



Australian Government

Assessment Requirements for AURTTE104 Inspect and service engines

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:

- inspect and service the engines of a least two different vehicles or machinery, completing the following in the course of the above work:
 - inspecting a vehicle for oil and fluid leaks
 - reporting any identified abnormal engine noises
 - inspecting ancillary components
 - replacing engine oil and filters
 - starting up and running engine to operating temperature
 - checking for leaks.

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 inspect and service engines, including:
 - vehicle manufacturer specifications and procedures or equivalent documentation
- workplace procedures required to inspect and service engines, including:
 - establishing the 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 inspecting and servicing engines, including procedures for working with:
 - rotating and hot components
 - engine oils
 - high energy ignition and charging systems
 - high voltage injectors
 - lifting and supporting equipment, including pits
 - hoists, including:
 - two-point hoists
 - four-point hoists
 - jack hoists
 - procedures for daily inspection of hoist
 - environmental requirements relating to inspecting and servicing engines, including procedures for:
 - trapping, storing and disposing of fluids released from engines
 - identifying and handling oils and fluids
 - identification and function of major engine components, including:
 - cylinder block and head
 - piston and connecting rod
 - crankshaft
 - valve train
 - manifolds
 - ports and reed valve
 - identification and function of engine systems, including:
 - lubrication
 - cooling system
 - fuel system
 - air system
 - basic operation of spark ignition engines and compression ignition engines, including:
 - two-stroke spark ignition engines
 - four-stroke spark ignition engines
 - four-stroke compression ignition engines
 - types of engine configurations, including:
 - two-stroke spark ignition engines
 - four-stroke spark ignition engines
 - four-stroke compression ignition engines
 - types and applications of engine oils and filters
 - difference between mineral and synthetic fluids
 - inspection procedures for engines, including:
 - oil and fluid leaks
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- ancillary components, including:
 - mountings
 - belts, pulleys and hoses
- service and adjustment procedures for engines, including:
 - adjusting or replacing engine components
 - replacing oil
 - replacing filter
- post-service testing procedures for engines.

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 engines 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 engine specifications
- two different vehicles or machinery with engines requiring servicing
- tools, equipment and materials appropriate for inspecting and servicing engines.

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>
