



Australian Government

Assessment Requirements for AURKTD102 Diagnose and repair mobile plant steering systems

Release: 1

Assessment Requirements for AURKTD102 Diagnose and repair mobile plant steering systems

Modification History

Release	Comments
Release 1	This version first released with AUR Automotive Retail, Service and Repair Training Package Version 6.0

Performance Evidence

The candidate must demonstrate the ability to complete the tasks outlined in the elements, performance criteria and foundation skills of this unit, including evidence of the ability to:

- diagnose and repair a fault in at least three mobile plant steering systems as follows:
 - at least one articulated steering system
 - at least 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

The candidate must be able to demonstrate knowledge to complete the tasks outlined in the elements, performance criteria and foundation skills of this unit, including knowledge of:

- methods to locate and interpret information required to diagnose and repair mobile plant steering systems, including:
 - information provided by customers and supervisors
 - manufacturer specifications and procedures or equivalent documentation
- workplace procedures required to diagnose and repair mobile plant steering systems, including:
 - establishing serviceability of tools and equipment
 - documentation procedures
 - housekeeping procedures, including:
 - examination of tools and equipment
 - storage of equipment

- identification, tagging and isolation of faulty equipment
- disposal of excess materials
- recycling procedures
- workplace health and safety (WHS) 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 relating to diagnosing and repairing mobile plant steering systems, 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
- 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

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.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volume Implementation Guide is found on VETNet -

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