

Uno™102

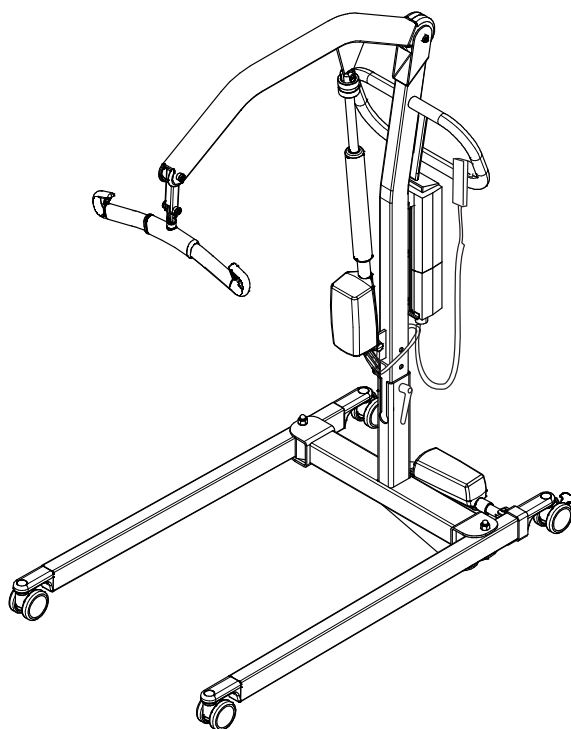
Mobile lift

Instructions for Use



Uno 102 EE

Prod. No. 2010004



Product Description

Uno 102 mobile lift has electric raising and lowering of the lift arm. Uno mobile lift 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 mobile lift 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.

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.

Table of Contents

Symbol Description	3
Safety Instructions	4
Definitions	5
Technical Data	5
Dimensions.....	6
EMC Table.....	7
Assembly	10
Operation	12
Charging the Batteries	14
Maximum Load.....	15
Recommended Lifting Accessories	15
Simple Troubleshooting.....	17
Recycling Instructions.....	18
Cleaning and Disinfection	18
Inspection and Maintenance	22

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 instructions 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 instructions 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

Intended Use

This product's intended use environments are professional healthcare facility and home healthcare. This product is not intended to be used by the patient alone. Lifting and transferring a patient shall always be performed with the assistance of at least one caregiver. This product is used as a means to perform the lift but is not in contact with the patient; therefore we do not go into the various patient conditions in this instruction for use. Contact your Hill-Rom representative for support and advice.

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 fulfills the requirements for correct use of the mobile lift, please contact your Hill-Rom representative for further advice and assistance.

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

Never leave a patient unattended during a lifting situation!

Before use, make sure that:

- the lift is assembled in accordance with the assembly instructions
- the lifting accessory is properly attached to the lift
- the battery has been charged for at least 6 hours
- you have read the instruction for use 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 lifting accessory is selected appropriately, in terms of type, size, material and design, with regard to 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 stretched up, but before the patient is lifted from the underlying surface.

Incorrect attachment of sling to slingbar may cause severe injury to the patient.



Uno 102 EE mobile lift has been tested by an accredited testing institute

No modification of this product is allowed.

Use of the product adjacent to other equipment should be avoided because it could result in improper operation. If such use is necessary, observe and verify that the other equipment is operating normally.

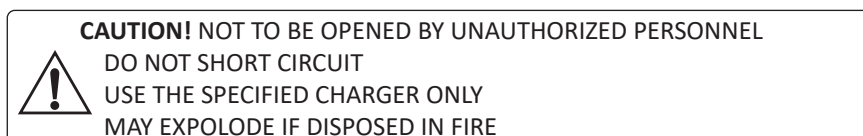
Electromagnetic disturbance may affect the lifting performance of the product. Modification using other parts than original spare parts (cables, etc.) may affect the electromagnetic compatibility of the product. Particular care must be observed when using strong sources of potential disturbance, such as diathermy, etc, so that diathermy cables are not positioned on or near the lift.

Essential performance: The product shall not move unintentionally while being submitted to disturbances.

If you have questions, please consult the responsible assistive-device technician or the supplier.

The product may not be used in areas where flammable mixtures may occur, for example, in areas where flammable goods are stored.

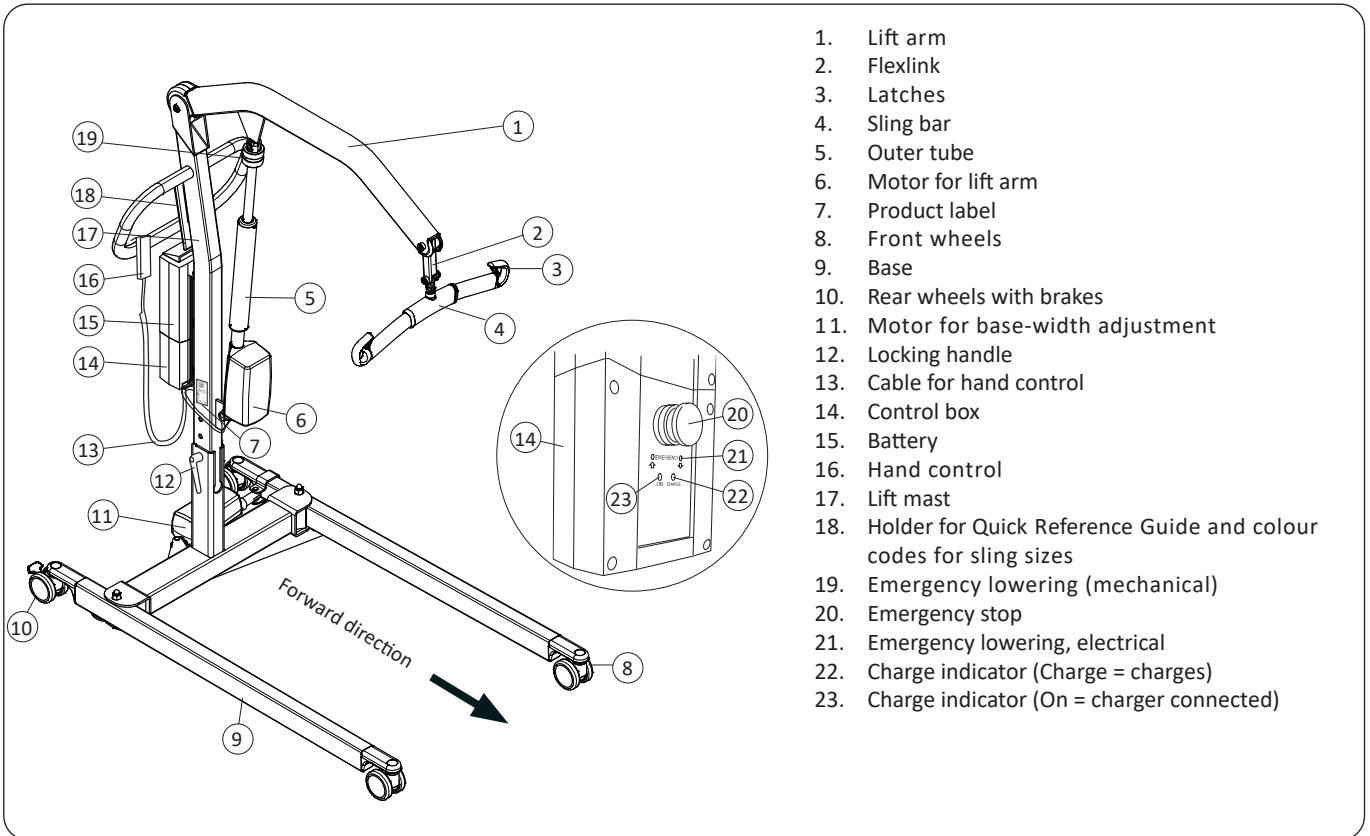
This Caution notice is found on the Battery:



This Caution notice is found on the Control box:






Definitions

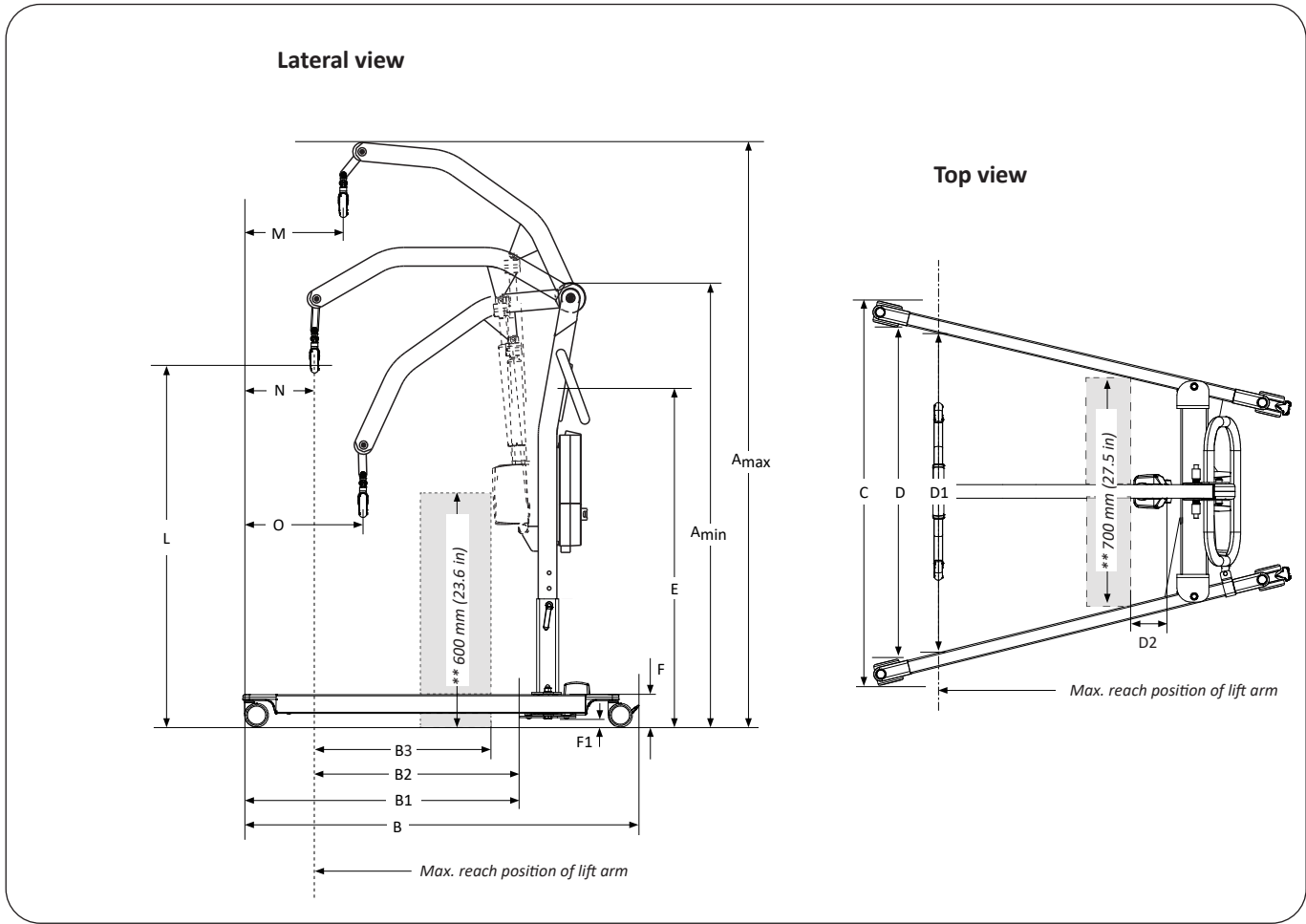


1. Lift arm
2. Flexlink
3. Latches
4. Sling bar
5. Outer tube
6. Motor for lift arm
7. Product label
8. Front wheels
9. Base
10. Rear wheels with brakes
11. Motor for base-width adjustment
12. Locking handle
13. Cable for hand control
14. Control box
15. Battery
16. Hand control
17. Lift mast
18. Holder 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

<p>Maximum load: 175 kg (385 lbs)</p> <p>Material: Powder-painted steel</p> <p>Weight: Total: 42,7 kg (94.1 lbs) Heaviest removable part: 22,3 kg (49.2 lbs)</p> <p>Wheels: Front: 75 mm (2.9 in) twin wheel Rear: 75 mm (2.9 in) individual wheels fitted with brakes</p> <p>Turning Diameter: 1380 mm (54 in)</p> <p>Emergency lowering device: Mechanical and electrical</p> <p>Lift Interval: 1270 mm (50 in)</p> <p>Lifting speed: 30 mm/sec (1.18 in/sec) without load</p> <p>Sound level: 39 dB(A)</p> <p>Protection class: IP X4</p> <p>Operating Forces of Controls: Buttons on hand control: 2.4 N</p> <p>Electrical data: 24 V</p>	<p>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.</p> <p>Batteries: 2 x 12 V 2.9 Ah valve-regulated lead-acid gel-type batteries. New batteries are provided by the supplier.</p> <p>Battery charger: Built-in, 100-240 V, AC, 50-60 Hz, max 400 mA.</p> <p>Lift motor: 24 V 6 A, permanent magnetic motor with mechanical safety mechanism, safety nut and outer tube.</p> <p>Motor for base-width adjustment: 24 V 3.5 A, permanent magnetic motor</p> <p>Surrounding functional environment: Temperature: +10°C to +50°C, (50° F to 122° F) Humidity: 20% to 90% at 30°C non-condensing, Atmospheric pressure: 700-1060hPa.</p>
	<p> The device is intended for use indoors.</p> <p> Type B, in accordance with the electrical shock protection class.</p> <p> Class II equipment.</p>

Dimensions



Measurement Table

Measurements in mm

Model	A*	A*	B	B ¹	B2	B3	C		D		D1	D2	E*	F**	F ¹ **	L*	L*	M	N	O
	Max.	Min.					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					1700	430												

Measurements in inch.

Model	A*	A*	B	B ¹	B2	B3	C		D		D1	D2	E*	F**	F ¹ **	L*	L*	M	N	O
	Max.	Min.					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					66.9	16.9												

* Different measurements depending on the assembly alternatives. See "Assembly", page 5. When changing to other lifting accessories, check that the lift still achieves desired lifting height.

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

EMC Table


Guidance and manufacturer's declaration – electromagnetic emissions		
<p>The product is intended for use in the electromagnetic environment specified below. The customer or the user of the product should assure that they are used in such an environment.</p> <p>"Essential performance according to the manufacturer: The product shall not move unintentionally while being submitted to disturbances."</p>		
Emissions test	Compliance	Electromagnetic environment - guidance
RF emissions CISPR 11	Group 1	The product uses RF energy only for its internal function. Therefore, its RF emissions are very low and are not likely to cause any interference in nearby electronic equipment.
RF emissions CISPR 11	Class B	The product is suitable for use in all establishments including domestic establishments and those directly connected to the public low-voltage power supply network that supplies buildings used for domestic purposes.
Harmonic emissions IEC 61000-3-2	Complies	
Voltage fluctuations/ flicker emissions IEC 61000-3-3	Complies	

Guidance and manufacturer's declaration – electromagnetic immunity			
<p>The product is intended for use in the electromagnetic environment specified below. The customer or the user of the product should assure that it is used in such an environment.</p> <p>"Essential performance according to the manufacturer: The product shall not move unintentionally while being submitted to disturbances."</p>			
Immunity test	IEC 60601 test level	Compliance level	Electromagnetic environment - guidance
Electrostatic discharge (ESD) IEC 61000-4-2	+/- 8 kV contact +/- 2 kV, +/- 4 kV, +/- 8 kV, +/- 15 kV air	+/- 8 kV contact +/- 2 kV, +/- 4 kV, +/- 8 kV, +/- 15 kV air	Floors should be wood, concrete or ceramic tile. If floors are covered with synthetic material, the relative humidity should be at least 30 %.
Electrical fast transient / Burst IEC 61000-4-4	+/- 2 kV for power supply lines +/- 1 kV for input/output lines	+/- 2 kV for power supply lines +/- 1 kV for input/output lines	Mains power quality should be that of a typical commercial or hospital environment.
Surge IEC 61000-4-5	+/- 0.5 kV, +/- 1 kV Line to Line	+/- 0.5 kV, +/- 1 kV Line to Line	Mains power quality should be that of a typical commercial or hospital environment.
Voltage dips, short interruptions and voltage variations on power supply input lines IEC 61000-4-11	0 % UT for 0,5 cycle at 0°, 45°, 90°, 135°, 180°, 225°, 270°, & 315° 0% UT; 1 cycle at 0° 70 % UT for 25 cycles 50Hz 0% UT; 250 cycle at 50Hz &	0 % UT for 0,5 cycle at 0°, 45°, 90°, 135°, 180°, 225°, 270°, & 315° 0% UT; 1 cycle at 0° 70 % UT for 25 cycles 50Hz 0% UT; 250 cycle at 50Hz &	Mains power quality should be that of a typical commercial or hospital environment. If the user of the [Equipment or System] requires continued operation during power mains interruptions, it is recommended that the [Equipment or System] be powered from an uninterruptible power supply or battery.
Power frequency (50/60 Hz) magnetic field IEC 61000-4-8	30 A/m	30 A/m	Power frequency magnetic fields should be at levels characteristic of a typical location in a typical commercial or hospital environment
<p>NOTE U_T is the a.c. mains voltage prior to application of the test level.</p>			

Guidance and manufacturer's declaration – electromagnetic immunity

The product is intended for use in the electromagnetic environment specified below. The customer or the user of the product should assure that it is used in such an environment.

"Essential performance according to the manufacturer: The lift shall not move unintentionally while being submitted to disturbances."

Immunity test	IEC 60601 test level	Compliance level	Electromagnetic environment - guidance
<p>Conducted RF IEC 61000-4-6</p> <p>Radiated RF IEC 61000-4-3</p>	<p>6 Vrms 150 kHz to 80 MHz</p> <p>10 V/m 80MHz to 2,7GHz</p>	<p>6 Vrms</p> <p>10 V/m</p>	<p>Portable and mobile RF communications equipment should be used no closer to any part of the product, including cables, than the recommended separation distance calculated from the equation applicable to the frequency of the transmitter.</p> <p>Recommended separation distance</p> $d = 1,2\sqrt{P}$ $d = 1,2\sqrt{P} \quad 80 \text{ MHz to } 800 \text{ MHz}$ $d = 0,7\sqrt{P} \quad 800 \text{ MHz to } 2,7 \text{ GHz}$ <p>where P is the maximum output power rating of the transmitter in watts (W) according to the transmitter manufacturer and d is the recommended separation distance in meters (m).</p> <p>Field strengths from fixed RF transmitters, as determined by an electromagnetic site survey, ^a should be less than the compliance level in each frequency range. ^b</p> <p>Interference may occur in the vicinity of equipment marked with the following symbol.</p> <div style="text-align: center;">  </div>

NOTE 1 At 80MHz and 800MHz, the higher frequency range applies.

NOTE 2 These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflected from structures, objects and people.

^a Field strengths from fixed transmitters, such as base stations for radio (cellular/cordless) telephones and land mobile radios, amateur radio, AM and FM radio broadcast and TV broadcast cannot be predicted theoretically with accuracy. To assess the electromagnetic environment due to fixed RF transmitters, an electromagnetic site survey should be considered. If the measured field strength in the location in which the product is used exceeds the applicable RF compliance level above, the product should be observed to verify normal operation. If abnormal performance is observed, additional measures may be necessary, such as reorienting or relocating the product.

^b Over the frequency range 150 kHz to 80 MHz, field strengths should be less than 10 V/m.

Guidance and manufacturer's declaration – electromagnetic immunity

The product is intended for use in the electromagnetic environment specified below. The customer or the user of the product should assure that it is used in such an environment.

"Essential performance according to the manufacturer: The product shall not move unintentionally while being submitted to disturbances."

Test frequency (MHz)	Band ^{a)} (MHz)	Service ^{a)}	Modulation ^{b)}	Maximum power (W)	Distance (m)	IMMUNITY TEST Level (V/m)
385	380 - 390	TETRA 400	Pulse modulation ^{b)} 18 Hz	1.8	0.3	27
450	430 - 470	GMRS 460, FRS 460	FM ^{c)} +/- 5 kHz deviation 1 kHz sine	2	0.3	28
710	704 - 787	LTE Band 13, 17	Pulse modulation ^{b)} 217 Hz	0.2	0.3	9
745						
780						
810	800 - 960	GSM 800/900, TETRA 800, IDEN 820, CDMA 850, LTE Band 5	Pulse modulation ^{b)} 18 Hz	2	0.3	28
870						
930						
1720	1700 - 1990	GSM 1800, CDMA 1900, GSM 1900, DECT, LTE Band 1, 3, 4, 25 UMTS	Pulse modulation ^{b)} 217 Hz	2	0.3	28
1845						
1970						
2450	2400 - 2570	Bluetooth, WLAN, 802.11 b/g/n, RFID 2450 LTE Band 7	Pulse modulation ^{b)} 217 Hz	2	0.3	28
5240	5100 - 5800	WLAN 802.11 a/n	Pulse modulation ^{b)} 217 Hz	0.2	0.3	9
5500						
5785						

NOTE If necessary to achieve the IMMUNITY TEST LEVEL, the distance between the transmitting antenna and the ME EQUIPMENT or ME SYSTEM may be reduced to 1 m. The 1 m test distance is permitted by IEC 61000-4-3.

a) For some services, only the uplink frequencies are included.

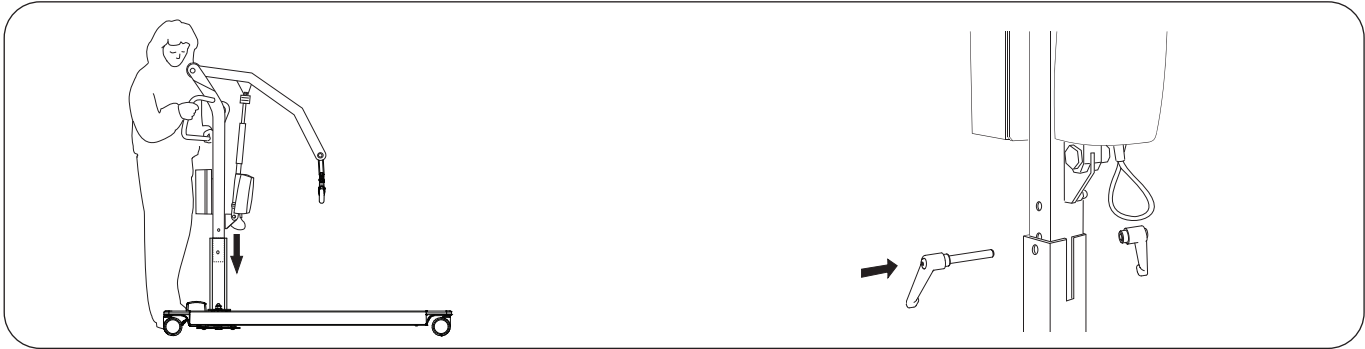
b) The carrier shall be modulated using a 50 % duty cycle square wave signal.

c) As an alternative to FM modulation, 50 % pulse modulation at 18 Hz may be used because while it does not represent actual modulation, it would be worst case.

Assembly

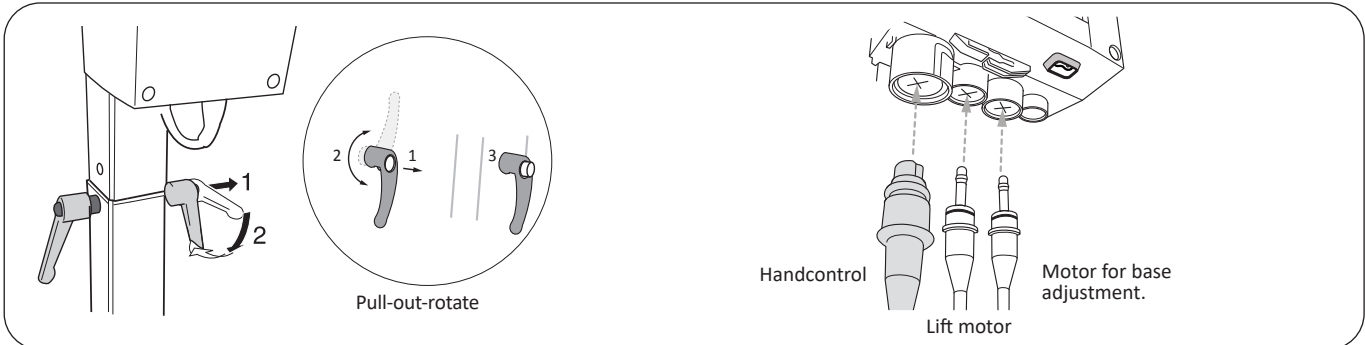
Before assembly, make sure you have the following parts:

- 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
- Bag containing Instruction for use, Quick Reference Guide, charger cable and charger extension cable.



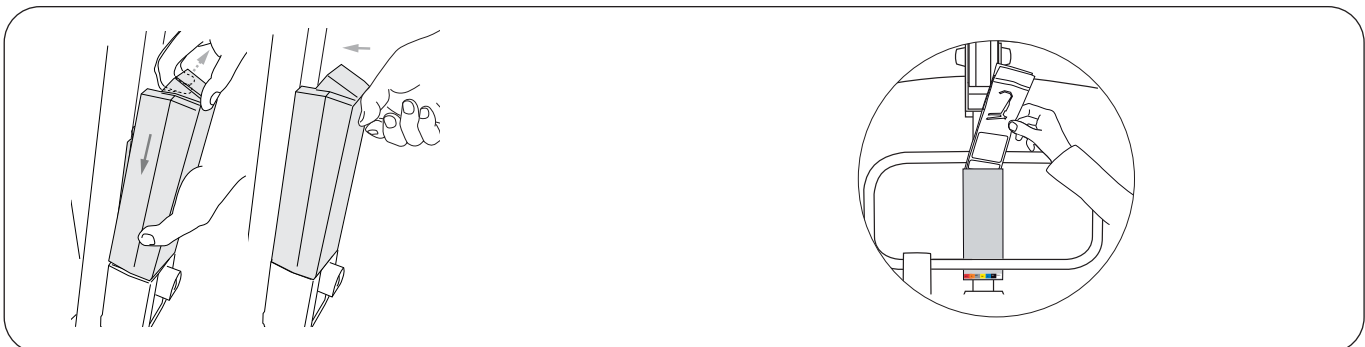
1. Lock both rear wheels. Remove the locking handles from the base and place the lift mast in the foot of the base.

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 in chapter "Dimensions".



3. Secure the lift mast in the desired position with the locking handles provided. After securing the mast use "Pull-out-rotate" to set the locking handles in a downwards position, see illustration.

4. Connect cables to the control box, see illustration. Make sure plugs are fully seated.



5. Connect the battery and secure it to the control box racket. A click sound can be heard when the battery is installed correctly.

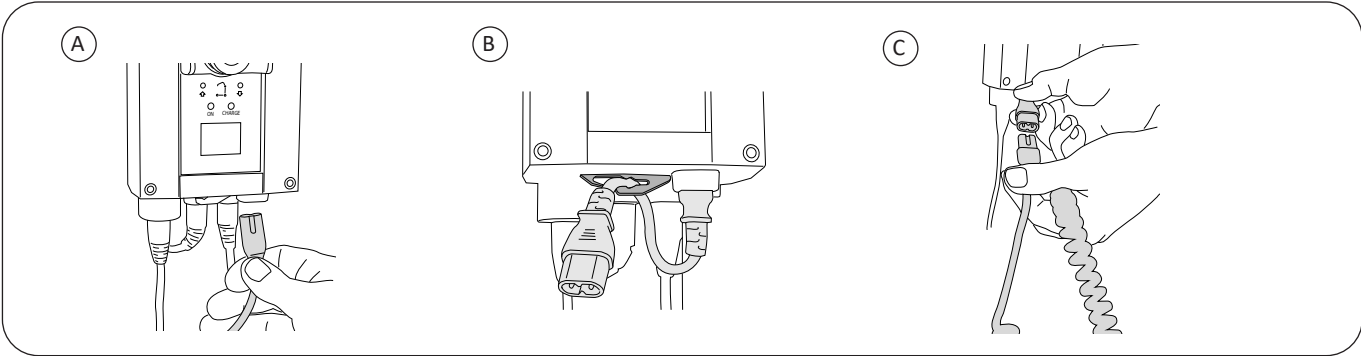
6. Place the Quick Reference Guide in the holder on the lift mast.





7. Hang the hand control on the handle.

8. Reset the emergency stop by turning the button clockwise.

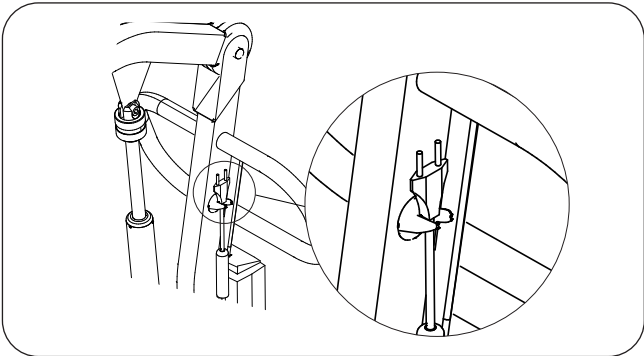


9. A) Connect the extension cable for the charging cable to the control box.

B) Insert the extension cable in the tension clip underneath the control box.

C) Connect the charging cable to the extension cable.

NOTE! Always charge the battery before using the lift the first time, See chapter “Charging the Battery”.



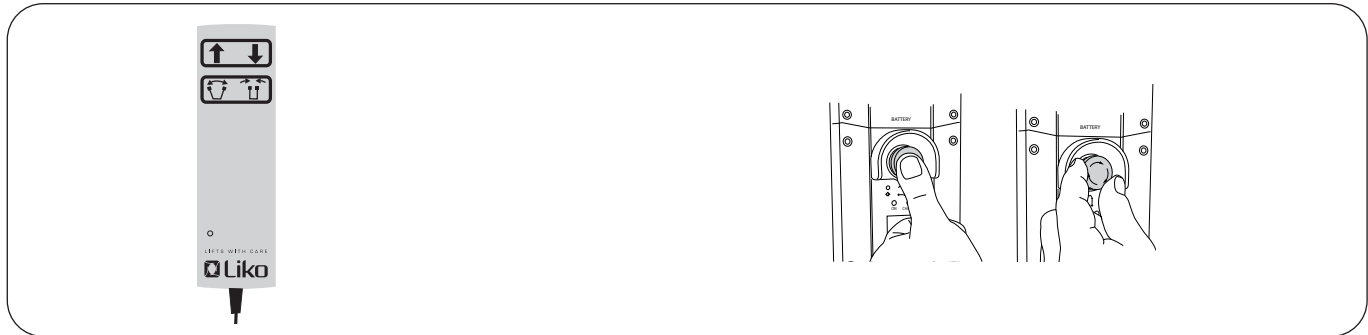
10. After completed charging, place the charger cable on the hook provided on the mast.

After assembly and charging, ensure that:

- the battery has been fully charged
- lift arm motions correspond with the buttons on the handcontrol
- base width adjustment correspond with the buttons on the handcontrol
- emergency lowering works properly (mechanical and electrical)
- rear wheel brakes, functions properly.

Operation

⚠️ Portable RF communications equipment (including peripherals such as antenna cables and external antennas) should be used no closer than 30 cm (12 inches) to any part of the lift, including cables specified by the manufacturer. Otherwise, degradation of the performance of this equipment could result.



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 .

To activate the emergency stop:

Push the red Emergency Stop button on the control box.

To reset the emergency stop:

Turn the button clockwise.



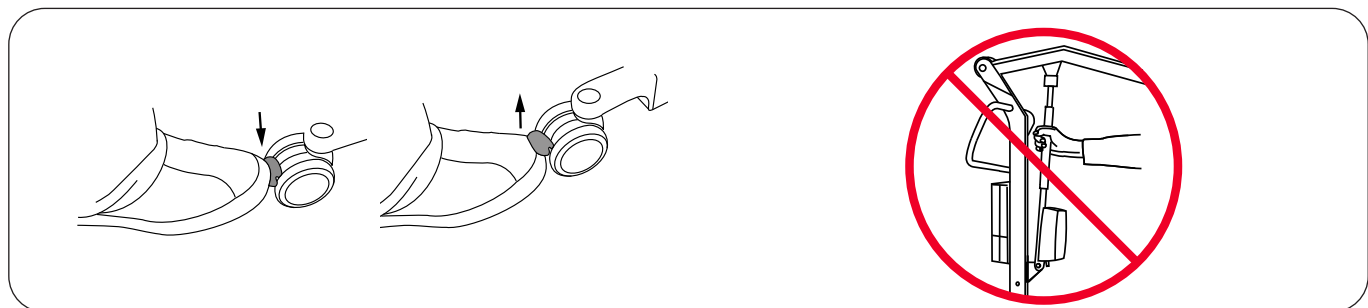
Mechanical Emergency Lowering

Turn the emergency lowering control clockwise, repeat the movements until the patient being lifted is on a firm surface and the strap loops of the sling can be unhooked.

Electrical Emergency Lowering

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

⚠️ Do not use sharp objects, since this may cause damage on the control box!



Locking the Wheels

The rear wheels can be locked to prevent rotating and turning. The locking/unlocking of the wheels is done with the foot.

NOTE: When lifting, the wheels should be unlocked so that the lift can be moved to the patient's centre of gravity. The wheels should be locked, however, if there is a risk of the lift rolling into the patient, for instance, when lifting from the floor.

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

⚠️ Never move the lift by pulling on the actuator!



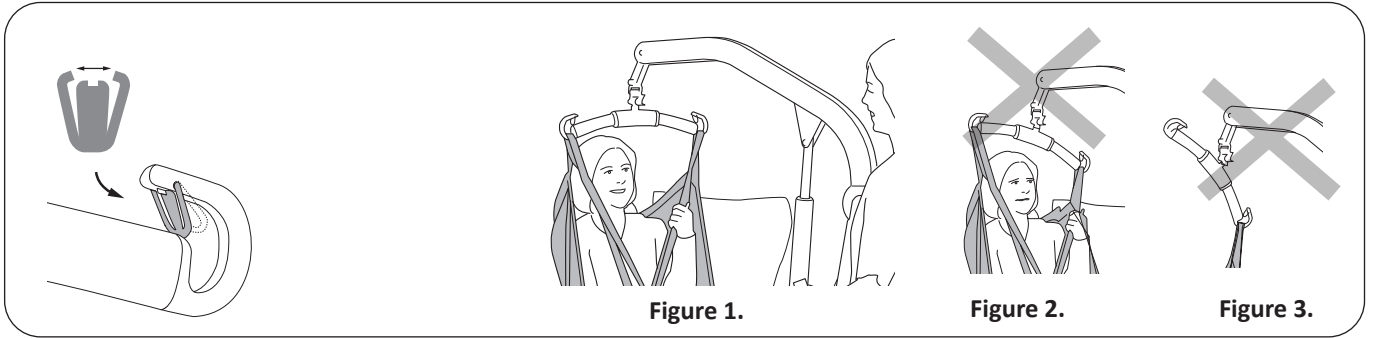


Figure 1.

Figure 2.

Figure 3.

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 for use 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

From/To:	Bed	Chair/Toilet Seat	Floor
			<p>NOTE: Place a pillow under the patient's head for increased performance and comfort. Always have the wheels locked when lifting from the floor.</p>

Charging the Battery

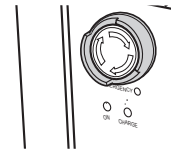
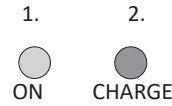
Indications for charging the battery

In the event of low battery capacity, 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.



Charger information

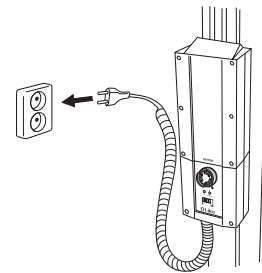
1. "ON" - lights up green when the charger is connected to mains.
2. "CHARGE" - lights up yellow constantly during charging and will turn off when charging is completed.



Charging with the control box internal charger (standard)

Plug the charger cable into mains (100-240 VAC), see charger information 1 - 2 above. The battery is fully charged after about 6 hours and the charger disconnects automatically, the yellow "CHARGE" diode turn off.

For maximum battery life, batteries must be charged regularly. We recommend charging after each use or every night.

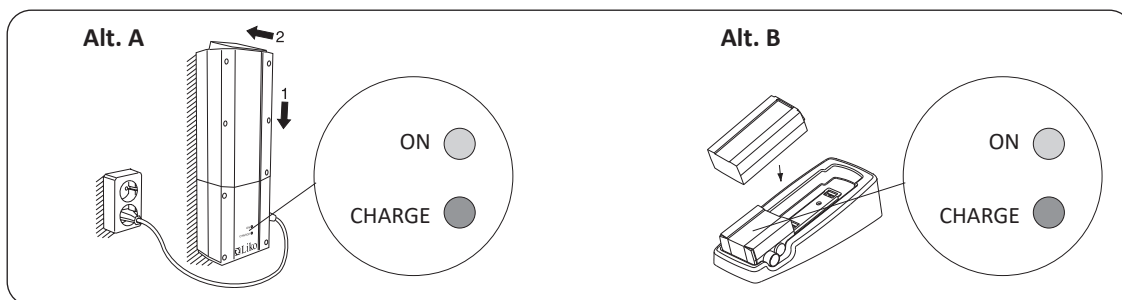


Never charge batteries in a wet area!

NOTE!

- If the charger cable (coiled cable) is stretched out it should be replaced to avoid the risk of the cable getting caught and tear.
- The lift cannot be used when the charger cable is plugged into a wall socket.
- If the yellow "CHARGE" diode at the control box continues to be lit after 8 hours, discontinue charging and replace the battery with a new one.
- A damaged battery shall be replaced and contact with leaking fluids shall be avoided.
- 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.
- The lift cannot be charged with the emergency stop activated.

Alternative charging procedures



Wallmounted charger accessory or table charger housing accessory:

Remove the battery pack from the control box by loosening the locking device on top of the battery pack. See chapter "Assembly".

Charger information;

"ON" - lights up green when the charger is connected to mains.

"CHARGE" - lights up yellow constantly during charging and will turn off when charging is completed.

Alt. A. Place the battery pack on the wallmounted charger. Plug the charger cable into mains (100-240 VAC) check that both "ON" and "CHARGE" on the charger lights up.

Alt. B. Place the battery pack on the charger in the table charger housing. Plug the charger cable into mains (100-240 VAC) check that both "ON" and "CHARGE" on the charger lights up.

Maximum Load

Different maximum loads may apply to different products on the assembled lift unit: 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 mobile lift which is approved for 175 kg (385 lbs) can be equipped with a lifting accessory 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.

Study 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.

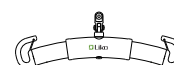
When changing sling bar or other lifting accessories, the highest possible lifting height of the lift is affected. Before changing lifting accessories you should always ensure that the lift, after change, can fulfil the desired lifting height in order to manage the lifting situations for which the lift is to be used. For additional guidance in selecting a sling, study the instruction for use for the respective sling models. There you will also find guidance for combining Liko™ sling bars with Liko slings.

Contact your Hill-Rom representative for advice and information on Liko's product range.

*** this product is also available in a version with Quick-Release Hook.**

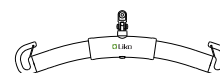
Universal SlingBar 350*
Max. 300 kg (660 lbs)

Prod. No. 3156074



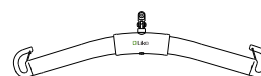
Universal SlingBar 450*
Max. 300 kg (660 lbs)

Prod. No. 3156075



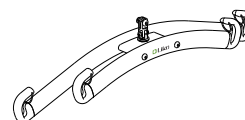
Universal SlingBar 600*
Max. 300 kg (660 lbs)

Prod. No. 3156076



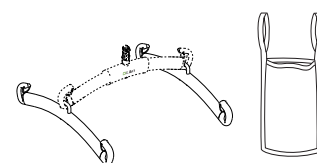
Universal TwinBar 670*
Max. 300 kg (660 lbs)

Prod. No. 3156077



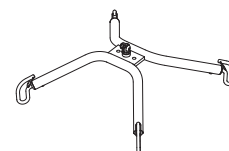
Universal SideBars 450 including bag
Max. 300 kg (660 lbs)

Prod. No. 3156079



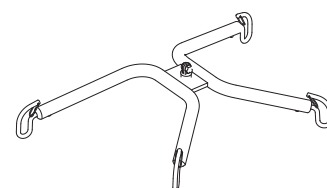
Sling Cross-bar 450*
Max. 300 kg (660 lbs)
(Adapter 12 mm, prod. no. 2016504 required)

Prod. No. 3156021



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

Prod. No. 3156018



Quick-Release Hook

Liko™ Quick-Release Hooks is a system for quick change of lifting accessories on Liko’s mobile and stationary lifts. Uno mobile lift must be equipped with the Q-link 13 in order to be used with the Quick-release Hook.

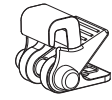
The Quick-release Hook Universal fits the Universal SlingBar 350, 450 and 600 (prod. no. 3156074 - 3156076). Quick-release Hook TDM fits the SlingBar Mini 220 (prod. no. 3156005), Sling Cross-bar 450 and 670 (prod. no. 3156021 and 3156018) and Universal TwinBar 670 (prod. no. 3156077).

When changing to a sling bar with quick release hook, the lifting height is reduced by 33 mm (1.3 in) in comparison with a fixed sling bar.

Contact your Hill-Rom representative for more information.



Q-link 13
Prod. No. 3156509



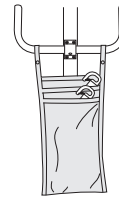
Quick-Release Hook Universal
Prod. No. 3156508



Quick-Release Hook TDM
Prod. No. 3156502

Bag for SlingBars

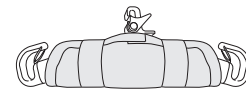
Prod. No. 2001025



Slingbar Cover Paddy 30

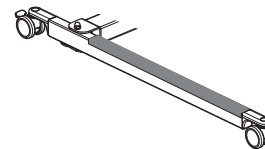
(fits Universal SlingBar 350, 450 and 600 and SlingBar Slim 350).

Prod. No. 3607001



Leg protector

Prod. No. 20190029



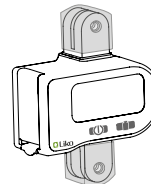
LikoScale™ device

for weighing a patient in combination with Uno mobile lifts.
Adapter 12 mm is required.

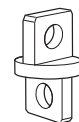
LikoScale™ 350, Max 400 kg (880 lbs)

Prod. No. 3156228

LikoScale™ 350 is certified according to the European Directive NAWI 2014/31/EU (Non-Automatic Weighing Instruments).



LikoScale 350
Prod. No. 3156228



Adapter 12 mm
Prod. No. 2016504

LikoScale™ devices only for use in the United states and Canada:

LikoScale™ 200, Max. 200 kg (440 lbs.)

Prod. No. 3156225

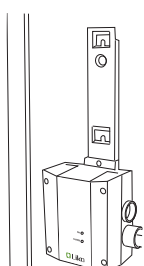
LikoScale™ 400, Max. 400 kg (880 lbs.)

Prod. No. 3156226.

Contact your Hill-Rom representative for more information.

Battery charger,

for wallmounting or to use with the Table Charger Housing
Prod. No. 2004106



Battery

Lead battery (Pb)
Prod. No. 2006106

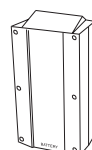
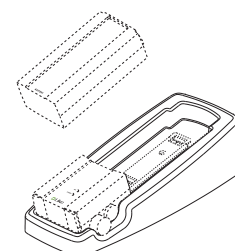


Table Charger Housing

excl. charger and battery
Prod. No. 2107103



Troubleshooting

The lift do not work up/down with Hand Control.

The base-width adjustment doesn't work (in/out) with the Hand Control.



1. Make sure that the emergency stop button has not been activated (shall not be pressed in).
2. Check the battery capacity.
3. Make sure that the battery is properly seated in the control box.
4. Check that the charger cable is not connected to an electric outlet.
5. Check that the handcontrol cable is correctly connected to the control box.
6. Check that the lift arm actuator cable is correctly connected to the control box.
7. Check that the base width actuator cable is correctly connected to the control box.
8. *If the problem persists, please contact Hill-Rom.*

The charger doesn't work.



1. Make sure that the emergency stop button has not been activated (shall not be pressed in).
2. Check that the charger cables are connected correctly.
3. Make sure that the battery is properly seated in the control box.
4. Try an alternative mains outlet.
5. *If the problem persists, please contact Hill-Rom.*

The lift is stuck in the high position.



1. Make sure that the emergency stop button has not been activated (shall not be pressed in).
2. Make sure that the battery is properly seated in the control box.
3. Check the battery capacity.
4. Check that the handcontrol cable is connected correctly.
5. Electrical emergency lowering, use the operation panel to lower the patient onto a firm surface, see chapter; "Operation".
6. Use the mechanical emergency lowering device to lower the patient onto a firm surface, see chapter; Operation.
7. *If the problem persists, please contact Hill-Rom.*

If you hear unusual sound from the lift.



Contact Hill-Rom.

Recycling Instructions



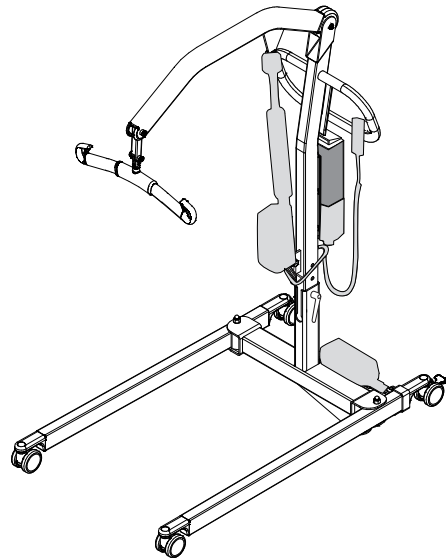
Lead battery (Pb)



Waste of Electrical and Electronic Equipment (WEEE).



Metals



Old batteries are to be deposited at the nearest recycling station or given to personnel authorized by Hillrom.

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.

Cleaning and Disinfection

These instructions do not replace the facility's own cleaning and disinfection policies.

⚠ Warnings:

To help prevent injury and/or equipment damage, obey these warnings:

- Warning—The potential for electrical shock exists with electrical equipment. Failure to follow facility protocol could cause death or serious injury.
- Warning—Do not reuse wiping material for multiple steps or on multiple products.
- Warning—Harmful cleaning solutions may cause skin rash and/or irritation upon contact. Follow the manufacturer's instructions found on the product label and Safety Data Sheet (SDS).
- Warning—Lift and move items correctly. Do not twist, and seek assistance when necessary.
- Warning—Fluid spills on to the lift electronics could cause a hazard. If this happens do not put the lift back into service until it is completely dry, tested, and found to be safe to operate.

⚠ Cautions:

To help prevent equipment damage, obey these cautions:

- Caution—Do not steam clean or power wash the lift. Pressure and excessive moisture can damage the protective surfaces of the lift and its electrical components.
- Caution—Do not use harsh cleansers/detergents, heavy duty grease removers, solvents such as toluene, xylene, or acetone, and do not use scouring pads (you may use a soft bristle brush).



Safety Recommendations

- Wear protective equipment according to manufacturer's instruction and per facility protocol throughout the cleaning operations, such as: gloves, eye protection, apron, face mask and shoe covers.
- Unplug mains (AC power source) before cleaning and disinfection.
- Never clean the lift by pouring water on it, steam cleaning it, or by using a high-pressure jet.
- Refer to the recommendations made by the cleaning and disinfecting product manufacturer.

Process Recommendations:

For proper cleaning and disinfection, staff members should be trained.

The trainer should carefully read the instructions and follow them when the trainee is being trained.

The trainee should:

- Be given time to read the instructions and to ask any questions.
- Clean and disinfect the product while the trainer supervises. During, and/or after this process, the trainer should correct the trainee about any differences from the instructions for use.

The trainer should supervise the trainee until the trainee can clean and disinfect the lift as instructed.

Hill-Rom recommends to clean and disinfect the lift between patient use and regularly during extended patient stays.

Some fluids used in the hospital environment, such as iodophor and zinc oxide creams, can cause permanent stains.

Remove temporary stains by wiping vigorously with a lightly-dampened wiping cloth.

Cleaning and Disinfection Overview:

Cleaning and disinfection are distinctly different processes. **Cleaning** is the physical removal of visible and non-visible soil and contaminants. **Disinfection** is intended to kill microorganisms.

When you perform the detailed cleaning steps, please note the following:

- A microfiber cloth is recommended as the wiping cloth.
- A soft bristle brush is recommended as a cleaning tool for the small holes in the Q-Link II.
- Always replace the wiping cloth when visibly soiled.
- Always replace the wiping cloth between steps (spot clean, clean, and disinfect)
- Always use Personal Protective Equipment (PPE) such as gloves, eye protection, apron, face mask, and shoe covers, as recommended by the facility protocol and manufacturers instructions

Cleaning and Disinfection Equipment:

- Protective equipment (such as: gloves, eye protection, apron, face mask and shoe covers) as recommended by the facility protocol and manufacturers instructions
- Disposable microfiber cloths recommended
- Soft bristle brush
- Warm water
- To find Cleaning / Disinfectants compatible or not compatible for use on Liko™ products, follow the "Application of commonly used Cleaning / Disinfectants on Liko products" in this document.

Prepare the Unit for Cleaning and Disinfecting:

 **Unplug mains (AC power source) before cleaning and disinfection.**

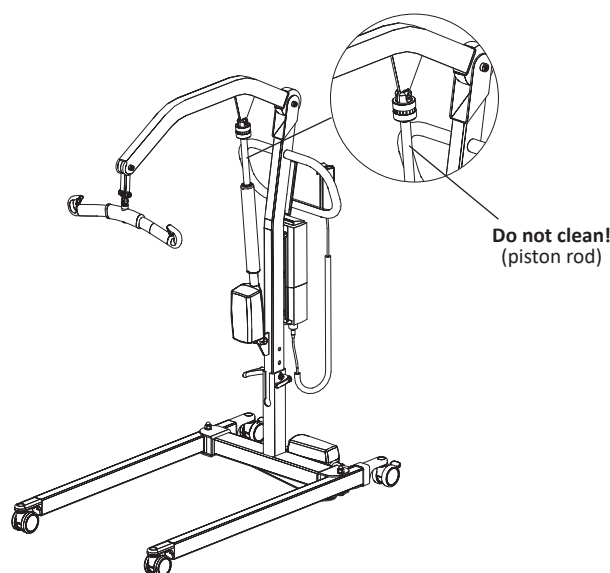


Step 1: Cleaning

1. Unplug the mains (AC power source) before cleaning and disinfection.
2. As necessary, first remove visible soil from the lift with a cloth moistened with warm water and a neutral, approved cleaner/disinfectant. See "Application of commonly used Cleaning / Disinfectants on Liko products." Do not use a cloth that is dripping wet.
 - A soft bristle brush may be used for hard-to-clean areas to remove stains and resistant dirt and to loosen hardened soil.
 - Use as many wiping cloths as needed to remove the soil. Replace cloth when soiled.
3. Wipe down the entire lift starting from the top down. Give special attention to seams, cracks and other areas where soil may accumulate. In particular, pay special attention to the following areas:

NOTE! Do not clean the piston rod!

- Sling bar
- Mechanical emergency lowering
- Handles
- Control box
- Battery
- Hand control
- Emergency stop
- Operation panel/display (where applicable)
- Lever for base width adjustment (where applicable)
- Pedal for base width adjustment (where applicable)
- Locking handles
- Wheels



Cleaner/Disinfection:

NOTE:

It is important to remove all visible soil from all areas before continuing to remove non-visible soil.

With a new wiping cloth soaked in an approved cleaner/disinfectant, use firm pressure to wipe all surfaces of the lift. Use a new or clean wiping cloth as often as necessary. Make sure the following items are cleaned:

- Hand Control
- Sling (refer to the specific sling Instruction for use and 7EN160884 Care and Maintenance of Liko Slings)
- Lift
- Slingbar
- Power cord
- Scale (if applicable)

Damaged items should be replaced!

Step 2: Disinfection:

1. For the use of suitable disinfectants see "Application of commonly used Cleaning / Disinfectants on Liko products" in this document.
2. Follow the manufacturer's instructions.
3. Make sure all surfaces **remain wet with the cleaner/disinfectant** for the **specified contact time**. Rewet surfaces with a new wiping cloth as necessary and per the manufacturer's instructions.

NOTE:

If bleach is used with another cleaner/disinfectant, use a new or clean cloth/wipe soaked in tap water to remove any disinfectant residue prior to and after the bleach application.

- ⚠ **The lift may not be cleaned with CSI or equivalent.**
- ⚠ **The hand control may not be cleaned with Viraguard or equivalent.**
- ⚠ **The control box may not be cleaned with Anioxy Spray or equivalent.**

Application of commonly used Cleaning / Disinfectants on Liko products

Chemical class	Active ingredient	pH	Cleaners / Disinfectant *)	Manufacturer *)	May not be used on the following items:
Quaternary ammonium chloride	Didecyl dimethyl ammonium chloride = 8.704% Alkyl dimethyl benzyl ammonium chloride = 8.19%	9.0 – 10.0 in use	Virex II (256)	Johnson/Diversey	Foot rest for Sabina™ and Roll-On™
Quaternary ammonium chloride	Alkyl dimethyl benzyl ammonium chloride = 13.238% Alkyl dimethyl ethylbenzyl ammonium chloride = 13.238%	9.5 in use	HB Quat 25L	3M	
Accelerated Hydrogen Peroxide	Hydrogen Peroxide 0.1 -1.5% BenzylAlcohol: 1-5% Hydrogen Peroxide 0.1 -1.5% BenzylAlcohol: 1-5%	3	Oxivir Tb	Johnson/Diversey	The lift straps for Golvo™ and ceiling lifts
Phenolic	Ortho-Phenylphenol = 3.40% Ortho-Benzyl-para-Chlorophenol = 3.03	3.1 +/- 0.4 in use	Wexcide	Wexford Labs	
Bleach	Sodium hypochlorite	12.2	Dispatch	Caltech	The lift straps for Golvo™ and ceiling lifts
Alcohol	Isopropyl alcohol = 70%	5.0 – 7.0	Viraguard	Veridien	Hand controls for all lifts
Quaternary ammonium	n-Alkyl dimethyl benzyl ammonium chlorides = 0.105% n-Alkyl dimethyl ethylbenzyl ammonium chlorides = 0.105%	11.5 - 12.5	CSI	Central Solutions Inc.	Viking™, Liko M220™, Liko M230™, Uno™, Sabina™, Golvo™, LikoLight™, Roll-On™, LikoRall™, Multirall™
Benzyl-C12-18-alkyldimethylammonium, chlorides	Benzyl-C12-18-alkyldimethylammonium, chlorides (22 %) 2-Phenoxyethanol (20 %) Tridecylpolyethylenglycolether (15 %) Propan-2-ol (8 %)	approx 8.6 in use	Terralin Protect	Shülke	Foot rest for Sabina™ and Roll-On™
Organic peroxide (type E, solid)	Magnesium monoperoxyphthalate hexahydrate (50-100%) Anionic surfactant (5-10%) Nonionic surfactant (1-5%)	5.3 in use	Dismozon Pur	Bode	The lift straps for Golvo™ and ceiling lifts
Ethanol	Hydrogen peroxide (2.5-10 %) Lauryldimethylamine oxid (0-2.5 %) Ethanol (2.5-10 %)	7	Anioxy-Spray WS	Anios	Control box for all mobile lifts
Trolosene sodium	Adipic acid 10-30% Amorphous silica < 1% Sodium Toluene sulphionate 5-10 % Trolosene sodium 10-30 %	4-6 in use	Chlor-Clean	Guest Medical Ltd	The lift straps for Golvo™ and ceiling lifts

*) Or equivalent

Inspection 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 to make sure that the emergency lowering (both electrical and mechanical) works.
- Charge the batteries each day the lift is used and then check that 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 chapter "Cleaning and Disinfection".

⚠ 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 activities are not allowed with the patient in the lift.

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 service life 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°C to +50°C (14°F – 122°F) and a relative humidity of 20–90%. The atmospheric pressure should be 700–1060 hPa.

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.



www.hillrom.com

 Liko AB
Nedre vägen 100
975 92 Luleå, Sweden
+46 (0)920 474700

Liko AB is a subsidiary of Hill-Rom Holdings Inc.

Enhancing outcomes for
patients and their caregivers:

Hill-Rom