



Australian Government

**Assessment Requirements for AURKTB103
Diagnose complex faults in mobile plant
braking systems**

Release: 1

Assessment Requirements for AURKTB103 Diagnose complex faults in mobile plant braking 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 a complex fault in the braking systems of at least three different pieces of mobile plant equipment
- in the course of the above work, develop a testing strategy to diagnose the cause of at least two of the following complex faults:
 - an intermittent fault
 - a fault that affects more than one system
 - a fault introduced as a result of a system repair
 - an indirect fault caused by the influence of external systems.

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 complex faults in mobile plant braking systems, including:
 - mobile plant braking system manufacturer specifications
- workplace procedures required to diagnose complex faults in mobile plant braking systems, including:
 - establishing the 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
 - safe disposal of materials

- recycling procedures
- workplace health and safety (WHS) requirements relating to diagnosing complex faults in mobile plant braking systems, including procedures for:
 - managing stored energy in springs and accumulators
 - working with high pressure fluid hazards
 - tagging out and isolating machines, and wheel chocking
- environmental requirements, including procedures for trapping, storing and disposing of hazardous materials and substances released from braking systems, including hydraulic fluid, brake fluid and brake fibres
- types of complex faults relating to mobile plant braking systems, including:
 - intermittent
 - multi-system
 - introduced as a result of system repair
 - indirect, caused by the influence of external systems
- types, functions and operation of mobile plant braking systems, including:
 - hydraulic pressurised
 - spring applied hydraulically released
 - braking systems, including:
 - multi-disc wet braking systems, including wheel end and inboard mounted
 - disc braking systems
 - parking brake systems
- testing procedures for mobile plant braking systems, including procedures for:
 - abnormal noise analysis
 - brake performance test
 - oil pressure and flow testing
 - accumulator pressure
 - component failure analysis
- types, and key features of diagnostic testing equipment required to diagnose complex faults in mobile plant braking systems
- procedures for accessing and interpreting scan tool system data, including:
 - diagnostic trouble codes (DTCs), including:
 - conditions that set the DTCs
 - conditions for running DTCs
 - live data
 - waveforms
 - mobile plant continuous and non-continuous monitored 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 braking 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 braking system specifications
- braking systems of three different mobile plant with complex faults
- mobile plant braking system diagnostic equipment, including:
 - scan tool
 - brake performance test equipment
 - oil pressure gauge
 - accumulator pressure gauge
 - component wear gauge
- tools, equipment and materials appropriate for diagnosing complex faults in mobile plant braking 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>