

N-01

MAINTENANCE MECHANIC TRAINING

TRAINER'S GUIDE

Duty N: System Troubleshooting
N-01: Troubleshoot Hydraulic System

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Instructions To The Trainer

1. The Learner will contact you when ready to practice troubleshooting a hydraulic system.
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 hydraulic system that is not operating within normal parameters, troubleshoot the hydraulic system.

Task Standards

1. The fault must be identified.
2. The recommended corrective action returns the hydraulic system to the normal operating conditions shown on the hydraulic print or in the manufacturer's manual.

What The Learner Will Need

This section contains the safety information, tools, and resources the Learner will need before troubleshooting a hydraulic system.



- Follow all Caterpillar facility safety standards when performing this task.
- Watch for rotating and moving parts/shafts, slides, or conveyors; the machine is energized during troubleshooting.



- Maintenance Mechanic hand tools



- machine manufacturer's manual
- hydraulic print



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 machine for the practice. Provide a hydraulic print for a machine and, if possible, insert a fault into the hydraulic system for the Learner to identify. An example of a fault may include disabling the motor so the pump will not operate.

After setting up the machine for hydraulic troubleshooting, ask the Learner to troubleshoot the system.

Ask the Learner to demonstrate the safe work practices while performing this task.

Practice Objective

The Learner must identify the fault in the hydraulic system. The Learner must recommend a corrective action the Trainer agrees will restore the hydraulic system to normal operating conditions. All safe work 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.

