



**Australian Government**

# **AURRTR1001 Inspect, service and maintain marine battery storage systems**

**Release 1**

## AURRTR1001 Inspect, service and maintain marine battery storage systems

### Modification History

Release	Comment
Release 1	New unit of competency

### Unit Descriptor

Unit descriptor	<p>This unit describes the performance outcomes to inspect service and maintain battery storage systems in recreational boating equipment and marine applications.</p> <p>No licensing, legislative, regulatory or certification requirements apply to this unit at the time of publication.</p>
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### Application of the Unit

Application of the unit	<p>Work applies to marine applications ranging from personal leisure craft to light commercial applications for inboard, stern drive and outboard marine applications.</p> <p>Work requires individuals to demonstrate limited judgement and problem-solving skills in managing own work activities.</p>
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### Licensing/Regulatory Information

Not applicable.

### Pre-Requisites

Not applicable.

## Employability Skills Information

<b>Employability skills</b>	This unit contains employability skills.
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## Elements and Performance Criteria Pre-Content

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

ELEMENT	PERFORMANCE CRITERIA
1. Prepare to undertake inspection	1.1. Nature and scope of work requirements are identified and confirmed 1.2. <i>Workplace Health and Safety (WHS) requirements</i> and other appropriate precautions are identified and taken 1.3. Technical inspection requirements are sourced 1.4. Tools and equipment are located and prepared 1.5. <i>Safe operating procedures</i> for working with batteries are identified and confirmed
2. Conduct inspection	2.1. Inspection methods are implemented according to workplace procedures 2.2. Inspection results are compared with job requirements 2.3. Results are documented with evidence and supporting information and recommendations made 2.4. Inspection report is forwarded to persons for action according to workplace procedures
3. Carry out service and maintenance	3.1. <i>Service and/or maintenance methods</i> are carried out according to workplace procedures and job requirements 3.2. Adjustments made during service and/or maintenance are carried out according to workplace requirements and job requirements 3.3. Unserviceable components are removed and tagged and faults are identified according to work requirements
4. Clean up work area and maintain equipment	4.1. Work area is tidied, and tools and equipment are replaced according to workplace requirements 4.2. Workplace documentation is completed according to workplace requirements

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

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

#### Required skills

- communication skills to:
  - clarify workplace instructions and determine job requirements
  - communicate information relating to work requirements and battery safety
- literacy skills to:
- read and follow battery inspection and maintenance information
  - read and follow information on standard operating procedures and job requirements
  - numeracy skills to interpret instruments, gauges and measuring equipment
- planning and organising skills to:
  - identify risk factors to minimise risk to self and others
  - contribute to activities which implement and follow standard workplace procedures
- problem-solving skills to:
  - recognise a workplace problem or a potential problem
  - refer problems outside area of responsibility to appropriate person
- self-management skills to:
  - locate and identify appropriate tools and equipment
  - locate technical information
  - recognise limitations and seek timely advice
- technical skills to:
  - select tools and equipment appropriate to the inspection, service and maintenance of marine batteries
  - use battery servicing and testing tools and equipment correctly
- technology skills to:
  - use workplace technology to assist with work practices
  - use workplace technology to access and transfer information including the reporting/documenting of results

#### Required knowledge

- WHS and environmental regulations/requirements, equipment, material and personal safety requirements
- battery inspection and maintenance procedures
- dangers of working with batteries and battery testing equipment
- operating principles and layout of marine battery storage systems
- work organisation and planning processes
- workplace documentation procedures



## Evidence Guide

### EVIDENCE GUIDE

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.

#### Overview of assessment

#### Critical aspects for assessment and evidence required to demonstrate competency in this unit

The evidence required to demonstrate competency in this unit must be relevant to workplace operations and satisfy all of the requirements of the performance criteria and required skills and knowledge.

A person who demonstrates competency in this unit must be able to:

- observe workplace safety procedures and battery safety requirements
- communicate effectively with others involved in or affected by the work
- select methods and techniques appropriate to the circumstances
- inspect, service and maintain battery storage systems in marine applications according to workplace, manufacturer and component supplier requirements
- complete workplace documents.

#### Context of, and specific resources for assessment

Competency is to be assessed in the workplace or a simulated workplace environment that accurately reflects performance in a real workplace setting.

Assessment is to occur:

- using standard workplace practices and procedures
- following safety requirements
- applying environmental constraints

Assessment is to comply with relevant:

- regulatory requirements
- Australian standards
- industry codes of practice

The following resources should be made available:

- workplace location or simulated workplace environment that reflects a marine maintenance facility or environment
- material relevant to inspection, servicing and maintenance of battery storage systems for marine or pleasure craft
- tools and equipment appropriate for the inspection and servicing and maintenance of battery storage systems

## EVIDENCE GUIDE

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.

### Overview of assessment

- specifications and workplace instructions.

### Method of assessment

Assessment must satisfy the endorsed Assessment Guidelines of this Training Package.

Assessment methods must confirm consistency and accuracy of performance (over time and in a range of workplace relevant contexts) together with the application of required skills and knowledge.

Assessment methods must be by direct observation of tasks and include questioning on required skills and knowledge to ensure correct interpretation and application.

Competence in this unit may be assessed in conjunction with other units which together form part of a holistic work role.

Where applicable, reasonable adjustment must be made to work environments and training situations to accommodate the needs of diverse clients.

Assessment processes and techniques must be culturally sensitive and appropriate to the language, literacy and numeracy capacity of the candidate and the work being performed.



## Range Statement

### RANGE STATEMENT

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><b><i>Workplace health and safety (WHS) requirements:</i></b></p>	<ul style="list-style-type: none"> <li>• are those prescribed under legislation, regulations, codes of practice, and workplace policies and procedures</li> <li>• may include:             <ul style="list-style-type: none"> <li>• protective clothing and equipment</li> <li>• use of tools and equipment</li> <li>• handling of material</li> <li>• use of fire-fighting equipment</li> <li>• first aid equipment</li> </ul> </li> <li>• hazard control, including control of hazardous materials and toxic substances.</li> </ul>
<p><b><i>Safe operating procedures may include:</i></b></p>	<ul style="list-style-type: none"> <li>• the conduct of operational risk assessment</li> <li>• toxic substances awareness</li> <li>• electrical safety</li> <li>• manual and mechanical lifting and shifting</li> <li>• working in proximity to others and site visitors.</li> </ul>
<p><b><i>Service and/or maintenance methods may include:</i></b></p>	<ul style="list-style-type: none"> <li>• inspection of battery and leads</li> <li>• inspection of battery securing system</li> <li>• battery removal</li> <li>• battery and battery compartment cleaning</li> <li>• battery fluid top-up</li> <li>• hydrometer testing</li> <li>• battery charging.</li> </ul>

## Unit Sector(s)

Competency field	Marine
Unit sector	Technical – Electrical and electronic

## **Custom Content Section**

Not applicable.