INSTRUCTION FOR USE **ELBUR PB 636 IV**







Dear Customer,

Congratulations on having chosen a quality ELBUR PB 636 IV nursing bed which will certainly fully meet your expectations. We would like to take this opportunity to thank you for showing such confidence and trust in our company and purchasing one of our products.

Due to designing and manufacturing in accordance to the latest technological development at the time of delivery, our Nursing Beds, which are used to alleviate and compensate for injuries and disabilities, are very durable and ensure essential performance. They combine modern design and technical accuracy with user-friendly handling, also meet the varying needs of patients and professional caregivers.

Based on great experience of Elbur company, we can guarantee high quality and reliability of our products. We also care about attractive design, as well as matching furniture systems and accessories, which can be chosen depending on the individual needs.

This instruction manual provides important information regarding safe operation for the Operators, Users and Patients. It describes: assembling, care and maintenance the nursing bed and operating the adjustment functions. It will help you to get familiar with the assembly actions, operation, capabilities and limitations of your bed. Read these instructions carefully and follow them exactly in order to provide reliable service and avoid damage or incorrect operation.

If you have any questions regarding setting up, using, maintaining this product or you would like to receive other customer service information, please do not hesitate to contact your local distributor or if in doubt our company directly.

We always meet customer expectations and we will do our best to fulfil your needs in future.

Team Elbur

Table of contents

General information	
Contact details	
Design policy	
Safety symbols used	
1.0. Product description	
1.1. Intended purpose and range of application	
1.2. Technical specification	
1.3. Labelling of Nursing Beds	
1.4. Explanation of symbols used on labelling	
2.0. Definition of the groups of persons involved	
3.0. Safety information and general warnings	
4.0. Scope of delivery, transport and storage	
5.0. Electric components	
6.0. Accessories and spare parts	
7.0. Mattress selection	
8.0. Assembly and use	
8.1. Preparation	
8.2. Mattress Support Platform	
8.3. Assembly of Control Box and MSP Actuators	
8.4. Actuator cable clip protection	
8.4.1. New type of actuator cable clip	
8.4.2. Old type of actuator cable clip	
8.5. Connecting electric components and cable routing	
8.6. Assembly of the Mattress Support Platform on the Scissor Lift	
8.7. Castors operating	
8.8. Assembly of the End Boards with MSP End Sections	
8.9. Height and angle adjustment of MSP sections	
8.10. Additional adjustment of the Lower Leg Rest	
8.11. Emergency lowering of the Back Rest	
8.12. Side Rails	
8.13. Side Boards	
8.14. Lifting Pole	
9.0. Movements of Nursing Beds	
10.0. Functionality Check	
11.0. Cleaning and Disinfection	
12.0. Troubleshooting	
13.0. Disassembly	
14.0. Disposal	
15.0. Maintenance	
16.0. Electromagnetic Compatibility statement	
17.0. Warranty	.54



General information

This instruction for use is part and parcel of the product and must accompany every product sold.

Article name, [number]	Instruction for use of ELBUR PB 636 IV, [35165]
Document number,	TF-13.5
version, date of issue	ver.01, 18.10.2021

All rights reserved - no part of this manual may be reproduced in any form without written permission of the manufacturer.

Contact details

When assistance is needed regarding setting up, using, maintaining this product or when is necessary to receive other customer service information, please do not hesitate to contact your local distributor or if in doubt our company directly at the following address:

Address	Elbur sp. z o.o. sp.k.
	Działosza 34
	56-500 Syców, POLAND (PL)
	NIP: 9112035149 REGON: 386426270
Telephone	+48 62 786 97 80
E-mail / Website	info@elbur.eu / www.elbur.eu

Design policy

This manual reflects the latest product development. However as our policy is one of continuous improvement, we reserve the right to modify design or introduce technical changes without prior notice or without being imposed to any obligation to adapt or replace similar products previously delivered.

Safety symbols used

In this instruction for use, safety information is displayed in the following way:

WAR	WARNING				
\triangle	Indication of a potentially hazardous situation that, if disregarded of				
	lead to death or injury.				

CAUTION		
\triangle	Indication of a potentially hazardous situation that, if disregarded could	
	result in damage / failure to the product or something around it.	

ATTENTION		
\triangle	General information or tips regarding the safe use and helpful courses	
	of action.	

It is very important to read all written safety information included in this manual and follow the instructions exactly!

Pictures are used to clarify instructions in this manual. Details of the depicted product may deviate from your product.

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1.0. Product description

1.1. Intended purpose and range of application

ELBUR PB 636 IV is classified as a Medical Device Class 1 in accordance with the Medical Device Regulation 2017/745 on medical devices. It is developed, manufactured and tested according to the current state of technical knowledge and all relevant safety standards for medically used beds. Most importantly, it ensures basic safety and essential performance, which are provided by the fulfilment of requirements presented in *EN 60601-2-52* standard.

ELBUR PB 636 IV is intended to be used in a long-term, continuous care for infirm, frail and handicapped adult patients. It provides a high degree of lying comfort. Subject to risk assessment, the Bed is used to and may help to maintain, improve, compensate or alleviate for injury, disability, disease and the overall condition of the patient.

WARNING		
<u> </u>	A risk assessment must be carried out before the Bed is used by a	
	patient.	

It may be used in the following application groups according to EN 60601-2-52:

- 3 Long-term care in a medical facility in which medical supervision is required and monitoring is provided if required. A medical electrical device used in medical procedures can be provided to help maintain or improve the condition of the resident (e.g. retirement and nursing homes, rehabilitation facilities and geriatric institutions).
- 4 Care in the home. A medical electrical device is used to alleviate or compensate for injuries, disabilities or illnesses.

ELBUR PB 636 IV is approved by manufacturer for use by patients having a physical size equal to or greater than 146 cm, a mass equal to or greater than 40 kg and a body max index (BMI) equal to or greater than 17.

It is recommended to use Elbur Mattress Platform Extension for patients taller than 190 cm.

It is designed and manufactured solely as resting place to support one patient with maximum weight of 140 kg. The safe working load of the bed is 175 kg.

The ELBUR Nursing Bed described in this manual is not suitable for the patient transport, but it can be moved within the patient's room for cleaning purposes or to allow access to the patient for care activities.

WAF	WARNING		
\triangle	Any other used than described above is considered improper and is excluded from a possible liability claim.		
\triangle	The indicated values of Maximum Patient Weight and Safe Working Load		
	cannot be exceeded.		
\triangle	Only use suitable Side Rails and Mattress on this Bed.		
\triangle	Only use accessories and spare parts approved by Elbur.		
A	ELBUR PB 636 IV is not suitable for child patients or for use in hospitals.		



ATTENTION



ELBUR PB 636 IV is not licensed for use on the North American market, especially in the United States of America. The distribution and use of the mentioned Nursing Bed in these markets, including through third parties, is prohibited by the manufacturer.

The ELBUR Nursing Beds are developed and constructed in such a way that they can function long and safely.

If the Bed is used and operated properly, the estimated product life is 4-8 years – it all depends on the conditions within and frequency at which is used.

ELBUR PB 636 IV ensures also enhancing conditions of work for the nursing staff, to make the work of caregivers easier. Electric regulation simplifies patients getting in/out to bed, comfortable setting in chosen position and access to patient during hygienic actions given by care assistant.

It is classified as a Class II electrical product and is suitable for indoor use only. The electrical building components comply with safety standard EN 60601-1 for Medical Electrical Equipment.

ATTENTION



ELBUR PB 636 IV has no special connectors for potential equalisation. Please be aware of that before connecting additional medical electrical equipment. The operator of the medical products has to ensure that the combination of the equipment meets the requirements of EN 60601-1 standard.

The indivdual ELBUR Nursing Bed coponents are made from the best quality materials, which biocompatibility is described in the technical documentation. The Bed is made predominantly of steel sections coated with a durable polyester-powder coating. All wooden or wood-based parts are protected with an ecologically coating that is low on harmful substances. The indicated surfaces are safe for contact with the skin.

A wide range of wooden finishes and a variety of colours allow for the harmonious integration of ELBUR PB 636 IV with any kind of furniture

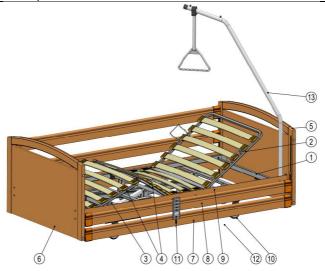
The Mattress Support Platform consists wooden slats as a base standard, but this model can be also ordered with metal slats as a base. It is divided into four functional sections: Back Rest, Stationary Seat, Upper Leg Rest, Lower Leg Rest.

The various parts of the Bed are moved with protective-low voltage by Linak Actuators. The Main Lifting Actuator is mounted on the scissor lift (pre-assembled in the factory) and control the Bed height. Two other Actuators are positioned underneath the Mattress Support Platform and control the Back Rest and the Leg Rest. Each individual position can be controlled adjusted continuoulsy with a touch of a button on the Handset. The Actuators, Handset and Power Cable are connected to a Control Box, which is fixed onto Mattress Support Platform

ELBUR PB 636 IV is equipped with Full-length Side Rails and Lifting Pole in the standard configuration. Instead of the Full-lenth Wooden Side Rails, ELBUR Nursing Bed described in this manual can be equipped also with Split Side Rails.



Basic UDI			
ELBUR nursing bed Model	GS1 Company Prefix	Internal Number / Model Ref.	Valid-check character pair
ELBUR PB 636 IV	590426134	ELBURPB636IV	HP
	590	426134ELBURPB636	IVHP



No.	Description	No.	Description
1	MSP (Head Section)	2	Back Rest Section
3	MSP (Leg Section)	4	Leg Rest Section
5	Head End Board	6	Foot End Board
7	Lower Side Rail	8	Upper Side Rail
	(with top holes drilling)		(with bottom holes drilling)
9	Side Board	10	Castor
11	Handset	12	Lifting Pole with Triangle Handle
13	Drive system: CB6 Control Box with Leg Rest Actuator, Back Rest		
	Actuator (concealed in picture)		

1.2. Technical specification

ATT	ENTION
\triangle	All indications of dimensions and weights in this manual are approximate (measurement tolerance: ± 15 mm / 0,5kg / 1,5°).
\triangle	The technical details above are only valid for this Nursing Bed, at standard settings and optimal ambient conditions.
\triangle	All parts and data are subject to a constant further development and therefore may differ from mentioned data.
\triangle	The values are no longer applicable if your Nursing Bed has been modified, damaged or suffers from severe wear.

ELBUR PB 636 IV



TECHNICAL SPECIFICATION		
MODEL:		ELBUR PB 636 IV
	Maximum Patient Weight	140
Load	Safe Working Load (SWL)*	175
[kg]	Lifting Pole	80
	External [WxL]	106 x 207
Dimensions [cm]	Mattress Support Platform (MSP) [WxL]	90 x 200
[6]	Under bed clearance	16
Adianton	Height – Mattress Support Platform [cm]	29 - 72
Adjustment	Angle – Back Rest Section [°]	0 - 70
	Angle – Upper Leg Rest Section [°]	0 - 32
Operating	Temperature [°C]	Od +10 do +40
conditions	Humidity [%]	30 - 75
Storage	Temperature [°C]	Od -20 do +50
conditions	Humidity [%]	30 - 75
Mattraga	Dimensions [HxWxL]	up to 12x90x200 [cm]
Mattress	Volume density of foamed material	35 - 50 kg/m ³
	Control Box	LINAK CA40
	Lifting Hi-Lo Actuator	LINAK LA40
	Back Rest / Leg Rest Actuator	LINAK LA27
	Input voltage **	100-240 V AC, 50/60 Hz
	Output voltage	24V DC
Drive	Power input **	Max. 2,5A
system	Operating time **	Duty cycle: 10%, 2 min / off 18 min
	Ingress Protection **	IP X4 (Actuators & Handset) /IP X6 Washable (Control Box)
	Electrical appliance Class **	II
	Noise level	Typically < 65 dB (A)
	Total	115,7
	MSP (Head End / Leg End Section)	19,4 / 19,2
	Scissor Lift with Main Lifting Actuator	34,1
Weight	End Board (1)	10,8
[kg]	Side rails (1 lath / Set)	2,8 / 11,2
	Lifting Pole with Triangle Handle	5,3
	Back Rest / Leg Rest Actuator	1,5 / 1,5
	Handset / Control Box	0,3 / 1,6

^{*} The safe working load equal to 175 kg is calculated as follows (as specified by EN 60601-2-52):

Maximum Patient Weight:140 kgMattress:20 kgAccessories:15 kg

^{**} Electrical data values visible on the Name Plate of the ELBUR Nursing Bed.



1.3. Labelling of Nursing Beds

Manufacturer's Name Plate (including serial number*)

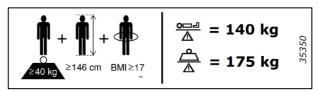
[located on the Scissor Lift inner tube]



*Please quote SN on all correspondence regarding sales and customer service information or to report unexpected operation.

Warning / Information label no. 35350

[located on the inside of the MSP Head End frame]

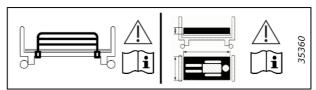


Warning

A Nursing Beds are designed for patient having a physical size equal to or more than 146 cm, a mass equal to or more than 40 kg and a body max index (BMI) equal to or more than 17.

Warning / Information label no. 35360

[located on the inside of the MSP Head End frame]



Warning

riangle Incompatible side rails can create entrapment hazards.

⚠ Incompatible mattresses can create entrapment hazards.

Warning / Information label no. 35365

(Mattress Support Platform - Head End Section)

[located on the top of Back Rest Section]

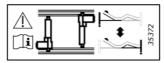




Warning / Information label no. 35372

(Indication of the appropriate assembly of drive units)

[located underneath the Bed]



Warning / Information label no. Linak CA40

(Indication of the appropriate cables connection to Control Box channels)

[located on the CA40 Control Box]



1.4. Explanation of symbols used on labelling

Symbol	Description
REF	Catalogue number
SN	Serial number
سا	Date of manufacture (month/year)
	Manufacturer
<u>о</u>	Maximum Patient Weight
<u>^</u>	Safe Working Load (SWL)
MD	Medical Device
\triangle	Caution, read instructions before use
(i)	Consult the Instruction for Use
X	Temperature limit
4	For indoor use only
<u>\$</u>	Do not dispose of in household waste. This product must be disposed via the separated municipal waste.
	Class II electrical device, double insulated, degree of protection against electric shock



Symbol	Description
∱	Type B applied part according to EN 60601-1 (symbol indicates this product has a degree of protection against electric shock for type B equipment)
C€	Conformity mark according to the Medical Device Regulation (EU) 2017/745
+ 1 + 1 + 1 + 1 + 1 + 1 + 1 + 1 + 1 + 1	Minimum Patient weight = 40 kg; Minimum Patient Height = 146 cm; Minimum Patient BMI = 17.
	Detachable side rail suitability
	Mattress suitability
🕏	Product with a thermofuse
0	Safety isolating transformer, general
©	Pollution control mark (China)
<u>&</u>	Symbol regulatory compliance mark of The Australian Safety/EMC Regulations

2.0. Definition of the groups of persons involved

WARNING

All pe

All persons working with the ELBUR Nursing Beds must be acquainted with the safety instructions contained in this manual. Improper operation can result in personal injuries or product damage.

Operator – every natural and legal person (e.g. care home operator, medical supply distributors) responsible for safe operation and supervising of the Bed.

User – person who is qualified how to operate the Bed or handle its functions, based on performed trainings, experience or briefing. The user is able to recognize and avoid possible risks and to assess the health condition of occupant.

Patient – person who is injured, disabled or handicapped and who occupies the ELBUR Nursing Bed in need of care.

For homecare application area Operator, User and Patient can be perceive as the same person.



3.0. Safety information and general warnings

14/4	ONITALC	
WARNING		
\triangle	Before assembling and operating the Nursing Bed, you must read, familiarize, understand and follow all instructions in this manual at with rated values/symbol provided on labelling carefully. It helps to prevent any damage and risk occurring due to incorrect operation or use.	
\triangle	Use the Nursing Bed in accordance to its intended purpose and in accordance to all instructions detailed in this manual, describing the normal operating procedure.	
\triangle	Remember to keep this instruction manual for future reference. Please ensure that the manual is available to users and carers at any time throughout the Bed's service life.	
\triangle	These instructions must be observed to ensure convenient handling, safe operation and effective use of this Bed and the safety of users and carers.	
\triangle	All actions regarding assembling, handling, positioning and using of the Bed must be performed in accordance with the provided information to ensure safe operation.	
\triangle	The safety features for operating the Bed and instructions concerning the Bed must be strictly observed.	
\triangle	Only use technically perfect Bed, in proper and faultless condition - it must not be used if faults have been detected on it that may injure the patient, staff or a third person.	
\triangle	If damage or malfunction is suspected, take the Bed out of service immediately, label it as non-conforming product and disconnect it from the power until exchange or repair of broken components.	
\triangle	Any actions that are inconsistent with the manual are performed at your own risk and can result in serious injury or death. Elbur sp. z o.o. sp.k. shall not be held liable for any damage, injuries or accidents arising from unauthorised modifications, non-genuine spare parts, negligence or use that is at variance with this manual.	
\triangle	Any serious incident that occurs in relation to this medical device, affecting the user/operator or the patient, should be reported to manufacturer - Elbur sp. a o.o. sp.k. and the Competent Authority of the Member State in which the device is used.	
\triangle	The Bed must only be operated by persons who are able to operate it in accordance with the manual. Operators and patients must be risk assessed to ensure they are able to operate the ELBUR PB 636 IV safely without risk to themselves or others.	
\triangle	Before using the Bed, the operator should understand the Bed and its functionality.	
\triangle	Bed users should only operate the Bed if they have been assessed as competent to do so and can understand the safety instructions in this	



WARNING	
	manual. The operating staff must make the patient aware of the control functions that apply to the patient subject to an assessment by a professional.
\triangle	Two people qualified in Nursing Bed's operating are recommended (not required) to perform the assembly process.
\triangle	This Bed must not be exposed to smoke, naked flame, extreme temperature, flammable gases or other hazardous substances or situations.
\triangle	The Bed must not be used where there is a danger of explosion or in the presence of uncontained flammable liquids.
\triangle	Electrical installations must meet local requirements.
\triangle	Electrical equipment can be hazardous if misused or abused. Do not open any electric components.
\triangle	Ensure that all cables (Power Mains Cable, Handset cable, Actuators cables) are not damaged by crushing, that there is no loop in the cables and that they are not get entrapped between the moving parts of the bed.
\triangle	Only the Power Supply Lead supplied with the Bed may be used. Connect it directly to an electrical outlet – do not use extension cords or multiple outlet extension cords.
\triangle	Nursing Bed should be located in place which allow to easily removing mains plug from the socket.
\triangle	The electrical supply cable could create a trip hazard. Safely position and route the cable.
\triangle	Make sure that the power supply cord does not get squished under the castors.
\triangle	The Handset should be positioned to avoid strangulation risk. Make sure that Handset is placed properly, that it is not trapped between Side Rails and Mattress Support Platform/other furniture.
\triangle	At the same time only one person can operate the Bed. It is strictly prohibited to press all buttons simultaneously on the Handset.
\triangle	Inappropriate use of the Power supply cable and Handset (shearing, kinking) could lead to dangerous electric hazards. The Bed must not be used if there is any visible damage to the Handset or Cables.
\triangle	When routing cable for other electrical equipment used with the Bed, ensure cables cannot be squeezed, crushed or damaged by the moving parts on the Bed. Inappropriate routing of accessory cables could lead to dangerous electric hazards. The Bed must not be used if there is any visible damage to any cables.
\triangle	If using the electrical functions adversely affects the health of the Bed user, disconnect the power supply and only use the Bed in static mode.



WARNING	
\triangle	It is essential to leave the Nursing Bed unused for at least 18 minutes, after maximum period of operation of 2 minutes, which must not be exceeded.
<u> </u>	For reasons of safety and electromagnetic compatibility, use only original electric components from Elbur that have been released for the Nursing Bed model in order. Otherwise it can caused danger for patients and loss of Bed functionality. It is still possible that the operation performance is influenced by electromagnetic fields like those of cell phones, power generators of high power energy sources, despite sample of ELBUR Nursing Bed has been tested on electromagnetic combability and complies to the EN 60601-1-2 standard. On the other hand, it is also possible that the electronics of the Bed influences other electronic devices.
\triangle	The special attention should be given to children and pets - keep them away from this Bed unless supervised by an adult as there is a risk of injury and/or choking on small parts.
\triangle	Maximum Patient Weight and Safe Working Load must never be exceeded.
\triangle	Only one person should occupy the Bed at any time.
\triangle	Use the Bed on the flat, level, solid floors - remember that all four castors must touch the ground and must be locked if there is a patient on the Bed and location is not going to move, as an unlocked Bed castor can cause injury to a patient who leaves the Bed or changes position.
\triangle	This Bed is not adapted for patient's transport, but it can be moved within patient room for cleaning or patient access. Due to force the propulsion, it has to be done by two people. Patient has to stay in flat position and Nursing Bed should be adjusted in the lowest height. Remember to unplug the Power Supply Lead before relocating the Bed and make sure it will not be rolled over or damaged in other way.
\triangle	Never stand on the Bed.
\triangle	Do not use the Bed as a means of transport, ladder, or storage for heavy or hot objects.
\triangle	Do not perform medical operation on the Nursing Bed.
\triangle	Before operating this Bed, ensure the Bed user is safely positioned to reduce the risks of Bed fall or entrapment.
\triangle	There must be enough space for Bed height adjustment. It cannot be blocked by any obstacles such as bedside lockers or window sills etc.
\triangle	When operating the moving parts of the Bed, care must be taken to ensure that the patient, operator or any other people, especially children, and objects do not become trapped, jammed or injured.
\triangle	The height of the Mattress Support Platform must be adjusted to the correct height for the condition of the patient.
\triangle	The Bed should be left in its lowest position when the patient is unattended to reduce risk of injury due to falls.



WARNING	
\triangle	Always check for any entrapment risks under the Bed before lowering to its lowest position.
\triangle	Never use area under the Bed as a storage space.
\triangle	Use only original Elbur accessories which are compatible with this Bed – any modification is strictly forbidden without authorization of Elbur.
\triangle	Only use Side Rails that are compatible with this Bed as supplied by Elbur. Incompatible Side Rails can create hazards and entrapment risks. There must be a minimum height of 22 cm without compression measured from the top of the mattress to the top edge of the top Rail.
\triangle	When different mattress thicknesses are in use (thicker than 12 cm), operator or person in charge has a duty to decide to undertake special safety measures in order to prevent trapping or person completely falling out in accordance to EN 60601-2-52.
\triangle	If a Lifting Pole is fitted on the Bed, increased attention must be taken during movement or lifting, to the space around the Lifting Pole, so that the equipment is not damaged.
\triangle	Make sure that other attached equipment can function in a secure and safe manner. Contact your local distributor or manufacturer, if you have any doubts.
\triangle	Before cleaning the Bed, the electrical supply must be disconnected.
\triangle	The Nursing Bed must be cleaned and washed down with disinfectant (refer to chapter 11. Cleaning and Disinfection) in case of a patient change or in other situation required it.
\triangle	Do not allow electric components to contact with water – the electrical components must not be cleaned with a water jet or a high-pressure cleaner. Clean only with a soft, damp cloth (not drenched).
\triangle	Only specially authorized technicians are allowed to carry out troubleshooting activities and replace individual electric components.
\triangle	When repairing the Bed, only original materials and components may be used, otherwise the manufacturer cannot guarantee against any damage that might occur. Contact your local distributor or manufacturer directly if the exchange or repair of faulty parts have to be made.
\triangle	It is obligated to perform periodic inspections and electrical tests according to EN 62353 performed by technically trained person at least once a year, with every re-use for a new patient or with every maintenance, to ensure safe condition of the Nursing Bed. The subsequent technical safety check has to be documented.
\triangle	During performing service work patient cannot lay on the Bed.
\triangle	When it is necessary service technicians will receive from manufacturer circuit diagrams, parts list with description, calibration instructions and other needed information.
\triangle	The manufacturer is not liable for damage caused as a result of not following instructions from this manual or by the lack or improper service.



4.0. Scope of delivery, transport and storage

CAU	CAUTION	
\triangle	An inspection must take place upon receipt to ensure the delivery is complete and undamaged. Check whether any visible damage has occurred to the Bed during transport.	
\triangle	Always verify shipment contents with your order (<u>items described</u> <u>below may not be included in the ordered model configuration</u>).	
\triangle	Before assembling or operating the Nursing Bed, you must read, understand and follow all instructions in this manual carefully.	
\triangle	If the Bed has become soiled or contaminated during transport refer to cleaning and disinfection instructions.	
\triangle	If the Bed is stored in conditions outside the normal operating range, it should be allowed time to stabilise, in normal operating conditions, before use.	

ATTENTION

Any missing parts, faults or damage must be reported immediately to the carrier and your local distributor or Elbur directly in writing.

ELBUR PB 636 IV is delivered unassembled and packed in the following order in several cardboard boxes:

- 1) Scissor lift with Main Lift Actuator LA40,
- 2) Mattress Support Platform (Head End and Foot End separated) with small Box of Accessories and assembly parts inside,
- 3) Set of two End Boards,
- 4) Lifting Pole with Triangle Handle,
- 5) Set of Side Rails,
- 6) Set of two Side Boards.

Reliable package protects bed components from external damages and ensures that patient or user get a Bed in the perfect condition.

If not in use, disassembly the Bed and store it at a dry location, protecting from mould, rust or destruction under external influences before re-use. Technical specifications ($subclause\ 1.2.$) contain guidance of operating and storage conditions.

No.	Description	Reference picture
1.	Mattress Support Platform – Head End (with CA40) and Back Rest	
2.	Mattress Support Platform – Foot End and Leg Rest	
3.	[set of 2 identical End Boards, which may be fitted to either and of the Mattress Support Platform]	



No.	Description	Reference picture
4.	Scissor Lift with Main Lift Actuator LA40 There are two options to order of the Scissor Lift to configurate ELBUR PB 636 IV: a) Standard model with total brake (individual) for each castor, b) Optional model with central brake	Standard model of PB 636 IV Scissor Lift with total brake for each castor Optional model of PB 636 IV Scissor Lift with central brake
5.	Carton Box with accessories: 2x Blind stopper for CA40 Control Box, 2x LA27 Actuator (for Back Rest and Leg Rest Sections), 1x HL74 Handset, 1x Locking Key for adjustment functions, 1x Power Supply Lead, 2x Cable (460mm long) for connecting LA27 Actuators to CA40 Control Box, 4x Plastic Slider with 4 fingers 6x Quick-release bolt, 6x Plastic head thumb screw (hand knob), 4x Grub screw, 8x M6x30 Button Head Screw, 8x Hole Cover Cap 1x 4mm Allen key, 4x T-Profile to attach End Boards on Mattress Support Platform, 2x Roller for assembly Mattress Support Platform on the Scissor Lift	
6.	Side rails set There are two options to order of the Side rails to configurate ELBUR PB 636 IV: a) Full-length Wooden Side Rails set (4 Side Rails with plastic end caps), b) Split Side Rails (1 short and 1 long for each side of the bed) Customer can also decide to configurate ELBUR PB 636 IV with Full-length Wooden Side Rails on one side of the bed and Split Side Rails on the other side.	Full-length Wooden Side Rails (Standard) Split Side Rails (optional)



No.	Description	Reference picture
7.	Side boards set	
	Depends on chosen Side rails there are two options of Side boards a) ELBUR Side Boards – Model Standard [R1] (designed to use with Full-length Side Rails), b) ELBUR Side Boards – Model Standard [R3] (designed to use with Split Side Rails)	Side Boards Model R1 Side Boards Model R3
7.	Lifting Pole with Strap and Triangle Handle	

5.0. Electric components

WAI	WARNING	
\triangle	Nursing Bed does not have emergency-off switch. Remove the power	
	plug in emergency situation.	
\triangle	Duty cycle: Intermittent operation 2 min / 18 min OFF. This implies that after the maximum continuous action of two minutes, there must be a break of 18 minutes.	
\triangle	Do not attempt to open or repair any electrical parts. It could be fatal!	

CAUTION		
	Ŷ	Thermal switch turns off Control Box if it overheats, when e.g. someone
		continuously playing with the Handset. After a cooling down time of
		approx. 30 minutes, it should be ready to re-use again.
	$\overline{\mathbb{V}}$	Limit switches turn off the Actuators, when they get to the limit position.

ELBUR PB 636 IV is equipped with drive system from Linak, a market leader in electric linear actuator technology worldwide.

The input voltage is converted into a protective non-hazardous low voltage in the Linak CA40 Control Box, so the Actuators and the Handset function with it.

The level adjustment of the Mattress Support Platform is adjusted via the Main Lifting Linak LA40 Actuator, connected to the Control Box with a straight cable.

Electric adjustments of the Back Rest and Leg Rest is performed by two separate Linak LA27 Actuators connected with Control Box by straight cables.

Control Box		
Туре	Linak CA40	
Supply voltage, frequency	100-240 V AC, 50/60 Hz	
Current input	Max. 2,5 A	
Protection category	IPX6 Washable	
Duty cycle	10 %, Max. 2 min / 18 min.	
Electrical appliance Class	II	



Power mains cable	
Туре	Linak, SML912163-A
	(The EPR Power Supply Lead is fitted with a
	push-on anti-kink device and tension protection)

Handset	
Туре	Linak HL74
Protection category	IPX4

Main Lift Actuator		
Туре	Linak LA40	
Maximum Load / Lift	Push 8000-5500 N / 225 mm	
Protection category	IPX6	
Power rate	24 V DC, Max. 7 A	
Duty cycle	10 %, Max. 2 min / 18 min.	
Electrical appliance Class	II	

3		
Back Rest Actuator / Leg Rest Actuator		
Туре	Linak LA27	
Maximum Load / Lift	3500 N / 85 mm	
Protection category	IPX4	
Power rate	24 V DC, Max. 3,8 A	
Duty cycle	10 %, Max. 2 min / 18 min.	
Electrical appliance Class	II	

6.0. Accessories and spare parts

WAF	WARNING	
\triangle	For safety reasons only use original Elbur accessories – modification of this Nursing Bed is strictly forbidden without the approval of the manufacturer.	
\triangle	Elbur sp. z o.o. sp.k. will assume no liability for any accidents, damage, injury, hazards and risks arising from the use of other accessories and spare parts (not supplied by your local distributor that come about through the use of accessories and spare parts not supplied by your local distributor from Elbur).	
\triangle	It is necessary to perform specific control tests after modifying the Nursing Bed to make sure that it is going to work properly.	
\triangle	When using accessories on the Bed, ensure particularly that there are no risks of crushing or shearing for the patient when adjusting Mattress Support Platform and positions of its sections.	
\triangle	Elbur sp. z o.o. sp.k. does not accept any liability for the use of these products on other makes.	

Every element of our additional equipment offer meets the special quality and safety standards of Elbur.

The installation of our practical and mobility-promoting accessories is done in a quick and easy manner using the fixing points on the bed that have already been prepared for this purpose. Those products ensure that ELBUR Nursing Bed



is tailored even more precisely to the individual needs of the patient who needs specific care. Various accessories can be added to assist patient and carer, but not to every product – it depends on the configuration of the ELBUR Nursing Bed.

Accessories intended to use with ELBUR Nursing Beds	Article No.
Bed Lever Model H-6	10154
Clip-on Safety Side Rail	10170
Extra-High Folding Side Rails	11215
Upholstered Cover for Full-Length Side Rails	38006
Upholstered Cover for Split Side Rails (Short & Long)	38007&38008
20-cm Mattress Support Platform Extension	10110
Tray (for 90 cm wide Nursing Bed)	10125

Please contact Elbur Customer Service to consult use of specific accessories with ELBUR Nursing Bed, which you own.

7.0. Mattress selection

WARNING		
\triangle	Incompatible mattresses can create hazards.	
\triangle	All mattresses must be fitted and used in accordance with the mattresses manufacturer or supplier's instructions.	
\triangle	Mattress platform extension infill piece must be used if the mattress support platform is extended. Failure to do so will result in unacceptable gaps and risk of injury and entrapment.	
\triangle	There must be a minimum height of 22 cm without compression measured from the top of the mattress to the top edge of the top Side Rail. This is illustrated on the picture below.	
	1 – mattress support platform, 2 – foot end board, 3 – head end board, 4 – mattress, G ≥ 22cm	
\triangle	Where a speciality mattress or mattress overlay is used and the distance from the top of uncompressed mattress to the top of the Side Rails, if fitted, is less than 220 mm a risk assessment must be performed to assure equivalent safety.	

Standard mattress size, which is dedicated to ELBUR PB 636 IV Nursing Bed, has dimensions equal to 90x200 cm. A volumetric weight of at least 35 kg/m³ is required.

The bed is configurated with Wooden Full-length Side Rails, which allow to use 12-cm thick mattress.

Clip-on Safety Side Rails (art. 10170), which can be assembled on the Standard Full-length Wooden Side Rails, allow to use even 32 cm thick mattress.



8.0. Assembly and use

CAUTION	
\triangle	Before commencing assembly of the Nursing Bed, you must read, understand and follow all instructions in this manual and labelling on the bed carefully.
\triangle	Assembly must be carried out by suitably trained and qualified personnel.
\triangle	All functions must be tested and approved after assembly by suitably trained and qualified personnel.
\triangle	Assembly must take place in clear, uncluttered area – there must be enough space available for adjusting the bed and the space under the Bed must remain clear.
\triangle	230 V power outlet (properly installed) must be available, near the nursing bed in easily reachable position.
\triangle	Children and pets should be kept away
\triangle	Packaging must be sorted according to recyclable and other types of waste and recycled and disposed of in line with the environmental regulations and legislation of the country concerned.

8.1. Preparation

It is necessary to:

- 1) remove all packaging material,
- 2) pull the Scissor Lift out of the first carton box,
- 3) pull the Carton Box with Accessories and two parts of Mattress Support Platform out of the second carton box.
- 4) pull two End Boards out of the third carton box,
- 5) pull the Side Rails out of its carton box,
- 6) pull the Lifting Pole out of the carton box,
- 7) pull the Side Boards out of the carton box.

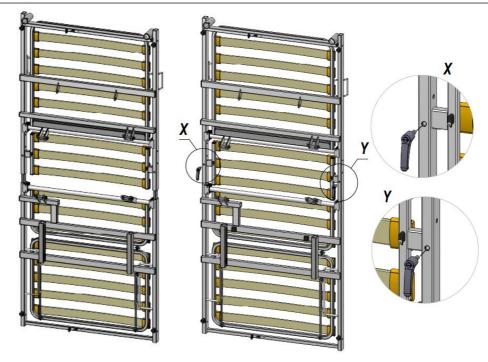
8.2. Mattress Support Platform

- 1) Insert Head Section* of Mattress Support Platform into Foot Section of Mattress Support Platform as far as it goes halves need to be joined by parallel movement to make sure that they do not get jammed.
- *Head End is marked with this label (placed on the Back Rest Section)



2) When both parts of the Mattress Support Platform are pushed together, secure the MSP Head End onto the MSP Foot End with the two Clamping Levers (included in the carton box of Side Boards) in threaded holes (in the middle of the bed) and tighten by hand, one on each bottom side of the bed frame.





8.3. Assembly of Control Box and MSP Actuators

Caution ⚠ Take special care in assigning Back Rest and Leg Rest actuators under the Mattress Support Platform. These must not be interchanged. Otherwise it can caused damage of electric components. Special Warning / Information label no. 35372 is located underneath the bed. ⚠ Back Rest Actuator has to be fitted under Mattress Support Platform with the motor housing towards the Foot End. ⚠ Leg Rest Actuator has to be fitted under Mattress Support Platform with the motor housing towards the Head End.

ATTENTION

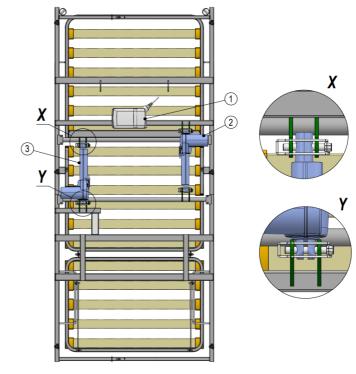
- The Control Box is fitted to the Mattress Support Platform in the warehouse.
- 1) Fit both Actuators into the MSP brackets (shown in green) align assembly holes in actuators with holes in those holding brackets,
- 2) Insert the quick-release bolts and secure by closing the retainers.



Bottom View

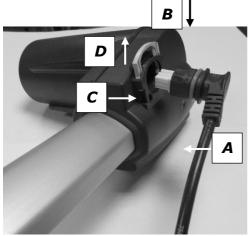
MSP Head End

- Control Box Linak CA40;
- Leg Rest Actuator Linak LA27;
- Back Rest Actuator Linak LA27.

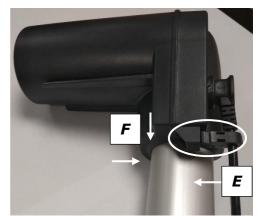


MSP Foot End

8.4. Actuator cable clip protection



New type of actuator cable clip



Old type of actuator cable clip



8.4.1. New type of actuator cable clip

To perform correct assembly insert the actuator cable to appropriate channel (A) and push the retaining clip down (B). Removing the retaining clip from the base of actuator is done by squeezing the clip on either side (C) then lifting the clip (D). If necessary, use a small flat blade screwdriver to lift the clip.

8.4.2. Old type of actuator cable clip

To perform correct assembly, insert cable plug appropriately in actuator channel and push retaining clip until it clicks into place (E). Removing the retaining clip old type from the base of actuator is done by pushing clip down then pulling it (F). Cable plug can be then easily bringing out from the actuator socket.

8.5. Connecting electric components and cable routing

Warning

 Λ

Inspect all wiring for damage and risk of crushing.

ATTENTION

The Control Box has a label to help identify the port into which to plug the handset and actuators cables. The numbers 1-4 are printed on the label and on the Control Box just above the ports.



- 1) Connect the cables from Actuators and Handset to the Control Box as described on the following page:
 - 1- Back Rest Actuator,
 - 2 Hi-Lo Main Lift Actuator of the Scissor Lift,
 - battery charging symbol unused connection slot (insert blind stopper),
 - 3 Leg Rest Actuator,
 - 4 unused connection slot (insert blind stopper),
 - Handset has to be connected to the slot placed below other slots.

*connect cable from the Main Lifting Actuator after assembly of Mattress Support Platform on the Scissor Lift.

- 2) Ensure the plugs are pushed into the sockets securely.
- 3) Ensure the Control box Clip securing cables plugged into appropriate channels is well-closed.
- 4) Connect the Power supply lead with Control box.

The power cable holder is located on the Mattress Support Platform, both Head End and Foot End. The Power Supply Lead has to be secured in the power cable



holder with the strain relief provided on the cable, otherwise it might be damaged by stretching, running over or squeezing.

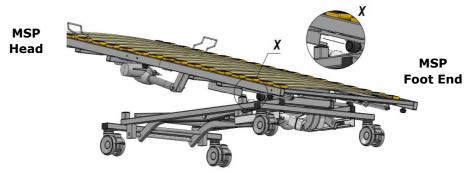
The handset cable must be routed from the Control Box underneath the Mattress Support Platform. It may come out from the MSP on either side, depending on user requirements. There are holders on both sides of the MSP (in the non-moving section), which can be used to hold Handset cable.

8.6. Assembly of the Mattress Support Platform on the Scissor Lift

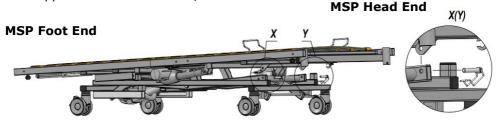
ATTENTION

⚠ It is recommended to perform described below activities by two people.

- 1) Place the Scissor Lift on the flat, horizontal surface,
- 2) Lock castor on both ends of the Nursing Bed,
- 3) Put two black rollers on external pins of the upper part of Scissor Lift,
- 4) Insert the guides of the Mattress Support Platform Foot End on just mounted black rollers,



- 5) Lower the Mattress Support Platform slowly and put it horizontal on the Scissor Lift,
- 6) Align holes of the Scissor Lift with the underneath brackets of the Mattress Support Platform Head End,



- 7) Insert two quick-release bolts through holes in the Scissor Lift tubes and brackets of the Mattress Support Platform Head End.
- 8) Connect cable from the Main Lifting Actuator after assembly of Mattress Support Platform on the Scissor Lift.



8.7. Castors operating

WARNING

Care must be taken to ensure the castor brakes are always locked when the Bed is in use, being assembled or being dismantled, so that the Bed does not move accidentally.

Always engage the brakes when the bed is stationery or left unattended.

CAUTION

The castors may become damaged, when moving the Bed along a rough, uneven or dirty surface. Good operation of the castors is influenced by wear and contamination of the castors (water, oil).

ATTENTION

There should be access to castors at all the time (especially for model with standard Scissor Lift).

⚠ Castors have to be placed along the Bed before locking them.

These castors are designed for use in an indoor environment and for travel on even, smooth and clean floors (e.g. ceramic floor tiles, linoleum, cast floors).

ELBUR PB 636 IV with the standard scissor lift (total brake for each castor)

Each of the four castors is equipped with a separate brake.

1) To apply the brake press down on the surface of the lower tilting lever downwards by foot as far as it goes (A), until it brakes the castor and locks in the 'down' position.

2) To release the brake press horizontally the surface of the top tilting lever backward by foot (B), until it springs back into the 'up' position - the castor is released.



ELBUR PB 636 IV with the optional scissor lift (central brake)

ELBUR PB 636 IV can be manufactured also with central brake, which means that pressing the foot brake lever allows to activate or deactivate locking system on all castors at the same time.





1) To apply the brake press down on the surface of the lower tilting lever downwards by foot as far as it goes (A), until it brakes the castor and locks in the 'down' position.



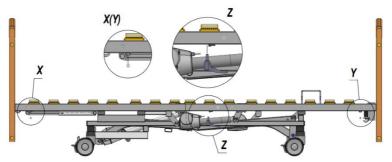
2) To release the brake press horizontally the surface of the top tilting lever backward by foot (B), until it springs back into the 'up' position - the castor is released.



8.8. Assembly of the End Boards with MSP End Sections

ATTENTION

- Two delivered End Boards are identical and may be fitted to either end of the Mattress Support Platform.
- 1) Fit an End Board and Mattress Support Platform Head End together (push the End Board T-Profiles into the MSP tubes to the limit). Two grub screws have to be used. Tighten them by Allen key when End Board is appropriately fitted into MSP tubes.



- 2) Fit the remaining End Board and Mattress Support Platform Foot End together in the same way like on the other end. Tighten by Allen key the grub screws, one either side of the Bed frame.
- 3) Ensure that all four grub screws (each end of the bed) and clamping levers (in the middle of the bed) are tightened securely in the Mattress Support Platform.





Grub screw



8.9. Height and angle adjustment of MSP sections

WAF	WARNING	
\triangle	Bed positioning must only be carried out by persons trained in use of	
	the Handset.	
\triangle	Bed users should only operate the Bed if they have been assessed as competent to do so and can understand the safety instructions in this manual. Before using the Handset, its operation must be well-explained to the bed user.	
\triangle	Check for obstructions around, above and below the Mattress Support Platform and position the Bed so that it can operate through the full height range without any possibility of obstruction or entrapment.	
\triangle	Adjustment of moving parts may only be used for the intended use.	
\triangle	Do not exceed the maximum duty cycle of 2 minutes. Observe a subsequent break of at least 18 minutes by all means.	
\triangle	Always store the Handset in a safe place when not in use to avoid risk of strangulation and entrapment in the bed mechanism.	
\triangle	Do not lose or misplace the Handset locking key.	

ATTENTION		
\triangle	Some of the buttons might not respond when you press them. If this is the case, they are locked to be used only by medical staff according to your medical condition.	

⚠ | Elbur assumes no liability for unauthorized technical changes.

The Handset allows to adjust height of Mattress Support Platform and angle of the Back Rest and Leg Rest sections, either individually or together (auto contour), within a predetermined range.

To change the position of the ELBUR PB 636 IV it is necessary to use the Handset. Press and hold one of the buttons on the keypad on the front side of the Handset until desired position is reached. To stop the movement, relase the button. The key-pad are marked with corresponding symbols.

Height adjustment range is $29 \div 72$ cm and Angle adjustment range is: $0 \div 70^\circ$ for Back Rest Section and $0 \div 32^\circ$ for Upper Leg Rest Section.

The Handset has got mounting bracket on its rear panel. It allows to keep the Handset always in easily reachable position on the Nursing Bed. A coiled cable allows the necessary freedom of movement while operating.





RAISING

Raise the Back Rest Section

Raise the Mattress Support Platform

Raise the Leg Rest Section

Raise the Back Rest and Leg Rest Section together at the same time



LOWERING

Lower the Back Rest Section

Lower the Mattress Support Platform

Lower the Leg Rest Section

Lower the Back Rest and Leg Rest Section together at the same time

℃ activated

6 disabled

To prevent unintended movements by the patient, the controls of the Handset can be individually Locked or Unlocked using the attached Linak Blue Locking Key.

For this purpose, insert the Handset Locking Key into the Lock / Unlock small dial between two buttons of the function to be Locked. the small dial between two buttons needs to be turned with help of the key.

Rotate the Handset locking key clockwise – the indicator changes then from Green (Unlocked) to Yellow (Locked).







Function Unlocked

If you turn the Handset Locking Key anti-clockwise, the indicator in the middle turns green, what means that the button is 'Unlocked' and function has been engaged again.



8.10. Additional adjustment of the Lower Leg Rest

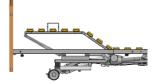
WARNING

 \triangle

Do not put your fingers between moving parts of the Mattress Support Platform – it can caused their entrapment and injuries!

If the Leg Rest is raised using the Handset, its both sections are adjusted in that direction: Upper Leg Rest and Lower Leg Rest.

During lowering the Leg Rest using the Handset, the Lower Leg Rest Section locks into place in several intermediate positions of two Rastomats fitted underneath this part of MSP Foot End. If the Leg Rest would be raised again using the Handset, the Lower Leg Rest would remain in position.



In addition to electrical regulation, Lower Leg Rest Section can be also manually adjusted. But first the Upper Leg Rest must be raised.

To raise the Lower Leg Rest manually, grab its end profile (not mattress guides) and pull it up until desired position is reached. The Lower Leg Rest engages automatically at a notch of Rastomat.

To lower this part of the bed, firstly it has to be raised to its full extent to unlock Rastomats and then lowered carefully.

8.11. Emergency lowering of the Back Rest

WAI	WARNING	
\triangle	Emergency lowering of the Back Rest should be carried out by at least two people.	
\triangle	Disregarding of these safety guidelines may lead to serious injuries for the user and the patient – back injuries and danger of hands squeezing.	
\triangle	All functions must be tested and approved after emergency situation by a competent person.	

ATTENTION



It is recommended to perform practice emergency lowering of the Back Rest under normal conditions so that in case of an emergency situation you will be able to react quickly and properly.

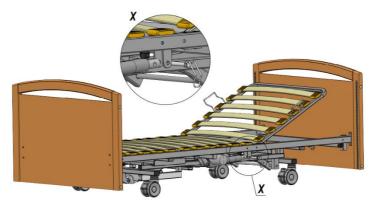
In an emergency situation, when mains voltage has been interrupted or in case of electric components failure, the Back Rest can be lowered manually by disassembling one of the quick-release bolt in the Head End, which fixes the Back Rest Actuator under the Mattress Support Platform.

Emergency lowering of the Back Rest has to be done in the following order:

- 1) Disconnect the Power Supply Lead from the mains supply,
- 2) Ease the load on the Back Rest,
- 3) One user has to lift the Back Rest slightly and holds it in that position,
- 4) At that time another user has to remove the quick-release bolt in the Head End used to fit Back Rest Actuator with mounted Control Box under the MSP

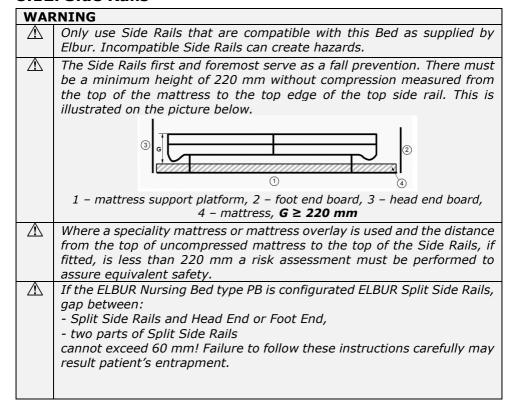


- open securing retainer and pull the quick-release bolt out of the hole in the mounting bracket,
- 5) Then, first person can carefully lower the Back Rest to the flat position.



6) To convert the Bed back to its normal operating state the quick-release bolt has to be fitted again and secured with retainer.

8.12. Side Rails





WARNING < 60mm Λ Position of drilled holes in the wooden slats of Full-length Side Rails are not the same. Upper wooden slat have two Lower wooden slat have two holes drilled offset downwards. holes drilled offset upwards. Wrong assembly of the Full-length Side Rails does not let to achieve required distance from the top of the mattress to the top edge of the top side rail, which can caused patient's entrapment or falling out of the Bed! \mathbf{W} The operation of the Side Rails should be done with great care. Fingers can be quickly pinched between the longitudinal pieces. Λ When lower the Side Rails, you must always hold the top wooden slat / bar to avoid its rapid decrease, potential damage or entrapment risk. Λ If the Side Rails are in the upper position, always make sure they are securely locked. Λ Both ends of the Side Rails shall always be at the same level during use. They may not remain in a diagonal position. \mathbf{M} Make sure that the bed's functions are not impaired when raising or lowering the Side Rails. Do not use the Side Rail or their height extensions to move / lift the Bed. ⚠ A qualified person or medical professional have to assess and approve patient to use the Side Rails. It is necessary to consider the size, age and condition of the patient before allowing the use of Side Rails. If agreed always advise the patient on correct use of them.

CAUTION

Before installation of the Side Rails and each new use, inspect all mechanical parts on the Mattress Support Platform, all parts of the Side Rails, and all parts which secure the Side Rails for any possible damages.



ATTENTION

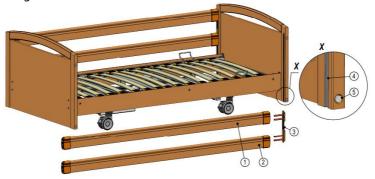
With every set of ELBUR Split Side Rails Instruction Manual of installation and use is supplied. Please refer to all instructions included in that document, when ELBUR Nursing Bes is configurated with them.

The ELBUR Nursing Bed described in this manual is equipped with Full-length Side Rails, made of wooden bars with plastic end caps. They are used to prevent the patient from accidentally falling out of the Bed.

Assembly

The ELBUR Full-length Side Rails are ready to use after assembly described below:

- 1) Insert the Plastic Slider [3] on the right and left in the upper [1] and lower [2] wooden slats.
- 2) Slide the wooden slats with Plastic Slider in the relevant sliding rail [4] of the Head End Board and press the release button [5] on its side at the same time.
- 3) Grasp the upper wooden slat and pull upwards until the Full-length Side Rails until they audibly engage at both ends.
- 4) Repeat these steps for the Foot End Board and later on for the other side of the Nursing Bed.



Lowering the Full-length Wooden Side Rails

- 1) Grasp the upper wooden slat and lift it slightly upwards,
- Press the release button (1) at the same time on one side of the Head or Foot Bed End,
- 3) The Side Rails are released on the corresponding side and can be easily lowered down from their highest position to the stop in the bottom. Lower the Wooden Full-length Side Rails slowly— do not let to rapid decrease.
- 4) The Side Rails are now diagonal (they cannot be left like that) carry out the previously described steps on the opposite end. The Full-length Side Rails would be then in the lower position and patient can easily get in or get out out of the ELBUR Nursing Bed.



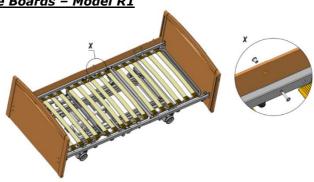


8.13. Side Boards

WAF	WARNING	
\triangle	Fitting of ELBUR Side Boards must be carried out by a suitably trained and qualified person, who at the end has to inspect and approve mounting on the ELBUR Nursing Bed.	
\triangle	Make sure there is no obstruction to the ELBUR Side Boards fitting.	
\triangle	ELBUR Side Boards can be fitted only on the ELBUR Nursing Bed (depends on model they are intended to work with). They cannot be used on any other medically used beds manufactured by other companies.	
\triangle	Do not use the ELBUR Side Boards to lift or move the ELBUR Nursing Bed they are fitted on.	

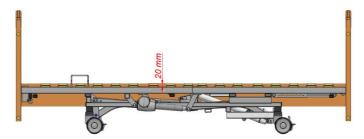
ATT	ATTENTION		
\triangle	With every set of ELBUR Side Boards an Assembly Manual is supplied.		
\triangle	Four Grub Screws and one additional Allen Key are supplied in the Accessory Carton Box with all assembly parts for ELBUR Nursing Bed.		
\triangle	It is recommended to use 13mm spanner to tighten M8 nuts when assembly of ELBUR Split Side Rails. It is not contained in the assembly kit.		



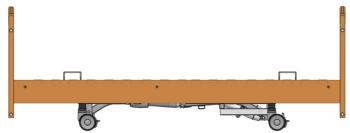




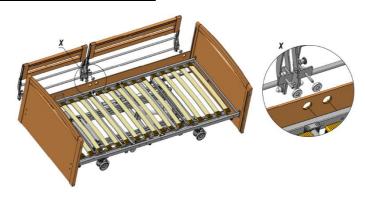
- 1) Attach ELBUR Side Board Model Standard [R1] to the external side of Mattress Support Platform, matching holes in them at the same time.
- 2) Insert three M6x30 Button Head Screws through holes in ELBUR Side Boards and Mattress Support Platform from inside of MSP.
- 3) Fit three M6 Sleeve Nuts on Screws from external side of Side Board.
- 4) Tighten Screws and Nuts using two Allen Keys (one is supplied with Side Boards set, another one with Accessory Carton Box of ELBUR Nursing Bed).
- 5) Always make sure that Side Board is assembled as it should be when it is fitted, you should measure 20 mm from the top edge of Mattress Support Platform to the top edge of Side Board.



- 6) Check all nuts and screws are tight.
- 7) Perform the same actions on the other side of the Bed.



ELBUR Side Boards - Model R3

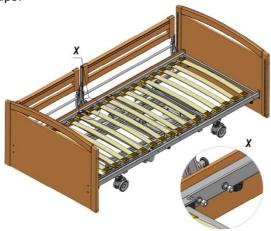




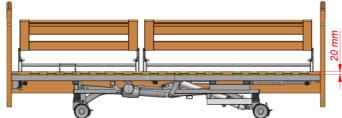
- 1) ELBUR Side Board Model Standard [R3] with inserted distance bushes attach to the external side of Mattress Support Platform, matching holes in them at the same time.
- 2) Assembly of Split Side Rails by putting threaded pins through holes in ELBUR Side Boards and Mattress Support Platform.

 Short Split Side Rail is assembled in the Head End of the ELBUR Nursing Bed.
- 3) From the internal side of the Mattress Support Platform place M8 washers and nuts on tapped pins, tighten them using 13mm spanner and protect with plastic end caps.

Long Split Side Rail is assembled in the Foot End of the ELBUR Nursing Bed.



4) Always make sure that Side Board is assembled as it should be – when it is fitted, you should measure 20 mm from the top edge of Mattress Support Platform to the top edge of Side Board.



- 5) Check that both ELBUR Split Side Rails with ELBUR Side Boards are assembled in appropriate way and firmly secured. If yes, they are ready to use then.
- 6) Perform the same actions on the other side of the Bed.



8.14. Lifting Pole

War	Warning		
\triangle	If a Lifting Pole is fitted on the Bed, increased attention must be taken during movement or lifting, to the space around the Lifting Pole, so that the equipment is not damaged. Do not use it to push or pull the Bed.		
\triangle	The maximum weight Lifting Pole co exceed it and do not hang other obje	an safely support is 80 kg – do not ects on the Lifting Pole and its parts.	
\triangle	Never use more than one Lifting Pol	e on the ELBUR Nursing Bed.	
\triangle	The Lifting Pole must not be fitted or swivelled with the top of the Lifting Pole beyond the edge of the Mattress Support Platform.		
	RIGHT	WRONG	
\triangle	If the Lifting Pole will not locate steadily across the bar in the one of the vertical tube and still rotates, the Lifting Pole cutout or mounting bar can be damaged. In this situation or if any other sign of wear is found (e.g. Strap), remove the Lifting Pole from use immediately and contact your local distributor or Elbur Customer Service directly.		
\triangle	A qualified person must advise the user on correct use of the Lifting Pole and adjust the Strap to the correct length.		

Caution

The appropriate location of the Lifting Pole is determined by the horizontal pin inside the corner socket of the MSP Head End.

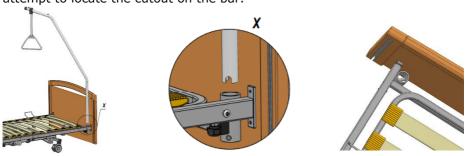
The Lifting Pole is supplied with an adjustable Strap and Triangle Handle. It is used to reposition the patient in Bed and to assist the user in getting out of Bed.

The Lifting Pole is ready to use after assembly described below:

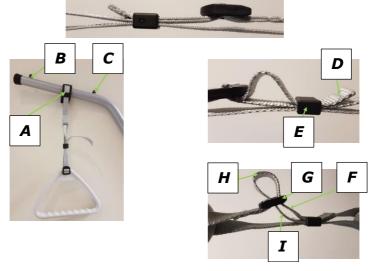
- 1) There are two vertical tubes on either side at the Head End of Mattress Support Platform into which Lifting Pole fits.
- 2) The Lifting Pole has cutouts at the base which must locate across the bar, which is welded at the base of each vertical tube.
- 3) Insert the Lifting Pole vertically downwards into chosen vertical tube (it should be installed on the side, where patient gets out of the Bed) and lower it until it reaches the base of the vertical tube.
- 4) Position the top of Lifting Pole so that it is above the centre of ELBUR nursing Bed. Rotate the Lifting Pole from side to side until the cutout locates in the bar in the vertical tube. It should not be possible now to rotate the Lifting



Pole. If it does rotate, lift the Lifting Pole up a little, then lower it again and attempt to locate the cutout on the bar.



- 5) Strap should be placed over the top of the Lifting Pole so its rubber pad (A) rests on the top of the Lifting Pole between two lugs (B and C) on the top of the horizontal part of the Lifting Pole.
- 6) To increase the length of the Strap, ease a short length of the loose end of the Strap (D) through the plastic retaining clip (E) [refer to pictures on the next page].
- 7) Push the Strap (F) through the buckle (G) until there is a small loop (H). Pull the other end of the Strap (I) back through the buckle [refer to pictures on the next page].
 - Repeat this operation until the Strap is the required length (to shorten the Strap length, reverse the procedure).
- 8) After adjusting the Strap, ensure it threaded as shown below.





9.0. Movements of Nursing Beds

WAF	WARNING	
\triangle	This bed is not adapted for patient's transport, but it can be moved within patient room for cleaning or patient access. Due to force the propulsion, it has to be done by two people. Patient has to stay in flat position and nursing bed should be adjusted in the lowest height.	
\triangle	Moving or repositioning must be carried out by suitably trained and qualified personnel.	
\triangle	Do not move the bed when the Power Supply Lead is plugged in to the mains supply socket.	
\triangle	All functions must be tested and approved after moving or repositioning by a competent person.	

Prior to moving the bed to a different location follow safety rules indicated below:

- 1) Ensure the Mattress Support Platform is at its lowest, flat and horizontal position.
- 2) Disconnect the Power Supply Lead plug from the mains supply and secure it against being crushed or dragged over the floor.
- 3) Side Rails are latched in upper position.
- 4) Secure the Handset, Power supply lead and all cables to prevent damage.
- 5) Unlock the castors brakes and move the bed.
- 6) When the bed has been moved or repositioned, lock all castors, inspect the Mains Power Cable visually for mechanical damage and if everything is fine, plug it in. Place the Power Supply Lead in a way that it will not be rolled over or strained during the operation of the bed.
- 7) Perform the full functionality check.

10.0. Functionality Check

CAU	CAUTION	
\triangle	Functionality check must be carried out by suitably trained and qualified personnel.	
\triangle	All functions must be tested and approved by a competent person after assembly and before putting the bed into operation.	
\triangle	Functionality check must not be carried out with the bed occupied.	
\triangle	The Power supply lead should be plugged into the separate socket during tests and use.	
\triangle	Position the bed where is enough space for operating it through its full height range without any chance of obstruction or entrapment – check for obstructions around, above and below the bed frame (it cannot bed blocked by any obstacles as bedside lockers or windowsills).	



CAUTION			
\triangle	Check all cable ties have been removed (there is one cable tie for attaching Back Rest to MSP Head Section and one cable tie for attaching Leg Rest Section to MSP Leg Section for transport).		
\triangle	Check all cables for risk of crushing – ensure that they cannot be		

ATTENTION

The Back Rest and Leg Rest sections are secured for transport using cable ties. Remove them before start checking designed functionality.

The Back Rest and Leg Rest sections are secured for transport using cable ties. Remove them before start checking designed functionality.

- 1) Check all bolts, nuts, screws and other fasteners are present and correctly tightened.
- 2) Examine all cables for risk of crushing or deterioration ensure that they cannot be damaged or overstretched.
- 3) Plug the Power supply lead into a mains supply socket and start testing all adjustment functions using Handset:
 - Raise the bed to full height,
 - Lower the bed until it stops,
 - Raise and the lower the Back Rest,
 - Raise and then lower the Leg Rest.

There should be no strange noises from drive units and adjustment should go seamlessly.

- 4) Check the correct function of the castors and brake control.
- 5) Check that Side Rails on both sides of the Bed are at the same level and are firmly assembled, secured. Check their safe operation and make sure they are locked in appropriate way when they are in the upper position.
- 6) Check the appropriate work of the Lifting Pole:
 - Make sure the Lifting Pole does not rotate from side to side.
 - Ensure the top of the Lifting Pole is over the centre line of the bed.
 - Make sure that the rubber pad on the Lifting Pole Strap Is located between the lugs on the top of the Lifting Pole.
 - Inspect the Strap for any damage or fraying.
 - Ensure the Strap buckle is secured correctly.
- 7) Check all other bed accessories, paying particular attention to fasteners and moving parts.



11.0. Cleaning and Disinfection

WAI	WARNING		
\triangle	The bed must be cleaned and disinfected before re-using the bed for a different patient or in any other situation requiring it.		
\triangle	Never use scouring agents, abrasive cleaning agents, corrosive, caustics, strong acids, detergents containing highly concentrated alcohol or other materials that could damage the coating and the surface of the bed parts and alter the structure of behaviour of the plastics.		
\triangle	All functions must be tested and approved after cleaning or disinfection actions by a trained and qualified personnel. On any suspicion of the intrusion of moisture into the electrical components, disconnect the mains plug immediately and do not re-establish the connection. Put the bed out of operation immediately, attach an appropriate visible label and contact the manufacturer.		
\triangle	Non-observance of these guidelines may result in serious injury and in the considerable damage of the nursing bed and its components.		

CAU	CAUTION		
<u> </u>	The bed must be disconnected from the mains supply before beginning		
	the cleaning and disinfecting procedure.		
\triangle	The bed must not be cleaned in automatic bed washer or with high-		
	pressure or steam cleaner, as liquid penetrates into the electrical		
	components could result malfunctions and danger. Protect especially		
	those components from moisture.		

ı	AIII	ATTENTION		
	$\overline{\mathbb{V}}$	Elbur cannot be liable for any damage or risk of damage if inappropriate		
		cleaning or disinfectant agents are used.		
	lack	Observing the instructions described in this chapter will retain the usability of the ELBUR nursing bed for a long time to come and will keep		
١		its nice appearance.		

Cleaning and disinfecting procedure:

ATTENITION

- 1) Empty the nursing bed remove the mattress and all accessories.
- 2) Adjust the mattress support platform to the highest position and adjust the position of the backrest and Leg Rest to provide access for cleaning all the mattress platform parts.
- 3) Disconnect the bed from the mains supply.
- 4) Lock the bed castors before beginning cleaning procedure where it will take place.
- 5) Clean / disinfect the bed by wiping all rigid parts with a soft, damp cloth (not drenched) with a mild household disinfectant, suitable for varnishes and synthetics (only gentle, not aggressive agents should be used in order to maintain the material resistance).
- 6) Before starting the operation, check the Mains plug and all electrical components for residual moisture or other damage.



12.0. Troubleshooting

WAF	WARNING	
\triangle	Troubleshooting must be carried out by suitably trained and qualified personnel – never repair your nursing bed yourself attempting to solve the problem.	
\triangle	Do not attempt to open or repair any electrical parts. It could be fatal!	
\triangle	All functions must be tested and approved by a competent person after troubleshooting.	

ATTENTION

<u> </u>	ALIENTEON		
\bigcirc	Even if the nursing bed is used properly, a technical problem may occur.		
	In this case, always contact your distributor or Elbur Customer Service		
	directly.		

DEFECT	POSSIBLE CAUSES	SOLUTION
Adjustment functions are not active (operator cannot adjust height or angle of	The Power supply lead is not plugged into the mains supply or is not plugged into the Control Box	Plug in the Main power cable
Mattress Support Platform)	The Actuator cables are not correctly plugged in at both the Actuator and the Control Box or the Handset is not plugged into the Control Box	Check the plug-in connection in Actuators and Control Box
	Adjustments functions are locked on the Handset	Unlock an appropriate function
	No voltage in the socket	Check the mains socket or fuse box (electrician!)
	The adjustment time or Safe Working Load exceeded	Reduce the load, follow the instructions from this manual and values on labelling, allow the drive system to cool down
	Actuators or Control Box or Handset defective	Notify the operator or Elbur Customer Service
Actuators stopped suddenly during adjustment	The adjustment time or Safe Working Load exceeded	Reduce the load, follow the instructions from this manual and values on labelling, allow the drive system to cool down
	Obstacles in the adjustment range	Remove all items, obstacles which interfere with the adjustment functions



DEFECT	POSSIBLE CAUSES	SOLUTION
Individual	Actuator, Control Box	Notify the operator or Elbur
Actuators run in	or Handset defective	Customer Service
one direction only		
Opposite functions	Mixed cables	Check the plug-in connection in
when operating the	connection in the	the Control Box, follow the
Handset	Control Box	instructions from this manual and
		the label on the Control Box
Locking castors are	Castors unclean	Clean castors, remove all
not active		obstacles
	Castors damaged	Notify the operator or Elbur
		Customer Service
Lower leg rest	Adjusting ratchets	Notify the operator or Elbur
(optional function)	damaged	Customer Service
does not adjust		

13.0. Disassembly

WAF	WARNING		
\triangle	Disassembly must be carried out by suitably trained and qualified personnel in a clear, uncluttered area. Children and pets should be kept away.		
\triangle	Do not move the Bed when the Power Supply Lead is plugged in to the Mains supply socket.		
\triangle	If Bed has become soiled or contaminated during use refer to cleaning and disinfection instructions.		

- 1) Lock the castor brakes.
- 2) Lower the Mattress Support Platform to its lowest position.
- 3) Unplug the Power Supply Lead from the mains supply.
- 4) Remove all accessories, e.g. mattress, Side Rails, Lifting Pole, Bed levers etc.
- 5) Disconnect cables from the Control Box (the Back Rest Actuator, the Main Lifting Actuator, the Handset cables and the Power Supply Lead).
- 6) Dismantle the Back Rest Actuator and the Leg Rest Actuator with fitted Control Box from the Mattress Support Platform.
- 7) Dismantle the both End Boards from the MSP Head End and Foot End.
- 8) Dismantle the Mattress Support Platform from the Scissor Lift by taking off two quick-release bolts and pulling the mattress base out from the lifting mechanism.
- 9) Insert the Bed Ends into the TLSU Transport Brackets and tighten the Head knobs by hand (or with grubs screws using Allen key).
- 10) Dismantle the Mattress Platform Support Head End from the Mattress Support Platform Foot End.
- 11) Protect all separated construction parts, drive units and assembly kits from destruction under external influences and insert them into several boxes before re-storage.



14.0. Disposal

CAUTION

 \triangle

If the ELBUR Nursing Bed is to be scrapped, the synthetic and metallic parts are to be separated and disposed of properly. The operator must ensure that all components of the Bed are to be disposed of are not contaminated

The ELBUR nursing bed is made of metal, wooden and plastic components, electronic parts and electric cables. In the event of the disposal of materials from the bed, end-of-life parts must be disposed of in accordance with current, local environmental legislation.

ELBUR Nursing Beds are classified as industrial electrical equipment (type b2b) in accordance with the WEEE Directive 2012/19/EC. All replaced electrical and electronic components of the electrical adjustment system must be treated as electric scrap and properly disposed of accordingly.

15.0. Maintenance

WAF	RNING				
\triangle	Maintenance must be carried out only by or under supervision of suitably trained and qualified personnel or professional persons such as electricians or electro-technically instructed persons who have knowledge of the relevant provisions and are able to recognize possible risks and hazards.				
\triangle	ELBUR Nursing Bed must be checked and serviced on regular base, once yearly as a minimum, before every re-use and after every repair.				
\triangle	Do not perform maintenance with the service user or a bed user on the ELBUR Nursing Bed.				
\triangle	All functions must be tested and approved after service actions by a competent, suitably trained and qualified personnel				
\triangle	If any damage, performance issue or cause for concern is noted during the inspection the bed should be withdrawn from service and appropriate steps taken.				

AT	ENTION					
↑ When it is necessary service technicians will receive from manufactoric circuit diagrams, parts list with description, calibration instructions other needed information.						
\triangle	Unauthorised technical changes to the product voids all warranty claims.					
\triangle	The manufacturer is not liable for damage caused by the lack of or improper service.					
\triangle	Elbur provides the Inspection Protocol for ELBUR Nursing Beds, which is included in every Instruction for Use and can also be downloaded from our website: www.elbur.eu . It should be kept on file and serves as evidence report of the performed service.					



Medical devices must be inspected regularly in terms of safety according to the stipulated regulations of manufacturer and the related technical standards. Regular inspections facilitate the maintaining of the highest possible safety level, prevent potential risk of wear and tear in the daily use and allow to keep ELBUR nursing bed trouble-free for years.

To ensure bed user or bed patient safety and to prolong the lifetime of the ELBUR nursing bed in safe condition, the company *Elbur sp. z o.o. sp.k.* as manufacturer specifies an inspection interval, which stipulates that a safety-technical inspection is to be executed at least once annually, before passing on to a new user and after every repair.

Also, daily visual inspection is strongly recommended and may be carried out by a competent person. First part of Inspection Protocol provided on the following pages relates to the Visual Check.



Inspection Protocol for ELBUR Nursing Beds type PB (Form Number: *PSF-08.9-01*; date of issue: 17.05.2021)

Customer Name / Medical Facility				
Address				
Model designation	ELBUR PB			
Reference Number				
Serial Number				
Electrical appliance class	I 🗌		II [
Date of manufacture				
Manufacturer	Elbur sp. z o.o	. sp.k.		
Type of inspection	First Inspection		ed Preventive intenance	Repair Service
Testing equipment (name, type, SN)		•		



1. \	Visual Inspection			
No.	Description	YES	NO	N/A
1.	Are the Name Plate and all Warning/Information			
	labels present, readable and easy to understand?			
2.	Is the Instruction for Use available?			
3.	Are the Maximum Patient Weight and Safe Working			
	Load observed and not exceeded?		Ш	
4.	Are the Mattress Support Platform, Back Rest and			
	Leg Rest sections, Bed Ends / Scissor Lift, Side Rails			
	and accessories (e.g. Lifting Pole, Bed Lever) in the			
	perfect condition (without any signs of abuse,			
	breakage, damage, deformation?			
5.	Is the powder coating of metal parts without any			
	scratches or damage? Is welding without any	П	П	
	cracks, craters, splatter? Are all sharp edges			
	deburred?			
6.	Are all fixtures, fittings, nuts, bolts etc. tight, secure	П	П	
_	and durable as appropriate?			
7.	Are all plastic end caps complete and without		П	
_	damage?			
8.	Is the Mattress Support Platform secured tightly to			
	the Bed Ends / End Boards using plastic headed		Ш	
	thumb screws, clamping levers or grub screws?			
9.	Is screw connection for mattress support platform			
4.0	Head End and Foot End appropriate and safe?			
10.	Is the Mattress Support Platform base (wooden			
	slats, meta strips) without any objections and signs			
	of damage? Is it stable, complete and well-			
	assembled? Are MSP sections (Back Rest and Leg Rest) fitted and adjusted properly in the safe			
	manner?			
11.	Are castors without any sign of damage, wear or			
11.	contamination?			
12.	Are the Power Supply Lead and all other electrical			
12.	cables secured, connected correctly (fully inserted			
	to appropriate slots/sockets) and routed to prevent	П	П	
	damage by pinching or crushing, especially			
	between moving parts?			
13.	Are all cables protected from non-intended running			
	over, wringing and bringing out?			



1. V	1. Visual Inspection					
No.	Description	YES	NO	N/A		
14.	Does the Power Supply Lead or Handset show any sign of damage or abuse?					
15.	Are indicators on the Handset easy to understand and readable?					
16.	Are Control Box with Back Rest Actuator and Leg Rest Actuator in the right direction, according to instructions in this manual and label underneath the Mattress Support Platform?					
17.	Are all Actuators mechanically secured in appropriate way with quick-release bolts or with bolts and clips?					
18.	Are housings of Control Box, Handset and Actuators sealed and without any sign of damage?					
19.	Are wooden components (End Boards, Side Rails) in the perfect condition and without any sign of damage, wear?					
20.	Is the Lifting Pole properly located and securely fixed?					
21.	Is the Triangle Handle place between its moving lugs and is Strap without any sign of wear?					
22.	Is the Bed Lever assembled in the fitted zone indicated in the accessory instruction manual?					
23.	Are there any other signs of abuse, damage, breakage or excessive wear?					
24.	Is the area around, above and below the bed clear of possible obstruction?					
	Performance check					
No.	Description	YES	NO	N/A		
1.	Is it possible to operate the ELBUR bed as per its					

2. F	2. Performance check				
No.	Description	YES	NO	N/A	
1.	Is it possible to operate the ELBUR bed as per its intended purpose without unexpected noise or motion?				
2.	Are all electrical positioning functions, available to achieve using the Handset, working properly?				
3.	Can the Bed be adjusted in the defined range indicated in this instruction manual, without any obstacles?				

ELBUR PB 636 IV

2. F	Performance check				
No.	Description	YES	NO	N/A	
4.	Is it possible to lock/unlock individual functions on the Handset with a special Locking Key?				
5.	Are drive units working properly (allow the smooth operation without any abnormal noises)?				
6.	Are the Mattress Support Platform and Bed Ends mechanically sound i.e. without any cracking at welds during position adjustment?				
7.	Is it possible to perform quick lowering of the Back Rest in the emergency situation?				
8.	Is it possible to adjust the Lower Leg Rest smoothly and safely, either electrically and manually (lock/unlock of two rastomats in several positions)?				
9.	Are castors operating correctly, including the brakes?				
10.	Is there any risk of entrapment or bed user injury?				
11.	Are the Side Rails without any sign of damage, breakage or wear?				
12.	Is set of Side Rails appropriately assembled and firmly seated in accordance to its instructions? Are they operating smoothly and in the safe manner? Is it simple to release Side rails and lock them in the upper position safely?				
13.	Is the difference between side rails, and between lower side rail and the mattress support platform, less than 12 cm?				
14.	Is the distance between Side Rails and Bed Head less, and between divided Side Rails less than 6 cm, and between Side Rails and Bed Foot End less than 6 cm or greater than 32 cm?				
15.	Is the mattress fitted correctly without any unacceptable gaps?				
16.	Is the distance between top of the mattress and the top edge of the top side rail at least 22 cm?				
17.	Are all accessories fitted in line with the accessory manufacturer instructions and their using is safe?				



3. El	3. Electric measurements (according to current EN 62353 standard)						
No.	Desc	ription			YES	NO	N/A
1.	Prote	ctive earth res	sistance:				
	meas	sured value les	s than or equal to 0,3 9	Ω			
			$R \leq 300 m\Omega$				
	(appl	ied only for Cl	ass I ME Equipment)				
	Resu	lt:					
2.		e leakage cur					
			Class I ME Equipment)				
	meas	sured value les	s than or equal to 0,5 r	mA			
			$I \leq 500 \mu A$]	
	Resu						
			(for Class II ME Equip	=			
	meas	sured value les	s than or equal to 0,1 r	mA			
			$I \leq 100 \mu A$		_		
	Resu		o (for Class II ME E :				
3.			e (for Class II ME Equip				
	meas	sured value gre	eater than or equal to 7	IAI75			
	$R \geq 7 M\Omega$ Result:						
	Resu	10.					
Eval	uation	1					
Resu	ılts of	Inspection	Date of inspection	Inspect	ed by	Sign	ature
Пр	ASS	□FAIL					
	7.55						
T 4.1.				1 EL DUD			
		=	n result did not pass an		∟ ке	pair	
nursi	ng bec	ı did not meet	the safety requirement	.S	☐ Tal	ke out	of use
□ N/A							
		comments /					
	-	n of defects					
(іта	pplica	DIE)					
Next	Insp	ection Date					



16.0. Electromagnetic Compatibility statement

Guidance and manufacturer's declaration – Electromagnetic emissionsThe ELBUR nursing bed is intended for use in the electromagnetic environment specified below. The customer or the user of the bed should assure that it is used in such an environment.

The custoffier of the user	or the bea should	assure that it is used in such an environment.
Emission test	Compliance	Electromagnetic environment - guidance
RF emissions CISPR 11 (partly)	Group 1	The ELBUR nursing bed uses RF energy only for its internal function. Therefore, its RF emissions are very low and are not likely to cause any interference in nearby electronic equipment.
RF emissions CISPR 11 (partly)	Class B	The ELBUR nursing bed is suitable for use in all establishments, including domestic
Harmonic emissions IEC 61000-3-2	Class A	establishment and those directly connected to the public low-voltage power supply network
Voltage fluctuations / flicker emissions IEC 61000-3-3	Compliance	that supplies buildings used for domestic purposes.

Guidance and manufacturer's declaration - Electromagnetic immunity

The ELBUR nursing bed is intended for use in the electromagnetic environment specified below. The customer or the user of the bed should assure that it is used in such environment.

Immunity test IEC 60601 test Compliance Electromagnetic				
Initiality test	level	level	environment-guidance	
Electrostatic	± 6 kV contact	± 6 kV contact	Floors should be wood, concrete	
discharge (ESD)	± 0 KV Contact	± 0 KV Contact	or ceramic tile. If floors are	
discharge (LSD)	±8 kV air	±8 kV air	covered with synthetic	
IEC 61000-4-2		_	material, the relative humidity	
			should be at least 30%.	
Electrical fast	± 2kV for power	± 2kV for power	Mains power quality should be	
transient / burst	supply lines	supply lines	that of a typical commercial or	
			hospital environment.	
IEC 61000-4-4	±1kV for	Not applicable		
	input/output			
C IEC	lines	14 137 4:001:-1	Mariana	
Surge IEC 61000-4-5	±1 kV line(s) to	±1 kV differential mode	Mains power quality should be	
01000-4-3	line(s)	illoue	that of a typical commercial or hospital environment.	
	±2 kV line(s) to	Not applicable	nospital chiment.	
	earth			
Voltage Dips,	<5% U _T (>95%	<5% U _T (>95%	Mains power quality should be	
short	dip in U_T) for 0,5	dip in U_T) for 0,5	that of a typical commercial or	
interruptions and	cycle	cycle	hospital environment. If the	
voltage variations	40% U _T (60%	40% U _T (60% dip	user of the ELBUR nursing bed	
on power supply	dip in U _T) for 5	in U _T) for 5	requires continued operation	
Input lines IEC 61000-4-11	cycles 70% U _T (30%	cycles 70% U _T (30% dip	during power mains	
01000-4-11	dip in U _T) for 25	in U _T) for 25	interruptions, it is recommended that the bed be	
	cycles	cycles	powered from an	
	<5% U _T (>95%	<5% U _T (>95%	uninterruptible power supply.	
	dip in U_T) for 5	dip in U_T) for 5	aco.: aptzie potre. sapp.,,:	
	sec	sec		
Power frequency	3 A/m	3 A/m	The bed power frequency	
(50, 60 Hz)			magnetic fields should be at	
magnetic field			levels characteristic of a typical	
TEC 61000 4 6			location in a typical commercial	
IEC 61000-4-8 or hospital environment.				
Note: U _T is the a.c. mains voltage prior to application of the test level.				



Guidance and manufacturer's declaration - Electromagnetic immunity

The ELBUR nursing bed is intended for use in the electromagnetic environment specified below. The customer or the user of the bed should assure that it is used in such environment.

Immunity test	IEC 60601 test level	Compliance level	Electromagnetic environment- quidance
Conducted RF IEC 61000-4-6	3 V 150 kHz to 80 MHz	3 V	Portable and mobile RF communications equipment should be used no closer to any part of the
Radiated RF IEC 61000-4-3	3 V/m 80 MHz to 2,5	3 V/m	ELBUR nursing bed including cables, than the recommended separation distance calculated from the equation
	GHz		applicable to the frequency of the transmitter.
			Recommended separations distance: $d = 1,2\sqrt{P}$ 150 kHz to 80 MHz $d = 1,2\sqrt{P}$ 80 MHz to 800 MHz
			$d = 2,3\sqrt{P} 800 \ MHz \ to \ 2,5 \ GHz$ where 'P' is the maximum output
			power rating of the transmitter in watts (W) according to the transmitter manufacturer and 'd' is the recommended separation distance in metres (m).
			Field strengths from fixed RF transmitters, as determined by an electromagnetic site survey, 'a' should be less than the compliance level in each frequency range 'b'. Interference may occur in the vicinity
			of equipment marked with the following symbol:
			((·•))
	and 800 MHz, the		I range applies. s. Electromagnetic propagation is

Note 2: These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects and people.

	directed by absorption and reflection from structures, objects and people:						
а	Field strengths from fixed transmitters, such as base stations for radio (cellular/cordless)						
	telephones and land mobile radios, amateur radio, AM and FM radio broadcast and TV						
	broadcast cannot be predicted theoretically with accuracy. To assess the electromagnetic						
	environment due to fixed RF transmitters, an electromagnetic site survey should be						
	considered. If the measured field strength in the location in which the ELBUR nursing						
	bed is used exceeds the applicable RF compliance level above, the ELBUR nursing bed						
	should be observed to verify normal operation.						
	If abnormal performance is observed, additional measures may be necessary, such as						
	re-orienting or relocating the ELBUR nursing bed.						

Over the frequency range 150 kHz to 80MHz, field strengths should be less than 3 V/m

b



Recommended separation distance between portable and mobile RF communications equipment and the ELBUR nursing bed

The ELBUR nursing bed is intended for use in an electromagnetic environment in which radiated RF disturbances are controlled.

The customer or the user of the ELBUR nursing bed can help prevent electromagnetic interference by maintaining a minimum distance between portable and mobile RF communications equipment (transmitters) and the ELBUR nursing bed as recommended below, according to the maximum output power of the communications equipment.

Rated maximum	Separation distance according to frequency of transmitter [m]					
output power of						
transmitter	150 kHz to	80 MHz	800 MHz			
[W]	80 MHz	to 800 MHz	to 2,5 GHz			
	$d = 1,2\sqrt{P}$	$d=1,2\sqrt{P}$	$d=2,3\sqrt{P}$			
0,01	0,12	0,12	0,23			
0,1	0,38	0,38	0,73			
1	1,20	1,20	2,30			
10	3,79	3,79	7,27			
100	12,00	12,00	23,00			

For transmitters rated at a maximum output power not listed above, the recommended separation distance 'd' in metres (m) can be estimated using the equation applicable to the frequency of the transmitter, where 'P' is the maximum output power rating of the transmitter in Watts (W) according to the transmitter manufacturer.

Note 1: At 80 MHz and 800 MHz, the separation distance for the higher frequency range applies.

Note 2: These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects and people.

CAUTION

 \triangle

For reasons of safety and electromagnetic compatibility, use only original electric components from Elbur that have been released for the nursing bed model in order. Otherwise it can caused danger for patients and loss of bed functionality.

It is still possible that the operation performance is influenced by electromagnetic fields like those of cell phones, power generators of high power energy sources, despite sample of ELBUR nursing bed type PB has been tested on electromagnetic combability and complies to the EN 60601-1-2 standard. On the other hand, it is also possible that the electronics of the bed influences other electronic devices.

17.0. Warranty

CAUTION

⚠ Damage to your product caused by improper use or lack of maintenance will cause the warranty to laps.

 \triangle | Unauthorised technical changes to the product voids all warranty claims.

The manufacturer gives a guarantee of 36 months for a perfect functioning nursing bed. It is based normal, intended use and maintenance as described in this manual.



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