



Australian Government

AURETR046 Remove and refit vehicle batteries

Release: 2

AURETR046 Remove and refit vehicle batteries

Modification History

Release	Comment
Release 1	New unit of competency
Release 2	Minor typographical errors corrected

Application

This unit describes the performance outcomes required to remove and refit lead-acid batteries from a vehicle. It requires the learner to plan and prepare the task; investigate battery types and connections; perform the task; and maintain the work area, tools and equipment.

It 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 and is not suitable for use in a vocational qualification.

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

Competency Field

Electrical

Unit Sector

Technical - Electrical and Electronic

Elements and Performance Criteria

Element	Performance Criteria
Elements describe the essential outcomes.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold and italicised text is used, further information is detailed in the range of conditions section.

Element Elements describe the essential outcomes.	Performance Criteria Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold and italicised text is used, further information is detailed in the range of conditions section.
1. Prepare to remove and refit battery	1.1 <i>Safety and environmental requirements</i> are sourced and interpreted 1.2 Task instruction is interpreted and vehicle battery to be worked on is identified 1.3 Manufacturer specifications and workplace procedures for battery removal and refitting are sourced and interpreted 1.4 Potential hazards and risks associated with task are identified and reported to workplace supervisor 1.5 Tools and equipment required for battery removal and refitting are identified according to manufacturer specifications
2. Remove battery	2.1 Tools, equipment and materials are selected and checked prior to use according to manufacturer specifications and safety requirements 2.2 Vehicle is prepared for battery removal according to workplace procedures and safety and environmental requirements 2.3 <i>Battery</i> is removed according to workplace procedures and manufacturer specifications, and without causing damage to components, tools or equipment 2.4 Battery is identified and inspected according to manufacturer specifications 2.5 Battery inspection results are recorded
3. Refit battery	3.1 Battery is refitted according to workplace procedures, manufacturer specifications and safety requirements, and without causing damage to components, tools or equipment 3.2 Vehicle is checked for correct electrical operation
4. Complete work processes	4.1 Final inspection is made to ensure work meets task instruction and workplace standards, and vehicle is presented ready for use or storage according to workplace procedures 4.2 Work area is cleaned, waste and non-recyclable materials are disposed of, and recyclable material is collected and stored according to environmental requirements and workplace procedures 4.3 Tools and equipment are checked and stored according to workplace procedures, or tagged and reported where necessary 4.4 Workplace documentation is processed according to workplace procedures

Foundation Skills

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

Skills	Description
Learning skills to:	locate appropriate sources of vehicle battery information and battery removal and refitting procedures.
Reading skills to:	- select and interpret key information from manufacturer specifications, safety requirements and workplace procedures to safely remove and refit batteries - select and interpret key information from environmental requirements and workplace procedures to ensure a clean and safe work site.
Writing skills to:	legibly and accurately fill out workplace documentation using correct industry terminology and conventions.
Oral communication skills to:	participate effectively in verbal exchanges using questioning and active listening to request, clarify and clearly convey information.
Numeracy skills to:	read and interpret numerical information imbedded in battery identification codes.
Planning and organising skills to:	plan own work requirements and prioritise actions to achieve required outcomes.
Self-management skills to:	recognise own limitations when selecting and using tools and equipment and seek timely advice.
Problem-solving skills to:	refer problems that cannot be readily resolved and seek assistance from workplace supervisor.
Technology skills to:	set up and operate equipment and tools required to remove and refit batteries.

Range of Conditions

This section specifies work environments and conditions that may affect performance.

Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included. Bold italicised wording, if used in the performance criteria, is detailed below.

<i>Safety and environmental requirements</i> must include:	- information about key aspects of work health and safety (WHS), occupational health and safety (OHS) and environmental requirements, including: - use of personal protective equipment, including safety glasses, ear protection and safety footwear
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	• use of hand tools and lifting equipment • application of procedures for handling, storing and disposing of automotive batteries.
Battery must include:	• lead-acid battery.

Unit Mapping Information

No equivalent unit.

Links

Companion Volume implementation guides are found in VETNet -

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

Assessment Requirements for AURETR046 Remove and refit vehicle batteries

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Performance Evidence

Before competency can be determined, individuals must demonstrate they can perform the following according to the standards defined in this unit's elements, performance criteria, range of conditions and foundation skills:

- correctly remove and refit the automotive batteries of a minimum of two different operational vehicles.

Knowledge Evidence

Individuals must be able to demonstrate knowledge of:

- key aspects of work health and safety (WHS), occupational health and safety (OHS) and environmental requirements when removing and refitting batteries, including:
 - safety data sheets (SDS) and procedures for handling, storing and disposing of used automotive batteries
 - use of personal protective equipment, including safety glasses, ear protection and safety footwear
 - use of hand tools and lifting equipment
- battery types and their application, including:
 - lead-acid batteries, including:
 - deep cycle batteries
 - maintenance-free batteries, including gel batteries and absorbed glass mat batteries
 - lithium-ion batteries
- battery identification procedures
- battery polarity and connection methods
- battery removal and refitting methods, precautions and procedures
- battery cleaning methods
- post-fitting inspection procedures

- work area clean-up and maintenance requirements.

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.

Where assessment of competency includes third-party evidence, individuals must provide evidence that links them to the vehicles where they have removed and refitted 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 operational vehicles with lead-acid batteries
- hand tools for removing and refitting lead-acid batteries.

Links

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