



Australian Government

AURVTS105 Fabricate vehicle body panels and components

Release: 1

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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 measure, develop patterns and templates, and fabricate body panels and components. It involves preparing for the task, selecting and using specialist tools and equipment, selecting and cutting materials according to patterns, templates and specifications, preparing cut edges, fabricating panels, and completing workplace processes and documentation.

The unit applies to those working in the automotive service and body repair industry.

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

Unit Sector

Vehicle Body Technical - Fabrication

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 fabricate vehicle body panel and components	1.1 Determine job requirements from workplace instructions 1.2 Access and interpret manufacturer specifications and workplace procedures 1.3 Identify panel materials from workplace instructions and inspect for quality 1.4 Identify hazards associated with the work and manage risks 1.5 Identify and select fabrication tools and equipment and check for serviceability 1.6 Plan work to identify methods to fabricate vehicle body panel and components, minimise waste, and use time efficiently
2. Produce patterns and	2.1 Identify and follow workplace procedures and safety and

ELEMENTS	PERFORMANCE CRITERIA
templates	environmental requirements 2.2 Produce paper patterns from sample panel or simulated frame 2.3 Produce templates to fit sample panel or simulated frame 2.4 Identify convex and concave shapes when developing templates and paper patterns
3. Cut material	3.1 Select panel steel or aluminium sections needed for the fabrication and inspect for quality 3.2 Transfer and secure paper patterns and templates to steel or aluminium sheet surface ready for cutting 3.3 Use selected hand tools to cut steel or aluminium to pattern and panel specification 3.4 File panels to remove sharp edges
4. Shape panels	4.1 Fabricate required shapes to pattern specification, following safety and environmental requirements and workplace procedures 4.2 Check shaped panel sections against pattern and template specifications for quality finish and conformity 4.3 Fit panels to vehicle or frame without distortion
5. Complete work processes	5.1 Conduct final inspection according to workplace procedures and confirm vehicle 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 not explicit in the performance criteria.

SKILL	DESCRIPTION
Learning	Locates required sources of information efficiently.
Numeracy	- Reads tape measures and rulers - Measures and calculates panel material, size, shape and specifications - Uses basic mathematical operations, including addition and subtraction, to calculate panel material quantity.
Oral communication	- Clarifies instructions and procedures - Reports quality issues and job outcomes clearly.

SKILL	DESCRIPTION
Planning and organising	- Plans own work requirements - Prioritises actions to achieve required outcomes - Ensures tasks are completed within workplace timeframes.
Technology	Sets up and operates specialised equipment and tools.

Unit Mapping Information

Supersedes and is equivalent to AURVTS005 Fabricate vehicle body panels and components.

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 AURVTS105 Fabricate vehicle body panels and components

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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:

- fabricate at least two different vehicle body panels and their components, at least one of which must include a vehicle door skin lower half.

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 fabricate vehicle body panels and components, including:
 - information provided by customer and supervisors
 - manufacturer specifications and procedures or equivalent documentation
- workplace procedures required to fabricate vehicle body panels, 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 fabricating vehicle body panels and components, including procedures for:
 - selecting and using personal protective equipment (PPE)
 - using tools and equipment
- environmental requirements, including procedures for trapping, storing and disposing of waste materials

- tools and equipment relating to fabricating vehicle body panels and components, including:
 - specialist hand tools
 - panel shaping equipment
 - English wheeling machine
 - specialist cutting equipment
- panel fabrication methods and techniques, including:
 - type of panel materials and application, including:
 - mild steel sheeting
 - aluminium sheeting
 - paper for pattern
 - cardboard for templates
 - marking out and cutting procedures
 - type and correct use of panel fabrication tools and equipment
 - techniques for producing paper patterns and templates
 - panel fabrication methods
 - wheeling and shaping techniques
- paper pattern requirements, including:
 - panel size and shape
 - all folds and edges for fabrication process
- procedures for final inspection of fabricated body panels and components.

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 vehicle body panels and components that they have fabricated, e.g. work 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
- PPE required to fabricate body panels
- materials to fabricate body panels and components
- two different vehicle body panels and components requiring fabrication
- tools, equipment and materials appropriate for fabricating vehicle body panels and components.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

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