



Australian Government

Assessment Requirements for AURJTE002

Diagnose complex faults in motorcycle engine and transmission systems

Release: 1

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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 a complex fault in the:
 - engine system of a motorcycle
 - manual transmission of a different motorcycle
 - automatic transmission or continuously variable transmission (CVT) of a third motorcycle
- the above diagnosis must involve two of the following types of 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

Individuals must be able to demonstrate knowledge of:

- work health and safety (WHS) and occupational health and safety (OHS) requirements relating to diagnosing complex faults in motorcycle engine and transmission systems, including procedures for lifting and supporting motorcycles
- environmental requirements, including procedures for trapping, storing and disposing of fluids released from engine and transmission systems
- types of complex faults relating to motorcycle engine and transmission systems, including:
 - intermittent
 - multi-system

- introduced as a result of system repair
- indirect, caused by the influence of external systems
- types, function and operation of motorcycle engine and transmission systems, including:
 - two and four-stroke air and liquid-cooled engines
 - manual transmissions
 - automatic transmissions
 - CVT
- testing procedures for motorcycle engine and transmission systems, including procedures for:
 - vehicle dynamic and static testing
 - abnormal noise analysis
 - component failure analysis
- types, functions, operation and limitations of diagnostic testing equipment required to diagnose complex faults in motorcycle engine and transmission 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
 - freeze frame data
 - waveforms
 - motorcycle continuous and non-continuous monitored systems
- methods and processes for documenting and reporting diagnostic findings and recommendations.

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 motorcycle engine and transmission 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 motorcycle engine and transmission system specifications
- three different motorcycles with complex faults in their engine and transmission systems

- motorcycle engine and transmission system diagnostic equipment
- tools, equipment and materials appropriate for diagnosing complex faults in motorcycle engine and transmission systems.

Links

Companion Volume implementation guides are found in VETNet -

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

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