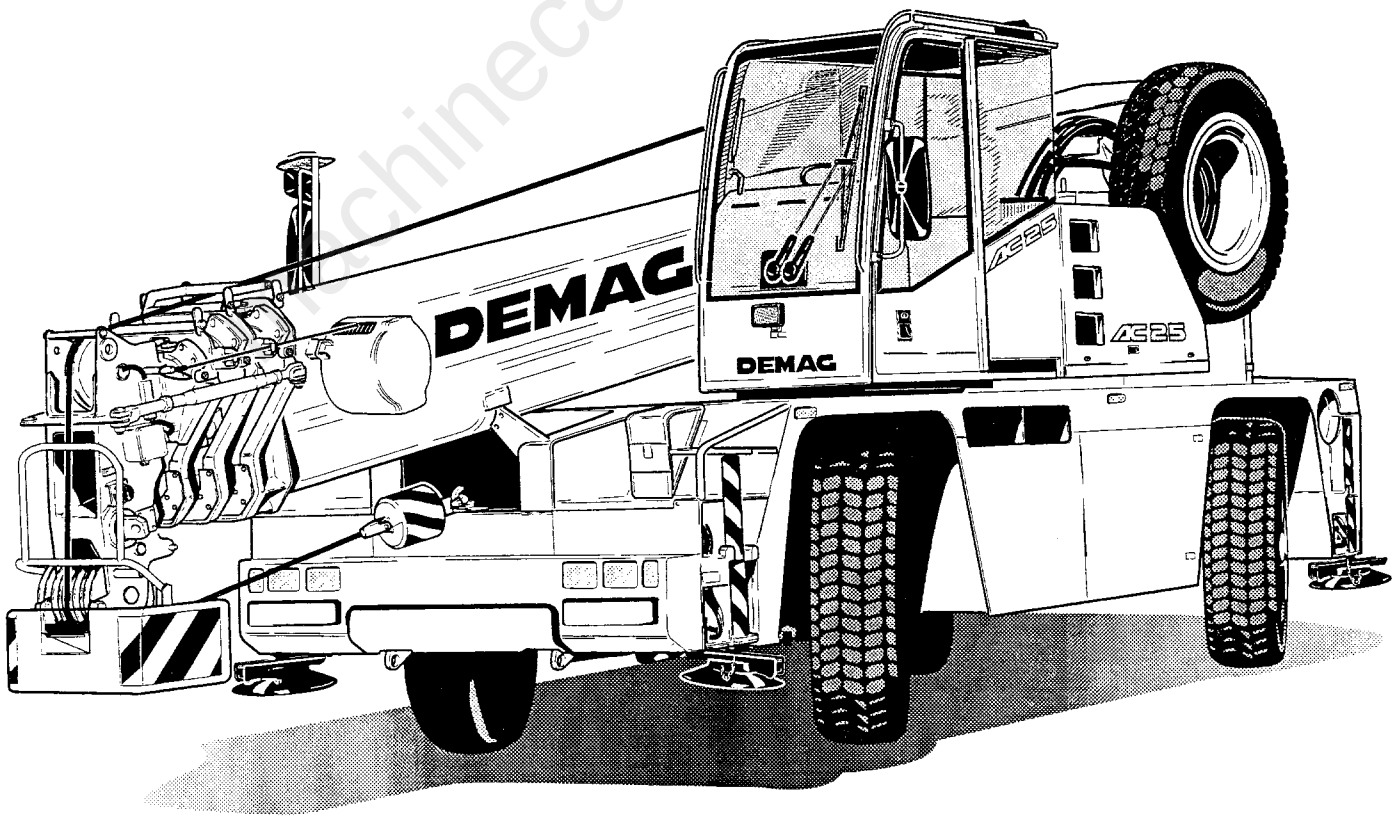


AC25

Part 2

Lubrication and Maintenance Instructions for the Crane



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Inspection No. 2 (year 2)

The crane has been used for harbour unloading operation:

- Load spectrum **L3**, i.e. $Km_2 = 0.5$

2000 h are recorded on the superstructure hour meter, i.e. during this period: 2000 h - 800 h (used in first year of operation) = **1200 h**.

The winch has therefore been in operation for approx. 40% of this time, i.e. $T_2 = 480$ h.

The spent share S_2 of the theoretical service life for the second inspection interval is thus:

$$S_2 = \frac{Km_2}{Km} \times T_2 = \frac{0.5}{0.125} \times 480 \text{ h} = 1920 \text{ h}$$

Theoretical remaining service life after the second year:

$$D_2 = D_1 - S_2 = 3040 \text{ h} - 1920 \text{ h} = 1120 \text{ h}$$

Inspection No. 3 (year 3)

The crane has been used for erection operation and occasionally for harbour unloading operation:

-Load spectrum **L2**, i.e. $Km_3 = 0.25$

3000 h are recorded on the superstructure hour meter, i.e. during this period: 3000 h - 2000 h (used in the first two years of operation) = **1000 h**.

The winch has been in operation for approx. 30% of this time, i.e. $T_3 = 300$ h.

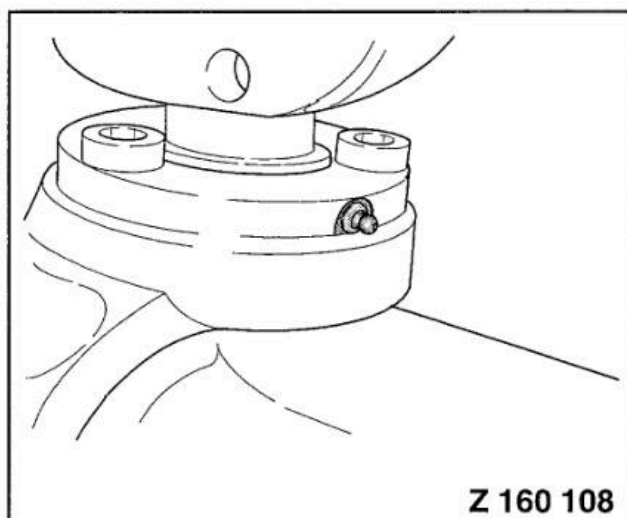
The spent share S_3 of the theoretical service life for the third inspection interval is thus:

$$S_3 = \frac{km_3}{km} \times T_3 = \frac{0.25}{0.125} \times 300 \text{ h} = 600 \text{ h}$$

Theoretical remaining service life after the third year:

$$D_3 = D_2 - S_3 = 1120 \text{ h} - 600 \text{ h} = 520 \text{ h}$$

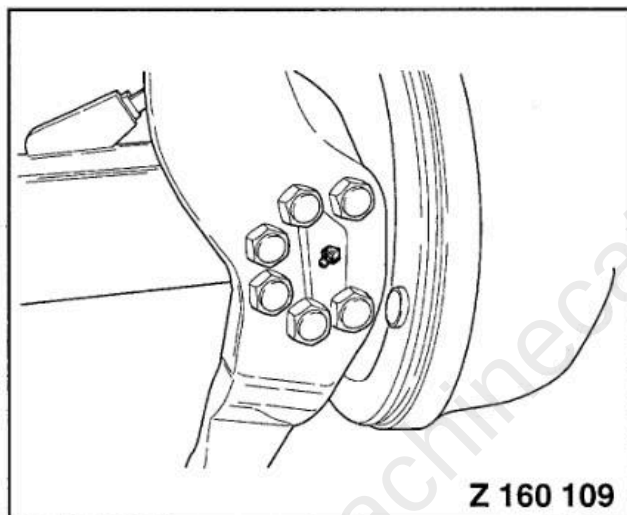
It must now be assessed whether the theoretical remaining service life is expected to be sufficient for the next period of operation. If this is not the case, a general overhaul must be undertaken (see Section 1.4.4).



Z 160 108

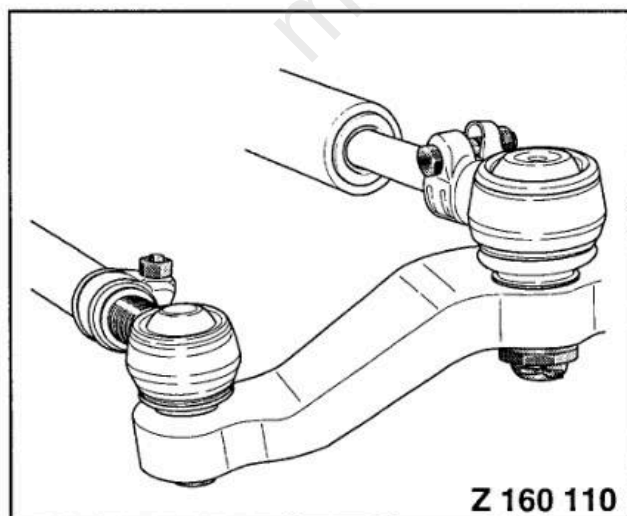
8.2 Lubricating the Axles

- **Steering knuckle bearing**
- Grease the upper part of the steering knuckle bearing.
(Z 160 108)



Z 160 109

- Grease the lower part of the steering knuckle bearing.
(Z 160 109)



Z 160 110

8.3 Steering and Track Arm

- Check the screws and tighten as necessary.
(Z 160 110)

Wear in brake linings

Each new brake lining must be worn in so that it achieves maximum braking efficiency. This is achieved by interval braking at low to medium speed; sudden braking is not acceptable for this purpose. The maximum brake drum temperature of 200 degrees C may not be exceeded during this procedure. The temperature rise resultant from any one brake actuation may not exceed 15 % of the maximum value.

When wearing in new linings, protracted braking and repeated sudden braking at high speeds are to be avoided.

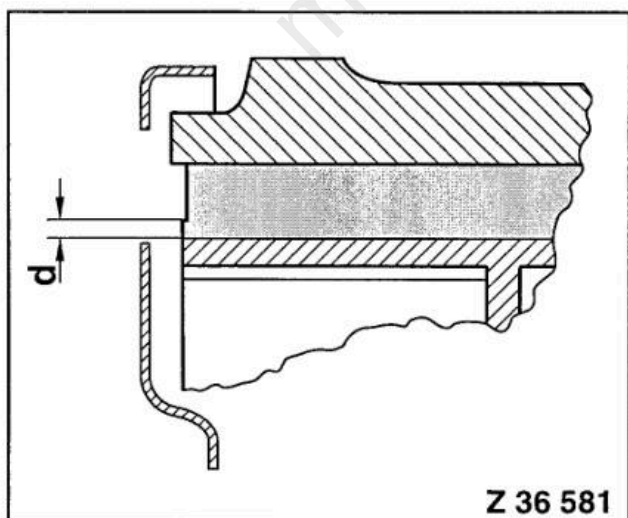
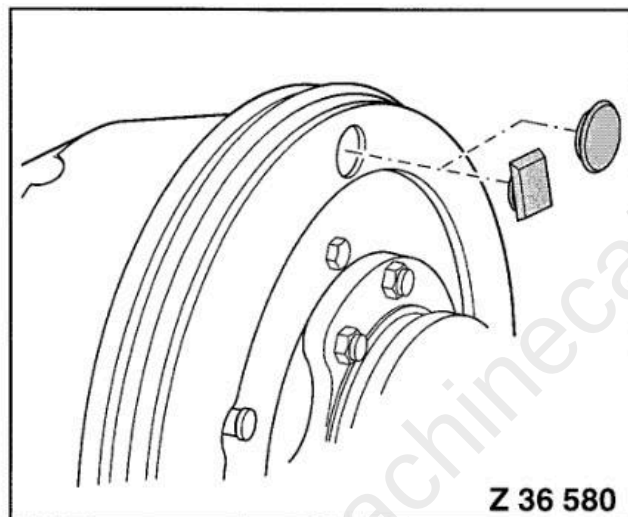
10.1 Check brake linings for wear

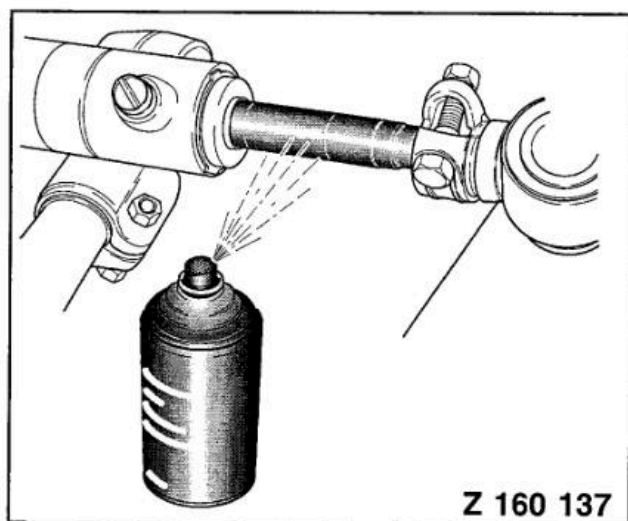
Drum brakes

- Remove plug.
(Z 36 580)
- Brake lining wear can be ascertained by looking through the inspection holes in the cover plate.
- Changing brake linings: after reaching the wear edge.
- Minimum lining thickness: $d = 4,5 \text{ mm}$.
(Minimum thickness for overlarge brake linings - (necessary for re-lathed drums: $d = 5,5 \text{ mm}$.)
(Z 36 581)

10.2 Renew brake linings

For worn or oiled brake linings always replace both brakes on an axle and always use a consistent quality of lining per axle. Ensure that only linings cleared for release are used.





17 Piston Rods

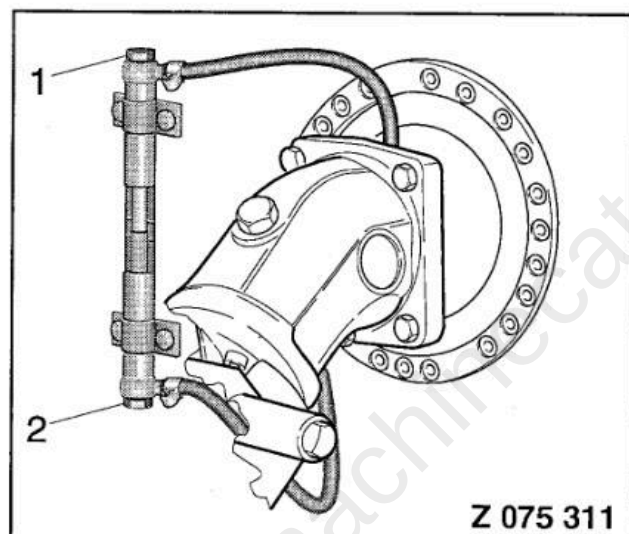
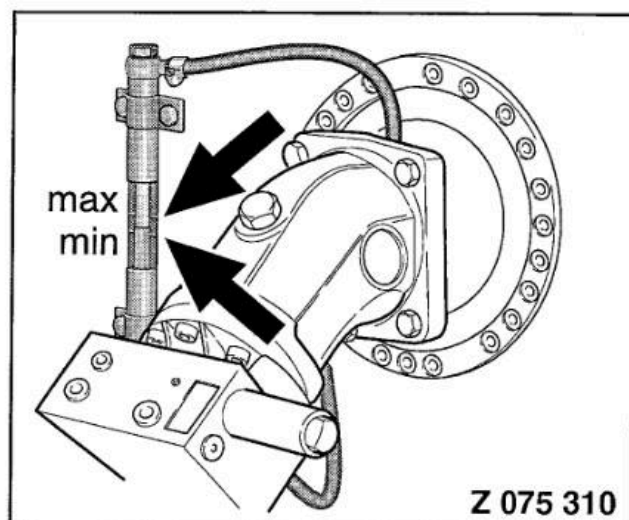
 Apply protective grease to exposed chrome surfaces.

Despite being of the highest quality, surfaces may be susceptible to corrosion in an aggressive environment. If the crane is out of operation for more than one day, exposed surfaces should be protected against corrosion by applying acid-free protective grease ("GLEITMO 350" is recommended, order number for aerosol:

604 106 40).

(Z 160 137)

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22 Hoists

22.1 Hoist Gear - Checking and Topping Up the Oil Level

Check the oil level through the inspection glass.

The oil level should be checked immediately after commencing operations, while the gear is at a standstill, as a considerable quantity of the oil is distributed throughout the inner parts of the housing during operation.

The correct oil level is reached when, with the crane in a level, horizontal position, the oil is level with the "max." marking on the inspection glass.

(Z 075 310)

If the oil level is too high, the oil in the hoist gear must be drained off and new oil filled in.

If the level is below the minimum marking proceed as follows:

- Remove the filler plug (1) at the upper end of the inspection glass.
(Z 075 311)
- Using a funnel or hose, fill in oil up to the "max." marking on the inspection glass.
(Z 075 310)

See section 22.2 and section 2 "Fuels and Lubricants" for the correct oil types.

- Screw the filler plug (1) back in.



If inspection reveals a continual loss of oil, operations must be halted and the system dismantled.

Full Version Available

Demag AC 25 All Terrain Crane Maintenance Manual

Demag AC 25 all terrain crane maintenance manual covering intervals, lubrication, fluids, filters and inspections. 122-page English PDF.

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