

# AUMATR001 Repair vehicle electrical faults in assembled vehicles

Release: 1

# **AUMATR001** Repair vehicle electrical faults in assembled vehicles

#### **Modification History**

Release	Comment
Release 1	Unit updated to reflect the new standards for Training Packages Replaces AUMATR3001 Rectify electrical faults on assembled vehicles

# **Application**

This unit describes the performance outcomes required to repair electrical faults in assembled vehicles, based on recommendations from inspection reports.

It applies to those in an automotive manufacturing environment and involves the application of skills and knowledge at a specialist technician level.

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

# **Competency Field**

Common

#### **Unit Sector**

Technical - Electrical

#### **Elements and Performance Criteria**

Elements	Performance Criteria
Elements describe the essential outcomes	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the range of conditions section
1. Plan and prepare	1.1 Workplace instructions are identified and used to determine job requirements
	1.2 Repair procedures and fault inspection reports are sourced and interpreted
	1.3 Repair and replacement materials are identified, obtained and prepared according to inspection reports

Approved Page 2 of 4

Elements	Performance Criteria	
	1.4 <i>Tools and equipment</i> are identified for rectification of electrical faults	
2. Diagnose and rectify electrical faults	2.1 Faults are located and diagnosed, and corrective repairs are planned	
	2.2 Rectification activities are carried out according to vehicle specifications and workplace procedures	
	2.3 Faults are re-diagnosed to ensure their elimination	
3. Complete work processes	3.1 Repair documentation is completed according to workplace procedures	
	3.2 Final inspection is made to ensure work is to workplace quality standards	
	3.3 Tools and equipment are cleaned, checked, maintained and stored, and work area is cleaned, according to workplace procedures	
	3.4 Faulty tools and equipment are identified, tagged and reported to supervisor	
	3.5 Work area is cleaned, and materials disposed of, reused or recycled according to workplace procedures	

#### **Foundation Skills**

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

Skills	Description
Reading skills to:	interpret work instructions, work health and safety (WHS) requirements and workplace procedures
	interpret inspection reports and vehicle specifications.
Writing skills to:	complete repair documentation
	complete faulty equipment tags
	prepare a repair plan.
Oral communication skills	communicate electrical faults with co-workers
to:	• use automotive terminology relevant to the job.
Numeracy skills to:	identify vehicle specifications and part numbers of replacement
	parts
	identify component faults from inspection reports and test
	measurements.
Digital literacy skills to:	use digital electrical testing and measuring equipment

Approved Page 3 of 4

	•	use workplace computer systems.
Problem-solving skills to:	•	interpret inspection reports identify vehicle electrical faults
		apply repair procedures to electrical faults.

# **Range of Conditions**

This section specifies 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. Bold italicised wording, if used in the performance criteria, is detailed below.

Workplace instructions	operator instruction sheets (OIS) or workplace equivalent
must include:	<ul> <li>process control plans (PCPs) or workplace equivalent</li> </ul>
	• standard operation procedures (SOPs) or workplace equivalent
	<ul> <li>testing and repair techniques</li> </ul>
	<ul> <li>vehicle specifications and drawings.</li> </ul>
Job requirements must	circuit testing and repair methods
include:	<ul> <li>correct use of tools and equipment</li> </ul>
	<ul> <li>identification of electrical faults</li> </ul>
	<ul> <li>methods to remove and replace electrical units.</li> </ul>
Tools and equipment must include:	hand tools
	electrical testing equipment
	• multimeters
	• test lamps.
Workplace procedures must include:	pre- and post-use inspection of equipment
	recording and reporting
	<ul> <li>test equipment operating instructions</li> </ul>
	• WHS requirements relating to rectifying electrical faults.

### **Unit Mapping Information**

No equivalent unit.

#### Links

Approved Page 4 of 4