

# Periodic Inspection protocol

FreeSpan™, FreeStand™ freestanding lift systems

3EN301001 Rev. 3

| System information                |  | Customer reference |  |
|-----------------------------------|--|--------------------|--|
| Type of Freestanding Lift System: |  | Agreement No:      |  |
|                                   |  | Name:              |  |
| Approved Max Load:                |  | Address:           |  |
| Year of installation:             |  | Post Code          |  |

**△** Liko™ Freestanding Lift System must be thoroughly inspected at least once per year. Inspection and service must be carried out by Hill-Rom authorized personnel. Periodic Inspections are available for: Liko™ Overhead Lifts (3EN191001), Overhead Rail System (3EN301001), Accessories (3EN601001) and Mobile Lifts (3EN371001).  
If printed: Make a color print of this instruction.

| INSTALLATION |                    | Action required: | Approved | Not approved |
|--------------|--------------------|------------------|----------|--------------|
| 1            | Decal rail marking |                  |          |              |
| 2            | General inspection |                  |          |              |
| 3            | Rails              |                  |          |              |
| 4            | End stops          |                  |          |              |
| 5            | Side Support       |                  |          |              |

| ADDITIONAL COMPONENTS |                            | N/A | Action required: | Approved | Not approved |
|-----------------------|----------------------------|-----|------------------|----------|--------------|
| 6                     | FreeSpan Cross-beam        |     |                  |          |              |
| 7*                    | FreeStand adj. support arm |     |                  |          |              |
| 8                     | Ultra Twist S/N:.....      |     |                  |          |              |
| 9                     | Wheels / Feet              |     |                  |          |              |
| ENVIRONMENTAL IMPACT  |                            |     |                  |          |              |
| 10                    | Corrosive environments     |     |                  |          |              |

| LOAD TESTING |              | Max Load applied: |      | Approved | Not approved |
|--------------|--------------|-------------------|------|----------|--------------|
| 11           | Maximum load | Kg:               | Lbs: |          |              |

| Required Measurements:  |  | Dimension and (one) unit |       | Approved | Not approved |
|-------------------------|--|--------------------------|-------|----------|--------------|
| 7* Support arm protrude |  | mm:                      | Inch: |          |              |

## Inspection sign off

Complete inspection according to the instructions (page 2-6), fill in this page and sign below.

Approval to use the freestanding lift system  Approved  Not approved

If the freestanding lift system has one or more inspection points "Not approved", the system must not be used.

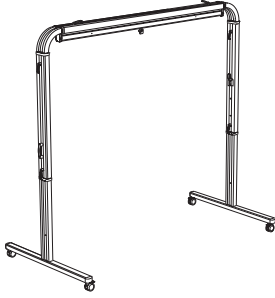
Action required: Actions according to the inspection items "NOT APPROVED" should be performed immediately. After performed actions sign below. If anything is unclear or if you have questions, please contact Hill-Rom or your local Hill-Rom representative. Contact information is to be found at [www.hill-rom.com](http://www.hill-rom.com).

|                          |  |       |  |
|--------------------------|--|-------|--|
| Inspection performed by: |  | Date: |  |
| Next inspection:         |  |       |  |

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

# Inspection points and product specifications

## Liko™ freestanding lift systems



### FreeSpan Straight Rail

FreeSpan Rail (Prod. No. 3103115-3103150 or 3103215-3103250)  
FreeSpan Side Support (Prod. No. 3103512)

*Maximum load: 250 kg (550 lbs) with FreeSpan Rail up to 3,5 m (138 inch)  
230 kg (507 lbs) with FreeSpan Rail 4,0 m (158 inch)  
200 kg (550 lbs) with FreeSpan Rail from 4,5 m (177 inch)*



### FreeSpan Traverse

FreeSpan Rail (Prod. No. 3103115-3103150 or 3103215-3103250) x 2  
FreeSpan Upright Support (Prod. No. 3103515)  
FreeSpan Cross-beam (Prod. No. 3103020-3103040)

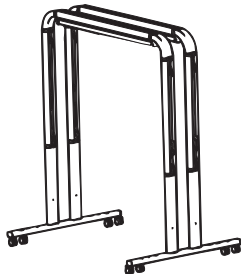
*Maximum load: 250 kg (550 lbs) with FreeSpan Rail up to 3,5 m (138 inch)  
230 kg (507 lbs) with FreeSpan Rail 4,0 m (158 inch)  
200 kg (550 lbs) with FreeSpan Rail from 4,5 m (177 inch)*



### FreeSpan UltraTwin Traverse

FreeSpan Rail (Prod. No. 3103115-3103135) x 2  
FreeSpan Upright Support (Prod. No. 3103515)  
FreeSpan Cross-beam (Prod. No. 3103015-3103045)  
Straight Rail H70, H100 or H140 x 2 (depending on cc-distance between the FreeSpan rails)

*Maximum load: 460 kg (1014 lbs)*



### FreeSpan UltraTwin

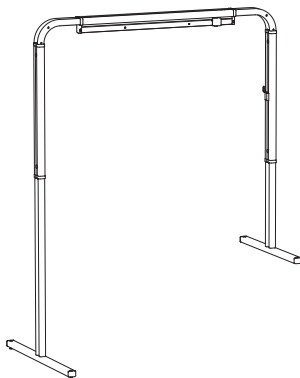
#### (cc 300 mm):

FreeSpan Rail (Prod. No. 3103115-3103150) x 2  
UltraTwin Upright Support (Prod. No. 3103520)

#### (cc 800 mm):

FreeSpan Rail (Prod. No. 3103115-3103150) x 2  
UltraTwin Upright Support (Prod. No. 3103521)

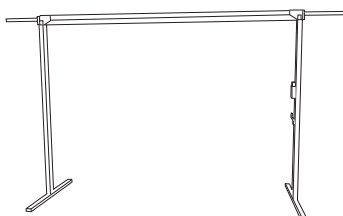
*Maximum load: 250 kg (550 lbs) with FreeSpan Rail up to 3,5 m (138 inch)  
230 kg (507 lbs) with FreeSpan Rail 4,0 m (158 inch)  
200 kg (550 lbs) with FreeSpan Rail from 4,5 m (177 inch)*



### FreeSpan Poollift

FreeSpan Rail (Prod. No. 3103115-3103150)  
FreeSpan Pool Side Support (Prod. No. 3103513)  
FreeSpan Pool High Side Support (Prod. No. 3103514)

*Maximum load: 250 kg (550 lbs) with FreeSpan Rail up to 3,5 m (138 inch)  
230 kg (507 lbs) with FreeSpan Rail 4,0 m (158 inch)  
200 kg (550 lbs) with FreeSpan Rail from 4,5 m (177 inch)*



### FreeStand

FreeStand Upright Support (Prod. No. 3104001)  
FreeStand parking set (Prod. No. 3104002)  
Rail H100 (max 3.2 m)

*Maximum load: 200 kg (550 lbs)*

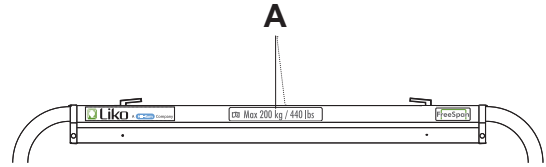
# Instructions for inspection points

Liko™ freestanding lift systems

△ In this document, this warning symbol indicates that special care should be taken. If instructions are not followed there is a risk of serious injury.

## 1 Decal rail marking

- Verify the Max-load decal (A) on the rail.
- Make sure the maximum load for the Freestanding Lift System is equal to or larger than the maximum load for the lift unit installed in the system.



## 2 General inspection

- Inspect that the Freestanding Lift System has no visible damage or deformations and that it is clean.
- Loosen and re tighten locking handles. Verify that threads are not damaged or binding.
- Check fixings and underlying surface.
- Make sure all bolts and nuts are tightened.

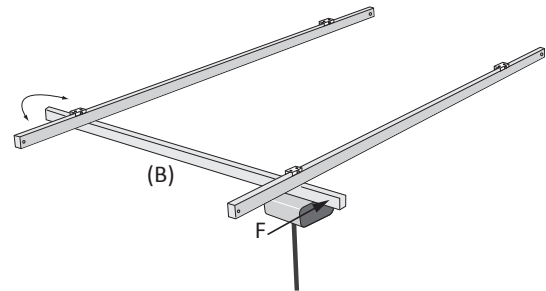
## 3 Rails

### Primary Rail

- Inspect that the primary rail has no visible damage or deformations and that it is clean.

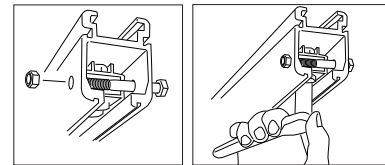
### Secondary Rail (if available)

- Make sure the secondary rail (B) run freely, by placing a force (F) on one side. Listen for abnormal sounds from movable parts.
- Check traverse carrier bolts and nuts.



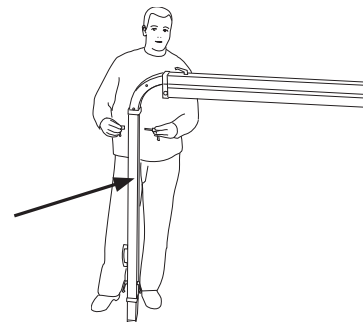
## 4 End stops

- Inspect that safety-through bolts with locking nuts are mounted.
- Inspect that the end stop is correctly mounted.



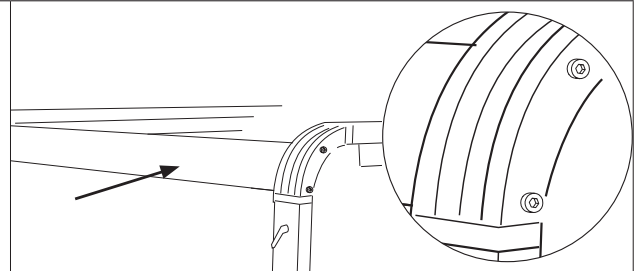
## 5 Side Support

- Verify that the side supports are correctly mounted.



## 6 FreeSpan Cross-beam

- Verify that the Cross-beams are correctly mounted.
- Bolts correctly mounted.

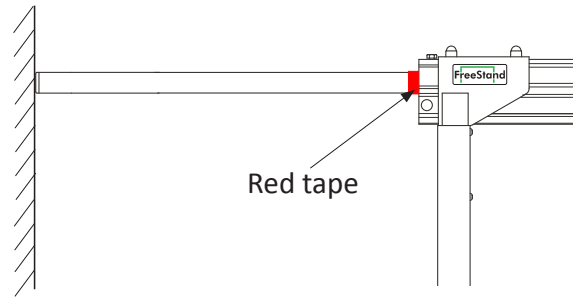


# Instructions for inspection points

Liko™ freestanding lift systems

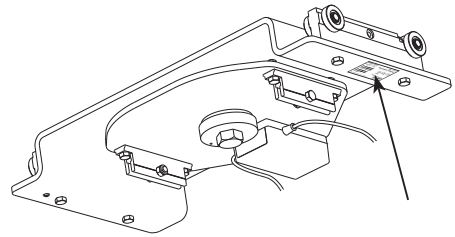
## 7 FreeStand adjustable support arm

- Each support arm may only protrude at most 855 mm (33 inch)
- The red tape on each support arm must not be visible after assembly.



## 8 Ultra Twist

- Verify presence of product decal with model type and serial number

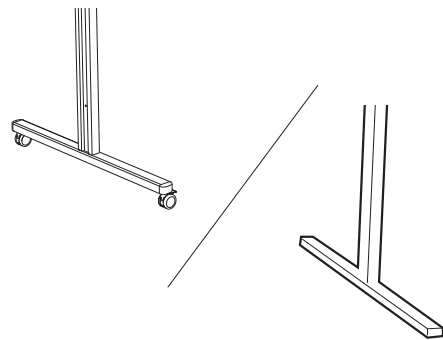


### General Inspection Ultra Twist

- Inspect visually to ensure that the steel construction is free from any sharp edges or deformations.
- Check that the unit rotates freely on its bearings.
- Verify that all functions on the hand control are working.
- Make sure the Ultra Twist is clean.
- Make sure bolts, nuts and joint screws are tightened.
- Inspect split pin at the center bolt and make sure it's intact
- Make sure cables are intact without damages.
- Roll the carriage within the rail. Verify that each wheel turns freely and the plastic wheel bearing covers not are cracked or missing.

## 9 Wheel / Feet

- Roll the unloaded freestanding lift system on the floor, make sure the wheels easy rolls and turns.
- Check wheels and screw assemblies.
- Lock the brakes. Make sure the wheels are locked in any direction.
- Check that covers and feet are in place.
- Make sure the bolts and nuts are tight (FreeSpan Poollift)



# Instructions for inspection points

Liko™ freestanding lift systems

## 10 Environmental Impact – corrosive environments

Due to the environment an Freestanding Lift 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.

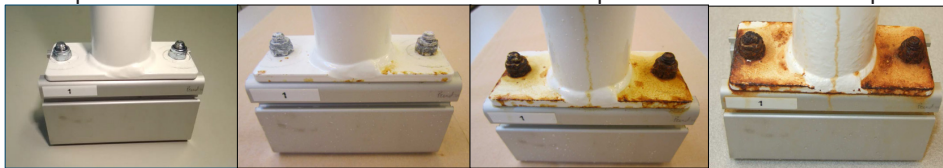


1. New bolt      2. Acceptable      3. Replace      4. NOT acceptable

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.

### Powder coated steel

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



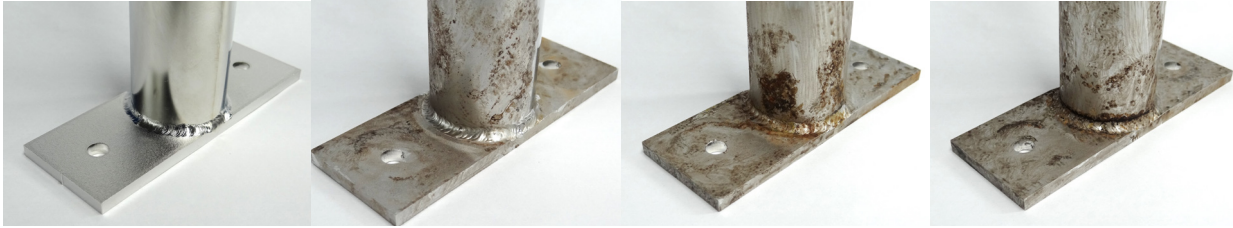
1. New      2. Acceptable      3. Replace      4. NOT acceptable

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.

**10 Environmental Impact – corrosive environments, cont.**

**Stainless steel**

These pictures describe the evaluation method for all stainless steel components.



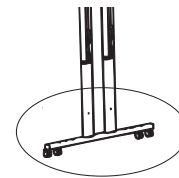
1. New                                      2. Acceptable                                      3. Replace                                      4. NOT acceptable

1. A stainless steel component.
2. Local discoloration may occur on stainless steel components. Minor stains on stainless steel surfaces NOT in the direct proximity of welds are acceptable.
3. Discoloration of stainless steel surfaces in the direct proximity of a weld might be an indication of Inter granular Corrosion. Corrosion will lead to material loss and the component should therefore be replaced.
4. A stainless steel component with visible cracking, gouging or extensive corrosion in the direct proximity of a weld is unfit to use.

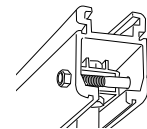
**Safety critical fixing points:**

- Load bearing bolts and nuts
- Carriers

Example of load bearing bolts and nuts:



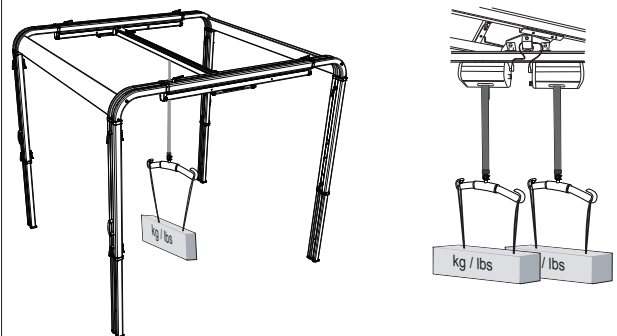
- End stop



**11 Maximum load Freestanding Lift system**

**⚠ All handling of heavy weights can pose a risk. Ensure that weights are securely fastened before lifting. Attach the test load so that the weight is evenly distributed over all sling bar attachment points. Ensure that the sling bar is level when lifting.**

- Carry out load test with lift motor carriages in Freestanding lift-system, using maximum load (±5%) for the system, across the whole lifting area, by moving the load along the primary rail, and then in a Z pattern (traverse).
- Listen for unusual noises and vibrations. Check for any abnormalities such as deflection, abnormal movement or resistance.



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