

User's manual

AMPLIPLUS BED



CE

Distributør i Norge:
Gymo AS - www.gymo.no
(+47) 4000 3522 - post@gymo.no

Table of contents

Preface

1. General notes

1.1. General information	<i>page 3</i>
1.2. Safety instructions	
1.2.1. Safety instructions for operators	<i>page 3</i>
1.2.2. Safety instructions for users	<i>page 3</i>
1.3. Product description	<i>page 4</i>
1.4. Technical information	
1.4.1. Slats bedframe	<i>page 5</i>
1.4.2. Side rails	<i>page 5</i>
1.4.3. Electrical adjustment system	<i>page 5</i>
1.4.4. Description of materials used	<i>page 5</i>
1.4.5. Noise level	<i>page 5</i>
1.4.6. Storage	<i>page 6</i>
1.4.7. Maximum load capacity and adjustment possibilities	<i>page 6</i>
1.4.8. Masses	<i>page 6</i>
1.4.9. Dimensions	<i>page 6</i>
1.4.10. Standards	<i>page 6</i>

2. Assembly and use

2.1. General informations	<i>page 7</i>
2.2. Mounting the bed	<i>page 7</i>

Step 1	Removing side rails and lifting pole	page 7
Step 2	Connecting the bed	page 7
Step 3	Mounting the bed ends	page 7
Step 4	Side rails	page 8
Step 5	Lifting pole	page 10
Step 6	Wooden side rails	page 11
Step 7	Connecting actuators	page 12
Step 8	Remote control	page 12
Step 9	Mattress holder	page 13
Step 10	Emergency lowering of the backrest	page 13
Step 11	Moving the bed around	page 14
Step 12	Central locking	page 14

2.3. Bed delivered on the transport tray: Assembly steps	<i>page 15</i>
2.4. Use of the Transkit	<i>page 25</i>
2.5. Use of the handtrolley	<i>page 26</i>
2.6. Wall protector	<i>page 27</i>

3. Cleaning and disinfecting

3.1. Maintenance	<i>page 28</i>
3.1.1. General information	<i>page 28</i>
3.1.2. Identification	<i>page 28</i>
3.2. Cleaning and disinfectants	
3.2.1. General information	<i>page 29</i>
3.2.2. Cleaning and desinfection	<i>page 29</i>
3.3. Troubleshooting	<i>page 30</i>
3.4. Test protocol for user	<i>page 31</i>
3.5. Exploded view	<i>page 31-34</i>
3.6. Shelf life and disposal	<i>page 35</i>



Preface

Dear Customer,

Thank you for the confidence you have shown in purchasing an HERDEGEN Home Care Bed. This „AMPLI + ®“ Bed is factory checked for electrical safety and functions and has left our factory in a perfect condition. Please read carefully this instruction manual. This applies especially to the assembly and disassembly phases but also to daily use. Keep this manual in a safe place for future reference. It informs the user and operator about the convenient handling of the bed and safe operation.

1. General notes

Operator : retailer, medical store, pharmacy, generally the company delivering and installing the Home Care bed.

User : qualified staff able to assembly-disassembly the Home Care bed and/or qualified staff able to use it in a correct way.

1.1 General information

*Please read these instructions carefully to avoid damage or incorrect use.

*Clean and disinfect the bed before the first use. The user shall ensure that the bed is in proper working order and in a perfect condition, he shall also have read the user's manual, before using the bed.

*The Home Care bed AMPLI + ® complies with all requirements of the guidelines 93/42/EWG for medical products. It is classified as a dynamic medical product of the class I.

*The Home Care bed AMPLI + ® has been checked by an independent test institute. Be aware that an improper use of this device can lead to damage and/or injury.

*This instruction and operating manual contains safety instructions which must be followed. All persons who work with the Home Care bed AMPLI + ® must have read those instructions and respect them.

*The use of original Herdegen parts and accessories guarantees the safety and compliance of the product.

*It is strictly forbidden to modify the bed and its accessories.

1.2 Safety instructions

*The nursing bed AMPLI + ® represents the latest technological development at the time of delivery and has been checked by an independent testing institute.

*In case of doubt, if the bed appears to be damaged or if you suspect a malfunction, immediately unplug it from wall outlet and mark it as „DEFECTIVE“.

1.2.1 Safety instructions for operators

Please refer to the „Maintenance Book“ delivered with the bed for specific maintenance programm

*Remember your responsibilities in accordance with the Medical Devices Operator Ordinance -MP Betrieb V in order to ensure the safe operation of this bed without endangering patients, users and third parties.

*Before using the bed, you must inform every user in the safe operation of the Home Care bed according to the safety instructions, which must be given to the user too.

*The user shall be informed of the location of this instruction manual according to Medical Devices Operator Ordinance -MPBetriebV 9.

*Make user aware of the dangers of improper use of the Home Care Bed, especially regarding the actuators and side rails.

*The Home Care bed should only be operated by properly trained staff.

*Make sure that relatives and potential users are also familiar with the operation of the Home Care bed.

*For long term use we recommend to inspect regularly (every month) the Home Care Bed, to check functions and make a visual inspection of the bed. For more information about checking which have to be done, please see 4.3

*The bed shall be connected directly to the electrical power. Do not use electrical outlets and extension cords.

*Make sure that the use of other medical or electronic devices (antidecubitus air mattress for example) is possible and ensure the safe operation of each device.

*Don't place several electrical outlets under the bed, as leaking liquids can be a fire hazard.

*Make sure that when using external electrical devices such as compressors, lamps..their wires are correctly positioned and don't risk to be crushed, sheared or torn apart when using the moving parts of the Home Care bed.

*In case of troubles or doubt, please ask your retailer or HERDEGEN SAS.

*Make sure that your staff is aware and respect the safety instructions.

1.2.2 Safety instructions for users

*Learn how to use the bed from your specialist.

*This product has a 24-month warranty starting from the date of purchase. The warranty includes all defects and errors caused by the material and workmanship. Defects and errors caused by improper use and external effects are not included in the warranty.

*Ensure before using the Home Care bed that it is in a perfect condition.

*Ensure that there is enough space available to use the moving elements of the bed in a proper way. No furniture, window frames should be in the way.

*Make sure that when using external electrical devices such as compressors, lamps..their wires are correctly positioned and don't risk to be crushed, sheared or torn apart when using the moving parts of the Home Care bed.

*Please make sure before connecting the bed that the electrical installation complies with the standard NF C 15 100; if your installation doesn't comply with this standard, HERDEGEN company would decide to accept or refuse any complains regarding the electrical components of this bed.*In case of troubles or doubt, please ask the operator or HERDEGEN SAS.

*The bed shall be connected directly to the electrical power. Do not use electrical outlets and extension cords.

*Don't place several electrical outlets under the bed, as leaking liquids can be a fire hazard.

*Unplug the power cable from wall outlet, before moving the Home Care bed around.

*Roll the cable on the support when moving the Home Care bed around so that they are not crushed or squeezed.

*Check the power cable regularly for damages (crushed, bare, sheared, porous..) and particularly :

1/after every mechanical strains(for example : rolling over the cables).

2/after having moved the Home Care bed and before plugging in the power cable.

3/every month in a normal use.

*Regularly check the cable strain relief, it must be in perfect condition.

*Don't store anything under the bed.

*Lower the Home Care bed to its lowest position when leaving the patient unattended, thus you reduce the risk of injuries when the patient leaves-enters the bed.

*Hang the remote control on the siderail or on the trapeze pole to avoid it from falling down. Make sure that the wire is correctly positioned to avoid squeezing or crushing the cables. Lock the remote if necessary by removing the key on it.

*In case of doubt, if the bed appears to be damaged or if you suspect a malfunction, immediately unplug it from wall outlet, mark it as „DEFECTIVE“ and contact your supplier.

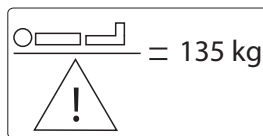
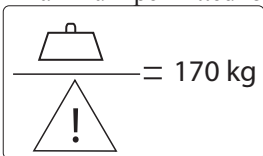
1.3 Product description

*The Home Care bed AMPLI + ® works as a convenient solution for taking care of infirm, disabled people in nursing homes or at home.

*This bed can be used for care under the instructions of a physician and can serve in diagnosing, treatment and observation of a patient. It is therefore equipped with a locking mechanism for the electrical adjustment functions.

*This bed has no special connector for a potential equalization.

*Maximum permitted load on the bed 170 kg (weight of Patient + weight of accessories), maximum user's weight 135kg



*This bed shall not be used for patient under 146 cm and less than 40kg.

*This bed shall only be operated by trained staff.

*This bed can be reused and rented.

*This bed can be moved across the building, even with the patient lying on it.

***This bed must be used in a proper way as detailed in this instruction manual. Any other uses are strictly prohibited.**

*This bed shall be used only per adults.

1.4 Technical information

The AMPLI + ® Home Care bed is delivered in parts, ready to be mounted. Siderails, Pole and bed ends are fastened on the bed frame.

The bed is made of Epoxy steel and has 2 or 3 motors according to the version.

The bed can be mounted per ONE SINGLE qualified person. It consists in : one slats frame (in 2 parts), one scissor frame, 2 side rails, 1 lifting pole with trapeze, 2 bed ends. The bed has 2 holders for the lifting pole. It is equipped with 4 castors, 2 of them with brakes.

1.4.1 Slats bed frame

The Home Care bed exists in 2 versions :

-with 2 motors (4-sections mattress support) what means an electrical backrest, an electrical Hi-low adjustment, and a manual legrest.

- with 3 motors (4-sections mattress supports) what means electrical backrest, Hi-low and legrest. Note that the legrest can be also adjusted manually to reach the desired position.

4-section mattress support : a movable backrest, a fixed middle section, a movable upper leg support and a movable lower leg support.

The frame is made of welded steel covered with a PE powder coating. All mobile parts, as well as the height of the lying surface can be adjusted by means of 24V remote control. Note that the upper leg support can be adjusted manually to get the desired position.

3-section mattress support : a movable backrest, a fixed middle section, a movable upper leg support and a movable lower leg support.

The frame is made of welded steel covered with a PE powder coating. All mobile parts, as well as the height of the lying surface can be adjusted by means of 24V remote control excepts the legrest, that must be adjusted manually.

1.4.2 Side rails

The bed has 2 side rails which can be raised as a barrier or lowered when not needed. The side rails prevent the patient from accidentally falling out of the bed.

Mark	Designations
1	base & scissor mechanism
2	legrest
3	backrest
4	side rails
5	lifting pole
6	remote control
7	actuator
8	bed ends
9	transport tray



1.4.3 Electrical adjustment system

The electrical adjustment system of this bed is error protected, flame-retardant (V0) and consists of:

*the central control box. For the safety of patient and user, the input voltage of 230V at 50-60Hz is converted to low voltage of 24V by means of a transformer.

*a remote control with a sturdy hook to hang it. The remote control can be locked if necessary.

*one actuator to adjust the backrest.

*one actuator (only on full electrical models) to adjust the legrest.

* one actuator for the hi-low adjustment.

Description	Type Timotion	Protection IP = indice de protection		Tensions	CAUTION: Please follow the terms of use indicated on the labels on the bed.
		Standard	Washable		
Power supply unit Tension: 100-240Vac 50-60Hz					
Actuator Hi-low	TC21	IP54	IP66	70VA – 24Vcc	
Actuator backrest	TA23	IP54	IP66	24 Vcc	
Actuator Legrest	TA31	IP54	IP66	24 Vcc	
Remote control	TA31	IP54	IP66	24 Vcc	
Télécommande	TH2	IP54	IP66	24 Vcc	

1.4.4 Description of materials used

The Home Care bed is mostly made of welded steel covered with a PE powder coating. **All surfaces are biocompatible.**

Apart from the actuators, the bed consists of the following main materials:

1) Steel epoxy paint, zinc or chrome.

2) Plastic parts.

3) Melamine boards, medium (MDF) stained, varnished or coated with microfiber or leather depending on the model.

1.4.5 Noise level during motor adjustment: max. 53dB (A)

1.4.6 Storage

The bed and its components must be stored as described here:	Température		Relative humidity without condensation	
	mini	maxi	mini	mini
Storage	5° C	+ 50° C	20%	70%
Use	10° C	+ 40° C	20%	80%
Air pressure	min. 700hPa max. 1060hPa.			

1.4.7 Maximal load capacity and adjustments

Maximal Safe work load : 170kg

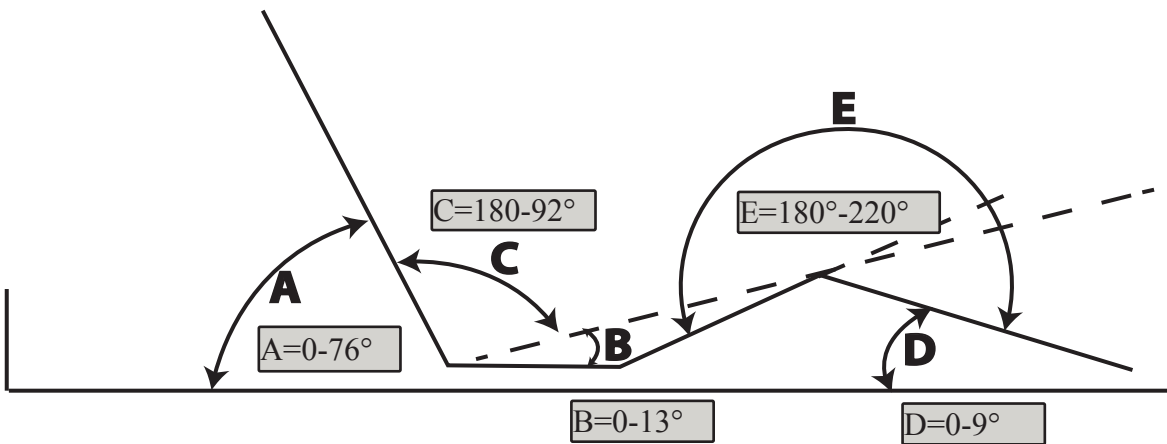
Maximal weight of the patient : 135kg

Maximal load on the lifting pole : 75 kg

Maximum load on the IV pole : 8kg

Backrest adjustment A: from 0° to around 67°

Legrest adjustment : from 0° to around 35°



1.4.8 Masses

- * Bed with 3 actuators and without bed ends : 70kg
- * Bed with 2 actuators and without bed ends : 68.2kg
- * Scissor frame: 31.90kg included base: 12kg and scissor mechanism: 19kg
- * Legrest with actuator and knee break: 19kg without knee break: 18kg
- * Backrest : 19.60kg

1.4.9 Dimensions

- * Bed slats frame : 2000*900mm
- * Complete bed with siderails: 2050*1020mm
- * Minimum Height : 200mm, Max. Height : 820mm.
- * With central locking, Minimum Height : 230mm, Max. Height : 850mm.
- * Height adjusts from 230 to 850mm

1.4.10 Standards

The bed complies with the following standards :

- Medical Products directive 93/42/EWG
 - Medical electrical equipment -Particular requirements for medical beds IEC 60601-2-52:2009
 - Medical electrical device-Part 2-52 : specific
 - Biocompatibility according to EN ISO 10993-1*
 - Risk Management according to ISO 14971
 - Electro Magnetic Compatibility according to EN 60601-1-2*
 - EN 60601-1 Medical electrical equipment. General requirements for basic safety and essential performance. Collateral standard.
- Usability

2. Assembly and disassembly

2.1 General

The AMPLI +[®] Home Care bed is delivered in parts, ready to be mounted. Siderails, Pole and bed ends are fastened on the bed frame. The bed has 2 or 3 motors.

The bed can be mounted per **ONE SINGLE** qualified person. It consists in : one slats frame (in 2 parts), one scissor frame, 2 side rails, 1 lifting pole with trapeze, 2 bed ends. The bed has 2 holders for the lifting pole and 1 for the infusion pole. It is equipped with 4 castors, with brakes.

You don't need any tools to mount the Home Care bed.

2.2 Bed delivered on the transport tray: Assembly steps

Before assembling the bed, look at it carefully to check that it is complete and has no visible damage.

Step 1 : Unpacking

The bed is delivered with its components in a box.

Step 2 : Removing the side rails and lifting pole

Open the box and remove the lifting pole and the two siderails (cut the RILSAN collar)

Roll the bed out of its box

Step 3 : Connecting the bed

Beware: make sure before connecting the bed, that all types of wires and cables (remote control cable, external electrical devices such as compressors, lamps) are correctly positionned and don't risk to be crushed, sheared or torn apart when using the moving parts of the Ampli Plus bed !

1-Unroll the cable and connect the bed to the main power supply

2-Lift the bed in the desired position using the remote control (3)



1



2



3

Step 4 : Mounting the bed ends (The highest board is the head panel.)

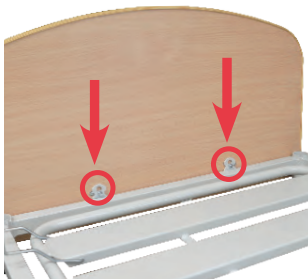
1-Insert the bed ends into the 2 holders located on the frame (in red on the photo) (1).

2-Push the bed ends downwards until they lock in the holders (2).

3-Make sure that the push button is fully engaged through the holder's hole. Check the stability of the bed ends before use (3).

To remove the bed ends, depress the push button and lift up the bed end (4).

Beware: never screw or unscrew the bolts, you wouldn't be able to install/remove the bed ends (5).



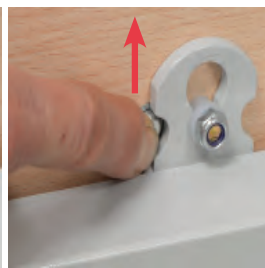
1



2



3



4



5

Step 5 : Mounting the side rails

1-Mounting :

The bed is equipped with 4 side rails holders, 2 on both sides of the bed frame (1).

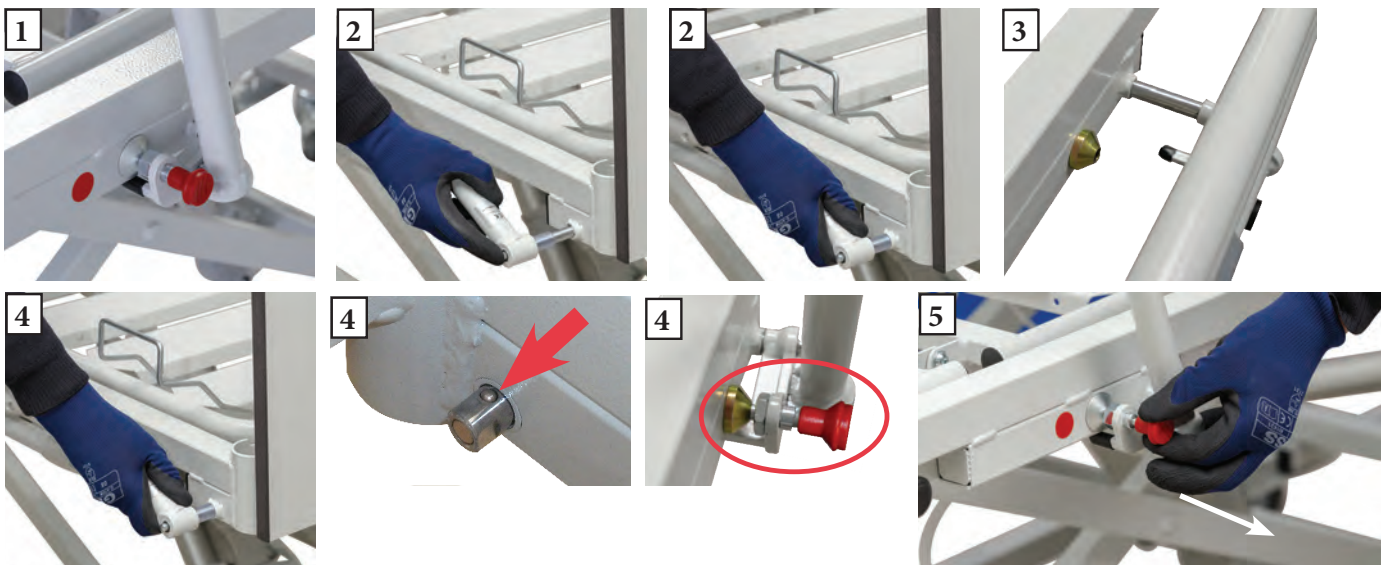
In order to mount easily the side rails, they are equipped with different locking pins: a red locking pin (for the left side rail when sitting in the bed) and a black one for the right side rail. Their locations on the bed are also marked by a colour sticker, see photo (1).

Our side rails are equipped with quick release axels which make them very easy to mount. Beware to place the rounded part (A) of the side rails in the holder located on the legrest side. See photo 3.

Insert halfway the quick release axel into one of the holder by pushing on the pushbutton, see photo (2). Then do the same with the other end of the side rail, see photo (3). When both axels are in position, push them completely into the holders until they are locked in position.

Once mounted, it should be impossible to remove the side rails from their holders.

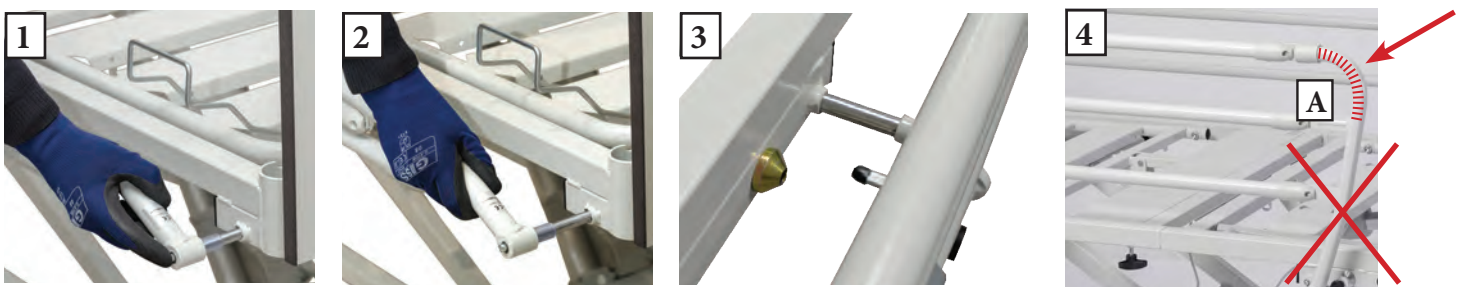
To use the side rails : lift up the side rail until the locking pin reaches its locking position. Check the correct fixation of the side rails before using, see photo (5). To fold the side rails : pull out the locking pin with one hand and fold in legrest direction with the other hand, see photo (5).



2-Dismounting the side rails :

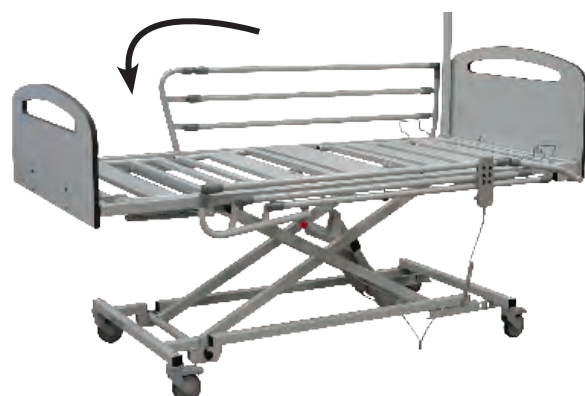
When the side rails are in upper position (in use), push on the pushbutton located on the backrest holder and pull out halfway the quick release axel, proceed in the same way for the other end of the side rail, see photos (1), (2) and (3).

Then, holding the round part (A) with your right hand, left hand locadet on the upper pipe of the side rail, remove completely the quick release axel from its holder, see photo (4). This is to avoid squeezing your left hand fingers.



For safety reasons, the side rails always fold into the leg direction.

Make sure, before using the side rail (folding or unfolding) that there are no risk of crushing or squeezing the patient's limbs. Thus, you will avoid severe injuries.



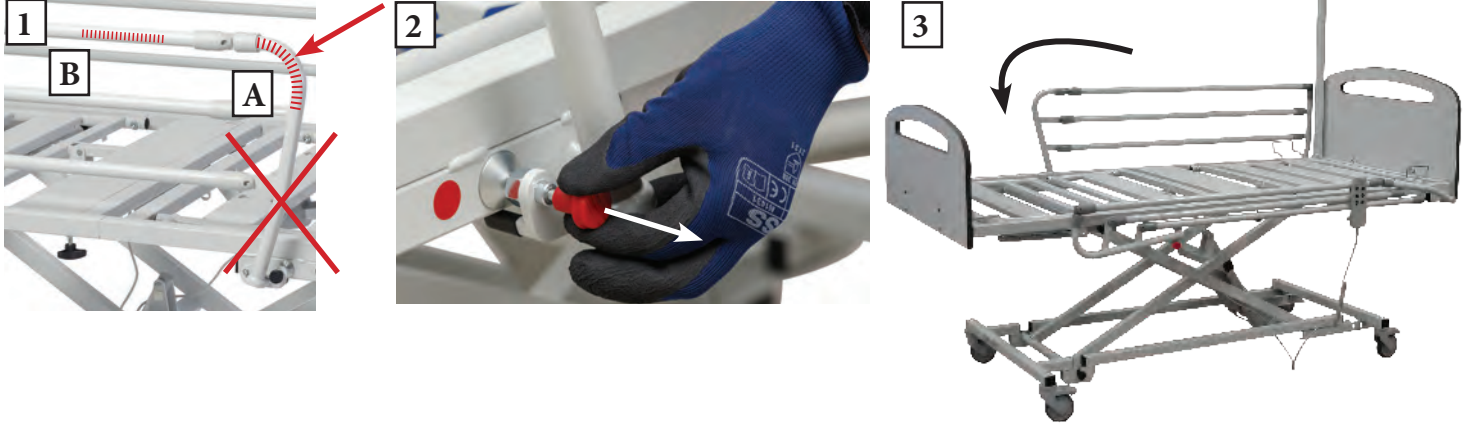
3-Using the side rails :

To unlock the side rail :

1- place your hands as described : right hand on the round part (A) of the side rail, see photo (1) , left hand on the upper tube (B) of the side rail, see photo 1.

Unlock the side rail by pulling out the locking pin, see photo 2.

Fold the side rail, see photo 3



Special safety notes for use of side rails:

- * Use only parts in perfect condition, do not use bent, cracked or damaged side rails.
- * Use only original HERDEGEN parts. Side rails from other suppliers won't fit correctly on the Home Care bed.
- * Before using the side rails evaluate and take in account the physical condition of the patient :
 - If the patient is very nervous, restless or confused don't use the siderails but other means such as safety belts for example.
 - For very small patients, additional protective measures maybe necessary to reduce the distance between the tubes of the siderail.
- * Use mattresses adapted to the Home Care bed with a maximal height of 14 cm. Mattresses should be fire resistant according to DIN 597 Part 1 and 2 .
- * Should specific antidecubitus mattresses be used, make sure that the side rail has an effective height of 22cm. If not, you must find solutions in order to ensure the safety of the patient.
- * Check regularly the various elements of the siderails (holders, pins, tubes..). In case of damages, immediately remove the side rail and use a new one.
- * Check every week the correct fixation of the side rails, screw again the knurled screws if necessary.
- * Make sure, before using the side rail (folding or unfolding) that there are no risk of crushing or squeezing the patient's limbs. Thus, you will avoid severe injuries.



If the upper rules are not followed, there are risks of severe injuries for the patient such as crush , pinch point injuries and fall risks.

Beware: in case of use of incompatible mattresses, there are risks of severe injuries for the patient !

MATTRESS

Please respect the medical prescription or recommendations regarding the size of the mattress.

Check the user manual if necessary.

Width of the bed's frame: 90cm

Suitable mattresses for the Ampli Plus medical bed:

Width: 86cm minimum - 90cm maximum

Length: 196cm

High resiliency foam of 34Kg/m³ minimum



Step 6 : Mounting and using the lifting pole.

The lifting pole enables the patient to get out of the bed easily.

Beware: The maximum load capacity of the pole is 75kg at the front end.

Mounting the pole

In both corners of the backrest are two pole holders (1) with a notch which restricts the swivel range (2).

The pole has a metal pin which restricts the swivel range (3+4).

Insert the pole in the pole holder and check that the metal pin is in the notch of the pole holder.

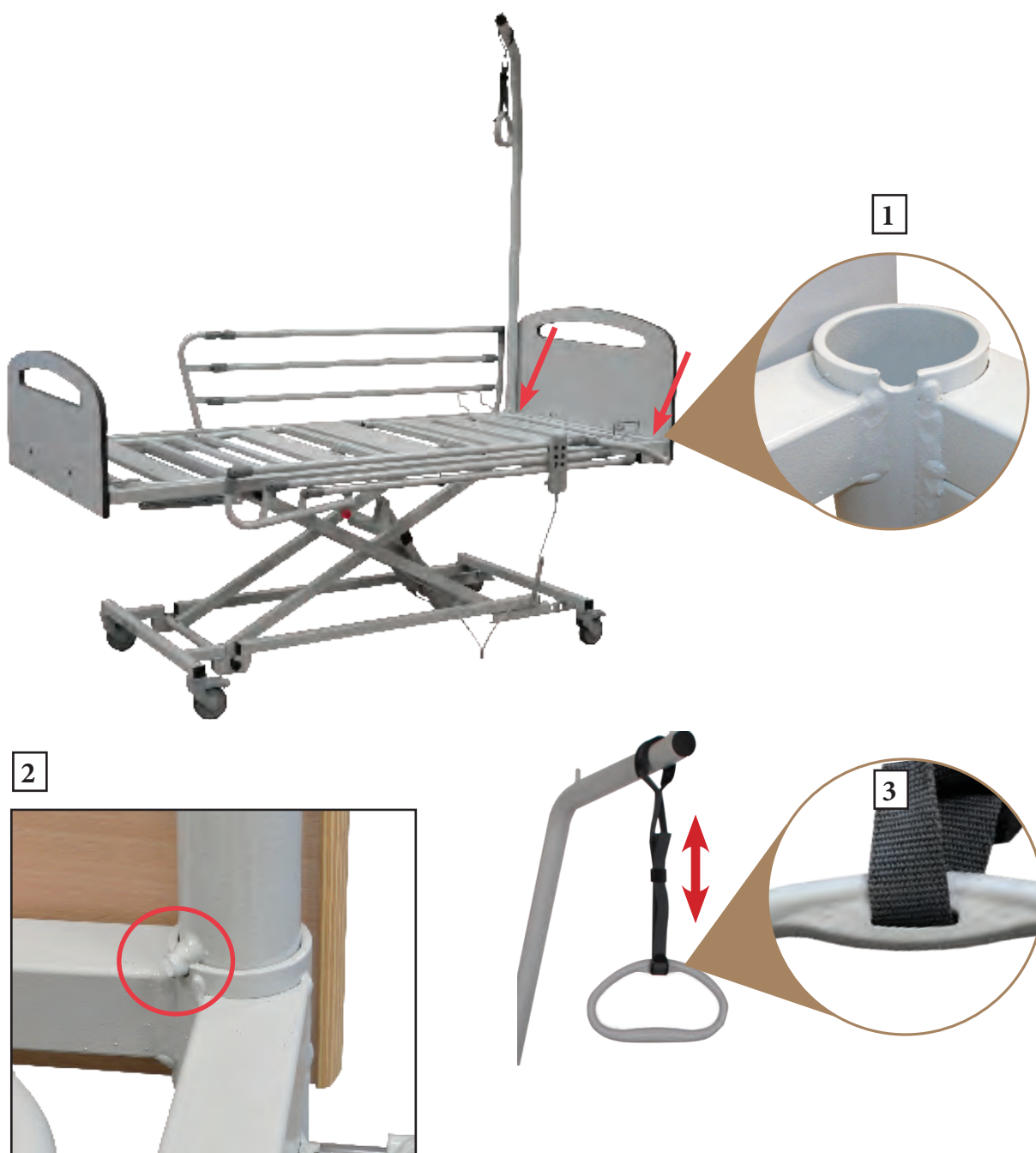
Mounting the trapeze

The trapeze pole should be installed on the side where the patient gets in and out of bed. The pole can be moved on the left or right sides. **Don't swivel the pole outside of the bed.**

The trapeze (5) needs to be attached to the pole for use.

Pull the loop over the top of the pole (5) and adjust the height of the trapeze using the strap (from 55 cm to 70 cm) (6).

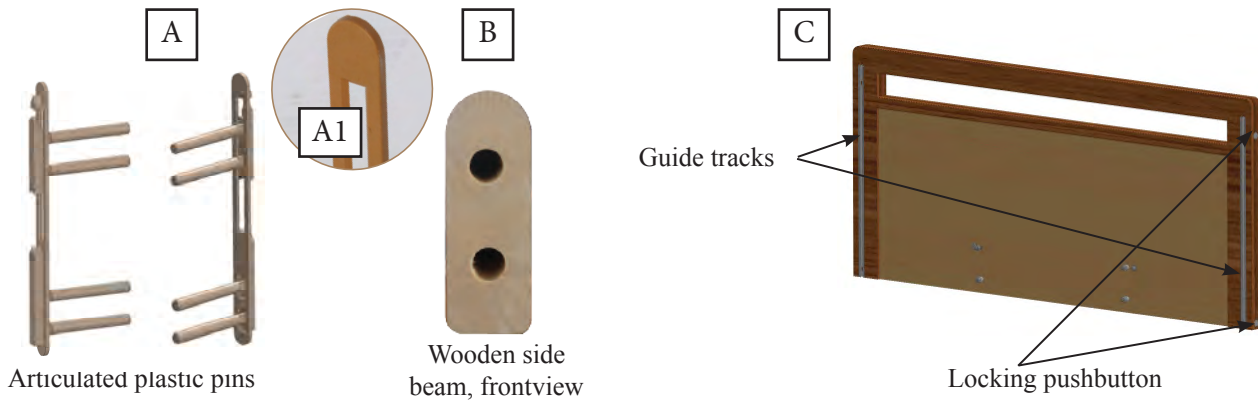
Make sure that the strap is positioned correctly through the buckle and tightly pull the trapeze downward to check it is secured. The trapeze has a date clock (7). With normal use the trapeze will last for five years. After 5 years, replace the trapeze.



Step 7 : Mounting and using wooden side rails

Wooden side rails are delivered with : 2 sets, each of them including 2 articulated plastic pins (drawing A) et 2 preholed wooden beams (photo B). Bed ends are equipped with guide tracks on each sides in which the plastic pins will be pulled up (drawing C). To mount the wooden side rails, please follow below steps :

- 1- Adjust the bed to its highest position
- 2- Insert the plastic pins into the bed end's guide tracks, rounded side must point upwards (photo 1, component A) pushing on the locking pushbutton , see photo (2), in order to enable the part to go through.
- 3- Now plug one side rail beam onto the pair of plastic pins, letting the other end of the side rail beam rest on the floor, see photo 3.
- 4- Insert second part "A" into the other end of the wooden beam.
- 5- Insert the second end into the bed end, as done in 2, see photos 4 and 5.
- 6- Push on the locking pushbutton "D" to adjust the wooden side rails, see photo 6.



Make sure, before using the side rail (folding or unfolding) that there are no risk of crushing or squeezing the patient's limbs. Thus, you will avoid severe injuries.

Special safety instructions for use of side rails : see page 9.



Special safety notes for use of side rails:

- * Use only parts in perfect condition, do not use bent, cracked or damaged side rails.
- * Use only original HERDEGEN SAS parts. Side rails from other suppliers won't fit correctly on the Home Care bed.
- * Before using the side rails evaluate and take in account the physical condition of the patient :
 - If the patient is very nervous, restless or confused don't use the siderails but other means such as safety belts for example.
 - For very small patients, additional protective measures maybe necessary to reduce the distance between the tubes of the siderail.
- * Use mattresses adapted to the Home Care bed with a maximal height of 14 cm. Mattresses should be fire resistant according to DIN 597 Part 1 and 2 .
- * Should specific antidecubitus mattresses be used, make sure that the side rail has an effective height of 22cm. If not, you must find solutions in order to ensure the safety of the patient.
- * Check regularly the various elements of the siderails (holders, pins, tubes..). In case of damages, immediately remove the side rail and use a new one.
- * Check every week the correct fixation of the side rails, screw again the knurled screws if necessary.
- * Make sure, before using the side rail (folding or unfolding) that there are no risk of crushing or squeezing the patient's limbs. Thus, you will avoid severe injuries.



If the upper rules are not followed, there are risks of severe injuries for the patient such as crush , pinch point injuries and fall risks.

Beware: in case of use of incompatible mattresses, there are risks of severe injuries for the patient !

MATTRESS: Please respect the medical prescription or recommendations regarding the size of the mattress. Check the user manual if necessary.

Width of the bed's frame: 90cm

Suitable mattresses for the Ampli Plus medical bed: Width: 86cm minimum - 90cm maximum Length: 196cm

High resiliency foam of 34Kg/m³ minimum

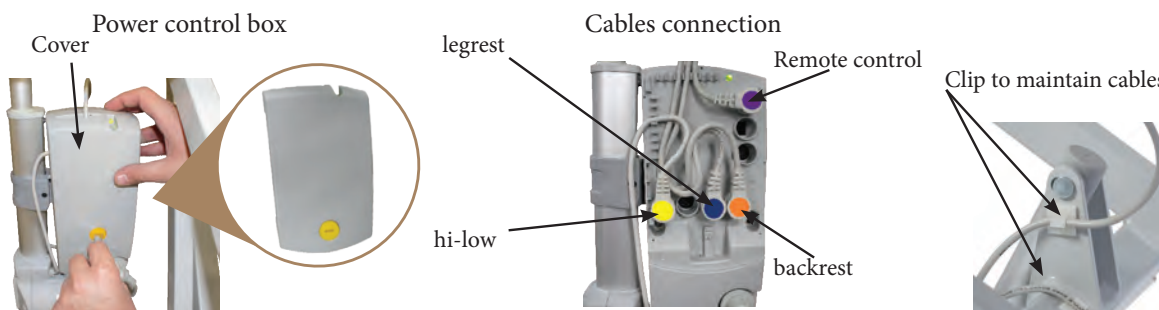
Step 8: Connecting the backrest and the legrest (on 3-motors beds only)

On 3-motors bed, you need to connect the actuator for the legrest, on 2-motors bed, only the backrest actuator. Unroll the electrical cable, connect the actuator to the main power supply and lift the bed to its maximum height.

Remove the cover of the power control box with a screwdriver or a standard key car for example.

Plug the actuators respecting the colours: blue in blue and orange in orange.

Insert the cables in their cable clamps and place back the power box cover.



Step 9 : Remote control

The Home Care bed is delivered with a precabled remote control. The electrical adjustments of the hi-low, backrest and legrest (only for 3 motors version) can be done using the remote control.

- The remote control is equipped with a plastic hook to hang it.
- The spiral cable enables easy movement.
- The remote control is waterproof and washable.
- The remote control is equipped with a safety key to lock it

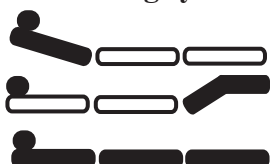
As long as you press the remote control button, the corresponding actuator will work. Adjustments are possible in both directions, up or down.

The functions of the buttons are :

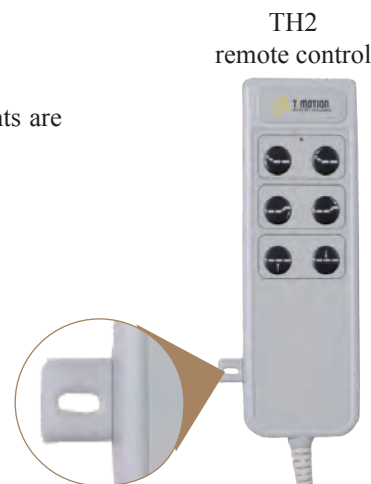
- UP
- DOWN

For safety reasons, there is a locking system built in the remote control

Backrest adjustment
Legrest adjustment
Hi-Low of the bed



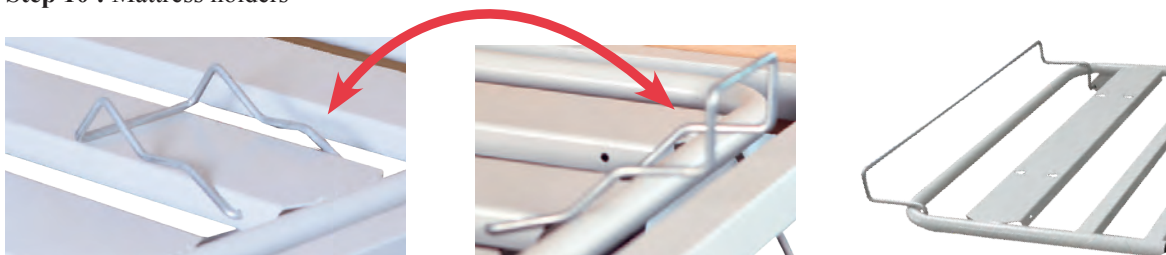
Key of the TH2 remote control (locking and unlocking):
 Key inserted: remote control unlocked
 Key removed: remote control locked



Special safety instruction for the use of actuators and electrical parts

- *Before using the actuators, make sure that no limbs from patient or third-person can be crushed or squeezed by the mobile parts of the bed.
- *For safety of the patient, lock the remote control when the side rails are in function. There are high risks of crushing or squeezing the patient's limbs.
- *When adding accessories on the bed, ensure that those don't create the risk for the patient to be hurt or crushed. If this is the case, disconnect the remote control or remove the accessory.
- *In that case, place the remote control out of the patient's reach.
- *Ensure that cables and wires of the remote control and central control box can't be damaged in other ways.
- *Make sure when moving the bed around that wires and cables can't be damaged or rolled over.
- *Unplug the power cord from the wall outlet, before moving the bed around.
- *Ensure that there is enough space available to use the moving elements of the bed in a proper way. No furniture, window frames should be in the way.
- *An electronic overload detector switches off the central control box, when the load is too great. After clearing the overload and pressing the remote control again the central control box will work again.
- *After some time the remote control will work again if you press on the adjustments button.
- *The maximum period of operation shall not exceed 2 minutes. Afterwards you must respect a pause of 18 minutes. It is also possible to operate 1 minute followed by a 9 minutes pause.
- * If the maximum continuous run time is not respected, a thermal safety component switches off the power for safety reasons. The remote control will stop working for a more or less longer time, depending on how big the overload was.
- *Please respect the adjustment possibilities given in &1.4.7.
- * If you use in the same time, various electronic equipment, particularly if those are close to the bed, electronic disturbances (similar to the interfering noise heard on the radio) could occur. In such rare cases, increase the distance between the devices, do not use the same wall outlet, or temporarily switch off either the interfering device or the one being interfered with.
- * Electrical connections :
 - The central control box supplies power to the actuators.
 - Actuators must be correctly plugged into the central control box. The plugs at the end of each cable is equipped with a colour sticker to avoid wrong plug in.
 - Ensure that cables are in a perfect condition and don't risk being damaged or crushed when using the bed.
 - Cables are equipped with strain reliefs [4] and cable holders are located under the bed frame. Please hang the cables there.

Step 10 : Mattress holders



Step 11 : Emergency lowering of the backrest.

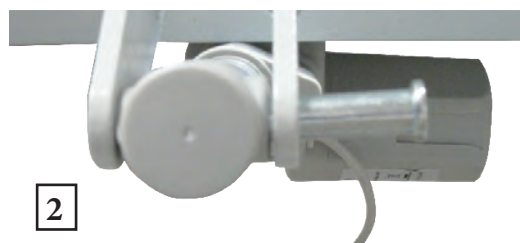
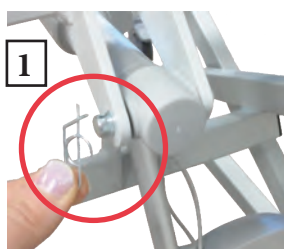
In case of power failure, the backrest can be lowered manually.

This function MUST be operated by at least two persons as the backrest may collapse and causes severe injuries. It MUST be done only per trained staff paying attention to the risks.

We advise you strongly to operate this function under normal conditions to get experienced.

Relieve the load on the backrest :

- the first person holds the backrest in an upper position.
- the second person removes the lynch pin of the actuator.
- the actuator is detached from the backrest and falls down (it is still fixed to the scissor frame).
- the first person brings down the backrest.



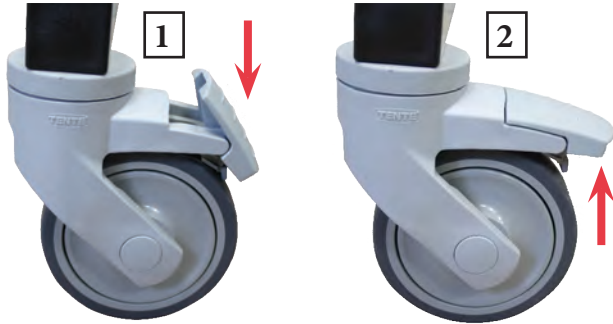
Step 12 : Castors

The bed stands on 4 castors with brakes

To brake : push the footlever down [1].

To drive: push the footlever forward [2].

Make sure that the bedframe is in the lowest position and remote control is correctly positionned, before moving the bed around.



Step 13 : Central locking

Available only on some models.

How to use the central locking :

- Lower position (1): 4 castors are braked.
- Medium position (2): 4 castors are released.
- Upper position (3): one steering wheel and 3 released castors for an easier rolling away of the bed.



2.3. Mounting the bed when it is delivered on its trolley
Many movies are available to teach you the various mounting possibilities

YouTube



General information

YouTube



Installation with the trolley
Method 1

YouTube



Method 2

YouTube



Mounting from the Transkit
Method 1

YouTube



Method 2

YouTube



Placing the bed
on the Transkit



Before assembling the bed, look at it carefully to check that it is complete and has no visible damage. Please contact us if any damages is noticed.

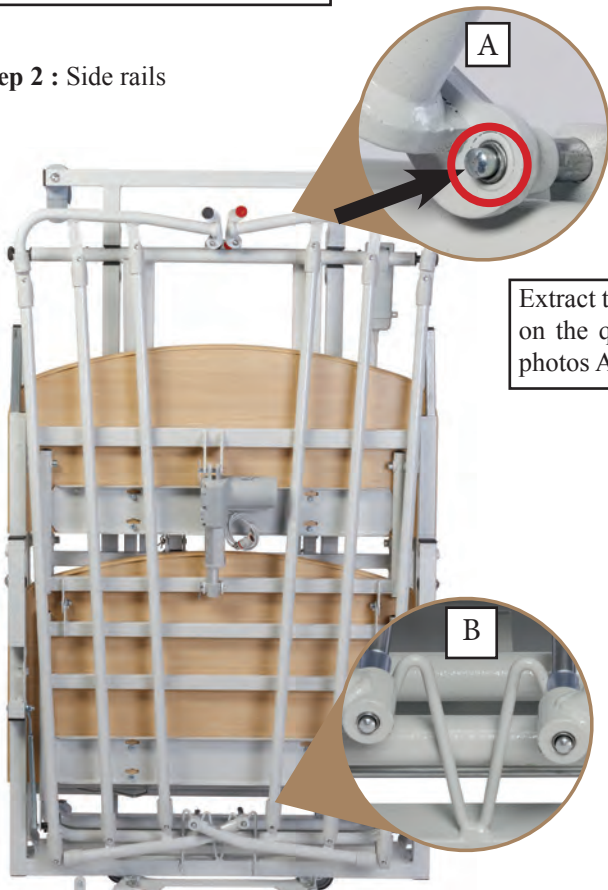
Step 1 : Unpacking and lifting pole removal



Locking the castors:
for safety lock the castors of the transport tray by pushing the footlever down.

Removing the pole:
remove the lifting pole from its holder without scratching the bed.

Step 2 : Side rails

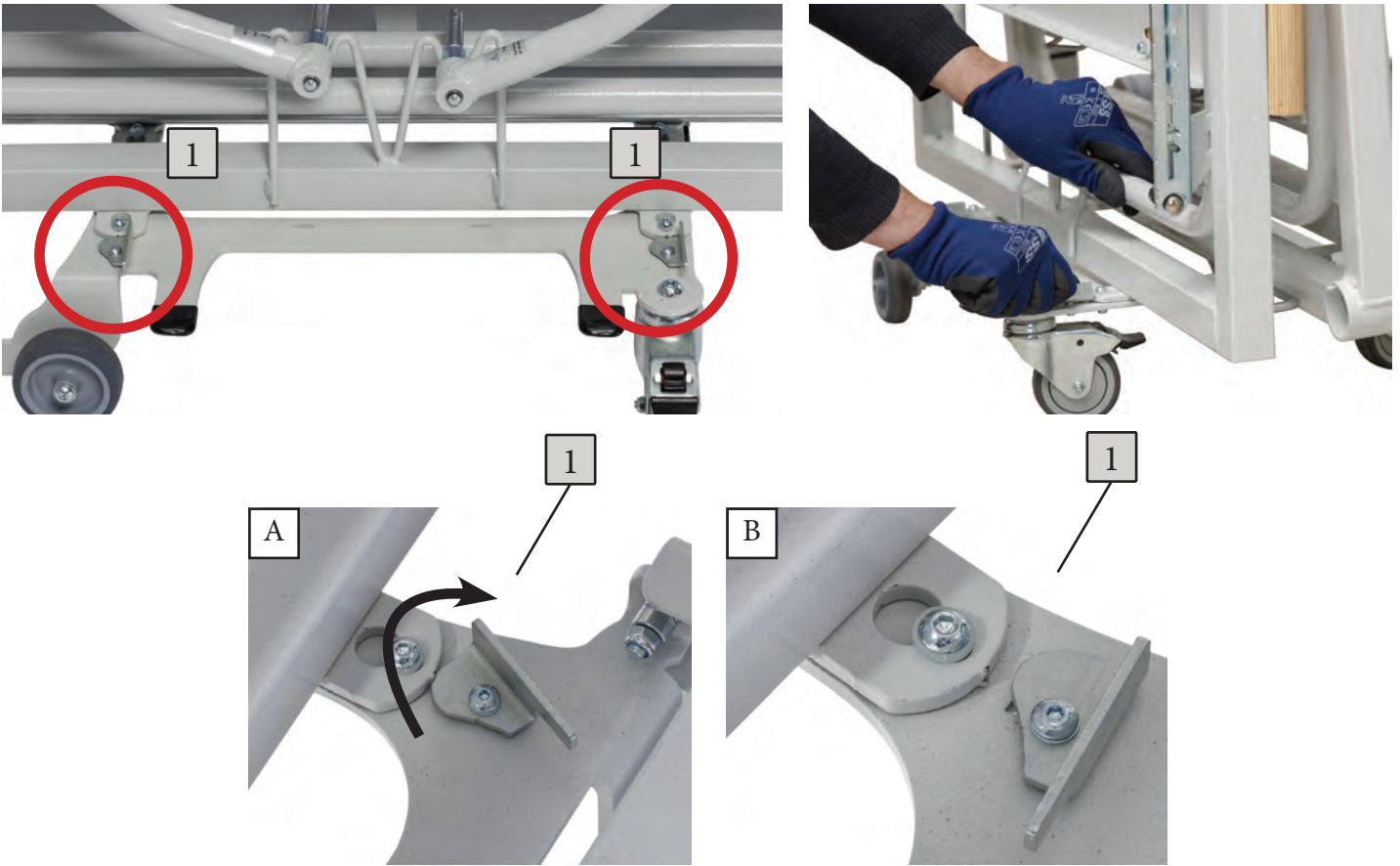


Extract the side rails by pushing on the quick release axles, see photos A et B.



Step 3 : removing the bed ends

1-Unlock the legrest (1) by rotating the wing bolts (1) which are maintaining it on the bed ends holders.and move it slightly backward to enable an easier removing of the bed ends. See photos A et B

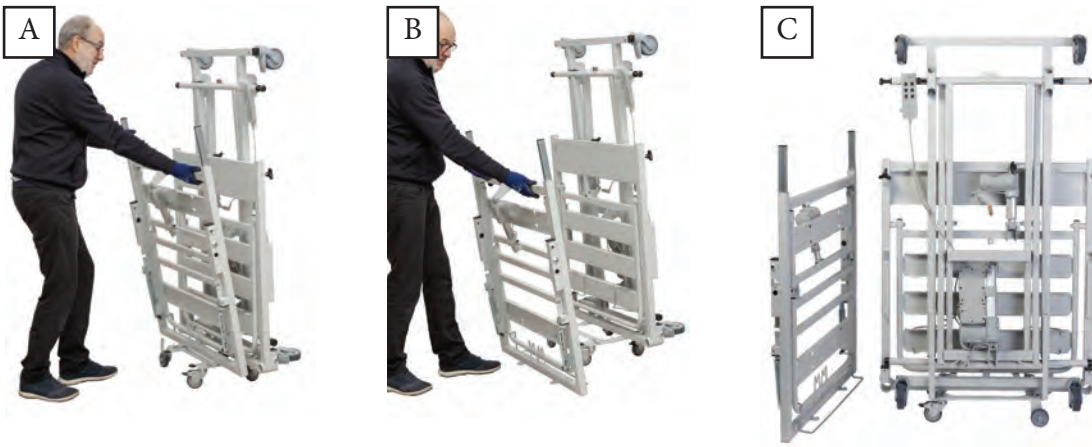


Slightly tilt the legrest toward your body, to make the removal of bed ends easier.
 Unclip the bed ends by pulling them carefully up. Proceed carefully in order not to scratch the panels.
 Follow below steps 1 to 4



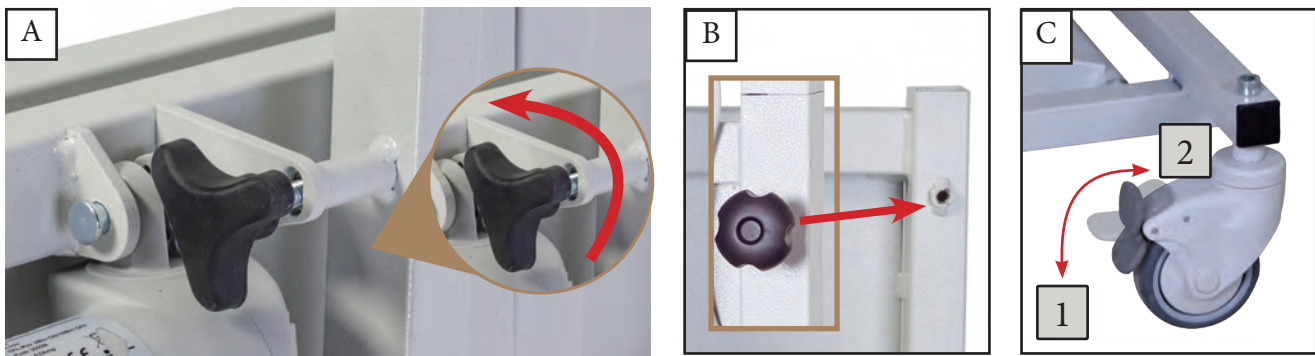
Step 4: Removing the legrest

Once the bed ends are removed from the trolley, remove the legrest from the transport tray, and place it apart. The legrest stands up on its own, see photos A, B, C.



Step 5: Removing the base

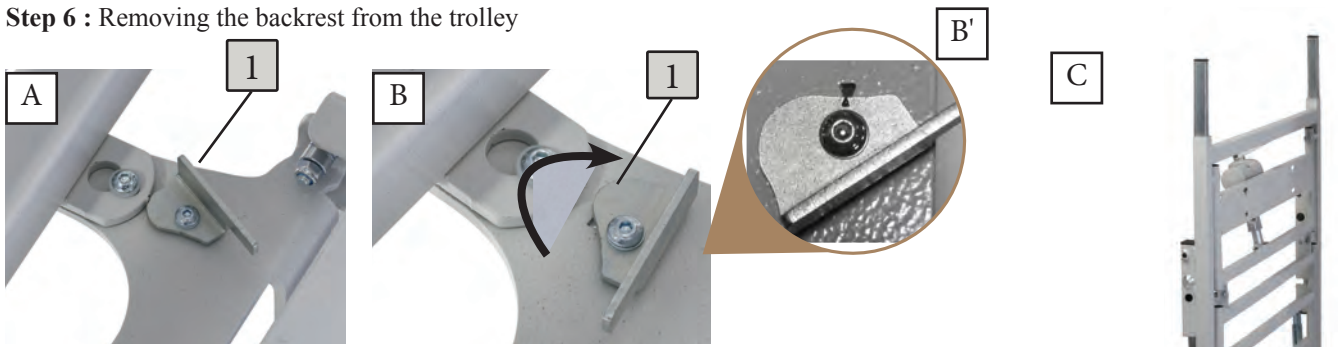
Loosen the knurled screw which holds the base on the trolley by rotating the knurled screws firmly anticlockwise, see photo A. Screw the knurled screw on the base frame, see photo B. Lock the 4 castors, see photo C : to lock see (1) to unlock see (2).



Bring delicately the base on the floor, see photos C. **⚠️ Hold it firmly. High risk of injury if the bed falls down.**



Step 6 : Removing the backrest from the trolley



Unlock the backrest by rotating the wing bolts (1) which are maintaining it on the trolley by rotating them clockwise, see photos A et B. Align both arrows, see photo B'.

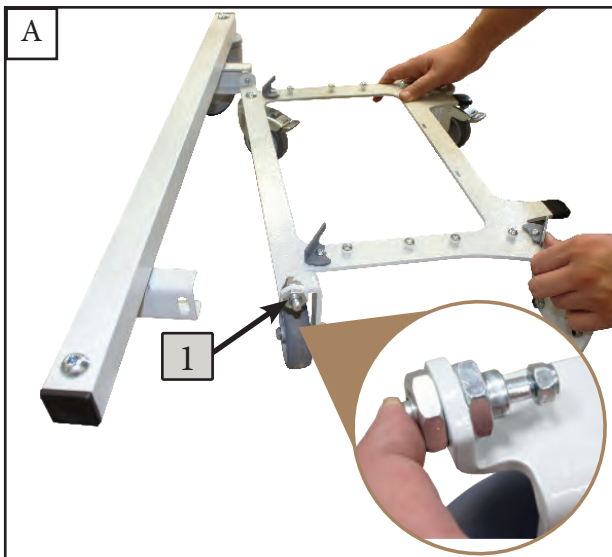
Place the backrest on the floor, it stands up on its own, see photo C.



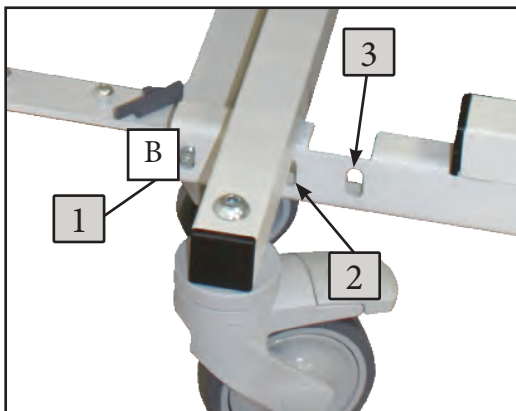
After that, remain the basis and the trolley, see photo D.

Step 7 : Removing the trolley from the basis.

Press on the pushbutton (1), see photo A, and rotate the trolley to extract it from the guide tracks. Remove the trolley out of range not to be disturbed while mounting the bed. To mount the trolley, emboiter le côté droit puis le côté équipé du bouton poussoir.



Special use of the trolley, see photo B
The holes (1+2) makes the transport tray works as a bed/wall protector. The third hole (3) enables the transport tray to be completely removed under the bed.



Base without trolley, see photo C

Step 8 : Connecting the backrest

1-Unroll the electrical cable, connect the actuator to the main power supply, see photos A, B and C.



A

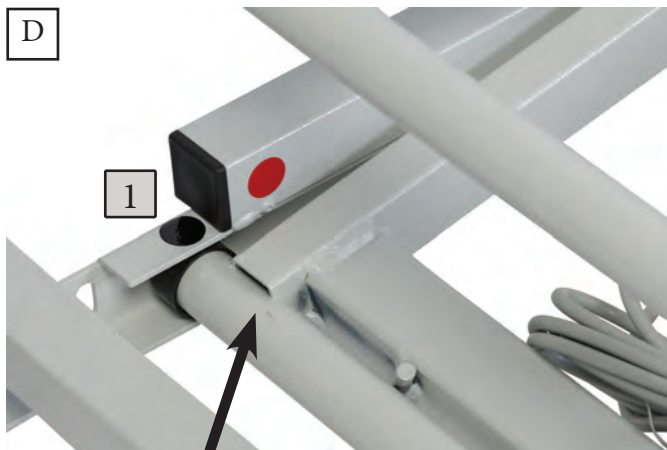


B



C

2-Using the remote control, adjust the height of the bed until you reach the black sticker (1) located on the base, see photo D.



D

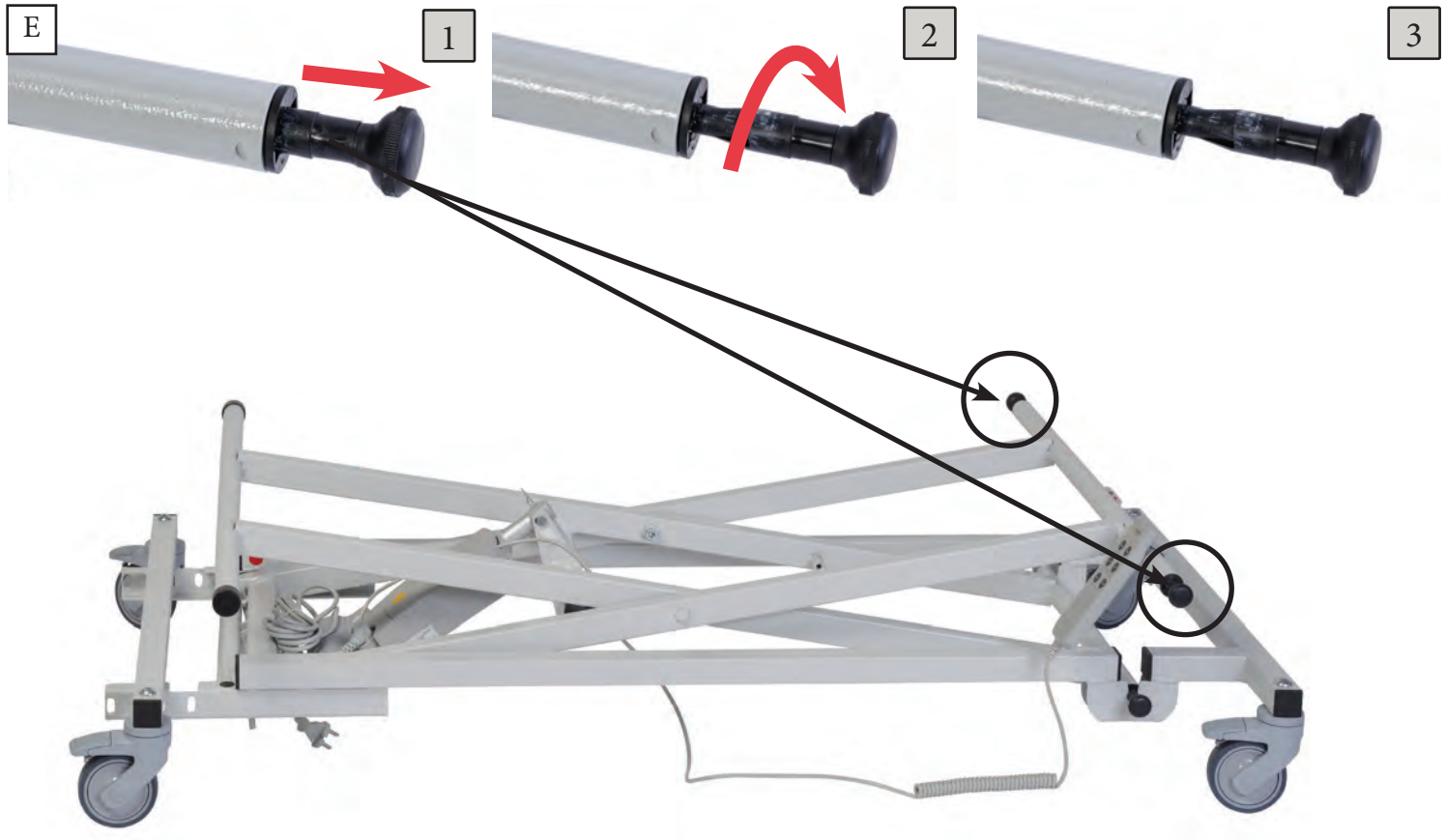
1



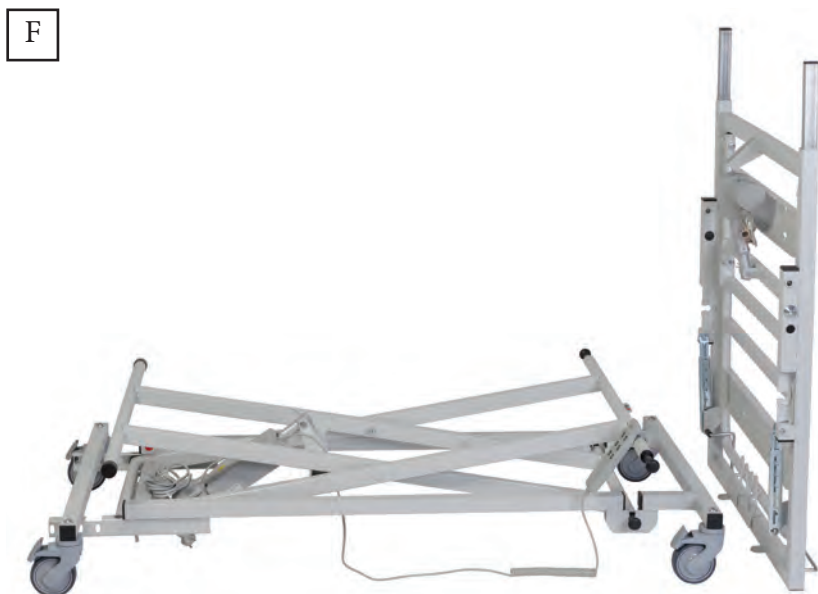
D

3-Pull out the 2 locking pins located on both side of the frame, see E and rotate them a quarter turn clockwise to lock in place, see photos (1+2+3).

Remove the mobile base from the slats bedframe and place it on the floor (4).



4-Place the legrest vertically in front of the bed, see photo F, and then place the legrest on the two locking pins located on the base, see photo G. This should be done very easily, if you have adjusted the bed as asked before to the black sticker level. Photos H and I show in detail how to insert the legrest in the locking pins.

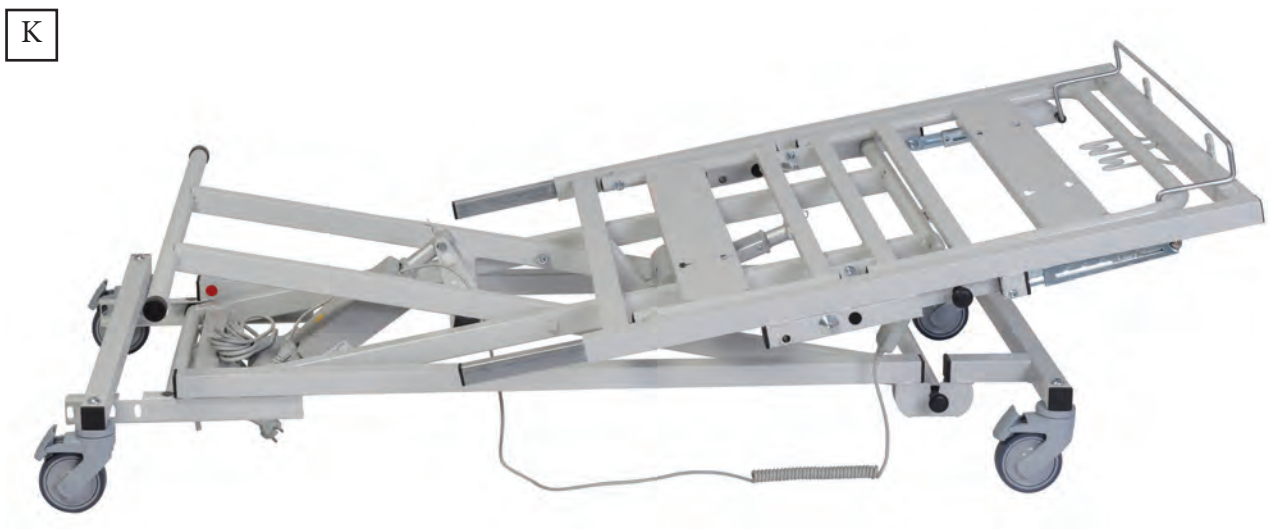




5-Lock the legrest on the base using the locking pins, see J : rotate them a quarter turn anticlockwise (1) and push them (2) to lock in place (3).

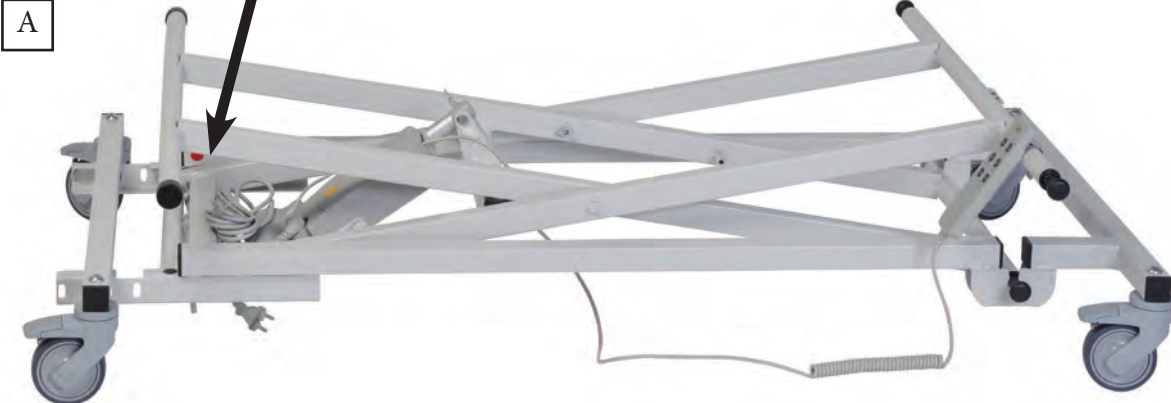


6- Then place the legrest on the base, see photo K

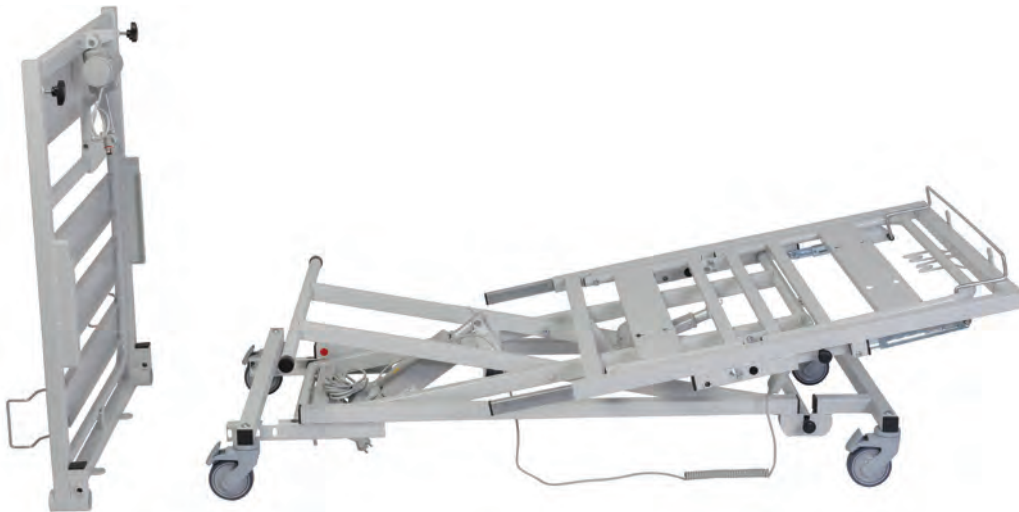


Step 9 : Mounting the backrest

Adjust the height of the bed to reach the red sticker, see photo A.



Place the backrest vertically on the floor in front of the bed...

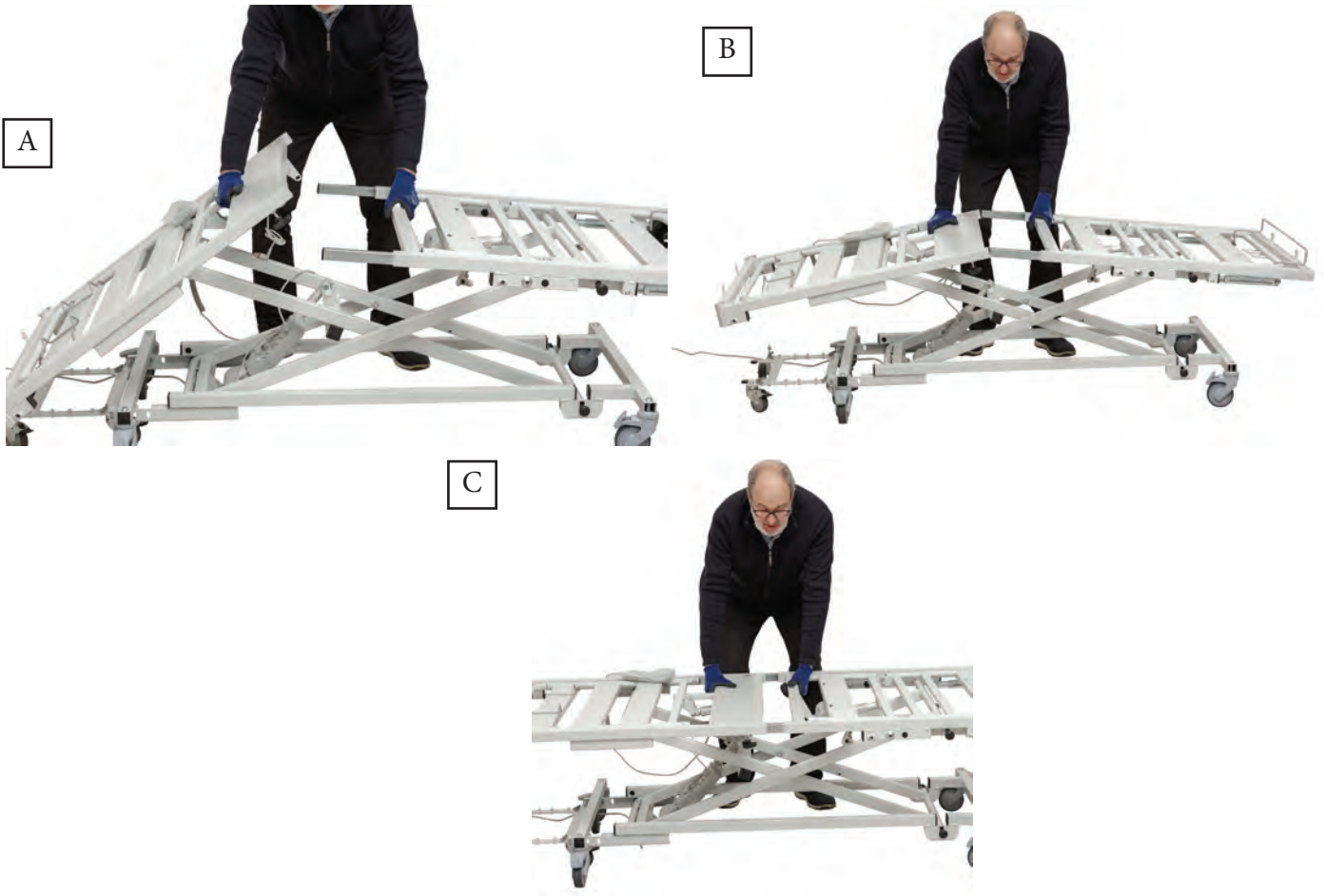


...then insert the backrest into the guide tracks, see photos B



Step 10 : Connecting legrest and backrest

Put the two parts in horizontal position and connect them together, see photos A, B and C



...lock the slats bedframe using the two knurled screws by rotating them clockwise, photo E.

**Check the locking every month.
High risk of injury in case of wrong fixation !**



Next steps : to mount the siderails, the bed ends, the actuators and the lifting pole, please see pages 7 to 14.

2.4. Mounting and using the "Transkit"

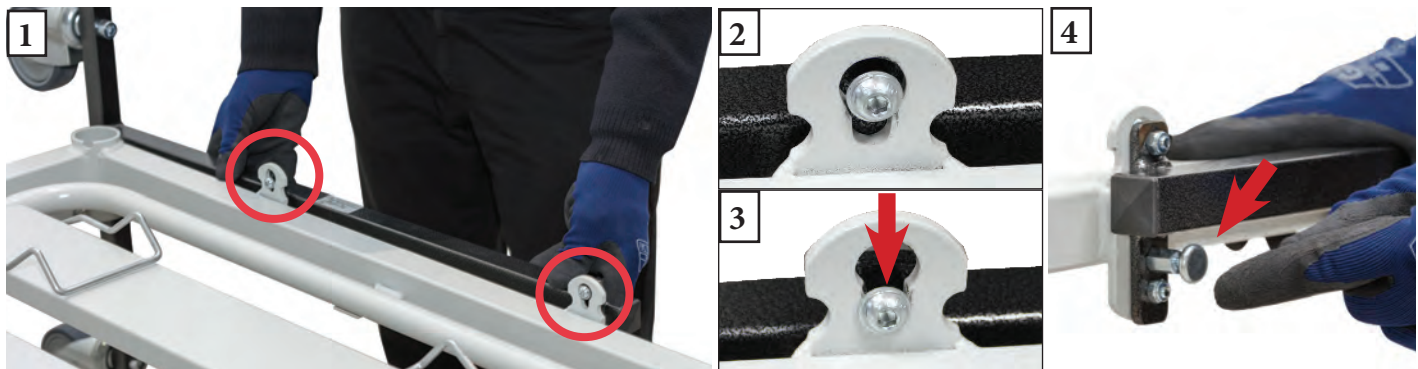
Transkit is a simple tool to enable a very simple transport of the bed on the side, it is very easy to mount on the bed itself.



Mounting:

- 1-Remove the lifting pole and lock the castors.
 - 2-Adjust the bed to its highest position and mount the transkit on each side of the bed, **castors with brakes in floor direction**, see photo 1.
 - 3-Insert the transkit in the bed ends holders located on both sides of the frame (2 on each side) and push downwards until you hear a "click", see photos 2 and 3.
 - 4-Check that the push button are correctly engaged, see photo 3 and that the Transkit is securely locked on the bed. **Beware, high risk of injury !**
- To remove the Transkit, pull first the locking pins and remove it lifting it up, see photo 4.

	<p style="text-align: center;">⚠</p> <p style="text-align: center;">Lock the bed castors !</p> <p>Castors with brakes on the Transkit must be oriented to the floor</p>
--	---



Utilisation :

1- Once the Transkit is in position, check again that all castors on bed and transkit are locked, and that bed is adjusted at the maximum height, see photo 1, then tilt the bed on the Transkit, see photos below 2 to 5. Do the contrary to place the bed on its base.



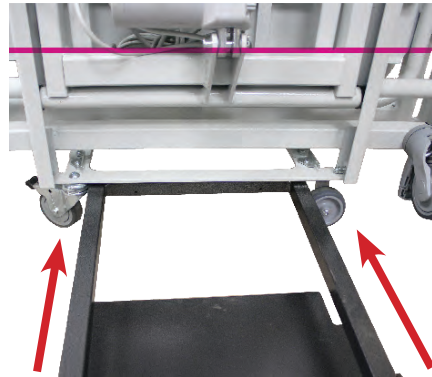
2.5. Use of the Handtrolley

A



Once the bed is on its trolley, place the handtrolley close to the bed, see photo A, and slide it under the trolley, see photo B.

B



C



D



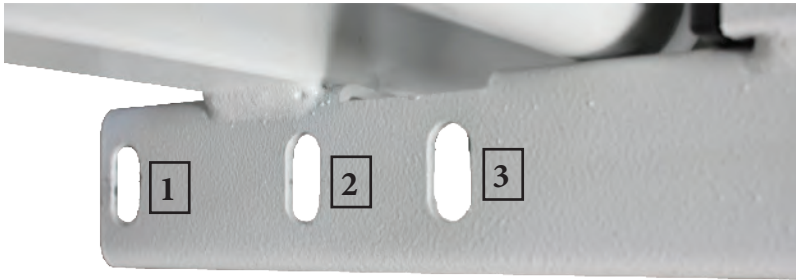
YouTube



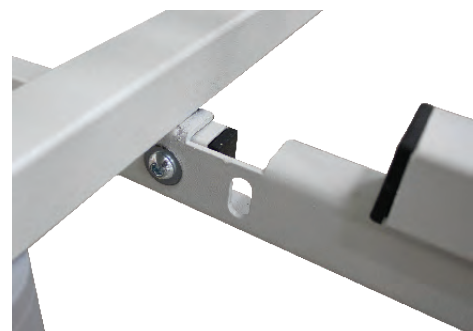
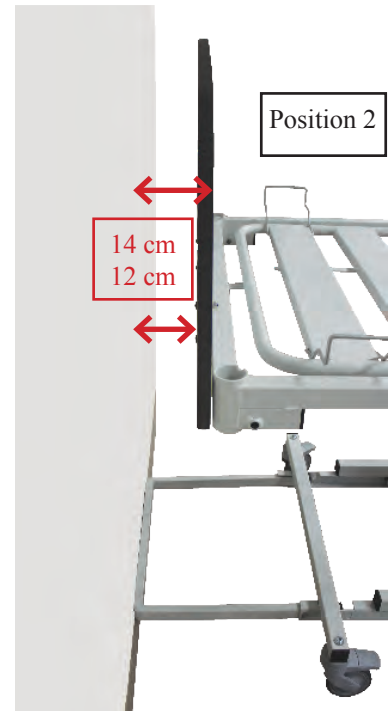
Make sure that the handtrolley is correctly placed under the trolley, see photo C. To tilt the bed, place one hand on the handle and the second one on the top of the bed to hold it firmly, see photo D

2.6. Wall protector

The wall protector is mounted using a screw and a spacer (images 1 and 2).



It can be used in position 1 or 2, **never in position 3**. Risk of injury



3. Maintenance and Cleaning

3.1 Maintenance

3.1.1. General information

The bed must be inspected according to our recommendations at least once a year.

Cleaning is the most important step for a successful disinfection. A regular cleaning is necessary, if the bed is used by the same patient is enough to ensure a correct hygiene. A disinfection of the bed is required only when a visible contamination with potentially infectious material (blood, pus...) is detected.

The bed must be disinfected, before it is given to another patient.

To keep the bed in a good state, please follow the maintenance book.

The organization that manages the medical device must carry out the following checks at each change of patient or at least annually:

- *Check the metal structure of the box spring as well as the parts for lifting the bust and leg sections
 - *Check the proper functioning of the various electrical systems such as the motorization.
 - *Check the condition of the electrical cables and maintain them to avoid pinching points.
 - *Check the plugs on the power supply box for leaks.
 - *Check that accessories such as barriers, bed panels and corner brackets are secure.
 - *Check the effectiveness of the wheel brakes.
 - *Check that the product has not been processed or modified.
 - *Train personnel using this device.
 - *Record these maintenance operations in a logbook or in the maintenance logbook provided with the product.
- Archive this information throughout the product management period.

3.1.2. Identification

Manufacturer: HERDEGEN SAS Rue Eugène Freyssinet 77500 Chelles France Tel : 02 48 23 84 54

Product reference: Ampliplus réf: 465 000 NF EN60601-2-52

Serial number: N° de série : 000000 1904

Read operator's manual

Caution: please read the manual to know about patient's sizes

CAUTION: please refer to the user's manual in order to respect the operating loads

Comply with MDR 2017/745

Operating loads: = 135 kg, = 170 kg, ≥40 kg, ≥146 cm, IMC ≥17

Risk of pinching

Engine service factor

Warning: refer to the user's manual for instructions on how to install the barriers.

Warning: refer to the user's manual for instructions on how to use the mattresses.

Protection against electric shock (type B)

Safety class

Protection rating (IP)

Voltage : V
Frequency : Hz
Intensity : A

Classe 2 Type B HERDEGEN CE

Facteur de service : 10% max 2min/18min IP 54

Puissance absorbée: 262VA 100-240V, 50/60Hz 1.23A



In order to benefit from the guarantee and ensure the proper functioning of the bed, it is imperative to use only original spare parts from HERDEGEN SAS.

For inquiries about spare parts and use of bed, please contact your authorized distributor or HERDEGEN SAS:

HERDEGEN SAS 5/7 Rue Freyssinet 77500 CHELLES FRANCE
Tel : +33 2.48.23.84.54 sav@herdegen.fr

3.2 Cleaning and disinfection

3.2.1. General information

Follow the rules before starting the disinfection :

- *Unplug the power cable from the wall outlet and protect it so that it doesn't come in contact with too much detergents.
- *Ensure that all cables are correctly plugged into the central control box and close that box.
- *Ensure that all electrical components are in perfect condition, so that detergents can't infiltrate the components.
- *Dry the bed after cleaning and make sure before operating that no moisture remains on the electrical components.
- *Do not use Kärcher or high pressure to clean the electrical components.
- *If water or detergent has infiltrated some parts, take the bed out of service.
- *The non-compliance with the above rules and procedures may lead to injuries and damages on the electrical components.**

Start the cleaning :

- *Remove the bed sheets.
- *Clean all surfaces with a mild and environmentally safe cleaning solution. This also applies to the remote control.
- *If the bed has visible contamination, it must be disinfected by wiping after cleaning. Use approved disinfectants for each surface according to the products listed by the DGHM (German Organization for Hygiene and Microbiology).
- *Disinfection of castors is only necessary in case of a visible contamination with potentially infectious material (blood, pus..)

Instructing the staff

Qualified staff must be taught how to clean and disinfect the Home Care bed. The following points must be respected :

- *The Home Care bed mustn't be contaminated during its transport to the patient's home.
- *We advise to clean and disinfect the bed immediately after disassembling. We recommend using only approved disinfectant in the approved concentration.
- *The cleaning staff must be equipped with handgloves and clothes.
- *The cleaning staff must use clean towels to clean and disinfect, those must be immediately laundered after use.
- *Once the disinfection is finished, the cleaning staff must wash and disinfect their hands before going to the next patient. The staff should be equipped with an appropriate disinfectant. The immediate cleaning-disinfection of the bed on place avoid transporting dirty beds and potential infectious spores.
- *Home Care beds must be covered when stored to avoid external and accidental pollution.

3.2.2. Cleaning and disinfection

Follow these instructions to keep the Home Care bed in a good state for a longer time.

- *Surfaces must be in perfect condition, scratches must be immediately repaired to avoid the penetration of moisture.
- *We advise to use a moist cloth with a mild commercial household cleaner.
- *Use only listed disinfectant to wash down the bed, please refer to German Organization for Hygiene and Microbiology.
- *Do not use abrasive agents or scouring agents to clean the bed, you could damage the surface.
- *Mix the disinfectant with cold water to avoid vapors.
- *Wear gloves to avoid direct skin contacts.
- *Ventilate the room after disinfection.
- *Don't use spray to clean the Home Care bed as you could inhale it.
- *Don't use alcohol to clean larger areas.



3.3 Troubleshooting

The following table indicates malfunctions that you can easily test and eliminate. Should you not be able to solve the problem, please contact qualified staff. Don't try to repair electronic parts yourself.

Problem	Possible causes	Possible solutions
Remote control/actuators not working	Main power cable not connected	Plug in the cable
	No power supply to outlet	Check the power outlet
	Remote control not correctly connected	Check the plug connection
	Defect remote control or actuator	Contact your operator
Bed doesn't go up	Overload	Reduce the weight on the bed
	Bed is blocked by an obstacle	Remove obstacles
Actuator works only in one direction	Remote control, actuator or central box are damaged	Contact your operator
When button is pressed, actuator stops after a short period of time	Internal problem in the actuator	Contact your operator
Actuators stop after a long period of time	Thermoswitch stopped the work, because of too much heat	See page 11



3.4. Test protocol for the user

Checking using the below tabel must be done every month.

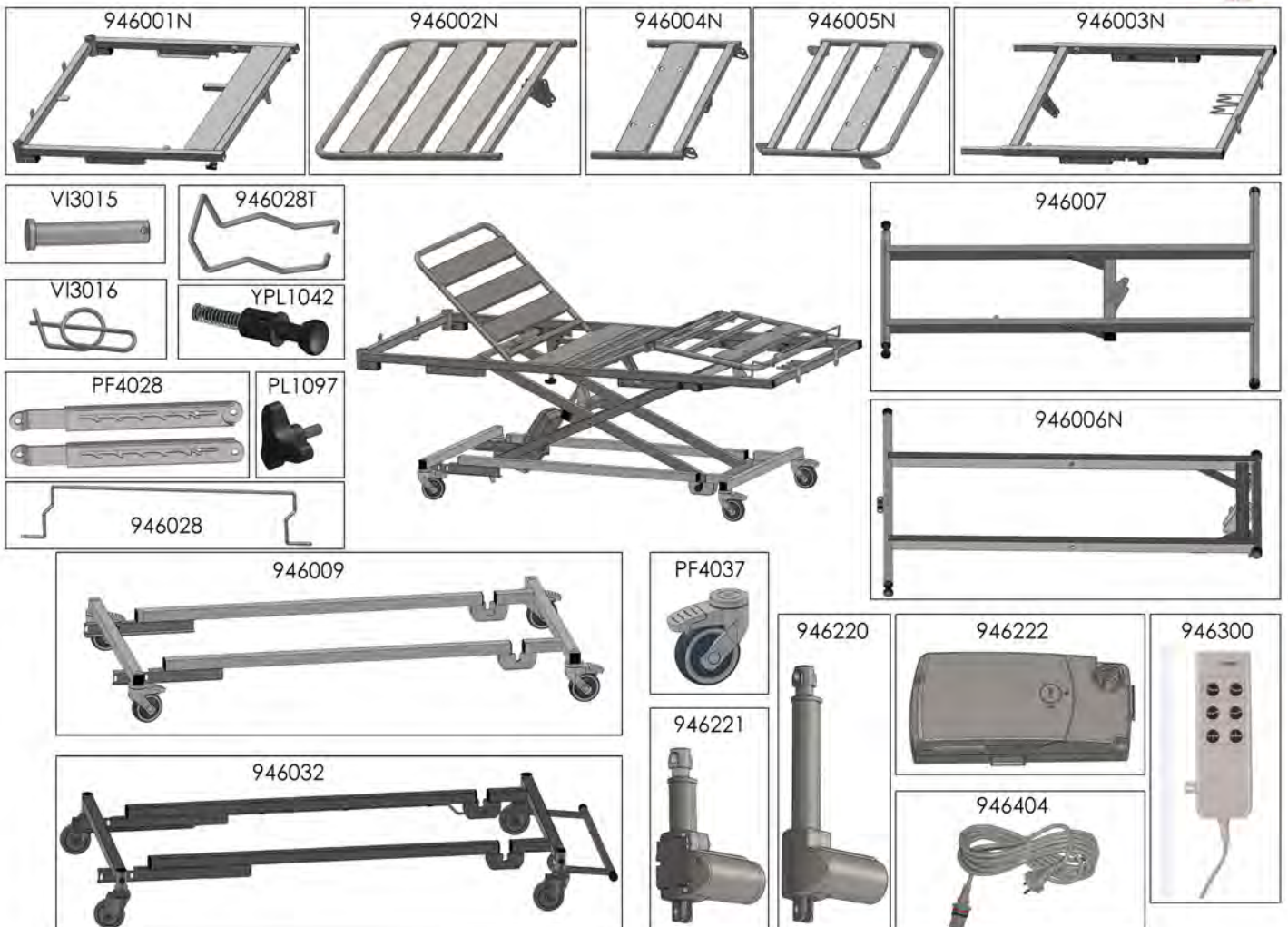
Test protocol for the user :

N°	Components & parts	Defect	Yes	No	Comments
Visual check of electrical components					
1	Remote control and cable	<i>Damage, crushed, bare, used, cut, porous</i>			
2	Power cord				
3	Strain relief, connection cables				
4	Housing of Transformator & actuators	<i>Cracked</i>			
Visual check of mechanical components					
5	Scissor bed frame & transport tray	<i>Damage, deformation, splinters, cracked</i>			
6	Slat bed frame				
7	Boards (Head and Foot)				
8	Side rails holders				
9	IV stand holder				
10	Pole holder				
Function test of electrical components					
11	Remote control	<i>Function tests</i>			
12	Hi-low adjustement				
13	Backrest adjustment				
14	Legrest adjustment(if electrical)				
Function test of mechanical components					
15	Emergency lowering of backrest	<i>Function tests</i>			
16	Castors & brakes				
17	knurled screws must be checked every month. Every week for the side rails.				
18	Side rail				
19	Legrest if mechanical				
20	Lifting pole				
21	Trapeze and straps				

Comments:

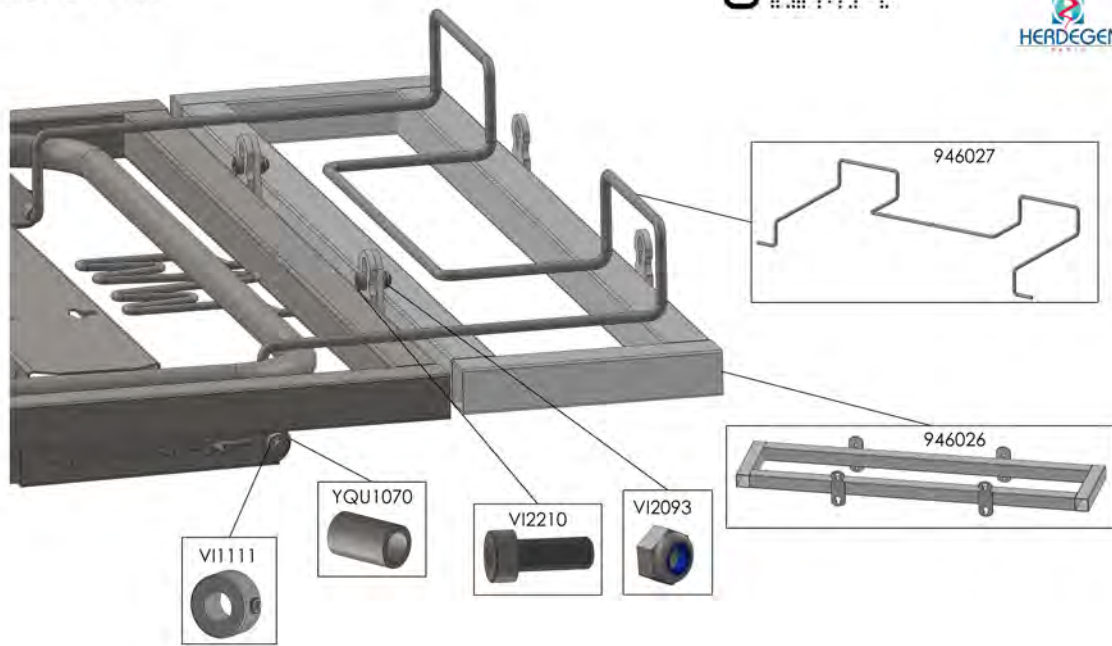
3.5. Exploded views

Bed complete



Frame extension

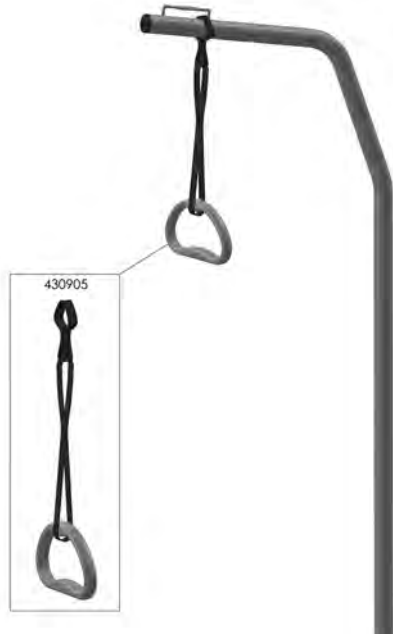
Rallonge de lit 946029



Side rails



Lifting pole



Hand trolley



Trolley



Transkit



Wall protector





3.6. Disposal & Shelf life

- * During normal use with regular maintenance, the life span of the bed and its accessories is 5 years.
- * The electrical components of this product are considered as Electrical and Electronic Equipment (EEE), subject to Directive 2012/19/EU of the European Union and of the Council on the selective sorting of electrical and electronic waste (WEEE)
- * The various electronic components of this bed (motors, transformer, remote control) must be disposed of in accordance with WEEE Directive 2002/96/EC.
- * The service provider or user is obliged to return the individual electronic components to the manufacturer for disposal. HERDEGEN SAS is at your disposal under the telephone number +33 2 48 23 23 84 54 to take back these components, however, the return costs are not covered by our company.
- * Please refer to our General Sales Conditions for more information.
- * The service provider or user must ensure that the returned components are not contaminated or infected.
- * If the entire bed is to be disposed of, it is important to separate the various elements such as steel, wood, plastics and to sort them separately.
- * Dispose of this product in accordance with your regional waste disposal regulations.



Distributør i Norge:
Gymo AS - www.gymo.no
(+47) 4000 3522 - post@gymo.no
