



Operating Manual English

for

SINA Comfort HYD-160 Shower Trolley

Part No. 278810

SINA Comfort HYD-200 Shower Trolley

Part No. 278820

SINA Comfort EL-160 Shower Trolley

Part No. 278830

SINA Comfort EL-200 Shower Trolley

Part No. 278840



Picture shows
SINA Comfort EL-200
Part No. 278840

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1. Preface

Dear Customer,

Thank you for purchasing a medical product from BEKA Hospitec GmbH. Please consider the following points:

1. Please read the enclosed instruction manuals carefully.
2. Use this device for its intended purpose only.
3. Operating this device is only admissible through instructed and trained personnel.
4. Electrical installations may only be done by specialist companies according to the currently valid VDE regulations.
5. Maintenance and safety checks are only permitted to be carried out by BEKA Hospitec or by companies authorised by BEKA Hospitec.
6. Installations, upgrades, changes or repairs are only permitted to be carried out by BEKA Hospitec or by companies authorised by BEKA Hospitec.

In case technical interventions such as amendments or changes to our devices are not made or carried out by BEKA Hospitec or by companies authorised by BEKA Hospitec, all warranties for the changes as well as for the device or device functionalities connected with these changes, shall expire immediately.

Liability and warranty

The manufacturer of the device shall only be responsible for the safety and reliability of the device if:

- a. the installation has been done by authorised persons,
- b. the respective space corresponds to the current VDE guidelines and has been maintained as such,
- c. the device is used for its intended purpose,
- d. functionality checks are carried out on a regular basis.

2. Introduction

2.1 Intended Use

The SINA shower trolley is designed to allow showering, bathing and nursing of patients in need of care in hospitals and nursing homes. The height adjustable SINA shower trolley allows the caregiver to nurse the patient/resident in the best possible working posture.

2.2 Duration of treatment

The duration of one treatment unit with the SINA shower trolley is specified as maximum **30 minutes**.

Please note:

Side effects through treatments are not known.

Please pay attention to the contraindications in section 2.4.

2.3 Typical indications

For showering, bathing and nursing patients in need of care in hospitals, nursing homes and care institutions.

2.4 Contraindications

Pregnant women should not be treated with the SINA shower trolley.

WARNING:



Patients with:

- cardiac insufficiency,
- cardiovascular diseases,
- craniocerebral injury,
- open wounds,
- feed or drain lines (e.g. catheter, drainage tube),
- tumor in the treatment area

may be treated with the SINA shower trolley only after consulting with the attending physician.

2.5 Safety Risk and possible Device Damage

WARNING:



Patients with infusion- or insulin pump, as well as patients in feverish conditions, inflammatory skin diseases, might **not** be treated with the SINA shower trolley.

Please observe the safety instructions provided in the following paragraph.

2.6 Service life

The expected useful life of the SINA shower trolley is approx. 8 years. The useful life of the battery is up to 5 years, depending upon use and storage conditions. Some components of the shower trolley may have to be exchanged during the service life of the device. This may include the following components: casters, shower mattress, battery, Bowden cable, drain hose, handset.

Kindly observe the safety instructions in the following section.

3. Safety Instructions



Please read the following safety instructions prior to initial operation of the SINA shower trolley. All the instructions and warnings on this device and in these operating instructions absolutely must be observed.

BEKA Hospitec GmbH does not assume any liability for errors or damage arising from improper operation or handling.

• Operating instructions



Read the instructions for use and the safety instructions prior to initial operation of the device. Keep these operating instructions in a safe place near the device for later reference.

- The SINA shower trolley may only be used for the intended purpose.
- The product may be used and operated only by appropriately trained and qualified staff.
- Prior to each use, check whether all the parts are undamaged; the SINA shower trolley must **not** be used if any parts are damaged.
- Please take care that the self-locking catches on all the side rails are engaged in order to prevent the patient/resident from falling from the shower trolley.
- The product must be disinfected after each use, as specified by the manufacturer.
- The transport/transfer of a patient/resident must always be performed by two caregivers in order to avoid injuries or falls.
- During patient transfers, always make sure that the brakes are applied on all the devices being used.
- The operator must ensure that the area below and above the SINA shower trolley is clear of any objects that could obstruct the free up- and down movement of the shower trolley.
- Before each use, the user must assure himself that the device is functionally reliable and in proper condition (e.g. visual check, functional check, etc.).
- The user must take care that the patient/resident is positioned correctly in order to avoid falls and injuries.
- The patient/resident must not be left unattended/unsupervised on the shower trolley at any time.
- The body length of the patient/resident must not be greater than 205 cm.
- The device is not approved to be used in explosion-prone areas.

- The treatment may be performed only under supervision.
- Sitting in the front- or rear area of the shower trolley is forbidden (danger of tilting).
- To prevent jamming, the patient's hands, arms, legs, feet and hair must always rest close to his body.
- To avoid scalding, the user must continuously check the water temperature with his bare hands (without gloves). When doing this, point the water jet away from the patient/resident.
- The caregivers must protect their skin and eyes against concentrated disinfectants and cleaning agents. **Follow the directions for use provided with the disinfectant.**
- **Hand control**
The hand control may only be operated by qualified staff appropriately instructed in the use of the device.
- **Power supply connection**
The electrical connection must be performed by an authorized electrician. The current local requirements must be observed. The electrical connection must be performed by an authorized electrician. The current local requirements must be observed.
- **EMC**
To prevent interference with the functioning of the control device due to electromagnetic radiation, it is forbidden to simultaneously use short-wave or microwave therapy devices in the immediate proximity of the shower trolley. Electromagnetic radiation from mobile phones can also lead to interference with the functioning of the device.
- **Ventilation**
Never cover, tape or modify slots or openings on the device.
- **Cable routing**
Route the power cord and connecting lead carefully, ensuring that they cannot be damaged. Damaged power cords can lead to fire or a life-threatening electric shock, and must not be used.
- **Customer service**
If the device is defective, and none of the measures described in Section 10.1 respectively 10.2 help to remove the defect, pull out the mains plug of the device and notify your BEKA dealer's or manufacturer's customer service department:



BEKA Hospitec GmbH
 Am Rübenmorgen 3 • 35582 Wetzlar
 Fon: +49(0)641-9 22 20 - 0
 Fax: +49(0)641-9 22 20 - 20
info@beka-hospitec.de
www.beka-hospitec.de

CAUTION:

Devices that could be influenced by moisture must not be operated or stored in the vicinity of the SINA shower trolley.

- **Electric motor**

The electric motor is equipped with an overload protection which automatically shuts down power within the unit when there is overload. The motor is ready for operation once again only after a short waiting period (10-20 minutes). **Opening of the motor will result in the loss of warranty coverage.**

- **Cleaning**

Do not use any aerosol cleaners for cleaning the SINA shower trolley. Instructions on cleaning and disinfecting can be found in Section 7.

- **Repair**

Only qualified personnel may carry out repairs on the SINA shower trolley. For any repair, contact your customer service.

Opening of the device or of accessories will result in loss of warranty and all liability claims.

- **Duty of care**

Prior to first use, assure yourself that the system is in proper condition and functionally reliable. Never insert a foreign body in the device. This represents a security risk and can lead to a life-threatening electric shock or damage to the device.

- **Safety checks**

A "Safety Checks" (SC) needs to be carried out with the SINA shower trolley in intervals of **12 months** in connection with maintenance work. For intervals please see section 9.

- **Accessories**

Operate the SINA shower trolley only with original accessories.

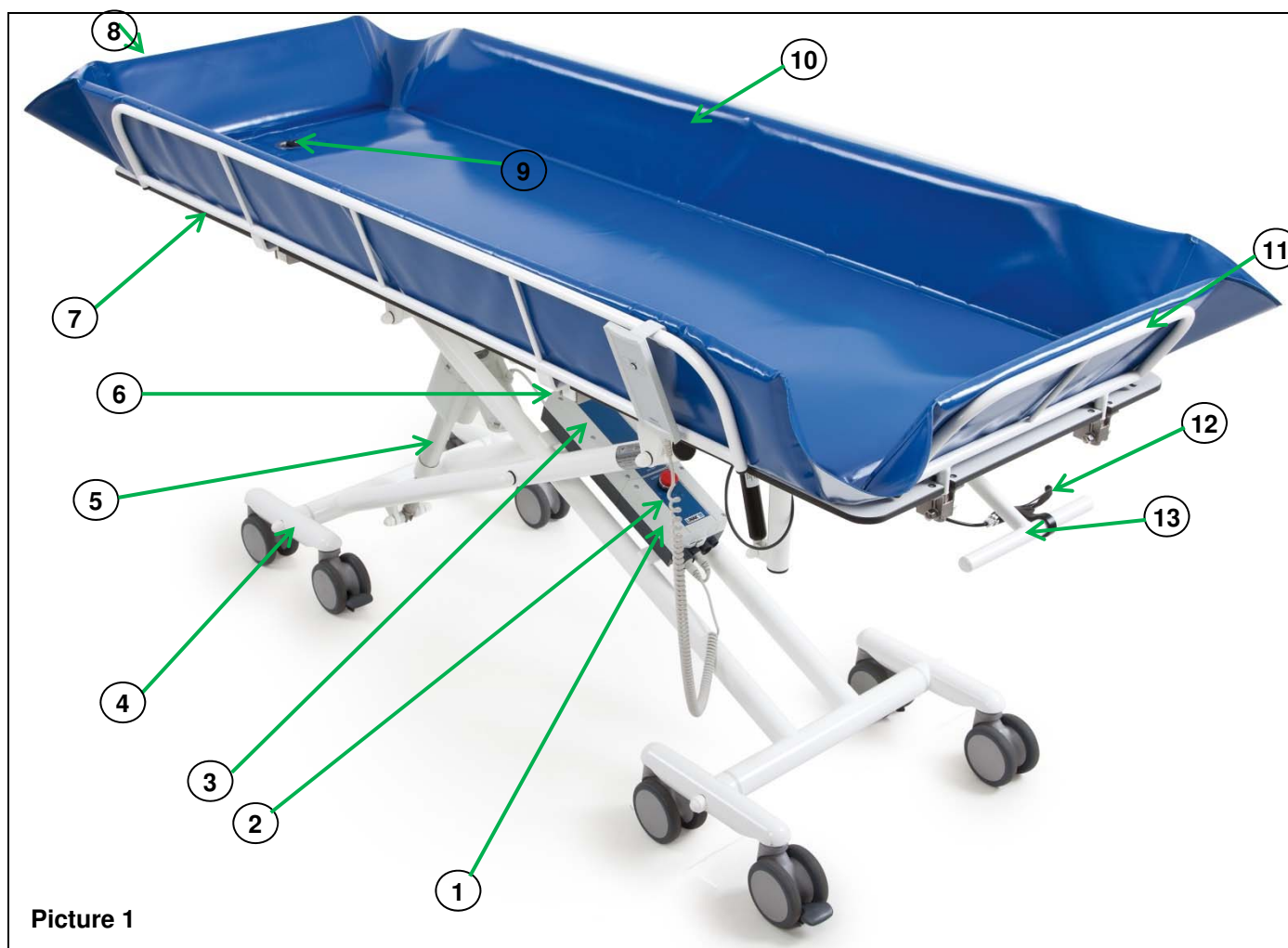
WARNING:

Any unauthorized repair, rebuilding's and changes are forbidden for safety reasons and exclude a liability of the manufacturer for the damages resulting from it.

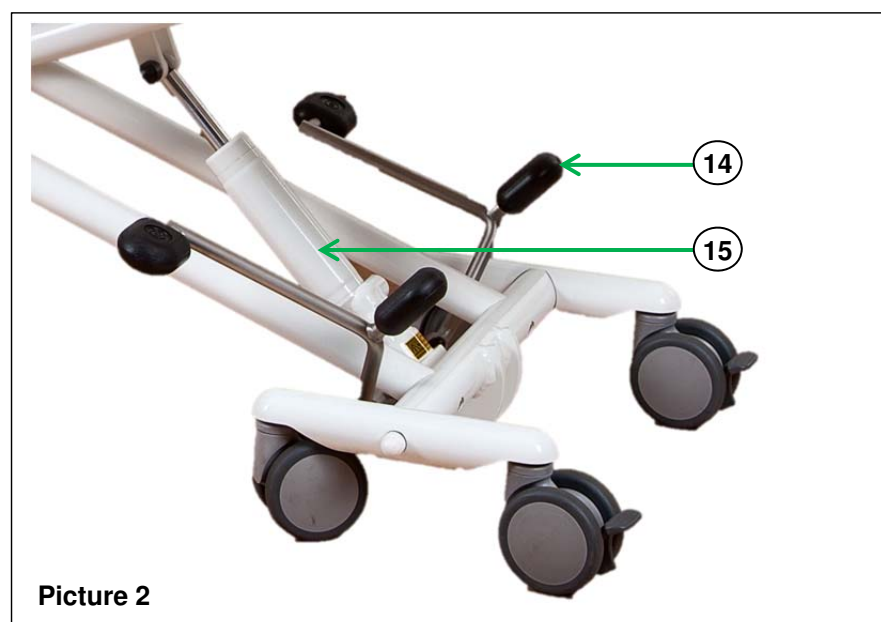
For the damages which result from the use of spare parts not released by the manufacturers or accessories every other liability of the manufacturer is excluded.

4. SINA shower trolley control elements

4.1 SINA EL shower trolley assemblies



4.2 SINA HYD shower trolley assemblies



Part No.	Description	Part No.	Description
1	Control unit with EMERGENCY-STOP switch	9	Drain plug
2	LED display (ON / CHARGE)	10	Shower mattress with drain valve and drain hose
3	Battery pack	11	Head rail (drop-down)
4	Castor holder with 2 twin wheel casters, one with brake	12	Actuating mechanism (tilted position of the stretcher surface)
5	Electric motor or hydraulic device	13	Hand grip
6	Grip for taking out the battery pack	14	Foot pedal with pedal lining (SINA HYD)
7	Side rail (fold-down)	15	Hydraulic unit (SINA HYD)
8	Foot rail (fold-down)	—	—

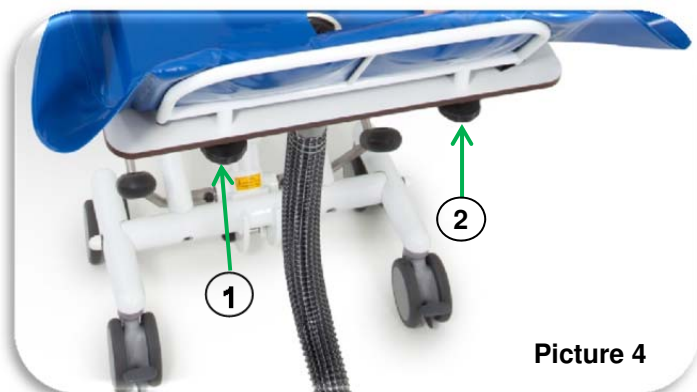
4.3 Head and foot rail



Picture 3

Picture 3:

The picture shows the opened head rail of the SINA shower trolley. To open the head rail, you must lift the head rail and tip it over.



Picture 4

Picture 4:

The picture shows the foot rail of the SINA shower trolley. To remove the foot rail, loosen and remove the 2 rotary grips (**1 and 2**).

	 <p>BEKA Hospitec GmbH Am Rübenmorgen 3 DE - 35582 Wetzlar-Dutenhofen Tel 0049-641-92220-0 Fax 0049-641-92220-20</p>	
Typ: Duschwagen SINA Comfort 200 EL		
<div>REF</div> 930507308		
<div>SN</div> 471316404		
		
		IPX4
Voltage Input DC 24 Volt	Power max. 240 VA	Frequency 50/60 Hz
Patient weight: 150 Kg		
short-term operating		
1 Min ON		
9 Min OFF		

The type label can be found on the frame of the unit. The serial number **SN** can look as follows "Example **471316404**".

If you have any questions, please always refer to the serial number of the unit on the type label.

5. Installation

Dear customer,

- As an operator, you must regularly check the functionality of the shower trolley **SINA HYD / EL**.
- These checks are required for the safety of your patients and for your own safety.
- The device is not approved to be used in explosion-prone areas.
- This device is only intended for use in medical rooms (according to VDE 0100).
- Repairs are only permitted to be carried out by BEKA Hospitec or by companies authorised by BEKA Hospitec. Otherwise all warranties for the changes as well as for the device or device functionalities connected with these changes shall expire immediately.

5.1 Please observe before initial operation

WARNING:



The SINA shower trolley may only be used in accordance with the instructions in the accompanying documents.

The manufacturer considers himself liable for the safety, reliability and performance of the device only if these prerequisites are fulfilled.

5.2 Installation of the battery pack

The **SINA EL** shower trolley is delivered in a ready-to-operate condition. The state of readiness is indicated by a green LED light on the handset. If an acoustic signal is emitted, the battery must be loaded immediately.

6. Operating the SINA EL / HYD shower trolley

6.1 Height adjustment of the SINA EL shower trolley

The **SINA EL** shower trolley is equipped with a 24 V electric motor. This motor is self-locking and, therefore, secured against settlement of the stretcher surface. The lifting and lowering of the **SINA EL** shower trolley is performed by means of the hand control. To move the shower trolley upwards, actuate the push-button with the arrow pointing upwards. To move the shower trolley downwards, actuate the push-button with the arrow pointing downwards.

NOTE:



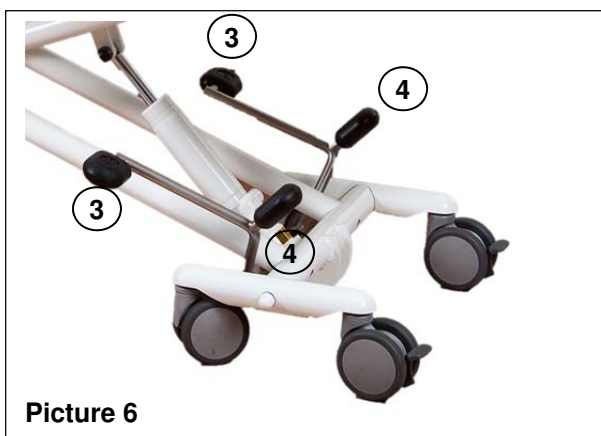
The electric motor is equipped with an overload protection switch, which automatically shuts down power within the unit when there is overload. The motor is once again ready for operation only after a short waiting time. Depending upon the room temperature, the cooling period is 15 – 20 minutes.



Picture 5

6.2 Height adjustment of the SINA HYD shower trolley

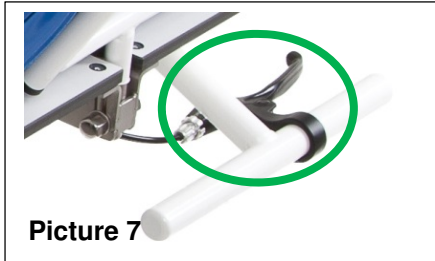
The **SINA HYD** shower trolley is equipped with a hydraulic system and the height is adjusted by means of the foot pedals. The lifting and lowering of the **SINA HYD** shower trolley is performed by means of the foot pedals. Pump foot pedal **3** to raise the SINA shower trolley. Press foot pedal **4** to move the shower trolley downwards. Release foot pedal **4**, to stop the shower trolley in the desired position.



Picture 6

6.3 Adjusting the tilt

The tilt of the **SINA EL / HYD** shower trolley can be adjusted easily and safely using the actuating mechanism (Picture 7) on the hand control. To adjust the tilt (Picture 8) of the shower trolley, pull at the actuating mechanism. This moves the shower trolley to a positive tilt position. To move the shower trolley back to the original position, press the actuating mechanism and press downward on the grip of the shower trolley. When you release the actuation mechanism, the shower trolley becomes stationary in the desired position.



Picture 7



Picture 8

6.4 Emergency-Stop switch

The SINA shower trolley's electric motor can be stopped immediately by cutting off the power supply using the emergency-stop switch (Picture 9). To make the shower trolley ready for operation once again, the emergency-stop switch must be unlocked by turning it clockwise as shown with the help of the symbols on the switch.



Picture 9

6.5 Initial operation and function (electric motor / battery unit)

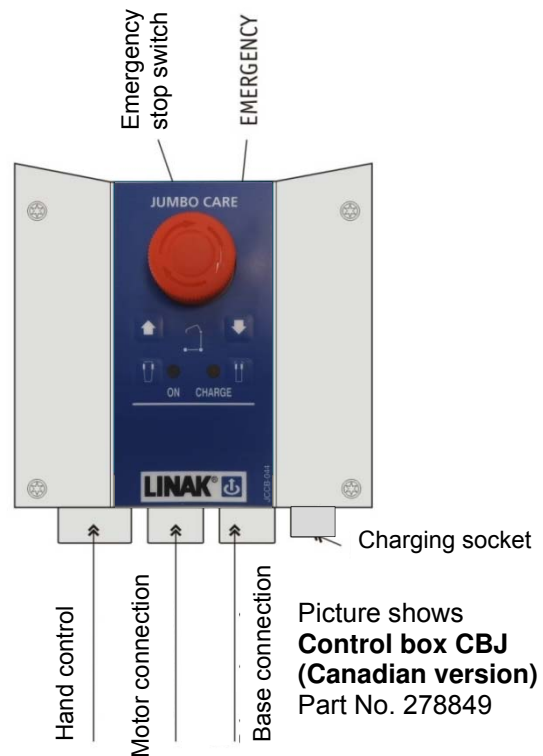
The **SINA EL** shower trolley is equipped with a 24 V electric motor. This motor is self-locking and, therefore, secured against accidental lowering of the stretcher surface. The **SINA EL** shower trolley's battery must be fully charged before initial operation.

Please check to make sure that the emergency-stop switch is unlocked. To unlock, turn the emergency-stop switch clockwise until it unlocks.

Note:

Fully charge the battery before initial operation (charging time is approx. 4 hours).

To move the SINA EL shower trolley, check whether the emergency-stop button is unlocked.



Picture shows
Coiled cord for the
Canadian version
(included in the scope of
delivery!)

6.6 Transfer from the bed

1. Apply the brakes on the bed.
2. Raise the bed to a working position that is convenient for you.
3. Fold down the side rail facing the transfer side.
4. Remove the rail (if any) on the bed of the resident.
5. One caregiver each must be positioned on the left and right side of the bed.
6. Move the resident into position (facing the transfer side).
7. Now turn the resident on his side (facing away from the transfer side).
8. The caregiver on the resident's side must hold the resident in position.
9. The second caregiver must now fold down the side rail located on the opposite side of the bed.
10. The second caregiver must move the shower trolley as near as possible to the resident's bed.
11. The brakes on the shower trolley must now be locked.
12. Lower the shower trolley to the height of the bed.
13. Turn the resident onto his back.
14. Both the caregivers must now help the resident to place himself in the middle of the shower trolley.
15. Fold up the side rails (opposite the transfer side).
16. Place the wedge-shaped bolster under the resident's head.
17. Now, release the brakes on the shower trolley.
18. Move the shower trolley away from the bed to the point where you can fold up the side rail on the shower trolley without any problems.
19. Now, tuck in the resident.
20. Raise the shower trolley to a working height at which you can conveniently move the resident.

6.7 Transfer from the shower trolley to the bed

1. Apply the brakes on the bed.
2. Raise the bed to a working position that is convenient for you.
3. Remove the rail (if any) on the bed of the resident.
4. Fold down the side rail facing the transfer side.
5. Position the shower trolley as near the bed as possible.
6. Now, apply the brakes on the shower trolley.
7. Fold down the side rails (opposite the transfer side).
8. Both the caregivers must help the resident to place himself in the middle of the bed.
9. Now turn the resident on his side (facing away from the transfer side).
10. Check to make sure that the patient/resident is no longer lying on the shower mattress.
11. The caregiver on the resident's side must hold the resident in position.
12. The brakes on the shower trolley must now be released.
13. Move the shower trolley away from the resident's bed.
14. Move the patient/resident back to the supine position.
15. Close the side rails on the patient/resident's bed.
16. Tuck in the patient/resident.

WARNING:

The SINA shower trolley must be completely disinfected with a disinfectant solution after each treatment to prevent any cross-contamination.

7. Cleaning / Disinfection

7.1 Cleaning the SINA shower trolley

Clean the **SINA** shower trolley with a soft, lint-free cloth. For a thorough cleaning, use a cloth dampened with soap water. For disinfection, you can dampen a cloth with an isopropyl alcohol solution.

To avoid damage, **do not** use aerosol cleaners, sprays, scouring agents or solvents for cleaning the control device.

Attention:

Please ensure that the system is not operational during the cleaning!

“Disconnect the main plug!”

WARNING:

The SINA shower trolley must be completely disinfected with a disinfectant solution after each treatment to prevent any cross-contamination.

The SINA shower trolley can be damp cleaned with a commercially available plastic cleaner. An isopropyl alcohol solution or an industry-standard disinfectant aerosol (spray) can be used for disinfecting.

7.2 Disinfecting the SINA shower trolley

In view of the risk of infection, we recommend carefully disinfecting and water jetting your SINA shower trolley after each use. The disinfection of the SINA shower trolley is performed manually. Please take note that a disinfectant may be used only for disinfecting, but not for cleaning. You must use a sponge and soap for removing grease stains, skin and hair remains.

Attention:

After the patient has vacated the SINA shower trolley, disinfect it first before using it again. Strictly follow the manufacturer's instructions provided with the disinfectant used. Avoid direct contact with the concentrated product. Where required, protect the skin and eyes with gloves and safety glasses while exchanging the disinfectant container.

Disinfectant: **Tub Disinfectant Cleaner**

Supplier: **McCuaig Solutions Corp.**
1687 Dublin Avenue
Winnipeg, Manitoba
Canada R3H 0H2

7.3 Sterilisation

The **SINA** shower trolley is **not** suitable for sterilization.

7.4 Contact persons for technical information

For technical information and questions about how to use the product, contact your dealer's medical devices consultant or the manufacturer.



BEKA Hospitec GmbH
Am Rübenmorgen 3 • 35582 Wetzlar,
Germany
Phone: +49(0)641-9 22 20 - 0
Fax: +49(0)641-9 22 20 - 20
info@beka-hospitec.de
www.beka-hospitec.de

8. Disposal

8.1 Disposal of the packaging material

Please treat the packing material provided with the **SINA** shower trolley in compliance with local applicable laws and regulations (recycling).

The metallic parts as well as the plastic and electronic components are to be recycled according to the WEEE.

8.2 Product disposal

After the end of the product life cycle get in touch with your BEKA contractual partner, who will deal with the **SINA** shower trolley as required in compliance with local applicable laws and regulations (recycling).

Being the manufacturer, BEKA Hospitec GmbH will provide more information on environment compatible disposal.

Even before disposing of the **SINA** shower trolley please clean and disinfect it.

9. Safety Check

A "Safety check" (SC) need to be carried out at the SINA shower trolley at intervals of **12 months** together with a service.

Safety checks and maintenance need to be documented in the medical product book.

After the validity period of the inspection plate has expired please contact the manufacturer.

Checks must be carried out by the manufacturer or professional staff authorised by the manufacturer only.

Attention: The BGV A3 inspection must be carried out with the SINA shower trolley once every year.

Daily checks: Cleaning, disinfecting, check disinfection level.

Weekly checks: Visual checks of all the components, lines and connections, performing of functional tests, cleaning of casters, shower mattress and wedge-shaped bolster.

Annual checks: SC, inspection, BGV A3.

9.1 Before each use

The following tests should be performed before each use in order to ensure safe and uninterrupted operation:

- Visual inspection of the shower trolley (external damage and wear).
- Check to ascertain whether screws on the shower trolley are missing or loose.
- Functional check of the shower trolley.
- Functional check of handset (up / down).
- Check of the emergency lowering function.
- Check of the charging function (battery unit).
- Check to confirm that the caster wheels are running freely and unimpeded.
- Check of the battery charge condition.
- Check of the tilting function.

10. Troubleshooting / Customer Support

10.1 Troubleshooting shower trolley SINA Comfort EL

Shower trolley SINA Comfort EL	Relief
The electrical stroke adjustment of the shower trolley SINA EL does not work.	a) Check that the emergency stop button is not pushed. b) Check that all cables are connected correctly. c) Check that the battery is charged. d) Check that the battery contacts are not defective.
The shower trolley SINA EL remains in the upper end position.	a) Check that the emergency stop button is not pushed. b) Check that the battery is charged. c) Use the emergency lowering (mechanical) to lower the patient.
The electrical motor does not work.	a) Check that the emergency stop button is not pushed. b) Check that the plugs are put correctly in the control box.
Actuator „stalls“ during lift.	a) Battery is low. Charge battery. b) The lifting capacity is exceeded (max. patient weight).
Audible „beep“ is heard from the control box.	Battery is low. Charge battery.
The hand control does not respond.	a) Check the connector on hand control cable. b) Check the battery capacity (replace with a fully charged battery).
Raise and lower buttons on hand control do not respond.	a) Check that the emergency stop button is not pushed or pressed. b) Check the battery capacity (replace with a fully charged battery). c) Check that the cables are properly connected at the control box.
The shower trolley SINA EL can be moved only with difficulty.	a) Check that all brakes are released. b) Check that all swivel castors move smoothly.
Castors make loud noises.	Clean castors.
If you hear unusual sounds.	Contact BEKA Service.
If the shower trolley is damaged.	Contact BEKA Service.
Charger	Relief
Battery charging does not work.	a) Check that the battery contacts are ok. b) Check the power plug.
„Power on“light on charger is not lit.	a) Check if the charger is connected to the wall receptacle. b) Check the fuse socket.
Charger is plugged in, but „Power on “light is not lit.	a) Check that there is power to the wall socket. b) Remove the battery and check for damage.

Battery	Relief
Battery is properly seated but no lights are visible.	Contact BEKA Service.
Indicator light does not go off after several hours of charging time.	Battery needs replacing. Contact BEKA Service.
Battery indicates it is fully charged when in the charger, but when placed in the shower trolley, will only do a few lifts.	Battery needs replacing. Contact BEKA Service.

10.2 Troubleshooting shower trolley SINA Comfort HYD

Shower trolley SINA Comfort HYD	Relief
The manual stroke adjustment of the shower trolley SINA HYD does not work.	Check that the shower trolley SINA HYD is already in the highest <u>or</u> lowest position.
The shower trolley SINA HYD remains in the upper end position.	Use the emergency lowering (mechanical) to lower the patient.
The shower trolley SINA HYD can be moved only with difficulty.	a) Check that all brakes are released. b) Check that all swivel castors move smoothly.
Castors make loud noises.	Clean castors.
If you hear unusual sounds.	Contact BEKA Service.
If the shower trolley is damaged.	Contact BEKA Service.

10.3 Customer Service

Please contact the customer service of your local dealer or the manufacturer, if the shower trolley SINA Comfort does not function properly and you could not eliminate the error with the relief actions according to section 10.1 respectively 10.2.



BEKA Hospitec GmbH
 Am Rübenmorgen 3 • 35582 Wetzlar
 Phone: +49(0)641-9 22 20 - 0
 Fax: +49(0)641-9 22 20 - 20
info@beka-hospitec.de
www.beka-hospitec.de

11. Appendix

12. Technical Data SINA Comfort EL-200

Dimensions and Weights

- Length:	204 cm
- Width:	76 cm
- Height hoist max.:	86 cm
- Height hoist min.:	54 cm
- Adjustment of the lying surface:	-7° / +8°
- Weight without packing:	242.5 lbs (110 kg)
- Patient weight:	330 lbs (150 kg)
- SWL (Safe Working Load):	352 lbs (160 kg) Patient and water

Electrical data

- Input voltage:	100 V - 230 V~ (AC) / 50 / 60 Hz
- Power consumption:	240 VA

Control unit

- Type of protection:	Class II
- Application part:	Type B
- Operating mode:	short-time operating
- Input voltage:	100 V - 230 V~ (AC) / 50 / 60 Hz
- Power input:	2 Amp.

Electrical motor data

- Power supply:	24 V (DC)
- Frequency:	50 / 60 Hz
- Power input:	4,2 Amp.
- Power-on time max.:	1 Min. Ein und 9 Min. Aus
- Protection type:	IP X4

Environmental conditions

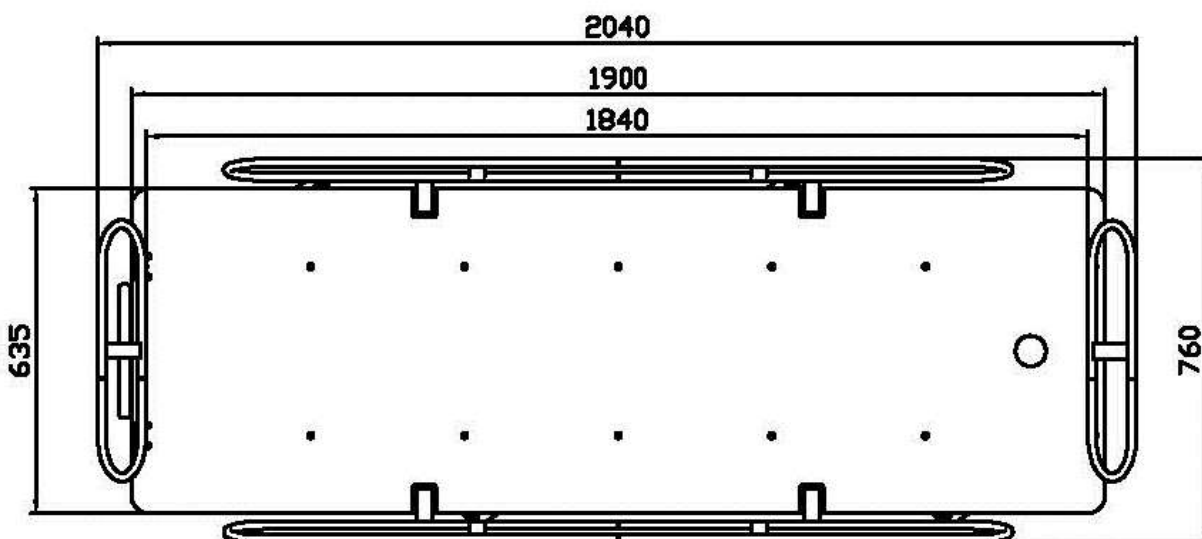
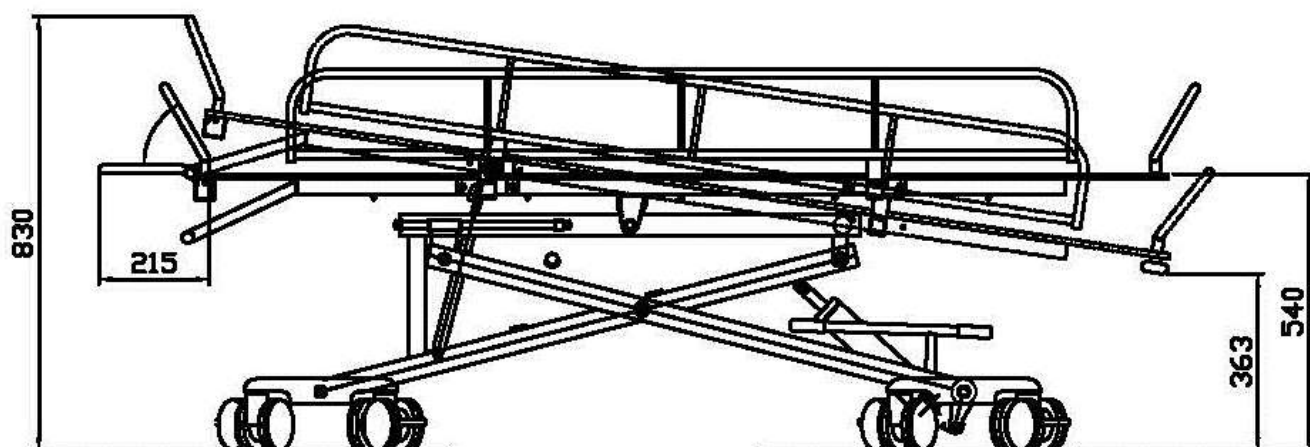
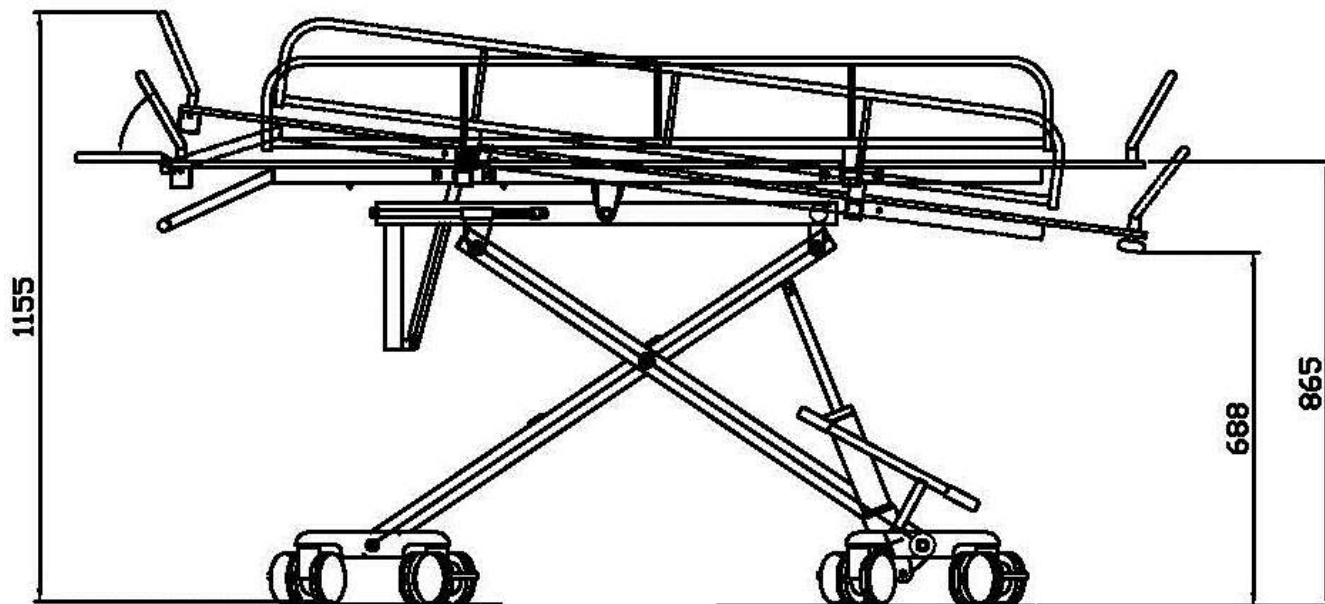
Operation

- Temperature range:	Between 10° C and 40° C
- Relative air humidity:	Between 15% – 100% at 20° C
- Atmospheric pressure range:	800 – 1060 hPa

Storage and Transport

- Temperature range (shower trolley):	Between -20° C and 70° C
- Temperature range (battery):	Between -15° C and 40° C
- Relative air humidity:	Between 10% - 80% at 20° C
- Atmospheric pressure range:	500 – 1100 hPa

12.1 Dimensions SINA HYD / EL (mm)



12.2 Pictograms and symbols used



Observe accompanying documents / operating manual.



Caution for a hazard area.



Application part "Type B" according to DIN EN 60601-1.



Do not pull at the motor.



No domestic waste.
Do not put the treatment system and packaging materials into the domestic waste.



CE mark according to 93/42/EEC for medical products.



Indoor use only.



Type of protection: Class II

IPX4

Water splashing against the enclosure from any direction shall have no harmful effect.

12.3 Declaration of conformity

The declaration of conformity for the SINA Comfort shower trolley can be obtained on request from **BEKA Hospitec GmbH**.

12.4 Peripheral equipment / accessories for the SINA shower trolley

SINA HYD / EL shower trolley	
Part No.:	Description:
278812	Height-adjustable head section
278813	Wedge-shaped bolster
278680	Spare battery
278845	External wall charger
278836	Drain hose
278811	Shower mattress 160
278821	Shower mattress 200
278825	Hydraulic lifting actuator
278844	Hand control
278841	Electric lifting actuator

13. Installation Instructions

13.1 Exchanging the drain hose

Picture 1:

Tools required:

1 x hexagon socket wrench 4 mm



Picture 2:

Remove the drain hose by turning and pulling the drain hose.

Picture 3:

The picture shows the drain socket on the underside of the SINA shower trolley.



Picture 4:

Loosen the union nut on the drain socket as shown in the picture.

Picture 5:

The picture shows the underside of the shower trolley after removal of the drain socket. You must now remove the rubber seal by gently pulling it downward.



Picture 6:

Now remove the drain plug within the shower mattress.

Picture 7:

The picture shows the shower mattress after removal of the drain plug.



Picture 8:

Loosen and remove the screw as shown here in the picture.

Picture 9:
Lift the shower
mattress and
remove the drain
from the shower
mattress of the
shower trolley.



Picture 10:
The picture shows the
shower trolley with the
removed drain.

**For installation, please follow the instructions
in the pictures in the order of sequence**

10 → 1!

13.2 Exchanging the Bowden cable

Picture 1:
Remove the
Bowden cable
from the bracket
by gently pulling at
the external cover
with the guide
bushing.



Picture 2:
Lead the Bowden
cable in the direction
of the bracket
mechanism with the
safety nipple hanging
out.

Picture 3:
The picture
shows the
Bowden cable
after removal
from the
damper side.



Picture 4:
Pull out the
Bowden cable with
the cover from the
frame bracket.

Picture 5:
Loosen and remove
the clamping screw
from the actuation
mechanism, and
lead the Bowden
cable out.



Picture 6:
Remove the safety
nipple from the
actuation
mechanism.

Picture 7:
The picture shows the actuation mechanism after removal of the Bowden cable.



For installation, please follow the instructions in the pictures in the order of sequence

7 ➡ 1!

13.3 Exchanging the mattress

ATTENTION:



**Please make sure that the drain hose is removed before the removal of the shower mattress!
For removal of the drain hose, see Point 12.1!**

Picture 1:
As shown here in the picture, actuate the 1st quick release fastener on the underside of the SINA shower trolley.



Picture 2:
As shown here in the picture, actuate the 2nd quick release fastener on the underside of the SINA shower trolley.

Picture 3:
You can now remove the shower mattress from the SINA shower trolley.



Picture 4:
The picture shows the shower trolley after removal of the shower mattress.

For installation, please follow the instructions in the pictures in the order of sequence

4 ➡ 1!

13.4 Exchanging the electric motor

Picture 1:

Tools required:

- 1 x flat-bladed screwdriver
- 1 x ratchet
- 1 x socket 17 mm
- 1 x open-end wrench 17 mm



Picture 2:

Before disconnecting any cables, press the Emergency-Stop switch.

Picture 3:

Grasp the cable at the connector and remove it by gently pulling it.



Picture 4:

The picture shows the removed connector.

Picture 5:

Using the flat screwdriver, remove the cover caps on the lock nuts.

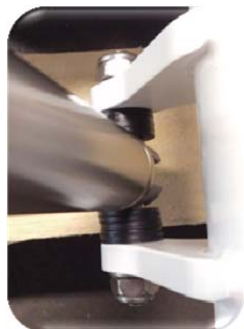


Picture 6:

The picture shows how to remove the cover caps on the lock nuts.

Picture 7:

The picture shows the spindle of the motor with the cover caps on the lock nuts removed.



Picture 8:

The picture shows the underside of the motor with the cover caps on the lock nuts removed.

Picture 9:
Loosen and
remove the lock
nut on one side of
the shaft.



Picture 10:
The picture shows the
lower shaft with the lock
nut removed.



Picture 11:
Remove the
shaft on the
spindle of the
motor.



Picture 12:
The picture
shows the
spindle side
of the
motor with
the shaft
removed.



Picture 13:
Loosen and remove the
lock nut at the shaft on
the underside of the
motor.



Picture 14:
The picture shows the
upper shaft with the
lock nut removed.



Picture 15:
Remove the
shaft on the
underside of
the motor.



Picture 16:
The picture shows the
underside of the motor
with the shaft
removed.



**For installation, follow the instructions in
the pictures in the order of sequence**

16 → 1!

13.5 Exchanging the handset

Picture 1:

Before pulling at the connecting cables, press the emergency-stop switch.



Picture 2:

Grasp the cable at the connector and remove it by gently pulling it.

Picture 3:

The picture shows the hand control with the connector removed.



Picture 4:

Plug in the connector of the new hand control and unlock the emergency-stop switch on the control by turning it clockwise.

For installation, follow the instructions in the pictures in the order of sequence 4 → 1!

13.6 Exchanging the hydraulic system

Picture 1:

Tools required:

- 1 x flat-bladed screwdriver
- 1 x open-end wrench 13 mm
- 1 x open-end wrench 17 mm
- 1 x ratchet
- 1 x socket 13 mm
- 1 x socket 17 mm



Picture 2:

Using the flat screwdriver, remove the cover caps on the lock nuts.

Picture 3:

The picture shows the screw and nut with the cover caps removed.



Picture 4:

Loosen the lock nuts on the screw for fastening the pedals on the left and right.



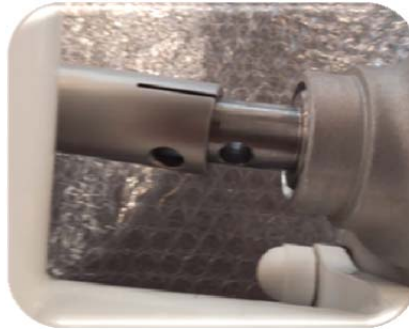
Picture 5:

Remove the lock nut and the screw from the bracket of the pedals on the left and right.



Picture 6:

Remove the pedal bracket on the left and right from the hydraulic system.



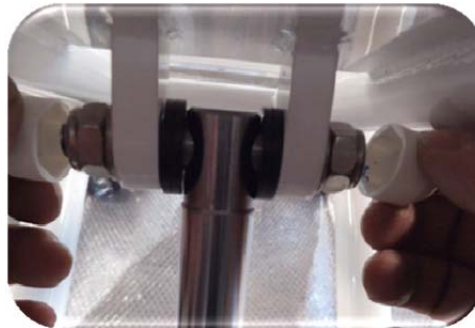
Picture 7:

Place the SINA shower trolley on its side. Remove the cover caps on the upper and lower shaft of the hydraulic system.



Picture 8:

The picture shows the shaft of the hydraulic rod with the cover caps removed.



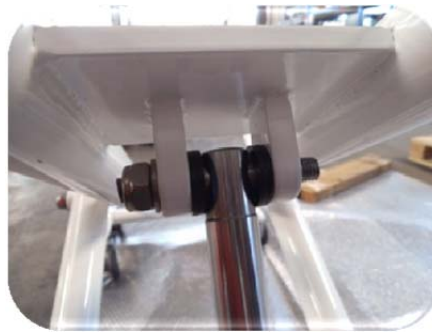
Picture 9:

Loosen and remove the lock nut at the shaft on the underside of the motor.



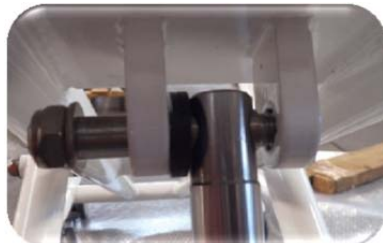
Picture 10:

The picture shows the upper shaft with the lock nut removed.



Picture 11:

Now remove the shaft from the hydraulic rod.



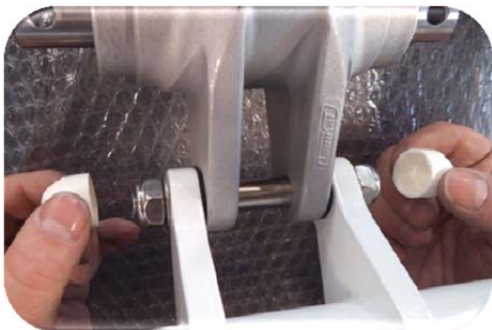
Picture 12:

Remove the cover caps on the upper and lower shafts of the hydraulic system.



Picture 13:

The picture shows the underside of the hydraulic system with the cover caps on the shaft removed.



Picture 14:

Loosen and remove the lock nut of the shaft on the underside of the hydraulic motor.



Picture 15:

The picture shows the underside of the hydraulic motor with the lock nut removed.



Picture 16:

Remove the shaft on the underside of the hydraulic motor.



For installation, follow the instructions in the pictures in the order of sequence

16 → 1!

13.7 Exchanging the casters

Picture 1:

Tools and auxiliary material required:

1 x open-end wrench 13 mm

1 x medium strength thread locker



Picture 2:

The picture shows SINA shower trolley with the castor to be removed.



To remove the castor, place the SINA shower trolley on one of its long sides.

Picture 3:

Place the open-end wrench as shown here in the picture and loosen the screw.



Picture 4:

The picture shows the foot of the shower trolley with the castor removed.



Picture 5:

When attaching the new castor, apply the medium strength thread locker on the thread.



Picture 6:

The picture shows the new castor with the medium strength thread locker applied on the thread.



Picture 7:

Now screw the castor tightly onto the castor holder once again.



For installation, follow the instructions in the pictures in the order of sequence

7 ➡ 1!

13.8 Exchanging the control device with mounting plate

Picture 1:

Tools required:

1 x T-handle wrench 2.5 mm



Picture 2:

Before removing the connecting cables, press the emergency-stop switch.

Remove all the cables except the control cables (hand control, motor).

Picture 3:

Remove the battery unit by grasping the recessed grip and actuating the unlocking mechanism.



Picture 4:

The picture shows the locking mechanism in unlocked state.



Picture 5:

The picture shows the locking mechanism in opened state.



Picture 6:

Gently lift the battery unit and remove it from the control unit.



Picture 7:

The picture shows the control unit with the battery unit removed.



Picture 8:

Loosen and remove the screw as shown here in the picture.



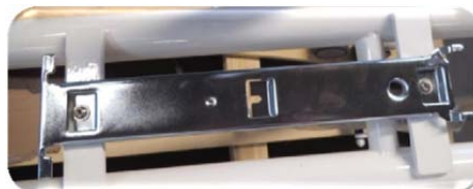
Picture 9:

The picture shows the control unit with the screw removed.



Picture 10:

The picture shows the mounting plate for the control unit and the battery unit.



Picture 11:

Loosen and remove the upper screw on the mounting plate.



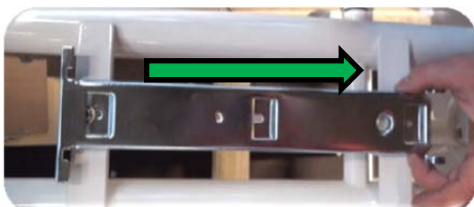
Picture 12:

Loosen and remove the lower screw on the mounting plate.



Picture 13:

Now pull the mounting plate in the direction of the arrow.



Picture 14:

The picture shows the removed mounting plate.



For installation, follow the instructions in the pictures in the order of sequence

14 → 1!

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480 University Ave. Suite 510, Toronto Ont. M5G1V2 | T 1.800.265.0677 | F 416.260.5580 | www.prismmedical.ca

