ProLift-series: innovative patient hoist soloution made of steel

Instructions for use

ProLift Cacero

Designation Version	ProLift Cacero H with Home-electronics	ProLift Cacero HU CBJ Home-electronics / UK version	ProLift Cacero C with Care-electronics	ProLift Cacero CU with Care-electronics/ UK version
Item no.	960800	960805	960810	960815

novacare

The **ProLift Cacero** steel hoist from **novacare** gmbh is the perfect homecare hoist that copes easily with every situation where lifting is required.

A good decision.
Your novacare team

Please read the following instructions for use carefully and observe the warning notices before you use the hoist.

1. Contents of pack

ProLift Cacero H / HU
1x hoist arm and hoist column, pre-assembled
1x wheeled trolley base
1x lifting bar
1x CBJH electronic control box and hoist motor pre-assembled
1x manual controller/charging cable/ cable cover
1x set of screws and screw caps

ProLift Cacero C / CU
1x hoist arm and hoist column, pre-assembled
1x wheeled trolley base
1x lifting bar
1x CBJC electronic control box and hoist motor pre-assembled
1x manual controller/charging cable/ cable cover
1x set of screws and screw caps

2. Description of product

The ProLift Cacero steel hoist from novacare® GmbH is the perfect homecare hoist that copes easily with every situation where lifting is required.

With the ProLift Cacero, ergonomics and design are equally important. A number of small details, such as the locking trolley wheels, complement the overall design of the ProLift Cacero. The steel hoist with a maximum load capacity of 200 kg, weighs only approx. 46,2 kg, so moving it into position presents no problem to care workers. The ProLift Cacero can be combined with an extensive range of harnesses and lifting bars. The expected service life of a ProLift Cacero series hoist is about 10 years, depending on use.

The ProLift Cacero is available in three versions: the ProLift Cacero H with ‚home electronics' pack (battery and controller in a single unit), the ProLift Cacero C with ‚care electronics' pack (separate battery and controller) and the ProLift Cacero CU with ‚care electronics' pack (separate battery and controller with special mains plug for UK market). Functionality, load capacity and application are identical for all three versions.

3. Function and areas of application

In these instructions for use, the person needing assistance is generally referred to as the „patient“. The ProLift Cacero is a mobile hoist designed for lifting patients. With a load capacity of 200 kg, this steel hoist is the ideal homecare hoist that can cope with almost every situation where lifting is required. The ProLift Cacero series can be used for routine lifting and transferring of patients in the home and in an institutional environment. Possible situations where lifting might be required include transferring the patient between bed and wheelchair, lifting on and off the toilet seat and (access permitting) into and out of the bath, and lifting up from the floor. The hoist can be used in wet areas but should be protected from splashes.

4. Overview of parts

1. Handle
2. Control box with battery and emergency stop button
3. Trolley base adjustmentTrolley frame
4. Double castors with brakes
5. Column shoe
6. Trolley frame
7. Front double castors
8. Lifting bar with quick-release lock/arm
9. Hoist motor and lift column
10. Emergency mechanical lowering device
11. Hoist column
12. Hoist arm

5. Safety measures to be observed before use

Attention!
In order to avoid damaging the hoist through incorrect operation or endangering the patient or the user, read these instructions for use thoroughly before using the hoist. Observe all warnings. Use the ProLift Cacero hoist and its accessories only in accordance with these instructions for use.

Keep these instructions for use in a safe place so that they are easily accessible at all times. If the hoist is sold or transferred to another owner, pass on these instructions for use. ProLift Cacero series hoists must be used only by persons who have been instructed in their correct use. To avoid a risk of injury, the hoist and harness must be used only as specified. Before each use, and especially after cleaning, check the lifting harness for possible damage such as torn fabric, faulty joints and cracks. Damaged harnesses must not be used and replaced immediately.

Novacare® GmbH accepts no liability for any use of ProLift Cacero series patient hoists and accessories not complying with these instructions for use.

Keep children away from the hoist and accessories to avoid a risk of injury through swallowing small parts, being strangled by the harnesses or crushing limbs on the hoist.

Before using the hoist, check the following:

- Check that all parts are functioning correctly.
- Check that all parts are correctly attached, screwed together, joined or mounted.
- Check the hoist for external damage, in order to avoid the risk of injury. Do not use a hoist that is defective.
- Check that any accessories to be used (e.g. lifting harness) are undamaged. Observe the instructions for using our accessories. Use only accessories produced or distributed by novacare® GmbH.
- All parts (hoist and accessories) must be used as specified and must not be altered or modified.
- Check that accessories are correctly and securely attached to the hoist.

- Depending on the mobility of the patient, select a lifting harness of the correct size - there is a risk of the patient slipping out of the harness if it is too large, while too small a harness can cause pressure points and there is a risk of limbs and the skin being crushed.
- Before first using the battery, it must be charged for a full 24 hours to ensure correct function and a long service life.
- Settings may be adjusted only by trained care specialists or trained individuals.

The following safety instructions should also be noted:

- Watch the patient the whole time while lifting or transferring is under way.
- When transferring a patient, the locking brakes must not be applied - risk of tipping!
- Ensure that neither the user's nor the patient's limbs will be squashed or crushed.
- Take particular care around strong electromagnetic sources such as MRI equipment. Electrical devices can affect one another through their electro-magnetic emissions. We recommend maintaining a safe distance of at least 1 metre, especially around sensitive devices (e.g. cardiac pacemakers).
- In general, legal regulations regarding medical products and their operation must be observed.
- Do not use the hoist if:
  - the hoist is defective.
  - the patient is heavier than the load capacity of the hoist or harness.
  - the accessories were not supplied by novacare® gmbh or authorised by novacare® gmbh.
  - the accessories are no longer safe or have not been tested.
  - you are unsure of how to use the hoist.
  - the patient is suffering from cramp and could fall out.
  - the hoist is standing on a sloping surface and might roll away.
  - there are obstacles in the way.

6. Maximum load capacity

Attention!
The upper weight limit (maximum load) of the ProLift Cacero series of hoists is a body weight of 200 kg. The load capacity of the hoist harness (body support system) varies from one model and load to another. Apply the limits of the component with the lowest maximum load (on a hoist, the hoist arm and body support system) to the entire system.

7. Unpacking and disposal of packaging material

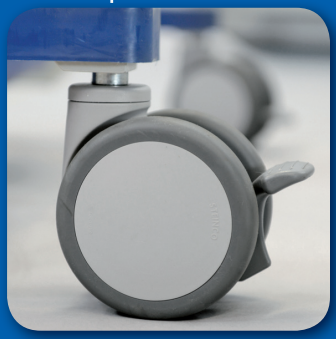
Please check goods and packaging on delivery for any damage. If the hoist is to be transported after use, use the original packaging. Otherwise, dispose of the packaging according to national waste disposal guidelines.

8. Installation and assembly

Before assembly, remove all parts carefully from their packaging. Inspect the parts for external damage. Damaged parts must not be assembled or used. Contact your dealer or novacare® gmbh. The hoist motor, electronic control box and trolley motor are preassembled on delivery. If this is not the case, observe the following instructions.
If not preassembled, first mount the upper end of the hoist motor on to the bracket of the hoist arm.

Hoist motor lifting column

Brake open



Brake closed

Apply the locking brakes on the trolley base for all installation work. Slide the hoist column into the column shoe and fix it in place using the enclosed lever screw.

A Mast support

B Hoist column
C Select height of hoist column

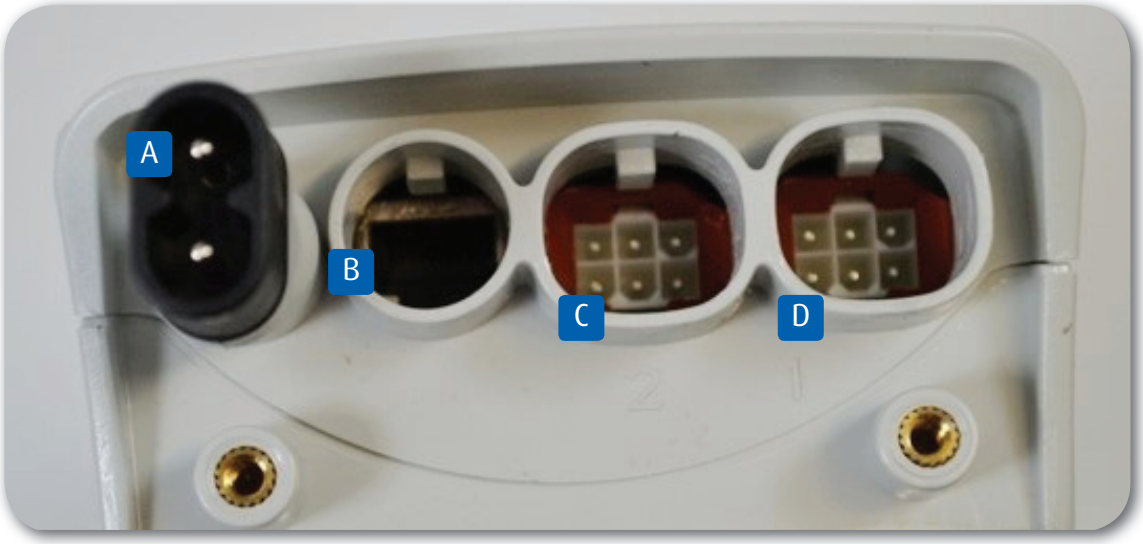
D Insert lever screw into screw hole
E Use washer

F Attach lever screw counterpart

G Adjust lever screw handle, Tighten locking screw

CBJH electronic control box

If the hoist is equipped with a CBJH electronic control box, connect the cable of the hoist motor to the CBJH electronic control box (socket CH1). Plug the manual controller into the connection socket. Screw the cable cover to the underside of the electronic control box. Connect the charger cable to the electronic control box.



A Connection socket for mains power cable

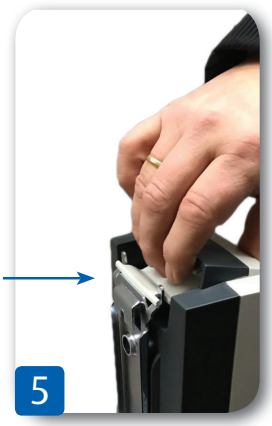
B Connection socket for manual controller

C CH2 connection socket for optional trolley motor

D CH 1 connection socket for hoist motor

CBJC electronic control box

If the hoist is equipped with a CBJC electronic control box, ensure that the electronic control box is correctly mounted. If the CBJC is not already mounted, attach the mounting bracket to the hoist with the supplied screws (Figure 1). Attach the electronic control box and fix it to the mounting bracket with the black screws supplied (Figure 2). Attach the battery (Figure 3) to the mounting bracket so that it is firmly connected to the electronic control box and the mounting bracket (Figures 4-6).



Connect the manual controller and the hoist motor as shown below. Connect the cable of the hoist motor to the CBJC electronic control box (socket CH1, Figure 1).
Plug the manual controller into its socket and the trolley motor connector to the appropriate socket (socket CH2, Figure 2). If your hoist has no trolley motor, seal the socket with a filler plug (Figure 3).

1. Connection socket for the manual controller
2. Cable relief support
3. CH1 hoist motor socket
4. CH2 socket Trolley motor
5. Mains power cable
6. Not occupied

Filler plug if no trolley motor installed

Now attach the hoisting bar
Press the lug of the hoisting bar hook downwards. This opens the hook. Attach the hook to the retaining bar of the hoisting bar. Release the lug - the hook is now closed again and secured against slipping off accidentally.

1. Retaining bar of the hoisting bar **2.** Hoisting bar **3.** Engage the hook of the hoisting bar **4.** Ensure hook is seated correctly **5. + 6.** Move the plug on the hook to open and close

Note! Ensure that all screw joints are tight and all cable connections properly connected. Check before first use that all parts are moving freely (hoist arm, hoisting bar, castors, brakes, trolley base). Ensure that the required power supply is available. Special care is advised when moving ProLift Cacero series hoists over carpet or across wet, slippery, rough or uneven surfaces. Never use ProLift Cacero series hoists on slopes that are too steep – you could lose control of the hoist or it might tip over. In order to avoid the risk of injury, you should activate the emergency stop button before assembly or disassembly.

9. Safety in use/Warnings and safety notes

Before installation, deinstallation or troubleshooting:

- Stop the hoist motor by pressing the EMERGENCY OFF button
- Switch off the power supply and unplug the mains power cable.
- Release any load from the hoist motor and lifting column

Before first use:

- Install the hoist only in accordance with the instructions for use.
- The individual elements (hoist motor, lifting column, manual controller etc.) must all be linked together before the control unit is connected to the mains.
- Ensure that the mains voltage is correct for the product or system before connecting it.
- Connect the charger to the correct power supply (socket).
- Ensure that the hoist can be freely moved and there are no obstacles in the way.
- Check that it functions correctly after assembly.
- The load on the hoist motor and lifting column must not exceed the value given in the Specification (see also product label).
- The maximum duty cycle indicated on the type identification plate must always be observed, as damage to the product might otherwise occur. Exceeding the maximum duty cycle can lead to a reduction in the service life of the system. Unless otherwise specified on the type identification plate, the maximum duty cycle is 10%, or 2 minutes of operation followed by 18 minutes at rest.
- The hoist motor and lifting column may be used only in areas appropriate to the type of protection (IPX) installed. You will find the type of protection specified on the type identification plate.
- Should individual parts appear to be defective, do not install them, but instead return them to the manufacturer to be checked.
- Use the hoist only for transporting and lifting persons. Use for lifting other loads and objects is not permitted.

10. Regular function and usage

During operation:

- Be alert to unusual noises and uneven performance. Stop the hoist motor/lifting column immediately if anything unusual occurs.
- If the control unit starts to produce unusual noises or odours during use, disconnect both the power supply and the external battery (if fitted).
- Ensure that the cables are not damaged.

Variante CBJH

- In order to start the lifting process, press the „Up arrow“ button **(1.)** on the manual controller. To start the lowering process, press the „Down arrow“ button **(2.)**.

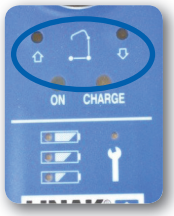
- To lower the hoist electrically in an emergency, press the „Down arrow“ button **(3.)** on the CBJH electronic control box.

- To lower the hoist mechanically in an emergency, pull the red emergency lower-ing lever on the motor in the direction of the arrow **(4.)**. The hoist arm will lower automatically.

CBJC Version

In order to start the lifting process, press the „Up arrow“ button **(1)** on the manual controller. To start the lowering process, press the „Down arrow“ button **(2)**.

The CBJC control box has either buttons or recessed buttons. The lifting arm can be raised or lowered by pressing the recessed buttons with the tip of a pen. This is a permissible method of raising/ lowering the hoist if a manual controller is not connected. The lifting/lowering „buttons“ function in the same way as the normal manual controller buttons (no extended functions are available with a low battery).



To lower the hoist mechanically in an emergency, turn the emergency lowering lever clockwise **(4)**. The hoist will lower automatically.

Please ensure that the red EMERGENCY STOP button is deactivated during use **(5)**. Activate the red EMERGENCY STOP button only in an emergency, if the hoist has to be switched off immediately (e.g. if the hoist is faulty or has toppled over).

If the hoist is not used for an extended period (e.g. during storage or transport), the red EMERGENCY STOP button can also be activated. To activate the red EMERGENCY STOP button, press the button until it locks **(6)**.

To deactivate the EMERGENCY STOP button, turn clockwise – this will release the button **(7)**. The hoist can then be used again. Note that the cause must be located.

In order to set the trolley base to the required width, press the left pedal on the trolley adjustment mechanism **(9).** To return it to the standard setting, press the right pedal **(10)**. The automatic snap-in system prevents accidental adjustment of the trolley.

Press down **(11)** on the brake of the double castor in order to lock it in place, and upwards **(12)** to release it. During use, ensure that the castors are unlocked - if you attempt to move the hoist while the brakes are engaged, it could tip over.

Attention!
The hoist must be moved and positioned only by means of the handle. Never pull or push the hoist using the hoist arm or motor. To ensure a safe working environment, always position the hoist so that you can work according to ergonomic guidelines.

13 Only move the hoist using the handle

14 Observe warnings

11. Warning lights

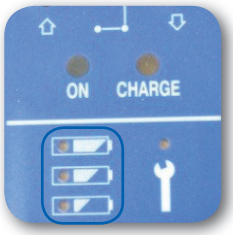
11.1 CBJH

Battery: if the battery capacity is low, a continuous alarm signal will sound when the manual controller is operated.
Overload: if an excessive load is exerted and the CBJH drive unit is overloaded, two audible signals will sound (power limit exceeded). The power is disconnected and the drive unit will stop. The drive unit can be restarted as soon as the overload has been remedied.

11.2 CHJC Maintenance warning light flashes:

Every 12 months (in line with the recommendation contained in EN10535) / after 8,000 cycles, whichever occurs first.
The first time the maintenance symbol lights up, the control box produces an audible warning. Once the maintenance date is reached, the maintenance warning light remains on for 2 minutes after use.
The control box then switches off, in order to conserve the battery. When the maintenance warning light is illuminated, the system can still be operated and will work normally. Contact us or an authorised service engineer. Compliance with the maintenance intervals serves to protect the patients and users.

Battery:
3 LEDs:
- Green: the battery need not be charged
- Yellow: the battery requires charging
- Yellow: the battery requires charging,
  audible signal also produced when manual controller activated



If hoist continues to be used on low battery charge, the LED will flash and will produce a continuous audible signal. At this point, it will still be possible to lower the hoist arm (lifting and trolley base adjustment will no longer be possible).

12. Batteries (charging/replacing)

Attention!
The batteries must be replaced after four years at the latest - possibly sooner, depending on extent of use. Frequent and rapid discharge of the batteries reduces their service life. For an optimal service life, the batteries should be connected to mains power as frequently as possible. The batteries must be charged at least once every three months, or they will be damaged by the selfdischarge process. The CBJC electronic controller contains an electronic control box and a separate battery box.

Fully charge before first use!

12.1 CBJ-Home:

1 Charging light (yellow)
2 LED showing manual controller activated (green)
3 Button for emergency electrical lowering

Battery box

1. Charging can only take place if the emergency „Stop“ button has been deactivated.
2. The indicator (1) flashes during charging.
3. The charging process is completed once both LEDs (yellow and green) remain illuminated.

12.2 Optionale external charger CHJ2

The charger can be mounted either between the control box and the battery on the patient hoist or separately on a wall or elsewhere. If the charger is mounted between the control box and the battery, the functions of the control box are deactivated when mains power is connected to the charger.

The charger has the following properties:

- It is mains charger with an input voltage of 100-240 V AC
- Charging time: max. 4 hours for the BAJ1/BAJ2 battery set
- Replaceable power cable with retaining ring
- Green light ON illuminating: Charger is connected to mains power
- Yellow light CHARGING illuminating: Battery is charging Lights OFF means: the
- battery is fully charged
- Simple assembly of charging device on JUMBO mount (optional)
- Unless the EMERGENCY STOP button has been activated the charging process takes place

Charger is connected to mains power, battery is charging

Plug locks in place

Plug socket

Wall bracket

13. Attaching the harnesses

13.1 Attachment of harness in sitting position:

Bend the patient's upper body forward and support him with your hip in order to stop him from accidentally falling out of the wheelchair. **(A)**

Place the lifting harness in the middle of the patient's back so that the label is legible on the outside. Slide the lower end of the harness down the patient's back with the palm of your hand until the point where the harness divides is level with the wheelchair seat or the patient's coccyx.

To make this process better and easier, a finger-pocket is attached to the lower end of the lifting harness. **(B)**

Push the Highsupport Sling sideways and down to the wheelchair seat, past the patient's bottom. Pull the leg support forwards between the side of the wheelchair and the patient's upper thigh **(C)**.

Now pull with equal pressure on both leg supports, in order to position the lifting harness around the patient with no folds **(D)**.

Tip: While pulling the leg loop forwards with one hand, press gently with the other hand against the patient's knee on the same side **(D)**.

A

B

C

D

Lift one leg gently and bring the leg support inwards around the patient's thigh. It is correctly positioned when the leg support is at a 90° angle to the upper thigh **(E)**

Tip: In order to prevent rotation and stop the harness from cutting into the patient, push the leg loop from the outside with the palm of one hand, while you pull it through with the other hand **(E)**

Now attach the loops of the harness to the hooks of the lifting bar in the following orders:

1. head loops
2. leg loops (F)

For maximum safety, attach the leg loops diagonally and in such a way that one loop passes through the other **(G).**

Ensure that the colour-coded loops and hooks match up.

E

F

G

13.2 Attachment of harness in lying position:

Place yourself in front of the bed and set the height of the bed at a level that will protect your back. Turn the patient to face you **(A)**. Support the patient with your body so that he can not fall out of the bed.

Place the Highsupport Sling flat on the mattress with the label side down. Position the long edge of the harness just beneath the patient. The point where it divides should be at the level of the patient's coccyx **(B)**.

Now grasp the top and bottom edges of the harness and wrap these around the patient **(C)**. Ensure that there are no folds in the harness. Roll the patient onto his back. Now pull the harness out, one side at a time, from the lower end (the leg loops).

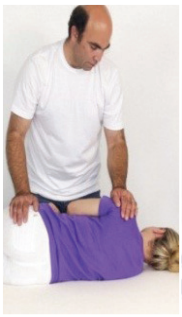
Bring the leg loops inwards underneath the patient's upper thigh **(D)**.
Ensure that they are at right-angles to the upper thigh **(E)**.

Attach the loops to the hooks of the lifting bar in the following order: 1. head loops
2. leg loops **(F)** Ensure that the colour-coded loops and hooks match up.

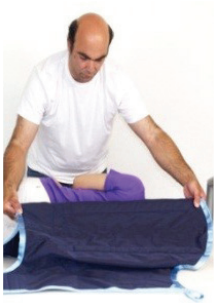

G

Attention: Depending on the size of the harness, it may be necessary to support the patient's head while lifting from a lying position, in order to avoid over-stretching the neck**(G)**.

Alternatively, the head section of the bed can be raised to bring the patient into a sitting position before starting to lift. When lifting the patient from the ground, proceed in exactly the same way. Set the trolley on the hoist to its extended position and position the hoist at the patient's head. Take care not to injure the patient.


A


B


C


D


E


F

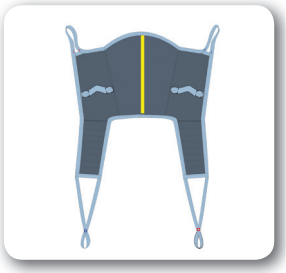
14. Optional accessories

Using the double hoisting bar

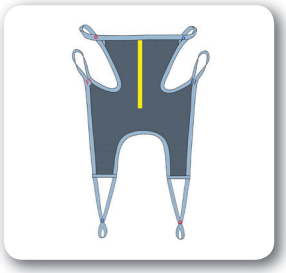
Using the single hoisting bar

14.1 Harnesses

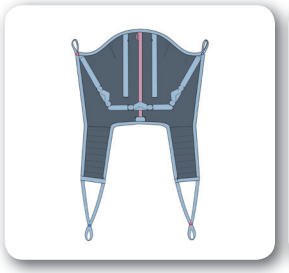
The harnesses specified here can be used on all hoists in the ProLift series and are approved by novacare. When using the harnesses, follow the instructions for use specific to our harnesses.



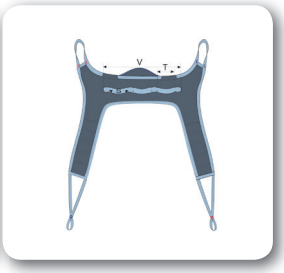
Middlesupport Sling



Flexsupport Sling



Highsupport Sling



Hygienesupport Sling

14.2 lifting bars and scales

The lifting bars shown can be used on all hoists in the ProLift series and are distributed by novacare

We supply our double lifting bar in two widths
1. 731 mm / 531 mm
2. 632 mm / 432 mm

We supply our single lifting bar with a width of 370 mm

The patient scales can be used on all hoists in the ProLift series and are approved by novacare® gmbh. They are Class 3 scales for weighing up to 400 kg.

15. Faults/Troubleshooting

Identifying faults on the hoist motor/lifting column

Symptoms	Possible causes	Remedies
• No sound from the motor or movement in the piston-rod	• the hoist motor is not connected to the power supply • the fuse in the control unit is faulty • the cable is damaged	• connect the hoist motor to the power supply • replace the fuse • send the drive unit away for repair
• Motor runs but spindle does not move	• gear or spindle damaged	• send the drive unit away for repair
• drive unit cannot lift a full load	• voltage drop in cable • motor damaged	• send the drive unit away for repair
• Sound from the motor but no movement in the piston-rod		• send the drive unit away for repair
• Piston-rod travels inwards but not outwards	• safety nut has deployed	• send the drive unit away for repair
Mains light is not showing	not connected to mains	connect to mainssend device
	fuse is defective	send device away for repair
	defective power cable	on control units with replaceable cable, replace cable. on units with fixed cable, send control unit away for repair.
	control unit defective	send control unit away for repair.
Mains light is showing but drive unit does not run	hoist motor plugs not correctly connected to the control unit	connect hoist motor plugs correctly to the control unit.
Hoist motor does not run on battery power, though the relay can be heard clicking	hoist motor plugs not correctly	hoist motor plugs not correctly
	connected to the control unit	connected to the control unit
	hoist motor defective control unit defective	replace hoist motor replace control unit
Control unit functions but only in one direction on one channel	manual controller defective control unit defective	send manual controller away for repair send control unit away for repair

16. Storage after use/Re-packing

Always store the ProLift Cacero indoors. Take care that water cannot penetrate into electronic components (e.g. manual controller, cable). During transportation, or if the patient hoist is not to be used for a period, the emergency „off“ button should be pressed. Recharge the battery before further use.

17. Ambient conditions

Storage:

Temperature:	-10 °C to +50 °C
Relative humidity:	20 % to 90 % at 30 °C - non-condensing
Air pressure	795 to 1060 hPa

Operation:

Temperature:	+5 °C to +40 °C
Relative humidity:	20 % to 90 % bei at °C - non-condensing
Air pressure:	795 to 1060 hPa

Transportation: The drive unit can be damaged if it is mounted onto the system and is subjected to pressure or force during transportation. Do not drop the drive unit or damage its casing during disassembly or transportation. You should not use a damaged drive unit.

18. Classification of information

The ProLift Cacero series is a medical aid. It is produced by novacare® GmbH, primarily for medical professionals (nursing staff, medical supplies specialists, operators, medical institutions, social institutions, etc.) and professional users.

Specialist areas and professional users include persons whose medical or similar training provides them with a sufficient understanding of the hoist to enable them to teach the patient and/or a non-professional user or medical layman to use a ProLift Cacero series hoist correctly.

The installation of ProLift Cacero series hoists for patients as well as transfer to and instruction of non-professional users and medical layman takes place by medical specialists and specialist suppliers. Instruction must include, e.g. a description of functions, explanation of control elements as well as cleaning and the mode of operation of the hoist with reference to the potential risks. A start-up by non-professional users and non-medical professionals is possible, but should not take place without adequate instruction.

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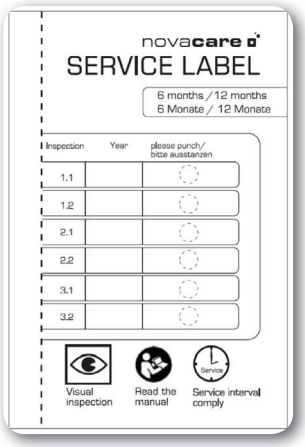
19. Use in combination with other products

Any accessories used must be designed for hoists in the ProLift Cacero series and approved by novacare® gmbh. Novacare accepts no liability for use of any other accessories. ProLift Cacero series hoists should not be used in combination with any other medical products.

20. Servicing/Maintenance

- The ProLift Cacero series is a medical product as defined by RL 93/42/EEC and the Medical Devices Act (MPG) of the German Federal Republic, whose legal provisions must be observed in their deployment and use.

- The system is suitable for sale or transfer elsewhere to be reused. Maintenance requirements must, however, be observed and faultfree operation ensured.
- To ensure correct functioning of the ProLift Cacero, regular maintenance and safety checks are required. These checks are separate from, and have no bearing on, the safety checks, visual and functional tests and tests on maximum load using suitable free-hanging reference weights as prescribed by law (in Germany, DGUV3).
- Maintenance and inspection must be carried out by the manufacturers or businesses authorised by them and a charge will be made.
- If safety checks are not carried out, do not comply with the prescribed schedules or technical specifications, or are not carried out by authorised persons, the warranties will no longer be valid.
- Warranties will also be invalidated and liability denied in cases where damage or functional failure for other reasons occur as a result of maintenance and inspection not being carried out according to the specified schedules or technical specifications, or of interference by unauthorised persons.
- Aside from those prescribed by law (in Germany, DGUV3) to be conducted by an authorised person, the necessary checks and tests include visual and functional tests (before use) by the user and maximum load tests conducted by an authorised person using suitable free-hanging reference weights.
- When the drive unit or CBJ is replaced, the maximum load must be readjusted in order to establish the correct power cut-off level for the entire new system.



Maintenance should be documented on the service labe

20.1 Hygiene

When reusing the hoist or for use for a new patient, the hoist must be prepared in accordance with „RKI guidelines for hospital hygiene and prevention of infection“ and the „Guidelines for the preparation of medical products“ and all relevant requirements must be observed. The Medical Devices Act and its regulations must be observed.
The hoist and its accessories should be cleaned and disinfected before a change of patient or at 2-weekly intervals. Regularly clean to remove fluff and dust from the double castors.

Attention

- Clean the hoist with water and a cloth dampened with a commercial disinfectant.
- Do not immerse electrical parts in water.
- Where approved procedures and hygiene plans for preparing the hoist already exist, these should be used.
- Follow the instructions for use prescribed by the manufacturer of the disinfectant.
- If necessary check with the manufacturer of the disinfectants that they will not harm the hoist system.
- Cleaning with a steam pressure cleaner is not permitted.
- **Do not use cleaning materials containing chlorine or phenol,** since such substances can damage steel and plastics.
- Guarantees will no longer be valid if unsuitable or unlisted preparations are used or are wrongly used.
- Preparations used must not be strongly alkaline or acidic (pH value should be 6-8) and must not contain any corrosive substances. Substances contained in them must not alter the surface of the plastic and they must not degrade the lubricant.
- Do not lift the hoist arm by hand. The engine can get damaged.

20.2 Preparation by qualified personnel

All servicing, repair and testing work must be carried out only by specialist trained personnel. The checklist must be assessed and repairs carried out only by specialist personnel who have the relevant training, skills and experience.

21. Assurances and Warranty

Novacare gmbh places great value on high quality, from the selection of materials to the standard of workmanship. Components supplied from outside, such as drive units, are specially manufactured to meet our high demands in terms of quality and reliability.

Guarantee conditions:

- We offer a guarantee on every hoist in the ProLift series, covering defects occurring within 24 months of purchase and arising from faults in manufacturing and/or materials. This guarantee covers repair or (if repair is impossible) replacement, free of charge.
- The guarantee will not apply where the defect in the device is due to inappropriate use and/or use outside the device's intended purpose or contrary to regulations contained in these instructions for use.
- We will not be liable for damage or faults arising from fair wear and tear or during transportation.
- Replacement of wear parts such as harnesses is not included in the guarantee.
- The guarantee on batteries is six months.

Warranty:

- The warranty complies with legal requirements.
- Any warranty is invalid if goods supplied by us are processed, handled or altered without our approval, or if our instructions for use are not followed.
- For medical products as defined by EU Directive 93/42/EEC, whose use is subject to regular maintenance and preparation (where relevant under the German Regulations for the Use of Medical Products - MPBetreibV), the warranty will apply only if the manufacturer's prescribed servicing intervals are observed.

- Where a claim under warranty is made and subsequent testing determines that it relates to wear and tear or to other damage not covered by the warranty, we reserve the right to pass on to the claimant any costs we have incurred (testing costs, transportation costs etc.).
- The use of elements or individual components from other systems or from another manufacturer or any combination thereof is not permitted. Damage caused by such use will render the warranty invalid. The operator will be liable for any such damage.
- Observe the stipulations of the German Medical Products Act and the German Regulations for the Use of Medical Products.

22. Disassembly and disposal

The hoist motor, manual controller and the electronic control box are defined as electrical waste and must be delivered to an appropriate disposal point. Lead acid batteries are used in all models.

Electrical devices from novacare® gmbh are registered (see symbol)
WEEE – Reg.- No. DE – 89 403 200

The batteries in this novacare® gmbh system are registered
(see symbol)
Pb- battery **Battery Return System Contract no 109101377**

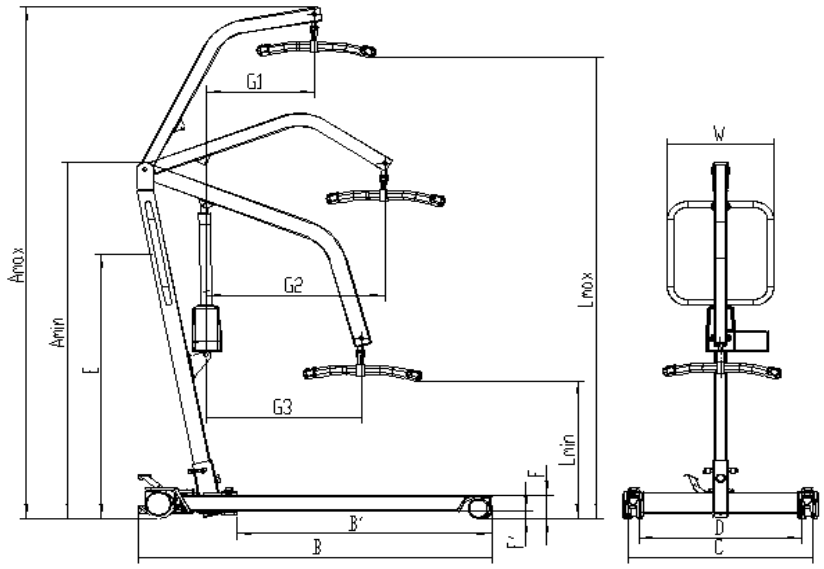
Old batteries must be disposed of professionally at your nearest recycling centre or returned to a dealer authorised by novacare® gmbh. Metals can be recycled.

23. Technical Specifications/Dimensions

The materials used are protected against corrosion.

Hoist frame:	Powdercoated steel
Casing of electronic control box and hoist motors:	PVC
Tyres:	grey-dyed polyurethane
Heaviest single remov. unit:	approx. 20 kg
Castors front:	75 mm, rotate thru 360°; Double castors
Castors rear:	100 mm, rotate thru 360°; Double castors with brakes
Emergency lowering:	Mechanical and electrical
Turning circle:	124 mm
Noise:	max. 50 dB in accordance with DS EN ISO 3743-1
Duty cycle:	2 min. continuous operation, followed by 18 min. rest
Cable length:	2.25 m

23.1 Dimensions



Max. load and eight in kg measures in cm. (unmarked tolerance: +/- 1cm)												
Item No.	Max. load	L		A		B	B'	C	D	E	F	F'
		Max.	Min.	Max.	Min.							
960800 960805 960810	200	172	52	193.5	138	128	88.8	66.5~100 (tolerance+/-2cm)	58~92 (tolerance+/-2cm)	122	11	5

G			W	NW	Wende-kreis
G1	G2	G3			
59 (tolerance+/-3cm)	75 (tolerance+/-3cm)	52 (tolerance+/-3cm)	46,2	33.5	138.5

23.2 Electrical data

	Pro Lift Cacero H / HU	Pro Lift Cacero C / CU
CBJ care electronic (Charger and controller)		U in: 100-240 V~50/60 Hz I in: Max 200 mA U out: 24 V max. 250 VA IPX 4
Battery box CBJ care (Accu)		Battery: U out: 24 V max. 10 AT 2.9 Ah, IPX 5
CBJ home (charger and controller)	U in: 100-240 V~50/60 Hz I in: Max 200 mA U out: 24 V max. 250 VA IPX 4	
Hoist drive unit LA 43	Max power: 8,000 N pushing force 4,000 N pulling force Electrical current requirement: 24 V- Max.7.7 A Duty cycle: 10% 2 min. operation/18 min. rest IPX 4	Max power: 8,000 N pushing force 4,000 N pulling force Electrical current requirement: 24 V- Max.7.7 A Duty cycle: 10% 2 min. operation/18 min. rest IPX 4
Manual controller CBJC L/S	IPX 4	IPX 4
Max. working load	200 kg/ 440 Ibs	200 kg/ 440 Ibs

24. Spezifikation der Motoren Elektronikboxen

24.1 Hoist motor LA 43

The LA 43 hoist motor is built into all versions of the Pro Lift Cacero series.

Characteristics:

- Max. pushing force: 8,000 N
- Max. pulling force: 4,000 N
- Rapid lowering (emergency mechanical lowering)
- Low noise level (<50 dB)
- Load-bearing steel components

24.2 Battery - electronic (CBJ-Home)

The electronic CBJ-Home battery is included as standard on ProLift Cacero H / HU.

Characteristics:
- Approx. 40 cycles per charge
- Soft-start function
- Emergency stop
- Audible low battery alarm (2-10 cycles)
- Integrated charger
- Front cover with:
  - green LED: manual control indicator
  - yellow LED: charging indicator
  - emergency lowering button

24.3 Battery - electronic (CBJ-Care)

The electronic CBJ-Care battery is included as standard on the ProLift Cacero C and CU models.
Characteristics:
- Soft-start/stop on channel 1
- Emergency raising and lowering function (CBJ1).
- 2-speed drive control on channel 1 (CBJ1)
- Electronic overload protection (EOP)
- Emergency stop switch
- Audible battery alarm when battery capacity is approx. 50%

25. EMC test values

Guidance and MANUFACTURER'S declaration – ELECTROMAGNETIC IMMUNITY – for all MEDICAL ELECTRICAL DEVICES and MEDICAL ELECTRICAL SYSTEMS.Medical products in ProLift Cacero series hoists are designed for use in an ELECTROMAGNETIC ENVIRONMENT as indicated below. The customer or user of the ProLift Cacero should ensure that it is being operated in such an environment.

Radiated interference measurements	Compliance	Electromagnetic environment - guidance
RF emissions accord-ing to CISPR 11	Class [B]	
Harmonic emissions IEC 61000-3-2	Class [A]	
Voltage fluctuation emissions/flicker IEC 61000-3-3	[complies]	ProLift Cacero series hoists are suitable for use in all environments, including domestic and similar, which are directly connected to the public grid from which buildings used for domestic purposes also receive their supply.

IMMUNITY tests	IEC 60601- TEST LEVEL	COMPLIANCE LEVEL	GUIDANCE ON ELECTRO-MAGNETIC ENVIRONMENT
Electrostatic discharge (ESD) (IEC 61000-4-2)	± 6 kV contact discharge ± 8 kV discharge through air	± 6 kV contact discharge ± 8 kV discharge through air	Flooring should be wood, concrete or ceramic tiles. If the floor covering is of synthetic material, relative air humidity must be at least 30%.
Rapid transient electrical interfer-ence/bursts (IEC 61000-4-4)	± 2 kV for mains cables ± 1 kV for input and output cables	± 2 kV for mains cables ± 1 kV for input and output cables	The quality of the mains voltage should be similar to that of a typical business or hospital environment.
Surge voltages (IEC 61000-4-5)	± 1 kV outer cable - outer cable ± 2 kV outer cable - earth	± 1 kV outer cable - outer cable ± 2 kV outer cable - earth	The quality of the mains voltage should be similar to that of a typical business or hospital environment.
Voltage dips, short-term interruptions and variations in mains voltage (IEC 61000-4-11)	< 5% UT (>95% dip in UT) for ½ period 40% UT (60% dip in UT) for 5 periods 70% UT (30% dip in UT) for 25 periods < 5% UT (>95% dip in UT) for 5 sec	< 5% UT (>95% dip in UT) for ½ period 40% UT (60% dip in UT) for 5 periods 70% UT (30% dip in UT) for 25 periods < 5% UT (>95% dip in UT) for 5 sec	The quality of the mains voltage should be similar to that of a typical business or hospital environment. If the ProLift Cacero series hoist is to operate also when the power supply is interrupted, it is recommended to supply the ProLift Cacero hoist via an uninter-ruptible power supply or a battery.
Magnetic field at the supply frequency (50/60 Hz) (IEC 61000-4-8)	3 A/m	3 A/m	Magnetic fields at mains frequency should be similar to those found in a typical business or hospital environ-ment.

REMARKS: UT is the mains AC voltage before the test level is applied

Guidance and MANUFACTURER'S declaration – ELECTROMAGNETIC IMMUNITY – for all MEDICAL ELECTRICAL DEVICES and MEDICAL ELECTRICAL SYSTEMS that are not LIFE-SUPPORTING:

The Pro Lift Cacero is intended for operation in an ELECTROMAGNETIC ENVIRONMENT as specified below. The customer or user of the ProLift Cacero should ensure that it is being operated in such an environment.

IMMUNITY tests	IEC 60601- TEST LEVEL	COMPLIANCE LEVEL	ELECTRO-MAGNETIC ENVIRONMENT - GUIDANCE
Conducted RF disturbances (IEC 61000-4-6) Radiated RF interference (IEC 61000-4-3)	3 Vrms 150 kHz - 80 MHz 80 - 800: 3 V/m 800 - 2500:10 V/m 2500 - 2700: 3 V/m	3 V 3 V/m	Portable and mobile radio devices should not be used closer to a Pro Lift Cacero series hoist, including cabling, than the recommended protective distance, which is calculated according to an equation applicable to the relevant transmission frequency. Recommended protective distance $d=\frac{3,5}{U_1}\sqrt{P}$ $d=\frac{3,5}{E_1}\sqrt{P}$ 80 MHz to 800 MHz $d=\frac{7}{E_1}\sqrt{P}$ 800 MHz to 2,5 GHz where P is the rated output of the transmitter in watts (W) according to the transmitter manufacturer's specification and d is the recommended protective distance in metres (m). The field strength of stationary radio transmitters at all frequencies, as determined by local testinga , should be less than the compliance level.b??? Disturbances may occur around devices bearing the following symbol. 

NOTE 1: At 80 MHz and 800 MHz, the higher frequency range applies.
NOTE 2: This guideline may not be applicable in all cases. Electromagnetic propagation is affected by absorption and reflection from structures, objects and people.

Field strengths from stationary transmitters, such as base stations for radio (cellular/cordless) telephones and land mobile radios, amateur radio stations, AM and FM radio, TV transmitters, theoretically cannot be predicted with complete accuracy. To assess the electromagnetic environment with regard to stationary transmitters, a site survey of electromagnetic phenomena should be considered. If the measured field strength in the location in which the ProLift Cacero is to be used exceeds the above compliance level, the ProLift Cacero should be observed to verify that it is functioning as specified. If unusual performance characteristics are observed, additional measures may be necessary, such as re-orientating or relocating the ProLift Cacero series hoist.

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

Recommended separation distances between portable and mobile RF telecommunications devices and the medical equipment device or system - for medical equipment devices and systems that are not life-supporting.

Recommended separation distances between portable and mobile RF telecommunications devices and the ProLift Cacero.
ProLift Cacero series hosts are intended for operation in an ELECTROMAGNETIC ENVIRONMENT in which RF interference is monitored. The customer or user of the ProLift Cacero hoist can help to avoid electromagnetic interference by maintaining the minimum distance between portable and mobile RF telecommunications devices (transmitters) and the ProLift Cacero hoist - depending on the output rating of the communication device, as specified below.

	Separation distance, depending on transmission frequency [m]		
Rated output of the transmitter [W]	**150 kHz to 80 MHz** $d=\frac{3,5}{U_1}\cdot\sqrt{P}$	**80 MHz to 800 MHz** $d=\frac{3,5}{E_1}\cdot\sqrt{P}$	**800 MHz to 2,5 GHz** $d=\frac{7}{E_1}\cdot\sqrt{P}$
0,01		0,12	0,07
0,1		**0,37**	**0,22**
1		**1,17**	**0,70**
10		**3,69**	**2,21**
100		**11,67**	**7,00**

For transmitters whose maximum output rating is not specified in the above table, the recommended separation distance d in metres (m) can be calculated using the equation found in the relevant column, where P is the maximum output rating of the transmitter in watts (W) according to the transmitter manufacturer's specification.

NOTE 1: At 80 MHz and 800 MHz, the higher frequency range applies
NOTE 2: This guideline may not be applicable in all cases. Electromagnetic propagation is affected by absorption and reflection from structures, objects and people.

26. Explanation of symbols

	Suitable only for indoor use (see Technical Specifications)
	Application part Type B - level of protection against electric shock (see Technical Specifications)
	The instructions for use must be followed (see hoist label)
	The CE symbol indicates all EU directives and standards relevant to the product have been complied with. (see hoist, instructions for use, packaging)
	Insulated casing Class II, Type of protection against electric shock (see Technical Specifications)
	Note: The device and batteries must not be disposed of with household waste. (see instructions for use)
	Manufacturer: novacare® gmbh, 67098 Bad Dürkheim, Germany (see hoist label)
	Protect from moisture (see hoist label)
	Follow the instructions for use (see hoist label)
IPXX	IPXX Type of protection against water penetration. (see type identification plate for the parts)
	RoHS DECLARATION (see type identification plate)
	Raising and lowering the hoist.

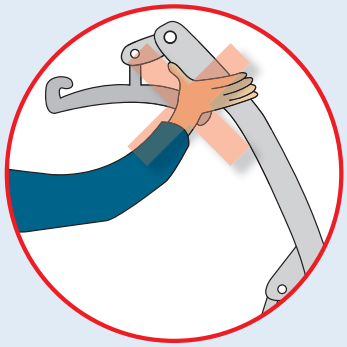
novacare

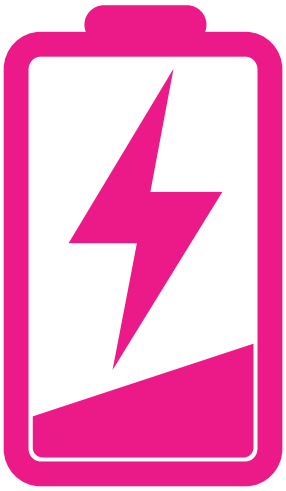
Hinweis

Den Hebearm nicht per Hand anheben!

Note

Do not lift the lifting arm by hand!





Akku vor erstem Gebrauch vollständig laden!

Fully charge before first use!

¡Cargue la batería antes de usarla por primera vez!

Charger complète-ment la batterie avant premier usage !

27. Notes

novacare® gmbh
ISO CERTIFIED
DIN EN ISO 13485

novacare gmbh, Bruchstrasse 48, D-67098 Bad Dürkheim,
Tel. +49(0)6322-9565-0, Fax +49(0)6322-9565-65, www.novacare.de

AH 09 V7 · Instructions for use

novacare