



Australian Government

Assessment Requirements for AURJTD005

Diagnose complex faults in motorcycle steering and suspension 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:
 - steering system of a motorcycle
 - suspension system of a different motorcycle
 - steering or suspension system of a third different 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 motorcycle steering and suspension systems, including procedures for:
 - lifting and supporting motorcycles
 - working with stored energy in springs
 - handling steering system bearing grease
- types of complex faults relating to motorcycle steering and suspension 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 steering and suspension systems, including:
 - telescopic forks, including:
 - fork tubes
 - gaiters
 - stanchions
 - triple clamps
 - steering dampers
 - upside down forks
 - anti-dive fork systems
 - trailing link fork suspension
 - leading link fork suspension, including:
 - springer fork
 - Earles fork
 - girder fork
 - Saxon-Motodd (telelever) fork
 - duolever front suspension (Hossack or Fior)
 - coaxial steering front suspension
 - non-fork front suspension, including hub centre steering
 - rear suspension, including:
 - twin shock swingarm
 - monoshock swingarm
 - monoshock single sided swingarm
 - rear monolever
 - rear paralever
 - steering angles, including:
 - wheelbase
 - trail
 - offset
 - rake angle
- testing procedures for motorcycle steering and suspension systems, including:
 - abnormal noise analysis
 - component failure analysis
- types, functions, operation and limitations of diagnostic testing equipment required to diagnose complex faults in motorcycle steering and suspension 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 steering and suspension 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 steering and suspension specifications
- three different motorcycles with complex faults in their steering and suspension systems
- diagnostic equipment for motorcycle steering and suspension systems
- tools, equipment and materials appropriate for diagnosing complex faults in motorcycle steering and suspension 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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