



Australian Government

Assessment Requirements for AURETR115 Inspect, test and service batteries

Release: 1

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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:

- inspect, test and service the batteries of three different vehicles, vessels or machinery, in which the work must involve one maintenance-free battery.

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 inspect, test and service batteries, including:
 - vehicle manufacturer specifications and procedures or equivalent documentation
 - battery manufacturer specifications
- workplace procedures required to inspect, test and service batteries, including:
 - inspecting, testing, servicing and post-service testing batteries
 - 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
- workplace health and safety (WHS) requirements relating to inspecting, testing and servicing batteries, including procedures for:
 - selecting and using personal protective equipment (PPE), including clothing, and eye and hand protection

- identifying a hybrid vehicle
- identifying a battery electric vehicle
- working with high current electrical systems
- manually handling batteries and toxic and corrosive substances
- conducting risk assessments of battery, vehicle and equipment movement before carrying out work
- working safely when using battery testing equipment
- environmental requirements, including procedures:
 - found in safety data sheets (SDS) relating to toxic and corrosive substances
 - for recycling and disposing of replaced batteries
- tools, equipment and materials relating to inspecting, testing and servicing batteries, including:
 - battery load testing device
 - multimeter
 - battery cleaning materials
- basic operating principles of batteries, including:
 - using chemical energy to produce electrical energy
 - the difference between voltage and current
- types of automotive batteries, including:
 - lead acid batteries
 - deep cycle batteries
 - maintenance-free batteries
 - gel batteries
 - absorbed glass mat batteries
 - calcium batteries
 - lithium ion and lithium ion phosphate batteries
- battery classifications, including:
 - reserve capacity
 - amp hour rating
 - cold cranking amps
- battery specifications and measurements, including:
 - battery-specific gravity measurements
 - cold cranking amp (CCA) measurements
- battery connection methods for 6 volt, 12 volt, 24 volt and 48 volt, including:
 - series
 - parallel
 - series parallel
- inspection and testing procedures for batteries, including:
 - terminals and leads
 - battery securing system

- testing battery with load testing devices
- testing battery with a hydrometer
- battery memory retention
- servicing procedures for batteries, including:
 - cleaning battery and battery compartments
 - topping up battery fluid
- post-service testing procedures, including confirming that battery is serviceable and operating to manufacturer specifications.

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 batteries that they have inspected, tested and serviced, 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 battery specifications
- PPE, including clothing, and eye and hand protection
- three different vehicles, vessels or machinery with batteries as specified in the performance evidence requiring servicing
- tools, equipment and materials appropriate for inspecting, testing and servicing batteries, including battery load testing devices, multimeters and cleaning materials.

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>