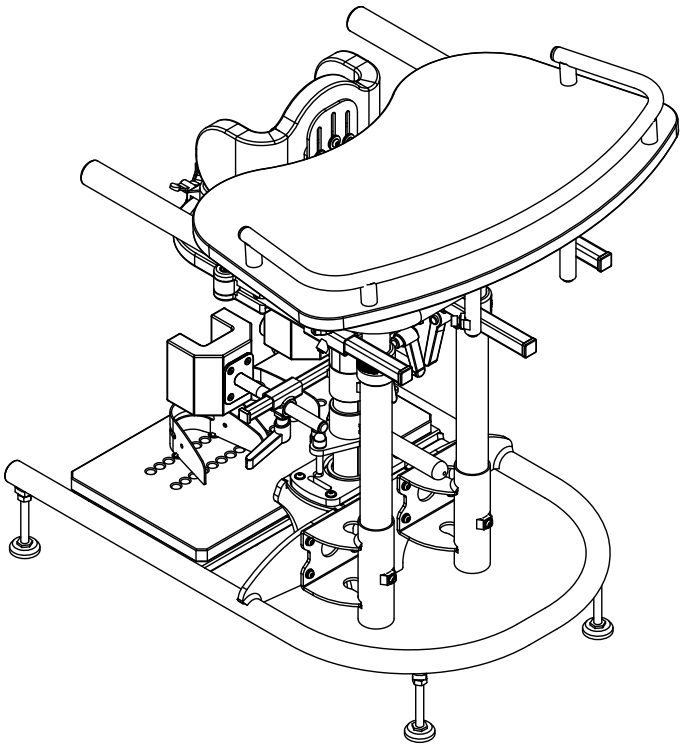
REHATEC®

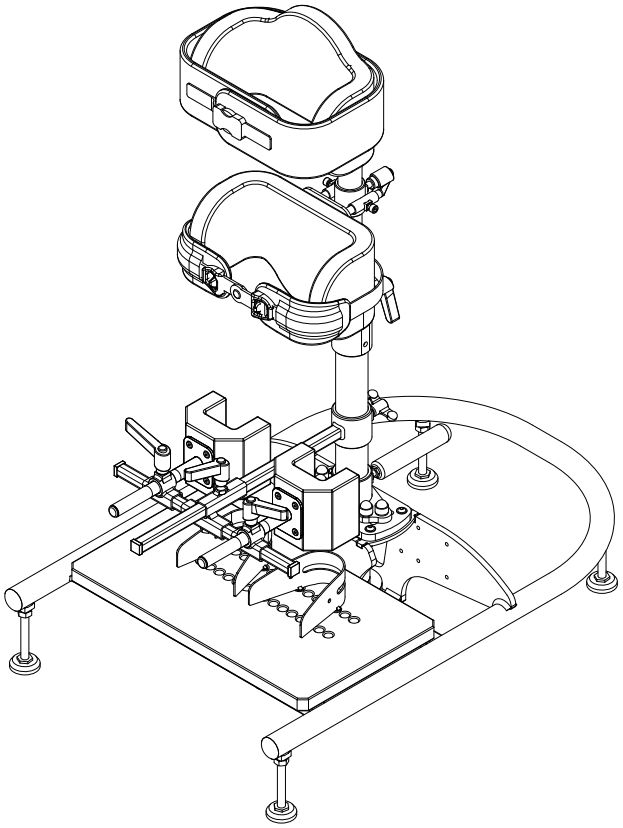
# Heidelberg Upright Stander Benni and Benni Light

*INSTRUCTIONS FOR USE*

**SERIAL NUMBER:** _____

English





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We set standards.

# Foreword

Dear user,

We are delighted that you have chosen a high-quality product from Rehatec® GmbH and thank you for your trust in us.

This manual is designed to help you familiarise yourself with your Heidelberg Benni standing frame (Benni Light)—hereinafter referred to as the standing frame—and to show you how to use it quickly and easily in a variety of everyday situations. Once you have adjusted your standing frame to the optimal settings, it is ready for use, and you can enjoy its benefits for a long time to come.

Please note that the illustrations and descriptions in this manual may differ slightly from your product due to individual configuration options. Rehatec® GmbH reserves the right to make technical modifications and improvements. Although this manual has been compiled with the utmost care, minor errors cannot be completely ruled out.

We wish you much success and enjoyment using your Heidelberg Benni (Benni Light) standing frame.

***Rehatec® GmbH***

## Important notice!

This user manual provides essential information and instructions for the setup, commissioning, operation, use, maintenance, inspection, care, and reuse of the device. It also includes important safety instructions and usage limitations to protect the patient, the operator, and third parties.

Please read this manual carefully before using your new device for the first time. Individuals with sensory, cognitive, or learning impairments may require the instructions to be adapted for easier understanding. This can be done, for example, by reading the text aloud, translating it into simpler language, or providing additional explanations through a third party.

The operator must have read and fully understood the entire manual before using the device. To ensure patient safety, the operator must not have any impairments that could temporarily or permanently limit attention or judgment.

Keep this manual readily available for future reference and ensure that it remains with the product if it is passed on to another user. If required, Rehatec® GmbH will gladly provide a replacement copy. The manual can also be viewed and downloaded from our website at www.rehatec.com
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# Contents

# 1. Safety

This chapter summarises all safety instructions that you must always observe for your own protection and that of third parties.
Please follow all instructions in this manual carefully. Incorrect operation can impair important device functions.

All safety instructions and other regulations must be observed at all times by both the patient and the operator. Failure to observe these instructions may result in injury or damage to property.

## 1.1 Warnings

Warning notices differ depending on the hazard, as indicated by the following signal words:

- **CAUTION** Warning of damage to property!
- **WARNING** Warning of personal injury!
- **DANGER** Warning of danger to life!

Warning/information notices have the following structure:

⚠ **CAUTION/WARNING/DANGER**
Type and source of the hazard! Measures to avoid the hazard.

ⓘ **IMPORTANT**
The information symbol indicates useful tips for easier operation and better understanding.

## 1.2 Safety instructions

⚠ **DANGER! The user must not have any impairments that temporarily or permanently restrict their attention and judgement.**

⚠ **DANGER! The device contains small parts (e.g. pipe plugs or protective caps) that could be swallowed by small children or mentally impaired patients! Always ensure that the small parts do not come loose!**

⚠ **DANGER! The padding, wooden and plastic parts installed on the device are not reliably flame-retardant. They are flammable, e.g. by smoking accessories, ovens, stoves, fireplaces and other room heating devices.**

⚠ **DANGER! Adjustment ranges must not be exceeded. A secure connection of the parts must be ensured.**

⚠ **DANGER! Perform maintenance at the specified intervals (see chapter "Maintenance").**

⚠ **DANGER! Repair and adjustment work, cleaning or disinfection must only be carried out when there are no users in the device.**

⚠ **DANGER! The maximum permissible patient weight must not be exceeded! See the "Technical Data" chapter or the type plate!**

⚠ **DANGER! Never carry the device with a user in it or transport it in a car!**

⚠ **DANGER! Carry out an annual inspection for damage and wear.**

⚠ **CAUTION! Be aware of the risk of pinching and crushing during all repair and adjustment work.**




⚠ **DANGER! Only for operation within the specified conditions! See the "TECHNICAL DATA" section.**

⚠ **DANGER! After each transport in a car, prolonged storage and before reusing the device, all checks must be carried out in accordance with the "Commissioning" section!**

⚠ **WARNING If available, the patient must only stand in the device with appropriate footwear!**

⚠ **WARNING Surfaces may become hot due to heat input – risk of burns! To protect the patient from burns, ensure that the device is kept away from heat sources (e.g. wood-burning stoves) and strong sunlight and that it never exceeds a temperature of 41°C.**

⚠ **DANGER! Combining the device with third-party products or non-original parts is not permitted and may be dangerous. The manufacturer accepts no liability for damage or complications resulting from such combinations.**

⚠ **CAUTION The patient may push themselves off the wall or other furniture with their hands. Increased risk of tipping! See chapter "Minimum space requirements for the patient's environment".**

⚠ **CAUTION Additional safety instructions for individual points in the chapter "Device settings" must be strictly observed!**

⚠ **DANGER! Depending on the clinical picture and weight, several people (or a patient lift) may be required to transfer the patient.**

⚠ **DANGER! The device is not suitable for transport between rooms! If necessary, door thresholds must be equipped with fixed ramps.**

⚠ **CAUTION Never use force when making adjustments, as improper handling can cause damage to the device!**

⚠ **DANGER! It is essential that the device is kept away from fireplaces, smoking accessories, stoves and other room heating devices!**

⚠ **DANGER! Some device settings can only be carried out without a patient!**

⚠ **The device is only intended for patients with intact skin!DANGER! The operator must not have any impairments that could temporarily or permanently affect their attention and judgement temporarily or permanently!**

⚠ **DANGER! The patient must never be left unattended. Constant supervision by an operator is required!**

⚠ **DANGER! All settings must be made correctly before each use of the device. Before each use, check that all parts are securely fastened.**

⚠ **DANGER! The individual limitations and abilities of the user must be taken into account at all times!**

⚠ **DANGER! The device is only approved for use by a singleperson!**

⚠ **DANGER! The user must be adequately secured/fastened to prevent them from falling out, without compromising their comfort!**

⚠ **DANGER! The device may only be used by a trained user who has read and understood the entire instruction manual! Training must be provided by the operator/service provider!**

# 1. Safety

**DANGER! The patient must always be secured immediately after being raised to a standing position with the rear crossbar or the swivel arm pelvic frame/necessary straps! Use of the device without the body fasteners or swivel arm pelvic frame is prohibited!**

**DANGER! Before use, clarify how long the patient may remain in the standing device in order to prevent possible injuries.**

**DANGER! The device may only be used with the dynamic column unlocked if the brakes on the castors are locked!**

**DANGER! Use of the device with damaged fastening straps is prohibited!**

**DANGER! The device must not be altered or modified without the manufacturer's permission.**

**DANGER! Never use the device inside a means of transport (car, train, aeroplane, etc.)!**

**DANGER! Only use the device on firm, level ground. There is a risk of tipping and slipping if the ground conditions change.**

**DANGER! Limited manoeuvrability on soft surfaces, e.g. carpeted floors – risk of tipping!**

**DANGER! When cleaning and disinfecting, residues of the agents used must be removed to avoid poisoning, irritation and allergic reactions! See chapter "Cleaning and disinfection".**

**DANGER! Only place loads on the device at the permitted points – excessive loads due to incorrect handling (e.g. by attaching objects, leaning on or leaning against the device, etc.) will result in a risk of tipping.**

**DANGER! When the table height is set to its maximum, the centre of gravity of the device shifts upwards and there is an increased risk of tipping!**

**DANGER! Protect the device from moisture! If it comes into contact with moisture, dry it immediately.For further information on protection against water, see the "TECHNICAL DATA" section.**

**CAUTION! Repair and inspection work may only be carried out by *Rehatec® GmbH* and authorised specialist dealers.**

**DANGER! Never use the device near or in conjunction with flammable substances and fire-causing objects.**

**DANGER If necessary, the wheelchair must always remain directly behind the patient with the brakes applied! This is particularly important during standing up, as long as the patient is not yet protected by the crossbar or the swivel arm pelvic frame!**

**DANGER Caution! Risk of tipping! Do not lean on the parallel bars! Only use the table mount when getting on and off.**

**WARNING The device is only suitable for use indoors!**

**WARNING The device must always be secured against rolling away by applying all parking brakes!**

**WARNING Before each use of the device, all settings must be adjusted to suit the patient!**
**WARNING The device is quite heavy and may only be lifted by at least 2 persons!**
**WARNING Always wear sturdy, closed footwear when transporting, adjusting, operating, maintaining, cleaning and disinfecting the device to avoid injury to your feet and toes!**

**DANGER! The device is only to be used for therapeutic purposes! It must not be considered or used as a patient lift for further transport or as a ladder!**

**DANGER! Risk of tipping! Children playing must not pull themselves up on the device!**

**DANGER! It is not permitted to operate the device under the influence of drugs or alcohol, or by operators with cognitive impairments.**

**IMPORTANT When reusing the device, it may be necessary to replace existing components or purchase new positioning elements. Contact your dealer to find the right components for your device.**

# 2. Symbol

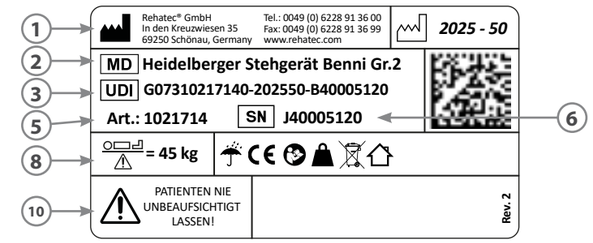
## 2.1 Symbols and markings on the product

| | | |
|---|---|---|
| 1 |  | Follow the instructions for use! |
| 2 |  | Only suitable for indoor use. |
| 3 |  | Manufacturer |
| 4 |  | Date of manufacture (week/year) |
| 5 |  | CE mark |
| 6 |  | Maximum permissible patient weight |
| 7 |  | Maximum permissible nominal load |
| 8 |  | Battery/device disposal |
| 9 |  | Serial number |
| 10 |  | Medical device |
| 11 |  | Unique identifier of a medical device |
| 12 |  | Protect the product from moisture. |
| 13 |  | Warnings. Caution! |
| 14 |  | Caution! The device weighs more than 10 kg!<br>At least 2 people are required to carry the device. |
| 15 |  | Warnings. Risk of crushing hands/fingers! |
| 16 |  | Instructions for use |

## 2.2 Type plate on the device

For clear identification and information purposes, the following labels are affixed to the base frame (see chapter 'Product and delivery overview'):

**1** Manufacturer address
**2** Device type/name/size (MD = Medical Device)
**3** UDI number (readable form)
**4** UDI number (machine-readable code)
**5** Model number
**6** Manufacturer serial number
**7** Date of manufacture (calendar week/year)
**8** Maximum permissible patient weight/
Maximum permissible rated load
**9** Symbols
**10** Safety notice
**11** Power supply/Power/Duty cycle




The illustration shows an example type plate. The serial number shown does not correspond to that of your device.

# 3. General information

## 3.1 Definition

The term operator refers to any natural or legal person who uses the device or on whose behalf the device is used (e.g. therapy centres, rehabilitation facilities, physiotherapy practices, specialist dealers, or health insurance providers). The operator is responsible for ensuring that all personnel who handle the device receive adequate instruction and training in its correct use.

Operators (such as therapists, accompanying persons, or assistants) are individuals who, through appropriate training, experience, or instruction, are qualified to operate the device and perform therapeutic activities with it. Operators must be capable of identifying and avoiding potential hazards and must be able to assess the patient's physical abilities and overall health condition. All operators must be properly instructed in the use of the standing device before use.

Specialist personnel are employees designated by the operator who, based on their professional training or instruction, are authorized to transport, adjust, and maintain the device. They are also responsible for performing inspection, cleaning, and disinfection tasks in accordance with relevant regulations.

Within this manual, the term patient refers to a physically disabled or mobility-impaired person who is supported in achieving and maintaining an optimal upright or seated position through the use of the device.

## 3.2 Intended use

The Heidelberg Upright Stander Benni (Light) device is designed for patients with standing impairments to maintain as physiological a standing position as possible for a few hours per day and to ensure stable standing. It enables the positive effects of a standing body position to be achieved. The standing device can be equipped with a gas pressure spring or an electric motor to make it easier for the patient to stand up.

## 3.3 Indications, contraindications and risks

The Heidelberg Upright Stander Benni (Light) can be used for the following indications.

For complete/incomplete hemiplegia/hemiparesis and, if necessary, involving the trunk muscles as a result of a brain disease (e.g. stroke, brain tumour). For complete/incomplete paralysis of the arms and legs (tetraplegia/tetraparesis) and, if necessary, involving the trunk muscles as a result of a disease of the brain (e.g. multiple sclerosis, brain injury), the spinal cord (e.g. poliomyelitis, spinal cord syndrome due to trauma or tumour) or the peripheral nervous system/muscle diseases (e.g. Guillain-Barré syndrome, muscular dystrophies) In cases of complete/incomplete paralysis of the legs (paraplegia/paresis) and, where applicable, involving the trunk muscles as a result of a disease of the spinal cord (e.g. spinal cord syndrome in traumatic/inflammatory/tumourous thoracic and lumbar spinal cord lesions) or diseases of the peripheral nervous system/muscle diseases (e.g. polyneuropathy, muscular dystrophy)

Before using the device, a doctor should be consulted to determine whether there are any contraindications. The indications for use must be monitored by a doctor or therapist at regular intervals.

The following generally applies: ***Any kind of pain is a contraindication!***

Depending on the clinical picture and therapy, the length of time a patient can remain in the standing device must be clarified with a doctor or therapist. The following symptoms may occur: circulatory problems, pain in the legs and/or back, increased spasticity, seizures. Use of the device for scoliosis in the patient's clinical picture only after consultation with the attending physician. The device does not correct poor posture and is not suitable for growth control!

Many patients can initially only stand in a bent position and can only be fully stretched later. Never correct posture by force or applying strong pressure!
Patients with skin injuries and open wounds must not use the standing device..

**Various clinical pictures with paralysis or reduced strength in the trunk muscles**, so that standing upright without extensive support is hardly possible or leads to poor posture, deformity and pain.

**The standing device is manufactured for therapeutic purposes and is not intended for use as a patient lift.**

## 3.4 Responsibility

The operator is responsible for:

- Intended use in accordance with the operating instructions and other information in this user manual.
- The necessary daily and regular inspection, maintenance and care of the standing device.
- For information on maintenance intervals, see the section "Maintenance and inspection".
- The necessary daily and regular care, cleaning and disinfection of the standing device.
- Compliance with the annual maintenance intervals..

The user is responsible for:

- the necessary regular cleaning and maintenance as well as inspection before each use of the standing device (for cleaning instructions, see section 7; for inspection instructions, see section 8)

**DANGER Product modifications, repairs and maintenance work must be carried out in accordance with the inspection schedule. System extensions may only be carried out by authorised persons!**

**IMPORTANT *Rehatec® GmbH* will only provide a warranty if the product is used under the specified conditions for its intended purpose and only original accessories are used.!**

**IMPORTANT All serious incidents related to the product must be reported to the manufacturer and the competent authority. The competent authority in Germany is the BfArM!**

# 3. General information

## 3.5 Intended use

**WARNING Read the chapter entitled "Technical Data" for important conditions of use!**

**DANGER! Proper use requires strict adherence to all instructions in this manual!**

**DANGER! Before using the device, check the following points with your doctor:**

- Disease-specific use of the device (contraindications)
- Maximum duration of use of the product to prevent possible injuries
- Suitable strapping for secure positioning of the patient
- Necessary accessories for correct and safe joint/body positioning
- Maximum possible adjustment limits of positioning elements
- Frequency of use of the device/therapy plan

The Heidelberg Upright Stander Benni (Light) device is designed for use indoors at ambient temperatures between 15 °C and 35 °C. Use in wet areas is not permitted. The device must also be kept away from heat sources and strong sunlight – risk of burns! Failure to observe this warning may result in considerable damage and endanger both the user and the assistant.

The device must not be used indoors:

- with very high humidity of over 70%
- that are part of wet areas (showers, swimming pools, etc.)
- where there is a risk of explosion or where flammable anaesthetic products are present.

**The standing device is designed for therapeutic purposes and is not intended for use as a patient lift or for patient transport..**

This product is designed exclusively for use by knowledgeable users/operators who have been trained by the operator. Areas of application include: physiotherapy, rehabilitation, medical therapy and home use.

***Rehatec® GmbH*** does not guarantee the suitability of this product for a specific therapeutic or diagnostic purpose. The user determines the appropriate use.

In order to ensure safe and successful operation for users of ***Rehatec® GmbH*** devices, all instructions, precautions and information in the user manual must be observed.



## 3.6 Declaration of conformity

The corresponding declaration of conformity can be found in the download area at www.rehatec.com.

The CE mark must be removed if the Rehatec® product is modified, altered or used in combination with unauthorised products from other manufacturers.

The CE mark also becomes invalid if non-Rehatec® original spare parts/accessories are used.

## 3.7 Service life

You can find a corresponding list of service lives at www.rehatec.com in the download area..

## 3.8 Service/Complaints

***Rehatec® GmbH*** is happy to assist you with any complaints, enquiries and further information or orders for accessories and retrofittable additional equipment.

All complaints must be made in writing.

Further information can be found on our website www.rehatec.com.

# 4. Product and delivery overview

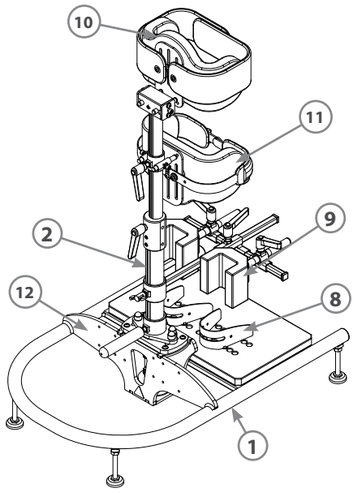
## 4.1 Scope of delivery and basic equipment

The Heidelberg Upright Stander Benni (Light) is available in 2 sizes. Technical data on size and permissible weight can be found in the table in the "Technical Data" section. The Heidelberg Upright Stander Benni (Light) is usually delivered fully assembled and in its default setting. To prevent damage during transport, plug-in and unattached parts are packed separately in the box.

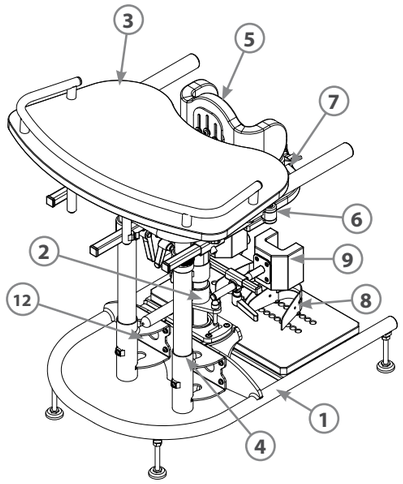
***Der Standard-Lieferumfang umfasst folgende Komponenten:***

**The illustration may differ from your product due to individual configuration options..**

*Heidelberg Upright Stander Benni Light*




*Heidelberg Upright Stander Benni*




| Item | Component designation | basic equipment Benni | basic equipment Benni Light |
|---|---|---|---|
| 1 | Base frame with footboard and feet | ✓ | ✓ |
| 2 | dynamic centre column | ✓ | ✓ |
| 3 | Therapy table | ✓ | |
| 4 | centre columns | ✓ | |
| 5 | Brustpolster (Standard) | ✓ | |
| 6 | Swivel arm sink frame | ✓ | |
| 7 | pelvic pads | ✓ | |
| 8 | Foot shells, plug-in | ✓ | ✓ |
| 9 | Knee pads (standard) | ✓ | ✓ |
| 10 | back support | | ✓ |
| 11 | Pelvic pad with Pelvi.Loc | | ✓ |
| 12 | nameplate | ✓ | ✓ |





## 4.2 Accessories

Accessories are parts or components that are not included in the basic configuration of your device.

We recommend ordering any accessories you require when you place your initial order. However, you can also purchase and install all accessory components at a later date.

For further information, please contact your specialist dealer.

You can optionally purchase the following accessories:

- Transport castors with locking brakes, 75 mm
- Wall and furniture protection
- Sternum chest pad, incl. adjustable side guides
- Back pad with/without headrest
- Anatomical knee pads
- Parallel adjustable armrests, incl. straight table
- Armrests for standard table
- Back strap for chest pad
- Table surround
- Table height adjustment via gas pressure spring
- Foot shells, screw-fastened
- Anatomical knee pads
- Individually adjustable knee pads with anti-twist device
- Knee pads adjustable in 3 levels
- Foot straps for foot shells

Further information and data can be found at: www.rehatec.com

**Or simply request them by e-mail, fax or post..**

## 4.3 Checking the delivery

Please check your delivery for completeness, integrity and possible contamination.

In the event of damage, incorrect delivery or incomplete delivery, please contact

our customer service department:

***Telephone number: +49 (0) 6228-9136-0***

When reordering accessories or spare parts, you should always quote the serial number. The serial number can be found on the type plate. (See chapter "Symbols and signs on the product")

**DANGER Risk of suffocation! Any packaging film must be kept away from children!**

**DANGER If the device is defective, damaged or modified, it must not be used and must be taken out of service immediately!**

**WARNING Combining the device with third-party products is strictly prohibited and may be dangerous. The manufacturer accepts no liability for damage or complications resulting from such combinations!**

# 5. Operation

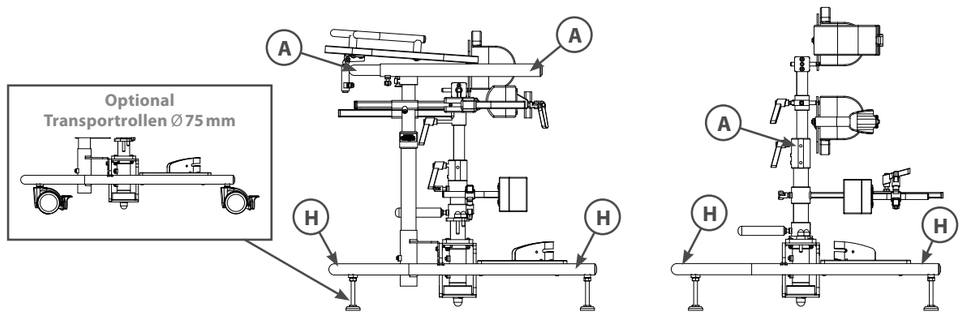
## 5.1 Device and patient transport

**CAUTION The device is quite heavy and must only be lifted by at least two people.**

**WARNING The device is not suitable for transport between rooms! If necessary, door thresholds must be equipped with fixed ramps.**

**DANGER Transporting the device with patients is only possible if the device is equipped with additional transport wheels. Transporting patients in the device is prohibited when the feet are in place!**

**DANGER Before transport, the patient must be secured against accidental falling out by means of appropriate straps!**




For safe and convenient transport of the device:

Grasp the device on the right and left sides at the front and rear at the holding points **[H]** and lift it simultaneously with two people.

For safe and convenient transport of the device and patient (only with transport castors) Use the holding or pushing points **[A]**.





## 5.2 Initial use

**WARNING Ensure that no one can injure themselves while using the device!**

**DANGER! If faults are detected in the system during the function test, the device must not be used until they have been rectified!**

Before the patient can be positioned in the device, the device must be adjusted to the patient's needs.

The exact descriptions of individual adjustment options to the patient's needs are provided in the following chapter.

**For all configurations of the device,** Please carry out a visual inspection and functional test of the device to confirm the following:

- The fixable centre column and table columns are free of defects and securely mounted.
- The rubber damper on the dynamic centre column is free of cracks and can reliably protect the centre column.
- All screw connections have the necessary counterparts and are securely fastened.
- Frame components and transport rollers are free of cracks and are not deformed.
- Transport castors/feet are securely fastened and parking brakes function properly.
- All available clamping elements of positioning elements (e.g. knee pads, chest pads, etc.) are available and functional.
- All contact surfaces are dry and free of contamination.
- Vests/harnesses are free of defects. The plug connections and zip fasteners function securely.

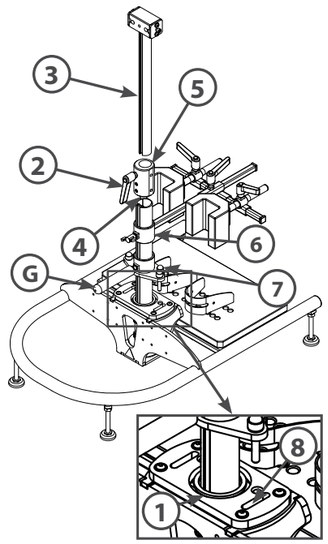
# 5. Operation

## 5.3 Replacement of the rubber damper

**DANGER! Only use the handle (G) provided for all adjustment work and movement of the blocker! Risk of crushing!**

Prolonged and intensive use may cause rapid wear of the rubber damper [1]. To replace it, the following steps must be carried out:

- Remove all positioning elements from the upper part of the centre column [3].
- Turn the clamping lever [2] anticlockwise and pull the upper part of the column [3] upwards.
- Turn the two grub screws [4] anticlockwise and pull the mount [5], knee bracket [6] and blocker [7] upwards.
- Remove the old damper [1] by moving it upwards on the column [6], then install the new one by moving it downwards on the column until it rests against the base of the profile. The damper [1] must not be higher than the
- surface of the plate [8]. Ensure that the damper ring is not higher than the top of the plate [8].
- Reassemble the device by following steps 3 to 1 in reverse order.




**DANGER! After making any adjustments, retighten all screws [4] and the clamping lever [2]!**





# 6. Operation/settings of the device and accessories

Before the device is adjusted to the user's needs and the user can be transferred to the Benni, the following preparations must be made:

**DANGER! The device may only be adjusted by the operator/service provider!**

**WARNING: Care must be taken to avoid the risk of pinching and crushing during all adjustment work. The settings should be carried out by two people to prevent possible injuries!**

**WARNING The device must be placed on a non-slip, level, stable and horizontal surface and the transport rollers must be locked before adjusting the device.**

**DANGER! Before using the device, check the following points with the attending physician:**

- Disease-specific use of the device (contraindications)
- How long may the patient remain in the device to prevent possible injury?
- Suitable straps for securing the patient safely
- Necessary accessories for correct and safe joint/body positioning
- Maximum possible adjustment limits of the device's positioning elements
- Frequency of use of the device/therapy plan

**DANGER! Some settings on the device can only be adjusted when there is no patient on the device.**

**DANGER! Some settings on the device require additional space for safe device handling. See "Minimum space around the patient" for the necessary dimensions.**

**CAUTION Maximum adjustment ranges must not be exceeded. It is essential to ensure that the parts are securely connected!**

## 6.1 Transport rollers (optional)

The four castors are equipped with locking brakes.

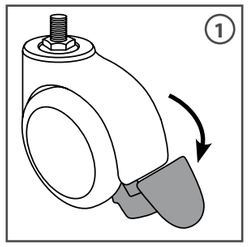
**WARNING The device must be placed on a firm, level and horizontal surface.**

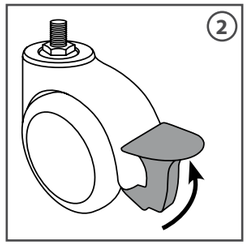
**WARNING When using the device, only wear closed shoes with a sturdy toe cap!**

**WARNING To prevent accidental rolling away, all four transport rollers should be locked.**

Locking the castors: press the lock downwards (Fig. 1).

Releasing the castors: press the lock upwards with the tip of your foot (Fig. 2).



# 6. Operation/settings of the device and accessories

## 6.2 Dynamic centre column

**WARNING: When making adjustments, be aware of the risk of pinching and crushing.**

**DANGER! Only use the handle [1] provided when making adjustments and moving the blocker! Risk of crushing!**

**DANGER! Only adjust the height of the upper part of the centre column when the patient is not on the table! The patient must be securely fixed in the standing position!**

**IMPORTANT When unlocking or locking the centre column, it may be necessary to apply force against the load from the patient/accessories in order to release the locking pins of the blocker.**

The dynamic centre column has 3 possible position.

### Position #1 The column can be moved in all directions (Figure I)

To unlock the centre column, follow these steps:

- Turn the handle [1] anticlockwise.
- Lift the blocker [3] on the column upwards so that the distance [A] between the blocker [3] and the plate [2] is more than 5.5 cm. The pins [4] must protrude completely from the plate, as shown in figure [I].
- Lock the blocker [3] back onto the column by turning the handle [1] clockwise.

### Position #2 The column can only be moved lengthwise (Figure II).)

To unlock the centre column lengthwise, follow these steps:

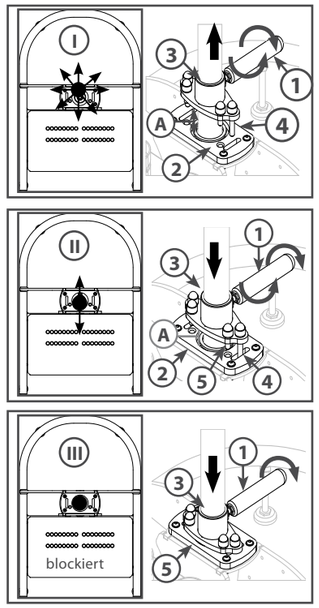
- Turn the handle [1] anticlockwise.
- Move the blocker [3] upwards on the column so that the distance [A] between the blocker [3] and the plate [2] is approx. 2.5 cm, the pins [4] remain approx. 1 cm recessed in the long slots of the plate [2] and the pins [5] remain above the plate, as shown in Figure [II].
- Lock the blocker [3] on the column again by turning the handle [1] clockwise..

### Position #3 The column is locked (Figure III)

To completely lock the centre column, follow these steps:

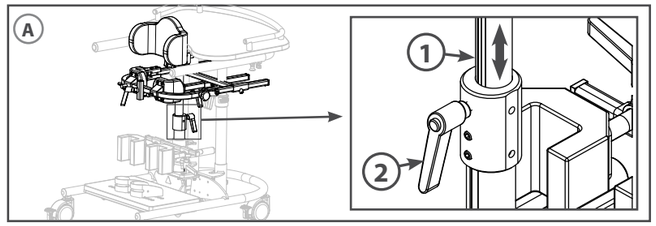
- Turn the handle [1] anticlockwise.
- Lower the blocker [3] on the column until it stops against the upper surface of the plate [2], so that all pins fit completely into the corresponding holes in the plate [2], as shown in Figure [III].
- Lock the blocker [3] on the column again by turning the handle [1] clockwise.

**IMPORTANT If a therapy table is fitted, the forward movement of the dynamic column is mechanically restricted.**








### For height adjustment of the upper section (Figure A):

- Hold the upper part of the centre column [1] with one hand.
- Loosen the clamping lever [2] by turning it anticlockwise.
- Adjust the upper part of the centre column [1] to the desired height by raising or lowering it.
- Tighten the clamping lever [2] by turning it clockwise.

## 6.3 Chest strap

**DANGER! All straps must be applied in accordance with requirements and securely fastened!**

**DANGER! Only adjust the basic setting of the strap length when the patient is not present!**

**DANGER! The chest strap should only be fitted by a person with specialist knowledge!**

**DANGER! Do not repair or glue damaged components such as straps or safety buckles and reuse them!**

**DANGER! After cleaning, ensure that the chest strap is functioning correctly!**

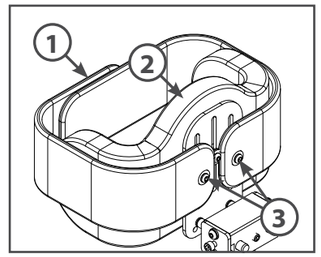
**WARNING Ensure that there are no objects under the belt! This will prevent painful pressure points.**

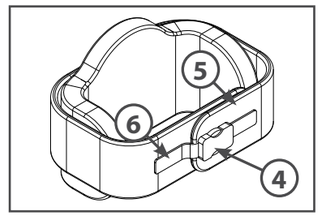
**DANGER! Do not use the chest belt if there are pressure points, wounds or other unhealed injuries in the area of the belt – risk of injury! Assembly/presetting the belt length**

To attach the chest strap, you must secure the respective end of the strap with the necessary eyelets [1] using screws [3] together with the chest/back padding [2].

**Application** Open the safety buckle by pressing the release button [4] and open the Velcro strap [5].

- Adjust the Velcro strap [5] to the patient's chest width until it fits comfortably but securely.
- Adjust the buckle [4] to the desired width by adjusting the buckle strap [6].
- Close the safety buckle [4] and perform a pull test!



# 6. Operation/settings of the device and accessories

**DANGER! Ensure that the Velcro fastener is securely fastened and that the safety buckle [4] is always closed!**

## 6.4 Pelvic belt - PELVI.LOC

**DANGER! All straps must be applied and securely fastened in accordance with requirements!**

**DANGER! Only adjust the basic strap length setting when the patient is not present!**

**DANGER! The PELVI.LOC should only be assembled by a person with specialist knowledge!**

**DANGER! Do not repair or glue damaged components such as perforated straps/webbing or toothed straps and reuse them!**

**DANGER! After cleaning, ensure that the PELVI.LOC is functioning correctly!**

**WARNING Ensure that there are no objects under the padding! This will prevent painful pressure points.**

### Assembly/presetting the belt length

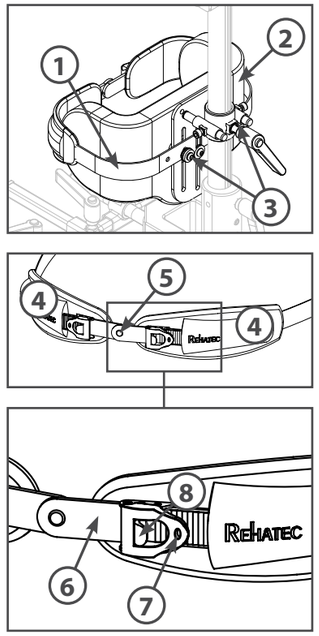
To attach the Pelvi.Loc, you must secure the respective strap [1] with screws [3] together with the pelvic padding [2].

**Application**

- To use the PELVI.LOC®, place the pads [4] in the pelvic area/hip crease.
- Then thread the toothed strap [6] through the respective ratchet. To do this, operate the corresponding ratchet buckle [7]. It is also important that the joint of the toothed strap [5] is located in the centre of the body.
- Then tighten the toothed strap [6] so that there is still enough space for a flat hand between the thigh and the pads.
- Ensure that the snaps [8] engage with the teeth of the toothed strap! Perform a tension test!

**DANGER! Ensure that the latches [8] engage with the teeth of the toothed belt [6]!**

To open the PELVI.LOC®, press the latch [8] and pull out the toothed band [5].








## 6.5 Foot shells, plug-in/screw-on

**DANGER! All straps must be applied and securely fastened in accordance with requirements!**

**DANGER! All adjustments/positioning of the footrests must only be carried out without the patient! In the standing position, the patient must always be securely positioned and fixed!**

**WARNING If available, the patient must only stand in the device with appropriate footwear!**

The footrests [1] serve to position the feet firmly on the footboard and secure them with optional foot straps [2] using Velcro fasteners.

### Positioning of the plug-in foot shells (Figure A)

Lift the foot shells [1] out of the footboard. Insert the foot shells [1] into the desired position (insert both pins into one hole each).

### Positioning of the screw-on foot shells (Figure B)

Loosen the nuts [2] counterclockwise and remove them. Lift the foot shells [3] out of the footboard and insert them into the desired position. Tighten the nuts [2] again.

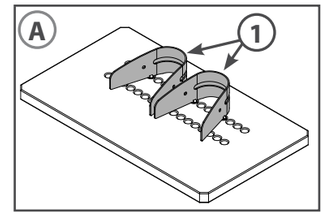
To open the Velcro fastener (Figure C), pull on the edge of the upper strap while holding the lower strap until the two are separated.

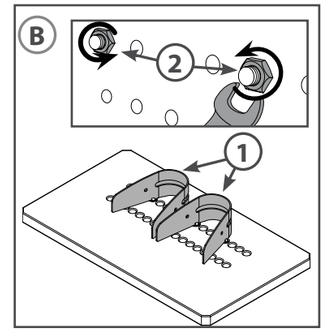
To close the Velcro fastener (Fig. D), first place and hold the strap with the upper hooks [H] in the desired position, then place the other strap with the loop [F] on top with a little tension and press it lightly along the entire overlap length [L].

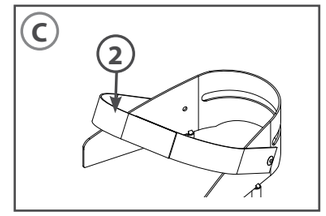
**WARNING To ensure that the Velcro fastener (Figure D) is securely attached, the overlap length [L] of the hooks [H] and loops [F] must be at least half the total hook length!**

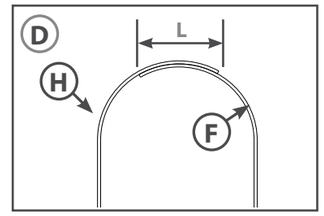
**WARNING If available, the patient should only stand in the device with appropriate footwear.**

**WARNING Due to wear and tear over time or possible contamination, the Velcro fastener loses its adhesive properties. If the straps are dirty or worn, both straps must be replaced immediately with new ones! Contact your dealer for a replacement..**



# 6. Operation/settings of the device and accessories

## 6.6 Knee pads

**DANGER! Perform all adjustments with the patient removed! The patient must be securely restrained in the standing position!**

**DANGER! Use of the device without fixed knee pads is not permitted!**

**CAUTION! Beware of the risk of pinching and crushing!**
**CAUTION! The maximum adjustment is reached when the ends of the adjustment tubes are flush with the guides!**

**The settings apply to both standard and anatomical knee pads.**

**When using the "Benni Light", use the clamping lever [3] to remove and install the knee pads.**

The adjustment options refer to the standard and 3-level brackets used with the U-shaped and anatomical knee pads.

### For height adjustment

- Loosen the wing screw [1] anticlockwise.
- Slide the knee pads to the desired height.
- Tighten the wing screw [1] again clockwise..

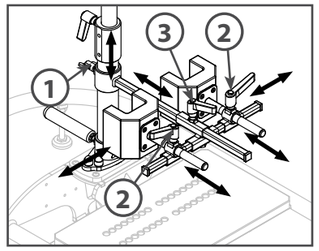
### For width/depth adjustment

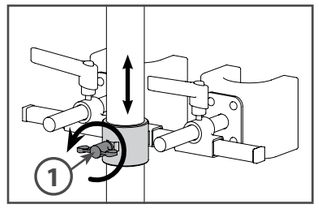
- Loosen the necessary clamping lever [2] or [3] in an anticlockwise direction.
- Adjust the knee pad.
- Tighten the clamping lever [2] again in a clockwise direction.

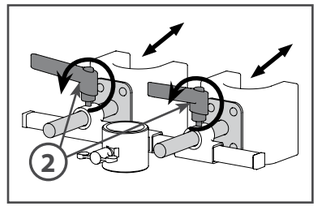
### For angle adjustment (only for knee pads adjustable in 3 planes)

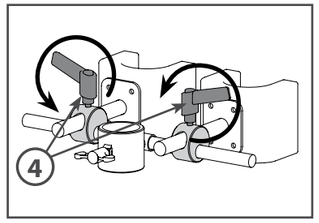
- Loosen the clamping lever [4] by turning it anticlockwise.
- Adjust the width of the knee pad.
- Tighten the clamping lever [4] again by turning it clockwise.

**DANGER! Tighten all clamping elements again after each adjustment!**








## 6.7 Swivel arm sink frame

**DANGER! Only adjust the depth and height settings when the patient is not on the table! The patient must be securely fastened in the standing position!**

**DANGER! Do not use the device without the swivel arm basin frame being securely closed!**
**CAUTION! The maximum adjustment is reached when the ends of the adjustment tubes are flush with the guides or when the stop is reached!**

### To open (Figures A and B):

- Open the star handle [1] by turning it anticlockwise.
- Lift the latch [2] on the fixed part of the sink frame [3] and swing the sink frame [4] backwards or sideways.

### To close (Figures A and B):

- Swing the basin frame [4] back until it contacts the fixed part of the frame [3].
- Allow the latch [2] to engage completely by applying counterpressure to the basin frame.
- Tighten the star handle [1] again by turning it clockwise.

### For height adjustment (Figure C):

- Open the clamping lever [5] by turning it anticlockwise.
- Set the basin frame to the desired height.
- Clamp the clamping lever [5] securely again by turning it clockwise.

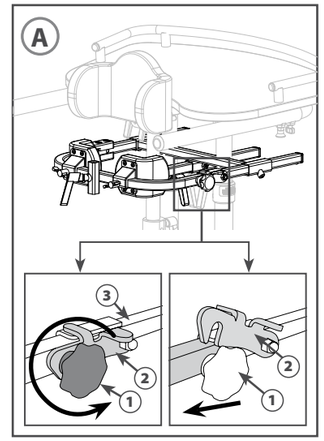
### For depth adjustment (Figure C):

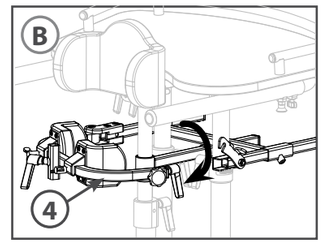
- Loosen the two grub screws [6] by turning them anticlockwise. If necessary (e.g. to avoid collisions with fixed parts of the table columns), you can also loosen the grub screw [7].
- Set the basin frame to the desired depth.
- Tighten all grub screws again by turning them clockwise..

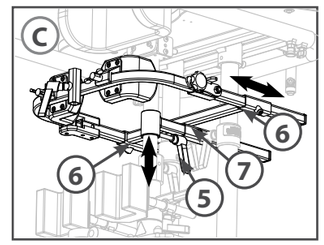
**DANGER! After adjusting the depth of the basin frame, always check that the required safety distances between the moving and stationary parts (approx. 3 cm) are maintained when the centre column is rocking!**

**DANGER! Tighten all clamping elements again after each adjustment!**

**DANGER Do not lean on the swivel arm basin frame! Only use the table mount when getting in or out.**



# 6. Operation/settings of the device and accessories

## 6.8 Therapy table

**CAUTION! Beware of the risk of pinching and crushing!**

The height of the table top should be adjusted to the patient's elbow measurement. To do this, the elbow of the patient lying down is bent at a 90° angle and the measurement between the elbow and the sole of the foot is taken. This measurement normally corresponds to the height to be set from the footboard to the table top.

**DANGER! Table height adjustment must only be carried out without the patient on the table!**

**IMPORTANT The complete frame assembly weighs more than 10 kg without removable accessories (all pads, crossbar, headrest)!**

**WARNING The table height adjustment must be carried out by at least two people together to prevent possible injury!**

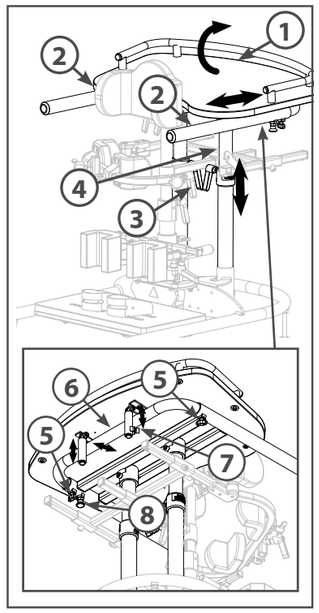
**WARNING Risk of breakage! When adjusting the table height, no lifting forces may be exerted on the table top! The entire upper frame section may only be lifted by the frame!**

### Table height adjustment

The table height is adjusted as follows:

- The upper part with the table [1] must be held on both sides [2] by one person on each side. The table top can also be removed beforehand using 2 screws [7] if necessary.
- Loosen both clamping levers [3] by turning them anticlockwise.
- Adjust the table columns [4] to the desired height by lifting/lowering the table mount [1].
- Tighten both clamping levers [3] by turning them clockwise.

**WARNING The maximum adjustment is reached when the red mark is visible.**




### Table depth adjustment

Loosen both mini wings [5] counterclockwise. Adjust the depth of the therapy table using the table bracket [6]. Tighten the mini wings [5] again clockwise.

**CAUTION! Maximum depth adjustment is reached when the locking bolt [8] releases.**

**DANGER! Tighten all clamping elements again after each adjustment!**

**CAUTION! Do not use a table to push the device! See section "Device and patient transport".**

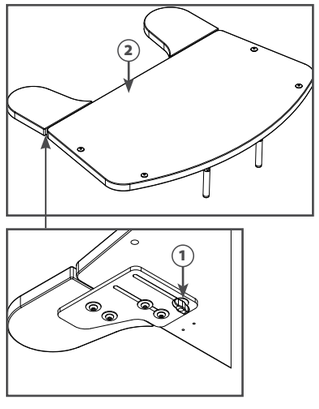
**IMPORTANT To facilitate adjustment of the pads or positioning of the patient, it is possible to tilt the table at the hinges..**





## 6.9 Therapy table with parallel adjustable armrests

An optional tabletop with a straight edge in the chest pad area is available. The parallel-adjustable side armrests are included with this tabletop.




**To move the armrests sideways, proceed as follows:**

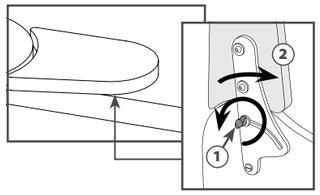
- Loosen the mini wings [1] counterclockwise.
- Two to three full turns should suffice.
- Move the armrest [2] sideways to the left or right.
- Tighten the mini wings [1] again clockwise..

**DANGER! Tighten all clamping elements again after each adjustment!**

**CAUTION! Risk of crushing! The armrests must not restrict the function of the dynamic centre column by colliding with the chest pad/side support pads!**

## 6.10 Armrests for standard tabletop

**To adjust the position of the armrests, proceed as follows:**




- Loosen the mini wings [1] anticlockwise.
- Two to three full turns should suffice.
- Position the armrest [2] using the angle adjustment.
- Tighten the mini wings [1] again clockwise..

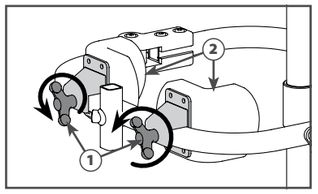
**DANGER! Tighten all clamping elements again after making any adjustments!**

**CAUTION! Risk of crushing! The armrests must not restrict the function of the dynamic centre column by colliding with the chest pad/side guide pads!**

## 6.11 Pelvic pads

**IMPORTANT With a swivel arm basin frame, the depth is determined by the frame and cannot be adjusted further.**

### Width adjustment




- Loosen the wing screw [1] anticlockwise.
- Move the pelvic pad [2] to the desired position.
- Tighten the wing screw [1] again clockwise..

**DANGER! Tighten all clamping elements again after each adjustment!**

# 6. Operation/settings of the device and accessories

## 6.12 Pelvic and back pads (Benni Light)

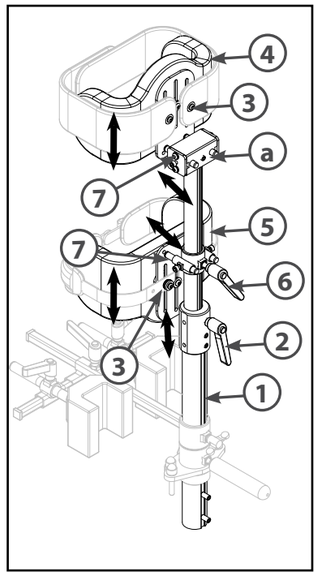
**DANGER! Only carry out all adjustments/positioning without the patient! When in a standing position, the patient must always be securely positioned and fixed in place!**

**WARNING Ensure that there are no objects under the cushion! This will help to avoid painful pressure points.**

The height of the mount [A] can be adjusted by adjusting the upper part of the centre column..

### For height adjustment of the upper part of the centre column:

- Hold the upper part of the centre column [1] with one hand.
- Loosen the clamping lever [2] by turning it anticlockwise.
- Adjust the upper part of the centre column [1] to the desired height by raising or lowering it.
- Tighten the clamping lever [2] by turning it clockwise.




### For height adjustment:

- Hold the pelvic pad [5] with one hand.
- Loosen the clamping lever [6] by turning it anticlockwise.
- Adjust the pelvic pad [5] to the desired height.
- Tighten the clamping lever [6] by turning it clockwise.

### For fine positioning :

- Loosen all 3 screws [3] anticlockwise. 1.5 to 2 full turns should be sufficient.
- Adjust the back pad [4] or pelvic pad [5] to the desired height.
- Tighten all 3 screws [3] clockwise.

**DANGER! The screws for fine positioning [3] are also used to secure the straps. Before use, all straps must be applied as required, securely fastened and checked!**

### For depth adjustment:

- Loosen the 2 screws [7] on both sides by turning them anticlockwise. 1.5 to 2 full turns should be sufficient.
- Adjust the back pad [4] or pelvic pad [5] to the desired depth.
- Tighten both screws [7] by turning them clockwise..

**DANGER! Tighten all clamping elements again after each adjustment!**



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## 6.13 Brustpelotte Standard/ Sternum

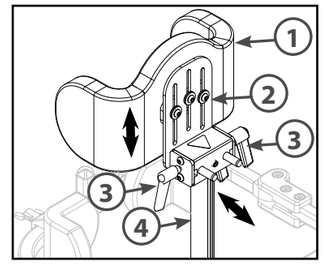
**CAUTION! Beware of the risk of pinching and crushing!**

**IMPORTANT Folding down the table makes it easier to adjust the settings.**

### For height adjustment:

- Hold the chest pad [1] with one hand.
- Loosen all 3 screws [2] counterclockwise. 1.5 to 2 full turns are sufficient.
- Adjust the chest pad [1] to the desired height.
- Tighten all 3 screws [2] clockwise.

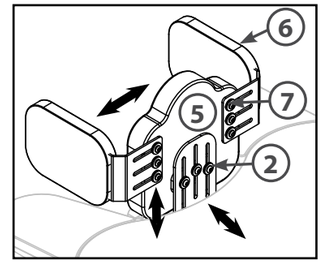
The height of the mount can be adjusted by adjusting the upper part of the centre column [4].




### For depth adjustment:

- Klemmhebel [3] von beide Seiten gegen den Uhrzeigersinn lösen. Hierzu sind 1,5 bis 2 volle Umdrehungen ausreichend.
- Brustpelotte [1] auf die gewünschte Tiefe einstellen.
- Beide Klemmhebel [3] im Uhrzeigersinn fest drehen.

Optional kann das Gerät mit einem Brustpolster [5] und breitenverstellbaren Seitenführungspelotten [6] ausgestattet werden.




### For width adjustment:

- Loosen all screws [7] on both sides by turning them anticlockwise. One and a half to two full turns should suffice.
- Adjust the side guide pads [6] to the desired width.
- Tighten all screws [7] by turning them clockwise..

**DANGER! After making any adjustments, tighten all clamping elements again!**

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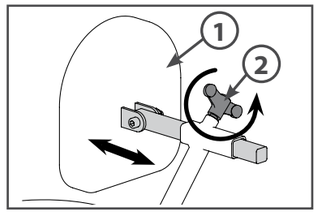
# 6. Operation/settings of the device and accessories

## 6.14 Back support on the pelvic frame

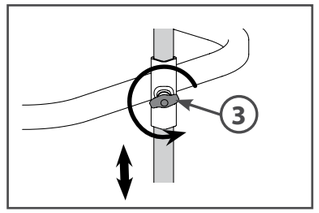
**CAUTION! Beware of the risk of pinching and crushing!**

**CAUTION! The maximum adjustment is reached when the tubes are flush with the guide..**




### For depth adjustment:

- Loosen the wing screws [2] anticlockwise.
- Adjust the depth of the backrest [1].
- Tighten the wing screws [2] clockwise again..




### For height adjustment:

- Loosen the mini wing [3] by turning it anticlockwise.
- Adjust the height of the back support.
- Tighten the mini wing [3] again by turning it clockwise..

**DANGER! Tighten all clamping elements again after each adjustment!**

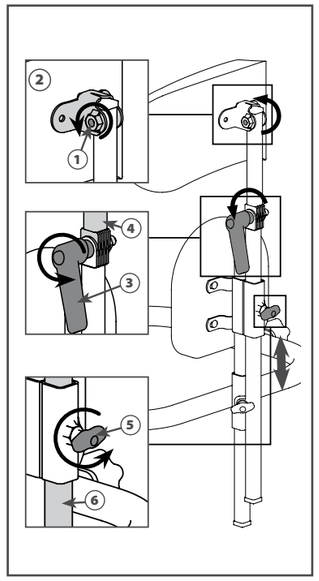
## 6.15 Headrest

**CAUTION! Beware of the risk of pinching and crushing!**

**DANGER! When standing, the patient must always be securely positioned and restrained!**

**DANGER Always check that the patient's head is in a safe position. The patient must be able to breathe freely!**

The headrest is attached to the backrest holder. If the depth of the swivel arm pelvic frame is adjusted, the headrest and backrest are automatically adjusted as well.




### For tilt adjustment:

- Loosen screw [1] anticlockwise.
- Adjust the headrest [2] to the desired angle.
- Tighten screw [1] clockwise again.

### For angle adjustment:

- Loosen the clamping lever [3] anticlockwise.
- Set the desired angle on the headrest holder [4].
- Tighten the clamping lever [3] again clockwise.





### For height adjustment:

- Loosen the wing screw [5] anticlockwise.
- Slide the headrest holder [6] to the desired height.
- Tighten the wing screw [5] clockwise again..

**DANGER! Tighten all clamping elements again after each adjustment!**

**CAUTION! The maximum adjustment is reached when the pipes are flush with the guide.**

## 6.16 Benni Light standing device: standing training

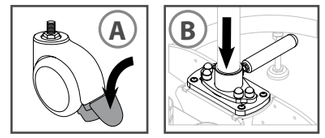
**WARNING: When making adjustments, be aware of the risk of pinching and crushing!**

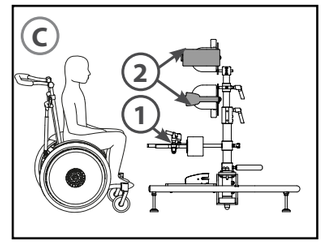
**DANGER! Place the device on a non-slip, level, stable and horizontal surface!**

**DANGER! Before use, clarify how long the patient may remain in the standing device in order to prevent possible injuries!**

**WARNING It is recommended that at least two people are present when setting up the device and initiating the standing process in order to prevent possible injuries.**

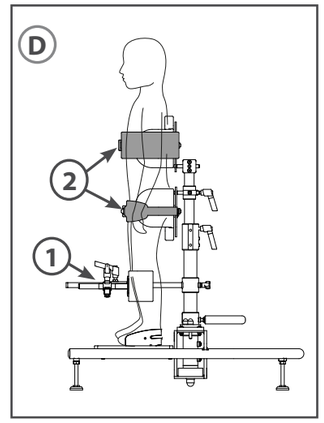
**DANGER! The patient must always be supported during the standing process – otherwise there is a risk of injury!**




Before you can place the patient in the Benni Light standing frame and adjust it, the following preparations must be made:

- If transport rollers are fitted, these must be locked before moving the device (Figure A).
- Ensure that the blocker is in the lowest position, locked and clamped (Figure B).
- Please check that all clamping and fastening elements are tight and secure.




### Sitting up the patient

- Position the patient's seat near the standing device and ensure that the standing device is secured against rolling away (Figure C). Remove the knee pads [1].
- Open the pelvic belt and, if present, the chest belt [2]. Lift the patient into the standing device and position their feet in the footrests (Figure D).
- Secure the patient with the pelvic belt and, if available, the chest belt [2].

- Attach the knee pads [1] and ensure that all clamping levers are securely fastened. Anatomical features must be taken into account when positioning the knee pads!

⚠ **DANGER! When raising the patient, the knee angle should not be less than 90° – otherwise there is a risk of injury!**

Only after the patient has been securely restrained can treatment begin and the dynamic column be unlocked.

**Ending standing training**

- Ensure that the blocker is back in the lowest position, locked and clamped (Figure B).
- Position the patient's seat near the standing device and ensure that both the standing device and the seat are secured against rolling away (lock the transport castors, if available).
- Remove the knee pads [1].
- Open the pelvic belt and, if present, the chest belt [2]. The patient must always be supported during this process!
  Lift the patient out of the standing device and onto the seat.

## 6.17 Benni standing device: standing training

⚠ **WARNING: When making adjustments, be aware of the risk of pinching and crushing!**

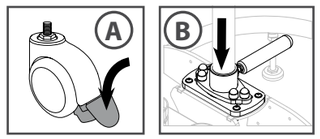
⚠ **DANGER! Place the device on a non-slip, level, stable and horizontal surface!**

⚠ **DANGER! Before use, clarify how long the patient may remain in the standing device in order to prevent possible injuries!**

⚠ **WARNING It is recommended that at least two people assemble the device and initiate the standing process to prevent possible injuries.**

Before placing the patient in the Benni standing frame and adjusting it, the following preparations must be made:

- If transport rollers are fitted, these must be locked before moving the device (Figure A).
- Ensure that the blocker is in the lowest position, locked and clamped (Figure B).
- Please check that all clamping and fastening elements are tight and secure.



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### Sitting up the patient

- Position the patient's seat near the standing device and ensure that the standing device is secured against rolling away (Figure C).
- Open the star handle [1] counterclockwise. Lift the latch [2] and swing the pelvic frame [3] backwards or sideways.

⚠ **DANGER! The patient must always be supported when standing up – otherwise there is a risk of injury!**

- Lift the patient into the standing device and position their feet in the footrests. Initiate the standing process until the patient is standing upright (Figure D). If possible, the patient can hold on to the table bracket [4] to assist with the process.

⚠ **DANGER! When raising the patient, the knee angle should not be less than 90° – otherwise there is a risk of injury!**

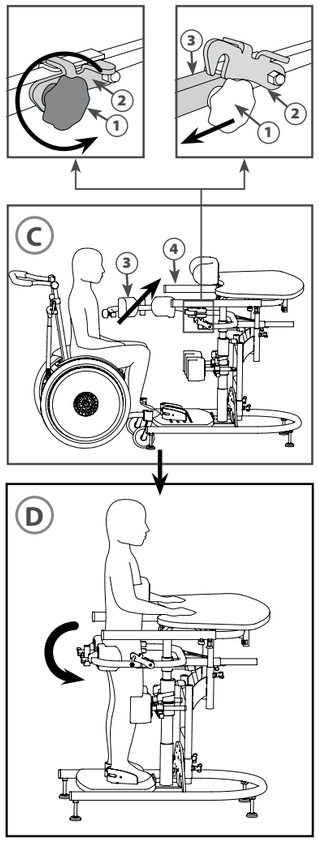
- Swing the pelvic frame [3] back. Allow the latch [2] to engage completely by applying counterpressure to the basin frame. Tighten the star knob [1] again by turning it clockwise.
- If available, fit the backrest/headrest.

⚠ **DANGER! Ensure that the table and other fixed parts do not collide with the patient.**

Only after the patient has been securely fixed in place can treatment begin and the dynamic column be unlocked.

**Ending standing training**

- Ensure that the blocker is back in the lowest
- position, locked and clamped (Figure B).
- Position the patient's seat as close as
- possible to the standing device and ensure that both the standing device and the seat are secured against rolling away
- (lock the transport castors if available).
- Fold the therapy table completely forward or upward.
- Open the swivel arm pelvic frame. The patient must always be supported during this process!
- Lower the patient into the seat, remove the patient's feet from the footrests and remove the standing frame from the patient.

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# 7. Cleaning and disinfection

The user is responsible for regular maintenance and care.

In the event of complaints or problems, please contact your service provider/dealer!

## 7.1 Safety instructions for cleaning and disinfection

**DANGER Neglected, inadequate or incorrectly performed cleaning or disinfection (using incorrect agents or procedures) can pose a serious risk to the operator and patient!**

**DANGER Maintenance, cleaning, repair and adjustment work may only be carried out on the device when there are no patients in it!**

**DANGER During cleaning and disinfection, pay attention to the residues of the agents used in order to avoid poisoning, irritation and allergic reactions!**

**CAUTION Do not use abrasive agents or cloths to clean the device!**

**WARNING Observe the care and safety instructions for the use of the respective cleaning/disinfecting agents!**

**WARNING Heavily soiled, cracked, perforated and contaminated foam parts that are bonded to carrier elements must be replaced. There is no cleaning/disinfection option for these parts!**

**CAUTION Do not use cleaning agents containing solvents if these affect the affect the structure and consistency of wood, wood surfaces and lacquer coatings, foam/plastics, plastic surfaces (benzene, toluene, acetone, etc.) and metal lacquers and coatings.**

**WARNING The device must not be used if it has come into contact with moisture. It must then be dried immediately!**

**CAUTION The product and its accessories are not designed for machine cleaning.**

**CAUTION The product and its accessories are not designed to be cleaned by spraying and**

**washing with pressure or steam cleaners! High-pressure cleaners must not be used!**

**CAUTION No germicidal or other irradiation may be used for disinfection if the irradiation can have a direct effect on wood, plastics and metals as well as their surfaces and coatings.**

**CAUTION Cleaning agents and disinfectants may only be diluted in accordance with the instructions of the respective manufacturers!**

**CAUTION All soft and textile components must be removed before basic cleaning!**

**CAUTION After cleaning or disinfection, all soft and textile parts must be completely dried before being reattached to the device!**

**CAUTION The owner of a medical device is solely responsible for cleaning it. Failure to clean the device may void the device warranty and compromise the clinical condition and safety of users and/or caregivers.**

**DANGER Follow these instructions and the dosage specified by the cleaning agent manufacturer..**

**IMPORTANT Some liquids used in healthcare can cause permanent stains! Test the cleaning agent on a small/inconspicuous area of the surface.**





## 7.2 General instructions for cleaning and disinfection

Remove and clean the following components separately (if this is not possible, protect them from cleaning agents): accessories, cushions/upholstered elements, removable wooden parts.

See Table [A] for the frequency of cleaning and disinfection for various components of the device..

**IMPORTANT Information on reinsertion can be found in the chapter "Reinsertion and patient change".**

Table A: Frequency of use for cleaning and disinfection

| Device components | Daily | Weekly | Monthly | Annually | Patient change | Complete cleaning | Reuse |
|---|---|---|---|---|---|---|---|
| Controls: clamping elements, handles, etc. | o | o | o | + | o | + | + |
| Armrests, footrests, tables or similar fixed contact surfaces | o | o | + | + | + | + | + |
| Transport rollers | – | – | o | + | o | + | + |
| Textile covers and straps | o | o | o | + | o | + | + |
| Faux leather covers | o | o | o | + | o | + | + |
| Upholstery* | – | o | o | o | o | x | x |
| Frames, brackets or similar structural elements | o | o | o | + | o | + | + |

* Upholstery glued to metal parts cannot be cleaned and disinfected safely and must be completely replaced with new assemblies as necessary.

+ = necessary; o = recommended/as necessary; – = not necessary; x = replacement/disposal only

## 7.3 Thorough cleaning before first use/storage

When unpacking the device, visually inspect all visible surfaces for dirt, damage or foreign substances.

Each device must be completely cleaned and disinfected (except for foam pads) before first use.

It is recommended that the device and accessories undergo a thorough cleaning at least every 2-3 weeks or as needed. See Table [A] for frequency of use.

Always consult the manufacturer of the cleaning agent for advice on the selection of the cleaning agent and its dilution in accordance with the following material table.

Before storage, the device must be cleaned and disinfected completely (with all accessories), as it is when it is reused.

If the device is intended for reuse, old pads and padded parts can be replaced.

# 7. Cleaning and disinfection

## 7.4 Cleaning during normal use (including domestic use)

It is recommended that all parts of the device that have been touched by patients and operators, as well as all handles and accessories, be cleaned daily.

Use a soft cloth, warm water and a mild detergent to remove dirt and clean the product. Spilled liquids should be removed as quickly as possible.

Never use polishing powder, steel wool or other materials and cleaning agents that could damage the surface of the device.

Never use strong acids or alkalis. The optimum pH value is 6–8.

Upholstered elements should be washed or replaced as necessary.

Removable foam cushions (without metal parts) and textile fabric covers (not made of imitation leather) are machine washable at max. 40 °C.

Clean the foam padding in a tub/sink with warm water, adding a little detergent and leaving it to soak for approx. 1 hour. Then rinse with clean water and hang up to dry.

The device may only be used again once it is completely dry and clean..

## 7.5 Cleaning and disinfection between patients

Before the device is used for therapy with a new patient, it must be carefully prepared.:

- All hard surfaces that the patient comes into contact with must be cleaned and treated with a disinfectant.
- All covers (made of imitation leather) must be cleaned and treated with a disinfectant..

## 7.6 Cleaning and disinfection for reuse

Before the device is used again, it must be carefully prepared.:

- All hard surfaces that the patient comes into contact with must be cleaned and treated with a disinfectant.
- All covers/straps must be cleaned and treated with a disinfectant (if possible).
- If soiled, all covers, foam elements and existing straps must be cleaned or replaced!
- All upholstery and padded elements must be replaced!



## 7.7 Selection of cleaning agents or disinfectants

When selecting the cleaning agent/disinfectant and its dilution, always seek advice from the manufacturer of the cleaning agents in accordance with the material table below [B]..

**IMPORTANT Some liquids used in healthcare can cause permanent stains! Test the cleaning agent first on a small/inconspicuous area of the surface..**

Table B: List of materials used

| Part of the device | Material |
|---|---|
| Rollers | ABS, S-Z, PA 66, TPE |
| Metal components of the device | S -P/-C/-Z, ALU-E |
| Plug-in buckle | POM / PA 66 |
| Buffer | Rubber |
| Screws, pins, nuts | S -Z/-N, ES |
| Wooden parts, fine veneer/ solid | Wood/ PU coating |
| Wooden parts, HPL coated | Wood/ Panels based on curable resins |
| Faux leather covers | PVC compound, BW/P knitted fabric, PU |
| Textile covers | P, PA |
| Upholstery parts | PU foam |
| Strapping | P, PA |

| Material | Abbreviation |
|---|---|
| S-P* | Steel, powder-coated** |
| S-C | Steel, chrome-plated |
| S-Z | Steel, galvanised |
| S-N | Steel, nickel-plated |
| ALU-E | Aluminium, anodised |
| ES | Stainless iron (stainless steel) |
| POM | Polyoxmethylen |
| PTFE | Polytetrafluoroethylene |
| PU | Polyurethan |
| PA | Polyamid |
| P | Polyester |
| PVC | Polyvinyl chloride compound |
| TPE | Thermoplastic elastomers |
| BW | Cotton |

(**) – All powder coating materials are epoxy resin/polyester-based

For example, you may consider using cleaning and disinfectant products from the following manufacturers.

Dr. Schumacher GmbH, Bode Chemie GmbH, Schülke & Mayr GmbH, Ecolab GmbH, B. Braun Melsungen AG, Dürr Dental AG und Lysoform Dr. Hans Rosemann GmbH.

.

# 7. Cleaning and disinfection

## 7.8 Cleaning and disinfection of solid surfaces

Only cleaning agents and CE-certified disinfectants that are intended for cleaning medical devices and have an optimal pH value of 6.5–7.5 may be used..

Cleaning of:

- Coated and painted metal surfaces
- Coated and painted wood surfaces
- Hard plastic surfaces of star handles, wing screws, clamping levers

This is best done with a soft, dry towel, a slightly damp microfibre cloth and lukewarm water (with or without cleaning agent).

Disinfection of:

- coated and painted metal surfaces
- coated, covered and painted wood surfaces
- hard plastic surfaces of star handles, wing screws, clamping levers

This is best done with soft cleaning cloths made of paper and microfibre. The disinfectant must not be sprayed directly onto the product. To do this, spray a soft cloth and apply the disinfectant to the surfaces.

The device and its accessories must not be sprayed with liquid agents to prevent liquids from penetrating.

To avoid skin irritation or allergic reactions, ensure that no residues of cleaning agents or disinfectants remain on the surfaces.

Then dry the parts thoroughly..





## 7.9 Cleaning and disinfection of covers

***The faux leather covers*** must be disinfected with a CE-certified surface disinfectant. The disinfectant must then be wiped off completely with a damp cloth and dried thoroughly with a microfibre cloth. Alternatively, disinfection can be carried out in a cold fogging system!

Any stains on the faux leather covers should be removed as soon as possible with lukewarm water and a slightly damp cloth, preferably microfibre or cotton. For heavier soiling, warm, mild soapy water and a soft hand brush or soft sponge can be used. The cleaning process may need to be repeated several times.

Then wipe away any remaining cleaning agent with a damp cloth.

Textile covers (not imitation leather) and straps can be washed in a washing machine at up to 40°C using a conventional CE-certified disinfectant detergent.

Only disinfectants for textiles that are specifically intended for medical devices (e.g. RHEOSOL-Deso) and meet the following requirements are permitted:

- Proven effective from 40°C,
- CE certified medical device,
- RKI or VAH listed (recommended),
- Approved in the EU (recommended).

Chemical cleaning, dry cleaning or bleaching of fabrics is not permitted.

Drying is only permitted at a low temperature (gentle cycle) in the dryer. Dry the items thoroughly afterwards.

Only iron fabrics with a lukewarm iron.

To avoid skin irritation or allergic reactions, ensure that no residues of cleaning agents or disinfectants remain on the fabrics.

Pay attention to symbols (see Table C) that can be found on some covers made of different materials!

**Table C: Symbols for substances**

| Symbol | significance |
|---|---|
|  | Wash cycle 40°C, easy care or delicate cycle |
|  | Do not bleach |
|  | Iron with a lukewarm iron |
|  | Tumble dry at low temperature (gentle) |
|  | Clean with perchloroethylene |

# 8. Maintenance and inspection

**DANGER Never use a device that is not in perfect condition!**

**DANGER If there is excessive wear or if worn product parts are not replaced, the safety of the product may no longer be guaranteed!**

**DANGER Faults, malfunctions or defects may only be rectified by the manufacturer, operator or service provider!**

**DANGER Do not make any modifications to the product!**

**WARNING Only use original spare parts/accessories or those approved by *Rehatec® GmbH*!**

**IMPORTANT In the event of complaints or problems, please contact your service provider/operator!**

**WARNING: During all repair and adjustment work, be aware of the risk of pinching and crushing!**

**CAUTION: During all maintenance or inspection work, follow all instructions in the "Cleaning and disinfection" section!**

## 8.1 Maintenance

***Before each use, please check the following functions:***

- All connecting parts and components required for the supply.
- The functions of the brakes. Safe braking must always be guaranteed.
- All visible screw connections are tight and complete.
- All padding and surfaces that can be touched must be checked for tears, scratches and scuffs. Defective parts must be replaced!
- All elements of the harness are undamaged and complete. Defective parts must be replaced!

***Regular care and maintenance***

For safety reasons, it is important that all components are undamaged during use. Therefore, check them regularly and have them repaired or replaced if necessary.

The device must be serviced and maintained at regular intervals by trained specialist personnel.

The maintenance requirements are based on the checks listed in section "8.3 Inspection schedule".

**DANGER The device requires maintenance every 12 months in accordance with the following inspection schedule.**





## 8.2 Inspection

**IMPORTANT To document the proper condition of the device and to document any abnormalities, malfunctions and defects, use the inspection plan from the "Inspection Plan" chapter!**

**WARNING Ensure that every safety check is recorded in the test log. The documentation must be retained until the device is disposed of..**

During an inspection, a visual inspection and mechanical function tests must be carried out.

If necessary, care and maintenance work must be carried out or repairs commissioned. Missing, damaged or dirty parts must be replaced.

When ordering spare parts, the dealer or the manufacturer's sales department can provide advice if the serial number, device type and date of manufacture are specified.

# 8. Maintenance and inspection

## 8.3 Inspection schedule

**IMPORTANT Inspections must be carried out by the operator/service provider and documented on a copy. This documentation is device-specific and serves as proof for reuse, transfer and warranty claims. Please keep together with the operating instructions.**

operator

Product | Serial number | Scheduled maintenance intervals: 12 months

| Item | Assembly | | Settings & functions | | Damage & deformation | | Screw connections | |
|---|---|---|---|---|---|---|---|---|
| | | | without defects | with defects | without defects | with defects | without defects | with defects |
| 1 | Frame | base frame | | | | | | |
| | | Transport castors and parking brake (optional) | | | | | | |
| | | Feet | | | | | | |
| | | Wall and furniture protection (optional) | | | | | | |
| | | Rubber damper | | | | | | |
| | | Blocker and carrier plate | | | | | | |
| | | Clamping and fastening elements | | | | | | |
| | | Dynamic centre column | | | | | | |
| 2 | Foot area | Footboard | | | | | | |
| | | Footrests | | | | | | |
| | | Foot strap (optional) | | | | | | |
| | | Clamping and fastening elements | | | | | | |
| 3 | Knee area | Knee braces Standard/Anatomical | | | | | | |
| | | Brackets for knee pads | | | | | | |
| | | Padding and covers for knee pads | | | | | | |
| | | Clamping and fastening elements | | | | | | |
| 4 | Pelvic area | Pelvic pad | | | | | | |
| | | - Brackets | | | | | | |
| | | - Upholstery and covers | | | | | | |
| | | - Fastening/clamping elements | | | | | | |
| | | Swivel arm frame | | | | | | |
| | | - Frame | | | | | | |
| | | - Brackets | | | | | | |
| | | - Fastening/clamping elements | | | | | | |





| Item | Assembly | | Settings & functions | | Damage & deformation | | Screw connections | |
|---|---|---|---|---|---|---|---|---|
| | | | without defects | with defects | without defects | with defects | without defects | with defects |
| | | Dynamic columns | | | | | | |
| | | - Brackets / mounts | | | | | | |
| | | -Upholstery and covers | | | | | | |
| | | - Fastening/clamping elements | | | | | | |
| | | Pelvi.Loc pelvic belt (only for Benni Light) | | | | | | |
| | | -Fastening and closure | | | | | | |
| | | -Textile elements and straps | | | | | | |
| 5 | Back/chest/ head area | Back/pelvic pad | | | | | | |
| | | - Brackets | | | | | | |
| | | -Upholstery and covers | | | | | | |
| | | Fastening/clamping elements | | | | | | |
| | | Headrests * | | | | | | |
| | | - Brackets | | | | | | |
| | | - Upholstery and covers | | | | | | |
| | | - Fastening/clamping elements | | | | | | |
| | | The sternum * | | | | | | |
| | | - Brackets | | | | | | |
| | | - Upholstery and covers | | | | | | |
| | | - Fastening/clamping elements | | | | | | |
| 6 | Table area / Armrests * | Mounts | | | | | | |
| | | Table columns | | | | | | |
| | | Table mount with depth adjustment | | | | | | |
| | | Wooden parts | | | | | | |
| | | Fastening/clamping elements | | | | | | |

(*) – only for the Heidelberg Benni standing device

Notes for any repairs and further maintenance:

Inspection carried out on | Inspection carried out by | Signature

**You can also find an interactive inspection plan that you can fill out yourself in the download area of our website.**

# 9. Reuse and patient change

**DANGER Before each reuse, the product should be thoroughly inspected in accordance with the inspection plan in the "Inspection Plan" chapter and cleaned in accordance with the "Cleaning and Disinfection" chapter!**

**DANGER Ensure that the product is not damaged when preparing the stickers! The safety information must be available and clearly legible!**

**DANGER The service provider is responsible for ensuring that the user has the instructions for use and the necessary knowledge to use the product!**

**DANGER The individual needs and clinical pictures of patients must always be taken into account!**

**DANGER The service provider is responsible for ensuring that the user has the instructions for use and the necessary knowledge to use the product!**

**DANGER The individual needs and clinical pictures of patients must always be taken into account!**

**DANGER The usage time must not exceed the specified service life! Continued use after the end of the service life can only be approved after a thorough inspection by the manufacturer/distributor!**

## 9.1 Reuse

**The upright standers / Benni Light** is generally suitable for reuse (e.g. after storage or transport), although products are subject to particular stress when reused.

The operator/service provider is responsible for ensuring that the device is in perfect condition and has been properly prepared for reuse.

When reusing the product, it is important that all documentation relating to the device (such as operating instructions, delivery note, inspection plans, etc.) is available.

If the product is passed on to other operators, all documentation relating to the device must be handed over to the next user. The device may only be handed over to other operators if the labels (manufacturer's and safety instructions) on the device are undamaged. The information on the device type and date of manufacture must be clearly legible for the new user.

When reusing the device, all padding (padded parts) must be replaced!
It is recommended that the fabric covers and straps be replaced. See the chapter "Cleaning and disinfection" and observe the relevant instructions!

**IMPORTANT If the device is more than 4 years old, it is recommended that the rubber damper be replaced with a new one when reusing it..**

## 9.2 Change of patients

The user is responsible for ensuring safe patient transfer and for performing all necessary reprocessing procedures. In case of any problems, please contact your service provider or dealer.
The Benni / Benni Light stander is generally suitable for patient transfer. Configurations with synthetic leather covers are recommended.
All surfaces that come into contact with the patient must be cleaned and disinfected.
It is recommended to replace textile covers and straps as necessary. Please refer to the chapter “Cleaning and Disinfection” and follow the relevant instructions





# 10. Technical data

## 10.1 Mechanical data

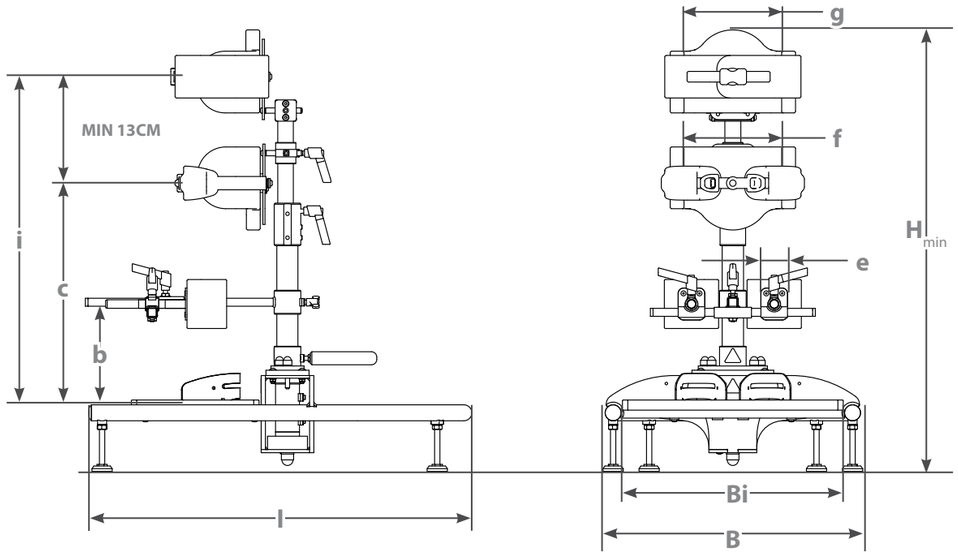
**Heidelberg Upright Stander Benni / Benni Light**

| Operating environment conditions | | | |
|---|---|---|---|
| operating temperature | +15 °C to +35 °C | | |
| humidity | 30% to 70% (non-condensing) | | |
| Environmental conditions during storage and transport | | | |
| temperature | -10 °C to +45 °C (+10 °C to +25 °C recommended) | | |
| humidity | 20% to 80% (non-condensing) | | |
| functional data | | | |
| Maximum patient weight | | Benni | Benni Light |
| | Size1 | 35 kg | 35 kg |
| | Size2 | 45 kg | 45 kg |
| Weight | | | |
| Total weight (for basic equipment) | | Benni | Benni Light |
| | Size1 | 35 kg | 19 kg |
| | Size2 | 40 kg | 22 kg |
| Transport dimensions | | | |
| [Width] x [Length] x [Height], cm (for basic equipment) | | Benni | Benni Light |
| | Size1 | 64 x 73 x 58 | 49 x 73 x 70 |
| | Size2 | 73 x 97 x 81 | 56 x 91 x 80 |
| Service | | | |
| maintenance | See chapter "Service and maintenance" | | |

# 10. Technical data

## 10.2 Mechanical and anthropometric data

Heidelberg Upright Stander Benni Light




| Size | knee height [B] | centre of the pelvis [C] | chest pad height [I] | chest width [G] | |
|---|---|---|---|---|---|
| 1 | 17 - 30 cm | 35 - 59 cm | ~48 - 72 cm | Standard: 15-28 cm | Sternum: 16-38 cm |
| 2 | 20 - 40 cm | 46 - 75 cm | ~59 - 88 cm | | |

| Size | Pelvic width [f] | knee width [e] | Base frame external width[B] | Base frame internal width[Bi] | Chassis length [L] | Total height [H] |
|---|---|---|---|---|---|---|
| 1 | 15 cm - 28 cm | 6 cm - 13 cm | 49 cm | 41 cm | 73 cm | 58 cm |
| 2 | | | 56 cm | 47,5 cm | 90,5 cm | 80 cm |

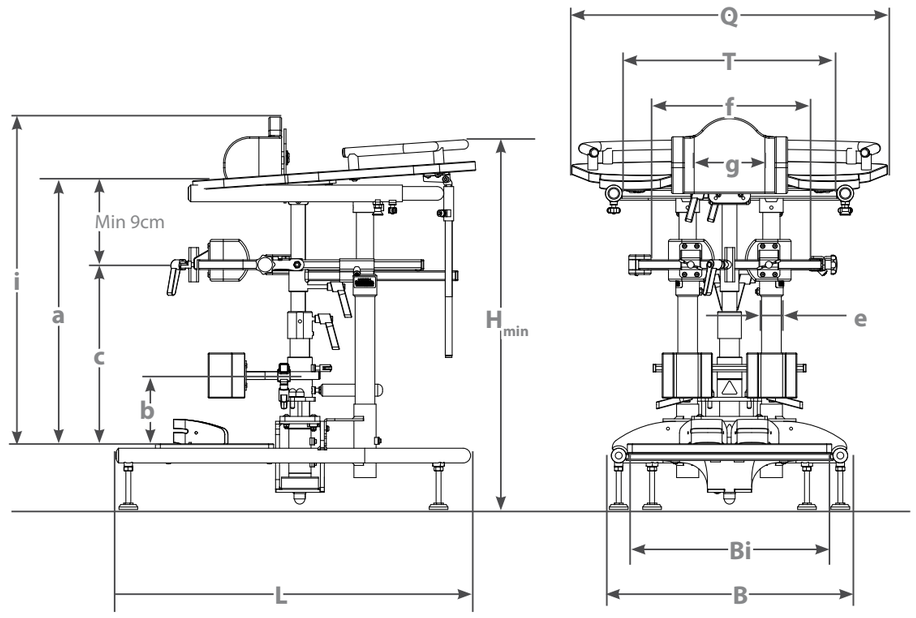
Dimensional tolerances ±3%

**IMPORTANT Due to the adjustment of the height of the central dynamic column to the specified patient parameters, the adjustment ranges of your device may differ from those shown in the table .**





Heidelberg Upright Stander Benni




| Size | Table height [a] | Knee height [B] | Centre of the pelvis [C] | Chest pad height [i] | Chest width[g] | | Pelvic width [f]) |
|---|---|---|---|---|---|---|---|
| 1 | 40 - 68 cm | 16 - 30,5 cm | 32,5 - 60 cm | 43 - 87,5 cm | Standard 15 - 28 cm | Sternum 16 - 38 cm | 14 - 20 cm |
| 2 | 64 - 90 cm | 20 - 37 cm | 53 cm | 64 - 93 cm | | | 22 - 33 cm |

| Size | Knee width [e] | table width [Q] | Base frame external width [B] | Table mount inner width [T] | Base frame internal width [Bi] | Chassis length [L] | Total height [H] |
|---|---|---|---|---|---|---|---|
| 1 | 6 - 13 cm | 64 cm | 49 cm | 43 cm | 41 cm | 73 cm | 68 cm |
| 2 | | 73 cm | 56 cm | 43 cm | 47,5 cm | 97 cm | 80 cm |

Dimensional tolerances ±3%

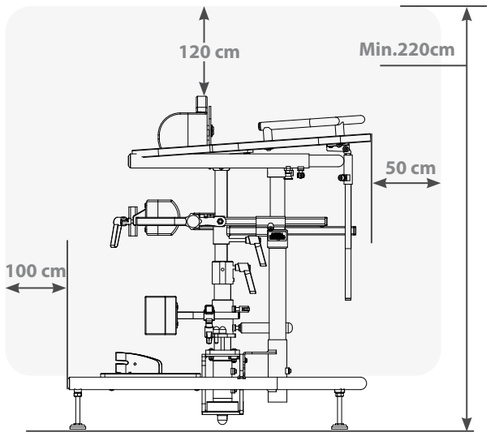
**IMPORTANT Due to the adjustment of the height of the central dynamic column to the specified parameters of the patient, the adjustment ranges of your device may differ from those shown in the table.**

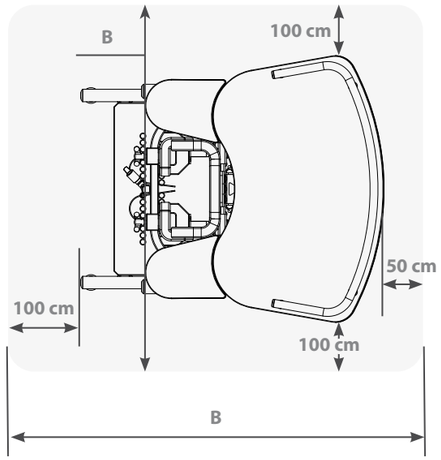
# 10. Technical data

## 10.3 Minimum spatial requirements around the patient

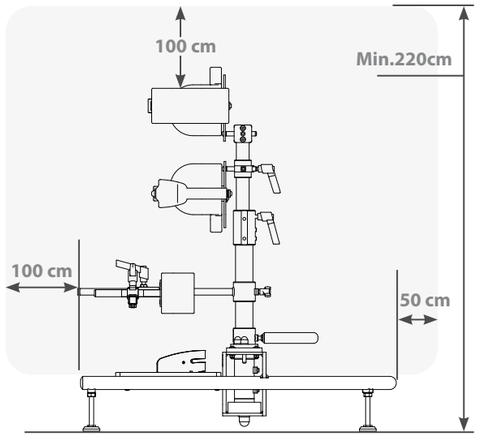
The areas marked in grey are required free areas that are necessary for a safe patient environment and convenient operation of the device.

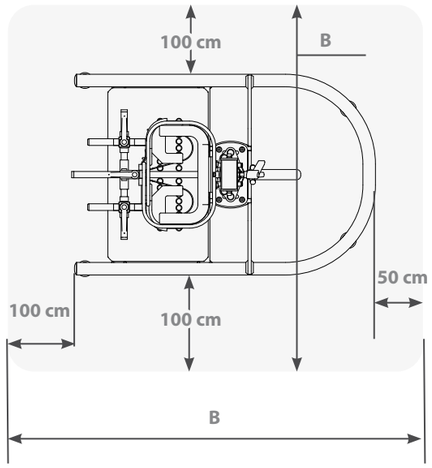
Heidelberg Upright Stander Benni




Heidelberg Upright Stander Benni light




Recommended minimum clearance

| [A] x [B], m | | Benni | Benni Light |
|---|---|---|---|
| | Size 1 | 3 x 3 | 2,5 x 3 |
| | Size 2 | 3 x 3 | 3 x 3 |





# 11. Disposal

Benni (Light) must be disposed of properly. Please contact your specialist dealer for assistance.

Packaging materials must be separated according to waste type and disposed of in the waste containers in accordance with the municipal recycling concept. Waste disposal may vary from municipality to municipality.

The product consists of recyclable steel and aluminium alloys, European wood types and plastic. For proper disposal, please contact your local waste disposal authority (recycling centre) or the administration of your place of residence if necessary.

Observe the disposal regulations of your country.

The operator must ensure that all components to be disposed of are not infectious/contaminated.

Outside Europe, the relevant laws and regulations of the respective country must be observed.

**The product must not be disposed of with household waste.**

# 12. Warranty

Warranty services relate to product defects that can be proven to be due to material or manufacturing faults.

We provide a 3-year warranty on the frame parts (wood) of the Benni and Benni Light from the date of delivery. Any defects will be repaired free of charge by ***Rehatec® GmbH***. Upholstery and castors are excluded from the warranty.

***Rehatec® GmbH*** cannot accept any further warranty or liability for damage resulting from:

- the use of non-original spare parts and accessories or those not approved by ***Rehatec® GmbH***
- modifications or interventions to the product without the approval of ***Rehatec® GmbH***
- natural wear and tear or excessive strain
- improper use or violent damage failure to observe the instructions for use
- Accidental damage
- Repairs or modifications carried out by untrained persons or persons not authorised by ***Rehatec® GmbH***

The warranty shall be void in the event of design modifications without the written consent of ***Rehatec® GmbH***.

Defective or replaced parts are the property of ***Rehatec® GmbH***.

The warranty does not cover accidental damage.

The warranty applies to new devices.

REHATEC®

# warranty card

You have purchased a high-quality product from ***Rehatec® GmbH***..

The Rehatec® product described below is of impeccable quality and functional design. ***Rehatec® GmbH*** undertakes to repair any damage resulting from material defects free of charge within the two-year warranty period from the date of purchase.

Only upholstery, fabrics and castors are excluded from the warranty**.**

**Heidelberg Upright Stander Benni | Benni Light**
*model designation*

_____
*serial number*

_____
*purchase date*

**Dealer's stamp and signature**



1023939_2.0 Subject to technical changes and printing errors..

# notes





# notes

REHATEC®

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