



Australian Government

Assessment Requirements for AURRTE003 Inspect and service marine inboard engines

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:

- inspect and service two different inboard engines, including one of the following:
 - four-stroke spark ignition inboard engine
 - four-stroke compression ignition inboard engine.

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 inboard engines, including procedures for identifying hazards and controlling risks associated with working with:
 - rotating components
 - hot components
 - engine oils and coolants
 - exhaust fumes
 - 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
 - camshaft and valves
 - manifolds

- identification and function of engine systems, including:
 - lubrication
 - cooling system
 - fuel system
- operating principles of inboard engines, including:
 - four-stroke spark ignition engines
 - four-stroke compression ignition engines
- types and applications of:
 - engine configurations
 - engine oils and filters
- inspection procedures for inboard engines, including:
 - oil and fluid leaks
 - ancillary components, including:
 - mountings
 - belts, pulleys and hoses
- service and adjustment procedures for inboard engines, including:
 - adjusting or replacing engine components
 - replacing oil
 - replacing filters
- post-service testing procedures for inboard engines, including procedures for:
 - running engine to operating temperature and checking cooling system operation
 - checking engine fluid and coolant levels
 - checking fuel system for leaks
 - checking for abnormal noises
 - checking operation of gauges and warning devices.

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 marine inboard 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:

- marine repair workplace or simulated workplace
- workplace instructions

- manufacturer inboard engine specifications
- two different inboard engines specified in the performance evidence and requiring servicing
- tools, equipment and materials appropriate for inspecting and servicing marine inboard engines.

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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