



Australian Government

MSMRV362 Install and repair battery systems in a recreational vehicle

Release: 1

MSMRV362 Install and repair battery systems in a recreational vehicle

Modification History

Release 1 - New unit.

Application

This unit of competency covers the skills and knowledge required to install and repair battery systems in a recreational vehicle. It includes dual battery systems. The work will be carried out in a recreational vehicle service and repair facility.

This unit of competency covers the preparation for, installation/repair of and clean-up after the battery system work.

The operator will be required to work to procedures, and follow plans/specifications, insurance requirements and customer needs.

This unit of competency applies to an individual working alone or as part of a team/work group and working in liaison with other shift team members.

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

Pre-requisite Unit

Nil

Competency Field

Operations

Unit Sector

Elements and Performance Criteria

Elements describe the essential outcomes

Performance criteria describe the performance needed to demonstrate achievement of the element

1	Plan the work	1.1	Review the requirements of the work, including insurance requirements and customer needs
		1.2	Determine impact on electrical system of proposed changes

- 1.3 Examine existing battery system, its capacity to handle proposed changes, determine what needs to be done and how to do it
 - 1.4 Check required tools and jigs are available at the worksite
 - 1.5 Check required materials and components are available at the worksite
 - 1.6 Identify any hazards and the related hazard controls
 - 1.7 Check that hazard controls are in place and operational
 - 1.8 Query any items that are different to usual and clarify requirements
 - 1.9 Remove items as required to make access for required work, maximising the potential for reuse
 - 1.10 Temporarily store items which are to be reused
- 2 **Install additional battery in accordance with devised procedures**
 - 2.1 Use relevant hazard controls, including personal protective equipment (PPE)
 - 2.2 Install appropriate battery housing/restraint
 - 2.3 Install required electrical connections
 - 2.4 Place, fix and connect additional battery
 - 2.5 Test system and make any required changes
 - 2.6 Segregate and handle waste in accordance with procedures
- 3 **Repair battery system in accordance with devised procedures**
 - 3.1 Use relevant hazard controls, including PPE
 - 3.2 Test battery system and determine fault
 - 3.3 Isolate location of fault where practical
 - 3.4 Replace components or repair fault as appropriate
 - 3.5 Run and connect new cabling if required

		3.6	Ensure any redundant cable is removed or left in a safe condition as appropriate
		3.7	Test system and make any required changes
		3.8	Segregate and handle waste in accordance with procedures
4	Make good area of work in accordance with devised procedures	4.1	Reinstate/replace removed items
		4.2	Check items are fixed appropriately
		4.3	Apply seals/sealing materials as required
		4.4	Trim as required
		4.5	Check items function as intended and make adjustments as required
5	Finish battery system work	5.1	Check work undertaken and make any required adjustments
		5.2	Clean up recreational vehicle and make ready for hand back to customer
		5.3	Clean up work area, leaving it ready for the next job
		5.4	Segregate and handle waste in accordance with procedures
		5.5	Complete any required documentation/records

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential to performance.

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

Range of Conditions

This field allows for different 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.

Regulatory framework The latest version of all legislation, regulations, industry codes of practice and Australian/international standards, or the version specified by the local regulatory authority, must be used, and include one or more of the following:

- legislative requirements, including work health and safety (WHS)
- industry codes of practice and guidelines
- environmental regulations and guidelines
- Australian and other standards
- licence and certification requirements

Procedures All operations must be performed in accordance with relevant procedures.

Procedures are written, verbal, visual, computer-based or in some other form, and include one or more of the following:

- work instructions
- standard operating procedures (SOPs)
- safe work method statements (SWMS)
- temporary instructions
- any similar instructions provided for the smooth running of the plant

Hazards Hazards include one or more of the following:

- heat, dust or other atmospheric hazards
- electricity
- gas
- equipment failures
- industrial (machinery, equipment and product)
- noise, rotational equipment or vibration
- hazardous products and materials
- unauthorised personnel
- sharp edges, protrusions or obstructions
- slippery surfaces, spills or leaks
- other hazards that might arise

Routine problems Routine problems must be resolved by applying known solutions.

Routine problems are predictable and include one or more of the following:

- equipment/plant/machine malfunction
- variations in process conditions
- variations in materials or contamination of materials
- equipment, tool, die or mould damage
- product faults
- tooling problems

Known solutions are drawn from one or more of the following:

- procedures
- training
- remembered experience

Non-routine problems must be reported according to relevant procedures.

Unit Mapping Information

No equivalent unit

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=d1287d36-dff4-4e9f-ad2c-9d6270054027>

Assessment Requirements for MSMRV362 Install and repair battery systems in a recreational vehicle

Modification History

Release 1 - New unit.

Performance Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy the requirements of the elements and performance criteria and demonstrate the ability to:

- install battery systems in at least one (1) recreational vehicles
- repair battery systems in at least three (3) recreational vehicles
- interpret requirements and plan work
- identify hazards and apply relevant hazard controls
- recognise situations requiring action and take the appropriate action
- communicate effectively with customers, team/work group and supervisors.

Knowledge Evidence

Evidence must be provided that demonstrates knowledge of:

- hazards that may arise in the job/work environment
- fitting procedures and the reasons for those procedures
- materials and tools to be used and their correct usage
- checks and adjustments to be made.

Assessment Conditions

- The unit should be assessed holistically and the judgement of competence based on a holistic assessment of the evidence.
- The collection of performance evidence:
 - should occur over a range of situations which include typical disruptions to normal, smooth operation
 - will typically include a supervisor/third-party report or other evidence, focusing on consistent performance and problem recognition and solving. A supervisor/third-party report must be prepared by someone who has a direct, relevant, current relationship with the person being assessed and who is in a position to form a judgement on workplace performance relevant to the unit of competency
 - may use industry-based simulation for all or part of the unit particularly where safety, lack of opportunity or significant cost is an issue.

- Assessment should occur in operational workplace situations. Where this is not possible, or where personal safety or environmental damage are limiting factors, assessment must occur in a sufficiently rigorous simulated environment reflecting realistic operational workplace conditions. This must cover all aspects of workplace performance, including environment, task skills, task management skills, contingency management skills and job role environment skills.
- Knowledge evidence may be collected concurrently with performance evidence (provided a record is kept) or through an independent process, such as workbooks, written assessments or interviews (provided a record is kept).
- Assessment processes and techniques must be appropriate to the language, literacy and numeracy requirements of the work being performed and the needs of the candidate.
- Conditions for assessment must include access to all tools, equipment, materials and documentation required, including relevant workplace procedures, product and manufacturing specifications associated with this unit.
- The regulatory framework will be reflected in workplace policies and procedures and is not required to be independently assessed.
- Foundation skills are integral to competent performance of the unit and should not be assessed separately.
- As a minimum, assessors must satisfy the Standards for Registered Training Organisations 2015 assessor requirements.

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