



Australian Government

AURVTN023 Repair adhesive bonded structural damage on vehicles

Release: 1

AURVTN023 Repair adhesive bonded structural damage on vehicles

Modification History

Release	Comment
Release 1	New unit of competency.

Application

This unit describes the performance outcomes required to repair bonded vehicle body panels and structures using an adhesive attachment method. It involves preparing for the task, selecting and using specialist tools and equipment, removing bonded structural damage, repairing panel sections, applying approved adhesives and realigning the structural repair, and completing workplace processes and documentation.

It applies to those working in the automotive body repair industry.

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

Competency Field

Vehicle Body

Unit Sector

Technical - Body

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 and italicised text is used, further information is detailed in the range of conditions section.
1. Prepare to repair adhesive bonded structural damage	1.1 Job requirements are determined from workplace instructions 1.2 Original equipment manufacturer (OEM) or authorised agency's recommended bonding and repair procedures are accessed and interpreted

Elements Elements describe the essential outcomes.	Performance Criteria Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold and italicised text is used, further information is detailed in the range of conditions section.
	1.3 Adhesive specifications and application instructions, including safety data sheets (SDS), and bonding materials are selected and prepared 1.4 Hazards associated with the work are identified and risks are managed 1.5 Adhesive application tools and equipment and personal protective equipment (PPE) are selected and checked for serviceability 1.6 Work is planned to identify adhesive bonding methods, minimise waste, and use time efficiently
2. Remove and replace bonded sections	2.1 Replacement panels and components are checked against vehicle specifications and for quality 2.2 Bonded panels and structures are removed according to OEM procedures and without causing damage to system or components 2.3 Bonded panels and structures are repaired according to OEM procedures and stored until required 2.4 Bonded panels and structures are refitted using approved bonding methods, adhesives, materials and equipment according to OEM or authorised agency specifications, and safety and environmental requirements 2.5 Sealants are selected and applied according to OEM or authorised agency's specifications and workplace procedures 2.6 Bonded panels and structures are cleaned without causing damage to systems or components
3. Complete work processes	3.1 Final inspection is made to ensure work meets workplace expectations and manufacturer specifications, and bonded vehicle panels and structures are presented ready for painting 3.2 Work area is cleaned, waste and non-recyclable materials are disposed of, and recyclable material is collected and stored 3.3 Tools and equipment are checked, reported if faulty, and stored according to workplace procedures 3.4 Workplace documentation is processed according to workplace procedures

Foundation Skills

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

Skills	Description
Learning skills to:	locate specifications and relevant information efficiently.
Writing skills to:	legibly and accurately fill out workplace documentation.
Oral communication skills to:	- clarify instructions and procedures - clearly report issues or outcomes.
Numeracy skills to:	- read tape measure and take accurate measurements - use basic mathematical operations, including addition, subtraction, multiplication and division, to: - estimate surface area according to bonding instructions - estimate adhesive curing times - calculate quantities of required materials - interpret adhesive code, type and grade.
Planning and organising skills to:	plan own work requirements and prioritise actions to achieve required outcomes and ensure tasks are completed within workplace timeframes.
Problem solving skills to:	identify quality issues and potential problems associated with repair of adhesive bonded structural damage.
Technology skills to:	use specialist removal and installation equipment.

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.

<i>Tools and equipment</i> must include:	- adhesive application equipment - hand tool and securing clamps.
<i>Safety and environmental requirements</i> must include:	- work health and safety (WHS) and occupational health and safety (OHS) requirements, including procedures for: - selecting and using PPE - using SDS for adhesives - manually handling vehicle panels - storing adhesives

	• using tools and equipment • environmental requirements, including procedures for trapping, storing and disposing of waste materials and adhesives.
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Unit Mapping Information

Equivalent to AURVTN3023 Remove and replace adhesive bonded panels and structures

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=b4278d82-d487-4070-a8c4-78045ec695b1>

Assessment Requirements for AURVTN023 Repair adhesive bonded structural damage on vehicles

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Performance Evidence

Before competency can be determined, individuals must demonstrate they can perform the following according to the standard defined in this unit's elements, performance criteria, range of conditions and foundation skills:

- remove and replace bonded panels on two different vehicles, in which the work must include two of the following:
 - door skins
 - vehicle turret
 - quarter panel
 - boot floor section
- use the following bonding methods and securing techniques during above work:
 - welding and bonding
 - rivet or screwing and bonding.

Knowledge Evidence

Individuals must be able to demonstrate knowledge of:

- work health and safety (WHS) and occupational health and safety (OHS) requirements relating to repairing adhesive bonded structural damage on vehicles, including procedures for:
 - selecting and using personal protective equipment (PPE)
 - using safety data sheets (SDS) for adhesives
 - manual handling vehicle panels
 - storing adhesives
 - using tools and equipment
- environmental requirements, including procedures for trapping, storing and disposing of waste materials and adhesives

- original equipment manufacturer (OEM) or authorised agency's recommended bonding procedures
- location and types of structural foams
- types of adhesives and their application methods and techniques
- removal and replacement techniques for bonded panels
- types of adhesive bonding methods
- securing techniques, including:
 - welding and bonding
 - rivet or screwing and bonding
- procedures for protecting vehicle and components when removing and replacing adhesive bonded panels
- procedures for final inspection of bonded structural repair.

Assessment Conditions

Assessors must satisfy NVR/AQTF assessor requirements.

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 vehicle structural damage that they have repaired using adhesive bonding, 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:

- automotive repair workplace or simulated workplace
- workplace instructions
- OEM or authorised agency repair procedures
- PPE required to remove and replace adhesive bonded panels and structures
- SDS for adhesives
- vehicle specifications
- two different vehicles or frames with bonded panels requiring repair
- adhesives
- cleaning agents and materials
- tools, equipment and materials appropriate for repairing adhesive bonded panels.

Links

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