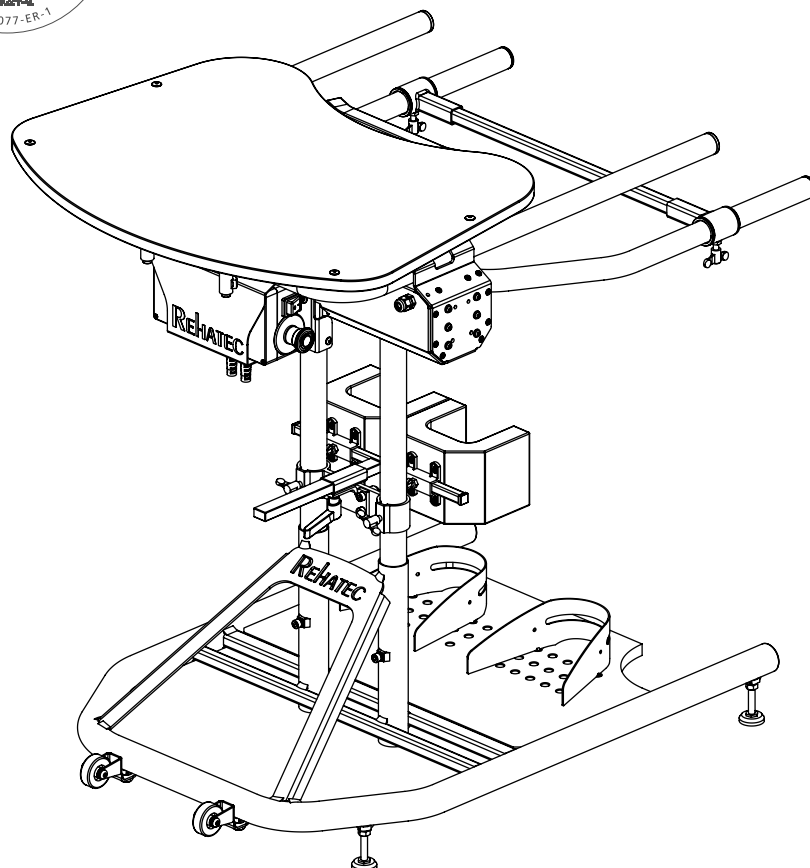


Heidelberg Upright Stander Impuls

INSTRUCTIONS FOR USE

SERIAL NUMBER: _____

English



Foreword

Dear user,

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

This manual is designed to help you familiarise yourself with your Heidelberg Upright Stander Impuls—hereinafter referred to as the standing device—and to show you how to use it quickly and easily in a variety of everyday situations. Once you have adjusted your standing device to the optimal settings, it is ready for use, allowing you to benefit from it 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 changes and improvements. Although this manual has been compiled with the utmost care, minor errors cannot be completely ruled out.

We hope you enjoy using your Heidelberg Upright Stander Impuls.

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 restrictions designed to protect patients, operators, and third parties.

Please read these instructions carefully before using your new device for the first time. Individuals with sensory, cognitive, or learning impairments may need the content to be adapted for better understanding. This may 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 restrict attention or judgement.

Keep this manual readily accessible for future reference and ensure that it remains with the product if it is passed on to another user. If required, we will be happy to provide another copy. The manual can also be viewed and downloaded from our website at www.rehatec.com

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1. Safety

This chapter summarises all safety instructions that you must always observe for your own protection and that of others.

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 instruction

-  **DANGER! The operator must not have any impairments that temporarily or permanently restrict their attention and judgment!**
-  **DANGER! The patient must never be left unattended. Constant supervision by an operator (adult) 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! Unauthorized access to the housings of electronic components is prohibited! All electrical components are closed units that do not require internal maintenance!**
-  **DANGER! The device is only approved for use by one person!**
-  **DANGER! The user must be adequately secured/fastened to prevent them from falling out, without restricting their comfort.**
-  **DANGER! The device may only be used by a trained user who has read and understood the complete instructions for use! Training must be provided by the operator/service provider!**
-  **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! Use of the device without the crossbar or swivel arm pelvic frame is prohibited!**

















-  **DANGER Risk of crushing! The function of the emergency stop mechanism of the limit switch on the chest pad must not be interfered with during the standing up process!**
-  **DANGER If unusual odors or noises are detected from the electric drive, the device must not be used any further and must be taken out of service immediately!**
-  **DANGER If there are any irregularities in the electric drive, the device must not be used any further and must be taken out of service immediately!**
-  **DANGER If there are any malfunctions in the limit switch in front of the chest pad, the device must not be used any further and must be taken out of service immediately!**
-  **DANGER Use of the device with damaged pull or buttocks 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, ship, airplane, etc.)!**
-  **DANGER During operation, the power plug and the emergency stop switch must be accessible at all times so that the device can be quickly disconnected from the power supply in an emergency!**
-  **DANGER! Only use the device on a firm, level surface. There is a risk of tipping and slipping if the surface conditions change.**
-  **DANGER! Limited maneuverability on soft surfaces, e.g., carpets – risk of tipping!**
-  **DANGER! When cleaning and disinfecting, remove any residues of the agents used to avoid poisoning, irritation, and allergic reactions! See chapter “Cleaning and disinfection.”**
-  **DANGER! The service life depends on the conditions and frequency of use.**
-  **DANGER! Risk of tipping! Extreme settings and unfavorable body posture (e.g., leaning out too far) increase the risk of tipping!**
-  **DANGER! When the table height is set to its maximum, the center of gravity of the device shifts upward, increasing the 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 authorized dealers.**
-  **DANGER! Never use the device near or in connection with flammable substances and fire-causing objects.**
-  **DANGER! Only connect or disconnect electrical components when they are de-energized and dry.**
-  **DANGER! Risk of electric shock! Never pull on the cables to move the device! There is a risk of electric shock if the cables are torn or the insulation is damaged!**
-  **DANGER! Risk of electric shock! Never touch the power plug with wet hands!**
-  **WARNING! Risk of burns! The surfaces of the device can heat up due to heat input (e.g., wood-burning stoves, sunlight)! Surfaces may heat up to over 40 °C!**

1. Safety

-  **DANGER** The wheelchair must always remain directly behind the patient with the brakes applied ! This is particularly important during the standing-up process, as long as the patient is not yet protected by the crossbar or the swivel arm pelvic frame!
-  **DANGER** The electric drive is maintenance-free! There is no reason to interfere with the housing!
-  **DANGER** When pulling the power plug out of the socket, always pull on the power plug itself and not on the power cord!
-  **DANGER** Caution! Risk of tipping! Do not lean on the bar! 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 standing device is very heavy and may only be lifted by at least 2 people!
-  **WARNING** The device is used in combination with an electric drive and must therefore not be cleaned with a high-pressure or steam cleaner!
-  **WARNING!** Always wear sturdy, closed-toe shoes when transporting, adjusting, operating, maintaining, cleaning, and disinfecting the standing device to avoid injury to your feet and toes!
-  **WARNING** Cable breakage! Trip hazard! When not in use, the power cord must be attached to the device in such a way that it cannot be crushed and does not pose a trip hazard!
-  **DANGER** The pull straps must always run inside the parallel bars to ensure correct rolling and unrolling!
-  **DANGER** When the emergency stop mechanism is activated, it must still be possible to unroll the straps! Otherwise, the device must not be used!
-  **DANGER** The device is only to be used for therapeutic purposes! It must not be considered or used as a patient lift!
-  **DANGER!** Cables lying around are a tripping hazard!
-  **DANGER!** Risk of electric shock! The device's cables are not run-over resistant! If a cable is damaged, the drive must be taken out of operation immediately and disconnected from the power source!
-  **DANGER!** Risk of explosion! The device must not be used in an environment where flammable or explosive gases or vapors are likely to occur (e.g., oxygen)!
-  **DANGER** If the drive starts up on its own, press the emergency stop button or pull the power plug to stop it immediately! The device must not be used any further and must be taken out of service immediately!
-  **DANGER** The electrical components of the device must not be opened or modified without the manufacturer's permission !
-  **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. The user must not have any impairments that temporarily or permanently restrict their attention and judgment.
-  **DANGER!** The standing 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!** Risk of electric shock! Keep children playing away from all electronic components!
-  **DANGER!** The device may only be connected to the mains supply if the mains voltage of the socket corresponds to the information on the type plate or in the "TECHNICAL DATA" section!
-  **DANGER!** The upholstery, wood, and plastic parts used in 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" section or the type plate!
-  **DANGER!** Never carry the device with users in it or transport it in a car!
-  **DANGER!** Perform an annual inspection for damage and wear.
-  **DANGER!** Pay attention to warning tones, LED signals, unusual noises, uneven functions, or changes in stability. Stop the therapy immediately and remove the patient from the standing device if you notice anything unusual.
-  **DANGER!** Before performing any technical work or cleaning processes on the standing device, disconnect the power plug!
-  **DANGER!** Observe the duty cycle: 10%, 2 minutes of continuous operation, followed by an 18-minute break!
-  **CAUTION!** The housings of components must not be exposed to shocks or similar stresses.
-  **CAUTION!** Be aware of the risk of pinching and crushing during all repair and adjustment work.
-  **DANGER!** If the parking brakes, gas spring, drive, emergency stop switch, manual control, or safety switch are defective, the device must be taken out of service immediately! Further use is not permitted!
-  **DANGER!** Only for operation within the specified conditions! See chapter "TECHNICAL DATA".

1. Safety

-  **DANGER!** After each transport in a car, prolonged storage, and before reusing the device, all checks must be carried out in accordance with the chapter “Commissioning”!
-  **DANGER!** Combinations of the device with third-party products or non-original parts are not permitted and can be dangerous. The manufacturer accepts no liability for damage or complications resulting from such combinations.
-  **DANGER!** The patient may push off from the wall or other furniture with their hands. Increased risk of tipping! See chapter “Minimum space around the patient.”
-  **DANGER!** Hanging lights/cables can pose a risk of electric shock! See chapter “Minimum space requirements for the patient environment”.
-  **WARNING** Additional safety instructions for individual points in the chapter “Device settings” must be strictly observed!
-  **WARNING** The device may only be used by patients wearing sturdy, non-slip footwear !
-  **DANGER** Depending on the patient's condition and weight, 1 to 2 assistants are required to bring the patient into a standing position and lower them back down!
-  **IMPORTANT** Do not expose the components of the drive system to UV radiation disinfection lamps. This can cause damage to the housing, carrier parts, and cables.
-  **WARNING** The device is not suitable for transport between rooms! If necessary, door thresholds must be equipped with fixed ramps.
-  **WARNING** The barrenholm is not designed for heavy loads. It is only used to secure the patient in a standing position at the rear. The patient must not pull themselves up or hold on to it when standing up or sitting down.
-  **CAUTION** Never use force when adjusting the device, as improper handling may cause damage to the device!
-  **CAUTION** It is essential that the device is kept away from wood-burning stoves, smoking accessories, stoves, and other room heating devices!
-  **CAUTION** When not in use, do not allow the pull straps to hang down low. Make absolutely sure that the pull straps do not touch the floor!
-  **DANGER!** Before the patient is transferred to the standing device with dynamic functions, all dynamic functions of the movable footboard, the movable swivel arm pelvic frame, and the dynamic knee pad must be locked!
-  **DANGER!** Caution! Risk of tipping! Do not lean on the parallel bar! Only use the table mount when getting in and out.
-  **WARNING** The parallel bar is not designed for heavy loads. It is only used to secure the patient in a standing position at the rear. The patient must not pull themselves up or hold on to it when standing up or sitting down.

2. Symbols

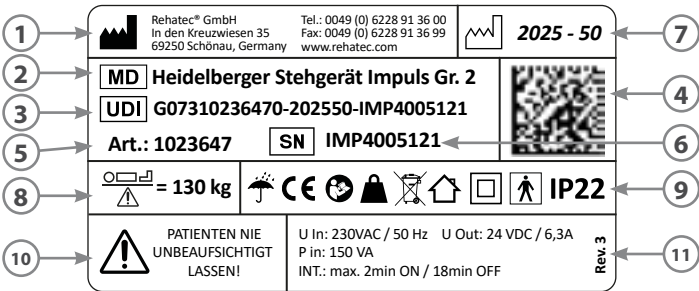
2.1 Symbols and signs on the product

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		Medizinprodukt
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! At least 2 people are required to carry the device.
15		Warnings. Risk of crushing hands/fingers!
16		Instructions for use
17		Type BF medical device
18		Class II device
19		Protection class: N1 - Degree of protection against foreign objects and contact N2 - Degree of protection against water

2.2 Type plate on the device

For clear identification and information purposes, the following labels are attached 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 (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 Impuls 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 is equipped with an electric motor to make it easier to raise the patient..

3.3 Indications and contraindications

The Heidelberg Upright Stander Impuls can be used for the following indications.

Complete/incomplete hemiplegia/hemiparesis, possibly involving the trunk muscles, as a result of a brain disorder (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. transverse syndrome in cases of traumatic/inflammatory/tumorous thoracic and lumbar spinal cord lesions) or diseases of the peripheral nervous system/muscle diseases (e.g. polyneuropathy, muscular dystrophies)

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.

As a general rule, any type of pain is a contraindication!

Depending on the clinical picture and therapy, a doctor or therapist must be consulted to determine how long a patient can remain in the standing device. The following symptoms may occur: circulatory problems, pain in the legs and/or back, increased spasticity, seizures. Use of the device in patients with scoliosis should only be considered after consultation with the attending physician. The device does not correct poor posture and is not suitable for growth guidance!

Many patients can initially only stand in a bent position and can only be fully stretched later. Never correct posture with force or strong pressure!

Patients with skin injuries and open wounds must not use the standing device.

3.4 Responsibility

The operator is responsible for:

- the intended use according to 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 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 for its intended purpose under the specified conditions 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 "Technical Data" section 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 injury
- Suitable fastenings for secure positioning of the patient
- Accessories required for correct and safe joint/body positioning
- Maximum possible adjustment limits of positioning elements
- Frequency of use of the device/treatment plan

The Heidelberg Upright Stander Impuls device is designed for use in enclosed spaces at an ambient temperature between 10 °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 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 intended for therapeutic use and not for patient lifting or transport.

Electrical installations must comply with local standards, which prescribe the necessary conditions for electronic installation.

Depending on the model, the device must be connected to a suitable power source for use. In an emergency or in exceptional situations (e.g. during a thunderstorm), the device must be shut down by pulling the mains plug.

This product is designed exclusively for use by knowledgeable users who have been instructed 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 operating instructions 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.

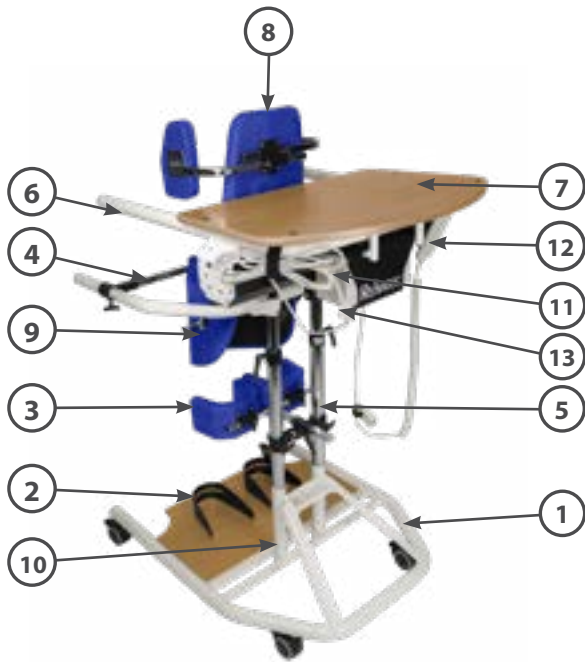
4. Product and delivery overview

4.1 Scope of delivery and basic equipment

The Heidelberg Upright Stander Impuls is usually delivered fully assembled and preset for the patient by an authorised medical supply dealer. The Heidelberg Upright Stander Impuls is available in different sizes. For more information on size and permissible weight, please refer to the table in chapter "13. Technical Data".

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

Pos.	Component designation
1	Base frame with transport castors
2	Footrests
3	Knee pads
4	Barrenholm with rear crossbar
5	Centre columns
6	Upper section with electrical components: drive, control box, emergency stop mechanism
7	Therapy table without table depth adjustment
8	Breast pad
9	Standard seat belt
10	Nameplate (serial number)
11	Type plate (electrical specification)
12	manual operation
13	power cord



 **Please note: The standard version of the standing frame does not include transport castors, foot straps, pelvic and lateral support pads.**

Basic equipment Heidelberg Upright Stander Impuls Size 1	Basic equipment Heidelberg Upright Stander Impuls Size 2
Standard base frame with feet and transport wheels	
electric belt retractor	
Barrenholm incl. holder for pelvic pads	
Knee pads, Standard	
Foot shells, plug-in, size 1	Foot shells, plug-in, size 1
Chest pad - emergency buffer, padded	
Therapy table (standard)	
Buttock strap size 1 (small)	Buttock strap size 2 (large)

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:

- Multi base frame, with low entry or widened
- Transport castors with locking brakes, 75 mm
- Wall and furniture protection
- Chest support
- Side support pads, height adjustable
- Back support with/without headrests
- Swivel arm pelvic frame
- Pelvic support pads, clip-on
- Anatomical knee supports
- Parallel adjustable armrests, incl. straight table
- Armrests for standard table
- Table top angle adjustment
- Table depth adjustment
- Table surround
- Table height adjustment via gas pressure spring
- Moulded seat belt
- Foot shells, screw-on
- Individually adjustable knee pads with anti-twist device
- Knee pads adjustable in 3 levels
- Foot straps for foot shells

You can optionally purchase the following accessories for the Heidelberg Upright Stander Impuls with dynamic functions:

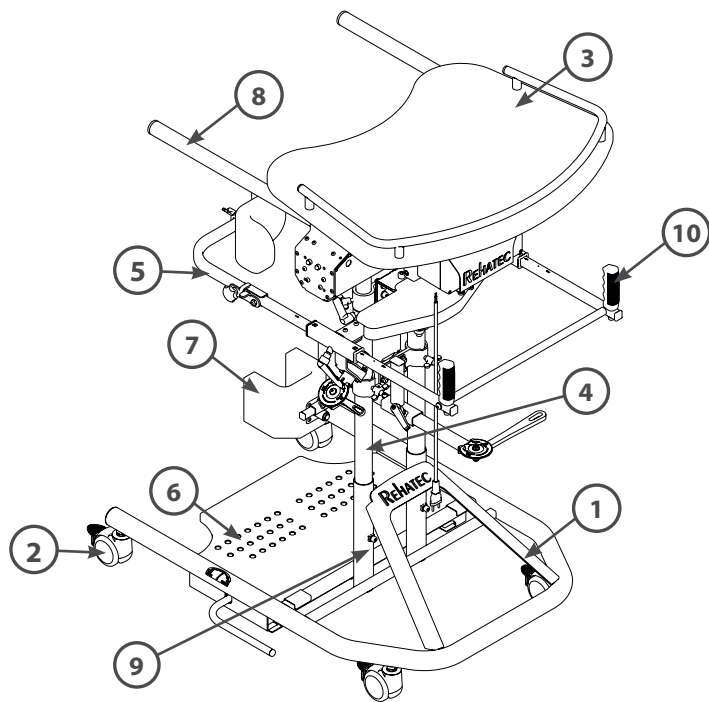
- Movable swivel arm pelvic frame incl. pelvic pads
- Handrails
- Base frame with movable footboard
- Movable chest pad, height-adjustable
- Movable back pad, height-adjustable, rotatable

Further information and data can be found at: www.rehatec.com
Or simply request it by e-mail, fax or post..

4. Product and delivery overview

The Heidelberg Upright Stander Impuls with dynamic functions is available in two sizes. The Heidelberg Upright Stander Impuls with dynamic functions is usually delivered fully assembled and in its default setting. To prevent damage during transport, plug-in and unfastened parts may be packed separately in the box.

Heidelberg Upright Stander Impuls with dynamic functions



Pos.	Component designation	Basic equipment Size 2+3
1	Base frame with movable footboard	✓
2	Transport castors 75 mm with brakes	✓
3	Semicircular therapy table	✓
4	Centre column	✓
5	Movable swivel arm pelvic frame incl. basin pads	✓
6	Footrests	✓
7	Dynamic Knee Pads	✓
8	Table mount including table depth adjustment	✓
9	Nameplate	✓
10	Handrails	✓







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 provide 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 generally not permitted and can be dangerous. The manufacturer accepts no liability for damage or complications resulting from such combinations!**
-  **DANGER! The electrical device must not be operated by small children or untrained personnel/ users/operators!**
-  **DANGER! The control unit must only be connected to the specified voltage. See chapter "TECHNICAL DATA".**
-  **IMPORTANT The control system, manual controls and drives are maintenance-free and designed to last for the entire service life of the device. Parts such as the tension belts may need to be replaced due to wear and tear!**

5. Operation

5.1 Manual operation

i **IMPORTANT Do not use sharp objects to operate the keypad!**

The drive of the device is controlled via the hand control.

The row of buttons [H] is used to roll up the belt.

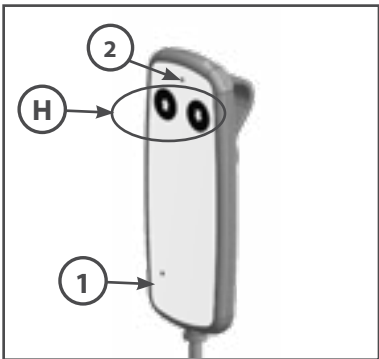
The motor only operates when the button is pressed and held down. Release the button as soon as you have reached the desired position.

Avoid switching quickly and repeatedly from one direction of travel to the opposite direction without allowing the motor to stop.

Power-On LED [1] - indicates whether the system is connected to the mains power supply.

Care LED [2] - provides information about the system status.

See the chapter "LED Indication" for detailed descriptions of the status indications.



5.2 Control unit

The control unit [A] evaluates and provides information about the status of the system and is used to shut down the device in an emergency.

We recommend always positioning the device near a power socket (without an extension cable).

After connecting the power supply, the device switches on with a delay. Wait at least 15 seconds before use and check the status of the control.

See the chapter "LED – Indication" for a detailed description of the status indication.

The LED indicator shows the status of the device.

The LED indicator shows the status of the device..

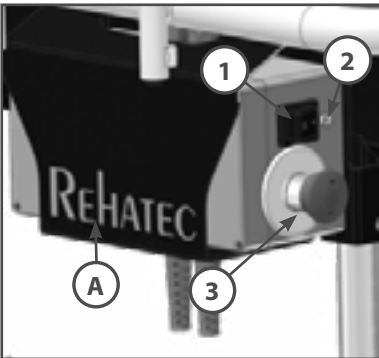
! **DANGER! The device may only be connected to the mains supply if the mains voltage of the socket corresponds to the information on the type plate or in the "TECHNICAL DATA" section!**

! **DANGER! Opening the housings of electronic components is prohibited! All electrical components are sealed units that do not require internal maintenance!**

Power-on switch (1) - used for normal/daily switching on or off of the device

Power-on LED (2) - provides information about the system's mains voltage

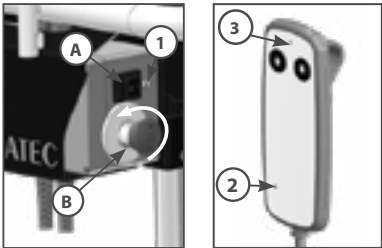
Emergency stop switch (3) - used for emergency shutdown of the device



5.3 LED – Indication

The control unit is equipped with a green LED [1] for the mains display. When the control unit is connected to the mains, the LED [1] lights up green.

Other possible LED signals are listed in the following table.



LED colour	Operating indicator
LED indicator #1 (control) and LED indicator #2 (manual switch): connected to the mains, switch A is in the ON position (I), emergency stop switch (B) deactivated, manual switch not activated	
LED (1) – GREEN LED (2) – GREEN	Connected to the mains The system is functioning correctly and is ready for normal operation.
LED (1) - not lit LED (2) - not lit	No power (check the position of the emergency stop button) or the system is faulty and should not be operated
LED (1) - GREEN LED (2) - not lit	Connected to the mains The system is faulty and should not be operated.
LED indicator #3 (manual switch), when button is pressed: connected to mains power supply, switch A is in ON position [I], emergency stop switch [B] deactivated	
LED (3) - ORANGE	Activated via manual control. The system functions perfectly.
LED (3) - not illuminated	activated via manual control.













5.4 Duty cycle

The drive may be operated for a maximum of 2 minutes under rated load, after which a 18-minute break must be taken. Alternatively, operate the tilt drive for a maximum of 5 switching cycles per minute under rated load, otherwise a malfunction may occur.

5. Operation

5.5 Commissioning

Before the Heidelberg Upright Stander Impuls can be adjusted to the patient's needs and the patient can be positioned in the device, the functionality of the electrical components and safety systems must be checked. To do this, the following must first be observed:

-  **DANGER** The device may only be used on a horizontal, hard, level and non-slip surface!
-  **DANGER** If the device is defective, damaged or modified, it must not be used and must therefore be taken out of service!
-  **DANGER** The electrical components of the device must not be opened or modified without the manufacturer's permission!
-  **DANGER** Ensure that no one can injure themselves or become strangled by any cables!
-  **DANGER** Risk of electric shock! Keep children playing away from all electronic components!
-  **DANGER** Risk of electric shock! The device's cables are not designed to be run over! If cables are damaged, the drive must be taken out of service immediately and disconnected from the power source!
-  **DANGER** If the emergency stop mechanism in front of the chest pad malfunctions, the device must not be used any further and must be taken out of service immediately!
-  **WARNING** The electric drive is not intended for use by small children!
-  **WARNING** Always keep an eye on the drive and all moving parts!
-  **WARNING** During operation, the mains plug and the emergency stop switch must be accessible at all times so that the device can be quickly disconnected from the power supply in an emergency!
-  **WARNING** Check that the device specifications are compatible with the existing power supply network! Refer to section "13. Technical data" and the stickers on the control box!
-  **CAUTION** Repair and inspection work may only be carried out by operators/service providers!

Once the device has been completely unpacked, checked for defects and damage, and positioned as specified, a functional test of the electric drive must be carried out. The following procedure applies here:

Step 1. Check whether the device is compatible with the existing power supply (230V / 50 Hz).

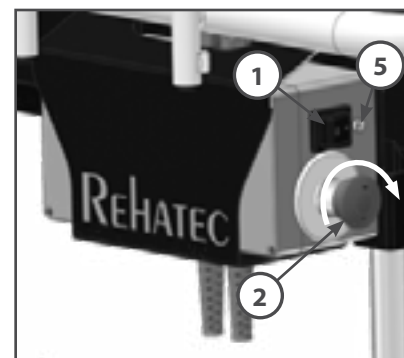
Step 2. Check whether the toggle switch [1] is in the "Off" position (On: switch position [I]; Off: switch position [O]).


Step 3. Reactivate the emergency stop function by turning the emergency stop switch [2] in the direction indicated by the arrow (clockwise) and releasing it.


Step 4. Insert the plug [3] into the socket [4].


Step 5. Set the toggle switch [1] on the control box to the "On" position (switch position [I]).

Step 6. Check the function of the LED indicator light [5] on the control box next to the toggle switch [1]. The indicator light [5] (5) must remain lit green.




 **IMPORTANT** As soon as the indicator light [5] lights up green continuously, the device is supplied with power and is ready for operation.

 **CAUTION** If, after steps 1 to 6, the indicator light [5] flashes or does not light up, the device must not be used! Please contact your dealer to clarify how to proceed!

 **DANGER** If the drive starts up on its own due to a defect, it must be stopped immediately by pressing the emergency stop button or pulling the mains plug. The device must not be used any further and must be taken out of service immediately!


 **WARNING** Always keep the hand switch away from magnetic objects and strong magnetic fields!

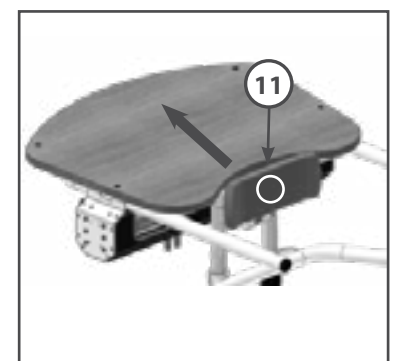
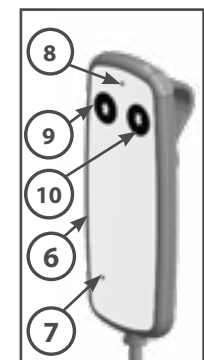
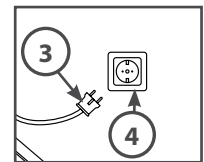
Step 7. Pick up the hand-held control unit [6] and check whether the indicator light [7] in the lower section is lit up green continuously. If the indicator light [7] is green, the device is ready for operation and can be operated using the hand-held control unit. If the indicator light [7] is not lit, there is a malfunction in the hand-held control unit [6].

 **DANGER** If the indicator light [7] remains off in step 7, the device must not be used! Please contact your dealer to clarify how to proceed!

The Heidelberg Upright Stander Impuls has a safety system known as an "emergency stop mechanism", which serves to protect the patient from being crushed between the seat belt and fixed parts in the chest area when in an upright standing position. The preset minimum distance between fixed parts (table, frame) and chest pad is approximately 1.5 cm.

 **DANGER** The safety system "emergency stop mechanism" must not be interfered with in its function!

 **DANGER** The preset safety distance between the fixed parts (table, frame) and the emergency stop pad or chest pad must not be changed during adjustment and assembly work!



5. Operation

Step 8. The emergency stop mechanism must be checked as follows: With one hand, press the chest pad [11] in the middle area as far as it will go towards the table (in the direction of the arrow shown) to activate the emergency stop mechanism behind it. At the hand control [6] , simultaneously press the "Up" button [9] with your other hand. (Button with upward arrow ↑).
The system is functioning correctly when:

- the indicator light [8] lights up yellow
- (i.e. the electric drive is in operation),
- the drive is out of order and at the same time
- der Aufrollvorgang des Zuggurts blockiert ist.

 **DANGER If the device does not function correctly in step 8**

- The indicator light [8] flashes or does not light up.
- Despite the emergency stop mechanism [11] being activated, the electric drive starts/rolls up the tension belt.

then the standing device must not be used!
Please contact your dealer to clarify how to proceed!

Step 9. Continue to press the chest pad [11] with one hand as far as it will go towards the table (in the direction of the arrow shown) to activate the emergency stop mechanism behind it, and press the "Down" button [10] on the hand control [6] with your other hand. (Down arrow key ↓). The system is functioning correctly when:

- the indicator light [8] lights up yellow (electric drive is in operation)
- the drive is functioning and
- the tensioning strap is being unwound.,


 **DANGER If the device does not function correctly in step 9**

- The indicator light [8] flashes or does not light up.
- Despite activating the emergency stop mechanism [11], the electric drive does not start/unroll the tensioning strap.

then the standing device must not be used!
Please contact your dealer to clarify how to proceed!

Step 10. Release the chest strap [11] and check that the belt rolls up and down properly by pressing the "Up" and "Down" buttons in turn. [9] (Button with upward arrow ↑) and "Off" [10] (Button with down arrow ↓) Press and hold for a moment. The system is functioning correctly if the two pull straps roll up and down evenly and smoothly.

 **The electric drive of the Heidelberg Upright Stander Impuls has an electromagnetic braking function and locks itself when no power is applied.**

 **The electric drive of the Heidelberg Upright Stander Impuls has two adjustable end positions for belt winding and unwinding (see section "Maintenance and Inspection").**

Once the electrical drive has been checked and before the patient can be positioned in the Heidelberg Upright Stander Impuls, the Heidelberg Upright Stander Impuls is adjusted to the patient's needs.

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

In this step, first check all the manufacturer's default settings and tighten all screw connections (which may have been loosened during transport).

The patient may only be positioned in the device once all screw connections have been tightened and the device has been adjusted to the patient's measurements.

Please note the following:

 **WARNING Ensure that no one can be injured while using the device!**

 **DANGER! If defects are found during functional testing/visual inspection, the device must not be used until they have been rectified!**

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

1. The table column is free of defects and securely mounted.
- 2.All screw connections have the necessary counterparts and are firmly fastened.
- 3.Frame components and transport rollers are free of cracks and are not deformed.
4. Transport rollers/feet are securely fastened and parking brakes function properly.
- 5.All available clamping elements for positioning elements (e.g. knee pads, chest pads, etc.) are available and functional.
- 6.All contact surfaces are dry and free of contamination.

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






- 1.The gas spring has no oil leaks and the frame has no visible defects.
- 2.The hydraulic release is free of defects, securely mounted and functions perfectly.

For all configurations with dynamic function, please carry out a visual inspection and functional test of the device to confirm the following:

1. The gas spring of the movable swivel arm pelvic frame has no oil leaks and the frame has no visible defects.
2. The hydraulic release of the swivel arm pelvic frame is free of defects, securely mounted and functions perfectly – the frame can be locked and released
3. The movable footboard can be locked
4. The dynamic knee pads can be locked
5. The straps of the movable pads show no signs of damage

5. Operation

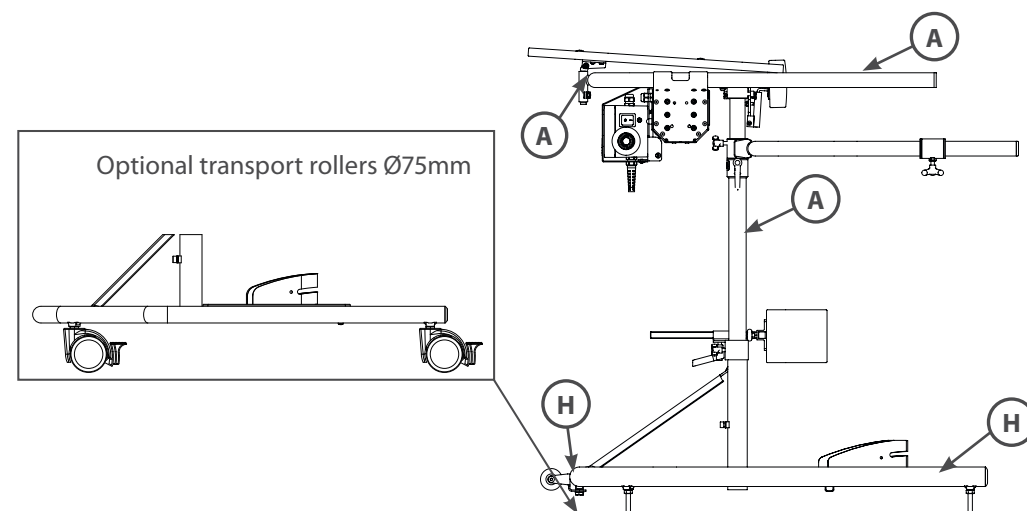
5.6 Device and patient transport

-  **CAUTION** The standing device is heavy and must only be lifted by at least 2 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. Patient transport in the device is prohibited when the feet are in place!
-  **DANGER** Before transport, the patient must be secured against unintentional falling out!
-  **WARNING** The therapy table and all other components of the device that are not marked as pushing points must not be used when transporting the device.


For safe and convenient transport of the device:

1. Set the table to the lowest position.
2. Grasp the unit on the right and left at the front and rear at the holding points [H] and lift it simultaneously with two people..

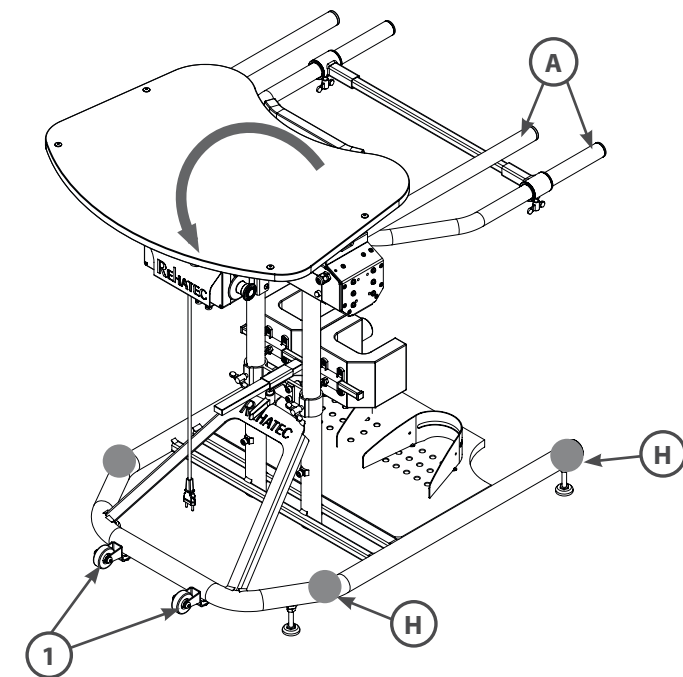
For safe and convenient transport of the device and patient (only with optional transport castors) Use the holding and pushing points [A].



Moving on temporary castors (standard)








-  **WARNING** The standing device must not be moved forward/moved together with the patient!
- To move the device using the temporary castors [1], tilt the device forwards at the pipe bend of the table mount or at the bar (A) until the device is standing on the temporary castors [1].

The device can now be moved to the desired location.






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 standing device, 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 adjustments 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 castors must be locked before adjusting the device.**
-  **DANGER! Before using the device, check the following points with the treating physician:**
 - Disease-specific use of the device (contraindications)
 - How long may the patient remain in the device to prevent possible injury?
 - Suitable accessories for ensuring the patient's stability
 - 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 made without a patient.**
-  **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. A secure connection between parts must be ensured!**

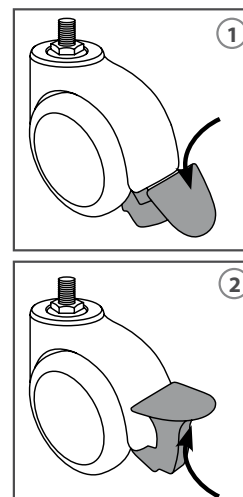
6.1 Transport castors

The four castors are equipped with locking brakes.

-  **WARNING The standing 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).



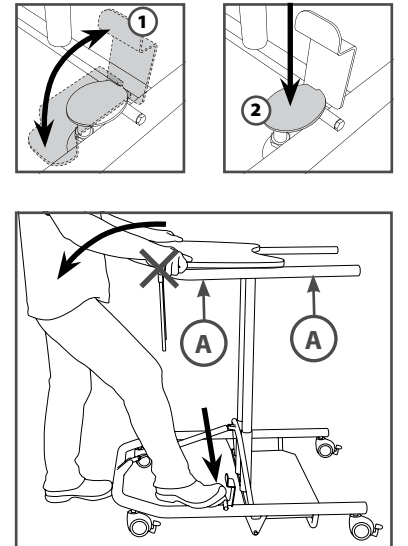
6.2 Multi base frame (optional)

With the Multi base frame, the frame can be tilted forward by up to 20°. This is used to train the back muscles and to straighten the pelvis.

-  **WARNING: When performing any adjustment work, be aware of the risk of pinching and crushing.**
-  **DANGER! If transport rollers are fitted, they must be locked in place before adjusting the device!**

Adjustment of the angle :







- Fold the cover [1] upwards.
- Press the foot release [2] down and hold it in place.
- Grasp the table with both hands at the holding points [A] and press down until the desired angle is reached.
- Release the foot release [2].
- Fold the cover [1] downwards..



6.3 Mechanical table height adjustment

The top edge of the table must be adjusted to the patient's elbow measurement. To do this, bend the elbow at a 90° angle and measure the distance between the elbow and the footboard.

This measurement corresponds to the required top edge of the table.

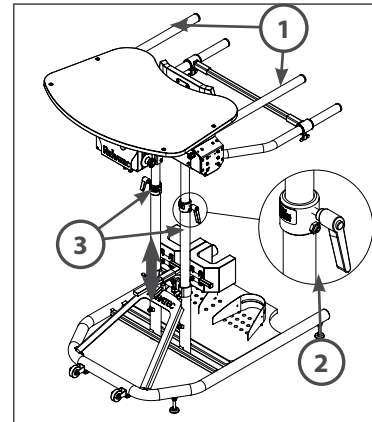
-  **WARNING It is strongly recommended that you make a temporary adjustment to the table height before using the device without the patient.**
-  **WARNING Adjustments without gas spring support must be carried out by two people to prevent possible injury!**
-  **IMPORTANT The complete frame assembly weighs more than 25 kg without accessories (all pads, crossbar, headrest)!**
-  **DANGER! Do not cross the red markings on the columns.**
-  **WARNING! Risk of breakage! When adjusting the table height, do not apply any lifting forces to the tabletop! The entire upper frame section may only be lifted by the frame!**
-  **CAUTION! Beware of the risk of pinching and crushing!**

6. Operation/settings of the device and accessories

Adjusting the table height:

- The table mount [1] must be held in place by one person on each side.
- Loosen both clamping levers [2] by turning them anticlockwise.
- Adjust the table columns [3] to the desired height by lifting the table mount [1].
- Tighten the clamping levers [2] again by turning them clockwise..

⚠ DANGER! The clamping levers [2] must be tightened securely – otherwise there is a risk of injury!



6.4 Table height adjustment via gas pressure springs (optional)

The top edge of the table should be adjusted to the patient's elbow height to ensure an ergonomically correct standing position. Thanks to the integrated gas pressure springs, height adjustment can be easily carried out by a single person.

⚠ WARNING It is strongly recommended that you make a provisional adjustment to the table height before using the device without the patient.

⚠ DANGER! The lift column moves upwards automatically when slight pressure is applied. Avoid applying excessive upward pressure, as this may cause the lift column to be pulled out of the guide. Exceeding the maximum adjustment range is indicated by the red mark.

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

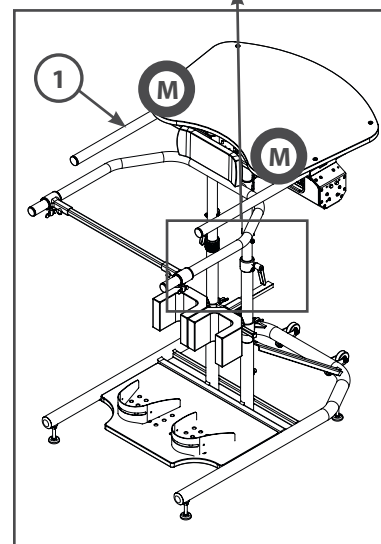
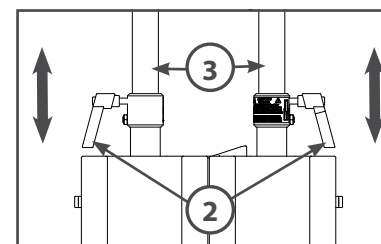
⚠ CAUTION! The table column may only be adjusted in height within the marked areas [M]. Adjustment outside these areas may cause the column to jam and impair its function.

Adjusting the table height :

- Hold the table mount [1] firmly with both hands.
- Loosen both clamping levers [2] anticlockwise.
- Adjust the table columns [3] to the desired height by raising or lowering the table mount in the area [M] in the centre axis.
- Tighten the clamping levers [2] again by turning them clockwise.

⚠ DANGER! The clamping levers [2] must be tightened securely – otherwise there is a risk of injury!

i CAUTION! Additional accessories installed on the centre column increase the effective load on the lift column. This means that the pressure required to raise the table must be increased accordingly. When lowering the table, it may be necessary to support it. It



is important to pay attention to the marked areas [M] to prevent the lift column from tilting.

⚠ CAUTION! In the retrofit kit, the gas pressure springs are in the extended position to ensure safe transport.

6.5 Swivel arm pelvic frame (optional)

⚠ WARNING If the patient is not fit enough to hold their upper body upright independently, increased force is required to open or close the frame!

⚠ WARNING The swivel pelvic frame is not designed for high tensile and compressive loads! It is only intended to secure the patient in the rear area in a standing position. The patient must not pull themselves up on it when standing up or sitting down.

⚠ DANGER The patient must always be secured with the rear crossbar or swivel arm/scissor pelvic frame after standing up! Use of the device without the crossbar or swivel arm/scissor pelvic frame is prohibited!

To open:

- Open the star handle [1] by turning it anticlockwise. Lift the latch [2] and swing the pelvic frame [3] backwards or sideways.

To close:

- Swing the pelvic frame [3] back. Allow the latch [2] to engage completely by applying counterpressure to the pelvic frame.
- Tighten the star handle [1] again by turning it clockwise.

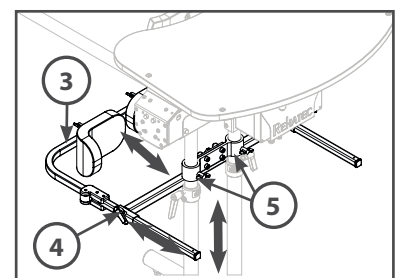
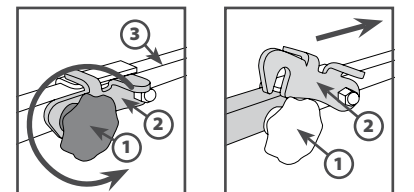
Depth adjustment:

- Loosen the clamping lever [4] anticlockwise.
- Adjust the depth of the swivel arm pelvic frame [3].
- Tighten the clamping lever [4] again clockwise.

Height adjustment:

- Loosen the wing screw [5] anticlockwise.
- Adjust the height of the swivel arm pelvic frame [3].
- Tighten the wing screw [5] clockwise again.

⚠ WARNING Tighten all clamping elements again after each adjustment!



6. Operation/settings of the device and accessories

6.6 Parallel support bars

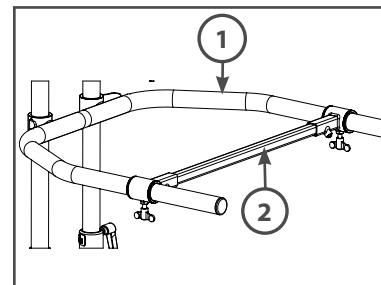
⚠ DANGER Caution! Risk of tipping! Do not lean on the bar! Only use the table mount when getting on and off.

⚠ WARNING The parallel support bars are not designed for heavy loads. It is only intended to secure the patient in a standing position at the rear.

The bar [1] allows the patient to support themselves and/or hold on to it when sitting up and sitting down.

The rear crossbar [2] on the bar provides additional protection against falling out for patients who are sitting up.

⚠ DANGER The patient must always be secured with the rear crossbar or swivel arm/scissor pelvic frame after being raised to a standing position!
Use of the device without the crossbar or swivel arm pelvic frame is prohibited!



Height adjustment

⚠ IMPORTANT It is easier to make the adjustment with two people!

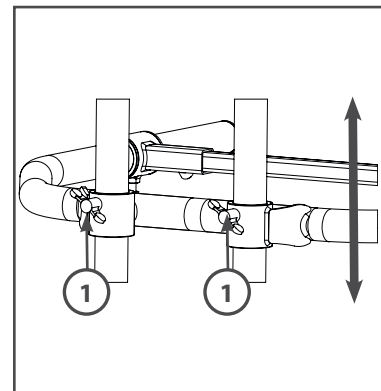
⚠ CAUTION! Beware of the risk of pinching and crushing!

The rear crossbar and pelvic pads can only be adjusted to the optimum height by adjusting the height of the bar frame. To adjust the height of the bar frame, proceed as follows:

1. The bar rack must be held firmly on the bars.
2. Loosen the wing screws [1] anticlockwise. Two to three full turns are sufficient for this.
3. Adjust the height of the bar frame with both hands.
4. Tighten the wing screws [1] again clockwise.

⚠ DANGER Caution! Risk of tipping! Do not lean on the bar! Only use the table mount when getting in and out.

The optionally available pelvic pads can be attached individually to the rear crossbar on the parallel bar and provide the patient with additional comfortable support during standing therapy.



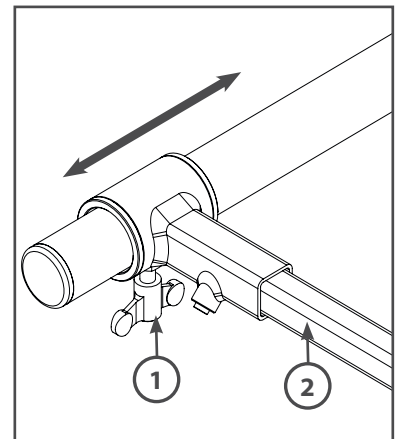
Depth adjustment

i The depth adjustment can only be applied along the bar frame by adjusting the rear crossbar forwards and backwards..

To adjust the depth of the pelvic pads (as with the depth adjustment of the rear crossbar), proceed as follows:

1. Loosen the wing screws [1] anticlockwise. Two to three full turns should suffice.
2. Adjust the rear crossbar [2] to the desired depth.
3. Tighten the wing screws [1] clockwise again.

⚠ DANGER Risk of injury! The wing screws must then be tightened securely!

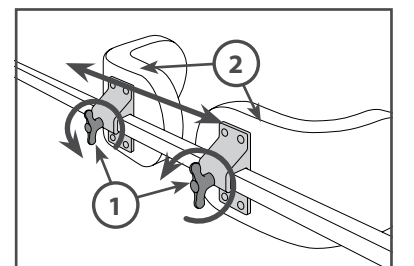


Width adjustment

To adjust the width between the pelvic pads, proceed as follows:

- Loosen the wing screw [1] anticlockwise.
- Two to three full turns should suffice.
- Move the pelvic pad holder [2] to the desired position.
- Tighten the wing screw [1] again clockwise..

i Repeat the process to adjust the second pelvic pad.



6.7 Foot shells, plug-in / screw-on

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

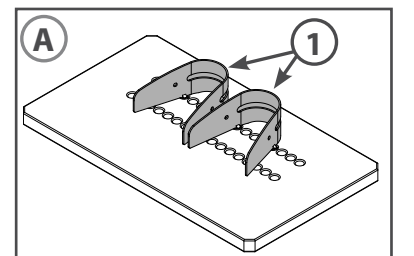
⚠ DANGER! All adjustments/positioning of the footrests must be carried out without the patient! When in a standing position, the patient must always be securely positioned and fixed in place!

⚠ WARNING If available, the patient should 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 [3] using Velcro fasteners.

For positioning 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).



6. Operation/settings of the device and accessories

For positioning the screw-on foot shells (Figure B)

Loosen the nuts [2] counterclockwise and remove them. Lift the foot shells [1] out of the footboard and insert them into the desired position. Tighten the nuts [2] again.

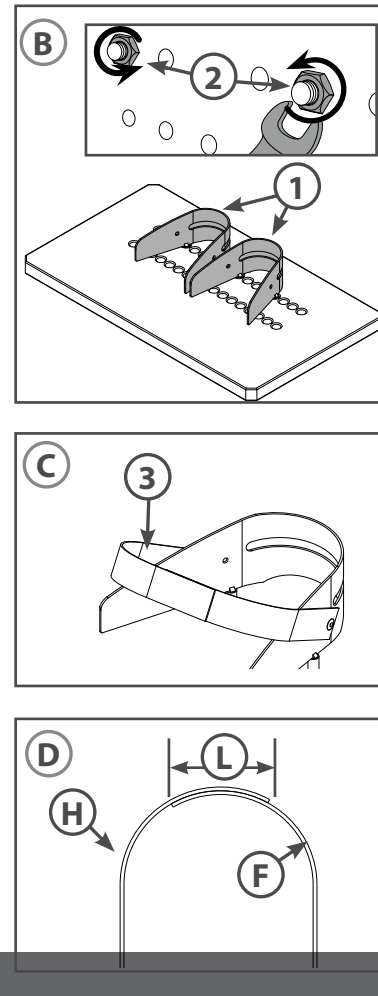
To open the Velcro fastener (Figure C), pull the edge of the upper strap until it opens while holding the lower strap in place.

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 Velcro [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 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.



6.8 Knee pads

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!

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

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

For height adjustment

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

For width adjustment

- Loosen the wing screws [2] counterclockwise.
- Adjust the knee pad.
- Tighten the wing screws [2] clockwise again.

DANGER! Performing depth adjustment without the patient! The patient must be securely restrained in the standing position!

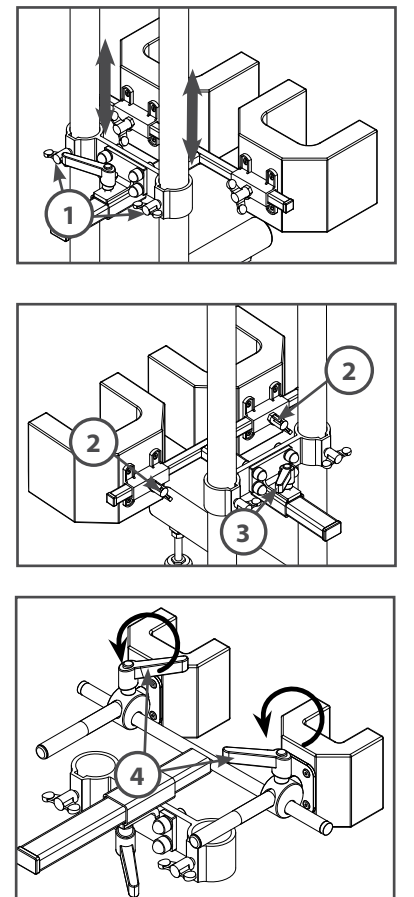
For depth adjustment

- Loosen the clamping lever [3] by turning it anticlockwise.
- Adjust the knee pad.
- Tighten the clamping lever [3] again by turning it clockwise.

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! After making any adjustments, tighten all clamping elements again.



6.9 Individually adjustable knee pad

The individually adjustable knee pads can be adjusted independently of each other in height..

DANGER! All safety instructions in section 6.9 Knee splints must be observed!

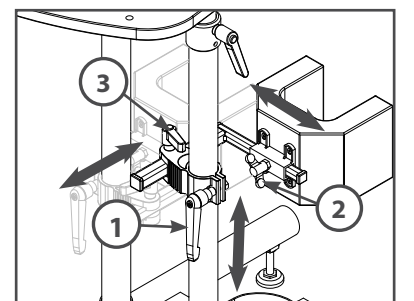
For height adjustment

- Loosen the clamping lever [1] by turning it anticlockwise.
- Move the knee pads to the desired height.
- Tighten the clamping lever [1] again by turning it clockwise.

For width adjustment

- Loosen the wing screw [2] counterclockwise.
- Adjust the knee pad.
- Tighten the wing screw [2] clockwise again.

DANGER! Adjust the depth without the patient! The patient must be securely fixed in the standing position!



6. Operation/settings of the device and accessories

For depth adjustment

- Loosen the clamping lever [3] counterclockwise.
- Adjust the knee pad.
- Tighten the clamping lever [3] clockwise again.

i Repeat the process on the other side.

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

6.10 Anti-rotation device for individually adjustable knee pads

Attaching the anti-rotation device

The anti-rotation device is pushed onto the holders of the individually adjustable knee pad holders.

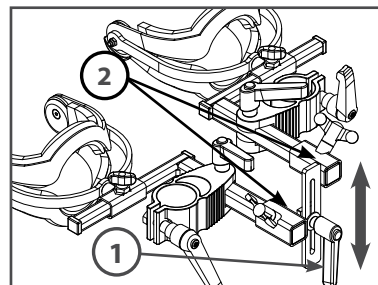
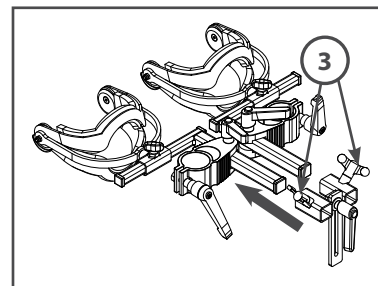
To do this, loosen the two mini wings [3] counterclockwise and push on the anti-rotation device. Then tighten the two mini wings [3] clockwise.

i **CAUTION** Be aware of the risk of crushing when adjusting!

Adjusting the anti-rotation device

By loosening the clamping lever [1] counterclockwise, the two holders [2] can be adjusted individually and independently of each other in height. Then tighten the clamping lever [1] again clockwise..

i **CAUTION** Be aware of the risk of crushing when adjusting!



6.11 Therapy table

The therapy table is ideal for occupational therapy exercises. In the standard version, it can be folded forward during the sitting-up process to give the patient additional support on the frame.

! **WARNING** The preset safety distance between the fixed parts (table, frame) and the emergency stop pad or chest pad is approximately 1.5 cm. This distance must always be observed when adjusting the table top and must never be changed!

! **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!** Only adjust the table height when the patient is not on it!

i **IMPORTANT** The assembled upper frame weighs over 10 kg (without removable accessories such as pads, crossbar and headrest).

! **WARNING** Table height adjustment must be carried out by at least two people together to avoid possible injury!

! **WARNING** Risk of breakage! When adjusting the table height, do not apply any lifting forces to the tabletop! The entire upper frame assembly 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 in place on both sides at positions [2] by one person each.
- Loosen the clamping lever [3] by turning it anticlockwise.
- Adjust the table column [4] to the desired height by lifting/lowering the table mount [1].
- Tighten the clamping lever [3] by turning it clockwise.

! **WARNING** The maximum adjustment is reached when the ends of the tubes become visible in the inspection windows. The tubes must not be pulled out any further – see section 6.3 Table column!

Table depth adjustment (optional)

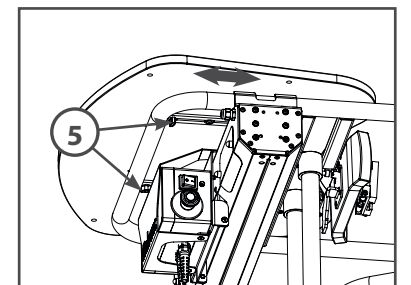
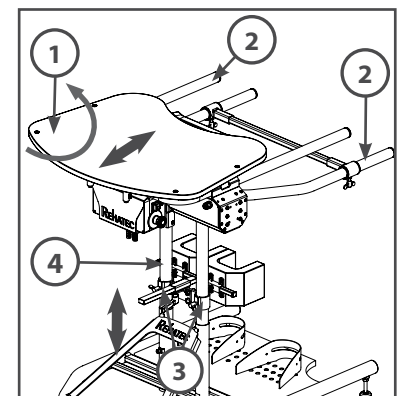
- Loosen both mini-wings [5] counterclockwise.
- Adjust the depth of the table by pushing it forwards or backwards.
- Tighten the mini-wings [5] again clockwise..

i **IMPORTANT** For configurations with table depth adjustment, the emergency stop mechanism is mounted on the table top and changes position along with the table top. In this version, the table top cannot be folded down!

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

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

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



6. Operation/settings of the device and accessories

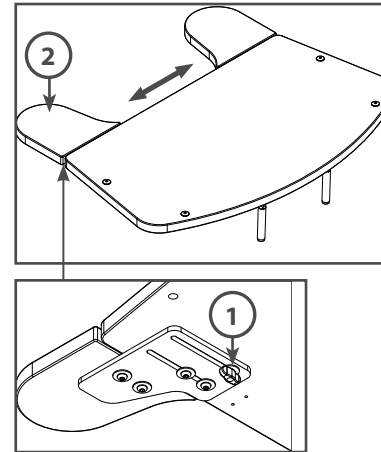
6.12 Therapy table top with straight table edge and parallel adjustable armrests

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 wing [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.

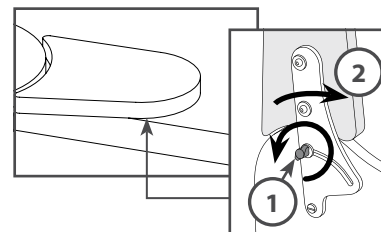
⚠ DANGER! Tighten all clamping elements again after each adjustment!



6.13 Armrests for standard tabletop

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

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

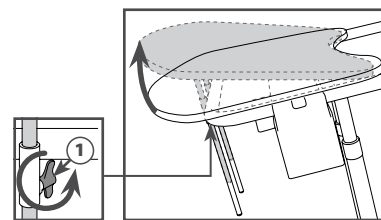


6.14 Table top tilt adjustment (optional)

The table top tilt adjustment can be used to return the table to a horizontal position when the "Multi" base frame is tilted.

After tilting the patient with the frame, proceed as follows with the table top tilt adjustment:

Loosen the wing screws [1] counterclockwise. Raise the table to the desired height. Tighten the wing screws [1] again.



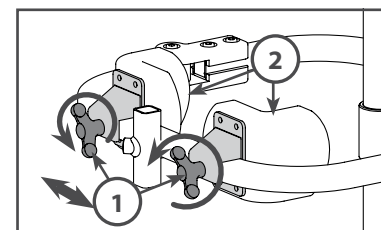
6.15 pelvic pads

i IMPORTANT With a swivel arm pelvic 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!



6.16 Chest pad (optional)

For more support during standing training, a chest pad with a larger contact surface is available as an option..

i To make it easier to attach the chest pad to the standing frame, the table top can be tilted forward.

i If side guides are attached to the chest pad, these must be removed before adjusting the chest pad and then reattached afterwards (see chapter "6.12 Side guides (attachment to the chest pad, optional)").

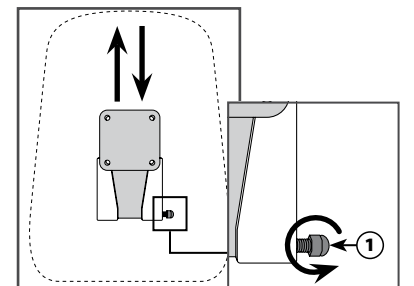
⚠ WARNING Risk of crushing! The armrests must not restrict the function of the emergency stop mechanism by colliding with the chest pad/side guide pads!

⚠ CAUTION! Beware of the risk of jamming and crushing!

Installation / Replacement

To fit the chest pad, proceed as follows:

- Loosen screw [1] by turning it anticlockwise.
- Pull the chest pad upwards out of the holder.
- Insert the (new) chest pad into the holder.
- Tighten screw [1] again by turning it clockwise..

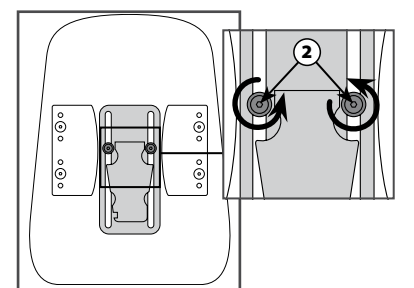


Height adjustment

i To adjust the height, the chest pad must first be removed from the standing frame (see "Assembly/Replacement" above).

To adjust the height of the chest pad, proceed as follows:

- Loosen the two screws [2] on the chest pad counterclockwise.
- Adjust the height of the chest pad holder.
- Tighten the screws [2] clockwise again.
- Reattach the chest pad to the standing frame.



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

6. Operation/settings of the device and accessories

6.17 Lateral support pads adjustable in height and width (optional)

The Heidelberg Upright Stander Impuls offers two variants of lateral support pads.:

- For attachment to the chest pad and for attachment to the back pad.

The following describes how to use the lateral support pads in conjunction with the optionally available chest pad.



CAUTION! Beware of the risk of pinching and crushing!
DANGER! Tighten all clamping elements again after each adjustment!

Assembly and width adjustment



The chest pad must be removed from the standing device for the purpose of mounting and adjusting the side guide pads and then remounted afterwards.

To fit the lateral support pads and adjust their width, proceed as follows:

- Loosen screws [1] counterclockwise.
- Attach the side guide pad as shown or adjust the width as desired.
- Tighten screws [1] clockwise again..



Repeat steps 1 to 3 to fit the second side guide pad or adjust its width.

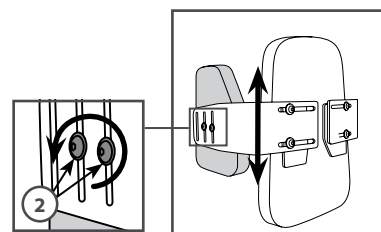
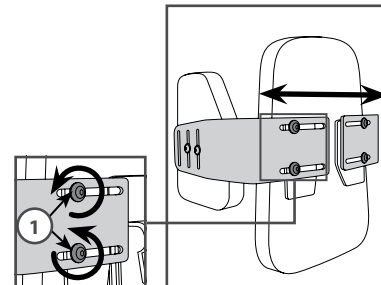
Height adjustment

To adjust the height of the side guide pads, proceed as follows:

- Loosen screws [2] anticlockwise.
- Adjust the height of the side guide pad.
- Tighten screws [2] clockwise again..



Repeat steps 1 to 3 to fit the second side guide pad or adjust its width..



6.18 Back support (optional)

An optional headrest and two side support pads can be attached to the back pad.



If the headrest is fitted, it must be removed before adjusting the backrest and refitted after adjustment.



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



DANGER! The cross connection for the back support is not intended to secure the patient and must not be used instead of the rear crossbar!

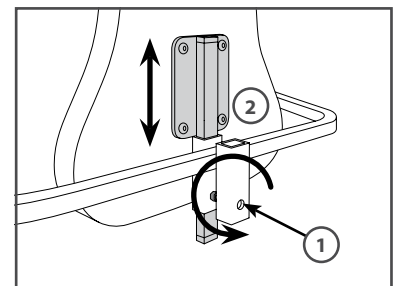
Height adjustment

To adjust the height of the backrest, proceed as follows:

1. Loosen the grub screw [1] anticlockwise.
2. Adjust the height of the back pad [2].
3. Tighten the grub screw [1] clockwise again.



DANGER! Tighten all clamping elements again after each adjustment!



Depth adjustment



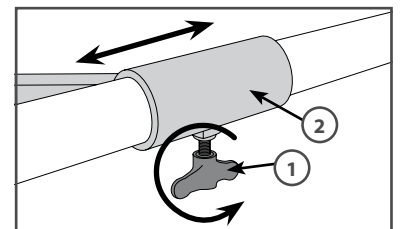
The backrest pad can only be positioned at the desired depth by adjusting the depth of the crossbar.

To adjust the depth of the backrest, proceed as follows: :

1. Loosen both wing screws [1] on the cross connection counterclockwise.
2. Adjust the depth of the cross connection [2].
3. Tighten both wing screws [1] on the cross connection clockwise again.



DANGER! Tighten all clamping elements again after each adjustment!



6. Operation/settings of the device and accessories

6.19 Lateral support pads (mounted on the back pad, optional)

The Heidelberg Upright Stander Impuls offers two variants of side support pads:

- For attachment to the chest pad and for attachment to the back pad.


The following describes how to use the lateral support pads in conjunction with the optionally available back pad.

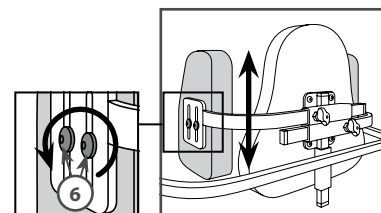
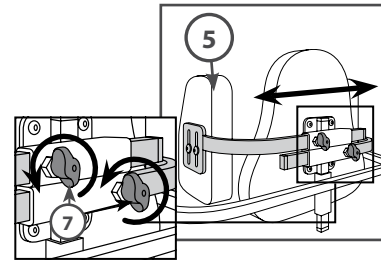
For height adjustment:

- Loosen all screws [6] counterclockwise.
- One and a half to two full turns should suffice.
- Adjust the lateral guide pad [5] to the desired height.
- Tighten all screws [6] clockwise.
- Repeat the process for the second side.

For width adjustment:


- Loosen the wing screws [7] on both sides by turning them anticlockwise. 1.5 to 2 full turns should be sufficient.
- Adjust the side guide pads [5] to the desired width.
- Tighten the wing screws [7] by turning them clockwise.

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





6.20 Headrests

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

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

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..

 **DANGER!** Always check the patient's head position. The patient must be able to breathe freely!

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

Incline adjustment, headrest

To adjust the angle of the headrest, proceed as follows:

1. Loosen the screw connection [1] by turning it anticlockwise.
2. Adjust the headrest [2] to the desired angle.
3. Tighten the screw connection [1] again by turning it clockwise..

Angle adjustment, headrest holder


To adjust the angle of the headrest, proceed as follows:

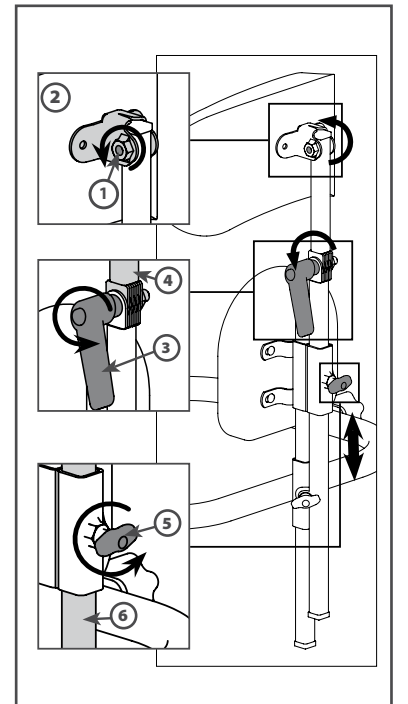
1. Loosen the clamping lever [3] anticlockwise.
2. Adjust the headrest holder [4] to the desired angle.
3. Tighten the clamping lever [3] again clockwise..

Height adjustment


To adjust the height of the headrest, proceed as follows:

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

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



6.21 Dynamic functions

 **Before using the device, the following points must be checked together with the attending physician:**

- Disease-specific suitability of the device (especially contraindications)
- Maximum duration of patient use of the device to avoid potential injuries
- Suitable accessories for safe stabilisation of the patient in a standing position
- Accessories required for correct and safe joint or body positioning
- Permissible adjustment limits of the positioning elements on the device
- Recommended frequency of use of the device in accordance with the therapy plan

 **DANGER!** Before transferring the patient to the standing device, the following safety measures must be carried out:

- The device must be placed on a non-slip, level, stable and horizontal surface.
- The transport castors must be locked before any adjustments are made to the device.
- All dynamic functions – such as the movable footboard, the swivel

6. Operation/settings of the device and accessories

- arm pelvic frame and the dynamic knee pads – must be completely locked.
- The device must be prepared and adjusted according to the individual needs of the user.
- Only when all these points have been fulfilled may the patient be safely transferred to the standing device.

! DANGER! Some settings on the device can only be made without a patient.

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

Dynamic footboard

! DANGER! Before transferring the patient to the standing device, the movable footboard must be locked – move the lever to the "Closed" position!

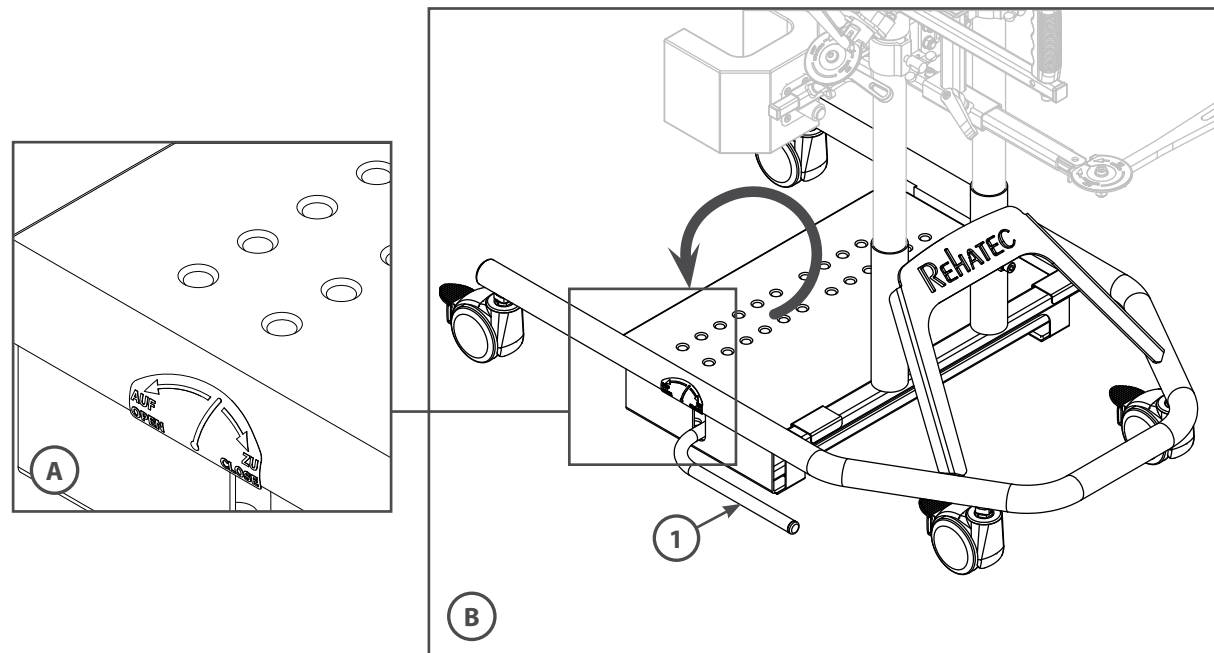
To close the dynamic function:

- Turn lever [1] to the right (clockwise).
- The footboard is now rigid – the dynamic function is deactivated. (see image B)

To open the dynamic function:

- Turn lever [1] to the left (counterclockwise).
- The footboard is now movable – the dynamic function is activated..

! Note: A sticker on the frame indicates the current position or setting of the footrest. (Image A)



Dynamic Knee Pad

! DANGER! Before transferring the patient to the standing device, the dynamic knee pad must be locked – lever in the closed position!

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

! CAUTION! The maximum adjustment is reached when the ends of the adjustment tubes are flush with the guides! **CAUTION!** Beware of the risk of pinching and crushing in zone "E"! For all adjustments in this area, the dynamic knee pad must be locked – lever in the closed position!

For height adjustment

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

For width adjustment

- Loosen the wing screws [2] counterclockwise.
- Adjust the knee pad.
- Tighten the wing screws [2] clockwise again..

! DANGER! Adjust the depth without the patient! The patient must be securely fixed in the standing position!

For depth adjustment

- Loosen the clamping lever [3] counterclockwise.
- Adjust the knee pad.
- Tighten the clamping lever [3] clockwise again.

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

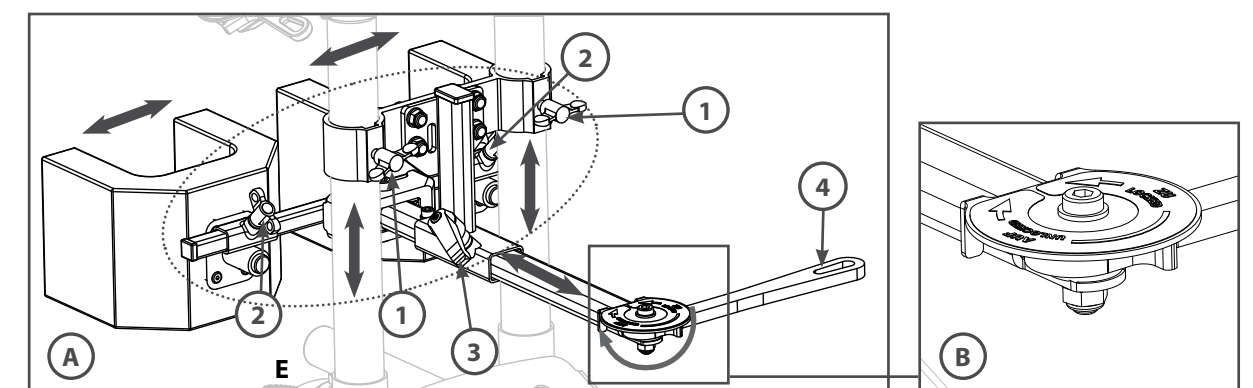
To close the dynamic function:

Move lever [4] to the right (clockwise). The knee pad now has no dynamic function. (Image A)

To open the dynamic function:

Move lever [4] to the left (counterclockwise). The knee pad is movable..

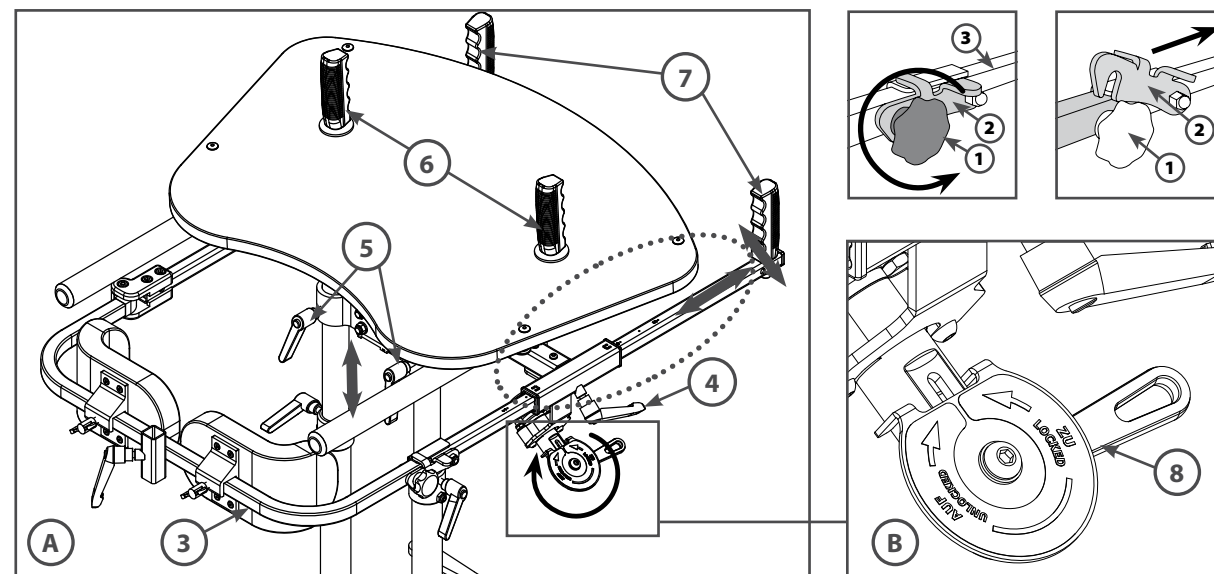
i Info: There is a sticker on the lever indicating the current setting of the knee pad (Figure B). Movable swivel arm pelvic frame



6. Operation/settings of the device and accessories

Dynamic swivel arm pelvic frame

- ! DANGER!** Before transferring the patient to the standing device, the dynamic swivel arm pelvic frame must be locked – lever in the closed position!
- ! WARNING** If the patient is unable to support their upper body independently, additional effort may be required to open/close the frame.
- ! WARNING** The swivel pelvic frame is not designed for high tensile and compressive loads! It is only used to secure the patient at the rear when standing. The patient must not pull themselves up on it when standing up or sitting down.
- ! DANGER** The patient must always be secured with the rear crossbar or swivel arm/scissor pelvic frame after standing up! Use of the device without the crossbar or swivel arm/scissor pelvic frame is prohibited!
- ! CAUTION!** Beware of the risk of pinching and crushing in zone "E"! For all adjustments in this area, the movable swivel arm pelvic frame must be locked – lever in the closed position!



To open:

- Open the star handle [1] counterclockwise. Lift the latch [2] and swing the pelvic frame [3] backwards or sideways.

To close:

- Swing the pelvic frame [3] back. Allow the latch [2] to engage completely by applying counterpressure to the pelvic frame.
- Tighten the star handle [1] again by turning it clockwise.

Depth adjustment:

- Loosen the clamping lever [4] anticlockwise.
- Adjust the depth of the swivel arm pelvic frame [3].
- Tighten the clamping lever [4] again clockwise.

Height adjustment:

- Loosen the clamping lever [5] by turning it anticlockwise.
- Adjust the height of the swivel arm pelvic frame [3].
- Tighten the clamping lever [5] again by turning it clockwise.

- ! WARNING** Tighten all clamping elements again after each adjustment!

To close the dynamic function:

- Move lever [8] to the right (clockwise). The swivel arm pelvic frame now has no dynamic function. (Image A)

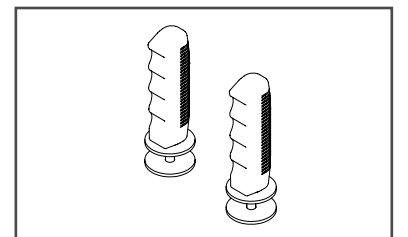
To open the dynamic function:

- Move lever [8] to the left (counterclockwise). The swivel arm pelvic frame is movable.
- To assist the patient, the movable swivel arm pelvic frame is equipped with additional grab handles. See also image A, position [7].

- i Info:** There is a label on the lever indicating the current setting of the swivel pelvic frame (Figure B).

Handrails

Optional handles are available which can be attached to the therapy table to provide additional support for the patient. See also image A, position [6].



Back and chest pad, movable, general

The adjustable chest and back pad adapts individually and ergonomically to the user's chest width/back width. The width is adjusted using the straps.

- ! DANGER!** All harnesses must be put on correctly and fastened securely!
- ! DANGER!** The straps must not be twisted!
- ! DANGER!** Check the harnesses at regular intervals!
- ! DANGER!** The user must be adequately secured/protected against falling out without compromising their comfort. Do not correct any incorrect body positions with excessive pressure. Use of the device without upper body safety elements (e.g. vests) is not permitted!
- ! DANGER!** Ensure that there are no objects under the padding! This will prevent painful pressure points.

6. Operation/settings of the device and accessories

To close (Figure A)

1. Place straps [1] and [2] on top of each other. The Velcro [3] and loop [4] of the two straps should overlap by at least 10 cm.
2. Close the buckles [5].
3. Tighten the straps [6].

The strap should fit comfortably but snugly on the user.

Image B shows the closed pad..

To open (Figure B)

1. Open the buckles [5].
2. Pull the straps [1] and [2] (Velcro) apart.

Now the user is free again.

Image A shows the pad in the open position.

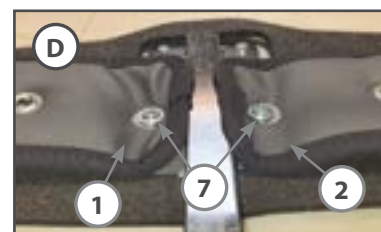
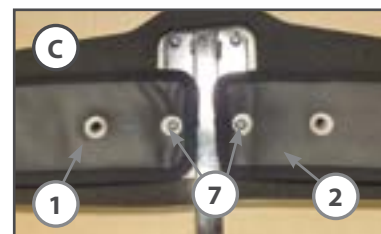
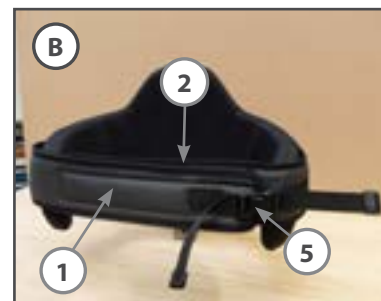
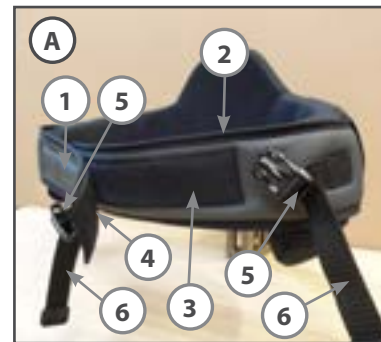
Further adjustment of the belt length:

To shorten straps [1] and [2]:

1. Open the cover at the zip on the back of the pad.
2. Remove the cover from the pad.
3. You will now see straps [1] and [2] (image C).
4. Unscrew the two screws [7].
5. Fold the strap so that the two eyelets are on top of each other and screw the screws [7] back in (Figure D).

To extend straps [1] and [2]:

1. Remove the cover from the pad.
2. Now you will see straps [1] and [2] (Figure D) in front of you.
3. Unscrew the two screws [7].
4. Unfold the strap and screw the screws [7] back in (Figure C).



Chest pad movable, height adjustable

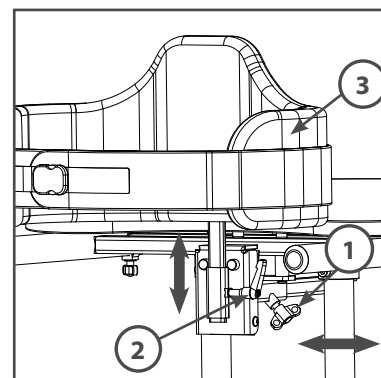
- CAUTION! Beware of the risk of pinching and crushing!**
- CAUTION! The maximum adjustment is reached when the pipes are flush with the guide.**

For depth adjustment:

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

For height adjustment:

- Loosen the clamping lever [2] by turning it anticlockwise.
- Adjust the height of the chest pad.
- Tighten the clamping lever [2] again by turning it clockwise.



To remove the breast pad:

- Loosen the clamping lever [2] anticlockwise.
- Remove the back pad [3].

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

Backrest pad movable, height-adjustable, rotatable

- CAUTION! Beware of the risk of pinching and crushing!**
- CAUTION! The maximum adjustment is reached when the pipes are flush with the guide.**

For depth adjustment:

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

For height adjustment:

- Loosen the clamping lever [3] anticlockwise.
- Adjust the height of the backrest.
- Tighten the clamping lever [3] again clockwise.

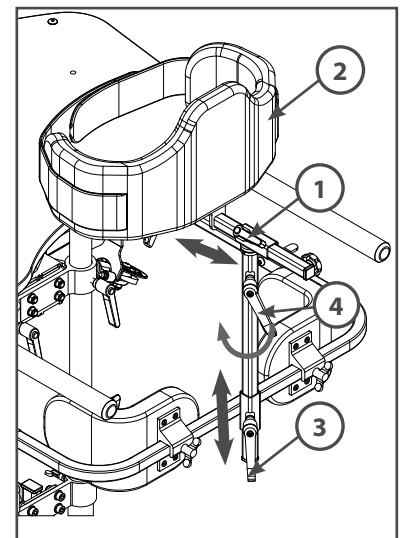
To remove the back pad:

- Loosen the clamping lever [3] anticlockwise.
- Remove the back pad [2].

Rotation of the back pad:

- Loosen the clamping lever [4] by turning it anticlockwise.
- Backrest pad [2] can be rotated (movable).















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




6. Operation/settings of the device and accessories

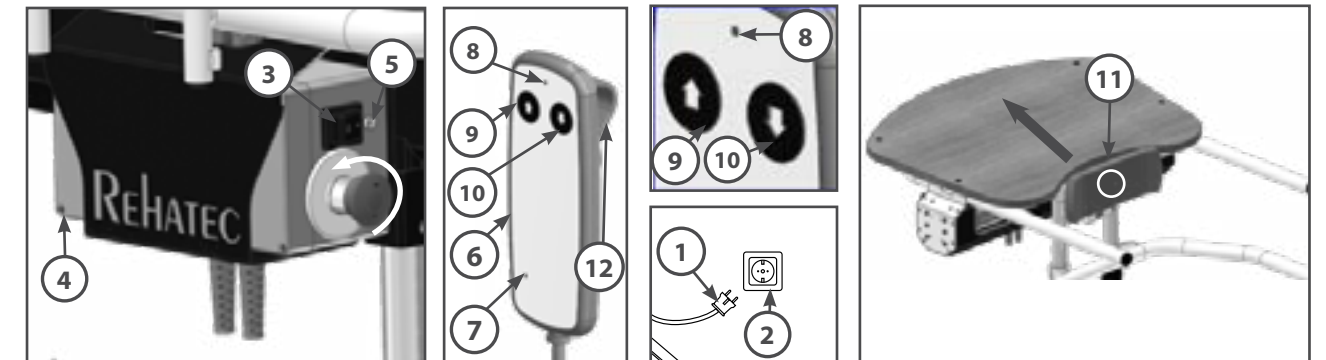
6.22 Use of the lifting system








Position the standing device near a power socket with a mains supply of 230 V / 50 Hz..

-  **DANGER** The device must be placed on a non-slip, level, stable and horizontal surface, and the transport rollers must be locked before the device is adjusted.
-  **DANGER** Risk of electric shock! The device's cables are not run-over resistant! If the cables are damaged, the drive must be taken out of operation immediately and disconnected from the power source!
-  **DANGER** The standing device may only be connected to the mains supply if the mains voltage of the socket corresponds to the information on the type plate!
-  **DANGER** The electric drive is not intended for use by small children!
-  **DANGER** The electric drive is maintenance-free! Do not open the housing!
-  **DANGER** Risk of electric shock! Keep children away from all electronic components!
-  **DANGER** Risk of explosion! The device must not be used in an environment where flammable or explosive gases or vapours (e.g. oxygen) are likely to occur. There is a risk of sparking during relay switching operations!
-  **DANGER** During operation, the mains plug and the emergency stop switch must be accessible at all times so that the device can be quickly disconnected from the power supply in an emergency!
-  **DANGER** Risk of electric shock! Never touch the mains plug with wet hands!
-  **DANGER** Risk of electric shock! Cables lying around are a tripping hazard! Damaged cables can cause electric shock!
-  **DANGER** The device is only to be used for therapeutic purposes! It must not be regarded or used as a patient lift!
-  **WARNING** Lay the power cable so that it does not become a tripping hazard!
-  **WARNING** A continuous operating time of 2 minutes must not be exceeded! After this, a minimum break of 18 minutes must be observed!
-  **WARNING** Ensure that no one can be injured while the drive is in use!

To use the lifting system, please proceed as follows:

1. Insert the plug [1] into the socket [2].
2. Set the toggle switch [3] on the control box [4] to the "On" position (On: switch position I; Off: switch position O).
-  **IMPORTANT** The device is ready for operation when the indicator light [5] on the control box [4] lights up green.
3. Take the hand control [6] in your hand.



-  **IMPORTANT** When the indicator light [7] is lit, the device is ready for operation..
-  **DANGER** The device may only be used after a successful functional test! The functional test must be carried out in accordance with steps 7 to 10 in section "5.5 Commissioning".
- 4. To roll up/raise, press the "Up" button [9]. (Button with upward arrow ↑) Press and hold to roll up the straps to the desired length or to raise the patient.
-  **IMPORTANT** If the "Up" button [9] is pressed, the LED indicator light [8] (yellow) illuminates and the drive is stationary, then:
 - the emergency stop mechanism [11] has been activated or the drive has reached its end position and the pull straps cannot be rolled up any further..
-  **DANGER** Risk of crushing! The function of the emergency stop mechanism [11] on the chest pad must not be impaired during the standing-up process!
-  **DANGER** The wheelchair must always be positioned directly behind the patient with the brakes applied, especially during the standing-up process, as long as the patient is not yet protected by the crossbar or the swivel arm pelvic frame!
- 5. To unroll/lower, press and hold the "Down" button [10] (button with downward arrow ↓) to unroll the straps to the desired length or to safely lower the patient into their wheelchair..
-  **IMPORTANT** If the "Down" button [10] is pressed, the LED indicator light [8] (yellow) illuminates and the drive stops, then the drive has reached its end position and the tension belts cannot be unrolled any further.
- 6. When not in use, hang the hand control [6] on the hook [12] on the standing device.
-  **DANGER** Disconnect the standing device from the mains when not in use!

6. Operation/settings of the device and accessories

6.23 Emergency discharge in the event of a power failure

In situations where the standing system cannot be used to lower the patient from the standing device into the wheelchair, the lowering process must be carried out manually. The operator must assess the situation correctly and call in additional helpers if necessary.

 **DANGER** Depending on the patient's condition and weight, 1-2 assistants may be required to lift the patient out of the standing device.


 **DANGER** The patient must never be left unattended!

 **CAUTION** The patient's individual limitations and abilities must be taken into account at all times!

 **CAUTION** When sitting down or standing up, do not place excessive weight on the footboard! Otherwise, there is an increased risk of tipping!

To lift the patient out of the standing device when the drive system is out of power or defective, proceed as follows:

1. In the event of defects or abnormalities in the drive, the standing device must be disconnected from the power supply immediately. It is also advisable to disconnect the device from the power supply in the event of a power failure to prevent the drive from being activated unintentionally.
2. Assess whether additional helpers are required and call for additional personnel if necessary.
3. Position the wheelchair directly behind the standing frame and apply all brakes.
4. Remove the rear crossbar or release the lock on the swivel arm pelvic frame and turn the swivel arm pelvic frame to the side.
5. Remove the snap hooks on the right and left of the seat belt one after the other while supporting the patient.

 **IMPORTANT** In extreme emergencies, the pull straps can be cut on one or both sides to remove the patient from the standing device! In this case, the standing device must be taken out of service until the pull straps have been replaced by a qualified specialist and the device has undergone a subsequent functional test!

6. Safely lower the patient into the wheelchair.
7. Release the patient's seat belt.
8. Position the patient comfortably in the wheelchair.
Remove the patient's feet from the standing frame's footplate..

 **DANGER** Do not use the device with damaged pull or seat belts!

6.24 Preparing the device


Before placing the patient in the Heidelberg Upright Stander Impuls, the following preparations must be made:

- The standing device should be set up by at least two operators to prevent possible injuries.
- Position the standing device in the desired location and lock the transport castors, if available.
- The Heidelberg Upright Stander Impuls must be connected to the mains power supply when using the belt reel.
- The safety instructions must always be observed when using the standing frame:

 **DANGER** The device may only be used on a horizontal, hard, level and non-slip surface!



 **DANGER** Risk of tipping! Extreme settings and unfavourable body posture (e.g. leaning out too far) increase the risk of tipping!

 **DANGER** Before each use and after each adjustment, check that all accessories are securely fastened!


 **DANGER** Risk of electric shock! Never pull on the cables to adjust the device! There is a risk of electric shock if the cables are torn or the insulation is damaged!

 **WARNING** Risk of burns! The surfaces of the device can heat up due to heat input (e.g. wood-burning stoves, sunlight)! The surfaces may heat up to over 40 °C!


 **WARNING** Always wear sturdy, closed footwear when transporting, adjusting, operating, maintaining, cleaning and disinfecting the standing device to avoid injury to your feet and toes!

 **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 or checked to suit the patient!

6.25 Preparing the patient for sitting up


 **DANGER** The standing device may only be used by a trained operator who has read and understood the complete operating instructions! Training must be provided by the operator/service provider!

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

 **DANGER** Depending on the patient's condition and weight, 1-2 assistants may be required to lift the patient onto and off the standing device!

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

 **WARNING** The individual limitations and abilities of the patient must always be taken into account!

 **WARNING** Immediately before use, be sure to test the emergency stop mechanism again by applying counterpressure to the pad while rolling up the pull strap (see chapter "5.5 Commissioning - Step 8 - How the emergency stop mechanism works").

6. Operation/settings of the device and accessories

! WARNING The standing device may only be used by one person! Ensure that the patient is adequately secured/fixed to prevent them from falling out, without compromising their comfort!

! DANGER! Before the patient may be transferred to the standing device with dynamic functions, all dynamic functions of the movable footboard, the movable swivel arm pelvic frame and the dynamic knee pad must be locked!

i Info: There are stickers on the levers of the dynamic functions (movable footboard, movable swivel arm pelvic frame and dynamic knee pad) indicating the current setting (OPEN/CLOSED).

i The lower the seat is positioned with the patient to the table, the easier it is to initiate the standing process!

All dynamic/movable functions are blocked (CLOSED)

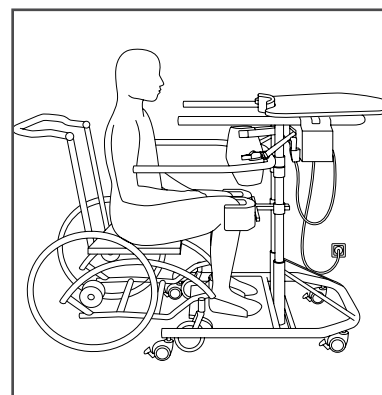
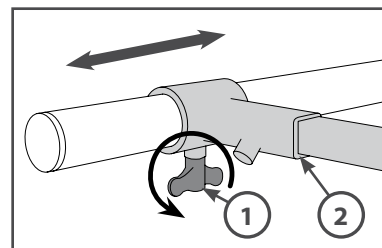
Remove the rear crossbar from the parallel bars as follows:

- Loosen the wing screws [1] counterclockwise.
- Remove the rear crossbar [2].
- Place the rear crossbar [1] safely within reach.
- If (optional) the swivel arm pelvic frame with pelvic pads is used: open the locking mechanism and swing the rear part of the device to the side.
- Position the wheelchair with the patient as close as possible to the standing device and apply all brakes on the wheelchair.
- Ensure that the wheelchair is secured against rolling away..

! DANGER The wheelchair must always be positioned directly behind the patient with the brakes applied – especially during standing up, when the patient is not yet secured by the crossbar or the swivel arm pelvic frame.

- Place the patient's feet in the foot trays.
- If foot straps are available, attach them and check the Velcro fastening.
- If necessary, make final adjustments to the knee pads (depth, height, distance, angle) to align them correctly above, below or on the patient's kneecap. For information on adjustment, see Chapter 6.8 'Knee pads (standard and 3-level support)' and Chapter 6.9 'Knee pads (individually adjustable, optional)'.

i Anatomical features must be taken into account when positioning the knee pads!



6.26 Attaching the lap belt

Open the snap hooks [1] by pressing the safety catch and remove the pull straps [2] of the strap reel from the snap hook [1].

! WARNING Risk of injury! Ensure that the snap hook does not slip out of the loops of the seat belt and that all loops are hooked in!

Tilt the patient forward until you can position the lap belt on the patient.

! WARNING Ensure that the buttock strap is positioned around the patient's buttocks and that the Velcro strap is fastened to the pelvis – otherwise, the buttock strap may slip and the patient may not be lifted properly!

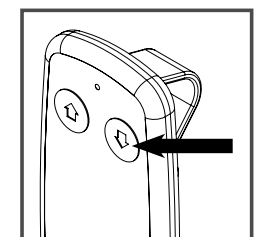
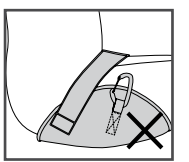
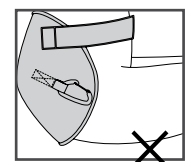
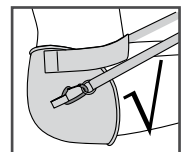
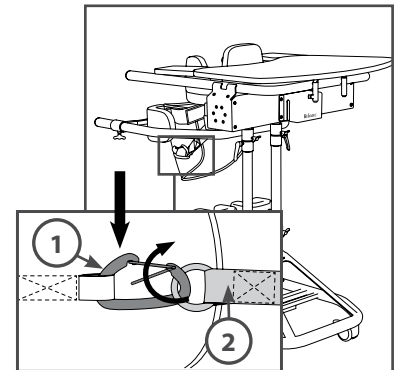
! WARNING The patient must always be supported during this procedure!

Press the 'Down' button (button with down arrow ↓) on the hand control and simultaneously pull both pull straps [2] until they reach the seat belt. Then hook the round eyelets of the pull straps [2] into the carabiner hooks [1].

i IMPORTANT During the unwinding process, the tension straps must always be pulled out by hand while applying tension!






! CAUTION The tension straps must run inside the bar frame to ensure correct winding.

i In order to operate the hand switch, the standing device must be connected to the mains (see chapter "6.22 Using the standing system").





6. Operation/settings of the device and accessories



6.27 Lifting the patient

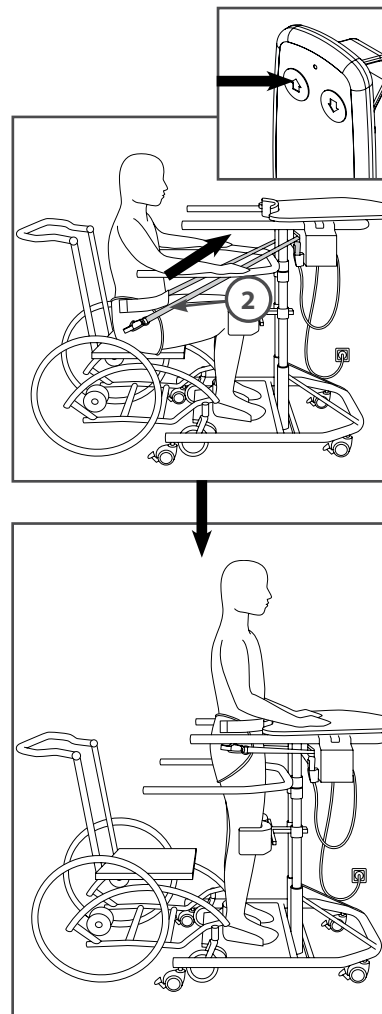
-  **DANGER Risk of injury!** When lifting the patient, the knee angle must not be less than 90°!
-  **WARNING Risk of injury due to crushing or trapping!** Keep your fingers away from the area between the carabiner of the pull straps and fixed frame parts!
-  **WARNING Risk of injury!** The patient must always be supported during the lifting process!
-  **DANGER** The wheelchair must always remain directly behind the patient with the brakes applied! This is particularly important during the lifting process, as long as the patient is not yet protected by the crossbar or swivel arm pelvic frame!
-  **WARNING** When sitting down or standing up, do not place excessive weight on the footrest! Otherwise, there is an increased risk of tipping!

Roll up the tension straps [2] by briefly pressing the "Up" button (button with upward arrow ↑) on the hand control and check that the lap belt does not slip.

-  **WARNING** If the lap belt slips, lower the patient and correct the position of the lap belt.
-  If possible, the patient can hold onto the bar or table bracket to assist with the standing up process.

Press the "Up" button (button with upward arrow ↑) on the hand control until the patient is in an upright standing position.


-  The emergency stop mechanism halts the belt retraction and prevents the patient from being crushed.
-  **DANGER** The patient must always be secured immediately after being raised to a standing position using the rear crossbar or swivel arm pelvic frame! Use of the device without the crossbar or swivel arm pelvic frame is prohibited!



To secure the patient during standing therapy, attach the rear crossbar to the parallel bar immediately after standing up as follows:


- If necessary, loosen the wing screws [1] anticlockwise.
- Adjust the rear crossbar [2] to the desired depth.
- Tighten the wing screws [1] again clockwise..

Alternatively (instead of steps 1 to 3 above), close the swivel arm pelvic frame with pelvic pads as described in section "6.5 Swivel arm pelvic frame (optional)" to secure the patient.

-  **DANGER** The patient's restraints must not be removed during therapy! They must remain securely fastened until the patient is fully prepared to be released. This means that the restraints may only be released once a wheelchair with the brakes applied is ready and the optional back pads and headrest have been removed.

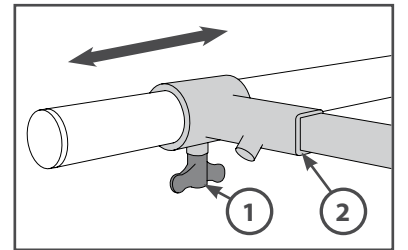
If necessary, move the wheelchair to one side, but only after the patient has been secured at the rear. Never remove the wheelchair from the therapy room. Always keep the patient's wheelchair within easy reach.

To avoid tripping hazards, unplug the power cord from the socket after switching off the device (on/off switch to "Off" (O)).

-  **CAUTION** The standing device connected to the power supply network may lead to unintentional activation of the drive system! Therefore, when performing therapy, the standing device must be switched off using the toggle switch after the uprighting process ("Off" switch position O)!

Adjust the Heidelberg Upright Stander Impuls (see chapter "6. Device settings / Use of accessories") to the patient:

- Adjust the depth or tilt of the table.
- Attach the pelvic pad, back pad and headrest, if available.
- Tilt the footplate on the Multi base frame and adjust the table top tilt, if available.



6. Operation/settings of the device and accessories

6.28 Ending standing training

All dynamic/movable functions are blocked (CLOSED).

If a multifunctional frame is present and has been tilted, the tabletop and frame must be returned to their original position.






Position the wheelchair behind the patient and apply all brakes.

If the backrest and headrest have been used, they must be removed.

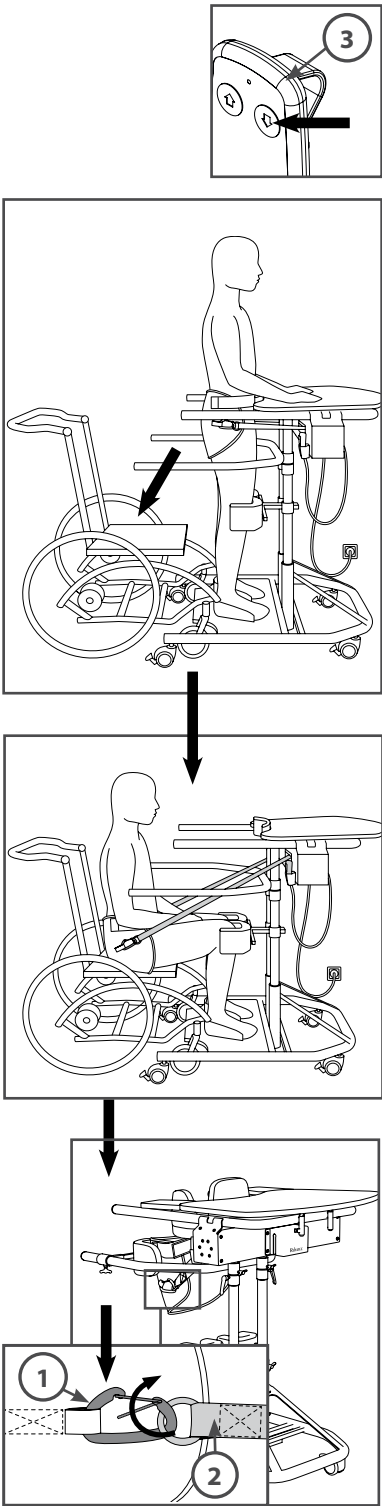
Remove the rear crossbar or open the locking mechanism on the swivel arm pelvic frame and swing the rear section to the side.

If necessary, reconnect the standing device to the mains and/or set the on/off switch to the "On" (I) position (see chapter "6.22 Using the standing system").

Press the "Down" button (button with down arrow ↓) on the hand control [3] until the patient is in the sitting position in the wheelchair.

- **To assist with standing up, the patient can hold onto the bar or table bracket, if possible.**
- **WARNING Risk of injury! The patient must always be supported during this process!**
- **WARNING The pull straps must run inside the bar frame to ensure correct unwinding!**
- **WARNING When lowering or raising the patient, do not place excessive strain on the footboard, as this may increase the risk of tipping.**
- Detach the pull straps [2] from the snap hooks [1].
 - Pull the lap belt away from the patient towards the rear.
 - Hook the eyelets of the pull straps [2] into the snap hooks [1] on the lap belt. Roll up the tension straps [2] again by pressing the "Up" button (button with upward arrow ↑) on the hand switch [3]. Apply tension to the tension straps during the rolling process so that they are wound up tightly.
- **If the tension straps are loosely rolled up, the subsequent unrolling process may be jerky!**

- Reattach the rear crossbar or securely close the swivel arm pelvic frame.




















7. Cleaning and disinfection





The user is responsible for regular maintenance and care.

If you have any complaints or problems, please contact your service provider/dealer!

7.1 Maintenance

- **DANGER Neglected, inadequate or incorrectly performed (using incorrect agents or procedures) cleaning or disinfection can pose a serious risk to the user and patient!**
- **DANGER Maintenance, cleaning, repair and adjustment work may only be carried out with the patient out of the device!**
- **DANGER Before carrying out any technical work or cleaning processes on the standing device, the tilt switch on the control box must be activated and the mains plug must be disconnected!**
- **DANGER When cleaning and disinfecting, 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/ disinfectants!**
- **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! 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 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 The product and its accessories are not intended for cleaning by spraying and washing with pressure or steam cleaners! High-pressure cleaners must not be used!**
- **CAUTION The cleaning and disinfecting agents 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 dry 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.**

7. Cleaning and disinfection

- **DANGER** Risk of electric shock! Electrical components must not be immersed in water or splashed with water!
- **DANGER** Follow these instructions and the dosage specified by the cleaning agent manufacturer.
- **CAUTION** Connection cables must remain plugged in during cleaning to prevent water from entering. All free sockets must be fitted with blanking plugs!
- **IMPORTANT** Some liquids used in healthcare can cause permanent stains. Therefore, test each cleaning agent on an inconspicuous area of the surface before applying it to a large area.

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 recommended frequency of cleaning and disinfection of the various components of the device.


 **IMPORTANT** Information on reuse can be found in the chapter "Reuse and patient change".

Table A: Frequency of use for cleaning and disinfection

Device components	Daily	Weekly	Monthly	Annually	Patient change	Complete cleaning	Reuse
Control elements: clamping elements, release/brake levers, push handle, etc.	o	o	o	+	o	+	+
Armrests, footrests, tables, wheel guards or similar fixed contact surfaces	o	o	+	+	+	+	+
The transport role	-	-	o	+	o	+	+
Textile covers / belts / textile elements	o	o	o	+	+	+	+
Covers / strapping made of imitation leather	o	o	o	+	+	+	+
Upholstery*	o	o	o	o	o	x	x
Frames, brackets, 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 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 should be cleaned and disinfected completely (with all accessories), as is also intended for reuse.

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

7.4 Cleaning during normal use (including domestic use)

It is recommended that all parts of the device that are touched by patients or operators, including 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 soon as possible.

Never use polishing powder, steel wool or other abrasive materials, as these can damage the surface of the device.

Strong acids or alkalis must not be used. The optimum pH value of the cleaning agent is between 6.5 and 7.5. 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.

Foam cushions can be cleaned in a tub or sink with warm water. Add a little detergent to the water, soak the cushions for approx. 1 hour, then rinse with clean water and hang up to dry.

The device may only be used again once all components are completely clean and dry.

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 then treated with a suitable disinfectant.
- All covers (made of imitation leather) must also be cleaned and treated with a suitable disinfectant.

7. Cleaning and disinfection

7.6 Cleaning and disinfection for reuse

- Before the standing device is used again, it must be carefully prepared.:
- All hard surfaces that come into contact with the patient must be cleaned and then treated with a suitable disinfectant.
 - All covers/straps must also be cleaned and treated with a suitable disinfectant.
 - If visibly soiled, all covers, foam elements and existing straps must either be thoroughly cleaned or completely replaced.
 - All upholstery and padded elements must be replaced for hygienic reasons..

7.7 Selection of cleaning agents or disinfectants

When selecting the cleaning agent/disinfectant and its dilution, always consult the manufacturer of the cleaning agent in accordance with the material table (B) below.

i **IMPORTANT** Some liquids used in healthcare can cause permanent stains. Therefore, test each cleaning agent on an inconspicuous area of the surface before applying it to a large area.

Table B: List of materials used

part of the device	Material	Material	abbreviation
Rollers	ABS, S-Z, PA 66, TPE	S-P*	Steel, powder-coated**
Metal components of the device	S -P/-C/-Z, ALU-E	S-C	Chrome-plated steel
plug-in buckle	POM / PA 66	S-Z	Galvanized steel
sliding elements	PTFE / POM / PA	S-N	Nickel-plated steel
Screws, pins, nuts	S -Z/-N, ES	ALU-E	Anodised aluminium
Wooden parts fine veneer / solid	PU coating	ES	Rustproof iron (stainless steel)
Faux leather covers	PVC compound, BW/P knitted fabric, PU	POM	Polyoxymethylene
Textile covers	P, PA	PTFE	Polytetrafluoroethylene
upholstery parts	polyurethane foam	P	Polyester
belting	P, PA	PVC	polyvinyl chloride compound
		TPE	Thermoplastische Elastomere
		BW	cotton

(**) –All materials for powder coating are based on epoxy resin/polyester.

For example, you can view products from the following manufacturers of cleaning agents/disinfectants:
Dr. Schumacher GmbH, Bode Chemie GmbH, Schülke & Mayr GmbH, Ecolab GmbH, B. Braun Melsungen AG, Dürr Dental AG and Lysoform Dr. Hans Rosemann GmbH.

Please always observe the manufacturer's instructions regarding material compatibility and application concentration.

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 are recommended.

- 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 and painted wood surfaces
 - Hard plastic surfaces of star handles, wing screws, clamping leversn

This is best done with soft cleaning cloths made of paper and microfibre. The disinfectant must not be sprayed-
ed 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

Faux leather covers should be disinfected with a CE-certified surface disinfectant.

Then wipe off the disinfectant completely with a damp cloth and dry 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 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 at temperatures above 40°C,
- CE-certified medical device,
- RKI or VAH listed (recommended),
- approved in the EU (recommended).

7. Cleaning and disinfection

Chemical or dry cleaning of fabrics is not permitted, nor is bleaching.

Tumble drying is only permitted at a low temperature (gentle cycle). 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.











Dry the items thoroughly afterwards.

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


Table C: Symbols for substances

Symbol	Signification
	Wash cycle 40°C, easy care or delicate cycle
	Bleaching not permitted
	Ironing with a lukewarm iron
	Dry in the tumble dryer at a low temperature (gentle cycle)
	Cleaning with perchloroethylene

8. Maintenance and inspection



-  **DANGER** Before starting any maintenance work, it is essential that the mains plug is disconnected from the power supply!
-  **DANGER** Never use a device that is not in perfect condition!
-  **DANGER** In the event of 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 any maintenance or inspection, all instructions in section "7. Cleaning and disinfection" must be followed!
-  **IMPORTANT** All electrical components are maintenance-free and designed to last for the entire service life of the device (except for the battery).

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.
 - Check the LED indicator on the control unit (see section "5.4 LED indicator").
 - Check that the battery has sufficient capacity (see section "5.4 LED indicator").
 - All visible screw connections are secure and complete.
 - The electric drives function properly during tilt/height adjustment, without noise or jerking.
 - All upholstery and accessible surfaces must be checked for tears, scratches and scuff marks. Defective parts must be replaced!
 - All elements of the harness are secure 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. Maintenance and inspection

8.2 Inspection


- **IMPORTANT** The inspection plan in section "8.2 Inspection plan" must be used to document the proper condition of the device and to document any abnormalities, malfunctions and defects.!
- **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 contaminated parts must be replaced.

When ordering spare parts, advice can be obtained from the dealer or the manufacturer's sales department by providing the serial number, device type and date of manufacture.

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 it 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	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		Transport castors and parking brake (optional)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		Feet	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		Wall and furniture protection (optional)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		Clamping and fastening elements	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		Multi base frame (optional)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		Angle adjustment via gas spring (Multi base frame)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		Centre column (table column)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		plug connections	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		Housing for electrical components	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2	Foot area	Footboard	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		Movable footboard (optional)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		Footrests (optional)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		Foot strap (optional)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		Clamping and fastening elements	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3	knee area	Knee splints Standard/Anatomical/Individually adjustable/Levels adjustable	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		Brackets for knee pads	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		Dynamic knee pad (optional)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		Anti-twist device for individually adjustable knee pads (optional)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		Padding and covers for knee pads	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		Clamping and fastening elements	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

8. Maintenance and inspection

Item	Assembly		Settings & functions		Damage & deformation		Screw connections	
			without defects	with defects	without defects	with defects	without defects	with defects
4	pelvic area	Pelvic pad						
		- Brackets	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		- Upholstery and covers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		- Fastening/clamping elements	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		Swivel arm pelvic frame (optional)						
		- Frame	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		- Brackets	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		- Movable swivel arm pelvic frame (optional)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		- Fastening/clamping elements	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		Parallel support bar						
		- Rear crossbar	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		- Frame	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		- Brackets	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		- Fastening/clamping elements	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5	Chest area (optional)	Standard chest pad						
		- Lateral support pads (optional)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		- Brackets	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		- Pads and covers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		- Fastening/clamping elements	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6	Back/head area (optional)	Back pad						
		- Brackets	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		- Cushions and covers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		- Fastening/clamping elements	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		Headrests (optional)						
		- Brackets	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		- Cushions and covers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		- Fastening/clamping elements	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Notes for any repairs and further maintenance:

Item	Assembly		Settings & functions		Damage & deformation		Screw connections	
			without defects	with defects	without defects	with defects	without defects	with defects
7	Table area / armrests	- Brackets	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		- Table mount with depth adjustment (optional)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		- Wooden parts	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		- Fastening/clamping elements	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>






Notes for any repairs and further maintenance:

Inspection carried out on

Inspection carried out by

Signature

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! 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 usage time must not exceed the specified service life! Continued use after the service life has expired can only be approved after a thorough inspection by the manufacturer/distributor!

9.1 Reuse

The Heidelberg Upright Stander Impuls 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 belonging to the device (such as instructions for use, delivery note, inspection plans, etc.) is available.

When passing the product on to other operators, all documentation belonging to the device must be handed over to the next user.

The device may only be transferred 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 textile covers and straps be replaced. Please refer to the information in the chapter "Cleaning and disinfection".

9.2 Change of patients

The user is responsible for the safe transfer of patients and necessary preparation.

If you encounter any problems, please contact your service provider/dealer!

The Heidelberg Upright Stander Impuls is generally suitable for changing patients. Configurations with imitation leather covers are recommended.

All surfaces that come into contact with patients must be cleaned and disinfected!

It is recommended that textile covers and straps be replaced. Please refer to the information in the chapter "Cleaning and Disinfection".

10. Technical data

10.1 Mechanical data

Heidelberg Upright Stander Impuls

Operating environment conditions	
operating temperature	+10 °C to +35 °C
humidity	30% to 75% (non-condensing)
air pressure	800 hPa to 1060 hPa
Environmental conditions during storage and transport	
temperature	-15 °C to +45 °C
humidity	20% to 85% (non-condensing)
air pressure	800 hPa to 1060 hPa
Electrical data	
protection class	II
degree of protection	BF
power supply	230 V ~, 50 Hz
Operating time of the electric motor	max. 2 minutes ON / 18 minutes OFF
EMV	Complies with Directive 2014/30/EU and IEC 60601-1-2
Power at rest	3,1 VA
Operating power	150 VA
functional data	
Maximum patient weight for frame without tilt function (standard)	130 kg
Maximum patient weight for frame with tilt function (multi)	110 kg
Max. torque of the drive	120 Nm
Minimum recommended pull angle	~ 35°
adjustment	2 buttons on hand control
Effective belt length	~1,4 m
Actuating time under load (UP/DOWN)	~ 40 / 30 s
Setting the end positions	by 2 built-in limit switches in drive (SW4)
Protection of the patient against crushing	Additional limit switch in emergency stop mechanism
sound power level	79 dB(A)
Protection class (for electrical system) according to DIN EN 60529	IP22
Service	
maintenance	See Chapter 9, "Maintenance and Inspection."

10. Technical data

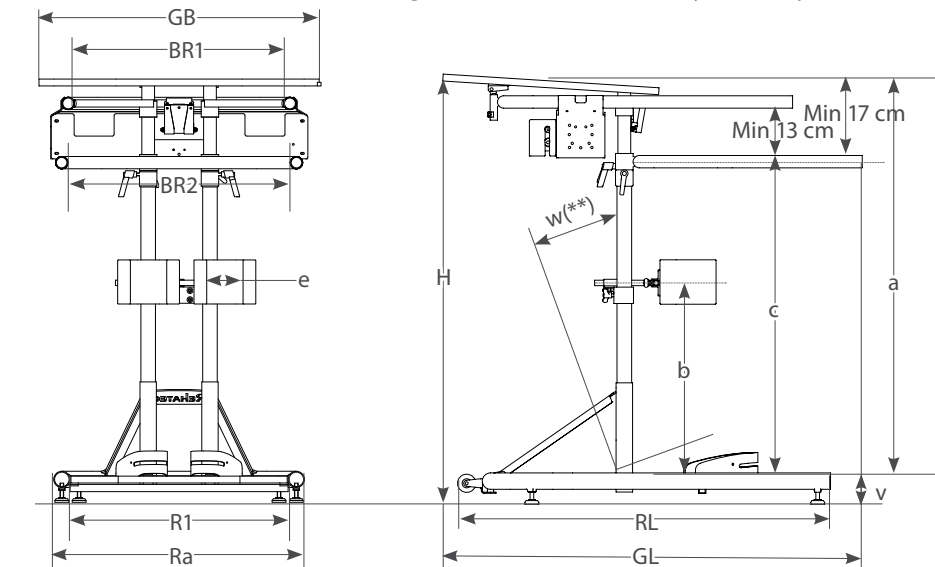
Weight	
Total weight (for basic equipment)	Size 1: from 56 kg
	Size 2: from 58 kg
transport dimensions	
[Width] x [Length] x [Height] (for basic equipment)	Size 1: 77 x 115 x 86 cm (in standard configuration)
	Size 2: 77 x 115 x 106 cm (in standard configuration)

10.2 Mechanical and anthropometric data

Heidelberg Upright Stander Impulse Size 1 and Size 2

Dimension tolerances ±3%

All dimensions are for the basic configuration of the device only, with adjustment to patient dimensions.



Device dimensions		Size 1	Size 2
H	Table height (min – max)	84,5/124,5	105,5/145,5
GL	Base frame length (standard)	113,5 cm	
RL	Multi base length	102,5 cm	
Ra	Base frame external width (standard)	69 cm	
Ri	Base frame internal width	60cm	
BR1	Table mount inner width	57,5 cm	
BR2	Swivel arm pelvic frame internal width	61 cm	
GB	table width	77 cm	
V	entry level	10,5 cm	

Dimensions of basic model/patient dimensions		Size 1	Size 2
a	table height	70-110 cm	85 - 125 cm
b	knee height	30 - 60cm	30 - 65cm
c	Height at centre of pelvis	55 - 90cm	70-110cm

Weight of the device (*)	59 kg	61 kg
Maximum permissible patient weight	Ohne Multi Funktion - bis 130 kg mit Multi Funktion - bis 110 kg	

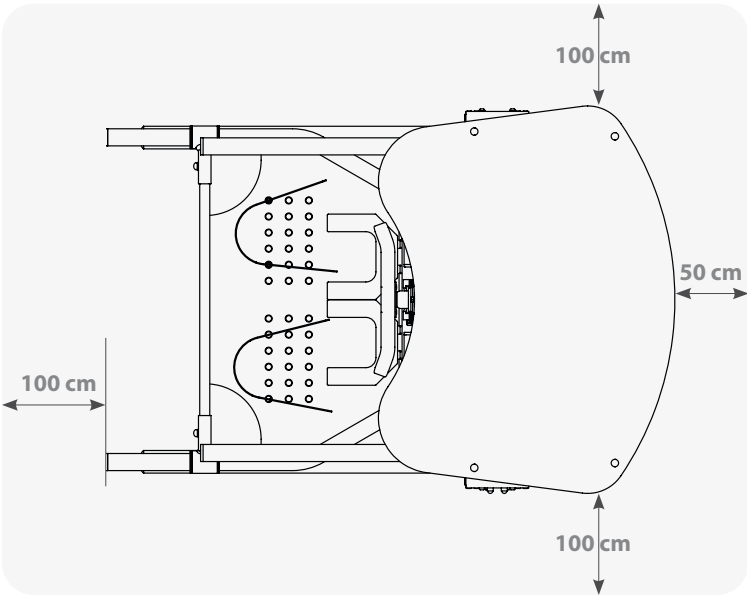
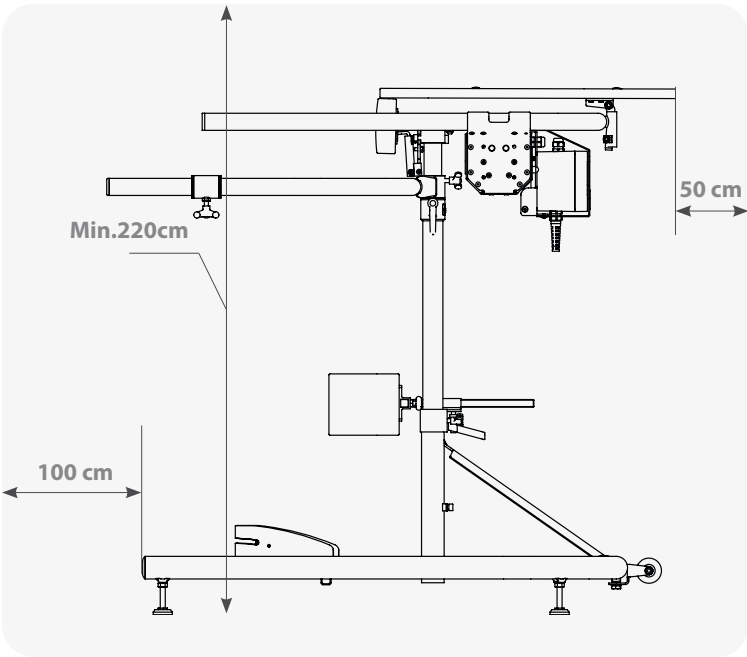
(*) - for the basic equipment of the device.
(**) – Max. tilt angle w = 20° only for frames with tilt function (multi-frames)

All technical data are nominal values and are subject to design and manufacturing tolerances (up to ±3%).

10.3 Minimum spatial requirements around the patient



The required clearance areas necessary for a safe patient environment and convenient handling of the device are marked in grey..

Heidelberg Upright Stander Impuls



10. Technical data

10.4 Electromagnetic compatibility

- **WARNING** Although the system has no active or sensitive parts, there is a risk that the proper operation of devices that emit or generate electromagnetic fields may be impaired.
- **WARNING** Be aware of possible electromagnetic interference, which could cause the device to interfere with the operation of surrounding devices that generate electromagnetic fields.
- Radiation**

The electric upright system is designed for operation in the electromagnetic environment specified below. The customer or user of the electric upright system should ensure that it is used in such an environment.

Heidelberg Upright Stander Impuls

Emission measurements	consistency	Electromagnetic Environment Guidelines
HF emissions according to CISPR 11	Group 1	The electric upright system uses RF energy exclusively for its internal function. Therefore, its RF emissions are very low, and it is unlikely to interfere with neighbouring electronic devices. The electric upright system is intended for use in all facilities, including: <ul style="list-style-type: none">• Residential areas• Facilities that are directly connected to a public utility network that also supplies buildings for residential purposes.
HF emissions according to CISPR 11	Class B	
Harmonics according to IEC 61000-3-2	Class A	
Harmonics according to IEC 61000-3-2	fulfilled	

Interference with other devices

The use of drive systems next to or on other equipment should be avoided as it may cause malfunctions. If such use is necessary, the drive system and other equipment should be monitored to verify that they are functioning normally. If the user notices unusual behaviour or interruptions in the drive system caused by mobile phones, microwaves or transmission towers, this could be a sign of electromagnetic interference.

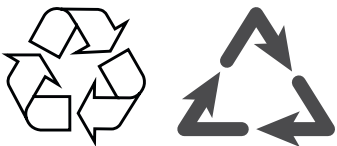
Portable RF communication devices (including peripherals such as antenna cables and external antennas) should not be used closer than 30 cm (12 inches) to any part of the drive system, including the cables specified by the manufacturer. Failure to do so could result in poor performance of the device.

11. Disposal

The Heidelberg Upright Stander Impuls 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.**
- **Recycle the device as electrical equipment.**

12. Warranty

Warranty services apply 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 of the Heidelberg Upright Stander Impuls from the date of delivery. Any defects will be repaired free of charge by **Rehatec® GmbH**. Electrical components, upholstery, wooden parts, castors, gas springs and Bowden cables are excluded from the warranty.

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

- the use of non-original replacement 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 persons who are not trained or 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 three-year warranty period from the date of purchase.

The only items excluded from the warranty are electrical components, upholstery, wooden parts, fabrics, castors, gas springs, Bowden cables, raster and tooth segments.

Heidelberg Upright Stander Impuls
Sizes 1 and 2

model designation

Seriennummer

purchase date

Dealer's stamp and signature

REHATEC®

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