



Australian Government

Assessment Requirements for AURHTE001 Remove and install heavy vehicle engine assemblies

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:

- remove and install two heavy vehicle engines, in which the work must involve:
 - removing and refitting ancillary components and systems
 - adjusting oil and fluid levels
 - post-installation adjustments
 - post-installation testing.

Knowledge Evidence

Individuals must be able to demonstrate knowledge of:

- work health and safety (WHS) and occupational health and safety (OHS) requirements relating to removal and installation of heavy vehicle engines, including:
 - isolating and stabilising vehicle or machinery
 - using vehicle or machinery lifting devices and supporting equipment
 - working with compression ignition engines
- environmental requirements, including procedures for trapping, storing and disposing of oils, fluids, coolants and gases released during removal and installation of engine assemblies
- methods of disconnecting and reconnecting related systems, including:
 - air conditioning system
 - cooling system
 - electrical systems
 - exhaust system
 - fuel system

- power steering system
- hydraulic system
- transmission systems, including:
 - automatic transmission
 - manual transmission
- removal procedures for heavy vehicle engine assemblies, including:
 - correct use of engine lifting devices and supporting equipment
 - item tagging procedures
 - methods for correctly disposing of hazardous substances
- installation procedures for heavy vehicle engine assemblies
- post-installation testing and adjustment procedures for heavy vehicle engine assemblies, including:
 - engine pre-start procedures
 - operational testing and run-in procedures
 - engine adjustments and cylinder head bolt retensioning as required
 - throttle adjustments
 - coolant adjustments
 - ancillary engine 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 heavy vehicle engine assemblies that they have removed and installed, 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 engine specifications
- two different heavy vehicles requiring removal and installation of engine assemblies
- tools, equipment and materials appropriate for removing and replacing heavy vehicle engines, including engine lifting devices and supporting equipment.

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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