



GoBed<sup>®</sup> II MedSurg Bed Model FL28EX

# SCRV/EP®



For Parts or Technical Assistance: USA: 1-800-327-0770 (option 2) Canada: 1-888-233-6888

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Warning/Caution, refer to accompanying documentation

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**.

# **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 60601-1, First Edition (2003) and CAN/CSA C22.2 No. 601.1-M90 with updates 1 and 2.



Safe Working Load Symbol



In accordance with European Directive 2002/96/EC on Waste Electrical and Electronic Equipment, this symbol indicates that the product must not be disposed of as unsorted municipal waste, but should be collected separately. Refer to your local distributor for return and/or collection systems available in your country.

# 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.

# A 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.

This manual is designed to assist you with the operation of the GoBed<sup>®</sup> II MedSurg Bed, Model FL28EX. Carefully read this manual thoroughly before using the equipment or beginning maintenance on it. To ensure safe operation of this equipment, it is recommended that methods and procedures be established for educating and training staff on the safe operation of this bed.

#### PRODUCT DESCRIPTION

The GoBed® II MedSurg Bed, Model FL28EX offers a high level of security, intuitive operation and enhanced mobility that allows you to support varying types of patients populations with ease and efficiency.

- Safe. Full siderail coverage, low bed height and the Chaperone center-of-gravity bed exit system combine to provide our patients with the highest level of protection.
- **Simple.** One-hand release siderails, single-button controls and an integrated pump holder are among the many features designed to help you save time and effort during your daily patient care routine.
- **Mobile.** Low start-up force, easy-roll casters and fifth-wheel steering reduce physical strain and risk of injury for you, while helping to ensure safer transport for your patient.

Safe Working Load           Note: Safe Working Load indicates the sum of the patient, mattress, and accessory weight.	500 lb	227 kg	
Scale System (Optional) - Capacity - Accuracy - Operating Angular Range	Patients weighing up to 500 lb (227 kg) $\pm$ 2% for weight from 100 lb to 500 lb (45,3 to 227 kg) $\pm$ 2 lb for weight under 100 lb (45,3 kg) -12° to +12°		
Overall Length/Width - Siderails Up - Siderails Down Weight with Headboard and Footboard	94 5/8" x 40" (240,34 cm x 101,6 cm) 94 5/8" x 39" (240,34 cm x 99,06 cm) 472 lb (214,1 kg)		
Patient Sleep Surface Recommended Mattress Size Mattress Maximum Thickness	35 x 84" (89 x 213 cm) 35 x 84" (89 x 213 cm) 6" (15,24 cm)		
Minimum/Maximum Bed Height Fowler Angle	14 1/2" to 29" (36,8 to 73,7 cm)         0° to 61°		
Gatch Angle - With Auto Contour (Optional) - Without Auto Contour Trendelenburg/Reverse Trendelenburg	0° to 24° 0° to 32° +14° to -14°		
Electrical Requirements - all electrical requirements meet CSA C22.2 No. 601.1, UL 60601-1 and IEC 60601-1, 60601- 2-38 specifications.			
Duty Cycle	10%		

# SPECIFICATIONS

#### Stryker reserves the right to change specifications without notice.

Specifications listed are approximate and may vary slightly from unit to unit or by power supply fluctuations.

# **ENVIRONMENTAL CONDITIONS**

Environmental Conditions	Operation	Storage and Transportation
Ambient Temperature	65° F (18° C)	-40° F (-40° C)
Relative Humidity (Non-Condensing)	20%	10%
Atmospheric Pressure	1060 hPa 700 hPa	1060 hPa 500 hPa

Stryker reserves the right to change specifications without notice.

- · Specifications listed are approximate and may vary slightly from unit to unit or by power supply fluctuations.
- · Operating environment recommended to ensure the scale system precision.

# **PRODUCT ILLUSTRATION**

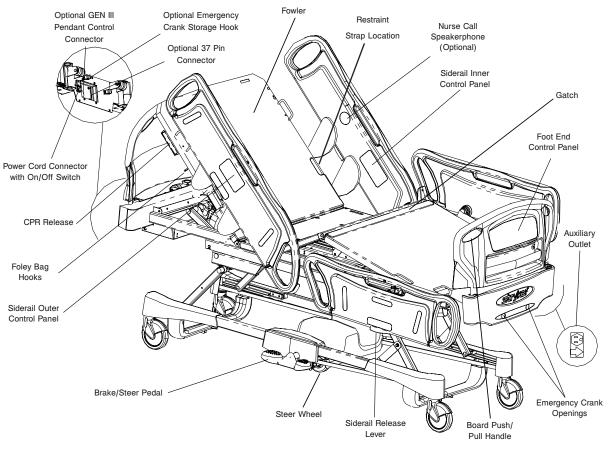


Figure 1.9

# STANDARD FEATURES

- 14.5" (37 cm) low bed height
- Retractable fifth-wheel steering
- Retractable sleep surface
- 6" (15 cm) casters
- Trendelenburg/Reverse Trendelenburg
- Four independent electric motors
- Trendelenburg display on footboard (only available with scale option)
- · Centrally located steer and four wheel brake mechanism
- Four drainage bag hooks
- · Eight IV pole/traction equipment sockets
- Roller bumpers
- · Manual back up for head and knee control
- Integrated pump holder
- Nurse controls on footboard and siderails
- Fixed patient controls on siderails
- Degree indicator for head elevation
- Patient restrain locations
- Electronic function lockout controls
- · One handed dampened siderail release
- Auto contour
- Photo sensitive night light
- · Chaperone center-of-gravity bed exit system
- CPR release
- · One-button cardiac chair
- · Siderails communications includes nurse call with speakers, TV, radio, volume, room/read lights

# **OPTIONAL FEATURES**

- Chaperone with Zone Control®
- · In-bed scale system
- Smart TV includes channel up/down
- · Mattresses: management and prevention
- · Pillow speaker interface
- Removable litter covers

# ACCESSORIES

- Monitor tray
- · Patient helper
- Emergency crank handle
- Oxygen bottle holder
- Bed extender and pad
- Removable I.V. poles
- Fixed I.V. poles
- Traction sleeves and adapters

Before operating the GoBed<sup>®</sup> II MedSurg Bed, Model FL28EX, it is important to read and understand all information in this manual. Carefully read and strictly follow the safety guidelines listed below. It is important that all users have been trained and educated on the inherent hazards associated with the usage of electric beds.

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- This bed is not intended for pediatric use.
- The mattress thickness should not exceed 6 inches (15,24 cm).
- This bed is equipped with a hospital grade plug for protection against shock hazard. It must be plugged directly into a properly grounded receptacle. Grounding reliability can be achieved only when a hospital grade receptacle is used.
- Shock Hazard Improper handling of the power cord may result in damage to the power cord and potential shock hazards. If damage has occurred to the power cord, immediately remove the bed from service, and contact the appropriate maintenance personnel. Failure to do so could result in serious injury or death.
- Serious injury can result if caution is not used when operating the bed. Operate the bed only when all people and equipment are clear of the electrical and mechanical systems.
- Always apply the brakes when a patient is on the bed or entering/exiting the bed. Serious injury could result if the bed moves while a patient is getting on or off the bed. After the brake pedal is engaged, push on the bed to ensure the brakes are securely applied.
- Keep siderails in the fully raised position and the sleep surface horizontal in its lowest position when the patient is unattended, unless its medical condition dictates otherwise. When raising the siderails, be sure that you hear the "click" that signals the locked condition. Pull firmly on the siderail to ensure it is locked into position.
- When the sleep surface sections are articulated, ensure that all the patient's limbs are within the raised siderails to avoid patient injury.
- When a patient's condition requires greater safety measures for his/her security, use the lockout controls in the foot board control panel to inhibit the siderail functions or remove any optional pendant control and install protective pads on the siderails.
- Siderails, with or without their padded covers, are not intended to serve as restraint devices to keep patient from exiting the bed. Siderails are designed to keep a patient from inadvertently rolling off the bed. It is the responsibility of the attending medical personnel to determine the degree of restraint necessary to ensure a patient will remain safely in bed. Failure to use the siderails properly could result in serious patient injury.
- To reduce risk of injury, ensure the sleep surface is horizontal and in the lowest position with the siderails fully raised and locked when moving the bed with a patient in it.
- To avoid injury to the patient and/or user, do not attempt to move the bed laterally with the steer mode engaged. The steer wheel cannot swivel.
- The CPR emergency release is for emergency use only. When activating the CPR release handle, all people and equipment must be removed from the area below and around the head, thigh and foot sections of the bed or serious personal injury and/or equipment damage could occur.
- Possible fire hazard exists when this bed is used with oxygen administering equipment other than nasal, mask type or half bed-length tent type. Unplug the bed power cord from the wall when oxygen-administering equipment is used. When using a half bed-length tent type, ensure that the siderails are outside the oxygen tent and that the tent does not extend below the mattress support level.
- 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 the bed. The addition or
  removal of equipment with a Bed Exit system armed must be done using the "Adding or Removing Equipment with
  the System Armed" procedure, otherwise the sensitivity of the system may be affected and the readings of the
  patient's movements in the bed be erroneous.
- The Bed Exit system is not designed to be used with patients weighing less than 50 lb (23 kg).
- When large fluid spills occur in the area of the circuit boards, cables and motors, immediately unplug the bed power cord from the wall outlet, remove the patient from the bed and clean up the fluid. Have maintenance completely check the bed. Fluids can have an adverse effect on operational capabilities of any electrical product. **Do not** put the bed back into service until it is completely dried and has been thoroughly tested for safe operation. Ensure, among other things, that the plastic components being used as covers for the siderail mechanism arms and the foot end casing are removed and that the parts they cover are thoroughly dried.

# MARNINGS (CONTINUED)

- Do not steam clean, hose off or ultrasonically clean the bed. Do not immerse any part of the bed. The internal
  electrical parts may be damaged by exposure to water. Hand wash regularly all surfaces of the bed with warm water
  and a mild detergent. Wipe cleaned surfaces dry to avoid build up of cleaning substance. Inspect the mattress
  after each use. Discontinue use if any cracks or rips, which may allow fluid to enter the mattress, are found in the
  mattress cover. Failure to properly clean the mattress, or dispose of it if defective, may increase the risk of exposure
  to pathogenic substances and may bring about diseases to the patient and user.
- Preventative maintenance should be performed at least once a year to ensure all bed features are functioning properly. Ensure that any bed malfunction is promptly reported to your service personnel for immediate attention.
- Always unplug the bed power cord from the wall outlet when servicing or cleaning the bed. When working under the bed with the bed in the high position, always apply the brakes and place blocks under the Hi-Low levers to prevent injury in case the bed down switch is accidentally pressed.
- To avoid damage to the siderail mechanisms, do not move the bed using the raised siderails. Move the bed using the push/pull handles integrated to the boards.
- Before using the optional emergency crank during a power failure, always unplug the power cord. An unexpected return of the power could rotate the handle and cause injury to the user.
- 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.
- When servicing use only identical replacement parts provided by Stryker.

# Note

Throughout this Operations Manual, the words "right" and "left" refer to the right and left sides of a patient lying face up on the bed.

It is important to ensure the GoBed<sup>®</sup> II MedSurg Bed, Model FL28EX is working properly before it is put into service. The following list will help ensure that each part of the bed is checked.

• Install the footboard and headboard on the bed. Insert the foot board carefully so that the board and the casing connectors fit in smoothly.

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

- Ensure that the molded shells of the head and foot sections are properly positioned.
- Plug the power cord to the bed connector at the head end of the bed and into a properly grounded hospital grade wall outlet. Turn on the power switch located on the power connector at the head end of the bed.

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The bed is equipped with a hospital grade plug for protection against shock hazard. It must be plugged directly into a properly grounded receptacle. Grounding reliability can be achieved only when a hospital grade receptacle is used.

- On both sides of the bed, depress the side of the pedal identified with a red arrow and ensure the brakes are applied and the bed immobilized. Toggle the pedal to neutral and ensure the brakes release.
- On both sides of the bed, depress the side of the pedal identified with a green arrow and ensure the steer wheel is engaged. Toggle the pedal to neutral and ensure the steer wheel disengages.
- · Ensure that the siderails raise, lock in the up position and lower smoothly.
- · Run through each control of the foot end panel.
- Verify the scale system, if equipped, (see the "Scale System Calibration" procedure in the Maintenance Manual) and the optional Bed Exit system for proper operation.
- Test each function on both inner and outer control panels of the head end siderails. Completely raise the bed and activate the Trendelenburg function. Ensure the head end lowers to the full down position. Level the bed using the Hi-Lo controls.
- Completely raise the bed and activate the reverse Trendelenburg function. Ensure the foot end lowers to the full down position. See F2 in the "Foot Board Control Panel Guide" section. Level the bed using the Hi-Lo controls.
- Verify the CPR emergency release using both CPR release handles: completely raise the Fowler and, using the CPR handle, lower the Fowler gradually to a flat position by pulling, holding and releasing the handle several times. Ensure the Gatch (if raised) also starts flattening when the Fowler is completely down. Following the complete lowering of the Fowler, wait approximately 30 seconds the time for the Fowler control motor to reset and verify that the motor has indeed reset by completely raising the Fowler using the Fowler up control.
- Verify the following optional equipment for proper operation: 120Vac auxiliary outlet, emergency crank operation, etc.

#### Note

If any problems are found during bed setup, contact our Technical Service department.

#### **POWERING THE BED**

The bed is equipped with an On/Off switch located on the power connector at the head end of the bed. To activate the bed functions, plug the power cord into a wall outlet and turn the switch on. When the power cord is unplugged from the wall outlet, the switch is turned off or in the event of a power failure, the settings of the lockout controls and the calibration data of the Scale and the Bed Exit (optional) systems are preserved.



Shock Hazard - Improper handling of the power cord may result in damage to the power cord and potential shock hazards. If damage has occurred to the power cord, immediately remove the bed from service, and contact the appropriate maintenance personnel. Failure to do so could result in death or serious injury.

#### **BRAKE/STEER PEDAL**

The bed is equipped with two pedals. They control the brakes and the fifth wheel steering. The following illustrations, appearing on the label affixed on the fifth wheel hood show the operation of the pedals.

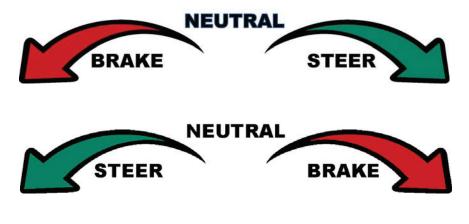


Figure 2.2

# **APPLYING THE BRAKES**

The bed is equipped with a central locking system activated by either lateral brake/steer pedals (see Product Illustration on page 9).

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Always apply the brakes when a patient is on the bed (except during transport) or when entering/exiting the bed. Serious injury could result if the bed moves while a patient is getting on or off the bed. After the brake pedal is engaged, push on the bed to ensure the brakes are applied.

#### **Brake Pedal Operation**

To engage the wheel brakes, fully depress the side of the pedal identified by the red arrow labeled "BRAKE".

To **disengage** the wheel brakes, toggle the pedal to the neutral position.

## MOVING THE BED

The bed is equipped with fifth wheel steering. The fifth wheel is activated by engaging either of the brake/steer pedals (see "Product Illustration" on page 9). The fifth wheel helps in guiding the bed along a straight line and pivot around corners.



To reduce risk of injury, ensure the sleep surface is horizontal and in the lowest position with the siderails completely raised and locked when moving the bed with a patient in it.

To avoid injury to the patient and/or user, do not attempt to move the bed laterally with the steer mode engaged. The steer wheel cannot swivel.

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To avoid damage to the siderail mechanisms, do not move the bed using the raised siderails. Use the push/pull handles integrated to the footboard and headboard to move the bed.

#### **Steer Pedal Operation**

To **engage the steer wheel**, fully depress the side of the pedal identified by the green arrow labeled "STEER" (Figure 2.2 on page 14).

To disengage the steer wheel, toggle the pedal to the neutral position.

# FOLEY BAG HOOK USAGE

The four Foley bag hooks (see "Product Illustration" on page 9) are located on both sides of the bed under the edges of the mattress support head and seat sections.

#### Note

The Foley bag hooks move when the Fowler is raised or lowered. Fowler motion must be locked out when using these hooks to avoid inadvertent movement of the hooks.

## PATIENT RESTRAINT STRAP LOCATIONS

The bed has 12 locations on the mattress support for installing patient restraint straps. Ten of them are located on the mattress support edges directly across from each other and the remaining two are located on the top edge of the head section (see "Product Illustration" on page 9).



Improperly adjusted restraint straps can cause serious injury to a patient. It is the responsibility of the attending medical personnel to determine proper use of the restraint straps.

## NIGHT LIGHT USAGE

The bed is equipped with a photoelectric night light to illuminate the floor area around the bed. The night light turns on as the room lights dim.

#### CPR EMERGENCY RELEASE

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The CPR emergency release is for emergency use only. When activating the CPR release handle, all people and equipment must be removed from the area below and around the head, thigh and foot sections of the bed or serious personal injury or equipment damage could occur.

When quick access to the patient is needed and the Fowler is raised, pull outward one of the two release handles located under the upper right and left sides of the head section (see "Product Illustration" on page 9). The Fowler will automatically flatten, and if raised, so will the Gatch.

The CPR handle can be released at any time to stop the lowering movement of the Fowler. But doing so will subsequently require that the Fowler be completely lowered, using the CPR handles or the Fowler down control, to enable the Fowler motor to reset itself. Failing to do so will prevent the Fowler from being fully raised.

#### Note

The use of the CPR release handle to partially lower the Fowler creates a situation where the course of the Fowler motor is temporarily out of sync with the actual position of the Fowler. The situation is automatically corrected when the Fowler is completely lowered. During the time the resetting process (approximately 30 seconds), the Fowler controls are not available.

#### Lowering the Fowler During a Power Failure

The CPR emergency release can also be used during a power failure to partially or completely lower the Fowler. Simply pull one of the CPR handles until the desired angle is reached. When power is restored, fully lower the Fowler to enable the Fowler motor to reset itself.

# NURSE CALL USAGE (OPTIONAL)

The nurse call function allows the patient to communicate through a speakerphone with the nurse station by simply pressing the red nurse call 🕒 button on the inner control panel. The speakerphones are located on both head end siderails (see "Product Illustration" on page 9).

The communication between the patient and the nurse station is established the moment a member of the nursing staff responds to the call signal.

#### Note

The nurse call system will automatically send a call signal to the nurse station if the communication between the bed and the nurse station is interrupted following a power failure, the switching off of the bed or the disconnection of the nurse call communication cable.

# AUXILIARY POWER OUTLET USAGE (OPTION AVAILABLE WITH 120VAC BED MODEL)

Located on the left side at the foot end of the bed (see "Product Illustration" on page 9), this feature provides nursing staff with a convenient power source for peripheral equipment. A 5A breaker is integrated to the power outlet.

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Use only hospital grade electric equipment consuming 5A or less with the auxiliary power outlet (optional). The use of standard electric equipment may bring the current leakage to an unacceptable level for hospital equipment.

## **POSITIONING SIDERAILS**

The bed siderails are designed to allow their lowering using only one hand. They have one locked position: in the upper position. They can be tucked away against the mattress support when not in use.

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Keep siderails completely raised and the sleep surface horizontal in its lowest position when the patient is unattended, unless its medical condition dictates otherwise. When raising the siderails, be sure that you hear the "click" that signals the locked condition. Pull firmly on the siderail to ensure it is locked into position.

Siderails, with or without their padded covers, are not intended to serve as restraint devices to keep patient from exiting the bed. Siderails are designed to keep a patient from inadvertently rolling off the bed. It is the responsibility of the attending medical personnel to determine the degree of restraint necessary to ensure a patient will remain safely in bed. Failure to use the siderails properly could result in serious patient injury.

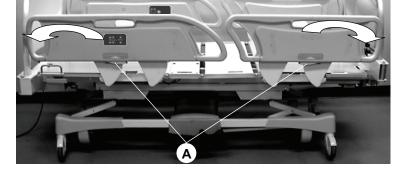
To lower the head siderail, lift the yellow lever (A) using one hand and rotate the siderail downward toward the head end

of the bed until it is completely lowered. Stow the siderail by pushing it against the mattress support.

To **lower the foot** siderail, the same procedure is required as for the head end siderail; however, the siderail rotates toward the foot end of the bed.

To **raise** a head siderail, rotate it upward toward the head end of the bed until it locks in the upright position; you will then

hear the "click" that indicates the locked condition.



To **raise** a foot siderail, the same procedure is required as for the head siderail; however, the siderail rotates toward the foot end of the bed.

# HEADBOARD AND FOOTBOARD OPERATION

Both the headboard and the footboard can be easily removed or replaced. The removal of the headboard allows easy access to the patient head.

#### **Removing/Installing Boards**

•	Removing:	Either End:	Grasp both ends of the head/footboard and lift up.
•	Installing:	Headboard:	Insert the board posts inside the mounting sockets.
		Footboard:	Insert the board slowly in the mounting sockets and ensure the connector properly
			fits on the connector of the foot end casing.

# Note

If the footboard must be removed and the electric functions are to remain accessible through the siderails, ensure that the siderail controls are operational by deactivating any lockouts (see D1, D2 and D3, "Foot Board Control Panel Guide" on page 19) before removing the foot board.

# HEAD SIDERAIL FUNCTION GUIDE

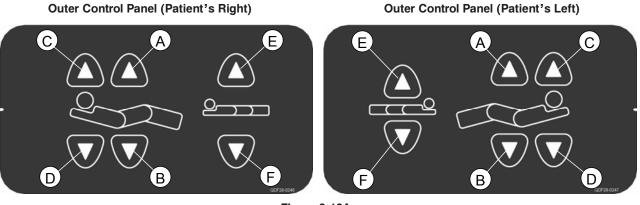


Figure 2.13A

- A: Press to raise Gatch B: Press to lower Gatch
- C: Press to raise Fowler

D:	Press	to	lower	Fowler

- E: Press to raise bed
- F: Press to lower bed

Inner Control Panel (Patient's Right)

Inner Control Panel (Patient's Left)

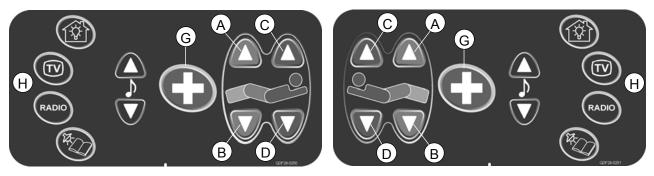


Figure 2.13B

- A: Press to raise Gatch
- B: Press to lower Gatch
- G: Press to activate Nurse Call (optional)

- C: Press to raise Fowler
- D: Press to lower Fowler
- H: Communications Package Controls

# C (D1` (D2 (D3 Е (F1) stryker BED EXIT CONTROLS Page 23 SCALE CONTROLS Page 20 $\Delta T \Delta$ (F2) А BÒ

## FOOT BOARD CONTROL PANEL GUIDE



A: Press to raise/lower the Fowler.

**B:** Press to raise/lower the Gatch.

# Note

The bed is equipped with the Auto Contour positioning. This function partially raises the Gatch as the Fowler is raised. It prevents the patient from slipping toward the foot end of the bed. The function is operational by default. To deactivate it: press the Gatch lockout control (D3), and the padlock icon will light up. Note that the Gatch functions on the siderail control panels will not operate longer while the lockout is activated.

- **C:** Press to raise/lower the bed.
- **D1:** Press to lockout all the controls related to the mattress support sections and bed height. The padlock icon will light up. The total lockout control deactivates the foot end and siderail controls.

# Note

The total lockout will not affect the operation of the nurse call (optional), Scale (optional) or Bed Exit (optional) systems.

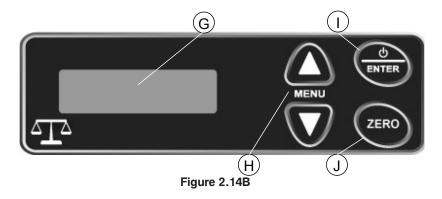
D2, D3: Press to lockout the inner and outer siderail control panel Fowler (D2) and Gatch (D3) functions. The corresponding padlock icon will light up.

# Note

The foot end controls are not affected by lockouts **D2** and **D3**. In the event of a power failure, the lockout settings will be saved.

- E: Press to obtain the cardiac chair position. Hold the button down until the bed reaches the cardiac chair position. The fowler and gatch sections will reach their highest positions and the bed will move into reverse Trendelenburg.
- F1: Press to obtain the desired Trendelenburg (head down, foot up) position. To return the sleep surface to the horizontal position, simply use the bed Hi-Lo controls to either raise or lower the sleep surface to its limits.
- F2: Press to obtain the desired reverse Trendelenburg (head up, foot down) position. To return the sleep surface to the horizontal position, simply use the bed Hi-Lo controls to either raise or lower the sleep surface to its limits.

# SCALE SYSTEM CONTROL PANEL GUIDE



#### Note

When the bed is powered on, the scale display will show a welcome message and the version (X.X) of the control software:

	S	т	R	Υ	к	Е	R	
S	С	Α	L	Е		v	Х	Х

- I: () / Enter Control
  - Press (b) once to activate the display. The Scale mode will be displayed.
  - The display may be shut off by pressing the () key.
  - Press ENTER when instructed to do so.
- J: Zero Control
  - To zero the scale
- H: Menu Up/Down Controls
  - Press either control repeatedly until desired mode is reached.
- G: Scale Display

#### Scale Menu Modes

Order of appearance of the modes when the MENU Down control is pressed repeatedly:

Mode Scale Gain or Loss Gain or Loss Reference Weight Change Equipment Change Patient Weight Select Weight Unit (lb/kg) First Line Appearing Weight Angle Gain Or Loss Gain/loss Zero Change Equipment Change Patient Weight Units

#### Note

- The scale readings must be within the range specified in the Specifications section of this manual. Otherwise, the scale must be calibrated. Refer to the scale calibration procedure of the Maintenance Manual.
- The scale does not operate when the bed is inclined more than 12° in the Trendelenburg or reverse Trendelenburg position. The LCD will display a warning message and the current bed angle, but not the patient's weight.
- Should the message "No Scale Found" appear on the screen during the normal course of operation of the scale, press the **enter** key. Data will reappear on the screen and the current operation will resume. If the message remains, contact Technical Support.

## SCALE SYSTEM

#### Zeroing the Scale System

• Prepare the bed for a patient stay (linens, pillows, etc.) and press 🕐 , the display will read:

Weight Angle

XXX.X lb +/- XX.X°

• Press and hold the Zero key for 2 seconds. Display will read:

#### Hold to Zero Weight followed by:

#### Release to Zero (release Zero), followed by:

**Do Not Touch Bed** (ensure no one touches the bed while this message is displayed)

• The system will return to the Scale mode and will display zero for the weight and the current angle value. The bed is now ready for the patient.

#### Note

The scale display turns off automatically after one minute of idle time, but the system itself remains active in the background. Pressing (b) will reactivate the display in the Scale mode.

On beds equipped with the Scale and Bed Exit systems, zeroing one system will also zero the other.

Do not zero the bed with a patient in the bed. An inaccurate patient weight reading will result. Should it occur, remove the patient from the bed and zero the scale (see above "Zeroing the Scale System").

#### **Registering the Reference Weight for Gain or Loss Readings**

The scale system enables the reading of the patient's weight variation through the Gain or Loss menu.

• Press 🕐 to activate the scale. The display will read:

WeightAngleXXX.X lb+/- XX.X°

· Press the Menu Down control to access the Gain or Loss Reference Weight menu. Display will read:

# Gain Or Loss

# XXX.X lb G/L XX.X

Where xxx.x lb is the current weight reading and G xxx.x or L xxx.x is the positive (G) or negative (L) variation compared to the reference weight.

• Press the Menu Down control again. The display will then read:

#### Gain/Loss Zero Press Enter

• Press Enter. The system will register the current weight as the reference weight and will display the Gain or Loss menu.

# Gain or Loss

#### XXX.X lb G/L XX.X

To access the patient's weight variation anytime, go to the Gain or Loss menu through the Menu Up/Down controls once the scale is activated.

# SCALE SYSTEM (CONTINUED)

#### Adding or Removing Equipment when a Patient is on the Bed

• Press **b** to activate the scale display. Access the Change Equipment mode using the **Menu** Down key, the display will read:

#### Change Equip Press Enter

· Press Enter. The display will read:

#### Release to Start (release Enter), followed by:

- Do Not Touch Bed (ensure no one touches the bed while this message is displayed).
- The following message will then appear:

# Add/Remove Equip

#### Press Enter Signalling that equipment can now be added or removed from the bed. When done with the equipment, press Enter.

Display will then read Release to Fin. (release Enter), followed by:
 Do Not Touch Bed (ensure that the patient remains still and that no one touches the bed while this message is displayed).

The system will return to the Scale mode displaying the patient's weight (the weight should be the same as the one displayed before the procedure).

#### Manually Changing the Numerical Value of Displayed Weight

In certain circumstances, it may be necessary to manually change the patient's weight displayed. To do so:

• Press 🕐 to activate the scale display. Access the Change Patient Weight mode using the Menu Down key. The display will read:

#### Change Patient Weight

Press Enter

· Press Enter. The display will read:

Release to Change Weight (release Enter), followed by:

Do Not Touch Bed (ensure no one touches the bed while this message is displayed).

The display will then read ▲▼ XXX.X lb / press Enter. Adjust the weight using the Menu Up/Down controls.
 When the desired weight is entered, press Enter. The system will return to the Scale mode and display the modified weight.

#### Note

The Change Patient Weight mode should not be used systematically for new patients. The scale should be zeroed each time a new patient occupies the bed.

#### Changing the Weight Unit of Measure

• Press **U** to activate the scale display. Access the Select Weight Unit (Ib/kg) mode using the **Menu Up** key. The display will read:

# Units

## Press Enter

• Press Enter. The display will read:

#### ■ Ib and OR ■ kg and Press Enter Press Enter

• Select the weight unit using the **Menu Up** or **Down** control and press ENTER. The system will return to the Scale mode with the weight displayed in the unit chosen.

# **BED EXIT SYSTEM**



The Bed Exit system is intended only to help 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 the bed. The addition or removal of equipment with a Bed Exit system armed must be done using the "Adding or Removing Equipment with the System Armed" procedure (on page 22), otherwise the sensitivity of the system may be affected and the readings of the patient's movement in the bed be erroneous.

The Bed Exit system is not designed to be used with patients weighing less than 50 lb (23 kg).

- K: Press to activate or deactivate the Bed Exit.
- M: Status LED.



#### Note

For the Bed Exit alarm signal to be heard in the nurse station, the bed must be equipped with the optional nurse call function. For beds without the optional nurse call, the alarm signal will be heard only in the patient's room.

#### **BED EXIT**

#### Zeroing the System

The Bed Exit system **absolutely must** be zeroed before use:

· Zero the scale if not already done (see "Zeroing the Scale System" on page 24).

#### Arming the System

Following the zeroing of the system, the Bed Exit system may now be activated:

- · Install the patient in the bed. Ensure the patient lies in the bed in its usual position before activating the system.
- Activate the Bed Exit by pressing Arm/Disarm (K). The status LED (M) will light up.
- To deactivate a Bed Exit alarm or to turn the system off, press Arm/Disarm (K). The status LED (M) will turn off.

#### Adding or Removing Equipment with the System Armed

Changing equipment on a bed with the Bed Exit system armed requires the user to follow either procedure described below:

• If the bed is equipped with the scale system, follow the "Adding or Removing Equipment when a Patient is on the Bed" on page 22.

-or-

 If the bed is not equipped with the scale system, remove the patient from the bed; change the equipment and zero the system (see "Zeroing the System" on page 24). The Bed Exit system may be activated once the patient returns to the bed.

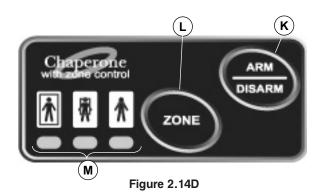
# BED EXIT SYSTEM WITH MULTI-ZONE CONTROL (OPTIONAL)

# 

The Bed Exit system (optional) 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 the bed. The addition or removal of equipment with the Bed Exit system armed must be done using the "Adding or Removing Equipment with the System Armed" procedure (page 25), otherwise the sensitivity of the system may be affected and the readings of the patient's movement in the bed be erroneous. Failure to set the zone properly could result in improper monitoring and patient injury. Verify that the proper zone is selected before leaving the patient.

The Bed Exit system (optional) is not designed to be used with patients weighing less than 50 lb (23 kg).

- K: Press to activate/deactivate the Bed Exit function.
- L: Press to select zone.
- M: Zone LEDs.



#### Note

For the Bed Exit alarm signal to be heard in the nurse station, the bed must be equipped with the optional nurse call function. For beds without the optional nurse call, the alarm signal will be heard only in the patient's room.

#### **Zone Features**

- The first zone (left LED) is the traditional Bed Exit zone. The patient can move in the bed freely but cannot fully exit the bed or the alarm will sound.
- The second zone (middle LED) is more restrictive. It allows the patient to sit up and roll over but any attempt to exit the bed will cause the alarm to sound.
- The third zone (right LED) is the most restrictive. Small movements like raising an arm or lifting the shoulder off the bed will cause the alarm to sound. The third zone is used to alert staff to a change in the condition of an unconscious or paralyzed patient.

#### Zeroing the System

The Bed Exit system absolutely must be zeroed before use:

- Zero the scale if not already done (see "Zeroing the Scale System") on page 21.
- Otherwise, apply the following procedure:
  - Before putting a new patient on the bed: Prepare the bed for a patient stay by adding linens and equipment to the bed.
  - Press and hold the ARM/DISARM key (K) until the larger zone LED (left LED) begins to flash, then release the control (do not touch the bed while the LED flashes). When the zone LED turns off, the system is zeroed.

# BED EXIT SYSTEM WITH MULTI-ZONE CONTROL (OPTIONAL) (CONTINUED)

#### Arming the System

Following the zeroing of the system, the Bed Exit system may now be activated:

- · Install the patient in the bed. Ensure the patient lies in the bed in its usual position before activating the system.
- Activate the Bed Exit by pressing ARM/DISARM (K) and select the desired zone.
  - By default, the least restrictive zone will be selected and its LED (left LED) will come on. To change the zone, press ZONE (L) repeatedly until the desired zone LED comes on.
- To deactivate the Bed Exit after an alarm or to simply turn it off, press ARM/DISARM (K). The zone LED will turn
  off.

#### Adding or Removing Equipment with the System Armed

Changing equipment on a bed with the Bed Exit system armed requires the user to follow either procedure described below:

• If the bed is equipped with the scale system, follow the "Adding or Removing Equipment when a Patient is on the Bed" on page 22.

-or-

• If the bed is not equipped with the scale system, remove the patient from the bed; change the equipment and zero the system (see "Zeroing the System" on page 24). The Bed Exit system may be activated once the patient returns to the bed.

Accessory	Part Number	Page Reference
GEN III Two Function Pendant Control	FA64136	See page 28
GEN III Four Function Pendant Control	FA64137	See page 29
Two Function Pendant Control	FA64165	See page 30
Monitor Tray	FA64163	See page 31
Patient Helper	FA64148L	See page 32
Emergency Crank Handle	FOHMAU	See page 34
Oxygen Bottle Holder	FA64169	See page 35
Bed Extender with Scale	FA64172	See page 36
Removable I.V. Pole, 1/2"	FDTSH	See page 38
Removable I.V. Pole, 1"	FA61002-G	See page 39
Fixed Two Stage I.V. Pole	FA64174	See page 40
Fixed Two Stage I.V. Pole, Foldable	FA64171	See page 41
Fixed Three Stage I.V. Pole, Foldable	FA64170	See page 43
Traction Adapters	FA64188 FA64189 FA64190 FA64191	See page 45

This button-type pendant control may be hooked on to the bed sheets. It is used for nurse call and to turn a television on or off.

🔨 WARNING

The scale and bed exit systems must be adjusted if this accessory is added when either system is in operation. Refer to the "Add / Remove Equipment" procedure (page 22).

## INSTALLATION

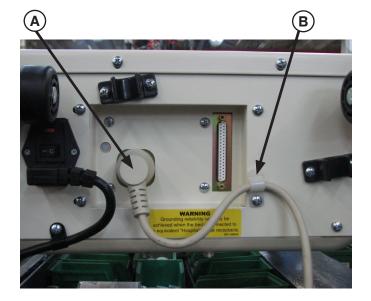
#### **Tools Required:**

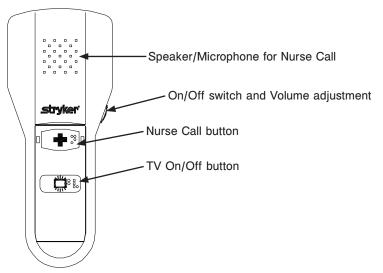
None

#### Procedure:

- 1. Plug the cable connector into the receptacle (A) located at the head end of the bed.
- 2. Insert the cable into the wire holder (B) to prevent the cable from pulling out of the receptacle.
- 3. Attach the pendant control to the bed sheets using the clip.

#### **OPERATION**





This button-type pendant control may be hooked on to the bed sheets. It is used for nurse call, to turn a television on or off, and to turn room and reading lights on or off.

MARNING

The scale and bed exit systems must be adjusted if this accessory is added when either system is in operation. Refer to the "Add / Remove Equipment" procedure (page 22).

# INSTALLATION

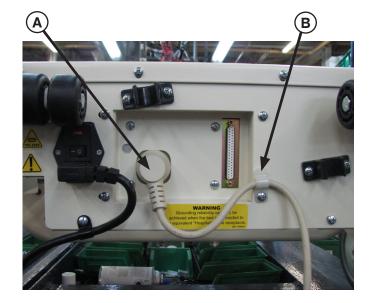
#### **Tools Required:**

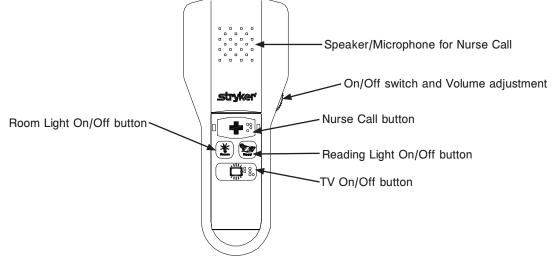
None

#### Procedure:

- 1. Plug the cable connector into the receptacle (A) located at the head end of the bed.
- 2. Insert the cable into the wire holder (B) to prevent the cable from pulling out of the receptacle.
- 3. Attach the pendant control to the bed sheets using the clip.

#### **OPERATION**





This button-type pendant control for the patient and nursing staff may be hooked on to the siderails. It is used to raise and lower the bed, and to raise and lower the head and gatch sections.

🚹 WARNING

The scale and bed exit systems must be adjusted if this accessory is added when either system is in operation. Refer to the "Add / Remove Equipment" procedure (page 22).

## INSTALLATION

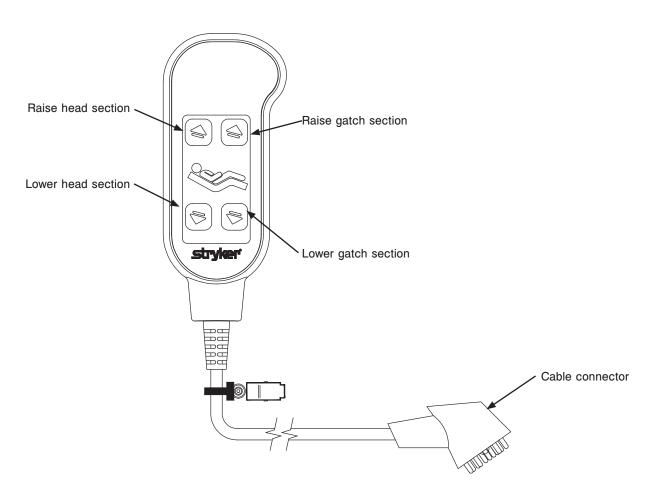
#### Tools Required:

None

#### Procedure:

- 1. Plug the cable connector into the socket under the center section on either side of the bed.
- 2. Install the pendant control cable into the wire clip located above the socket.

#### **OPERATION**



The monitor tray is designed to hold and secure a monitor using a Velcro strap. The tray can also be used as a writing support. It folds down into a storing position.



The scale and bed exit systems must be adjusted if this accessory is added when either system is in operation. Refer to the "Add / Remove Equipment" procedure (page 22).

#### INSTALLATION

#### **Tools Required:**

None

#### Procedure:

1. Insert the monitor tray posts into the I.V. pole holders located on the foot end of the unit.

#### **OPERATION**

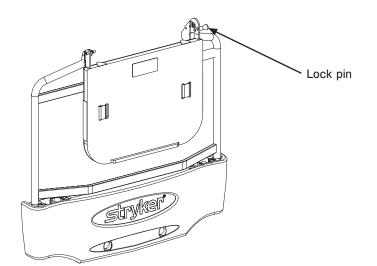
# 

- Do not use the monitor tray as a push/pull device.
- Do not use an I.V. pole at the foot end of a unit equipped with this device.
- 1. To use the tray for monitor support, pull the lock pin (A), lift the tray and fold it back toward the head end of the bed, and release the pin.
- 2. To use the tray for writing support, pull the lock (A) and lift the tray to about 30 degrees and release the pin.
- 3. To place the tray into its stored position, pull the lock pin (A), lower the tray to its lowest position and release the pin.

Note: Secure the monitor to the tray using the Velcro strap.

# 🕂 WARNING

The maximum load capacity of the tray is 40 lb (18 kg).



The overhead trapeze patient helper provides a support that allows the patient to change position in bed. The system features a fixed lower section, a mobile upper section and a trapeze. When in use, the upper section is centered over the patient. When not in use, the upper section can rotated to either side of the bed for storing.

# \Lambda WARNING

The scale and bed exit systems must be adjusted if this accessory is added when either system is in operation. Refer to the "Add / Remove Equipment" procedure (page 22).

# INSTALLATION

#### **Tools Required:**

None

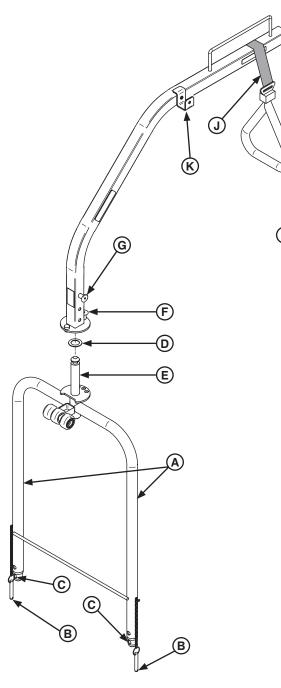
#### Procedure:

- Insert the lower section posts (A) into the slots on the head end of the bed. Ensure the posts seat completely into the slots
- 2. Insert the hitch pins (B) into the holes (C) located on the ends of each post.
- Place the nylon washer (D) onto the pivot pin (E) of the lower section.
- 4. Pull the lock pin (G) and install the upper section onto the pivot pin (E) of the lower section.
- 5. Verify the lock pin (F) on the upper section is seated in an adjustment hole.

# **OPERATION**

# 🚹 WARNING

- The overhead trapeze is designed to help the patient change position in bed. The trapeze must not be used as a support to enter or exit the bed. Injuries may result due to improper use of the overhead trapeze. Medical advice may be necessary to determine if the use of an overhead trapeze is adequate for the patient's condition or treatment given.
- The maximum load capacity of the overhead trapeze is 150 lb (68 kg).
- To position the trapeze over the patient, pull the lock pin (F) and pivot the upper section towards the center of the bed. Release the lock pin and ensure it is properly engaged.
- To adjust the trapeze (H) height, shorten or lengthen the strap (J). If you must detach the strap to free the trapeze, ensure the strap is properly reinserted in the fastener.



# **OPERATION (CONTINUED)**

# MARNING

To prevent injury to the patient, ensure the trapeze is properly attached to the upper section

- 3. The trapeze can be stored on its storage hook (K) when not in use.
- 4. When not in use, store the trapeze by pulling the lock pin (F) and pivoting the upper part to the 30 degree storing position on either side of the bed.



The overhead trapeze should not be used when in the storage position. This may result in injury to the patient or damage to the equipment.

The emergency crank is used to adjust the position of the mobile sections of the bed during a power failure.

# OPERATION

# 

Before using the emergency crank during a power failure, always unplug the unit. An unexpected return of power could rotate the handle and cause injury.

#### Note:

- Exert pressure on the crank while turning to compress the adaptor spring.
- Only the Fowler and Gatch positions can be adjusted during a power failure.
- 1. Insert the crank into the appropriate aperture located at the foot end of the bed and follow the icon indications to adjust as desired.
- 2. Remove the cranks after use and store it at the head end of the bed.

The oxygen bottle holder accepts a 4" diameter oxygen bottle. It can be installed at the foot or head end of the bed.

# 🚹 WARNING

The scale and bed exit systems must be adjusted if this accessory is added when either system is in operation. Refer to the "Add / Remove Equipment" procedure (page 22).

# INSTALLATION

#### **Tools Required:**

None

#### Procedure:

- 1. Remove the lock pin (A) from the holder support rod.
- 2. Insert the support rod into the hole on the I.V. pole holder (B) a the head or foot end of the bed.
- 3. Bring the chain under the head or foot end casing and insert the lock pin in the hole (C) on the holder rod.

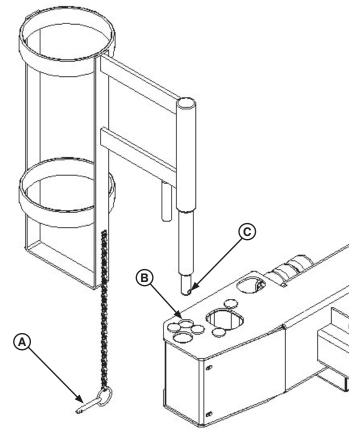
**Note:** The bottle holder installation must be finalized by installing the lock pin. The function of the pin is to prevent the bottle holder from coming out of its position when an oxygen bottle is removed from it.

## **OPERATION**

1. Insert the oxygen bottle into the holder.

# WARNING

- The maximum load capacity of the oxygen bottle holder is 75 lb (34 kg).
- Possible fire hazard exists when this unit is used with oxygen administering equipment other than nasal, mask type, or half be length tent type. It is recommended to unplug the unit from the wall socket when oxygen administering equipment is used. When using a half bed length tent type, ensure the siderails are outside the oxygen tent and the oxygen tent should not extend below the mattress support level.



The bed extender is designed to temporarily increase the mattress support by 10" on beds equipped with the optional scale system. It also allows the installation of an 80" or 84" long mattress. A cushion (DM64063 for a 6" thick mattress) must be ordered separately to accompany the extension.



- The scale and bed exit systems must be adjusted if this accessory is added when either system is in operation. Refer to the "Add / Remove Equipment" procedure (page 22).
- The surface added by the bed extender is not included in the area monitored by the Bed Exit system.
- Do not perform this procedure while a patient is in the bed.

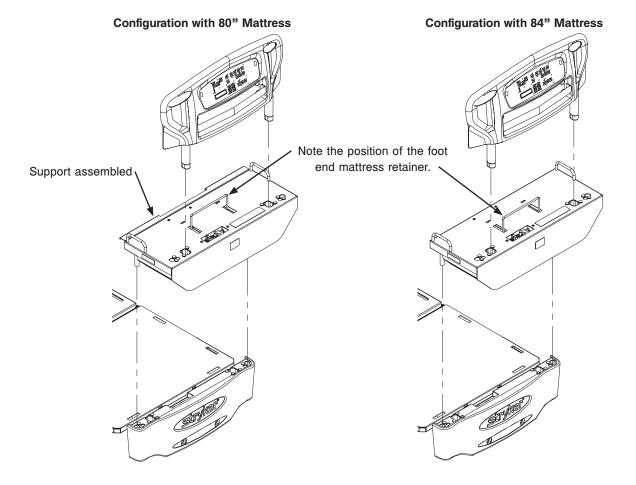
# INSTALLATION

#### **Tools Required:**

#2 Phillips Screwdriver

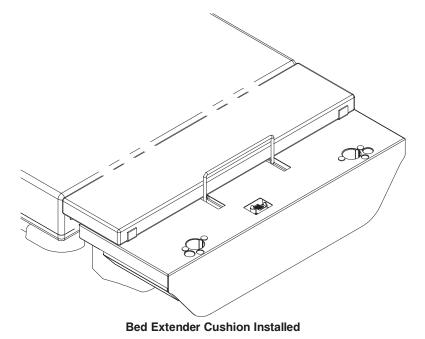
#### Procedure:

- 1. Apply the brakes.
- 2. Unplug the bed from the wall socket.
- 3. Remove the foot board.
- 4. Before installing the extender, adjustments must be made depending on the length of mattress being used:



## INSTALLATION (CONTINUED)

- For an 80" mattress, assemble the support on the bed extender using the screws provided with a #2 Phillips screwdriver. Do not move the foot end mattress retainer, it is positioned for an 80" mattress from the factory. See the "Configuration with 80" Mattress" illustration on page 36.
- For an 84" mattress, move the foot end mattress retainer to the position nearest to the bed extender foot end by pressing inward on its lateral pins. Do not assemble the support to the extender. See the "Configuration with 84" Mattress" illustration on page 36.
- 5. Insert the mattress support extension posts into the foot board mounting sockets.
- 6. Install the cushion onto the bed extender. Do not use the cushion straps; squeeze the cushion between the mattress end and the mattress retainers on the bed extender. See the illustration below.



- 7. Insert the foot board into the mounting sockets on the bed extender.
- 8. Verify proper operation of the unit before returning it to service.

# 

The bed extender must be removed before using the emergency crank (optional).

The removable I.V. pole FDTSH is a 1/2" diameter I.V. pole with an adjustable height.

# 🚹 WARNING

The scale and bed exit systems must be adjusted if this accessory is added when either system is in operation. Refer to the "Add / Remove Equipment" procedure (page 22).

## INSTALLATION

#### Tools Required:

None

#### Procedure:

1. Insert the I.V. pole into one of the sockets located on the four corners of the bed and either side of the seat section.

#### **OPERATION**

# 

Do not use the I.V. pole as a push/pull device.

- 1. To adjust the height of the pole:
  - Turn the locking sleeve counterclockwise and raise the telescoping portion of the pole to the desired height.
  - Tighten the locking sleeve.
- 2. Hang the I.V. bags.

# 🚹 WARNING

The weight of the I.V. bags must not exceed 11 lb (5 kg).

Tightening Sleeve

The removable I.V. pole FA61002 is a 1" diameter I.V. pole with and adjustable height. The base of the pole is equipped with a lock pin to prevent the pole from rotating when installed in a socket.



The scale and bed exit systems must be adjusted if this accessory is added when either system is in operation. Refer to the "Add / Remove Equipment" procedure (page 22).

#### INSTALLATION

#### **Tools Required:**

None

#### Procedure:

- 1. Insert the I.V. pole into one of the sockets located on the four corners of the bed.
- 2. Rotate the pole to until the lock pin engages in the socket.

#### OPERATION

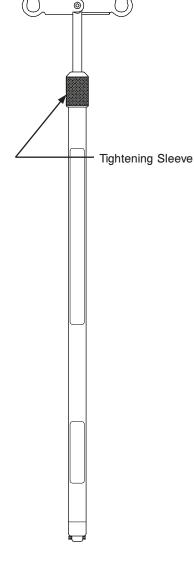


Do not use the I.V. pole as a push/pull device.

- 1. To adjust the height of the pole:
  - Turn the locking sleeve counterclockwise and raise the telescoping portion of the pole to the desired height.
  - Tighten the locking sleeve.
- 2. Hang the I.V. bags.

# WARNING

The weight of the I.V. bags must not exceed 11 lb (5 kg) per hook.



The fixed two stage I.V. pole FA64174 is a permanently attached, telescoping I.V. pole. The extension of the telescoping section provides a second height position.

🔨 WARNING

The scale and bed exit systems must be adjusted if this accessory is added when either system is in operation. Refer to the "Add / Remove Equipment" procedure (page 22).

#### INSTALLATION

#### **Tools Required:**

• 1/2" Combination Wrench

#### Procedure:

- 1. Using a 1/2" combination wrench, remove the bolt (A) and spring washer (B) from the base of the I.V. pole.
- 2. Install the I.V. pole into the socket and attach it using the bolt and spring washer.

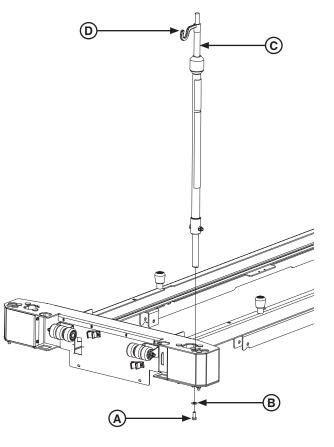
**Note:** The bolt is coated with "Scotch Grip". The coating becomes less effective once the bolt is tightened and removed thereafter. Replace the bolt if the I.V. pole is removed and reinstalled in another socket or bed.

## **OPERATION**

- 1. To increase the height of the pole, pull up on the telescoping portion (C) until it locks into place.
- 2. Rotate the I.V. pole hangers (D) to the desired position and hang the I.V. bag(s).

# 🛕 warning

The weight of the I.V. bags must not exceed 40 lb (18 kg).



The fixed two stage I.V. pole FA64171 is a permanently attached, telescoping I.V. pole. The extension of the telescoping section provides a second height position. The I.V. pole can fold into a storage position.

🚹 WARNING

The scale and bed exit systems must be adjusted if this accessory is added when either system is in operation. Refer to the "Add / Remove Equipment" procedure (page 22).

#### Tools Required:

- Ratchet with a 7/16" and 1/2" Socket
- 7/16" and 1/2" Combination Wrench
- #2 Phillips Screwdriver

#### I.V. POLE INSTALLATION

Note: The I.V. pole can only be installed on the right side of the head end of the bed.

- 1. Remove the head board.
- 2. Using a 1/2" combination wrench, remove the bolt (A) and spring washer (B) from the base of the I.V. pole.
- 3. Install the I.V. pole into the socket and attach it using the bolt and spring washer removed in step 2.

**Note:** The bolt is coated with "Scotch Grip". The coating becomes less effective once the bolt is tightened and removed thereafter. Replace the bolt if the I.V. pole is removed and reinstalled in another socket or bed.

- 4. Using a 1/2" combination wrench, remove the two nuts (D) and bolts (C).
- 5. Install the storage plate (G) and secure with the bolts and nuts removed in step 4.
- 6. Reinstall the head board.

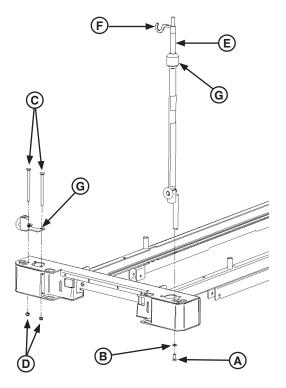
## I.V. POLE OPERATION

- 1. Lift and pivot the pole from the storage position and push down until it is locked into the receptacle.
- 2. To increase the height of the pole, pull up on the telescoping portion (E) until it locks into place.
- 3. Rotate the I.V. pole hangers (F) to the desired position and hang the I.V. bag(s).

# 

The weight of the I.V. bags must not exceed 40 lb (18 kg).

 To store the I.V. pole, turn the latch (G) clockwise until the telescoping section (E) lowers. Lift up on the pole to remove it from the receptacle. Fold the pole down and store it on the bracket.



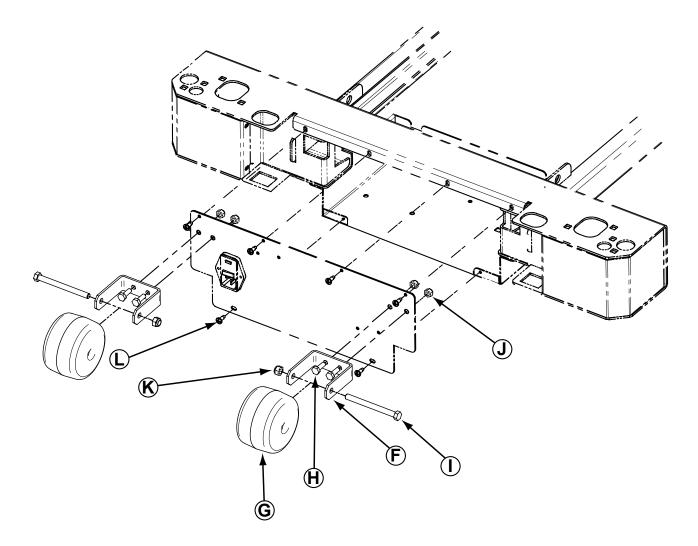
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# MARNING

Ensure all the connectors stay plugged into the electronic board if it is present on the head casing cover.

#### **BUMPERS INSTALLATION**

- 1. Unplug the power cord from the bed.
- 2. Using a 1/2" combination wrench with a 1/2" socket, remove the bolts, washers and nuts holding the rollers in place.
- 3. Using a Phillips screwdriver, remove the screws (L) holding the head casing cover.
- 4. Using a 7/16" combination wrench with a 7/16" socket, remove the nuts (J) and the bolts (H) holding the bumper brackets to the head casing cover.
- 5. Mount the new brackets (F) on the head casing cover using the new hexagonal bolts (H) and nuts (J), as shown in the drawing below.
- 6. Install the head casing cover back on the bed frame using the screws (L) removed in step 3.
- 7. Insert the rollers (G) on each bracket and secure using the new hexagonal bolts (I) and nuts (K). Note: When tightening the nuts, make sure that there is enough room for the rollers to spin freely.



The fixed three stage I.V. pole FA64170 is a permanently attached, telescoping I.V. pole. The extension of the telescoping section provides several additional height positions. The I.V. pole can fold into a storage position.

# 

The scale and bed exit systems must be adjusted if this accessory is added when either system is in operation. Refer to the "Add / Remove Equipment" procedure (page 22).

#### **Tools Required:**

- Ratchet with a 7/16" and 1/2" Socket
- 7/16" and 1/2" Combination Wrench
- #2 Phillips Screwdriver

#### I.V. POLE INSTALLATION

**Note:** The I.V. pole can only be installed on the right side of the head end of the bed.

- 1. Remove the head board.
- Using a 1/2" combination wrench, remove the bolt (A) and spring washer (B) from the base of the I.V. pole.
- 3. Install the I.V. pole into the socket and attach it using the bolt and spring washer removed in step 2.

**Note:** The bolt is coated with "Scotch Grip". The coating becomes less effective once the bolt is tightened and removed thereafter. Replace the bolt if the I.V. pole is removed and reinstalled in another socket or bed.

- 4. Using a 1/2" combination wrench, remove the two nuts (C) and bolts (D).
- 5. Install the storage plate (G) and secure with the bolts and nuts removed in step 4.
- 6. Reinstall the head board.

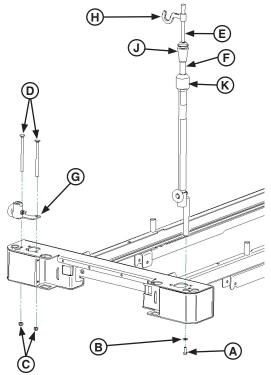
## I.V. POLE OPERATION

- 1. Lift and pivot the pole from the storage position and push down until it is locked into the receptacle.
- 2. To increase the height of the pole, pull up on the first telescoping portion (E) until it locks into place.
- 3. To increase the height further, pull up on the second telescoping portion (F). Release the section at any desired height and it will lock into place.
- 4. To lower the second telescoping section, push up on the red part of the handle (J) while holding the section. Lower the section to the desired height and release the handle to lock the section into place.
- 5. Rotate the I.V. pole hangers (H) to the desired position and hang the I.V. bag(s).

# 

The weight of the I.V. bags must not exceed 40 lb (18 kg).

6. To store the I.V. pole, push up on the red portion of the handle (J) while holding onto the second section and lower it. Turn the latch (K) clockwise to lower the first section. Lift the pole to remove it from the receptacle. Fold the pole down and store it on the bracket.

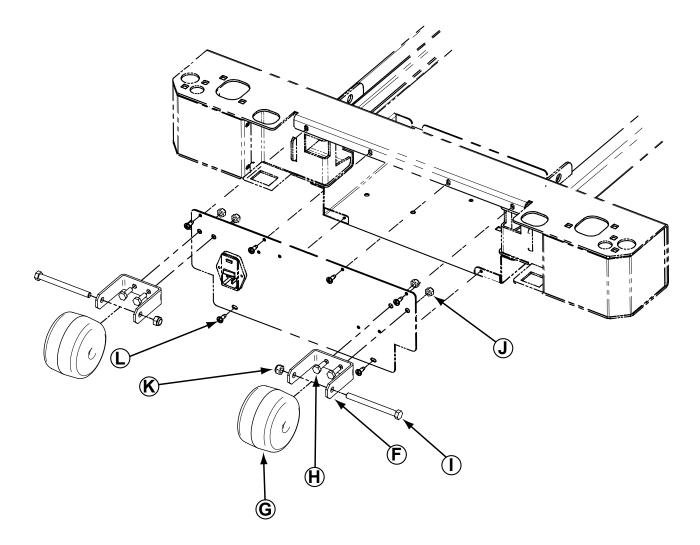


# MARNING

Ensure all the connectors stay plugged into the electronic board if it is present on the head casing cover.

#### **BUMPERS INSTALLATION**

- 1. Unplug the power cord from the bed.
- 2. Using a 1/2" combination wrench with a 1/2" socket, remove the bolts, washers and nuts holding the rollers in place.
- 3. Using a Phillips screwdriver, remove the screws (L) holding the head casing cover.
- 4. Using a 7/16" combination wrench with a 7/16" socket, remove the nuts (J) and the bolts (H) holding the bumper brackets to the head casing cover.
- 5. Mount the new brackets (F) on the head casing cover using the new hexagonal bolts (H) and nuts (J), as shown in the drawing below.
- 6. Install the head casing cover back on the bed frame using the screws (L) removed in step 3.
- 7. Insert the rollers (G) on each bracket and secure using the new hexagonal bolts (I) and nuts (K). Note: When tightening the nuts, make sure that there is enough room for the rollers to spin freely.



These adapters allow for the installation of traction frames. This applies to FA64188, FA64189, FA64190 and FA64191.

# 🕂 WARNING

The scale and bed exit systems must be adjusted if this accessory is added when either system is in operation. Refer to the "Add / Remove Equipment" procedure (page 22).

# INSTALLATION

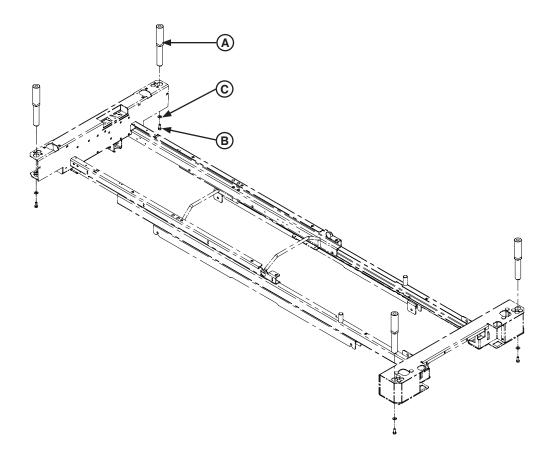
#### **Tools Required:**

• 1/2" Combination Wrench

## Procedure:

- 1. Install the four adapters (A) into the corresponding holes located in the corners of the bed.
- 2. Using a 1/2" combination wrench, secure the washers (B) and bolts (C) provided.

**Note:** The bolt is coated with "Scotch Grip". The coating becomes less effective once the bolt is tightened and removed thereafter. Replace the bolt if the traction adapter is removed and reinstalled on another bed.



Beds require an effective maintenance program, we recommend checking these items annually. Use this sheet for your records and keep on file.

## CHECKLIST

- \_\_\_\_\_ All fasteners secure (reference all assembly drawings).
- \_\_\_\_\_ The head and foot section molded shells are properly attached to the section structures.
- \_\_\_\_\_ Inspect the oil-impregnated bronze shoulder spacers (found at bed hinge points) for excessive wear. Do not lubricate these spacers. Replace as needed.
- \_\_\_\_\_ Check the grease present on the components detailed in the "Lubrication Requirements" section of the Maintenance Manual. Lubricate as needed. Lubricate them at least every two years.
- \_\_\_\_\_ On both sides of the bed, depress fully down the side of the pedal identified with a red sticker and ensure that the brakes are applied and the bed immobilized. Toggle the pedal to neutral and ensure the brakes are released.
- On both sides of the bed, depress fully down the side of the pedal identified with a green sticker and ensure that the fifth steer wheel is engaged. Toggle the pedal to neutral and ensure that the fifth wheel disengages.
- \_\_\_\_\_ Siderails move, latch and stow properly.
- \_\_\_\_\_ All controls on the foot end panel working properly, including LEDs.
- \_\_\_\_\_ Calibrate the scale system (see the "Scale System Calibration" section in the Maintenance Manual).
- \_\_\_\_\_ All siderail controls working properly (see Head Siderail Function Guide).
- Ensure that the optional nurse call alarm sounds in the nurse station.
- \_\_\_\_\_ Ensure that the optional Communications Package controls operate properly.
- Verify the CPR emergency release using both CPR release handles: Completely raise the Fowler and, using the CPR handle, lower the Fowler gradually to a flat position by pulling, holding and releasing the handle several times. Ensure the Gatch (if raised) also starts flattening when the Fowler is completely down. Following the complete lowering of the Fowler, wait approximately 30 seconds - the time for the Fowler control motor to reset - and verify that the motor has indeed reset itself by completely raising the Fowler using the Fowler up control.
- \_\_\_\_\_ Verify the Fowler, Gatch and Hi-Lo movements to ensure that the motion interrupt switch integrated to the four electric actuators is operating properly.
- \_\_\_\_\_ Auxiliary outlet (option available only with 120V electric system beds) working properly.
- \_\_\_\_\_ Night light working properly.
- \_\_\_\_\_ No cracks in the boards, siderails, wheel covers, fifth wheel hood (optional) and plastic cover of the head and foot sections.
- \_\_\_\_\_ Head end bumpers tightly secured to frame and working properly.
- \_\_\_\_\_ No rips or cracks in mattress cover.
- \_\_\_\_\_ Power cord not frayed.
- \_\_\_\_\_ No cables worn or pinched.
- \_\_\_\_\_ All electrical connections tight.
- \_\_\_\_\_ All grounds secure to the frame.
- \_\_\_\_\_ All casters roll properly. Check caster for cuts, wear, etc.
- Ground impedance not more than 100 m $\Omega$  (milliohms).
- \_\_\_\_\_ Current leakage not more than 100 μA (microamps).

Bed Serial Number:	

Completed by:

Date:

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# 

Unplug the bed prior to cleaning or servicing the unit.

Hand wash all surfaces of the GoBed<sup>®</sup> II MedSurg Bed, Model FL28EX with warm water and mild detergent. **Dry thoroughly**. Do not steam clean or hose off the bed. Using these methods of cleaning is **not** recommended and may void this product's warranty. 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-phenylphenyol).
- 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.

#### 

SOME CLEANING PRODUCTS ARE CORROSIVE IN NATURE AND MAY CAUSE DAMAGE TO THE PRODUCT IF USED IMPROPERLY. If the products suggested above are used to clean Stryker patient care equipment, measures must be taken to insure the bed is wiped with a damp cloth soaked in clean water and thoroughly dried following cleaning. Failure to properly rinse and dry the bed 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.

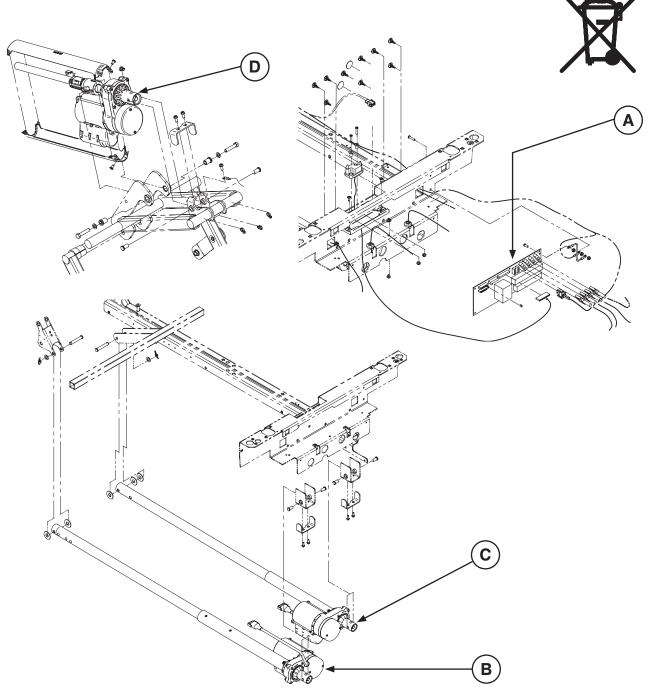
For mattress cleaning instructions, please see the tag on the mattress, or contact the mattress manufacturer.

Clean Velcro<sup>®</sup> after each use. Saturate Velcro<sup>®</sup> with disinfectant and allow disinfectant to evaporate. (Appropriate disinfectant for nylon Velcro<sup>®</sup> should be determined by the hospital).

L28-006 (Reference Only) Α B Ń

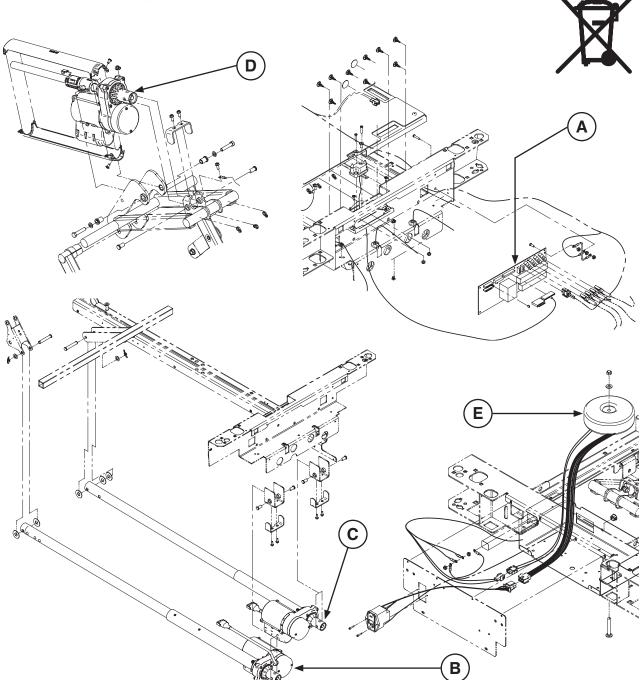
Item	Recycling/Material Code	Important Information	Qty
А	QDF25-0593 Circuit Board		1
В	QDF5095 Buzzer		1

OL280118 (Reference Only)



ltem	Recycling/Material Code	Important Information	Qty
А	QDF25-0592 Circuit Board		1
В	28-0769L Motor		1
С	28-0770 Motor		1
D	28-0768 Motor		2

OL280119 (Reference Only)

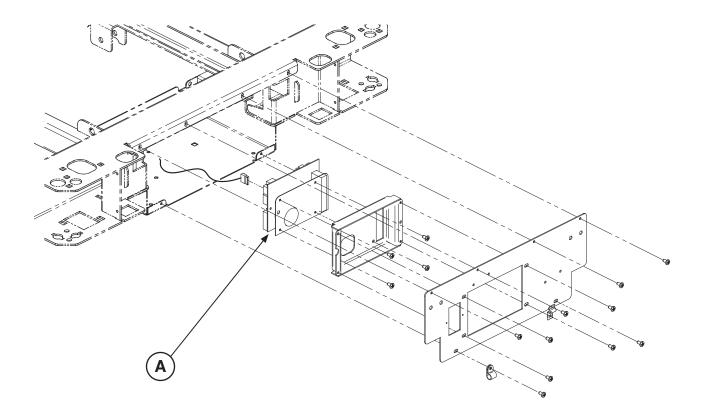


ltem	Recycling/Material Code	Important Information	Qty
А	QDF25-0592 Circuit Board		1
В	28-0769L Motor		1
С	28-0770 Motor		1
D	28-0768 Motor		2
E	QDF14-1160 Transformer		1

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OL280022 (Reference Only)

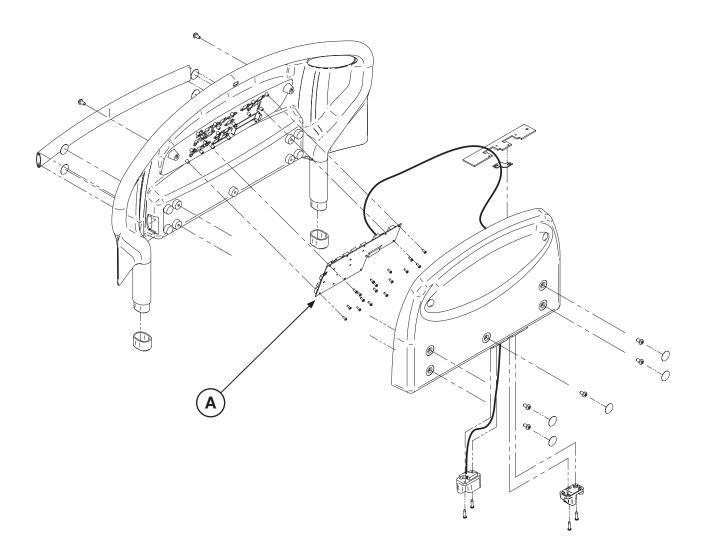




Item	Recycling/Material Code	Important Information	Qty
A	QDF21-1163 Circuit Board		1

L28-014 (Reference Only)

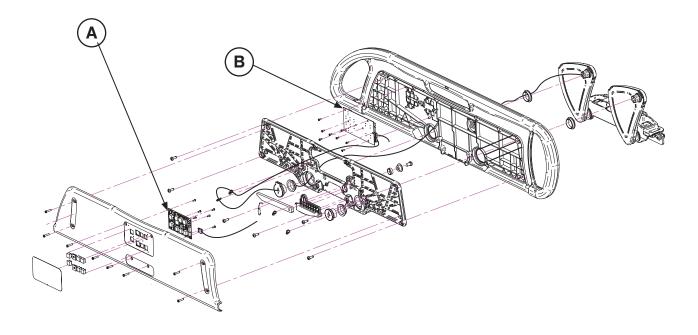




Item	Recycling/Material Code	Important Information	Qty
А	QDF21-1154 Circuit Board		1

28-0001, 28-0002 (Reference Only)

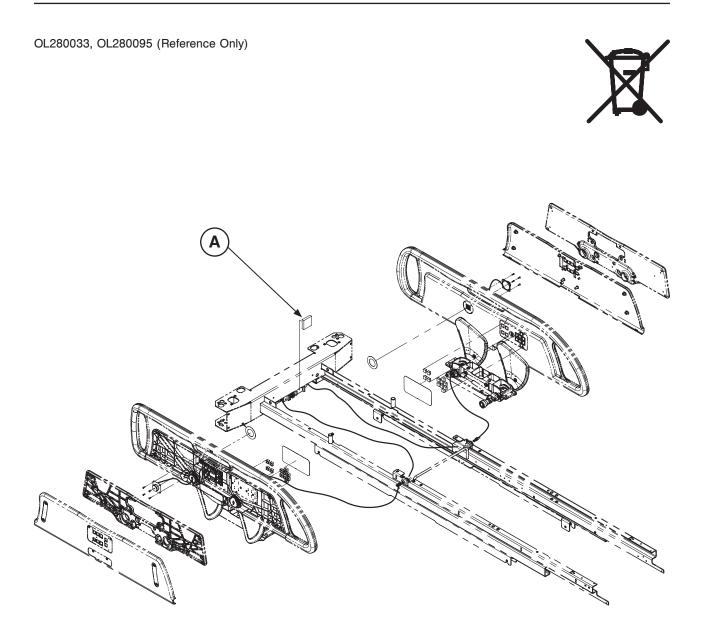




ltem	Recycling/Material Code	Important Information	Qty
А	QDF21-1151 Circuit Board		1
В	QDF21-1169 Circuit Board		1

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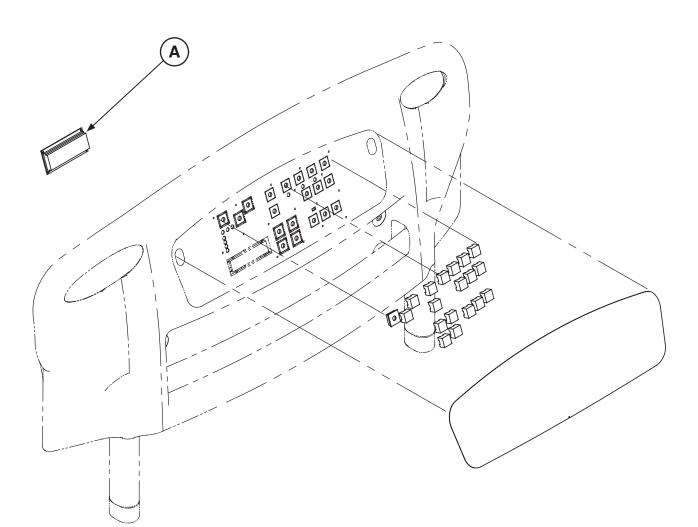
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Item	Recycling/Material Code	Important Information	Qty
А	QDF2060 / QDF28-0595 Circuit Board		1

OP280012, OP280013, OP280014 (Reference Only)





Item	Recycling/Material Code	Important Information	Qty
А	QDF25-0463 Vacuum Fluorescent Display		1

## LIMITED WARRANTY

Stryker Medical Division, a division of Stryker Corporation, warrants to the original purchaser the GoBed<sup>®</sup> II MedSurg Bed, Model FL28EX, to 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. If requested by Stryker, products or parts for which a warranty claim is made shall be returned prepaid to the factory. Any improper use or any alteration or repair by others in such manner as in Stryker's judgment 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 Bed products are designed for a 15 year expected service life under normal use, conditions, and with appropriate periodic maintenance as described in the maintenance manual for each device. Stryker warrants to the original purchaser that the welds on its Bed products will be free from structural defects for the expected 15 year life of the Bed product as long as the original purchaser owns the product.

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 here under 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 USA at 1-800-327–0770, Canada 1-888-233-6888.

## 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

## SERVICE CONTRACT PROGRAMS

Stryker offers the following service contract programs:

Service Agreement Options *	Premium	Complete	Standard
Annually scheduled preventative maintenance	X		Х
All parts	X	X	
All labor and travel	X	x	
Unlimited emergency service calls	X	X	
Priority one contact: two hour phone response	X	X	
Most repairs completed within 3 days	X	X	
JCAHO documentation	X	X	Х
On-site record of PM & emergency service	X		Х
Factory-trained Stryker service technician	X	X	Х
Stryker authorized parts used	X	X	Х
Service during regular business hours (8-5)	X	X	Х

\* Does not include maintenance due to abuse or for any disposable items. Stryker reserves the right to change options without notice.

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.

## **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.

## **GOBED® II MEDSURG BED, MODEL FL28EX**

## Guidance and Manufacturer's declaration - Electromagnetic Immunity

The GoBed<sup>®</sup> II MedSurg Bed, Model FL28EX is suitable for use in the electromagnetic environment specified below. The customer or the user of the GoBed<sup>®</sup> II MedSurg Bed, Model FL28EX should assure that it is used in such an environment.

Immunity Test	IEC 60601 Test Level	Compliance Level	Electromagnetic Environment Guidance
Electrostatic Discharge (ESD) IEC 61000-4-2	<u>+</u> 6 kV contact <u>+</u> 8 kV air	<u>+</u> 6 kV contact <u>+</u> 8 kV air	Floors should be wood, concrete, or ceramic tile. If floors are covered with synthetic material, the relative humidity should be at least 30%.
Electrostatic fast Transient/burst IEC 61000-4-4	<u>+</u> 2 kV for power supply lines <u>+</u> 1 kV for input/ output lines	<u>+</u> 2 kV for power supply lines <u>+</u> 1 kV for input/ output lines	Main power quality should be that of a typical commercial or hospital environment.
Surge IEC 61000-4-5	<u>+8</u> kV differential mode <u>+</u> 2 kV common mode	<u>+8</u> kV differential mode <u>+</u> 2 kV common mode	Main power quality is that of a typical commercial and/or hospital environment.
Voltage dips, voltage variations and short interruptions on power supply input lines IEC 61000-4-11	<5%Ut (95% dip in Ut) for 0.5 cycle 40%Ut (60% dip in Ut) for 5 cycles 70%Ut (30% dip in Ut) for 25 cycles. <5% Ut (>95% dip in Ut) for 5 sec.	<5%Ut (95% dip in Ut) for 0.5 cycle 40%Ut (60% dip in Ut) for 5 cycles 70%Ut (30% dip in Ut) for 25 cycles. <5% Ut (>95% dip in Ut) for 5 sec.	Main power quality should be that of a typical commercial and/or hospital environment. If the user of the GoBed <sup>®</sup> II MedSurg Bed, Model FL28EX requires continued operation during power main interruptions, it is recommended that the device be powered from an uninterrupted power supply or a battery.
Power frequency (50/60 Hz) magnetic field IEC 61000-4-8	3 A/m	3 A/m	Power frequency magnetic fields should be at levels characteristic of a typical location in a typical commercial and/or hospital environment.

Note:  $U_{T}$  is the a.c. mains voltage prior to applications of the test level.

## GOBED<sup>®</sup> II MEDSURG BED, MODEL FL28EX (CONTINUED)

# Recommended separation distances between portable and mobile RF communications equipment and the GoBed<sup>®</sup> II MedSurg Bed, Model FL28EX.

The GoBed<sup>®</sup> II MedSurg Bed, Model FL28EX is intended for use in an electromagnetic environment in which radiated RF disturbances are controlled. The customer or the user of the GoBed<sup>®</sup> II MedSurg Bed, Model FL28EX can help prevent electromagnetic interferences by maintaining a minimum distance between portable and mobile RF communications equipment (transmitters) and the GoBed<sup>®</sup> II MedSurg Bed, Model FL28EX as recommended below, according to the maximum output power of the communications equipment.

Rated maximum output power of transmitter	Separation distance according to frequency of transmitter m		
W			
	150 kHz to 80 MHz d=1.2√P	80 MHz to 800 MHz d=1.2√P	800 MHz to 2.5 GHz d=2.3√P
0.01	1.12	0.12	0.23
0.1	0.38	0.38	0.73
1	1.2	1.2	2.3
10	3.8	3.8	7.3
100	12	12	23

For transmitters rated at a maximum output power not listed above, the recommended separation distance d in meters (m) can be estimated using the equation applicable to the frequency of the transmitter, where P is the maximum output power rating of the transmitter in watts (W) according to the transmitter manufacturer.

#### Note 1

At 80 MHz and 800 MHz, the separation distance for the higher frequency range applies.

## Note 2

These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects and people.

## GOBED<sup>®</sup> II MEDSURG BED, MODEL FL28EX (CONTINUED)

The GoBed<sup>®</sup> II MedSurg Bed, Model FL28EX is suited for use in the electromagnetic environment specified below. The customer or the user of the GoBed<sup>®</sup> II MedSurg Bed, Model FL28EX should assure that it is used in such an environment.

Immunity Test	IEC 60601 Test Level	Compliance Level	Electromagnetic Environment - Guidance
			Portable and mobile RF communications equipment should be used no closer to any part of the GoBed <sup>®</sup> II MedSurg Bed, Model FL28EX, including cables, than the recommended separation distance calculated from the equation appropriate for the frequency of the transmitter.
			Recommended Separation Distance
Conducted RF IEC 61000-4-6	3 Vrms 150 kHz to 80 MHz	3 Vrms	d=1.2√P
Radiated RF IEC 61000-4-3	3 V/m 80 MHz to 2.5 GHz	3 V/m	d=1.2√P
			$d=2.3\sqrt{P}$ 800 MHz to 2.5 GHz where <i>P</i> is the maximum output power rating of the transmitter in watts (W) according to the transmitter manufacturer and <i>d</i> is the recommended separation distance in meters (m). Field strengths from fixed RF transmitters, as determined by an electromagnetic site survey, <sup>a</sup> should be less than the compliance level in each frequency range. <sup>b</sup> Interference may occur in the vicinity of equipment marked with the following symbol: ((()))

Note 1

At 80 MHz and 800 MHz, the higher frequency range applies.

#### Note 2

These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects and people.

<sup>a</sup>Field strengths from fixed transmitters, such as base stations for radio (cellular/cordless) telephones and land mobile radios, amateur radio, AM and FM radio broadcast, and TV broadcast cannot be predicted theoretically with accuracy. To assess the electromagnetic environment due to fixed RF transmitters, an electromagnetic site survey should be considered. If the measured field strength in the location in which the GoBed<sup>®</sup> II MedSurg Bed, Model FL28EX is used exceeds the applicable RF compliance level above, the GoBed<sup>®</sup> II MedSurg Bed, Model FL28EX should be observed to verify normal operation. If abnormal performance is observed, additional measures may be necessary, such as reorienting or relocating the GoBed<sup>®</sup> II MedSurg Bed, Model FL28EX.

<sup>b</sup>Over the frequency range 150 kHz to 80 MHz, field strengths are less than 3 V/m.

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# GOBED<sup>®</sup> II MEDSURG BED, MODEL FL28EX (CONTINUED)

#### Guidance and Manufacturer's declaration - Electromagnetic Emissions

The GoBed<sup>®</sup> II MedSurg Bed, Model FL28EX is intended for use in an electromagnetic environment specified below. The customer or the user of the GoBed<sup>®</sup> II MedSurg Bed, Model FL28EX should assure that it is used in such an environment.

Emissions Test	Compliance	Electromagnetic Environment
RF Emissions CISPR 11	Group 1	The GoBed <sup>®</sup> II MedSurg Bed, Model FL28EX uses RF energy only for its internal function. Therefore, its RF emissions are very low and are not likely to cause any interference in nearby electronic equipment.
RF Emissions CISPR 11	Class A	The GoBed <sup>®</sup> II MedSurg Bed, Model FL28EX is 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.
Harmonic Emissions IEC 61000-3-2	Class A	
Voltage Fluctuations Flicker Emissions IEC 61000-3-3	Complies	

UNITED STATES Stryker Medical 3800 E. Centre Ave., Portage, Michigan USA 49002

CANADA Stryker Canada 45 Innovation Drive Hamilton, Ontario Canada L9H 7L8

EC REP

European Representative Stryker France ZAC Satolas Green Pusignan Av. De Satolas Green 69881 MEYZIEU Cedex France

