



Australian Government

Assessment Requirements for AURHTB006

Diagnose complex faults in heavy commercial vehicle braking 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 standard defined in this unit's elements, performance criteria, range of conditions and foundation skills:

- diagnose a complex fault in the following heavy commercial vehicle braking systems:
 - air braking system
 - air over hydraulic braking system
 - anti-lock braking system
- 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 heavy commercial vehicle braking systems, including procedures for:
 - working with stored energy, including pneumatic pressure and spring energy
 - handling and controlling brake dust and brake fluids
- 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 heavy commercial vehicle braking 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 heavy commercial vehicle braking systems, including:
 - air braking systems
 - hydraulic braking systems
 - air over hydraulic braking systems
 - anti-lock braking systems
- testing procedures for heavy commercial vehicle braking systems, including:
 - vehicle dynamic and static testing procedures
 - abnormal noise analysis
 - component failure analysis
- types, functions, operation and limitations of diagnostic testing equipment required to diagnose complex faults in heavy commercial vehicle 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
 - freeze frame data
 - waveforms
 - vehicle 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 heavy commercial vehicle 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 heavy commercial vehicle braking system specifications

- three different heavy commercial vehicles with complex faults in the braking systems specified in the performance evidence
- heavy commercial vehicle braking system diagnostic equipment, including:
 - pressure gauge
 - scan tool
- tools, equipment and materials appropriate for diagnosing complex faults in heavy commercial vehicle braking 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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