

Assessment Requirements for AURHTZ001 Diagnose and repair heavy vehicle emission control 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 and repair a fault in three of the following heavy vehicle emission control systems:
 - closed crankcase ventilation system
 - exhaust gas recirculation system
 - diesel engine particulate filter system
 - selective catalytic reduction system.

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 and repairing heavy vehicle emission control systems, including
 procedures for working safely with engines producing toxic emissions
- environmental requirements, including procedures for containing and disposing of emission control system fuels, fluids and components
- heavy vehicle emissions and their effects on the environment and health:
 - · carbon monoxide
 - oxides of nitrogen
 - ozone
 - · sulphur dioxide
 - particulate matter
 - hydrocarbons

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- application, purpose and operating principles of heavy vehicle emission control systems and components, including:
 - closed crankcase ventilation system
 - exhaust gas recirculation system
 - diesel engine particulate filter system
 - selective catalytic reduction system
 - catalytic converter system
- diagnostic testing procedures for heavy vehicle emission control systems, including:
 - closed crankcase ventilation system operation
 - · exhaust gas recirculation system operation
 - diesel engine particulate filter system operation
 - selective catalytic reduction system operation
 - catalytic converter system operation
 - exhaust gas analysis
- repair procedures for heavy vehicle emission control systems, including procedures for removing, replacing and adjusting the system components
- post-repair testing procedures for heavy vehicle emission control 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 emission control 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 vehicle emission control system specifications
- heavy vehicle engines with faults in the emission control systems specified in the performance evidence
- diagnostic equipment for testing heavy vehicle emission control systems
- tools, equipment and materials appropriate for repairing, replacing and adjusting heavy vehicle emission control systems.

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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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