



**Australian Government**

**Assessment Requirements for AURETR143  
Diagnose and repair electronic body  
management systems**

**Release: 1**

# Assessment Requirements for AURETR143 Diagnose and repair electronic body management systems

## Modification History

Release	Comments
Release 1	This version first released with AUR Automotive Retail, Service and Repair Training Package Version 6.0

## Performance Evidence

The candidate must demonstrate the ability to complete the tasks outlined in the elements, performance criteria and foundation skills of this unit, including evidence of the ability to:

- diagnose and repair a fault in at least 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
  - supplemental restraint system (SRS) air bag
- carry out a diagnostic test in the course of the above for at least one of the following faults:
  - high resistance in an input system
  - damaged connectors or wiring
  - shorted or worn system components.

## Knowledge Evidence

The candidate must be able to demonstrate knowledge to complete the tasks outlined in the elements, performance criteria and foundation skills of this unit, including knowledge of:

- methods to locate and interpret information required to diagnose and repair electronic body management systems, including:
  - information provided by customers and supervisors

- manufacturer specifications and procedures or equivalent documentation
- workplace procedures required to diagnose and repair electronic body management systems, including:
  - establishing serviceability of tools and equipment
  - documentation procedures
  - housekeeping procedures, including:
    - examination of tools and equipment
    - storage of equipment
    - identification, tagging and isolation of faulty equipment
    - disposal of excess materials
    - recycling procedures
- workplace health and safety (WHS) 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
  - disarming vehicle airbag and safety restraint systems, including:
    - airbag construction
    - safe testing
    - safe deployment
    - safe disposal
- operating principles of electronic body management systems and associated components, including types of electronic body management systems
- 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
    - 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

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.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

## Links

Companion Volume Implementation Guide is found on VETNet -

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