

# **BB-06**

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## **MAINTENANCE MECHANIC TRAINING**

### **SKILL CHECK GUIDE**

**Duty BB: Spindles**

**BB-06: Set Bearing Load**

Issued 03/01/98

## **Rationale**

The Skill Development Guide provides the knowledge a Learner needs to set a bearing load. The Learner must be able to measure housing bore depth, measure for preload, measure bearing stack length and set bearing load according to print requirements.

## **Skill Check Set-Up**

Provide the Learner with a spindle, bearings, and a bearing load that must be set.

You must make available the tools, materials, and resources needed to demonstrate the task.

## What The Learner Will Need

This section contains the safety information, tools, and resources you will need before setting a bearing load.



- Follow all Caterpillar facility safety standards when performing this task.
- Wear protective gloves when working with hazardous temperatures (extreme cold or heat).
- Spindles often have excessive weight; use caution when working on or around the spindle.



- precision measuring instruments: dial indicator, depth micrometer, and inside or outside micrometer
- rubber mallet
- pry bar
- deburring stone
- infrared or other thermometer
- grease (as recommended by the manufacturer)



- Engineering blueprint
- ERS history (to check for a repeated problem)



## Skill Check

Given a spindle, bearings, spacers, and required components, set the bearing load for a spindle.

Needs  
Mastered Practice

### Safe Work Practices

- |       |       |   |
|-------|-------|---|
| _____ | _____ | 1. Follow all Caterpillar facility safety standards when performing this task.              |
| _____ | _____ | 2. Wear protective gloves when working with hazardous temperatures (extreme cold or heat).  |
| _____ | _____ | 3. Spindles often have excessive weight; use caution when working on or around the spindle. |

### Task Standards

- |       |       |  |
|-------|-------|--|
| _____ | _____ | 1. The spindle bearing load must be set to meet manufacturer's specification for end-play and radial movement. |
| _____ | _____ | 2. The spindle must cut without causing chatter or out-of-round bores.   |
| _____ | _____ | 3. When the spindle is turning, heat caused by the bearing must be within the manufacturer's specifications.   |



## Evaluator's Sign-Off

The Learner has demonstrated safe work practices and competent performance of the task.

Evaluator:

Date:

Learner:

Clock No:

