

AC-03

MAINTENANCE MECHANIC TRAINING

SKILL CHECK GUIDE

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

Issued 01/01/99

Rationale

This Skill Development Guide provides the knowledge a Learner needs to replace a rotary actuator. The Learner must be able to replace a rotary actuator.

Skill Check Set-Up

Identify a rotary actuator that requires replacement.

Provide 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 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



Skill Check

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

Needs
Mastered Practice

Safe Work Practices

- | | | |
|-------|-------|---|
| _____ | _____ | 1. Follow all Caterpillar Facility Safety Standards when performing this task in the plant. |
| _____ | _____ | 2. The hydraulic source that powers the actuator must be locked out while the actuator is being removed and replaced. |
| _____ | _____ | 3. 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. |
| _____ | _____ | 4. 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. |

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. |



Evaluator's Sign-Off

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

Evaluator: _____ Date: _____

Learner: _____ Clock No: _____

