



Australian Government

**Assessment Requirements for AURKTD002
Diagnose and repair mobile plant steering
systems**

Release: 1

Assessment Requirements for AURKTD002 Diagnose and repair mobile plant steering systems

Modification History

Release	Comment
Release 1	New unit of competency.

Performance Evidence

Before competency can be determined, individuals must demonstrate they can perform the following according to the standards defined in this unit's elements, performance criteria, range of conditions and foundation skills:

- diagnose and repair a fault in three mobile plant steering systems as follows:
 - one articulated steering system
 - two of the following systems:
 - front wheel steering
 - all wheel steering
 - differential steer
 - steering clutch and brake
- inspect and charge one accumulator according to manufacturer specifications and relevant Australian standards.

Knowledge Evidence

Individuals must be able to demonstrate knowledge of:

- work health and safety (WHS) and occupational health and safety (OHS) requirements relating to diagnosing and repairing mobile plant steering systems, including procedures for:
 - isolating and locking articulated steering systems
 - isolating and stabilising machines
 - working with stored fluid pressures from accumulators
 - working with high pressure fluid hazards
 - using lifting, jacking and supporting equipment
- environmental requirements, including procedures for trapping, storing and disposing of hydraulic fluid released from steering systems

- operating principles of mobile plant steering systems and associated components, including full hydraulic steering and:
 - safety protection valves in the circuits
 - hand metering units (HMUs) and flow amplifier
 - hydraulic and electrohydraulic control
 - accumulator steering circuit
- application, purpose and operation of mobile plant steering systems and components, including:
 - articulated steering
 - front wheel steering
 - all wheel steering
 - differential steer
 - steering clutch and brake
- identification, function and adjustment of toe-in and toe-out steering angles
- diagnostic testing procedures for mobile plant steering systems, including:
 - pressure and flow testing the system and individual components
 - accumulator tests
 - HMU and flow amplifier tests
 - testing the pressure settings on all safety protection valves in the circuit
- repair and adjustment procedures for mobile plant steering systems, including:
 - accumulator inspection and charging procedures that reflect manufacturer specifications and Australian standards
 - pressure settings and adjustment procedures for main and safety protection valves in the steering circuit
- post-repair testing procedures for mobile plant steering systems.

Assessment Conditions

Assessors must satisfy NVR/AQTF assessor requirements.

Competency is to be assessed in the workplace or a simulated environment that accurately reflects performance in a real workplace setting.

Assessment must include direct observation of tasks.

Where assessment of competency includes third-party evidence, individuals must provide evidence that links them to the mobile plant steering systems that they have worked on, e.g. repair orders.

Assessors must verify performance evidence through questioning on skills and knowledge to ensure correct interpretation and application.

The following resources must be made available:

- automotive repair workplace or simulated workplace
- workplace instructions
- manufacturer mobile plant steering system specifications

- three different mobile plant steering systems specified in the performance evidence with system faults
- diagnostic equipment for mobile plant steering systems
- tools, equipment and materials appropriate for repairing and adjusting mobile plant steering systems.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=b4278d82-d487-4070-a8c4-78045ec695b1>

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