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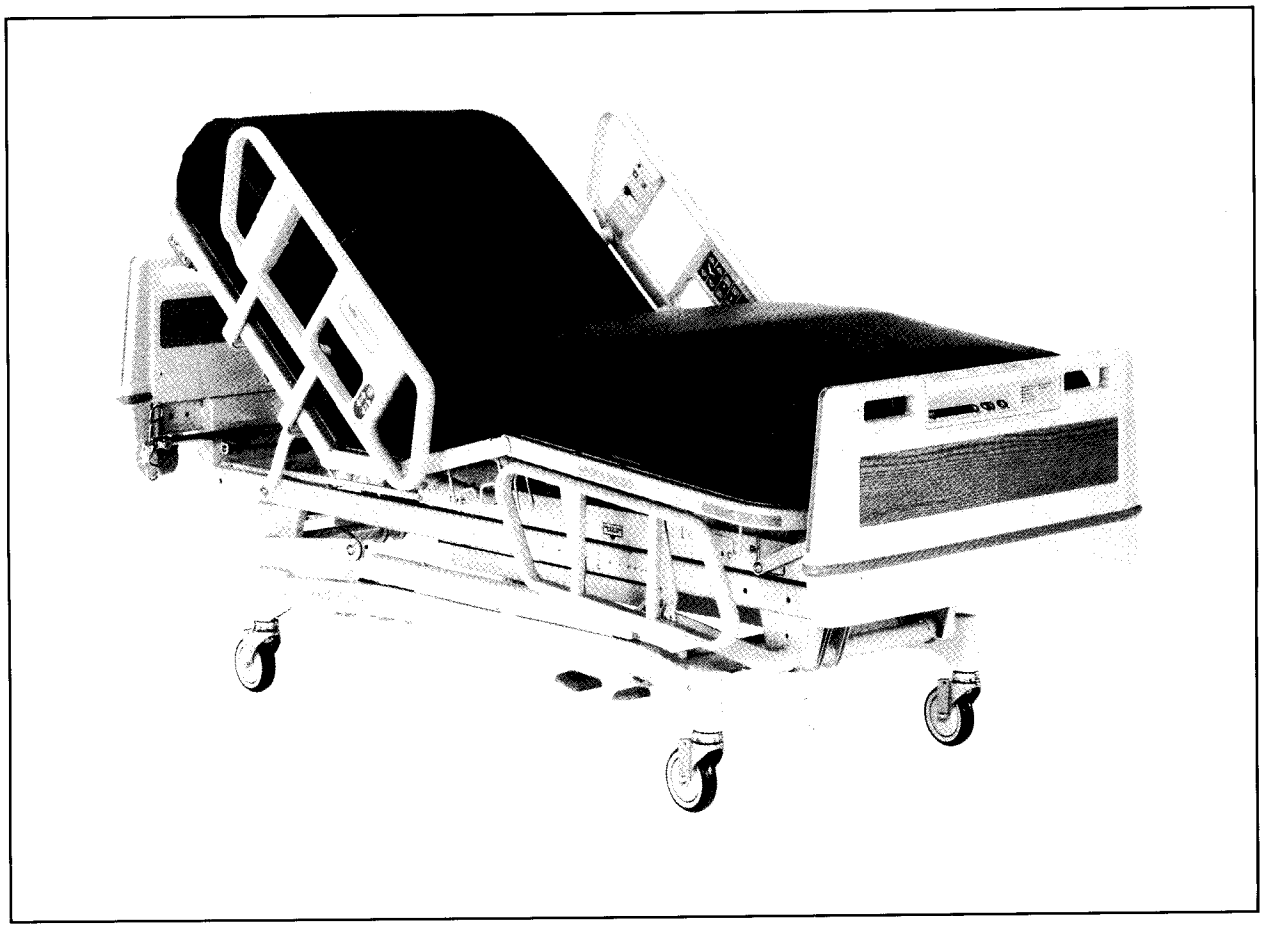
IN-SERVICE MANUAL

Advance® Series Bed

From Hill-Rom®



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The information in this manual applies to all the models of the Advance Series beds except where indicated.

Hill-Rom recommends the use of its sleep surface and mattress products as part of a comprehensive patient care plan included in the Pressure Ulcer Prevention and Treatment Guidelines established by the Agency For Healthcare Policy and Research.

An In-Service videotape is available. Contact your Hill-Rom representative or call 1-800-445-3720.

FOR SPECIAL ASSISTANCE:

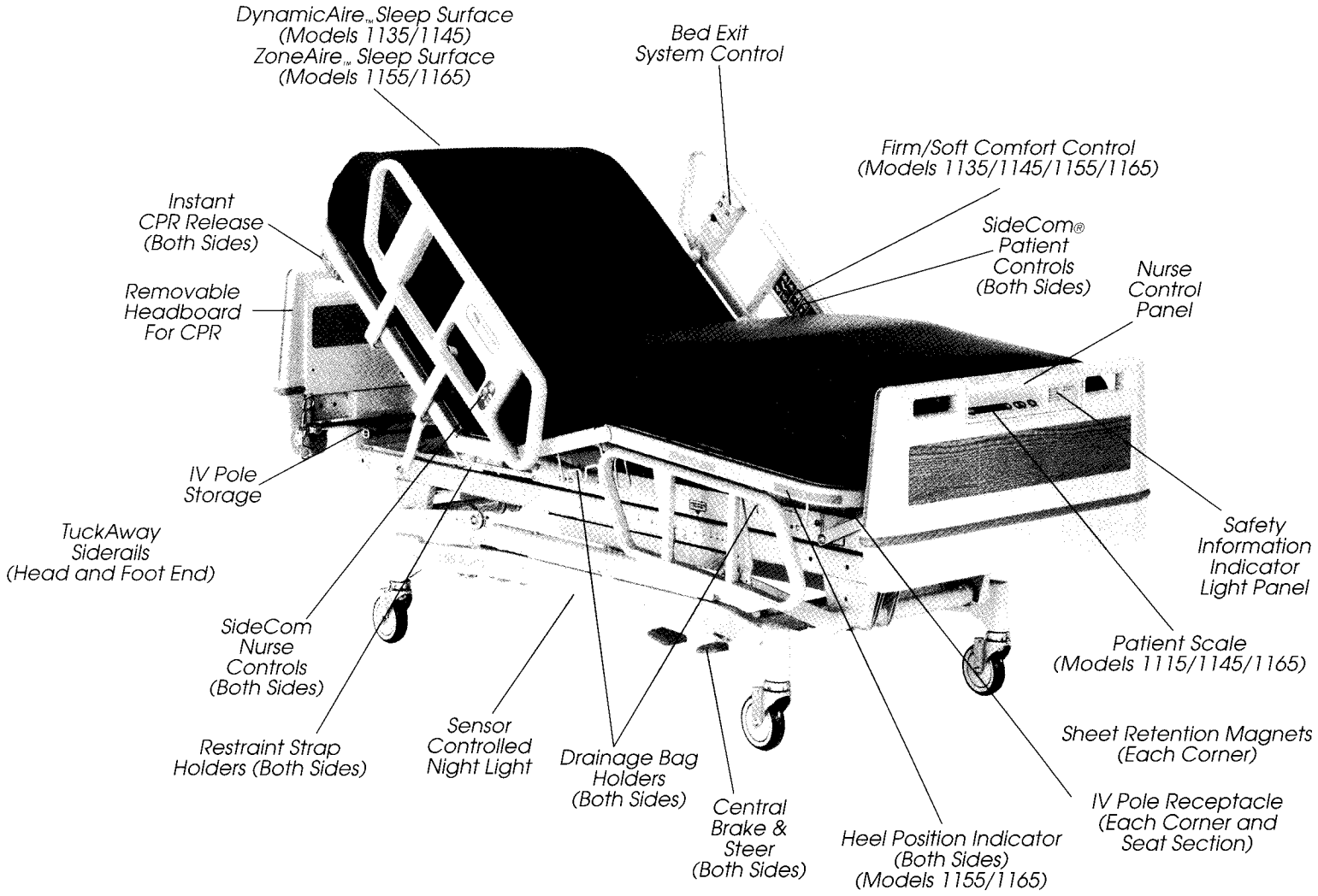
Hill-Rom Account Manager _____ Phone _____

Clinical Consultant _____ Phone _____

Field Service Technician _____ Phone _____

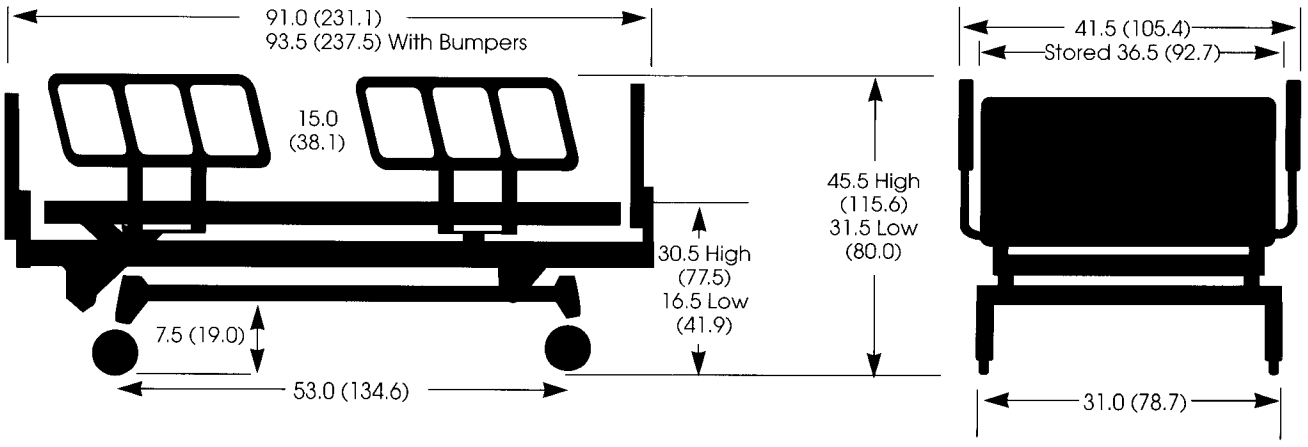
Customer Service Representative _____ Phone _____

FEATURES



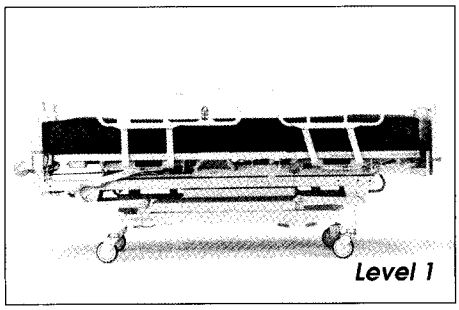
DIMENSIONS

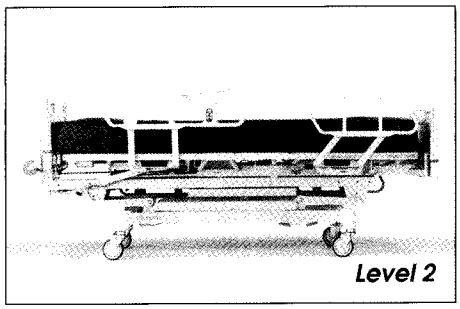
Measurements: Inches (centimeters)

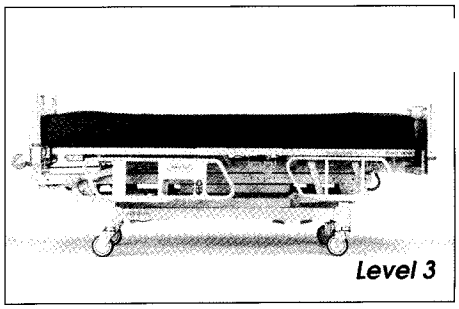


STANDARD FEATURES

SIDERAILS







To raise or lower the Siderails, press the push button next to the Siderail and swing the Siderail away from the center of the bed and into the desired position. You will hear a "click" when the Siderail is securely in place. The foot-end Siderails can be adjusted to three different levels. The head-end Siderails can be adjusted to two different levels.

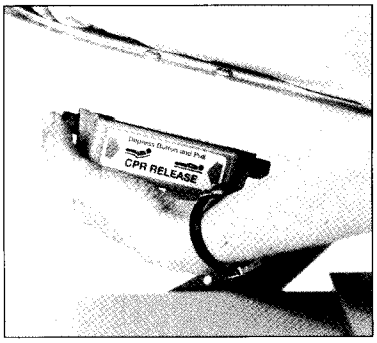
Level 1: This position, both Siderails fully upright, can discourage the alert and oriented patient from leaving the bed in most situations.

Level 2: This position, with foot-end Siderails lowered to the middle position, allows the patient to egress from the bed while still providing reasonable protection.

Level 3: This position places the Siderails beneath the mattress deck. To store the Siderails, lower each Siderail completely and push in toward the frame.

NOTE: For patient transfer, place Siderails in the lowest position and push toward the frame. Also ensure the Brake Pedal is depressed and the bed is stable. Always tug on the Siderails, after changing positions, to ensure that they are securely locked in place.

INSTANT CPR RELEASE



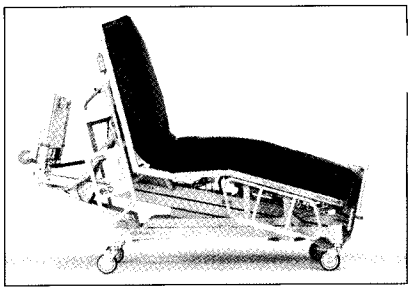
To activate the Instant CPR Release, press either red button on the side of the handle and simultaneously pull the handle then release. The head section will instantly lower to the "down" position without having to be held. This feature allows emergency procedures to be performed without unnecessary loss of time.

NOTE: The Instant CPR Release should not be used to raise the head section of the bed...use the HEAD UP control on the Siderail.

NOTE: When this feature is used on models 1155/1165, the Auto Firm mode is automatically engaged.

CHAIR POSITION

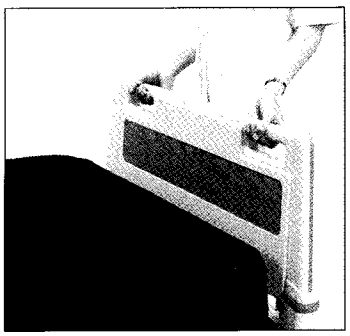
For beds with the ZoneAire Surface, activate the Chair Position on the Nurse Control Panel by pressing the CHAIR IN button. For beds without the ZoneAire Surface, activate the Chair Position switch, on the Nurse Control Panel, upward. First, the bed will travel to the lowest level while the head section elevates and the knee section bends. After this is complete, the bed will place itself into Reverse Trendelenburg. The patient will now be in a position very similar to that assumed in a chair. The upright position of the patient, in the Chair Position, helps to promote easier eating and bed pan use while in the bed. To take the patient out of the Chair Position on the ZoneAire Surface, press the CHAIR OUT button. To take the patient out of the Chair Position on the beds without the ZoneAire Surface, activate the Chair Position switch downward.



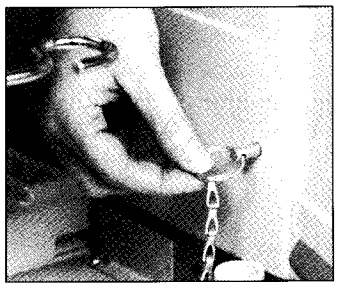
HEADBOARD REMOVAL

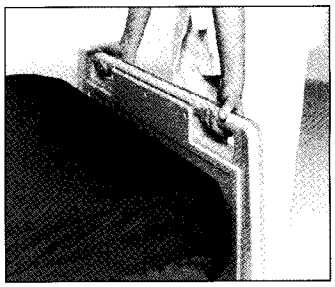
The headboard is removed by grasping the hand holds and lifting up. To replace the headboard, lower the board onto the posts.

The headboard can be removed to gain increased access to the patient's head and can be used as a backboard during CPR procedures.



FOOTBOARD REMOVAL



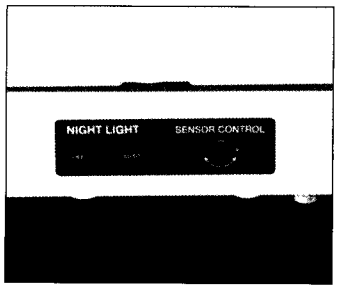


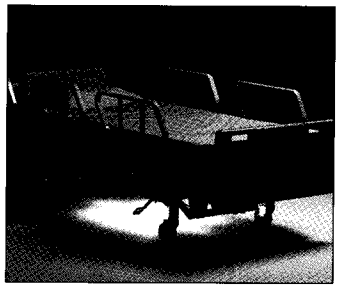
For the footboard to be removed, the cotter pins at the lower corners of the footboard must be pulled out. The footboard is then removed by grasping the hand holds and lifting up. To replace the footboard, lower the board onto the posts. The cotter pins must be replaced and nurse panel controls checked for proper operation.

NOTE: The footboard should only be removed during maintenance of the bed. The bed should be unplugged before the footboard is removed and plugged in again when the footboard is placed back again.

STANDARD FEATURES

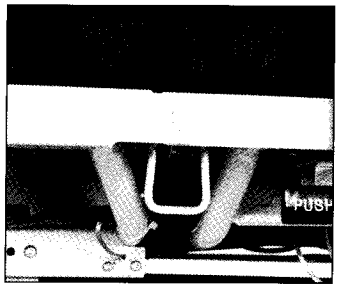
NIGHT LIGHT





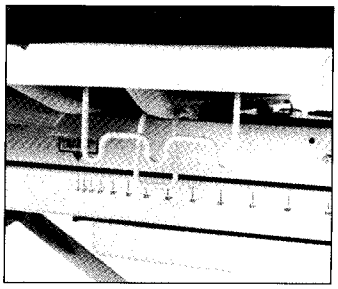
The Night Light will come on as the existing light in the patient room dims, and will automatically go off when the room becomes light again. To turn the light off manually, there is a switch located under the mattress deck at the mid-section of the bed frame. Also located here is a Sensor Control which adjusts the level of light required to turn on the Night Light.

RESTRAINT STRAP HOLDERS



Restraint Strap Holders on both sides under the mattress deck allow for the use of patient restraints when necessary. They are recessed under the frame to prevent access by the patient.

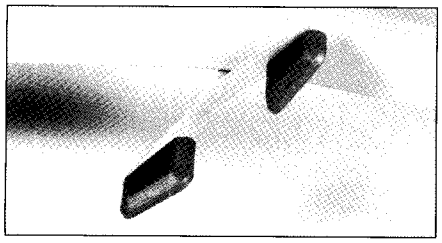
DRAINAGE BAG HOLDERS



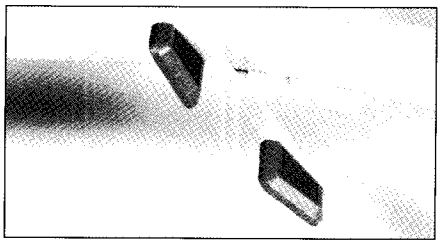
Drainage Bag Holders on both sides under the mattress deck at the seat and foot sections, accomodate different types of disposable drainage kits. They are recessed under the frame to permit normal Siderail operation.

CENTRAL BRAKE AND STEER

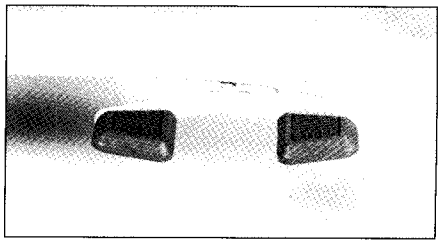
Use the Brake and Steer Pedals as directed in the following situations:



1. Docking Position: When the bed is in place in the patient room, press the Brake Pedal.



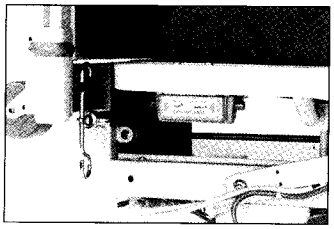
2. Transport: For moving the bed down a corridor, depress the Steer Pedal and push from the headboard.



3. Moving Bed: When moving the bed in tight areas or in a patient room, place the Brake and Steer Pedal in neutral.

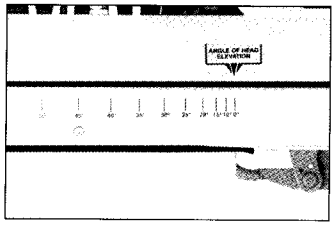
NOTE: When brake is not set, a yellow light will flash on the Indicator Light Panel at the foot end of the bed.

IV ROD



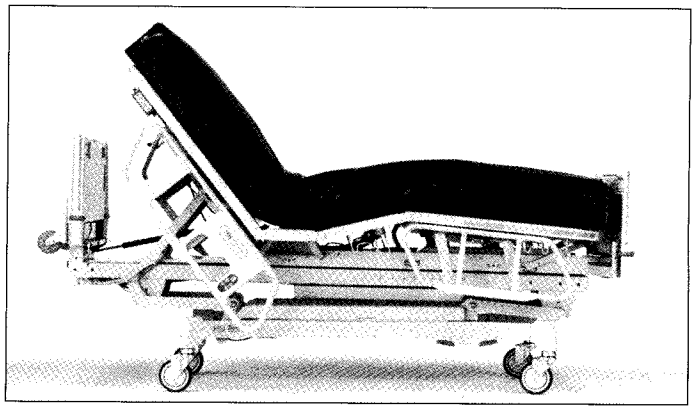
The IV Rod storage area is at the head end of the bed, between the headboard and the mattress deck. Six IV Rod receptacles are provided, one on each corner of the bed and one on each side on the bed frame at the seat section.

HEAD ELEVATION INDICATOR



The Head Elevation Gauges, located on the bed frame on either side of the bed beneath the mattress, indicate the degree of head elevation. The degree to which the arrow is pointing is the correct elevation.

AUTO CONTOUR

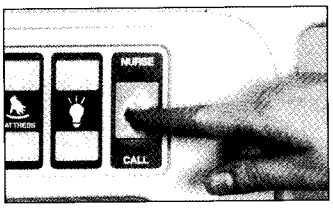


The knee section simultaneously breaks to approximately 15° when the head section is elevated. This helps prevent the patient from gravitating to the end of the bed. To adjust the knee below or beyond Auto Contour level, use independent knee control. To deactivate Auto Contour and all electrical knee adjustments, lock out knee control at the Nurse Control Panel.

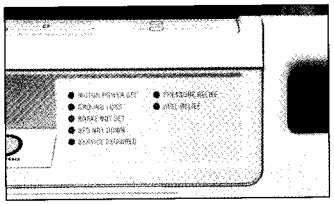
STANDARD FEATURES

NURSE CALL ACTIVATION

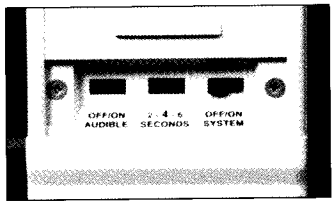
There are four situations in which a nurse call could be activated:



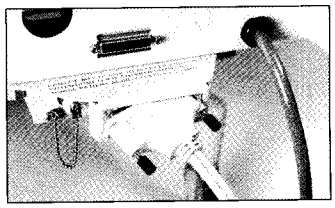
1. Patient call.



2. Excessive air loss in mattress. (Bed Exit System equipped beds, Models 1135/1145/1155/1165)



3. Patient leaves bed when Bed Exit System is engaged.

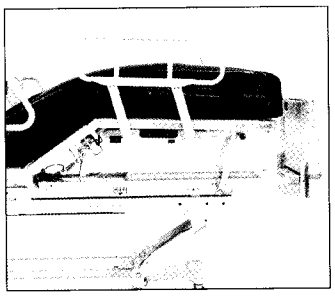


4. Communication Cable is unattached.

NOTE: Patient-controlled calls can be turned off at the nurse's station while the other signals are turned off at the bed. The specific message or call will differ by the type of Nurse Call system.

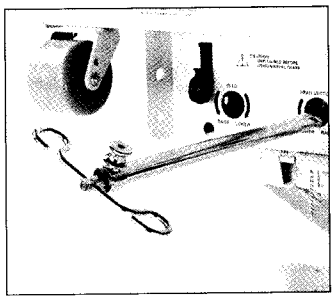
MANUAL POSITIONS WITHOUT POWER

KNEE GATCH



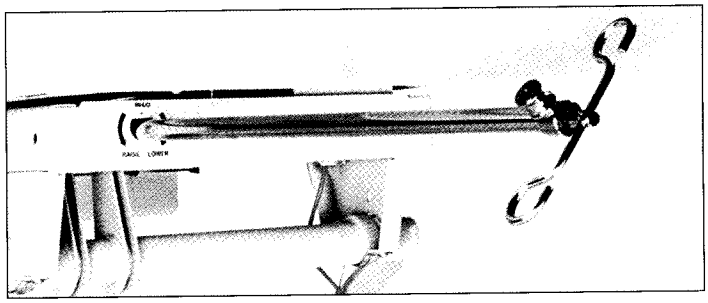
Use the Knee Gatch position for patient leg elevation. Use a Siderail control to raise the knee section, then move the knee gatch cross bar towards the head of the bed to the desired Gatch position.

HEAD SECTION



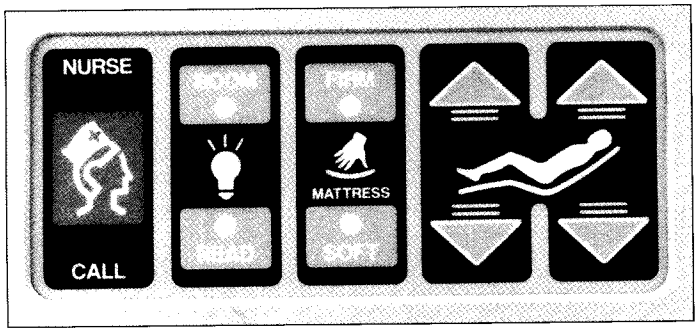
- Unplug main power cord.
- Extend and insert the IV pole through the access hole for the head screw assembly at the head end of the bed.
- Turn the IV pole clockwise to raise/counterclockwise to lower the head section.

HI-LO



- To manually change the Hi-Lo position, both the Head and Foot Hi-Lo drive must be raised or lowered.
- Unplug main power cord.
- Extend and insert the IV pole through the access hole for the Hi-Lo head screw assembly at the head end of the bed (the left hole).
- Turn the IV pole counterclockwise to raise/clockwise to lower the head section.
- Extend and insert another IV pole through the access hole for the Hi-Lo foot screw assembly at the foot of the bed.
- Turn the IV pole counterclockwise to raise/clockwise to lower the foot section.

PATIENT CONTROLS



HEAD UP/HEAD DOWN
When using the Head Up and Down Controls, press the top button to raise the head section and the bottom button to lower the head section until patient reaches the desired position.

KNEE UP/KNEE DOWN
When using the Knee Up and Down Controls, press the top button to raise the knee section and the bottom button to lower the knee section to the desired position.

NURSE CALL
To place a nurse call simply depress the NURSE CALL Button. A yellow light will illuminate to indicate that a call has been sent.

BACKLIGHTING
The Siderails are automatically illuminated by a low light, which will be visible when the room is darkened.

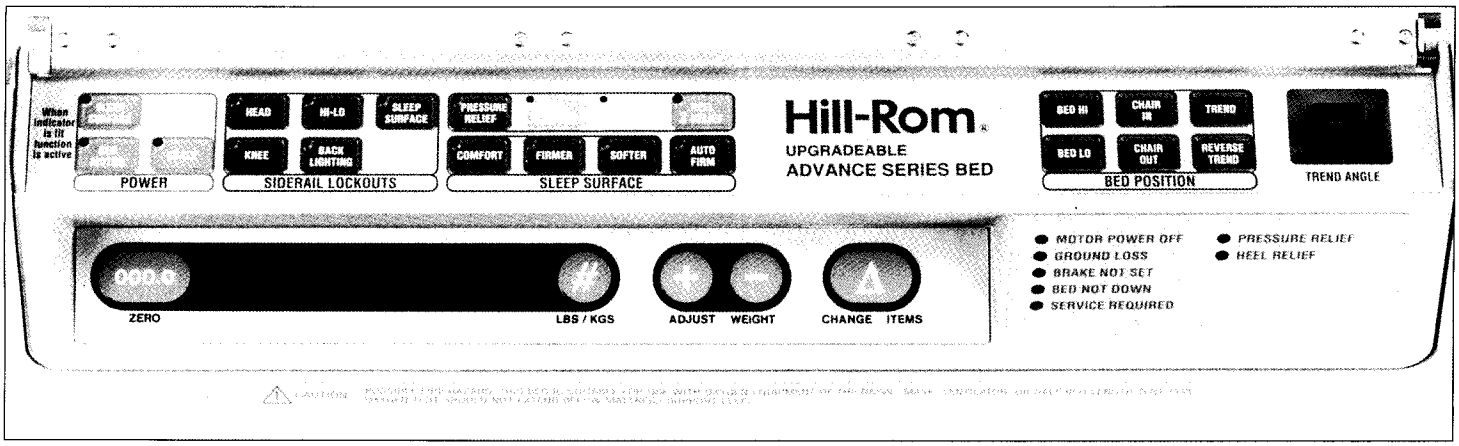
LIGHTING
To activate the indirect room light, press the Top Lighting Button. To activate the Exam or Reading light, depress the bottom button.

MATTRESS FIRM/SOFT
(Models 1135/1145/1155/1165)
The surface can be adjusted to the desired level of firmness by pressing the MATTRESS SOFT or FIRM button, in the Comfort Mode only.

NOTE: These controls are labeled "Mattress" so they will be clearly understood by the patient.

NOTE: The surface can be locked out by the nurse at the Nurse Control Panel by pressing the Sleep Surface Lockout button or by placing the bed in the Pressure Relief Mode (1155/1165) or putting the switch in the Prevention Mode (1135/1145).

NURSE CONTROL PANEL - ZoneAire Sleep Surface (Model 1155 and 1165)



Each Power, Siderail Lockout and Sleep Surface touchpad control within the Nurse Control Panel has a green light in the upper left hand corner of the control. When the specific function associated with the control is "on" the light is lit. When the function is "off" the light is not lit.

POWER CONTROLS

Power to the bed, Sleep Surface (Models 1155/1165) and Patient Scale Display (Model 1165) can be turned on or off using these controls. The red MOTOR POWER OFF light on the Footboard Indicator Panel will be lit when the bed motor power is turned off.

SIDERAIL LOCKOUT CONTROLS

Operation of the Siderail controls can be locked out using these controls. This includes patient controls - head elevation, knee elevation and Surface Firm/Soft (Models 1155/1165) as well as nurse controls - Hi-Lo and backlighting of the SideCom controls.

SLEEP SURFACE CONTROLS

The Sleep Surface controls are utilized when the Advance Series Bed includes the ZoneAire Sleep Surface. Operation of these controls is described in the section of the manual covering the Sleep Surface on page 7.

HI-LO

The Hi-Lo controls are located on the exterior of each head-end Siderail and within the Nurse Control Panel. On the Siderails, press the top control to raise and the bottom control to lower the bed to the desired height. At the Nurse Control Panel, press the BED HI control to raise and the BED LO control to lower the bed. When the bed is not at its lowest position, the yellow BED NOT DOWN light on the footboard Indicator Panel will be lit.

CHAIR

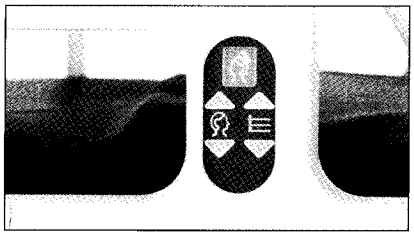
Activate the CHAIR IN control to place the bed into a Chair Position. To take the bed out of the Chair Position, activate the CHAIR OUT control. Press and hold the CHAIR IN control to place the bed in Chair Position. Press and hold the CHAIR OUT control to take the bed out of the Chair Position.

TRENDELENBURG/REVERSE TRENDELENBURG

To place the bed in the Trendelenburg or Reverse Trendelenburg positions use the TREND and REVERSE TREND controls. Press TREND and hold to obtain the desired degree of Trendelenburg positioning. Use the Trend Angle gauge to measure the inches and/or degrees of Trendelenburg positioning. To take the bed out of the Trendelenburg position press the REVERSE TREND control until the Trend Angle gauge reads zero degrees which indicates that the bed is in the flat position.

Press REVERSE TREND and hold to obtain the desired degree of Reverse Trendelenburg positioning. Use the Trend Angle gauge to measure the inches and/or degrees of Trendelenburg positioning. To take the bed out of the Reverse Trendelenburg position press the TREND control until the Trend Angle gauge reads zero degrees which indicates that the bed is in the flat position.

SIDERAIL NURSE CONTROLS - All Models



NURSE CALL

Press the Nurse Call button to request assistance at bedside.

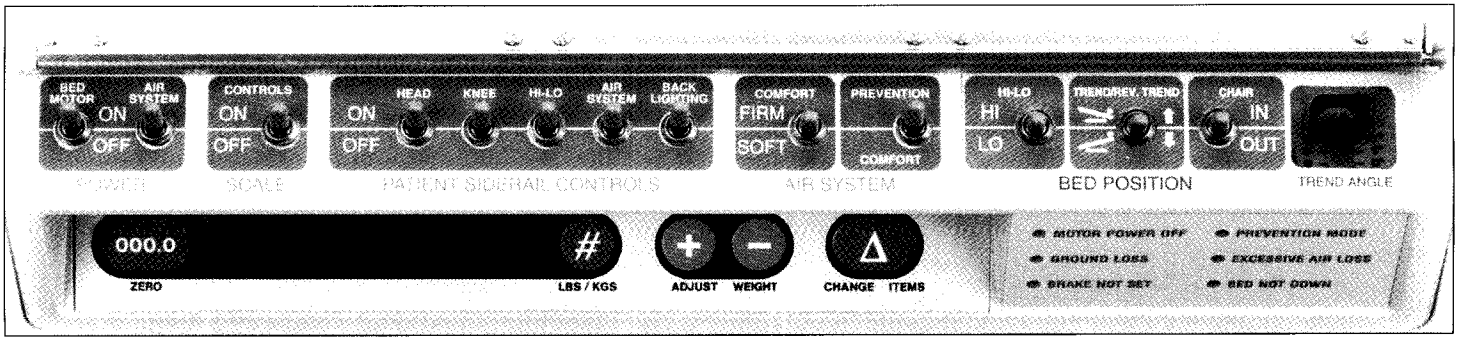
HEAD UP/DOWN

Allows you to raise/lower the head section of the bed without having to reach in and use Head Up/Down on the inside of the Siderail.

Hi-LO

Press top arrow to raise bed and bottom arrow to lower bed. Allows you to raise/lower bed from bedside without having to go to foot section of bed to use Hi-Lo button in footboard. The Hi-Lo controls can be locked out at the Nurse Control Panel.

NURSE CONTROL PANEL - DynamicAire Sleep Surface (Model 1135 and 1145)



POWER SWITCHES
Power to the motors which control both the bed position and the air system can be turned on or off using these switches. The red MOTOR POWER OFF LED on the Footboard Safety Panel will be lit when the bed motor power is turned off.

PATIENT CONTROL LOCKOUT SWITCHES
Turn the appropriate switch on when the patient control in the Siderails is to be operable, off when patient control is not desired. This is available for Knee, Head, Backlighting, Hi-Lo and Surface Comfort Control.

PREVENTION MODE
Activate this switch when it has been clinically determined that the patient is at risk of developing pressure sores. This will automatically lock out the patient's Siderails Comfort Control and adjust the surface to minimize pressure. When this control is activated, a green LED will be lit on the Footboard Safety Panel.

COMFORT MODE
Activate the switch upward if the mattress needs to be firmer, down if it needs to be softer. This function can also be controlled by the patient using the Siderail controls. When the bed is in the Prevention Mode the Comfort Control switches on the Siderails and Nurse Control Panel will automatically be locked out.

NOTE: The Air System Control switch must be placed in COMFORT for this control to be activated.

HI-LO
The Hi-Lo controls are located outside of both head-end Siderails and at the Nurse Control Panel. On the Siderails, activate the top button to raise and the bottom button to lower the patient to the desired height. At the Nurse Panel, activate the switch up to raise, down to lower the patient. When the bed is not in low position, a yellow BED NOT DOWN light will be lit on the LED footboard panel.

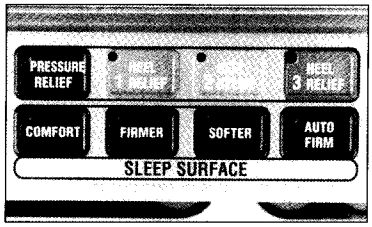
TRENDELENBURG
Activate the Trendelenburg/Reverse Trendelenburg switch upward to place the patient in the Trendelenburg position. Refer to the Trendelenburg Gauge for the measurement in inches and degrees. To take the patient out of Trendelenburg, activate the Reverse Trendelenburg until the Trendelenburg Gauge indicates zero degrees which indicates that the bed is in the flat position.

Activate the Trendelenburg/Reverse Trendelenburg switch downward to place the patient in the Reverse Trendelenburg position. Refer to the Trendelenburg Gauge for the measurement in inches and degrees. To take the patient out of Reverse Trendelenburg, activate the Trendelenburg until the Trendelenburg Gauge indicates zero degrees which indicates that the bed is in the flat position.

CHAIR
Activate the Chair Position switch upward to place the bed into a Chair Position. To take the bed out of the Chair Position, activate the switch downward.

OPTIONAL UPGRADEABLE FEATURES

ZONEAIRE SLEEP SURFACE



The ZoneAire Sleep Surface has four patient care modes. They are Pressure Relief, Heel Relief 1, 2, or 3, Auto Firm and Comfort. The choice of mode is best determined through an assessment of the patient as to their risk of pressure ulceration.

COMFORT MODE

For patients assessed not to be at-risk, the Surface can be placed in the Comfort Mode. This gives the patient and caregiver control of the firmness/softness of the Surface. This is accomplished by the caregiver pressing the COMFORT touchpad control within the footboard control panel. The firmness/softness of the Surface is then controlled by the patient through the mattress controls located on the interior of each head-end Siderail. Similarly, the firmness/softness can be controlled by caregivers through the FIRMER and SOFTER touchpad controls located on the footboard control panel.

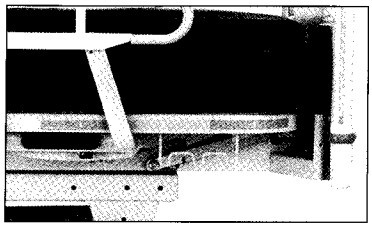
PRESSURE RELIEF MODE

For patients assessed to be at-risk of ulceration and who require pressure relief, the Surface should be placed in the Pressure Relief Mode. This is accomplished by the caregiver pressing the PRESSURE RELIEF touchpad control within the footboard control panel. In the Pressure Relief Mode, the amount of air within each zone of the Surface is adjusted by the Surface itself. Air volumes are changed to contour the Surface around the patient's body, especially bony prominences, to more evenly distribute pressure across the body. The Surface adjusts not only to patient's weight distribution but to patient position and bed articulation.

When the ZoneAire Sleep Surface is placed in the Pressure Relief Mode, the green Safety and Information Indicator Light, "Pressure Relief" turns on, reminding caregivers that the Surface is in the proper mode for the patient. When in the Pressure Relief Mode, the patient and caregivers no longer have control of the firmness of the Surface.

HEEL RELIEF MODE

For patients who are assessed to be at-risk of ulceration, require pressure relief and whose level of mobility is such that the patient's heels are at particular risk of ulceration, the Heel Relief Mode should also be utilized. To engage the Heel Relief feature, press one of the three HEEL RELIEF touchpad buttons within the footboard control panel, either HEEL RELIEF 1, 2, or 3. Engage the appropriate HEEL RELIEF button by determining where the supine-lying patient's heels rest on the Surface. To determine which HEEL RELIEF button to press, look at the Heel Relief Position Indicator on the edge of the bed's mattress deck. Note where the patient's heels rest on the Surface. Match where the heels rest on the Sleep Surface with the Heel Relief Position Indicator 1, 2, or 3.



If the patient's heels rest above Heel Position Indicator 1, press the 1 HEEL RELIEF button on the Nurse Control Panel.

If the patient's heels rest above Heel Position Indicator 2, press the 2 HEEL RELIEF button on the Nurse Control Panel.

If the patient's heels rest above Heel Position Indicator 3, press the 3 HEEL RELIEF button on the Nurse Control Panel.

Once the Heel Relief Mode has been engaged, check to ensure that the proper button has been pushed. This can be done by examining the Surface under the patient's heels. When engaged properly, the Heel Relief Mode will lower the Surface under the heels and slightly raise the Surface under the calves. This has the effect of transferring a great percentage of the support of the foot from the heel to the calf and, consequently, significantly reduces the interface pressure on the heel.

AUTO FIRM MODE

To facilitate patient handling, the caregiver can press the AUTO FIRM button within the control panel of the footboard. The Auto Firm Mode will fully inflate all the air bladders within the Surface making the Surface very firm. The patient's body will no longer displace air out of the air bladders and will be raised up onto the Surface. This allows the caregiver to more easily handle the patient during ambulation, repositioning, procedures within the bed and transfers from the bed.

The Auto Firm Mode is automatically activated when the Instant CPR Release is engaged. The air bladders of the Surface will automatically fill sequentially from head to foot. The resulting firm mattress provides a stable surface on which to perform patient procedures.

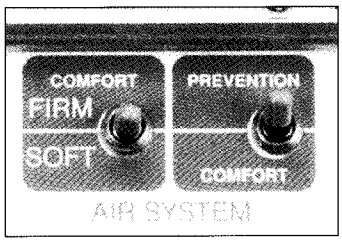
When the Auto Firm Mode is engaged, whether from the touchpad control within the footboard control panel or automatically with Instant CPR Release engagement, the mode will only stay active for one hour. After one hour it will default to its previous mode, Comfort or Pressure Relief (and Heel Relief if it is engaged). This ensures that the patient does not rest on a firm surface for an extended period of time.

NOTE: Mattress overlays are not required on the ZoneAire Sleep Surface and therefore should not be utilized on top of the Surface.

See page 12 for Surface cleaning instructions.

OPTIONAL UPGRADEABLE FEATURES

DYNAMICAIRE SLEEP SURFACE



The DynamicAire Sleep Surface has two patient care modes, Prevention and Comfort. The choice of mode is best determined through an assessment of the patient as to their risk of pressure ulceration.

For patients assessed not to be at-risk, the Surface can be placed in the Comfort Mode. This gives the patient and caregiver control of the firmness/softness of the Surface. This is accomplished by activating the COMFORT switch within the footboard control panel. The firmness/softness of the Surface is then controlled by the patient through the mattress controls located on each
head-end Siderail. Similarly, the firmness/softness can be controlled by caregivers through the FIRM and SOFT switch located on the footboard control panel.

For patients assessed to be at-risk of pressure ulceration, the Surface should be placed in the Prevention Mode. This is accomplished by activating the PREVENTION switch located on the footboard control panel. In the Prevention Mode the amount of air within the dual air-bladder system of the Surface is controlled by the Surface itself to reduce interface pressure across the patient's body, especially the bony prominences. The Surface adjusts in response to changes in patient and bed positions.

When the DynamicAire Sleep Surface is placed in the Prevention Mode, the green Indicator Light turns on, reminding caregivers that the Surface is in the proper mode for the at-risk patient. When in the Prevention Mode, the patient and caregivers no longer have control of the firmness/softness of the Surface.

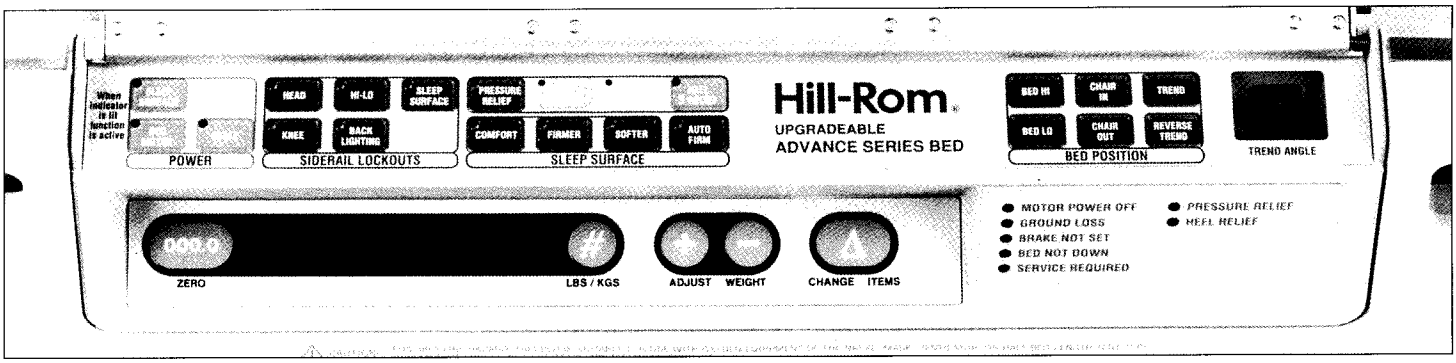
NOTE: Mattress overlays are not required on the DynamicAire Sleep Surface and therefore should not be used on top of the Surface.

NOTE: See page 12 for Surface cleaning instructions.

PATIENT SCALE

INSTRUCTIONS (Models 1115/1145/1165)

The Patient Scale has an average accuracy of 1%, repeatability of 0.1% and an operating range of 0 to 450 lbs. The scale has five buttons and a display area. A caption appears below each button describing its function. Each caption lights up when the room light is low and becomes brighter and flashes when its function is active. The scale controls and the associated color-coded instructions are located on the footboard.



The ⊙ (ZERO) button is green. It is used to reset the bed scale to 0.0 prior to placing the patient on the bed.

The scale display is located between the ZERO and Pounds-Kilograms buttons. Weight readings and other messages appear in the display through a Liquid Crystal Display (LCD).

The ⊕ (LBS/KGS) button is green. It is used to switch weighing units from pounds to kilograms or kilograms to pounds.

The ADJUST WEIGHT buttons are red. They are used to manually increase or decrease the weight reading in the scale display. Press ⊕ to increase and ⊖ to decrease the reading.

The △ (CHANGE ITEMS) button is blue. It is used to properly maintain the patient's weight reading automatically when items are placed on or removed from the bed.

BEFORE OPERATING THE SCALE

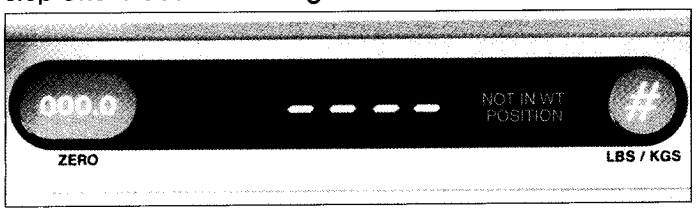
Before operating the scale, be aware of the following:

- The scale is very sensitive. The most accurate weight reading will be achieved if the bed is not touching anything. This includes the headwall, lines such as pendant controls and ventilators, drainage bags, and anything else that could impact the weight and cause an incorrect weight to appear in the display.
- It is also important that no one touch the bed while the scale is operating. For example, touching the footboard can add several pounds to the weight display.

OPTIONAL UPGRADEABLE FEATURES

PATIENT WEIGHING

Step One–Place Bed in Weight Position



- The bed must be in its weight position before a patient can be weighed. If it is not, the scale display will show four dashes (----) and the message "NOT IN WT POSITION''. The scale buttons will only be active when the bed is in its weight position.
- If the bed is in Trendelenburg or Reverse Trendelenburg, take it out. The bed does not need to be completely flat for the scale to work. The most accurate weight reading is achieved with the head section below 40 degrees.
- Use the Hi-Lo function to move the bed until the message "NOT IN WT POSITION" disappears from the scale display.

Step Two–Prepare Sleep Surface

- Before placing a new patient on the bed, the sleep surface must be prepared to accurately weigh the patient. This includes placing all pillows, blankets, and any other items of non-variable weight which the patient will be using, on the bed. You might want to place a list of these items near the bedside for future reference.
  NOTE: It is important for the hospital or unit to develop a protocol to determine what items belong on the bed at the time of weighing.

Step Three–Zero Scale

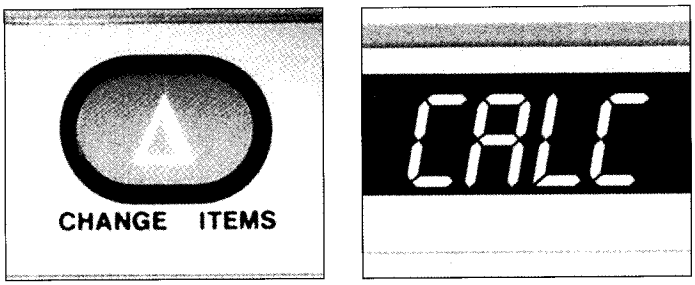


- Press and hold 000.0.
- "000.0" will flash in the scale display.
- When "000.0" stops flashing, release the button.
- "CALC" will flash in the display as the scale zeroes. This may take up to 20 seconds. Do not touch the bed while it is calculating.
- "CALC" will stop flashing and a beep will sound once zeroing is complete.
- "0.0" will appear in the display.

Step Four–Place Patient on Bed

- Place patient on the bed. For the most accurate weight reading, the patient should be centered on the bed and lying still. The scale will automatically calculate and display the patient's weight. As long as the bed is in its weight position, the patient's weight will be displayed.

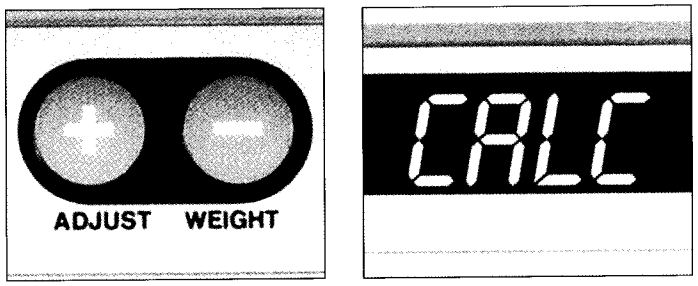
CHANGING ITEMS ON THE BED



During the patient's stay in the hospital, items will be added to and removed from the bed. To account for the weight of items placed on or taken off of the bed surface without affecting the patient's weight reading, use the △ button.

- Press and release the △ button.
- Patient's weight reading will flash. It will be stored in memory while you change items on the bed.
- Place the item(s) on or remove it from the bed. The function remains active until the △ button is pressed again.
- When the change is complete, press and release the △ button, "CALC" will flash in the display.
- When "CALC" stops flashing, a beep will sound. The patient's original weight reading will reappear.

MANUALLY ADJUSTING DISPLAYED WEIGHT



The displayed weight can be manually overridden if necessary using the ⊕ and ⊖ ADJUST WEIGHT buttons. Use the Adjust Weight feature if an incorrect weight display needs to be corrected or if the exact weight of the item being placed on or removed from the bed is known.

EXAMPLE: If the patient has had a cast put on, the added weight of the cast needs to be accounted for. If the weight is not accounted for when the patient is placed back on the bed, the weight reading that is displayed will be incorrect. The scale will display the patient's weight plus the weight of the cast. The ⊖ button should be used to return the display to the patient's original weight.

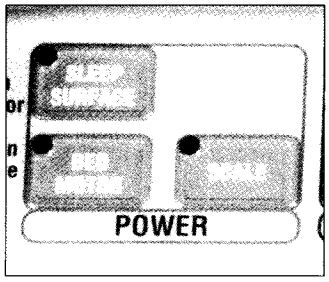
NOTE: These buttons can also be used to input a known patient weight if the patient was placed on the bed without first zeroing the bed.

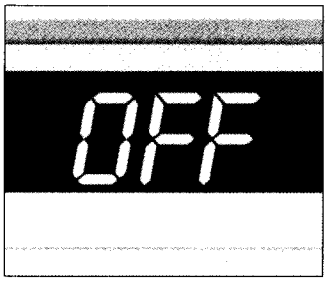
To use either ADJUST WEIGHT button:

- Press and hold the appropriate button...⊕ to increase the weight reading or ⊖ to decrease the reading.
- The display will flash a few times, but continue to hold the button.
- When the display stops flashing, continue holding the button until the display adjusts and the weight reading increases or decreases.
- Once the desired weight is reached, release the button.
- After a few seconds "CALC" will flash in the display.
- When "CALC" stops flashing, a beep will sound.
- The new weight will be displayed.

OPTIONAL UPGRADEABLE FEATURES

TURNING WEIGHT DISPLAY ON OR OFF



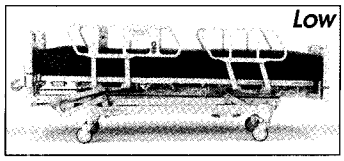


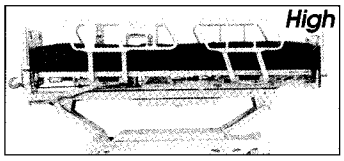
The weight display can be turned on or off through the Nurse Control Panel. This feature allows for patient privacy and deactivates the scale buttons.

- To turn the weight display off, locate the button labeled SCALE in the Nurse Control Panel.
- Press the button so the green light goes off.
- The word "OFF" will appear in the scale display and the scale buttons will be deactivated.
- To display the patient's weight reading again, turn the SCALE POWER button on.

NOTE: The displayed weight can also be removed by moving the bed out of its weight position, "----" and the message "NOT IN WT POSITION" will appear in the display. The scale buttons will also be deactivated.

WEIGHT POSITION



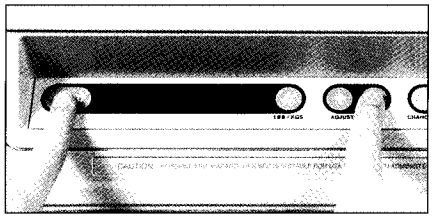


The Advance Series bed has two weight position options. In the high position, the bed is raised all the way up. The low position is approximately 2" above the bed's lowest point. Only one of these positions can be active at a time.

When you first receive the Advance Series bed with Patient Scale, the lower weight position will be active. But, it is possible to change to the higher weight position. Your Hill-Rom Territory Sales Manager will help you determine the best weight position for your hospital or unit.

To change weight positions, either from low position to high or high to low:

- Place the bed in its current weight position. Use the Hi-Lo function as needed.
- Press and hold 000.0.
- "000.0" will flash in the scale display.
- When "000.0" stops flashing, keep holding the 000.0 button, and press the ⊖ button.



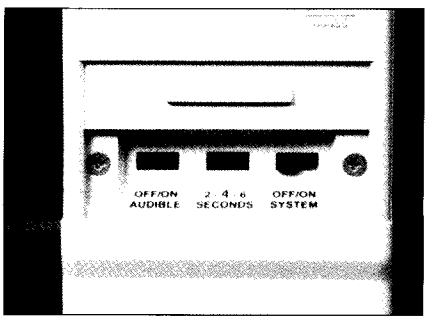
- "----" and "NOT IN WT POSITION" will appear in the scale display.
- Move the bed to the other weight position using the Hi-Lo function.
- You will know that the bed is in the other weight position when "NOT IN WT POSITION" disappears from the display and a weight is displayed.

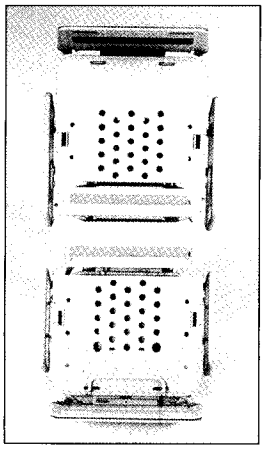
BED EXIT SYSTEM

Two special sensor strips run horizontally between the mattress deck and the mattress. When a patient's weight is removed from the mattress, the sensors send a time-delayed electronic signal to the nurse's station if the bed is equipped with the SideCom system. The signal can vary to delay at 2, 4 or 6 seconds. If desired, the system can be set up so that a signal will sound in the patient's room to indicate that the patient left the bed.

On/off, message time interval and audible bedside alarm controls are located on the outside of the SideCom unit behind a sliding panel in the left head Siderail. This system should be used in conjunction with your regular safety procedures.

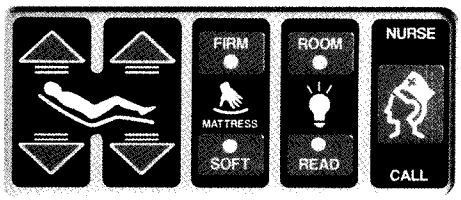
NOTE: The Bed Exit system is intended as a reminder, not a restraint device.





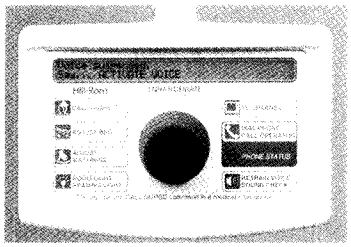
SIDECOM

The SideCom system is a modular communications package built into the Siderails within constant reach of the patient. The basic package integrates bed controls and surface controls with the DynamicAire Sleep Surface and ZoneAire Sleep Surface. The modular bed can be upgraded to nurse call, lighting, bed exit, and entertainment.



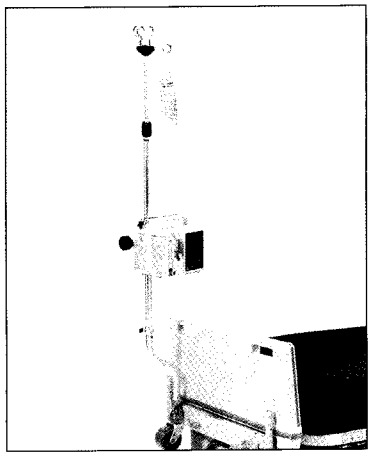
ENHANCEMATE

The EnhanceMate allows patients who are unable to use Siderail embedded controls to operate bed functions and control the room environment. The patient can operate the bed in one of two ways: voice input or rehabilitation devices such as touchpads or sip and puff. The patient can call the nurse, adjust the head and knee sections of the bed, adjust the air surface, turn room and reading lights on and off, operate the television, and send and receive phone calls.



ACCESSORIES

INFUSION SUPPORT SYSTEM (ISS)



The system consists of a Mount Installation Kit (face or top), Offset Bar, and Transfer Pole. Components may be purchased together or separately.

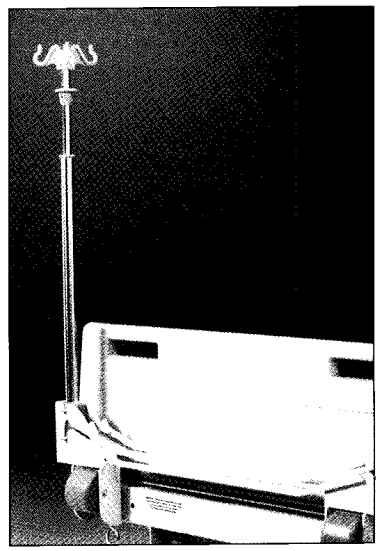
The Mount is the structural interface between the bed frame and the pole assembly. It consists of an adaptor block, stop plate and bolts, and rotational lock screw. The block may be mounted to the top or face of either side of the headboard base.

To install pole:

Place the offset Pole into the ISS mount. Push the Transfer Pole into the Offset Bar. To secure system, tighten the butterfly screw on the bed and the Offset Bar.

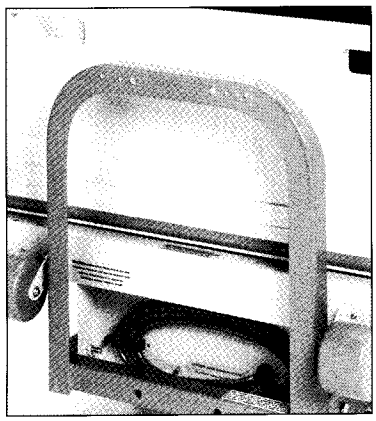
NOTE: Insure that the Transfer Pole and Offset Bar are firmly secured to each other before removing them for transfers.

SLIDING PERMANENT IV POLE



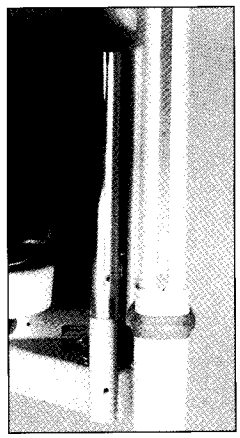
The Sliding Permanent IV Pole is mounted to the frame of the bed at the head section. The sturdy pole features a unique mechanism which allows the pole to be moved along a runner to either side of the bed. The pole itself can be raised or lowered with one hand.

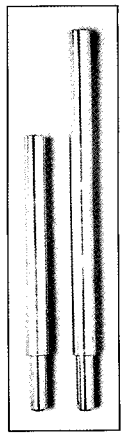
TRAPEZE SUPPORT BRACKET



The Trapeze Support Bracket is mounted at the head end of the bed frame and will accommodate the installation of trapeze equipment. The assembly is mounted with the provided hex head screws and lock-nuts. Holes are provided on the bracket for bolt-on or clamp-on type trapeze units.

FRACTURE FRAME ADAPTORS

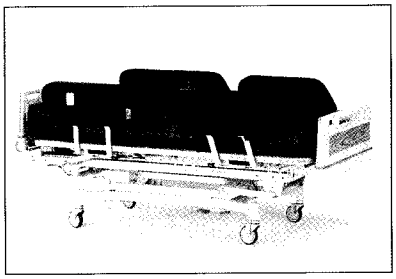




The bed will accommodate most fracture frame equipment. For fracture frame equipment with 1/2" diameter support poles, the Hill-Rom adaptors can be used to allow the frame to interface with the bed. The adaptors are placed in the IV sockets located at all four corners of the bed. The frame posts are inserted in each adaptor. Fracture frame equipment with 3/4" diameter support poles may be inserted into the IV sockets. An adaptor may be needed if additional frame post height is required.

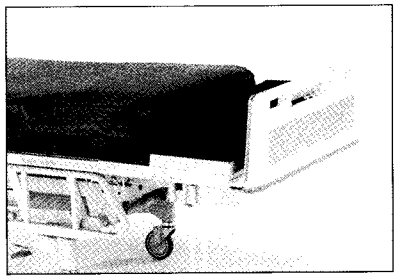
NOTE: To determine whether adaptors are required, please check with your Hill-Rom representative.

SIDERAIL PADS



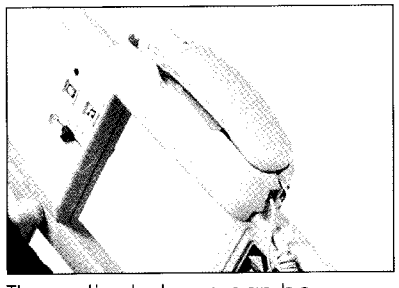
Siderail pads provide a soft cover for the rails while maintaining access to patient nurse controls.

BED EXTENDER



The Bed Extender is mounted on the foot end of the bed to provide additional length for taller patients. The Nurse Controls in the footboard can still be operated with the bed extended.

PATIENT PHONE



The patient phone can be mounted to either head-end Siderail for ease of access by the patient. The phone will also rest on the bedside cabinet or overbed table for use by patient's visitors.

DYNAMICAIRE AND ZONEAIRE SLEEP SURFACE CLEANING

REMOVAL

To remove the sleep surface, raise the foot end of the bed frame manually and disconnect all four quick disconnect hoses and detach the strap.

To reconnect, replace mattress onto the frame with the hoses at the foot end of the bed. Insert the hoses and the strap through the bed frame and re-attach the strap and hoses.

NOTE: Never remove the mattress from the bed frame without disconnecting the hoses and straps at the foot of the bed.

NOTE: Before the bed is cleaned, and especially before touching any electrical components, it should be disconnected from the electrical outlet. Since the bed is electric, the excess use of cleaning fluids should be avoided.

NOTE: Care must be taken to secure the foot section to the head section during any of the above procedures to ensure that the foot section does not drop back onto the frame while cleaning.

CLEANING

To clean under the frame, manually lift the foot end frame until it's secure.

To clean directly beneath the sleep surface, lift the mattress from the head end of the bed.

GENERAL CLEANING

General cleaning of the sleep surface mattress cover should be done by wiping down with a sponge or rag that has been dampened in a cleaning solution.

The cleaning solution can be any standard household quaternary type cleaners may be used. Whatever cleaning solution is used, it must be used and diluted according to the manufacturer's instructions.

Clorox® brand bleach can be used for disinfecting purposes, but should not be used in concentrations greater than 1 part bleach to 10 parts water.

Care should be taken to wipe up excess cleaning solutions. Damp areas can take 15 to 30 minutes to dry.

LINENS

Although the bottom sheet can be flat, fitted sheets are recommended. Proper sizing of fitted sheets is important to insure good retention. The best retention will be achieved if the fitted sheet extends 2 inches or more under the corners of the surface.

Magnets are used on the underside of the surface to assist in the retention of additional sheets and blankets. Better retention will be achieved if the number of layers folded under the magnets is minimized.

CLEANING MEDICAL FLUID SPILLS

Fluid spills should be wiped up as soon as possible. Some fluids used in the hospital environment, such as betadine, will leave a permanent stain, but most will not.

Temporary stains can be removed by wiping vigorously with a rag or sponge that is wet with a standard household cleaning solution. Whatever cleaning solution is used, it must be diluted according to the manufacturer's instructions.

CLEANING BLOOD AND EXCRETA

If possible, excesss blood and excreta should be wiped up when wet, since the cleaning process is more difficult when these substances are dry and caked onto the ticking.

Cleaning of blood and excreta from the ticking can be accomplished by wiping vigorously with rag or sponge that is wet with a standard household cleaning solution.

The rag or sponge must be rinsed periodically until, after wiping, the rag or sponge shows no evidence of the substance being cleaned. Rinsing may be required five to ten times for puddled, dried blood.

A final wipe should be done using clean disinfecting solution, and a clean rag or sponge. Allow 30 to 60 minutes for the ticking to dry completely.

Whatever cleaning or disinfecting solution is used, it must be diluted according to the manufacturer's instructions.

DAMAGE REPAIR

Repair of tears or holes in the upper mattress cover section is not recommended due to leak potential of the repair.

Tears or punctures in the air chambers can usually be repaired. A repair kit is available from Hill-Rom's Service Organization. An air chamber can withstand up to 15 typical needle punctures without significantly affecting performance.

SAFETY TIPS

BED POSITIONS
Always leave the bed in the low position when the patient is unattended. This could reduce the possibility of patient falls and the severity of resultant injury.

SIDERAILS/RESTRAINTS/PATIENT MONITORING
The Siderails should always be in a full upright position and latched when a patient is unattended. When raising the Siderails, an audible "click" should indicate that the Siderails are completely raised and locked in place.

Hill-Rom recognizes that certain healthcare situations may indicate the need for specialized Siderail configurations. In response to this need, we offer, upon request, several Siderail accessories.

Siderails are intended to be a reminder, not a patient restraining device. Hill-Rom recommends the appropriate medical personnel determine the level of restraint necessary to ensure a patient will remain safely in bed. Consult the restraint manufacturer's instructions for use to verify the correct application of each restraining device.

Whenever "high profile" patients (typically, the frail, elderly and medicated or confused) are involved, Hill-Rom recommends the following minimum actions:

1. Develop guidelines for all high profile patients that indicate:
   - Which patients may need to be restrained and the appropriate restraint to utilize.
   - The proper method to monitor a patient, whether restrained or not, including time interval, visual check of restraint, etc.
2. Develop training programs for all caregivers concerning the proper use and application of restraints.
3. Maintain the bed at its lowest position whenever a caregiver is not in the room.
4. Clarify the need for restraint devices to families or guardians.

BRAKES
Brakes should always be set when the bed is occupied and in position, especially during patient transfer. Patients often use the bed for support when getting out of bed and could be injured if the bed unexpectedly moves. After setting the brake, push and pull the bed sideways to ensure stability.

FLUIDS
When spills occur on the Siderails or the foot end areas of the bed, immediately:
- Clean the fluid from the bed.
- Check the bed controls (i.e. Head, Knee, Hi-Lo) to see if they are operable.
- Have the maintenance department check the internal electronics.
- Fluids remaining on the electronic controls may cause corrosion, which may cause the electronic components to fail. These component failures may cause the bed to move or operate on its own at a time that may be injurious to the patient or staff.

ELECTRICAL SAFETY
Policies and procedures must be established to train and educate your staff on the risks associated with electric equipment. At any time, it is not prudent or necessary for staff personnel to have their entire body within the confines of the bed. Whenever a bed is being cleaned or serviced it should be unplugged from its power source. If service personnel need to get under the bed, the Hi-Lo portion must be blocked up as an added precaution (refer to Advance Series Bed Service Manual).

LOCKOUT CONTROLS
Whenever a patient should be restricted from operating the patient controls, activate the appropriate Siderail Lockouts in the Nurse Control Panel at the foot end of the bed. This is especially true for patients in traction since it can prevent a patient or visitor from accidentally activating a control, which would cause the bed to move and possibly result in an injury. The Siderail Lockouts are for the convenience of the staff and the safety of the patient and should be used when necessary.

INSTANT CPR RELEASE
The emergency head release, "Instant CPR Release," is to be used by health care professionals only.

BED EXIT SYSTEM
The Bed Exit System can assist the nurse in monitoring certain patient activities that could lead to bed falls.

PARTS AND ACCESSORIES
Use only Hill-Rom parts and accessories. Do not modify the bed without authorization from Hill-Rom.

MATTRESSES
The use of mattresses other than Hill-Rom's may substantially reduce the effectiveness of the safety features and systems incorporated into Hill-Rom beds.

PREVENTIVE MAINTENANCE
Annual preventive maintenance must be performed to insure all bed features are functioning as originally designed. Particular attention must be addressed on safety features, including but not limited to:
- Siderail latching mechanisms.
- Caster braking systems.
- Electrical cords and components.
- All controls return to OFF or neutral position when released.
- Controls or cabling entanglement of bed mechanisms in Siderails.
- Proper operation of the Siderail Lockout functions.

TROUBLESHOOTING

Problem	Solution
"GROUND LOSS" LIGHT FLASHES	When the GROUND LOSS Light flashes, check all electrical plugs to make sure that they are properly grounded. Flashing may also be caused by incorrect wiring polarity of the wall outlet (ie: the "hot" and neutral wires reversed). **NOTE:** It is normal for the light to flash if the bed is connected to an isolated AC power source.
PATIENT CONTROLS NOT FUNCTIONING	If the Patient Controls are not functioning, ensure the power cord is plugged in and make sure that the controls at the Nurse Control Panel are not locked out. Also, check the SideCom connector, located on the bed frame below the mattress deck, to ensure that it is properly plugged into the mating connector. **NOTE:** The Firm/Soft Control will also be locked out if the bed is in the Prevention or Pressure Relief mode or if the Sleep Surface Power is turned off at the Nurse Control Panel.

ACCESSORY PRODUCT NUMBERS

SIDERAILS

325CB-48	Parallelogram Foot End Siderails
855C1	Parallelogram Siderail Pads
855C1H	Parallelogram Head End Siderail Pads

INFUSION

2217	IV Rod
2221	Sliding Permanent IV Pole
155-03	Infusion Support System Top Mount
155-11	Infusion Support System Face Mount

PENDANT/CABLE ADAPTOR

721C-3	Four Motor, Six Button (Head, Knee, & Sleep Surface)
8494	Jumper Cable Adaptor

BUMPERS

284C-48	Architectural Cane Bumpers
818C03-48	Face Mount Roller Bumpers
818C04-48	Bottom Mount Roller Bumpers

COMMUNICATION

383	SideCom Nurse Call, Lighting, Entertainment
384	SideCom Nurse Call, Entertainment, Bed Exit System
385	SideCom Nurse Call, Lighting, Entertainment, Bed Exit System
386	SideCom Nurse Call, Bed Exit System
389	SideCom (Upgrade System)
436	COMposer™ On-Line Kit
495	Patient Phone
5020	EnhanceMate

OTHER

844A-48	Trapeze Support Bracket
847B	Fracture Frame Adaptor - 3/4" Pin
847C	Fracture Frame Adaptor - 1/2" Pin
9932	Bed Extender - 4 Motor

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