



**Australian Government**

# **AURVTN220 Remove and replace major welded panels on vehicles**

# AURVTN220 Remove and replace major welded panels on vehicles

## Modification History

Release	Comments
1	This unit of competency was first released in AUR Automotive Retail, Service and Repair Training Package Release 9.0.

## Application

This unit describes the skills and knowledge required to remove and replace vehicle welded panels and panel sections. This unit involves preparing for the task, selecting and using specialist tools and equipment, removing, repairing, aligning and welding major vehicle panels and sections. It also includes finishing repair to pre-paint condition and completing workplace processes and documentation.

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

## Licensing/Regulatory Information

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

## Pre-requisite unit(s)

No pre-requisite units

## Competency field(s)

N/A

## Unit sector(s)

Vehicle Body Technical - Body

## 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 replace major welded panels	<p>1.1 Determine job requirements from workplace instructions</p> <p>1.2 Source vehicle specifications and original equipment manufacturer (OEM) or authorised agency's recommended repair procedures and check against workplace instructions</p> <p>1.3 Identify hazards associated with the work and manage risks</p> <p>1.4 Select and check tools and equipment for serviceability</p> <p>1.5 Plan work to identify methods, minimise waste, and use time efficiently</p>
2. Remove welded panels	<p>2.1 Remove major welded panels and sections according to OEM or authorised agency's approved methods and safety and environmental requirements</p> <p>2.2 Drill out spot welds using recommended drill bit and drill diameters</p> <p>2.3 Seek assistance from authorised personnel where removal of welded panels and sections disturbs vehicle trim or electrical, mechanical or air conditioning systems</p>
3. Replace and align welded panels	<p>3.1 Replace, align and weld panel sections using approved OEM or authorised agency's methods and procedures</p> <p>3.2 Carry out replacement, alignment and welding of panel section to pre-paint condition</p>
4. Complete work processes	<p>4.1 Conduct final inspection according to workplace procedures and confirm vehicle is ready for use</p> <p>4.2 Clear work area and dispose of or recycle materials according to workplace procedures</p> <p>4.3 Complete documentation according to workplace procedures</p>

## Foundation skills

**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	<ul style="list-style-type: none"> <li>Measures using universal measuring system</li> <li>Uses basic mathematical operations, including addition and subtraction, to calculate:</li> </ul>

	<ul style="list-style-type: none"><li>○ OEM or authorised agency repair measurements and tolerances</li><li>○ material requirements</li><li>• Adjusts welder displays settings</li><li>• Sets alignment equipment.</li></ul>
Oral communication	<ul style="list-style-type: none"><li>• Clarifies instructions and procedures</li><li>• Reports quality issues and job outcomes clearly.</li></ul>
Problem solving	Refers problems outside area of responsibility to required person.
Technology	Uses specialised tools and equipment.

## Range of conditions

N/A

# Assessment Requirements for AURVTN220 Remove and replace major welded panels on vehicles

## Performance Evidence

The candidate must demonstrate the ability to complete the tasks outlined in the elements, performance criteria and foundation skills of this unit. Evidence must include the ability to remove and replace three different major welded panels from the list below:

- quarter panel
- turret
- side panel
- beaver panel
- outer wheel house

The panels can be from the one vehicle or different vehicles.

During above work, conduct welding according to specifications of original equipment manufacturer (OEM) or authorised agency.

## 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 remove and replace major welded panels on vehicles, including:
  - information provided by customer and supervisors
  - manufacturer specifications and procedures or equivalent documentation
- workplace procedures required to remove and replace major welded panels on vehicles, 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 removing and replacing major welded panels on vehicles, including procedures for:

- selecting and using personal protective equipment (PPE)
  - manually handling vehicle panels
  - using tools and equipment when welding panels
- environmental requirements, including procedures for trapping, storing and disposing of waste materials
- tools and equipment relating to removing and replacing major welded panels on vehicles, including:
  - personal protective equipment (PPE)
  - universal measuring system
  - hand and power tools and equipment
  - approved heating equipment of OEM or authorised agency, as required
  - approved welding equipment of OEM or authorised agency
- OEM or authorised agency vehicle specifications
- major welded panel replacement procedures and techniques
- repair and alignment methods and techniques, including:
  - use of tools and equipment, including tagging methods as required
  - approved welding processes
  - types and location of high strength steel (HSS)
- procedures for protecting vehicle and components when replacing panels
- procedures for final inspection of welded panel sections.

## 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 major welded vehicle panels that they have replaced, 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 workplace or simulated workplace
- workplace instructions
- PPE required to replace major welded vehicle panels
- universal measuring system

- OEM or authorised agency's specifications
- OEM or authorised agency's approved welding equipment
- three different major welded panels from one vehicle or different vehicles
- tools, equipment and materials appropriate for replacing major welded vehicle panels.

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

## Mandatory Workplace Requirements

Assessment of performance evidence may be in a workplace setting or an environment that accurately represents a real workplace.

## Unit Mapping Information

Previous Code and Title	Equivalence	Comments
AURVTN120 Remove and replace major welded panels on vehicles	Equivalent	

## Links

Companion volumes, including implementation guides, are found on the national training register - <https://training.gov.au/training/details/AUR>.