

# MAS SLEWING BEARING

## The slewing bearing of excavators installation, use and maintenance

### Requirement of installation

1. Clean the slewing bearing and the mounting structures:

(including paint residues, rust, welding beads, and burr formations) In doing this, ensure that:

\*Cleaning material does not penetrate into the slewing bearing



\* Applicable provisions are observed (e.g. manufacturer directions, protection of workers, environmental protection etc,)

\*Cleaning solvents that attacks the sealing material is not used

2. The soft zone (shown by S stamped on a surface of the gear ring) and the loading plug should be located at non-loading area, non-always loading area or slightly loading area.

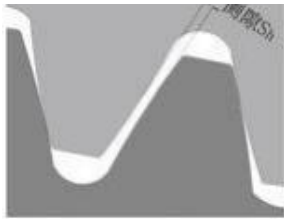
3. The pretightening force level of bolts must be maintained as to 0.6 times to 0.7 times of yield value of bolts. Tight bolts should be installed at 180° direction symmetrical. it is usually use 10.9 level of bolt in the commonly construction machine. Spring washer is banned.

4. Notice of gear installation

The pinion must be installed from the gear which painted green, and the backlash “Sh” between the gear and the pinion must be more than 0.06M( M is Module of gear)

“Sh” can be identified according to the model of excavators

the model of excavator	Sh(mm)
$\leq 8T$	0.5
10-15T	0.6
20-25T	0.8
$\geq 30T$	1



### Maintenance of the slewing ring

1. The slewing ring had been filled a few of No.3 lithium based grease in the race before delivery. Consumers should fill the new grease suitably according to different working condition before use it. Generally, it is necessary to fill in grease once every 100 hours for ball slewing ring. When filling in lithium based grease, it must make the grease even till the grease out off from the sealing. The filling period should be shorten if there is the special working condition such as at the torrid zone, high humidity, severe dust, large temperature variation and long continuing working time.
2. It should be filled with new grease before and after the machine being long time stop working.
3. The gear faces exposed in air should periodically cleaned and spread with appropriate oil on it.
4. In general working condition, check the pretightening force of the bolts after first 100 working hours then check it every 500 hours of the slewing ring. It must be always kept enough pretightening force.
5. Cleaning the slewing ring with high-pressure water is not permissible during operation so as to avoid the water entering to the rolling race.
6. Stop and check the machine during operation if there is abnormal noise, vibration occurred or suddenly power rose. Remove the trouble or dismantle it for repairing if necessary.
7. Should not let the hard materials access or enter in the engaging area of the gear.
8. Regularly check the seal ring is that OK or not. Replace it if it is damaged and reset it when it is fallen.
9. Multi-slewing rings overlapping together horizontally must put at least 3-5 pads evenly in the direction of circumference between the slewing rings. And the upper and lower pads put in the circumferential direction of the position should be consistent. Slewing ring stand up is prohibited.
10. Slewing ring should be placed on non-corrosive medium, and stored in dry, flat indoor room, cannot be soaked or watered.