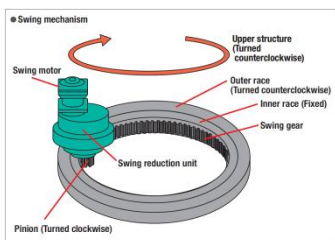


SWING BEARING

A Swing bearing is a VITAL part of a crane

●What is a swing bearing?

Swing bearings comprise an inner ring and an outer ring, one of which usually incorporates a gear. Together with attachment holes in both rings, they enable an optimized power transmission with a simple and quick connection between adjacent machine components. The bearing raceways, in conjunction with the rolling elements and cages or spacers, are designed to accommodate loads acting singly or in combination, and in any direction.



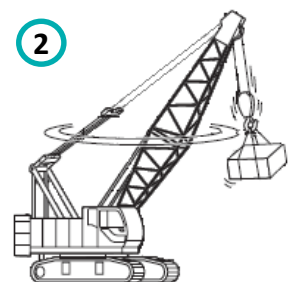
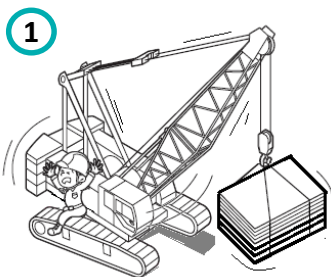
●What are signs of bearing damage?

- ▶ Abnormal sound when in swinging movement.
- ▶ Small metal filings may appear in the swing bearing grease.
- ▶ Swing operation is noisy. Sounds emanating from area of swing bearing.
- ▶ Gaps may appear between the lip of the seal and the swing bearing. (See photo below)



●What can cause damage?

1. Overload condition.
2. Rough swing operation.
3. Working / Propelling on Uneven and Soft Ground (Including Pick & Carry).
4. Lack of Daily Maintenance etc.,



●Possible case scenarios caused by swing bearing damage

- ▶ Staggering of load due to damage of the swing bearing.
 ⇒ Load hits workmen or structures, causing possible major injury and / or critical damage.
- ▶ Crane operation stops with swing bearing damage.
 ⇒ Project interruption due to crane unavailability.
- ▶ Upper frame could disconnect while lifting.
 ⇒ Potential of a major accident could happen.



We KOBELCO offer simple periodical inspection of the swing bearing for customer.

Easy periodic inspection method is described on the following page!

Frequently operating in any of the above conditions, will increase the contact pressure inside of the swing bearing and can cause critical damage!!

SWING BEARING

The Swing bearing is a VITAL part of crane

● Easy inspection method of swing bearing

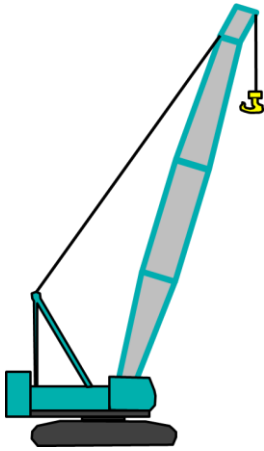


Figure A
Maximum boom angle (Approx. 80 deg)
without weight

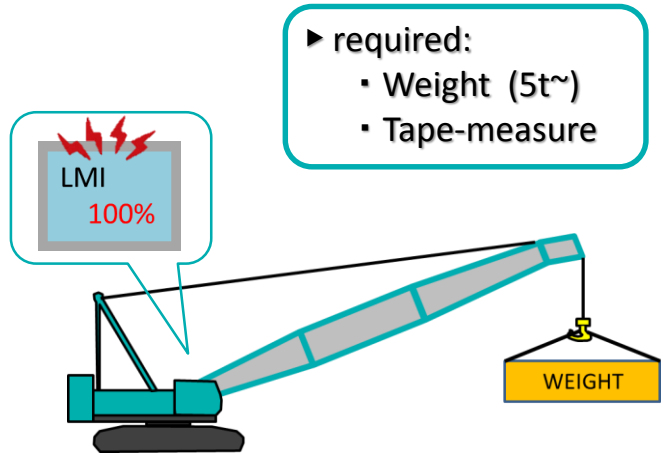
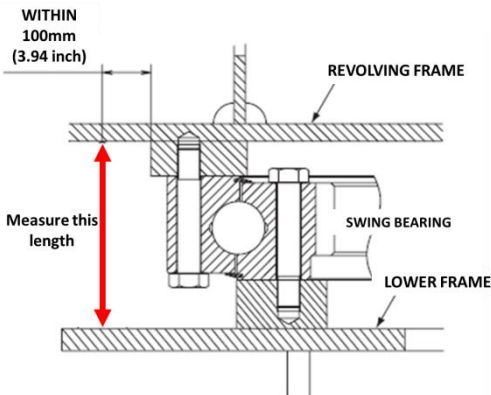


Figure B
Lowest boom angle when LMI mentioned 100% load
with weight

1. Check the measurement between revolving frame and lower frame with tape-measure in configuration A and configuration B (for guide see photo below).
2. Note the difference between the two measurements (from A & B).



**KOBELCO standard allowable difference should be
Less than 3mm (0.118 inch)**

● What if your machine exceeds the KOBELCO standard?

Replace the swing bearing.
The safety of your machine, staff and job-site
surroundings are paramount.
Feel free to contact us.

Check It Now!!

KOBELCO CONSTRUCTION MACHINERY MIDDLE EAST AND AFRICA FZCO.

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