



**Australian Government**

# **AURPTR2002 Test and service outdoor electric powered equipment**

**Release 1**

## AURPTR2002 Test and service outdoor electric powered equipment

### Modification History

Release	Comment
Release 1	<p>Replaces AURE222976B Test and service outdoor electric powered equipment</p> <p>Unit code updated to meet policy requirements</p> <p>Reference to OHS legislation replaced with new WHS legislation</p>

### Unit Descriptor

Unit descriptor	<p>This unit of competency describes the skills and knowledge required to carry out testing and servicing of outdoor electric powered equipment, including shears, blowers, shredders and mulchers.</p> <p>Licensing, legislative, regulatory or certification requirements may apply to this unit in some jurisdictions. Users are advised to check with the relevant regulatory authority.</p>
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### Application of the Unit

Application of the unit	<p>This unit applies to individuals who undertake testing and servicing of outdoor electric powered equipment.</p> <p>The testing and servicing of 240 V portable generators is covered by the unit AURPTR3001 Test and service 240 V portable generators.</p> <p>Where state/territory legislation requires a Restricted Electrical Licence (REL) or other such requirement to undertake work on electric 240 V, the appropriate units of competency from the UEE11 Electrotechnology or MEM05 Metal and Engineering Training Packages should be sourced as electives.</p>
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## Licensing/Regulatory Information

Refer to Unit Descriptor

## 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 performance needed to demonstrate achievement of the element. Assessment of performance is to be consistent with the evidence guide.
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## Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Prepare for test	1.1. Confirm nature and scope of work requirements 1.2. Identify and source procedures, information and tooling required 1.3. Analyse method options, select those most appropriate to the circumstances and make preparations 1.4. Source technical and/or calibration requirements for testing and prepare support equipment
2. Conduct test and analyse results	2.1. Observe workplace health and safety (WHS) requirements, including individual state/territory regulatory requirements and personal protection needs, throughout the work 2.2. Observe warnings in relation to working with 240 V 2.3. Carry out load test in accordance with workplace procedures and manufacturer/component supplier specifications 2.4. Compare test results with specifications to indicate compliance or non-compliance 2.5. Document results with evidence and supporting information and make recommendations 2.6. Forward report to persons for action in accordance with workplace procedures
3. Prepare to service equipment	3.1. Confirm work to be carried out 3.2. Access and interpret service procedures, workshop manuals and manufacturer's information 3.3. Identify and prepare tools, equipment and materials required for servicing job 3.4. Set up work area
4. Carry out equipment service	4.1. Service equipment following manufacturer/component supplier recommended procedures and specifications 4.2. Make minor adjustments during the service in accordance with manufacturer/component supplier specifications 4.3. Replace electronic module, as required
5. Prepare equipment for delivery to customer	5.1. Complete service schedule documentation and update customer and warranty information, as required 5.2. Inspect serviced unit to ensure protective guards,

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b>
	cowlings and safety features are in place 5.3.Clean unit to workplace expectations 5.4.Clean work area, dispose of waste, and store tools and equipment in accordance with workplace procedures 5.5.Provide customer report on service and explain use and care of equipment and warranty requirements

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

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

#### Required skills

Required skills include:

- technical skills to the level required to use workplace technology and tools related to testing and servicing electric powered equipment
- communication skills to the level required to confirm work requirements and specifications, to communicate effectively regarding work requirements with supervisor, other workers and customers, to report work outcomes and problems, and to relate to people from a range of social, cultural and ethnic backgrounds and of varying physical and mental abilities
- literacy skills to the level required to understand information related to work orders and to locate, interpret and apply manufacturer/component supplier information, workplace policies and procedures
- numeracy skills to the level required to correctly calculate time, assess test results, apply accurate measurements, calculate material requirements and establish quality checks
- problem-solving skills to the level required to plan and organise activities and establish safe and effective work processes which anticipate and/or resolve problems and downtime, and to systematically develop solutions to avoid or minimise reworking and avoid wastage
- team skills to the level required to work effectively and cooperatively with others to optimise workflow and productivity

#### Required knowledge

Required knowledge includes:

- dangers of working with 240 V equipment
- WHS regulations/requirements, equipment, material and personal safety requirements
- volts, amperage and power and their relationship to each other
- types and layout of service/repair manuals (hard copy and electronic)
- electrical testing procedures
- equipment servicing procedures
- selection, checking and use of tooling and equipment
- manufacturer and/or component supplier specifications
- applicable commonwealth, state or territory legislation, regulations, standards and codes of practice, including WHS and environment, relevant to testing and servicing electric powered equipment
- organisational policies and procedures, including quality requirements, reporting and recording procedures, and work organisation and planning processes, related to

<b>REQUIRED SKILLS AND KNOWLEDGE</b>
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testing and servicing electric powered equipment
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## Evidence Guide

<b>EVIDENCE GUIDE</b>	
<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>	
<b>Overview of assessment</b>	
<b>Critical aspects for assessment and evidence required to demonstrate competency in this unit</b>	<p>Assessors must be satisfied that the candidate can competently and consistently:</p> <ul style="list-style-type: none"> <li>• observe safety procedures and requirements</li> <li>• communicate effectively with others involved in or affected by the work</li> <li>• select methods and techniques appropriate to the circumstances</li> <li>• accurately interpret test results</li> <li>• complete preparatory activity in a systematic manner</li> <li>• conduct the testing in accordance with workplace requirements</li> <li>• complete servicing to manufacturer/component supplier requirements</li> <li>• present equipment to customer in compliance with workplace requirements.</li> </ul>
<b>Context of, and specific resources for assessment</b>	<ul style="list-style-type: none"> <li>• The application of competency is to be assessed in the workplace or a simulated environment that reflects as far as possible the actual working environment.</li> <li>• Assessment is to occur using standard and authorised work practices, safety requirements and environmental constraints.</li> <li>• Assessment is to comply with relevant regulatory requirements, including specified Australian standards.</li> <li>• Where applicable, reasonable adjustment must be made to work environments and training situations to accommodate ethnicity, age, gender, demographics and disability.</li> <li>• The following resources should be made available: <ul style="list-style-type: none"> <li>• a range of electric powered equipment and components</li> <li>• materials relevant to testing and servicing of outdoor electric powered equipment</li> <li>• equipment, hand and power tooling appropriate to</li> </ul> </li> </ul>



<b>EVIDENCE GUIDE</b>	
	<p>testing and servicing of electric powered equipment</p> <ul style="list-style-type: none"> <li>• specifications and work instructions.</li> </ul>
<b>Method of assessment</b>	<ul style="list-style-type: none"> <li>• Assessment must satisfy the endorsed Assessment Guidelines of this Training Package.</li> <li>• Assessment methods must confirm consistency and accuracy of performance (over time and in a range of workplace relevant contexts) together with application of Required Skills and Knowledge.</li> <li>• Assessment methods must be by direct observation of tasks and include questioning on Required Skills and Knowledge to ensure its correct interpretation and application.</li> <li>• Assessment may be applied under project-related conditions (real or simulated) and require evidence of process.</li> <li>• Assessment must confirm a reasonable inference that competency is able not only to be satisfied under the particular circumstance, but is able to be transferred to other circumstances.</li> <li>• Competence in this unit may be assessed in conjunction with other functional units which together form part of the holistic work role.</li> </ul>
<b>Guidance information for assessment</b>	<p>Assessment processes and techniques must be culturally sensitive and appropriate to the language and literacy capacity of the candidate and the work being performed.</p>

## Range Statement

<b>RANGE STATEMENT</b>	
<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. 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>Outdoor power equipment</b>	<p>Outdoor power equipment may include:</p> <ul style="list-style-type: none"> <li>• shears, blowers, blower vacs, shredders and mulchers, which may be electric or power</li> </ul>

<b>RANGE STATEMENT</b>	
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<b>Servicing methods</b>	<p>Servicing may include:</p> <ul style="list-style-type: none"> <li>• on- and off-site servicing and repair</li> <li>• inspection and replacement of components</li> <li>• adjustments</li> <li>• communicating with customers</li> <li>• documenting and reporting on service and replacement</li> </ul>
<b>Tooling and equipment</b>	<p>Tooling and equipment may include:</p> <ul style="list-style-type: none"> <li>• specific service/repair and general workshop equipment and tooling</li> <li>• multimeter and electrical testing equipment</li> <li>• cleaning equipment</li> <li>• ear muffs and safety glasses</li> </ul>
<b>Materials</b>	<p>Materials may include:</p> <ul style="list-style-type: none"> <li>• spare parts</li> <li>• lubricants</li> <li>• cleaning materials</li> </ul>
<b>Information/documents</b>	<p>Information/documents may include:</p> <ul style="list-style-type: none"> <li>• verbal or written and graphical instructions, signage, work schedules/plans/specifications, work bulletins, memos, material safety data sheets (MSDS), diagrams or sketches</li> <li>• safe work procedures related to testing and servicing electric powered equipment</li> <li>• regulatory/legislative requirements pertaining to testing and servicing electric powered equipment</li> <li>• engineer's design specifications and instructions</li> <li>• organisation work specifications and requirements</li> <li>• instructions issued by authorised enterprise or external persons</li> <li>• Australian standards</li> </ul>
<b>WHS requirements</b>	<p>WHS requirements are to be in accordance with applicable commonwealth, state or territory legislation and regulations, and organisational safety policies and procedures, and may include:</p>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• personal protective equipment and clothing</li> <li>• safety equipment</li> <li>• first aid equipment</li> <li>• hazard and risk control</li> <li>• electrical safety</li> <li>• elimination of hazardous materials and substances</li> <li>• manual handling, including shifting, lifting and carrying</li> <li>• emergency procedures</li> </ul>
<b>Legislative requirements</b>	<p>Legislative requirements are to be in accordance with applicable commonwealth, state or territory legislation, regulations, certification requirements and codes of practice, and may include:</p> <ul style="list-style-type: none"> <li>• award and enterprise agreements</li> <li>• industrial relations</li> <li>• Australian standards</li> <li>• Australian Design Rules</li> <li>• confidentiality and privacy</li> <li>• WHS</li> <li>• the environment</li> <li>• equal opportunity</li> <li>• anti-discrimination</li> <li>• relevant industry codes of practice</li> <li>• duty of care</li> </ul>
<b>Environmental requirements</b>	<p>Environmental requirements may include:</p> <ul style="list-style-type: none"> <li>• waste management</li> <li>• pollution</li> <li>• noise</li> <li>• dust</li> <li>• clean-up management</li> </ul>
<b>Quality requirements</b>	<p>Quality requirements may include:</p> <ul style="list-style-type: none"> <li>• regulations, including Australian standards</li> <li>• internal organisational quality policies and procedures</li> <li>• enterprise operations and procedures</li> </ul>
<b>Organisational policies and procedures</b>	<p>Organisational policies and procedures may include:</p> <ul style="list-style-type: none"> <li>• quality policies and procedures, including</li> </ul>

**RANGE STATEMENT**

	Australian standards
	<ul style="list-style-type: none"><li>• WHS, sustainability, environment, equal opportunity and anti-discrimination</li><li>• manufacturer specifications and industry codes of practice</li><li>• safe work procedures</li><li>• reporting and recording procedures</li></ul>

**Unit Sector(s)**

<b>Unit sector</b>	Outdoor Power Equipment
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**Co-requisite units**

Not applicable.

**Competency field**

<b>Competency field</b>	Technical - Engines
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