Assessment Requirements for AURETR015
Inspect, test and service batteries
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Modification History

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<th>Release</th>
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<td>Release 1</td>
<td>New unit of competency.</td>
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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, performance criteria, range of conditions and foundation skills:

- 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

Individuals must be able to demonstrate knowledge of:

- work health and safety (WHS) and occupational health and safety (OHS) 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
  - 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
  - basic operating principles of batteries, including using chemical energy to produce electrical energy
  - 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 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

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 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.

Links

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

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