

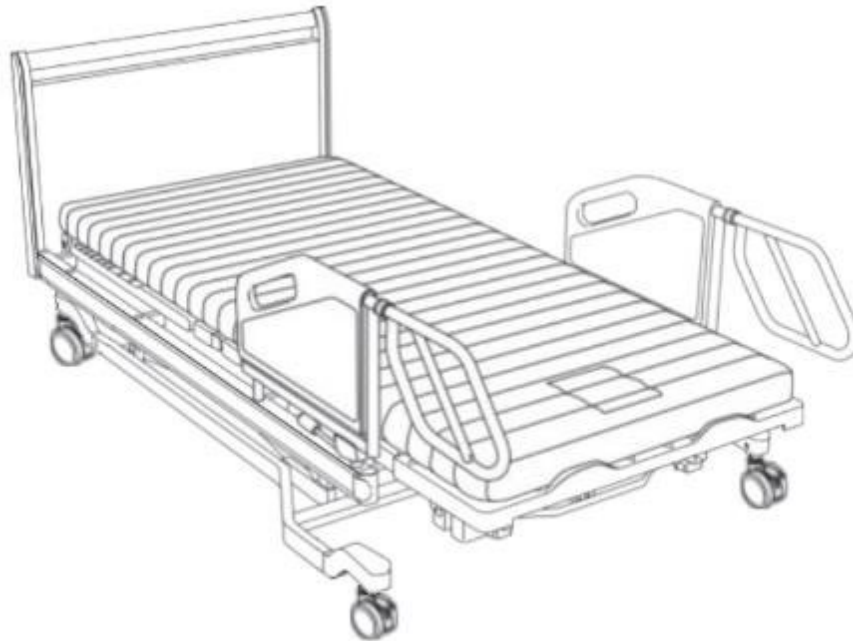
User Manual

ReNuCare®

Standing Bed



KEYWAY MEDICAL INC.



Introduction

This user manual describes precautions and operating procedures for using the product safely.

Read this manual carefully as it contains important information about safety, use, and maintenance of this product. Be sure to keep this manual in a safe place for future reference.

This User Manual should be stored in a convenient location near to the bed so that it can be easily accessed when necessary.













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Safety Precautions (Must be observed)

About symbols

This user manual uses the symbols below to indicate how to use the product safely and correctly. The symbols and their meanings are as follows. Make sure you understand the information properly before using the bed.

	Indicates a matter that may cause death or serious injury if ignored or incorrectly handled.		Indicates a matter that may cause injury or product damage if ignored or incorrectly handled.
	This symbol indicates an action that is prohibited. (Must not be performed.)		This symbol indicates an action or instruction that is mandatory. (Must be performed.)
	TYPE B APPLIED PART		Read the user manual before use.
	Unrecyclable		PILE LIMITED
IPX4	Ingress Protection Rating		HANDLE WITH CARE
	THIS WAY UP		GROSS WEIGHT
	KEEP DRY		

Safety Precautions (Must be observed)

INTENDED USE

For use in long-term care settings and in the home.

Environment:

Maximum temperature in normal use is 30°C / 86°F, temperature: +15°C / 59°F ~+35°C / 95°F

Relative humidity: 40~95% RH, Atmospheric pressure range: 796~1030 hPa

Intended users:

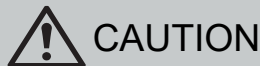
Persons who need assistance in getting on and off the bed and who can operate the bed themselves or who need carers or nursing staff to operate the bed for them.

Functions of the bed:

To aid independent living for users who need assistance to get up or change position.






About symbols

This user manual uses the symbols below to indicate how to use the product safely and correctly. The symbols and their meanings are as follows. Make sure you understand the information properly before using the bed.



Installation Precautions












	<p>Always seek assistance before assembling or disassembling the bed.</p> <p>Never attempt to assemble or disassemble the bed on your own as a serious accident may occur.</p>		<p>Place the bed away from obstacles such as surrounding walls and furniture. Do not place any objects around the bed. Leave the following clearances.</p> <p>Head end of the bed: 1.6 inch or more Both sides of the bed: 10 inch or more Foot end of the bed: 24 inch or more</p> <p>Bed movement may cause damage to the objects around the bed, or an accident or failure may occur.</p>
	<p>Ensure the location of the bed does not prevent doors from opening / closing, obstruct furniture or power points.</p>		<p>Avoid a location exposed to high temperature or high humidity. Warping, bending, corrosion, mold generation, damage, or other problems may occur</p>
	<p>Only use the bed indoors on a level floor where there are no obstructions.</p> <p>Using the bed in a location that is not flat, outdoors, in a bathroom, or other unsuitable locations may cause the bed to become unstable, malfunction or cause an accident.</p>		<p>Avoid a location exposed to direct sunlight or wind from air conditioning units.</p>
	<p>Make sure that the floor is strong enough to bear the weight of the bed. Use carpet or other materials whenever possible to protect the floor.</p>		<p>Do not place a heater or other heating appliances or fire sources near the bed.</p>
	<p>Secure the headboard and leg section properly. To prevent them becoming detached as this may cause an accident.</p>		<p>Avoid using in a high magnetic environment as there is a risk of product magnetization, malfunction or interference.</p>
			<p>Do not modify this equipment without authorization from the manufacturer.</p>

	Do not use the bed with a power supply other than 100-240VAC, 50/60 Hz. Fire or electric shock may occur.		Do not place heavy objects on the power cable, and do not crush the power cable with the bed as this may damage the power cable resulting in fire or electric shock and malfunction.
	Do not place any objects above the bed location. Objects falling may cause an injury.		Insert the power plug directly into the power outlet. Do not use an extension lead nor connect other electrical products into the same plug socket. It may exceed the capacity of the power outlet. Avoid connecting multiple cables to a single outlet. Fire may occur, and the bed may fuse.
	Maintenance should not be carried whilst the bed is occupied.		



WARNING



















Precautions to be taken during use

	<p>Make sure that the side rails, bed grips, and mattress used match the specification of the bed. Check which side rails, bed grips, and mattresses are suitable for this bed by referring to this user manual.</p> <p>Use of non-specified products may cause damage that could result in an injury.</p> <p>Ensure there are no gaps at the foot end / head end or sides of the bed as, a serious injury may occur.</p>		Before transferring the user, adjust the bed to an appropriate height. An unexpected injury may occur.
	<p>Bed operations (back raising, leg raising, and height adjustment) may adversely affect the medical condition of the user.</p> <p>When using the bed, follow the instructions of a healthcare professional.</p>		<p>Adjust the bed to an appropriate height before use. The bed should be adjusted to a height that allows the user to take a sitting position on the edge of the bed or at its lowest position. If there is no attendant, the bed should be used at the lowest position for safety.</p> <p>If the bed is not at an appropriate height, the user may fall when getting on or off the bed.</p>
	<p>Prevent children from playing near the bed.</p> <p>Place the handheld controller in a location that is out of the reach of children.</p>		In case of any emergencies, the bed should be re-adjusted to supine position. Keep pressing the sleeping button.
	<p>Perform the back-raising operation while the user is lying face up with the head at the back raising end.</p> <p>If the user is in a different position excessive force may be applied to the body.</p>		<p>Do not allow the handheld controller to be operated by someone not trained in the operation of the bed.</p>
	<p>When operating the bed with the handheld controller, pay attention to the safety of the user and any persons or the objects around and under the bed (and around the feet of the user). If you sense any danger, stop the operation immediately. Be particularly cautious when using side rails and bed grips.</p> <p>Injury to a person, damage to an object, or other accident may occur.</p>		<p>This bed is designed for an adult. Do not use the bed for a child aged 12 or under, including a newborn infant or baby.</p> <p>Do not allow the bed to be used by a person who is incapable of understanding the information in the user manual and on the caution and warning labels.</p> <p>An unexpected accident may occur.</p>
			Please ensure that the seatbelt is securely fastened. Failing to fasten the seatbelt properly increases the risk of falling.
















WARNING

Precautions to be taken during use

	<p>Do not place a body part below the bed or between the raised platform and frame. If there is a possibility that the bed may be operated by someone who is not trained, remove the safety key on the handheld controller.</p> <p>Do not apply any unexpected load to the bed by, for example, sitting on a side rail or the headboard.</p> <p>Damage or injury may occur.</p>		<p>Do not use the bed, side rails, or bed grips if they are damaged</p>
	<p>Do not apply any unexpected load to the bed by, for example, sitting on a side rail or the headboard.</p> <p>Damage or injury may occur.</p>		<p>Never try to forcefully get off the bed from the space between the side rails and bed grips or by climbing over them.</p> <p>A serious accident may occur.</p>
	<p>Do not bounce on the bed or stand or sit on the bed while the back section is raised.</p> <p>Damage or injury may occur.</p>		<p>Do not jump or bounce on the bed. Damage or injury may occur.</p>
	<p>The maximum working load is 450 lbs (approx. 441 lbs, maximum weight of the user is approximately 375 lbs). Do not use the bed when the load, including the weight of the user, mattress and accessories, exceeds 450 lbs.</p> <p>The bed may be damaged or a serious accident may occur.</p>		<p>If the bed does not operate or another abnormality occurs, remove the power plug from the power outlet, and check the "Troubleshooting" section of this user manual. If the problem still persists, stop using the bed immediately, remove the power plug from the power outlet and contact Key Way Medical.</p>
	<p>Do not place a body part below the bed or between the raised platform and frame. If there is a possibility that the bed may be operated by someone who is not trained, remove the safety key on the handheld controller.</p>		<p>If the bed will not be electrically operated for a long period of time or if there is a power outage, remove the power plug from the power outlet. Leaving the power plug inserted may cause an accident or failure.</p>
	<p>This bed is for one person. It should not be used for two or more persons at one time.</p> <p>A serious accident may occur.</p>		<p>When removing the power plug from the power outlet, do not pull on the power cable. Hold the plug at the end of the cable. The cable may be damaged resulting in fire or electric shock.</p>
	<p>The rated operation duration of the motor is 2 minutes. Do not use the motor continuously for longer than 2 minutes. Wait a sufficient time for the motor to cool down before using the motor again next time.</p> <p>A failure may occur</p>		<p>Regularly clean and tidy the area around the bed. If the area around the bed is untidy, an unexpected injury may occur.</p>
	<p>Do not insert a cable in a gap in a side rail or bed grip. When a bed operation such as back raising is performed, the cable may get caught, resulting in an accident or damage.</p>		<p>If the power cable is damaged (core wire is exposed, broken, etc.), bed will not operate, or other abnormality occurs, remove the power plug from the power outlet, and contact Key Way Medical.</p> <p>Continuing use in this condition may cause electric shock.</p>
	<p>Do not run a cable (such as a power cable) of an electrical appliance other than the bed, under or inside the bed. The cable may get caught in a caster or moving part and be damaged resulting in fire or electric shock.</p>		

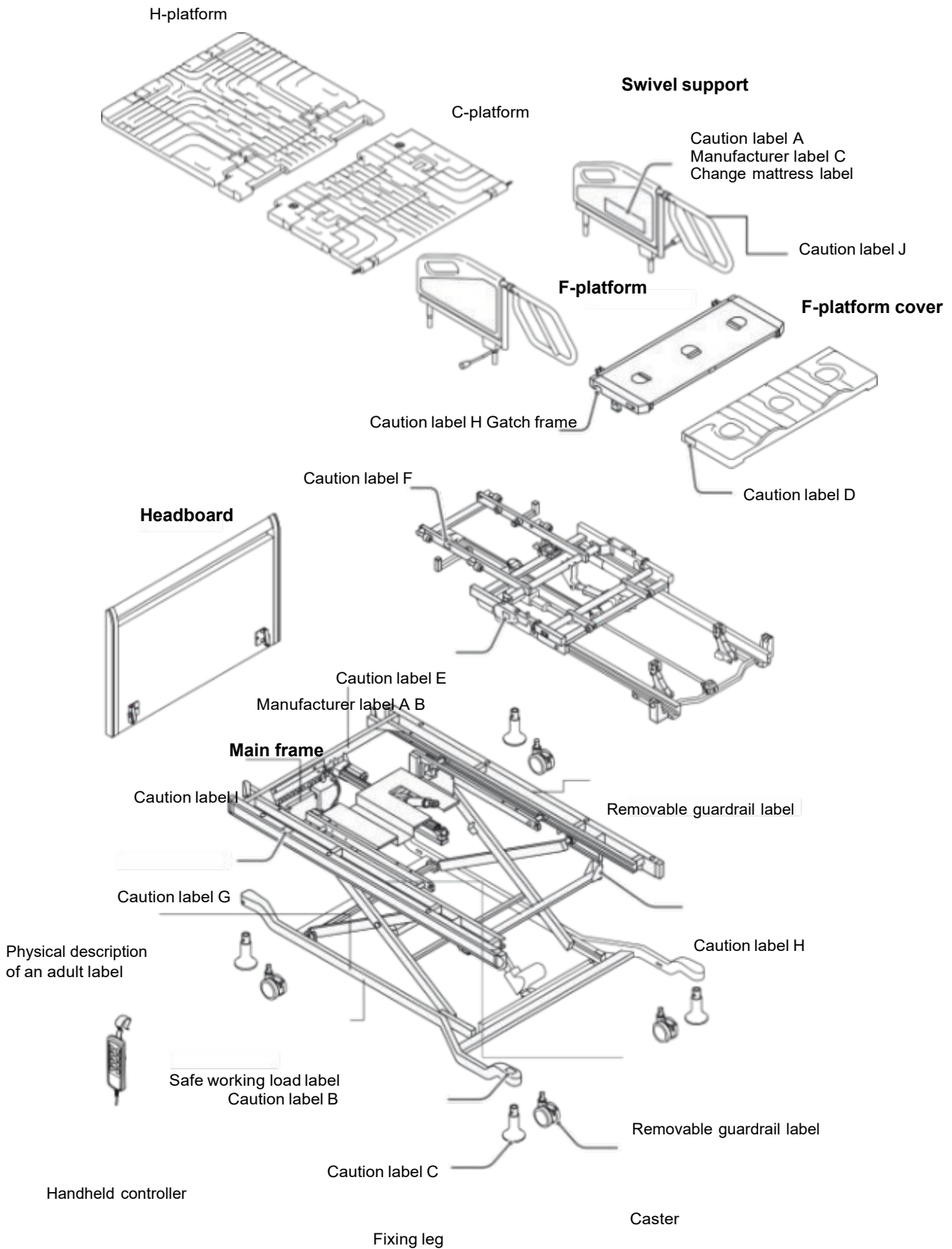
Safety Precautions to be taken during use.

	<p>Press the buttons on the handheld controller one at a time for the required operation.</p> <p>If multiple buttons are pressed at the same time or an unnecessary button is pressed, the bed may move unexpectedly, resulting in injury to the person on the bed or a person near the bed.</p>
	<p>When not using the handheld controller, hook it on the outer side of the headboard or on the outer side of a side rail or bed grip.</p> <p>Placing the handheld controller on the bed or hooking it on the inner side of the headboard or a side rail or bed grip may result in incorrect operation due to it being unintentionally touched.</p>
	<p>Before assisting the user from the head end, remove the headboard.</p> <p>Do not apply excessive force to the headboard as this may cause damage to the bed.</p>
	<p>To prevent unintended operation or operation by someone not trained, remove the safety key from the side of the handheld controller and remove the power plug from the power outlet.</p> <p>Incorrect operation may occur due to unintentionally touching a button, which may cause an unexpected accident.</p>
	<p>Before setting the bed to the standing or sitting position, remove any quilts and covers.</p>

	<p>Before the user gets off the bed, raise the back section whenever possible.</p> <p>Bed grips should be used if the user has poor mobility.</p>
	<p>Do not smoke on the bed. Damage or fire may occur.</p>
	<p>Do not remove or insert the power plug with wet hands.</p> <p>An electric shock may occur.</p>
	<p>Do not damage, modify, forcefully bend, twist, pull, bundle, trap, bind, or heat the power cable or handheld controller cable.</p> <p>The cable may be damaged resulting in fire or electric shock.</p>
	<p>Do not spill liquids on the motor, handheld controller, or other electrical parts.</p> <p>A failure or accident may occur.</p>
	<p>Do not press the buttons on the handheld controller with a fingernail or sharp object or press them with more force than necessary.</p> <p>The buttons may be damaged, etc.</p>
	<p>Do not drop, drag, or forcefully pull the handheld controller.</p> <p>A failure may occur.</p>
	<p>Do not drag the bed by holding the headboard.</p> <p>The bed may be damage</p>

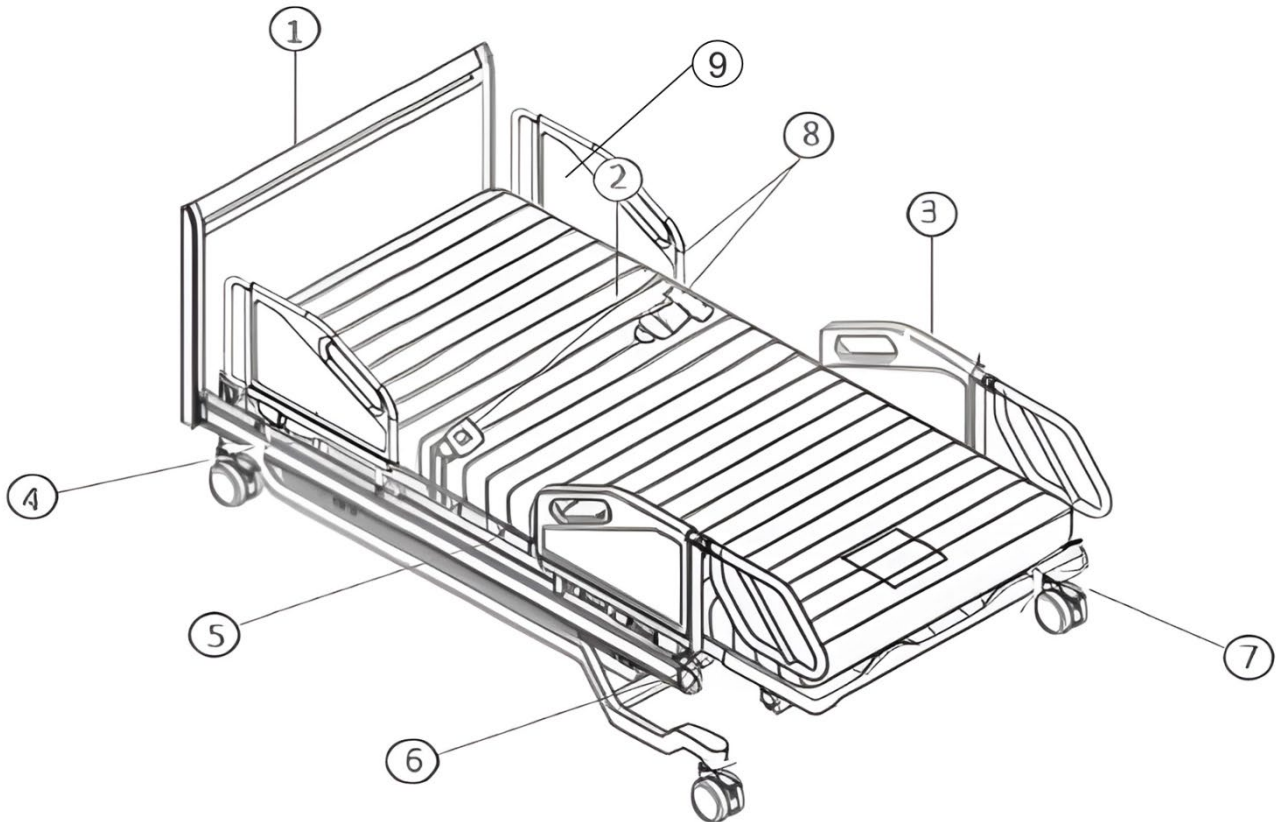
Part Names

Caution labels are affixed to this bed as shown in the figure below. Check the caution label locations and caution information before using the bed.



Accessories and detachable parts

- ① Headboard ② Mattresses ③ Bed grip
- ④ H-platform ⑤ C-platform ⑥ F-platform
- ⑦ F-platform cover ⑧ Seat belt ⑨ Front armrest



Accessories and detachable parts

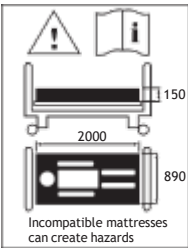
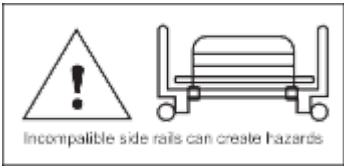

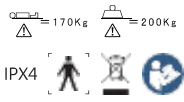
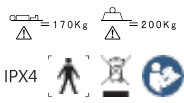
Items	Model	Icon	Quantity
Side Rails	ARMERST_R	GR-MP R	1
	ARMERST_L	GR-MP L	1
	FRONT ARMREST_R	FRONT ARMREST_R	1
	FRONT ARMREST_L	FRONT ARMREST_L	1

Part Names

The caution labels show the precautions requiring special attention.
Do not remove or deface (get dirt on) them.

<p>Caution label A</p>	
<p>Caution label B</p>	
<p>Caution label C</p>	
<p>Caution label D</p>	
<p>Caution label E</p>	
<p>Caution label F</p>	
<p>Caution label G</p>	
<p>Caution label H</p>	
<p>Caution label I</p>	
<p>Caution label J</p>	

The caution labels show the precautions requiring special attention.
Do not remove or deface (get dirt on) them.

<p>Change mattress label</p>	
<p>Removable guardrail label</p>	
<p>Physical description of an adult Label</p>	
<p>Manufacturer label A</p>	<p>MODEL : MPB-SU B30SW CE MP01 29G 100V-240V~50/60Hz 2.65A(+/-0.2) MANUFACTURER : JOCHU Manufacturer : JochuTechnology Co., Ltd. Duty Cycle : 10% Max.on 2 min./Min. off 18 min. Weight : Approx. 141 kg Manufacturing lot number: DATE : NO.42 ,Kuangfu Rd., Hsin Chu Industrial Park, Hukou, Hsinchu 303, Taiwan(R.O.C)</p> 
<p>Manufacturer label B</p>	<p>MODEL : MPB-SU B30SW CE MP01 30DG 100V-240V~50/60Hz 2.65A(+/-0.2) MANUFACTURER : JOCHU Manufacturer : JochuTechnology Co., Ltd. Duty Cycle : 10% Max.on 2 min./Min. off 18 min. Weight : Approx. 144 kg Manufacturing lot number: DATE : NO.42 ,Kuangfu Rd., Hsin Chu Industrial Park, Hukou, Hsinchu 303, Taiwan(R.O.C)</p> 
<p>Manufacturer label C</p>	<p>Product name: Dedicated Fixed Type Grip with Swivel Support GR-MP Model Number: Date: Manufacturer: JOCHU</p>





Using the Bed

Preparation before Using the Bed

Perform the following preparation before using the bed for the first time.

- Install the bed in a location where there are no surrounding obstacles. Insert the power plug into a power outlet properly while ensuring the power cable is sufficiently slack.
- Press the buttons on the handheld controller and check that the operations are performed normally.
- Check that the cables do not catch on anything during operation within the bed operating ranges, and that they have sufficient slack.

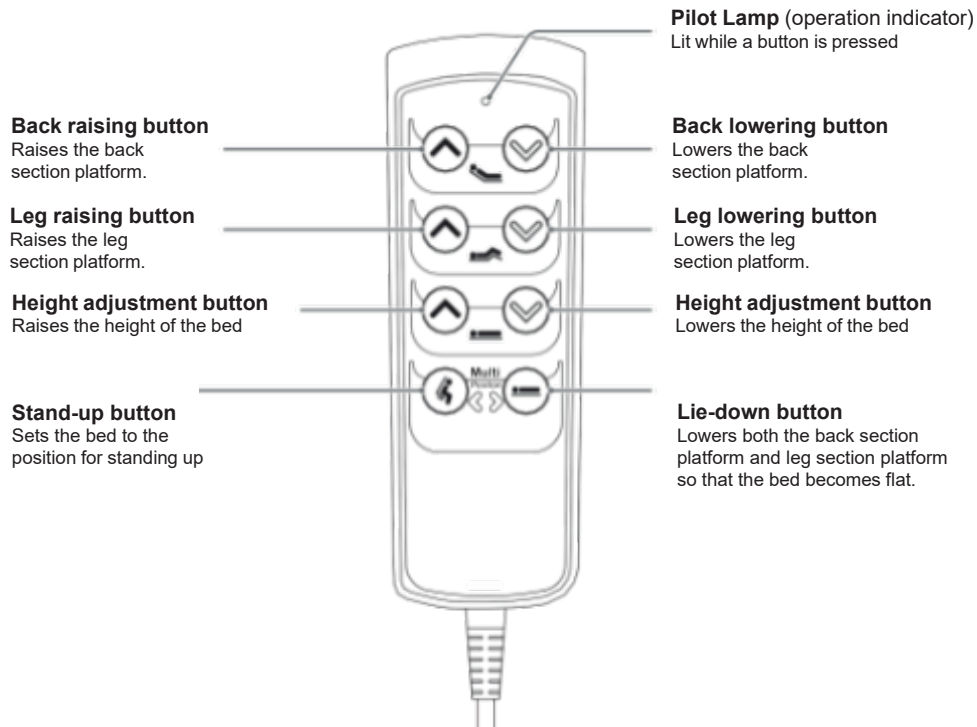
WARNING

	Before operating the bed, check that there are no persons or objects that may obstruct the bed. Ensure the side rails and bed grips are free of obstructions.
	Press the buttons on the handheld controller one at a time for the required operation.
	The rated operation duration of the motor is 2 minutes. Do not use the motor continuously for longer than that. The safety device will be activated and operation will become impossible. If the bed cannot be operated, wait a sufficient time for the motor to cool down and then operate the bed.
	If a malfunction occurs, unplug the bed immediately to avoid causing damage.

Using the Bed

Operating the Handheld Controller

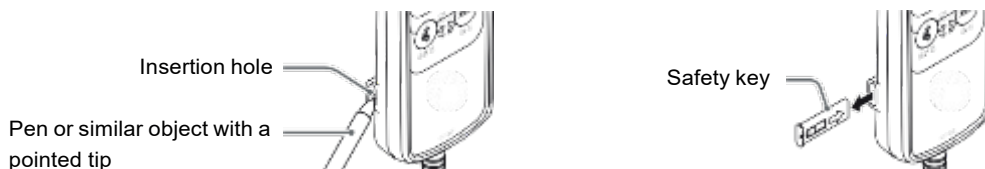
When operating the bed, press the buttons on the handheld controller one at a time.



Operating the Safety Key

You can prevent operation of the handheld controller by removing the safety key on the side of the handheld controller.

- Keep the safety key in a safe place so that it will not be lost.







Resetting

If there is an unintended operation with the initial settings or there is an operation error when using the handheld controller, (refer to “Troubleshooting” on page 30).

The pilot lamp flashes 3 times.

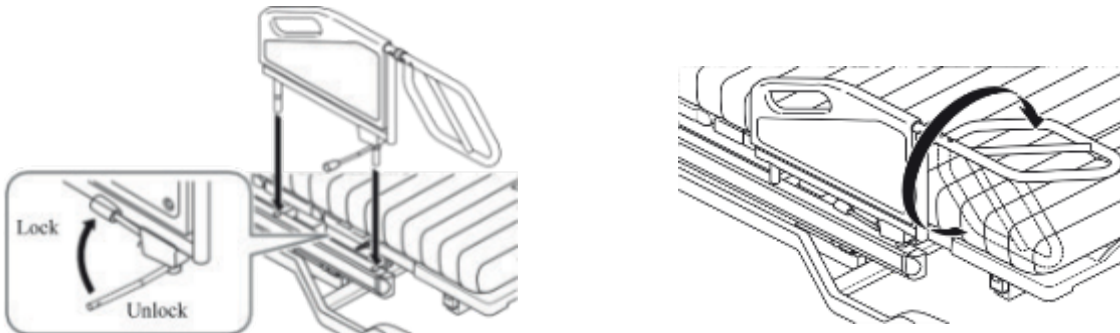
- Press and hold the \wedge/\vee buttons on the handheld controller at the same time until the back-raising and leg-raising angles and height of the bed are reset to the initial settings.

WARNING



	Reset is not possible if the safety key has been removed from the handheld controller.
	Wait until the pilot lamp has flashed 3 times and the reset has completed before attempting normal operation.
	If an \neq -unintended operation occurs during use, perform the reset operation.
	Before performing the reset operation, check that there is at least 32 inch / 80 cm of space available at the foot end of the bed. During reset operation, the bed movement is different from that of the normal operation.

Using the Dedicated Fixed Type Grips

- Insert the grips into the attachment holes for the side rails at the foot end and then fix them in place
- When standing up, use the grips with the handrails rotated.



WARNING

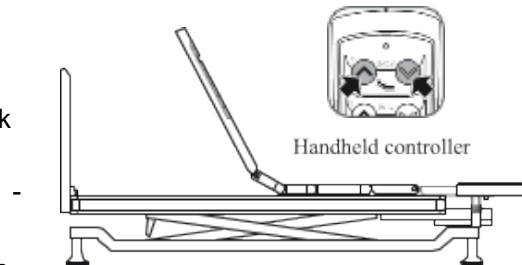
	Return the handrails to the original positions except when standing up.
	Attach the dedicated fixed type grips so that the caution labels are on the inner side.

Performing the Back-raising and Leg-raising Operations

Press the corresponding button on the handheld controller to perform the back-raising operation or leg-raising operation.

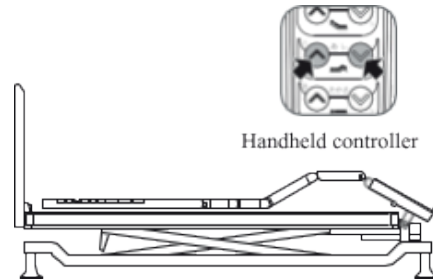
■ Back-raising operation

- Convenient for getting out of the bed.
- Allows the back section to be used as a back rest when, for example, eating a meal or reading in bed.
- Reduces the burden on the caregiver.
- Stabilizes the sitting position. (When the side up function is used, refer to “Performing the Side-up Operation” on page 18.)



■ Leg-raising operation

- Use this operation when the user's legs are swollen or the user wishes to raise their legs.
- When raising the back section, performing this operation first will minimize the body shift toward the legs.



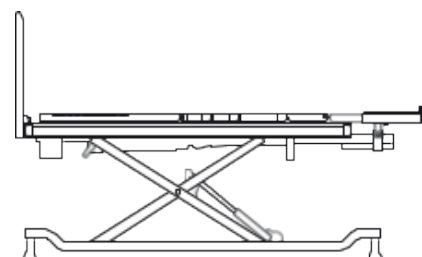
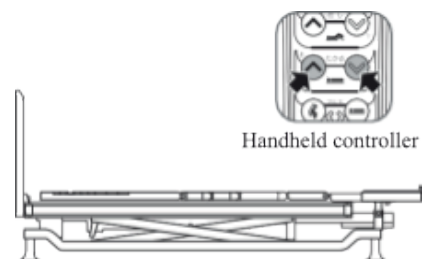
(The figure shows the leg section raised.)

Performing the Height Adjustment Operation (High/Low Function)

Press the corresponding button on the handheld controller to perform the height adjustment operation.

■ Height adjustment operation

- Allows adjusting the height for standing up from the bed.
- Allows matching the height of the bed when transferring the user to a portable toilet or wheelchair.
- Adjusting the bed height enables caregivers to assist the user in a comfortable position.



Performing the Multi-position Operation

Pressing and holding the STAND-UP button on the handheld controller allows the user to change the bed position in the order of reclining position, sitting position, and standing position. To return the bed to the original position, press and hold the FLAT button on the handheld controller.



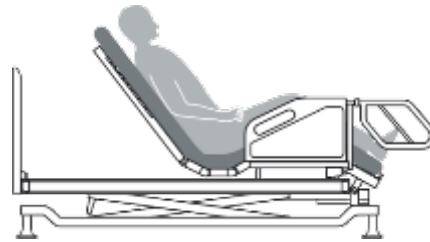
Handheld controller



Handheld controller

■ Reclining position

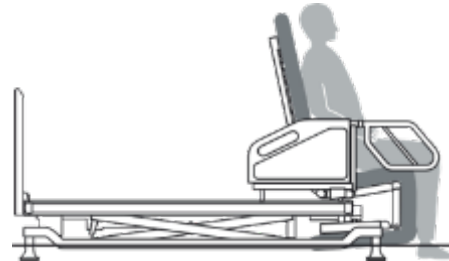
Using back raising and leg raising together allows the user to take a relaxed position and prevents body shift.



Both sides of the back section platform rise up toward the center of the bed in conjunction with the back-raising operation, stabilizing the sitting position during the back-raising operation. (When the side-up function is used)

■ Sitting position

- The sitting position is stabilized by adjusting the height from the floor (17 to 29 inch / 42 to 73 cm) to allow the user to firmly place the soles of their feet on the floor.
- The user's torso is stabilized to allow firmly sitting on the edge of the bed by adjusting the back-raising angle (0° to 75°) and leg-raising angle (10° to 20°) and using the Side-up function at the same time.
- Using an independence support table or breakfast tray allows the user to have a meal in the sitting position.

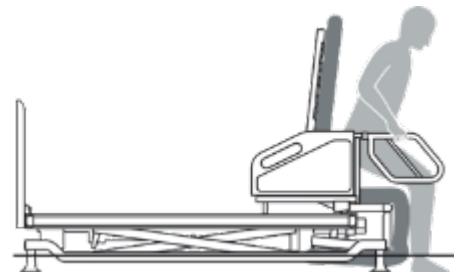


Precaution

The initial height from the floor for the sitting position is 17 inch/ 42cm. If the height is made lower than that, the mattress may touch the floor and get dirty.

■ Standing position

- This position assists standing up because the seat face is inclined to allow the user to lift the body up from an inclined position. If a user feels insecure using an incline to stand up they may stand up without using the incline.
- A user who can stand up from the sitting position can stand up from the bed alone by operating the handheld controller themselves to set the seat face to an angle at which standing is easy.
- When a user cannot stand up from the sitting position, the caregiver can enable the user to be transferred easily by adjusting the angle of the seat face. This helps prevent caregiver suffering back pain.

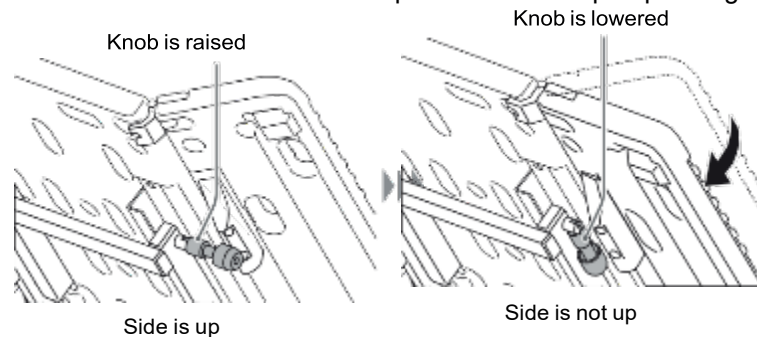


■ Using a pillow and quilt

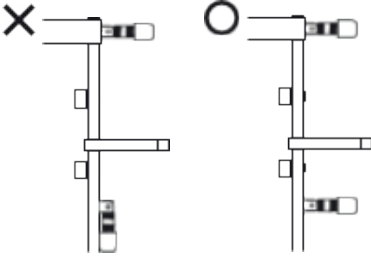

- When using a pillow, use a thin pillow that is about 3.15 inch / 8 cm thick. Do not use a thick pillow because it will get in the way when using the sitting position.
- If the pillow shifts while using the bed, the sitting operation cannot be performed correctly. Return the pillow to its original position and then operate the bed.

Performing the Side-up Operation

- The sitting position can be stabilized during the back-raising operation by using the side-up function in conjunction with the back-raising operation.
- Raise the back section to an appropriate position and then slide the knurled knobs toward the outer side and bend the side-up rollers (2 places on each side) while lifting up the left side or right side of the back section platform. When setting is completed, slowly lower the back section platform.
- The bed can be used with either one side up or both sides up depending on the situation.

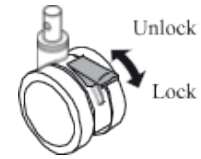


⚠ WARNING

	<p>When performing switching of the sitting position assistance function, ensure both the upper and lower knobs face the same direction. If they face in different directions, an accident or failure may occur.</p> 
	<p>When raising or lowering a knob, check that the collar is slid all the way to the end. If it is positioned part way along, the side may come detached resulting in an accident or failure.</p> 

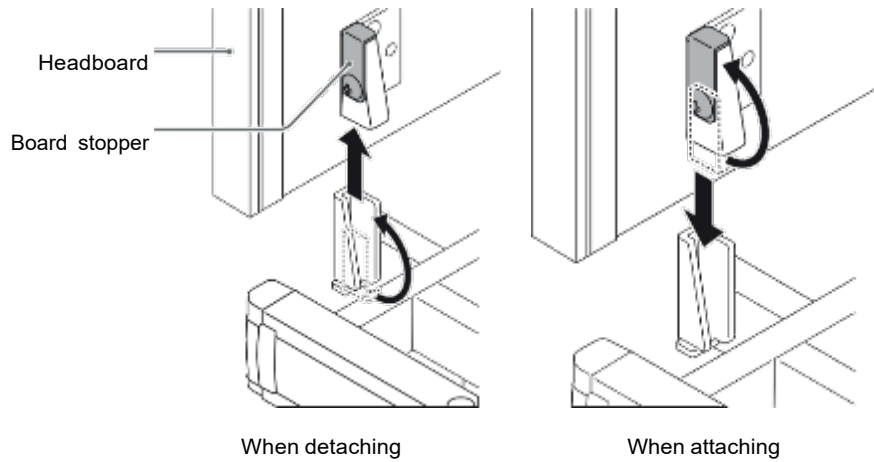
Using Casters

- All four of the casters have a locking mechanism.
- Ensure the casters are locked unless you are moving the bed.
- Do not move the bed while the casters are locked.



Attaching and Detaching the Headboard

The headboard can be detached by turning the board stopper of the headboard upward and then lifting up the headboard while holding the board stopper with one hand. To attach the headboard, hold the board stopper while it is turned upward with one hand and insert the headboard while taking care not to bang it against another part.



Attaching and Detaching a Mattress

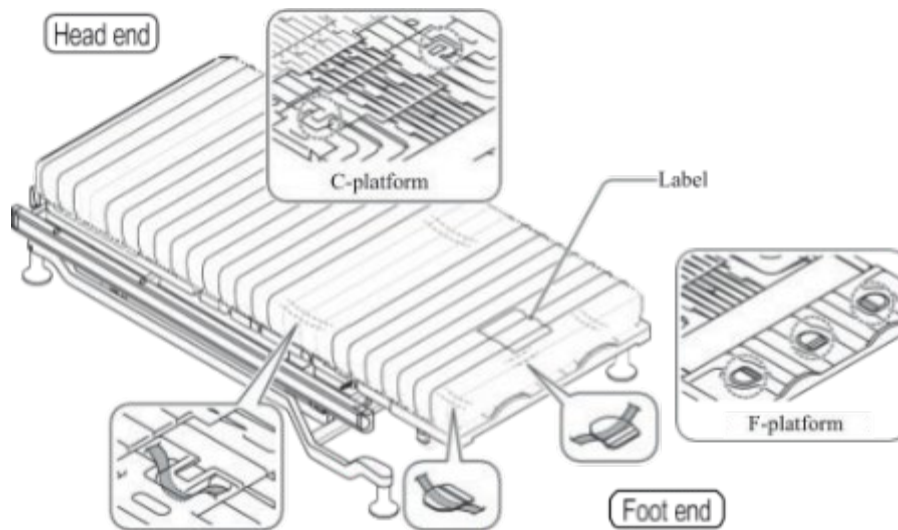
A mattress can be attached to the bed. To detach the mattress, perform the attachment procedure in reverse.

1. Place the mattress on the bed oriented so that the side with the label is the top surface and the label is at the foot end.

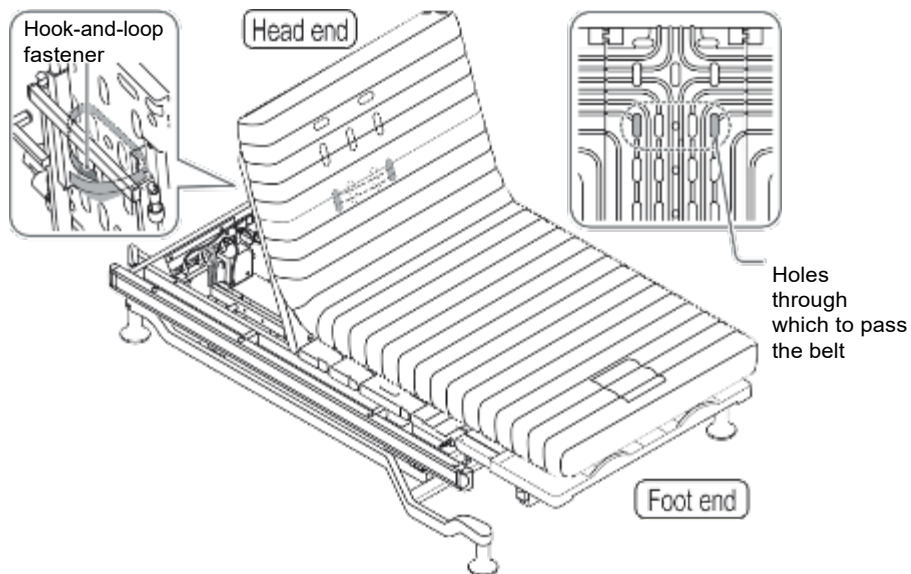
Push in the belts in two places, one on the left and the other on the right, on the back section with fingers and pass them through the hooks of C-platform.

Attach the belts in 2 places, one on the left and the other on the right, at the foot end to the hooks on F-platform.

Attach the belt in 1 place at the center of the foot end to the hook on F-platform.



2. Lift up the back section platform with one hand and pass the hook-and-loop fastener at the head end of the mattress through the holes in H-platform and affix the ends of the fastener together.



3. Slowly lower the back section platform.



WARNING



When lowering the back section, lower it slowly.

Handling the Battery

- A battery is located under the main frame at the head end of the bed.
- Even if the power supply is temporarily interrupted by a power outage or other problems, you can set the back section and leg section to the flat state by using the handheld controller.
- When you insert the power plug into a power outlet, charging starts automatically.
- The battery life varies depending on the frequency of use and environment. It is recommended to replace the battery every 3 years regardless of the frequency of use.
- Charge the battery when the bed is used for the first time or hasn't been used after a long time.
- For details on replacing the battery, contact Key Way Medical.



WARNING

	<p>If electrolyte leaks from the battery, stop using the bed immediately and contact Key Way Medical. Continuing use may result in an injury or accident.</p>
	<p>If battery electrolyte leaks and gets on clothing or a part of the body, immediately wash it off with plenty of water and then seek medical attention. A burn or serious injury may occur.</p>



WARNING

	<p>The battery life may shorten depending on the temperature, humidity, and frequency of use. Regularly inspect the battery.</p>
	<p>Do not apply a strong impact to the battery or dismantle the battery. Incorrect handling may cause a leak or an electric shock, fire or other accident.</p>
	<p>If the device is not used for a long time, please remove the battery to avoid battery and device wear and tear.</p>

■ Charging Status

The charging status is indicated by the LED lamp.

Battery status	LED lamp	Remark
80% or more	Lit green	Can be used.
80% to 25%	Repeatedly lit green for 0.5 seconds and then off for 4 seconds	Can be used.
Less than 25%	Repeatedly lit orange for 0.5 seconds and then off for 4 seconds	Can be used.
Recharging	Repeatedly lit green for 1 second and then off for 1 second	Charge the battery.
Protected	Off	Charge the battery immediately.
Failure	Lit orange	*

*When the LED lamp is lit orange, stop using the bed immediately and contact Key Way Medical.

■ Long-term Storage

- When the bed is stored for a long period of time, inspect it every 6 months. For the inspection procedure, refer to “Inspection” on page 28.
- Ensure the battery is charged before using the bed after long-term storage.



If the bed is stored for a long period of time with the battery uncharged, the battery life will shorten.
When storing the bed for a long period of time, regularly inspect the battery.

Side Rails and Bed Grips

■ Suitable Side Rails and Bed Grips

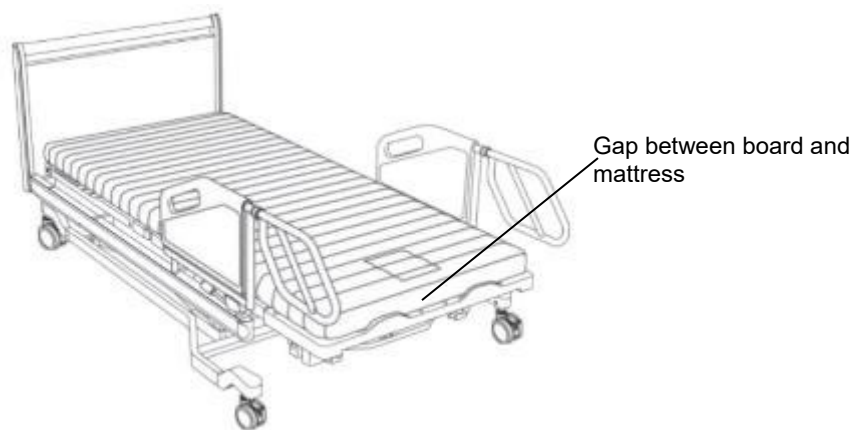
- The available side rail and bed grip for the bed are the dedicated fixed type grip only.
- When attaching the dedicated fixed type grip to the bed, be sure to attach it at the foot, end of the bed.

Suitable Side Rails and Bed Grips

Product name	Shape / dimensions (inch)	Materials, coating, and weight
Dedicated Fixed Type Grip with Swivel Support ARMREST		<p>Steel Epoxy resin powder coating 14 (lbs) / 6.5 (kg)</p>
Dedicated Fixed Type Grip		<p>Steel Epoxy resin powder coating 11 (lbs) / 5.0 (kg)</p>









■ Precautions for Side Rails and Bed Grips

The precautions that are common for both side rails and bed grips are as follows.










Precautions related to gaps when attached to bed

WARNING

	Take care that the user does not lean against the side rail or bed grip and apply pressure on their body. If the user leans against the side rail or bed grip, pressure will be applied to the body and may result in a physical disability or a life-threatening injury.
	When using one side rail or bed grip (use for one side of the bed), ensure the gaps created between the bed don't become too large. In particular, pay close attention to a user who cannot maintain their posture independently. When a side rail or bed grip is attached on only one side of the bed, the user's body may get caught in the gap between the raised mattress and side rail or bed grip.
	It is recommended to use dedicated side rails to prevent the user from falling.
	When side rails and bed grips will be used while the user is sleeping, remind the user that the side rails and bed grips are raised. Some users may forget about the existence of side rails and bed grips. Ensure the user is aware of the side rails and bed grips before falling asleep.
	Ensure the user pays attention to the side rails and bed grips when getting in and out of the bed. Ensure the user secures a foothold and moves slowly and carefully when getting in and out of the bed. Depending on the clothing, the user may get caught on the side rail or bed grip when falling over or off, resulting in a serious accident.
	Do not use the side rails and bed grips in a way which will apply an unnecessary force, such as standing or sitting on them. Do not allow the user to get in or out of the bed by stepping over the side rail or bed grip. The side rail or bed grip may be damaged or the user may fall over or off, resulting in an accident.
	Do not allow a body part to be inserted in a gap in the side rail or bed grip. When a bed operation such as back raising is performed, the body part may get caught. In particular, pay attention to a user who might act in unexpected ways on the bed or who is unable to avoid dangerous situations. Also, when the bed is used by such a user, cover the gaps with cushion material or blankets to prevent an accident. Also, be careful not to trap a user's hand or finger when giving the user a bed bath or changing sheets. Injury due to a body part getting caught may occur.
	Do not use the bed for an infant. An infant may fall from a gap in the bars of the side rail or bed grip.

CAUTION

	When attaching a side rail or bed grip to the bed, be sure it is inserted in both places. If it is insufficiently secured, it may shake and cause an accident.
	Insert and remove the side rail while keeping it parallel without using unnecessary force. Using unnecessary force to insert and remove it may cause damage.
	If the side rail or bed grip becomes unstable because the insertion parts have become loose due to, for example, use over a long period of time, contact Key Way Medical. Continuing to use a loose side rail or bed grip may cause an accident.
	Be careful with regard to use for a user who cannot maintain the sitting position. A user who finds it difficult to maintain the sitting position may fall onto a bed grip while the back section is raised, resulting in a serious accident due to pressure being applied to the cervical region.
	Do not move the bed while holding the side rail or bed grip or otherwise apply unnecessary force. If excessive force is applied, deformation or damage may be caused.
	Do not repair or modify the side rail or bed grip. Contact Key Way Medical and request repair. An accident may occur.
	To prevent an injury, regularly inspect the bed for faults

Side Rails and Bed Grips

■ Side Rail and Bed Grip Maintenance Information

If you notice any of the following faults with the side rail or bed grip, stop using it immediately and contact Key Way Medical and request replacement.

- Insertion parts move abnormally.
- Easily detached from bed.
- Moving bar cannot be fixed correctly.
- Not possible to unlock.
- Other fault.






Specifications







Electrical ratings	Rated voltage	100-240 VAC
	Rated frequency	50/60 Hz
	Rated power consumption	2.65 A(+. 0.5) (continuous operating time of 2 minutes)
Battery	Type	Lead acid battery
	Capacity	2.0 Ah
	Ingress Protection Rating	IP66
	Input	30V
	Output	24V=2A
	Capacity	2.2Ah
Bed dimensions	Duty Cycles	10% max 2min ON/18 min OFF
	a: width (maximum external dimension)	Fixing legs: 47 inch / 120 cm Casters : 51 inch / 130 cm
	b: Length between legs (distance between leg attachment positions)	69 inch / 175 cm
	c: Platform height (height from floor to platform top)	17 to 29 inch (when using fixing legs) 17 to 29 inch (when using casters) (stroke: 12 inch)
	d: From platform top to headboard(frame) top	20 inch / 51 cm
	e: Length (maximum external dimension)	81 inch / 206 cm
	f: Depth of seat face	17 inch / 42 cm
Back-section, Leg (knee) section	g: Height of sitting position	17 to 29 inch / 42 to 73 cm
	α: Maximum incline angle of back section	75°
	β: Maximum incline angle of leg (knee)sect	20°
Materials	Frame	Steel pipes, steel plates, aluminum Epoxy resin powder coating Resin molding
	Platform	Polyethylene resin
Weight	Fixing legs	Approx. 311 lbs. / 141 kg
	Casters	Approx. 317 lbs./ 144 kg
Power cable length		4.0 m from control box outlet
Leg section	Fixing legs	Attachment height: 5 inch Resin molding
	Casters	Attachment height: 5 inch Caster diameter: 4 inch Resin molding
Maximum user weight		375 lbs / 170 kg
Safe working load		441 lbs /200 kg
Mattress	Model	ABNB0101002B0
	Size	2000 x 890 x 140 mm
	Weight	15 lbs
Noise		80 dB (A) or less

If the total weight of the mattress and accessories exceeds 44 lbs. / 20 kg, ensure the bed is used with a total weight of 441 lbs. / 200 kg or less when the weight of the user is combined. However, the user's body weight limit is 375 lbs. / 170 kg.

Maintenance

When performing bed maintenance, observe the following.

 WARNING	
	Remove the power plug from the power outlet before starting maintenance. An electric shock may occur.
	Regularly remove the power plug from the power outlet and wipe the prongs and the surface that contacts the power outlet with a dry cloth to ensure dust does not adhere to the power plug. If dust adheres to the power plug or the power plug is not inserted into the power outlet firmly, an electric shock or fire may occur.
	When cleaning the bed, do not wash the bed by directly pouring water onto it. Electric shock or malfunction may occur.
	Do not dismantle, repair, or modify the bed yourself. Fire, electric shock, or malfunction may occur.

 WARNING	
	Regularly inspect the bed. Tighten any loose screws and other threaded parts. Also, avoid using the bed while it is damaged. An accident may occur.
	When storing the bed, set the back section platform and leg section to the flat state, and lower the bed to the lowest position. Remove the power plug from the power outlet. A failure may occur if the bed is not stored in the lowered position.
	Do not use an organic solvent, such as paint thinner, benzene, or gasoline, abrasive powder, bleach, etc. for wiping off dirt. When using a commercially available cleaner, first try using it in a place that is not conspicuous. Discoloration, deterioration, or scratches on the bed may occur.
	Do not store the bed in a location subject to high temperature, high humidity, or excessive dust. A failure may occur.
	Do not lay the bed down on one side or stand it upright. An accident or failure may occur.

- Wipe the bed frame with a dry, soft cloth. If there is stubborn dirt, wipe using a household cleaner or soapy water and then wipe with a dry cloth. Never use a volatile substance. Deterioration or discoloration may occur.
- Wipe the bed frame (including the wood parts) with a dry, soft cloth.
- Occasionally check that the screws and other threaded parts have not come loose. If they have come loose, tighten them.
- Before cleaning the handheld controller, remove the power plug. Do not use an undiluted solvent or detergent solution. Wipe with a cloth that has been soaked in diluted neutral detergent and wrung out well. After leaving the bed long enough to dry, insert the power, plug into the power outlet and make sure you check the operation.

Inspection

Appropriate maintenance is required to maintain the performance of the electric bed and side rails and other accessories used. The bed should be inspected daily to ensure there are no faults.

The bed is a collection of many parts that deteriorate and wear out over time with use. Performing regular inspections prolongs the life of the bed.

■ Exterior inspection items

Inspect the exterior for scratches, deformation, and other blemishes by checking visually or by touch.

- Check that there is no abnormality with the headboard, platform, leg section, side rails, head grips, and casters.
- Check that the parts such as screws, pins, and retaining parts are attached securely.
- Check that the labels are affixed and the user manual is available.
- Check that there is no damage to the cables and cases of the electrical parts (handheld controller, motor, and battery).

■ Operation inspection items

Connect the power plug of the bed to the power outlet and check each operation using the handheld controller.

- Check that the indicator lamp lights as specified.
- Check that the operations are performed properly.
- Check that there is no abnormal sound during operation.

■ Battery inspection items

Inspect to check that the battery operates normally and whether it is time for replacement.

When using the bed:

- Check that there is no damage to the cable and case.
- Check that electrolyte is not leaking.
- Check the LED lamp that indicates the charging status. (Under the base frame at the head end)
- Remove the power plug from the power outlet and operate the bed at any position with handheld controller to check that the bed returns to the flat state.

When in long-term storage:

- Check that there is no damage to the cable and case.
- Check that electrolyte is not leaking.
- Check the operation of the battery every 6 months. Insert the power plug into a power outlet to charge the battery. Then, remove the power plug from the power outlet and operate the bed from any position with the handheld controller to check that the bed returns to the flat state.

It is recommended to inspect the battery regularly to ensure that the bed can be operated by battery in the event of a power outage, etc. The battery needs replacing if the bed cannot be switched to the flat state by operating the handheld controller after removing the power plug. Contact Key way Medical and ask for the battery to be replaced. Never carry out replacement, repairs, etc. yourself.

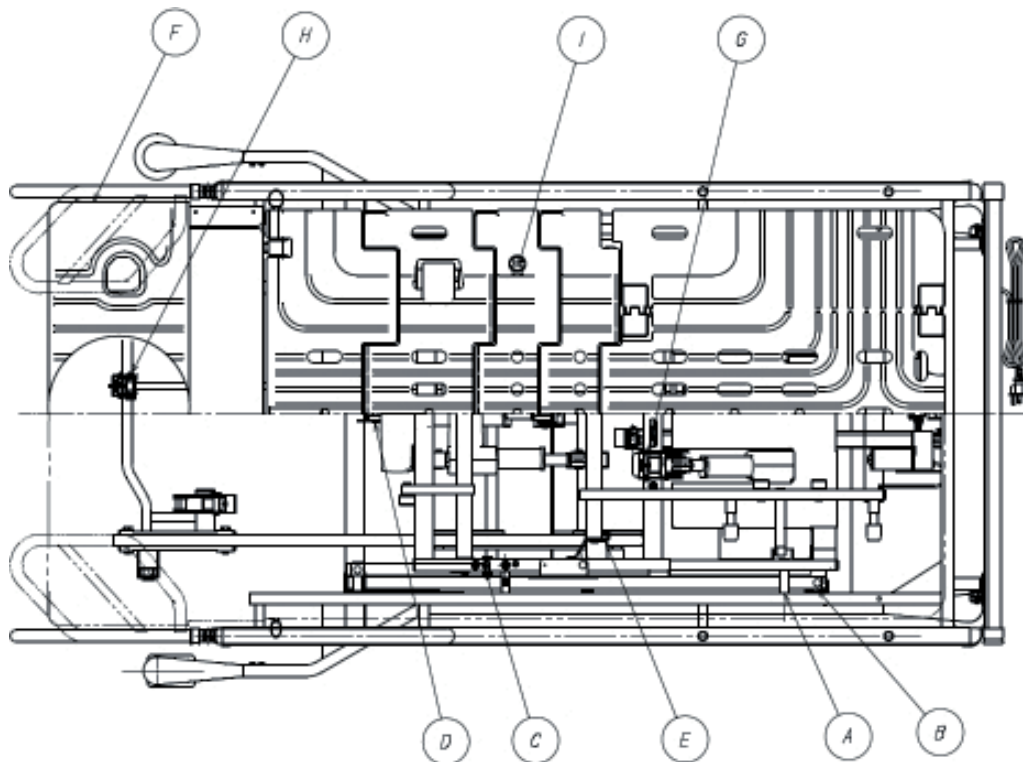
If you discover a problem while using or inspecting the bed, immediately stop using the bed and promptly contact Key Way Medical and request repair.

Never carry out replacement, repairs, etc. yourself.

Inspection

■ Inspections and adjustments

Perform the following inspections and adjustments to ensure the bed can be used safely for a long period of time.



Greasing

Apply grease to the moving parts. This is not necessary unless abnormal noises are heard.

- (A) Orange roller section rotation shafts (12 places)
- (B) Pins connecting high/low frame and high/low bracket (2 places)
- (C) High/low pin
- (D) Pin connecting motor

Inspection of screws and other threaded parts

Screws and other threaded parts may come loose and the bed may become unsteady. Inspect the following screws and other threaded parts.

- (E) Screws securing the pins for performing back raising and leg raising (4 places)
- (F) Screws fixing the slide hinges attached to F-platform (4 places)
- (G) Adjustment dial of stand up motor (1 place)
- (H) Adjustment dial of pull-in motor (1 place)
- (I) Decorative screws fixing C-platform (2 places)

Cable check

Check that the various cables are not damaged.

The bed is made up of service parts and consumable parts. The main consumable parts of the bed are listed below.

Parts name	Possible causes of failures
Handheld controller (including cable)	<ul style="list-style-type: none"> • A wire of the cable breaks due to applying more than the expected load by, for example, wrapping the cable around the side rail. • A wire of the cable breaks due to dragging the cable which has dropped onto the floor. • A wire of the cable breaks due to stepping on the cable. • The handheld controller is damaged due to misuse.
Power cable	<ul style="list-style-type: none"> • A wire of the cable breaks due to moving the bed while the power cable is connected to a power outlet. • The power plug is damaged due to moving the bed while the power cable is connected to a power outlet.
Various pins	<ul style="list-style-type: none"> • The various pins have worn out due to repeated application of more than the expected load or running out of grease.
Casters	<ul style="list-style-type: none"> • Casters are damaged due to forcibly moving the bed while the casters are locked. • A lock mechanism is damaged due to use of a lock position as a brake during movement.
Battery	<ul style="list-style-type: none"> • The battery has deteriorated due to being left installed without power being supplied.

Service Life

The service life is 8 years. During this period, the consumable parts can be repaired or replaced under specified usage conditions and specified inspection.

The service life is not the warranty period.

Warranty

The warranty period for your Standing Bed starts on the delivery date and is 3 years for the frame and 1 year for the motor and batteries. The warranty covers manufacturing defects only and does not cover damage caused by negligence, misuse, normal wear and tear or any use not covered by the user manual.

If you think that you have a defect with your Standing Bed that is covered by the warranty, you should contact Key Way Medical immediately by email at info@keywaymedical.com. Please supply your name and address, serial number of the bed and date of purchase, if known.

Disposal



WARNING



At the end of its life, the bed should be disposed of according to local environmental legislation.

Troubleshooting

If the bed will not operate, check the following items before requesting repair. If the bed does not operate properly after performing the checks, stop using the bed immediately, remove the power plug from the power outlet, contact Key Way Medical and request repair.

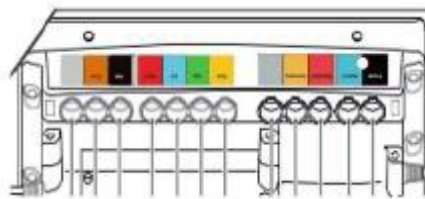
If an operation error or unintended operation occurs during use, following the table for troubleshooting.

Symptom	Check item	Measure
The bed does not operate even though a button on the handheld controller is pressed.	Is the power plug inserted into the power outlet?	Insert the power plug into the power outlet. Operation may sometimes not be possible immediately after inserting the power plug in the power outlet. Wait 30 seconds before operating the bed.
	Are the connectors inserted all the way into the correct positions in the control box?	Insert all the connectors of the handheld controller, etc. all the way into the correct connector ports.
	Is the power cable or handheld controller cable damaged?	The power cable or handheld controller cable has been crushed or its coating is damaged. Request repair.
	Has the safety key on the side of the handheld controller come out or been removed?	Firmly insert the safety key.
Multi-position operation cannot be performed.	Are the connectors inserted all the way into the correct positions in the control box?	Insert the various connectors all the way into the correct connector ports and then perform the reset operation.
Operation stops part way through.	Are the connectors inserted all the way into the correct connector ports in the control box?	Insert the various connectors all the way into the correct connector ports.
	Is the power cable, handheld controller cable, or motor cable damaged?	The power cable, handheld controller cable, or motor cable has been crushed or its coating is damaged. Remove the power plug from the power outlet, disconnect the battery connectors, and request repair.
Bed does not rise or lower.	Are there any obstacles around the bed?	Remove any obstacles.
	Is the bed overloaded?	Check the safe working load before use.
The platform does not become flat.	Is a quilt, blanket, or other bedding trapped between the platform and main frame?	Raise the platform slightly and remove the trapped bedding.
The bed is unsteady	Are the adjustment dials of the stand up motor and pull-in motor loose?	Tighten the adjustment dials properly.
	Is the headboard attached properly?	Reattach the headboard properly.
	Has a stopper pin or other part come out?	Check that no stopper pin or other part has come out. If a part has come out, Insert it firmly.

Symptom	Check item	Measure
Movement of the bed is not normal.	Is the bed assembled correctly?	Contact Key Way Medical.
	Are the connectors inserted all the way into the correct positions in the control box?	Insert the various connectors all the way into the correct connector ports.
	Is the power cable, handheld controller cable, or motor cable damaged?	The power cable or handheld controller cable has been crushed or its coating is damaged. Remove the power plug from the power outlet, disconnect the battery connectors, and request repair.
There is an abnormal sound during raising and lowering of the bed.	Check the temperature in the room where the bed is located. If the temperature is low, a sound may be generated from the motor for raising and lowering when the height adjustment operation is performed.	Ensure the temperature in the room where the bed is located is kept at a normal room temperature (15 to 35°C/59 to 95°F). If the bed has been moved from a low temperature location, performing the height adjustment a few times may make the sound disappear.

Connector Ports of Control Box

The units that connect to the connector ports of the control box are listed below. Make sure the colors of the labels on the connector ports of the control box and the colors on the rings attached to the cables match.

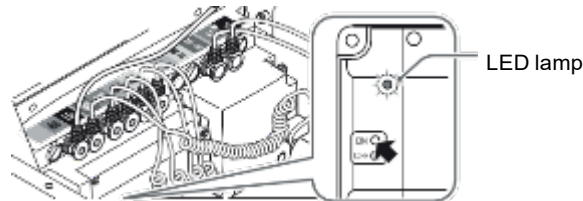


1) 2) 3) 4) 5) 6) 7) 8) 9) 10) 11) 12)

| Connector port | Label | Device to be connected |
|-----------------------------|------------------|--|
| 1) Connector port | — | This is not used. |
| 2) PUSH connector port | Orange label | Connects with the push-out motor. |
| 3) PULL connector port | Black label | Connects with the pull-in motor. |
| 4) STAND UP connector port | Red label | Connects with the stand up motor. |
| 5) LIFT connector port | Light blue label | Connects with the lift motor. |
| 6) LEG connector port | Green label | Connects with the leg raising motor. |
| 7) BACK connector port | Yellow label | Connects with the back raising motor. |
| 8) Connector port | — | This is not used. |
| 9) ACCESSORY connector port | Yellow label | Connects with an optional handheld controller. |
| 10) HANDHELD connector port | Red label | Connects with the handheld controller. |
| 11) Connector port B | Light blue label | Connects with the battery. |
| 12) Connector port P | Black label | Connects with the power supply unit. |

When Stopped while Back/Leg Section Platform Is Raised Due to Power Outage or Failure

- The raised back section platform or leg section platform can be returned to the flat state using the battery.
 - Perform only the operation to return to the flat state. Returning to the flat state will not be possible once the battery runs out of power. (For details on the battery LED lamp indication, refer to “Charging Status” on page 18.)
1. Check that the power of the battery mounted to the control box is turned on. Turn the power on if it is not turned on.



2. Operate the bed using the handheld controller.



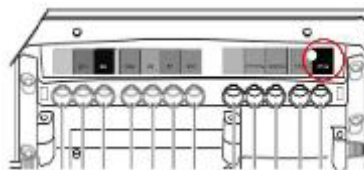
Emergency operation

1. When you need to lower your back in an emergency, please press the back down button.



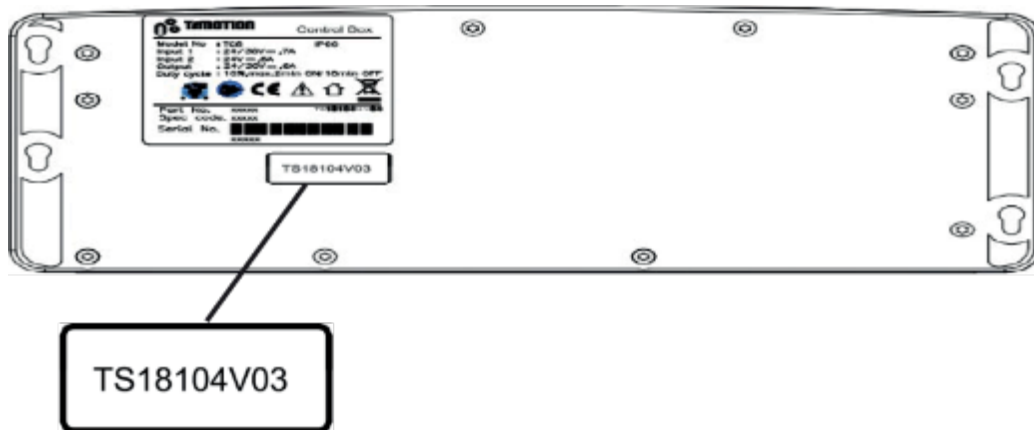
In the event of an emergency, when the hand controller is released and the device cannot stop the bed, please follow the steps below to cut off the bed:

1. Remove the power cord from the bed
2. Remove the battery connection cable from the controller



Software Version of the Control Box

1. The software version is displayed as a label on the control box.
2. Current software version is TS18104V03



Contact Information

■ When asking for repair

Before requesting repairs, read the user manual carefully, and perform another inspection. If the issue persists, contact the dealer or our customer service center.

Please provide the following information:

- Address
- Name
- Telephone number
- Model name
- Serial number of the bed
- Dealer
- Date of purchase
- Description of the failure or error (as detailed as possible)

■ Customer service

Rigorous inspections are conducted before our products are delivered. If you encounter any issues, please contact the dealer or our customer service department.

Key Way Medical Inc.

Address: 377 S. Lemon Ave., Suite #C, Walnut, CA 91789

Email: info@keywaymedical.com

Phone: 909-480-0307

Website: <https://keywaymedical.com>



KEYWAY MEDICAL INC.