



## Owner's Manual

Versatech II00

Read this entire booklet carefully before using the bed and its accessories.

These illustrations are for information purpose only.

### TECHNICAL ASSISTANCE AND PARTS

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## **Preface**

This manual contains all necessary indications to use the Rotec International Versatech 1100 medical bed safely. It has to be accessible at all times for the medical and maintenance staff. In addition, this manual must stay with the bed when it is sold or transferred.

Rotec International manufactures reliable beds. An appropriate use and a regular maintenance are indispensable to maintain this reliability. The user and the personnel's security depend on it.

It is imperative that every person in charge acknowledges this manual in order to train the staff properly before using this bed and its accessories. This will prevent any potential injuries to the user or the personnel.

This bed meets the following security standards: CAN/CSA C22.2, CAN/CSA C22.2 No. 601.1 M90, CAN/CSA C22.2 No. 601.1S1 94, C22.2 No. 601.1 M90, CAN/CSA C22.2 No. 601.1 Amendment 2, CAN/CSA C22.2 No. 60601-2-38-03, UL Standard No. 60601-1.

## **Our policy on products and services**

Manufacturing adjustable beds has been Rotec International's passion since 1985. The company's vision has allowed it to become an enterprise with a reputation that is the envy of both residential and medical industries. The company's mission is to provide a superior quality range of safe and comfortable adjustable beds.

Anticipating tomorrow's markets, the members of Rotec International's team are proud to contribute to the company's success. Our multidisciplinary team constantly strives to reach and maintain a high level of excellence.

Over the years, this passion has been the foundation of our expertise. Rotec International is now proud to share its success with you...

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## **Legend**



: Used when special attention to the indications is needed in order to avoid any injuries and/or equipment failure.

## **1. TECHNICAL SPECIFICATIONS**

### **1.1 Safe working load**

The maximum safe working load (SWL) for this bed is 500 kg (1100 lbs).

### **1.2 Bed weight**

The bed weighs ~ 199 kg (~ 438 lbs). The weight of the bed may vary depending on the options and accessories installed on it.

### **1.3 Accessories**

- Remote control
- Mattress retainers
- Emergency battery for temporary autonomy
- Nurse control at the foot end of the bed
- CPR (electrical) and light underneath the bed
- Casters with synchronized brake system
- Composite half side rails
- Composite covering for the platform

Headboards and footboards available:

- wooden headboard
- wooden footboard
- composite headboard
- composite footboard

Optional accessories available:

- Bar with trapeze
- Patient control integrated to the side rails
- Nurse call *in lieu of* the light feature
- 127 mm (5 in) thick mattress (available separable in sections)
- Bed trolley
- Scale system with display at the foot end of the bed

### **1.4 Electrical specifications**

Nominal voltage: 120 VCA

Cycles: 60 Hz

Maximum power: 2,7 A

Operation cycle: 10%, maximum (2 min / 18 min)

Protection: This product is certified IPX4.

The electric components are certified IP54.

## **1.5 Conditions of use**

Please note that the use of this product or for its storage you must respect the following indications:

Temperature of operating : 10 à 40 °C

Température of storage : -40 à +70 °C

Relative humidity of operating : 5% à 95% (without condensation)

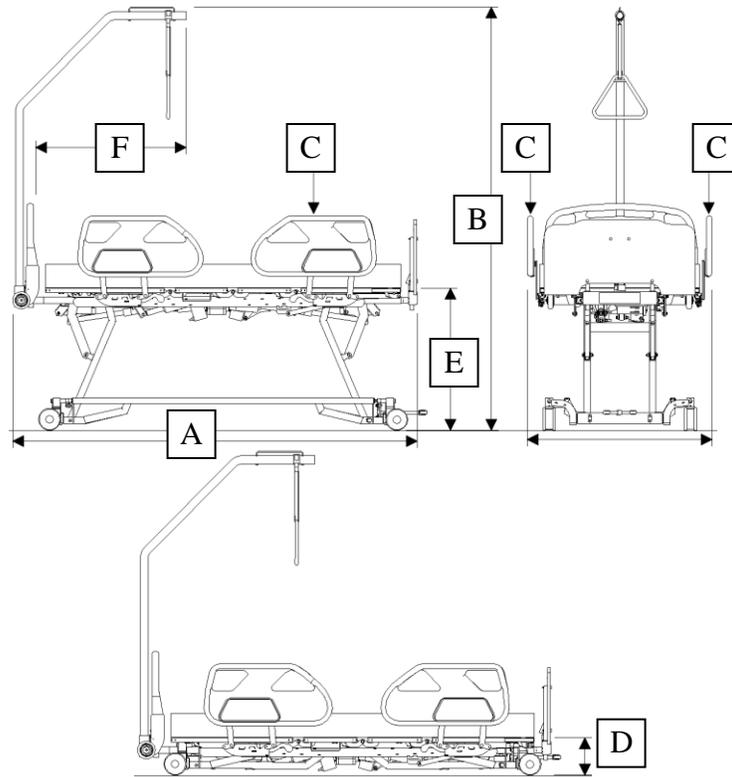
Relative humidity of storage: 10 à 100%

## **1.6 Moving specifications**

Before moving the bed, it must be at the lowest position and you need to wind the power cable around the hooks situated at the head of the bed (see p.8: power cable support). Always use the headboard or the footboard of the bed to move it. Make sure it is properly fixed before proceeding. Never use the side rails to move the bed.

Always manipulate the bed carefully. Apply the brakes when the bed is in place.

## 1.7 Measurement specifications



- 1 Overall length (A): 2365 mm (93 1/8 in)

**NOTE:** The overall length is expandable up to 2568mm (101 1/8 in) (with head and foot panel). The platform is expandable from 2032mm up to 2235mm (80 in to 88 in)

- 2 Overall height (B): 2417 mm (95 1/4 in)  
(With trapeze bar and the bed at its highest position)

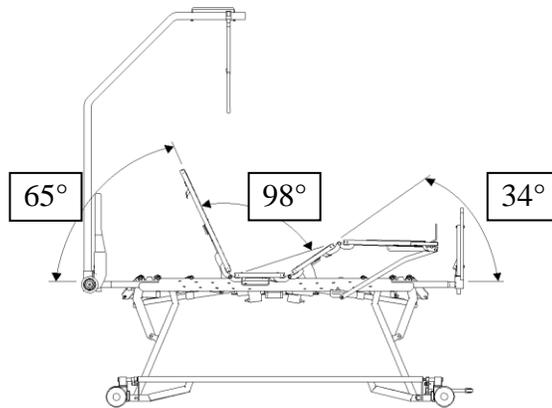
- 3 Overall width: - Half side rails (C) : 1016 mm (40 in)

**NOTE:** The overall width is expandable up to 1511 mm (59 1/2 in) (with side rails)

The platform is expandable from 889mm up to 1372mm (35 in to 54 in)

- 4 Height of bed without mattress: - Lowest position (D): 211 mm (8 5/16 in)  
- Highest position (E): 813 mm (32 in)

- 5 Distance between the head and the tip of the trapeze bar (F): 871 mm (34 5/16 in)



- 6 Maximum angles
- Head ~65 degrees
  - Thighs ~34 degrees
  - Head - Thighs ~98 degrees
  - Trendelenburg and reverse Trendelenburg ~ 15 degrees

\* The dimensions specified in this manual do not take the manufacturing tolerances into consideration.

- 7 Rotec international recommends the use of a mattress that fit the dimensions below:

- Length: 80'' to 88'' (depends on adjustability of the platform).
- Height: 5'' or 6''
- Width: 35'' to 54'' (depends on adjustability of the platform).

\* Must ensure that the platform is properly adjusted to the width of the bed to avoid any risk of entrapment.

## **1.8 Limited warranty**

Rotec International manufactures reliable beds. Our products are guaranteed against manufacturing defects up to one year after the bed is bought. Furthermore, we offer a specific 10-year guarantee on the frame, 2-years on the electric motors, hand control and electronic components following the date of purchase.

Rotec International reserves the right to substitute equal or superior quality materials during repairs and/or replacements. The material replaced and covered by this warranty does not allow one to benefit from a new warranty. It only benefits from the original warranty. For further information, contact our technical services.

This warranty does not cover damages caused by negligence or inappropriate use. Rotec International will not be held responsible for any other warranty offered by any person, firm or company, to the exclusion of the one stipulated above.

This warranty gives you specific legal use rights and is only valid for the original purchaser or for anyone who would have received it as a gift.

## **1.9 Return policy**

### **1.9.1 Non compliant product**

If a Rotec International product is not according to the original order invoice, the problem must be notified within 48 hours after the time of delivery. Actions necessary to correct the situation will be at Rotec International's expense and will be made as soon as possible, following the notification of the non compliancy.

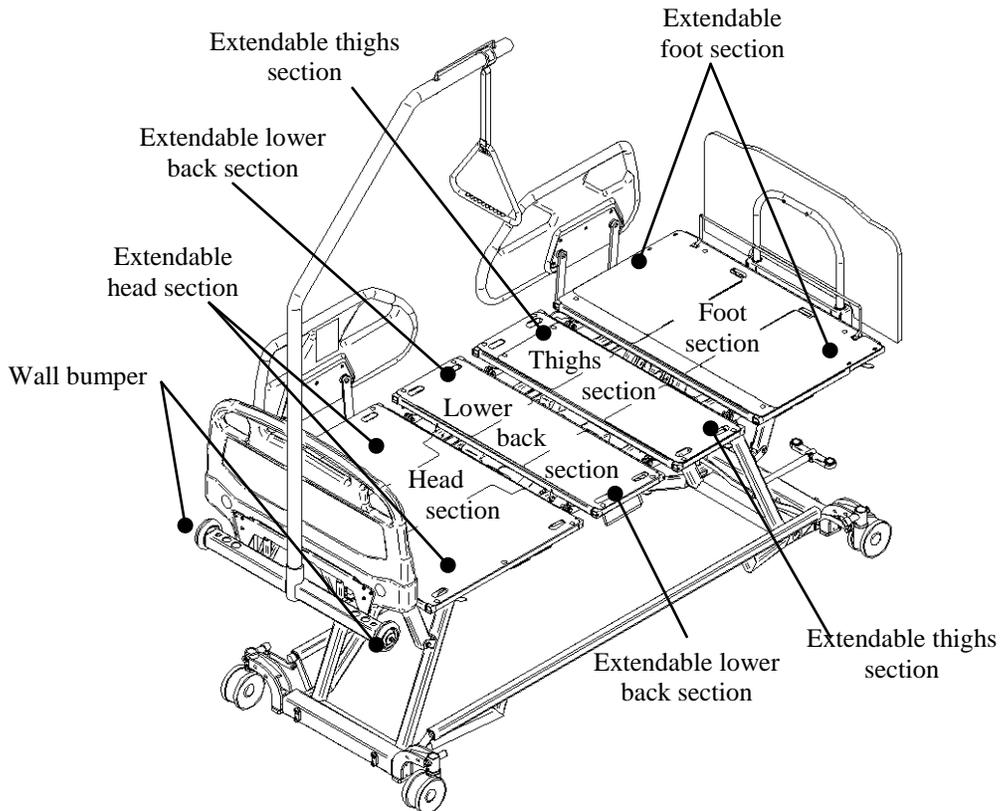
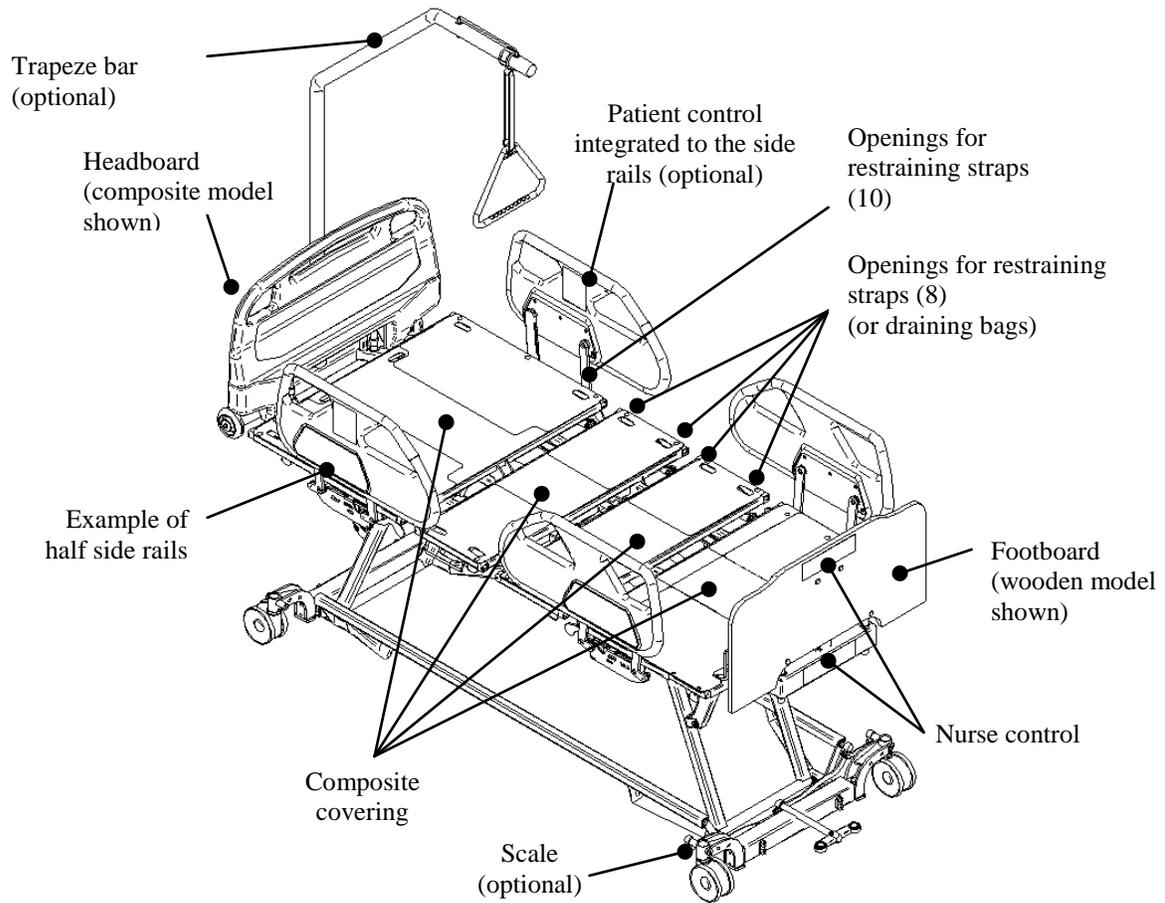
### **1.9.2 Damaged product**

It is the responsibility of the receiver to verify the shipment even if the box(es) seems to be in good condition. **If there is any damage, it must be indicated on the bill of lading.** Rotec International must be informed of the situation within 24 hours of receipt of goods in order to notify the carrier as soon as possible. If Rotec International is not informed within 24 hours or the damages are not indicated on the bill of lading, the customer may have to pay all the costs incurred to replace or repair the damaged product.

### **1.9.3 Returned product**

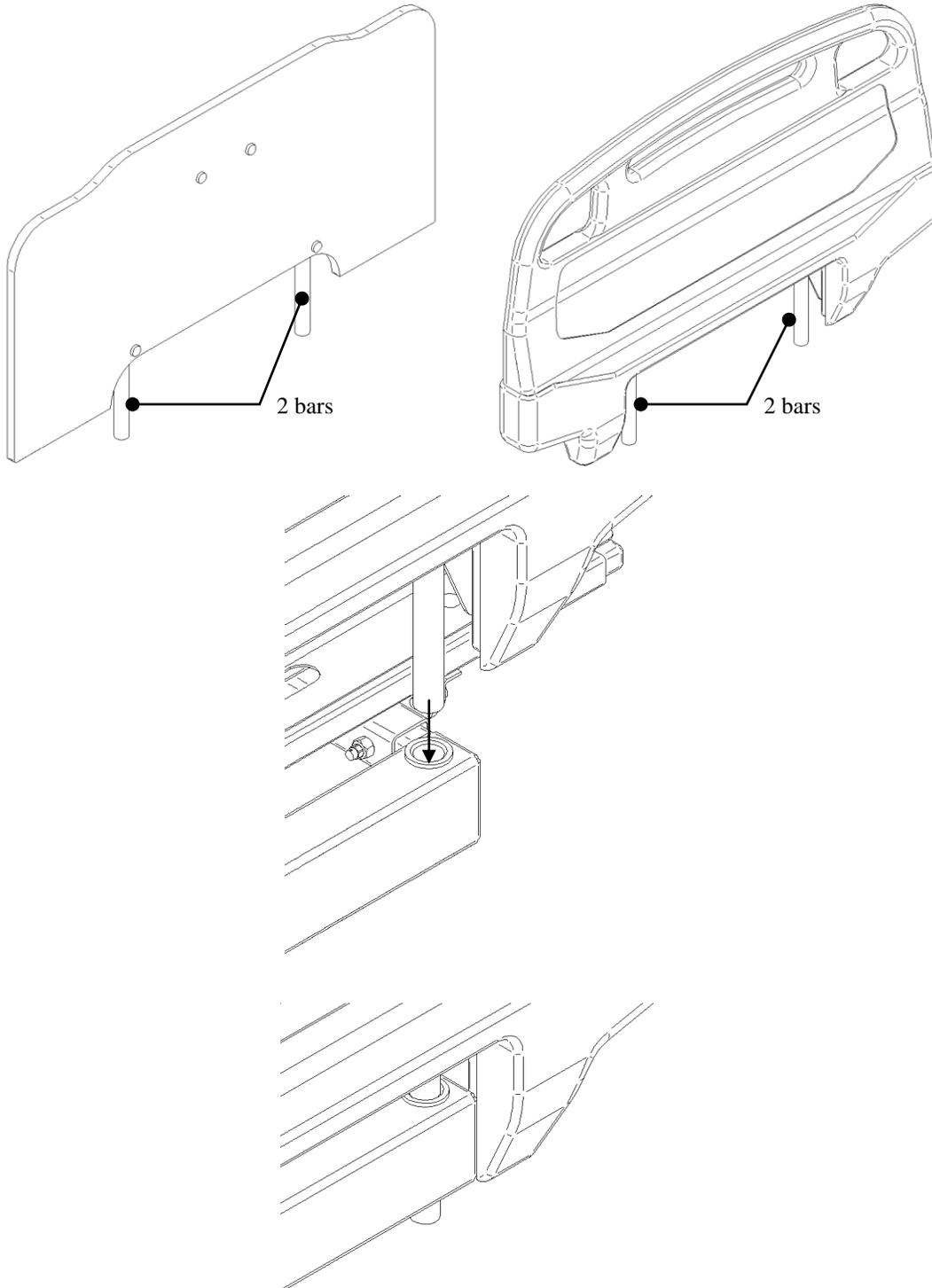
Returned goods require a RGA number and are subject to a 25% restocking fee. Furthermore, the customer must pay the transport charges. For more information, please contact our customer service.

## 2. ACCESSORIES INSTALLATION INSTRUCTIONS



## 2.1 Wooden (or composite) head and foot boards installation

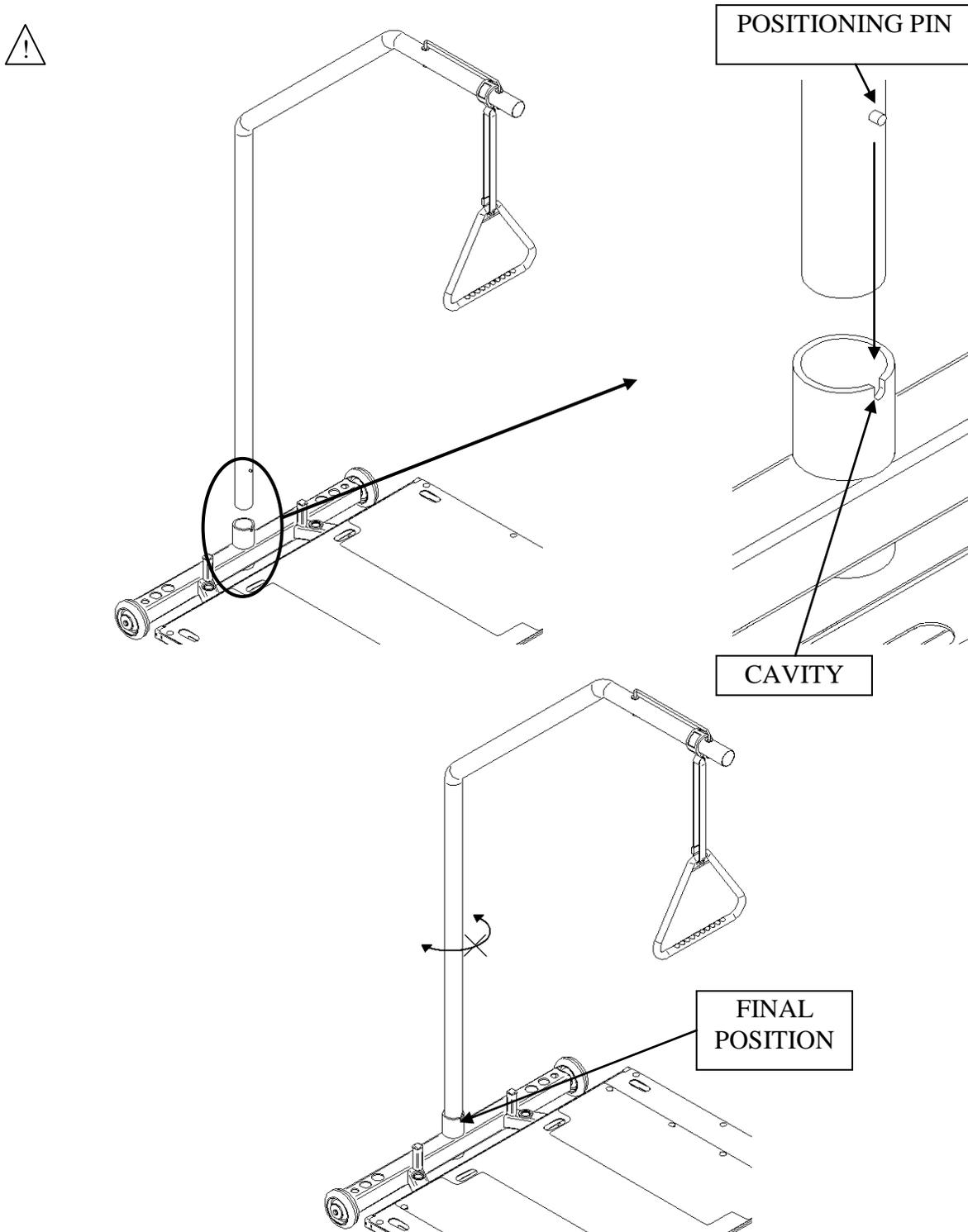
Gently slide the two (2) bars, of the head and foot boards, into the anchorage, to the bottom;



To remove the head or the foot boards, lift the head or foot boards.

## 2.2 Trapeze bar installation (optional)

Insert the trapeze bar into the slot and line up the positioning pin with its cavity.



Make sure that the trapeze bar is locked by trying to rotate it.

## **3. USER INSTRUCTIONS**

### **3.1 Precautions**



Do not use this bed and its accessories without reading carefully this manual and acknowledging all of the following precautions:

- This bed is not for pediatric use;
- This bed should not be used in presence of flammable anesthetic gas mixed with air, oxygen or nitrogen oxide;
- Always apply the brakes after moving the bed and before a person sits or lays down in the bed. This procedure is important in order to reduce the risk of injuries when the user is getting in or out of the bed. Try to move the bed to make sure that the brakes are applied;
- Take into consideration the general condition of the user before automatically raising the half side rails at the foot end of the bed so that the user can get out of the bed at their convenience;
- Unless otherwise medically advised by a professional, leave side rails up and locked when the user is sleeping or left without supervision;
- When the side rails are up, try to move them to make sure that they are properly locked;
- Side rails are made to prevent accidental falls. They must not be used to restrain, to keep the user from getting out of the bed or to help the user to turn. It is the staff's responsibility to use the appropriate restraining means, for the user's safety;
- Always lower the bed when the user is sleeping or left without supervision to reduce risks of falls or injuries;
- Always make sure that nothing interferes with the functioning of the bed before using the commands, i.e.: user or staff's limbs, medical equipment, etc... which could result in injuries and/or equipment failure;
- Make sure that the power cable is properly fixed so it cannot be damaged during the functioning of the bed and to avoid injuries and/or equipment failure;
- Never widen the platform from only one side. Always widen it from both side and from equal length in order to ensure bed stability;
- Unless otherwise proscribed by a medical professional, always place the platform horizontally when the user is sleeping;

- Use a mattress that is properly sized to fit mattress support platform, which will remain centered on mattress support platform relative to State and Federal guidelines. Length and width should match mattress support platform. Use of an improperly fitted mattress could result in injury or death.
- Use a properly sized mattress in order to minimize the gap between the side of mattress and Side Rails/Assist Devices. This gap must be small enough to prevent resident/patient from getting his/her head or neck caught in this location. Make sure that raising or lowering bed, or contouring the mattress support platform, does not create any hazardous gaps. Excessive gaps may result in injury or death.
- If required for the user's welfare or security, use the nurse control (if included), located at the foot end of the bed, to lock all functions of the user's remote control or simply unplug the remote (refer to section 3.3);
- To reduce the risk of injuries when moving the bed with a person laying in it, always put the bed at its lowest position, then place the platform horizontally and leave the side rails raised;
- Activate the directional mode of the casters when moving the bed along the corridors to prevent the swivel of one of the casters. Never try to move the bed sideways when the directional mode is on. This could result in injuries to the user and/or the staff;
- **During an emergency situation ONLY**, use the CPR function (electric) to lower the head section. Make sure that nothing is under the head section of the platform of the bed, including the user's limbs (refer to section 3.9.5) to avoid injuries and/or damages to the bed;
- Unplug the bed immediately if a significant overflow of liquid is accidentally spilled on the electronic components, the wires or the electric motors. The functioning of these components can be affected. The user must be removed, the bed cleaned and examined by a qualified technician. The bed can be used again only if it has been properly cleaned and examined;
- To clean the bed, use detergents normally used in hospitals, such as Fectolime, Presept, Percept, Zochlor etc., or a home used detergent, and wash the bed by hand. The products may be applied by spraying. Always unplug the bed before cleaning. May be steam washed, but do not use high pressure stream. Never use high pressure

streams of water, nor ultrasounds and never submerge the bed parts to clean them up.  
Make sure that the cleaned parts are dry before using the bed again;

- When changing an electric component, unplug the power cable. This must be done by a qualified technician;
- A regular maintenance is essential to maintain the bed's reliability. A defective bed should not be used;
- Make sure to block the frame of the bed if you need to work under the platform. This will prevent the bed structure from falling accidentally;
- The manufacturer reserves the right to modify the bed;
- Only use Rotec International replacement parts.

### 3.2 Verification before starting to use the bed

These verifications are necessary to make sure that the bed was not damaged during transport:

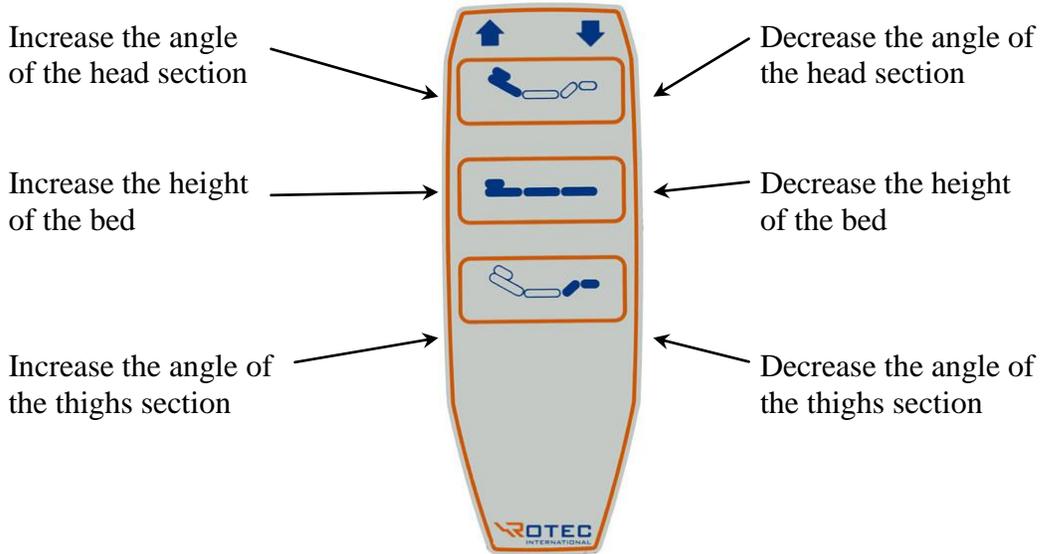
- Inspect the bed and its accessories visually;
- Inspect the head and foot boards installation (refer to section 2.1);
- Verify the functioning of the side rails and their locking mechanisms;
- Apply the brakes of the casters and check their functioning (refer to section 3.9.3);
- Plug the power cable and activate all the motors. Check if their functioning is constant and complete. This verification also allows you to check the functioning of the remote control (refer to section 3.3.1);
- Unplug the power cable and turn on the motors to check the battery.  
**NOTE : Plug the bed for 48 hours consecutively to charge the battery before doing this verification;**
- Verify the locking functions of the nurse control by activating them and trying to use the functions of the remote control. Verify also that the commands on the nurse control work properly by activating them (refer to section 3.3.2);
- Verify the patient control integrated to the side rails (option) by activating them (refer to section 3.3.3)
- Verify the functioning of the CPR function (electric) with a mattress and with someone leaning back against the backrest. **Proceed carefully** (refer to section 3.9.2).

If the bed is damaged or does not work properly, contact Rotec International customer service.

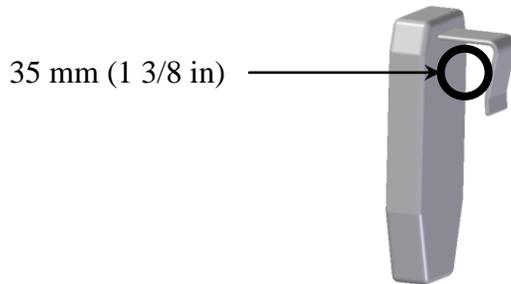
### 3.3 Using the functions of the bed

#### 3.3.1 Remote control of the bed

The remote control supplied with the nurse control allows you to use the following functions of the bed:

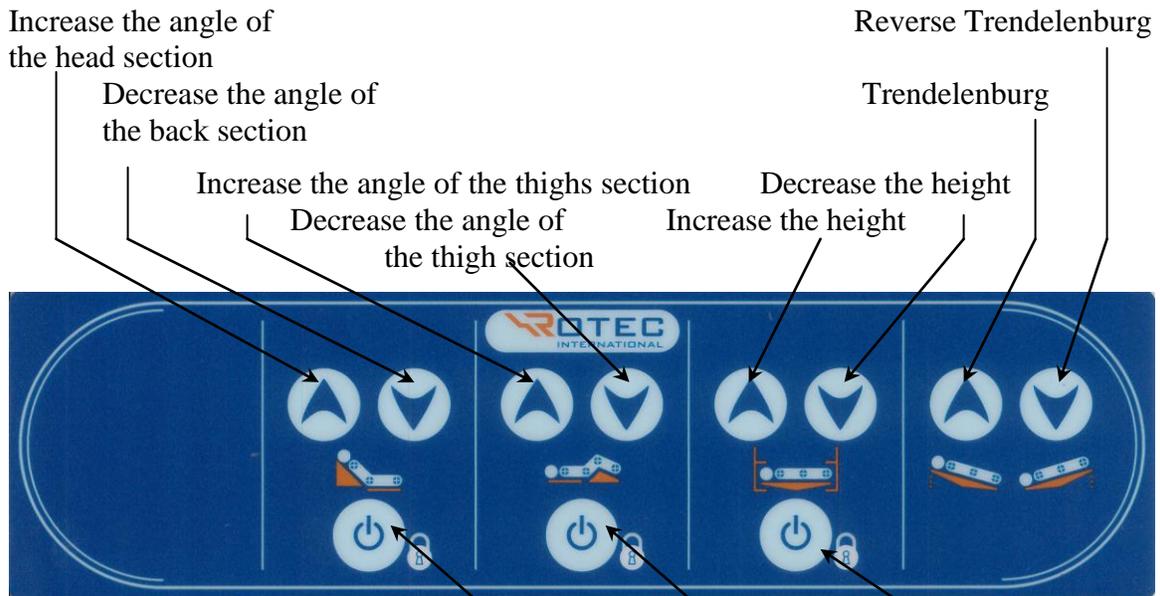


The remote control fits well in the hand and does not slip out of it, thanks to its flexible hook located in the back. Moreover, it can be hung onto objects having a maximum width of 35 mm (1 3/8 in).



### 3.3.2 Nurse control

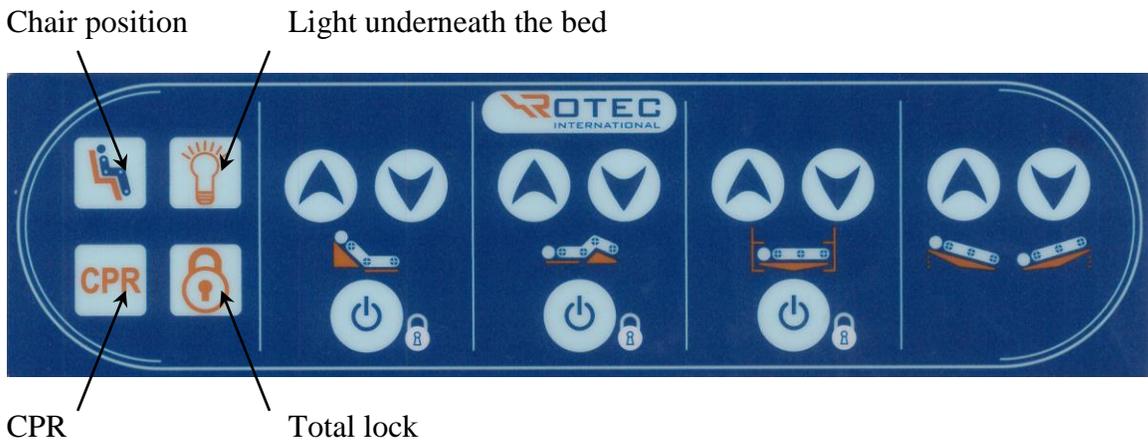
3.3.2.1 Here are the controls offered with the standard nurse control:



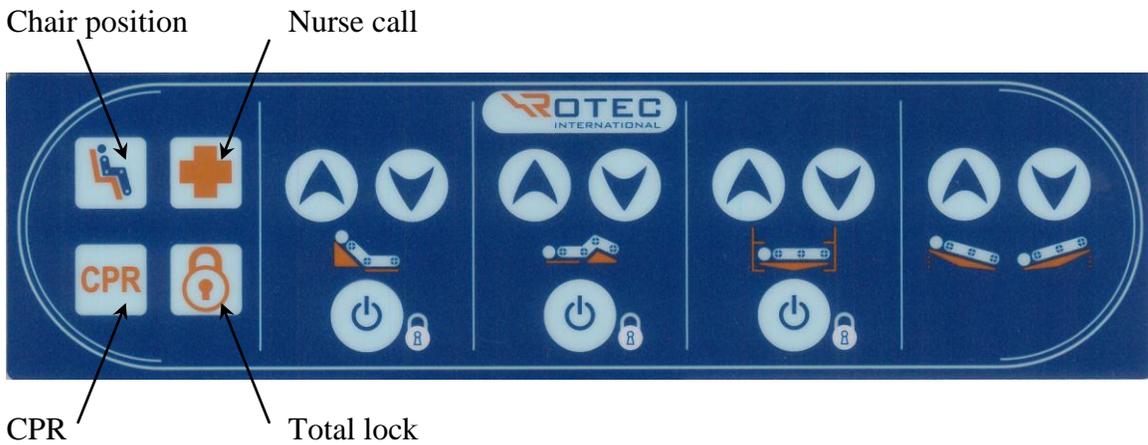
Lock or unlock the commands of the remote control accessible to the user: of the head section, of the thighs section and of the height.

To lock the control of the user's remote control, press the button located beside the lock symbol , the symbol will light red from underneath. The functions of the remote control can be lock individually or in group.

3.3.2.2 Here are the additional controls present on the nurse control with CPR and underneath the bed light:



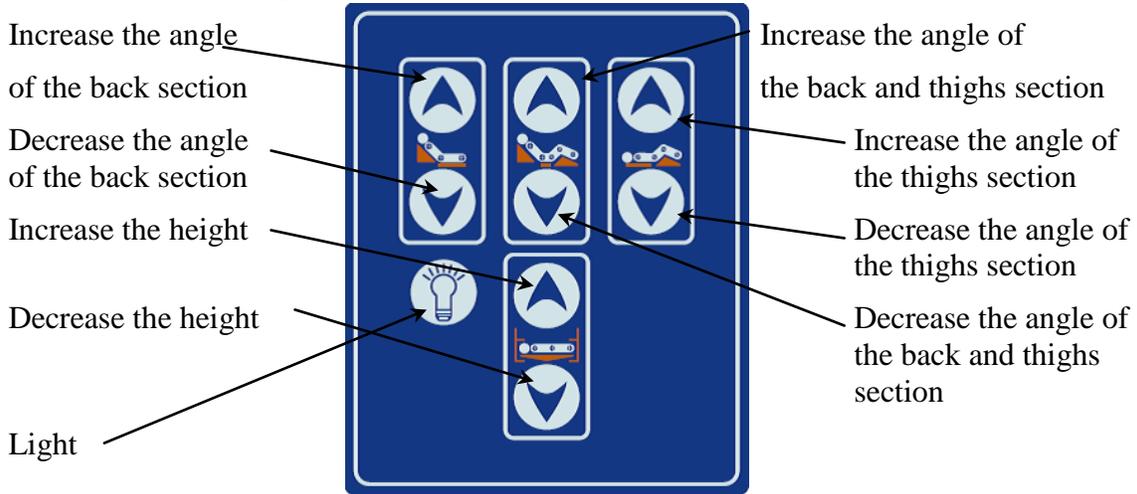
3.3.2.3 Here are the additional controls present on the nurse control with CPR and nurse call (optional):



**Warning:** Pushing the CPR button will put the bed in an optimal position to give cardiopulmonary resuscitation (CPR). However, this function must be used ONLY for that purpose; serious injury may occur if this function is not used properly. See section 3.9.5 for more information.

### 3.3.3 Functions of the patient control integrated into the side rails (optional)

Here are the controls present on the side rails:

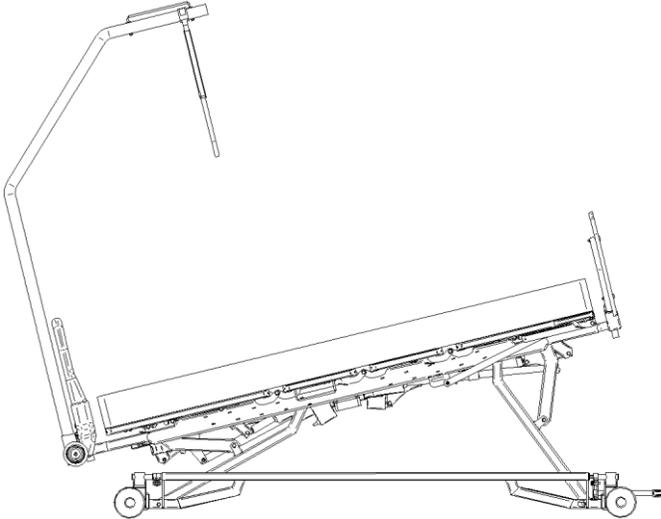


### 3.4 Trendelenburg and reverse Trendelenburg

The arrows on the panel of the nurse control correspond to the position of the head section compared to the foot section, thus:

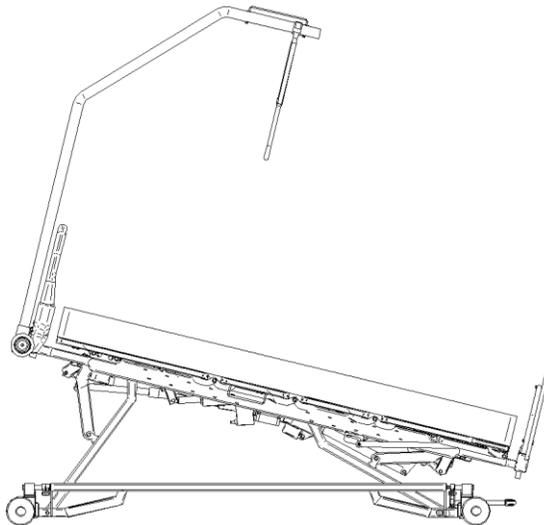
- To obtain the Trendelenburg position:

Press :



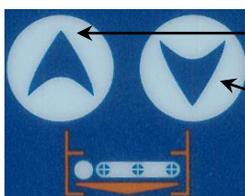
- To obtain the reverse Trendelenburg position :

Press :



**Warning :** Ensure that the Trapeze bar does not come in contact with the wall. To do so, place the bed at a minimum of 15 in (380mm) from the wall before proceeding.

To put back to horizontal position, raise or lower the bed by pressing either:



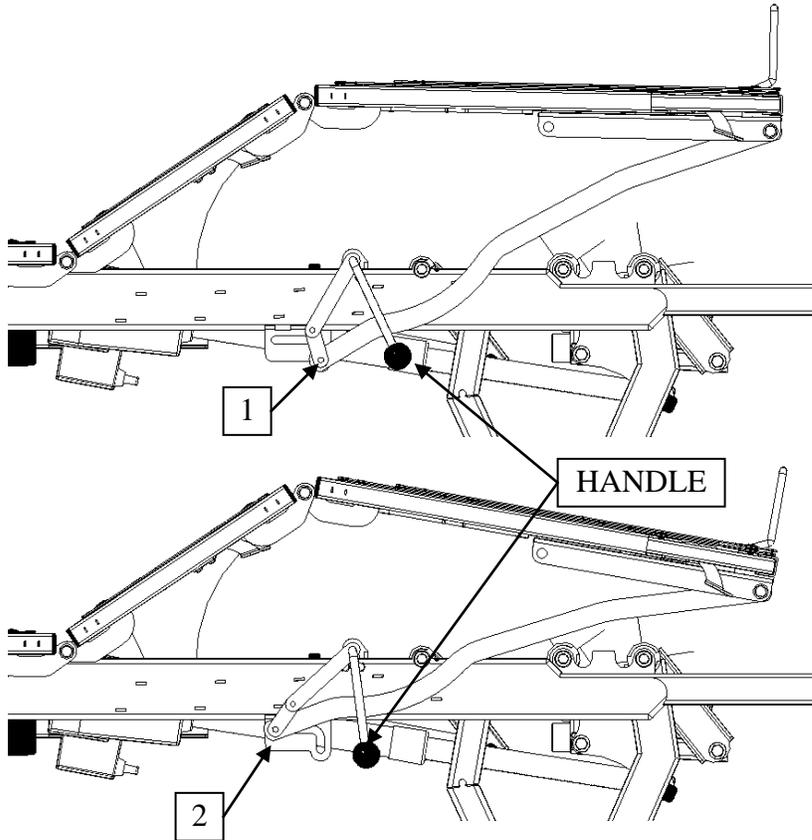
- Increase the height



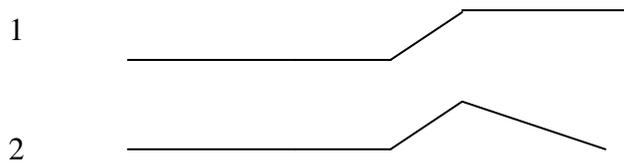
- Decrease the height

### 3.5 Adjusting the angle of the foot section

The foot section of the platform can be adjusted to two different angles according to your needs.



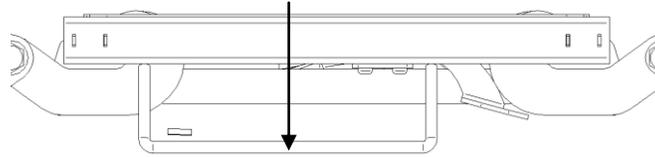
The foot section has two adjusting position :



Before changing to any position, you must ensure that the side rails are raised. Afterwards, change to the position needed with the handle. Stay close to the foot section in order to work safely and avoid injuries.

### 3.6 Hooks for draining bags

The two (2) hooks for the draining bags are located under and on each side of the lower back section of the platform.



The eight (8) openings for the restraining straps located on each side of the lower back and the thighs sections of the platform can also be used for draining bags.

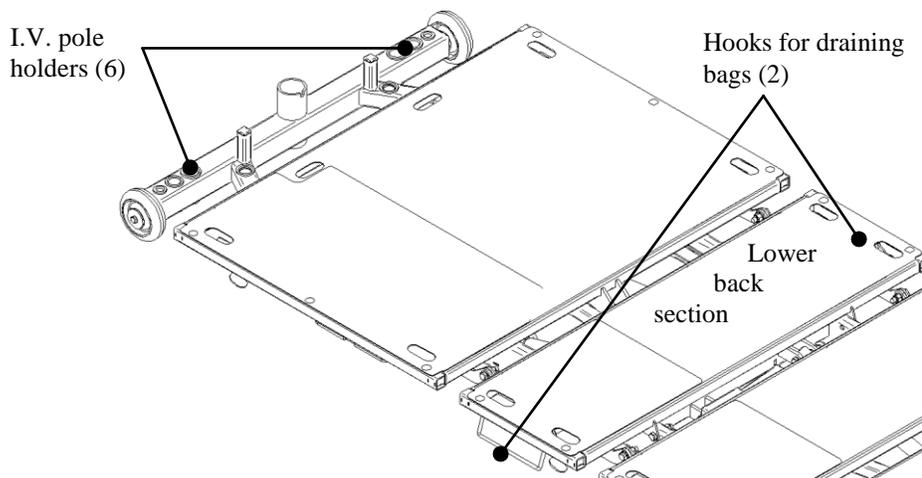
**NOTE:** The four (4) openings located on each side of the thighs section can be moved when the angle is modified. Ensure that the bag does not hook the side rails when moving.

### 3.7 Openings for restraining straps

The ten (10) openings for restraining straps are located on each side of the platform (see p.8). It is the medical staff's responsibility to use properly the restraining straps and to choose the appropriate openings. Make sure that the straps do not tighten more when moving the platform.

### 3.8 I.V. pole holders

Six (6) receptacles are at the head end of the bed, they offer three different dimensions.



## 3.9 Using the accessories

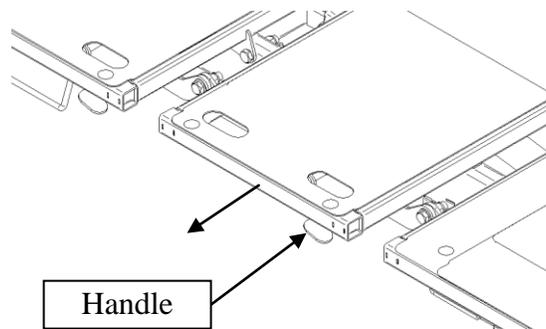
### 3.9.1 Side rails

Refer to the book inserted in this manual or in the box with the side rails.

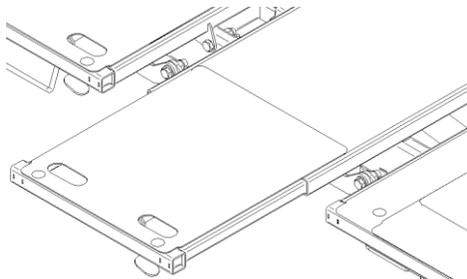
### 3.9.2 Platform extensions

3.9.2.1 To extend the platform:

- 1- Lift the handle under the desired section;
- 2- Pull the extension;



- 3- Release the handle, the extension will automatically lock to the following mattress dimension: 35 in, 38 in, 42 in, 47 in and 53 in;

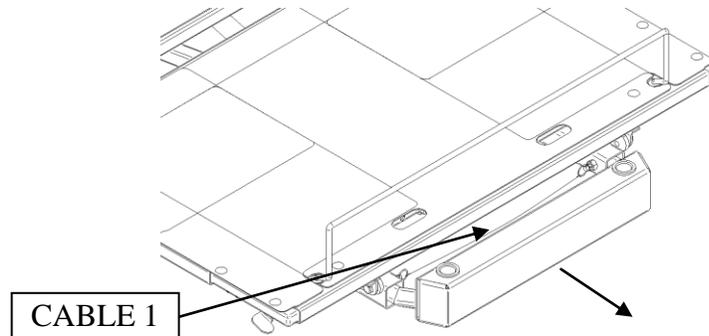


- 4- Ensure that the extension panel is properly locked to prevent accidental retraction of the panel.
- 5- Repeat for each extension, and on each side of the bed.

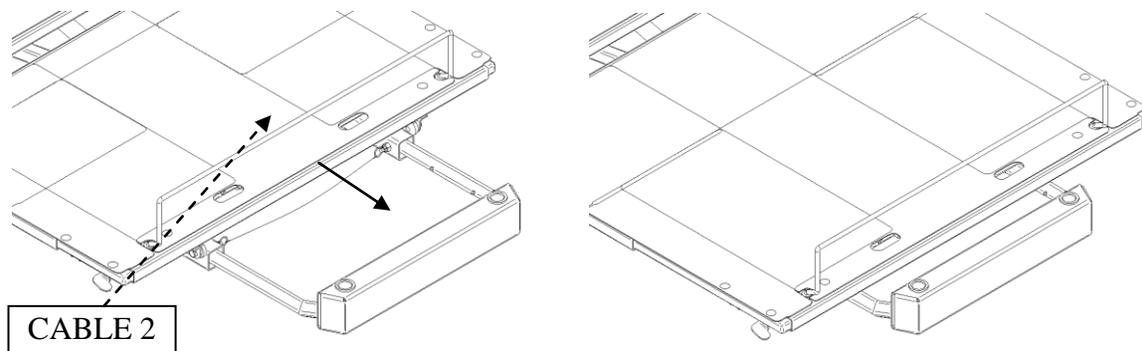
### 3.9.2.2 To extend the platform:

\*It is recommended to raise the foot section in order to easily extend the length of the platform

- 1- Pull on the cable 1 located beneath the platform foot section, on the frame;
- 2- With the other hand, pull on the foot frame extension;
- 3- Release the cable and the extension will automatically lock to the following mattress length: 84 in & 88 in.



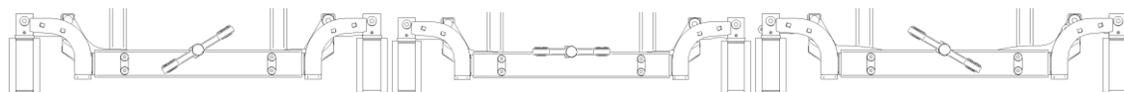
- 4- Pull on cable 2 located directly beneath the platform foot section;
- 5- With the other hand, pull on the foot platform extension;
- 6- Release the cable and the extension will lock to the same dimension (84 in & 88 in).



### 3.9.3 Casters with synchronized brake system

To facilitate access to the brake system, it is recommended to raise the height of the bed to at least 150mm (6 in) from the lowest position.

To activate the brake system, position the pedal in one of the three following positions:



#### DIRECTIONAL\*

➤ To start the directional mode and to allow the bed to move in a straight line:

➤➤ push down on the green side of the pedal.

#### NEUTRAL

➤ To remove any restriction and to allow the bed to move in any direction:

➤➤ put the pedal horizontally.

#### BRAKE

➤ To apply the brakes:

➤➤ push down on the red side of the pedal.



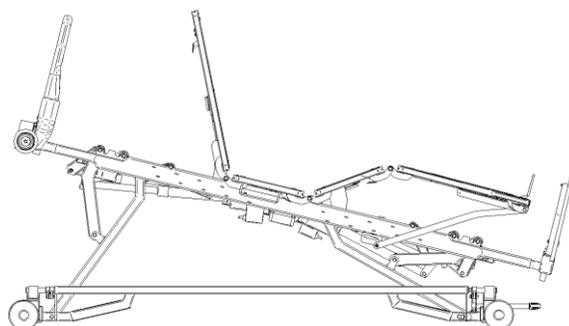
\* Do not move the bed sideways when the directional mode is on. This will avoid injuries to the user and the personnel..

### 3.9.4 Chair position

This function place the bed in reverse Trendelenburg position, increase the angle of the back and thighs section simultaneously.

Activate this function as follow:

- Press on the button on the nurse control (refer to section 3.3.2) and maintain it until the bed is in the chair position. (require around 60 seconds)



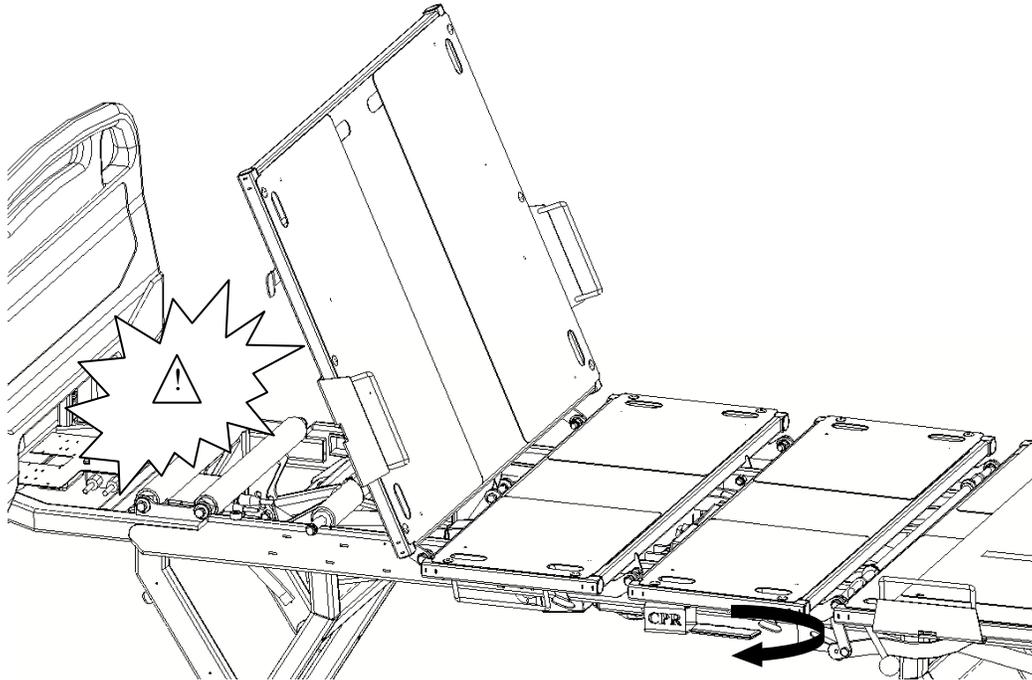
### 3.9.5 CPR (mechanical or electrical)

Note: The side rails of the bed should be in raise position before triggering the CPR function. Trigger CPR as follows:

- (Mechanical) Pull the CPR handle under the thighs section platform as shown below to lower the back section only.
- (Electrical) Press on the button on the nurse control (refer to section 3.3.2) to get the platform to move automatically to a completely horizontal position.



**Caution!** The back section will automatically fall to horizontal position by holding the CPR handle or the press button (electrical CPR will also lower the thighs section). Ensure that no member of the user exceeds the mattress and no objects or equipment is not in the head section of the bed platform, to avoid the risk of injury and / or breakage.



**Note :**

The total lock function does not affect the CPR function.

A second handle can be installed in option



**Caution!** If electrical CPR function button is released within 4 seconds the action will stop. Otherwise, if the button is held for more than 4 seconds and then released, the action will automatically continue. Press any key on the nurse control panel or patient control panel to stop and cancel the automatic movement.



**Caution!** CPR function should only be used in case of emergency to reposition the patient in an optimal position for practicing cardiopulmonary resuscitation(CPR) maneuvers. The use of this function for other purposes could result in serious injury to the patient or the user.

### 3.9.6 Total lock

This function allows locking all the functions of the bed, except the CPR function.

Activate the total lock function as follow:

- Press on the button on the nurse control (refer to section 3.3.2) for 5 seconds. Red light will shine from under each of the lock symbol from the nurse control.
- To deactivate this function, press again for 5 seconds on the button.

### 3.9.7 Light

This function turns on the light located underneath the bed.

Activate light function as follow:

- Press on the button on the nurse control (refer to section 3.3.2) to turn on or off the light.

### 3.9.8 Nurse call (Optional)

This function sends a signal to the nurse's station.

Activate the nurse call function as follow:

- Press on the button on the nurse control (refer to section 3.3.2).

### 3.9.9 Scale (Optional)

Refer to the booklet inserted in this manual.

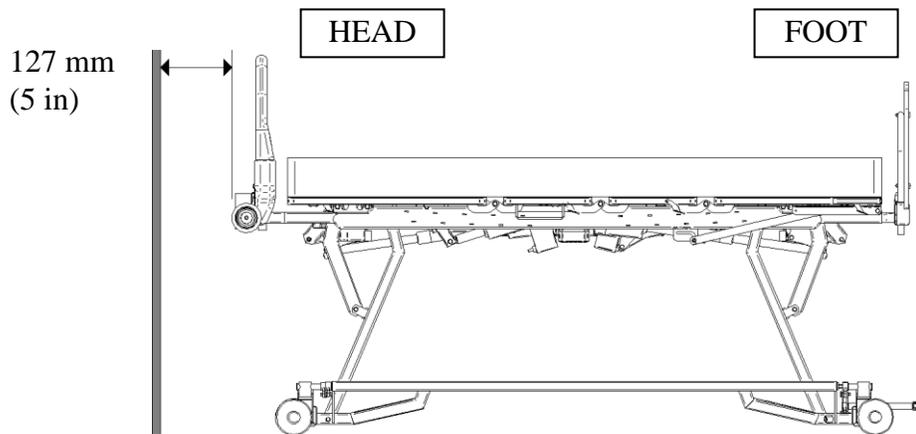
### 3.10 Inspection

All defects must be repaired immediately by a qualified and authorized technician. The maintenance of the bed must be done once a year. Refer the maintenance manual for more details.

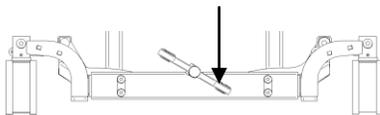
### 3.11 Special recommendation

To install this model of bed, you must:

- Raise the bed completely;
- Place the bed at a minimum of 127 mm (5 in) from the wall;



- Apply the brakes;



- To apply the brakes :
- Push down on the red side of the pedal.

It is now possible to use the bed without hitting the wall.