# Hälsa Plus Bed

# **Owner's Manual**





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This manual includes installation instructions as well as important safety and maintenance information for your Hälsa Plus Bed.

All information, pictures, illustrations and specifications are based upon the product information available at the time this manual was created.

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# **Technical and Customer Support**

In the event of any issues, contact your dealer or call Permobil Canada at 800-265-9830. Be prepared to provide the bed serial number. Spare parts and accessories may be ordered through your dealer.

### Permobil Canada

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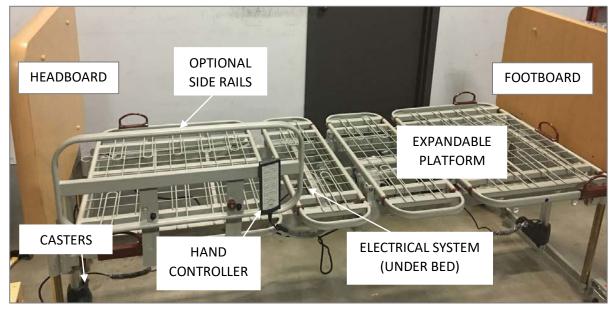
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# Introduction

# **Design and Functions**

The Hälsa Plus Bed is an electric adjustable bed with Trendelenburg & reverse Trendelenburg capabilities.



The Hälsa Plus Bed includes

- platform
- headboard and footboard
- electrical systems
- hand controller
- 4 casters
- optional partial side rails (available at an additional cost)

The platform disassembles into 4 parts for easy assembly, transport and storage.

# **Specifications**

Weight capacity: The maximum weight capacity for the Hälsa Plus Bed is 226 kg (500 lbs)

Weight: The Hälsa Plus Bed weighs approximately 99 kg (265 lb) but can vary depending on the options and accessories included

**Overall dimensions:** 223 cm ±10 mm L x 96 cm ±10 mm W (88" ± 0.5" L x 38" ± 0.5" W)

Platform dimensions: 201 cm  $\pm$ 10 mm L x 91 cm W with expansion to 99 cm, 106 cm and 121 cm W,  $\pm$ 10 mm (79"  $\pm$  0.5" L x 36" W, with expansion to 39", 42" and 48" W  $\pm$  0.5")

**Minimum height:** 24.5 cm ±10 mm (10" ± 0.5")]

**Maximum height:** 64 cm  $\pm 10$  mm (25"  $\pm 0.5$ ")

Electrical: 120V, 60 Hz

Additional electrical specifications are indicated on the motor.

# Safety Precautions

Read and follow all instructions and warnings in this manual before assembling and using your electric bed. Incorrect assembly or use may injure the user or damage the bed.

Permobil is not responsible for personal injuries or property damage resulting from any person's failure to follow the warnings and instructions in this manual. Permobil is not responsible for injuries or damage resulting from failure to exercise good judgment.

The Hälsa Plus Bed is not for pediatric use.

The final selection and purchasing decision about the type of electric bed to be used is the responsibility of the user and his or her healthcare professional. Permobil is not responsible for inappropriate selections of models or features or improper mountings on the bed.

The maximum weight capacity for this bed is in the specifications section listed above. Operation of the bed by users who exceed the maximum allowable weight can lead to personal injury and property damage, including damage to the bed, as well as voiding any warranty applicable to the bed.

The Hälsa Plus Bed should not be used in the presence of flammable anesthetic gas mixed with air, oxygen, or nitrogen oxide.

# Assembly

# Overview

The Hälsa Plus Bed is designed for easy assembly, disassembly, and transport.

Assembly can be accomplished by one person.

The general steps are as follows:

- 1 Unpack the bed
- 2 Assemble the platform
- 3 Connect the electrical systems
- 4 Install optional side rails, if using
- 5 Install the headboard and footboard
- 6 Finish the assembly

Instructions for each of these steps is included in this manual.

**Tools required:** cable tie snippers, flat head screwdriver, ratchet set (for optional half side rails only), Phillips head screwdriver

# Inspection before unpacking

Your bed will arrive in 2-3 separate boxes, depending on whether or not you ordered side rails:

- Platform, including motors and electrical components
- Headboard and footboard
- Optional side rails

## Damage during transport

Check your shipment to ensure that the Hälsa Plus Bed or accessories have not suffered transport damage. It is the responsibility of the receiver to check the shipment. If damaged, there is a risk that the bed and its accessories can no longer be used safely and securely. Contact your dealer or Permobil for further information.

If there is any damage, it must be indicated on the bill of lading. Permobil must be informed of the situation within 24 hours of receipt of goods so that the carrier can be notified as soon as possible. If Permobil 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.

### Incorrect shipment

If a Permobil product does not match the original order invoice, the problem must be communicated to Permobil within 48 hours of the time of delivery. Then, actions necessary to correct the situation will be at Permobil's expense and will be made as soon as possible, following the notification of the incorrect shipment.

# 1 – Unpack the bed

The platform is shipped in 4 pieces in the same box:

- Head support
- Foot support
- Head platform with motors and electrical systems attached
- Foot platform with motors and electrical systems attached

The head support and platform are longer than the foot support and platform, so you can easily tell them apart. All pieces are secured to a bracket on the packing skid.

#### STEPS

- 1 Identify the box that contains the bed.
- 2 Remove the outer box by slowly lifting it up. A wooden protective insert could fall out if the cardboard box is not removed carefully.

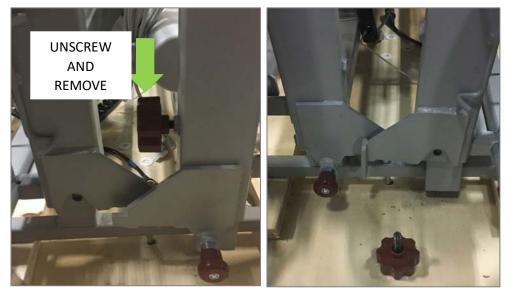
Note that the bed is attached to a bracket on the packing skid.



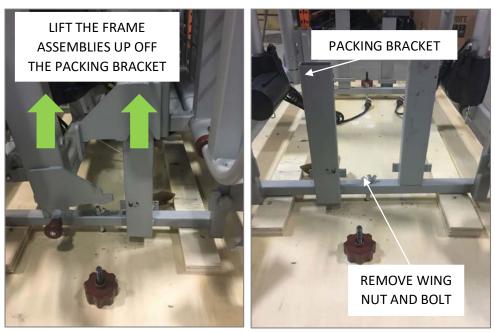
3 - Remove the bag containing 4 replacement end caps and put it aside. These parts are not needed for assembly. Store the replacement end caps for possible future use.



4 - From the side of the packing skid, unscrew and remove the red-handled knobs on each side of the head and foot platform assemblies to unfasten the bed from the packing bracket. There are 2 knobs total (1 on each side).



- 5 Lift the head and foot platform assemblies off the packing support and move it aside.
- 6 Remove the wing nut and bolt securing the packing bracket to the skid.



7 - The head and foot supports are still attached to the packing bracket. Shift the head support higher and the foot support lower so there is clearance off the skid. Undo the locking pins on each side of the foot platform to release the foot platform from the packing bracket.



8 - Repeat to release the head support from the bracket.

### Packing Materials

After removing the 4 bed pieces, you will have a skid, 2 locking knobs and 2 bolts with wing nuts that are not needed to assemble the bed. These items are for packing and transport. It is recommended to store these packing materials so that you can securely store and transport the bed if necessary.



# 2 – Assemble the platform

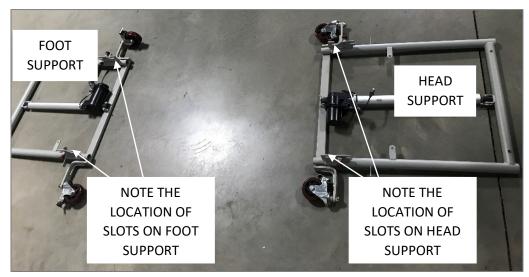
The Hälsa Plus Bed platform is provided in 4 pieces. You will lie the head and foot supports on the floor and then attach the head platform assembly to the head support and the foot platform assembly to the foot support. Casters come installed on the frame.

#### STEPS

1 - Lock casters as necessary.



2 - Lie the head and foot supports down about 91 cm (3') apart.



3 - Place the head platform assembly above the head support, lining up the lock pins on the head platform assembly with the slots on the head support.



4 - Hook and join the head frame assembly to the head support by sliding the lock pins on the head frame assembly into the slots on the head support. Ensure that each lock pin is in position at the end of the slot as shown below. Rotate the red locking knob to secure the lock pin in place. Repeat on the other side of the head frame. Ensure that the lock pins are secured in place on each side.



5 - Repeat steps 3 and 4 to secure the foot platform assembly to the foot support.

6 - Place a foot on the head support to hold it steady and then pull down on the head frame assembly to lay it down on the ground.



7 - Repeat with the foot end so that the head platform assembly and foot platform assembly are on the ground in a bed shape.



8 - Lift the head and foot platforms so that you can align the locking inserts on the foot platform to the locking slots on the head platform.



- 9 Ensure that each locking insert is fully in the corresponding locking slot.
- 10 Rotate the red knobs clockwise to lock the platforms together.
- 11 Ensure that the platforms are securely locked together.



# Remove cable ties

To access the electrical connections and motors, you must remove all cable ties on the platforms.

#### Tool required: cable tie snipper



# 3 – Connect the electrical systems

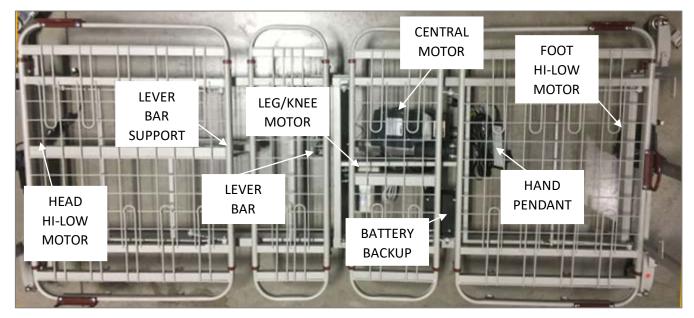
To connect the electrical systems, 4 cables must be connected to the central motor. All connections (except the battery backup) are color-coded.

Overview

- 1 Connect the foot hi-low motor green
- 2 Connect the head hi-low motor blue
- 3 Plug in the power cord
- 4 Connect the battery backup
- 5 Connect the lever support and lever bar
- 6 Connect the leg/knee motor grey cable with red color coding
- 7 Test electrical systems

**NOTE:** The back motor cable (yellow) and the hand pendant (white) are already connected.

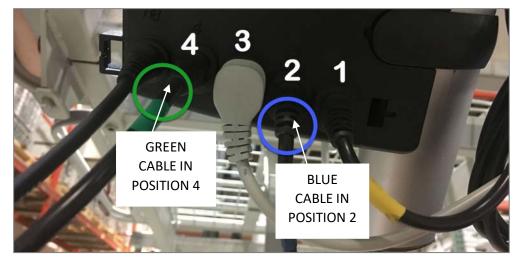




## 3.1 - Connect the head and foot motors

#### STEPS

- 1 Remove the packaging from the head and foot motors.
- 2 Connect the green color-coded cable (foot) to position 4 on the central motor.
- 3 Connect the blue color-coded cable (head) to position 2 on the central motor.



## 3.2 - Connect the power cord

#### STEPS

- 1 Remove the twist tie around the power cord.
- 2 Remove the power plug cap.
- 3 Plug the power cord in to a 120V outlet in the room.
- 4 Use the hand pendant to raise the bed up to make it easier to reach the central motor. (4th button down the top left side of the hand pendant).



## 3.3 - Connect the lever bar and lever bar support

Underneath the foot end of the platform, there is a lever bar and lever bar support that are used to raise the back of the bed. These levers need to be connected to the head connecting tube on the motor.

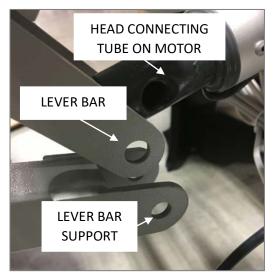


#### STEPS

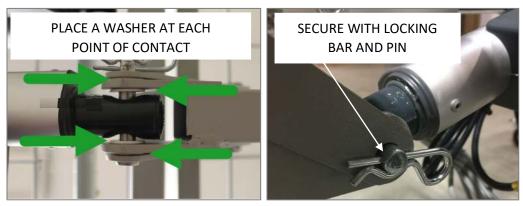
1 - Remove the pin, 4 washers, and locking bar from the lever bar.



2 - Line up the holes on the lever bar support, lever bar, and the head connecting tube on the motor.



- 3 Place a washer between the lever bar support, lever bar, and the head connecting tube on each side, and then use the locking bar and pin to secure the 3 pieces together.
- 4 Ensure that they are secure.



# 3.4 - Connect the battery backup

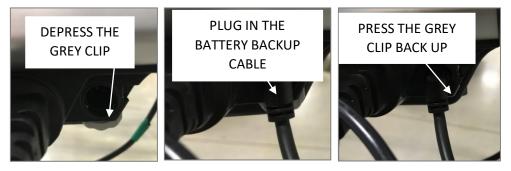
The main power to the bed and the battery backup must be plugged in for 48 consecutive hours to charge the battery.

STEPS

- 1 Run the wire from the battery backup through the hook as shown.
- 2 Locate where the battery backup plug connects to the central motor, on the side, apart from where the other cables connect.



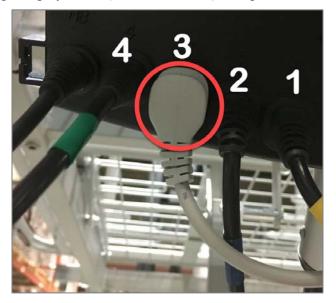
- 3 Depress the grey clip.
- 4 Plug in the battery backup cable.
- 5 Press the grey clip up to secure the cable.



# 3.5 - Connect the leg/knee motor

#### STEPS

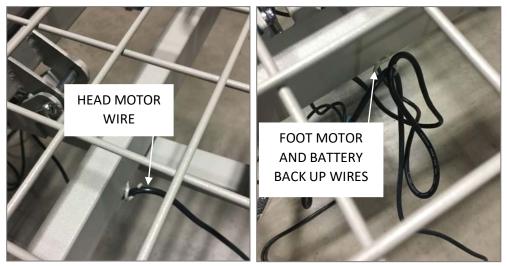
1 - Plug the grey cable (color-coded red) into position 3 on the central motor.



3.6 - Run wires through hooks under bed

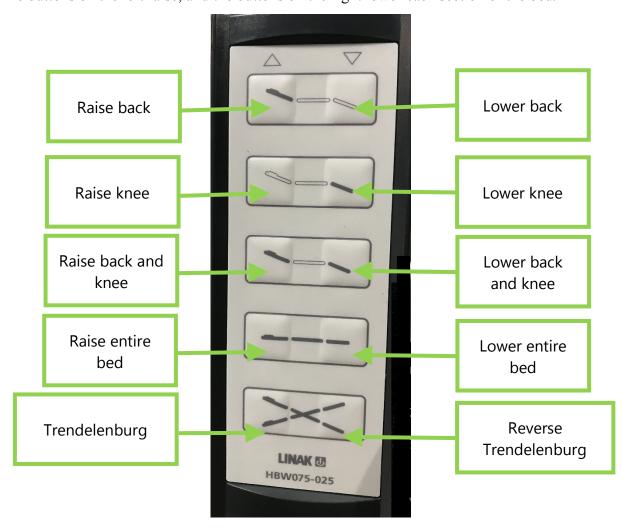
#### STEPS

- 1 Run the head motor wire through the hook at the head end of the bed, under the platform.
- 2 Run the foot motor and battery back up wires through the hook at the foot end of the bed, under the platform.



### 3.7 - Test the connections

Use the hand pendant to test all bed positions to be sure that all motors are connected properly. The buttons on the left raise, and the buttons on the right lower each section of the bed.



When finished, hang the hand pendant on the bed using the hook on the back of the hand pendant.

# 4 – Install optional half side rails

If you are using half side rails with your Hälsa Plus Bed, they should be installed after the electronic components have been connected. Side rails are shipped in a separate box.

#### Tool required: ratchet set

#### STEPS

1 - Open the half side rail box and remove the side rails.



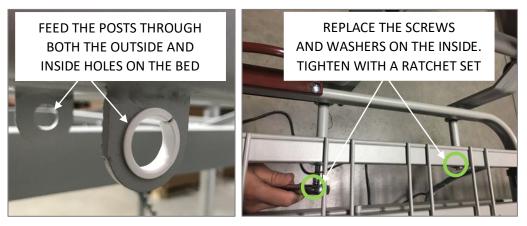
2 - Remove the packaging from the side rails. You will find two half rails with all necessary hardware. Each rail is color-coded to match the frame.



3 - Position one of the side rails next to the bed with the corresponding color dot. Locate the holes in the frame where the side rails will be attached.



- 4 Remove the screws and washers from the side rail. Feed the posts on the side rail through both the outside and inside holes on the bed frame.
- 5 Replace the screws and washers from the inside. Tighten with a ratchet set.



6 - Pull the red knob to test and ensure that the half side rail collapses away from the head end.



7 - Repeat for the half side rail on the other side of the bed, and for additional half side rails on the same side of the bed, if applicable.

# 5 – Install the headboard and footboard

The headboard and footboard are shipped in a separate box.

#### Tool required: Phillips head screwdriver

#### STEPS

1 - Open the head & footboard box and remove the contents.

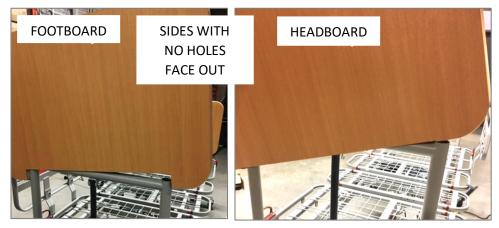


- 2 Look inside the headboard wrapping to find a bag of cap assemblies and bumpers. Place the bag aside for now.
- 3 Remove the packaging. Note that the footboard has a cutout at the bottom, whereas the headboard does not.

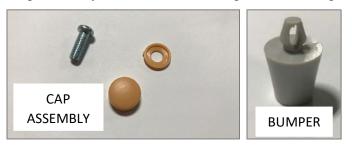


4 - Use the hand pendant to reposition the bed frame out of the way.

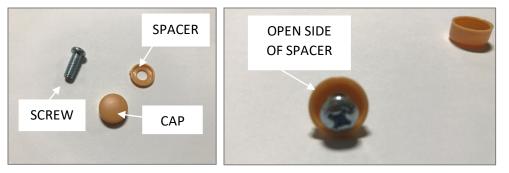
- 5 Slide the footboard over the footboard support so the side with pre-drilled holes faces in/away from the installer.
- 6 Slide the headboard over the headboard support so the side with pre-drilled holes faces in/away from the installer.



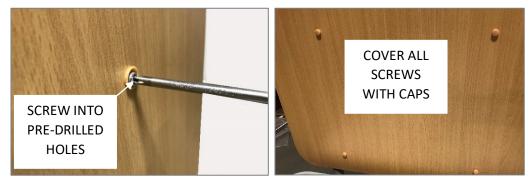
7 - Open the bag of screws. The bag contains 8 cap assemblies and 4 bumpers. Each cap assembly includes a screw, a spacer, and a cap.



8 - Seat each screw into a spacer so the open side of the spacer is on the screw head side.



- 9 Use a Phillips head screwdriver and the cap assemblies to secure the head and footboards to the head and footboard supports through the pre-drilled holes. There are 4 on the footboard and 4 on the headboard.
- 10 Snap a cap into place over each screw.



# 6 – Finish the assembly

The final steps in the assembly include placing bumpers by the casters, and tidying the wires.

### 6.1 - Install bumpers

Take the 4 bumpers that were in the bag inside the headboard and insert them into the holes on the bottom of the bed frame near the casters.



### 6.2 - Tidy wires

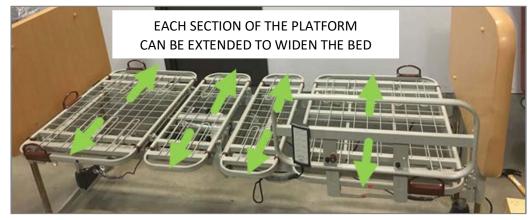
After everything is installed and you have tested the functions of the bed, tidy all the wires so they are out of the way, not on the floor, and the bed can be moved without entangling the wires. Suggestion: use zip ties to tidy wires. You can purchase zip ties at a hardware store.

### 6.3 - Prepare to install the mattress

The mattress is sold separately from the Hälsa Plus Bed. Place the Hälsa Plus Bed in a flat position when installing the mattress. Be sure that any mattress used meets all applicable safety standards.

# 6.4 - Expand the width of the platform

The Hälsa Plus Bed platform can be expanded from 91 cm (36") to 106 cm or 121 cm W (42" or 48" W) if necessary.



#### STEPS

- 1 Adjust the bed so that it is flat.
- 2 Press and hold the extension lock button on one of the bed platform sections.
- 3 While pressing the button, pull the extension out until it locks in one of the 3 possible positions: 99 cm, 106 cm, or 121 cm (39", 42" or 48").





4 - Repeat for each section of the bed on both sides until the platform is the desired width.

# Usage

The Hälsa Plus Bed is an electric adjustable bed with Trendelenburg & reverse Trendelenburg capabilities.

# Inspect the bed before use

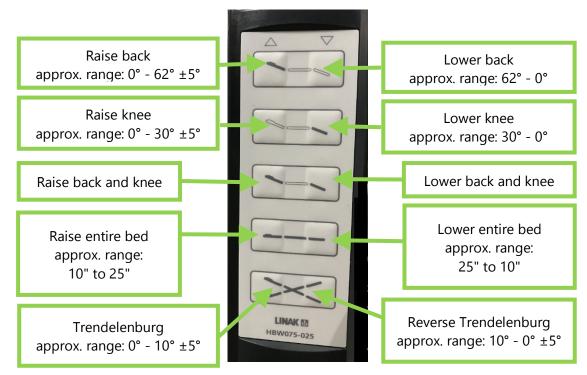
- ✓ Visually check the bed and its accessories. Ensure that no wires are exposed.
- ✓ Make sure the power cable cannot get damaged to avoid injuries and/or equipment failure.
- ✓ Check the headboard and footboard to be sure that they are secure and that all screws have caps securely in place.
- ✓ Verify the functioning of all side rails.
- ✓ Apply the brakes on the casters and ensure that they function properly.
- ✓ Use the hand pendant to check all positions of the bed (see next section).
- ✓ After the bed has been plugged in for at least 48 continuous hours, unplug the power cord and test the battery backup by using the hand pendant.



# Move the bed into different positions

Before moving the bed into a different position, ensure that nothing will interfere with the movement of the bed.

Use the hand pendant to move the bed into different positions. The buttons on the left raise, and the buttons on the right lower each section of the bed. The darkened area shows which part of the bed will move.



# Safe operation

### Moving the bed

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.

Always apply the brakes after moving the bed, and before a person sits or lies down on the bed. Check the bed to make sure the brakes have been applied.

## Using side rails

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 caretaker's responsibility to use the appropriate restraining means for the user's safety.

Half side rails at the head of the bed should always be up when repositioning the bed or moving the bed.

When the side rails are up, make sure that they are properly locked.

It is the responsibility of the user and his or her healthcare professional to determine whether the half side rails at the foot end of the bed should be left up or down, so that the user can get out of the bed at their convenience.

### User safety

Unless otherwise medically advised by a professional, lower the bed to the lowest horizontal position and leave side rails up and locked when the user is sleeping or left without supervision.

If required for the user's welfare or security, unplug the remote.

### **Electrical safety**

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.

No electrical components should be changed by anyone other than a qualified technician. Before changing an electric component, unplug the power cable and the battery fuse. This must be done by a qualified technician.

# Maintenance

Regular maintenance is essential to maintain the bed's reliability. A defective bed should not be used.

Make sure to support the frame of the bed if you need to work under the platform. This will prevent the bed's structure from falling accidentally.

If a moving part needs to be re-lubricated, use any piston lube.

### Cleaning

Always unplug the bed before cleaning. To clean the bed, use detergents normally used in hospitals or at home. Products may be applied by spraying or steam washing, but do not use high pressure steam. Never use high pressure water, or ultrasounds, and never submerge the bed parts to clean them. Make sure the cleaned parts are dry before using the bed again.

Do not remove lubricant from the moving parts of the bed.

### **Regular inspection**

- □ Visually check the bed and its accessories. Ensure that no wires are exposed.
- □ Make sure the power cable cannot get damaged to avoid injuries and/or equipment failure.
- □ Check the headboard and footboard to be sure that they are secure and that all screws have caps securely in place.
- $\Box$  Verify the functioning of all side rails.
- $\Box$  Apply the brakes on the casters and ensure that they function properly.
- $\Box$  Use the hand pendant to check all positions of the bed.

After the bed has been plugged in for at least 48 continuous hours, unplug the power cord and test the battery backup by using the hand pendant.

All defects must be repaired immediately by a qualified and authorized technician.

Only use Permobil replacement parts.

## Warranty

The Hälsa Plus Bed is guaranteed against manufacturing defects up to one year after the bed is purchased. Furthermore, the Hälsa Plus Bed has a specific 10-year guarantee on the frame and 2 years on the electric motors, hand control, and electronic components following the date of purchase.

Permobil reserves the right to substitute equal or superior quality materials during repairs and/or replacements. All repaired or replaced parts are guaranteed for whichever is greater: 1 year from the date of service or the life of the warranty.

This warranty does not cover damages caused by negligence or inappropriate use. Permobil 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.

### Returns

Returned goods require a Return Authorization number and are subject to a 25% restocking fee. Furthermore, the customer must pay the transport charges. For more information, please contact customer service at 800-265-9830.