



Australian Government

AURPTR101 Test and service 240 volt portable generators

Release: 1

AURPTR101 Test and service 240 volt portable generators

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 test and service 240 volt portable generators according to manufacturer specifications. The unit involves preparing for the task, testing and servicing the equipment, performing post-service testing, and completing workplace processes and documentation.

The unit applies to those working in the outdoor power equipment service and repair industry. The portable generators may be driven by petrol or diesel engines. Testing and servicing relate only to the 240 volt generator, and not the engine driving the generator.

Licensing, legislative, regulatory or certification requirements may apply to this unit in some jurisdictions. Users are advised to check with the relevant regulatory authority.

Unit Sector

Outdoor Power Equipment Technical - Electrical and Electronic

Elements and Performance Criteria

ELEMENTS	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 undertake load test of portable generator	1.1 Identify job requirements from workplace instructions 1.2 Source and interpret workplace inspection and service procedures 1.3 Identify and manage hazards associated with the tasks 1.4 Select tools and equipment and check for serviceability
2. Conduct test and interpret results	2.1 Inspect and test system according to manufacturer specifications, workplace procedures, and safety requirements 2.2 Compare test results with manufacturer specifications to determine service requirements 2.3 Obtain authorisation to proceed according to workplace

ELEMENTS	PERFORMANCE CRITERIA
	procedures
3. Prepare to service generator	3.1 Analyse service options and select those most appropriate based on the circumstances 3.2 Check and select tools, equipment and materials for serviceability
4. Service generator	4.1 Service components, and adjust and replace as required according to manufacturer specifications, workplace procedures, and safety requirements, and without causing damage to components or systems 4.2 Run generator and perform resistive load test and compare with manufacturer specifications
5. Complete work processes	5.1 Conduct final inspection according to workplace procedures and confirm equipment is ready for use 5.2 Clear work area and dispose of or recycle materials according to workplace procedures 5.3 Complete documentation according to workplace procedures

Foundation Skills

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

SKILL	DESCRIPTION
Learning	Locates required sources of information efficiently.
Numeracy	- Uses basic mathematical operations, including addition and subtraction, when testing and servicing generator - Interprets gauges and test equipment.
Oral communication	Clarifies instructions.
Reading	Interprets information from manufacturer and workshop literature when seeking test and service specifications and procedures relating to 240 volt portable generator.
Planning and organising	- Plans own work requirements - Prioritises actions to achieve required outcomes - Ensures tasks are completed within workplace timeframes.
Technology	Operates specialised equipment.

Unit Mapping Information

Supersedes and is equivalent to AURPTR001 Test and service 240 volt portable generators.

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 AURPTR101 Test and service 240 volt portable generators

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:

- test and service at least two different 240 volt portable generators.

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 test and service 240 volt portable generators, including:
 - information provided by customer and supervisors
 - manufacturer specifications and procedures or equivalent documentation
- workplace procedures required to test and service 240 volt portable generators, including:
 - 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
- work health and safety (WHS) requirements relating to testing and servicing 240 volt portable generators, including procedures for:
 - selecting and using personal protective equipment (PPE)
 - safely using electrical test equipment
 - working with exhaust fume hazards
 - working with hot or rotating parts

- licensing and regulatory requirements for working with 240 volt components
- application, purpose and operation of different types of 240 volt portable generators, including:
 - inverter
 - standard, including:
 - brush
 - brushless
- test and service procedures for 240 volt portable generators, including:
 - alternating current (AC) output voltage and frequency
 - battery voltage
 - load testing
 - generator mountings and frame
 - engine oil level check
 - engine performance test
 - control panel inspection
- post-service testing and re-testing procedures for 240 volt portable generators, including operating portable generators through full operating range.

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 240 volt portable generators that they have tested and serviced, 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:

- outdoor power equipment repair workplace or simulated workplace
- workplace instructions
- manufacturer specifications for 240 volt portable generators
- area and equipment, including PPE, for safely testing 240 volt portable generators
- two different 240 volt portable generators requiring testing and service
- tools, equipment and materials appropriate for testing and servicing 240 volt portable generators, including electrical load test equipment and engine tachometer.

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>