



# **PROTEKT AKRA BARIATRIC™**

**Full Electric Bed w/Half Rails**

**48" Width / 54" Width**

**Model: PMBAB48 / PMBAB54**



## **User Manual**

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# General Information

## Symbol definitions

Signal words with symbols are used in this manual to improve readability and increase understanding of its content. These symbols are also designed to highlight hazards or unsafe practices which could result in personal injury or property damage.

- ◆ Standard text - Normal character style used for “basic” information.
- ◆ **Boldface text** - Emphasize a word or phrase.
- ◆ Symbols - Represent different risks or hazards and information.



### **DANGER**

Danger indicates an imminently hazardous situation which, if not avoided, will result in death or severe injury.



### **WARNING**

Warning indicates a potentially hazardous situation which, if not avoided could result in death or severe injury.



### **CAUTION**

Caution indicates a potentially hazardous situation which, if not avoided, may result in property damage or minor injury or both.



### **IMPORTANT**

Indicates a hazardous situation that could result in damage to equipment or property if it is not avoided.



### **INFORMATION**

Gives useful tips, recommendations and information for ease of use.

## Intended Use

The PROTEKT AKRA BARIATRIC™ Full Electric Bariatric Bed is intended for use within an institutional healthcare environment, i.e., nursing homes, rehabilitation care, assisted living.

The bed is not a transport device. The wheels on the bed are for positioning the bed only. These shall be locked at all times when in use.

## Safety Precautions



### WARNING

Before using the bed, thoroughly read the instructions in this user manual. This manual provides instructions for routine use and maintenance.

### Unpacking the Bed



### INFORMATION

To avoid injury, do not attempt to remove the bed from the carton without assistance.

### Assembling the Bed



### WARNING

Make sure all attaching hardware is securely tightened.

Do not overtighten the mounting hardware as this will damage the mounting brackets.

Do not modify this equipment without authorization of the manufacturer. Doing so will void the warranty.

Do not use accessories that are not designed or approved for use with the bed.

## Operating the Bed



Do not operate your bed until it is fully assembled and checked.

Do not exceed maximum weight limitations of the bed.

Always make sure the power cable is clear of any moving parts of the bed before switching on the power.

Always keep hands and fingers away from moving parts to avoid injury.

Only use appropriate mattresses and always adjust the mattress retainer system accordingly to ensure the mattress is fixed in place.

The mattress must be properly sized to meet entrapment zone dimensional guidelines published by the FDA. For a full listing of products/mattresses, please visit our website at [www.proactivemedical.com](http://www.proactivemedical.com).

The mattress platform shall be kept in a flat position if the patient's condition could lead to patient entrapment.

Never permit anyone under the bed at any time.

Do not use side rails as handles to move the bed.

The side rails may not be used as a restraint.

When operating/moving the bed, ensure that the resident is positioned properly within the confines of the bed. Do not let any extremities protrude over the side or between the rails when performing these functions.

Keep all moving parts free from obstruction (i.e., blankets/sheets, pads, tubing, etc.) which may get tangled around the bed, side rails, or legs.

When using nasal or masked type administering equipment, oxygen or air tubing must be routed and secured properly to ensure tubing does not become entangled, kinked, or severed during normal operation of the bed.

The caster lock provides the resident with a stable and secure bed, providing easy access in and out of the bed. Check that the caster lock is engaged and the bed is solidly in place before leaving the bed unattended or before attempting resident transfers into or out of the bed.

The caster lock is not intended to be used on a sloping floor or building access ramp. Failure to comply could result in injury or death.

For maximum resident safety, casters should be locked at all times, except when moving the bed.

## Performing Maintenance



### **WARNING**

Only qualified personnel should carry out the bed maintenance.

Do not attempt to open the pre-sealed actuator or obtain local service. Doing such will void the warranty and might result in damage. Consult your dealer or manufacturer for further information.

Inspect the casters every six months to check for tightness and wear.

Regular maintenance of bed and accessories is necessary to ensure proper operation. Do not overtighten mounting hardware. This will damage mounting brackets.

Unplug the power cord when performing any maintenance on the bed.

## Electrical and Earthing



### **WARNING**

Do not, under any circumstances, cut or remove the earthing prong from any plug. Some devices are equipped with three-prong (earthing) plugs for protection against possible shock hazards. Where a two-prong wall receptacle is encountered, it is the personal responsibility and obligation of the customer to contact a qualified electrician and have the two-prong receptacle replaced with a properly earthed three-prong wall receptacle in accordance with the regional and national regulations. If you must use an extension cable, use only a three-wire extension cable having the same or higher electrical rating as the device being connected.

Do not use if the power cable is cut, frayed or loosely connected to the device. Power supply cable may be damaged by inappropriate handling, e.g., by kinking, shearing or other mechanical damages. The power supply cable is only replaceable by service personnel.

## Radio Frequency and Interference



### **WARNING**

Most electronic equipment is influenced by Radio Frequency Interference (RFI). Caution should be exercised with regard to the use of portable communication equipment in the area around such equipment. If RFI causes erratic behavior, switch the power off immediately. Do not turn the power switch on while transmission is in progress.

## Disposal



### **WARNING**

This product has been supplied from an environmentally aware manufacturer.

This product may contain substances that could be harmful to the environment if disposed of in places that are not appropriate according to legislation.

Please be environmentally responsible and recycle this product through your recycling facility at its end of life.

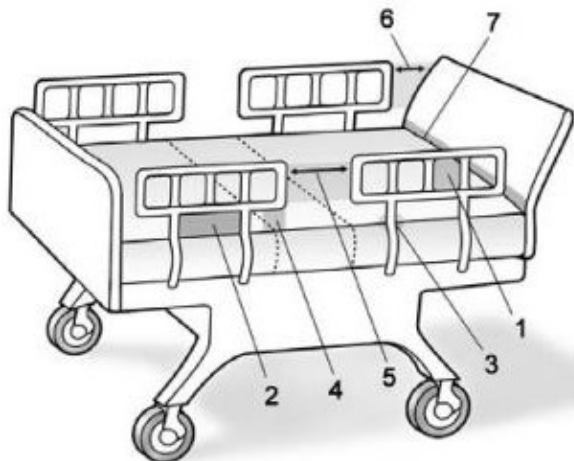
## Reducing the Risk of Entrapment



### WARNING

The Hospital Bed Safety Workgroup (HBSW) in partnership with the FDA has recognized potential entrapment zones in hospital bed systems and has developed dimensional guidance to reduce the risk of entrapment. They have identified seven zones in the bed system where there is a potential for patient entrapment. Entrapment may occur in flat or articulated bed positions, with the rails fully raised or in intermediate positions. Each facility is responsible for compliance with the entrapment guidelines. For more information about entrapment zones and guidelines please visit the FDA website.

### ENTRAPMENT ZONES:



Zone 1: Within the rail

Zone 2: Between the top of the mattress and the bottom of the rail, between the rail supports

Zone 3: Between the rail and the side of the mattress

Zone 4: Between the top of the mattress and the bottom of the rail, at the end of the rail

Zone 5: Between the split bed rails

Zone 6: Between the end of the rail and the side edge of the headboard or footboard

Zone 7: Between the headboard or footboard and the mattress end

## Steps to Prevent Bed Fires

- ◆ Inspect the bed's power cord for damage.
- ◆ Connect the power cord directly into a wall-mounted outlet that is in good working order, with no cracks or chips. The plug should fit tightly into the outlet. The ground pin should be intact and secure.
- ◆ Do not connect the bed's power cord to an extension cord or to a multiple-outlet strip.
- ◆ Do not cover any power cord with a rug. Heat may build up or the cord may be damaged.
- ◆ Inspect the floor beneath the bed for buildup of dust and lint. Ask housekeeping to clean if necessary.
- ◆ Inspect the resident's bed controls, looking for signs of damage where liquids could leak in.
- ◆ Test the bed and its controls, including resident lockout features, to ensure that the bed can move freely in both directions without damaging any cords.
- ◆ Check monitors and other resident equipment for signs of overheating or physical damage.
- ◆ Keep linens and clothes away from power sources.
- ◆ Tell maintenance staff about any unusual sounds, burning odors, or unusual movement of a bed.
- ◆ If you suspect overheating, follow your facility's policy for fire safety and move resident to a safe area if necessary.

## Technical Specifications

These are average values, which may vary according to manufacturing tolerances.

Model PMBAB48		
Operating Range	Bed Height	13" – 24.5"
	Back Rest Angle	0° - 70°
	Knee Break Angle	0° - 40°
	Additional Manual Leg Lift	N/A
	Trendelenburg / Reverse Trendelenburg	N/A
Weight Limit	Safe Working Load (SWL)	750 LBS
Weights & Dimensions	Sleeping Surface Dimension Width x Length	48" x 80"
	Caster Size	5"
	Weight in Carton (Head Deck/Foot Deck/Boards)	79 LBS / 92 LBS / 123 LBS
	Weight out of Carton (Head Deck/Foot Deck/Boards)	73 LBS / 86 LBS / 117 LBS
Electrics	Power Supply (V/PH/Hz)	100-240V / 1ph / 50-60Hz
	Power Consumption (Max)	288 W
	Number of Motors	4
	Protection Class	IP54
	Insulation Class	II Type B
	Duty Cycle	10%, Max. 2 mins / 18 mins
	Battery backup	N/A
Environment	Operating Temperature	41°F ~ 113°F (5°C ~ 45°C)
	Storage Temperature	14°F ~ 122°F (-10°C ~ 50°C)
	Operation & Storage Humidity	20% - 80%
	Operation & Storage Atmospheric Pressure	86 ~ 1006 KPa
	Operation & Storage Altitude	≤ 3000 m
	Noise Level	≤ 52 dB

Model PMBAB54		
Operating Range	Bed Height	13" – 24.5"
	Back Rest Angle	0° - 70°
	Knee Break Angle	0° - 40°
	Additional Manual Leg Lift	N/A
	Trendelenburg / Reverse Trendelenburg	N/A
Weight Limit	Safe Working Load (SWL)	1000 LBS
Weights & Dimensions	Sleeping Surface Dimension Width x Length	54" x 80"
	Caster Size	5"
	Weight in Carton (Head Deck/Foot Deck/Boards)	82.5 LBS / 94.5 LBS / 129.5 LBS
	Weight out of Carton (Head Deck/Foot Deck/Boards)	76 LBS / 88 LBS / 122.5 LBS
Electrics	Power Supply (V/PH/Hz)	100-240V / 1ph / 50-60Hz
	Power Consumption (Max)	288 W
	Number of Motors	4
	Protection Class	IP54
	Insulation Class	II Type B
	Duty Cycle	10%, Max. 2 mins / 18 mins
	Battery backup	N/A
Environment	Operating Temperature	41°F ~ 113°F (5°C ~ 45°C)
	Storage Temperature	14°F ~ 122°F (-10°C ~ 50°C)
	Operation & Storage Humidity	20% - 80%
	Operation & Storage Atmospheric Pressure	86 ~ 1006 KPa
	Operation & Storage Altitude	≤ 3000 m
	Noise Level	≤ 52 dB

## Equipment Assembly



### CAUTION

Use only parts supplied by Proactive Medical Products for assembly to ensure correct alignment of all parts for safe operation.

## Handling Procedures

Check for any obvious damage to the carton. If damage is evident, notify the carrier and the dealer.

Carefully unpack the components from the shipping cartons.

Inspect all components. Examine exterior of the bed and parts for nicks, dents, scratches or damages.

Unless the bed is to be used immediately, retain boxes, containers and packing material for use in storing until use of the bed is required.



### CAUTION

Do not place other objects on top of the packaged bed.

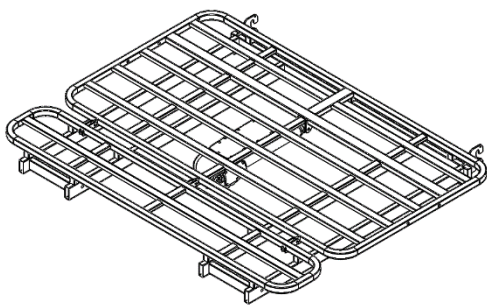


### INFORMATION

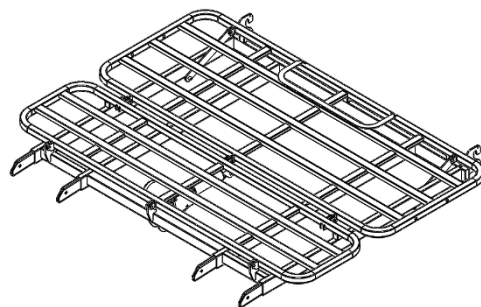
Store the packaged bed in a dry area.

## Components

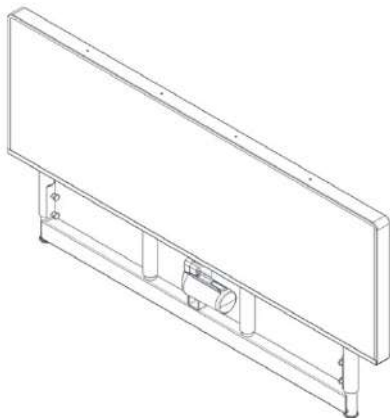
Components Description	Piece
Head Deck with Control Box	1
Foot Deck with Mattress Retainer	1
Head/Footboard with Motor	2
Half Rail	2
Caster	4



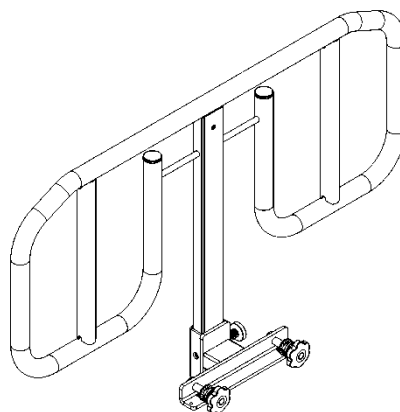
Head Deck with Control Box x 1



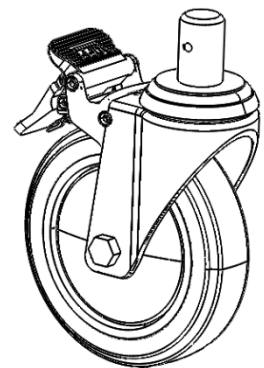
Foot Deck with Mattress Retainer x 1



Head/Footboard with Motor x 2



Half Rail x 2

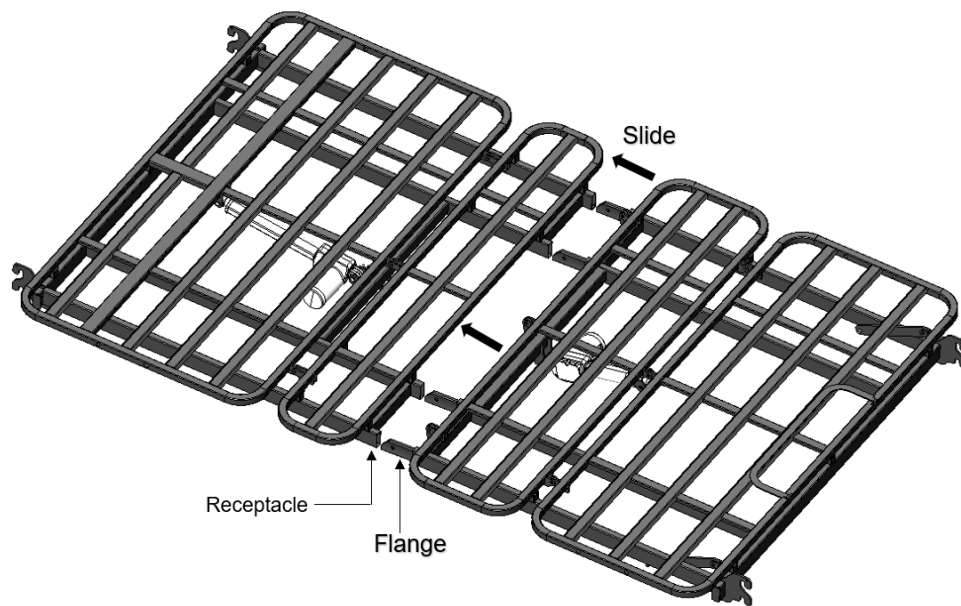


Caster x 4

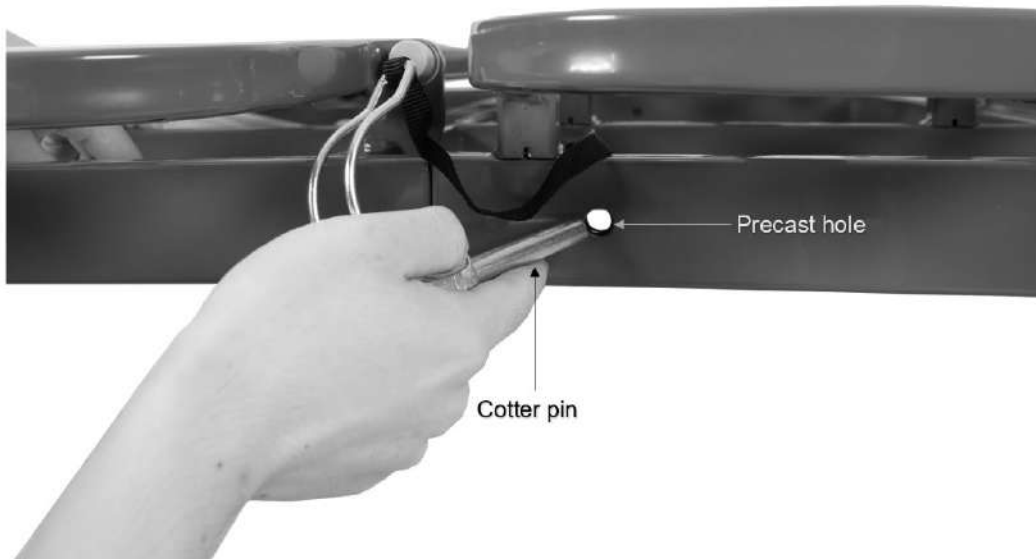
## Assembling the Bed

### Assembling the Frame

1. Place both the head deck and foot deck on the ground and make sure the sleep surface of each deck is facing upwards.
2. Align the four flanges with the receptacles. Connect the two decks by sliding the two sides together. Make sure the flanges are inserted all the way into the receptacles.



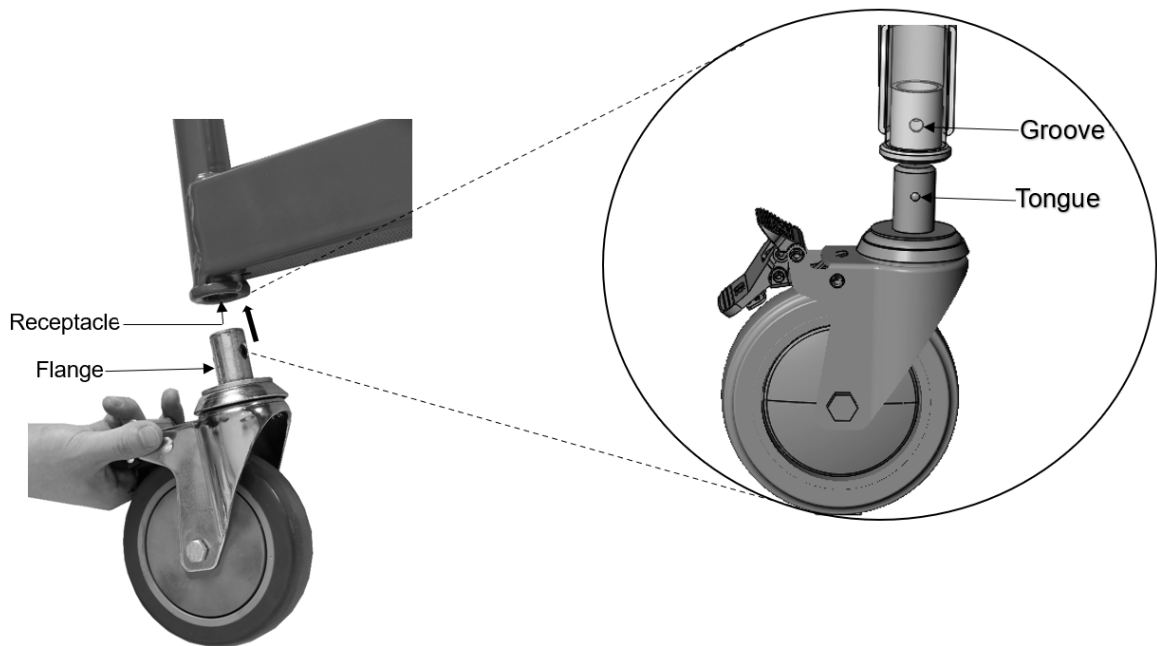
3. Secure the head deck and foot deck with the cotter pin. Lock the cotter pin with the attached clasp.



4. Repeat the same procedures on the opposite side.

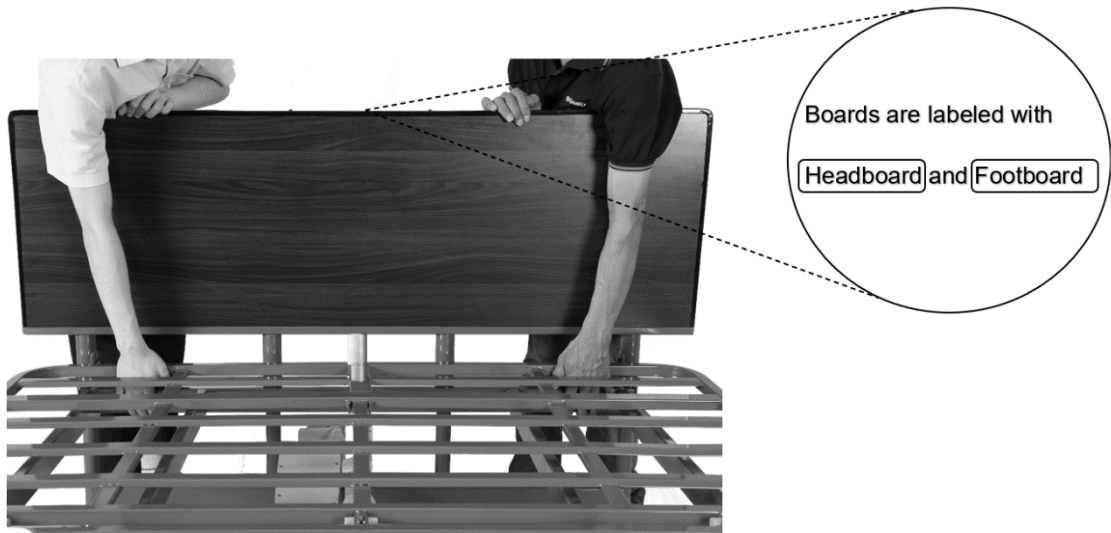
## Installing the Casters

1. Take the headboard and lay it flat on the ground.
2. Take two casters and align the flanges with the receptacles at the bottom of the headboard frame. Insert the flange all the way up to the receptacle. Turn the caster to lock the tongue and groove.
3. There should be an audible click indicating that the caster is locked in place.
4. Repeat the same procedures on the footboard.

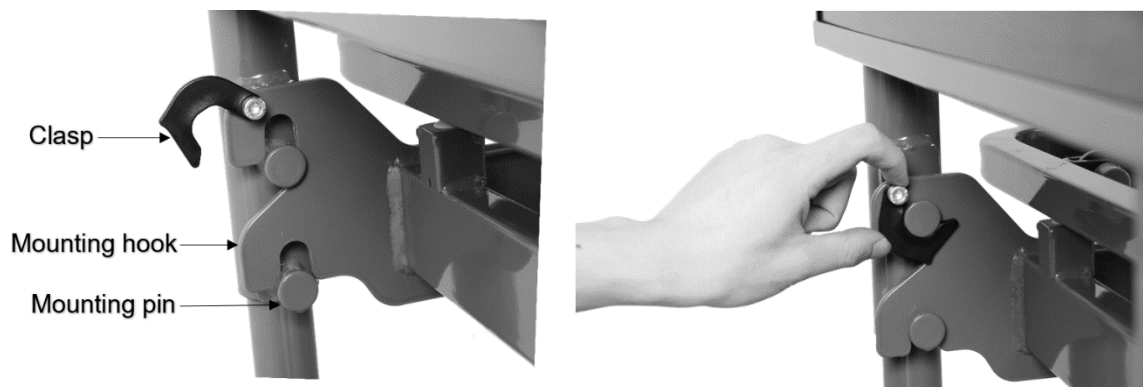


## Assembling the Head/Footboard

1. The head/footboards are side specific. Assemble the headboard and footboard on respective sides according to the labeling.



2. Install the headboard by aligning the frame mounting hooks over the bed end mounting pins and push the frame down to secure in place.



3. Slide the clasp down and secure around the pin to get them locked properly.
4. Repeat the same procedures for footboard installation.

## Installing the Rails

1. Before installing the rails, the bed should be in a flat position.
2. Remove the rubber cover for the appropriate holes.



### INFORMATION

The holes are pre-cast on the outer side of the bed frame and plastic washers are pre-installed on the corresponding inner side.



### WARNING

Do not attempt to remove the plastic washers while installing the rails.

Do not install the rails if plastic washers are missing.

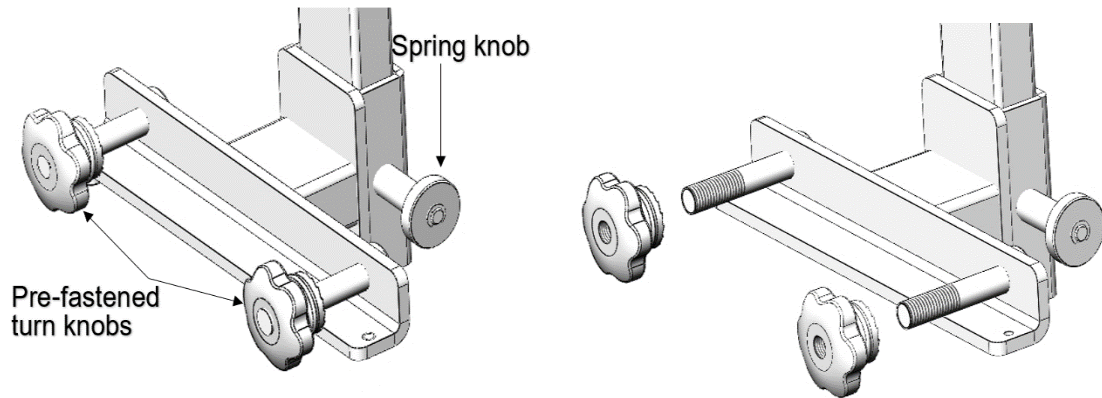
Incorrect placement of the plastic washers may result in an unstable connection, leading to the rail damage and potential injury.



### CAUTION

If any plastic washers are missing, please contact the dealer immediately.

3. Loosen the turn knobs pre-fastened on the rail.



4. The rails are side specific. Place right and left rails on respective sides according to the labeling.

5. Take the rail and insert the studs into precast holes.

6. Fasten the turn knob to secure the rail in place.

Frame and rails are labeled with (L) & (R)



7. Repeat the same procedures to install the other rail.

## Connecting the Control Box (Item# BP-BAR-CB)

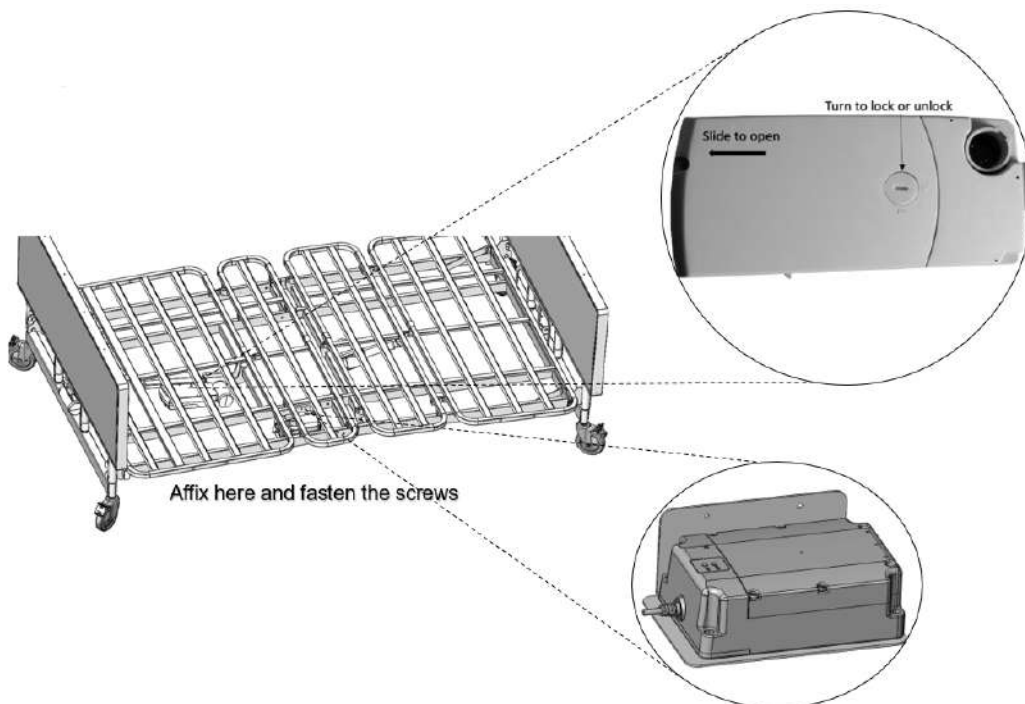
Upon opening the control box, each motor connection port is color coded for ease of identification.



1. DC Port
2. Back Motor (Green)
3. Foot Motor (Red)
4. Head Hi-Lo Motor (Yellow)
5. Foot Hi-Lo Motor (Yellow)
6. Hand Pendant
7. Battery Backup Port

## Installing Battery Backup (Optional Accessory)

1. Switch the power supply off when installing the backup battery.
2. Affix the backup battery with screws to the side of the edge of the bed frame.
3. Turn to unlock the control box and slide the lid to expose the connection port.
4. Connect the backup battery cord to the control box.
5. Close the lid, turn to lock the control box and switch the power supply back on.



## Equipment Operation

### Positioning the Bed

1. To lock the bed, step on the lever at the front and rear casters.



2. To unlock the casters, step on the “OFF” lever at the rear of the bed.

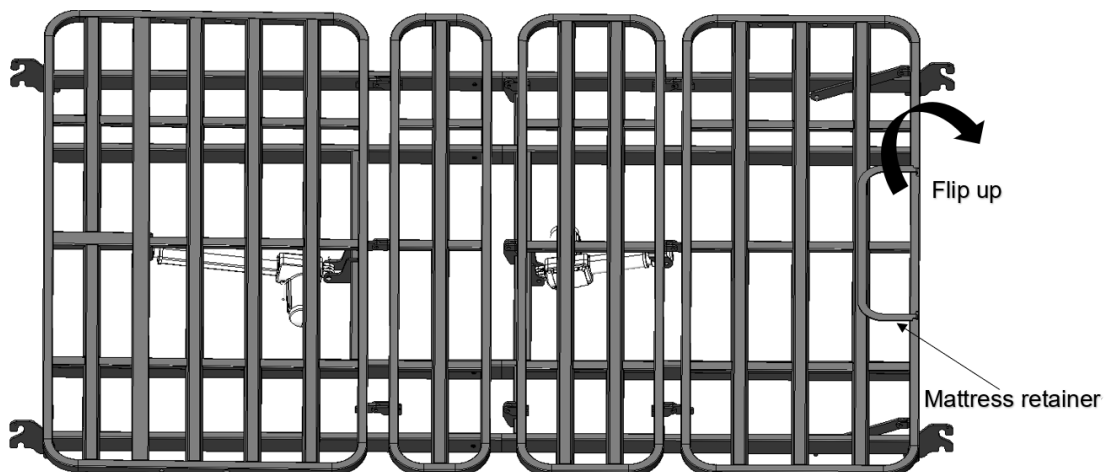


### CAUTION

Head end caster must be unlocked when raising and lowering the bed.

### Using the Mattress Retainer

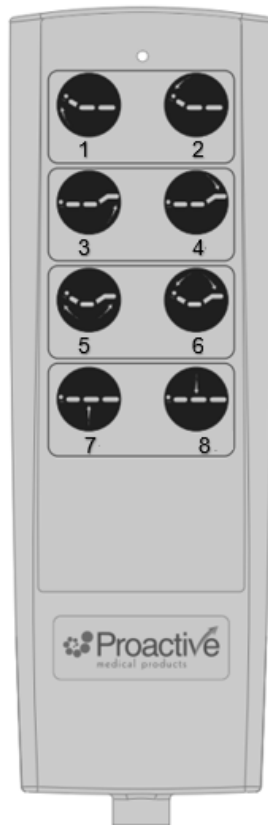
1. Flip up the mattress guard at the bottom edge of the foot deck to reduce mattress movement.



## Using the Hand Pendant (Item# BP-BAR-PNDT)

The up arrow (▲) indicates raising the corresponding parts of the bed.

The down arrow (▼) indicates lowering the corresponding parts of the bed.



1. Use button 1 and 2 to adjust the backrest up or down.
2. Use button 3 and 4 to adjust the knee-break up or down.
3. Use button 5 and 6 to adjust the backrest and knee-break up or down.
4. Use button 7 and 8 to simultaneously raise or lower the bed platform.

## Operating the Bedrails (Optional Accessory)

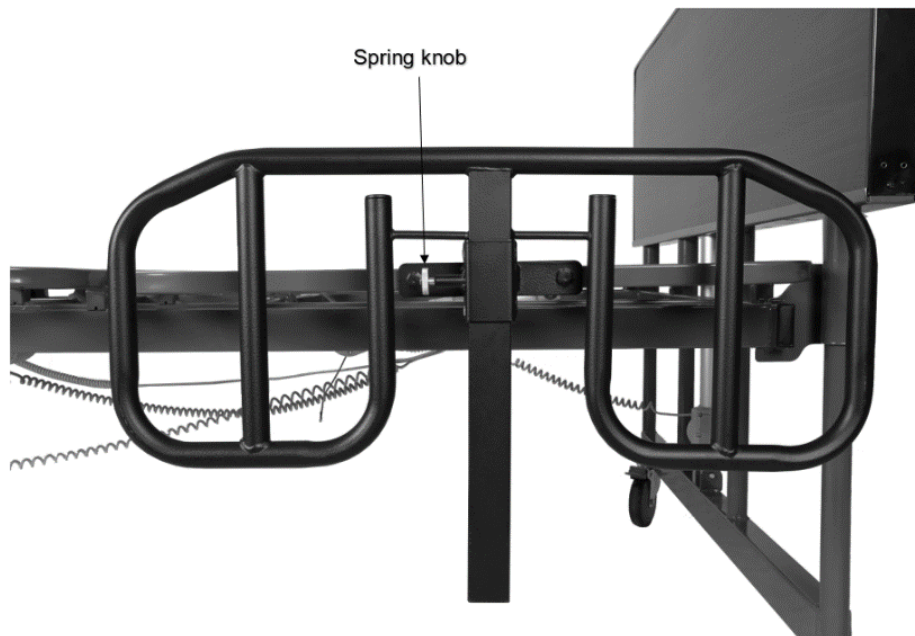


### INFORMATION

Installation refers to page 16 and 17.

#### Half Rail (Item# BP-HRBA)

- ◆ Raise bed rail: While holding onto the top part of the rail, raise the rail upwards until it is securely locked in place.
- ◆ Lower bed rail: While holding onto the top part of the rail, pull the spring knob and “gently” lower the rail to its desired position.



## Troubleshooting Guide

Symptoms	Possible Faults	Possible Solutions
Bed idle when hand pendant buttons are pressed.	<p>Adjustment may be at the maximum or minimum position.</p> <p>Power cord not connected or damaged.</p> <p>Hand pendant or actuator connectors are loose.</p> <p>Control box, hand pendant or actuator are damaged or broken.</p> <p>Load is too heavy.</p>	<p>Check if other buttons are working.</p> <p>Ensure the power cord is properly connected to the electrical socket and the bed.</p> <p>Ensure tight connection of all connectors to control box.</p> <p>Replace the control box, hand pendant or actuator. Contact your supplier.</p> <p>Ensure the load weight is within the designated capacity. Reduce the load.</p>
Casters/Brakes noisy or stiff.	Debris or fluff in bearings.	Replace casters.
Noisy or dry sound from pivots.	Need lubrication.	Lubricate your bed.
Unusual noise from actuator.	Actuator is worn or damaged or spindle is bent.	Replace the actuator. Contact your supplier.
Head/footboard unstable.	Head/footboard frame not tightly secured.	Refer to Equipment Assembly.

If problems persist following the above remedial procedures, please contact your dealer or the manufacturer.

## **Limited Warranty**

Your Proactive Medical brand product is warranted as follows:

Limited Lifetime: Welds and Frame

5 Years: Motor and Hand Control

1 Year: All Other Parts and Components

This warranty does not cover device failure due to owner misuse or negligence or normal wear and tear. The warranty does not extend to nondurable components, such as rubber accessories, casters and etc. which are subject to normal wear and need periodic replacement.

If you have a question about your Proactive Medical device or this warranty; please contact an authorized Proactive Medical dealer.

# Appendix

## Service record

Date	Performed by	Condition Report





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