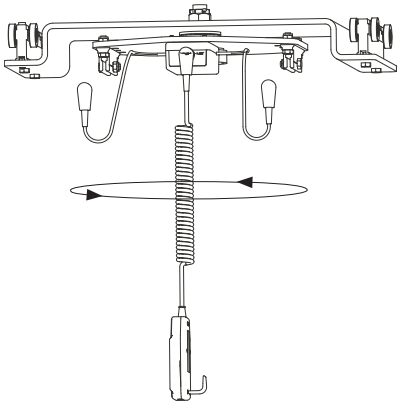
Liko™ Ultra Lift System

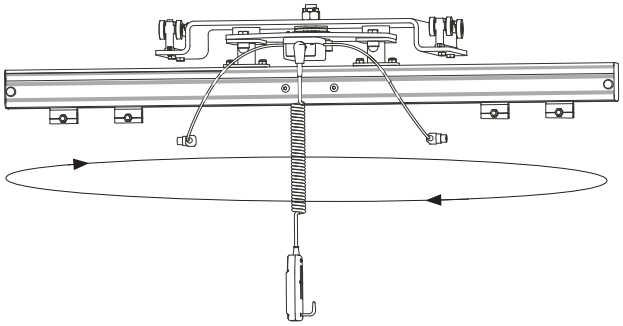
Instruction for Use

Applies to the following models:

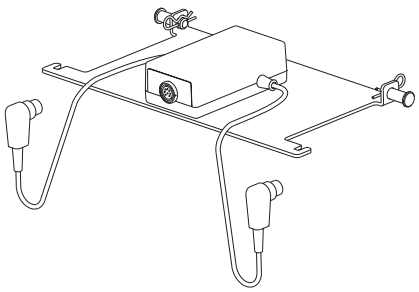
UltraTwist Slim	Prod. No. 3126045
UltraTwist Wide	Prod. No. 3126047
Ultra Control Unit	Prod. No. 3126040



UltraTwist Slim



UltraTwist Wide



Ultra Control Unit

Product Description

Lifting heavy patients requires special lifting techniques and specially designed lifting accessories. UltraTwin is the name of Liko's system for lifting up to 500 kg (1100 lbs). The system is based on the use of two Likorall™ lift motors working together which also allows individual maneuvering that is helpful in positioning of the patient to upright, semi-reclined or lying position. Ultra Twist is an accessory to the UltraTwin system, which facilitates 360° rotation of the patient and gives great advantage to transfers from bed, lifting to gurney, ambulation or when used in confined spaces etc. Ultra Twist is available in two versions (Wide and Slim), to suit different lifting needs.

UltraTwist Slim and UltraTwist Wide can be used with sling bars for transfers in seated position, e.g. between bed and wheelchair or to/from the toilet. UltraTwist Wide can also be used with stretchers for horizontal transfers of the patient, e.g., in surgery or X-ray situations.

For lifting of heavy patients Liko offers a wide range of specially designed lifting accessories.

Ultra Control Unit can be used with Likorall™ lift motors. It is used for simplified maneuvering with one hand control when combining two lift motors installed in separate rails.

In this document, the person being transferred is referred to as the patient and the person helping them is referred to as the caregiver.

IMPORTANT!
Lifting and transferring a patient always involves a certain level of risk. Read the instructions for use for both the patient lift and lifting accessories before use. It is important to completely understand the contents of the instructions for use. The equipment should only be used by trained personnel. Ensure that the lifting accessories are suitable for the lift used. Exercise care and caution during use. As a caregiver, you are always responsible for the patient's safety. You must be aware of the patient's ability to make it through the lifting situation. If something is unclear, contact the manufacturer or supplier.

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Enhancing outcomes for patients and their caregivers.
Hill-Rom

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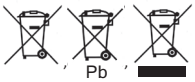
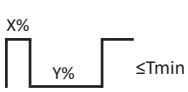
Symbol Description

These symbols can be found in this document and/or on the product.

Symbol	Description
	For indoor use only.
	The product has extra protection against electric shock (Insulation Class II).
	Protection level against electric shock Type B.
	Warning; this situation requires extra care and attention.
	Read instruction for use before use.
	CE mark
IP N_1 N_2	Protection level against: ingress of solid objects (N1) and ingress of water (N2).
	Legal Manufacturer.
	Date of manufacture.
	Caution! consult instructions for use.
	Read instruction for use before use.
	Battery.
	All batteries in this product must be recycled separately. - Pb underneath the symbol indicate batteries containing lead - Single Black line underneath the symbol indicate this product have been placed on the market after 2005.
	UL Recognized Component Mark for Canada and the United States.
	EFUP, Environmental Friendly Usage Period (years).
	Environmentally-friendly product which can be recycled and reused.
	The Australian Safety/EMC.
	PSE Mark (Japan).
	Product Identifier.
	Serial Number.
	Medical Device.
	Recyclable.
	The safety and essential performance of medical electrical equipment.
	Proof of Product compliance to North American safety standards.
	Non-ionizing electromagnetic radiation.
	Duty cycle for non-continuous operation. The maximum active operation time X% of any given time unit, followed by a deactivation time, Y%. The active operation time shall not exceed the specified time in minutes, T.
	GS1 Data Matrix Barcode that may contain following information (01) Global Trade Item Number (11) Production Date (21) Serial Number

Safety Instructions

⚠ **Before lifting, keep the following points in mind:**

- lifting accessories are properly connected to the lift;
- the correct lifting accessory has been chosen, with respect to the type, size, material and design in relation to the needs of the patient.
- plan the lifting and transfer operation carefully, so the patient is as comfortable and secure as possible;
- identify which of the lift motors is controlled with the single arrows on the hand control. Make sure that this motor lift at the head end of a stretcher (marked with a head symbol), alternatively, the wider of the two sling bars;
- ensure that wheels/castors on the bed, gurney, etc. are locked during the lifting operation;
- the lift strap is not twisted or worn and can be run freely in and out of the lift motor;
- lifting accessories are not damaged;
- the sling/lift sheet is correctly and securely applied to the patient, so that there is no risk of personal injury
- the lifting accessory is correctly applied to the lift;
- the sling's/lift sheet's strap loops are correctly applied to the sling bar hooks when the sling's/lift sheet's straps are extended, but before the patient is lifted from the underlying surface.

⚠ **UltraTwist must always be assembled by an authorized technician; see current installation instructions.**

⚠ **Never leave a patient unattended during a transfer situation!**

⚠ **Incorrect attachment of sling to slingbar may cause severe injury to the patient!**

CE Medical Device Class I Product

Technical Data

Weight: 18.7 kg (41 lbs) - Ultra Twist Slim (excl. lift motors)
24.5 kg (54 lbs) - Ultra Twist Wide (excl. lift motors)
1.3 kg (2,8 lbs) - Ultra Control Unit (excl. lift motors)

Max. load: 500 kg (1100 lbs)

Material (casing): Aluminium and steel

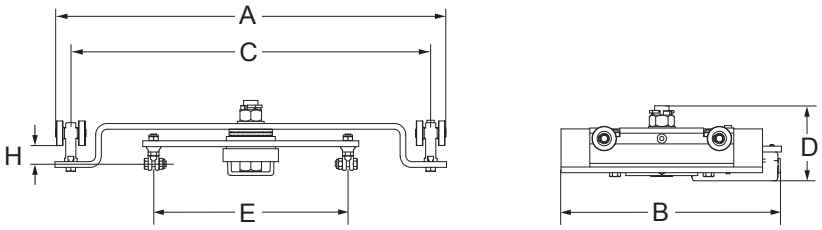
The device is intended for indoor use.

Measurements

Ultra Twist Slim Prod. no. 3126045

A: 542 mm (21.3 inch.)
B: 305 mm (12.0 inch.)
C: 500 mm (19.7 inch.)
D: 104 mm (4.1 inch.)
E: 270 mm (10.6 inch.)

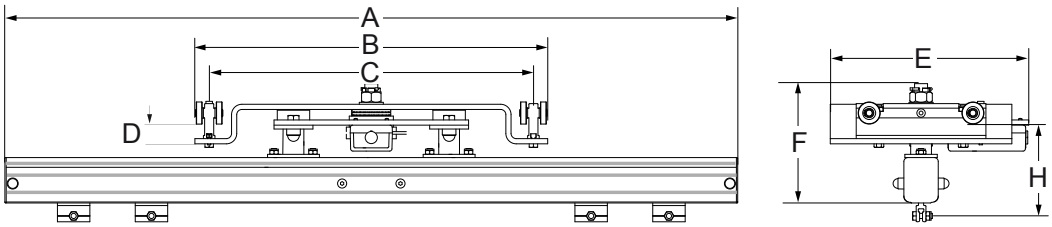
H: 16 mm (0.6 inch.)



Ultra Twist Wide Prod. no. 3126047

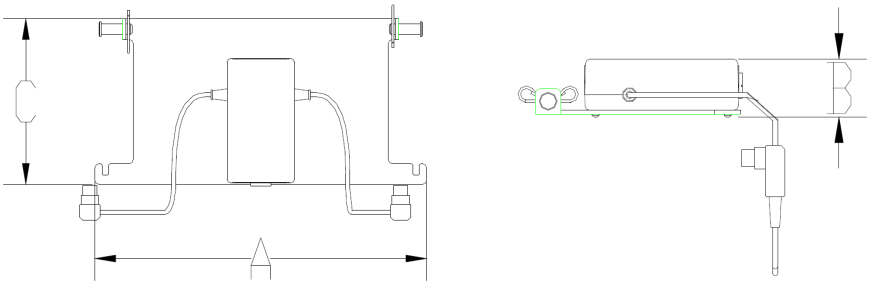
A: 1130 mm (44.5 inch.)
B: 544 mm (21.4 inch.)
C: 500 mm (19.7 inch.)
D: 27 mm (1.1 inch.)
E: 306 mm (12.5 inch.)
F: 184 mm (7.2 inch.)

H: 141 mm (5.7 inch.)



Ultra Control Unit Prod. no. 3126040

A: 320 mm (12.6 inch.)
B: 45 mm (1.8 inch.)
C: 160 mm (6.3 inch.)



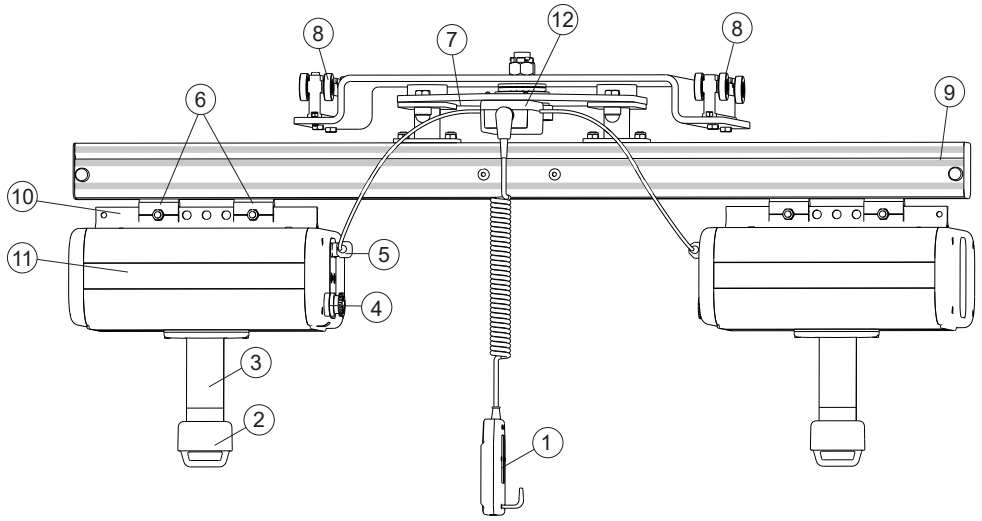
Maximum Load

Different maximum loads may apply to different products on the assembled lift system: lift, sling bar, sling and any other accessories used. For the assembled lift system, the maximum load is always the lowest maximum load rating for any of the components. To maintain the 500 kg (1100 lbs) maximum load rating, two Likorall™ 250 ES lift units are used. It is also essential that the accessories that are used are intended for the same maximum load or greater.

Study the markings on the lift and lifting accessories and contact your Hill-Rom representative if you have any questions.

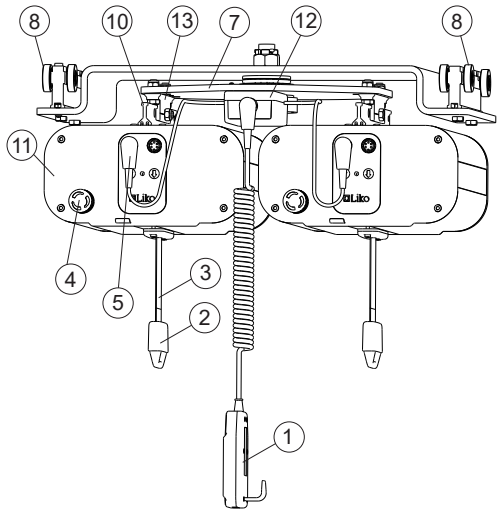
Definitions

Ultra Twist Wide (with Likorall™ lift motors)

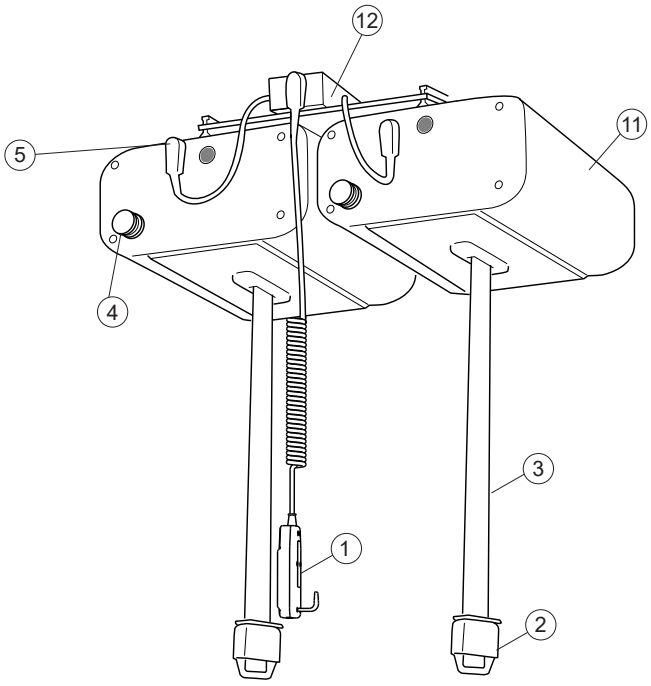


1. HandControl UT
2. Q-Link
3. Lift strap
4. Emergency stop
5. Manoeuvre contact
6. Carriage (pair)
7. Rotation plate (360°)
8. Wheel set
9. Rail H70
10. Mounting rail
11. Lift motor (Likorall™)
12. Connection box
13. Mounting bracket

Ultra Twist Slim (with Likorall™ lift motors)



Ultra Control Unit (with Likorall™ lift motors)



Recommended Lifting Accessories

⚠ **Using lifting accessories other than those approved can entail a risk.**

Below, we present recommended sling bars and accessories for use with Ultra Lift systems.

UltraTwist Slim and Ultra Control Unit– lifting in a seated position

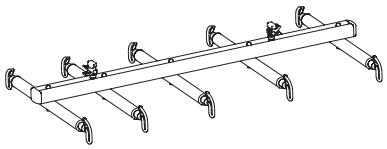
For this combination we recommend two Universal Slingbar 600 (Prod. No. 3156086) or Universal SlingBar 450 (Prod. No. 3156085) together with Universal SlingBar 600 (Prod. No. 3156086). If you use slingbars with two different widths, the wider of the two sling bars is intended for use with the sling's upper strap loops and the narrower sling bar is to be used with the leg support´s strap loops.

UltraTwist Wide – lifting in a seated position

For this combination we recommend two Universal Slingbar 600 (Prod. No. 3156086) or Universal SlingBar 450 (Prod. No. 3156085) together with Universal SlingBar 600 (Prod. No. 3156086). If you use slingbars with two different widths, the wider of the two sling bars is intended for use with the sling's upper strap loops and the narrower sling bar is to be used with the leg support´s strap loops.

UltraTwist Wide – horizontal lifting

For horizontal lifting, we recommend UltraStretch (Prod. No. 3156058). This can be used with a full lift sheet (Prod. No. 3684105-106).

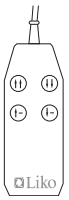


Operation

HandControl UT (included with UltraTwist)

Controls both lift motors: Up Down

Controls one of the lift motors: Up Down

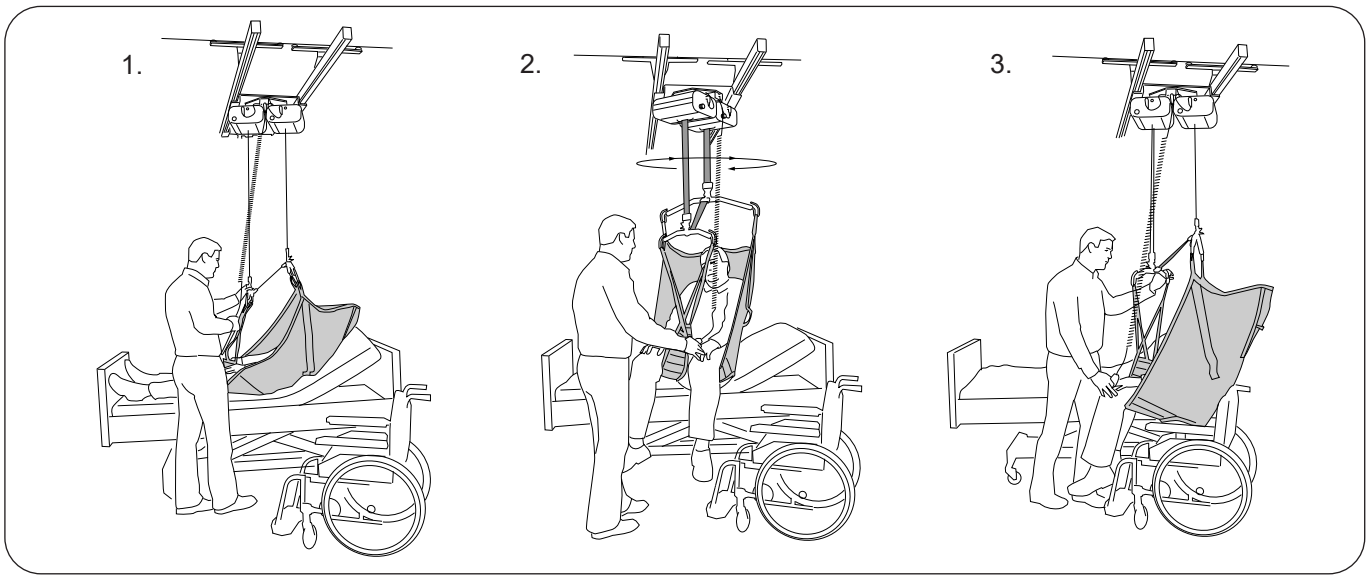


Charging

The lift motor batteries are charged via the hand control. One battery charger (accessory) is sufficient for the entire system if HandControl UT is used. For complete charging instructions, see the instruction for use for the respective lift motor.

From bed to chair/wheelchair with UltraTwist Slim and UltraControl Unit

Before starting the lifting operation it is important to ensure that the sling bars are properly connected to the lift motor´s lift straps. Below, we illustrate a transfer from bed to wheelchair using Original HighBack Sling Mod. 200 alt. 26.



1. Apply the sling as described in the instruction for use. Before the patient is lifted from the underlying surface, but when the straps are properly extended, it is important to ensure that the straps are correctly attached to the sling bars. In conjunction with lifting, use the bed's raising and lowering functions.
   For advice on how to regulate the patient's sitting posture, see below.

⚠ Load must be applied to all four hooks during lifting.

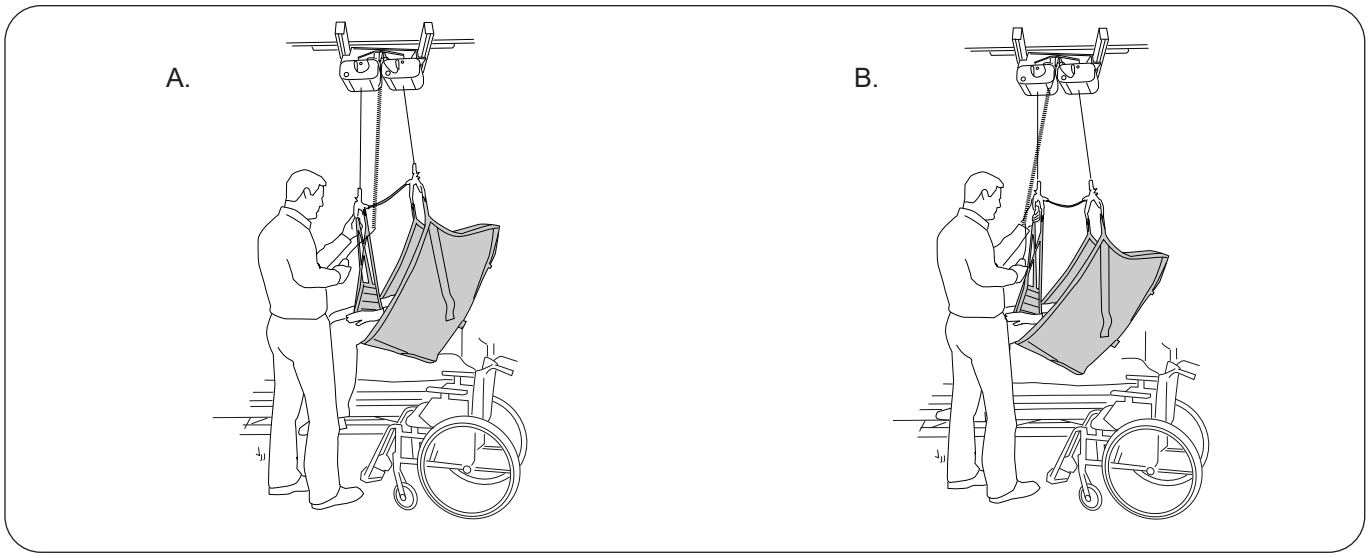
⚠ When lifting, always lift with both lift motor´s!

2. Placement of the patient in a chair is facilitated by UltraTwist's rotation function. Grasp the sling bars, sling and/or the patient's legs/knees and rotate to the desired position.

   Note! Rotation function not applicable for Ultra Control Unit. Plan lift accordingly.

3. Guide the patient toward the chair. Lower the patient.

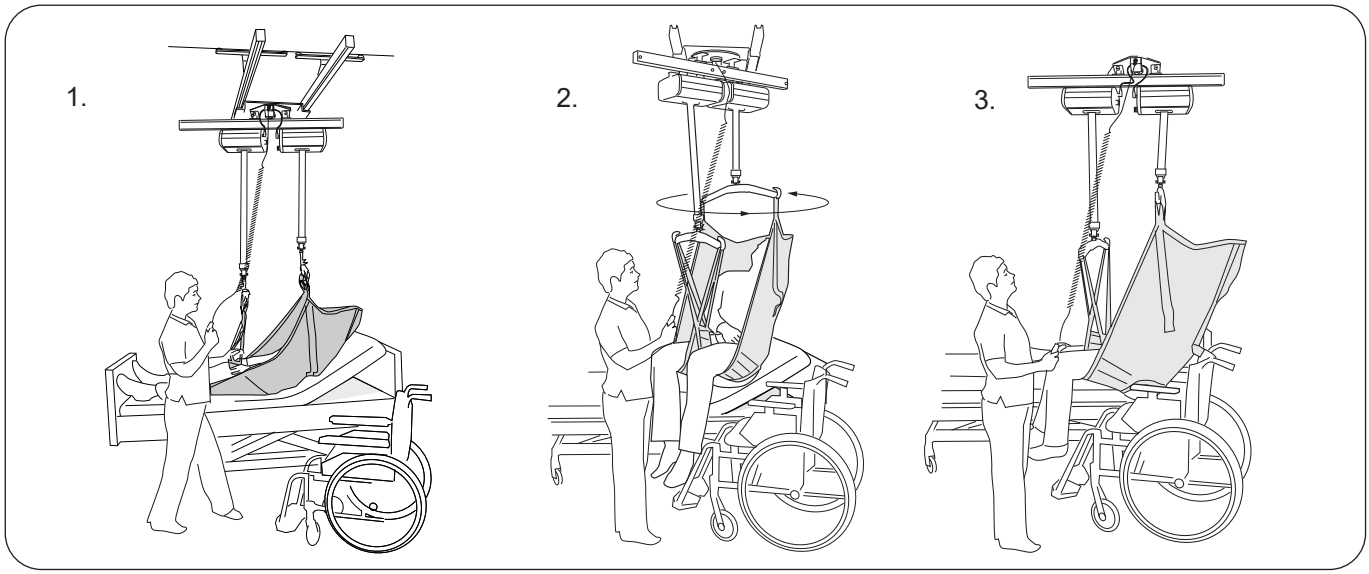
Adjusting the patient's sitting posture (leaning in a seated position)



By raising or lowering only one of the two lift strap´s you may adjust the patient in position for a comfortable and secure transfer. Seat the patient in a more upright position (A) when transferring to a chair, and seat the patient in a more reclined posture (B) when transferring to a bed. The patient's sitting posture is manouvered via the lower buttons (single arrows) on the HandControl UT, or with the hand control that manouvers the lift motor which lifts the upper body.

From bed to chair/wheelchair with UltraTwist Wide

Before starting the lifting operation it is important to ensure that the sling bars are properly connected to each lift motor´s lift strap. Recommended sling bars for UltraTwist Wide: Universal SlingBar 600 and Universal SlingBar 450. Universal SlingBar 600 is intended for the sling's upper strap loops and is connected to the lift strap that is manouvered via the lower buttons on the hand control. Universal SlingBar 450 is intended for the leg support´s strap loops. Below, we illustrate a transfer from bed to wheelchair using the above-mentioned sling bars and an Original HighBack Sling Mod. 200 alt. 26.

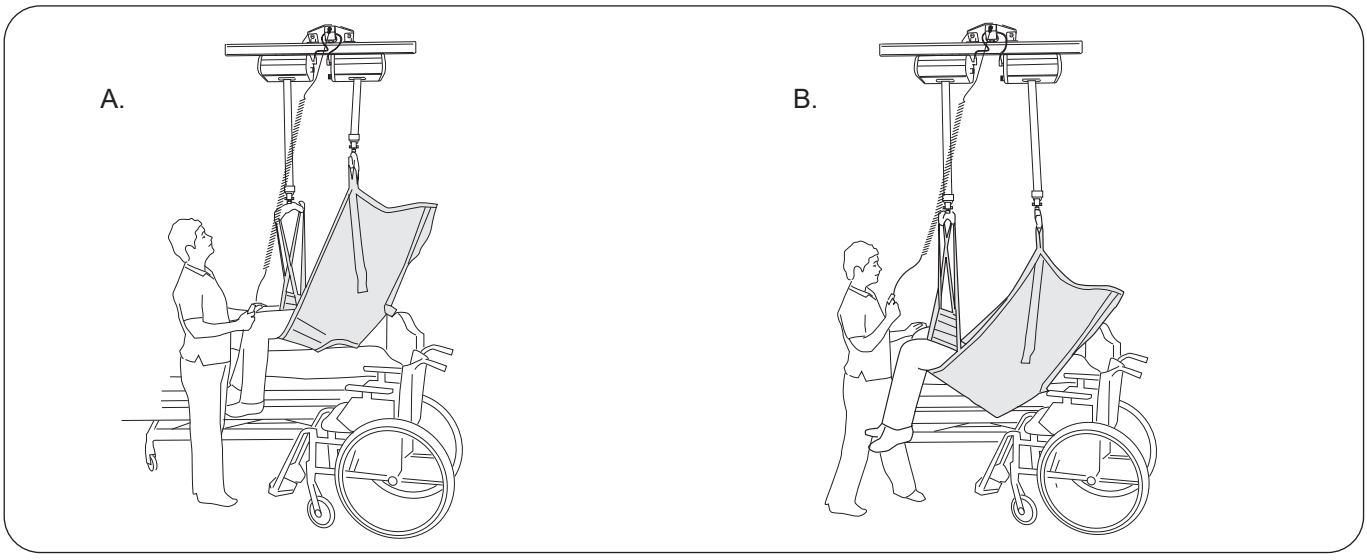


1. Apply the sling as described in the instruction for use. Before the patient is lifted from the underlying surface, but when the straps are properly extended, it is important to ensure that the straps are correctly attached to the sling bar. In conjunction with lifting, use the bed's raising and lowering functions.
   For advice on how to regulate the patient's sitting posture, see below.
2. Placement of the patient in a chair is facilitated by UltraTwist's rotation function. Grasp the sling bars, sling and/or the patient's legs/knees and rotate to the desired position.
3. Guide the patient toward the chair. Lower the patient.

⚠ **Load must be applied to all four hooks during lifting.**

⚠ **When lifting, always lift with both lift motor´s!**

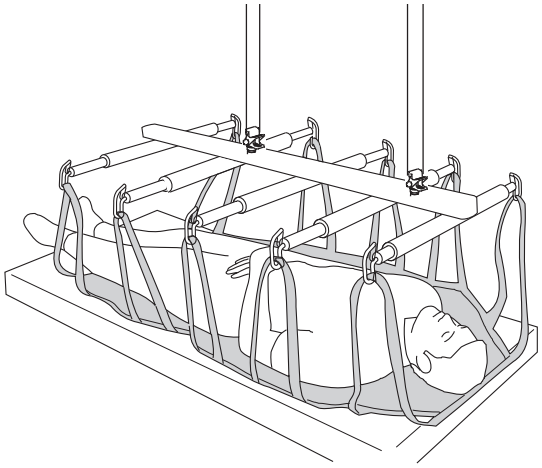
Adjusting the patient's sitting posture (leaning in a seated position)

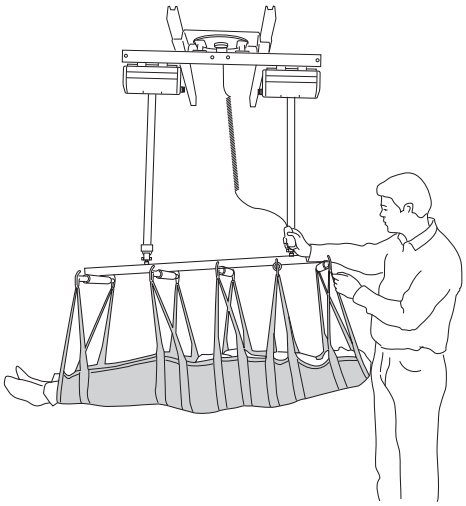


By raising or lowering only one of the two lift strap´s you may adjust the patient in position for a comfortable and secure transfer. Seat the patient in a more upright position (A) when transferring to a chair, and seat the patient in a more reclined posture (B) when transferring to a bed. The patient's sitting posture is manouvered via the lower buttons (single arrows) on the HandControl UT, or with the hand control that manouvers the lift motor which lifts the upper body.

Lifting with a stretcher on UltraTwist Wide

UltraTwist Wide should be used when lifting with a stretcher. We recommend the use of UltraStretch (see page 6). Below, lifting with UltraStretch and LiftSheet XL is illustrated. Carefully study the instruction for use for the accessories used.



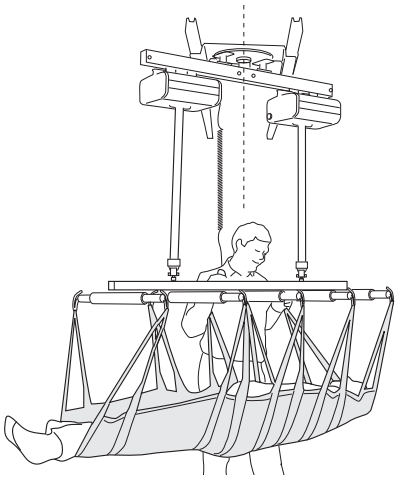


1. Apply the lift sheet as described in the instruction for use. Guide the UltraStretch over the patient and lower to about half a metre above the bed. Hang all of the strap loops on the stretcher. Note that the stretcher has a head end and a foot end (see marking with head symbol).

   ⚠ **Ensure that all strap loops are properly hooked when the straps are extended but before the patient is lifted from the underlying surface.**

   ⚠ **When lifting, always lift with both lift motor´s!**

2. During lifting, check to ensure that the patient is resting in the desired position: fully prone or with the head slightly higher. If necessary, this can be regulated by raising or lowering one of the lift motors.



UltraTwist Wide can rotate 360°. This is a great advantage if you need to change bedding, lift to a stretcher or when lifting in confined spaces. Grasp the stretcher and rotate the patient to the desired position.

Inspection and Maintenance

For trouble-free use, certain details should be checked each day the lift is used:

- Check the lift system for any signs of external damage.
- Check carriage function.
- Check the sling bar's/stretcher's Quick-release Hook safety function.
- Ensure that all screws are tightened.

When necessary, clean the lift with a moist cloth, using warm water or disinfectant. **NOTE! Do not use cleaning agents that contain phenol or chlorine, since these can damage aluminium and plastic materials.**

⚠ **The lift should not be exposed to running water.**

Service

A periodic inspection of the UltraTwist should be carried out at least once a year.

⚠ **Periodic inspection, repair and maintenance may be performed only in accordance with the Liko service manual by personnel authorized by Liko and using original Liko spare parts.**

Service Agreement

Liko offers the opportunity to enter into service contracts for the maintenance and regular inspection of your Liko product.

Expected Life Time

The product has an expected life time of 10 years when correctly handled, serviced and periodically inspected in accordance with Liko's instructions.

Transport and Storage

The environment in which the product is transported and stored should have a temperature of 10–40 ˚C (50-104 °F) and a relative humidity of 30–75 %. The atomspheric pressure should be 700–1060 hPa.

Recycling

Ultra Control Unit should be recycled as Waste of Electrical and Electrical Equipment (WEEE). Electronic parts on UltraTwist should be recycled as Waste of Electrical and Electrical Equipment (WEEE) and the rest of the product as scrap metal.

Hillrom evaluates and provides guidance to its users on the safe handling and disposal of its devices to aid in the prevention of injury, including, but not limited to: cuts, punctures of the skin, abrasions, and any required cleaning and disinfection of the medical device after use and prior to its disposal. Customers should adhere to all federal, state, regional, and/or local laws and regulations as it pertains to the safe disposal of medical devices and accessories.

If in doubt, the user of the device shall first contact Hillrom Technical Support for guidance on safe disposal protocols.

Product Changes

Change to Liko products undergo continuous development, which is why we reserve the right to make product changes without prior notice. Contact your Hill-Rom representative for advice and information about product upgrades.

Design and Quality by Liko in Sweden

The management system for both manufacturing and development of the product is certified in accordance with ISO9001 and its equivalent for the medical device industry, ISO13485. The management system is also certified in accordance with the environmental standard ISO14001.

Notice to Users and/or Patients in EU

Any serious incident that has occurred in relation to the device, should be reported to the manufacturer and the competent authority of the Member State in which the user and/or patient is established.

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Enhancing outcomes for patients and their caregivers.
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