



Australian Government

**Assessment Requirements for AURKTX002
Analyse and evaluate faults in wheeled
mobile plant transmission and driveline
systems**

Release: 1

Assessment Requirements for AURKT002 Analyse and evaluate faults in wheeled mobile plant transmission and driveline 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:

- analyse and evaluate a fault in the:
 - transmission system of a wheeled mobile plant machine
 - driveline system of a different wheeled mobile plant machine
 - transmission or driveline system of a third wheeled mobile plant machine.

Knowledge Evidence

Individuals must be able to demonstrate knowledge of:

- work health and safety (WHS) and occupational health and safety (OHS) requirements relating to analysing and evaluating faults in wheeled mobile plant transmission and driveline systems, including procedures for tagging out and isolating machines
- environmental requirements, including procedures for trapping, storing and disposing of oils and fluids released from transmission and driveline systems
- principles and processes involved in planning and implementing analysis and evaluation of wheeled mobile plant transmission and driveline system faults
- design and planning of diagnostic procedures of wheeled mobile plant transmission and driveline system faults, including procedures for diagnosing:
 - hydraulic faults
 - mechanical faults
 - pneumatic faults
 - electrical faults
- procedures for analysing and evaluating wheeled mobile plant transmission and driveline system faults, including:

- system failure analysis
- component failure analysis
- types, functions, operation and limitations of the following systems:
 - transmission systems, including:
 - mechanical transmissions
 - power shift transmissions
 - automatic transmissions
 - continuously variable transmissions (CVTs)
 - driveline systems, including:
 - drive shafts
 - final drive assemblies
 - differential assemblies
- testing procedures for wheeled mobile plant transmission and driveline systems, including:
 - oil and pneumatic pressures
 - transmission performance
 - stall testing
 - powertrain management
 - driveline vibrations
 - sensor, actuator and wiring harness integrity
- types, functions, operation and limitations of diagnostic testing equipment required to analyse and evaluate faults in wheeled mobile plant transmission and driveline systems
- procedures for documenting and reporting the analysis and evaluation process.

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 wheeled mobile plant transmission and driveline 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 wheeled mobile plant transmission and driveline specifications
- three different wheeled mobile plant machinery with transmission and driveline system faults

- diagnostic equipment for wheeled mobile plant transmission and driveline systems
- tools, equipment and materials appropriate for analysing and evaluating wheeled mobile plant transmission and driveline 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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