



Australian Government

Assessment Requirements for AURBTR101 Inspect and service electric power-assisted bicycles

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 and service at least three different electric power-assisted bicycles in which the work for each bicycle involves:
 - battery testing and charging
 - checking operation of controller
 - checking wiring
 - checking connectors at motor plug
 - testing brake cut-outs, throttle and pedal assist sensor (PAS).

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:

- work health and safety (WHS) requirements relating to inspecting and servicing electric power-assisted bicycles, including procedures for:
 - manually handling bicycles
 - identifying workplace hazards
 - using tools and equipment, including personal protective equipment (PPE)
- environmental requirements, including procedures for disposing of waste materials
- electric power-assisted bicycle terminology
- operating principles of electric power-assisted bicycles, including:
 - throttle response
 - power and performance
 - pedal assist function
 - throttle function

- function of electric power-assisted bicycle components specified in the range of conditions
- types and use of tools and equipment used to inspect and service electric power-assisted bicycles
- techniques and processes for inspecting and servicing electric power-assisted bicycles, including:
- identification of electric power-assisted bicycle components and specifications, including:
 - hub motor
 - motor connectors and plugs
 - electric controllers
 - battery
 - selection and checking of personal protective equipment
 - fault identification
- bicycle measuring techniques
 - adjustment techniques
 - battery testing and charging
 - checking operation of controller, wiring, and connectors at motor plug
 - testing procedures, including:
 - brake cut-outs
 - throttle
 - pedal assist sensor
- servicing options, including:
 - on- and off-site servicing
 - servicing and adjusting components
 - upgrading components.

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 electric power-assisted bicycles that they have serviced, e.g. service 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:

- bicycle workplace or simulated workplace, including location to test bicycles
- workplace instructions detailing job requirements
- workplace procedures relating to the service of electric power-assisted bicycles
- electric power-assisted bicycle manufacturer specifications

- PPE required to service electric power-assisted bicycles
- three different electric power-assisted bicycles requiring service and maintenance
- tools and equipment appropriate for servicing electric power-assisted bicycles.

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>