



Australian Government

Assessment Requirements for AURHTZ101 Diagnose and repair heavy vehicle emission control systems

Release: 1

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Modification History

Release	Comments
Release 1	This version first released with AUR Automotive Retail, Service and Repair Training Package Version 6.0

Performance Evidence

The candidate must demonstrate the ability to complete the tasks outlined in the elements, performance criteria and foundation skills of this unit, including evidence of the ability to:

- diagnose and repair a fault in at least 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

The candidate must be able to demonstrate knowledge to complete the tasks outlined in the elements, performance criteria and foundation skills of this unit, including knowledge of:

- methods to locate and interpret information required to diagnose and repair heavy vehicle emission control systems, including:
 - information provided by customers and supervisors
 - manufacturer specifications and procedures or equivalent documentation
- workplace procedures required to diagnose and repair heavy vehicle emission control systems, including:
 - establishing serviceability of tools and equipment
 - documentation procedures
 - housekeeping procedures, including:
 - examination of tools and equipment
 - storage of equipment
 - identification, tagging and isolation of faulty equipment
 - disposal of excess materials
 - recycling procedures

- workplace health and safety (WHS) requirements relating to diagnosing and repairing heavy vehicle emission control systems, including procedures for working with vehicles that produce toxic emissions
- environmental requirements relating to diagnosing and repairing heavy vehicle emission control systems, 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
 - carbon dioxide
 - oxides of nitrogen
 - ozone
 - sulphur dioxide
 - particulate matter
 - hydrocarbons
- purpose and operation 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 procedures for testing:
 - 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
 - exhaust smoke 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

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.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volume Implementation Guide is found on VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=b4278d82-d487-4070-a8c4-78045ec695b1>