F \leq$	
	MATTRESS SUPPORT PLATFORM in $F \le 60 \text{ mm}$ 120 m		120 mm	
	the flat position.			
G	Total length of the SIDE RAIL or sum of	$\sum Gx > half th$	e length of the	
	the length of segmented SIDE RAILS on	MATTRES	S SUPPORT	
	one side of the BED.	PLATFORM		

# **Safety Tips**

#### **Electrical Leakage Test Point**



**CAUTION:** If the ground is not properly connected to the electrical leakage test point a false reading may occur.

In the event the electrical leakage test is done, the proper location for this test is on the main frame by the center joint on either side of the bed. Labeling on the main frame will indicate proper location.



#### Acceptable Levels of Leakage Current

Allowable limits for leakage current measurements for medical devices depend upon function and intentional contact with patient. Limits are required for UL 60601-01, IEC 60601-1 and CSA C22.2 No. 601.1. The maximum allowed leakage readings for the SW Low Boy® is 300 micro amps.

#### **Electromagnetic Compatibility (EMC)**

The SW Low Boy<sup>®</sup> has been tested for compliance with the EMC requirements. The guidelines in this section will help to ensure the medical equipment will meet the requirements of the standard.



**WARNING:** Medical equipment should not be used, stacked or located on or around equipment that may create electromagnetic interferences.

#### Emissions

The SW Low Boy<sup>®</sup> has been type tested and has passed the requirements of CISPR 11. Observe the following recommendations to minimize radio frequency emissions in this section and the Electromagnetic Interference section.

#### Immunity

The SW Low Boy® has been stringently tested for susceptibility to electromagnetic radiation over the frequency range 80 MHz to 2.5 GHz. The test was conducted on this bed and passed the requirements of IEC 61000-4-3.

All pins of connectors have passed ESD testing.

#### List of Cables and Accessories

Replacement parts, such as cables and accessories, must be purchased through Sizewise to ensure proper compliance requirements.



**WARNING:** Using other manufacturer's cables and accessories may affect EMC performance. Unauthorized use of these items will void warranty and could result in patient and/or user injury as well as damage to equipment or other property.

The use of cables or accessories other than those for which the bed was designed or tested can significantly degrade emissions and immunity performance.

Cables and Accessories	Specifications and Requirements		
Hand Control	Length: 9.51 feet (2.9 meters)		
	105°C (221°F)		
	24 AWG Strand		
	PVC Insulated		
	Standards: UL AWM Style 2464, NEC Type CMG/cUL CEC		
	Type CMG FT4, CSA AWM I A, EU CE		
Power Cord	Hospital Grade		
	Length: 16 feet (4.88 meters)		
	SJT 16/3C 60°C (140°F)		
	End Types: YP-18L-2 and YC-12		
	UL and CSA certified 3 prong IEC C13 power cord receptacle.		
	Built to the IEC 60320-C13 standard. Rated 13A 125V/250V.		
	This IEC C13 power cord receptacle is fully molded with a low		
	profile ergonomic design and fully RoHS and REACH		
	compliant.		

#### **Electromagnetic Interference (EMI)**

The SW Low Boy® has been tested and is intended for safe use with other components compliant to IEC 601 standards for medical devices. The bed can cause interference with non-601 regulated equipment and/or other non-601 regulated equipment can cause interference with the bed. This section is in accordance with IEC 60601-1-2 section 5.2.2.



**WARNING:** Radio wave sources such as radio stations, TV stations, amateur radio (HAM) transmitters, two-way radios and cellular phones can affect this bed. Following the warnings listed for electromagnetic interference should reduce the chance of the bed's unintended movement that could result in serious injury.

DO NOT turn ON hand-held personal communication devices, such as citizens band (CB) radios and cellular phones while the bed is turned ON.

Be aware of nearby transmitters, such as radio or TV stations, and try to avoid coming close to them.

If unintended movement occurs, turn the bed OFF as soon as it is safe.

Adding accessories, components or modifying this bed may make it more susceptible to interference from radio wave sources (there is no easy way to evaluate their effect on the overall immunity of the bed).

Report all incidences of unintended movement to the bed's manufacturer and note whether there is a radio wave source nearby.



**CAUTION:** It is very important to read the information regarding the possible effects of electromagnetic interference on the SW Low Boy®.

#### Electromagnetic Interference (EMI) from Radio Wave Sources

The SW Low Boy® has been tested and is intended for safe use with other components compliant to IEC 601 standards for medical devices. The bed may be susceptible to electromagnetic interference (EMI), which is energy that is reflected or emitted from sources such as radio stations, TV stations, amateur radio (HAM) transmitters, two-way radios and cellular phones in the form of electrical and magnetic waves that travel through space. The interference (from radio wave sources) is not likely but in extreme circumstances can cause this bed to move by itself or move in unintended directions. It can also permanently damage the bed's control system. The intensity of the interfering EMI energy can be measured in volts per meter (V/m). The bed can resist EMI up to a certain intensity. This is called its "immunity level".

The essential performance of this bed is to adjust the bed, using the hand control or foot control box, into various positions, such as bed up/down, head up/down, foot up/down, Trendelenburg and Reverse Trendelenburg with no interference.

**GUIDANCE AND MANUFACTURER'S DECLARATION** 

Company:	Wheelchairs of Kansas
Model:	Low-Boy Bed
<b>Control Number:</b>	3107769

# Table 201 Guidance and Manufacturer's Declaration – Emissions Equipment and Systems that are NOT Life-Supporting

The SW Low Boy® is intended for use in the electromagnetic environment specified below. The customer, or user, of the bed should ensure that it is used in such an environment.

<b>Emissions Test</b>	Compliance	Electromagnetic Environment Guidance
<b>RF</b> Emissions	Group 1	The bed uses RF energy only for its internal function.
CISPR 11		Therefore, its RF emissions are very low and are not
		likely to cause any interference to nearby electronic
		equipment.
<b>RF</b> Emissions	Class A	The bed is suitable for use in all establishments other
CISPR 11		than domestic and those directly connected to the public
Harmonics Emissions	Class A	low-voltage power supply network that supplies
IEC 61000-3-2		buildings used for domestic purposes.
Voltage Fluctuations/	Complies	
Flicker		
IEC 61000-3-3		

# Table 202 Guidance and Manufacturer's Declaration – Immunity All Equipment and Systems

The SW Low Boy® is intended for use in the electromagnetic environment specified below. The customer, or user, of the SW Low Boy® should ensure that it is used in such an environment.

Immunity Test	IEC 60601	Compliance	Electromagnetic Environment
	Test Level	Level	Guidance
ESD	±6kV	А	Floors should be wood, concrete or
IEC 61000-4-2	Contact		ceramic tile. If floors are synthetic, the
	±8kV Air		r/h should be at least 30%.
EFT	±2kV Mains	А	Mains power quality should be that of a
IEC 61000-4-4	±1kV I/Os		typical commercial or hospital
			environment.
Surge	±1kV	А	Mains power quality should be that of a
IEC 61000-4-5	Differential		typical commercial or hospital
	±2kV		environment.
	Common		
Voltage Dips/Dropout	>95% Dip	А	Mains power quality should be that of a
IEC 61000-4-11	for		typical commercial or hospital
	0.5 Cycle		environment. If the user of the bed
			requires continued operation during
	60% Dip for		power mains interruptions, it is
	5 Cycles		recommended that the bed be powered
			from an uninterruptable power supply or
	30% Dip for		battery.
	25 Cycles		
	>95% Dip		
	for		
	5 seconds		
Power Frequency	3A/m	A	Power frequency magnetic fields should
50-60Hz			be that of a typical commercial or
Magnetic Field			nospital environment.
IEC 61000-4-8			

# Table 204 Guidance and Manufacturer's Declaration – Immunity Equipment and Systems that are NOT Life-Supporting

The SW Low Boy® is intended for use in the electromagnetic environment specified below. The customer, or user, of the bed should ensure that it is used in such an environment.

Immunity Test IEC 60601		Compliance	Electromagnetic Environment	
•	Test Level	Level	Guidance	
			Portable and mobile communications equipment should be separated from the bed by no less than the distances calculated/listed below:	
			D=(3.5/V1)(Sqrt P)	
			D=(3.5/V1)(Sqrt P) 80 to 800 MHz	
Conducted RF IEC 61000-4-6	3 Vrms 150 kHz to 80 MHz	(V1)Vrms = 3	D=(7/V1)(Sqrt P) 800 MHz to 2.5 GHz	
Radiated RF IEC 61000-4-3	3 V/m 80 MHz to 2.5 GHz	(E1)V/m = 3	Where P is the max power in watts and D is the recommended separation distance in meters.	
			Field strengths from fixed transmitters, as determined by an electromagnetic site survey, should be less than the compliance levels (V1 and E1).	
			Interference may occur in the vicinity of equipment containing a transmitter.	

# Table 206 Recommended Separation Distances between portable and mobile RGCommunications equipment and bed.

#### Equipment and Systems that are NOT Life-Supporting

Recommended Separations Distances for the SW Low Boy®: The SW Low Boy® is intended for use in the electromagnetic environment in which radiated disturbances are controlled. The customer, or user, of the SW Low Boy® can help prevent electromagnetic interference by maintaining a minimum distance between portable and mobile RF Communications Equipment and the bed, as recommended below, according to the maximum output power of the communications equipment.

D=(3.5/V1)(Sqrt P) D=(3.5/E1)(Sqrt P) 80 to 800 MHz D=(7/E1)(Sqrt P) 800 MHz to 2.5 GHz

<b>Compliance Level</b>	Cond RF 3	Rad RF-800 MHz 3	Rad RF – 2.5 GHz
0.01	0.12	0.12	0.23
0.1	0.37	0.37	0.74
1	1.17	1.17	2.33
10	3.69	3.69	7.38
100	11.67	11.67	23.33

#### **General Safety**



**WARNING:** The bed is to be used in accordance with each facility's policies and procedures.



**CAUTION:** Possible fire hazard when used with oxygen administering equipment other than the nasal, mask or 1/2 bed length type tent. Oxygen tent should not extend below the mattress support level. Lock hand control at foot of bed when using oxygen administering equipment.



**WARNING:** Electric shock may occur when plugging the bed into the wall outlet. Use ONLY grounded or hospital grade outlets.

DO NOT use the bed if the power cord is cut, frayed or loosely connected to the bed.

#### **Pinch Point**

Watch for pinch points on the bed, which are indicated by the pinch point label.





**HAZARD:** Pay close attention to pinch points on the bed to avoid injury to the patient and/or care provider.

Pinch points have minimal clearances between two moving parts that fail to maintain a clearance of  $\leq 8$ mm or  $\geq 25$ mm.

Pinch points are present on both sides of the bed between the bed deck and the bed frame.



Pinch points are also present between the bed deck and each of the four casters.



#### <u>Transport</u>



**WARNING:** During transport, use caution so the bed does not tip or overbalance. Failure to do so could result in patient and/or user injury as well as damage to equipment or other property.



**CAUTION:** The bed needs to be stored, transported and operated in a temperature range of  $-5^{\circ}$ C to  $45^{\circ}$ C (23°F to 113°F).

DO NOT expose the bed to humidity greater than 95%.

It is not recommended to transport a patient when the bed is in the Trendelenburg or Reverse Trendelenburg positions.

Generally, as the load increases, the risk of instability goes up.

Lower the foot section and head section to increase stability.

Lower the bed deck height approximately 12"-15" (30.5 cm - 38 cm) from the floor to increase stability.

Use and position of accessories may affect stability. DO NOT overextend IV poles or similar accessories and DO NOT overload accessories. If multiple accessories are in use, distribute them evenly from side to side or head to foot.

For inclines or thresholds, approach them moving forward or backwards, rather than sideways.

To help prevent overbalance or collision with hidden objects or people, DO NOT make sharp turns or turn the bed at high speeds.

The bed complies with the 60601 Threshold Test (21.6.102) and will go over a rectangular cross-section 20 mm high and 80 mm deep.

# **Cleaning Instructions**



**WARNING:** Before cleaning the bed, be sure to disconnect it from the wall outlet (power source). Failure to do so could result in electrical shock and could result in patient and/or user injury as well as damage to equipment or other property.

To minimize the negative impact of cleaning agents:

- Contact time must be monitored and kept to the required time identified on the manufacturer's instructions.
- All cleaning solutions must be diluted in accordance with manufacturer's instructions.

#### **Recommended EPA Registered Disinfectants:**

Wex-Cide 128 (Wexford Labs), EPA Reg. #34810-31

Equipment must be disinfected using an EPA registered, hospital-grade disinfectant, according to the manufacturer's recommendations for use.

#### **Recommended Stain Remover(s):**

Stain Away (ABC Compounding)

This stain remover is effective in removing most difficult stains and is intended to be used in its original concentration.

#### *Clostridium difficile* (C. diff) Prevention:

Clorox Germicidal Wipes (Clorox Professional Products Company), EPA Reg. #67619-12

These pre-moistened wipes meet the CDC's recommendations for *Clostridium difficile* (C.diff) bacteria, after the manufacturer's recommended "wet contact time".

- 1. Perform hand hygiene using soap and warm water, or hand sanitizer, and then put on disposable gloves and eye protection.
- 2. Use wipes to wipe the top and front of head/footboards, hand controls and cords, side rails and mattress top cover, making sure to wipe between the mattress and side rails.
- 3. Change wipes often to ensure that surfaces remain wet with disinfectant for the manufacturer's required contact time. Used wipes are to be discarded in the trash.
- 4. Remove disposable gloves and discard in the trash; perform hand hygiene using soap and warm water, or hand sanitizer, and then remove eye protection.

To reduce the discoloration of fabrics and degradation of the sleep surface lining, surfaces must be thoroughly rinsed with clean, fresh water to remove chemical residues immediately after the manufacturer's recommended "wet contact time" has been reached. The use of bleach-based solutions must be avoided whenever possible.

#### **General Patient Room Cleaning/Disinfecting**

Personal Protective Equipment should always be used as directed by the Material Safety Data Sheet for the disinfectant.

Prepare the disinfectant according to the manufacturer's recommendations.

Prepare a separate bucket of warm, fresh water to be used for rinsing the equipment after cleaning/disinfecting procedures are completed as instructed.

Inspect sleep surface for attachment straps that may be securing the sleep surface to the bed top deck and disconnect attachment straps.

For any active therapy based sleep surface, disconnect hoses from the control unit to prevent damage to control unit or hose connections.

Remove sleep surface from the bed to gain full access to bed top deck and internal surfaces of headboards, footboards and side rails.

Raise all bed functions to the highest position for easy access to all surfaces.

- Bed to highest position
- Head articulation to highest position
- Foot articulation to highest position

Disconnect the bed from all electrical power to avoid electrical shock.

All bed frame surfaces are to be wiped using a coarse cloth, dampened with the disinfectant solution, prepared as directed by the manufacturer's recommendations, to remove organic material and visible soil.

When cleaning components, such as hand and/or foot controls and areas where there are electrical connections and components, avoid excessive moisture to prevent damage.

Allow all bed surfaces to remain wet with disinfectant solution for the manufacturer's recommended contact time.

Rinse all surfaces with a clean cloth dampened with fresh water to remove chemical and organic residue.

After cleaning, all surfaces are to be wiped with a clean, dry cloth to remove any moisture or residue.

**NOTE:** Additional cleaning may be completed, as desired, with a mild soap solution and/or household cleaning products. Avoid using harsh chemicals, such as acetone or paint thinner, as they will damage the finish of the paint.

#### **Steam Cleaning**

This product may be steam cleaned to eliminate bacteria and/or bed bug infestations, if desired. When applying steam, avoid areas such as electrical connections and components including scale meters, scale system components, hand and/or footboard controls that may be damaged by being exposed to excessive moisture and/or heat.

Rinse all surfaces with a clean cloth dampened with fresh water to remove chemical and organic residue.

After cleaning, all surfaces are to be wiped with a clean, dry cloth to remove any moisture or residue.

#### **Bed Electronics and Hand Controls**

Electronic components (Electrical Control Module, electrical connections and motor box covers and hand controls) are to be wiped using a coarse cloth, dampened with the disinfectant solution, prepared as directed by the manufacturer's recommendations, to remove organic material and visible soil.

Avoid excessive moisture to prevent damage.

Allow the electrical components and hand control to remain wet with disinfectant solution for the manufacturer's recommended contact time.

Rinse all electrical components with a clean, dry cloth to remove any moisture or residue.

#### Sleep Surfaces (Including Mattress Bases and Top Covers)

**NOTE:** The use of bleach-based products/solutions will provide a higher concentration of the agent than is required to eliminate the bacteria and will increase the potential for damage to the fabric and the built-in protective barrier to fluid of the sleep surface.

**NOTE:** To reduce the discoloration of the sleep surface lining, surfaces must be thoroughly rinsed with clean, fresh water to remove chemical residues immediately after the required "wet contact time" has been reached.

- 1. Personal Protective Equipment should be used as directed by the Material Safety Data Sheet for the disinfectant.
- 2. Prepare the disinfectant according to the manufacturer's recommendations.
- 3. Inspect sleep surface for attachment straps that may be securing the sleep surface to the bed top deck and disconnect attachment straps.
- 4. For any control unit based sleep surface, turn OFF the control unit and disconnect from electrical power. Disconnect hoses from control unit to prevent damage to control unit or hose connections.
- 5. All surfaces of the mattress are to be wiped using a coarse cloth, dampened with the disinfectant, prepared as directed by the manufacturer's recommendations, to remove organic material and visible soil. When cleaning the mattress, special attention is to be given to sewn seams and folds in mattress fabrics.

- 6. Allow the mattress to remain wet with disinfectant solution for the manufacturer's recommended contact time.
- 7. Stains on the mattress may be treated using a mild stain remover, according to the manufacturer's recommendations, using a soft bristled brush.
- 8. Rinse all surfaces of the mattress with fresh water and clean cloth to remove chemical and organic residue.
- 9. After cleaning, all surfaces are to be wiped with a clean, dry cloth to remove any moisture or residue and allowed to air dry.

#### **Control Unit and Hand Control (if equipped)**

**NOTE:** Hand clean only. DO NOT place in sterilization room or chamber.

- 1. Personal Protective Equipment should be used as directed by the Material Safety Data Sheet for the disinfectant.
- 2. Prepare the disinfectant according to the manufacturer's recommendations.
- 3. Turn OFF the control unit and disconnect it from all electrical power to avoid electrical shock.
- 4. When cleaning the control unit, avoid excessive moisture especially in areas where there are electrical connections and components, to prevent damage.
- 5. All surfaces of the control unit and the power cord are to be wiped using a coarse cloth, dampened with the disinfectant solution, prepared as directed by the manufacturer's recommendations, to remove organic material and visible soil.
- 6. Allow the control unit to remain wet with disinfectant solution for the manufacturer's recommended contact time.
- 7. Rinse all surfaces of the control unit with fresh water and use a clean cloth to remove chemical and organic residue.
- 8. After cleaning, all surfaces are to be dried with a clean, dry cloth.

Control unit air filters must be cleaned weekly. Replacement of the control unit air filter is recommended every 6 months.

- 1. Remove the air filter located on the back of the control unit.
- 2. Clean with prepared disinfectant solution and allow to air dry.
- 3. Reinstall the filter when dry.

#### **Laundry Instructions**

If additional cleaning is necessary, top covers may be removed and laundered using standard hospital disinfectant/detergent. DO NOT use temperatures in excess of 120°F (49°C).

- 1. Set washing machine to Regular Cycle.
- 2. Pre-soak with disinfectant/detergent in cold water for 10 minutes. DO NOT USE HARSH SOLVENTS OR CLEANERS.
- 3. Main wash cycle: 15 minutes (time dependent on soil level).
- 4. Rinse cycle: 5 minutes, minimum.
- 5. Spin/Drain cycle: 5 minutes, minimum.

After washing, the mattress top cover is to be air dried or dried in a dryer at very low or no heat to protect it from heat related damage.

#### **Air Therapy Internal Mattress Components**

- 1. Prepare the disinfectant according to the manufacturer's recommendations.
- 2. Prepare a separate bucket of warm, fresh water to be used for rinsing the equipment after cleaning/disinfecting procedures are completed as instructed.
- 3. Using a clean cloth dampened with the disinfectant solution, wipe all internal mattress surfaces, including the air cells, and allow to remain wet for the manufacturer's recommended contact time.
- 4. Rinse all surfaces of the air cells with fresh water and clean cloth to remove chemical and organic residue.
- 5. After cleaning, dry the internal air cells with a clean, dry cloth.
- 6. After all mattress components are dry, reinstall the top cover.
- 7. Store the mattress in a clean environment until the next use.

**NOTE:** Only the outer cover of the mattress requires cleaning and maintenance. Disassembly of the support surface for the maintenance of internal components is not recommended. DO NOT use harsh solvents or cleaners. Special care should be used to not puncture the mattress with needles or sharp instruments. This may result in loss of integrity of the mattress cover or internal components.

#### **Optional Accessories**

#### **Battery Backup Units**

Turn OFF and disconnect the battery backup unit from all electrical power to avoid electrical shock.

All surfaces of the battery backup unit and the power cord are to be wiped using a coarse cloth, dampened with the disinfectant solution, prepared as directed by the manufacturer's recommendations, to remove organic material and visible soil.

Avoid excessive moisture to prevent damage.

Allow the battery backup unit to remain wet with disinfectant solution for the manufacturer's recommended contact time.

Rinse all surfaces with a clean cloth dampened with fresh water to remove chemical and organic residue.

After cleaning, all surfaces are to be wiped with a clean, dry cloth to remove any moisture or residue.

#### **Full-Frame Trapeze**

The entire frame of the trapeze is to be wiped using a coarse cloth, dampened with the disinfectant solution, prepared as directed by the manufacturer's recommendations, to remove organic material and visible dirt.

Allow the trapeze to remain wet with disinfectant solution for the manufacturer's recommended contact time.

Rinse the trapeze with a clean cloth dampened with fresh water to remove chemical and organic residue.

After cleaning, all surfaces are to be wiped with a clean, dry cloth to remove any moisture or residue.

If necessary, the trapeze frame may be steam cleaned.

#### **Cleaning Blood and Other Excretions:**

Blood and other excretions should be wiped up while wet, if possible. These substances are more difficult to remove once they have dried to surfaces. Dried blood and other excretions are to be removed using ample disinfectant solution in order to moisten the substance and make it easier to clean.

## **Maintenance**



**CAUTION:** The bed requires regular maintenance to uphold performance and avoid premature wear, damage and injury.

Check the items on this chart at the indicated intervals. If any of the items are loose, worn, bent or distorted, immediately have them checked and/or repaired by an authorized Sizewise Technician. Frequent maintenance and servicing will improve performance between each use and extend bed life. For long term use, the following maintenance chart should be followed:

	Three Months	Six Months
SW Low Boy®		
Side Rails		Х
Fasteners	X	
Frame		Х
Foam Mattress		Х
Casters	X	
Hand Control	X	
Actuators	X	
Batteries	X	
Power Cords	Х	

The following is an equipment safety checklist that can be used with the maintenance chart to maintain and service this product:

- $\Box$  Make sure the bed operates easily and freely and all parts work smoothly.
- □ Check for excess noise, vibration or a change in ease of use. These may be signs of a problem such as a need for lubrication, loose fasteners or damage to the bed.
- $\Box$  Plug bed into AC power.
- □ Verify each function operates fully on the hand control.
- □ Ensure side rails are installed and lock properly.
- □ Ensure brake/steer casters lock in place.
- □ Verify each function operates on battery power.
- □ Charge batteries 4-6 hours prior to first use.
- □ Ensure bed is clean/disinfected and patient ready.

Batteries may take additional maintenance, such as visual inspection every three months. When inspecting batteries look for any corrosion, leaking or bulging. Batteries should be replaced after 18 months, or sooner, depending on the care and usage.

The battery may require recycling in accordance with local laws. Contact a local recycling center for proper battery disposal or local regulatory authorities for more information.



**WARNING:** Never dispose of batteries in a fire because they may explode.

All power cords are fastened in a manner to keep them free from moving or pinching parts. At any time parts are replaced, all cords should be secured into proper position to prevent damage.

If a problem is detected, make sure to repair or adjust the bed before using it. Contact an authorized Sizewise technician to help find and correct the problem.

#### **Fasteners**



**WARNING:** Many of the screws and bolts used in the bed are special highstrength fasteners. Contact an authorized Sizewise technician to assist if finding the correct fasteners. If improper fasteners are used, they could result in patient and/or user injury as well as damage to equipment or other property.

Improper fasteners may fail. Use only screws and bolts provided by an authorized Sizewise representative.

If screws or bolts become loose, tighten them immediately.

If a problem is detected, make sure to repair or adjust the bed before using it.

#### **Storage and Disposal**

The bed should be stored in a dry location so that the components DO NOT become contaminated with moisture. If the bed is stored for any period of time, make sure it is adjusted properly and that all components are in working order before using the bed.



**CAUTION:** The bed needs to be stored, transported and operated in a temperature range of  $-5^{\circ}$ C to  $45^{\circ}$ C ( $23^{\circ}$ F to  $113^{\circ}$ F).

DO NOT expose the bed to humidity greater than 95%.

End-of life Sizewise products must be disposed of properly according to local laws and regulations. If your product contains a battery and / or electronics components, disposal of those components must be completed separate from standard waste disposal. Please contact Sizewise or your local authorities for disposal and recycling options.

# **Troubleshooting**



**CAUTION:** Only authorized personnel should engage in the troubleshooting process. Troubleshooting by unauthorized persons could result in personal injury or equipment damage.

#### The bed will not operate with all functions unresponsive:

- Ensure the bed is plugged into a power source.
- Ensure the hand control cable is properly connected and secured to the Electronic Control Module.
- Verify all switches on the foot control panel are set to the "Unlocked" position.
- Verify the "Master Switch" is set to the "Unlocked" position.
- Ensure all cables to the Electronic Control Module are properly connected and secure.
- Check the two (2) fuses within the Electronic Control Module and replace if necessary.

#### One function of the bed will not operate:

- Verify the switch on the foot control panel that corresponds to the non-operating function is set to the "Unlocked" position.
- Verify the "Master Switch" is set to the "Unlocked" position.
- Ensure all cables to the Electronic Control Module are properly connected and secure.

#### The bed will not operate off of battery power:

- Ensure the hand control cable is properly connected and secured to the Electronic Control Module.
- Ensure the connection between the batteries and the Electronic Control Module is secure.
- Verify the two (2) batteries are connected properly and secure.
- Check the inline fuse between the batteries and replace if necessary.
- If the bed will not operate off of battery power after completing the above actions, plug the bed into a power source and let charge for 24 hours.

**NOTE:** If the troubleshooting process does not solve the problem please contact a Sizewise representative for service.

# Warranty Information

#### Sizewise Rentals<sup>TM</sup>, LLC (Sizewise) Limited Warranty

Sizewise is dedicated to manufacturing and distributing equipment that provides solution-oriented approaches to exceed the clinical, comfort and safety needs of our customers. Sizewise is proud to offer to the original purchaser, the following warranties, effective February 20, 2012:

Model	Capacity	Frame	Welds	Electronics & Parts	Actuators
SW Low Boy™	850 lbs.(385 kg)	5 yr.	10 yr.	1 yr.	1 yr.

#### How to obtain Parts and Service

- 1. Contact Sizewise Parts and Service at 1-800-814-9389 to speak with a qualified specialist who can assist with troubleshooting, parts and repairs. The product model and serial identification numbers are required for service and parts. Parts can be expedited upon request for an additional fee. If on-site technical service is required, a qualified service representative will be dispatched.
- 2. If a product or part should be returned to Sizewise, a return authorization number (RA#) will be issued. The RA# will be valid for 21 days from the date it is issued.
- 3. If the problem is a result of defective material or workmanship, the product or part will be replaced or repaired at the discretion of Sizewise, at no charge to the customer.
- 4. For replacement or repair of a product or part not covered under this warranty, or if warranty is void, the standard rates will apply. Freight or delivery charges will be billed to the customer.
- 5. Sizewise products are identified by serial number. Removal of this number may void the warranty.

#### **Limitations and Exclusions**

- 1. Products that have been subject to negligence, abuse, improper storage or handling, improper operation, unauthorized modifications or damages beyond normal wear and tear, as determined by Sizewise, are not covered by this warranty.
- 2. If weight capacity on any such product is exceeded, the warranty will be void. Any unauthorized repairs to product/part, as well as tampering with any components, will void the warranty.
- 3. Parts or materials that are subject to normal wear resulting from the use of these products that must be replaced or repaired are excluded and are not covered by this warranty.
- 4. SUBJECT TO STATE SPECIFIC LAW, THIS WARRANTY IS EXCLUSIVE AND IN LIEU OF ALL OTHER EXPRESS OR IMPLIED WARRANTIES, INCLUDING BUT NOT LIMITED TO THE IMPLIED WARRANTY OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, AND SHALL NOT EXTEND BEYOND THE DURATION OF THIS WARRANTY. SIZEWISE SHALL NOT BE LIABLE FOR ANY CONSEQUENTIAL OR INCIDENTAL DAMAGES.
- 5. This warranty applies to the original purchaser only and is non-transferable.
- 6. Headboard, footboard and batteries are excluded from the one (1) year warranty.
- 7. Cleaning upholstery or fabrics with harsh chemicals, or bleach, outside the recommended cleaning guidelines may void the warranty.

#### **Manufacturer Disclaimer**

#### **General Information**

All specifications, equipment and prices are subject to change without notice. Sizewise reserves the right to make improvements from time to time. Photos and drawings are representative of the products and may vary slightly from actual production models. Some items photographed in this user's manual may include optional equipment. Contact or consult Sizewise to ensure proper equipment sizes, specifications and options.

#### **Trademarks and Patents**

SW Low Boy® is a registered trademark of Sizewise Rentals LLC.

Patent Pending for the SW Low Boy®.

#### Copyright

Copyright<sup>©</sup> 2012 by Sizewise Rentals LLC. All rights reserved.

No part of the contents of this manual may be reproduced, stored in a retrieval system or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without the written permission of Sizewise.



8601 Monrovia Street Lenexa, KS 66215

> 800-814-9389 sizewise.com

Sizewise is a registered trademark of Sizewise Rentals, LLC. All specifications, equipment, and prices are subject to change without notice. Photos and drawings are representative of the products and may vary slightly from actual production models.