

K-08b

ELECTRICIAN TRAINING

SKILL CHECK GUIDE

Duty K: PLC (Modicon)

K-08b: Troubleshoot Peripheral

Issued 01/01/98

Rationale

At Caterpillar, typical peripherals include the Panel Mate and the SMART Screen. Typical peripheral problems include a blank screen or screen lock-up, peripheral keyboards not functioning, or an error message displaying. After following the troubleshooting steps if the Learner is unable to determine the cause of the problem, then he or she must contact the Electrical Engineer and clearly describe the problem.

Skill Check Set-Up

Select either a Panel Mate or a SMART Screen to troubleshoot for the Skill Check. Contact the Operator where the peripheral is located to schedule a convenient time for the Skill Check. Before the Learner begins, modify the peripheral so that it either has a power failure or it has a communication error. Ask the Learner to troubleshoot the peripheral to find the change you made and to make a corrective action to the peripheral. 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 troubleshooting a peripheral.



- Follow all Caterpillar Facility Safety Standards when performing this task in the plant.
- This task poses an electrical hazard. Use caution when working around the peripheral.
- Wear safety glasses and hearing protection in assembly and production areas.



- SMART Screen
- Panel Mate
- Voltmeter
- Flat head screwdriver



- None



Skill Check

Upon notification of a peripheral device problem, troubleshoot the peripheral.

Needs
Mastered Practice

Safe Work Practices

- | | | |
|-------|-------|---|
| _____ | _____ | 1. Follow all Caterpillar Facility Safety Standards when performing this task in the plant. |
| _____ | _____ | 2. This task poses an electrical hazard. Use caution when working around the peripheral. |
| _____ | _____ | 3. Wear safety glasses and hearing protection in assembly and production areas. |

Task Standards

- | | | |
|-------|-------|---|
| _____ | _____ | 1. The Learner identifies the problem and determines a corrective action. |
| _____ | _____ | 2. The corrective action results in the peripheral functioning within specifications. |
| _____ | _____ | 3. If corrective action fails to resolve the peripheral problem, the Learner clearly describe the problem to the Electrical Engineer. |



Evaluator's Sign-Off

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

Evaluator: _____ Date: _____

Learner: _____ Clock No: _____

