Operations Manual

Medical

Epic II Critical Care Bed
Model 2030

For parts or technical
assistance call
800 327 0770 (option 2)

**Important
Information**
File in your
maintenance
records

Table of Contents

Introduction

INTRODUCTION

This manual is designed to assist you with the operation of the Stryker Model 2030 Epic II® and Epic II® + Critical Care Beds. Read it thoroughly before using the equipment.

SPECIFICATIONS

Safe Working Load	500 pounds (227 kilograms)
Scale System Capacity (optional equipment)	Loads weighing up to 500 pounds (227 kilograms)
Scale System Accuracy (optional equipment)	± 1 pound of total patient weight at any bed position[1] (patients weighing 100 pounds or less) ± 1% of total patient weight at any bed position[1] (patients weighing greater than 100 pounds)
Overall Bed Length/Width	L−91" /W−42.5" or L−231 cm /W−108 cm
Minimum/Maximum Bed Height (Standard) Minimum/Maximum Bed Height (Enhanced)	18" to 32.5" ± 0.5 / 46 cm. to 82.5 cm. 19.5" to 34.5" ± 0.5 / 49.5 cm. to 88 cm. (Add 2 inches if the bed has 8" casters.)
Fluoro Access	17.5" (Epic II®), 16" (Epic II®+)
Knee Gatch Angle	0° to 30°
Back Angle	0° to 90°
Trendelenburg/Reverse Trendelenburg	−12° to +12° ± 2°
Electrical Requirements	115 VAC, 60 Hz, 7.0 Amps 230 VAC, 50/60 Hz, 4.0 Amps 100 VAC, 50/60 Hz, 9.0 Amps (Japan Option)
Battery Voltage (optional equipment)	24 V, 31 Ah
Noise Level	> 65 Decibels
Outlet Option	125 VAC, 5A, 60 Hz

[1] If the bed is equipped with the enhanced height option, the scale accuracy is as described above for litter angles from 0° to ± 5° Trend.

Stryker reserves the right to change specifications without notice.

Introduction

WARNING / **CAUTION** / **NOTE DEFINITION**

The words WARNING, CAUTION and NOTE carry special meanings and should be carefully reviewed.

⚠ **WARNING**

Alerts the reader about a situation, which if not avoided, could result in death or serious injury. It may also describe potential serious adverse reactions and safety hazards.

⚠ **CAUTION**

Alerts the reader of a potentially hazardous situation, which if not avoided, may result in minor or moderate injury to the user or patient or damage to the equipment or other property. This includes special care necessary for the safe and effective use of the device and the care necessary to avoid damage to a device that may occur as a result of use or misuse.

NOTE

This provides special information to make maintenance easier or important instructions clearer.

SAFETY TIPS AND GUIDELINES

Before operating the Epic II® and Epic II®+ Critical Care Beds, it is important to read and understand all information in this manual. Carefully read and strictly follow the safety guidelines listed on this page and on pages 4 and 5.
To ensure safe operation of the bed, methods and procedures must be established for educating and training hospital staff on the intrinsic risks associated with the usage of electric beds.

⚠ **WARNING**

- The Epic II® Critical Care Bed is equipped with a hospital grade plug for protection against shock hazard. It must be plugged directly into a properly grounded three–prong receptacle. Grounding reliability can be achieved only when a hospital grade receptacle is used.

- Serious injury can result if caution is not used when operating the bed. Operate bed only when all persons are clear of the electrical and mechanical systems.

- Leave the bed in the lowest position when the patient is unattended. Leaving the bed in a raised position could increase the chance of patient falls and injury.

- Always apply the caster brakes when a patient is getting on or off the bed. Always keep the caster brakes applied when a patient is on the bed (except during transport). Serious injury could result if the bed moves while a patient is getting in or out of bed. After the brake pedal is applied, push on the bed to ensure the brakes are locked. When moving the bed, toggle the steer pedal to put the bed in the steer mode. This locks the swivel motion of the right foot end caster and makes the bed easier to move.

- When raising the siderails, listen for the "click" that indicates the siderail has locked in the up position. Pull firmly on the siderail to ensure it is locked into position. Siderails are not intended to be a patient restraint device. It is the responsibility of attending medical personnel to determine the degree of restraint and the siderail positioning necessary to ensure a patient will remain safely in bed.

Safety Tips and Guidelines

SAFETY TIPS AND GUIDELINES (CONTINUED)

⚠ **WARNING**

- Ensure the brakes are completely released prior to attempting to move the bed. Attempting to move the bed with the brakes actuated could result in injury to the user and/or patient.

- Assistance is required to lower the Back if the angle of the Back is greater than 80° when the CPR emergency release is activated. Attempting to lower the Back in this position without assistance may result in injury to the operator.

- The Bed Exit System is intended only to aid in the detection of a patient exiting the bed. It is NOT intended to replace patient monitoring protocol. The bed exit system signals when a patient is about to exit. Adding or subtracting objects from the bed after arming the bed exit system may cause a reduction in the sensitivity of the bed exit system.

- If the bed is equipped with the Epic II®+ option, there is a power save mode. The power save mode is activated after one hour on battery power with no motion release switch activation. Functions including Bed Exit, scale and motion will cease to operate when the unit enters the power save mode. Injury to the patient could occur if proper patient monitoring protocol is not observed.

- Due to the weight the battery back–up option adds to the bed (approximately 50 pounds), additional force is required to move a bed equipped with the Epic II®+ Option. Caution should be used when transporting this bed. Additional assistance should be used when necessary. Failure to use caution while transporting this bed may result in injury to the user.

- Always unplug bed during service or cleaning. When working under the bed, always place blocks under the litter frame to prevent injury in case the Bed Down switch is accidently activated.

- The battery tray assembly weighs 50 pounds. Take care when removing the two hex head screws securing it to the base frame or personal injury could result.

- Battery posts, terminals and related accessories contain lead and lead compounds, chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. **Wash hands after handling.**

- The Epic II® Critical Care Bed is not intended for pediatric use or for patients under 50 pounds.

- Explosion Hazard – do not use bed in the presence of flammable anesthetics.

- To avoid entanglement, possibly resulting in frayed power cords and risk of electrical shock, wrap the bed power cord around the roller bumpers at the head end of the bed during transport.

- Service only by qualified personnel. Refer to the maintenance manual. Verify the power cord is unplugged and the battery power switch (Epic II®+ option) is turned to the off position before servicing.

To avoid possible injury and to assure proper operation when using a powered mattress replacement system such as XPRT:

- Confirm proper scale system operation following mattress installation. For best results, secure the therapy mattress power cord to prevent damage to the cord or interference with the bed frame and the scale system.

- Do not zero bed scales or weigh patient with Percussion, Vibration, Rotation or Turn–Assist active. Patient motion and position resulting from the dynamic therapy mattress may adversely affect scale system performance.

- Do no initialize ("arm") bed exit with Percussion, Vibration, Rotation or Turn–Assist active. The patient motion and position resulting from the dynamic therapy mattress may adversely affect bed exit system performance.

SAFETY TIPS AND GUIDELINES (CONTINUED)

⚠ **CAUTION**

- Scale function may be affected by siderail/caster interference. With the litter fully lowered or lowered in Reverse Trendelenburg, the siderails tucked under the litter in the storage position and the casters turned, there is the potential for interference between the siderail and the caster. Raise the siderails when lowering the litter to the full down position to prevent the interference from causing the bed's scale system to weigh inaccurately.

- The lockout buttons on the foot board lock the Fowler, Gatch and Bed Up/Down functions and prevent motion of the bed. It is the responsibility of attending medical personnel to determine whether these functions should be locked and to use the buttons accordingly.

- Because individual beds may have different options, foot boards should not be moved from one bed to another. Mixing foot boards could result in unpredictable bed operation.

- If large fluid spills occur in the area of the circuit boards or motors, immediately unplug the bed power cord from the wall socket. Remove the patient from the bed and clean up the fluid. Have maintenance completely check the bed. Fluids can short out controls and may cause the bed to operate erratically or make some functions completely inoperable. Component failure caused by fluids could even cause the bed to operate unpredictably and could cause injury to the patient. DO NOT put the bed back into service until it is completely dry and has been thoroughly tested for safe operation.

- Preventative maintenance should be performed at a minimum of annually to ensure all features are functioning as designed. Close attention should be given to safety features including, but not limited to:
  Safety side latching mechanisms   Caster braking systems
  Leakage current 300 microamps max.   No controls or cabling entangled in bed mechanisms
  Frayed electrical cords and components   All controls return to off or neutral position when released

- The siderails are not intended to be used as a pushing device. Damage to the siderails could occur.

- The use of a mattress overlay may reduce the effectiveness of the siderail.

- When attaching equipment to the bed, ensure it will not impede normal bed operation or patient injury could occur. For example: hooks on hanging equipment must not actuate control buttons, equipment must not hide the nurse call button, etc.

- The weight of the IV bags should not exceed 40 pounds.

The following Caution statements apply to the optional outlet:

- Maximum total load 5A receptacle rating: 125VAC, 5A, 60Hz.

- The total system chassis risk current should not exceed 300uA

- Grounding continuity should be checked periodically.

- Do not use for life–sustaining equipment.

- Use only hospital–grade equipment with electrical outlet.

- Unplug free–standing equipment before transporting the bed.

SET−UP PROCEDURES

It is important that the Epic II® Critical Care Bed is working properly before it is put into service. The following list will help ensure that each part of the bed is checked.

- Plug the bed into a properly grounded, hospital grade wall receptacle.

⚠ **WARNING**

The Epic II® Critical Care Bed is equipped with a hospital grade plug for protection against shock hazard. It must be plugged directly into a properly grounded three−prong receptacle. Grounding reliability can be achieved only when a hospital grade receptacle is used.

- Depress the pedal at either side of the bed fully to set the four wheel brakes and ensure all four casters lock. Depress the pedal again to release the brakes.
- Toggle the steer pedal to put the bed in the steer mode and ensure the locking caster engages.
- Ensure the siderails raise and lower smoothly and lock in the up and intermediate positions.
- Run through each function on the foot board control panel and ensure that each is working properly (see function lockout system usage, page 15 and scale system control panel guide, page 20).
- Ensure all functions are working properly on the siderail controls.
- Raise the Back up to approximately 60°. Squeeze the CPR release handle and ensure the Back and Knee will drop with minimal effort.
- If the bed is equipped with the Epic II®+ battery backup option, unplug the power cord from the wall socket. Push the battery power switch located on the lower left corner of the head end to the "ON" position. Again, verify each function on the foot board and siderails is operating properly. The 12 volt batteries that provide back−up power to the unit functions with the Epic II®+ option will charge whenever the power cord is plugged into the wall socket. The batteries require approximately 10 hours of charging time before the bed is put into service.
- If the bed is equipped with the Nurse Call option, verify it is functioning properly prior to patient use.

Symbols

Warning, Refer to Service/Maintenance Manual

~ Alternating Current

Type B Equipment: equipment providing a particular degree of protection against electric shock, particularly regarding allowable leakage current and reliability of the protective earth connection.

Class 1 Equipment: equipment in which protection against electric shock does not rely on BASIC INSULATION only, but which includes an additional safety precaution in that means are provided for the connection of the EQUIPMENT to the protective earth conductor in the fixed wiring of the installation in such a way that ACCESSIBLE METAL PARTS cannot become live in the event of a failure of the BASIC INSULATION.

Mode of Operation: Continuous

IPX4: Protection from liquid splash
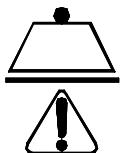
Dangerous Voltage Symbol

Protective Earth Terminal

Potential Equalization Symbol

Medical Equipment Classified by Underwriters Laboratories Inc. with Respect to Electric Shock, Fire, Mechanical and Other Specified Hazards Only in Accordance with UL 2601−1 and CAN/CSA C22.2 No. 601.1

Safe Working Load Symbol

BRAKE PEDAL OPERATION

⚠ **WARNING**

Always apply the caster brakes when a patient is getting on or off the bed. Push on the bed to ensure the brakes are securely locked. Always engage the brakes unless the bed is being moved. Injury could result if the bed moves while a patient is getting on or off the bed.

Ensure the brakes are completely released prior to attempting to move the bed. Attempting to move the bed with the brakes actuated could result in injury to the user and/or patient.

To activate the brakes, push down once on one of the pedals located at the midpoint of the bed on both sides (identified by the label at right). The pedal will remain in the lowered position, indicating the brakes are engaged. To disengage the brakes, push down once and the pedal will return to the upper position.

BRAKE
PRESS TO SET OR RELEASE

NOTE

There are LED lights on the outside of the head end siderails that will blink when the brakes *are not* engaged only if the bed is plugged into a wall socket (see page 11). The brakes will still operate properly when the bed is not plugged in.

STEER PEDAL OPERATION

The purpose of the steer caster is to help guide the bed along a straight line and to help with pivoting at corners when the bed is moved.

To activate the steer caster, move the pedal located at the head end of the bed to your left as shown on the label.

ON STEER OFF

NOTE

For proper "tracking" of the steer caster, push the bed approximately 10 feet to allow the wheels to face the direction of travel before engaging the steer pedal. If this is not done, proper "tracking" will not occur and the bed will be difficult to steer.

⚠ **WARNING**

To avoid entanglement, possibly resulting in frayed power cords and risk of electrical shock, wrap the bed power cord around the roller bumpers at the head end of the bed during transport.

CPR EMERGENCY RELEASE USAGE

If the Back and/or Knee is raised and quick access to the patient is needed, squeeze one of the two red emergency release handles, located under the litter top at the head section on either side of the bed, and the Back and Knee will lower to a flat position. The handle can be released at any time to stop the Back from lowering.

⚠ **WARNING**

Assistance is required to lower the Back if the angle of the Back is greater than 80° when the CPR emergency release is activated. Attempting to lower the Back in this position without assistance may result in injury to the operator.

CPR BOARD USAGE

The CPR board is stored on the bed's head board. To remove it, pull it away from the head board and lift it out of the storage position. The head board can also be removed and used as an emergency CPR board.

FOLEY BAG HOOKS USAGE

The standard Foley bag hooks are found at two locations on both sides of the bed, under the frame rail below the seat section and at the extreme foot end of the bed. The patient weight reading on the bed scale system will not be affected when the Foley bag hooks are used.

Siderail Operation Guide

POSITIONING SIDERAILS

NOTE
The siderails can be locked at two heights (intermediate & full up).

- The siderails can be tucked away under the bed when not in use. To remove the rail from the tucked position, grasp the top of the rail and pull outward.

- To engage the head end siderail, grasp the rail and swing it upward to full height. When the siderail is being raised, it does not lock in the intermediate position. To lower the siderail, push in the red release handle and rotate the siderail until it locks in the intermediate position. To lower the siderail fully, push in the red release handle again and rotate the siderail until it is completely lowered.

NOTE
To activate the siderail bypass mechanism, the rail must be fully lowered. If the rail is not completely lowered, the siderail will lock in the intermediate position when it is raised.

- To engage the foot end siderail, the same procedure is required as for the head end siderail, however, the siderail swings toward the foot end of the bed.

⚠ **WARNING**

When raising the siderails, listen for the "click" that indicates the siderail has locked in the up position. Pull firmly on the siderail to ensure it is locked into position. Siderails are not intended to be a patient restraint device. It is the responsibility of attending medical personnel to determine the degree of restraint and the siderail positioning necessary to ensure a patient will remain safely in bed.

⚠ **CAUTION**

Scale function may be affected by siderail/caster interference. With the litter fully lowered or lowered in Reverse Trendelenburg, the siderails tucked under the litter in the storage position and the casters turned, there is the potential for interference between the siderail and the caster. Raise the siderails when lowering the litter to the full down position to prevent the interference from causing the bed's scale system to weigh inaccurately.

The siderails are not intended to be used as a pushing device. Damage to the siderails could occur.

The use of a mattress overlay may reduce the effectiveness of the siderail.

NOTE
For the Back to raise to 90°, both head end siderails must be in the intermediate or down position.

SIDERAIL CONTROL PANEL LIGHTS

- The head end siderails are equipped with lights to illuminate the siderail control buttons and the nurse call switch. The lights are activated at the foot board control panel.

- There are three settings for the intensity of the siderail control lights: low, medium and high. When all the siderail lights are off, push the siderail control light button on the foot board once to turn on both the control lights and the nurse call indicator light. Push the button again to change the siderail control lights from low to medium setting, and again to change to the high setting. (The intensity of the nurse call indicator light does not change.)

- When all the siderail lights are on, pushing the button once will turn off only the siderail control lights and pushing it again will turn off the nurse call indicator light (see control panel guide).
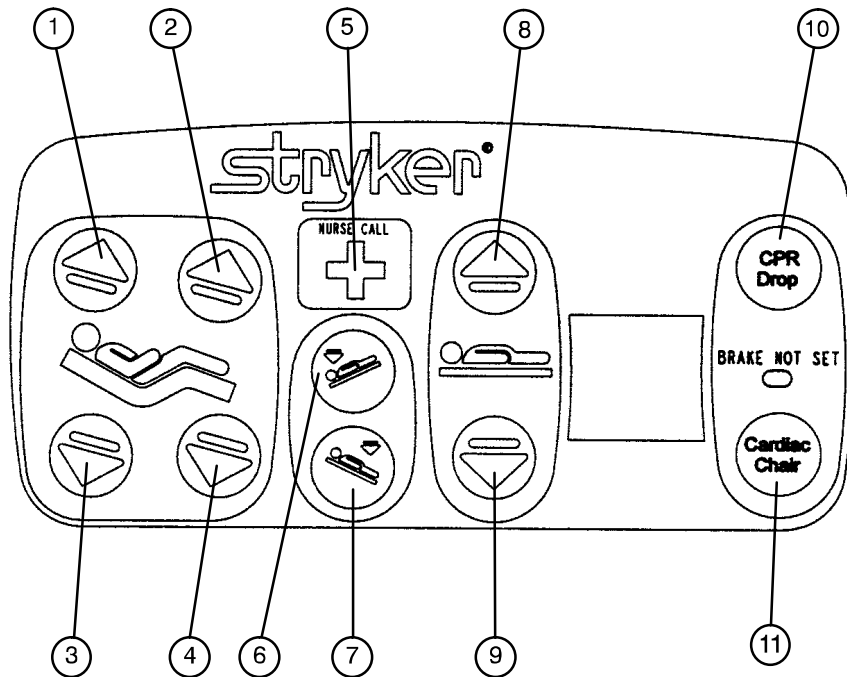
⚠ **CAUTION**

The nurse call indicator light on the siderails helps ensure the patient understands where the button is for contacting the nurse station. Turning this light off will compromise this ability, especially in a darkened room.

Siderail Operation Guide

OUTSIDE SIDERAIL FUNCTION GUIDE

1.   Press to raise back section.

2.   Press to raise knee section.

3.   Press to lower back section.

4.   Press to lower knee section.

5.   Press to activate nurse call.

▶ This function is optional equipment.

6.   Press to lower the head end of the bed (Trendelenburg).

7.   Press to lower the foot end of the bed (Reverse Trendelenburg).

8.   Press to raise the litter. If your bed is equipped with the enhanced height option, continue to hold the button an additional 5 seconds after the first stop. The litter will raise an additional 2 inches.

9.   Press to lower the litter.

10.   Press to activate emergency CPR positioning.
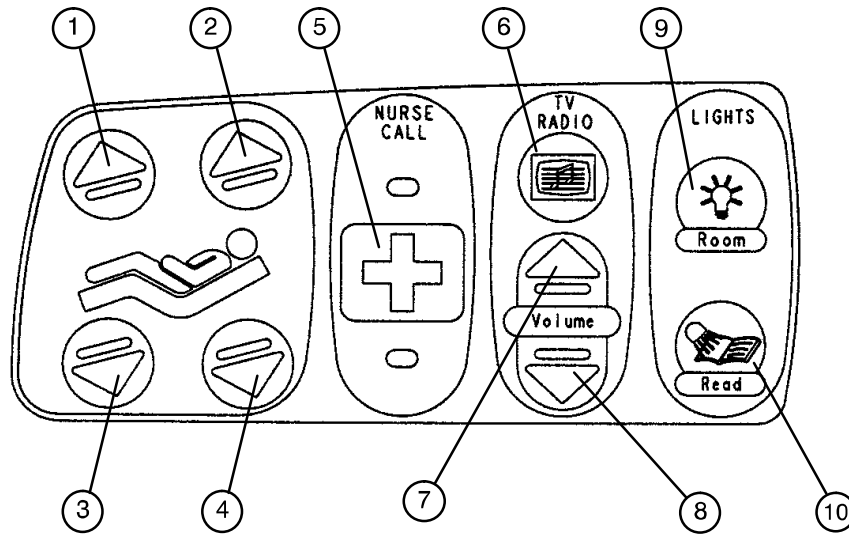
11.   Press to activate Cardiac Chair positioning.

⚠ **CAUTION**

When attaching equipment to the bed, ensure it will not impede normal bed operation or patient injury could occur. For example: hooks on hanging equipment must not actuate control buttons, equipment must not hide the nurse call button, etc.

Siderail Operation Guide

INSIDE SIDERAIL FUNCTION GUIDE

Beds with All Options (Including Basic TV/Radio)

1. Press to raise knee section.

2. Press to raise back section.

3. Press to lower knee section.

4. Press to lower back section.

▶ The following functions are optional equipment.

5. Press to activate the nurse call.

6. Press to turn on the TV or radio. Press again to change TV channels and to turn off the TV.

7. Press to increase the TV or radio volume.

8. Press to decrease the TV or radio volume.

9. Press to turn on the room lights. Press again to turn off.

10. Press to turn on the reading light. Press again to turn off.

⚠ **CAUTION**

When attaching equipment to the bed, ensure it will not impede normal bed operation. For example: hooks on hanging equipment must not actuate control buttons, equipment must not hide the nurse call button, etc.

Siderail Operation Guide

INSIDE SIDERAIL FUNCTION GUIDE
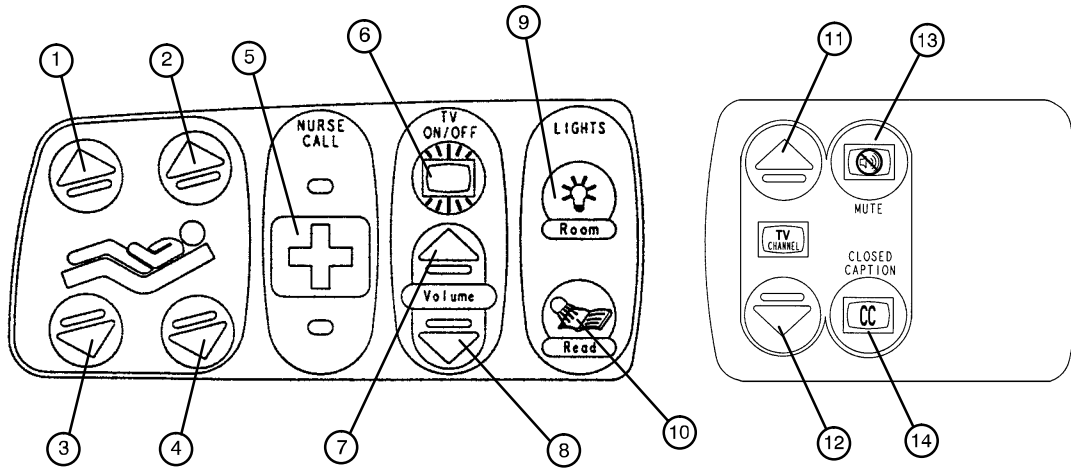
Beds with All Options (Including Smart TV)

1. Press to raise knee section.

2. Press to raise back section.

3. Press to lower knee section.

4. Press to lower back section.

▶ The following functions are optional equipment.

5. Press to activate the nurse call.

6. Press to turn the TV on. Press again to turn off the TV.

7. Press to increase the TV or radio volume.

8. Press to decrease the TV or radio volume.

9. Press to turn on the room lights. Press again to turn off.

10. Press to turn on the reading light. Press again to turn off.

11. Press to change the TV channel up.

12. Press to change the TV channel down.

13. Press to mute the TV sound. Press again to turn the sound back on.
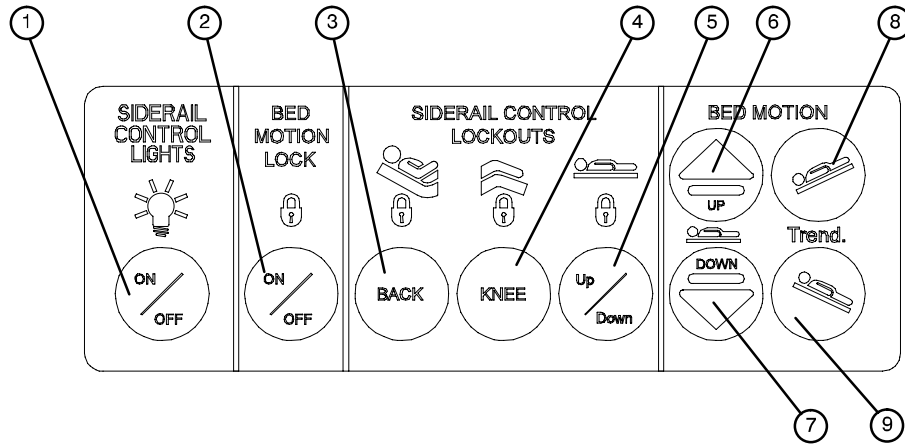
14. Press to display TV closed captioning.

⚠ **CAUTION**

When attaching equipment to the bed, ensure it will not impede normal bed operation. For example: hooks on hanging equipment must not actuate control buttons, equipment must not hide the nurse call button, etc.

Foot Board Operation Guide

FOOT BOARD CONTROL PANEL GUIDE

1. Press repeatedly for low, medium and high settings for the siderail control lights. Continue to press this switch to turn off the siderail control lights and the nurse call indicator light (see page 10).

2. Press to lock out all bed motion controls on the siderails. Press again to unlock.

3. Press to lock out Back motion control on the siderails. Press again to unlock.

4. Press to lock out Knee motion control on the siderails. Press again to unlock.

5. Press to lock out bed up/down motion controls on the siderails. Press again to unlock.

6. Press to raise the bed height. If your bed is equipped with the enhanced height option, continue to hold the button an additional 5 seconds after the first stop. The litter will raise an additional 2 inches.

7. Press to lower bed.

8. Press to lower head end of bed (Trendelenburg).

9. Press to lower foot end of bed (Reverse Trendelenburg).

⚠ **CAUTION**

When attaching equipment to the bed, ensure it will not impede normal bed operation or patient injury could occur. For example: hooks on hanging equipment must not actuate control buttons, equipment must not hide the nurse call button, etc.

Because individual beds may have different options, foot boards should not be moved from one bed to another. Mixing foot boards could result in unpredictable bed operation.

Foot Board Operation Guide

FOOT BOARD CONTROL PANEL GUIDE (CONTINUED)

LED Display Panel Guide

The LED DIsplay Panel is located at the foot end of the bed, below the Control Panel.

○ **POWER**   ○ **BED MOTION LOCKED**

"POWER" – will light when the bed is plugged into the wall receptacle or the battery power switch is on. Will blink if the 9V Nurse Call battery needs to be replaced.

"BED MOTION LOCKED" – will light when the Bed Motion Lock has been activated.

Function Lockout System Usage

1. To lock out all bed motion switches on the bed, press the "ON/OFF" switch in the "Siderail Control Lockouts" module. The "padlock" symbol on the control panel will be lighted when that function is locked out.

2. To lock out the bed movement functions on the siderails and prevent the patient from changing the positioning of the bed, press the "BACK" or "KNEE" switch in the "Siderail Control Lockouts" module. The "padlock" symbol on the control panel will be lighted when that function is locked out.

3. To lock out the bed up/down motion on the siderails, press the Up/Down switch in the "Siderail Control Lockouts" module. The "padlock" symbol on the control panel will be lighted when that function is locked out.

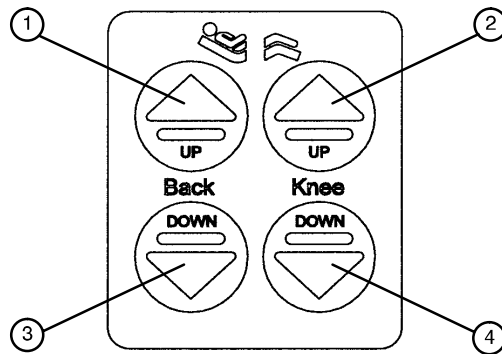⚠ **CAUTION**

The lockout buttons on the foot board lock the Fowler, Gatch and Bed Up/Down functions and prevent motion of the bed. It is the responsibility of attending medical personnel to determine whether these functions should be locked and to use the buttons accordingly.
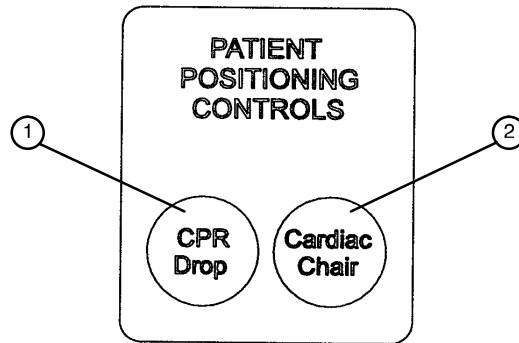
Foot Board Operation Guide

FOOT BOARD CONTROL PANEL GUIDE (CONTINUED)

1. Press to raise back section.
2. Press to raise knee section.
3. Press to lower back section.
4. Press to lower knee section.

1. Press to activate the emergency CPR drop function. The bed will level from Trendelenburg/reverse Tren-delenburg, the Fowler will lower to flat, the Knee will lower to flat and the litter will lower to full down.

2. Press to activate the Cardiac Chair function. The Knee will raise, the Fowler will raise or lower to approxi-mately 52° and the bed will tilt to approximately –12° reverse Trendelenburg (foot end down) or –14° if the bed has the enhanced height option. Release the button to stop bed movement: hold the button until movement stops to complete the function.

CHAPERONE® BED EXIT (OPTIONAL EQUIPMENT)
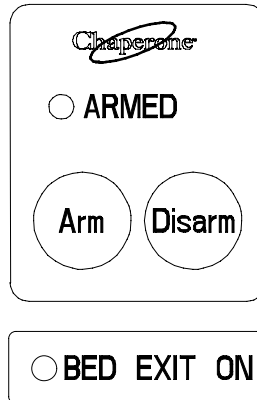
For beds with a scale system:

NOTE
If the scale system is in use, it will switch to "off" when the "ARM" key is pressed.

1. Before putting the patient on the bed, the scale system must be zeroed for the Bed Exit System to function properly (see page 22 for instructions on zeroing the scale system).

2. Put the patient on the bed and push the "ARM" key to activate the Bed Exit function. The "ARMED" light will come on.

3. To deactivate Bed Exit, push the "DISARM" key. The "ARMED" and "BED EXIT ON" lights will turn off.

For beds without a scale system:

1. Before putting the patient on the bed, press and <u>hold</u> the "ARM" and the "DISARM" keys together until the "ARMED" light begins to flash.

2. Release the "ARM" and the "DISARM" keys and <u>do not touch the bed</u> until the "ARMED" light stops flashing.

3. Put the patient on the bed and push the "ARM" key to activate the Bed Exit function. The "ARMED" light will come on.

4. To deactivate Bed Exit, push "DISARM". The "ARMED" and "BED EXIT ON" lights will turn off.

⚠ **WARNING**

The Bed Exit System is intended only to aid in the detection of a patient exiting the bed. It is NOT intended to replace patient monitoring protocol. It signals when a patient is about to exit. Adding or subtracting objects from the bed after arming the bed exit system may cause a reduction in the sensitivity of the bed exit system.

To avoid possible injury and to assure proper operation when using a powered mattress replacement system such as XPRT, do not initialize ("arm") bed exit with Percussion, Vibration, Rotation or Turn–Assist active. The patient motion and position resulting from a dynamic therapy mattress may adversely affect bed exit system performance.

Foot Board Operation Guide

CHAPERONE® BED EXIT WITH ZONE CONTROL (OPTIONAL EQUIPMENT)
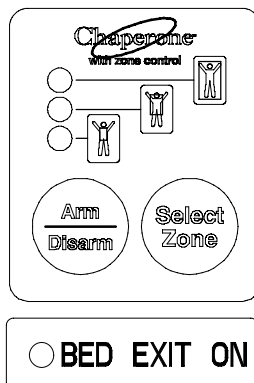
For beds with a scale system:

NOTE
If the scale system is in use, it will switch to "off" when Bed Exit is armed.

1. Before putting the patient on the bed, the scale system must be zeroed for the Bed Exit System to function properly (see for instructions on zeroing the scale system).
2. Put the patient on the bed and push and release the "ARM/DISARM" key (top light will come on).
3. The Bed Exit system with Zone Control will automatically select the first zone. To change the zone, push and hold the "SELECT ZONE" key until the light indicating the desired zone comes on.
4. To deactivate Bed Exit, push the "ARM/DISARM" key. The selected zone light and "BED EXIT ON" lights will turn off.

For beds without a scale system:

1. Before putting the patient on the bed, press and <u>hold</u> the "ARM/DISARM" and the "SELECT ZONE" keys together for 5 seconds. The top light will begin to flash.
2. Release the "ARM/DISARM" and the "SELECT ZONE" keys and <u>do not touch the bed</u> until the top light stops flashing.
3. Put the patient on the bed and push and release the "ARM/DISARM" key (top light will come on).
4. The Bed Exit system with Zone Control will automatically select the first zone. To change the zone, push and hold the "SELECT ZONE" key until the light indicating the desired zone comes on.
5. To deactivate Bed Exit, push the "ARM/DISARM" key. The selected zone light and "BED EXIT ON" light will turn off.

⚠ WARNING

To avoid possible injury and to assure proper operation when using a powered mattress replacement system such as XPRT, do not initialize ("arm") bed exit with Percussion, Vibration, Rotation or Turn–Assist active. The patient motion and position resulting from a dynamic therapy mattress may adversely affect bed exit system performance.

Foot Board Operation Guide

CHAPERONE® BED EXIT WITH ZONE CONTROL (CONTINUED)

CHAPERONE® ZONE SETTINGS

The first zone (top indicator light) is the traditional Bed Exit zone. The patient can move around the bed freely but cannot <u>fully</u> exit the bed or the alarm will sound.

The second zone (middle indicator light) is more restrictive than the first zone. When the zone is selected, the bed measures the location of the patient's center of gravity. If the patient's center of gravity moves from the original location more than 6.5 inches to either side or 13 inches toward the head or foot, an alarm will sound.

The third zone (bottom indicator light) is the most restrictive zone. When the zone is selected, the bed measures the location of the patient's center of gravity. If the patient's center of gravity moves from the original location more than 1 inch to either side or 1 inch toward the head or foot, an alarm will sound.

NOTE

All zone dimensions are ± .5 inches.

Foot Board Operation Guide

SCALE SYSTEM CONTROL PANEL GUIDE

SCALE

ZERO

MENU MODE ON\OFF

CHANGE EQUIP.

SCALE ON\OFF

ENTER LBS. / KG.
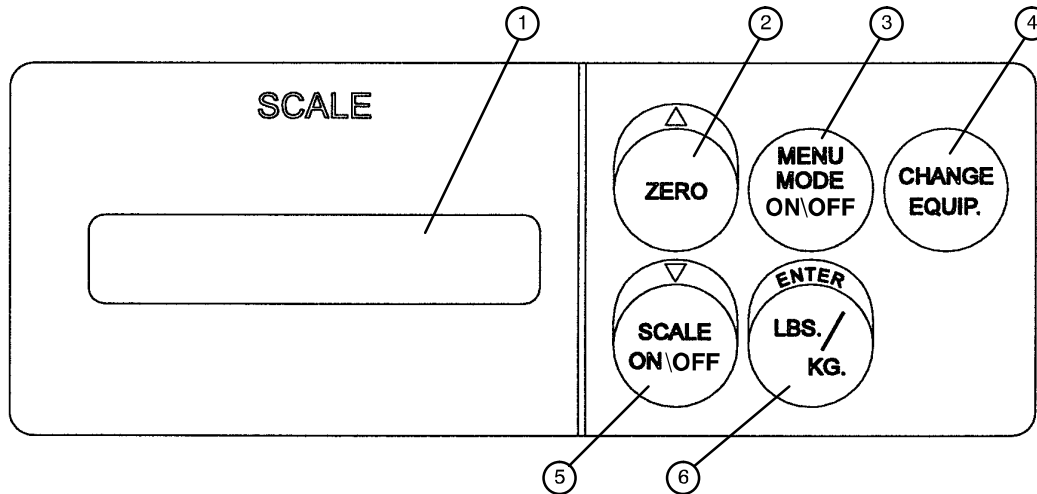
▶ This panel is optional equipment.

1. LCD – displays patient weight. Trendelenburg angle is displayed when the scale is not active.

2. Press to zero bed (see page 22). Also press to scroll while Menu Mode is active.

3. Press to enter and exit the Menu Mode.

4. Press when adding or removing equipment to the bed (see page 23).

5. Press to turn scale system on and off. Also press to scroll while Menu Mode is active.

6. Press to change weight from pounds to kilograms or back (see page 24). Also press while using the Menu Mode.

7. To display the Trendelenburg or Fowler angle of the bed see page 24.

NOTE
If weight is displayed, SCALE ON/OFF must be pressed to turn off the scale before the Trend. or Fowler angle will display.

⚠ **CAUTION**

Scale function may be affected by siderail/caster interference. With the litter fully lowered or lowered in Reverse Trendelenburg, the siderails tucked under the litter in the storage position and the casters turned, there is the potential for interference between the siderail and the caster. Raise the siderails when lowering the litter to the full down position to prevent the interference from causing the scale system to weigh inaccurately.

WARNING
To avoid possible injury and to assure proper operation when using a powered mattress replacement system such as XPRT:

• Confirm proper scale system operation following mattress installation. For best results, secure the mattress power cord to prevent damage to the cord and interference with the bed frame and the scale system.

• Do not zero bed scales or weigh patient with Percussion, Vibration, Rotation or Turn–Assist active. Patient motion and position resulting from the dynamic therapy mattress may adversely affect scale system performance.

Foot Board Operation Guide

For more detailed operating instructions, see the following:

Scale System Usage

PREPARING THE BED FOR PATIENT STAY/ZEROING THE SCALE SYSTEM

NOTE

Do not zero the bed while a patient is in bed. If this should occur, remove the patient and zero the bed again. If Bed Exit is armed, it must be disarmed before the scales can be zeroed.

*   Prepare the bed for the patient's stay by adding/removing linens, pillows, etc.

*   Press and release (SCALE ON/OFF)   The scale monitor will read:

                    "LET GO FOR SCALE"

                        "WEIGHING"

                        "XXX.X LB"

*   Press and hold (ZERO)   The scale monitor will read:

                    "HOLD TO ZERO WT."

                    "RELEASE TO ZERO"

*   Release (ZERO)   The scale monitor will now read:

                    "DO NOT TOUCH BED"

                        "0.0 LB"

The bed is now ready for the patient.

NOTE

If there is a problem with a load cell or another component of the scale system, the system will try to zero for 30 seconds, and the scale monitor will read:

                    "UNABLE TO ZERO"

                        "TRY AGAIN"

If the problem continues, after 3 attempts at zeroing, the scale system will lock and the scale monitor will read:

                    "Scale Sys. Error"

                    "Call for service"

Unplug the bed power cord from the wall socket and plug it back in. If the problem continues, call a service technician.

ACTIVATING THE SCALE SYSTEM AND DISPLAYING PATIENT WEIGHT

*   Press and release (SCALE ON/OFF)   The scale monitor will read:

                    "LET GO FOR SCALE"

                        "WEIGHING"

                        "XXX.X LB"

Scale System Usage

ADDING OR REMOVING ITEMS DURING A PATIENT'S STAY

- If it is necessary to add or remove items (monitors, pumps, etc.) during the patient's stay, press and release (SCALE ON/OFF) to activate the scale system. After the scale monitor reads: "XXX.X LB", press and hold (CHANGE EQUIP.)   The scale monitor will read:

<div align="center">

"HOLD TO START"

"RELEASE TO START"

</div>

- Release (CHANGE EQUIP.) The scale monitor will read:

<div align="center">

"DO NOT TOUCH BED"

"ADD/REMOVE EQUIP."

</div>

- Add or remove the equipment and press (CHANGE EQUIP.) The scale monitor will read:

<div align="center">

"RELEASE TO FIN."

</div>

- Release (CHANGE EQUIP.) The scale monitor will read:

<div align="center">

"DO NOT TOUCH BED"

"XXX.X LB"

</div>

The weight displayed will be that of the patient only.

- If the CHANGE EQUIPMENT function is started but not finished, after approximately 45 seconds the monitor will read:

<div align="center">

"HIT CH. EQ. TO END"

</div>

- Press (CHANGE EQUIP.) The scale monitor will read:

<div align="center">

"RELEASE TO FIN."

</div>

- Release (CHANGE EQUIP.) The scale monitor will read:

<div align="center">

"DO NOT TOUCH BED"

"XXX.X LB"

</div>

Scale System Usage

DISPLAYING TRENDELENBURG OR FOWLER ANGLE

- If scale system is on, press and release (SCALE ON/OFF)   The scale monitor will read:

"EXIT SCALE"

"FOWLER ANGLE X°" (default setting)

or

"TREND ANGLE X°"

- If scale system is not active, the scale monitor will read:

"FOWLER ANGLE X°" (defualt setting)

or

"TREND ANGLE X°"

CONVERTING THE PATIENT'S WEIGHT

- Press and release (ENTER LBS./KG.)   The scale monitor will read:

"WEIGHT NOW KGS"

"XXX.X KG"

- Repeat the procedure to return to pounds. The display will read:

"WEIGHT NOW LBS"

"XXX.X LB"

- If the unit of measurement has been locked, the display will read:

"UNITS ARE LOCKED"

A service technician must be called to unlock the unit of measurement.

DISPLAYING THE WEIGHT LOG

- To display a list of the previous 10 weight readings, press (SCALE ON/OFF) to activate the scale system. The scale monitor will read:

    "LET GO FOR SCALE"

    "XXX.X LB"

- Press (MENU MODE ON\OFF) to enter the Menu Mode. The scale monitor will read:

    "▲▼   FOR OPTIONS"

- Press (SCALE ON/OFF) or (ZERO) to scroll through the menu options. The scale monitor will read:

    "SHOW WEIGHT LOG"

    "PUSH ENTER"

- Press (LBS./ KG.) The scale monitor will read:

    "▲▼   WEIGHT LOG"

- Press (SCALE ON/OFF) or (ZERO) to scroll through the weight log. The scale monitor will read:

    "1. 0.0 LB"

- A weight reading is logged each time the (SCALE ON/OFF) button is pressed and the bed is in the scale mode for at least 15 seconds.

    The first weight reading displayed (1.) is the most recent. If the change in the patient's weight since the last reading was taken is less than .2 pounds, the log will not update. Zeroing the scale system clears the weight log.

Scale System Usage

VIEWING PATIENT WEIGHT IN GAIN/LOSS MODE

- To view the patient's weight and to begin totaling the amount of weight the patient has gained or lost, press SCALE ON/OFF to activate the scale system. The scale monitor will read:

  "LET GO FOR SCALE"

- Press MENU MODE ON\OFF to enter the Menu Mode. The scale monitor will read:

  "▲▼ FOR OPTIONS"

- Press SCALE ON/OFF or ZERO to scroll through the menu options. The scale monitor will read:

  "START GAIN/LOSS"

  "PUSH ENTER"

- Press LBS./KG. The scale monitor will read:

  "DO NOT TOUCH BED"

  "XXX.X LB G XX.X"

- To exit Gain\Loss mode, press MENU MODE ON\OFF to enter the Menu Mode. The scale monitor will read:

  "▲▼ FOR OPTIONS"

- Press SCALE ON/OFF to ZERO to scroll through the menu options. The scale monitor will read:

  "QUIT GAIN/LOSS"

  "PUSH ENTER"

- Press LBS./KG. The scale monitor will read:

  "XXX.X LB"

Scale System Usage

CHANGING THE NUMERICAL VALUE OF DISPLAYED WEIGHT

- To decrease the numerical value of the displayed weight, press ⬇️(SCALE ON/OFF) to activate the scale system.

  The scale monitor will read:

  "LET GO FOR SCALE"

  "XXX.X LB"

- Press (MENU MODE ON\OFF) to enter the Menu Mode. The scale monitor will read:

  "▲▼   FOR OPTIONS"

- Press (SCALE ON/OFF) or (ZERO) to scroll through the menu options. The scale monitor will read:

  "CHNG. PTNT. WGT."

  "PUSH ENTER"

- Press (LBS./ KG.)   The scale monitor will read:

  "HOLD ▲   TO INC.
          ▼   TO DEC."

- Press (SCALE ON/OFF) to decrease the displayed weight or (ZERO) to increase the displayed weight.

- Once the desired weight is displayed, press (LBS./ KG.)   The scale monitor will read:

  "XXX.X LB"

NOTE

If one of the load cells is malfunctioning or overloaded, the scale monitor will read:

"Scale Sys. Error"

"Call for service"

Call a service technician.

Optional Pendant Operation

Press to turn on
the TV/Radio

Press to increase the
volume of the TV/Radio

Press to decrease the
volume of the TV/Radio

Press to raise
head section

Press to lower
head section

TV/RADIO

VOLUME

HEAD   **KNEE**

Press to activate
Nurse Call

Press to turn on
room lights

Press to turn on
reading light

Press to raise
knee section

Press to lower
knee section
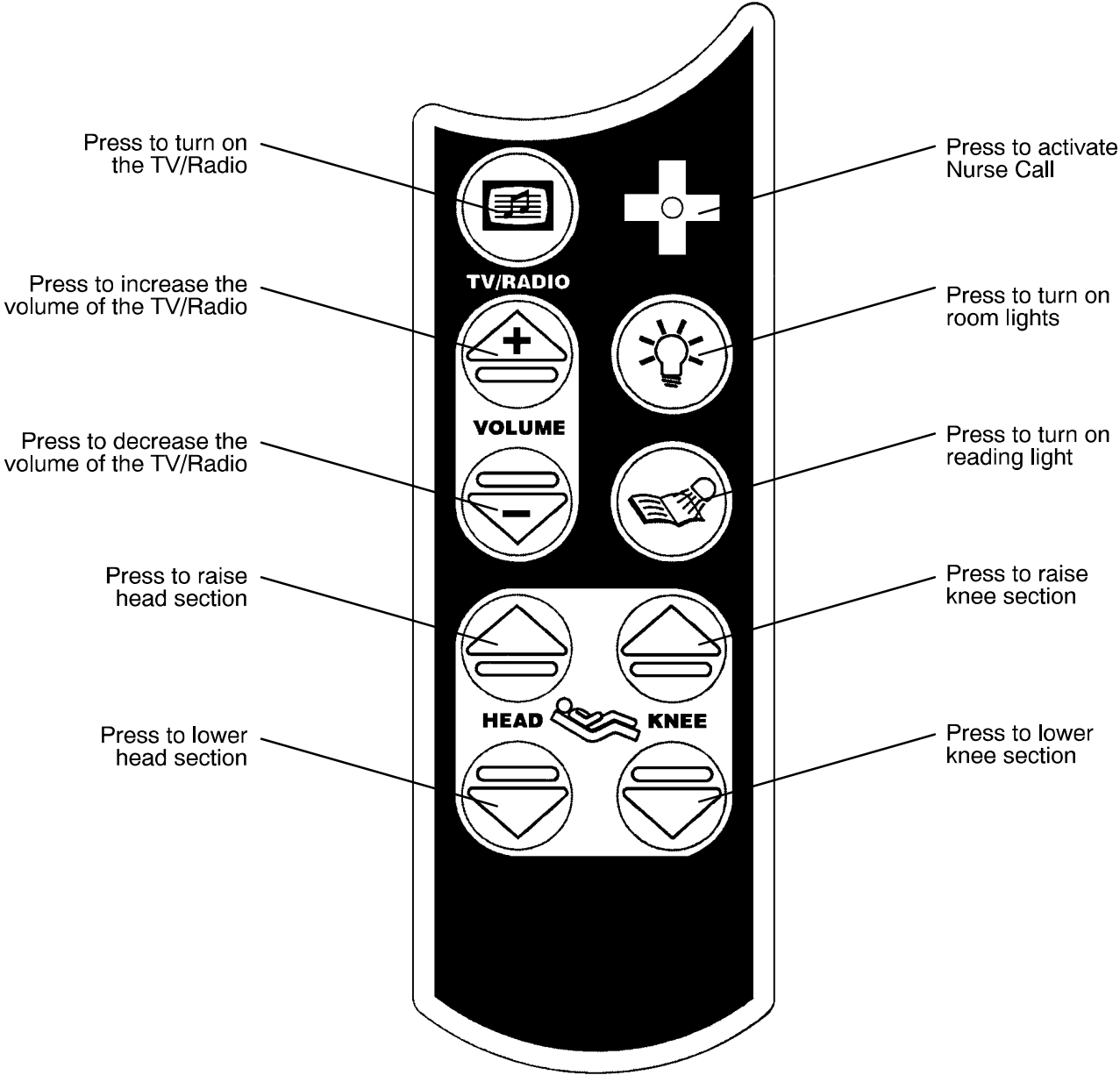
OPERATING THE OPTIONAL EPIC II®+ HEAD END CONTROL PANEL
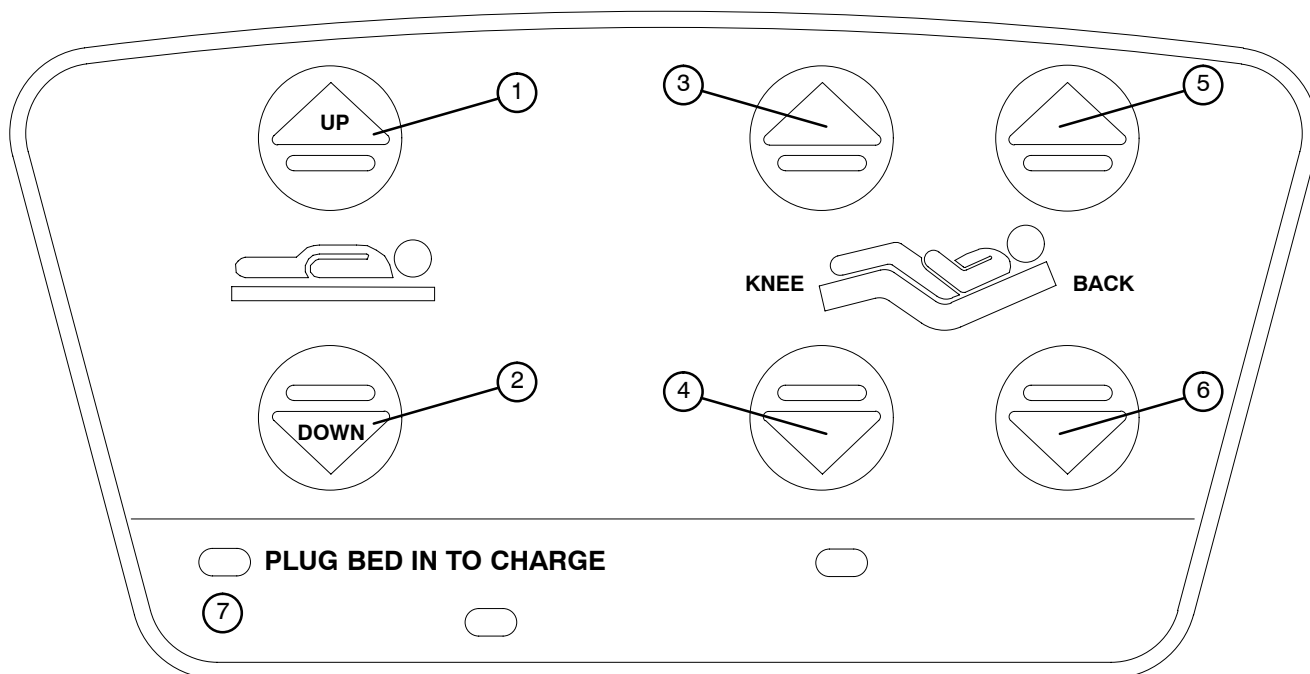
1. Press and hold to raise the litter. If your bed is equipped with the enhanced height option, continue to hold the button an additional 5 seconds after the first stop. The litter will raise an additional 2 inches.

2. Press and hold to lower the litter

3. Press to raise the Knee section.

4. Press to lower the Knee section.

5. Press to raise the Back section.

6. Press to lower the Back section.

7. The "Plug Bed In To Charge" LED will be illuminated while the battery power switch is on if the battery level is low. Plug the bed power cord into the wall socket to charge the batteries.

BATTERY BACKUP OPERATION AND BATTERY CHARGING (EPIC II®+ OPTION)
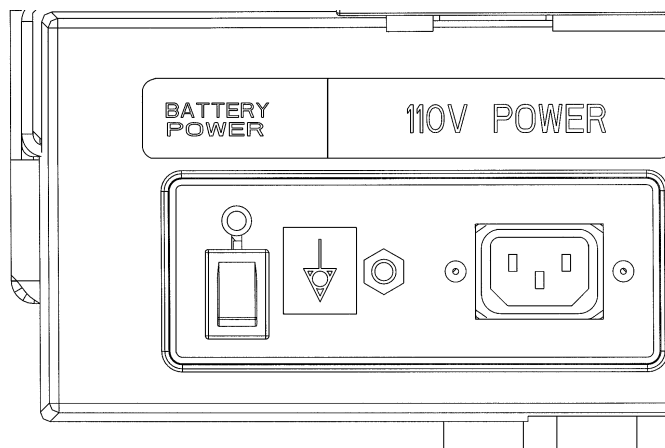
1. A unit equipped with the Epic II®+ option has two 12 volt batteries to provide back−up power to the unit functions if the power cord is unplugged from the wall socket. The unit functions will not operate properly with the power cord unplugged if the batteries are not sufficiently charged. The batteries are charging whenever the power cord is plugged into a properly grounded, hospital grade wall socket. When the unit is stationary, the power cord should be plugged into a wall socket whenever possible. The batteries require approximately 10 hours of charging time when they are fully discharged.

2. Activate the battery backup option by placing the battery power switch located at the left side of the head end of the litter in the "ON" position. The Battery Power LED will illuminate. The three LED's on the head end control panel will flash on for approximately 1 second to indicate the level of battery charge. All three will flash if the batteries are fully charged, two will flash if the batteries are partially discharged but still adequate for operation and only one will flash if the batteries are near full discharge. The "Plug Bed In To Charge" LED on the Head End Control Panel (see page 29) will remain illuminated while the battery power switch is on if the battery level is low. Plug the power cord into a wall socket to charge the batteries.

3. After one hour on battery power, the unit will enter power save mode and none of the unit's powered functions will operate. To reactivate the battery backup, either toggle the battery power switch off and back on again or plug the bed power cord into a wall socket.

NOTE
The Battery Power LED located above the battery power switch will be illuminated when the unit is in power save mode.

⚠ **WARNING**

Functions including Bed Exit, scale and bed motion will cease to operate when the unit enters the power save mode. Injury to the patient could occur if proper patient monitoring protocol is not observed.

Due to the weight the battery back−up option adds to the bed (approximately 50 pounds), additional force is required to move a bed equipped with the Epic II®+ Option. Caution should be used when transporting this bed. Additional assistance should be used when necessary. Failure to use caution while transporting this bed may result in injury to the user.

OPERATING IV POLES
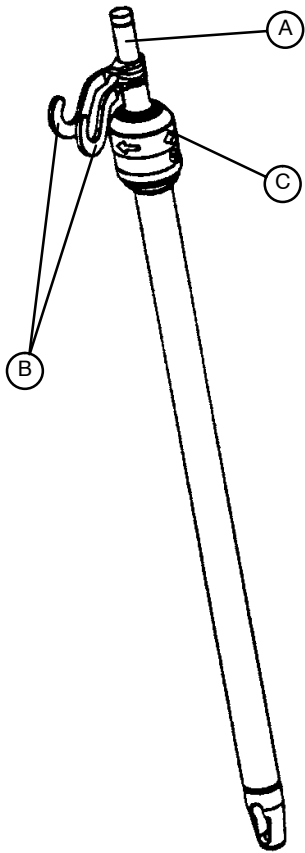
To use the 2–Stage Permanently Attached IV pole:

NOTE
The 2–stage permanently attached IV pole is an option and may have been installed at either the head, foot or both ends of the stretcher. The choice was made at the time the stretcher was purchased.

1. Lift and pivot the pole from the storage position and push down until it is locked into the receptacle.

2. To raise the height of the pole, pull up on the telescoping portion (A) until it locks into place at its fully raised position.

3. Rotate the IV hangers (B) to desired position and hang IV bags.

4. To lower the IV pole turn the latch (C) clockwise until section (A) lowers.

⚠ **CAUTION**

The weight of the IV bags should not exceed 40 pounds.

To use the "Removable" IV pole:

1. Install the pole at any of the four receptacles on the bed top (located on all four corners of the bed.)
2. To raise the height of the pole, turn knob (A) counterclockwise and pull up on the telescoping portion (B) of the pole and raise it to the desired height.
3. Turn knob (A) clockwise to tighten the telescoping portion in place.

⚠ **CAUTION**

The weight of the IV bags should not exceed 40 pounds.
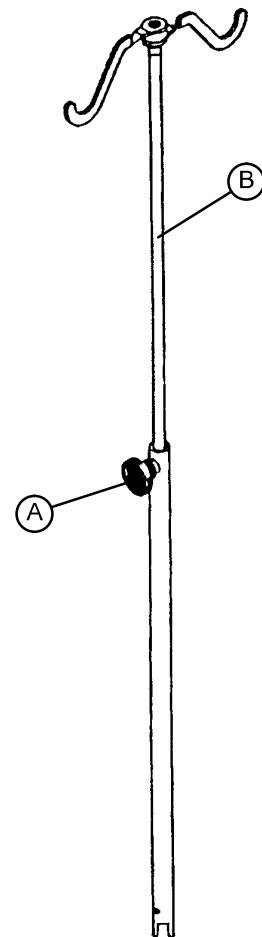
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Preventative Maintenance

NURSE CALL BATTERY

To prevent a low battery condition when the bed is not plugged in, position the cord out switch at the head end of the bed to the off position. The switch is identified by the label shown below. If the switch is not positioned as shown below and the bed power cord and pendant cord are unplugged, the life of the back–up battery will be significantly reduced.

If the power light (located on the foot board) is flashing, the Nurse Call battery needs to be replaced. The battery is located on the patient's left side at the head end of the bed. No tools are required to replace the battery. Unplug the bed power cord from the wall socket and replace the battery. Properly dispose of the old battery in accordance with local regulations.
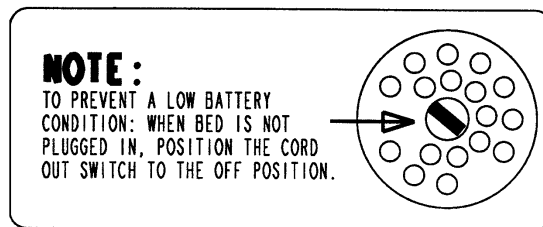
MAIN BED POWER CIRCUIT BREAKER

In the event of a loss of bed functions, unplug the bed power cord from the wall socket and reset the circuit breaker(s) located under the bed on the patient's left side. Plug the bed into a properly grounded wall receptacle and follow the set–up procedures listed on .

BATTERY CHARGER CIRCUIT BREAKER (EPIC II®+ OPTION)

If the battery charger circuit breaker(s) located under the litter on the patient's head end, left side are tripped, refer to the troubleshooting section of the maintenance manual.

Preventative Maintenance

MAINTENANCE CHECKLIST

_____ All fasteners secure

_____ Engage brake pedal and push on the bed to ensure all casters lock securely

_____ Optional locking steer caster engages and disengages properly

_____ Siderails move, latch and stow properly

_____ All functions on siderails working properly (including LED's)

_____ Head End Control Panel working properly (including LED) – optional equipment

_____ Confirm battery powered functionality – optional equipment

_____ CPR release working properly

_____ Foot prop intact and working properly

_____ I.V. pole working properly

_____ Foley bag hooks intact

_____ Chart rack intact and working properly

_____ CPR board not cracked or damaged and stores properly

_____ No cracks or splits in head and foot boards

_____ All functions on footboard working properly (including LED's)

_____ No rips or cracks in mattress cover

_____ Scale and Bed Exit system calibrated properly – optional equipment

_____ Motion interrupt switches working properly

_____ Power cord not frayed

_____ No cables worn or pinched

_____ All electrical connections tight

_____ All grounds secure to the frame

_____ Ground impedance not more than 100 milliohms

_____ Current leakage not more than 300 microamps

_____ Apply grease to litter grease points

Bed Serial No.   _____   _____

                      _____   _____

                      _____   _____

                      _____   _____

Completed By:_____   Date:_____

Cleaning

CLEANING

Hand wash all surfaces of the bed with warm water and mild detergent. DRY THOROUGHLY. Do not steam clean or hose off the Epic II Bed. Do not immerse any part of the bed. Some of the internal parts of the bed are electric and may be damaged by exposure to water.

Suggested cleaners for bed surfaces:

Quaternary Cleaners (active ingredient – ammonium chloride)

Phenolic Cleaners (active ingredient – o–phenyl phenyl)

Chlorinated Bleach Solution (5.25% – less than 1 part bleach to 100 parts water)

Avoid over–saturation and ensure the product does not stay wet longer than the chemical manufacturer's guidelines for proper disinfecting.

⚠ CAUTION

SOME CLEANING PRODUCTS ARE CORROSIVE IN NATURE AND MAY CAUSE DAMAGE TO THE PRODUCT IF USED IMPROPERLY. If the products described above are used to clean Stryker patient care equipment, measures must be taken to insure the beds are wiped with clean water and thoroughly dried following cleaning. Failure to properly rinse and dry the beds will leave a corrosive residue on the surface of the bed, possibly causing premature corrosion of critical components. Failure to follow the above directions when using these types of cleaners may void this product's warranty.

For mattress cleaning instructions, please see the tag on the mattress, or contact the mattress manufacturer.

Clean Velcro® AFTER EACH USE. Saturate Velcro® with disinfectant and allow disinfectant to evaporate. (Appropriate disinfectant for nylon Velcro® should be determined by the hospital.

Warranty

Limited Warranty:

Stryker Medical Division, a division of Stryker Corporation, warrants to the original purchaser that its products should be free from defects in material and workmanship for a period of one (1) year after date of delivery. Stryker's obligation under this warranty is expressly limited to supplying replacement parts and labor for, or replacing, at its option, any product which is, in the sole discretion of Stryker, found to be defective. Stryker warrants to the original purchaser that the frame and welds on its beds will be free from structural defects for as long as the original purchaser owns the bed. If requested by Stryker, products or parts for which a warranty claim is made shall be returned prepaid to Stryker's factory. Any improper use or any alteration or repair by others in such manner as in Stryker's judgement affects the product materially and adversely shall void this warranty. Any repair of Stryker products using parts not provided or authorized by Stryker shall void this warranty. No employee or representative of Stryker is authorized to change this warranty in any way.

Stryker Medical beds are designed for a 15 year expected life under normal use conditions and appropriate periodic maintenance as described in the maintenance manual for each device.

This statement constitutes Stryker's entire warranty with respect to the aforesaid equipment. STRYKER MAKES NO OTHER WARRANTY OR REPRESENTATION, EITHER EXPRESSED OR IMPLIED, EXCEPT AS SET FORTH HEREIN. THERE IS NO WARRANTY OF MERCHANTABILITY AND THERE ARE NO WARRANTIES OF FITNESS FOR ANY PARTICULAR PURPOSE. IN NO EVENT SHALL STRYKER BE LIABLE HEREUNDER FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING FROM OR IN ANY MANNER RELATED TO SALES OR USE OF ANY SUCH EQUIPMENT.

To Obtain Parts and Service:

Stryker products are supported by a nationwide network of dedicated Stryker Field Service Representatives. These representatives are factory trained, available locally, and carry a substantial spare parts inventory to minimize repair time. Simply call your local representative, or call Stryker Customer Service at (800) 327–0770.

Service Contract Coverage:

Stryker has developed a comprehensive program of service contract options designed to keep your equipment operating at peak performance at the same time it eliminates unexpected costs. We recommend that these programs be activated *before* the expiration of the new product warranty to eliminate the potential of additional equipment upgrade charges.

A SERVICE CONTRACT HELPS TO:

- Ensure equipment reliability
- Stabilize maintenance budgets
- Diminish downtime
- Establish documentation for JCAHO
- Increase product life
- Enhance trade–in value
- Address risk management and safety

Warranty

Stryker offers the following service contract programs:

SPECIFICATIONS	GOLD	SILVER	PM* ONLY
Annually scheduled preventative maintenance	X		X
All parts,** labor, and travel	X	X	
Unlimited emergency service calls	X	X	
Priority one contact; two hour phone response	X	X	X
Most repairs will be completed within 3 business days	X	X	
JCAHO documentation	X	X	X
On−site log book w/ preventative maintenance & emergency service records	X		
Factory−trained Stryker Service Technicians	X	X	X
Stryker authorized parts	X	X	X
End of year summary	X		
Stryker will perform all service during regular business hours (9−5)	X	X	X

 * Replacement parts and labor for products under PM contract will be discounted.
** Does not include any disposable items, I.V. poles (except for Stryker HD permanent poles), mattresses, or damage resulting from abuse.

Stryker Medical also offers *personalized* service contracts.

Pricing is determined by age, location, model and condition of product.

***For more information on our service contracts,
please call your local representative or call (800) 327−0770 (option #2).***

Return Authorization:

Merchandise cannot be returned without approval from the Stryker Customer Service Department. An authorization number will be provided which must be printed on the returned merchandise. Stryker reserves the right to charge shipping and restocking fees on returned items.

SPECIAL, MODIFIED, OR DISCONTINUED ITEMS NOT SUBJECT TO RETURN.

Damaged Merchandise:

ICC Regulations require that claims for damaged merchandise must be made with the carrier within fifteen (15) days of receipt of merchandise. DO NOT ACCEPT DAMAGED SHIPMENTS UNLESS SUCH DAMAGE IS NOTED ON THE DELIVERY RECEIPT AT THE TIME OF RECEIPT. Upon prompt notification, Stryker will file a freight claim with the appropriate carrier for damages incurred. Claim will be limited in amount to the actual replacement cost. In the event that this information is not received by Stryker within the fifteen (15) day period following the delivery of the merchandise, or the damage was not noted on the delivery receipt at the time of receipt, the customer will be responsible for payment of the original invoice in full.

Claims for any short shipment must be made within thirty (30) days of invoice.

International Warranty Clause:

This warranty reflects U.S. domestic policy. Warranty outside the U.S. may vary by country. Please contact your local Stryker Medical representative for additional information.

European Representative

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