

Modular Patient System (MPS) 3000 Bed

OPERATIONS MANUAL

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Introduction

INTRODUCTION

This manual is designed to assist you with the operation of the Modular Patient System (MPS) 3000 Bed. Read it thoroughly before using the equipment. There is a separate maintenance manual for the 3000 bed that contains information on preventative maintenance, troubleshooting, repair procedures, parts lists, etc.

SPECIFICATIONS

Maximum Weight Capacity	500 pounds
Overall Bed Length/Width	93"/41–1/2"
Patient Sleep Surface	84"/35"
Minimum/Maximum Bed Height	15 3/8"/31"
Knee Gatch Angle	0° to 40°
Fowler Angle	0° to 60°
Trendelenberg/Reverse Trendelenberg	–12° to +12 °
Weigh System Accuracy (optional equipment)	+ / – 1% of total patient weight
Electrical Requirements – all electrical requirements meet UL 544 specifications.	110 VAC, 60 Hz, 10.0 Amp

WARNING / CAUTION / NOTE DEFINITION

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

WARNING

The personal safety of the patient or user may be involved. Disregarding this information could result in injury to the patient or user.

CAUTION

These instructions point out special procedures or precautions that must be followed to avoid damaging the equipment.

NOTE

This provides special information to make important instructions clearer.

Set-Up Procedures

SET-UP PROCEDURES

It is important that the MPS 3000 Bed is working properly before it is put into service. The following list will help assure that each part of the bed is tested.

- Plug the bed into a properly grounded, hospital grade wall receptacle and assure the "Power" LED light at the foot end of the bed comes on.

WARNING

The 3000 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.

- Plug the optional interface cable into the 37 pin connector under the litter frame at the head end of the bed, and into the "Patient Station", "Head Wall", "Docker Station", or equivalent (whichever applies).
- Assure the siderails raise, lower and store smoothly and lock in the up and intermediate positions (page 13).
- Assure that all four casters lock when the brake pedal is engaged (page 5).

NOTE

Assure that the "Brake Not Set" LEDs located on the outside of the head end siderails and on the foot board control panel come on when the brakes are disengaged.

- Run through each function on the foot board control panel to assure that each function is working properly (page 10 & 11).
- Run through each function on both head end siderails to assure that each is working properly (page 14 & 15).
- Activate the motion stop system to assure it is functioning properly: press and hold down the BED DOWN key. As the bed lowers, lift up on the motion interrupt pan (page 4) and assure the downward motion stops. Release the pan and allow the downward motion to continue.

NOTE

The bed's upward motion or other functions are not disrupted by the motion stop system.

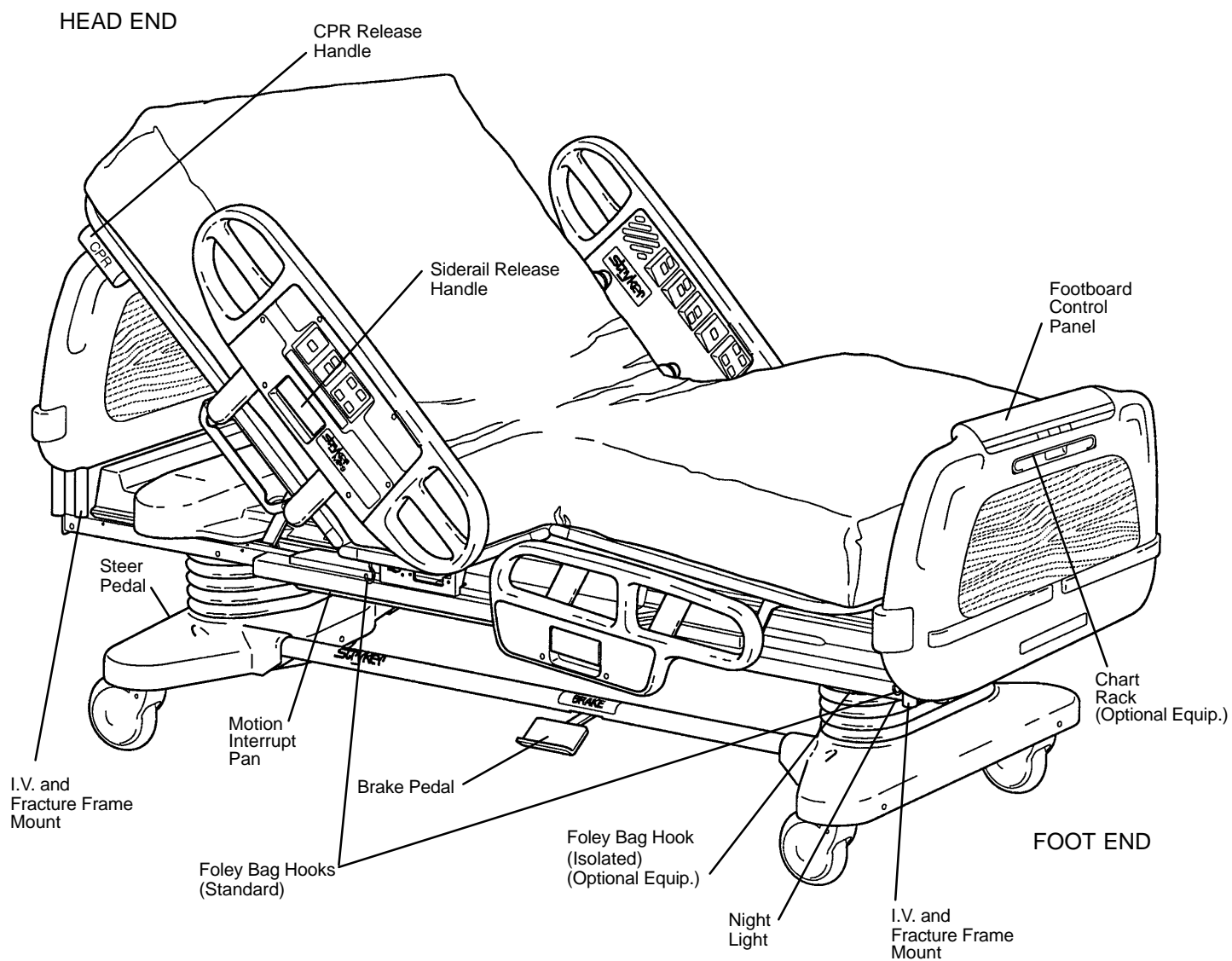
If any problems are found during bed set-up, contact Stryker Customer Service at 800-327-0770.

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.** Stryker Customer Service must be notified immediately. Stryker will aid the customer in filing 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.

Bed Illustration



Base Operation Guide

BRAKE PEDAL OPERATION

WARNING

Before putting a patient on the bed, be sure the brakes are fully engaged.

To activate the brakes, push down once on the pedal identified by the label at right (located at both sides of the bed). To disengage, push down once.

BRAKE
PRESS TO SET OR RELEASE

NOTE

There are LED lights on the outside of the head end siderails and on the foot end control panel that will blink when the brakes are not engaged only if the bed is plugged into a wall socket (see pages 12 & 15). 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.

Litter Operation Guide

CPR EMERGENCY RELEASE USAGE

When quick access to the patient is needed, and the Fowler is raised, squeeze one of the two red release handles (see illustration, page 4) and the Fowler can be guided down to a flat position.

NOTE

The handle can be released at any time to stop lowering the Fowler.

FOLEY BAG HOOKS USAGE, STANDARD AND ISOLATED (Isolated Optional Equipment)

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 the extreme foot end of the bed.

NOTE

The patient weight reading on the bed scale system will be affected by using the standard Foley bag hooks.

The optional isolated Foley bag hooks are located under the litter frame at the top of the foot end bellows.

CAUTION

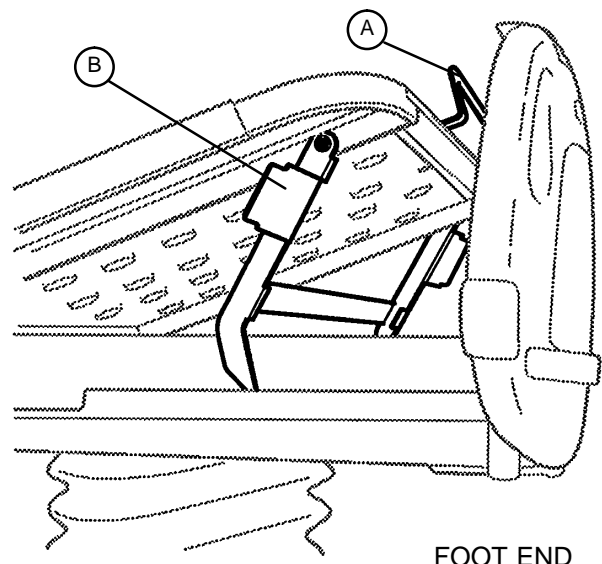
The Foley bag hooks move when the Fowler is raised or lowered. Fowler motion must be locked out when using these hooks, and great care must be taken by the clinician to avoid inadvertent movement of the hooks.

NOTE

The patient weight reading on the bed scale system will not be affected by usage of the isolated Foley bag hooks.

FOOT PROP USAGE

To prop the foot end of the Knee Gatch up, grasp the handle (A) at the end of the Knee Gatch and lift upward, allowing the latch arm to engage at the desired height. To release the prop, lift up slightly on the handle (A) and swing the foot prop handle (B) toward the head end of the bed to disengage the hinge and allow the foot end to lower.

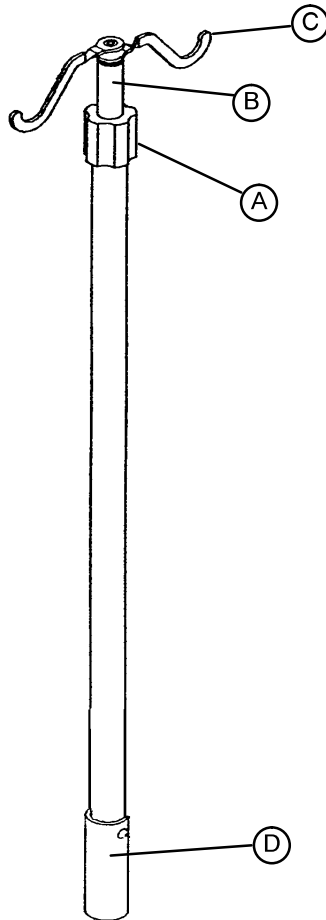


FRACTURE FRAME USAGE

A standard fracture frame can be mounted on the bed using the I.V. sockets located on all four corners of the bed. I.V. poles can be used in conjunction with a fracture frame if I. V. pole adaptor sockets are purchased.

Litter Operation Guide

I.V. POLES



To use the Permanently Attached I.V. pole (optional equipment):

1. Lift and pivot the pole from the storage position and push down until it is locked into receptacle (D).
2. To raise the height of the pole, turn the lock actuator (A) counter-clockwise and pull up on the telescoping portion (B) of the pole to raise it to the desired height.
3. Turn the lock actuator (A) clockwise to lock the telescoping portion in place.
4. Rotate the I.V. hangers (C) to desired position and hang I.V. bags.

CAUTION

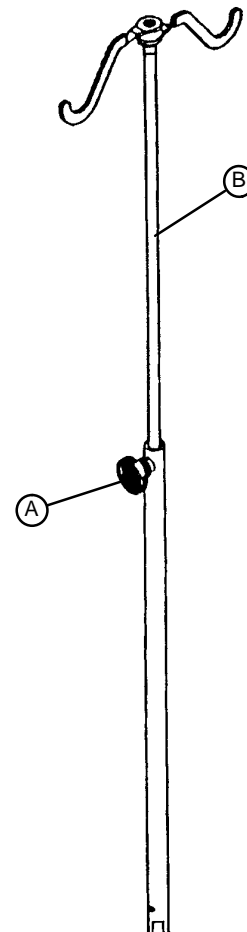
The weight of the I.V. bags should not exceed 40 pounds.

To use the "Removable" I.V. pole:

1. Remove the pole from its storage position located at the foot end of the bed, under the foot board.
2. Install the pole at any of the six receptacles on the bed top (located on all four corners of the bed and halfway down the bed, on both sides.)
3. 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.
4. Turn knob (A) clockwise to tighten the telescoping portion in place.

CAUTION

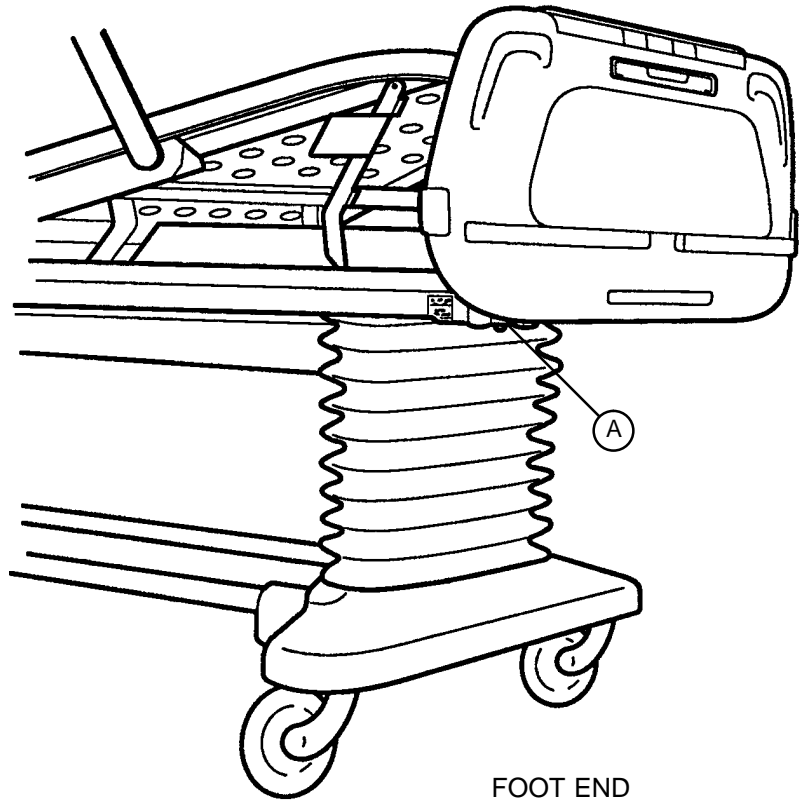
The weight of the I.V. bags should not exceed 40 pounds.



Litter Operation Guide

NIGHT LIGHT USAGE (Optional Equipment)

The bed may be equipped with an optional night light (A) that will illuminate the floor area around the bed. The light has three settings: LOW–OFF–HIGH.



PATIENT RESTRAINT STRAP LOCATIONS

The bed is equipped with 12 separate locations for installing patient restraint straps. The "cutouts" in the bed top are located directly across from each other (on both sides of the bed).

WARNING

Improperly adjusted restraint straps can cause serious injury to a patient. The clinician must use her/his judgement to determine proper use of restraint straps and restraint strap locations.

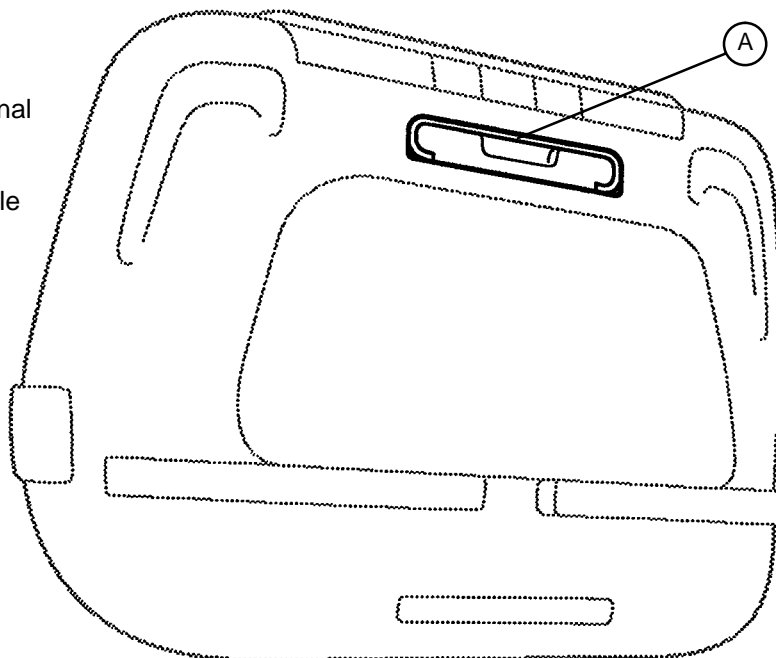
Foot Board/Head Board Operation Guide

CHART RACK USAGE (Optional Equipment)

If the bed is equipped with the optional chart rack, it is located on the foot board. To use, pull handle rod (A) downward. To store, push the handle back to its storage position until it locks in place.

CAUTION

Do not use handle rod (A) as a device for pulling the bed. Doing so may cause damage to the chart rack and foot board.



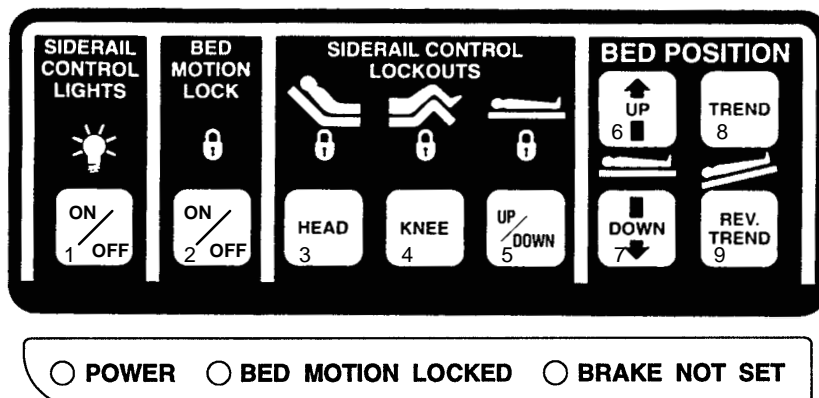
FOOT END

CPR BOARD USAGE (Optional Equipment)

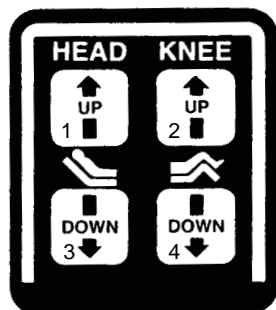
If the bed is equipped with the optional CPR board, it is stored on the bed's head board. To remove, pull away from the head board and lift out of storage position. If the CPR board option was not purchased, the head board can also be removed and used as an emergency CPR board.

Foot Board/Head Board Operation Guide

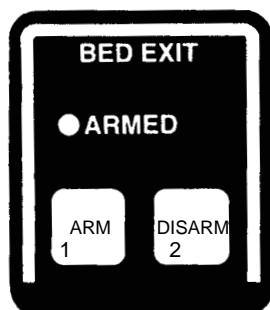
FOOT BOARD CONTROL PANEL GUIDE



1. Push to turn on siderail control panel lights. Push again to turn off (see page 13).
2. Push to lock out all bed motions. Push again to unlock (see page 20).
3. Push to lock out Fowler. Push again to unlock (see page 20).
4. Push to lock out Knee Gatch. Push again to unlock (see page 20).
5. Push to lock out bed height movement. Push again to unlock (see page 20).
6. Push to raise bed height.
7. Push to lower bed height.
8. Push to lower head end/raise foot end of bed (Trendelenberg position).
9. Push to lower foot end/raise head end of bed (Reverse Trendelenberg position).



1. Push to raise Fowler.
 2. Push to raise Knee Gatch.
 3. Push to lower Fowler.
 4. Push to lower Knee Gatch.
- This panel is optional equipment.



1. Push to activate Bed Exit function (see page 20).
 2. Push to deactivate Bed Exit function (see page 20).
- This panel is optional equipment.

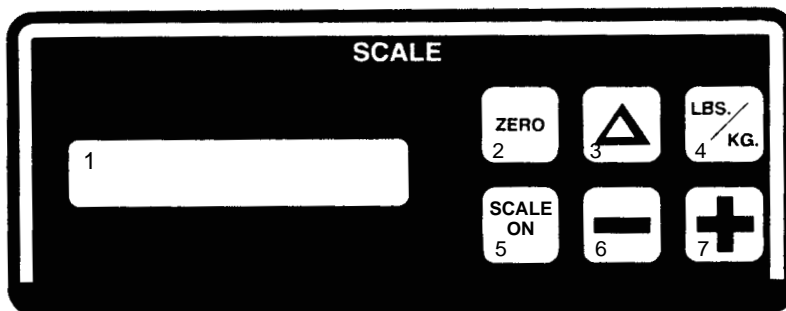
☐ BED EXIT ON

Foot Board/Head Board Operation Guide

FOOT BOARD CONTROL PANEL GUIDE (Continued)



1. Push to turn the Dynamic Mattress system on or off (see page 20).
 2. Push to activate automatic or manual modes (see page 20).
- This panel is optional equipment.



1. LCD – displays patient weight.
 2. Push to zero bed (see page 16 & 18).
 3. Push when changing equipment on the bed (see page 16 & 18).
 4. Push to change weight from pounds to kilograms or back (see page 17 & 18).
 5. Push to turn weigh system on (see page 16 – 18).
 6. Push to decrease numerical value of displayed weight (see page 17 & 19).
 7. Push to increase numerical value of displayed weight (see page 17 & 19).
- This panel is optional equipment.

NOTE

See page 12 for explanation of LED's.

Foot Board/Head Board Operation Guide

LED DISPLAY PANEL GUIDE

The LED Display Panel is located at the foot end of the bed, under the Control Panel.



"POWER" – will light when the bed is plugged into the wall receptacle.

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

"BRAKE NOT SET" – will blink when the brakes have not been set.

"BED EXIT ON" – will light when the Bed Exit function has been activated (optional equipment).

"AIR LOSS" – will light when there is a possible air leak in the Dynamic Mattress System (optional equipment).

Siderail Operation Guide

POSITIONING SIDERAILS

NOTE

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

The siderails can be tucked away under the bed when not in use.

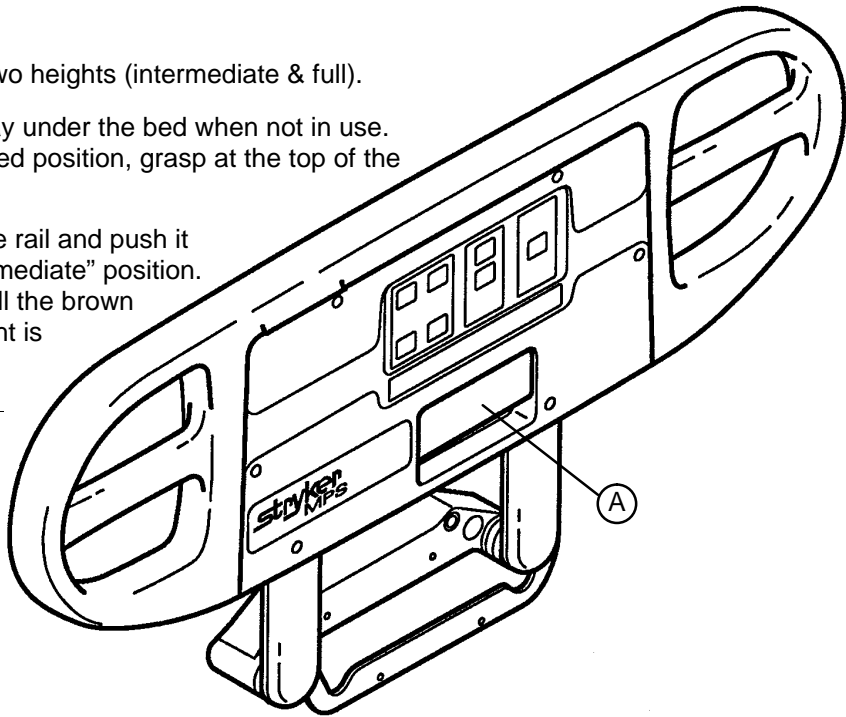
To remove the rail from the tucked position, grasp at the top of the rail and pull outward.

To engage the siderail, grasp the rail and push it upward until it rests in the "intermediate" position.

To continue to the full height, pull the brown release handle (A) until full height is reached.

WARNING

Be sure rail is locked securely into position. Siderails are not intended to keep patients from exiting the bed. They are designed to keep a patient from inadvertently rolling off the bed. Proper restraint methods should be utilized to ensure the patient remains in bed.



To disengage the rail, pull the brown release handle and pivot rail down to desired height. Tuck away siderails by pushing the rails under the bed. Rails must be in the full down position before they can be tucked.

SIDERAIL CONTROL PANEL LIGHTS

The bed is equipped with lights that will illuminate the head end siderail control panel and can be activated at the foot board control panel (see control panel guide page 10).

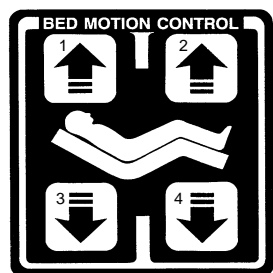
Siderail Operation Guide

INSIDE SIDERAIL FUNCTION GUIDE



(Patient's Right Rail)

1. Push to raise Knee Gatch.
2. Push to raise Fowler.
3. Push to lower Knee Gatch.
4. Push to lower Fowler.



(Patient's Left Rail)

1. Push to raise Fowler.
2. Push to raise Knee Gatch.
3. Push to lower Fowler.
4. Push to lower Knee Gatch.

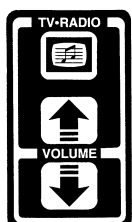


Push to activate Nurse Call.

NOTE

Yellow LED will light when button is pushed. Red LED will light with Nurse Station acknowledgment.

► This panel is optional equipment.



Push to turn TV or radio on and to select a channel.

Push to increase volume.

Push to decrease volume.

► This panel is optional equipment.



Push to increase firmness of mattress.

Push to decrease firmness of mattress.

LED will light when the "Manual" mode has been set at the foot end of the bed.

► This panel is optional equipment.



Push to turn the room light on.

Push to turn the bed overhead light on.

► This panel is optional equipment.

Siderail Operation Guide

OUTSIDE SIDERAIL FUNCTION GUIDE



(Patient's Right Rail)

1. Push to raise Fowler.
2. Push to raise Knee Gatch.
3. Push to lower Fowler.
4. Push to lower Knee Gatch.

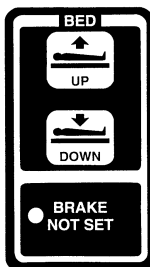
► This panel is optional equipment.



(Patient's Left Rail)

1. Push to raise Knee Gatch.
2. Push to raise Fowler.
3. Push to lower Knee Gatch.
4. Push to lower Fowler.

► This panel is optional equipment.



Push to raise bed height.

Push to lower bed height.

LED will blink when the brakes are not set.



Push to activate Nurse Call.

► This panel is optional equipment.

Weigh System Usage

OPERATING THE SCALE BEFORE PUTTING A NEW PATIENT IN BED





- Prepare bed for patient stay (linens, pillows, etc.).
- Press and release "SCALE ON". The scale monitor will read:
"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

Do not zero the bed while a patient is in bed. If this should occur, remove the patient and zero the bed.

OPERATING THE SCALE IF PATIENT IS ALREADY IN BED

- If it is necessary to add or remove special equipment (monitors, pumps, etc.) during the patient's stay, press and release "SCALE ON" to activate the weigh system. After the scale monitor reads "XXX.X LB", press and hold . The scale monitor will read:
"HOLD TO START"
"RELEASE TO START"
- Release . The scale monitor will read:
"DO NOT TOUCH BED"
"ADD/REMOVE EQUIP"
- Add or remove the equipment and press . The scale monitor will read:
"RELEASE TO FIN."
- Release . The scale monitor will read:
"DO NOT TOUCH BED"
"XXX.X LB"

The weight displayed will be that of the patient only.

Weigh System Usage

CONVERTING THE PATIENT'S WEIGHT

- To convert the patient's weight from pounds to kilograms, press and release "SCALE ON" to activate the weigh system. After the scale monitor reads "XXX.X LB", press and release the "LBS/KGS" button. 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"

CHANGING THE NUMERICAL VALUE OF DISPLAYED WEIGHT

- To decrease the numerical value of the displayed weight, press and hold "-". The scale monitor will read:

"HOLD TO DEC. WT."

"XXX.X LB"

- Hold "-" until desired value is achieved.

- To increase the numerical value of the displayed weight, press and hold "+". The scale monitor will read:

"HOLD TO INC. WT."

"XXX.X LB"










- Hold "+" until desired value is achieved.

NOTE

The weigh system will shut off approximately one minute after a function has been used, if another function is not activated. Display light will shut off and display will read "SCALE OFF".

The weigh system will retain all patient weight information in its memory even when the scale monitor is off or when the bed is unplugged from the wall socket.

Weigh System Control Panel Guide

SYMBOL	ACTION	DISPLAY
To prepare bed for new patient:		
	Press and release "SCALE ON" to activate the scale system, begin a new function and to display patient weight.	"WEIGHING..." "XXX.X LB"
	Press and hold "ZERO" Release "ZERO"	"HOLD TO ZERO WT." "RELEASE TO ZERO" "DO NOT TOUCH BED" "0.0 LB"
To add or remove equipment during patient stay without affecting registered patient weight:		
	Press and release "SCALE ON"	"WEIGHING..." "XXX.X LB"
	Press  Release 	"HOLD TO START" "RELEASE TO START" "DO NOT TOUCH BED" "ADD/REMOVE EQUIP."
	Add or remove equipment.	
	Press  Release 	"RELEASE TO FIN." "DO NOT TOUCH BED" "XXX.X LB"
To convert the patient's weight:		
	To convert the patient's weight to kilograms, press and release "LBS./KG." Repeat the procedure to return to pounds.	"WEIGHT NOW KGS" "XXX.X KG"

Weigh System Control Panel Guide


SYMBOL

ACTION

DISPLAY


To change the numerical value
of displayed weight:



Press  and hold to scroll to
desired weight.

"HOLD TO DEC. WT."
"XXX.X LB"



Press  and hold to scroll to
desired weight.

"HOLD TO INC. WT."
"XXX.X LB"

System Operation Guide

"BED EXIT" SYSTEM USAGE (Optional Equipment)

1. Before putting a new patient on the bed: prepare bed for patient stay by adding linens and equipment to the bed. Press and hold "DISARM" key for 5 seconds – "ARMED" light will begin to flash. Release "DISARM" key and do not touch the bed until "ARMED" light stops flashing.
2. To arm Bed Exit: place patient on the bed, push "ARM" key and release ("ARMED" light will come on).
3. To deactivate Bed Exit, push "DISARM". The "ARMED" and "BED EXIT ON" LED's will turn off.

NOTE

If the scale system is active, it will switch to "off" when Bed Exit is armed. Bed Exit will be temporarily disarmed when the scale system is activated. When the bed is equipped with scales, the scales must be properly zeroed for the Bed Exit System to function properly (see page 16 for scale system usage instructions).

WARNING

Bed Exit System does not prevent the patient from exiting the bed. 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.

DYNAMIC MATTRESS SYSTEM USAGE (Optional Equipment)

1. Turn the mattress system on using the "ON/OFF" switch in the "Prevention Mattress" module on the foot board control panel (see page 11 for Foot Board Control Panel Guide).

NOTE

Push this switch to turn the system both on and off. The "AUTOMATIC" or "MANUAL" LED on the foot board will be on when the system is active.

2. The system can be set in either "AUTOMATIC" or "MANUAL" modes. The "AUTO/MAN" switch is used to activate both modes. When Automatic mode is selected, the "AUTOMATIC" LED on the foot board control panel will be on. When Manual mode is selected, the "MANUAL" LED on the foot board control panel and the "MANUAL" LED on the inside siderail control panel will be on.
3. When the Automatic mode is selected, the firmness of the mattress will adjust automatically as needed. When the Manual mode is selected, the firmness of the mattress can be adjusted by the patient or the hospital clinical staff. The "FIRM" and "SOFT" switches are located on the control panels on the inside of the head end siderails.

NOTE

The "MANUAL" LED on the inside siderail will blink when the "FIRM" or "SOFT" switches are pressed while in the manual mode.

4. If the "AIR LOSS" LED is on, an air leak may exist.

FUNCTION LOCKOUT SYSTEM USAGE

1. To lock out the bed movement functions on the siderails and prevent the patient from changing the positioning of the bed, push the "HEAD", "KNEE" and/or "UP/DOWN" switches in the "Siderail Control Lockouts" module on the foot board control panel (see page 10).

NOTE

The foot board controls for these motions are not affected by the lockout switches.

The "padlock" symbol on the control panel will be lighted when that function is locked out.

2. To lock out the entire bed motion for all switches on the bed, push the "ON/OFF" switch in the "Bed Motion Lock" module on the foot board control panel (see page 10).



420 Alcott Street, Kalamazoo, MI 49001

DH 7/93 3000-000-021 REV ____