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## Service Bulletin D15-011

- X Information Only**  
Product Update – Warranty  
Product Update - Non Warranty  
Action Required

**Date:**  
August 13, 2015

**To:**  
Mobile Crane Distributor Service Managers  
Mobile Crane Field Support Personnel

**Subject:**  
Measuring of turntable bearings

**Model(s) Affected:**  
KMK, GMK, GTK, TMS, GSK

### **PURPOSE:**

Manitowoc Crane Care Wilhelmshaven previously published a Service Bulletin (G08-043) for “Measuring and recording of turntable bearing vertical movements”. The list of turntable bearings for AT and TM products is hereby updated.

The updated list includes

- The crane model
- The Part number for the turntable bearing
- Note A = Diameter of turntable bearing
- Note B = Maximum allowable bearing lift in service

The procedure for measuring the turntable bearing vertical movement is given in GMK Maintenance manuals. An example of these instructions is included with this bulletin.

Should you have any questions or complications, please contact Manitowoc Crane Care.

Crane Model	Swing Bearing P/N	Note A	Note B
2025	1685344	1180	1,60
25 GMT	1685344	1180	1,60
2035	2313545	1397	1,80
2035 GMT	1677006	1500	2,00
3040	1930312	1501	2,08
3045	1930312	1501	2,08
3050	2310345	1454	2,08
4055	1922679	1500	3,05
4060	1922679	1500	3,05
4070	1922679	1500	3,05
4071	1922679	1500	3,05
70 GMT	1372670	1832	2,60
4080	1927885	1490	3,28
5090	1927885	1490	3,28
100 GMT	1203992	2002	3,30
5100	1377017	1810	3,20
5110	1927885	1490	3,28
5130	3006454	2030	3,31
5130 L	3006454	2030	3,31
5160	2252873	2020	3,48
5180	3010190	2252	3,58
6140 -40°C	1971322	2090	
6160	1927343	2240	0,84
6180	1927343	2240	0,84
6200	1927343	2240	0,84
6250	2315663	2440	0,74
7250	1927343	2240	0,84
2035-E	23313545		1,80
3050	02301672/KDV 02310345	1454	1,80
3050-1	3010997	1454	2,60
3055	3010997	1454	2,60
4070-1	1922679	1502	3,05
4075/4075-1	3056048	1601	3,20
4080-1	3056048	1601	3,20
4100/4100L	3116869	1813	3,20
5095	3116869	1813	3,20
5100	3012551	1800	3,20
5110-1	3012551	1800	3,20
5130-1	3012551	1800	3,20

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5130-2	3012551	1800	3,20
5170	3109525	2291	3,20
5200	3010190	2254	3,58
5220	3109525	2291	3,20
6300	2315663	2425	0,84
6300 L	3166237	2494	3,20
6300 L -V2	3143380	2462	3,20
7450	3319920	2801	1,00
GTK 1100/1100-1	3321654	2854	1,85
GSK 55	3010997	1622	2,60
TMS 900 E -1/-2	7069100068	1601	2,10
TMS 9000 E	7069100068	1601	2,10

## 8.9.4


## Measuring tilting play

M 6



### Reducing the interval

- When after several years of intensive crane operation, half of the value for the maximum permissible tilting play is reached, then you must reduce the maintenance interval.
- Measure the tilting play from then on every three months (**M 3**).

### Spare parts and tools

- Dial gauge (precision 0.01 mm) with tripod.
- Measurement report from when the truck crane was put into operation;  *Delivery receipt*.

### Prerequisites

- The slewing bearing has been previously checked for tightness;  *Checking the screws*, p. 8 - 49.
- The truck crane is rigged with an outrigger span of at least **7.8 x 7.5 m** and is level;  *Operating manual*.
- The counterweight combination **28.5 t** must be rigged according to the *Lifting capacity table* and equipment on the truck crane.
- The appropriate counterweight combination according to the *Lifting capacity table* and equipment of the truck crane is rigged:  
**28.5 t**
  - The lattice extension must have been removed.
  - The auxiliary hoist has been removed.
  - The main boom is telescoped to 50-50-50-50-0.
  - The current load must not exceed **1 t** – where necessary unreeve the hook block.

### Type

The truck crane GMK 5130-2 is equipped with a slewing bearing of the bearing type: KDV, single-row.

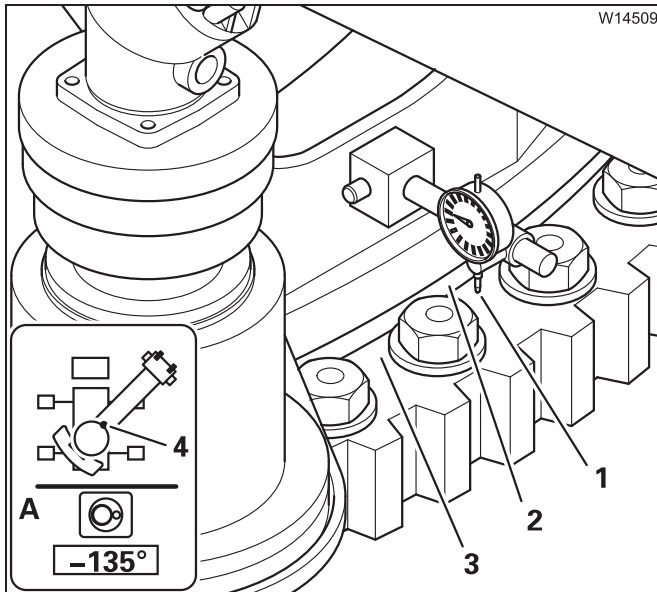
Type of slewing bearing	GROVE part number
Ball slewing bearing Bearing type: KDV, single-row	03012551 Model plate: Inside the inner ring.

### Measuring tilting play

The base value of the tilting play is determined and documented by **Manitowoc Crane Care** or an authorised GROVE dealer when the slewing bearing is put into operation or replaced.

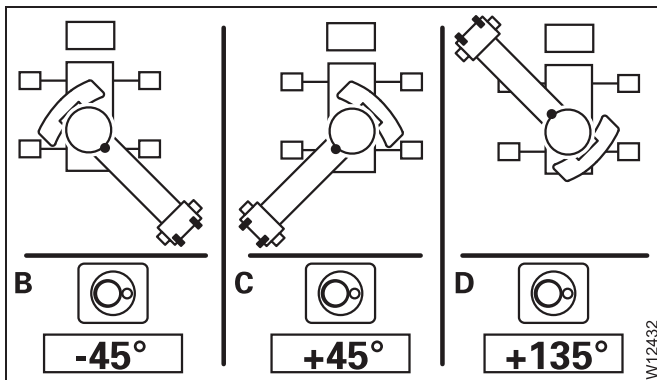
The maximum permissible wear is 3.2 mm.  
This results in the maximum permissible tilting play.

<b>For example:</b>	<b>Base value + max. permissible wear =</b>	<b>max. permissible tilting play</b>
	0.35 mm + 3.2 mm	3.55 mm



### Measuring current tilting play

- Raise the main boom to 80° and slew to -135° – display (A).
- Fasten a dial gauge on the front on the turntable (4) and place the button (1) on to the lower ring (3) as close as possible to the gasket (2).
- Slowly lower the main boom to 25°.
- Read off from the dial gauge how far the turntable is inclined and record this value as the current tilting play; ► *Appendix – Tilting play measurement report.*
- Remove the dial gauge.



- Repeat the measurement with the slewing angles
  - B** -45°
  - C** +45°
  - D** +135°

If the **current tilting play** is greater than the **max. permissible tilting play**, you must have the ball slewing bearing replaced by **Manitowoc Crane Care** or an authorised GROVE dealer.

If the **current tilting play** is half as great as the **max. permissible tilting play**, you must reduce the maintenance interval; ► *Reducing the interval*, p. 8 - 56.