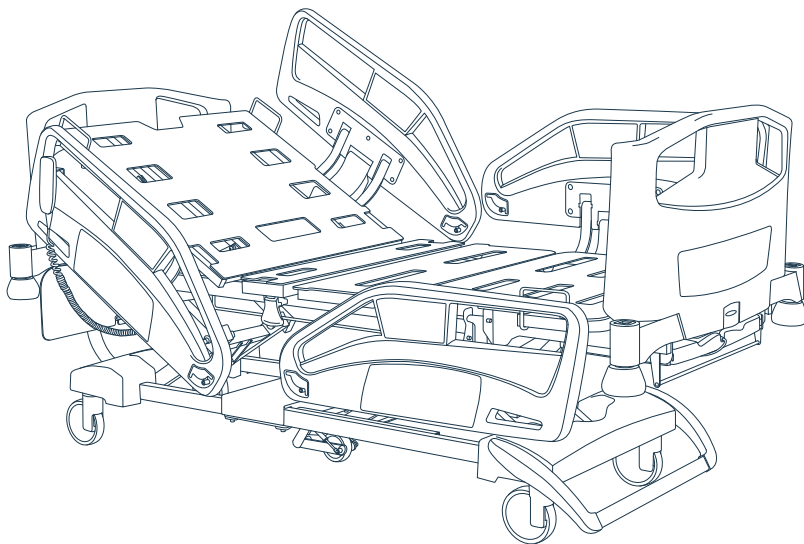


User and maintenance manual

NewCare V3 beds



INNOVA[®]
CARE CONCEPTS

Hospital bed

This manual is valid for the following bed models:

- NewCare V3

Industrias Pardo

Los Ángeles nº 5. Pol. Ind. Centrovía, 50198 La Muela (Zaragoza, Spain)

www.pardo.es

Tel: +34 976 300 033 - Fax: +34 976 320 647

The manufacturer reserves the right to modify the content of this manual related on the product technical regulations. For this reason, the manual content can have discrepancies with the real product.

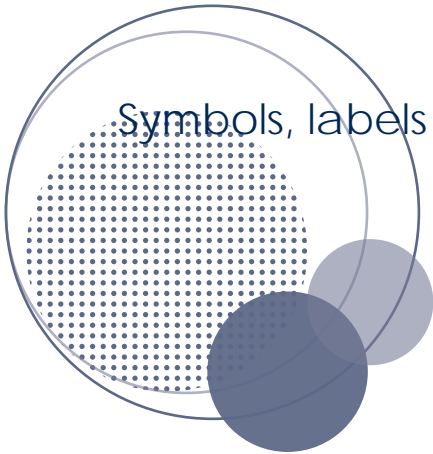


Index

SYMBOLS, LABELS AND MANUAL ORGANIZATION	6
Typographical conventions.....	7
Symbology	7
Organization	7
Bed labelling.....	8
SAFETY ADVICES.....	9
General notices	10
Electrical risk warnings.....	11
Entrapment warnings	11
REGULATIONS, RULES AND CODES.....	12
DESCRIPTION.....	14
Bed description	15
Bed components.....	17
Electric components.....	17
Controls.....	17
Control box.....	17
Battery	17
Linear electric actuators.....	17
Mechanical components	18
Rails.....	18
Headboard and footboard.....	18
Centralised braking bar	18
Bed elongation	19
Feet module universal positioning	19
CPR bilateral actioning system.....	19
Other components.....	19
Multifunctional extensible tray	19
Guides and X-ray cassette carrier.....	19
Protection discs	19
Fifth wheel.....	19
Accessories support	20
Wheels.....	20
Accessories	20
Infusion stands	20
Trapeze.....	20
Aluminium Balkan frame	20
Multifunction table	20
Tank holder.....	20
List of components.....	21
BED OPERATION	22
Reception	23
Installation	23
Initial operation.....	23
Controls functioning.....	24
Control types	24
Wired patient control.....	24
Membrane controls	25
Nursing controls	26

Operating	27
Basic control operating	27
Pre-programmed functions	28
Light indicators.....	29
Bed functions locking.....	29
Other functions in the controls.....	30
Bed components functioning.....	31
CPR bilateral actioning system.....	31
Rails	31
Full length rails	31
Removable Headboard / Footboard with locking system	32
Placement	32
Removal	32
Multifunction pedal	33
Bed braking	33
Bed moving	33
Directional wheel actioning	33
Fifth wheel.....	33
Bed extension.....	34
Bed extension	34
Bed contraction.....	34
Feet module positioning system.....	34
Under footboard extensible table	35
Table extraction	35
Table folding	35
Cassette carrier.....	35
Bed base panels	36
Movement indicator	36
CLEANING AND MAINTENANCE	37
Bed cleaning.....	38
Bed maintenance	39
Product disposal	39
Preventive maintenance guide	40
Rapid problems resolution	43
TECHNICAL SPECIFICATIONS	45
Use environment (according to direction EN 60601-2-52:2010).....	46
Use environment physical description	46
Storage environment physical description	46
Physical bed description	47
Rails physical description.....	47
Headboard/Footboard physical description.....	47
Electric system description	48
Recommended mattress description	48
Electrical diagram.....	49
CE DECLARATION	51
PREVENTIVE MAINTENANCE CONTROL LIST	53

Symbols, labels and manual organization



Typographical conventions

This manual contains different typographical conventions and symbols designed to enhance readability and understanding of its content, for example:

- **Standard text:** used for the text throughout the manual.
- **Boldface text:** used to emphasize words or important phrases.

Symbology

- **Warning or general caution**
It identifies situations or actions that may affect patient or user safety, as well as caution points out special procedures or precautions that the service personnel must follow to avoid equipment damage. Ignoring a warning may cause injuries to patient or user.



- **Electrical shock warning:**
Improper handling of some elements may cause electrocution by electrical exposure. Thus, it is recommended to be handled the marked areas by specialised personnel.



- **Entrapment and/or crushing warning:**
Do not hinder certain areas whilst moving as may cause entrapment or crushing.



- **Feet crushing warning:**
Do not hinder certain areas whilst moving to avoid crunching.



















Organization

This manual has 3 chapters that includes from the most general issues to the most particular ones.

- **General description.**
Provides a general description of the product to know its main aspects.
- **Functioning and handling**
Describes the use of different mechanical and electrical systems mounted in this product.
- **General procedures, cleaning and maintenance.**
Describes the cleaning tasks and preventive maintenance that have to be taken for a correct product running.

Bed labelling

	<p>Read the user manual</p>
<p>Input: (120V-220V) - 50/60Hz 700W</p>	<p>Motor voltage</p>
	<p>Electric insulation Class II</p>
	<p>Protection against electric hazard accidents - Type B</p>
	<p>IP66 Protection</p>
	<p>Suitable for indoor use only</p>
	<p>Safety Weight Load (SWL)</p>
	<p>Maximum Patient Weight (MPW)</p>
	<p>Do not load over 140 kg. at the beds ends whilst it is extended</p>
	<p>Serial number label and CE mark</p>
	<p>Maximum load weight warning for the under footboard auxiliary table</p>
	<p>Do not store any object under the bed</p>
	<p>Entrapment danger warning in these areas whilst lowering the bed</p>
<p>C.P.R</p> 	<p>Manual emergency CPR</p>
	<p>Recommended mattress dimensions</p>
	<p>Do not throw away the device along with the domestic waste. Recyclable product</p>
	<p>Do not seat on the articulated bed base panels whilst are raised, neither activate movements if there are people seated on the modules</p>



Safety advices

General notices

- This bed is not designed to be used with special anatomy users (amputees, etc) neither with children, because his anatomy or special circumstances can cause entrapment risks not contemplated in our risks tests. This is the reason why this product is not recommended for such cases.
- This manual describes all beds functions as well as its use, explaining all functions and components in detail. To obtain more accurate information relative to the bed handling refer to the manuals specific sections of the manual.
- Refer to the manual before using the bed. Otherwise personal injuries or material damages may occur.
- The determination and problem solutions of the bed can be only done by qualified and authorised technical staff. The determination and problem solutions of the bed done by non authorised personnel can lead to personal injuries or material damages.
- Do not remove RFID labels from the bed. The reference that appears on it are essential to identified the bed and warranties the safety maintenance operations. Otherwise personal injuries or material damages may occur.
- Never raise the bed with other tool than the designed by the manufacturer. Not complying with this instruction may cause a rising mechanism dysfunction and body injuries.
- The motorised mechanisms of the machine can cause injuries. Do not use the bed controls until all the people are away from it. A bed articulation function can be interrupted releasing the control, pressing the button of the contrary movement or unplugging the supply connector from mains.
- The bed is designed for indoor use. Do not use or storage it on outdoors or humid environments.
- Do not use the equipment if the width, height and patient weight exceed the limits specified in this manual. Patient injuries may occur.
- Do not use in this bed mattress that cannot be adapted to the bed base articulations.
- Only authorised maintenance staff should make the preventive maintenance of the bed. A preventive maintenance mad by unauthorised personnel could produce personal injuries or material damages.
- The motors use cycles (intermittent operation) does not exceed 2 minutes / 20 minutes, otherwise equipment damages can be caused.
- Refer to the beds user manual before using the accessories to avoid any patient or user injuries risk.
- Only the following accessories specifically identified can be used in this bed. The use of any other accessories not included in the list will compromised the bed and patient safety.
- Do not hit the different movement controls. In the same way, never manipulate the inside of the manual or motor controls.
- Do not activate any movement before placing the mattress previously.
- Unplug the bed before any cleaning operation, bed moving or electric equipment repair is taking place. There is electrical shock risk.
- Never manipulate the manual or motor control inside.
- The electrical installation which the bed is connected has to have the regulatory protections, otherwise do not connect the device.
- In case any deformation is observed in any of the bed element, get in contact with the distributor.
- In the modules rising and lowering movements, it has to be observed that no materials or body parts are in-between the bed base and the bed supporting frames. Otherwise there are entrapment risks between the bed base and its supporting points whilst lowering.
- For the patient safety, the bed should be in it lowest position when the patient is not being attended, to avoid the risk of falling damages.

Electrical risk warnings

- The use of electric equipment involves electrical risk. The staff has to be capable and have the respective information about the inherent risks of electrical equipment.
- An abStandardlly leakage of current is symptom of a AC power cable and of power supply unit. If the leakage is over 500 microamperes, personal injuries can be caused.
- Unplug the bed before any bed cleaning or maintenance action is made. Otherwise, personal injuries or material damages may occur. Refer to the specific manual section for further warnings.
- For patient or staff safety, take precaution whilst connecting other wired devices. Avoid harming or pressing the wires of other equipment with the different elements and mobile parts of the bed.
- Concerning the bed connection, avoid harming or pulling the power cord, because it could imply electrical risk.

Entrapment warnings

- There are entrapments or crushing risks whilst lowering the moving parts of the bed base. Check there are not obstacles on its way down.
- There are entrapments or crushing risk between the rail and other bed parts. Check those whilst going down there are no obstacles on its way.
- There are entrapment or crushing risk between the bed parts and accessories (for example the infusion holder) if they are not used according to the manual instructions.

An abstract graphic consisting of several overlapping circles. One large circle on the left contains a dense grid of small dots. Two smaller, solid-colored circles (one dark blue, one light blue) overlap the bottom right of the dotted circle. Another circle is partially visible behind the dotted one.

Regulations, rules and codes

NewCare V3 bed is in accordance with the following regulations:

- Directive 93/42/CE
- Directive 2006/42/CE
- Directive 2006/95/CE
- Directive 2004/108/CE

NewCare V3 bed complies with the following rules:

- Directive UNE-EN ISO 12100
- Directive UNE 20324
- Directive UNE-EN 60204-1
- Directive UNE-EN 60601-1
- Directive UNE-EN 60601-1-2
- Directive EN 60601-2-52

NewCare V3 bed has the following marking:



Industrias Pardo s.l. has the following certifications:





Description

Bed description

The hospitalization bed NewCare V3 is specially created to be used in hospitals, clinics and other similar uses. Designed for 10 to 15 years lifetime, according to its use.

Its structure is made of steel with texturised coating painting with polyester base.

The bed base is divided in two articulated panels electrically actioned (backrest and extremities), another manually articulated panel (feet) and one fix panel. The bed base is made of four HPL (High Pressure Laminated) high resistance pieces, removable and fireproof.

It is designed to place the patient in different positions (horizontal, fowler, Trendelenburg, etc) with other available emergency pre-programmed positions.

It has four supports for infusion stand, trapeze, Balkan frame, etc,... made of thermoplastic material, as well as drainage and nasogastric supports at both bed sides.

It has four 150mm wheels. the 5th wheel acts as directional. In case there has not 5th wheel, one of the four wheels of the bed will be antistatic and directional.

Multifunction pedal with three positions:

- Directional wheel activation.
- Wheel releasing and beds free moving.
- Wheels blocking.

Compass lifting and lowering system with great stability.

The backrest and legs modules synchronized motion, whilst activated, improves the pressures distribution and contributes to the reduction of the PU's formation. It has bed base auto regression.

Universal feet module positioning by gas spring.

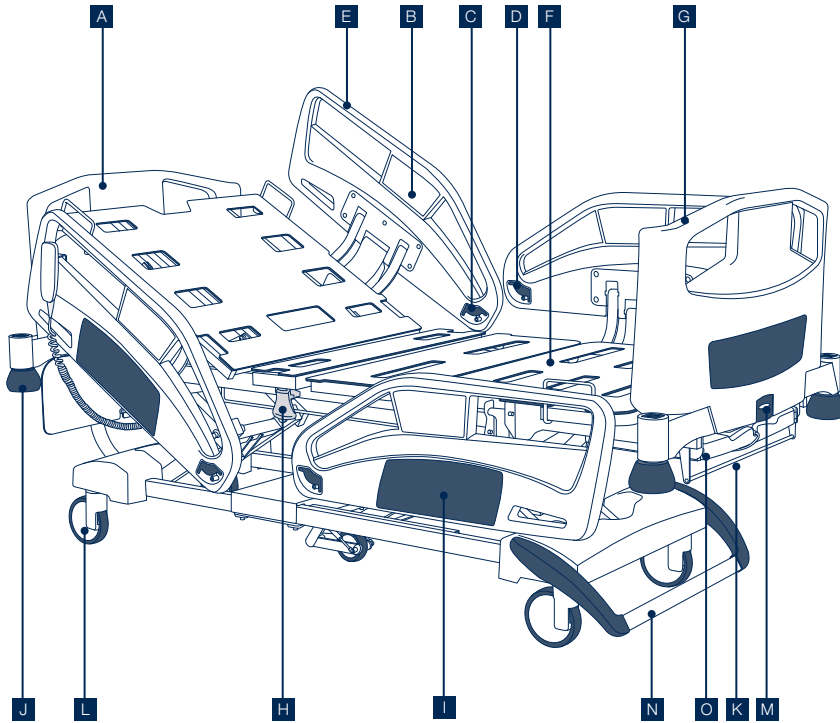
Trendelenburg and Reverse Trendelenburg positioning system with tilting possibility in both senses.

Different bed movement controls are available, such as, wired patient control, membrane control fitted in the side rails and allows the patient and the caregiver control, and the nurse control that has the option to block the beds movements and has the pre-programmed specific functions.

The bed can be used in 1, 2, 3 y 5 environments according to directive EN 60601-2-52:2010.



Before using the bed ensure to read and understand the NewCare V3 user manual content. It is important to read and strictly follow the safety instructions contained in the manual.



Item	Description	Item	Description
A	Removable headboard	I	Extremities side rails
B	Rails membrane control	J	Protection discs
C	Backrest tilting indicator	K	Bed elongation handle
D	Trend and reverse trend tilting indicator	L	Ø150 mm. wheels
E	Backrest side rails	M	Headboard and footboard unlocking
F	HPL bed base	N	Braking pedal
G	Removable footboard	O	Under footboard table
H	Emergency CPR handle		

Bed components

Electric components



Do not hit the controls. Do not manipulate in case of breakage and do not access to the controls inside. In case of power failure, the control will enter in lock mode. To unlock follow the instructions specified in this manual. In case of breakdown, please, consult your dealer.



The use of electrical equipment carries electric risks. The staff should be capable and must have available the information inherent to the electrical equipment. The electric circuit is electrically insulated from the bed metal parts. To avoid motor overload, the manoeuvre should not last over two minutes. Any electric component reparations should be done with the bed unplugged of mains and disconnected battery. Do not manipulate the boxes, controls or electrical motors in case of breakdown or access inside the electric components. Observe that the power socket and bed plug are properly connected. An error respecting this can cause overheating in these components. Check that the mains voltage match with the nominal voltage needed. The electrical installation where the bed is connected must have the regulatory protections.

Controls

The bed has different control options depending on the final use and client needs.

- Patient wired control.
- Bed foot side nurse control.
- Membrane control integrated at both sides of the rails.
- Foot control for lifting and lowering.

Control box

The control box of the electric system is located next to the extremities motor.

Battery

The battery is located in the bed chassis, in the central area next to the extremities motor and control box.

The nurse control has a battery indicator, which shows when the bed is plugged to mains and the battery is properly charging.

Linear electric actuators

It has 2 linear actuators located in bed chassis which take over with the backrest and extremities sections rising; and 2 actuators in the chart for its lifting and lowering.

The backrest motor includes a clutch for the lowering in case of emergency and self-locking to avoid entrapment.

Mechanical components

Rails



The use of any element to cover the mattress reduces the rails real height as well as other equipment dimensions. In case of using such elements, evaluate the patient falling or entrapment risks and take the necessary measures.

When the bed is moved, with or without patient in its lowest position, the rails must be in its highest position to avoid patient injuries whilst moving.

Integrated rails

Installed in the bed sides, the objective of the rails is to **remember the patient the bed limits** but it will never be a contention system it selves.

There are two folding rails at the backrest section and articulates with it (with optional control membranes in the inside and outside of the rail) and two folding rails fixed to the bed chassis at the legs section. Each rail has a lever for folding and a degrees indicator that, in case of the legs section rails. Indicates the degrees of trendelenburg and reverse trendelenburg positions and in case of the backrest rails shows its angle of inclination.

Headboard and footboard

The headboard is anchored to the cart

It is a cart fixed headboard system that maintains it always in the same position and height, independent to the bed positions and moving made.

Removable headboard and footboard with locking system.

Located in the head and feet sides of the bed, its objective is to remember the patient the bed limit but they are not a contention device it selves.

With a bed lock/unlock system in the centre of them that makes it possible to place and **remove easily** by the bed operator without any tools.

Centralised braking bar

Multifunction pedal



Remember always to keep the brake on when the bed in not being moved, to avoid injuries in case of accidental displacements.

Ensure, at any bed transportation, that it is unplugged from mains

Placed at the feet side of the bed, the multifunction pedal allows the **centralised braking** with auto locking of the four wheels, **total free** movement and a third possibility, depending on the bed configuration the **5h wheel** can be activated or the **directional wheel** instead, once they are activated the beds manoeuvrability will be improved whilst it is being moved, avoiding lateral displacements.

It has an Unrestrained Acoustic Warning as an option.

Centralised braking pedals.

Placed next to the wheels, this pedals allows the centralised braking with auto locking on the four wheels, the total free of movements and the directional wheel activation.

Bed elongation



When the bed is on its extended position, do not seat or lean on the feet side because it might overturned the bed.

The bed is **300 mm.** extensible, to reach up to 2300 mm. useful length, to accommodate the bed to the physical patient characteristics.

Feet module universal positioning



Articulate only the feet module when the knees are bent, otherwise it could cause patient injuries.

The feet module can be raised or lowered by a gas spring until the chosen position is reached.

This positions helps the medium and long stay patients to change positions and contribute **PU's prevention** in the heels areas.

CPR bilateral actioning system



Do not use the CPR bilateral actioning levers to lift the beds backrest under no circumstances, because it may cause a lifting motor failure and the bed will stop working.

Placed in both sides of the bed at the middle section, the CPR bilateral actioning system allows the lowering of the bed quickly.

The system has a buffered lowering to avoid a sharp fall of the backrest.

Other components

Multifunctional extensible tray



The maximum supported weight of this tray is 15 kg.

Under the bed base at the feet section, the bed has a high resistance extensible tray that can be used by the patient or the assistance personnel.

Under it you can find the nurse advanced control, in case it is included.

Guides and X-ray cassette carrier

The bed has guides in the backrest section to fit the X-ray cassette carrier to be able to make **radio-graphies on the thorax section** to the patient without moving him from the bed. There more, the bed base material is radio transparent.

Protection discs

Located in the four bed corners, the protection discs protect the bed against shocks.

Fifth wheel

Made of high resistance synthetic plastic material to avoid exposed metal parts and, therefore, making impossible the danger of corrosion.

Some of its characteristics are:

- Cushioned: The cushioning system avoids the danger against the presence of small steps.
- Antistatic: It allows the electricity conduction to the ground because of the wheel material composition.
- Directional: It locks the fifth wheel in directional position, relieving the sanitary staff of extra effort because it facilitates the manoeuvrability of the bed.

Accessories support



This supports can only be used to hold our manufacturing products, otherwise, product damages or patient injuries may be caused.

Along all the bed different supports can be found to fit accessories, such as:

- Corner supports to fit infusion stands, trapezes or Balkan frames.
- Drainage holder arcs under the bed base.
- Patient fixing arcs with "SEGUFIX" system, placed along the sections.

Wheels

In NewCare beds can be installed different wheel models, depending on the hospital or clinic needs. The wheels are Ø150 mm. and they can be integral or double.



Depending on wheel model, the maximum and minimum bed height, as well as the hoist passage height may vary.

Accessories

Infusion stands



Check regularly the correct state of accessories.

The infusion stands are located in one of the supports and it is made of two chromed steel parts, a fixing label with liquid protection system in the lower tube and a four holding hooks system with eight kilograms total capacity (2 kilograms per tube).

Trapeze

The trapeze can be hold in one of the supports and it is composed of one steel arm with ergonomic designed handle and a belt with anti-sliding system and 300mm height adjusting system, by pressing button.

Aluminium Balkan frame

Aluminium frame structure with octagonal section with jaws, balancers, trapeze (with handle and belt) and infusion stand.

Multifunction table

Table attached to the beds footboard.

Tank holder

Metallic structure where can be attached to the footboard or the headboard of the bed and can hold an oxygen bottle.

List of components



01	Patient control	09	Ø150 mm. double wheels	17	Removable tray
02	Nursing control	10	Ø150 mm. simple wheels	18	Bed extension
03	Rails membrane control	11	5th wheel	19	Infusion stand
04	Lifting control by pedal	12	Multifunction pedal	20	Trapeze
05	Battery	13	Centralised pedal	21	X-ray cassette carrier
06	"Full Length" rails	14	Feet positioning gas spring	22	Balkan frame
07	Headboard and footboard	15	Under bed lighting	23	Tank holder
08	Cart anchored headboard	16	Brake alarm		

Bed operation



Reception

- When the product is received, check if the shipment is correct.
- Inform the forwarder and supplier when any deficiency or damages are detected immediately.
- Unpack the product conveniently and eliminate the packaging waste as it is explained further down.

Installation

- Ensure not to step on any wire whilst moving the bed.
- Ensure the power supply cable is attached to the headboard hook.
- Ensure the wheels are unlocked before moving the bed.
- Move the bed on appropriate surfaces.
- Mount the headboard and footboard on the bed.
- Ensure the power supply cable is not trapped or overstretched when the bed is placed.
- Ensure the plug is correctly connected.

Initial operation

- Our beds are prepared to operate from the outset. The battery is charged, in case, at the time the bed is plugged, the battery is discharged, it must be recharged before putting it into service.
- An initial bed movement testing can be made:
 - Lift the bed to its highest position.
 - Take down the bed to its lowest position.
 - Articulate the bed base sections.
 - Check the rails cushioned lowering.
 - Check that the headboard and footboard can be released correctly.
 - Check the correct function of all the bed controls



*Only authorized maintenance staff of the establishment should do the star up of the beds.
The manufacturer will not be responsible of any bed or battery damage caused because by an inappropriate handling of the bed or components.*

Controls functioning

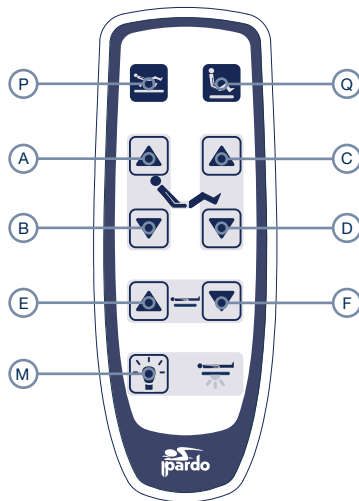
The bed runs by pressing different control elements. The control elements will depend on the chosen bed model.

- Wired patient control.
- Rails membrane control for patient and nurse.
- Nurse controls:
 - Nurse control.
 - Rising bed pedal.

The individual function locking in nurse control affects to all the other control elements.

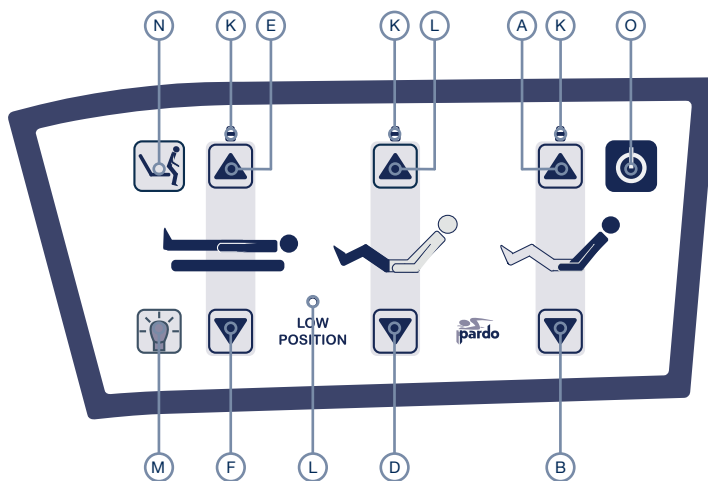
Control types

Wired patient control



A	Rise backrest	F	Low base bed
B	Low backrest	P	Flat pre-programmed position
C	Rise extremities	Q	Cardiac chair pre-programmed position
D	Low extremities	M	Turn on / off the light under the bed
E	Rise bed base		

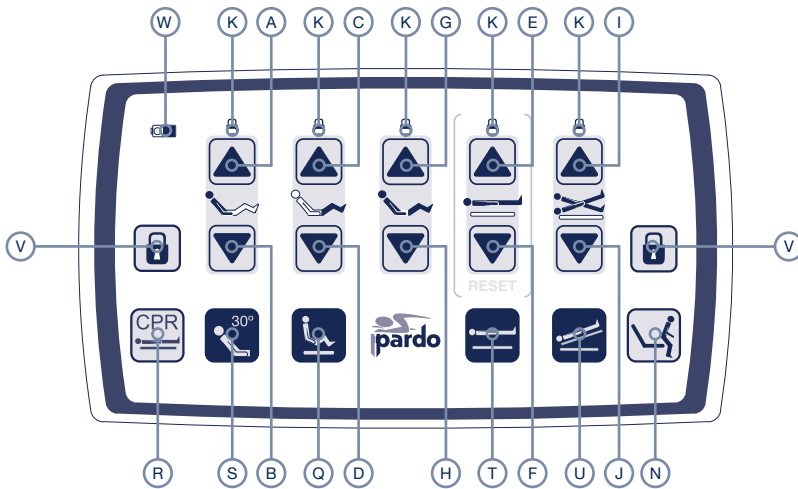
Membrane controls



A	Rise backrest	M	Turn on / off the light under the bed
B	Low backrest	N	Safety exit pre-programmed position
C	Rise extremities	K	Led indicator for locking movement
D	Low extremities	L	Led indicator for bed lowest position
E	Rise bed base	O	ON / OFF Button
F	Low bed base		

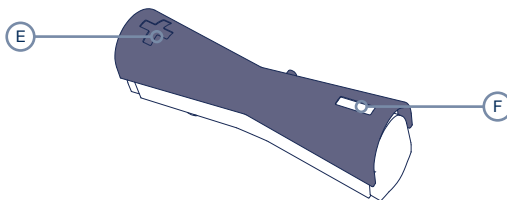
Nursing controls

Nurse control



A	Rise backrest	K	Led indicator for locking movement
B	Low backrest	N	Safety exit pre-programmed position
C	Rise extremities	Q	Cardiac chair pre-programmed position
D	Low extremities	R	Emergency CPR pre-programmed position
E	Rise bed base	S	Backrest at 30° pre-programmed position
F	Low bed base	T	Examination pre-programmed position
G	Rise backrest and extremities simultaneously (autocontour)	U	Emergency Trendelenburg pre-programmed position
H	Low backrest and extremities simultaneously (autocontour)	V	Locking functions button
I	Trendelenburg	W	Led indicator for battery charge
J	Reverse trendelenburg		

Lifting pedal



E	Rise bed base	F	Low bed base
---	---------------	---	--------------

Operating

Basic control operating



Do not seat on the articulated sections whilst raised, neither activate the movements if there are people seated in those modules.



There are entrapments or crushing risks whilst lowering the moving parts of the bed base. Check there are not obstacles on its way down.



*There are crushing risks whilst lowering the bed between it and the cart, in case you are resting your feet on the cart.
There are crushing risks whilst lowering the bed when the rails are all the way down, or if when the rails are being folded with the bed in its lowest position.*

Rise and low backrest



Do not use the CPR bilateral actioning levers to lift the beds backrest under no circumstances, because it may cause a lifting motor failure and the bed will stop working.

With the backrest rising and lowering buttons (A and B) the backrest module can be positioned at the desired angle.

To activate the movement keep on pressing the backrest rising or lowering button to reach the maximum or minimum tilting respectively.

Rise and low extremities

With the legs rising and lowering buttons (C and D) the legs module can be positioned at the desired angle.

To activate the movement keep on pressing the legs rising or lowering button to reach the maximum or minimum tilting respectively.

Rise or low bed base



Do not try to lift or low the bed with other means than the ones designed by the manufacturer. If this warning is not taken in count a lifting mechanism dysfunction or body injuries may occur.

With the bed rising and lowering buttons (E and F) the bed can be positioned at the desired height.

The maximum height improves the assistant ergonomics and the minimum height the patients.

To activate the movement keep on pressing the bed rising or lowering button to reach the maximum or minimum height respectively.

Rise or low the backrest and extremities simultaneously (autocontour)

With the backrest and legs rising and lowering buttons (G and H) the backrest and legs modules can be positioned at the desired angle at the same time.

To activate the movement keep on pressing the backrest and legs rising or lowering button to reach the maximum or minimum tilting respectively.

Trendelenburg and reverse Trendelenburg



Trendelenburg and reverse Trendelenburg movements always have to be done under medical supervision.



There are crushing risks whilst lowering the bed between it and the cart, in case you are resting your feet on the cart.

There are crushing risks whilst lowering the bed when the rails are all the way down, or if when the rails are being folded with the bed in its lowest position.

With the Trendelenburg (J) and reverse Trendelenburg (I) buttons, the bed can be tilted to reach the Trendelenburg or reverse Trendelenburg positions

- Trend

Activation: Press the Trend (I) button to tilt the footboard related to the headboard until the maximum inclination is reached. the rest of the bed base stays in the original position.

- Reverse Trendelenburg

Activation: Press the reverse Trend (J) button to tilt the headboard related to the footboard until the maximum inclination is reached

Pre-programmed functions

Safety exit

This position makes easy the patient exit of the bed by pressing the (N) button. In this position the bed base lifting actuators moves towards the maximal position (in the backrest area), whilst the body section actuators moves slightly until the patient is placed in a seated position that makes easier the bed exit.

Flat



There are entrapments or crushing risks whilst lowering the moving parts of the bed base. Check there are not obstacles on its way down.

Position that can be selected only from the patient control with which, by pressing the pertinent button (P) the beds body sections goes down to their lowest position leaving the bed in a totally horizontal position what helps to the comfortability and wellness of the patient whilst resting.

Cardiac chair

With the cardiac chair button (Q) the modules tilt to its maximum; the bed base tilts to the reverse trendelenburg position. The movement successions needed to reach this position follows certain order and intervals to improve patient ergonomics and safety.

Emergency CPR

Through CPR (R) button, all the bed modules rest in horizontal position and the bed will go down to its lowest position, for a possible urgent cardiopulmonary resuscitation.



There are entrapments or crushing risks whilst lowering the moving parts of the bed base. Check there are not obstacles on its way down.

Backrest at 30°

Therapeutically backrest section position by pressing button (S), which locks the backrest at 30° to improve the patient respiration.

Exploration or maximum height position

There are entrapments or crushing risks whilst lowering the moving parts of the bed base. Check there are not obstacles on its way down.

Via maximum height button (T) the bed reaches its highest and horizontal position, to facilitate a doctor's ergonomic position

Emergency Trendelenburg

Trendelenburg and reverse Trendelenburg movements always have to be done under medical supervision.

Activation: Press the emergency Trendelenburg button (2) to place the bed base sections horizontal and tilting the footboard towards the headboard.

On / Off button

Each membrane has its own activating button. It is necessary to press its own button to activate each membrane.

By pressing the On / Off (O) button, the rails membrane control is activated to be able to use the functions located in it. After an inactivity of 60 seconds, the membrane turns off and it is necessary to press again the button to reactivate.

Under bed lighting button

The under bed lighting button (M) lights on the luminary located under the bed base and allows to walk by night without turning on the rooms lighting, without bothering near people.

To turn on the light press the button once and to turn it off press it once again.

Light indicators**Movements lock indicator**

If the indicator (K) is lighted, shows that the corresponding movement is locked.

Lowest position indicator

The rails membranes have an indicator (L) to shows if the bed is in its lowest position when lighted.

Low battery indicator

The nursing controls have a light indicator (W) to remark if the battery is charging. When the LED is lighted the battery is charging, if it is off, the battery is completely charged.

Bed functions locking**Nursing control**

The locking of the different sections or functions is made by pressing the button with a lock icon (V) and afterwards press the button you want to lock (A, C, G, E, I). The light indicator (K) of the pressed button will rest on. To unlock, repeat the same action. The light indicator will twinkle for several seconds.

Other functions in the controls

Disable the brake alarm

In the case the bed braking alarm is not installed in its configuration, it will come deactivated from the factory. On the contrary, you will be able to activate it by pressing simultaneously the A, E, and I buttons in the nursing control.

System reset

The system reset has to be used when the whole system is locked because it has been exceeded the safety limits. A beep sounds from the control showing there has been a failure in the system.

- Patient control

Keep pressed the B and D buttons for a few seconds until the beep stops. The system will reboot and it will work properly again.

- Nursing control

Press E and F buttons (the buttons are marked) to reset the system for a few seconds until the beep disappears. The system will reboot and it will work properly again.

Bed components functioning

CPR bilateral actioning system

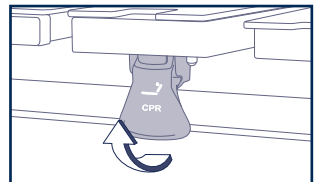


Do not use the CPR bilateral actioning levers to lift the beds backrest under no circumstances, because it may cause a lifting motor failure and the bed will stop working.



There are entrapments or crushing risks whilst lowering the moving parts of the bed base. Check there are not obstacles on its way down.

Activate by hand any of the two levers placed in the beds centre section. For patient safety, the system has a shock absorber to avoid a sharp fall of the backrest.



Rails



When the rail has been risen, ensure it is fully locked because it could produce damages if it accidentally falls down.

Whilst the bed is being moved, with or without patient, in its lowest position, the rails should always be raised because equipment damages or patient injuries may occur.

Do not seat or lean on the rail because it might harm it.

The use of any element to cover the mattress reduces the rails real height as well as other equipment dimensions. In case of using such elements, evaluate the patient falling or entrapment risks and take the necessary measures.

Designed to be used in our manufactured beds.

Regularly check the tight of the bed fixings.



There are crushing risks whilst lowering the bed when the rails are all the way down, or if when the rails are being folded with the bed in its lowest position.

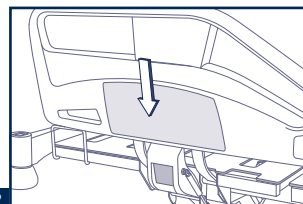
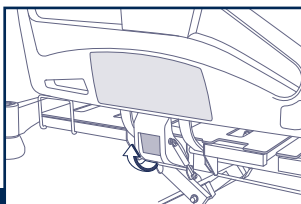
Full length rails

Rail elevation

To rise a rail you have to pull up until its highest position and lock.

Rail lowering

To lower a rail pull the underneath hanger (1) outwards. The rail (2) will soften come down.



Removable Headboard / Footboard with locking system



Ensure, by pulling up, that the rails are fully locked.

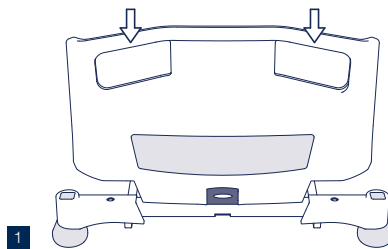


There are entrapments or crushing risks when the headboard or footboard is being placed. Ensure that there are no obstacles during operation.

Placement

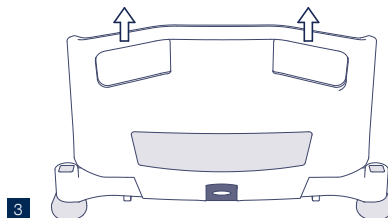
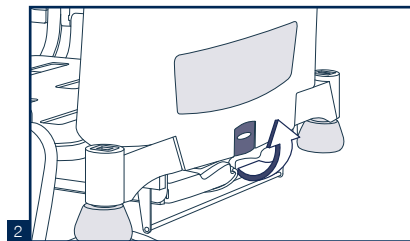
Place the footboard anchors over the beds corner holes.

Insert in until the piece is fully fitted by pressing downwards. (1).



Removal

Unlock by actioning the lever located in the centre of the headboard or footboard (2) as it is shown in the drawing, now the headboard is unlocked. Hold the footboard and pull it upwards (3) from the upside where the handles are.



Multifunction pedal



Remember always to keep the brake on when the bed is not being moved, to avoid injuries in case of accidental displacements.

Bed braking

When the brake is active, the four wheels should be locked simultaneously to keep the bed still.

For actioning step on the pedal all the way down.

This operation is the same for the centralised braking bar and the butterfly pedals located in each wheel.

In case it has a 2 + 2 brake, the pedals only brakes the front or rear wheels.

Bed moving

In bed moving position, the wheels remain free to move the bed in any direction.

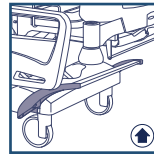
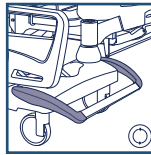
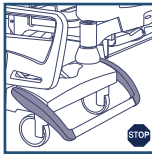
To activate push the pedal until its intermediate position is reached

Directional wheel actioning

The actioned directional wheel allows to carry the bed straight to facilitate the movement without swinging.

To activate it, lift the pedal to its highest position.

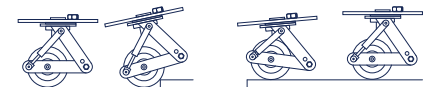
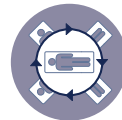
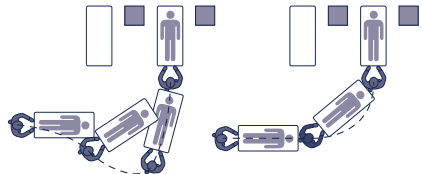
*Optionally, the bed has an unlock acoustic, wish beeps when the brake pedal is not activated and the bed stills plugged.



Fifth wheel

The bed can have a 5th wheel as an option. The active 5th wheel makes easier the bed transportation along the corridors (keeping straight). Having a rolling point in the middle of the bed allows to make sharp turns with less effort (entering in an elevator or turning a corner). Another benefit that brings the 5th wheel is to make a complete 360° turn without moving the bed towards any other direction.

- Cushioned, antistatic and directional
- The cushion system avoids the damages of the presence of little gaps.
- Allows to conduct the electricity to the ground because of the wheel composition.
- Allows to lock the fifth wheel in directional position, makes it easier the bed manoeuvrability.



Bed extension

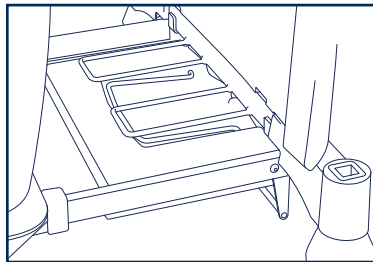
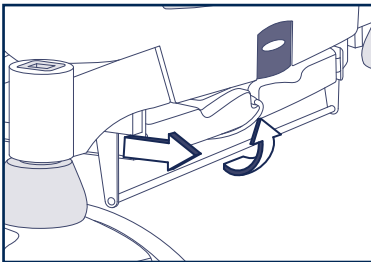


*When the bed is on its extended position, do not seat or lean on the feet side because it might overturned the bed.
Ensure to do the bed extension with the brakes on to avoid involuntary movements.*

Bed extension

Located under the footboard, there is a longitudinal small bar to activate the bed extension. The extension can be done with just one hand in this way:

- Pull the bar upwards to unlock the anchoring system.
- Pull the footboard until the bed is completely extended (300 mm.) This extended section has metallic guides to fit the supplementary mattress piece.



Bed contraction

To contract the beds extended section you will have to proceed in a similar way:

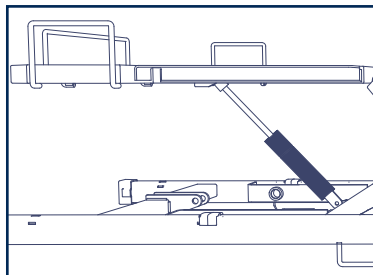
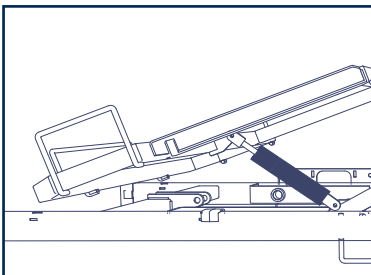
- Pull up the bar to unlock the anchoring system.
- Push the footrest until it is locked in its original position.

Feet module positioning system



It is recommended to articulate the feet module only when the knees are bent, otherwise it could cause patient injuries.

Once the legs module has been electronically risen, move the feet section to reach the desired position. The damper system allows fixing the feet in the desired position. To increase the angle only needs to pull upwards the module. To reduce the tilting, push the module down until it is in the desired position.



Under footboard extensible table



*Before removing or introducing the table, ensure the brakes are on.
Ensure the table is locked in its position when it has been inserted.*

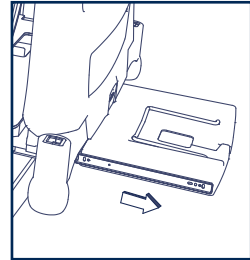
Table extraction

To unfold the under footboard table you have to hold it from below and pull outwards until it stops.

Once it is out, the table has an arc that allows increasing its length and being able to leave on the food tray or similar elements.

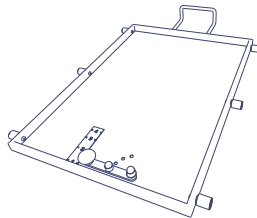
Table folding

To insert back the table, hold it from below and push inwards the bed until it is locked in its original place.



Cassette carrier

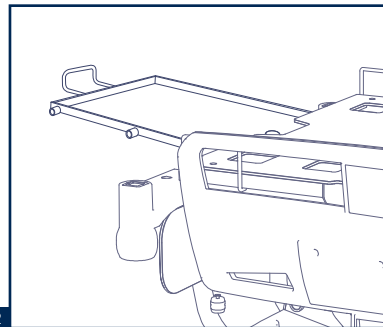
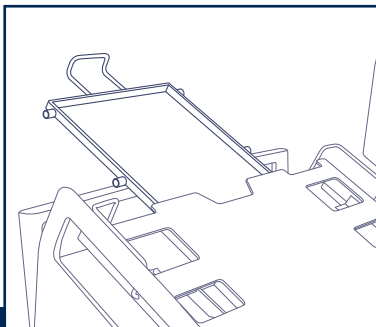
The bed has, as an option, the possibility to include an X-ray cassette carrier to be able to make radiographs to the patient of the thorax section without transferring the patient to a x-ray stretcher or bed.



The cassette carrier has a height adjuster to place the x-ray cassette in the desired place.

To do so, the backrest section has two guides to place the cassette carrier. It can be placed in two ways:

- Rise the backrest until it is over the headboard and be able to introduce it (1).
- Remove the headboard and introduce the cassette carrier without the necessity to lift the backrest avoiding to move the patient (2).



Bed base panels



Ensure by pulling the panels up, that they are correctly installed.

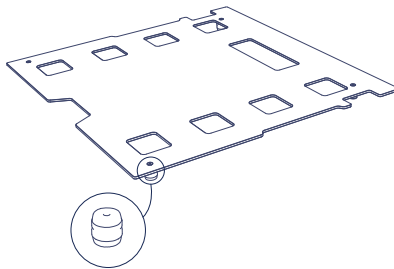


There are entrapments or crushing risks during the bed base panels fixation. Ensure that there are no obstacles during operation

Double regression HPL removable panels, both thorax and legs sections, to prevent PU's.

The thorax section is prepared to include an x-ray cassette carrier as the material the panels are made are radio translucent.

The panels are easy and friendly removable as it does not need to use any tool to fix them. They have a clipping piece to place them on the beds structure



Movement indicator

Backrest

Located in the backrest rails, it shows the tilting degrees in the rising and lowering movements of this section.



Trendelenburg and reverse trendelenburg

Located in the extremities rails, it shows the tilting degrees in the trendelenburg and reverse trendelenburg movements of the bed.





Cleaning and maintenance

Bed cleaning



*It is recommended not to use any steaming cleaning systems because an excessive humidity and temperature may damage some components.
Do not use organic dissolvent for bed cleaning.*



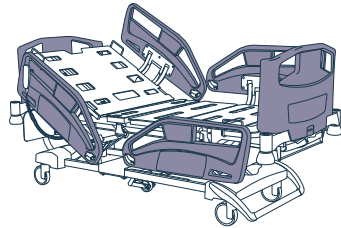
Any cleaning operation has to be done with the bed unplugged.

General cleaning

We recommend cleaning the bed with detergent and warm water. Do not use an excessive quantity of water, neither abrasive cleaning product.

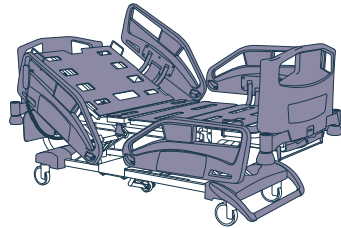
Daily cleaning and disinfection

- Headboard.
- Footboard.
- Rails.



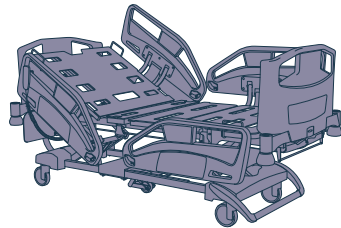
Cleaning and disinfection after a patient leaving

- Headboard.
- Footboard.
- Rails.
- Bed base panels.
- Rails system.
- Protection discs and table.
- Fairing.
- CPR levers.
- Drainages rods.



Exhaustive cleaning and disinfection each two months

- The entire bed.



Steam cleaning

It is recommended not to use any steaming cleaning device to clean NewCare bed range. An excessive humidity may damage the bed mechanisms and components.

Stubborn stains cleaning

To clean stubborn or indelible stains, we recommend using standard domestic cleaning products and a soft-bristled brush.

To clean thick or dry stains on the floor, it may be necessary to saturate them first.

Disinfection

Dilute the disinfectant and/or germicides according to the instructions on the manufacturer's label.

Bed maintenance

Bed storing

For a long storing period, the bed has to be in its lower height, covered, vibrations free and at a temperature between 0° and 40° C.

Do not use the bed as support (for working or storing purposes) throughout the storage period.

For the correct battery functioning, it is recommended to charge it every two months whilst the storing period.

After a storage period, it is recommended to plug the bed for 10 hours for a total battery charge before putting the bed into service.

Let the bed reach the room temperature before using it after a long storing period.

Lubrication requirements

Some of the beds parts need to be lubricated at least once a year for an optimal operation. Check the preventive maintenance guide hereafter.

Preventive maintenance

The bed should be submitted to an efficient maintenance program. This will ensure the operating life and product productivity, and it will help to reduce the deactivation time due to an excessive use.

Every two years, a qualified client service technician should check the electrical equipment to ensure the correct functioning condition.

Product disposal

The NewCare bed elements can be recycled as follows: All metallic elements, plastic elements, wooden elements, phenolic elements, packaging (carton, paper) and RAEES (motors, batteries, and electric and electronic elements are 100% recyclable as no dangerous waste; the wheels and PS blocks are thrown to the bin.



Preventive maintenance guide

The preventive maintenance guide serves to help the technician to do the correct bed maintenance recommended procedures.

All the points have to be followed making the appropriate and necessary changes during the procedures.

This guide is designed to be used along with the preventive maintenance chart. This chart is designed to keep a maintenance history and the consequent repair costs of the bed. Taking specific notes and fulfilling the maintenance can increase the bed life time.

Bed overall status (check every two years)

- Check the general status of the bed verifying there are no visible structural defects such as dents or alarming deformations.
- Verify there are no corrosion signs with extra care on welding joints.
- Observe that all pieces are correctly fitted.
- Check the identification labels are in good conditions and well placed; replace them if necessary.

Make all the repairs, paintwork or component replacement in case it is necessary.

Headboard and footboard (check every two years)

- Check the correct status of the headboard and footboard and its fixations.
- Ensure the locking system of the bed is in good use conditions and locks the footboard correctly.

Repair all the things and replace the components if necessary.

Rails (check every two years)

- Verify that the rails are in good condition and there are not kinked or bent.
- Check that stays properly locked in its highest position.
- Check if the rail releasing system is in good state of use.
- Check that, lowering the rail, the absorber operates correctly.

Make all the needed repairs and replace the components if necessary.

Emergency CPR (check every two years)

- Lift electrically the backrest until the maximum tilted position is reached.
- Verify that the cables that goes from the emergency CPR actioning levers to the motor are in good condition.
- Observe the correct union of the absorber to the bed and if it is in good conditions.
- Action independently one lever and check the correct lowering of the backrest as well as the good absorber functioning.
- Perform steps 1 and 4 activating in step 4 the other lever.

Make all the needed repairs and replace the components if necessary.

Universal positioning of the feet module (check every two years)

- With the electric control rise the legs module until the maximal tilting point is reached.
- Verify the correct condition of the absorbers and the proper fixation with the bed.
- Lift the feet module to test the correct operation.

Make all the needed repairs and replace the components if necessary.

Wheels (check every two years)

- Check the condition of each one of the wheels and that rotates freely.
- Verify the correct condition of the tread and that it has not erosion signs.

Make all the needed repairs and replace the components if necessary.

Multifunction pedal (check every two years)

- Step on the multifunction pedal until it reaches its lowest position (beds brake position).
- Verify that the bed does not move from its place and all the wheels are locked.
- Rise the multifunction pedal until its middle position (free movement position).
- Move the bed and verify that it can make the movements and that no wheel remain locked.
- Rise the multifunction pedal to its highest position (directional fifth wheel position).
- Verify that the fifth wheel is active (it has to touch the floor without forcing the mechanism) and move the bed to ensure it turns on itself without lateral movements.

Make all the needed repairs and replace the components if necessary.

Power supply cable (check every year)

- Verify the cable is not torn or cut.

Make all the needed repairs and replace the components if necessary.

Patient wired control (check every two years)

- Visually check the correct condition of the control plug.
- Verify the wire is in good condition.
- Confirm the correct buttons status.
- Select for two seconds each one of the movements that can be done with the control.
- It must perform the selected function and it has to be a continuous motion.

Make all the needed repairs and replace the components if necessary.

Patient membrane control (check every two years)

- Visually check the correct condition of the control.
- Check the membrane is not worn and it is well attached.
- Verify the correct condition of the control plug.
- Select for two seconds each one of the movements that can be done with the control. It must perform the selected function and it has to be a continuous motion.

Make all the needed repairs and replace the components if necessary.

Nurse control (check every two years)

- Visually check the correct condition of the control.
- Check the membrane is not worn and it is well attached.
- Verify the correct condition of the control plug.
- Select for two seconds each one of the movements that can be done with the control. It must perform the selected function and it has to be a continuous motion.
- Check that the control can lock and unlock correctly all the movements.

Make all the needed repairs and replace the components if necessary.

Elevation system (check every six months)

- Check the motor set to ensure if the axis and fixations are correctly assembled.
- Make a whole bed lifting / lowering cycle.
- Verify that is not heard any friction strange noise and there is not an overload signal whilst moving.
- Replace the motor in case of dysfunction.

Make all the needed repairs and replace the components if necessary.

Backrest motor (check every two years)

- Verify the correct motor attachment to the bed.
- Lift the backrest to its highest position and afterward down it to its lowest position (flat).
- Check that no strange friction noise can be heard and no overload signal sounds whilst moving.

Make all the needed repairs and replace the components if necessary.

Legs motor (check every two years)

- Verify the correct motor attachment to the bed.
- Lift the legs section to its highest position and afterward down it to its lowest position (flat).
- Check that no strange friction noise can be heard and no overload signal sounds whilst moving.

Make all the needed repairs and replace the components if necessary.

Battery (check every two years)

- If necessary recharge the battery.
- Unplug the bed from mains.
- Try to perform all the beds functions and check that works correctly and there is not disfunction signs.
- Check that the battery date is not over three or four years. If it is exceeded, it is recommended to be replaced.

Make all the needed repairs and replace the components if necessary.

Unbrake sound alarm (check every two years)

- Connect the bed to mains.
- Unbrake to hear the alarm.
- Brake again to check the alarm stops.
- Ensure the cable is in correct condition.

Make all the needed repairs and replace the components if necessary.

Rapid problems resolution

PROBLEM	RESOLUTION
The bed beeps each time a button is pressed.	It is possible the power is not reaching the bed and it beeps to warn that the battery is discharging.
The bed has locked functions.	Some or all bed functions are locked. To unlock follow the next instructions: From the nursing control: The unlocking of the bedbase sections or bed functions is made by pressing the locking button with a lock icon (V) and following press once the button of the desired section (B, D, H, F, J). The light indicator (K) of the selected section will turn off.
Leds blinks and the bed does not work.	Wait till the leds stop blinking and check the locking situation as the preview section.
The bed is locked and nothing works.	The bed is locked and nothing works. Unplug from mains and battery. Wait 30 sec. and plug to mains again. Once the controls are recognised plug the battery.
The bed stay locked and the above procedure did not work.	In this case reset the system as follows: From the patient control: Press and hold A and C keys for a few seconds until the control beep disappears. The system resets and operates correctly again. From the nursing control: Press and hold simultaneously E and F keys for a few seconds till the system resets.
After reset the system the bed operates but when pressing any button it locks again.	If after reset the bed by pressing the controls it locks again, it is possible that there is a problem with the connexion cables and produces a short circuit in the control box and stops the bed. Replace the cable and call the technical service.
The battery does not work.	If after the battery charge, the charge indicator located in the nursing control does not shows that it is charged, check the battery condition. If it is below 17 volts, replace it for a new one.

To avoid the battery discharge, the bed will be shipped with the battery unplugged. That's why, once the bed has been plugged to mains and after checking the controls (nursing control LEDs stop working), the battery has to be connected to the control box.

The batteries have a limited life that depends on the use done of them. The value from which it is impossible to recharge is 17 volts. Below this value, the battery is unrecoverable and it has to be replaced. Below 20 volts, it is already a low value and it is recommended not to surpass it.

The batteries have to stay in the bed when it is plugged to mains. In case the bed is stored, it is recommended to unplug the battery and if the storing time is over 2-3 months, is better to remove the battery and leave it on a charger or use it in another bed that is plugged, to avoid discharges.

The bed's clutch is only to lower the bed and not to lift it. The inappropriate use of the system voids the backrest motor and clutch warranty.

Once the membranes are stuck, do not reuse them because they can be damaged whilst taking them off. When a membrane is removed, it is important to clean the supporting surface to avoid damages on the pulsation.

The connection box has an overuse protector (approx. for 2 minutes) that is added to the reversible and non-reversible thermics (80 y 95°) that has the control box as safety elements.

If the connectors are hard to plug, do not remove the o-rings (it may lose the IP66 protection). It should apply a little bit of grease or vaseline to facilitate its connection.

When disconnecting from mains always wait a couple of minutes to connect it again and press the controls buttons to discharge the control PCB capacitors.



Technical specifications

Use environment (according to direction EN 60601-2-52:2010)

Use environment 1	Intensive care hospital.
Use environment 2	Acute care hospital.
Use environment 3	Long stay hospitalization.
Use environment 5	Outpatient care.

Use environment physical description

Condition	Range
Temperature	Between +5°C and +40°C
Humidity	30% - 75%
Pressure	From 500 hPa to 1060 hPa (from 0 to 2000 m. altitude)

Storage environment physical description

Condition	Range
Temperature	Between +5°C and +40°C
Humidity	20% - 80% at 30°C
Pressure	From 500 hPa to 1060 hPa (from 0 to 2000 m. altitude)

Physical bed description

Measurement and weight specification	Dimension
Total length with headboard and footboard (extensible up to 2300 mm. the useful surface)	2220 mm. ± 10 mm.
Total width with rails folded/rised	1010 mm. ± 10 mm.
Resting surface height R.150 (lower position - higher position).	400 mm. - 800 mm. ± 5 mm.
Bad base double regression	165 mm. ± 10 mm.
Head section maximal tilting	$70^\circ \pm 5^\circ$
Feet section maximal inclination	$47^\circ \pm 2^\circ$
Feet section, maximal inclination respecting the horizontal.	$18^\circ / 7^\circ \pm 3^\circ$
Trendelenburg / Reverse Trendelenburg	$13^\circ / 15^\circ \pm 2^\circ$
Beds maximum weight without mattress and accessories	140 kg.
Safety weight load (SWL)	265 kg.
Maximum patient weight (MPW)	205 kg.
Cranes passage height	170 mm.

Rails physical description

Specifications	Dimension
Backrest rail length	942 mm.
Legs section rail length	942 mm.
Rails height respecting the bed base	430 mm.

Headboard/Footboard physical description

Specifications	Dimension
Headboard height respecting the bed base	462 mm.
Footboard height respecting the bed base	462 mm.

Electric system description

Description	Specification
Electric shocks protection type (CEI 60601-1)	Class II
Electric shocks protection grade (CEI 60601-1)	Typo B
Water entry protection (CEI 60529)	IPX6

Recommended mattress description

Specifications	Dimension
Mattress weight	860 mm.
Mattress length	2000 mm.
Minimum mattress height	130 mm.
Maximum mattress height	210 mm.

Control box

Characteristics:

- Supply voltage: 230 V. 50Hz.
- Use temperature range: 5° - 40°
- Protection IP66.

Battery

- Rechargeable battery type: Lead gel.
- Voltage: 24 V
- Capacity: 1,2 Ah.
- Protection: IPX6.

Electric linear actuator

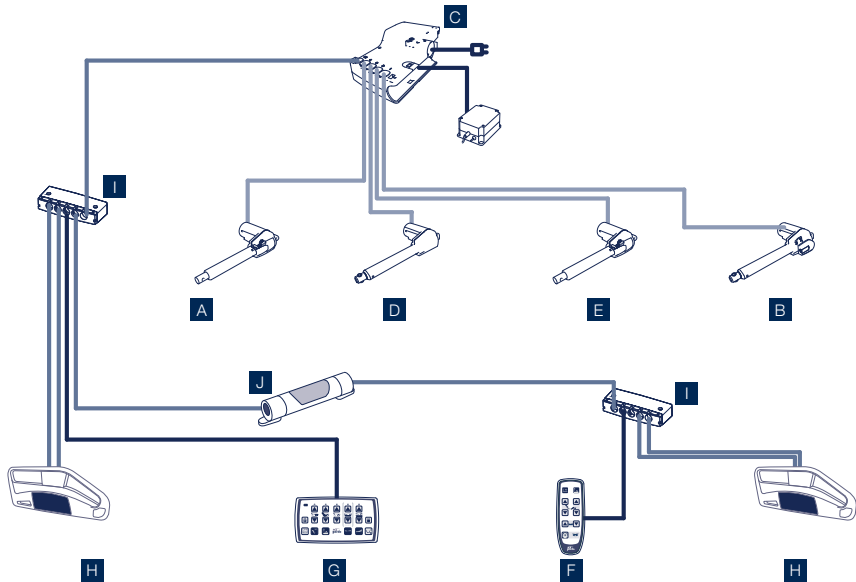
- Motor voltage: 24 V
- Installation dimensions:
 - 445 mm. (Backrest).
 - 336 mm. (legs).
 - 363 mm. (bed).
- Thrust:
 - 4000 N. (backrest).
 - 3000 N. (legs).
 - 6000 N. (bed).
- Stroke length:
 - 200 mm. (backrest).
 - 100 mm. (legs).
 - 150 mm. (bed).
- Protection: IPX6.

Electrical diagram

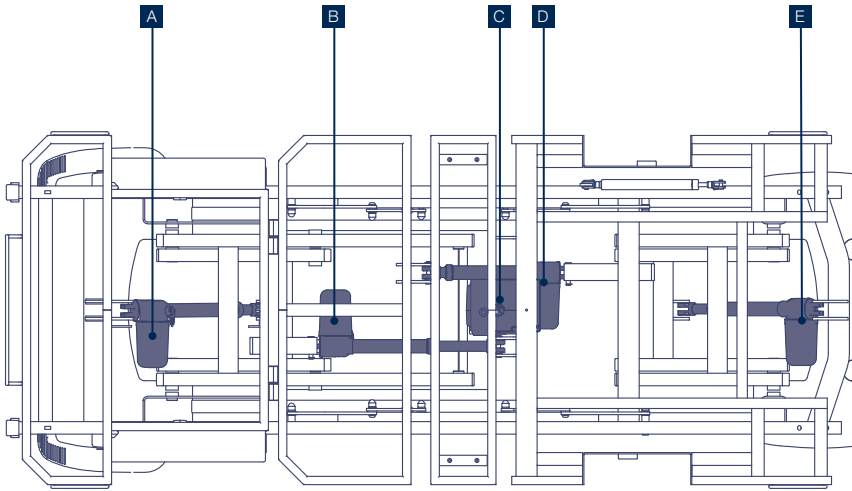
NewCare bed has the following configuration:

- Control box system.
- Battery.
- Two connectio boxes (depending on options).
- Under bed light (UBL)
- Four lineal actuators (one for the backrest, one for the legs and two for the lifting).
- Two rails with membrane control (depending on options).
- Patient control with extendable wire (depending on options).
- Nursing control with extendable wire (depending on options).

The wiring diagram* is the following:



*This diagram is just an example of the possible configuration.



Item	Description	Item	Description
A	Bed lifting motor (extremities section)	F	Patient control
B	Backrest lifting motor	G	Nursing control
C	Control box	H	Membranes control rails
D	Extremities lifting motor	I	MJB (motor junctions box)
E	Bed lifting motor (backrest section)	J	Under bed light UBL

CE Declaration



EC DECLARATION OF CONFORMITY

INDUSTRIAS HIDRÁULICAS PARDO, S.L.
C/ Los Ángeles 5, (Polígono Centrovía)
50198 La Muela, Zaragoza (Spain)
CIF: B50057322

Autorized company by the Spanish Medical and Sanitary Products Agency of the Spanish Health Ministry
with num. 261 P.S.

STATES THAT THE PRODUCTS DESIGN AND MANUFACTURING ARE:

Typo:	Hospital bed
Model:	NEWCARE V3
Serial Num.:	Check label
Production date:	Check label
Classification:	This product are Class I, according to Annex IX of the Directive 93/42/CE

IN ACCORDANCE WITH THE FOLLOWING DISPOSITIONS:

- Directive 93/42/CE of Parliament and the Council, of 14 June concerning medical devices.
- Directive 2006/42/CE of Parliament and the Council on 17 May 2006 concerning machines and amending the Directive 95/16/CE.
- Directive 2006/95/CE of Parliament and the Council, of 12 December 2006 concerning on the aproximation of the laws of the Member States relating to the electrical material to be use don certain voltage limits.
- Directive 2004/108/CE of Parliament and the Council, 15 December 2004 concerning on the aproximation of the laws of the Member States relating to the electromagnetic compatibility.

REFERENCE STANDARDS:

- Standard UNE EN ISO 12100, "Machinery safety. General principles for design, risks analysis and risks reduction".
- Standard UNE 20324, "Degrees of protection provided by enclosures (IP Code)". Equate to IEC 60529"
- Standard UNE EN 60204-1, "Machinery safety. Electric equipment of the machines. Part 1: General requirements"
- Standard UNE EN 60601-1, "Medical electrical equipment. Part 1: Basic safety general requirements and essential functioning"
- Standard UNE EN 60601-1-2, "Medical electrical equipment. Part 2: Safety general requirements. Collateral standard: Electromagnetic compatibility. Requirements and tests"
- Standard EN 60601-2-52, Medical electrical equipment. Part 2-52: Basic safety general requirements and essential functioning of hospital beds"





Preventive maintenance control list

Client:

Model:

Serial num.:

KEY	
L = Lubrication	R= Repair Replacement
M = Cleaning	Ok = No problem
A = Adjustment	NA = Not applicable

FUNCIONES								
	Date	Date	Date	Date	Date	Date	Date	Date
General Status								
Headboard and footboard								
Brake system								
Electric system								
Rails								
Wheels								
Bed base								
Sections motors								
Lifting motors								
Extensible, rastomat, CPR								
Others								
Repair cost								
Labour cost								
Total cost								
Reviewed by								

Client:

Model:

Serial num.:

KEY	
L = Lubrication	R= Repair Replacement
M = Cleaning	Ok = No problem
A = Adjustment	NA = Not applicable

FUNCIONES								
	Date	Date	Date	Date	Date	Date	Date	Date
General Status								
Headboard and footboard								
Brake system								
Electric system								
Rails								
Wheels								
Bed base								
Sections motors								
Lifting motors								
Extensible, rastomat, CPR								
Others								
Repair cost								
Labour cost								
Total cost								
Reviewed by								

THE MOST
INNOVATIVE
HEALTHCARE
EQUIPMENT IN
THE WORLD.



T: 0345 034 1450
E: enquiries@innova.uk.com
W: www.innovacareconcepts.com