



**Australian Government**

**Assessment Requirements for AURETR004  
Diagnose complex faults in convenience and  
entertainment systems**

**Release: 1**

## Assessment Requirements for AURETR004 Diagnose complex faults in convenience and entertainment 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 standard defined in this unit's elements, performance criteria, range of conditions and foundation skills:

- diagnose a complex fault in the convenience and entertainment systems of two different vehicles, vessels or machinery
- the above diagnosis must involve two of the following types of complex faults:
  - an intermittent fault
  - a fault that affects more than one system
  - a fault introduced as a result of a system repair
  - an indirect fault caused by the influence of external 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 complex faults in vehicle convenience and entertainment systems, including procedures for identifying hazards and controlling risks associated with:
  - working around vehicle supplementary restraint systems (SRS), including airbags
  - wearing jewellery while working around high electrical currents
- types of complex faults relating to vehicle convenience and entertainment systems, including:
  - intermittent
  - multi-system
  - introduced as a result of system repair
  - indirect, caused by the influence of external systems

- methods for locating and content of manufacturer specifications, workplace procedures, and other technical information relating to vehicle, vessel or machinery convenience and entertainment systems
- types, function and operation of convenience and entertainment systems in vehicles, vessels or machinery, including:
  - infotainment systems
  - telematics systems
  - intelligent transport systems
  - safety restraint systems
  - passenger comfort systems
- testing procedures for vehicle convenience and entertainment systems, including:
  - using digital multimeter, scan tool and oscilloscope
  - component wear analysis
  - system operation analysis
  - vehicle continuous and non-continuous monitored systems
- types, functions, operation and limitations of diagnostic testing equipment required to diagnose complex faults in vehicle convenience and entertainment systems
- procedures for accessing and interpreting scan tool system data, including:
  - diagnostic trouble codes (DTCs), including:
    - conditions that set the DTCs
    - conditions for running DTCs
  - live data
  - freeze frame data
  - waveforms
- methods and processes for documenting and reporting diagnostic findings and recommendation.

## 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 convenience and entertainment 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 convenience and entertainment system specifications
- two different vehicles, vessels or machinery with complex faults in their convenience and entertainment systems
- convenience and entertainment system electrical and electronic system diagnostic equipment, including:
  - digital multimeter
  - scan tool
- tools, equipment and materials appropriate for diagnosing complex faults in convenience and entertainment systems.

## **Links**

Companion Volume implementation guides are found in VETNet -

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

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