

# Assessment Requirements for AURTTE004 Inspect and service engines

Release: 1

# Assessment Requirements for AURTTE004 Inspect and service engines

## **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:

• inspect and service the engines of two different vehicles or machinery, including replacing the engine oil and filters.

## **Knowledge Evidence**

Individuals must be able to demonstrate knowledge of:

- work health and safety (WHS) and occupational health and safety (OHS) requirements relating to inspecting and servicing engines, including procedures for working with:
  - · rotating and hot components
  - engine oils
  - high energy ignition and charging systems
- environmental requirements, including procedures for trapping, storing and disposing of fluids released from engines
- 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

Approved Page 2 of 4

- 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 and applications 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
- inspection procedures for engines, including:
  - oil and fluid leaks
  - 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

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 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.

Approved Page 3 of 4

#### Links

Companion Volume implementation guides are found in VETNet - <a href="https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=b4278d82-d487-4070-a8c4-78045ec695b1">https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=b4278d82-d487-4070-a8c4-78045ec695b1</a>

Companion Volume implementation guides are found in VETNet - <a href="https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=b4278d82-d487-4070-a8c4-78045ec695b1">https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=b4278d82-d487-4070-a8c4-78045ec695b1</a>

Approved Page 4 of 4