

# Bakare Prestige Range

Instructions for use



Exclusively manufactured for BaKare Beds by:



# Preface

1.	Table of Contents
2.	Instructions
3.	Safety Guidelines
4.	Product Illustration
5.	Functions
5.1.	Backrest
5.2.	Thigh Support
5.3.	Height Adjustment
5.4.	Blocking
5.5.	Braking and Moving
5.6.	Adjusting Side Rails
6.	Technical Specifications
6.1.	Motor for Mattress Position
6.2.	Motor for Height Adjustment
7.	Intended Use
8.	Product Safety
9	Delivery and Assembly
9.1.	Assembly Headboard / Mattress Section
9.2.	Replacement of Mattress Position Motor
10.	Accessories (Excerpt)
10.1.	Back Support
10.2.	Infusion Holder
10.3.	Bed Lamp
10.4.	Mattress Extender
10.5.	Urine Bottle Holder / Urine Bottle
10.6.	Manual Control Holder
10.7.	Mattresses
10.8.	Side Rail Extender / Three Side Rails
11.	Cleaning and Disinfection
11.1.	Disinfection
11.2.	Care of Wooden Parts
11.3.	Environmental Impact
12.	Troubleshooting
13.	Maintenance
13.1.	Inspection Schedule
13.1.1.	Mattress Frame
13.1.2.	Hoisting System
13.1.3.	Electrical Systems
14.	Storage
15.	Warranty and Service
16.	Declaration of Conformity

Dear Customers,

You have purchased a nursing bed from BaKare Beds, a durable product that complies with the demands of nursing care for function and the highest level of safety.

We thank you for the confidence you have shown us.

Our company guarantees you that we select materials with care and conduct quality controls of state-of-the-art production methods.

Follow the directions and operating instructions to prevent accidents and obtain the greatest benefits from this patient bed.

#### 2. Instructions

The following tips and guidelines in these instructions are for nursing staff or other employees or persons who are responsible for using and handling the patient bed.

! The instructions must be available to the staff at all times to prevent errors in use and endure smooth operation. The nursing staff must be instructed carefully in the use of patient beds before operating them. The instructions must be followed.

The instruction booklet is designed for the Impulse series of patient beds. The illustrations, diagrams, and texts included do not cover the entire line.

# 3. Safety Guidelines

- 1) The instructions must be read and followed before using the patient bed.
- 2) Explanation of symbols on the type label.

CE Conformity label according to the medical products guidelines IPX4 Electrical equipment splash proof "Use only in dry rooms" Safety class II (double insulation, reinforced insulation)

The information on the type label must be observed.

- 3) The bed may not be operated in case of malfunctions or defects that could endanger persons.
- 4) Electric patient beds may be operated only by trained personnel.

- 5) Before operating the bed, the user must check it for safe function and proper operating condition.
- 6) To avoid the danger of falls when patients get in and out of bed, the brakes on the wheels should always be locked.
- 7) The bed can be transported in various positions. Please ensure that no body parts or other objects are in the adjustable areas.
- 8) Only nursing staff may adjust the side rails. Please ensure that the patient is not touching the side rails when changing mattress position to avoid crushing body parts.
- 9) The function of the side rails must be inspected daily and they may not be loaded more than 70 kg in vertical position or 50 kg in horizontal position.
- 10) When lowering the mechanical emergency back rest (option) it must always be supported to prevent a sudden collapse.
- 11) The functions of the manual control can be blocked or activated by an additional switch on the back. The action of the blocking function must be checked on the manual control.
- 12) The drive mechanism used must be supplied with power from a VDF power source power adaptor 220 V, 50 Hz.
- 13) The power cable has an additional mechanical strain relief. Still, care should be taken to protect the cable from sharp edges and crushing or abrasion.
- 14) The layout of the manual control device allows it to be placed in the holder so that the buttons are not accidently activated between two objects. It should be ensured that the manual control is freely accessible and not blocked between the side rails and nightstand.
- When using the bed in the patient room, ensure to maintain safe distances from the walls, windowsills, or other furnishings. The safe distances are determined depending on the design and model of the bed and the height adjustment and positioning. The minimum distance is 30 mm.
- 16) When used improperly, the following dangers may arise:
  - Unintended activation of electrical functions
  - Use of the bed by children under age 12
  - Moving the bed by pulling the power cable or side rails
  - Simultaneous activation of electrical functions by more than one person
  - Activation of the functions by patients who have not been instructed in use
  - Pulling on the power cable to cut off electricity
  - Moving the bed on a slope or rough surface
  - The mattress used must comply with safety standards and may not be more than 120 mm thick.

- Permanent presence of liquids in the motor area is to be avoided (e.g. incontinence)
- The handle on the backrest is to be replaced completely every 5 years for safety reasons.
- Repairs and maintenance of electrical components may use only original manufacturer replacement parts and must be carried out by specially trained personnel.
- The patient bed is not intended for permanent operation for more than 2 min. If the motor is overused or overheated, operations are automatically switched off. The motor can be switched on again only after a 2-hour cooling-down period.
- Blocking the mechanical parts of the bed must be avoided as this can lead to damage and complete loss of the motor function from overheating.
- Exceeding the safe load must also be avoided.
- The long-term positioning of immobilized patients can cause bedsores if no other positioning aids are used. The manufacturer of the patient bed is not liable for bedsores.
- Electrically operated patient beds are medical products and according to the medical product law and medical product operator directive § 6 are subject to technical safety checks. These regular technical safety checks must be conducted at least once a year. A visual and functional inspection of functional and electrical safety according to VDE0751 must be conducted. See. No. 13. Maintenance
- In addition, electric patient beds are electrical equipment; the employer is responsible for their safety. Monitoring this responsibility is the duty of the professional association for health care and welfare (BGW) and the trade supervisory offices. The regulations of the associations for safety and health (BGV, formerly VBG) apply. In particular BGV A2 (formerly VBG) "Electrical Systems and Equipment", which recommends inspections of portable electrical equipment every six months, but at least once a year. These inspections may be carried out only by an electrician or a person with electrical training using a special test instrument. The inspections according to BGV A2 can be carried out during safety checks for medical products by personnel trained by the manufacturer, as these BGV inspections are included in the technical safety tests.
- Electrically powered patient beds are active medical products and in accordance with the medical device operator directive must be included in an inventory list for each business premises. It is recommended to document the proper execution of the required technical safety checks in the inventory and to present it at the next inspection. The required records of the previously technical safety checks should be included in the inventory.
- The orderly execution and documentation of the technical inspections, service and maintenance work, and technical safety checks recommended by the manufacturer are a necessary condition for preserving the customer's warranty rights. If the operator of a medical product does not fulfill his duties, risks of damages and accidents may arise that are expressly not the responsibility of the manufacturer.
- Repairs are to be carried out in accordance with VDE0751-1 and concluded by documenting with a technical safety inspection.

# 4. Product designation

Prestige

# 5. Function description

Depending on the model and type of hospital bed, the bed can be used in the following positions by adjusting the backrest, the upper and lower leg sections as well as the height.

# 5.1. Backrest (RL)

The RL is adjusted by means of the corresponding buttons on the hand control unit

The movement sequence of the RL enables a length compensation at the head section of the bed of 120 mm. This function (mattress compensation) permits the patient to adopt a comfortable sitting position without being compressed or restricted in movement in the abdomen and upper body.

# Mechanical unlocking of the backrest (option)

When operating the mechanical unlocking, hold the backrest firmly in the set position and reduce force slightly where necessary. Then pull firmly on the unlocking mechanism of the RL until the RL is significantly lowered. Slowly lower the RL to the end position.

Engaging the unlocking mechanism: Press the corresponding button on the hand control unit downwards until the sound of the motor is no longer audible. Then press the button on the hand control unit upwards until an audible locking sound can be heard. The electric RL function is once again active.

# 5.2. Upper leg section (OT)

The OT is adjusted by means of the corresponding buttons on the hand control unit.

For safety reasons, this position may only be set by medical personnel. The lower leg section (UT) can be set to the horizontal position by nursing personnel using a fine locking device.

# 5.3. Height adjustment (HV)

The HV is adjusted by means of the corresponding buttons on the hand control unit.

# Hand command Prestige

Backrest up

Legsection up

Autocontour

Elevation up

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Backrest down

Legsection down

Autocontour

Elevation down

Caution! When adjusting the height, care should be taken to ensure that the patient is secure! No foreign objects may be present in the area of the lifting mechanism.

### 5.4. Blocking function on manual control unit

The electrical equipment is based on state-of-the-art technology and first failure safety.

The blocking function provides an additional safety measure. This function is located on the rear side of the hand control unit and can be operated by personnel using a key switch. In the event of a malfunction of the electric drive, the functions can be stopped using the appropriate rotary switch. Operation:

- 1) Turn the rotary switch to the symbol "Lock open" to release the manual switch function.
- 2) Turn the rotary switch to the symbol "Lock closed" to lock the manual switch function.

# 5.5. Braking and transporting

# 5.5.1 *Caution!*

The hand control brake release switch has a double function.

The lying surface is in the lowest position. Hold down switch S6 on the hand control unit and at the same time press the roller button on the hand control unit to release the castors. The bed is now ready for transport. Use the S5 button on the hand control unit  $\rightarrow$  height adjustment of lying surface to retract the castors. The bed is now resting on the supporting feet.

Caution! The function rendering the bed ready for transport may only be set during the time when the bed is being transported, and must then be reset by moving the lying surface to the raised position!

# 5.6. Adjusting the side railing

#### 5.6.1 Continuous side protection

The side railings are located one above the other in the exit position, adjacent to the frame of the lying surface.

# Lifting function:

Lift the upper side railing on the railing groove upwards until the safety knob locks with an audible sound.

# Ensure that the side railing is locked by repeated shaking of the side railing.

Lowering function: raise slightly while simultaneously pressing the safety knob. Slowly lower the side railing to the lowest position.

Caution! When lowering and raising the side railings, take great care not to jam fingers, hands or other body parts between the side railings and the frame of the lying surface.

In the case of disoriented or undernourished patients, we urgently recommend that side railing buffers be used to avoid the possibility of jamming between the side railings, and associated injuries.

# 5.6.2. Split side protection

The side railings are located on the sides of the lying surface in the resting position, providing support against slipping of the mattress.

The side railings can be set to a middle height position by raising the side protection using a swivel movement. This position is particularly suitable as a mobility support for a patient's movements.

Caution: When raising the side protection, ensure and check that the locking mechanism is engaged.

The side railing is unlocked for height adjustment using two pressure pieces in the inner, upper area and positioned to the maximum height. Perform telescopic setting up and down with two hands, and avoid tilting. **Do not use force!** When lowering the side railings, follow a similar procedure to that used when raising the side railings.

#### 6. Technical data

Dimensions: approx. 206 x 102 cm

Lying surface: 200 x 90 cm

Height adjustment: approx. 37 to 78 cm

measured from frame of lying surface

Backrest adjustment: 70° reclining angle for backrest

30°

(mattress compensation) 12 cm

Upper leg setting:

Maximal load bearing

capacity: 180 kg (145 kg patient weight + 20 kg mattress +

15 kg accessories)

Weight: approx. 120 kg

Protection type: IPX4

# 6.1. Lying surface drive

Electrical connection: 220 V, 50 Hz

Protection type: IPX4
Protection class: II
Output voltage: 24 V

Continuous load of motors: maximum 2 min

Power consumption: up to approx. 400 W peak load

Adjustment speed: approx. 5 mm / s Compressive force: max. 2500 N

# 6.2. Lifting system drive

Maximum voltage: 24 V

Current limiter: approx. 5.5 A

Compressive force: 6000 N

Adjustment speed: greater than 10 mm / s
Protection type: IPX4 (in assembled state)

Protection class:

Continuous load of motors: maximum 2 min

### 7. Purpose

Hospital beds from Betten Malsch GmbH are for use in old-age and nursing care environments. These beds are used exclusively for this purpose. The beds' convenience and functionality provide relief for personnel when performing nursing duties, and offer postural compensation and relief to disabled persons in old-age and nursing care facilities.

# Use of the hospital beds for other applications requires the prior written consent of Betten Malsch GmbH.

The product must be used as an operational and auxiliary aid for nursing care, and is subject to the regulations of the employer's liability insurance association. The hospital bed complies with the applicable norms and regulations for a medical product. As such, the product may only be used under medical supervision.

# 8. Product safety

The product carries the CE symbol, and consequently complies with the German and European safety regulations applicable to the product.

The product is manufactured to DIN EN ISO 9001 standards.

Norm Comment

Medical product according to

93/42/EWGMDD

CE designation

Medical product law MPG MPG

EN 1441 Risk analysis

DIN EN12 182 Technical assistance for disabled persons

After 1/1/01 EN 1970:2003 Adjustable beds for disabled persons

As per DIN EN 60601-1 from

1/1/01

Medical electrical devices

As per DIN EN 60601-2-38:2000 Medical electrical devices and accessories

As per EN 12530 Castors for hospital beds

DIN EN 980 Graphical symbols for designation of medical

products

DIN EN 1041 Symbols and information that accompany a

medical product

DIN 33402 Human body dimensions

DIN 68861-1 Furniture surfaces

DIN EN 60601-1-2 EMC electromagnetic compatibility

BfArM recommendation: Bundesinstitut für Arzneimittel und

dated 07-2000 Medizinprodukte (Federal Institute for Drugs

and Medical Devices)

#### 9. Supply and assembly

Hospital beds from Betten Malsch GmbH are generally supplied in a fully assembled state, or assembled on site by professional installers or business partners. Completeness and conformity must be checked, based on the delivery documentation. Any defects or damage must be indicated immediately to the shipping agent and the supplier, and must be indicated as such on the delivery note. On delivery of the item/s, both parties must sign the acceptance sheet.

During use, for example for purposes of exchange, simple assembly procedures may also be performed by technically qualified personnel.

#### 9.1. Assembly or exchange of bed fronts / lying surface

- Loosen the bolt connection between the bed front and the lying surface

- Exchange side railings and lying surface cladding

Caution: When loosening the bed fronts, secure the continuous side railing against falling down.

# 9.2. Assembly or exchange of lying surface motor

- Disconnect power supply and plug for individual drives. Loosen motor cover on the housing
- After exchanging the motor, reconnect the plug connections for individual drives and check that the motor is located correctly on the drive shaft.

Caution: After exchanging individual or all drive elements, the full functionality of the system must be checked.

# 10. Accessories (optional) (excerpt)

#### 10.1. Back Support

The back support can be placed to the left or right of the head at the mounting plugs for this purpose. Please ensure the correct placement of the bolt in the intended mounting notch.

The max. load for the back support is 90 kg.

#### 10.2. Infusion Holder

The infusion holder is attached just as the back support in the intended mounts on the mattress frame.

The infusion stand is intended only for hanging infusions and not for attaching other accessories or the like.

#### Maximum load is 8 kg (2 kg per hook).

### 10.3. Bed Lamp

The bed lamp is attached just as the back support to the intended mount on the mattress frame.

Important! For reasons of safety, the bed lamp may be attached only using the original manufacturer adapter and only by authorized personnel. Please note the safety guidelines in the user instructions for the bed lamp.

#### 10.4. Mattress Extender

The bed can be lengthened by 20 cm using the additional "mattress extender". For this, the full-length side rails and mattress cover must be replaced.

Important! The mattress extender may be installed only by authorized personnel or contract partners.

# 10.5. Urine Bottle Holder / Urine Bottle / Urine Bag Holder

The mount for the urine bottle holder or urine bag holder is located on the mattress frame. The urine bottle holder can be attached at the left or right side of the bed.

Important: Before attaching the accessories, please ensure that there will be no collision with other parts of the bed or room furnishings.

### 10.6. Manual Control Holder (optional)

The additional manual control holder is for positioning the manual control to be accessible to the patient.

Important! The manual control holder is special equipment and may be mounted only by our mechanics or contract partners.

The manual control holder is flexible and may not be used as an aid for standing up or as a grip.

#### 10.7. Mattresses

Betten Malsch GmbH provides custom-made special mattresses for various uses and requirements for the mattress contour of patient beds. Please ask your dealer or manufacturer about the mattresses you need.

Important! Use only mattresses approved and tested by Betten Malsch GmbH. For reasons of safety, the thickness of the mattress and the standard safety spacing of the side rails may not exceed 12 cm.

# 10.8. Side Rail Extender / Three Side Rails

To prevent decubitus (bedsores) and for positioning patients with hip and spine injuries, several different pressure systems and pads can be used that make the

mattress thicker than 12 cm. For this use, Betten Malsch GmbH offers a flexible side rail extender or the use of three side rails.

Important! Use only original Betten Malsch GmbH accessories. Side rail extenders and the use of 3 side rails are coordinated and approved by the relevant DIN standards and Betten Malsch patient beds.

# 11. Cleaning and Disinfection

#### 10.1. Disinfection

The patient bed must be disinfected regularly, at least every time the user is changed. All products certified by DIN EN 12720 can be used for wet wipe disinfection of the bed. The patient bed may not be disinfected in washing systems or with water spray. For disinfection, Betten Malsch GmbH recommends Terralin, Perform, and Sagrotan-Med or equivalent products.

The disinfectants may be used only according to manufacturer's instructions. The wood body may not be cleaned with these products.

Important! Do not use scouring powder, abrasive pads, or stainless steel cleaner for cleaning. When using disinfectants, please note the proper dosages and any dangers from combining with other products.

When disinfecting the patient beds, please pull the power plug and protect the motor from moisture.

#### 11.2. Care of Wood Parts

For Betten Malsch GmbH patient beds, all wood bodies are finished in compliance with the DIN 68861-1A standard. The objective is to achieve a stylish design, best functionality, and practical use. To ensure that you will be able to get the most use from this product, we recommend cleaning with commercial furniture cleaners and polishes.

Even with the most careful selection and sorting of genuine wood materials, wood is subject to a natural aging process. Environmental influences such as humidity, temperature, and UV radiation lead to changes in the color, even of varnished wood surfaces. It is also important to note that solid wood finishes have their own individual characteristics from the different trees they are taken from. Slight differences in color and contrast within one delivery are natural and cannot be avoided. For these reasons, relative differences in contrast and colors and inclusions in genuine wood material due to growing conditions are not considered a defect and Betten Malsch GmbH cannot assume any liability or warranty for this.

#### 11.3. Environmental Impact

Betten Malsch GmbH patient beds are manufactured in accordance with applicable regulations and latest technology, and are free of hazardous materials. The materials used in the finish contain no CFCs or solvents.

Patient beds that must be taken out of use due to age or damage must be disposed of in accordance with the legal regulations for disposals.

Important! Please observe the respective regional regulations when disposing of metal, wood, and electrical waste.

# 12. Troubleshooting

Problem	Possible Cause	Remedy
Motor does not function when using manual control	Power cable not plugged in	Plug in power cable
	Socket has no power	Check socket
	Cable is not firmly connected	Check connections to the motor and manual control
	Manual control or motor is defective	Notify the operator, dealer, or Betten Malsch GmbH
	Power main not activated	Activate power by pressing the green button
	Switchbox function is blocked	Activate switchbox function
Electric motor does not adjust settings properly	There is an object blocking adjustments	Check moving parts and remove foreign bodies
	The safe load has been exceeded	Reduce load
Motor shuts off after continuous use	Adjustment time or safe load has been exceeded, motor reacted to excessive heat	Allow the motor sufficient time to cool off
Using manual control causes opposite functions	Motor plugs are mixed up	Check for proper cables or notify your operator, dealer, or Betten Malsch

		GmbH
The side rails cannot be properly positioned	Mechanism is blocked or bent	Check movable parts and remove foreign bodies or contact customer service
Wheels do not brake or cannot be rolled	Foreign bodies are lodged in the wheels	Remove foreign bodies
	The roller system is	Contact our customer
	defective	service

#### 13. Maintenance

The manufacturer is liable for the safety and reliability of the product only if it is regularly serviced and used in accordance with the safety guidelines. If significant defects occur during maintenance so that safe operation of the product cannot be ensured, the product must not be used. Servicing must be carried out at least **once a year**. The provisions of the general operator ordinance and the provisions for using adjustable, electrically powered furniture apply. §6 MPBetreibV (Medical Devices Operator Ordinance)

#### 13.1. Inspection Schedule

Inspection and maintenance must be carried out only by trained personnel. This applies in particular to compiling inspection records and analyzing and archiving them.

#### Measures

Inspect connections and power cables for damage, firmly fitting connectors, and strain relief and for kinks

Inspect side rails for damage and free movement

Inspect locking function of the side rails

# 13.1.1. Mattress Frame

Visual inspection of all frame and adjusting elements for deformation, wear,

damage, and corrosion

Check whether all adjustments can be made to the maximum positions

Inspect connecting elements (screws, nuts, locking rings) for completeness, function, and good fit

Inspect back support mount and all components of the back support

Inspect wood body for damage, breaks, and joints and for condition of surface

#### 13.1.2. Hoisting System

Visual inspection of all frame and adjusting elements for deformation, wear, damage, and corrosion

Check whether all adjustments can be made to the maximum positions

Inspect connecting elements (screws, nuts, locking rings) for completeness, function, and good fit

Inspect connections and power cables for damage, firmly fitting connectors, and strain relief and for kinks

Check the function of wheels for free movement, operation, and brakes

#### 13.1.3. Electrical Systems

Check whether motors function properly

Visual inspection for damage to

Power supply cable and attachment of additional mechanical strain relief Location of cables away from moving parts

Manual control cable

Electrical inspection according to DIN EN VDE 0751

Test of protective conductor for safety class I models Test of operating current Insulation resistance (Riso >  $2M\Omega$ )

Record and archive results of the electrical inspections separately.

Defects that impair the function and safety of the patient bed must be eliminated before it is operated again and reported to the responsible person.

Only original Betten Malsch GmbH replacement parts may be used.

#### 14. Storage

When storing the patient beds, the following steps should be taken.

- Pull the power plug and stow it safely for transport.
- Remove accessories such as bed lamp, back support, etc.
- Cover patient beds to prevent damage to wood body and frame.
- Affix the storage date to the bed in a visible location (for maintenance intervals)

Important! The same conditions apply to the storage of patient beds as for use (temperature, humidity, heat, etc.).

# 15. Warranty and Service

You have purchased a high quality product from Betten Malsch GmbH patient beds.

The patient beds are covered by a warranty for 24 months

after date of purchase.

For defects caused by material or manufacture, you will receive free replacement or remedy within the warranty period. Malfunctions or defects caused by improper handling or external factors are excluded from the warranty. Our terms of business and delivery apply.

In case of questions, please contact us at the following numbers:

Customer Service Tel: 06626 / 915 128

Fax: 06626 / 915 127

Email info@bettenmalsch.de

Internet www.bettenmalsch.de



# CE Declaration of Conformity

According the provisions of EG directive for medicine products 93/42/EWG, appendix VII

Herewith the Manufacturer

Betten Malsch GmbH Rohbergstraße 9

D 36208 Wildeck-Obersuhl

Germany

declare under our sole responsibility that the following products are in conformity with appendix I, guideline 93/42/EWG

# Model Ayleen 100

The named products hab been produced with the application of the harmonized standards

DIN EN 1970 : 2000 + A1:2007

,

adjustable beds for handicapped people

DIN EN 60601-2-52:2010 reliability of electr. Operating beds

All products are developed, produced and testet under applying the TQM system DIN EN ISO 9001, certificate no. 73 100 1297.

The conformity of TQM is certified by TÜV CERT-certificate authority TÜV Hessen.

In case of non verified modifications of above products the declaration will lose validity.

Wildeck, den 18.06.2012

Betten Malsch GmbH

R. Malscr C.E.O.

Erfüllungsort:

Usferungen erfolgen unter Eigentumsvorbehalt und nach unseren allg. Geschäftsbedingungen, einzusehen unter www.bettenmalsch.de und bleiben bis zur vollständigen Bezahlung unser Eigentum

Wildeck

Internet: www.bettenmalsch.de

