## Hälsa Bed

## **Owner's Manual**



# permobil

Version 2.0 August 2018 © Permobil 2018

This document may not be reproduced, copied or used for purposes

other than its intended use without the prior written consent of Permobil.

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

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

The information in this document is subject to change without notice.

ALL RIGHTS RESERVED

## **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

2215/2221 46e Avenue • Lachine, QC H8T 3C9 Tel: 800-265-9830 • Fax: 877-636-8944 • Email: sales.ca@permobil.com www.permobil.ca

## Table of Contents

Introduction	1
Design and Functions	1
Specifications	2
Safety Precautions	2
Assembly	3
Overview	3
Inspection before unpacking	3
Damage during transport	4
Incorrect shipment	4
1 – Unpack the bed	5
2 – Assemble the frame	8
Remove the platform	
3 – Connect the electrical systems	
3.1 - Access the central motor	14
3.2 - Temporarily remove the cable separator	15
3.3 - Connect the foot hi-low motor	16
3.4 - Connect the head hi-low motor	17
3.5 - Connect the power cord and hand pendant	17
3.6 - Connect the battery backup	
3.7 - Connect the leg/knee motor	19
3.8 - Cut remaining cable ties on bed frame	20
3.9 - Test the connections	21
3.10 - Replace the cable separator	22
4 – Install optional side rails	23
Install full side rails	23

Install half side rails	25
5 – Install the platform	27
6 – Install the headboard and footboard	
7 – Finish the assembly	
Install bumpers	
Tidy wires	
Prepare to install the mattress	31

## Usage

ว	า
5	۷

Inspect the bed before use	32
Move the bed into different positions	33
Safe operation	33
Moving the bed	33
Using side rails	34
User safety	34
Electrical safety	34
Maintenance	35
Cleaning	35
Regular inspection	35
Warranty	35
Returns	36

## Introduction

## **Design and Functions**

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

The Hälsa Bed includes

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

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



## Specifications

Weight capacity: The maximum weight capacity for the Hälsa Bed is 170 kg (375 lbs)

Weight: The Hälsa 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 90 cm  $\pm$ 10 mm W (79"  $\pm$  0.5" L x 36"  $\pm$  0.5" W)

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

## Assembly

## Overview

The Hälsa 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 frame
- 3 Connect the electrical systems
- 4 Install optional side rails, if using
- 5 Install the platform
- 6 Install the headboard and footboard
- 7 Finish the assembly

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

**Tools required:** cable tie snippers, flat head screwdriver, Allen key (for optional full side rails only), 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:

- Frame and platform, including motors and electrical components
- Headboard and footboard
- Optional side or full rails

## Damage during transport

Check your shipment to ensure that the Hälsa 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 frame and platform are shipped in 4 pieces in the same box:

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

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



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



6 - 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 frame to release the foot frame from the packing bracket.



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

### **Packing Materials**

After removing the 4 bed pieces, you will have a skid, 4 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 frame

The Hälsa Bed frame is provided in 4 pieces. You will lie the head and foot supports on the floor and then attach the head frame assembly to the head support and the foot frame 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 frame assembly above the head support, lining up the lock pins on the head frame 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 frame 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 frame assembly and foot frame assembly are on the ground in a bed shape.



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



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



## Remove the platform

To access the electrical connections and motors, you must first temporarily move the platform out of the way.

#### Tool required: cable tie snipper

#### STEPS

1 - Remove all cable ties from the 4 platform segments. Note that one of the platform segments is cable tied underneath the frame.



2 - Lift the 4 platform segments off the frame, and put them aside.



## 3 – Connect the electrical systems

To connect the electrical systems, 5 cables must be connected to the central motor. All connections (except the battery backup) are color-coded.

#### Overview

- 1 Access the central motor
- 2 Remove the cable separator
- 3 Connect the foot hi-low motor blue
- 4 Connect the head hi-low motor green
- 5 Plug in the power cord
- 6 Connect the hand pendant white
- 7 Connect the battery backup
- 8 Connect the leg/knee motor red
- 9 Cut remaining ties on frame
- 10 Test electrical systems
- 11 Replace cable separator

Back HILD Leg HILD HE

**NOTE:** The back motor cable (yellow) is already connected.



## 3.1 - Access the central motor

Cut the cable tie holding the hand pendant and power cord to the central motor.



## 3.2 - Temporarily remove the cable separator

To make the electrical connections, you must temporarily remove the cable separator from the bed's central motor. The cable separator is snapped in on each end of the underside of the motor.

#### Overview



## **Tool required:** flat head screwdriver STEPS

- 1 Locate where the cable separator is connected on one side of the motor.
- 2 While pushing in with a flat head screwdriver, push down until you can swing the cable separator out.



3 - Repeat on the other side of the motor so you can remove the cable separator completely.

## 3.3 - Connect the foot hi-low motor

#### STEPS

- 1 Remove the packaging from the foot hi-low motor.
- 2 Run the green color-coded cable under the frame and through the first hook.
- 3 Extend the coiled cord as needed to reach the central motor.



- 4 Run the cable ABOVE the back motor and then through the second hook.
- 5 Plug the green plug into the green location on the central motor, making sure that the arrow is on top.



## 3.4 - Connect the head hi-low motor

#### STEPS

- 1 Remove the packaging from the head hi-low motor.
- 2 Plug the blue plug into the blue location on the central motor, making sure that the arrow is on top.



## 3.5 - Connect the power cord and hand pendant

#### STEPS

- 1 Remove the twist tie around the power cord and hand pendant.
- 2 Remove the power plug cap.
- 3 Plug the power cord in to a 120V outlet in the room.
- 4 Remove the fasteners from the hand pendant. Plug the hand pendant into the white location on the central motor, making sure that the arrow is on top.
- 5 Use the hand pendant to incline the back of the bed up to make it easier to reach the central motor. (1st button at the top left side of the hand pendant).



## 3.6 - 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.



3 - Depress the grey clip.



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



## 3.7 - Connect the leg/knee motor

#### STEPS

- 1 Remove packaging on all motors.
- 2 Plug the red plug into the red location on the central motor, making sure that the arrow is on top.



## 3.8 - Cut remaining cable ties on bed frame

Cut the remaining 5 cable ties on the bed frame, making sure that the tool does not scratch the bed or paint during cutting.



## 3.9 - 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 frame using the hook on the back of the hand pendant.

## 3.10 - Replace the cable separator

#### STEPS

- 1 Ensure that the correct color-coded wires are connected to the central motor with the arrow on each cable facing up.
- 2 Feed the cables through the wire separator.



3 - Click the cable separator into place on both sides.



4 - Use the hand pendant to lower the back and knee portions of the bed so that the bed is flat.



## 4 – Install optional side rails

If you are using full or partial side rails with your Hälsa Bed, they should be installed after the electronic components have been connected, before the platform is installed. Side rails are shipped in a separate box.

### Install full side rails

#### Tool required: Allen key

#### STEPS

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



2 - Remove the packaging from the side rails. You will find two full rails and a bag containing 4 screws and spacers.



- 3 Position one of the side rails next to the bed so that it will swing away from the head end. Turn the red adjustment knob to loosen the rail to allow enough play to align the rail with the bed.
- 4 Put one of the provided screws through the hole in the side rail. Place a spacer on the screw between the rail and the bed.



- 5 Finger-tighten the first screw to attach the rail to the bed, then install the second screw on the same side of the bed. For example, if you did the foot end first, do the head end next.
- 6 Use an Allen Key to tighten the screws on both ends of the side rail.
- 7 Repeat the above steps to install the side rail on the other side.
- 8 Ensure that both side rails are securely fastened and that they collapse away from the head end of the bed.



### Install half side rails

#### 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 platform

After the electrical systems have been connected and you have installed any optional side rails, you can install the platform.

STEPS

- 1 Retrieve the platform segments that you put aside earlier. Remove all remaining packaging.
- 2 Snap each of the 4 pieces into position on the bed frame. Note that the top sides of the platform pieces are flat: any protrusions must go the underside. Simply apply hand pressure to snap the pieces into place on the frame.



3 - Ensure that all platform pieces are securely in place.



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



6 - 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.



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



- 8 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.
- 9 Snap a cap into place over each screw.



## 7 – Finish the assembly

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

### 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.



## 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.

### Prepare to install the mattress

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

## Usage

The Hälsa Bed is an electric adjustable bed with Trendelenburg & reverse Trendelenburg capabilities. *(shown here for reference with a 5 Minds Mobility mattress – not included in Hälsa Bed purchase)* 



## Inspect the bed before use

- $\checkmark$  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.
- $\checkmark$  Verify the functioning of all side rails.
- $\checkmark$  Apply the brakes on the casters and ensure that they function properly.
- $\checkmark$  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

CAUTION

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.
- $\Box$  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 Bed is guaranteed against manufacturing defects up to one year after the bed is purchased. Furthermore, the Hälsa 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.