



Australian Government

Assessment Requirements for AURJTA003 Analyse and evaluate 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:

- analyse and evaluate a fault in the:
 - engine system of a motorcycle
 - transmission system of a different motorcycle
 - engine or transmission system of a third motorcycle.

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 motorcycle engine and transmission systems, including procedures for:
 - lifting and supporting motorcycle engine and transmission systems
 - avoiding entanglement in chains, sprockets, belts and pulleys
- environmental requirements, including procedures for trapping, storing and disposing of fluids released from engine and transmission systems
- principles and processes involved in planning and implementing analysis and evaluation of motorcycle engine and transmission system faults
- design and planning of diagnostic procedures of motorcycle engine and transmission system faults, including procedures for diagnosing:
 - hydraulic faults
 - mechanical faults
 - electrical faults

- procedures for analysing and evaluating motorcycle engine and transmission system faults, including:
 - system failure analysis
 - component failure analysis
- types, functions, operation and limitations of motorcycle engines and components, including two-stroke and four-stroke engines
- types, functions, operation and limitations of motorcycle transmission systems and components, including:
 - continuously variable transmission (CVT)
 - dual clutch transmission
 - constant mesh transmission
 - dry, wet and centrifugal clutch
- operation and limitations of motorcycle driveline systems and components, including:
 - chain drive
 - belt drive
 - shaft drive
- testing procedures for motorcycle engine and transmission systems, including for engine performance under load
- types, functions, operation and limitations of diagnostic testing equipment required to analyse and evaluate faults in motorcycle engine and transmission systems
- procedures for documenting and reporting the analysis and evaluation process
- requirements of Australian Design Rules (ADRs) relating to motorcycle engine and transmission 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 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 faults in the engine and transmission systems
- diagnostic equipment for motorcycle engine and transmission systems

- tools, equipment and materials appropriate for analysing and evaluating motorcycle engine and transmission 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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