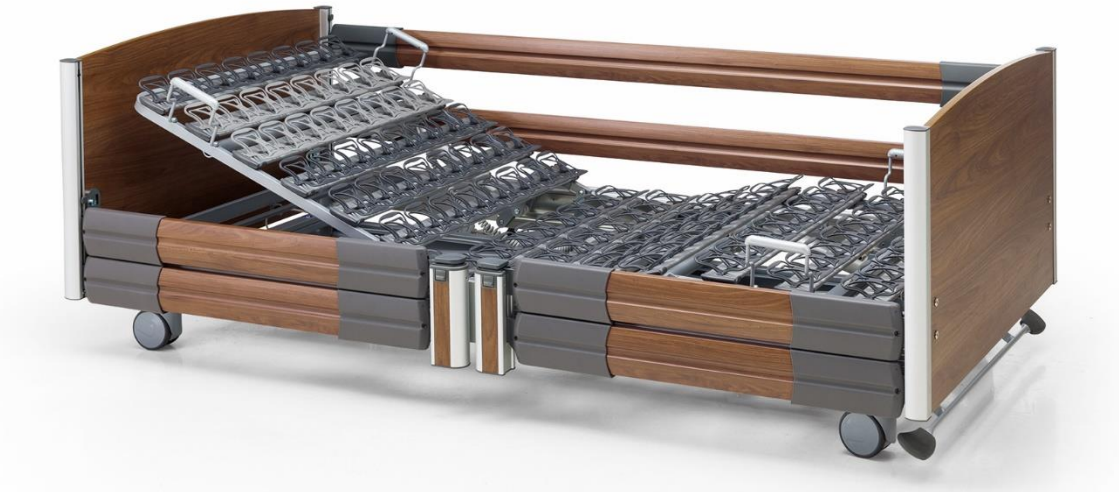
Assembly and operation manual

CE

Nursing care beds

.bock

- practico alu plus
- practico alu SCC



Dear valued customer,

with your decision to purchase a nursing care bed from Hermann Bock GmbH, you are receiving a long-lasting care product with superior functionality at the highest safety level. Our electrically operated nursing care beds guarantee optimal lying comfort and allow professional care at the same time. This product was designed with a focus on the elderly, whose confidence must be reinforced and whose life needs protection. With this health care product, we meet these requirements.
We urge you to prevent potential malfunctions and the risk of accidents by complying strictly with the safety and operating instructions and by carrying out the necessary maintenance.

Klaus Bock

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1 Preface and general instructions

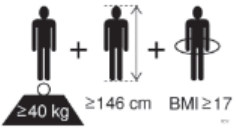
The various bed systems from Hermann Bock meet special requirements for the use in care and treatment facilities as well as for home care. Reliable functionality and a long product life make each bed particularly valuable. Our beds need little maintenance with proper operation and care. Each bed from Hermann Bock must pass quality testing in a final inspection before it is shipped anywhere. The beds are manufactured according to the current standards and compliant with the statutory requirements for medically used beds, and tested accordingly.

The nursing care beds comply with the EN 60601-2-52 standard. The electrical building components comply with safety standard EN 60601-1 for medical devices. Nursing care beds are medical devices and are to be assigned to Class 1.

These standards divide the beds in five different areas of use:

1. Intensive care in a hospital; intensive care bed
2. Short-term care in a hospital or other medical facility; patient bed in the hospital
3. Long-term care in medical environment; stationary nursing care bed
4. Care at home, pure so-called “HomeCare bed”
5. Home-care nursing service

1.1 Intended purpose



The nursing care bed is suitable for persons (adults) in need of care who are at least 146 cm tall. The person's weight must not exceed 185 kg and must be over 40 kg. The body mass index (BMI = weight of the person (kg) / body height of the person $(m)^2$) must be greater than or equal to 17.

The nursing care bed may be used in homes for the elderly or nursing homes and rehabilitation facilities. It is used to alleviate a disability and/or to facilitate the lives of people who are in need of care or to make the work of their caregivers easier. Furthermore, the nursing care bed was also designed as a convenient solution for the home care of frail and elderly people as well as for home care of people with disabilities. Accordingly, the nursing care beds are designed to be used for the application environments 3 to 5. Any other use is considered improper and is excluded from a possible liability claim.

The Trendelenburg function may be used exclusively under supervision of medical professionals. The beds, which are determined for application environment type 4, are equipped with a hand control which is unable to operate the Trendelenburg function.

The nursing care bed is not suitable for use in hospitals. If the nursing care bed is equipped with open wheels, the nursing care bed is suitable for the transport of patients. The nursing care bed is mobile with the patient resting in it. To prepare for this, lock the castors and move the lying surface to the lowest horizontal position. Unlock the castors and move the bed. After the transport, lock the castors. If the nursing care bed is equipped with a roller cover, the bed is only suitable to be moved for cleaning purposes inside the patient's room or to allow access to the patient.

The bed is suitable for the re-use. Please observe the instructions for cleaning, care and disinfection in these assembly and operation manual. Special attention must also be paid to the information regarding the inspections.

Attention: The beds come with no special connection options for a potential equalisation. Electrical medical devices connected to the patient intravascular or intracardiac may not be used. The operator of the medical products has to ensure that the combination of the equipment meets the requirements of EN 60601-1.

This user manual contains safety instructions. All persons working with the beds must be acquainted with the contents of these instructions. Improper operation can result in personal injuries.

1.2 Definition of person groups

Operator
Operators (e.g. medical supply stores, specialist dealers, facilities and cost units) include all physical or juridical persons, who use the beds or have the beds used for medical purposes. The briefing on the use of the product shall generally be conducted by the operator.

User
Users are persons whose training, experience or briefing on the product allows them to operate the nursing care bed or carry out works on it. The user is able to recognize possible hazards and/or to avoid them and to assess the health condition of the patient.

Patient/resident
Person with one or more disabilities, one or more activity restrictions, one or more participation restrictions or a combination thereof.

Qualified personnel
Employees of the operator are referred to as qualified personnel. They are entitled to deliver the nursing care bed, assemble, dismantle and transport it, on the basis of their training or instructions. Besides knowing how to operate, mount and demount the nursing care bed, these persons must be instructed according to the guidelines concerning the cleaning and disinfection of the nursing care bed.

1.3 Safety instructions

The intended use/operation of all moving parts is as important for the safety of the person in need of care as well as for the relatives and the caregivers/nursing staff to avoid potentially dangerous situations. This requires the correct installation and operation of the bed. The individual physique of the person in need of care as well as type and the extent of their disability must be taken into account by all means when operating the bed.

Avoid dangers, accidental motor adjustments and incorrect operation by using the disabling function. When the operator, e.g. the nursing staff/caregivers or the care providing relative leaves the room, the entire operating functions of the bed should be disabled via the hand control. This is achieved by operating the key of the hand control. First, lower the lying surface to the lowest position and activate the lock function with a twist of the key, located in the key lock on the backside. Remove the key and check the function of the hand control for safety reasons. Make sure that it is indeed locked.

These recommendations apply particularly:

- if the person in need of care cannot operate the hand control safely due to certain disabilities;
- if the person in need of care or the caregivers could be at risk due to those accidental adjustments;
- if the side rails are in a raised position and there could be danger of trapping and crushing,
- if children are unsupervised in the room with the bed.

Always make sure that the hand control (when not in use) is securely hooked in the support hook at the bed and cannot drop.

As a general rule, the bed should be operated by instructed nursing staff/caregivers, relatives or in attendance of instructed persons.

When adjusting the lying surface, it is particularly important to ensure that no limbs are placed within the adjustment range of the side rails. If the side rails are adjusted, pay attention to the correct lying position of the person in need of care.

Prior to making any electrical adjustment, it should, as a general rule, be made sure that no limbs are positioned in the adjustment range between the chassis and the head or foot part, especially that there are no persons or animals in the area between the floor and the raised lying surface. Danger of being crushed is particularly high in these areas. Always beware of objects that are located close to or even below the nursing care bed. This can lead to damages.

The permitted person's weight depends on the total weight of the equipment that has been mounted to the bed (mattresses and other electronic medical devices). For safe working load, please refer to the type plate on the lying surface frame of the bed.

1.4 Service life / warranty

This nursing care bed was developed, designed and manufactured for safe operation over a long period of time. With proper operation and maintenance, this nursing care bed has an expected service life of 15 to 20 years. The service life depends on operating conditions and frequency.

Attention: Unauthorised technical changes to the product voids all warranty claims.

This product is not approved for the North American market, particularly not for the United States of America (USA). Distribution and use of the nursing care bed in these markets, including through third parties, is prohibited by the manufacturer.

1.5 Requirements for the installation location

The company Hermann Bock GmbH is not liable for damages which might arise from the daily usage on the floor.

To avoid floor indentations, floor should correspond to the recommendations of the FEB - Fachverband der Hersteller elastischer Bodenbeläge e.V. (Association of Elastic Floor Coverings Manufacturers). To do this, the technical information FEB No. 3 can be referenced.

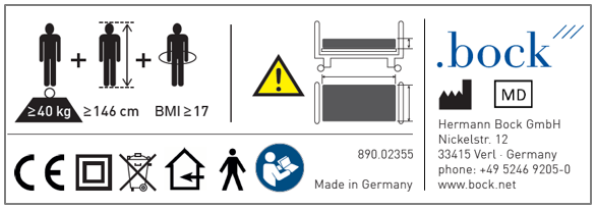
Hazard note from Bock

Simultaneous use of electrical appliances particularly in the vicinity of the operational bed may result in small electromagnetic interactions of these electric devices, e.g. static noise in the radio. In such rare events, increase the distance of the devices. Do not use the same socket or temporarily switch off the interference source and/or the disturbing or disturbed device.
If the bed should be operated with electrical medical equipment (contrary to its intended use), the functions of the bed must first be disabled via the integrated locking function in the hand control for the duration of the application.

1.6 Type plate

Each nursing care bed is marked with an individual and a general type plate.

Individual and general type plate



(1) Model designation
(2) Manufacture date: Day, month and year
(3) Serial number: Order number - running number
(4) Mains voltage, mains frequency and power input
(5) Duty cycle
(6) Drive protection class
(7) Maximum patient weight / safe working load
(8) Manufacturer
(9) Symbols (located on the right side)

Explanation of the symbols:

Conformity mark according to the medical device regulation

Symbol for observance of the user manual

Within the European Union, this product must be disposed via the separated municipal waste. Product may not be disposed of as household waste.

Medical application part type B

Use only in dry rooms

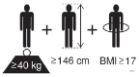
Protection class II (double insulation, insulated for protection)

Protection of electrical equipment against splashing water

Symbol for maximum patient weight

Symbol for safe working load

Symbol for the identification of a medical device



Patient population

Follow the instructions appropriate for mattress size and thickness

Address of the manufacturer

2 General description of the functions

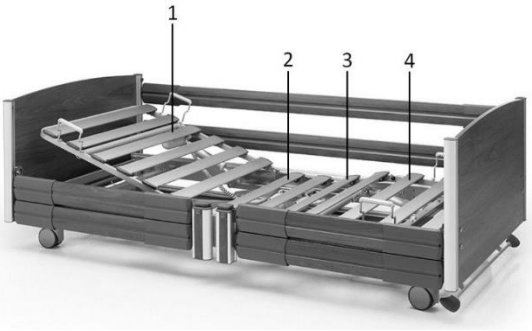
Construction design and function

Corrosion protection

The Hermann Bock GmbH nursing care beds are developed and constructed in such a way that they can function long and safely. For this reason, all materials that may corrode are protected accordingly. All metal parts are equipped with a surface protection. The steel parts are either galvanised or stove-enamelled with a PES powder coating and the aluminium profiles are anodised.

The lying surface with 4 function areas

The lying surface consists as standard of a slatted comfort frame (can alternatively be fitted with aluminium slats or special suspension systems) and is divided into four functional areas: Backrest, fixed seat part, upper and lower leg rest.



1 long back part
2 fixed seat part
3 upper leg rest
4 lower leg rest

The comprehensive lying surface frame is welded from a steel / aluminium tube. The steel tubes are stove-enamelled with a PES-powder coating. The electric variable height adjustment of the lying surface is carried out with protective low-voltage DC motors (29 to 35V), and controlled with the smooth keys of the hand controller. The backrest can be adjusted electrically. The leg part consists of a foot support that is divided into two parts. With a touch of a button on the hand control, each individual position can be adjusted continuously. In case of a power failure the back part that can be lowered by loosening the tube clip.

The chassis

The height adjustment of the bed is performed through a base frame with two individual drives. The surface of the tubular steel structure is stove-enamelled with a PES-powder coating.

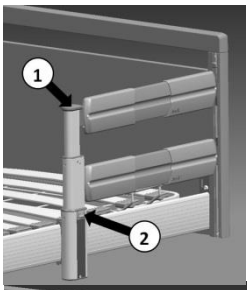
The side rail

Each nursing care bed can be equipped on both sides with two side rails at a special safety height. The side rails can be lifted and lowered through a rail. The sliding pieces run particularly smoothly and quietly with an impact damper, and each end is fitted with a functional cap. The side rail can be easily operated through an ergonomically designed release

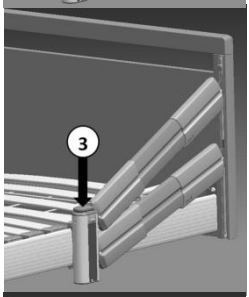
button. Depending on the model, shorter or longer divided side rail variations are available.

Operating the telescopic divided side rails

Each side rail element can be adjusted independently from the rest of the side rail parts. The release buttons for adjustment are on the bottom of the telescopic post and on the top of the appropriate end panel of the nursing care beds, right next to the metal guides for the side guard rail bars.



To lower the side rail element, hold the upper knob (1) of the middle post with one hand, **lift it up slightly**, and with the other hand press the release button (2) on the middle post in the inner direction.

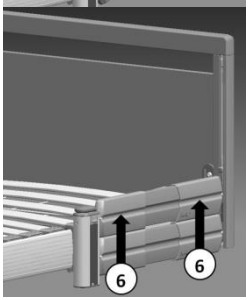


The side rail opens at the corresponding place and can be easily lowered downwards as far as it will go (3). The side rail is now diagonal.

To also lower the other side, please hold the side rail on the side of the end panel at the gripping groove (4), and slowly raise the side rail somewhat. Now, you can fully press the release button (5) and slowly lower the side rail.

Please observe:
Be sure to raise the side rail slightly, and only then press the release button! Failure to do so will result in damage to the release.

The side rail is now in the lowered position.



If the side rail element should be placed in the top position to aid in fall prevention, reach with both hands in the centre of the gripping groove (6) in the upper side guard rail, and pull it upwards until you hear it click into place at both ends. The side rail is now in a pulled-up position.

Fig. 1: Continuous wood side rail

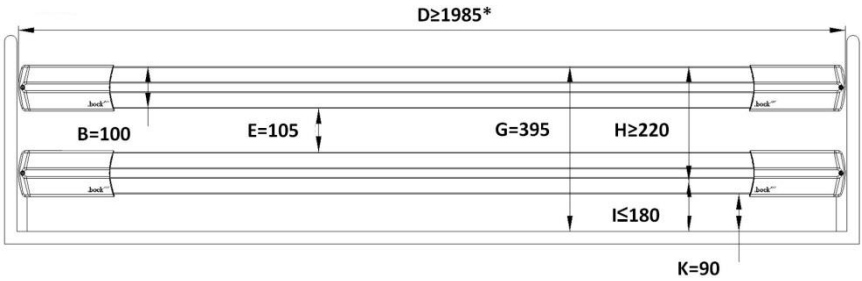


Fig. 2: Telescopic wooden side rail, solo post in the middle

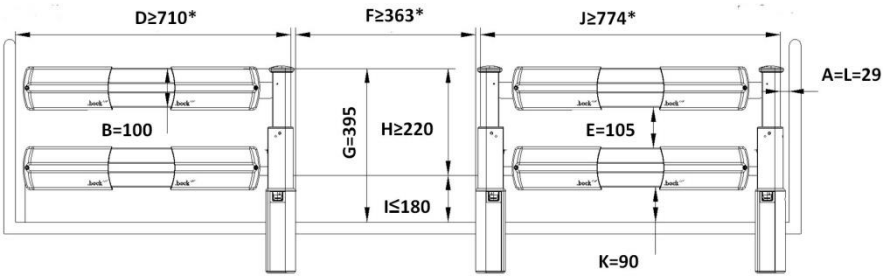
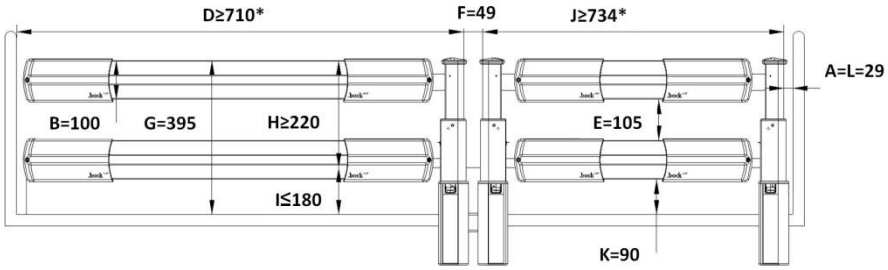


Fig. 3: Telescopic wooden side rail, double post in the middle



All dimensions in mm.

(*) Depending on the length of the lying surface. The single post at the head and leg end is optional. The dimension in brackets is optional.

Legend	
A:	Distance between the head part and the side rail
B:	Height 1 of side rail
C:	Height 2 of side rail
D:	Width 1 of the side rail
E:	Distance between the elements within the side rail
F:	Distance between the divided side rails
G:	Distance between the lying surface and the upper edge of the side rail
H:	Height of the top edge of the side rail above the mattress without compression
I:	Thickness of the mattress for the intended use
J:	Width 2 of the side rail
K:	Smallest dimension between side rail and lying surface (or the panel, if any)
L:	Distance between the foot part and the side rail

Item numbers	
Designation	item no.
Fig. 1: Continuous wood side rail	
Wooden side rail (two bars)	91703
Fig. 2: Telescopic wooden side rail, solo post in the middle	
Wooden side rail (two bars)	91868
Fig. 3: Telescopic wooden side rail, double post in the middle	
Wooden side rail long head part (two bars)	91704
Wooden side rail short foot end (two bars)	91705

Hazard note from Bock

Use only original Bock side rails, which are available as accessories for every nursing care beds. Use only technically flawless and non-damaged side rails with the permissible gap dimensions. Make sure that the side rails are engaged securely.

Before installation of the side rail and each new use, inspect all mechanical parts on the bed frame, and all parts of the side rails, and all parts which secure the side rails, for any possible damages.

The operation of the side rail should be done with great care. Fingers can be quickly pinched between the longitudinal pieces.

3 Electric parts

3.1 The drive unit

The drive unit consists of individual drives for the electrical adjustment of the back and leg rest part. The level adjustment is performed with two individual drives that are attached to the chassis. The adjustment range of these individual drives is determined via Hall sensors. The motors and the hand control are connected to the inner control box. A power supply converts the input voltage into a low voltage power of max. 29 VDC (direct current). The motors, controller and the hand control function with this non-hazardous low protective voltage. The cables are double-insulated and the mains plug has a primary fuse.

A power adjustment provides constant function speed. Therefore, the safety functions comply with protection class II and the moisture barrier protection type IPX4.

The maximum duty cycle is specified on the (type plate) of the bed. For example, 10% duty cycle (2 min. ON / 18 min. OFF) means that any electronic adjustment can be performed for a max. of 2 minutes within a timeframe of 20 minutes (protection against overheating).

If the maximum setting time of two minutes is exceeded by two minutes (e.g. someone plays continuously with the hand control), which could lead to overheating of the controller or drives, the thermal fuse immediately shuts off the power supply to the bed. After a cooling time of approx. one hour, the power supply in the controller is automatically restored.

3.2 Caution: Electric drive

The electrically operated nursing care bed enables the person in need of care to support the recovery process psychologically and physically and at the same time relieve pain through its various functions. Electrically operated beds that are medical products need special care in regards to constant safety checks. This includes safety-conscious handling of the bed, daily inspection of electrical equipment and proper maintenance and cleaning.

To prevent damages to the cables, wiring should be conducted outside of the area in which damages could be caused. Furthermore, avoid touching the sharp parts. To prevent injury through an electric shock, avoid the possibilities of too high contact voltages. These circumstances may especially be the case if the power cable is damaged, if inadmissible and excessive leakage currents exist, or if liquid was spilled into the motor housing, e.g. during improper cleaning. This damage can cause malfunction of the controller, which could result in unwanted movements of single bed elements, posing a risk of injury for the operator and the person in need of care.

3.3 Drives

Hermann Bock GmbH equips nursing care beds with drive systems from the company DewertOkin GmbH.

Each drive consists always of four main components.

– Housing
– Motor
– Gear
- Spindle with nut

The housing principle of the individual drive guarantees the permanent function of all drive components. Through a detailed interior structure, the construction of the housing interior creates an essential prerequisite for the precise integration of the drive technology, as well as a trouble-free assembly/disassembly.

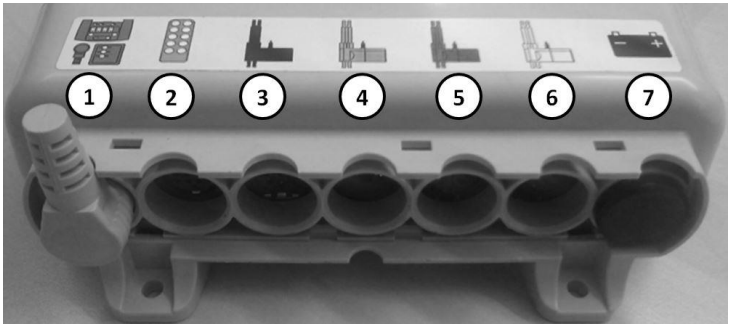
3.4 The external switch mode power supply SMPS

The plug-in part of the external switch mode power supply (SMPS) is an electronic transformer, which warms up only to a minimum degree under load and it is equipped with electronic performance monitoring. The result is a constant voltage up to the maximum load (no loss of speed) and a high level of protection against overloading. The external transformer ensures safety right from the socket because it converts the voltage directly into the 29V safety low-voltage which is used to actuate the bed. It is connected via plug coupling to the mains supply line feeder cable and can be replaced separately if defective.

The plug-in part of the external switch mode power supply complies with the European directives for electrical household appliances. In standby mode, it also has a low energy consumption of maximum 0.5 Watt and can be used internationally with variable input voltages from 100 V to 240 V. Electromagnetic alternating fields are not measurable on the SMPS adapter.

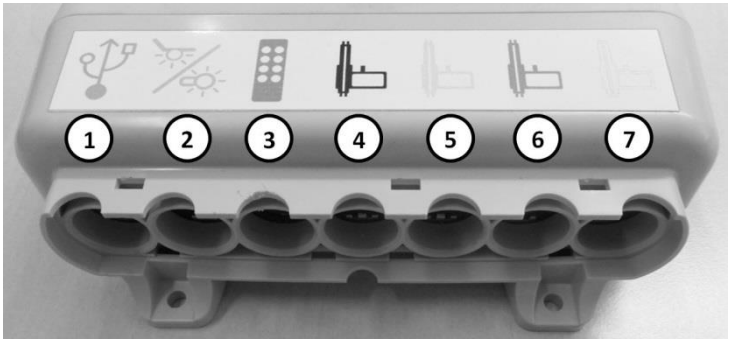
The external switch mode power supply

3.5 The controller



Practico alu plus controller

The practico alu plus is equipped with a controller system from DewertOkin GmbH. Four drives can be connected to the controller (sockets 3,4,5 and 6). The colour coding can be found in chapter 4 "Assembly and operation". Additionally, a floor lighting can be connected to the connection socket for the hand control (socket 2). Please make sure that a dummy plug is attached to the connector for the battery (socket 7) if no battery is connected. A jumper plug must be fitted to the connection for the additional control element (socket 1). The pigtail connector (not in Fig.), which is the cable that is run from the top of the controller, can be used to connect a reading lamp.



Practico alu SCC controller

The practico alu SCC is equipped with a controller system from Hermann Bock GmbH. The socket 1 is a CAN-BUS connection which can also be used to connect a sensor pad for bed-off detection. Further details can be found in the separately supplied assembly and operation manual of the Smart-Care-Control unit. A Y-cable is plugged into the socket 2, which is used to connect the floor lighting and the reading lamp. The supplied hand control must be connected to socket 3. The connector sockets 4, 5, 6 and 7 are intended for the individual drives in the scissor and lying surface.

Hazard note from Bock

All drive components must not be opened!
Troubleshooting or exchanging single electrical components may only be performed only by special qualified personnel.

Hazard note from Bock

The motors meet the water protection standard IPX4. Do not squeeze/crush the cables. Adjustment of moving parts may only be used for the intended use. Hermann Bock GmbH assumes no liability for unauthorized technical changes.

Hazard note by Bock

Do not try to fix failures on the electrical equipment itself. It could be fatal! Either call the customer service of Hermann Bock GmbH or an authorised/licensed electrician who conducts the troubleshooting in compliance with all relevant VDE regulations and safety regulations.

3.6 The series hand control

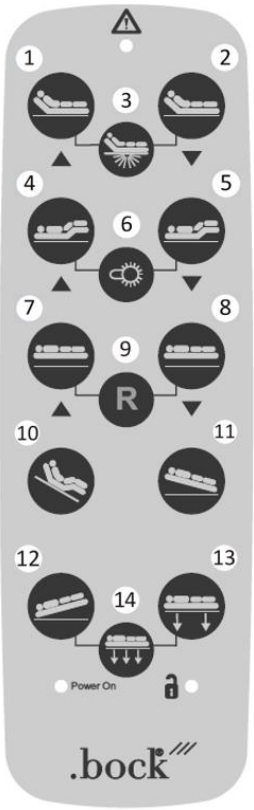
The series hand control is equipped with a built-in locking device, which allows the caregivers to lock the hand switch via a key completely or partially for its operation.

The lockable hand control, first-fault protected
The base functions can be controlled through the ten operation keys on the hand control. The four symbols in the middle indicate a special function that can be performed by simultaneously pressing the adjacent keys. The individual keys are marked with corresponding symbols. The servomotors run until as long as a corresponding key is pressed and held. A coiled cable allows the necessary freedom of movement while operating.

With the rear-mounted suspension unit, the hand control can be attached to the side rail - particularly when cleaning and during the maintenance of the bed. Thus, a possible disruptive position of the hand control can be avoided by simply attaching it to any preferred spot on the bed.

Function keys:

(1)	Back part upwards
(2)	Back part downwards
(3)	Floor lighting: Push keys (1) and (2) simultaneously
(4)	Lower leg part upwards
(5)	Lower leg part downwards
(6)	Lightening / reading lamp: Push keys (4) and (5) simultaneously
(7)	Lying surface upwards
(8)	Lying surface downwards *(Interim stop at the 37.5 cm exit position)*
(9)	Reset (only applies to practico alu plus): **It is absolutely necessary to carry out this work during initial commissioning and after disconnection from the power supply!** (The reset motion is carried out by pushing keys (7) and (8) simultaneously. In doing so, after approx. 8 seconds, the bed moves slowly in the lowest position. After a signal beep from the controller, reset is carried out completely.)
(10)	Comfort sitting position upwards (*)
(11)	Foot-lowering position (anti-Trendelenburg)
(12)	Head-lowering position (Trendelenburg)
(13)	Lying surface, back and lower leg part downwards *(Interim stop at the 37.5 cm exit position)*
(14)	Without function



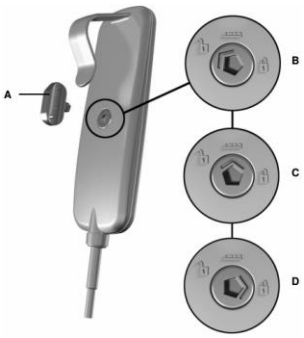
The following described remaining travel must only be carried out with the practico alu plus nursing care bed!

Reset: Reset motion is carried out by pushing keys (7) and (8) simultaneously. In doing so, after approx. 8 seconds, the bed moves slowly in the lowest position. After a signal beep from the controller, reset is fully carried out.

With the **practico alu SCC nursing care bed** it is possible to reset all motor positions by moving all motors to the lower position, with an actuation of the respective button for about 1 second after the lower control limit switch has been reached.

(*) The comfort sitting position just moves upwards. All adjusted positions can be lowered by pressing key 13.

3.7 Hand control - lock functions



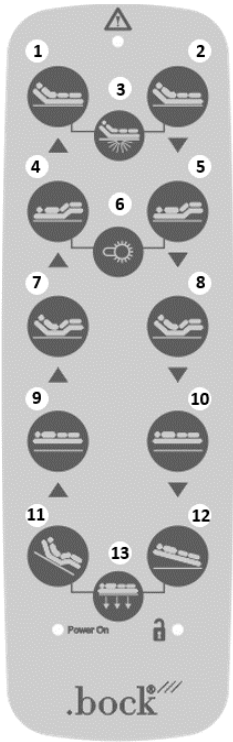
The hand control comes with an integrated disabling function that can be activated and deactivated with the corresponding key. To disable the entire electrical function, insert the key in the keylock on the backside and turn the lock function on or off with a corresponding twist of the key.

A: Socket key
B: Release hand control keys
C: Head-lowering position (Trendelenburg) blocked
D: Release hand control keys

3.8 Hand control for the domestic environment (practico alu plus)

In the domestic environment, the head-lowering position may not be used. Beds for the application environment 4 are supplied with the hand control shown here. This hand control also has a built-in locking device, as described in the previous section. However, in position C the buttons (11) comfort sitting position and (12) low foot support are locked.

As described in the previous section, the reset operation is performed by simultaneously pressing keys (7) and (8).



(1)	Back part upwards
(2)	Back part downwards
(3)	Floor lighting: Push keys (1) and (2) simultaneously
(4)	Lower leg part upwards
(5)	Lower leg part downwards
(6)	Ambient lighting: Push keys (4) and (5) simultaneously
(7)	Autocontour upwards
(8)	Autocontour downwards
(9)	Lying surface upwards
(10)	Lying surface downwards *(Interim stop at the 58 cm exit position)*
(11)	Comfort sitting position upwards (*)
(12)	Foot-lowering position (anti-Trendelenburg)
(13)	Low function: Push keys (11) and (12) simultaneously

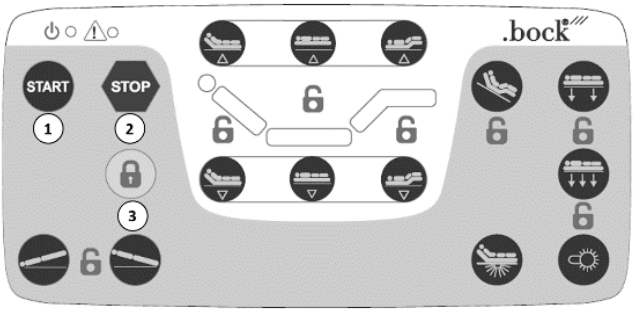
Hazard note from Bock

Do not exceed the maximum duty cycle of 2 minutes. Observe a subsequent break of at least 18 minutes by all means.

3.9 Second controller (optional as accessory)

The nursing care bed can optionally be equipped with an additional controller.

For this purpose a second control box is mounted in the bed, which is connected to socket 2 of the controller. The hand control in socket 1 and the second controller in socket 2 are plugged into this second control box. Sockets 3, 4 and 5 remain unassigned and are equipped with a blind plug.



Operation:
To control the nursing care bed with the control panel, the keys must be released by pressing the "START" key (1). Now all functions can be executed that you can also find on the hand control. After adjusting the nursing care bed, you can press the "STOP" button to activate the key lock immediately, otherwise it will be activated automatically after some time of non-use.

Locking of functions:
You can use the second control panel to lock individual functions. To do this, press the key with the symbolic lock (3). Now you can select individual functions. The function is not disabled when the respective control lamp is lit. If the respective control lamp does not light up, the function is disabled. These functions are then disabled on the control panel **and** on the hand control. After you have locked all the necessary keys, you can confirm your selection by pressing the "START" or "STOP" key. The settings remain saved.

ATTENTION: If certain functions have been locked on the hand control, they are not locked on the second controller. These functions must be locked separately here.

3.10 Rechargeable Battery (optional as accessory)

The battery serves as a mains-independent reset function. No warranty shall be provided for the functioning of the drive in the event of a power failure.

Fully charge the battery for at least 24 hours before the first use. The built-in rechargeable batteries only reach their full capacity after 5 to 10 charging and discharging cycles.

As long as the controller is supplied with mains voltage, the automatic charging circuit ensures a permanent operational readiness. After using the drive system independently from the mains power, the battery should be recharged immediately by re-establishing the mains connection.

When the battery voltage reaches the cut-off threshold, the drive system is completely deactivated. The deep discharge protection protects the battery from possible damages that could result from failure to observe the discharge warning. If the voltage of the battery reaches the threshold of the deep discharge protection warning during driving, an acoustic signal sound. The battery should be charged immediately when the acoustic signal sounds, but the drive can still be moved for a short time.

Technical data	AG7 rechargeable battery
Input voltage	24V DC
Capacity	1.2 Ah
Fuse	T 15 A
Degree of protection	IPX4
Battery type	Lead fleece
Charge cut-off voltage	29 V DC
Charging time	approx. 14 hours
Service life	approx. 1000 charging cycles
Self-discharge	approx. 6 months

Hazard note from Bock

Note the idle time of the battery. This must rest for at least one hour prior to commissioning, removal and replacement of the battery.

There is a danger of electric shock! Before mounting, be sure to disconnect the mains plug of the drive from the socket! Make sure that the mains plug is accessible at all times.

To increase operational safety, carry out the following measures before initial commissioning or after extreme mechanical loads: Check the housing for damages. If the housing show signs of damage, or if the unit heats up excessively: Then disconnect the battery from the controller and shut down the drive system.

Do not open or destroy the battery.

Do not expose the battery to heat or open fire. Avoid storage in direct sunlight.

If the battery is leaking and there is a contact with the leaking liquid, rinse the liquid off thoroughly with water and seek medical attention immediately.

Dispose of the battery in accordance with the legal regulations for used batteries and rechargeable batteries,
as these may not be disposed of with household waste.

Maintenance: Perform regular visual inspections (at least every 6 months). Pay attention to possible damages on the housing, and check the plug connections and the cables for damages, crushed sections or shearing.

Maximum storage time 6 is months at the recommended storage temperature. Afterwards, the battery should be
charged again. At higher storage temperatures, the battery should be charged at an earlier point in time. This is to avoid a deep discharge, which could lead to an irreparable damage of the battery.

3.11 Further accessories for the practico alu SCC

For information about further accessories which can be connected to the practico alu SCC, please refer to the separately supplied assembly and operation manual.

Hazard note from Bock

Bed models with roller covers are not suitable for the transportation of the patient. The beds must be only moved for cleaning purposes inside the patient's room or to allow access to the patient.

4 Assembly and operation

4.1 Technical data

Technical data	practico alu plus practico alu SCC
Lying surface dimension: cm	90 x 200
Outer dimension: cm	101.5 x 208.5
Outer dimensions of the wood end panel type 20: cm	101.5 x 210
safe working load: kg	220
max. Weight of person: kg	185
Height adjustment: cm	25 - 81
Length of backrest: cm	88
max. Angle of incidence to horizontal:	
- back part	70°
- Lower leg part	20°
- Trendelenburg position	15°
Side rail height with spring strips: cm	39.5
Side rail height with ripolux neo®: cm	35
Selection options for side rails:	
- Continuous wood side rail	•
- Telescopic wooden side rail	•
Lifter bottom space clearance: cm	> 15
Sound level: dB(A)	< 65
Weights:	
Total incl. continuous Wood side rail: kg	135
Lying surface: kg	46.8
Chassis (open role, ZV): kg	55
Wood end panel (type 22): kg	8.6
Continuous wood side rail: kg/set	8.1
Telescopic wood side rail: kg/set	11.2
Electric data	
Input voltage: V	100-240
Frequency: Hz	50/60
max. power consumption: A	3.5

All parts and data are subject to a constant further development and may therefore differ from the mentioned data.

4.2 practico alu plus and practico alu SCC

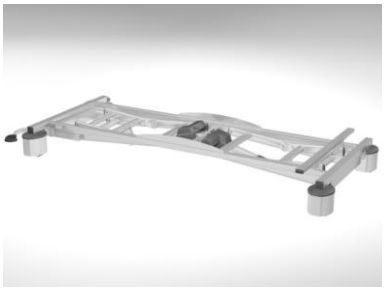
A bed for all circumstances that unifies technology and comfort. Technically perfected down to the last detail: The practico alu plus and the practico alu SCC can be extended without any tools, and therefore individually adapted to patients. It is really easy: The fully ergonomic, real bed extension is inserted in the blink of an eye, as described at the end of this chapter. The side rails are provided for all lengths. These nursing care beds provide a high degree of comfort to frail people, patients who need care and people with disabilities, thus facilitating an optimal care through a high lying comfort and an easy operation.

- practico alu plus and practico alu SCC are not intended to be used in hospitals.
- If the practico alu plus or practico alu SCC are equipped with open wheels, the nursing care bed is suitable for the transport of patients. The bed is mobile with the patient resting in it. To prepare for this, lock the castors and move the lying surface to the lowest horizontal position. Unlock the castors and move the bed. After the transport, lock the castors. If the nursing care bed is equipped with a roller cover, the bed is only suitable to be moved for cleaning purposes inside the patient's room or to allow access to the patient.
- The nursing care bed is suitable for persons (adults) in need of care who are at least 146 cm tall. The person's weight must not exceed 185 kg and must be over 40 kg. The body mass index (BMI) must be greater than or equal to 17.
- Under certain circumstances the practico alu plus or practico alu SCC can be used (if necessary) for medical purposes with other electric medical equipment (e.g. suction devices, ultrasonic humidifiers, food systems, anti-bedsore systems, oxygen concentrators and similar devices). In this event, disable all bed functions for the duration of the application via the integrated disabling function.

Attention: The bed has no special connection options for a potential equalisation. Electrical medical devices connected to the patient intravascular or intracardiac may not be used. The operator of the medical products has to ensure that the combination of the equipment meets the requirements of EN 60601-1.

practico alu plus and practico alu SCC preparation for operation

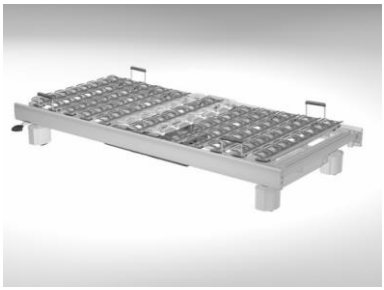
Remove all packaging from the bed and place chassis on a free and flat surface.



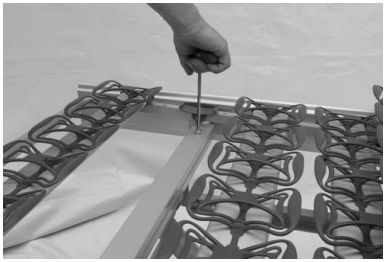
Place the lying surface on top of the chassis.

Pay attention to the head and leg end.

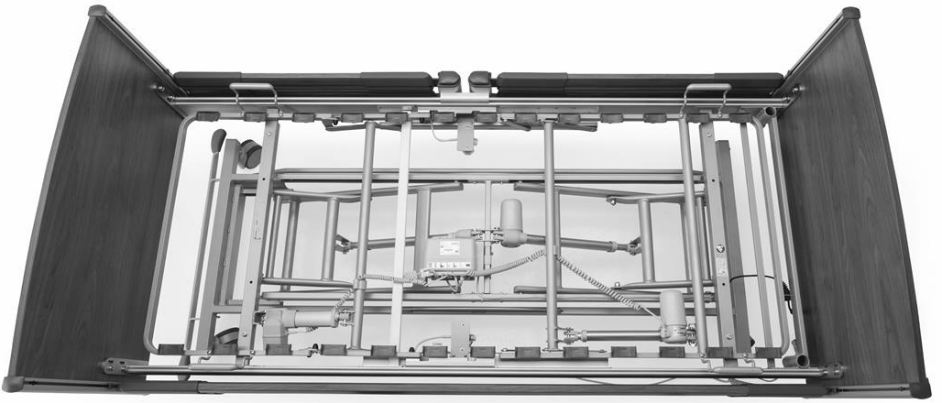
This Fig. shows the central locking foot pedal on the left side of the chassis, which must be located on the foot end of the lying surface.



Slide the lying surface on the chassis so that the holes are aligned on top of each other. Attach the lying surface using the 4 screws provided (cylinder head screws M8x45) and the 4 nuts.

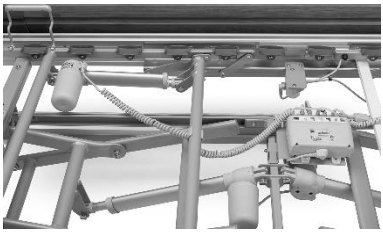


Now, route the lying surface motor cables and the cable of the hand control safely below the lying surface up to the control box. Ensure that the cables cannot be not clamped or damaged in any way. To simplify the cable routing, you can remove some of the panels from the lying surface frame.



Attention: The following note only applies to the alu practico plus: If your bed is factory-equipped with an floor lighting, you must insert the hand control into the free socket of one of the two floor lighting units. The floor lighting is already mounted on the lying surface frame. In this case, the plug of the floor lighting must be inserted into the socket for the hand control (red mark) on the controller. Ensure that all sockets are subsequently covered with the locking caps, in order to guarantee the protection class requirements.

Cable routing from the head part motor to the controller.



Please use the clip to attach the cable centred on the head lifter part.

Cable routing from the foot part motor to the controller.

Please use the clip (see upper Fig.) to attach the cable centred on the foot lifter part on the height level of the controller.

Practico alu plus and practico alu SCC nursing care bed socket assignment on the control box:

- Red: hand control or floor lighting
- Black: head part of lying surface
- Yellow: foot part of lying surface
- Blue: Scissor drive - head
- White: Scissor drive - foot

Please note the descriptions of the controllers in Chapter 3.

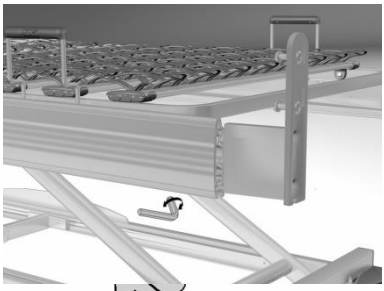
After all plugs have been connected to the controller, you can clip the supplied cover cap on the controller so that the connectors are securely fastened.

Route the power cable in the middle across the frame of the undercarriage, all the way to the head end piece. There, please screw on the cable with the help of the strain relief.

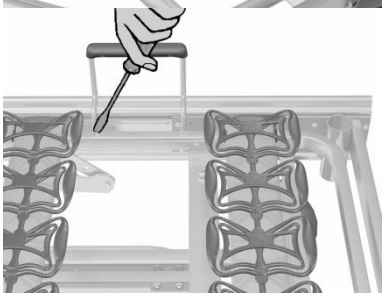
IMPORTANT!

Please perform a reset of all the motors, before putting the bed into operation. This process is described in Chapter 3 on page 18.

If the mounting latches for the end panels are not yet mounted, slide them into the longitudinal bars of the lying surface, and attach them from below with the enclosed threaded rods.

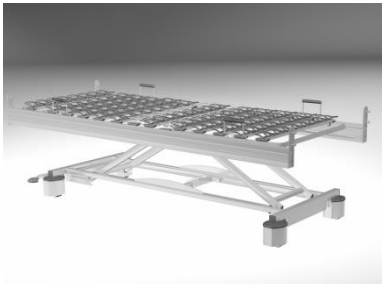


Now, attach the mattress brackets using the supplied self-tapping screws, if these were not factory-installed (depending on shipping method of the nursing care bed).



Subsequently, raise the chassis for the further assembly.

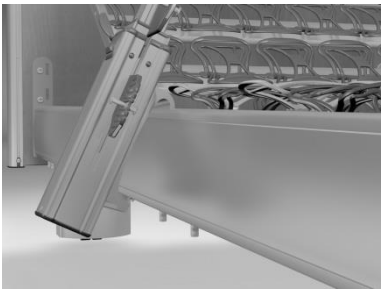
Actuate the central parking brake to prevent an unintentional movement of the bed.



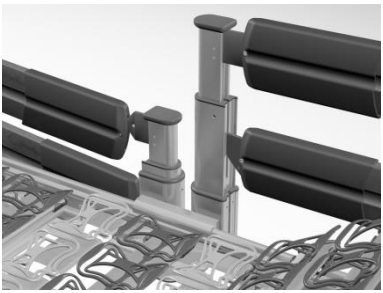
Bolt the end panels and the lying surface together.

Telescopic side protection:

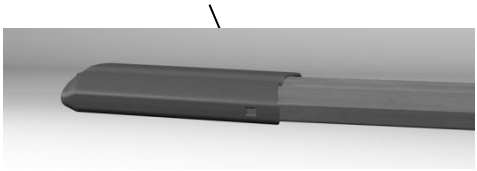
Place the outer posts at the end of the lying surface and the middle posts in the centre on the longitudinal frame of the lying surface.

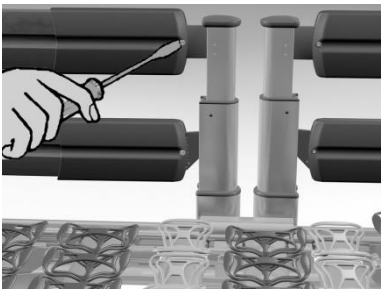


Insert the side guard rails onto the mounting latches and screw them together.

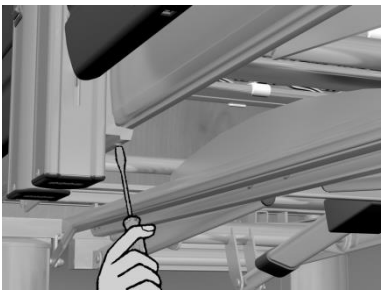


The markings on the side rail receptacles must point downwards.



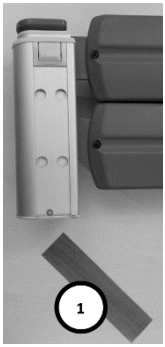


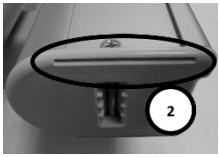
Align the middle post sideways and tighten it from below.

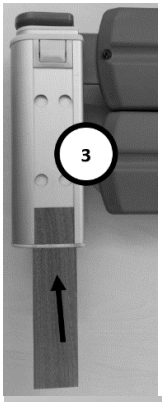


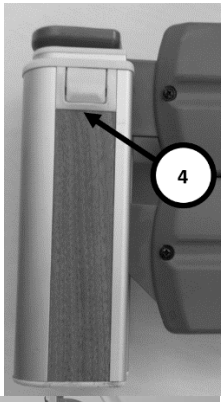
Inserting the decorative foil into the telescopic posts

Take the decorative foil (1) and push it from below through the slot in the plug (2) into the aluminium profile of the side rail post (3). Please make sure that the correct side of the decorative film is facing outwards. This will be difficult to remove later. Push the decorative foil in until it is flush with the button (4). On the lower plug (2) there is a snap-in lug which prevents the decorative foil from falling out.







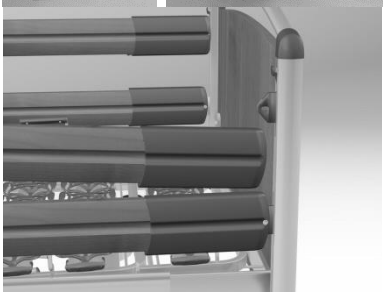


For continuous side rails:

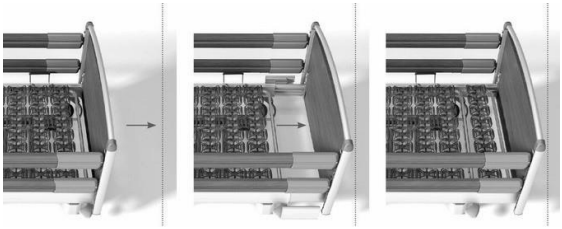
Loosen the screws of the insertion at the head end piece and pull it out slightly.

Now, insert the side guard rails onto the mounting latches and screw them together.

After all side guard rails have been installed, slide the end panel back and tighten the screws again.



Check all screw connections again before operating the bed.

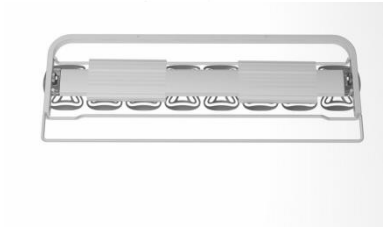


4.3 Bed extension

On the foot part, remove the two lower screws of the end panel attachment.

Pull the foot end piece out, approx. 220 mm.

Take the foot bracket extension (*available as accessory*) and remove both attached aluminium caps, as well as both of the folding thumb-screws.

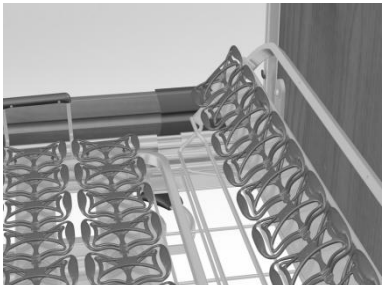


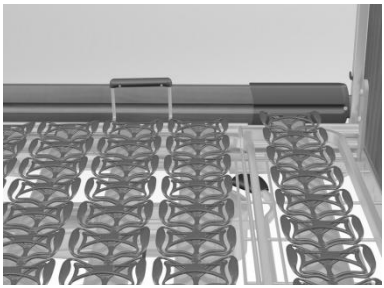
Clip them onto the pull-outs.

Slide the foot end piece again back, so that the longitudinal frame and the clipped-on part lie levelled on each other.

The end panel is then firmly attached with the two folding thumb-screws.

Insert the foot bracket extension as shown in the Fig.





4.4 Emergency lowering - back part (standard)

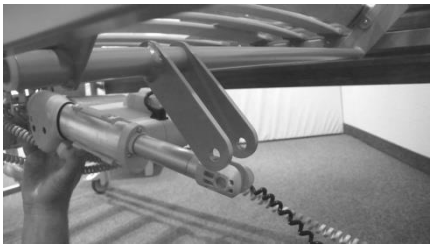
In case of power or drive system failure, you can lower the elevated back part manually.

Must be carried out always by two people!

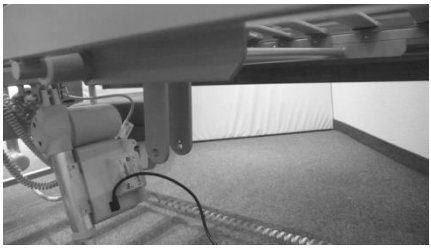
One person lifts the back part slightly (to take pressure off) and holds it in this position. As next step, the second person removes the locking pin from the motor.

The motor is now separated from the back part and can be swivelled downwards.

Once the second person has left the danger zone, the first person can lower gently the back part.



Hold the back part by all means until it is fully lowered.



Hazard note from Bock

Emergency lowering may be only carried out in an emergency by people who safely master this operation.
Absolutely disconnect the bed from the mains as long as the motors have not been mounted again.

4.5 Emergency lowering - back part (optional)

In an emergency, the backrest can be lowered by means of a mechanical device on the nursing care bed. To do this, move the red operating lever upwards in the direction of the head end piece. The speed of lowering depends on the weight of the mattress and the weight of the patient.

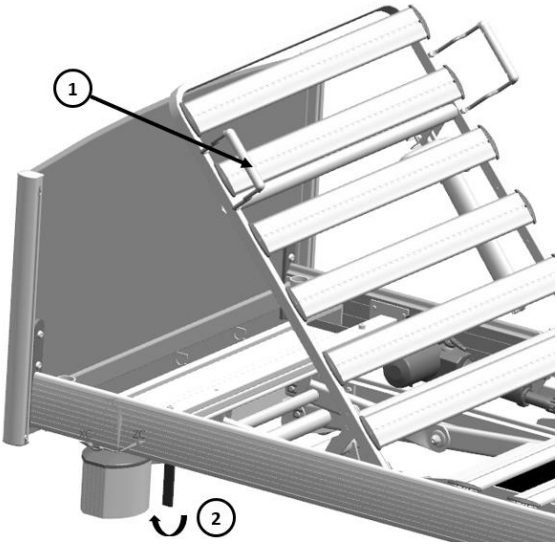
Hazard note from Bock

With heavy patients, the backrest can lower very quickly. Always lower the backrest with one hand on the mattress bracket to check the adjustment.

Operation:

Hold the mattress bracket (1) on the backrest with one hand and move the red operating lever (2) upwards with the other hand in the direction of the head end piece (see arrow direction). The backrest moves downwards. Hold your hand on the mattress bracket (1) until you release the control lever (2). The backrest will then be held in this position.

Make sure that the control lever (2) points vertically downwards again after the operation.



Hazard note from Bock

With the practico alu SCC nursing care bed model, the head part motor must be retracted completely once with the hand control after using the emergency release.

4.6 Change of location

If the bed must be moved to another location, please follow these safety instructions:

- Move the lying surface into the lowest position using the button (8) of the hand control.
- Before performing a movement, pull out the mains plug and attach with the suspension device at the wood side rail, to secure the power cable against falling and being crushed through over-travel. Make sure that the cable is not dragged over the floor.
- Before inserted the mains plug again, inspect the power cable visually for mechanical damage (dents and kinks, abrasions and bare wires).
- Place the power cable in a way that it will not be rolled over or strained during the operation of the bed or could be damaged when inserting the mains plug again.
- Perform the reset movement, as described on page 18 (applies to the practico alu plus).

4.7 Transport, storage and operating conditions

	Transport and storage	Operation
Temperature	0°C to +40°C	10°C to +40°C
Relative humidity	20% to 80%	20% to 70%
Air pressure	800hPa to 1060hPA	

4.8 Function notes

To keep the bed in one location, you must block the brakes on castors of the chassis. To accomplish this, use your foot to move the locking lever on the chassis downwards.

If necessary, pull the integrated side rails up until they lock into place. When using mattresses of different thickness, the minimum height of 22 cm, measured from the top edge of the side rail above the mattress without compression, may not be underrun (additionally, a third side rail attachment guard must be used, which is available as an accessory).

4.9 Disposal

Each of the components made of plastic, metal and wood are recyclable and can be disposed/recycled in compliance with the relevant legal provisions. Please note that electric adjustable nursing care beds or nursing beds are considered commercially used electronic scrap according to the WEEE-EC directive 2012/19/EC (b2b). All replaced electrical and electronic components of the electrical adjustment system must be handled in accordance with the requirements of the Electrical and Electronic Equipment Act (ElektroG) and disposed of properly.

4.10 Troubleshooting

This overview helps you to detect and correct malfunctions on your own and explains, what kind of malfunctions require the consultation of suitably qualified service personnel.

Malfunction	Potential causes	Remedy
The drive units cannot be controlled via the hand control	Power cable is not connected	Insert power cable
	Signals of the drives for the height adjustment are incorrectly processed within the controller	Perform the reset movement, as described on page 18 (only applies to the practico alu plus).
	No voltage in the socket	Check the socket or the fuse box
	Plug connector of the hand control not fixed firmly	Check the plug-in connection on the motor
	Hand control or drive unit defective	Notify the operator or Bock customer service
	Disabling function or control box in the hand control activated	Disabling function or control box in the hand control deactivated
When buttons are pressed, the drive units stop after a short time	There is an obstruction in the adjustment range	Remove obstruction
	The safe working load has been exceeded	Reduce the load
The drives stop after a longer adjustment time	The adjustment time or safe working load has been exceeded and the polyswitch in the transformer of the controller has responded to increased heat	Allow the drive system to cool down sufficiently. After 2 minutes of adjustment under full load, a break of 18 minutes must be observed
Opposite functions when operating the hand control	Check the pin assignments on the controller, see Chapter 4.2	Connect the cables according to the colour marking, or inform the operator or the customer service of H. Bock
Individual drive units run in one direction only	Hand control, drive unit or controller defective	Notify the operator or Bock customer service
Drive units stop and bed remains in a tilted position	Constant operation of adjustment functions	Move lying surface in bottom or top position as this will straighten it again horizontally. Activate disabling function in hand control

5 Accessories

Hermann Bock GmbH offers practical and mobility-promoting accessories to ensure that each nursing care bed is tailored even more precisely to the individual needs of the person in need of care. The installation is done in a quick and easy manner using the fixing points on the bed that have already been prepared for this purpose. It goes without saying that every element of our additional equipment offer meets the special quality and safety standards of Bock. In addition to the standard accessories included in basic equipment, the customer can also choose from our variety of accessories, which is available for each bed model. These optional accessories vary depending on the bed model and are fitted to its special functions and location of use. The range stretches from technical elements over mattresses up to the occasional extra bed. A wide range of wooden finishes and a variety of colours allow for the harmonious integration of each nursing care bed with any kind of furniture.

5.1 Special dimensions

Special dimensions are an essential part of the production Hermann Bock GmbH. Optimal lying comfort for persons in need of care who have a particular physique can only be achieved by means of custom-built models. With its customized models, Hermann Bock GmbH enables customers to have their nursing care bed tailored to fit the individually physical requirements of the person in need of care. For body heights greater than 180 cm, Hermann Bock GmbH recommends the use of an integrated bed extension together with a foot extension (refer to *Accessories*) that allows an extension of the lying surface to a length of up to 220 cm. This enables even tall people to lie comfortably while maintaining the same level of functionality.

Hazard note from Bock

When using accessories on the bed or medically necessary devices as infusion stands in close proximity to the bed, ensure particularly that there are no risks of crushing or shearing for the person in need of care when adjusting the back and leg rests.

The representative of the service hotline of Hermann Bock are looking forward to informing you about the best retrofitting
solution for your bed. Hotline no. 0180 5262500 (14 cents/min. for calls from landline phones, 42 cents/min. for calls from mobile phones).
A wide product range of auxiliary furniture complements the various bed models up to the complete interior design of your home. This combination creates a care and living comfort resulting in perfect harmony.

6 Cleaning, maintenance and disinfection

The individual bed elements consist of high quality materials. The surfaces of the steel tubes are covered with a durable polyester-powder coating. All surfaces of the wooden parts are surface-sealed with an ecologically coating that is low on harmful substances. All bed elements are easy to clean and cared for using wipe and spray disinfection means according to the applicable cleaning requirements with respect to the various areas of application. Observing the following care instructions will retain the usability and visual appearance of your nursing care bed for a long time to come.

6.1 Cleaning and care

Steel tubes and vanished metal parts:
Please use a wet wipe and a regular mild household detergent for the cleaning and care of these surfaces.

Wooden-, decorative-, and plastic elements:
All standard furniture cleaners and cleaning detergents can be used. Using a wet wipe without detergent additives for the cleaning of the plastic elements should generally be sufficient. For care of the plastic surfaces use a product that is specifically suitable for plastics.

Drive:
To prevent the intrusion of moisture into the motor housing, we recommended using only a damp rag to clean outside housing.

Spring systems ripolux neo:
Use a damp rag without adding any detergents, or, if deemed necessary, a detergent that is exclusively suitable for plastics and clean the spring elements made of plastics. In case of heavy contamination, remove the spring elements from the supporting elements and the supporting elements from the frame of the lying surface. The dismounted plastics elements can be rinsed or spray-washed with hot water to get them clean. For the disinfection, the components should be sprayed with a detergent suitable for plastics. Most of the moisture drips off the plastic surface by slightly shaking it, while the rest will dry on its own within a very short time. Remount the elements after they have completely dried. If required, you can also remove each of the individual lying surface elements completely from the frame to clean them.

6.2 Disinfection

Disinfect the nursing care bed with a wipe disinfectant. Please adhere to the tested and recognised procedures of the Robert Koch Institute (RKI). You can use commercially available cleaning and disinfecting agents approved by the RKI. In order to maintain the material resistance of the plastic elements such as the motor housing and decorative elements, only mild and gentle agents should be used for disinfection. Concentrated acids, aromatic and chlorinated hydrocarbons as well as detergents containing highly concentrated alcohols, ether, ester and ketone may damage the material and should therefore be avoided. The list of disinfectants and disinfection methods tested and approved by the Robert Koch Institute can be found on the Internet at www.rki.de.

6.3 Avoidance of hazards

In order to avoid dangers in connection with cleaning and disinfection, you must first observe the following regulations in connection with the electrical components of your nursing care bed. Non-observance of these guidelines may result in considerable damage of the electrical lines and the drive.

1. Pull the mains plug and position it in such a way that contact with excessive amounts of water or detergents can be excluded.
2. Check all plug-connections for correct position according to the instructions.
3. Check the cables and electrical component parts for damage. Should you detect any damage, do not perform any cleaning operations but first have the defects repaired by the manufacturer or an authorised/ licensed electrician.
4. Before starting the operation, check the mains plug for residual moisture and dry or blow out the device, if necessary.
5. 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/supplier.

Hazard note from Bock

Use of abrasive cleansers and/or detergents containing grinding particles, cleaning pads or stainless steel cleaners for the cleaning is absolutely not recommended. Neither use organic solvents such as halogenated/aromatic hydrocarbons and ketones nor detergents containing acid or alkaline.
Under no circumstances must the bed be sprayed with a water hose or high-pressure cleaner, as liquid penetrates into the electrical components, and as a result malfunctions
and dangers could occur.

Clean and disinfect the bed before using it again. Also, at the same time, perform a visual inspection to check for any mechanical damages. You will find detailed information on this in the inspection list.

7 Guidance and manufacturer's declaration

Guidance and manufacturer's declaration

– Electromagnetic emission

The *medizinisches Bett* is intended for use in the electromagnetic environment specified below.
The customer or the user of the *medizinisches Bett* should assure that it is used in such an environment.

Emission test	Compliance	Electromagnetic environment - guidance
RF emissions CISPR 11 (partly)	Group 1	The medical used bed uses RF energy only for its internal function. Therefore, its RF emissions are very lowand are not likely to cause any interference in nearby electronic equipment.
RF emissions CISPR 11 (partly)	Class B	The medizinisches Bett is suitable for use in all establishments other than domestic and those directly connected to the public-voltage power supply network that supplies buildings used for domestic purpose.
Harmonic emissions IEC 61000-3-2	Class A	
Voltage fluctuations/flicker emissions IEC 61000-3-3	Complies	

– Electromagnetic immunity

The *medizinisches Bett* is intended for use in the electromagnetic environment specified below.
The customer or the user of the *medizinisches Bett* should assure that it is used in such an environment.

Immunity test	IEC 60601 test level	Compliance level	Electromagnetic environment - guidance
Electrostatic discharge (ESD) IEC 61000-4-2	± 6 kV contact ± 8 kV air	± 6 kV contact ± 8 kV air	Floors should be wood, concrete or ceramic tile. If floors are covered with synthetic material, the relative humidity should be at least 30%.
Electrostatic transient/burst IEC 61000-4-4	± 2 kV for power supply lines ± 1 kV for input/output lines	± 2 kV for power supply lines ± 1 kV for input/output lines	Mains power quality should be that of a typical commercial or hospital environment.
Surge IEC 61000-4-5	± 1 kV differential mode ± 2 kV common mode	± 1 kV differential mode ± 2 kV common mode	Mains power quality should be that of a typical commercial or hospital environment.
Voltage dips, short interruptions and voltage variations on power supply input lines IEC 61000-4-11	< 5 % U_T (>95 % dip in U_T) for 0.5 cycle 40 % U_T (60 % dip in U_T) for 5 cycles 70 % U_T (30 % dip in U_T) for 25 cycles < 5 % U_T (>95 % dip in U_T) for 5 sec	< 5 % UT (>95 % dip in UT) for 0.5 cycle 40 % UT (60 % dip in UT) for 5 cycles 70 % UT (30 % dip in UT) for 25 cycles < 5 % UT (>95 % dip in UT) for 5 sec	Mains power quality should be that of a typical commercial or hospital environment. If the user of the medizinisches Bett requires continued operation during power mains interruptions, it is recommended that the medizinisches Bett be powered from an uninterruptible power supply or a battery.
Power frequency (50/60 Hz) magnetic field IEC 61000-4-8	3 A/m	3 A/m	Power frequency magnetic fields should be at levels characteristic of a typical location in a typical commercial or hospital environment.

Note: U_T is the a. c. mains voltage prior to application of the test level.

– Electromagnetic immunity

The *medizinisches Bett* is intended for use in the electromagnetic environment specified below.
The customer or the user of the *medizinisches Bett* should assure that it is used in such an environment.

Immunity test	IEC 60601 test level	Compliance level	Electromagnetic environment - guidance
Conducted RF IEC 61000-4-6 Radiated RF IEC 61000-4-3	3 V 150kHz-80MHz 3 V/m 80MHz-2500MHz	3 V 150kHz-80MHz 3 V/m 80MHz-2500MHz	Portable and mobile RF communications equipment should be used no closer to any part of the EQUIPMENT medizinisches Bett, including cables, than the recommended separation distance calculated from the equation applicable to the frequency of the transmitter. Recommended separation distance: $d = \left[\frac{3,5}{3}\right]\sqrt{P}$ 150 kHz to 80 MHz $d = \left[\frac{3,5}{3}\right]\sqrt{P}$ 80 MHz to 800 MHz $d = \left[\frac{7}{3}\right]\sqrt{P}$ 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 surveya, should be less than the compliance level in each frequency rangeb. Interference may occur in the vicinity of equipment marked with the following symbol: 

NOTE 1 At 80 MHz and 800 MHz, the higher frequency range applies.
NOTE 2 These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection form structures, objects and people.

[a] 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, en electromagnetic site survey should be considered. If the measured field strength in the location in which the medizinisches Bett is used exceeds the applicable RF compliance level above, the medizinisches Bett should be observed to verify normal operation. If abnormal performance is observed, additional measures may be necessary, such as reorienting or relocating the medizinisches Bett.

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

Recommended separation distances between portable and mobile RF communications equipment and the medizinisches Bett

The medizinisches Bett is intended for use in an electromagnetic environment in which radiated RF disturbances are controlled.
The customer or the user of the medizinisches Bett can help prevent electromagnetic interference by maintaining a minimum distance between portable and mobile RF communications equipment (transmitters) and the medizinisches Bett as recommended below, according to the maximum output power of the communications equipment.

Rated maximum output of transmitter W	Separation distance according to frequency of transmitter m		
	150 kHz to 80 MHz $d = \left[\frac{3,5}{3}\right]\sqrt{P}$	80 MHz to 800 MHz $d = \left[\frac{3,5}{3}\right]\sqrt{P}$	800 MHz to 2,5 GHz $d = \left[\frac{7}{3}\right]\sqrt{P}$
0,01	0,12	0,12	0,23
0,1	0,37	0,37	0,74
1	1,17	1,17	2,33
10	3,69	3,69	7,38
100	11,67	11,67	23,33

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.

8 Regular inspections with service

Regular inspections facilitate the maintaining of the highest possible safety level, and are considered to be an important safety precaution. Medical devices must be inspected regularly in terms of safety according to the stipulated regulations of the manufacturer and the generally accepted rules of technology. The safety-related protection measures are subject to different requirements and demands. This also applies to the potential wear and tear in the daily use. To prevent such risks, constant and consistent compliance with the deadlines for regular functional testing is absolutely necessary. The manufacturer has no influence on the operator's adherence with respect to the observance of these regulations concerning electric beds. Bock facilitates the observance of the necessary precautionary measures to be taken by means of their time-saving services.

The execution of the inspection, assessment and documentation must be performed only by or under supervision of professional persons such as electricians or electro-technically instructed persons who have a thorough knowledge of the relevant provisions and are able to recognize possible impacts and hazards.

In the event that no person on the part of the user is eligible for the regular inspections or is commissioned, the Bock service offers you the assumption of the regular inspections with simultaneous control and observance of the corresponding intervals for a fee.

The company Hermann Bock GmbH specifies an inspection interval which stipulates that a safety-technical inspection is to be executed at least once annually, and with each reuse of the bed.

For support purposes, Hermann Bock GmbH will provide you with the inspection list in the assembly and operation manual for carrying out all the necessary tests. Please copy the checklist as a form for your inspection. The checklist serves as evidence report of the performed inspection and must be kept on file.

The inspection list can also be downloaded from the Internet: www.bock.net.

Attention: Unauthorised technical changes to the product voids all warranty claims.

Inspection list for Bock nursing care beds	Page 1 of 2	Issuing date: 09.10.2018
Model designation		.bock
Serial / Inventory-No.:		
Year of manufacture:		
Manufacturer:	Hermann Bock GmbH	

Visual inspection:

No.	Description	Yes	No	Remark
General:				
1	Type plate/sticker present on bed and legible?	☐	☐	
2	Operating manual available?	☐	☐	
3	Is the safe working load as per type plate (patient weight + mattress weight + accessory weight) observed?	☐	☐	
4	Are the accessories (e.g. lifting pole incl. handle and belt, stand-up aid, wall deflector rollers, etc.) in perfect condition? Are all accessories securely fixed and without signs of wear? Is the handle on the lifting pole not older than 5 years (service life of the handle according to the manufacturer's specifications)?	☐	☐	
Electric components:				
5	Power cables, connecting cables and plugs without cable breaks, pressure and kinking points, abrasions, porous points and exposed wires?	☐	☐	
6	Strain relief firmly fastened and efficient?	☐	☐	
7	Correct and secure cable leading and cable connections?	☐	☐	
8	Housings of motors and hand control without damages?	☐	☐	
9	Motor lift pipes without damages?	☐	☐	
Chassis (with scissors construction beds) / end panels (of actuator beds):				
10	Chassis construction free of defects with no ruptured welding seams?	☐	☐	
11	Are the castors and bumper rollers (if available) without damages?	☐	☐	
12	Plastic end caps and mechanical connecting elements (screws, bolts, etc.) complete and without damages?	☐	☐	
Lying surface and end panels:				
13	Sprung wooden slats, aluminium/steel bars, carrier plate and/or springs without damages? (No cracks, no fractures, tight fit, enough pressure, etc.) *Only for nursing care bed dino:* Distance between aluminium bars less than 6 cm?	☐	☐	
14	Frame of lying surface and lifting parts free of defects with no ruptured welding seams?	☐	☐	
15	Plastic end caps and mechanical connecting elements (screws, bolts, etc.) complete and without damages?	☐	☐	
16	Tight fit and no cracks or breakages of head and foot end piece?	☐	☐	
Side rail:				
17	Are the side rails without cracks, breakages or damages?	☐	☐	
18	Is the distance between side guard rails is not more than 12 cm? *Only nursing care bed dino:* Distance between bars less than 6 cm? Distance between side rail and lying surface smaller than 6 cm?	☐	☐	
19	Is the height of the side rail above the mattress at least 22 cm? *Only nursing care bed dino:* Is the height of the side rail above the mattress at least 60 cm?	☐	☐	
20	*Only with split side rails:* Is the distance between the end part and side rails and/or distance between divided side rails less than 6 cm or greater than 31.8 cm?	☐	☐	

Inspection list for Bock nursing care beds	Page 2 of 2	Issuing date: 09.10.2018
Name / location:		.bock
Address / Postcode / City:		
Station / Room:		
Name of examiner / Date:		

Functional testing:

No.	Description	Yes	No	Remark
Side rail:				
21	Are the side rails running smoothly in the tracks and locking into place safely? *Only nursing care bed dino:* Smooth running of the doors on the aluminium profiles? Doors lock securely into the locking mechanism?	☐	☐	
22	Are the side guard rails/parts sufficiently mounted and firmly seated?	☐	☐	
23	Was the load stress test of the side rail without deformation?	☐	☐	
Lying surface:				
24	Back part, leg part adjustment and special functions properly and without any obstacles?	☐	☐	
25	Safe grid mechanism of lower leg rest (if available) in every step, even under stress?	☐	☐	
26	*Only domiflex 2 nursing care bed:* Is the clamping effect of the 6 eccentric clamps sufficient? If this is not the case, the stop nut must be tightened slightly!	☐	☐	
Chassis (with scissors construction beds) / end panels (of actuator beds):				
27	Hub adjustment properly and without any obstacles?	☐	☐	
28	Safe braking effect, blocking and free running of wheels?	☐	☐	
Electric components:				
29	Testing of hand control (keys and disabling function) all working properly without any defects?	☐	☐	
30	Battery/Bock battery/emergency lowering: Function properly and without any defects?	☐	☐	
General:				
31	Function of the accessories flawless and safe? (e.g. lifting pole incl. grab handle and belt, stand-up aids, wall deflector holder, etc.)	☐	☐	

Electric measuring:

No.	Description	Yes	No	Remark
Insulation resistance - (must be only measured on old models before manufacture year of 2002.)				
32	Insulation resistance – measured value larger than 7 MΩ?	☐	☐	
Device leakage current - (This measurement does not have to be carried out for nursing care beds with a limoss drive set for nursing care beds manufactured from 2018-05 onwards, or for nursing care beds with a Dewert drive set for nursing care beds manufactured from 2015-07 onwards during the first 10 years of service life, if the visual and functional testing is passed, if this is a nursing care bed with a limoss or Dewert switched-mode power supply (SMPS). With these nursing care beds, the mains voltage is directly converted into a safety extra-low voltage of max. 35 V in the switch-mode power supply unit.)				
33	Device leakage current - measured value smaller than 0.1mA?	☐	☐	

Evaluation

No.	Description	Yes	No	Remark
34	All values/inspection within the permissible range passed?	☐	☐	

In the event the inspection result did not pass:	☐Repair ☐Singling out
Date / Signature	**Next inspection**

Hermann Bock GmbH
Nickelstr. 12
D-33415 Verl, Germany

Tel.: +49 52 46 92 05 - 0
Fax: +49 52 46 92 05 - 25
Internet: www.bock.net
E-Mail: info@bock.net

Our SALES PARTNERS
Our business partners pursue the same strategy as we do: quality, innovation and above-average standards that are internationally recognized. You can rely on our business partners as you can rely on us.
Please note that only our authorised personnel and our sales partners can provide training, supply of spare parts, repairs, inspections and other service. Otherwise, all warranty claims will be void.
A listing of our current distributors can be found under www.bock.net/kontakt/vertriebspartner

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