



**Australian Government**

# **Assessment Requirements for AURTTL005 Diagnose and repair LNG fuel systems**

**Release: 1**

# Assessment Requirements for AURTTL005 Diagnose and repair LNG fuel systems

## 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 two vehicles with different liquefied natural gas (LNG) fuel systems.

## 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 LNG fuel systems, including procedures for:
  - working with extremely cold and flammable gas
  - storing LNG
- environmental requirements, including procedures for preventing loss of gas to atmosphere
- key requirements of AS/NZ 2739 Natural gas (NG) fuel systems for vehicle engines
- operating principles of LNG fuel systems and associated components
- application, purpose and operation of LNG fuel systems and components, including:
  - mixers
  - regulators
  - fuel lock-off valves
  - filters
  - tanks
  - control valves and switches
- diagnostic testing procedures for LNG fuel systems, including:
  - mixers

- regulators
- fuel lock-off valves
- electronic control valves and switches
- repair procedures for LNG fuel systems, including procedures for removing, replacing and adjusting the systems
- post-repair testing procedures for LNG fuel 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 LNG fuel 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 LNG fuel system specifications
- AS/NZ 2739 Natural gas (NG) fuel systems for vehicle engines
- two vehicles with different LNG fuel systems with faults
- diagnostic equipment for LNG fuel systems, including exhaust gas analyser
- tools, equipment and materials appropriate for repairing LNG fuel systems.

## 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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