

# Kundendienst-Information

## Service Information Information du service



LIEBHERR-WERK EHINGEN GMBH  
D-89582 Ehingen/Donau - Tel. (07391) 502-0

Datum	Abteilung	Nr.
13.09.2007	VKD / juh1	U080701e

## Axle-suspension steering-transfer parts on mobile cranes

### Information on wear measurements

On the wheel side - steering knuckle bearing, axle suspension and mechanical steering transfer parts.

Upon inspections of bearing clearance by the customer's service personnel or upon the annual crane inspection by the technical inspection authorities (at Germany like TÜV etc.) it has happened lately quite often that on the following components an oversized bearing clearance was claimed and consequently the respective components were exchanged!

After damage findings by the respective suppliers it was noted, that the claimed bearing clearance were still within the permissible tolerances and that the objections were consequently not justified!

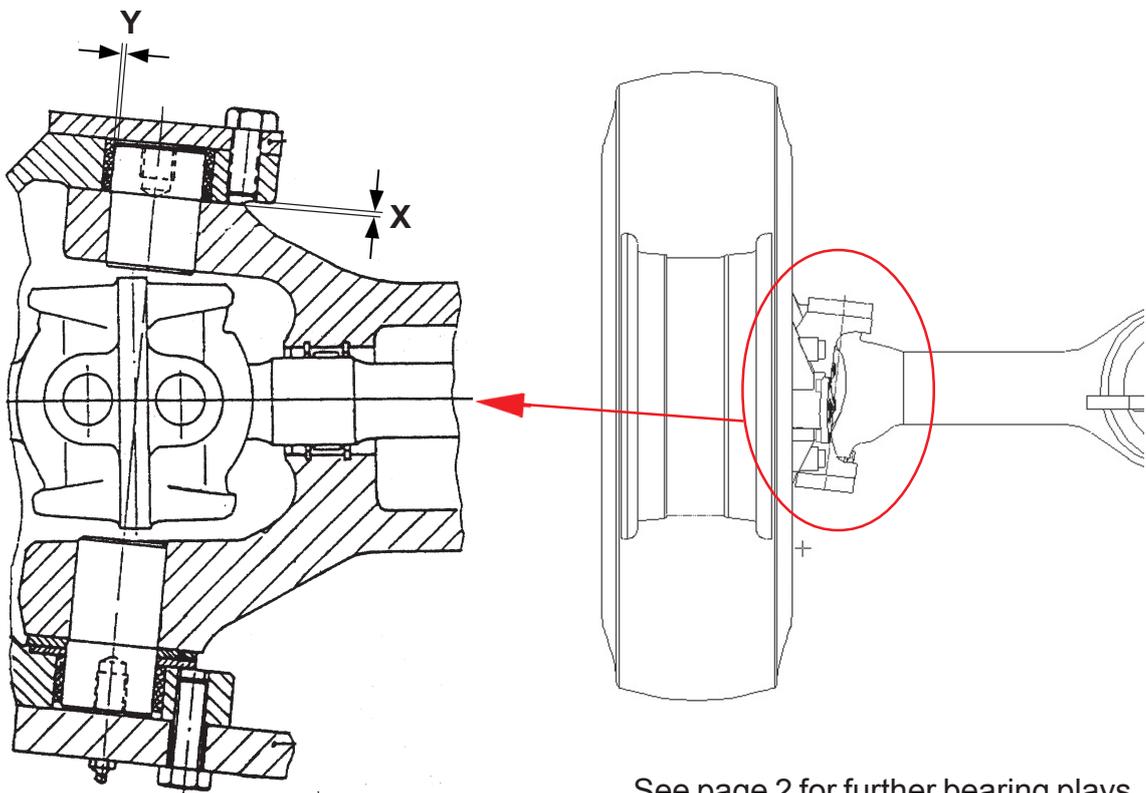
In order to prevent an unnecessary exchange in future, the bearing clearance of the following components should be conveyed to the respective inspection authorities.

**Please forward this information to the respective inspection authorities!**

### 1. Bearing clearance on the wheel side - steering knuckle bearing

1.1 Max. permissible radial clearance on pos. Y = 0,4 mm

1.2 Max. permissible axial clearance on pos. X = 1,2 mm



See page 2 for further bearing plays

**2. Bearing clearance on the axle suspension**

**2.1 Axle guide - top/bottom (pos. 1)**

Bearing combination = steel/steel

Max. permissible bearing clearance per joint:

**Radial (Y) = 0,6 mm** (Testing force: 800-1000N)

**Axial (X) = 1,2 mm** (Testing force: 1500N)

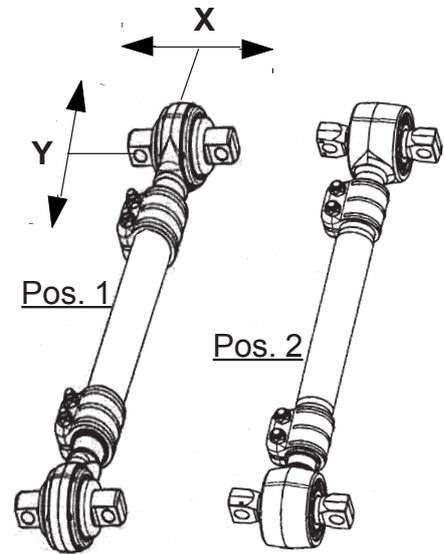
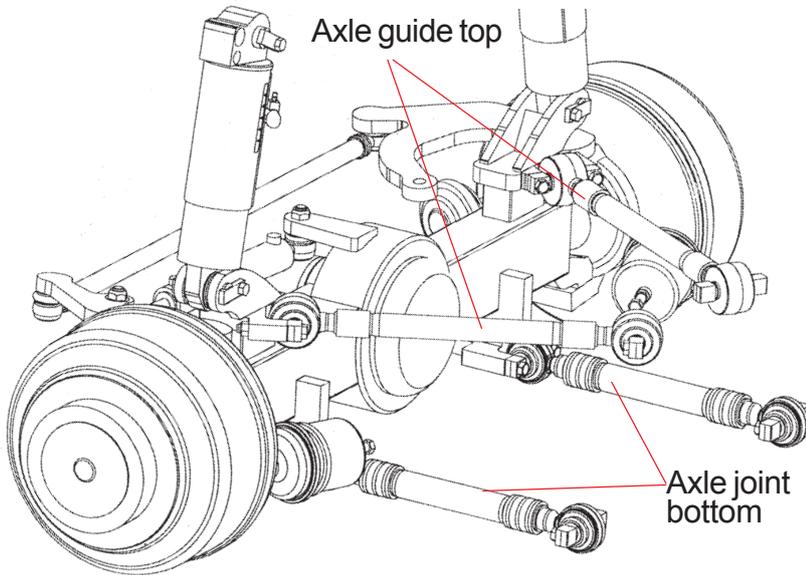
**2.2 Axle guide - top (pos. 2)**

Bearing combination = rubber/steel  
(Molecular bearing)

Bearing clearance per joint:

**Radial/Axial = 0 mm**

(Rubber bearing must be free of cracks)



**3. Bearing clearance on steering-transfer parts**

**3.1 Deflection lever (pos. 3)**

Max. permissible bearing clearance per deflect. lever:

**Radial (Y) = 0,04 mm**

**Axial (X) = 0,15 mm**

**3.2 Universal joints (pos. 4)**

Max. permissible bearing clearance per joint

**Radial (Y) = 0,45 mm** (Testing force: 1000N)

**Axial (X) = 1,0 mm** (Testing force: 1500N)

