



Australian Government

**Assessment Requirements for AURETR043
Diagnose and repair electronic body
management systems**

Release: 1

Assessment Requirements for AURETR043 Diagnose and repair electronic body management 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 the unit's elements and performance criteria, range of conditions and foundation skills:

- diagnose and repair a fault in two of the following electronic body management systems of vehicles, vessels or machinery:
 - entry and exit systems, which must include:
 - power door lock circuit
 - key coding to vehicle
 - anti-theft immobilisation circuit
 - power window system
 - lighting system
 - navigation system
 - infotainment system
 - passenger comfort system.

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 electronic body management systems, including procedures for:
 - using specialised tools and equipment
 - using appropriate personal protective equipment (PPE)
 - identifying hazards and controlling risks associated with wearing jewellery while working around high current wiring systems

- electronic body management system principles, including types of electronic body management systems
- application, purpose and operation of electronic body management systems and components, including:
 - entry and exit systems, including:
 - power door lock circuits
 - key coding to vehicles
 - anti-theft immobilisation circuits
 - power window systems
 - lighting systems
 - navigation systems
 - infotainment systems
 - passenger comfort systems
- diagnostic testing procedures for electronic body management systems, including:
 - accessing and interpreting scan tool system data, including:
 - diagnostic trouble codes (DTCs)
 - live data
 - freeze frame data
 - waveforms
 - using diagnostic flow charts
- testing electrical systems, including procedures for:
 - accessing electrical terminals and using test probes without damaging connectors, fuse holders or wiring
 - resistance and voltage drop tests
 - open and short circuit tests
 - checking shorts to signal, power circuits and grounds
- repair procedures for electronic body management systems, including procedures for removing and replacing system components
- post-repair testing procedures for electronic body management systems, including:
 - DTC clearing procedures
 - static and dynamic performance tests of electronic body management 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 electronic body management 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 body management system specifications
- vehicles, vessels or machinery with electronic body management system faults
- diagnostic equipment for body management systems, including:
 - multimeter
 - scan tool
- tools, equipment and materials appropriate for repairing vehicle, vessel or machinery electronic body management systems.

Links

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

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