



A **Hill-Rom** Company

Likorall™

6.1
Likorall 200, 240, 242, 243, 250

Periodic inspection

2014-06-26

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 and service must be carried out by Hill-Rom/Liko 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.

INSPECTION POINTS

	Approved	Not approved	To be actioned:
1 General inspection	<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 (200 & 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 rail system	<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/Liko or your local Hill-Rom/Liko representative. Contact information is to be found at www.liko.com.

Inspection performed by: _____ Date: _____

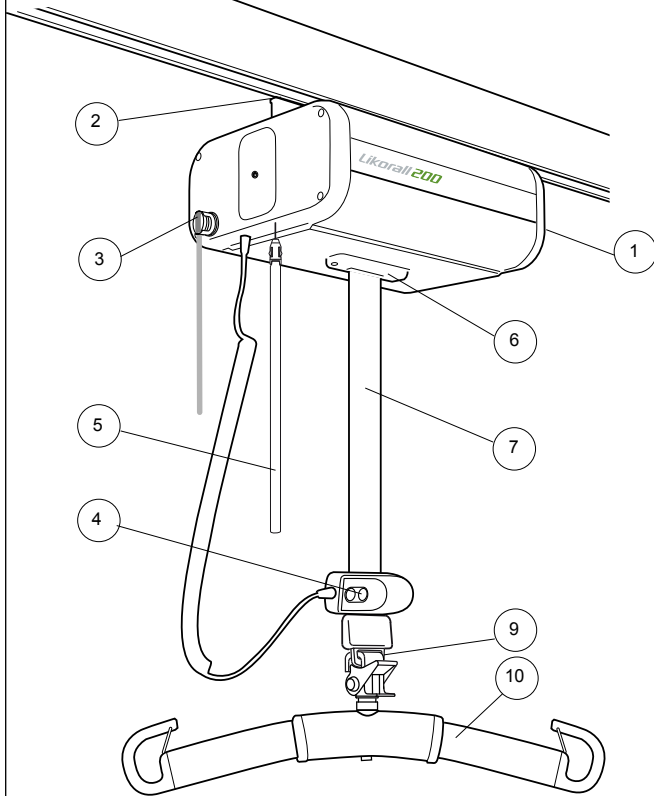
Final approval by: _____ Approval date: _____

Next inspection: _____

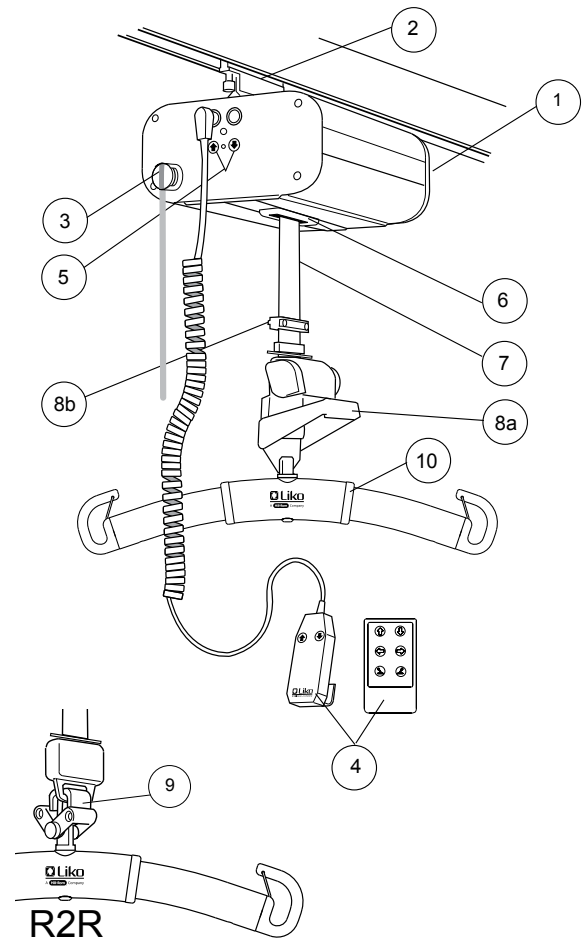
Inspection performed in accordance with ISO 10535:2006 Annex B- Periodic inspection

Inspection points

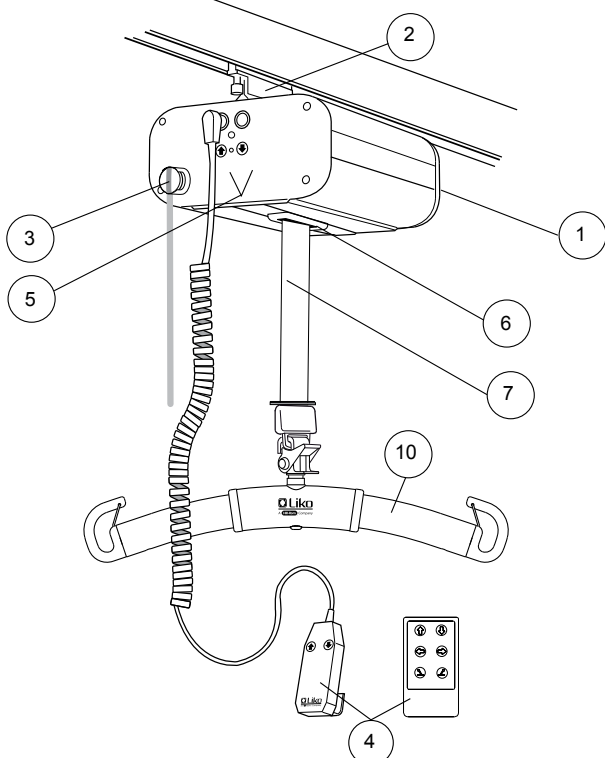
Likorall 200



Likorall 242



Likorall 243 & 250



Instructions for the inspection points

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 aluminium body for dents or scratches.

2 Carriages

- Verify that carriages are secured to motor with bolts and nyloc nuts.
- Roll the carriage within the rail. Verify that each wheel turns freely and the plastic wheel bearing covers not are cracked or missing.

R2R Turnable Hanger:

- Verify that the centre pin is held secure with a split pin.

Carriage with brake:

- If applicable, check that the carriage brake assembly tightens and holds.
- Check the brake function of the carriage.

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 pulling down the handle (Likorall 200) or pressing the up and down arrows on the electronic card cover. Check for corresponding lift operation.

6 SSP Limit Switch

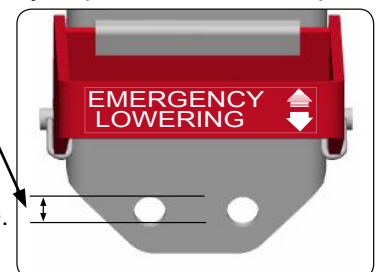
- Check that the (2) mounting screws secure the micro switch e-card to the motor casing.
- Check function of twist protection.
- With the emergency stop out, move the lifts trap all the way up against the SSP Limit switch. Check that the motor does not operate when touching the SSP Limit switch.

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 lifts trap safety pin is seated securely in the middle recess of the Q-link.

8a Mechanical emergency lowering (Likorall 242)

- Make sure the hole at the emergency lowering **not** exceeds 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 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.

Instructions for the inspection points

9 TDM & R2R Hook (Likorall 242 R2R and Likorall 200)

- Manually press and lower the plastic covers and spring assembly away from the aluminium 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 User Manual or the Quick reference guide.

Load testing

12 Mechanical lowering load test (50 kg / 110 lbs) (Likorall 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 200: 200 kg / 440 lbs Likorall 240: 180 kg / 400 lbs Likorall 242: 200 kg / 440 lbs Likorall 243: 230 kg / 507 lbs Likorall 250: 250 kg / 550 lbs

- 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 peculiar noises and vibrations.



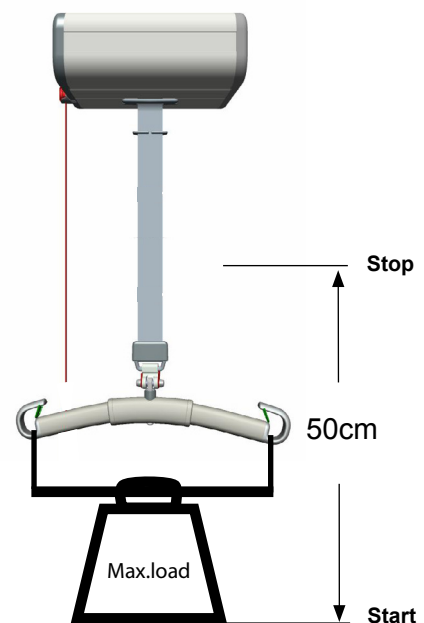
Note:

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 Instruction guide or Quick reference guide, to the lift unit, are available.

Instructions for the inspection points

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

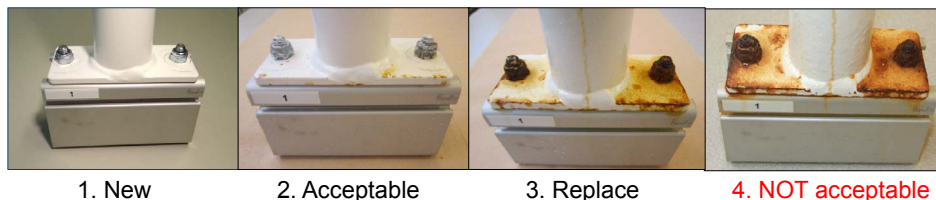
These pictures describes the evaluation method for all galvanized steel components.



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.

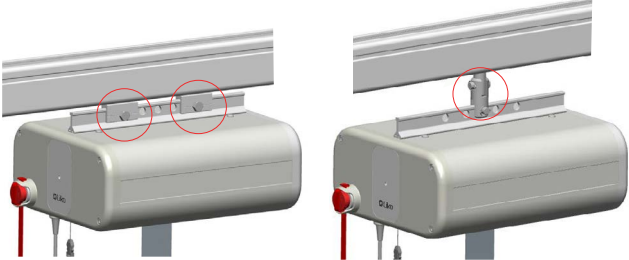
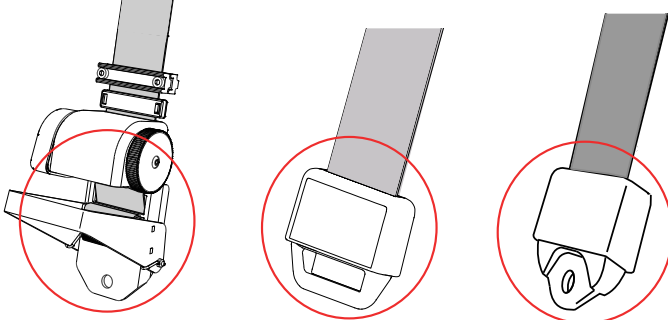
Powder coated steel

These pictures describes the evaluation method for all powder coated steel components.



1. A powder coated steel component.
2. Local discoloration may occur in close proximity to corroding non-painted components. Stains on the painted surface is acceptable.
3. Cracks in the paint and red corrosion under the paint is a sign of corroding steel. Corroding steel will result in material loss and should therefore be replaced.
4. A component with peeling coating, bubbles in the paint and red corrosion under the paint is unfit to use.

Instructions for the inspection points

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 motor.	

Periodic Inspection

3EN111001 Rev 10

System information

Type of Rail system:

S/N:

Approved Max Load:

Year of Installation:

Customer references

Agreement No:

Name:

Address:

Post code:

The Rail System must be thoroughly inspected at least once per year. Inspection and service must be carried out by Hill-Rom/Liko authorized personnel.

△ See Installation condition checklist on next page to determine how to perform inspection points 1 and 3.
Make a color print of this instruction.

INSPECTION POINTS

	Approved	Not approved	To be actioned:
INSTALLATION			
1 General inspection	<input type="checkbox"/>	<input type="checkbox"/>
2 Labels / Signs	<input type="checkbox"/>	<input type="checkbox"/>
3 Ceiling / Pendant / Ceiling Fixture	<input type="checkbox"/>	<input type="checkbox"/>
4 Wall / Wall Bracket	<input type="checkbox"/>	<input type="checkbox"/>
LOAD-BEARING PARTS / RAIL SYSTEM			
5 Upright Support	<input type="checkbox"/>	<input type="checkbox"/>
6 Primary rail	<input type="checkbox"/>	<input type="checkbox"/>
7 Secondary Rail	<input type="checkbox"/>	<input type="checkbox"/>
8 Traverse Carriage	<input type="checkbox"/>	<input type="checkbox"/>
9 End stop	<input type="checkbox"/>	<input type="checkbox"/>
10 Rail Joint	<input type="checkbox"/>	<input type="checkbox"/>
POWER UNIT			
11 Lift motor	<input type="checkbox"/>	<input type="checkbox"/>
LOAD TESTING			
12 Maximum load rail system	<input type="checkbox"/>	<input type="checkbox"/>
13 Extended 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 overhead system

☐ Approved

☐ Not approved

☐ To be actioned

Not approved: If the system has one or more inspection points with result "Not approved" the system must not be used.
To be actioned: Actions according to the "Instructions for the inspection points" should be performed immediately. After performed actions sign below. If anything is unclear or if you have questions, please contact Hill-Rom/Liko or your local Hill-Rom/Liko representative. Contact information is to be found at www.liko.com.

Inspection performed by: _____

Date: _____

Final approval by: _____

Approval date: _____

Next inspection: _____

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

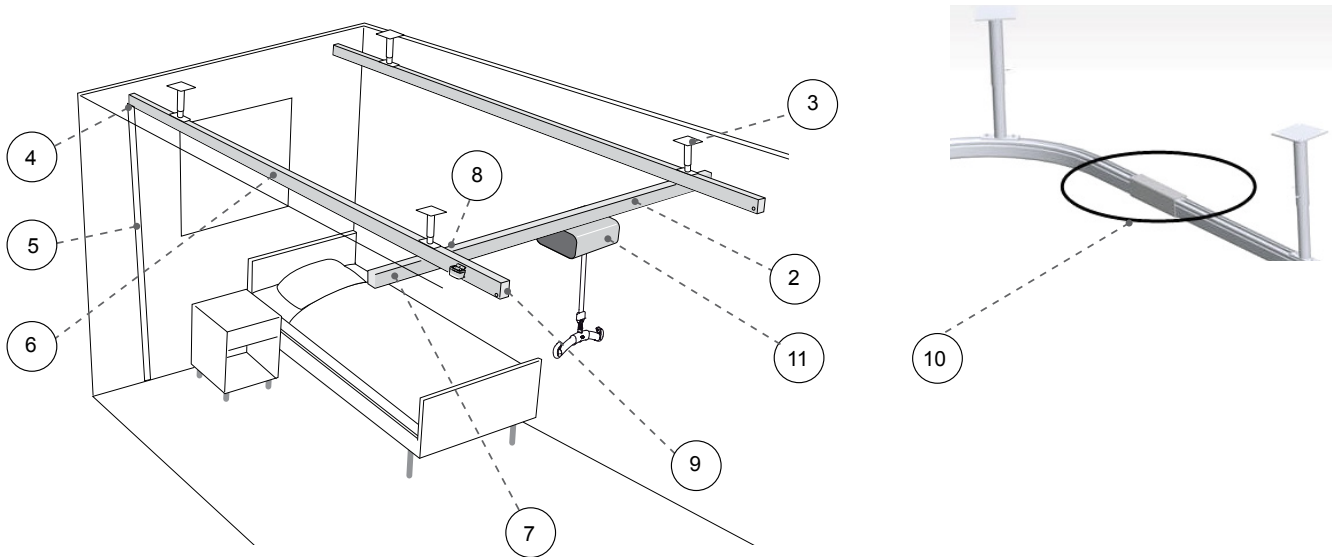
Installation condition checklist

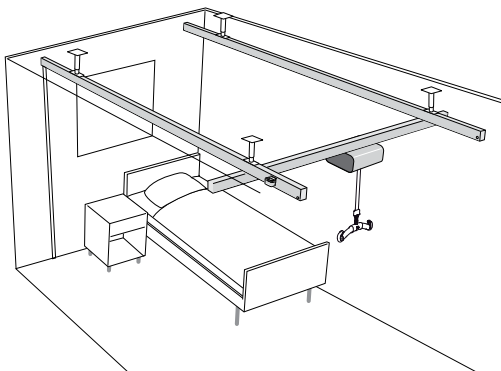
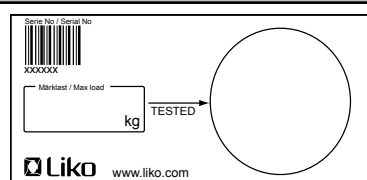
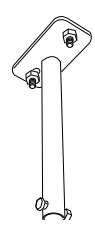
This checklist helps to determine ways to perform inspection points 1 and 3, depending on what environment the system is installed in.

All other inspection points has to be performed according to the instructions.

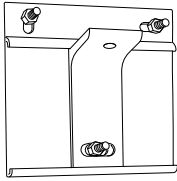
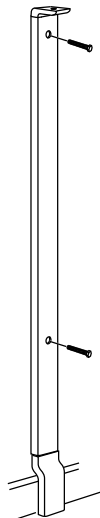
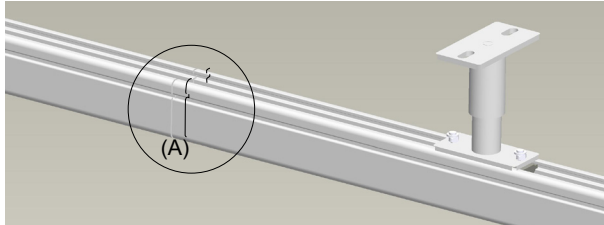
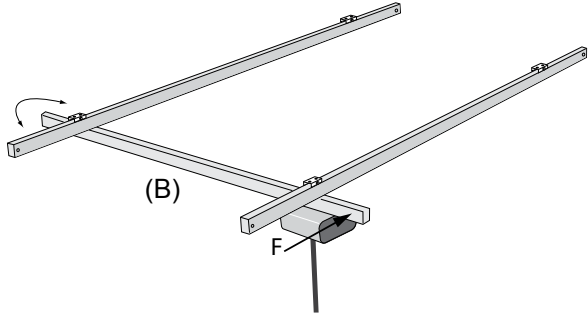
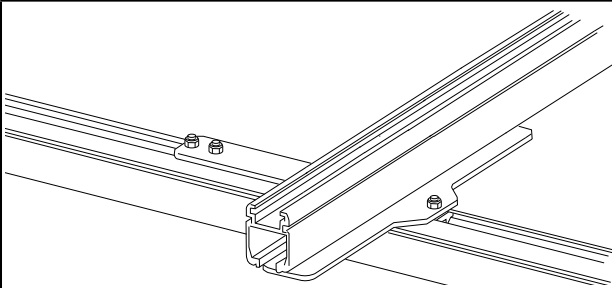
Environment:	Accessible fixing points:	Partly accessible fixing points:	Non accessible fixing points:
	<i>All attachments are visible</i>	<i>E.g. false ceiling with inspection hatches</i>	<i>E.g. false ceiling</i>
Non corrosive environment	<ul style="list-style-type: none"> Inspect a minimum of 20% (at least two) of the fixing points. 	<ul style="list-style-type: none"> Inspect a minimum of 20% (at least two) of the fixing points. If less than 20% can be inspected, extended maximum load test must be performed on non visible fixing points, according to section 13 	<ul style="list-style-type: none"> Extended maximum load test according to section 13.
Corrosive environment <i>e.g. bathroom or other high humidity environment.</i>	<ul style="list-style-type: none"> Inspect all fixing points. Perform corrosion inspection according to section 15. 	<ul style="list-style-type: none"> Inspect a minimum of 20% (at least two) of the fixing points. If less than 20% can be inspected, extended maximum load test must be performed on non visible fixing points, according to section 13 Perform corrosion inspection according to section 15. 	<ul style="list-style-type: none"> Extended maximum load test according to section 13.
Chlorinated corrosive environment <i>e.g. indoor pool</i>	<ul style="list-style-type: none"> Inspect all fixing points. Perform corrosion inspection according to section 15. 	<ul style="list-style-type: none"> Inspect all fixing points. Perform corrosion inspection according to section 15. <p>NOTE! Make inspection with inspection hatches or similar.</p>	<ul style="list-style-type: none"> Inspect all fixing points. Perform corrosion inspection according to section 15. <p>NOTE! Make inspection with inspection hatches or similar.</p>

Instructions for inspection points

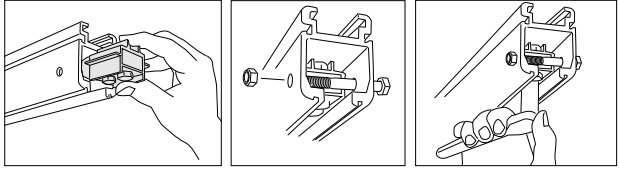
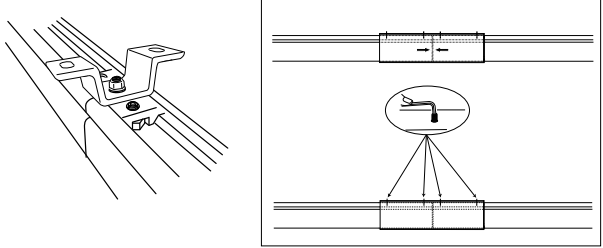
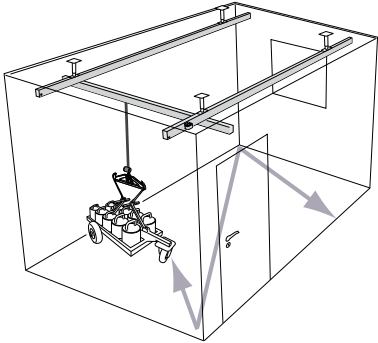


1 General inspection <ul style="list-style-type: none"> • Verify that there is a valid Installation Certificate for the overhead lift system. • Inspect that the distance between the installation points and the overhang match the instructions for the rail and the max load for installed lift unit. <i>See Tables in Overhead System Installation Hand Book.</i> • Inspect that the overhead lift system has no visible damage or deformation. • Inspect a minimum of 20% of the fixing points to make sure that bolts and nuts are not loose, or see "Installation condition checklist" on previous page if fixing points are unaccessible. • Use the appropriate inspection method for the bolts. (This is given by the supplier of the bolt.) 	
2 Decal / Labels <ul style="list-style-type: none"> • Inspect the S/N on the label, if available • Make sure the maximum load at the decal on the rail, is equal to, or larger than the maximum load for the lift unit installed in the system. 	
3 Ceiling / Pendant / Ceiling Fixture <ul style="list-style-type: none"> • Inspect a minimum of 20% (at least two) of the fixing points to make sure that bolts and nuts are not loose, or see "Installation condition checklist" on previous page if fixing points are unaccessible. • (See 1 General inspection) 	

Instructions for inspection points

4 Wall / Wall Bracket <ul style="list-style-type: none"> Inspect that there is no play between the wall and the bracket. Inspect the fixing between the rail and the wall bracket. 	
5 Upright Support <ul style="list-style-type: none"> Make sure that there is no play between the fixing points in the wall and the upright support. Inspect the fixing between the wall and the upright support. Inspect the floor for damage/deflection around the bottom of the upright support. 	
6 Primary rail, (straight rail, traverse) <ul style="list-style-type: none"> Make sure there are at least two fixings per rail. Inspect that joint gap is max 2 mm / 0,08 inch. (A) Make sure that the rail joint is supported by a fixing or a proper joint section. 	
7 Secondary Rail <ul style="list-style-type: none"> Inspect that the drawing affect in the system is acceptable, by placing a force (F) on one side. The secondary rail (B) should then run freely. 	
8 Traverse Carriage <ul style="list-style-type: none"> Inspect that the carriers are functioning correctly without exercise. Listen for abnormal sounds from movable parts. 	

Instructions for inspection points

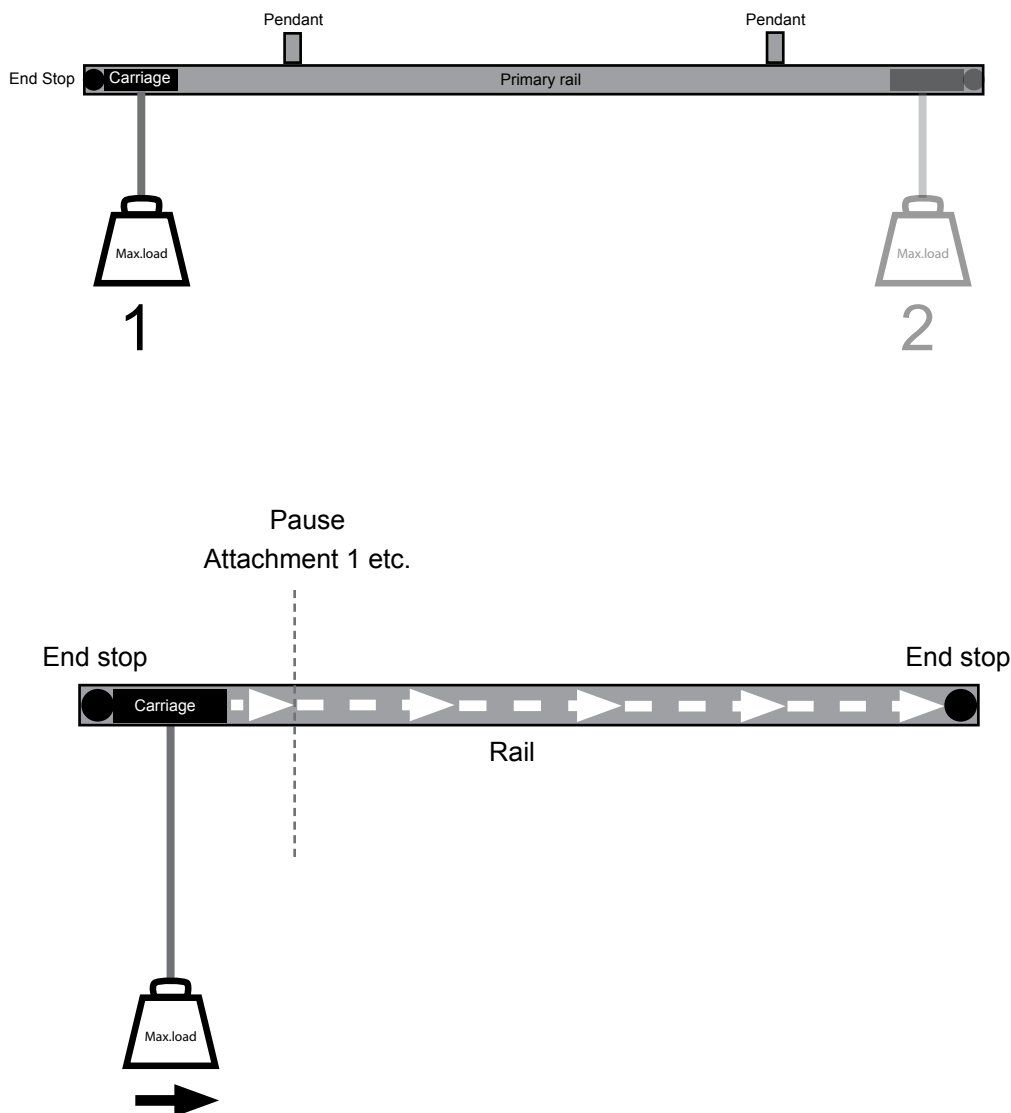
9 End stop <ul style="list-style-type: none"> Inspect that safetythrough bolts with locking nuts are mounted. Inspect that the end stop is correctly mounted. 	
10 Rail Joint (in rail, pendant and ceiling bracket) <ul style="list-style-type: none"> Inspect the Rail Joint to make sure that bolts and nuts are tightened and there is no play between the parts. Make sure the Rail Joint is assembled with the joints in the middle. 	
11 Lift motor <ul style="list-style-type: none"> See Periodic inspection for the particular lift /product in the rail system. (Available at www.partner.liko.net) 	
12 Maximum load rail system <ul style="list-style-type: none"> Carry out load test with lift motor carriages and rail system, using maximum load for the rail system, across the whole lifting area, by manoeuvre the load along each primary rail, and then in a Z pattern. Listen for unusual noises and vibrations. Check for any abnormalities such as deflection, abnormal movement or resistance. 	

Instructions for inspection points

13A Extended maximum load test

STRAIGHT RAIL SYSTEM

- Apply the maximum load for the overhead rail system. Travel the applied load along the rail from one end stop to the other end stop, with a pause under each fixing point. Travel as the dashed line shows.
- Listen for unusual noises and vibrations. Check for any abnormalities such as deflection, movement or resistance.

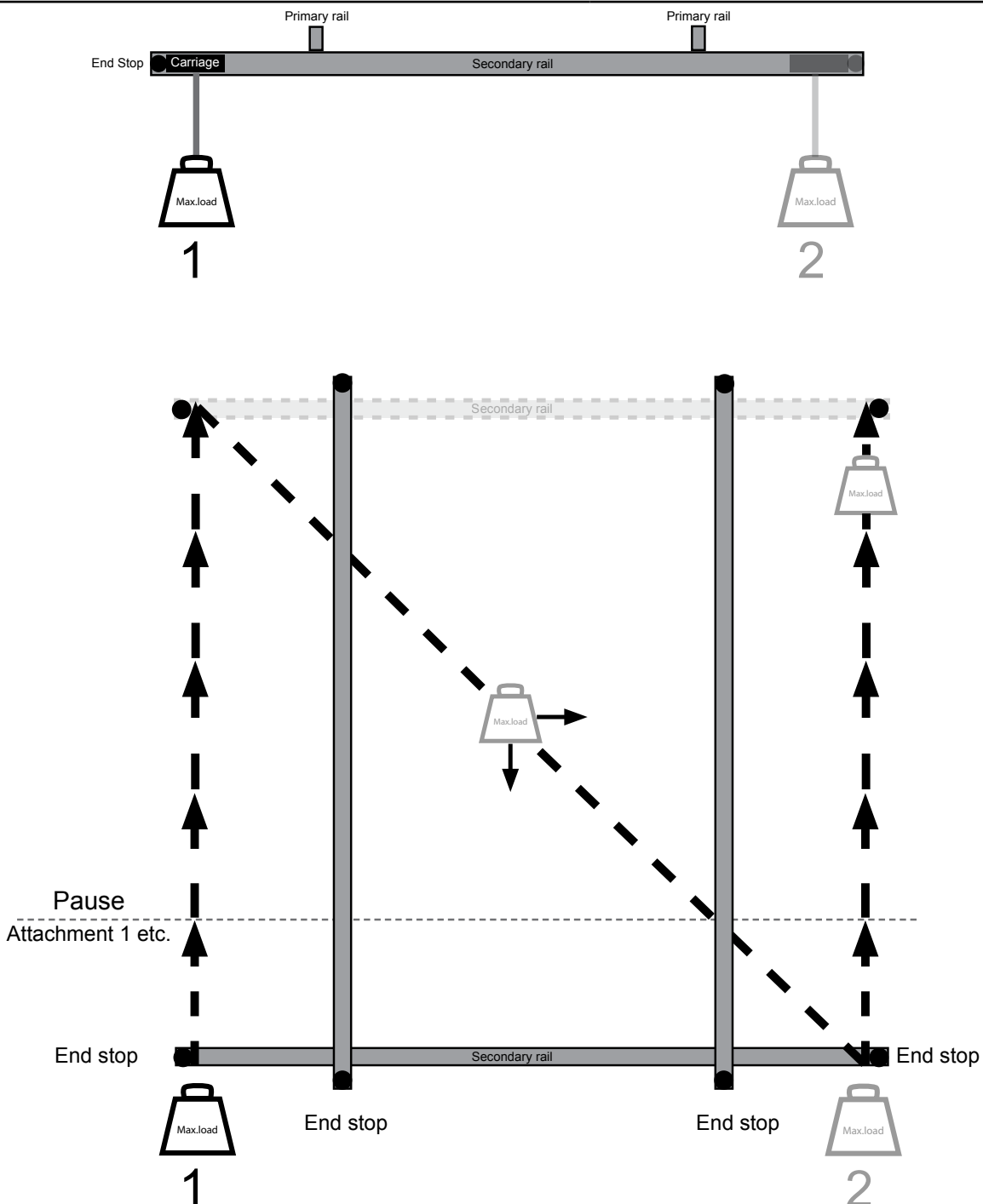


Instructions for inspection points

13B Extended maximum load test

TRAVERSE SYSTEM

- Apply the maximum load for the overhead rail system.
- Place the carriage with the applied load at the end stop of the secondary rail (1). Move the secondary rail, with a pause under each fixing point, from one end stop to the other end stop of the first primary rail.
- Continue by moving the applied load diagonally through the centre of the system over to the other side, as the dashed line shows.
- Now continue by moving the secondary rail with the applied load, from (2), with a pause under each fixing point, from one end stop to the other end stop of the second primary rail.
- Listen for unusual noises and vibrations. Check for any abnormalities such as deflection, movement or resistance.



Instructions for inspection points

14 Instructions / Instruction guide

- Make sure Instruction guide or Quick reference guide, to the lift unit, are 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

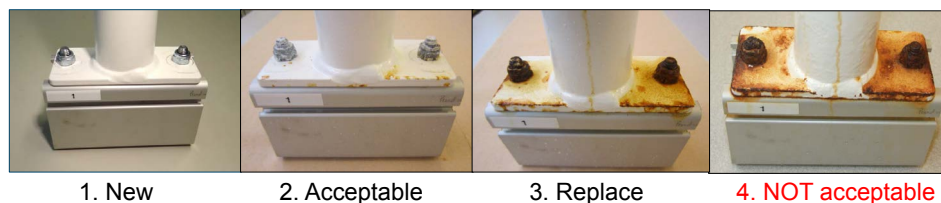
These pictures describes the evaluation method for all galvanized steel components.



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.

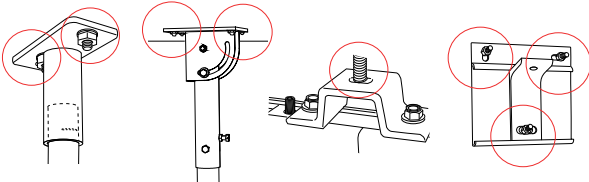
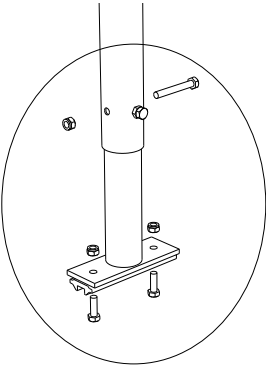
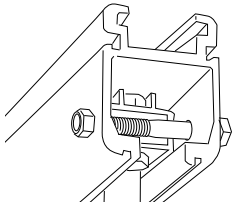
Powder coated steel

These pictures describes the evaluation method for all powder coated steel components.



1. A powder coated steel component.
2. Local discoloration may occur in close proximity to corroding non-painted components. Stains on the painted surface is acceptable.
3. Cracks in the paint and red corrosion under the paint is a sign of corroding steel. Corroding steel will result in material loss and should therefore be replaced.
4. A component with peeling coating, bubbles in the paint and red corrosion under the paint is unfit to use.

Instructions for inspection points

<p>Safety critical fixing points:</p> <ul style="list-style-type: none"> Ceiling and wall attachments 	
<ul style="list-style-type: none"> Load bearing bolts and nuts in <ul style="list-style-type: none"> Pendants Ceiling and wall brackets Traverse carriers Switches and turntables 	<p>Example of load bearing bolts and nuts:</p> 
<ul style="list-style-type: none"> End stop 	

Preventative Maintenance

2013-11-05

Customer Reference:

Lift type:
Product No: _____ Version: _____
Serial No:
Prod. Year:

Contract No:
Name:
Address:
(Zip Code)

To ensure maximum life cycle should Preventative Maintenance be carried out according to the table below. Inspection and service must be carried by HillRom/Liko authorized personnel. Instructions for the check points, from the next page.

Check points:

Carriage

Month 12 24 36 48 60 72 84 96 108 120

1 Carriage cleaning.....	<input type="checkbox"/>			<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>
2 Bearing inspection.....	<input type="checkbox"/>			<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>
Bearing replacement.....					<input type="checkbox"/>					<input type="checkbox"/>

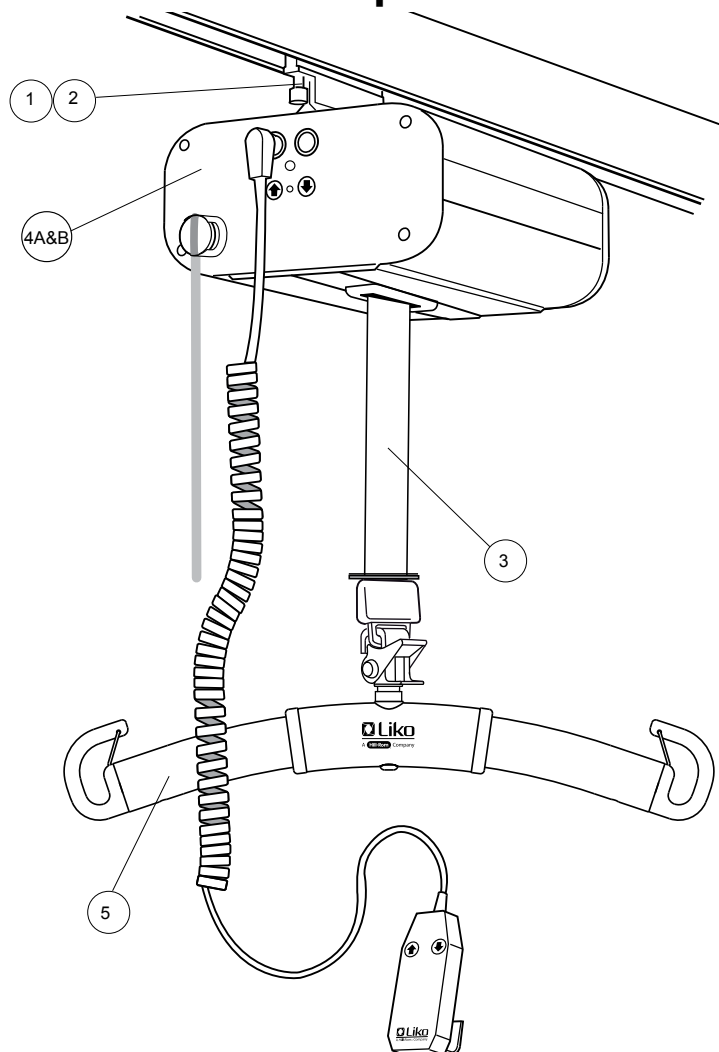
Motor

3 Lift strap replacement.....					<input type="checkbox"/>					<input type="checkbox"/>
4 Battery inspection.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Battery replacement.....			<input type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>		
5 Sling bar	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Interval/Month: _____ Date: _____

Serviced by: _____

Check points

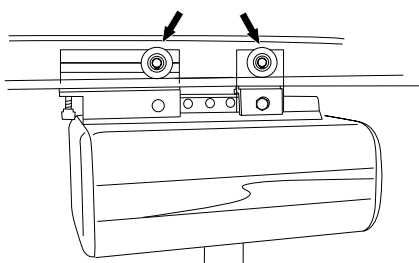


Instructions regarding the check points for Likorall 200/240/242/243/250

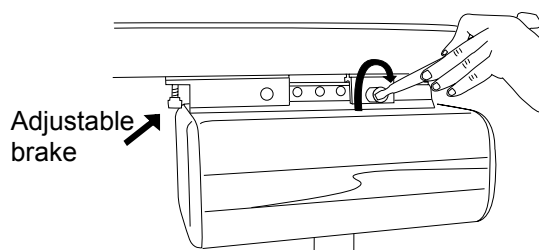
1. Carriage cleaning

Tools required

 13 mm



A. Remove the carriage from the rail and clean the wheels and the inside surface of rails with a moist cloth.

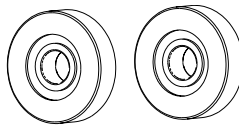


B. Place carriage in rail, mount motor. Tighten carriage screws. Adjust the brake on the carriage (friction brake).

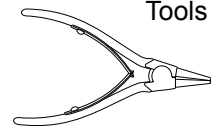
2. Bearing inspection and replacement

Spare part No:
31290060 Plastic wheel with bearing.

△ **Not** for IRC-carriage 3126114 and IRC Traverse Adapter 3102540



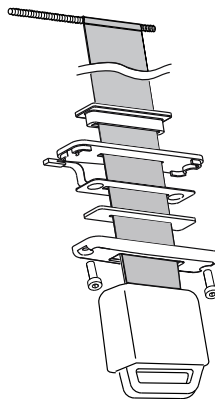
Tools required



Bearing replacement recommended every 5th year

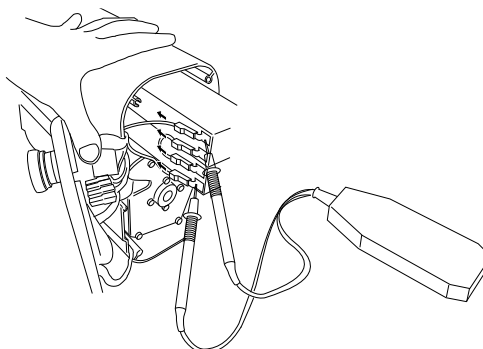
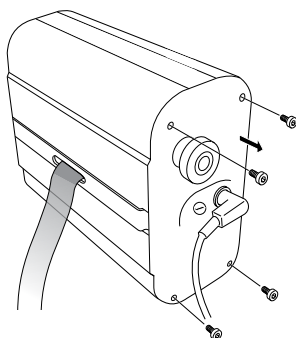
3. Lift strap replacement

Spare part No. according to spare part list.

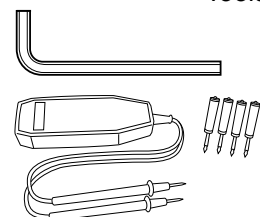


Lift strap replacement recommended every 5th year

4 Battery inspection and replacement



Tools required



3 mm

Battery tester Prod. No. 2101100

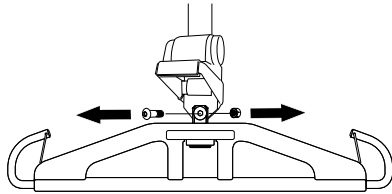
- Remove the cover by unfasten the 4 screws and then pull out the batteries.
- Check the battery with Battery tester Prod. No. 2101100, signal should be audible for more than 5 sec. If not, replace battery with Spare part No. 31290007.
- Replace battery according to assembly instruction for Spare part 31290007.

Battery replacement recommended every 3rd year

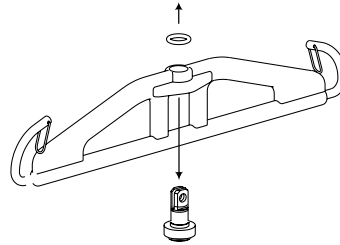
Likorall 200/240/242/243/250

5. Sling bar cleaning

△ Only on SlingBar Standard:



A. Unfasten sling bar from Likorall.



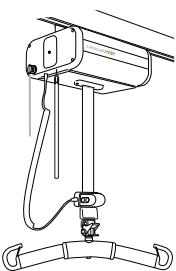
B. Clean sling bar and center bolt on old type of slingbar.

Tools required

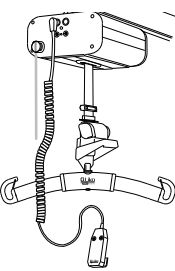
 17 mm 6 mm

Cleaning of sling bar and center bolt recommended every year

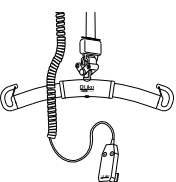
Product changes



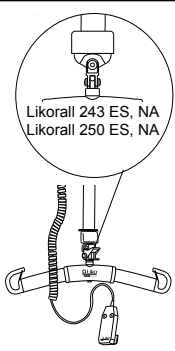
Likorall 200



Likorall 242 S
Likorall 242 ES



Likorall 242 S R2R
Likorall 242 ES R2R



Likorall 243 ES
Likorall 250 ES
Likorall 250 S IRC

Likorall 200	Prod. No. 3121001
Likorall 242 ES	Prod. No. 3122005-3122006 / NA
Likorall 242 ES R2R	Prod. No. 3122007-3122008 / NA
Likorall 242 S	Prod. No. 3122009-3122010 / NA
Likorall 242 S R2R	Prod. No. 3122011-3122012 / NA
Likorall 243 ES, natural	Prod. No. 3123001 / NA
Likorall 243 ES, white	Prod. No. 3123002 / NA
Likorall 250 ES, natural	Prod. No. 3122501 / NA
Likorall 250 ES, white	Prod. No. 3122502 / NA
Likorall 250 S, IRC	Prod. No. 3124050
Likorall 240 natural / white	Prod. No. 3120001-3121617 - Discontinued 2004
Likorall 242 natural / white	Prod. No. 3122001-3122004 - Discontinued 2004

2013					
Changes	Type	Prod. No.	Rev.	From S/N	Proj.
Spareparts to old versions of Likorall has been discontinued.	Likorall 240	31290052 31290053 31290005	- - -	- - -	1910
- The liftstraps has been modified. New type of seam and new 145 mm long treaded bolt. All Lift Strap Spare Parts has got new spare part numbers. (see Spare Parts List)	Likorall 200	3121001	02	8 411 000	1797
	Likorall 242 S	3122009	02	8 024 000	
		3122010	02	8 024 000	
		3122011	02	8 024 000	
		3122012	02	8 024 000	
		3122009NA	02	286 200	
		3122010NA	02	286 200	
		3122011NA	02	286 200	
		3122012NA	02	286 200	
	Likorall 242 ES	3122005	02	8 103 700	
		3122006	02	8 103 700	
		3122007	02	8 103 700	
		3122008	02	8 103 700	
		3122005NA	02	429 200	
		3122006NA	02	429 200	
		3122007NA	02	429 200	
		3122008NA	02	429 200	
	Likorall 243 ES	3123001	02	8 205 400	
		3123002	02	8 205 400	
		3123001NA	02	368 200	
		3123002NA	02	368 200	
	Likorall 250 ES	3122501	02	8 306 300	
		3122502	02	8 306 300	
		3122501NA	02	6 604 200	
		3122502NA	02	6 604 200	
	Likorall 250 S IRC	3124050	02	5 500	

Product changes

2012					
Changes	Type	Prod. No.	Rev.	From S/N:	Proj.
<ul style="list-style-type: none"> - New longer and grey lift straps. - The motor has been modified. - New version of PCBA - Revision numbers (Rev.) are implemented. It is visible on the product label at the lift and on the packaging label. - Clarifying instructions regarding maximum load testing has been inserted in our documentation. (never go below start position with max load) 	Likorall 200	3121001	01	8 406 676	1748 1817
	Likorall 242 S	3122009	01	8 000 001	
		3122010	01	8 000 001	
		3122011	01	8 000 001	
		3122012	01	8 000 001	
		3122009NA	01	260 001	
		3122010NA	01	260 001	
		3122011NA	01	260 001	
		3122012NA	01	260 001	
	Likorall 242 ES	3122005	01	8 100 001	
		3122006	01	8 100 001	
		3122007	01	8 100 001	
		3122008	01	8 100 001	
		3122005NA	01	420 001	
		3122006NA	01	420 001	
		3122007NA	01	420 001	
		3122008NA	01	420 001	
	Likorall 243 ES	3123001	01	8 200 001	
		3123002	01	8 200 001	
		3123001NA	01	362 301	
		3123002NA	01	362 301	
	Likorall 250 ES	3122501	01	8 300 001	
		3122502	01	8 300 001	
		3122501NA	01	6 600 001	
		3122502NA	01	6 600 001	
	Likorall 250 S IRC	3124050	01	2001	

2011

Changes	Type	Prod. No.	S/N:	Proj.
<p>Due to production problems some Likorall was produced according to proj 754, with shorter black lift strap, old version of motor, and PCBA.</p> <p>Temporary solution until project 1748 was released.</p>	Likorall 200	3121001	7 900 001 - 8 405 800 8 405 969 - 8 406 299	-
	Likorall 242 S	3122011	7 920 001 - 8 016 112 8 016 169 - 8 016 399	

Product changes

2011

Changes	Type	From S/N	Project
New layout on decal and product labels.	Likorall 200		1690/1694
New layout on decal and product labels.	Likorall 242 S		1690/1694
	Likorall 242 ES		
	Likorall 243 ES		
	Likorall 250 ES		
	Likorall 250 S IRC		
	Likorall 242 S (NA)	285 300	
	Likorall 242 ES (NA)	427 700	
	Likorall 243 ES (NA)	366 306	
	Likorall 250 ES (NA)	6 603 100	
Spare part 31290078 Emergency guard activator, reintroduces.			

Changes	Type	From S/N	Project
- The Hand Control Cable is 15 cm longer and more flexible. - The lifting range has been modified to 205 cm. - New longer lift strap. - The motor has been modified.	Likorall 200	8 405 801	1211/1051
- The lifting range has been modified to 205 cm. - New longer and grey lift straps. - The motor has been modified. - New fuse (12A) and fuse holder	Likorall 242 S	8 016 001	1211/1051
	Likorall 242 ES	8 102 001	
	Likorall 243 ES	8 203 501	
	Likorall 250 ES	8 303 501	
	Likorall 250 S IRC	3000	
Proj 1211/1051 was never implemented on Likorall NA.	Likorall 242 S (NA)	-	
	Likorall 242 ES (NA)	-	
	Likorall 243 ES (NA)	-	
	Likorall 250 ES (NA)	-	

2010

Changes	Type	From S/N	Project
New type of ceiling lift, prepared for continuous charging through the rail system by In-Rail charging system (IRC)	Likorall 250 S IRC	2001-2500 (pre serial)	1099
New cover with integrated emergency stop collar and emergency stop cord. Lift strap equipped with Q-link is now standard on Likorall 243 ES and Likorall 250 ES.	Likorall 242 S	8 007 961	754
	Likorall 242 ES	8 100 714	
	Likorall 243 ES	8 201 237	
	Likorall 250 ES	8 301 629	
New cover with integrated emergency stop collar and emergency stop cord.	Likorall 200	8 401 443	
	Likorall 242 S (NA)	284 580	
	Likorall 242 ES (NA)	426 991	
	Likorall 243 ES (NA)	365 346	
	Likorall 250 ES (NA)	6 601 769	

Product changes

2009

Changes	Type	From S/N	Project
New version of electronic card; version F	Likorall 200	8 401 051	1030

2007

Changes	Type	From S/N	Project
New version of Electronic card.	Likorall 242 S Likorall 242 ES Likorall 243 ES Likorall 250 ES	8 000 001 8 100 001 8 200 001 8 300 001	560
New version of Electronic card.	Likorall 242 S (NA) Likorall 242 ES (NA) Likorall 243 ES (NA) Likorall 250 ES (NA)	278 548 425 687 363 741 6 600 301	

2005

Changes	Type	From S/N	Project
Current limit changed from 10.5A to 11.5A.	Likorall 242 ES	424689	383
Safety Squeeze Protection upgraded with Twist Protection.	Likorall 242 S Likorall 243 ES Likorall 242 ES	267210 362586 424379	156
Hang-Up for Hand control	Likorall 242 S Likorall 242 ES Likorall 243 ES	266387 424229 362487	183



A  Company

www.liko.com

Manufacturer:

Liko AB
SE-975 92 Luleå
Sweden