



**Australian Government**

# **Assessment Requirements for AURTTA026**

## **Diagnose complex faults in electronic over hydraulic systems**

**Release: 1**

# Assessment Requirements for AURTTA026 Diagnose complex faults in electronic over hydraulic 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 a complex fault in three different electronic over hydraulic systems
- 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 electronic over hydraulic systems, including procedures for working with high pressure fluid systems
- environmental requirements, including procedures for trapping, storing and disposing of fluids released from hydraulic systems
- types of complex faults relating to electronic over hydraulic systems, including:
  - intermittent
  - multi-system
  - introduced as a result of system repair
  - indirect, caused by the influence of external systems
- types, functions, operation and limitations of electronic over hydraulic systems and components, including:
  - input sensors

- output actuators
- computer systems
- testing procedures for different electronic over hydraulic systems, including:
  - electronic control analysis
  - component wear analysis
  - system operation analysis
- types, functions, operation and limitations of diagnostic testing equipment required to diagnose complex faults in different electronic over hydraulic systems, including:
  - scan tools
  - vacuum gauges
  - oil pressure gauges
- 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
  - vehicle continuous and non-continuous monitored systems
- methods and processes for documenting and reporting diagnostic findings and recommendations.

## 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 electronic over hydraulic 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 electronic over hydraulic system specifications
- three different electronic over hydraulic systems with complex faults
- electronic over hydraulic system diagnostic equipment, including:
  - scan tool

- vacuum gauge
- oil pressure gauge
- tools, equipment and materials appropriate for diagnosing complex faults in electronic over hydraulic 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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