

Evolution®



User Manual

Doc. #: _____ Rev. Date: _____ Rev.: _____

Sizewise®
Designed to heal

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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.

|  Warning/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. |
| 27008710, Rev. 1.0 | | |

Manufacturer's Label

| | | | | | | | |
|---|------------------------------------|---|--|---|--|---|---|
| Sizewise Manufacturing | Class I Electrical Equipment | ETL CLASSIFIED  US Intertek 3107769 |  MDR Class I Device IPX4 |  |  Type B | Model: Serial #: Manufacture Date: Battery: Duty Cycle: Weight Capacity: Electrical Rating: |  (01)000000000000(21)246195 |
| Legal Manufacturer: Raye's, Inc. d/b/a Sizewise Manufacturing 500 Commerce Pkwy, Hays, KS 67601 | | Medical Electrical Equipment Conforms to UL std. 60601-1, IEC std. 60601-2-38 | | | | | |
| 27008622, Rev. 1.0 | | | | | | | |

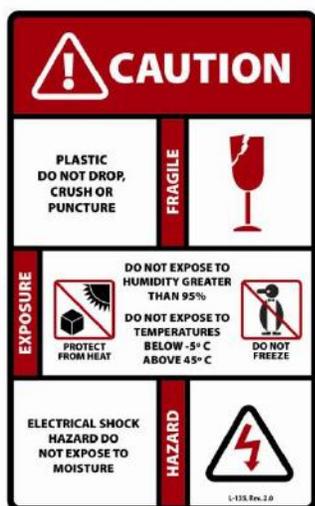
Type B
IPX4



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



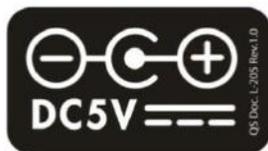
The pinch point is spacing between movable parts of the device which, in positions of normal use fail to maintain a clearance of $\leq 8\text{mm}$ or $\geq 25\text{mm}$.



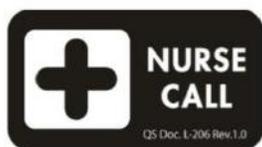
The hazards and warnings are indicated on the shipping container by this label.



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



Electrical Input



Nurse Call Outlet

Rechargeable Battery





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 Evolution™. 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

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.
- Any change to the specifications can result in malfunction or damage to the SW Evolution™ and Rest Secure System™.

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 (page 45).
- 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.
- 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.

- 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.
- Electric shock may occur when plugging the SW Rest Secure System™ into the wall outlet. Use ONLY grounded or hospital grade outlets.
- DO NOT use the SW Rest Secure System™ if the power cord is cut, frayed or loosely connected to the bed.
- To ensure reliable functionality, the battery reserve should only be used as a temporary power source until AC power is restored. When the battery reaches 15% charge, the unit should be plugged into AC.

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 or lock controls at the end of the bed 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
- The bed is to be used in accordance with each facility's policies and procedures.

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.
- 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.
- Resistance reading must be under 0.20 ohms. All leakage reading must be less than 50 micro amps to pass. Never attempt to repair damaged power cords, cables, or actuators. This could create an electrocution hazard. All power cords must be replaced if damaged.

- 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 Evolution™ and Rest Secure System™.
- 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°C to 45°C (23°F to 113°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 documents referenced, 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.

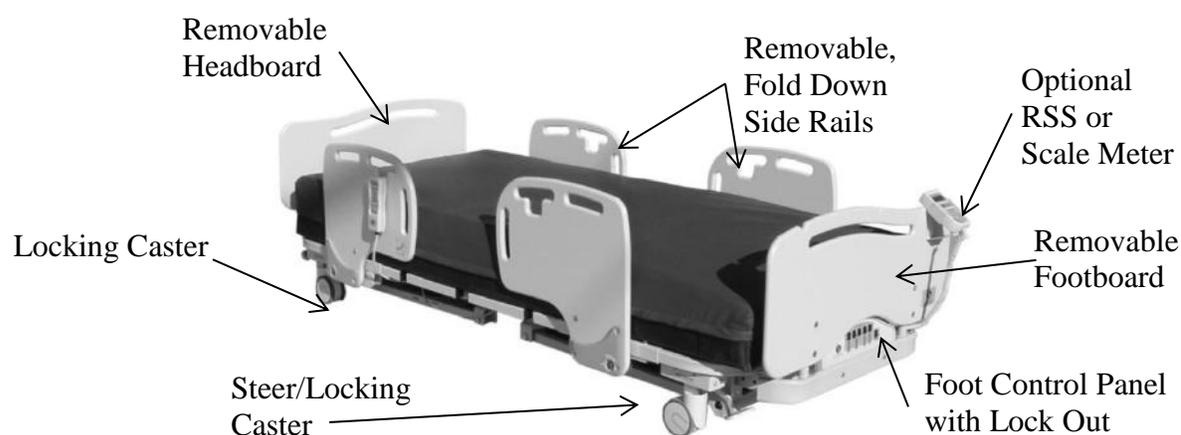
Troubleshooting

- 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 Evolution™

The SW Evolution™ is an electric bed. Its purpose is to assist the care provider by reducing the chance of 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 9" (23 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, low air loss mattress and 2 additional side rails.



Description of the optional SW Rest Secure System™ (RSS)

The purpose of the SW Rest Secure System™ is to alert the care provider that a patient is attempting to exit the bed or is in an immediate risk of falling in settings where continuous surveillance of a patient is not possible. This is achieved by precisely monitoring a change in patient position. When the patient makes an attempt to get out of bed an alarm will sound either at the hand control or activate the nurse call signal.

The SW Rest Secure System™ also has an integrated scale that utilizes a transducer based system to accurately record the weight of the patient while in the bed. It also has the capability to record the weight automatically every day for 30 days at user-defined intervals.

Another feature is the protocol timer, which can be set for 1, 2 or 4 hours, to alert the care provider that the patient needs attended to or checked on. It has the capability to alert the care provider by an audible tone or activating the nurse call signal.

Weight Capacity -Bed.....850 lbs. / 385 kg
Optional IV Pole.....50 lbs. / 22 kg
Optional Trapeze850 lbs. / 385 kg

(Exceeding these limits will void the warranty)

With Optional Trapeze Attached to Bed

Height from Floor 67.5” – 90.5” / 95 cm – 230 cm



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.

SW Rest Secure System™ Specifications

Control Module

The Control Module is located under the bed.

Housing

Material ABS, UL94-V0 rated
Width 7.25" / 18.5 cm
Length 3.25" / 8.5 cm
Thickness 2.00" / 5 cm

Connectors

Power 2.1 mm Center Positive
Load Cell 6 pin RJ11
Nurse Call 1/4 Phono TS
CAN Network 6 pin RJ11

Nurse Call

Open 0 Ohms
Alarm 0.3 Ohms
Output 0.206 VRMS Max

External Power

AC Adapter 5.0 Volts, DC, UL Recognized supply
Current 800 mA, fused at 800 mA

Battery Power

Type 2 x AA, NiMH Rechargeable
Capacity 1600 mAH
Recharge Time Normally 30 mins, from dead 120 mins
Operating Time (No Alarms) 200 mins

Operating Current

Normal 170-280 mA
Charging 320 mA
Alarming 275 mA

Weighing Function

Resolution 1-1.5 lbs. / .5-.7 kg
Sampling Frequency 10 Hz
Averaging 16 samples/ 1.6 seconds



WARNING: Any change to the specifications can result in malfunction or damage to the SW Rest Secure System™.

Hand Control

The Hand Control is located on the footboard.

Housing

Material ABS, UL94-V0 rated
Width.....3.00” / 7.5 cm
Length7.00” / 18 cm
Thickness 1.75” / 4.5 cm

Connectors

CAN Network 6 pin RJ11

Operating Current

Normal 54-160 mA
Alarming150 mA

Audio

Record Memory 4 Mbits
Voice Record Alarm Time..... 15 seconds
Sound Level90 dB @ 12 inches
Tones..... 5 selectable tones

Display

Type LCD Graphic, blue LED backlighting
Size..... 64 x 17.9 mm
Resolution32 Pixels

Functions

Bed Exit Alarms..... Off, Low, Medium, High
Protocol Alarm..... Off, 1, 2, 4 Hours
Sound Volumes..... Off, Low, Medium, High
Scale..... 0-1000 lbs. / 0-453.5 kg
Scale Accuracy*..... +/- 5 lbs. / 2.25 kg

*Scale accuracy can only be achieved by proper factory calibration



WARNING: Any change to the specifications can result in malfunction or damage to the SW Rest Secure System™.

Unpacking and Set-Up Instructions

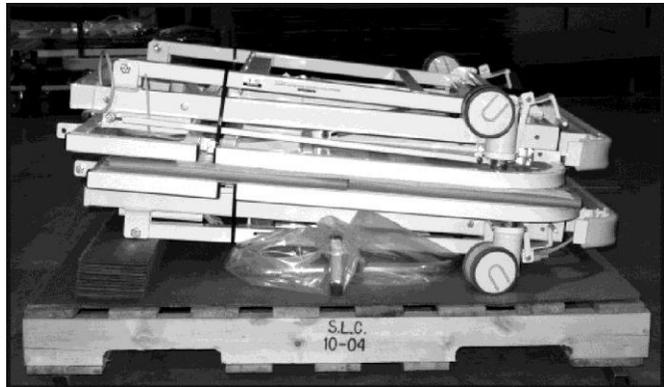
SW Evolution™ Unpacking and Set-Up

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
- Footboard Posts (2)
- Headboard Posts (2)
- Scale Meter
- Scale Meter Holder
- 3/16" Allen Screws (4)
- 1/2" Screw (8)
- Side Rails Mounts (2)
- Mattress Bar & Locking Pin
- Side Rails (2)
- RSS System (optional)



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.



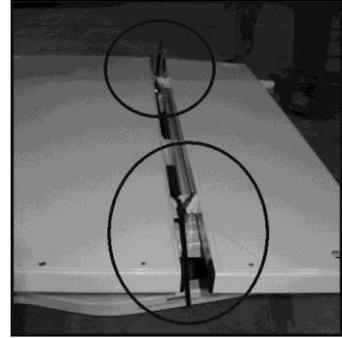
WARNING: Failure to follow the set-up instructions could result in patient or user injury as well as damage to equipment or other property.

Bed Set-Up

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

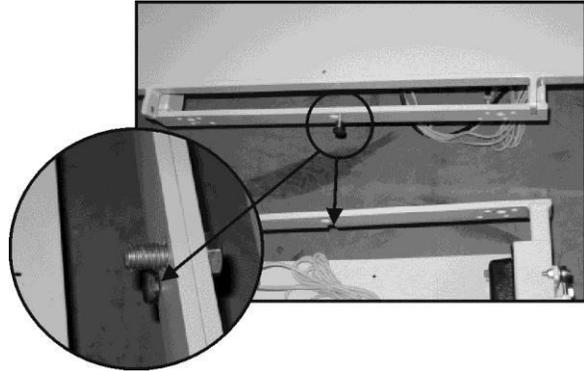
The head section is placed upside down on the foot section. The headboard and footboard are placed between the two sections. Separate these pieces and inspect for damages.

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.

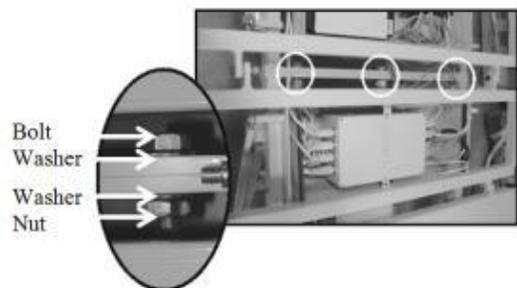


WARNING: During set-up, DO NOT remove the shoulder bolt on the center joint of the frame. It allows one side of the frame to slide out when ready to lift the frame apart. Failure to follow this warning could result in patient or user injury as well as damage to equipment or other property.

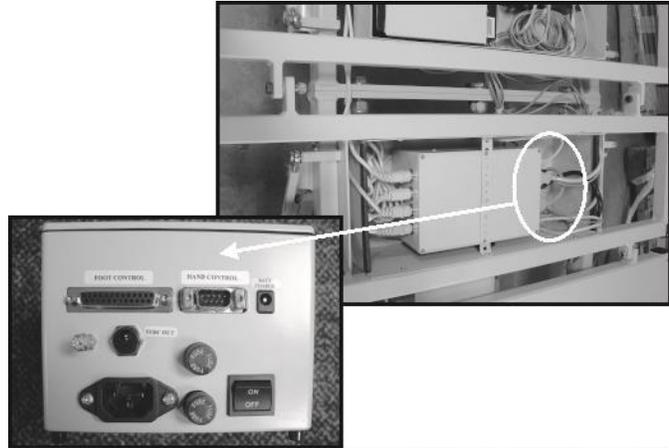
3. Using a #2 square drive screwdriver, remove the sheet metal on the lumbar section of the deck.



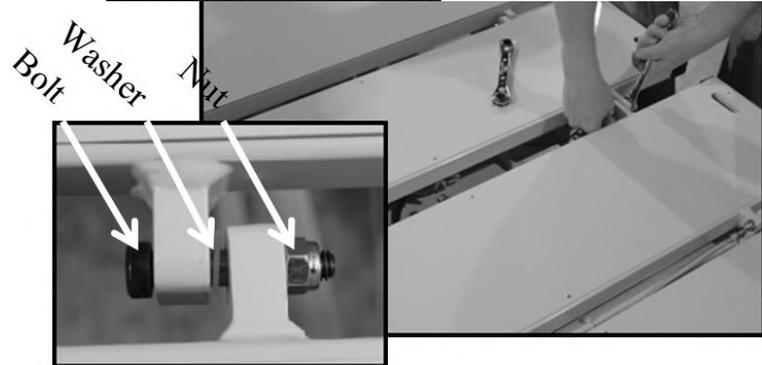
4. Locate the 3 – 5/8” bolts, washers and nuts. Place the bolt and washer together, then insert through the head section and then through the foot section of the bed. Add the washer and Nylock nut to complete the bed frame assembly. Secure tightly using 15/16” wrenches.



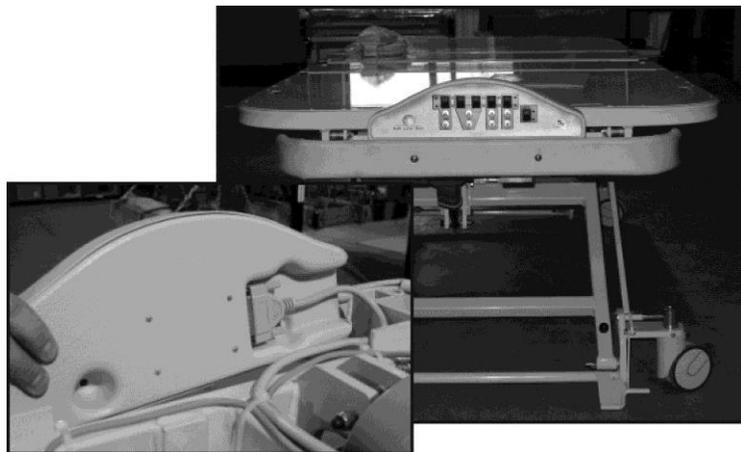
5. Plug in power cord, foot control, hand control and battery cord into the appropriate outlets.
6. Plug in actuator cable to the appropriate marked outlets on the control box.



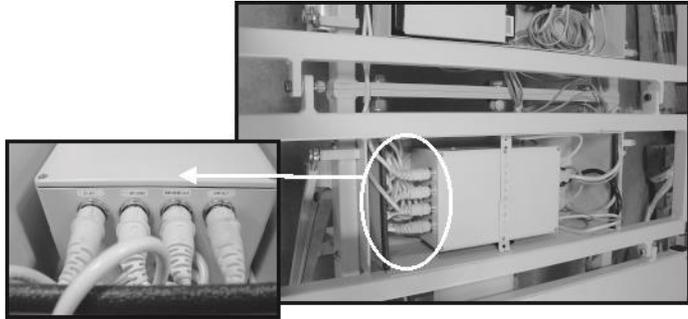
7. Attach the two sections with a 3/16" Allen wrench. Put the bolts in through the two sections with the washer between the two sections. Then secure the nuts tightly with the 9/16" wrench.



8. 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.



9. 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 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 (page 45).

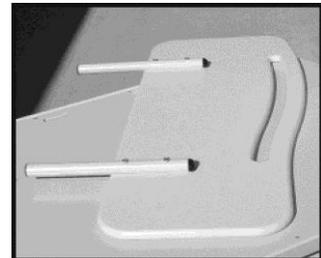
Radio wave sources such as radio stations, TV stations, amateur radio (HAM) transmitters, two-way radios and cellular phones can affect this bed. Following the warnings listed for electromagnetic interference should reduce the chance of the bed's unintended movement that could result in serious injury.

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

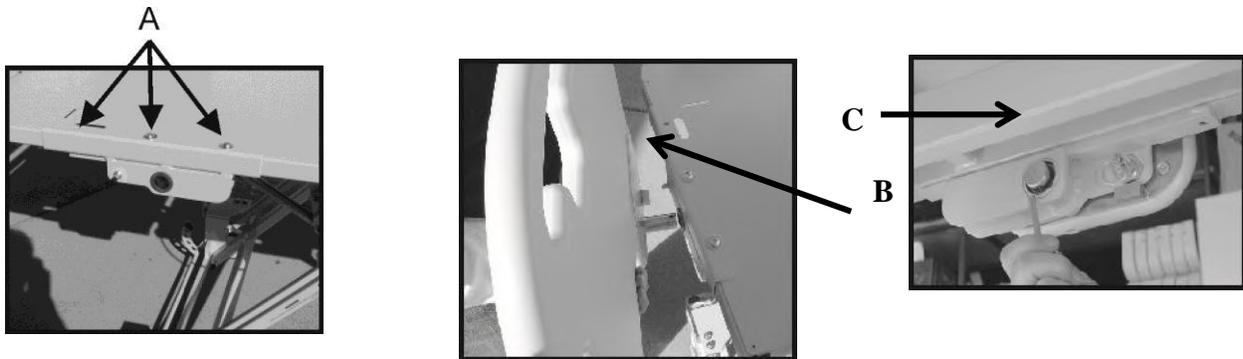


WARNING: It is recommended to have the side rails upright at all times while the patient is in the bed. However, the ultimate decision lies with the medical personnel who are on site and can fully evaluate all factors.

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 attached to the side rails. 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 rail 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.

SW Rest Secure System™ Set-Up

Basic Set-Up



WARNING: Electric shock may occur when plugging the SW Rest Secure System™ into the wall outlet. Use ONLY grounded or hospital grade outlets.

DO NOT use the SW Rest Secure System™ if the power cord is cut, frayed or loosely connected to the bed.

Make sure the unit is plugged into AC power and the hand control is connected to the bed's footboard. The Nurse Call Interface cable at the head of the bed should be securely plugged into the Nurse Call Interface on the wall to function properly. Press the enter button to activate the hand control.

The first photo shows the unit operating on AC power. The second photo shows the unit operating on battery reserve power with full charge. The third photo shows the battery reserve with 15% charge.



AC Power



Battery 100% Charge



Low Battery Warning

The unit will go into standby after 60 seconds of inactivity. If this occurs press any button, except back, to resume.

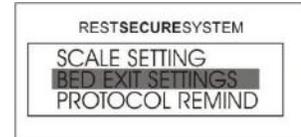


CAUTION: To ensure reliable functionality, the battery reserve should only be used as a temporary power source until AC power is restored. When the battery Low Battery Warning screen is shown, the unit should be plugged into AC immediately.

Bed Exit Alarm: Alert Type

The nurse call is always active no matter what selection is made. When selecting nurse call only, the audio alert will be disabled in the room. This unit will chime on an alarm if a voice message has not been recorded and the unit is set to Voice Recording.

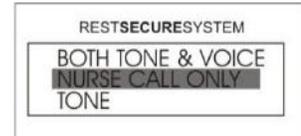
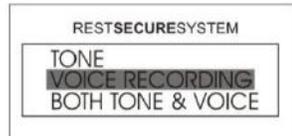
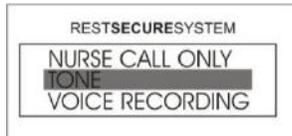
1. Access the Menu by pressing the UP or DOWN arrow until Bed Exit Settings is highlighted and then press ENTER.



2. Select Set Alert Type and then press ENTER

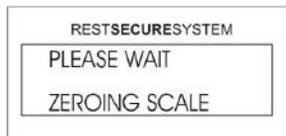


3. Choose one of the four alert types and then press ENTER. The selection has now been made and the user will be returned to the Home Screen.



Scale System: Zeroing the Scale

With the patient out of the bed, press and hold the ZERO button for 3 seconds. This process sets the tare weight (base weight) and will return to the Home Screen when complete.



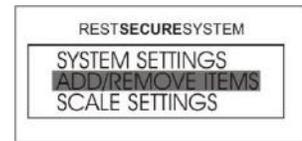
With the tare weight set, the patient may now be placed in the bed and begin recording weight.

NOTE: Make sure all equipment and linens are on the bed before zeroing the scale. If an air support mattress is being used with the patient, be sure to fully inflate the mattress prior to zeroing the scale. Adding or removing items during the zeroing process will cause inaccurate patient weight. It is highly recommended that the scale be zeroed before each new patient.

Scale System: Adding/Removing Items

The feature will allow items to be added and removed such as blankets or pillows from the bed without affecting the current weight reading of a patient.

1. Access the Menu by pressing the UP or DOWN arrow until ADD/REMOVE ITEMS is highlighted and then press ENTER.



2. Press ENTER to add/remove items from the bed.



3. Change the items on the bed and press ENTER when complete. The user will now return to the Home Screen.



NOTE: If steps 2 and 3 are not completed within 30 minutes then the unit will automatically exit the Add/Remove Items screen and return to Standby.

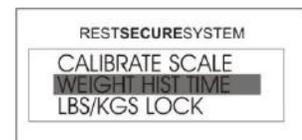
Scale System: Weight History Time Setting

The SW Rest Secure System™ is designed to record the weight of the patient by date and time. The unit will automatically record the weight for 30 days at a default time of 00:00 hours (midnight).

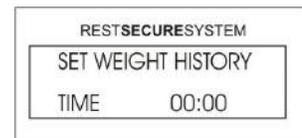
1. Access the Menu by pressing the UP or DOWN arrow until SYSTEM SETTINGS is highlighted and then press ENTER.



2. Select WEIGHT HISTORY TIME and then press ENTER.



3. Using the arrows, select the time desired for the unit to record a weight and then press ENTER. The user will return to the Home Screen.

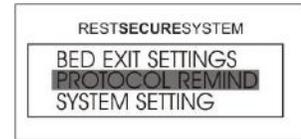


NOTE: Time must be set in 24-hour clock in 1/2 hour intervals. Example: 13:00 = 1:00 pm

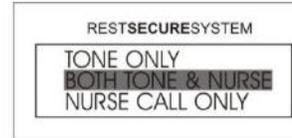
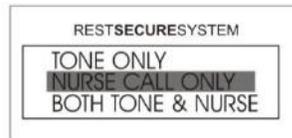
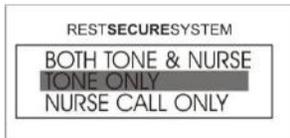
Protocol: Set Alert Reminder

The protocol reminder is a timer that can be set for 1, 2 or 4 hours as a reminder that the patient needs to be attended to or checked on. There are three alert settings for the protocol alarm.

1. Access the Menu by pressing the UP or DOWN arrow until PROTOCOL REMIND is highlighted and then press ENTER.



2. Choose from one of the three alert types and then press ENTER. The selection has now been completed and the user will be returned to the Home Screen.

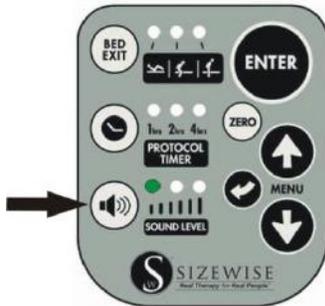


NOTE: The protocol audible tone is specific and is unchangeable to ensure differentiation between a bed exit alarm and a protocol alarm. The protocol alarm will have short frequent beeps.

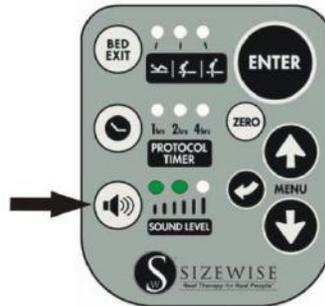
Protocol Timer: Sound Level Setting

There are 3 sound levels for the bed exit alarm/protocol reminder.

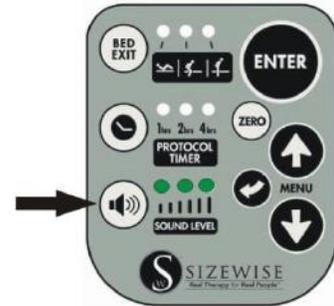
Press the sound level button once for low volume, twice for medium volume, and a third time for high volume. By pressing the sound level button for a fourth time, the sound level will be reset to low volume.



Low Volume



Medium Volume



High Volume

NOTE: When the bed exit alarm and protocol timer are disabled, the sound level indicator lights will be OFF. This indicates that the sound level has been disabled.

Setting the Time/Date

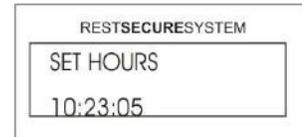
1. Access the Menu by pressing the UP or DOWN arrow until SYSTEM SETTINGS is highlighted and then press ENTER.



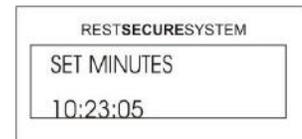
2. Select SET TIME/DATE and then press ENTER.



3. Using the UP or DOWN arrow, the user can set the hours and then press ENTER. The time must be set in 24-hour clock. (13:00 = 1:00 pm)



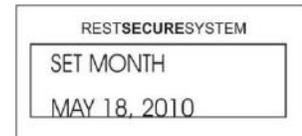
4. Using the UP or DOWN arrow, the user can set the minutes and then press ENTER.



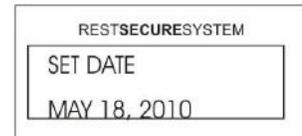
5. Using the UP or DOWN arrow the user can set the seconds and then press ENTER. This is an optional setting and may be bypassed by pressing ENTER.



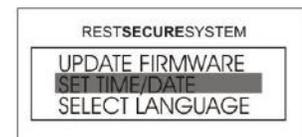
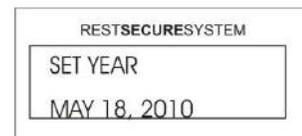
6. Using the UP or DOWN arrow the user can set the month and then press ENTER.



7. Using the UP or DOWN arrow the user can set the date and then press ENTER.



8. Using the UP or DOWN arrow the user can now set the year and then press ENTER. After pressing ENTER the user will return to the SET TIME/DATE menu. To get back to the Home Screen, press and hold the BACK button for 3 seconds.



SW Rest Secure System™ Default Settings: Resetting to Factory Variables

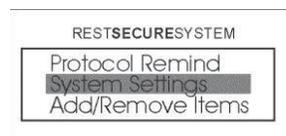
It is important to reset to the factory defaults, before placing a different patient in the bed. This routine is typically performed during quality control checks or during routine service. Resetting defaults should also be performed, if the PC board in either the RSS control box or the RSS hand control has been replaced, or if the firmware has been updated (see the section SW Rest Secure System Updating Firmware on page 170 in the Technical Manual for SD card location). Performing a reset will ensure that the RSS is operating to the specifications in which it was intended. Resetting the defaults will not require a re-calibration to the scale.

Resetting the defaults will:

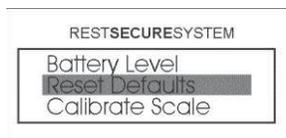
- Set the Bed exit alarm to its default tone #1.
- Reset the bed exit sensitivity thresholds to the default values: +/- 6 lbs. for High, -10 lbs. for Medium and -50 for Low.
- Set the language back to English.
- Set the weight units to Pounds.
- Clear patient weight history file.
- Set lbs./kg lock to unlock.
- Set bed exit alert type to tone.
- Set protocol alert type to tone.
- Erase voice message is erased and replace with a tone sound.
- Reset the weight history record time to 24:00 (00:00) hours.

Resetting the Defaults:

1. Access the Menu by pressing the UP or DOWN arrow until System Settings is highlighted and then press ENTER.



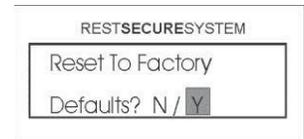
2. Select Reset Defaults and then press ENTER.



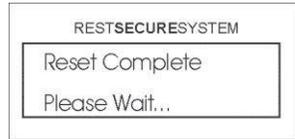
3. Enter the password using the UP or DOWN arrows on the key pad. The password for this operation is “up, down, up, down, Enter”. The password is not displayed on the screen upon entering. If the password is not entered correctly, the screen will display “Invalid Password Try Again” and you will be returned to the Reset Defaults screen as shown in step 2, where you must press ENTER to proceed.



4. Using the UP or DOWN arrows on the keypad, select Y for Yes and then press ENTER. If you select N for No, you will be returned to the Home Screen without resetting the defaults.



5. The unit is now resetting the defaults and will return to the Home Screen when complete.



Operating Instructions

SW Evolution™ 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.



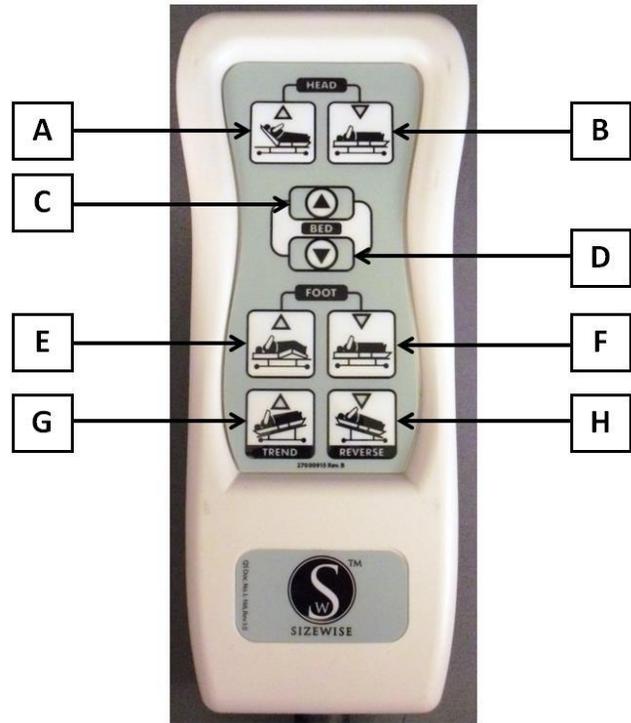
WARNING: Once the bed is positioned correctly, lock casters. Failure to do this could result in patient and/or user injury as well as damage to equipment or other property.



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. Gatches 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.

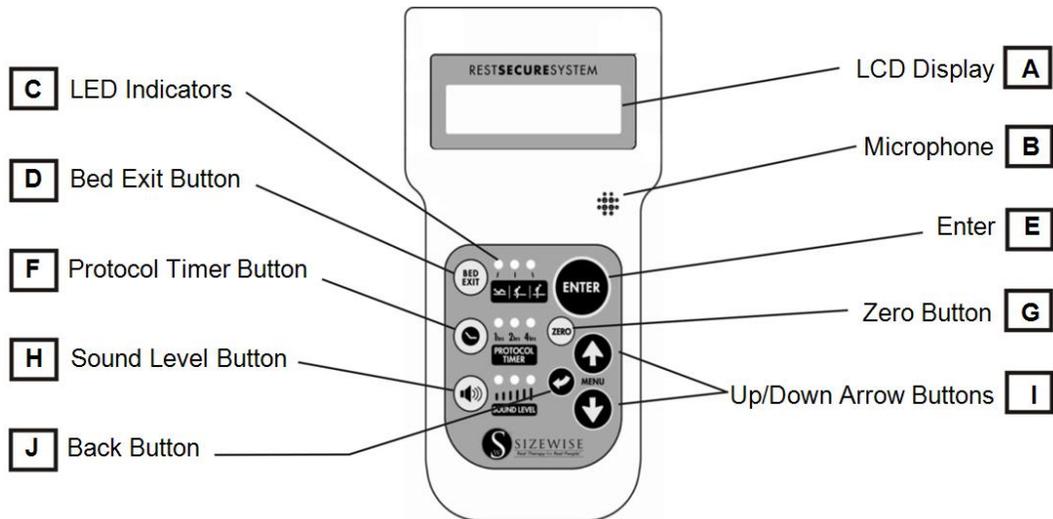
The bed is an electrically powered mechanism. Electrical hazard may occur if the bed is plugged into inadequate power supply. Make sure the bed is plugged into a 120V grounded outlet.



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.

Rest Secure System Operating Instructions

Hand Control



The hand control has glow-in-the-dark features; in case of power outages operation is not impaired.

- A. **LCD Display** – Lighted display shows the weight and allows the navigation of on-screen menus.
- B. **Microphone** – Use to record a message for the voice alarm.
- C. **LED Indicators** – Green lights indicate what setting or function is selected.
- D. **Bed Exit Button** – Use to set the bed exit alarm.
- E. **Enter Button** – Use for making a selection when in the main and sub menus.
- F. **Protocol Timer Button** – Use for the protocol reminder.
- G. **Zero Button** – Use for zeroing the scale and establishing the tare weight (base weight).
- H. **Sound Level Button** – Use for selecting low, medium and high volume.
- I. **Up/Down Arrow Menu Buttons** – Use for accessing the menu and making adjustments to menu items.
- J. **Back Button** – Press this button once to go to the previous menu or press and hold this button for 3 seconds at any time to go back to the Home Screen no matter what menu is displayed.

Bed Exit Alarm: Use Alarm

The bed exit alarm function on the SW Rest Secure System™ alerts the care provider that a patient is attempting to exit the bed or is in an immediate risk of falling. This is especially important in settings where continuous surveillance of the patient is not feasible.



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

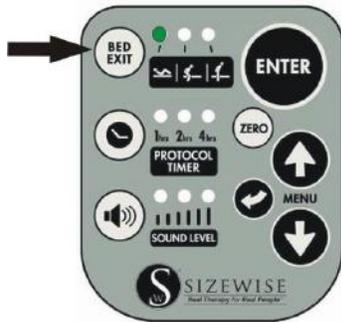
There are 3 bed exit alarm sensitivity settings:

High Sensitivity: Detects patient movement, typically this setting would be used by the care provider when needing to be notified of any movement, generally patients at very high risk for falls.

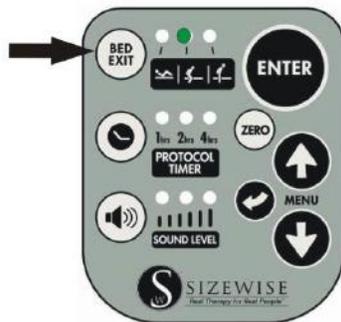
Medium Sensitivity: Detects a patient attempting to exit the bed, typically this setting would be used by the care provider in situations where the patient is at a moderate to high risk for falls.

Low Sensitivity: Detects when a patient has exited the bed. This setting would typically be used by the care provider in situations where the patient responds to verbal or audible commands and is at a lower risk for falls. If the patient is on an air support surface a lower sensitivity setting may be more appropriate as well.

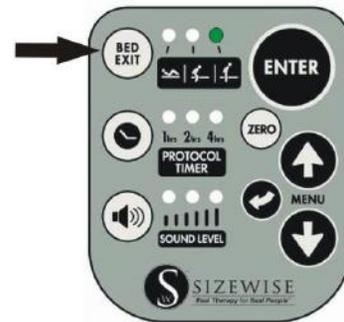
NOTE: High and medium sensitivity settings may detect other movement, such as air therapy mattresses.



High Sensitivity



Medium Sensitivity



Low Sensitivity

To set the bed exit alarm:

In order to set the bed exit alarm, the patient must be in the bed prior to selecting the desired sensitivity level. To set the alarm, press the BED EXIT button until the desired sensitivity is selected. When there are no indicator lights on, the alarm is disabled. When a bed exit alarm has been activated, simply press the ENTER button to reset the alarm and the monitoring process will be restored.

NOTE: The bed exit indicator light will blink for 10 seconds before the alarm will activate. Upon activation, the indicator will stay on. The bed exit alarm can only be activated with a minimum of 35 lbs. (16 kg) on the bed.

Scale System: Use Scale and Access Weight History

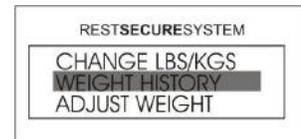
The Rest Secure System’s integrated scale helps reduce the risk of care provider or patient injury by allowing care providers to accurately record the weight of the patient without having to transport or move the patient each time the weight is needed. The scale system is set to weigh and record the patient’s weight automatically at midnight every day up to 30 days. This bed offers care providers convenience in attending to the patient.

Before a patient is placed into the bed, the scale should be zeroed out. See the section SW Rest Secure System Set-Up Scale System: Zeroing the Scale page 22.

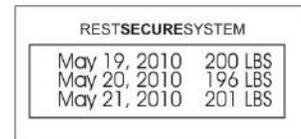
1. Access the Menu by pressing the UP or DOWN arrow until SCALE SETTINGS is selected and then press ENTER.



2. Select WEIGHT HISTORY and then press ENTER.



3. Using the arrows, the user can toggle through the last 30 days of history. Press the BACK button twice to return to the Home Screen.



NOTE: The unit will only store the last 30 days of weight history. When the memory is full, it will begin replacing the older weight history readings first.

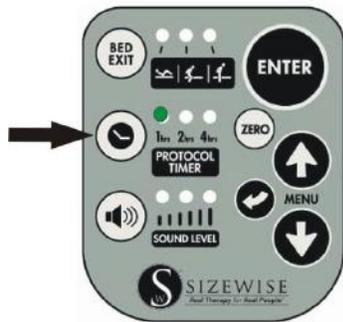
Protocol Timer: Using the Timer

The SW Rest Secure System™ protocol timer can be utilized to alert the care provider that the patient needs to be attended to or checked on at intervals of 1, 2 or 4 hours. The protocol timer has the capability to alert the care provider by an audible tone on the unit and, if connected to the Nurse Call Interface, can activate the nurse call signal.

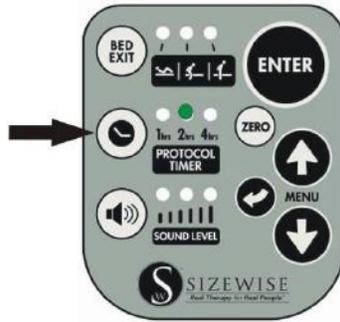


WARNING: The bed is to be used in accordance with each facility's policies and procedures.

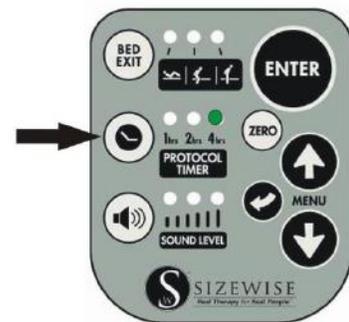
Press the PROTOCOL TIMER button once to set the timer to 1 hour, press it twice to set the timer to set to 2 hours, press it three times to set to 4 hours. By pressing the PROTOCOL TIMER button a fourth time, the timer will be disabled and no indicator lights will be lit. When a protocol alarm has been activated, simply press the ENTER button to reset the alarm and repeat the timing process.



1 Hour



2 Hours



4 Hours

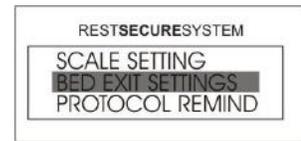
NOTE: On alarm, the unit must first be reset by pressing ENTER before the protocol timer can be changed.

The sound level on the protocol timer can be changed, see the section SW Rest Secure System Protocol Timer: Sound Level Setting on page 24.

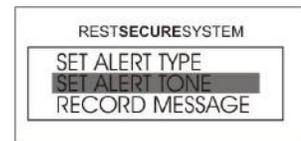
Bed Exit Alarm: Set Alert Tones

There are 5 different audible alarm tones for the bed exit alarm. The user will hear each of the different tones as they scroll through the 5 selections.

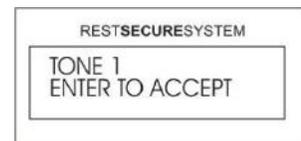
1. Access the Menu by pressing the UP or DOWN arrow until Bed EXIT SETTINGS is highlighted and then press ENTER.



2. Select SET ALERT TONE and then press ENTER.



3. Using the arrows, select one of the 5 tones and then press ENTER. The selection has now been completed and the user will return to the Home Screen.

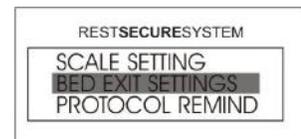


Bed Exit Alarm: Record Message

The Bed Exit Menu will allow you to change the alert type, alert tone, and also let you record a message to the patient so they are not startled by the tones of the bed exit alarm. This unit is also equipped with a Nurse Call Interface which will activate the nurse call whether the unit is set to alert tone or voice message.

NOTE: The unit must be connected to the interface in order for the nurse call to activate.

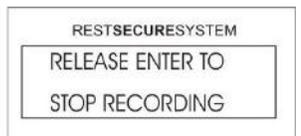
1. Access the Menu by pressing the UP or DOWN arrow until BED EXIT SETTINGS is highlighted and then press ENTER.



2. Select RECORD MESSAGE and then press ENTER.



3. Press and hold the ENTER button until the user hears a series of beeps. With the ENTER button still pressed, the user may begin to record a message by speaking directly into the microphone. The message can be recorded for a maximum length of 15 seconds. When the recording is finished, release the ENTER button and follow the on-screen prompts.



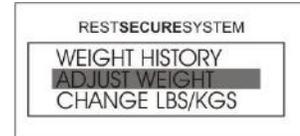
Scale System: Adjust Weight

This feature is designed to manually adjust the weight if items were added to the bed without using the Add/Remove option. The user will need to make sure the patient's weight is known before using this option.

1. Access the menu by pressing the UP or DOWN arrows until SCALE SETTINGS is highlighted and then press ENTER.



2. Select ADJUST WEIGHT and then press ENTER.



3. Adjust the weight that is added or removed from the bed in 0.5 lb. increments using the up or down arrow and then press ENTER. The user will now return to the Home Screen.

NOTE: The adjusted weight will return to 0.0 lb. when zeroing the scale as shown in the section SW Rest Secure System Set-Up Scale System: Zeroing the Scale on page 22.

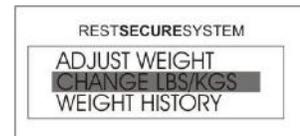
Scale System: Change LBS/KGS Setting

This feature will allow the user to display the patient's weight in either pounds (lbs.) or kilograms (kgs.). The default for patient weight display is pounds (lbs.). This unit has a Lbs./Kgs. Lockout feature to prevent an accidental change of units (see the section Operating Instructions Scale System: Locking/Unlocking the Unit in LBS/KGS on page 35 for instructions).

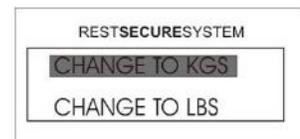
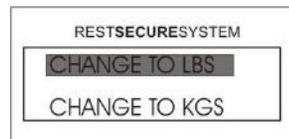
1. Access the menu by pressing the UP or DOWN arrows until SCALE SETTINGS is highlighted and then press ENTER.



2. Select CHANGE LBS/KGS and then press ENTER.



3. Select CHANGE TO KGS or CHANGE TO LBS and then press ENTER.



4. The unit will return to the Home Screen showing the weight in kilograms or pounds dependent upon which was chosen.



Scale System: Locking/Unlocking the Unit in LBS/KGS

As part of a safety feature, this unit has the ability to lock the unit of measure in lbs. or kgs. This will prevent accidentally changing the units in the Scale Settings menu.

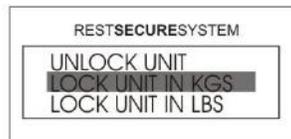
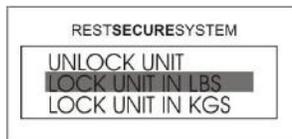
1. Access the menu by pressing the UP or DOWN arrow until SYSTEM SETTINGS is highlighted and then press ENTER.



2. Select LBS/KGS LOCK and then press ENTER.



3. Select the preferred unit of measure to lock and then press ENTER. The selection has been completed and the user will return to the Home Screen.



NOTE: Follow the directions in the section Operating Instructions Scale System: Change LBS/KGS on page 34.

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.

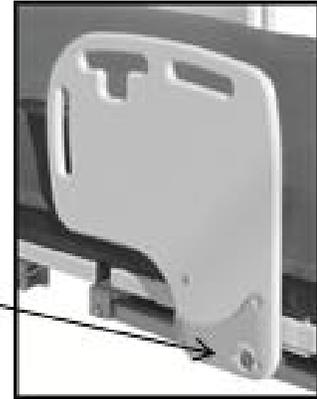
Never allow the patient to reach with both hands. In doing so, the patient may not be able to catch himself or herself to prevent a fall.

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.

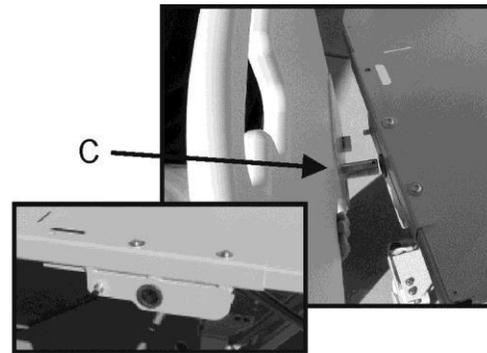
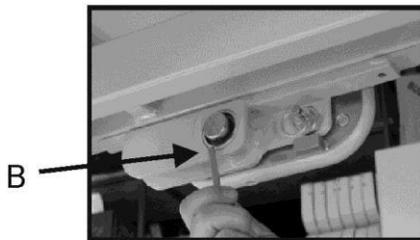


WARNING: It is recommended to have the side rails upright at all times while the patient is in the bed. However, the ultimate decision lies with the medical personnel who are on site and can fully evaluate all factors.

A

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 the section Seven Zones of Bed Rail Entrapment on page 43.



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.

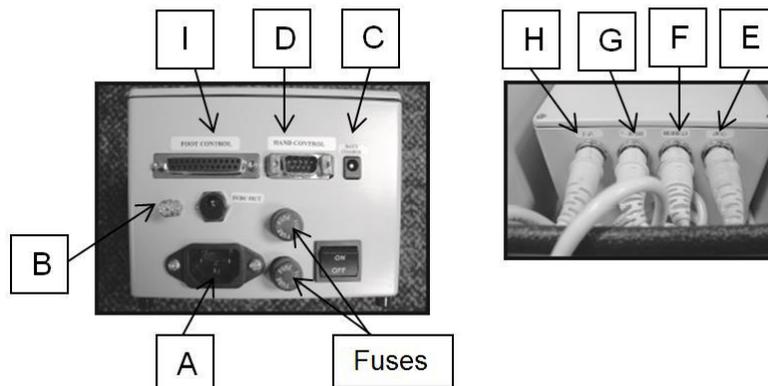
To avoid and reduce risk of a tripping injury to the patient and/or care provider, align the casters with the bed.

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
- C. Battery Back-Up (if equipped)
- D. Hand Control
- E. Head Actuator
- F. Bed – Head Actuator
- G. Bed – Foot Actuator
- H. Foot Actuator
- I. 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.

Battery Specifications:

| | | |
|-------------------------------|--------------|--------------------|
| 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* 25°C (77°F) | 20 Hour Rate (0.25A) | 5Ah | |
| | 10 Hour Rate (0.47A) | 4.65Ah | |
| | 5 Hour Rate (0.85) | 4.25Ah | |
| | 1 Hour Rate (3.00A) | 3.00Ah | |
| Internal Resistance (milliohms) | Fully Charged Battery 25°C (77°F) | Approx. 50 | |
| Temperature Dependency of Capacity (20 Hour Rate) | 40°C (104°F) | 102% | |
| | 25°C (77°F) | 100% | |
| | 0°C (32°F) | 85% | |
| | -15°C (5°F) | 65% | |
| Self-Discharge 25°C (77°F) | Residual Capacity After Standing 3 Months | 91% | |
| | Residual Capacity After Standing 6 Months | 82% | |
| | Residual Capacity After Standing 12 Months | 64% | |
| Charge Method (Constant Voltage) | Cycle Use (Repeating Use) | Initial Current | 1.75A or smaller |
| | | Control Voltage | 14.5-14.9V |
| | Float Use | Control Voltage | 13.6-13.8V |

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

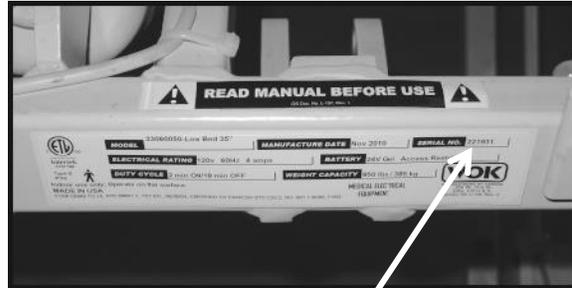
The specifications and characteristics of the battery are from the manufacturer's guidelines sheet. If the battery needs to be changed, follow the manufacturer's specifications listed in this section as well as the information listed in the section Replacement Instructions Battery Replacement page.



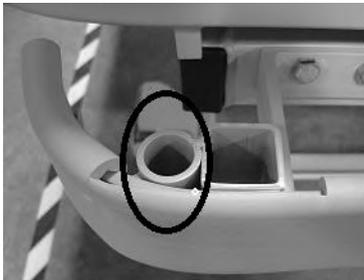
WARNING: Failure to follow the provided battery specifications could result in patient and/or user injury as well as damage to equipment or other property.

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



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 the following applicable warnings and cautions, 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.

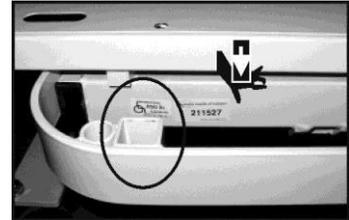


WARNING: Before positioning patient on bed, verify all components are secure after adjustments, repairs, or servicing of the trapeze, single pole patient assist, or any other overhead components/devices.

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

Zone 2: Under the Rail, Between the Rail Supports or Next to a Single Rail Support

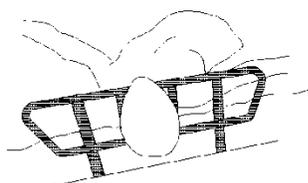
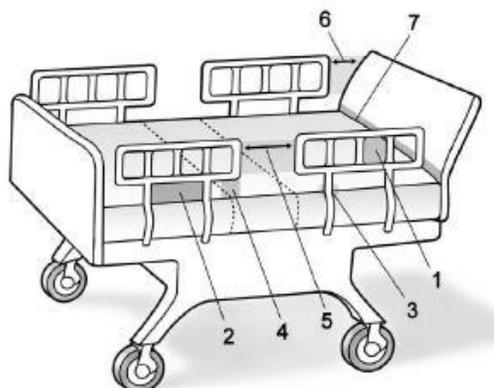
Zone 3: Between the Rail and the Mattress

Zone 4: Under the Rail, at the Ends of the Rail

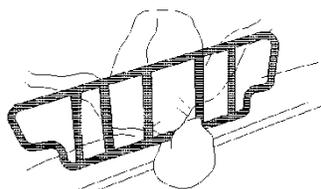
Zone 5: Between Split Bed Rails

Zone 6: Between the End of the Rail and the Side Edge of the Head or Footboard

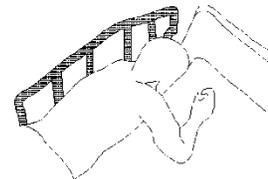
Zone 7: Between the Head or Footboard and the Mattress End



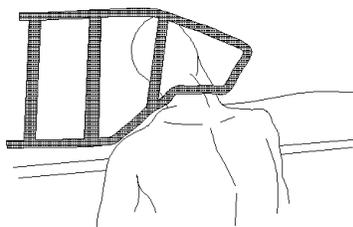
Zone One



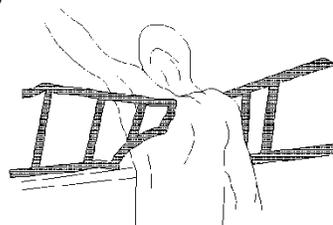
Zone Two



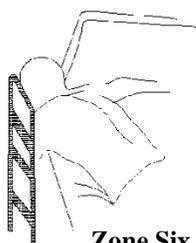
Zone Three



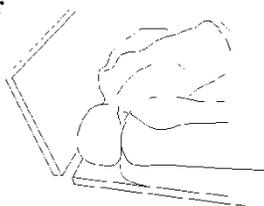
Zone Four



Zone Five

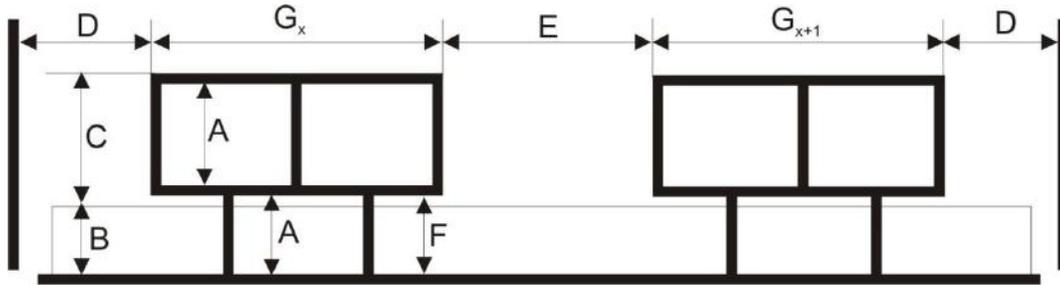


Zone Six



Zone Seven

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 | |
|------------|--|---|---|
| A | Smallest dimension between elements inside the perimeter of the SIDE RAIL in its raised/locked positions or perimeters created between the SIDE RAIL and fixed parts of the BED. | ≤ 120 mm | |
| B | Thickness of NORMAL USE mattress. | Specified by the manufacturer | |
| C | Height of the top edge of the SIDE RAIL above the mattress (see B) without compression. | > 220 mm | |
| D | Distance between segmented SIDE RAIL with the MATTRESS SUPPORT PLATFORM in the flat position. | ≤ 60 mm Or > 235 mm | |
| E | Smallest dimension of any accessible opening between the SIDE RAIL and the MATTRESS SUPPORT PLATFORM in the flat position. | ≤ 60 mm Or > 235 mm | |
| F | Smallest dimension of any accessible opening between the SIDE RAIL and the MATTRESS SUPPORT PLATFORM in the flat position. | If D or E > 235 mm then $F \leq 60$ mm | If D or E ≤ 60 mm then $F \leq 120$ mm |
| G | Total length of the SIDE RAIL or sum of the length of segmented SIDE RAILS on one side of the BED. | $\sum G_x >$ half the length of the MATTRESS SUPPORT 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. Sizewise electrical products run significantly lower leakage readings than the maximum allowed. Leakage limits for the Sizewise electrical components are defined in the electrical test procedures for each product.

Electromagnetic Compatibility (EMC)

The SW Evolution™ and SW Rest Secure System™ have 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 Evolution™ and SW Rest Secure System™ have been type tested and have 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 Evolution™ and SW Rest Secure System™ have 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. |
| Coiled Cord (RSS) | US Plug 6P6C, Gold Plated 3u” 28 AWG (7/0.12BC)*6C+Jacket Curve Length 1ft, 3ft L: (1ft*Æ13)+105+105mm OD: 3.5mm RoHS Compliant |

Electromagnetic Interference (EMI)

The SW Evolution™ and SW Rest Secure System™ have been tested and are intended for safe use with other components compliant to IEC 601 standards for medical devices. The SW Evolution™ and SW Rest Secure System™ can cause interference with non-601 regulated equipment and/or other non-601 regulated equipment can cause interference with the SW Evolution™ and SW Rest Secure System™. 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 Evolution™ and Rest Secure System™.

Electromagnetic Interference (EMI) from Radio Wave Sources

The SW Evolution™ and SW Rest Secure System™ have been tested and are intended for safe use with other components compliant to IEC 601 standards for medical devices. The SW Evolution™ and SW Rest Secure System™ 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: 33060400 – 35" Evolution, 33060450 – 39" Evolution
Control Number: 3107769

**Guidance and Manufacturer’s Declaration – Emissions
Equipment and Systems that are NOT Life-Supporting**

The SW Evolution™ and SW Rest Secure System™ are 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.

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

**Guidance and Manufacturer’s Declaration – Immunity
All Equipment and Systems**

The SW Evolution™ and SW Rest Secure System™ are intended for use in the electromagnetic environment specified below. The customer, or user, of the SW Evolution™ and SW Rest Secure System™ should ensure that it is used in such an environment.

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

**Guidance and Manufacturer’s Declaration – Immunity
Equipment and Systems that are NOT Life-Supporting**

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

Recommended Separation Distances between portable and mobile RG Communications equipment and bed.

Equipment and Systems that are NOT Life-Supporting

Recommended Separations Distances for the SW Evolution™ and Rest Secure System™: The SW Evolution™ and SW Rest Secure System™ are intended for use in the electromagnetic environment in which radiated disturbances are controlled. The customer, or user, of the SW Evolution™ and SW Rest Secure System™ 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.

$$D=(3.5/V1)(\text{Sqrt } P)$$

$$D=(3.5/E1)(\text{Sqrt } P)$$

80 to 800 MHz

$$D=(7/E1)(\text{Sqrt } P)$$

800 MHz to 2.5 GHz

| Compliance Level | 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.



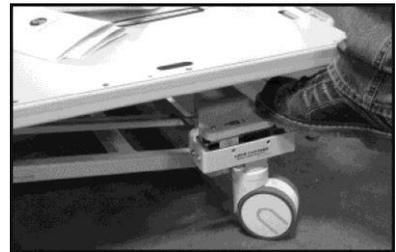
HAZARD: Pay close attention to pinch points on the bed to avoid injury to the patient and/or care provider.

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

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.



Transport



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°C to 45°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 (.787") 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.

Scale System Components

All surfaces of the scale meter and the coiled 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 scale meter and coiled cord to remain wet with disinfectant solution for the manufacturer's recommended contact time.

Rinse all surfaces of the scale meter 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 Evolution™ | | |
| Side Rails | | X |
| Fasteners | X | |
| Frame | | X |
| Foam Mattress | | X |
| Casters | X | |
| Hand Control | X | |
| Actuators | X | |
| Batteries | X | |
| Power Cords | X | |
| SW Rest Secure System™ | | |
| Load Cells | | X |
| 5V Power Supply (if equipped) | X | |
| Control Box | | X |
| Inline Connector | | X |
| Nurse Call Connector | | X |
| Hand Pendant | | X |
| Rechargeable AA Batteries | X | |

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

- 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.
- 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.
- Ensure scale system is calibrated and functions properly (if installed).
- 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 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.

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°C to 45°C (23°F to 113°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.

SW Evolution™ Troubleshooting

The bed will not operate with all functions unresponsive:

- Ensure the bed is plugged into a power source.
- Ensure all cables to the Electronic Control Module are properly connected and secure.
- Verify all switches on the foot control panel are set to the “Unlocked” position.
- 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.
- Ensure all cables to the Electronic Control Module are properly connected and secure.

The bed will not operate off of battery power:

- If the bed will not operate off of battery power, plug the bed into a power source and let charge for 24 hours.
- Ensure all cables to the Electronic Control Module are properly connected and secure.

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

SW Rest Secure System™ Troubleshooting



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

Display on handheld shows Load Cell Error or yellow light flashing on CPU box under the bed:

- Check the CPU box to make sure that all load cell cables are plugged in. Check for damaged load cell cables.

The unit will not power up:

- Make sure the CPU (located under bed) is plugged into the wall. Unplug handheld from the footboard, wait 5 seconds and then plug it back in.

Weight history readings will not store:

- Make sure the clock time and weight history time is set correct (24-hour clock format).

Scale showing incorrect weight:

- Make sure the zeroing process was done correctly (see the section Unpacking and Set-Up Instructions Scale System: Zeroing the Scale on page 22).

Unit will not change from LBS to KGS in the scale settings menu:

- Unlock LBS/KGS (see the section Rest Secure Operating Instructions Scale System: Locking/Unlocking the Unit in LBS/KGS on page 35).

Nurse call will not activate:

- Make sure cable from bed to wall interface is securely plugged. Check cable from CPU box to bed frame.

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PLEASE READ THESE WARRANTY TERMS AND CONDITIONS CAREFULLY BEFORE USING YOUR SIZEWISE PRODUCT. BY USING THE PRODUCT, YOU ARE CONSENTING TO BE BOUND BY THE FOLLOWING WARRANTY TERMS AND CONDITIONS.

LIMITED WARRANTY.

Sizewise warrants the above referenced product to be free from material defects in materials and workmanship for the warranty periods set forth below when the product is used and serviced properly in accordance with the specifications set forth in the Sizewise owner's manual in effect at the time of sale of the product, including without limitation compliance with the safe working load set forth therein. If there is no period of time specified below, the warranty period shall be ninety (90) days. The warranty periods commence on the invoice date of the original purchase. This warranty applies only against defects discovered within the warranty period and extends only to the original purchaser or designated original end user of the product ("Buyer"). Parts repaired or replaced under the terms of this warranty will be warranted for the remainder of the original warranty period only. Buyer is solely responsible for determining whether the products and services offered by Sizewise are appropriate for its intended use including use by Buyer's employees, invitees, contractors, representatives, third party beneficiaries, or any other person Buyer intends to use the product. Buyer acknowledges it has made the selection of the products based upon its own judgment and that the product is of a size, design, capacity, condition, quality, durability selected by Buyer. Buyer expressly disclaims any reliance upon any statements or representations made by Sizewise or any other party on its behalf except as otherwise specifically provided for in this Limited Product Warranty. Buyer acknowledges and agrees that the remedy in this warranty for the repair and replacement of defective product or part(s) shall constitute the sole remedy in the event of a defective product or part(s). Sizewise's obligations under this warranty are limited as set forth below.

THE WARRANTY GIVES BUYER SPECIFIC LEGAL RIGHTS, AND BUYER MAY ALSO HAVE OTHER RIGHTS THAT VARY FROM STATE TO STATE

WARRANTY PERIOD AND COVERAGE.

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

CONDITIONS AND RESTRICTIONS.

This warranty is valid only in accordance with the conditions set forth below:

- The warranty applies to this Sizewise product only while:
 - it remains in the possession of the Buyer and proof of purchase is demonstrated,
 - it has not been subjected to accident, misuse, abuse, improper service, or modification,
 - claims are made within the warranty period.
- This warranty does not apply to any other products or devices sold separately regardless of whether used with this product. Such other products or devices will be subject to the separate limited product warranty set forth in the user manual for such product or device.
- Sizewise's sole liability shall be discharged by replacing or repairing, at Sizewise's option, the product or its part or parts which are determined by Sizewise to be defective under normal and proper use during the warranty period.
- Buyer shall notify Sizewise or the authorized Sizewise dealer immediately but in no event more than seven (7) days after the date of discovery of any alleged defect by contacting Sizewise Parts and Services at 1-800-814-9389 Monday through Friday 8am – 5pm local time.
- If the product or part should be returned to Sizewise, a return authorization number (RA#) must be obtained by Buyer from Sizewise. The RA# will be valid for 21 days from the date it is issued.
- Buyer is responsible for any shipping, freight, handling, pickup or delivery charges or fees including without limitation any expediting fees involved with the delivery of the defective product or parts to Sizewise's factory for repair or replacement.
- If on-site technical service is required, a service representative will be dispatched during Sizewise's standard service hours Monday through Friday 8am-5pm CST and provided the product is located within Sizewise's service territory.
- If Sizewise determines the problem with the product or part(s) is a result of defective material or workmanship, the

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product or part will be replaced or repaired at the discretion of Sizewise, and at no charge to the Buyer however subject to the limitations and exclusions of this Limited Product Warranty.

- At the election of Sizewise, replacement parts may be new or refurbished; and Sizewise reserves the right to substitute materials if original materials are no longer available.
- If Sizewise determines the product or part that Buyer has requested warranty services on are not covered by the warranty for any reason including without limitation because it is outside of the warranty period, excluded from the warranty or the warranty is void, Buyer shall pay for the repair or replacement services, including parts and labor performed by Sizewise at Sizewise's prevailing time and material rates plus freight and delivery.
- If Buyer declines the repair or replacement service upon notice from Sizewise it is not covered under warranty, Buyer shall reimburse Sizewise for all costs from investigating and responding to Buyer's request.
- Any costs to Buyer as referred to herein shall be at Sizewise's prevailing time and material rates plus any freight and delivery charges incurred by Sizewise.
- Any assistance provided by Sizewise outside the terms of this warranty does not waive the limits of this warranty.
- Sizewise does not pay labor outside the United States.
- Any description of Sizewise's products is for identification purposes only and is not an express warranty.
- Loaned products, demo or sample products and/or consumable products including without limitation batteries and sheets are furnished to Buyer on an "AS IS WITH ALL FAULTS" basis.

EXCLUSIONS AND LIMITATIONS.

This Limited Product Warranty shall not apply to, and Sizewise shall have no obligation to make repairs, replace or correct products including any part or parts of the product as the result of Sizewise's determination of any of the following:

1. Software (PROM) or firmware version upgrades or updates or any other changes and/or any outages, interruptions, delays, attacks, malware, or any other technology or viruses on such software or firmware or Buyer's network, if applicable to this product.
2. Normal wear and tear of the product including without limitation normal discoloring, body impressions on mattresses or loss in some resiliency, if applicable to this product, and cosmetic items, consumable items including without limitation mattresses, casters, sheets, handsets and batteries.
3. Damage due to improper transport, storage, installation, maintenance, use, repair or failure to follow Sizewise's instructions or procedures as detailed in the owner's manual.
4. Damage or malfunctions resulting from work performed by service providers not authorized by Sizewise.
5. Repairs performed on a Sizewise product or parts missing a serial number or with a serial tag that has been altered, tampered with or defaced in any manner.
6. Service calls to correct installation of the product unless installed under contract by Sizewise or its partners and in which event the terms of the service contract only shall apply to service installation corrections.
7. Shipping, freight, handling, pickup and delivery charges or fees involved with delivery of the products and or part(s) to Sizewise's factory for repair or replacement and returning the replacement or repaired products and/or parts to Buyer.
8. Any labor costs incurred beyond the applicable labor warranty period.
9. Damage or product failure from causes external to the product or part(s) including without limitation power or electric failure or surges, electrical wiring not in compliance with electrical codes or Sizewise owner's manual specifications.
10. Damage caused by failure to provide reasonable and necessary maintenance as outlined in the owner's manual.
11. Damage caused by the use, misuse, negligence, loss, abuse of the product or any parts by Buyer including without limitation any third party beneficiaries, end user or others persons Buyer intends to use the product, including without limitation (except Sizewise or an authorized Sizewise service provider):
 - a. exceeding the safe working load on this product or any specific weight capacity for a part,
 - b. cleaning upholstery or fabrics with harsh chemicals, or bleach, outside the recommended cleaning guidelines,
 - c. altering, tampering with, or modifying in any manner without the express written consent of Sizewise any part(s) or structural components or appurtenances of the products,
 - d. use of the product or part(s) in a manner for which it is not designed or in any manner inconsistent with the information set forth in the Sizewise owner's manual including without limitation use with other devices or ancillary products for which it was not intended.
12. Exposure of the product or part(s) to, whether foreseen or unforeseen, accident, acts of God, or natural causes (such as natural disasters, fire, flood, wind, water or power failures, acts or threats of terrorism).

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13. Operation of the product beyond its normal useful life.
14. Buyer's failure to show proof of purchase.
15. Products or items not manufactured by Sizewise. Rather for products or items obtained by Sizewise from an original manufacturer or third party supplier Sizewise may assign to the Buyer any warranty rights in such products or items that Sizewise may have from the original manufacturer or third party supplier, to the extent such assignment is allowed by the original manufacturer or third party supplier.

DISCLAIMER AND RELEASE.

The warranties provided herein are the exclusive warranties given by Sizewise and supersede any prior, contrary or additional representations or warranties, whether oral or written. **EXCEPT FOR THE EXPRESS WARRANTIES IN THIS LIMITED PRODUCT WARRANTY, SIZEWISE DISCLAIMS ANY AND ALL OTHER WARRANTIES WHETHER EXPRESS OR IMPLIED WARRANTIES, INCLUDING, WITHOUT LIMITATION, ANY WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR NON-INFRINGEMENT, AND ANY WARRANTIES ARISING FROM COURSE OF DEALING, USAGE OF TRADE, OPERATION OF LAW OR OTHERWISE WITH RESPECT TO ANY PRODUCT, SERVICES, PARTS INCLUDING REPAIRED OR REPLACED PRODUCTS AND PARTS. ARE HEREBY DISCLAIMED AND EXCLUDED. Sizewise ALSO HEREBY DISCLAIMS AND EXCLUDES ALL OTHER OBLIGATIONS OR LIABILITIES, EXPRESS OR IMPLIED, ARISING BY LAW OR OTHERWISE, WITH RESPECT TO ANY NONCONFORMANCE OR DEFECT IN ANY PRODUCT OR PART(S), INCLUDING BUT NOT LIMITED TO: (A) ANY OBLIGATION, LIABILITY, RIGHT, CLAIM OR REMEDY IN TORT, WHETHER OR NOT ARISING FROM THE NEGLIGENCE OF SIZEWISE OR ITS SUPPLIERS (WHETHER ACTIVE, PASSIVE OR IMPUTED); AND (B) ANY OBLIGATION, LIABILITY, RIGHT, CLAIM OR REMEDY FOR LOSS OF OR DAMAGE TO ANY PRODUCT OR PART(S). THIS DISCLAIMER AND RELEASE SHALL APPLY EVEN IF THE EXPRESS WARRANTY SET FORTH ABOVE FAILS OF ITS ESSENTIAL PURPOSE.**

Exclusive Remedies.

For any product described above that Sizewise determines to have failed to conform to its warranty, Sizewise will provide, at its option, one of the following:

- (1) repair;
- (2) replacement; or
- (3) refund of the purchase price.

Sizewise Limited Product Warranty service may be obtained by contacting Sizewise or the authorized dealer from whom Buyer purchased the item. Sizewise compensates only Sizewise authorized service providers for warranty trips within their normal service area to repair commercial products at the customer's location.

THESE SHALL BE THE SOLE AND EXCLUSIVE REMEDIES OF THE BUYER FOR ANY BREACH OF WARRANTY.

EXCLUSION OF CONSEQUENTIAL AND INCIDENTAL DAMAGES.

SIZEWISE AND/OR ITS SUPPLIERS SHALL HAVE NO OBLIGATION OR LIABILITY, WHETHER ARISING IN CONTRACT (INCLUDING WARRANTY), TORT OR ANY OTHER LEGAL THEORY (INCLUDING ACTIVE, PASSIVE, OR IMPUTED NEGLIGENCE AND STRICT LIABILITY), OR OTHERWISE, FOR DAMAGE TO THE PRODUCT INCLUDING PART(S), PROPERTY DAMAGE, DEATH, PERSONAL INJURY, LOSS OF USE, GOODWILL, REVENUE OR PROFIT, COST OF CAPITAL, COST OF SUBSTITUTE PRODUCT, ADDITIONAL COSTS INCURRED BY BUYER (BY WAY OF CORRECTION OR OTHERWISE) OR ANY OTHER INCIDENTAL, SPECIAL, INDIRECT, COMPENSATORY OR CONSEQUENTIAL DAMAGES, INCLUDING WITHOUT LIMITATION WHETHER RESULTING FROM NONDELIVERY, USE, MISUSE OR INABILITY TO USE THE PRODUCT, SERVICES OR PART(S). THIS EXCLUSION APPLIES EVEN IF THE ABOVE WARRANTY FAILS OF ITS ESSENTIAL PURPOSES AND REGARDLESS OF WHETHER SUCH DAMAGES ARE SOUGHT FOR BREACH OF WARRANTY, BREACH OF CONTRACT, NEGLIGENCE, OR STRICT LIABILITY IN TORT OR UNDER ANY OTHER LEGAL THEORY. SIZEWISE LIABILITY SHALL BE LIMITED TO THE AMOUNT PAID BY BUYER FOR THE RELEVANT PRODUCT. SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATION AND EXCLUSION ON SUCH MAY NOT APPLY.

EXTENDED WARRANTY. If the product covered under the Limited Product Warranty set forth herein had from Sizewise an extended warranty option made available only at the time of the Buyer's original purchase from Sizewise, Buyers who then also purchased such extended warranty, and have proof of such purchase, may extend the warranty period stated above in the Limited Product Warranty on parts, electronics, frame and labor relating to parts, electronics and frame repairs, as applicable,

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for an additional one (1) or two (2) years, whichever extension is purchased by Buyer ("extended warranty period"). Other than the extension on the warranty period, all other terms of the limited product warranty including without limitation the conditions and restrictions, exclusions and limitations, disclaimer and release, and exclusion of consequential and incidental damages of the original limited product warranty apply during the extended warranty period. For the purpose of clarity an extended warranty is not available where the original warranty period is less than one (1) year, and an extended warranty may only be purchased by Buyer at the time of the original purchase of the product from Sizewise.

To make a warranty claim, contact:

SIZEWISE
8601 MONROVIA
LENEXA, KS 66215
800-814-9389 Monday through Friday 8am-5pm local time

Complete this portion and keep for your records.

Purchased From: Sizewise

Product/model:

Serial number: _____



8601 Monrovia Street
Lenexa, KS 66215

800-814-9389
sizewise.com

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All specifications, equipment, and prices are subject to change without
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vary slightly from actual production models.*