



Australian Government

AURETR147 Recharge vehicle batteries

Release: 1

AURETR147 Recharge vehicle batteries

Modification History

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

Application

This unit describes the skills and knowledge required to recharge a vehicle battery. It involves preparing for the task, investigating battery types and connections, inspecting, testing and charging batteries; and completing work processes and documentation.

The unit applies to those undertaking a Vocational Education and Training in Schools (VETiS) or pre-vocational qualification as preparation to entering the automotive service and repair or automotive manufacturing industry.

The unit is designed for use in a highly supervised context.

No licensing, legislative, regulatory or certification requirements apply to this unit at the time of publication.

Unit Sector

Electrical Technical – Electrical and Electronics

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare to recharge battery	1.1 Identify task requirements from task instructions, including vehicle battery to be worked on 1.2 Obtain and interpret technical information and safe operating procedures for battery recharging 1.3 Identify potential hazards and risks associated with the task according to workplace health and safety and environmental requirements and report to workplace supervisor 1.4 Implement control measures in line with workplace policies and procedures 1.5 Identify tools and equipment required for battery removal

ELEMENT	PERFORMANCE CRITERIA
	and refitting and establish serviceability according to manufacturer specifications, workplace procedures and workplace health and safety and environmental requirements
2. Determine battery serviceability	2.1 Clean battery and prepare for inspection and testing according to manufacturer specifications, workplace procedures and workplace health and safety and environmental requirements 2.2 Inspect and test battery according to manufacturer specifications, workplace procedures, and workplace health and safety and environmental requirements 2.3 Record battery condition, serviceability and issues requiring further exploration according to workplace procedures
3. Charge battery	3.1 Identify tools and equipment required for battery charging and establish serviceability according to manufacturer specifications, workplace procedures and workplace health and safety and environmental requirements 3.2 Charge battery according to manufacturer specifications, workplace procedures and workplace health and safety and environmental requirements 3.3 Check post-charging condition of battery and serviceability according to manufacturer specifications and workplace procedures 3.4 Record battery condition, serviceability and issues requiring further exploration according to workplace procedures
4. Complete work processes	4.1 Conduct final inspection according to workplace procedures and confirm vehicle is ready for use 4.2 Clear work area and dispose of or recycle materials according to workplace procedures 4.3 Complete documentation according to workplace procedures.

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential to performance but not explicit in the performance criteria.

SKILL	DESCRIPTION
Learning	Locates required sources of information efficiently
Reading	Selects and interprets key information from manufacturer specifications, workplace health and safety requirements and

SKILL	DESCRIPTION
	- workplace procedures relating to recharging vehicle batteries - Selects and interprets key information from environmental requirements and workplace procedures to ensure a clean and safe work site
Oral communication	Participates effectively in verbal exchanges using questioning and active listening to request, clarify and clearly convey information
Numeracy	- Interprets numerical information in battery identification codes and ratings - Uses mathematical operations, to calculate appropriate charge rates - Interprets electrical test equipment, including voltmeters and hydrometers, and reports and records the results using relevant mathematical symbols and conventions (e.g. V for volts)
Planning and organising	- Plans own work requirements - Prioritises actions to achieve required outcomes
Self-management	Recognises own limitations when selecting and using tools and equipment and seeks timely advice
Problem-solving	Refers problems that cannot be readily resolved and seeks assistance from workplace supervisor
Technology	Sets up and operates specialised equipment and tools.

Unit Mapping Information

Supersedes and is equivalent to AURETR047 Recharge vehicle batteries.

Links

Companion Volume Implementation Guide is found on VETNet -

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

Assessment Requirements for AURETR147 Recharge vehicle batteries

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:

- recharge at least two automotive batteries with different cold-cranking amp (CCA) ratings.

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 remove and refit vehicle batteries, including:
 - battery and vehicle manufacturer specifications
 - safety data sheets (SDS)
- workplace procedures required to recharge vehicle batteries, including:
 - battery inspection and testing procedures, including:
 - visual checks
 - hydrometers
 - high-rate discharge testers
 - resting battery voltage
 - battery charging procedures, including:
 - methods for determining charging rate, including reserve capacity (RC) and CCA methods
 - 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
- key aspects of workplace health and safety (WHS) and environmental requirements, including:
 - selecting and using personal protective equipment (PPE), including safety glasses, ear protection and safety footwear
 - dangers of working with battery testing and charging equipment
 - procedures for handling, storing and disposing of automotive batteries and battery fluid
- key features and operating procedures for automotive battery chargers.

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 vehicles where they have recharged batteries, 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 workplace or simulated workplace
- personal protective equipment appropriate to the workplace
- two lead-acid automotive batteries with different CCA ratings
- battery testing equipment, including hydrometer and high-rate discharge tester
- battery charger
- automotive hand tools.

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>