

K-03a

ELECTRICIAN TRAINING

TRAINER'S GUIDE

Duty K: PLC (Allen-Bradley)

K-03a: Load Program

Issued 01/01/98

Instructions To The Trainer

1. The Learner will contact you when ready to practice loading a program.
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

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

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.

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



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 location for the practice. The Learner must practice the task online in the PROG Mode.

Provide the Learner with a PLC program on a floppy disk. Ask the Learner to load the program and verify that it loaded. After the program is loaded, ask the Learner to cycle the machine to verify that the program is operational.

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

Practice Objective

The Learner should load the program and cycle the machine. The processor should operate without displaying fault messages. Safe work practices should 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 whenever he or she is ready to demonstrate the task unaided and meet all the task standards and safe work practices.

