

Uno™102

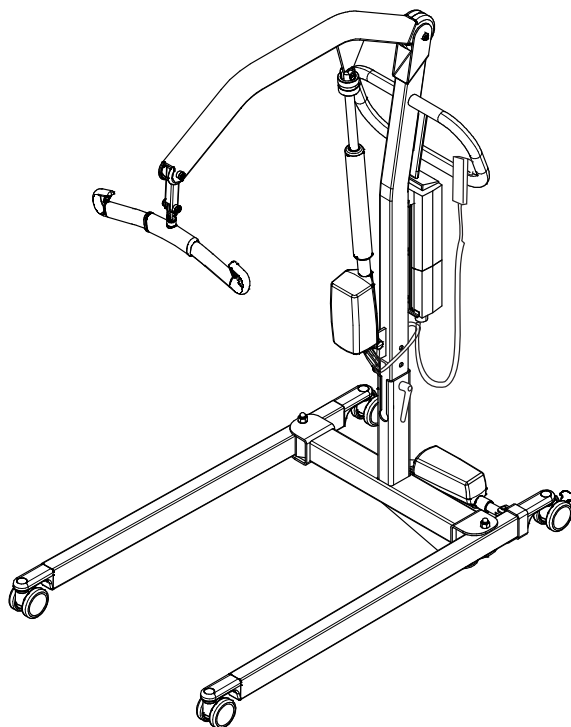
Mobile lift

Instruction Guide



Uno 102 EE

Prod. No. 2010004



Product Description

Uno 102 is a mobile lift with electric raising and lowering of the lift arm. Uno is intended mainly for use in Post Acute Care facilities like nursing homes and other care homes in the most common lifting situations, for instance, transfers between bed and wheelchair, to and from toilet and for lifting to and from the floor.

Uno has three alternative height settings, in order always to provide the optimum lifting height. The middle position is

the standard setting; the lowest is suitable for, for instance, lifting children and lifting to/from the floor. Select the highest position for lifting extra high, for instance, to beds and gurneys with fixed heights.

Individual fitting of the sling and other lifting accessories is of utmost importance for function and safety when using the lift.

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

△ is a warning triangle used for situations which require extra care and attention.

IMPORTANT!

Read the instruction guides for both the patient lift and lifting accessories before use. Lifting and transferring a person always involves a certain level of risk. It is important to completely understand the contents of the instruction guides and the equipment should be used only by trained personnel. Please contact Hill-Rom in the event of any uncertainties or questions.

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△ NOTE!

This instruction guide contains important information for the user of the product. All who use the product should review and completely understand and adhere to the contents of the instruction guide. Remember to keep the instruction guide in a place where it is always available to those using the product.

Warning!

Certain environments and conditions can limit the correct use of the mobile lifts, including: thresholds, unlevel floor surfaces, various obstacles, and extra-thick carpets. These environments and conditions can cause the wheels of the mobile lift not to roll as intended, possible imbalance in the mobile lift, and increased exertion by the caregiver. If you are uncertain that your care environment fulfils the requirements for correct use of the mobile lift, please contact your Hill-Rom representative for further advice and assistance.

Safety Instructions

Before using, make sure that:

- the lift is assembled in accordance with the assembly instructions
- the lifting accessory is properly attached to the lift
- the batteries have been charged for at least 6 hours
- you have read the instruction guides for the lift and lifting accessories
- personnel using the lift are informed of the correct operation and use of the lift

Before lifting, always make sure that:

- the lifting accessories are not damaged
- the lifting accessory is correctly attached to the lift
- the lifting accessory hangs vertically and can move freely
- the correct lifting accessory type, size, material and design are selected to suit the patient's needs
- the lifting accessory is correctly and safely applied to the patient in order to prevent injuries
- the latches are intact; missing or damaged latches must always be replaced
- the sling's strap loops are correctly connected to the sling bar hooks when the sling straps are extended, but before the patient is lifted from the underlying surface.

△ Unbalanced lifting poses a tipping risk and may damage the lift equipment!

△ Never leave a patient unattended during a lifting situation!



Uno 102 EE has been tested by an accredited testing institute and fulfils the requirements specified in the Medical Device Directive 93/42/EEC, for Class I products.

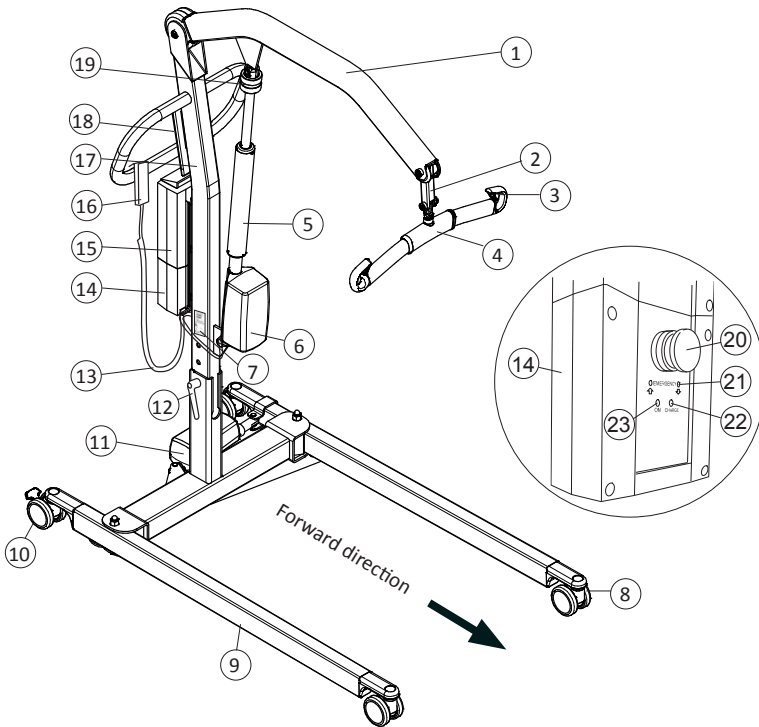
Uno 102 EE complies with the requirements in EN ISO 10535:2006, IEC 60601-1, EN 60601-1-2, ANSI/AAMI ES60601-1 and CAN/CSA C22.2 no 60601-1.

△ The lift must not be modified under any circumstances. If you have any questions, please contact Hill-Rom.

Particular care must be observed when using strong sources of potential disturbance, such as diathermy, etc, so that diathermy cables are not positioned on or near the lift. If you have questions, please consult the responsible assistive-device technician or the supplier.

The lift is not suitable for use in the presence of flammable mixtures, for example, in areas where flammable goods are stored.

Definitions






1. Lift arm
2. Flexlink
3. Latches
4. Sling bar
5. Outer tube
6. Motor for lift arm
7. Product label
8. Front wheels
9. Base
10. Rear wheels with brakes
11. Motor for base-width adjustment
12. Locking handle
13. Cable for hand control
14. Control box
15. Battery box
16. Hand control
17. Lift mast
18. Holder for Quick Reference Guide and colour codes for sling sizes
19. Emergency lowering (mechanical)
20. Emergency stop
21. Emergency lowering, electrical
22. Charge indicator (Charge = charges)
23. Charge indicator (On = charger connected)

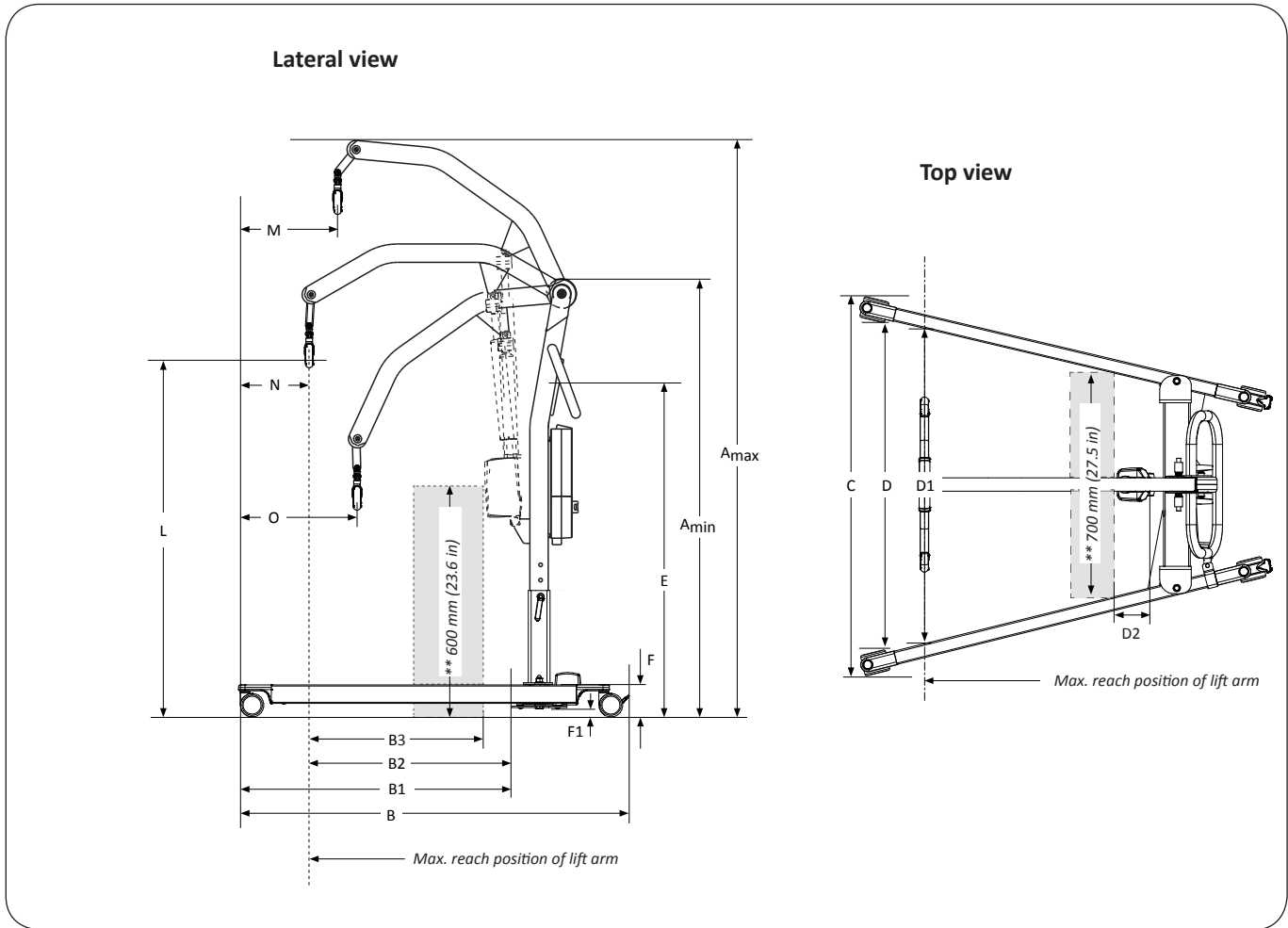
Technical Data

Maximum load:	Uno 102: 175 kg (385 lbs)
Material:	Powder-painted steel
Weight:	Total: Uno 102 42,7 kg (94.1 lbs) <i>Heaviest removable part:</i> Uno 102 22,3 kg (49.2 lbs)
Wheels:	Front: 75 mm (2.9 in) twin wheel Rear: 75 mm (2.9 in) individual wheels fitted with brakes
Turning Diameter:	Uno 102 1380 mm (54 in)
Emergency lowering device:	Mechanical and electrical
Lift Interval:	Uno 102 1270 mm (50 in)
Lifting speed:	30 mm/sec (1.18 in/sec) without load
Sound level:	39 dB(A)
Protection class:	IP X4
Operating Forces of Controls:	Buttons on hand control: 2.4 N

Electrical data:	24 V
Intermittent power:	Int. Op 10/90, active operation max 2 min. Only 10% of a given length of time may be active, but no more than 2 min.
Batteries:	2 x 12 V 2.9 Ah valve-regulated lead-acid gel-type batteries. New batteries are provided by the supplier.
Battery charger:	Built-in, 100-240 V, AC, 50-60 Hz, max 400 mA.
Lift motor:	24 V 6 A, permanent magnetic motor with mechanical safety mechanism, safety nut and outer tube.
Motor for base-width adjustment:	24 V 3.5 A, permanent magnetic motor

-  The device is intended for use indoors.
-  Type B, in accordance with the electrical shock protection class.
-  Class II equipment.

Dimensions



Measurement Table

Measurements in mm

Model	A* Max.	A* Min.	B	B'	B ₂	B ₃	C		D		D ₁	D ₂	E*	F**	F ^{1**}	L* Max.	L* Min.	M	N	O
							max.	min.	max.	min.										
Uno 102	2015	1435	1255	920	730	590	1090	690	980	580	950	45	1105	100	25	1790	520	370	185	495
	1965	1385					1055	1015	1740	470										
	1925	1345					1015	1700	430											

Measurements in inch.

Model	A* Max.	A* Min.	B	B'	B ₂	B ₃	C		D		D ₁	D ₂	E*	F**	F ^{1**}	L* Max.	L* Min.	M	N	O
							max.	min.	max.	min.										
Uno 102	79.3	56.5	49.4	36.2	28.7	23.2	42.9	27.2	38.6	22.8	37.4	1.8	43.5	3.9	1.0	70.5	20.5	14.6	7.3	19.5
	77.4	54.5					41.6	40.0	68.5	18.5										
	75.8	53.0					40.0	66.9	16.9											

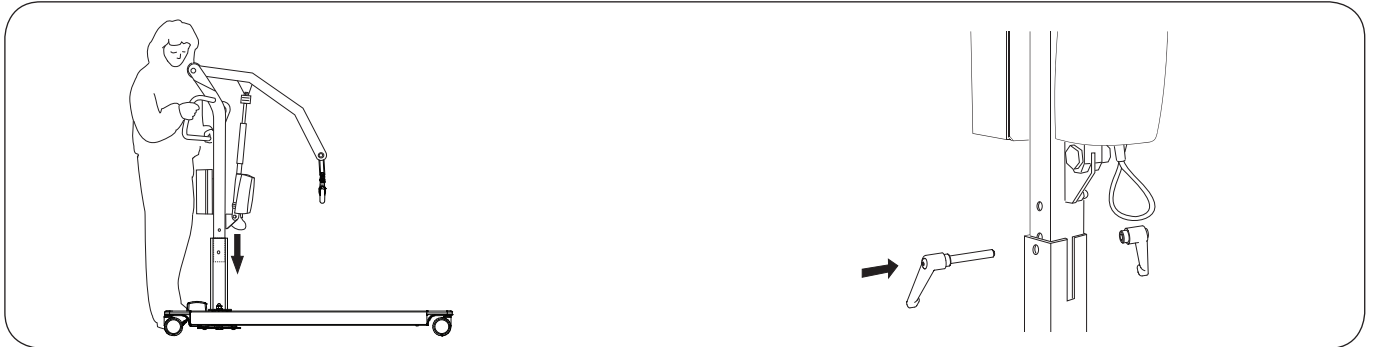
* Different measurements depending on the assembly alternatives. See "Assembly", page 5. The change or complementary addition of other lifting accessories result in a change of the lifting height.

** Reference measurement according to Standard EN ISO 10535:2006.

Assembly

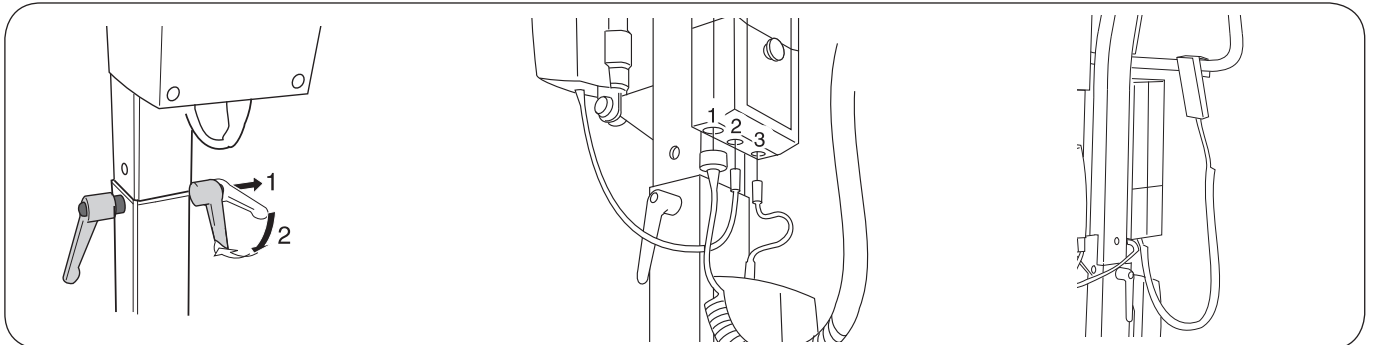
Before assembly, make sure you have the following parts:

- Lift mast with lift arm, control box, motor for lift arm, flexlink, locking handles and sling bar
- Base (including motor for width adjustment)
- Hand control with cable
- Battery box and holder for the charging cable
- Bag containing Instruction Guide, Quick Reference Guide, charger cable and charger extension cable.



1. Remove the locking handles from the base and place the lift mast in the foot of the base.

2. The lifting height can be set to three different levels. Select one of the three holes according to the illustration above. The middle hole is recommended in most cases. The lower hole of the lift mast is recommended for extra high lifting height. The upper hole is recommended for lower lifting heights. Please see the measurement table on p. 4.

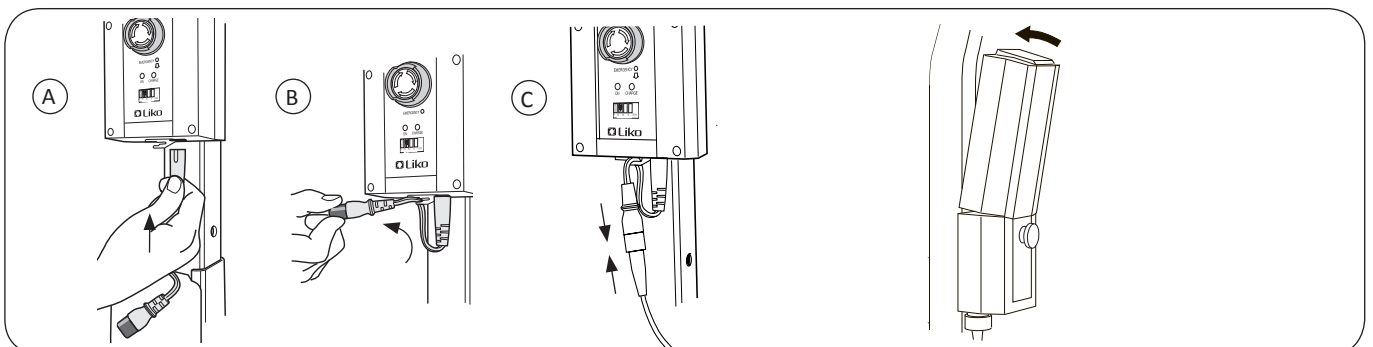


3. Secure the lift mast in the desired position with the locking handles provided. Adjust the position of the locking handles so that they point downwards.

4. Connect the cables as follows:

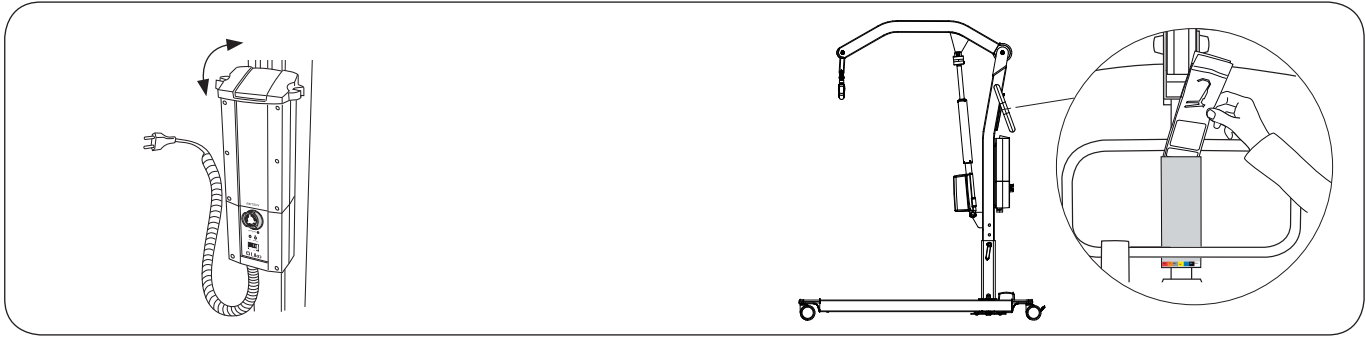
- Cable hand control to socket 1.
- Cable for the lift arm motor to socket 2.
- Cable for motor for base-width adjustment to socket 3.

5. Hang the hand control on the handle.



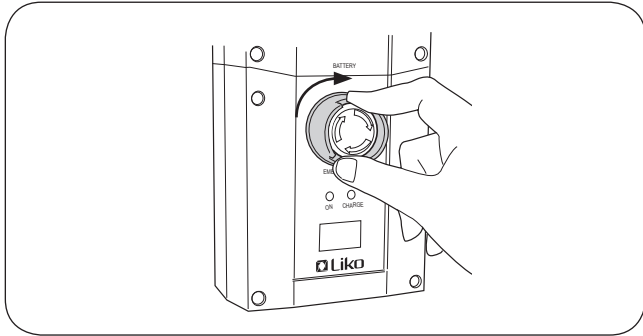
6. A) Plug the charger connector cable into the socket under the control box.
 B) Attach the connector cable to the strain relief system.
 C) Plug the charger cable into the connector cable.

7. Place the battery box in its bracket above the control box. Make sure that the battery box is secured (you will hear a clicking sound).



8. Install the holder for the charging cable:
Hook it onto the front edge of the battery box and push down on the back until you hear a click.

9. Place the Quick Reference Guide in the holder on the lift mast.

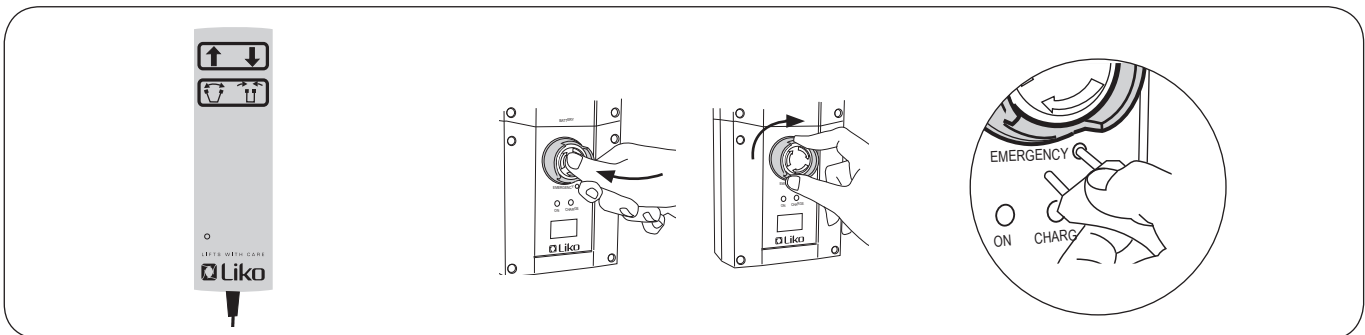


10. Release the emergency stop by turning the button in the direction indicated by the arrows on the button.
Charge the battery, see page 8.

After assembly, make sure that:

- the battery of the lift is charged
- the indicator lamps on the front of the control box are illuminated during charging
- the motion of the lift arm corresponds to the buttons on the hand control
- the emergency lowering works (mechanical and electrical)
- the base-width adjustment works
- the wheel brakes are working.

Operation



Operating

When raising or lowering the lift arm:
Push or . The direction of the arrows applies when the hand control is held as shown in the picture. The lifting motion stops as soon as the push button is released. For adjustment of the base width, push: or .

Emergency Stop

To activate: Press the red button on the control box.

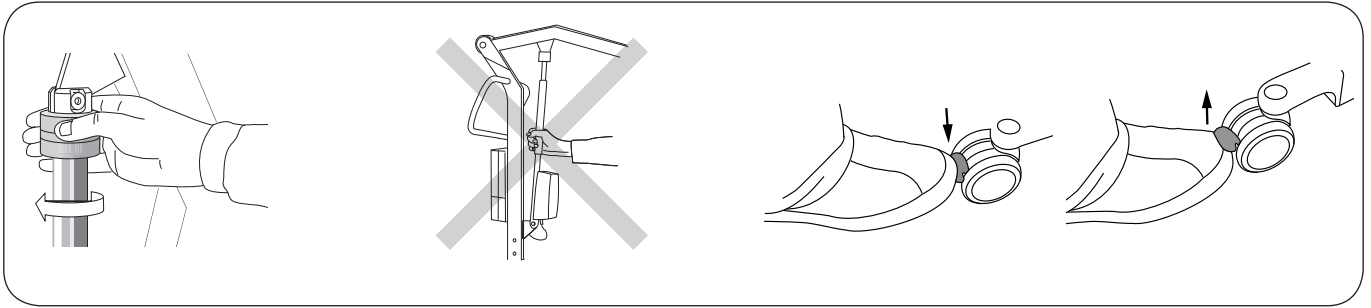
To reset: Turn the button in the direction of the arrows until the button springs out.

Electrical Emergency Lowering

Push a narrow object into the hole on the control box (marked “Emergency”).

⚠ The object used to press must not be too sharp, since this may cause damage to the control box!





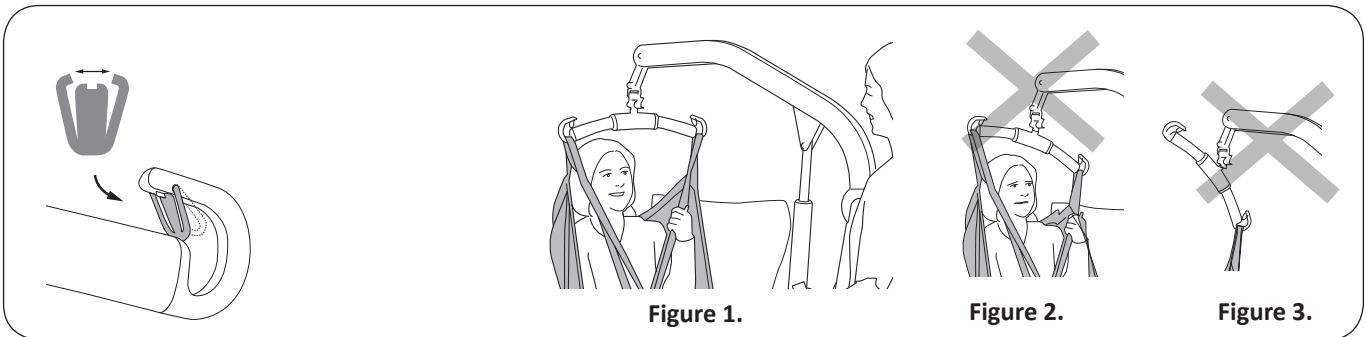
Mechanical Emergency Lowering
Mechanical emergency lowering is achieved by rotating the red emergency lowering cylinder in the direction of the arrow.

⚠ Never move the lift by pulling on the actuator!

Wheels with brakes

During the lifting of a patient, the wheels should be unlocked in order for the lift to be able to center around the patient's center of gravity. The rear wheels can be locked against rotation and turning. To lock the wheel, press down the lock pedal. To release the brake, lift up the lock pedal with your foot.

⚠ Locked wheels during lifting can increase the risk of tipping.



Installation of Latches

After installation, ensure that the spring loaded latches is taut against the sling bar and moves freely in the sling bar hook.

Lift correctly!

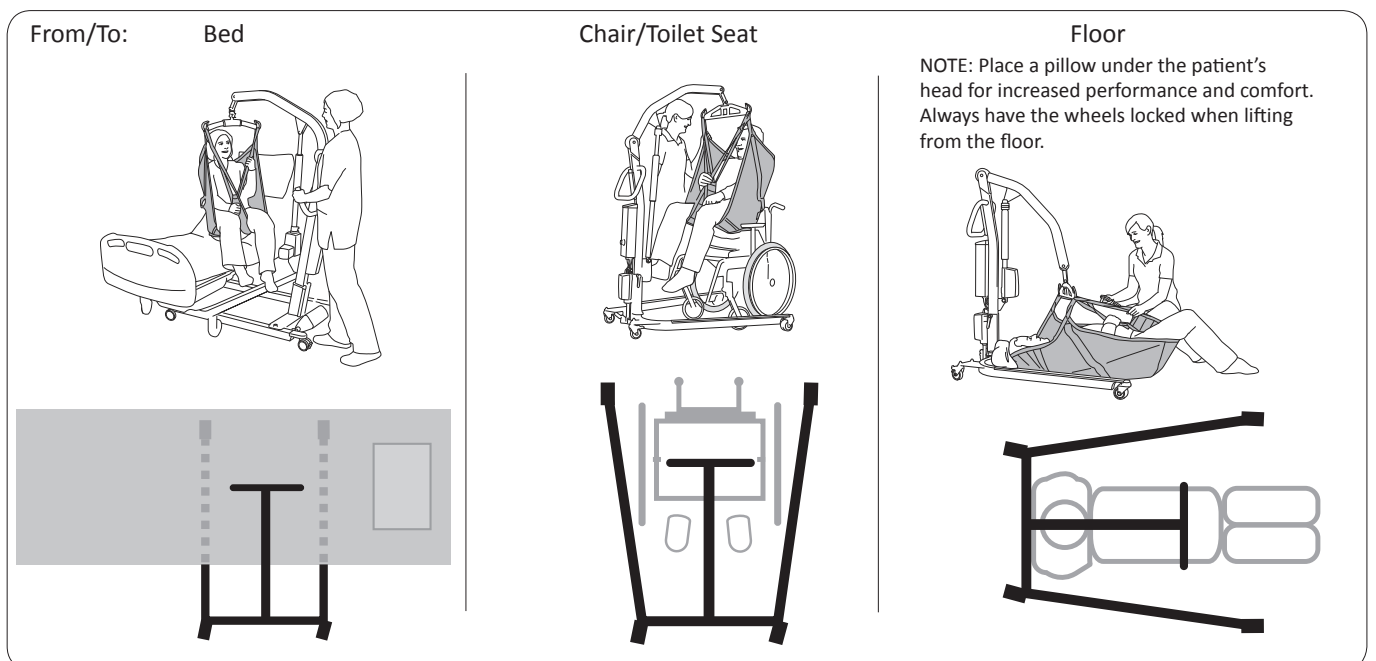
Before each lift, make sure that:

- the Sling loops at opposite sides of the Sling are at the same height
- all the Sling loops are fastened securely in to the Slingbar hooks
- the Slingbar is level during the lift, see Figure 1.

⚠ If Slingbar is not level (see Figure 2) or if the sling loops is wrongly attached to the slingbar (see Figure 3) lower the user to a firm surface and adjust according to the Instruction Guide of Sling in use.

⚠ An improper lift can be uncomfortable for the user and cause damage to the lift equipment! (see Figure 2 and figure 3).

Position of the Lift when Lifting



Charging the Batteries



Battery Capacity

In the event of low battery voltage, a signal from the control box will sound and the indicator (A) on the hand control will light. When this happens, the battery must be charged as soon as possible. However, there is sufficient power for a few more lifts.

In order to ensure maximum battery life, it is important to charge the batteries regularly. We recommend charging the batteries after use or every night.

Maximum charge is achieved after approximately 6 hours. When the batteries are fully charged, the charger will disconnect automatically.

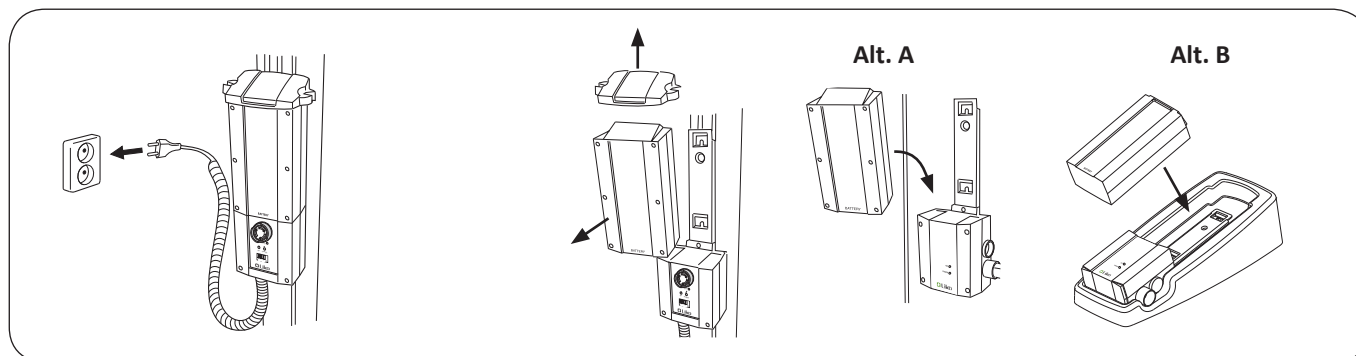
NOTE! When charging, a yellow indicator lamp on the control box will be illuminated. The yellow lamp turns off when the batteries are fully charged. If the lamp has not

turned off after 8 hours of charging, the batteries probably need replacing. Stop charging and replace the batteries.

Never charge batteries in a wet area.

If the lift is not used every day, we recommend pushing the emergency stop after use, in order to turn off the power and conserve battery life. Make sure the battery is completely charged before pushing the emergency stop.

Alternative Charging Procedures



With built-in charger:

Connect the charger cable to an electrical outlet (100-240 V AC). Check that both lamps on the control box are lit. A yellow lamp indicates power supply to the charger.

If the charger cable is beginning to stretch, it should be replaced in order to minimize the risk of the cable getting stuck and breaking.

With a wall-mounted charger or a table charger housing:

Detach the holder for the charger cable. Remove the battery box from the control box by releasing the latch on top of the battery box.

Alt. A. Place the battery box on the wall-mounted charger. Plug the charger into a wall socket (100-240 V AC). Make sure that both lights on the charger are lit. The yellow light indicates charging and the green light indicates power supply to the charger.

Alt. B. Place the battery box on the charger in the table charger housing. Plug the charger into a wall socket (100-240 V AC). Make sure that both indicator lamps on the charger are lit. The yellow light indicates charging and the green light indicates power supply to the charger.

NOTE: The lift cannot be used when the charger cable is plugged into a wall socket.



Uno 102 complies with the requirements in the 2002/96/EC directive for waste electronic and electrical equipment. Used batteries should be deposited at the nearest recycling station in accordance with local regulations or given to personnel authorized by Hill-Rom.

Maximum Load

Different maximum loads may apply to different products on the assembled lift unit lift: lift, sling bar, sling and any other accessories used. For the assembled lift unit, the maximum load is always the lowest maximum load rating for any of the components. For example, a Uno 102 which is approved for 175 kg (385 lbs) can be equipped with a sling bar which is approved for 300 kg (660 lbs). In this case, the maximum load of 175 kg (385 lbs) applies to the assembled lift unit. Check the markings on the lift and lifting accessory or contact your Hill-Rom representative if you have any questions.

Recommended Lifting Accessories

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

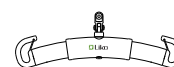
When changing a sling bar or other lifting accessories, the highest possible lifting height of the lift is affected. Before changing lifting accessories you should always ensure that the lift, after change, can fulfil the desired lifting height in order to manage the lifting situations for which the lift is to be used.

To select suitable slings and other lifting accessories, please see the "Lifting Accessories" brochure. For additional guidance in selecting a sling, study the instruction guide for the respective sling models. Here you will also find guidance for combining Liko's sling bars with Liko's slings.

Contact your Hill-Rom representative or visit www.liko.com for advice and information on Liko's product range.

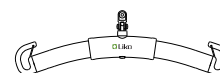
Universal SlingBar 350*
Max. 300 kg (660 lbs)

Prod. No. 3156074



Universal SlingBar 450*
Max. 300 kg (660 lbs)

Prod. No. 3156075



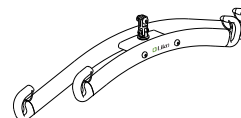
Universal SlingBar 600*
Max. 300 kg (660 lbs)

Prod. No. 3156076



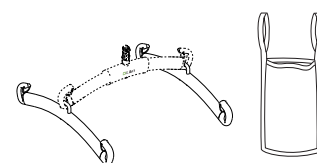
Universal TwinBar 670*
Max. 300 kg (660 lbs)

Prod. No. 3156077



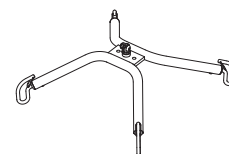
**Universal SideBars 450
including bag**
Max. 300 kg (660 lbs)

Prod. No. 3156079



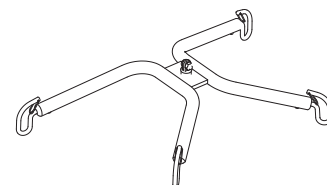
Sling Cross-bar 450*
Max. 300 kg (660 lbs)
(Adapter 12 mm, prod. no. 2016504 required)

Prod. No. 3156021



Sling Cross-bar 670*
Max. 300 kg (660 lbs)
(Adapter 12 mm, prod. no. 2016504 required)

Prod. No. 3156018



* also available equipped with Quick-Release Hook.

Quick-Release Hook

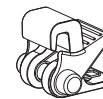
The Liko Quick-Release Hooks are a system for quick change of lifting accessories on Liko's mobile and stationary lifts. Uno must be equipped with the Q-link 13 to enable use with a Quick-Release Hook.

The Quick-release Hook Universal fits the Universal SlingBar 350, 450 and 600 (prod. no. 3156074 - 3156076). Quick-Release Hook TDM fits the Sling Cross-bar 450 and 670 (prod. no. 3156021 and 3156018) and Universal TwinBar 670 (prod. no. 3156077).

Please see "Guide to Liko's Quick-Release Hook System", which can be downloaded from our website www.liko.com, or contact Hill-Rom for more information about the possibilities of the Quick-Release Hook system.



Q-link 13
Prod. No. 3156509



Quick-Release Hook Universal
Prod. No. 3156508



Quick-Release Hook TDM
Prod. No. 3156502

Bag for SlingBars

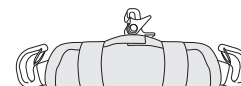
Prod. No. 2001025



Slingbar Cover Paddy 30

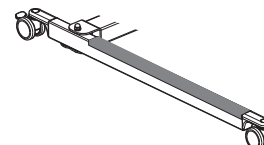
(fits Universal SlingBar 350, 450 and 600 and SlingBar Slim 350).

Prod. No. 3607001



Leg protector

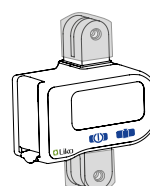
Prod. No. 20190029



Scale for Uno

For weighing patients in combination with Uno, we recommend LikoScale 350 (adapter 12 mm required). LikoScale 350 is approved in accordance with European Directive NAWI 2014/31 (Non-Automatic Weighing Instruments).

Contact Hill-Rom for further information.



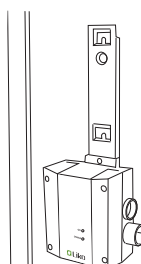
LikoScale 350
Prod. No. 3156228



Adapter 12 mm
Prod. No. 2016504

Battery Charger

For wall installation or for use with table charger housing
Prod. No. 2004106



Extra Battery

Prod. No. 2006106

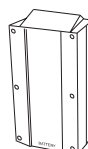
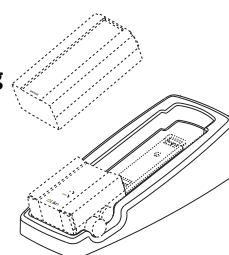


Table Charger Housing

excl. charger and battery
Prod. No. 2107103



Simple Troubleshooting

**The lift doesn't work up/down.
The base-width adjustment doesn't
work (in/out).**



1. Check that the emergency stops have not been activated.
2. Check that the cables to the control box are connected correctly.
3. Check that the charger cable is not connected to an electric outlet.
4. Check the battery voltage.
5. Check that the contact plates of the battery box are not defective or broken.
6. *If the problem persists, please contact Hill-Rom.*

The charger doesn't work.



1. Check that the emergency stops have not been activated.
2. Check that the contact plates of the battery box are not defective or broken.
3. *If the problem persists, please contact Hill-Rom.*

The lift is stuck in the high position.



1. Check that the emergency stops have not been activated.
2. Use the electrical emergency lowering to lower the patient onto a firm surface.
3. Use the mechanical emergency lowering to lower the patient onto a firm surface.
4. Check the battery voltage.
5. *If the problem persists, please contact Hill-Rom.*

If you hear unusual sounds.



Contact Hill-Rom.

Inspection and Maintenance

Care and Maintenance

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

- Inspect the lift and check to make sure that there is no external damage
- Check the sling bar attachment
- Check the functionality of the latches
- Check the functionality of the lifting motion and the base-width adjustment
- Check that the emergency lowering (both electrical and manual) works
- Charge the batteries each day the lift is used and make sure the charger works.

When necessary, clean the lift with a moist cloth and check that the wheels are free from dirt. Find more detailed information regarding cleaning and disinfection of your Liko product in the document *Care and Maintenance* at our website: www.liko.com.

△ The lift should not be exposed to running water.

Service

A periodic inspection of the lift should be carried out at least once per year.

△ Periodic inspection, repair and maintenance should be performed only in accordance with the Liko Service Manual, and by personnel authorized by Hill-Rom and using original Liko spare parts.

Service Agreement

Hill-Rom 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 inspected in accordance with Liko's instructions.

Transport and Storage

During transport, or if the lift is not going to be used for a long time, the emergency stops should be engaged.

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

Recycling

For instructions on how to recycle your Liko product, please visit our website: www.liko.com.

Product Changes

Liko's 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

Hill-Rom's Management system are certified in accordance with ISO 9001 and its equivalent for the medical device industry, ISO 13485. Hill-Rom's Management system is also certified in accordance with environmental standard ISO 14001.



www.hill-rom.com | www.liko.com