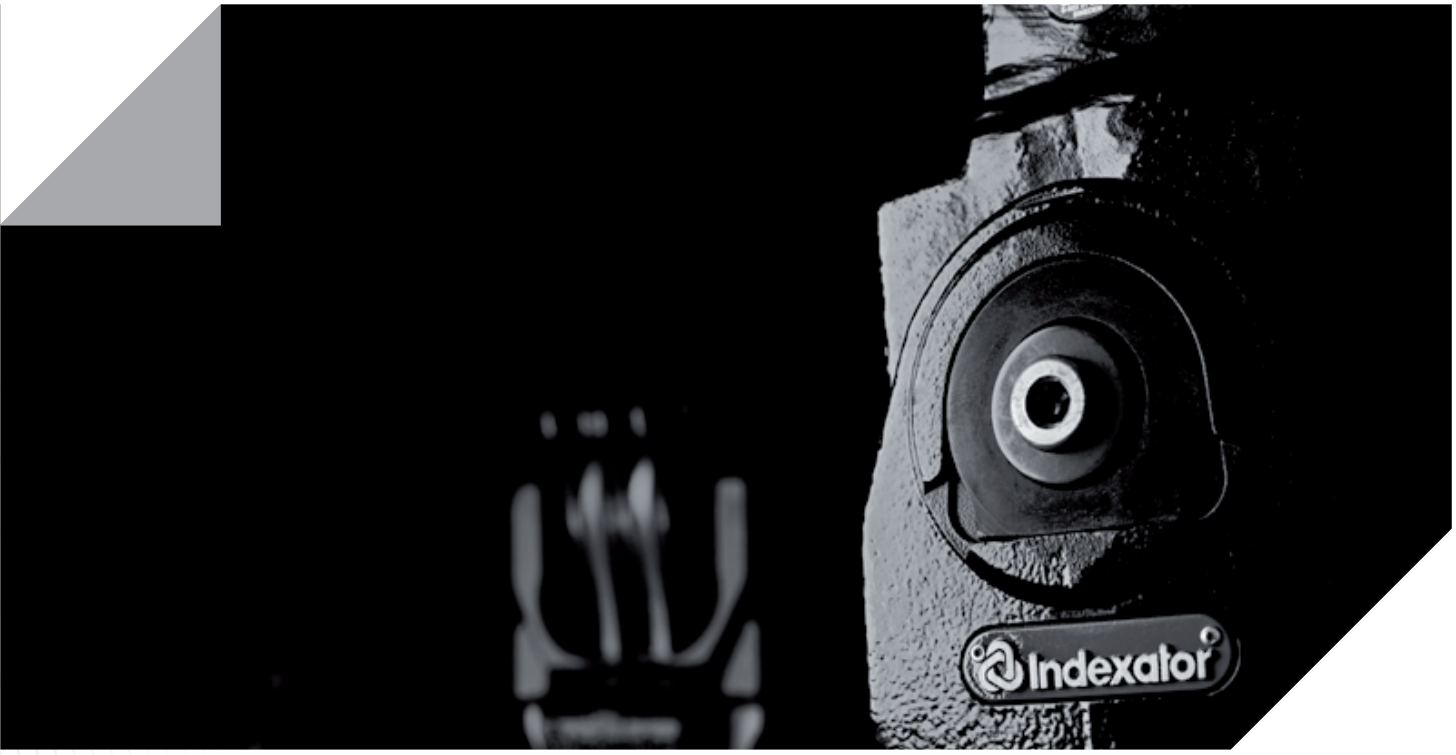
Indexator
Rotator Systems

User manual



LINKSET

Dual Swingdamper MPB1-80/45 KPL
Dual Swingdamper MPB1-100/45 KPL
Dual Swingdamper MPB2-100/45 KPL
Dual Swingdamper MPB2-100/45C KPL
Dual Swingdamper MPB2-CRH KPL
Dual Swingdamper MPB2-CRH C KPL

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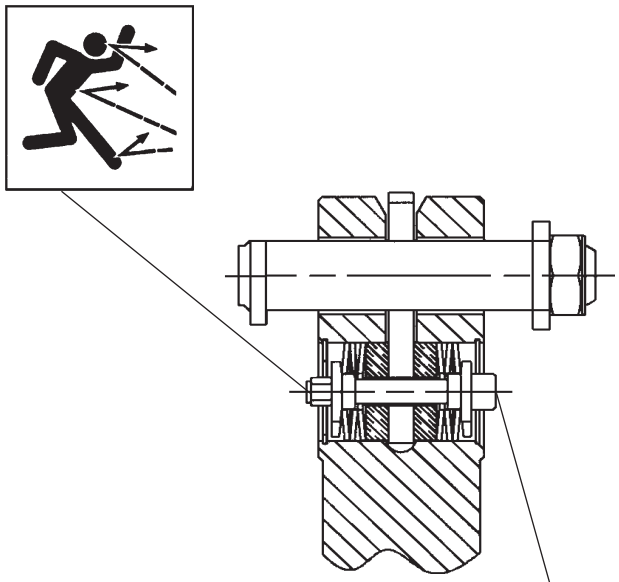
1. Description

This product is designed for the supen-sion of a freely hanging load.
Adapted for use in combination with Indexator's H-rotators. The products brake unit is designed to reduce the oscillating action. The disc should be kept free of grease and oil to ensure the best braking effect.

1.1 Warning
The locking rings are a safety feature, preventing parts from being ejected from the spring-action brake assembly in the event of bolt fracture. It is therefore essential that the locking ring is always in place when adjusting/tightening. The locking rings may only be removed when the brake springs are not compressed (loosely adjusted), eg, when replacing the brake lining.



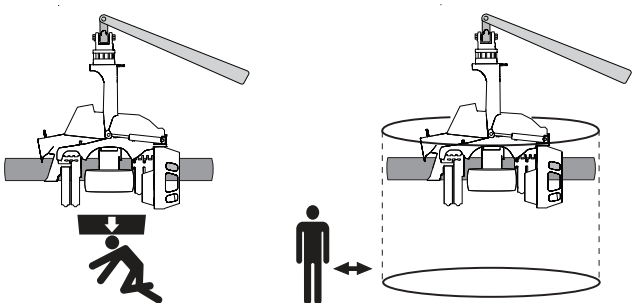
2.1.1 - Locking rings (B)

2. Safety instructions

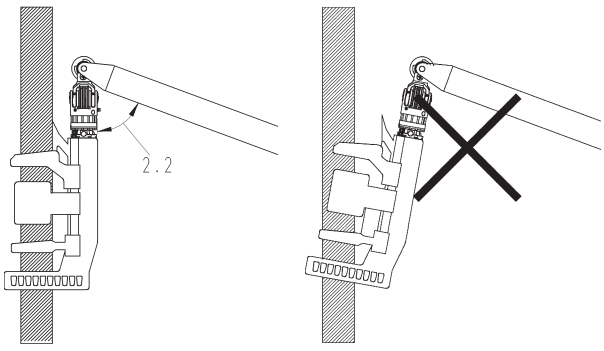
2.1 Check that

2.1.1 the locking rings B are mounted, see also 4.1.2.

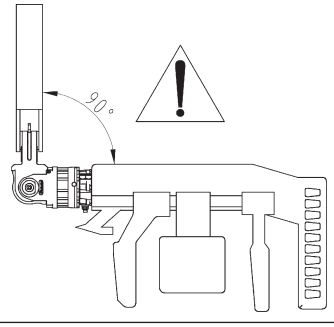
Check every 250 hours of operating.



2.2 The link's working area must be suffi ciently large to allow handling of free vertically suspended loads. The link must not come into contact with the oscillation stop in the crane nose.

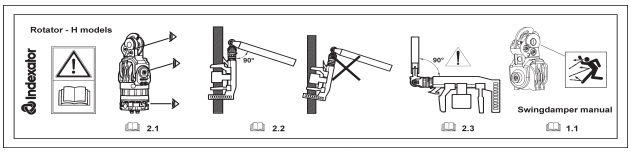


2.3 Avoid oscillating the rotator to the stop positions of the link.
Max. angle of oscillation +90°.



3. Safety sticker

3.1 The sticker should be positioned so that it is easily visible to the driver without hindering the view.



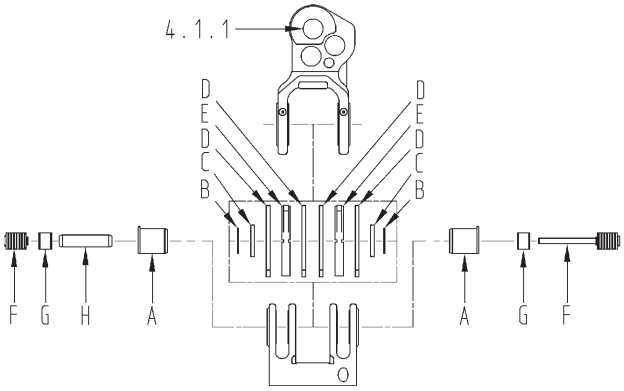
3.2 The sticker is self-adhesive. The surface to which the sticker is attached must be thoroughly cleaned.

4. Assembly instructions for the lower brake

4.1 For rotator and swing damper

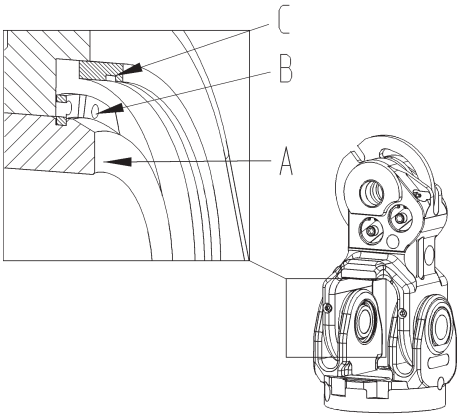
4.1.1 Check that the bushings are correctly attached and that the required number of lubrication holes are present.

4.1.2 Fit the pins **A** so that the stop is turned downwards. Fit the locking rings **B** and secure them with clamping rings **C** (with the groove turned outwards).



4.2 Dismantle

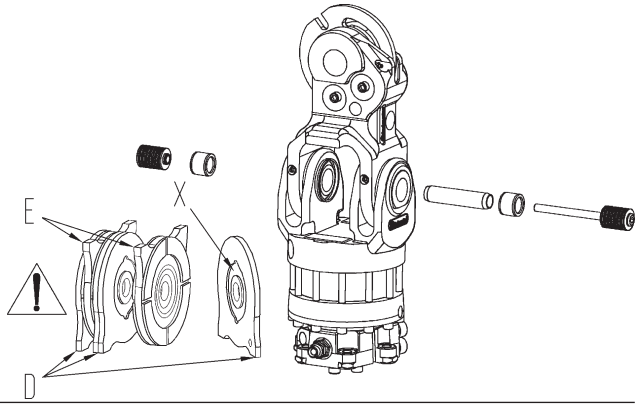
4.2.1 Dismantle in the reverse order. Make sure that the grapple/harvesting head and rotator are steady. Prize the clam ping rings loose **C** possibly using a grooving chisel. Then loosen the locking rings **B** and then remove the pins **A**.



4.3 Assembly of the brake system

4.3.1 Assemble the brake discs **D** so that the feet are turned downwards, towards the rotator. Worked surface **X** turned towards the brake lining.

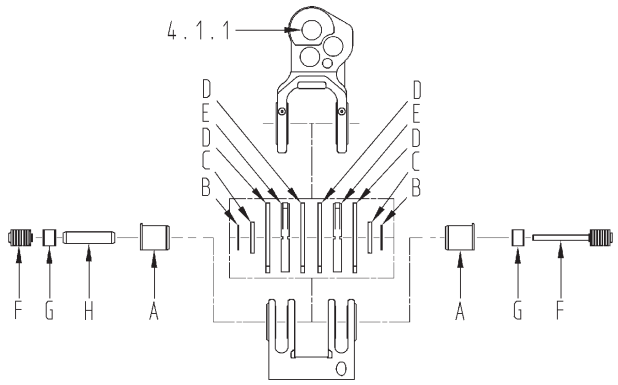
4.3.2 Assemble the brake lining **E** so that the feet are turned upwards, away from the rotator. Incorrect fitting will damage the rotator.



4.3.3 The sleeves **G**, have to be greesed both in- and outside, and the tube **H** greesed ourside with copper paste or similar.

4.3.4 Assemble sleeves **G** from each direction and then feed into the centre pipe **H** to the centre.

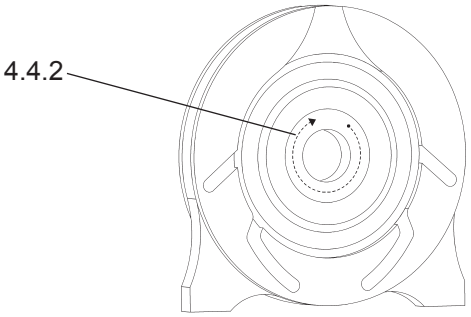
4.3.5 Assemble the adjustment screws **F**. Re commended braking moment is achieved when the adjustment screw **F** is tightened until it stops. Notice that max. tightening tourque is 60 Nm. If less brake power is required, the adjustment screw **F** can be untightened.



4.4 Dismantle

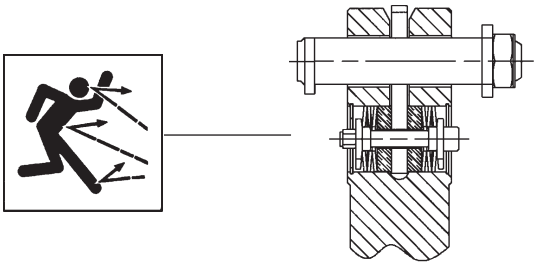
4.4.1 Dismantle in the reverse order.

4.4.2 In order to extend the service life time of the bearing, after 2000 h the brake disc has to be disassembled and the bearing race turned 360 degrees.



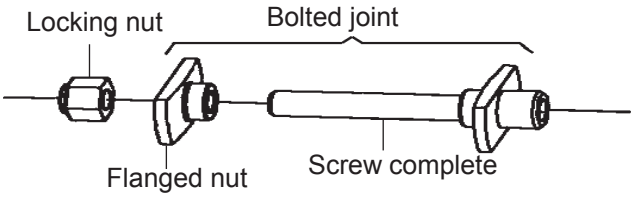
5. Assembly instructions for the upper brake

5.1 Warning
Please notis the warning instruction, see 1.1.



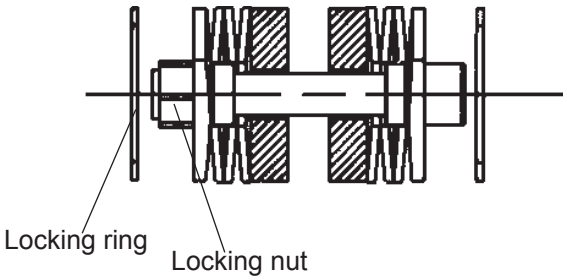
5.2 Changing and maintaining the brake lining, screw complete and brake disc

5.2.1 Unscrew the locking nut. Unscrew the bolted joint.Remove the locking rings, change or clean the lining.Clean the brake disc.



5.2.2 It is important when refitting that the cup springs are mounted according to Fig. 1. Remember to fit back the locking rings before tightening. Position the locking rings so that they are easily accessible for tools/pliers.

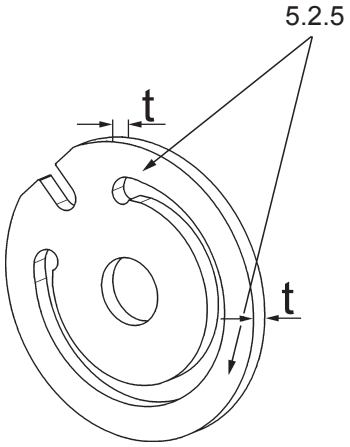
Fig 1 (brake kit 80)



5.2.3 It is important that linings are replaced in time to prevent the steel plate that is glued to the lining from chafing/damaging the brake disc.

5.2.4 The screw complete must regulary be inspected and replaced. Changing the screw when changing the brake lining is recommended.

5.2.5



5.2.5 For saftey reasons and i order to get max. effect of the brake the brake disc ought to be replaced when the thickness (t) varies more than 1,0 mm, see picture 5.2.5.

5.3 Adjustment

5.3.1 For safety reasons, allow the locking rings to remain in place. Unscrew the locking nut before tightening. Hold the flange-nut and tighten the screw. Maximum tightening torque for the bolted joint is 30 Nm.
Greater tightening torque will result in greater wear and worsen the safety.
Secure the bolted joint with the locking nut after adjusting.

5.3.2 The pin in the crane nose is assembled in accordance with the crane manufacturer’s recommendations.
Indexator recommends:
Surface fineness Ra < 1,25 µm (50 µin)
Surface hardness > 50 HRC

6. Maintenance instructions

6.1 Lubricate the link's bearings every 50 hours.

6.2 In order to achieve the best operating purpose possible the sleeves **G** should be greesed both in- and outside, and the tube **H** greesed outside with copper paste or similar every 1000 working hours. See 4.3.3.

6.3 Adjust the brake when necessary, see 4.3.5.

6.4 Check that there are no cracks in the upper or lower attachment of the rotator.

6.5 Check that no abnormal play has arisen in the link´s bearing. Differences in excess of 1,0 mm must be corrected.

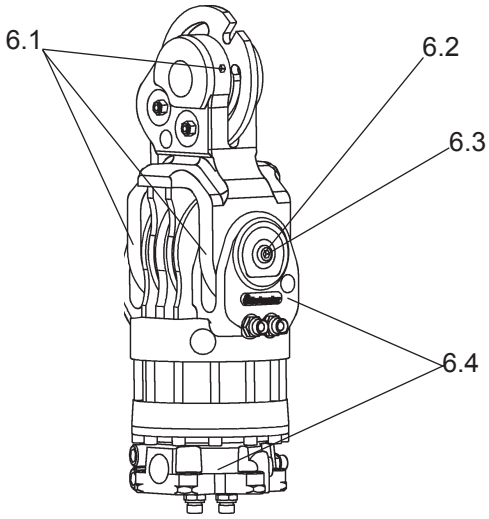
6.6 If any leakage of hydraulic oil should occur, it might be necessary to clean the brake discs. To disassamble and assem ble, see item 4.3.

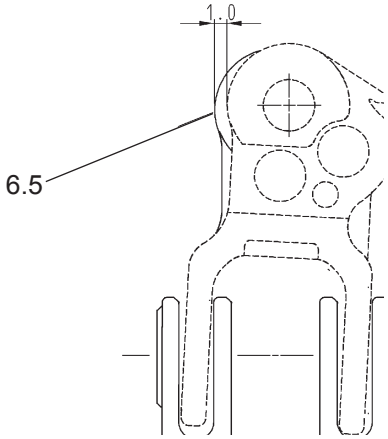
If any of the problems in points 6.4, 6.5 are detected, contact your dealer, for replacement of worn and defective defective components.

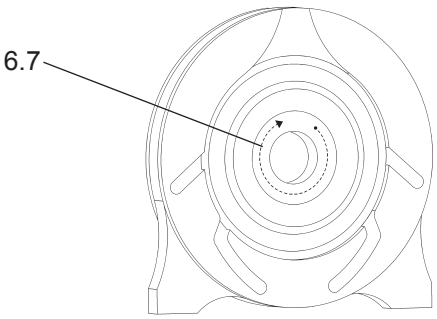
6.7 In order to preserve the function and a long service life of the swing damper the brake linings have to be checked and cleaned every 600 working hours or every second month.

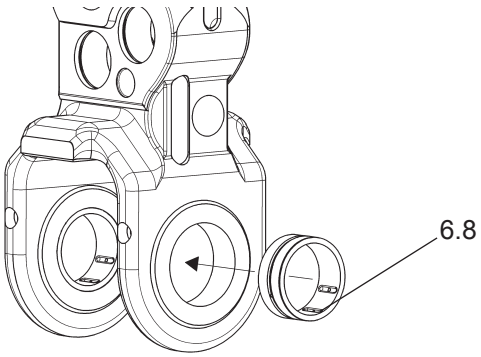
- Dismount the brake package.
- Remove the grinding dust that piled up in the cavities of the lining.
- Rotate the inner race of the bearing 360 degrees. See sketch below.
- Reassemble the brake package if the bearing runs smoothly with no play.

If there is play in the bearing, if it feels tight, or if the rubber seal is damaged the bearing should be replaced.









7. Technical data

For futher technical information we refer to our product data sheets.

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