

# **K-03a**

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## **ELECTRICIAN TRAINING**

### **SKILL CHECK GUIDE**

**Duty K: PLC (Allen-Bradley)**

**K-03a: Load Program**

**Issued 01/01/98**

## **Rationale**

This Skill Development Guide provides the knowledge a Learner needs to load a program. Programs are loaded on the PLC after offline modification, if a faulty processor has been replaced, or in the event of a new installation. Failure to load a program, or loading the wrong file could result in excessive downtime, unpredictable machine control, or injury to personnel.

## **Skill Check Set-Up**

Select a PLC location for the Skill Check. Contact the Operator where the PLC is located to schedule a convenient time for the Skill Check. Provide the Learner with a copy of the PLC program that runs at the location you selected for the Skill Check. Ask the Learner to load the program and verify that the machine cycles correctly after the program is loaded.

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 loading a program.



- Follow all Caterpillar Facility Safety Standards when performing this task in the plant.
- Use caution when working around the PLC; high voltage is present on the inside of the PLC cabinet door and near the input/output (I/O) chassis.
- Be careful when working near moving or rotating machinery.
- Wear safety glasses and hearing protection in assembly and production areas.



- PC equipped with PLC software (DEK if loading from the Ethernet; Laptop or PC equipped with 1784 KT Card; Allen-Bradley programming Terminal)
- PLC
- PLC program on floppy disk
- Interconnect cable
- Processor Keyswitch Key (if the processor is not in the REM position)
- Password (if necessary)



- Plant Engineering Standards
- Electrical Standards



## Skill Check

After an offline program modification, a processor replacement, or a new installation, load the PLC program.

Needs  
Mastered Practice

### Safe Work Practices

- |       |       |                                                                                                                                                    |
|-------|-------|----------------------------------------------------------------------------------------------------------------------------------------------------|
| _____ | _____ | 1. Follow all Caterpillar Facility Safety Standards when performing this task in the plant.                                                        |
| _____ | _____ | 2. Use caution when working around the PLC; high voltage is present on the inside of the PLC cabinet door and near the input/output (I/O) chassis. |
| _____ | _____ | 3. Be careful when working near moving or rotating machinery.                                                                                      |
| _____ | _____ | 4. Wear safety glasses and hearing protection in assembly and production areas.                                                                    |

### Task Standards

- |       |       |                                                                                                                                              |
|-------|-------|----------------------------------------------------------------------------------------------------------------------------------------------|
| _____ | _____ | 1. The processor operates without displaying fault messages.                                                                                 |
| _____ | _____ | 2. Output cards are not active if the machine is in the PROG mode; output cards are active if the machine is in either the REM or RUN modes. |
| _____ | _____ | 3. The machine operates within specifications and meets production requirements.                                                             |



## Evaluator's Sign-Off

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

Evaluator:

Date:

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Learner:

Clock No:

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