POTAIN®

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Recipients
Potain service network and representatives.

Subject
Hoisting hook maintenance.

Tower crane models
GMA + GME ranges

A	Technical Support	03/18/2022	Creation
Index	Written by	Date	Comment

Update of the preventive maintenance instructions for the hoisting hooks.

1. Origin/Description:

The purpose of this service bulletin is to inform the service and distribution network of the **update to the hook maintenance instructions** in the technical manual, and to specify what is authorized or not authorized on the hook during checks.

2. Update of the hook maintenance instructions:

The schedule of preventive maintenance retains at 500 hours or 3 months / whichever comes 1st

- the visual check on the condition of the hook, as well as
- the greasing of the ball thrust bearing of the hook if the hook is equipped with a grease nipple.

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The schedule of detailed maintenance at 8000 hours or 4 years / whichever comes 1st is updated as follows:

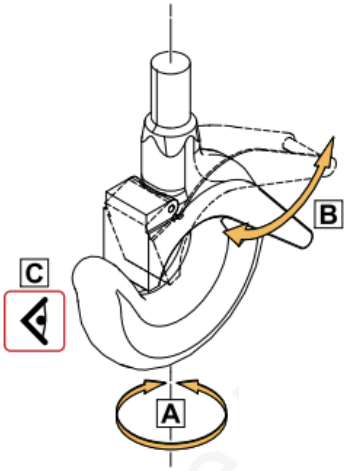
Ropes and pulleys	Pulley blocks	Hooks	CHECK the wear level of the pulley block hook.
Ropes and pulleys	Pulley blocks	Ball thrust bearing	CARRY OUT an external visual inspection of the operation of the ball stop of the pulley block.

All checks are updated as follows:

1.21 Hook

1.21.1 Checking the condition of the hook

Procedure



1. A Check that the hook can rotate freely, with no sticking points.
2. B Check that the safety catch moves freely and closes properly.
3. C Check that the surface of the hook is free of corrosion.

4. Perform this procedure when the condition below exists.

Conditions
- Considerable axial play.

OR:
- Serious corrosion or deformation on the outside of the threaded rod or nut.

OR:
- Damaged nut or missing safety pin, preventing the hook fastening nut from being loosened.

OR:
- Hook fastening nut lock damaged.

OR:
- Cracks on the hook.

DANGER
Risk of serious or even fatal accident
Risk of the load detaching from the hook
- ▶ It is prohibited to open the hook to replace a component.
- ▶ Replace the entire hook.

1.21.2 Lubricating the hook ball thrust bearing

Work material

Grease gun	1 unit

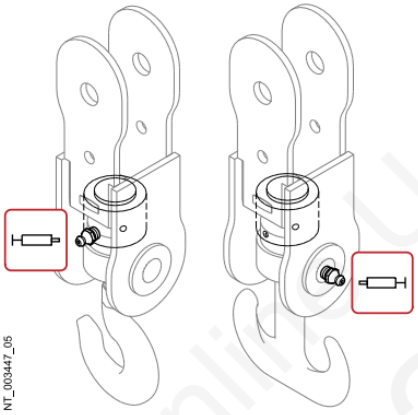
Consumables

Grease type G2 (L-XBDHB 2, K2K-25) ➡ page D-7	E-01032-51	See procedure for quantity.

Conditions

- Only the trunnion load hooks fitted with one or more grease nipples can be greased.

Procedure



► Inject the grease into the grease nipple(s).

Required material	
Grease gun	1 unit
Grease type G2 (L-XBDHB 2, K2K-25) (E-01032-51)	

1.21.3 Checking the wear on the hook

Work material

Vernier caliper	See procedure for quantity.

Technical data

Option: 12,00 t	85 mm
Height (h)	
Option: 12,00 t	59 mm
Opening with hook safety catch (Pal)	

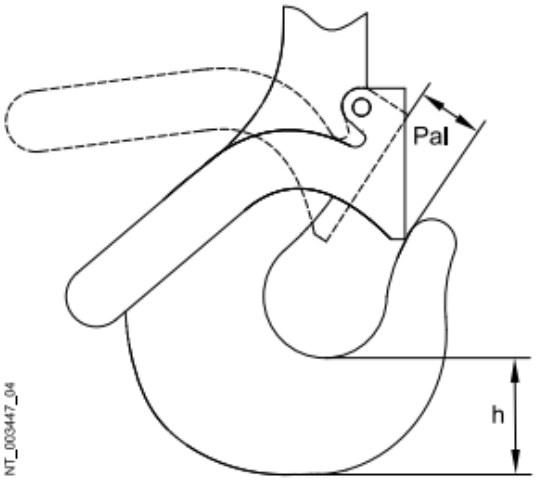
DANGER

Risk of serious or even fatal accident

Risk of the load detaching from the hook.

► Do not apply welds to the hook to compensate for wear.

Procedure



1. Determine the theoretical value of the dimension **(Pal)**.

Technical data	
Opening with hook safety catch (Pal)	59 mm

2. Measure the actual dimension **(Pal)**.

Required material	
Vernier caliper	1 unit

Result

Measured dimension **(Pal)** : Min. Theoretical dimension **(Pal)** x 110 %

► Replace the entire hook.

3. Determine the theoretical value of the dimension **(h)**.

Technical data	
Height (h)	85 mm

4. Measure the dimension **(h)**.

Required material
Vernier caliper

Result

Measured dimension **(h)** : Max. Theoretical dimension **(h)** x 95 %

► Replace the entire hook.

1.21.4 Checking the wear on the hook chain

Work material

Micrometer	1 unit
Vernier caliper	1 unit

Conditions

- The hook is equipped with a chain.

Procedure

1. Visually check every link of the chain for damage.

Result

One of the links is bent out of shape.

► Replace the hook chain.

3. Ball thrust bearing - Safety pin:

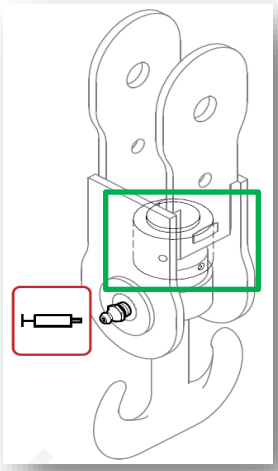
In accordance with the instructions of the hook suppliers and the check procedure described above, it is:

- Essential to periodically check the presence of the safety pin (*Mecanindus* type), which prevents the fastening nut from being unscrewed from the hook;
- Prohibited to open the hook to replace a component;
- and it is therefore prohibited to dismantle the following on the hooks of cranes in service:
  - ✓ the safety pin and
  - ✓ the ball thrust bearing.

  Dismantling could damage the thread of the hook rod and seriously damage the hook, resulting in the risk of load release.

Check on the presence of **the safety pin**

Never dismantle the **ball thrust bearing**



For further information, please contact your usual Potain customer support agent or Tower Crane Potain Product Support.