

U *SER MANUAL*

ROLLERFORKS®

Manual Number 6921954



KOOI

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Table of Contents

Definitions	2
Note.....	2
Quality standards, norms and directives	2
Introduction.....	2
Safety	3
Type plate	4
Type Indication – Explanatory Notes.....	4
Load Capacity	5
Putting the ROLLERFORKS® into service	6
Mounting the ROLLERFORKS®	7
Instructions for equalising.....	7
Picking up a load with the ROLLERFORKS®	8
Dividing 2 packages with the ROLLERFORKS®	9
Inspection and Maintenance.....	10
Instructions for replacing the cartridges.....	11
Instructions for replacing the tip	11
Instructions for replacing the support rollers.....	12
Torques	12
Ordering Components	12

Definitions



Warning:

Blocks of text accompanied by a “Warning” icon (as shown on the left) and starting with the text “Warning: ” provide information about actions that can result in (serious) personal injury.



Caution:

Text blocks accompanied by a “Caution” icon (as shown on the left) and starting with the text “Caution:” provide information about actions which may result in damage to the ROLLERFORKS®, components of the ROLLERFORKS® or goods.

Note

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Quality Standards, Norms and Directives

Cascade KOOI complies with the following quality standard:

- ISO 9001

The ROLLERFORKS® comply with the following norms/directives:

- CE (2006/42/EC) – Machine Directive
- ISO 2328 – Fork-lift trucks – Hook-on type fork arms and fork arm carriages – Mounting dimensions
- ISO 3834-2 Quality requirements for fusion welding of metallic materials – Part 2: Comprehensive quality requirements

Introduction

The ROLLERFORKS® are forklift truck forks made for palletless retrieval and lifting of goods, whether or not the goods are placed on a slipsheet. In addition, the ROLLERFORKS® can be used as replacements for standard forklift truck forks, for use with standard pallets.

The ROLLERFORKS® are intended for use on forklift trucks or other ‘material handling’ machines, and are fitted as standard with an ISO 2328 suspension for attachment to these machines. The ROLLERFORKS® do not incorporate any electrical or hydraulic components and are driven by the manoeuvring back and forth of the machine on which they are mounted.

ROLLERFORKS® can be used both in dry or wet environments and at temperatures between -20°C and +50°C.

Safety



Warning:

Never exceed the forklift truck's maximum load capacity, regardless of the stated load capacity of the ROLLERFORKS®.



Warning:

Never exceed the maximum load capacity of the ROLLERFORKS®.



Warning:

Never walk under the ROLLERFORKS®.



Warning:

Do NOT use the ROLLERFORKS® in an environment where the temperature is lower than -20°C / -22°F or higher than 50°C / 122°F.



Warning:

The ROLLERFORKS® may not be operated by a minor.



Warning:

Do NOT use the ROLLERFORKS® to move people or animals.



Warning:

Do NOT weld anything to the ROLLERFORKS® without specific permission from the supplier. If anything is welded to the ROLLERFORKS® without permission from the supplier, all guarantee provisions become null and void.



Warning:

If the ROLLERFORKS® have a defect, do NOT use them until they have been expertly repaired.



Warning:

While driving with a load, contact between the ROLLERFORKS® and the ground must be avoided. As soon as the ROLLERFORKS® touch the ground the load will roll off the forks, which can lead to damage and dangerous situations.



Warning:

Do NOT lift or move a load using the tips of the ROLLERFORKS® alone.



Caution:

Before use, always equalise the length of the ROLLERFORKS® using the adjusting screw on the heel side. (See Instructions for equalising the ROLLERFORKS®)



Caution:

Do not use a side-shift system when the ROLLERFORKS® are on the ground. This is in order to prevent damage to the ROLLERFORKS®.



Caution:












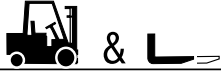

To prevent damage to the rollers, always lower the ROLLERFORKS® (and carriage plate) in a controlled manner.













Caution:

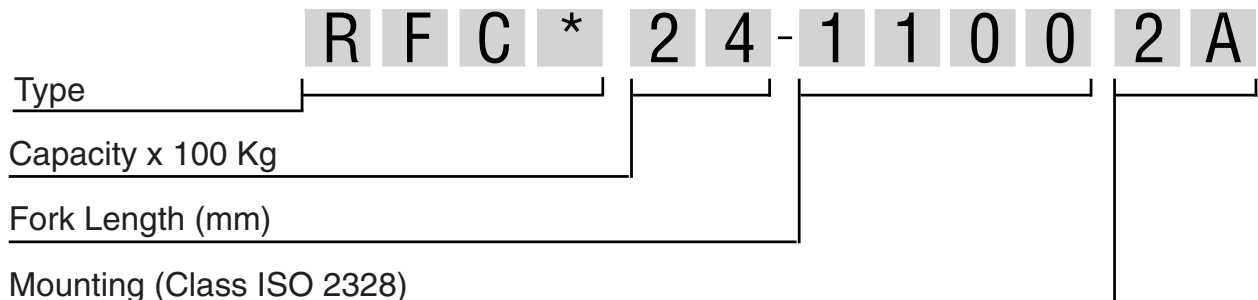
Always use the widened ROLLERFORKS® (RFCC) for the loading and unloading of refrigerated containers with special circulation grooves on the underside. The rollers of the standard ROLLERFORKS® could get into the grooves.

Nameplate

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	<input type="text"/>		

-  Type Description
-  Build Year
-  Serial No.
-  Tare weight
-  Centre of gravity
-  Additional information
-  Max. capacity at loaded centre of gravity
-  Loaded centre of gravity
-   **WARNING:** Never exceed the capacity indicated on the forklift truck's type plate. The capacity of the combination of forklift truck and extension is the responsibility of the forklift truck manufacturer, and may be lower than the capacity as indicated on the extension's type plate.

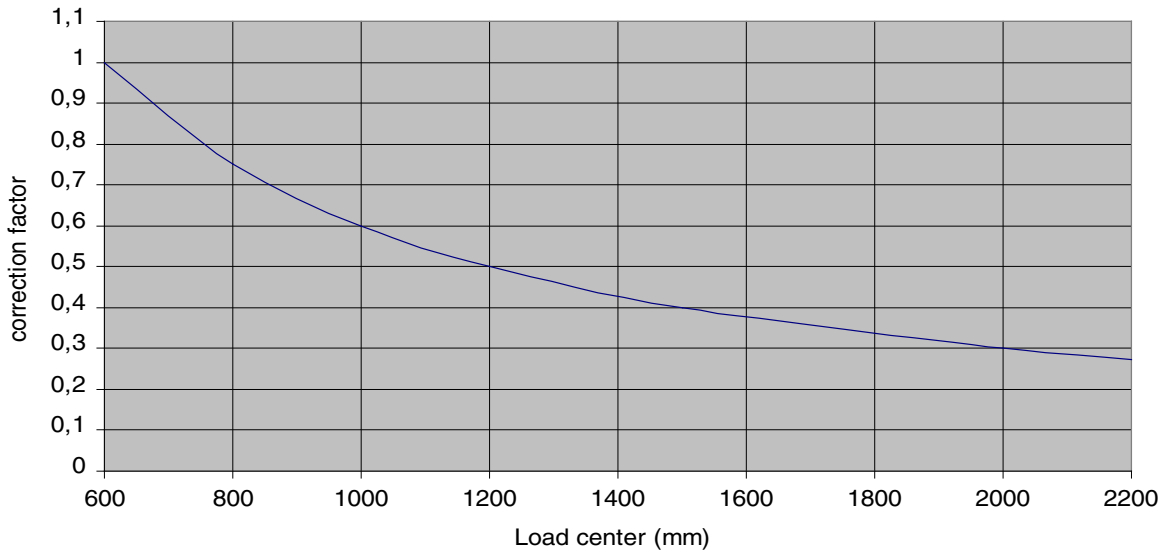
Type Indication – Explanatory Notes



* C = Wider rolls for use in refrigerated containers (optional).

Load Capacity

Among other things, the type plate shows the maximum load capacity per set of ROLLERFORKS®. Using the loading diagram shown below, one can determine the load-bearing capacity per ROLLERFORK® or per pair of ROLLERFORKS® for every load centre distance. Correction factors are shown vertically and load centre distances are shown horizontally, measured in millimetres from the front edge of the fork's back.

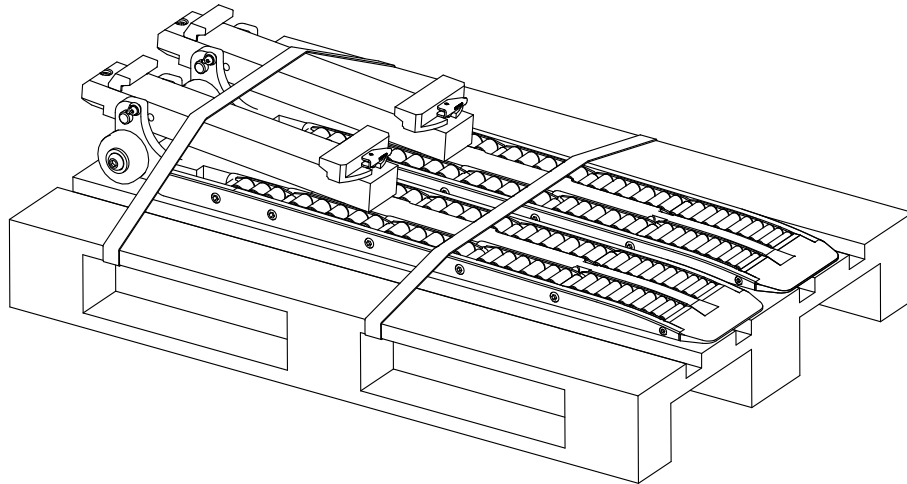


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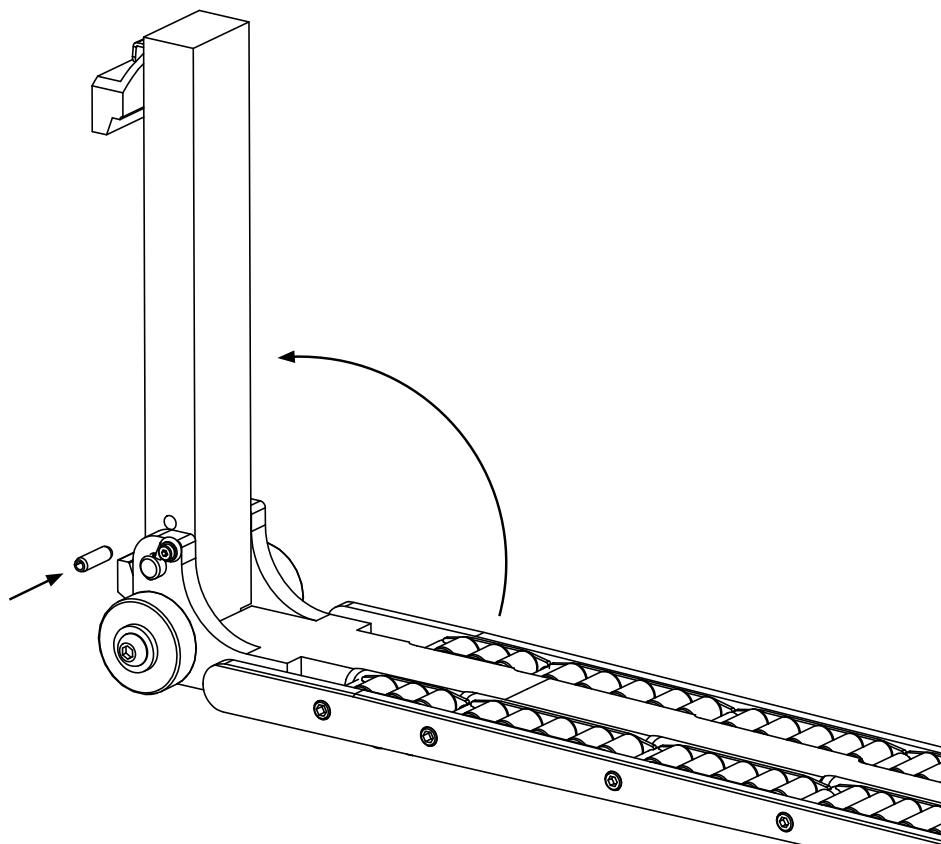
The above diagram is only applicable to the ROLLERFORKS®
The forklift truck's residual load capacity with the ROLLERFORKS® must be provided by an official forklift truck dealer.

Putting the ROLLERFORKS® into service

1. Check the ROLLERFORKS® for any (transport) damage.
2. Loosen the ROLLERFORKS® from the pallet by snipping or cutting through the tensioning straps.

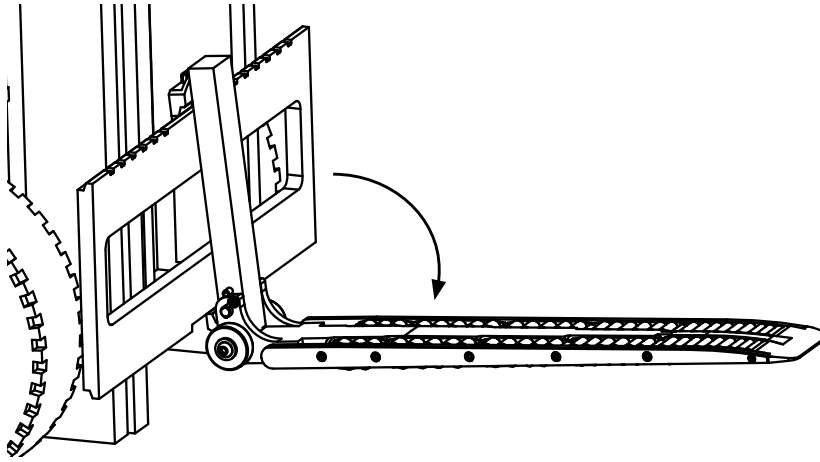


3. Lift up the fork back of the ROLLERFORKS®.
4. Secure the fork back in its upright position by placing the supplied clamping bush into the hole. (see following image)
Possibly, use a plastic hammer in order to place the clamping bush in the hole.
5. The ROLLERFORKS® can now be mounted onto the carriage plate

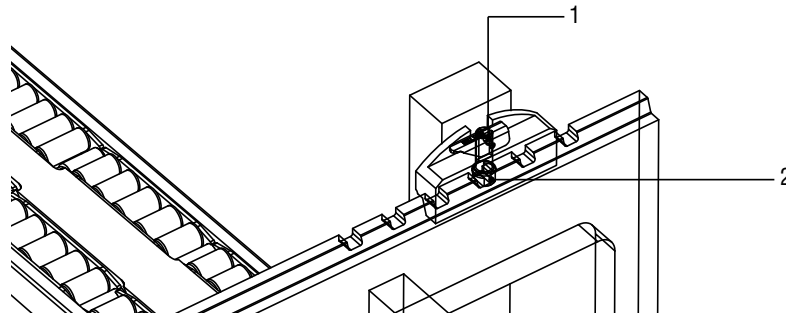


Mounting the ROLLERFORKS®

1. Tilt the mast forwards and hang the ROLLERFORKS® onto the carriage plate in accordance with the following image.

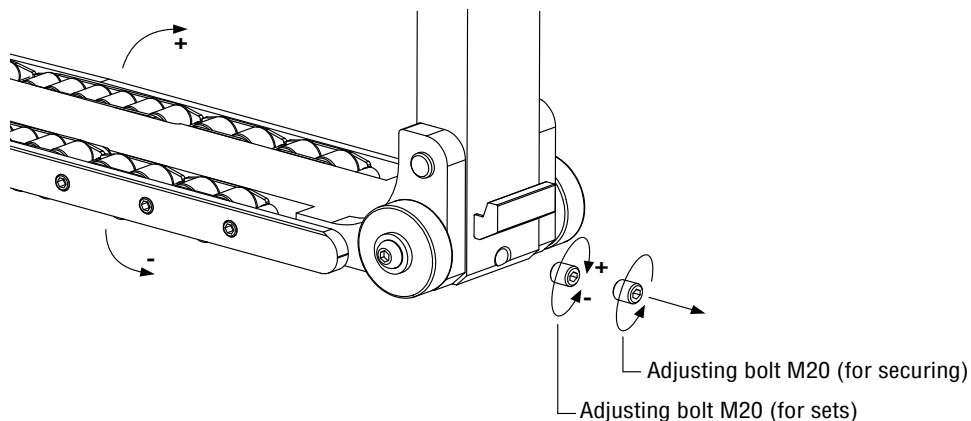


2. Slide the ROLLERFORKS® left or right over the carriage plate. Make sure that the locking pin (1) of each Rollerfork drops into one of the notches (2) of the carriage plate.



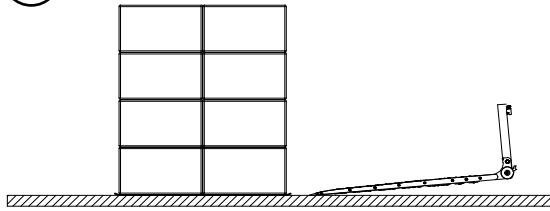
Instructions for Equalizing

1. Move the ROLLERFORKS® to eye level, then tilt the mast forwards or backwards until the two ROLLERFORKS® are virtually horizontal.
2. Unscrew the rear adjusting bolt M20 from the heel.
3. Using the foremost adjusting bolt M20, adjust the ROLLERFORKS® until the tips of the 2 forks are at the same level.
4. Secure the front adjusting bolt with the rear adjusting bolt (torque 170 Nm)



Picking up a load with the ROLLERFORKS®

A1

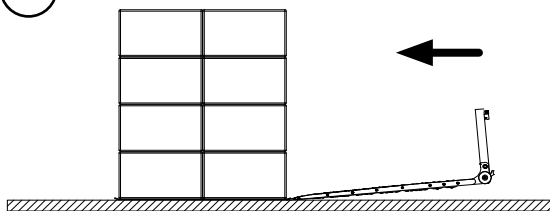


A1.

Check whether the slipsheet projects out on the side where the package is to be picked up.

Tilt the ROLLERFORKS® forward and allow them to contact the ground at their tips.

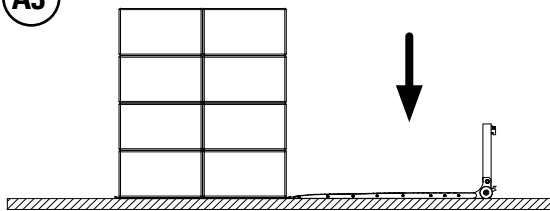
A2



A2.

Drive towards the package until the tips of the ROLLERFORKS® are under the slipsheet

A3

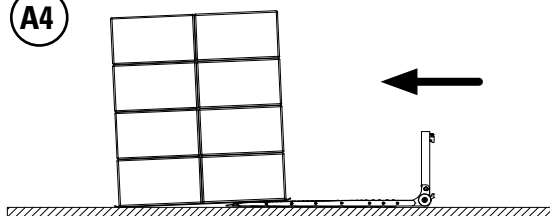


A3.

Lower the forward-tilting mast until the ROLLERFORKS® are standing flat on the ground. (All the rollers of the ROLLERFORKS® should now touch the ground)

Thanks to the hinging heel, the rollers come to touch the ground.

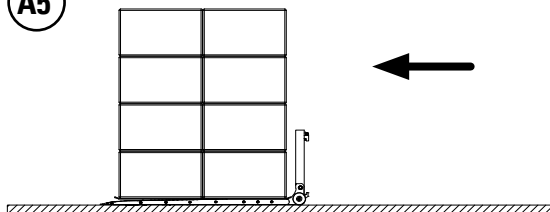
A4



A4.

Drive forward so that the ROLLERFORKS® roll under the package.

A5

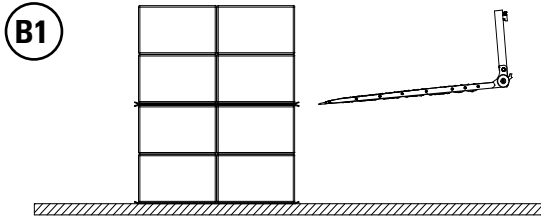


A5.

Continue driving forward until the entire package is sitting on the ROLLERFORKS®.

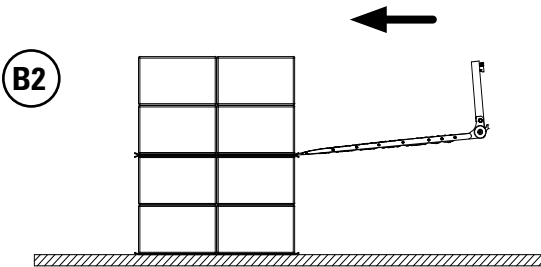
Tilt the mast backwards. The package can now be lifted

Dividing 2 packages with the ROLLERFORKS®



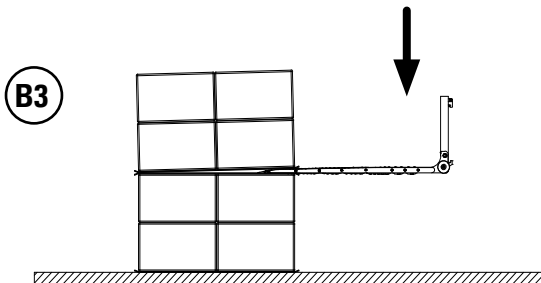
B1.

Tilt the ROLLERFORKS® downward and bring the tips approximately to the height of the underside of the upper package.



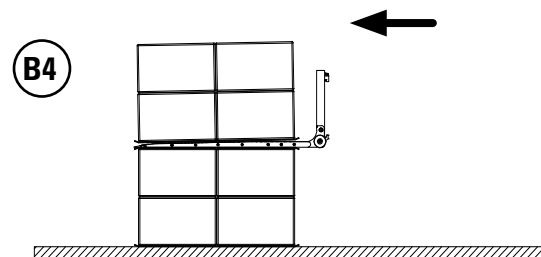
B2.

Drive forwards and manoeuvre the tips of the ROLLERFORKS® between the projecting parts of the two slipsheets separating the packages.



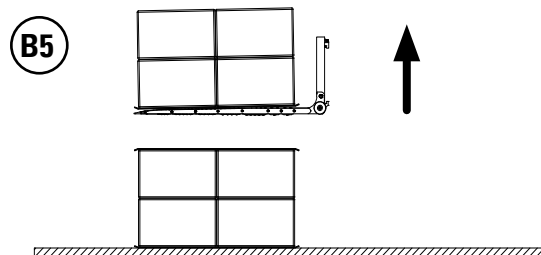
B3.

Lower the ROLLERFORKS® until the heels are at roughly the same height as the tips of the ROLLERFORKS® and are parallel with the lower slipsheet.



B4.

Drive forwards until the entire upper package is resting on the ROLLERFORKS®.









B5.

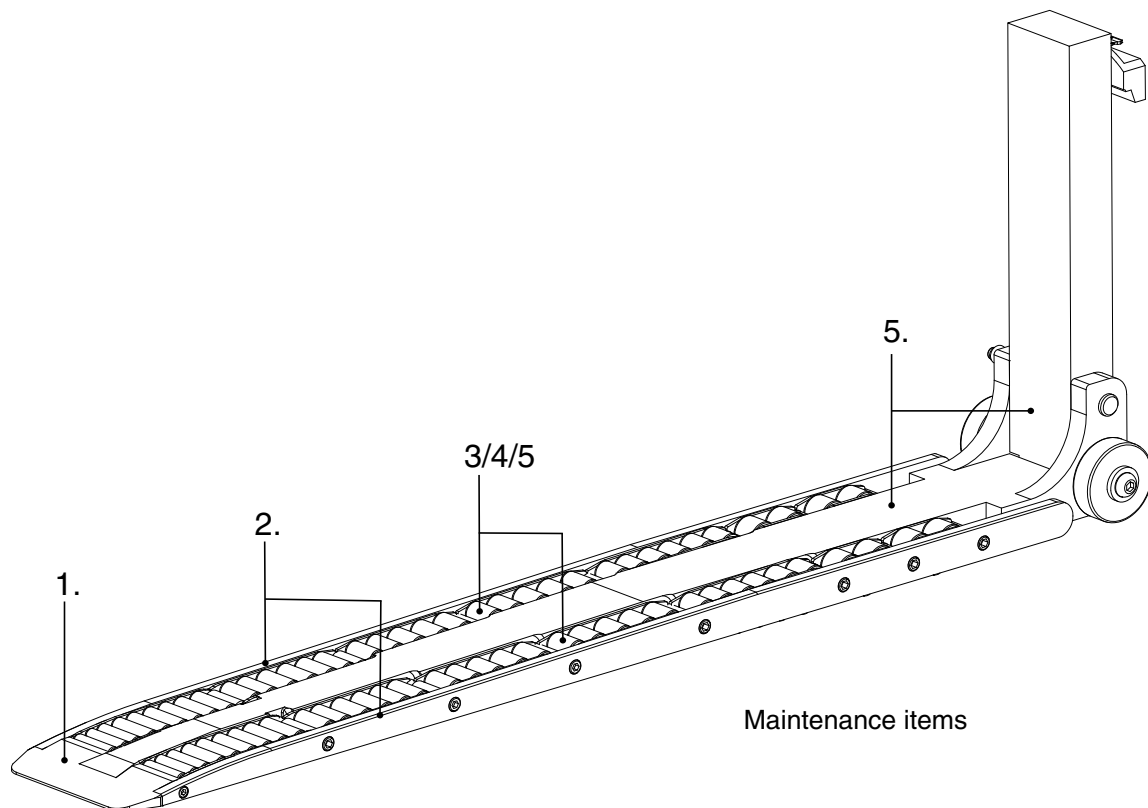
Tilt the mast back. The package can now be lifted

Inspection and Maintenance

Consult the maintenance schedule for additional inspection work.

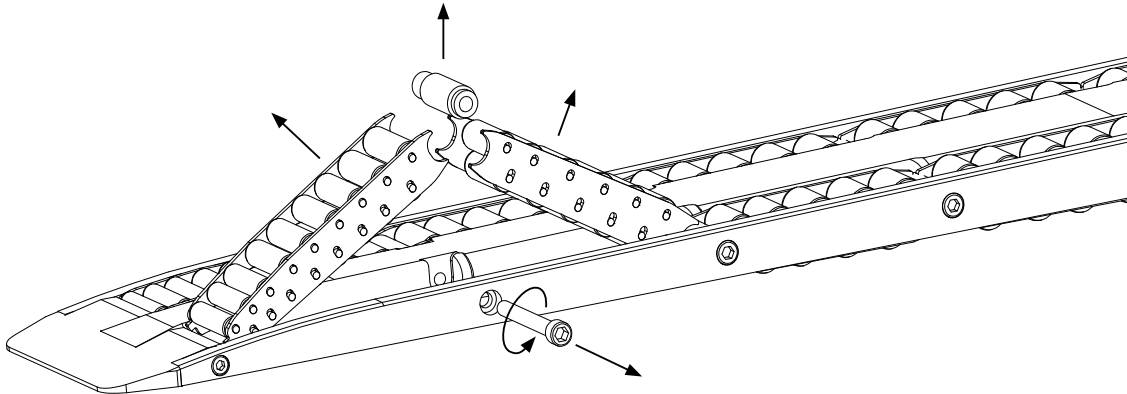
At least once a year, the ROLLERFORKS® must be tested again by a specialist in accordance with ISO5057 standards. The results of this test should be recorded in a logbook. Other checks are shown in the table below.

N°	Description	Daily	Monthly	Annually or every 2,000 hours
1.	Check wear and tear on tip Reject if tip is no longer functional or is worn down to inner fork or side plate.			
2.	Check wear and tear on the side plates Reject if side plate is no longer functional or is worn down to bolt heads.			
3.	Check wear and tear on the rollers Reject if rollers no longer extend above or below fork when the ROLLERFORKS® are resting on the ground.			
4.	Check for broken rollers Reject if roller is broken.			
5.	Check cartridges <i>Reject if Cartridges do not descend sufficiently under the fork blade</i>			
6.	Check inner fork in accordance with ISO5057 standards Rejection: in accordance with ISO 5057.			



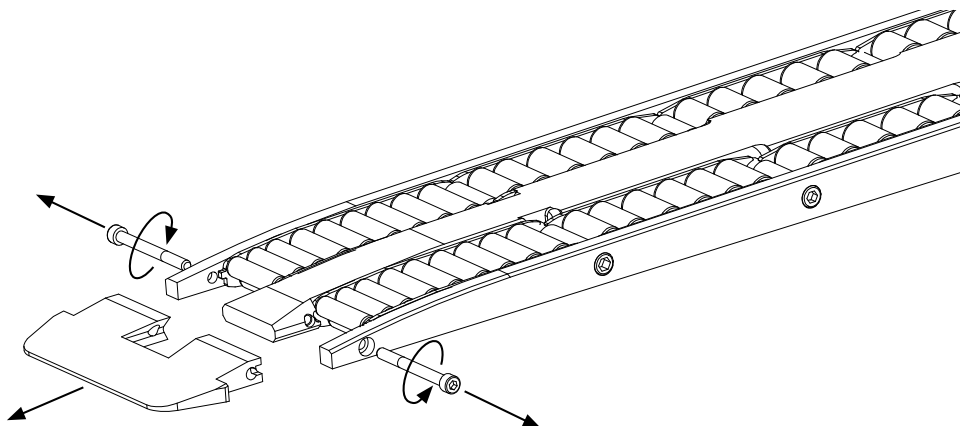
Instructions for Replacing the Cartridges

1. Set the ROLLERFORKS® to hip height and switch off the forklift truck.
2. Unscrew the 2nd, 4th, 6th, 8th, etc. bolts (starting from the front of the tip), whichever is relevant to the cartridge to be replaced. For example: unscrew the 2nd bolt in order to replace the first and/or second cartridge.
3. Now change the cartridge which is to be replaced, in accordance with the image below
4. Remove the old Loctite and clean the screw threads of the bolts using Loctite 7063 cleaner
5. Apply Loctite 2701 to the bolts and tighten the bolts in accordance with the torque table.



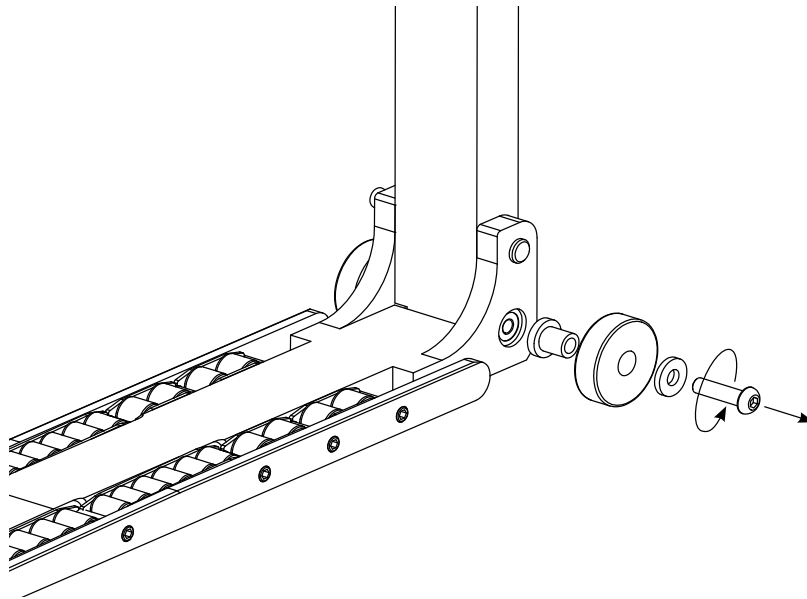
Instructions for Replacing the Tip

1. Set the ROLLERFORKS® to hip height and switch off the forklift truck.
2. Remove the tip in accordance with the image below, possibly, use a plastic hammer in order to (dis-)mount the tip
3. Clean the surfaces and remove any sharp edges.
4. Replace the tip. Ensure that the tip is mounted with its flat side at the bottom, and that the underside is flush with the side plates.
5. Remove the old Loctite, clean the screw thread using Loctite 7063 cleaner, and apply new Loctite 2701 to the bolts.
6. Tighten the bolts in accordance with the torque table.



Instructions for Replacing the Support Rollers

1. Set the ROLLERFORKS® to hip height and switch off the forklift truck.
2. Remove the components in accordance with the image below.
3. Remove the old Loctite and clean the screw thread of the bolt using Loctite 7063 cleaner.
4. Now apply Loctite 2701 to the bolt.
5. Fit the new support roller and accompanying parts, and tighten the bolt in accordance with the table Torques for ROLLERFORKS®.



Torques

Item	Recommended torque (Nm)
Bolt M8 class 12.9	37
Bolt M10 class 12.9	70
Bolt M16 class 8.8	180

Table of Torques for ROLLERFORKS®

Ordering Components

When ordering components, you are advised to not only look up the product numbers in the appendices but also to check the measurements of the relevant components yourself. This is because a special version may be involved, in which some components may vary from the standard version.

Do you have questions you need answered right now? Call your nearest Cascade KOOI Service Department. Visit us online at www.cascorp.com

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