



Australian Government

AURVTN017 Repair vehicle thermoplastic body panels and components

Release: 1

AURVTN017 Repair vehicle thermoplastic body panels and components

Modification History

Release	Comment
Release 1	New unit of competency.

Application

This unit describes the performance outcomes required to repair vehicle interior and exterior thermoplastic panels and components. It involves preparing for the task, selecting and using specialist thermoplastic repair tools and materials, repairing thermoplastic components to pre-paint condition, 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

Vehicle - 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 thermoplastic body panels and components	1.1 Job requirements are determined from workplace instructions 1.2 Original equipment manufacturer (OEM) or authorised agency's specifications for <i>thermoplastic panel and component repairs</i> and relevant safety data sheets (SDS) are sourced and interpreted 1.3 Repair method is selected, and materials are checked for quality

Elements	Performance Criteria
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	and prepared 1.4 Hazards associated with the work are identified and risks are managed 1.5 Tools and equipment, including personal protective equipment (PPE), are identified and checked for serviceability 1.6 Work area is prepared and work is planned to minimise waste and use time efficiently
2. Carry out repair activities	2.1 Suitable thermoplastic welding, fusion techniques and adhesives, including adhesion promoter where applicable, are used to repair thermoplastic body panels and components according to <i>safety and environmental requirements</i> 2.2 Body filler that is formulated for the repaired thermoplastic is selected and used 2.3 Repairs are completed to pre-paint condition according to specifications of OEM or authorised agency and workplace procedures
3. Complete work processes	3.1 Final inspection is made to ensure work meets workplace expectations and thermoplastic body panels 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	clarify instructions and procedures

Skills	Description
to:	clearly report issues or outcomes.
Numeracy skills to:	- use basic mathematical operations, including addition, subtraction, multiplication and division, to calculate ratios for dilution rates.to: - calculate repair material quantities - measure surface area - take accurate measurements using measuring equipment.
Planning and organising skills to:	plan own work requirements and prioritise actions to achieve required outcomes and ensure tasks are completed within workplace timeframes.
Technology skills to:	use specialist thermoplastic panel repair tools and measuring 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>Thermoplastic panel and component repairs</i> must include:	- splits - tears - dents.
<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 thermoplastics - manually handling body panels and components - using tools and equipment, including dust and fume collection equipment - environmental requirements, including procedures for trapping, storing and disposing of waste materials.

Unit Mapping Information

Equivalent to AURVTN3017 Repair body panels and thermoplastic components

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 AURVTN017 Repair vehicle thermoplastic body panels and components

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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:

- repair vehicle thermoplastic body panels on four different vehicles, including:
 - two vehicle exterior thermoplastic panel components with a tear or dent
 - one thermoplastic panel component incorporating a flange and contour with a split of 100 mm
 - one interior or ornamental plastic trim component with a split, tear or dent.

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 vehicle thermoplastic body panels and components, including procedures for:
 - selecting and using personal protective equipment (PPE)
 - using safety data sheets (SDS) for thermoplastics
 - manually handling body panels and components
 - using tools and equipment, including dust and fume collection equipment
- environmental requirements, including procedures for trapping, storing and disposing of waste materials
- original equipment manufacturer (OEM) or authorised agency repair specifications specific to the vehicles specified in the performance evidence
- thermoplastic repair procedures and techniques, including:
 - plastic material types
 - plastic repair tools and equipment

- plastic welding
- plastic adhesives
- repair quality requirements
- procedures and requirements for protecting vehicle and components during thermoplastic repair work
- procedures for final inspection of completed thermoplastic repairs.

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 the vehicle thermoplastic components that they have repaired, 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 location or simulated workplace
- workplace instructions
- SDS for thermoplastics
- OEM or authorised agency repair specifications
- thermoplastic components specified in the performance evidence requiring repair
- tools, equipment and materials appropriate for repairing vehicle thermoplastic body panels and components, including required PPE.

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