



Non Liko® Rail Installation Periodic Inspection

Customer Reference:

Lift type: Contract No:
 Prod No: Version: Name:
 Serial No: Address:
 Prod. Year: (Zip Code)

The patient lift must be thoroughly inspected at least once per year. Inspection, service, and preventative maintenance must be carried out by Hill-Rom authorized personnel.

- △ If the system is installed in a corrosive environment such as indoor pool or bathroom, please see section 15 before starting inspection. Make a color print of this instruction.
- △ The non Liko® rail infrastructure must follow original manufacturer's periodic inspection procedure and is not represented in this inspection.

INSPECTION POINTS	Approved	Not Approved	Required Actions
1 General inspection incl. rail & end stop	<input type="checkbox"/>	<input type="checkbox"/>
2 Carriages	<input type="checkbox"/>	<input type="checkbox"/>
3 Emergency Stop	<input type="checkbox"/>	<input type="checkbox"/>
4 Hand control	<input type="checkbox"/>	<input type="checkbox"/>
5 Electrical emergency lowering device	<input type="checkbox"/>	<input type="checkbox"/>
6 SSP Limit Switch	<input type="checkbox"/>	<input type="checkbox"/>
7 Lift Strap	<input type="checkbox"/>	<input type="checkbox"/>
8a Mechanical emergency lowering (242)	<input type="checkbox"/>	<input type="checkbox"/>
8b Fixed strap-stop (242)	<input type="checkbox"/>	<input type="checkbox"/>
9 TDM & R2R Hook (242 R2R)	<input type="checkbox"/>	<input type="checkbox"/>
10 Slingbar	<input type="checkbox"/>	<input type="checkbox"/>
11 Charger function	<input type="checkbox"/>	<input type="checkbox"/>
LOAD TESTING			
12 Mechanical lowering load test (242)	<input type="checkbox"/>	<input type="checkbox"/>
13 Maximum load test	<input type="checkbox"/>	<input type="checkbox"/>
DOCUMENTATION			
14 Instructions / Instruction guide	<input type="checkbox"/>	<input type="checkbox"/>
ENVIRONMENTAL IMPACT			
15 Corrosive environments	<input type="checkbox"/>	<input type="checkbox"/>

Approval to use the patient lift: Approved Not approved To be actioned

If the patient lift has one or more inspection point with result "Not approved" the system must not be used. If the system has one or more inspection point with result "To be actioned" these actions should be performed immediately. After performed actions, sign below. If anything is unclear, or if you have questions, please contact Hill-Rom or your local Hill-Rom representative. Contact information can be found at www.liko.com|www.hill-rom.com.

Note: This periodic inspection certifies that the Likorall® Overhead Lift and Carriage are safe for intended uses within safe working load conditions and required preventative maintenance per the product instruction guide. This periodic inspection does **NOT** certify that the non Liko® rail infrastructure is safe for use. Hill-Rom hereby disclaims all liability for product failures caused by the non Liko® rail infrastructure.

Inspection performed by: _____ Date: _____

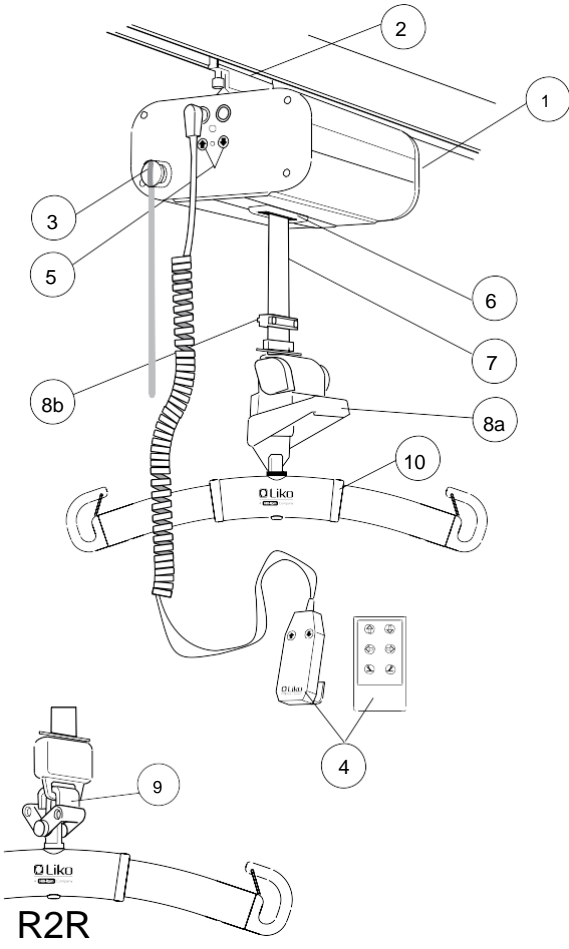
Final approval by: _____ Approval Date: _____ Next Inspection date: _____

Inspection performed in accordance with ISO 10535:2006 Annex B- Periodic inspection

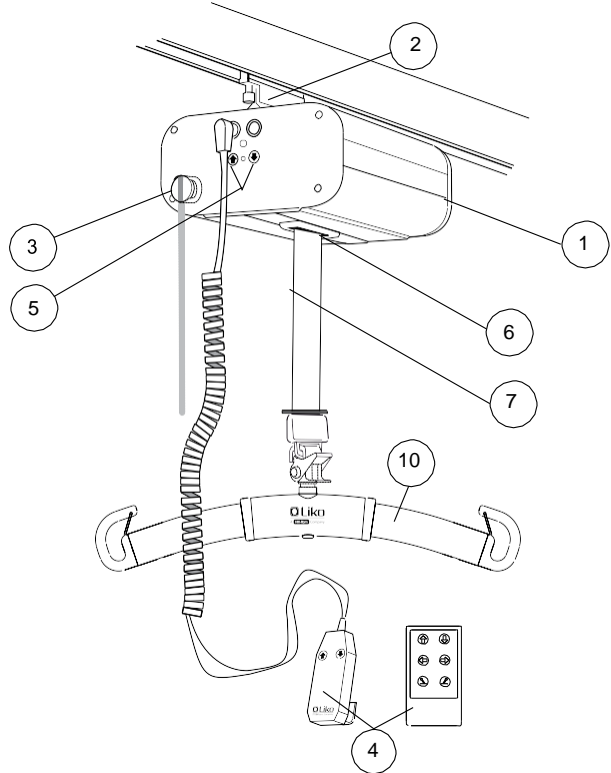


Inspection points

Likorall® Overhead Lift 242



Likorall® Overhead Lifts 243, 250



Inspections

1 General inspection

- Verify presence of decal with model type and serial number.
- Check the front plastic cover for cracks.
- Check rear plastic cover for cracks and that the end-cover screws are in place.
- Check aluminum body for dents or scratches.
- Inspect non Liko® rail for noticeable damage.
- Inspect end stop for noticeable damage.
- Inspect end stop bolt to ensure bolt is tight and locknut is engaged with bolt threads.

2 Carriages

- Verify that carriages are secured to motor with bolts and nyloc nuts.
- Inspect the plastic wheel bearing covers not are cracked or missing.
- Roll the carriage with max load applied throughout the rail and verify that each wheel turns freely and that there are no abnormal noises or vibrations.

3 Emergency Stop

- Press in the Emergency Stop button. Verify that it holds and locks in the closed position. If the Emergency Stop cord is attached, check that it is secured properly.
- With the Emergency Stop button pressed in, check that the motor does not operate when the hand control buttons are pressed.
- Turn the red Emergency button in the direction of the arrows. Verify that the button releases from the locked position into the raised, open position.

4 Hand control

- Check cord for exposed wear or tear in the insulation sleeve.
- Inspect casing for damage, verify dust & water seal is intact.
- With the Emergency Stop out, press each button and check for corresponding lift operation.

5 Electrical emergency lowering device

- Test the electrical emergency lowering device by pressing the up and down arrows on the electronic card cover. Check for corresponding lift operation.

6 SSP Limit Switch

- Check that the (2) mounting screws secure the micro switch e-card to the motor casing.
- Check function of twist protection.
- With the Emergency Stop out, move the lift strap all the way up against the SSP Limit switch. Check that the motor does not operate when touching the SSP Limit switch.

7 Lift Strap

- Using the hand control, lower the strap to its maximum extension. Inspect the belt for frayed edges, heavy wrinkles or wear-through areas.
- Verify that the Q-link is secure on strap. Slide plastic cover off the Q-link and visually inspect that the lift strap safety pin is seated securely in the middle recess of the Q-link.

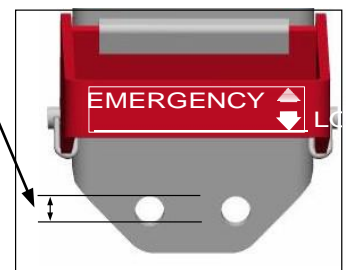
8a Mechanical emergency lowering (Likorall® Overhead Lift 242)

Make sure the hole at the emergency lowering does **not** exceed 12 mm / 0.47 inch.

- Attach the sling bar to the lift strap. Make sure the sling bar is correctly mounted.
- Verify the position of the red plastic adjustable stop at the top of the Spring magazine. Ensure that the snap-fit is interlocked and secure.
- Apply slight manual downward pressure on the sling bar. Simultaneously pump the red handle on the mechanical emergency-lowering. Verify that the spring action handle lowers and recoils upward and that the strap is let out of the Spring magazine.
- Manually elevate the sling bar so there is no weight on the mechanical lowering assembly. Simultaneously pump the red handle until the strap rewinds up to the red plastic adjustable stop.
- Ensure that the red plastic handle cover is in place.

8b Fixed strap-stop (Likorall® Overhead Lift 242)

- Verify that screws (2) are tight in two-piece assembly
- If requested and/or necessary, reset the strap-stop height according to service manual instructions.



9 TDM & R2R Hook (Likorall® Overhead Lift 242 R2R)

- Manually press and lower the plastic covers and spring assembly away from the aluminum hook. Release the spring assembly and verify that the spring snaps back against the hook, providing a secure snap-fit lock.
- Verify that the screw joints are tight.

10 Sling bar

- Visually inspect the sling bar to detect any scratches, sharp edges or deformities.
- Check that the unit rotates freely on its bearings.
- Make sure both safety latch clips are mounted and fall back against the body of the sling bar.
- Verify that the sling bar fasteners are tight.
- On old model of sling bar, made of steel; verify that the o-ring is present and positioned in the center bolt groove.

11 Charger function

- With the Emergency Stop out, insert the hand control into the wall-mounted charger outlet (110 - 240V). Visually inspect that diode lights on the charger unit and hand control light up according to the instruction guide or the quick reference guide.

Load testing

12 Mechanical lowering load test (50 kg / 110 lb) (Likorall® Overhead Lift 242)

- With the Emergency Stop out, and the strap with the sling bar lowered, secure the weights.
- Using the hand control, raise the weights approximately 10-15 cm (4-6 inch).
- Firmly apply increasing downward pressure on the red Emergency-Lowering handle until the strap begins to slowly lower the weight to the floor. Remove the weights and rewind the strap to its original position, as described in inspection point 8a.

13 Maximum load test

- Likorall® Overhead Lift 242: 200 kg / 440 lb
- Likorall® Overhead Lift 243: 230 kg / 507 lb
- Likorall® Overhead Lift 250: 250 kg / 550 lb

- With the Emergency Stop out, and the strap with the sling bar lowered, secure the weights.
- Using the hand control, raise the maximum load 50 cm.
- Make sure the lift strap does not drift more than 15 cm (6 inch)/ 30 sec.
- Lower the maximum load to the start position.
- Listen for abnormal noises and vibrations.



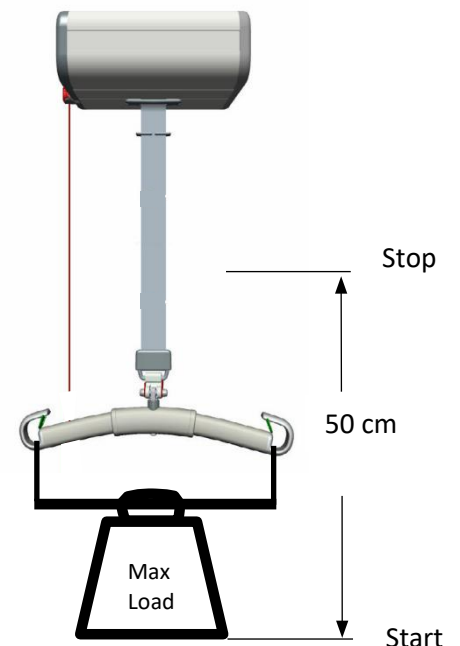
Note:

Never go below start position with the maximum load!

Make sure the batteries are fully charged before maximum load test!

If the low-battery alarm sounds during the lift, the battery must be recharged prior to load testing.

If the low-battery alarm sounds during the lift with fully recharged batteries, the batteries must be replaced.



Documentation

14 Instructions/Instruction guide

- Make sure the instruction guide or quick reference guide, for the lift unit, is available.

15 Environmental Impact – corrosive environments

Due to the environment an overhead system is installed in, components may be subject to corrosion. High temperature, high relative humidity, poor ventilation, presence of chlorine and different combinations of these factors, will affect the corrosion rate.

Depending on material type a corrosion attack can occur suddenly or in other cases form gradually. The corrosion rate and type of corrosion attack might be different in one area of the installation compared to another. **Fixing points classified as safety critical, installed in a corrosive environment such as indoor pool or bathroom, must be inspected.** When a component has reached a certain stage of corrosion it might need to be replaced.

Note! Print out in color.

Check for visible severe corrosion and material loss and identify if components need to be replaced.

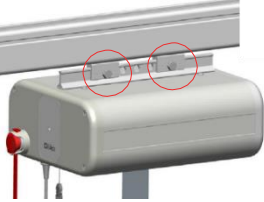
Galvanized steel

These pictures are to illustrate the appearance for the acceptance criteria in the evaluation method for all galvanized steel components. These are not the actual components for inspection.



1. New 2. Acceptable 3. Replace 4. NOT acceptable

1. A galvanized steel component.
2. White rust on a component appears when the surface treatment corrodes.
3. Red rust appears when the actual steel has started to corrode. Corroding steel will result in material loss and should therefore be replaced.
4. A component covered in red rust is unfit for use.

Safety critical fixing points:	Example of load bearing parts:
<ul style="list-style-type: none"> Carrier bolts and pins 	
<ul style="list-style-type: none"> Load bearing components below lift 	