



**Australian Government**

# **Assessment Requirements for AURETH101 Depower and reinitialise battery electric vehicles**

**Release: 1**

# Assessment Requirements for AURETH101 Depower and reinitialise battery electric vehicles

## 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:

- safely depower the rechargeable energy storage system (RESS) and separated extra low voltage (SELV) system of two different battery electric vehicles (BEVs), and stabilise the vehicles ensuring that no residual high voltage (HV) is measured
- safely reinitialise each BEV's RESS and SELV system and confirm correct vehicle operation.

## 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 depower and reinitialise battery electric vehicles, including:
  - vehicle manufacturer specifications and procedures or equivalent documentation
- workplace procedures required to depower and reinitialise battery electric vehicles, including:
  - establishing the 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
- work health and safety (WHS) requirements relating to depowering and reinitialising BEVs, including procedures for:
  - identifying hazards and controlling risks associated with:

- working with high voltages on BEV electrical systems
- wearing jewellery while working around high electrical currents
- determining appropriate procedures for minimising risk associated with hazards, including applying electrical safety precautions when:
  - using personal protective equipment (PPE), including electrical safety gloves with 1000 volt rating and Australian standards rated HV insulating mat
  - identifying and using firefighting equipment as appropriate
  - using the 'one hand' rule
  - following live system warning tags and signs
  - depowering vehicle
  - isolating HV RESS electrical supply
  - stabilising vehicle electrical system
- requirements of AS 5732 Electric vehicle operations - Maintenance and repair
- operating principles of RESS and SELV electrical systems relevant to a range of BEVs
- purpose and operation of a range of vehicle RESS depowering and reinitialising methods.

## 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 BEVs that they have depowered and reinitialised 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
- PPE and safety equipment, including electrical safety gloves with 1000 volt rating and Australian standards rated HV insulating mat
- manufacturer specifications and service procedures for the BEVs being depowered and reinitialised
- AS 5732 Electric vehicle operations - Maintenance and repair
- two different BEVs as specified in the performance evidence
- electrical test equipment, including:
  - digital multimeter with Cat III 1000 volt rating
  - insulation tester
  - residual voltage tester, if specified in original equipment manufacturer (OEM) test requirements
  - scan tool
- tools, equipment and materials appropriate for depowering and reinitialising BEVs.

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>