



Australian Government

Department of Education, Employment and Workplace Relations

AURE218670A Service, maintain or replace batteries

Release: 1

AURE218670A Service, maintain or replace batteries

Modification History

Not Applicable

Unit Descriptor

Unit descriptor	This unit covers the competence to inspect, service, maintain or remove and replace batteries.
------------------------	--

Application of the Unit

Application of the unit	<p>The unit includes identification and confirmation of work requirements, preparation for work, testing of batteries, analysis of test results, servicing and maintenance of batteries and completion of work finalisation processes, including clean-up and documentation.</p> <p>Work involved includes all vehicles and equipment.</p> <p>Work requires individuals to demonstrate some judgement and problem-solving skills in managing own work activities and contributing to a productive team environment.</p> <p>Work is carried out in accordance award provisions.</p>
--------------------------------	--

Licensing/Regulatory Information

Not Applicable

Pre-Requisites

Prerequisite units		

Employability Skills Information

Employability skills	This unit contains employability skills.
-----------------------------	--

Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
---	--

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Prepare to inspect battery	1.1. Nature and scope of work requirements are identified and confirmed 1.2. OHS requirements, including individual state/territory regulatory requirements and personal protection needs are observed throughout the work 1.3. Procedures and information such as workshop manuals and specifications, and tooling are sourced 1.4. Method options are analysed and those most appropriate to the circumstances are selected and prepared 1.5. Technical and/or calibration requirements for testing batteries are sourced and support equipment is identified and prepared 1.6. Warnings in relation to working with batteries are observed
2. Conduct battery test	2.1. Methods for the conduct of tests are implemented in accordance with workplace procedures and manufacturer/component supplier specifications 2.2. Test results are compared with manufacturer/component supplier specifications to indicate compliance or non-compliance 2.3. Results are documented with evidence and supporting information and recommendations made 2.4. Report is forwarded to persons for action in accordance with workplace procedures
3. Service batteries	3.1. Information for servicing is accessed from manufacturer/ component supplier specifications and correctly interpreted 3.2. Material, components, tooling and equipment to complete work are identified, selected and prepared in accordance with site procedures 3.3. Electrolyte levels are checked and topped up in accordance with site procedures 3.4. Batteries and terminals are cleaned in accordance with site procedures
4. Remove and replace battery	4.1. Procedures and information are identified and sourced 4.2. Technical and tool requirements for removal and replacement are identified and support equipment is identified and prepared

ELEMENT	PERFORMANCE CRITERIA
	<p>4.3. Methods for the conduct of removal and replacement are implemented in accordance with workplace procedures and manufacturer/component supplier specifications</p> <p>4.4. All adjustments made during the replacement are in accordance with manufacturer/component supplier specifications</p>
5. Prepare vehicle/equipment for delivery to customer and/or storage	<p>5.1. Work/schedule documentation is completed</p> <p>5.2. Final inspection is made to ensure protective guards, safety features and cowlings are in place</p> <p>5.3. Final inspection is made to ensure work is to workplace expectations</p> <p>5.4. Vehicle/equipment is cleaned and/or stored to workplace expectations</p> <p>5.5. Job card is completed and delivered to appropriate persons</p>

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

Required skills

- research and interpretive skills sufficient to locate, interpret and apply manufacturer/component supplier procedures, workplace policies and procedures
- analytical skills for identification and analysis of technical information
- communicate ideas and information
- plain English literacy and communication skills in relation to dealing with customers and team members
- questioning and active listening skills for example when obtaining information from customers
- oral communication skills sufficient to convey information and concepts to customers
- plan and organise activities for own work activities, including making good use of time and resources, sorting out priorities and monitoring one's own performance
- interact effectively with other persons both on a one-to-one basis and in groups, including understanding and responding to the needs of a customer and working effectively as a member of a team to achieve a shared goal
- use mathematical ideas and techniques to correctly calculate time, assess

REQUIRED SKILLS AND KNOWLEDGE

tolerances, apply accurate measurements, calculate material requirements and establish quality checks

- establish safe and effective work processes which anticipate and/or resolve problems and downtime, to systematically develop solutions, to avoid or minimise reworking and avoid wastage
- use workplace technology related to servicing, maintenance and replacement of batteries, including use of specialist tooling, measuring equipment and communication devices and the reporting/documenting of results

Required knowledge

A working knowledge of:

- OHS and environmental regulations/requirements, equipment, material and personal safety requirements
- dangers of working with battery testing equipment
- operating principles of batteries and chargers and their relationship to each other
- inspection procedures
- testing procedures
- enterprise quality procedures
- work organisation and planning processes

Evidence Guide

EVIDENCE GUIDE	
<p>The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.</p>	
Overview of assessment	
Critical aspects for assessment and evidence required to demonstrate competency in this unit	<p>It is essential that competence in this unit signifies ability to transfer competence to changing circumstances and to respond to unusual circumstances in the critical aspects of:</p> <ul style="list-style-type: none"> • observing safety procedures and requirements • communicating effectively with others involved in or affected by the work • selecting methods and techniques appropriate to the circumstances • completing preparatory activity in a systematic manner • accurately interpreting inspection results • testing carried out to manufacturer/component supplier requirements • testing carried out to manufacturer/component supplier requirements • conducting servicing, removal and replacement in accordance with workplace and manufacturer/component supplier requirements • completing work within workplace timeframes • vehicle/equipment presentation to customer in compliance with workplace requirements.
Context of, and specific resources for assessment	<p>Application of competence is to be assessed in the workplace or simulated worksite.</p> <p>Assessment is to occur using standard and authorised work practices, safety requirements and environmental constraints.</p> <p>Assessment is to comply with regulatory requirements, including Australian standards.</p> <p>The following resources should be made available:</p> <ul style="list-style-type: none"> • workplace location or simulated workplace • material relevant to servicing, maintenance or replacement of batteries • equipment, hand and power tooling appropriate to

EVIDENCE GUIDE	
	servicing, maintenance or replacement of batteries <ul style="list-style-type: none"> • activities covering mandatory task requirements • specifications and work instructions.
Method of assessment	<ul style="list-style-type: none"> • Assessment must satisfy the endorsed Assessment Guidelines of AUR05 Automotive Industry Retail, Service and Repair Training Package. • Assessment methods must confirm consistency and accuracy of performance together with application of underpinning knowledge. • Assessment must be by direct observation of tasks, with questioning on underpinning knowledge and it must also reinforce the integration of key competencies. • Assessment may be applied under project related conditions and require evidence of process. • Assessment must confirm a reasonable inference that competence is able to be under the particular circumstance, and is able to be transferred to other circumstances. • It is preferable that assessment reflects a process rather than an event and occurs over a period of time to cover varying quality circumstances. • Evidence of performance may be provided by customers, team leaders/members or other persons subject to agreed authentication arrangements.
Guidance information for assessment	

Range Statement

RANGE STATEMENT	
<p>The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.</p>	
OHS requirements	OHS requirements are to be in accordance with legislation/regulations/codes of practice and

RANGE STATEMENT	
	<p>enterprise safety policies and procedures, and may include:</p> <ul style="list-style-type: none"> protective clothing and equipment, use of tooling and equipment, workplace environment and safety, handling of material, use of fire fighting equipment, enterprise first aid, hazard control and hazardous materials and substances
Personal protective equipment	Personal protective equipment is to include that prescribed under legislation/regulation/codes of practice and workplace policies and practices
Safe operating procedures	<p>Safe operating procedures are to include, but are not limited to:</p> <ul style="list-style-type: none"> the conduct of operational risk assessment and treatments associated with vehicular movement, toxic substances, electrical safety, machinery movement and operation, manual and mechanical lifting and shifting and working in proximity to others and site visitors
Emergency procedures	<p>Emergency procedures related to this unit are to include but may not be limited to:</p> <ul style="list-style-type: none"> emergency shutdown and stopping of equipment, extinguishing fires, enterprise first aid requirements and site evacuation
Environmental requirements	<p>Environmental requirements are to include but are not limited to:</p> <ul style="list-style-type: none"> waste management, noise, dust and clean-up management
Quality requirements	<p>Quality requirements are to include, but are not limited to:</p> <ul style="list-style-type: none"> regulations, including Australian standards, internal company quality policy and standards and enterprise operations and procedures
Statutory/regulatory authorities	<p>Statutory/regulatory authorities may include:</p> <ul style="list-style-type: none"> federal, state/territory and local authorities administering acts, regulations and codes of practice

RANGE STATEMENT	
Tooling and equipment	<p>Tooling and equipment may include:</p> <ul style="list-style-type: none"> • hand tooling, meters, gauges and load testing devices
Materials	<p>Materials may include:</p> <ul style="list-style-type: none"> • battery consumables and cleaning material
Communications	<p>Communications are to include, but are not limited to:</p> <ul style="list-style-type: none"> • verbal and visual instructions and fault reporting and may include site specific instructions, written instructions, plans or instructions related to job/task, telephones and pagers
Information/documents	<p>sources of information/documents may include:</p> <ul style="list-style-type: none"> • verbal or written and graphical instructions, signage, work schedules/plans/specifications, work bulletins, memos, material safety data sheets, diagrams or sketches • safe work procedures related to the servicing, maintenance and replacement of batteries • regulatory/legislative requirements pertaining to automotive industry, including Australian Design Rules • engineer's design specifications and instructions • organisation work specifications and requirements • instructions issued by authorised enterprise or external persons • Australian standards

Unit Sector(s)

Unit sector	Electrical
--------------------	------------

Co-requisite units

Co-requisite units		

Competency field

Competency field	
-------------------------	--