

P-03

MAINTENANCE MECHANIC TRAINING

TRAINER'S GUIDE

Duty P: Steam Systems

P-03: Perform Startup and Shutdown Procedures

Issued 01/01/99

Instructions To The Trainer

1. The Learner will contact you when ready to practice performing startup and shutdown procedures.
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 an operating or a shut down steam system, perform startup/shutdown procedures.

Task Standards

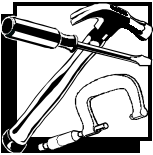
1. Steam system must be shutdown so that no pressure is built up on the controller valves when performing the shutdown procedures.
2. Steam system must be built up so that the incoming pressure gage reads approximately 250 psi when performing startup procedures.
3. Steam system must be built up so that the first controller pressure gage reads approximately 100 psi when performing startup procedures.
4. The steam system must be built up so that the second controller pressure gage reads approximately 50 psi when performing startup procedures.

What The Learner Will Need

This section contains the safety information, tools, and resources you will need before performing startup/shutdown procedures.



- Follow all Caterpillar facility safety standards when performing this task.
- Shutting down steam requires lock and tag.
- Lift/man trucks (JLG) may be required to reach various steam components.
- Exercise extreme caution, steam temperatures can reach 406°F at 250 psi, starting up the steam pressure too fast can result in death.



- basic Maintenance Mechanic hand tools
- pipe wrenches
- packing glands 8" to 10" valves



- print, if available (plant pneumatic/steam layout)



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

Identify the various components and required pressures in the process and heating systems.

Practice Objective

The Trainer must agree that all components and pressures in the system are correctly identified.

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.

