

AC-03

MAINTENANCE MECHANIC TRAINING

TRAINER'S GUIDE

Duty AC: Rotary Actuators
AC-03: Replace Rotary Actuators

Issued 01/01/99

Instructions To The Trainer

1. The Learner will contact you when ready to practice replacing a rotary actuator.
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

Upon receiving a ticket to replace a rotary actuator, remove the original rotary actuator and install the replacement rotary actuator.

Task Standards

1. The replaced rotary actuator must function according to manufacturer's specifications, positioning the arm accurately, without looseness, and holding position without slippage.
2. All required safe practices must be demonstrated.

What The Learner Will Need

This section contains the safety information, tools, and resources you will need before replacing a rotary actuator.



- Follow all Caterpillar Facility Safety Standards when performing this task in the plant.
- The hydraulic source that powers the actuator must be locked out while the actuator is being removed and replaced.
- The Man Mate must be reduced to a Zero Mechanical State, with all pressure relieved, and all components either on the floor or securely blocked in position.
- A hoist is necessary to support the actuator as it is being removed and replaced; a jack is necessary to support the arm at the terminal device.



- air hose and nozzle
- hoist and sling
- jack or stand for the arm
- Maintenance Mechanic hand tools
- air-powered socket driver and extension



- none



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

You will designate a rotary actuator for replacing. During the practice the Learner will:

- Remove the rotary actuator.
- Install the rotary actuator.
- Test the installed rotary actuator.

You will observe the Learner removing, installing, and testing the rotary actuator to ensure that replacement task is preformed properly. The Learner is required to follow all the recommended safe practices.

Practice Objective

The replaced rotary actuator must function reliably, positioning the arm accurately, without looseness, and holding position without slippage. All safe 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.

