

EG-02

MAINTENANCE MECHANIC TRAINING

TRAINER'S GUIDE

Duty EG: Cranes/Hoists
EG-02: PM Crane/Hoist (15 Ton)

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Instructions To The Trainer

1. The Learner will contact you when ready to practice PM Crane/Hoist.
2. Be prepared to demonstrate the steps for this task.
3. Ask the Learner to contact the Evaluator when ready for the Skill Check.



Skill Objective

Given a Crane Preventive Maintenance Checklist, PM the crane/hoist.

Task Standards

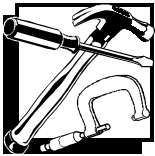
1. The hook must not show signs of cracks or excessive wear.
2. The hook must not deviate more than 10 degrees in twist measurement.
3. There must not be more than one frayed wire in any five foot length of cable.
4. The cable diameter must not be more than 1/16 inch reduced.
5. All required safe practices must be demonstrated.

What The Learner Will Need

This section contains the safety information, tools, and resources you will need before performing a PM check on a crane/hoist.



- Follow all Caterpillar facility safety standards when performing this task.
- The crane's electrical system must be locked and tagged after the power on checks have been completed during the PM check.
- Gloves must be worn to check the wire rope.
- A safety harness must be worn while in the bucket of the JLG.
- A tripping hazard exists when moving around catwalk, while climbing around to check the various components and getting in and out of the cab.



- flashlight
- JLG
- gloves
- adjustable wrench
- channel lock pliers
- putty knife
- shop towels or rags
- caliper
- machinist ruler
- tape measure
- pencil and paper



Crane Preventive Maintenance Checklist



Practice Set-Up

The Learner may perform the following practice to help prepare for the Skill Check. Set up the practice for the Learner. Assist the Learner during the practice, if necessary; answer any questions concerning the task; and be prepared to demonstrate the task to the Learner. Make sure the Learner follows safe work practices while practicing the task.

Practice

Designate a crane/hoist for performing a PM. Ask the Learner to:

- Inspect the hook.
- Check the main hoist.
- Check the auxiliary hoist (50 and 60 ton cranes) if applicable.
- Check the trolley (north/south motion).
- Check the bridge (east/west motion).
- Perform an operational check on the bridge, trolley, and hoist controls.

The Learner will inspect the hook, the main and auxiliary hoist, trolley, and bridge and their components for serviceability. All required safe practices must be demonstrated.

Practice Objective

The major components will be inspected for serviceably, showing no signs of wear, cracks, or breakage. The hook must show not show signs of cracks or excessive wear. The hook must not deviate more than 10 degrees in twist measurement. The cable must not have more than one frayed wire in any five foot length. The diameter of the wire rope must not be more than 1/16 inch reduced. All safe practices must be demonstrated.

Next Step

Allow the Learner to continue practicing and developing skills needed to demonstrate the task. The Learner should ask the Evaluator to schedule a Skill Check when ready to demonstrate the task unaided and meet all the task standards and safe work practices.