



Australian Government

AURVTN006 Remove and replace mechanical units during vehicle repair

Release: 1

AURVTN006 Remove and replace mechanical units during vehicle repair

Modification History

Release	Comment
Release 1	New unit of competency.

Application

This unit describes the performance outcomes required to remove and replace mechanical units and assemblies to facilitate vehicle body repair activities. It involves preparing for the task, selecting and using specialist tools and equipment, removing and replacing mechanical units according to original equipment manufacturer (OEM) procedures and workplace procedures, and completing workplace processes and documentation.

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

Assistance from licensed persons must be sought in relation to air conditioning, liquefied petroleum gas (LPG), or other alternative fuel systems and components.

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 remove and replace mechanical	1.1 Job requirements are determined from workplace instructions 1.2 Removal and replacement specifications are sourced and

Elements	Performance Criteria
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units	interpreted from OEM and workplace procedures 1.3 Hazards associated with the work are identified and risks are managed 1.4 Tools, equipment and materials are selected and checked for serviceability 1.5 Vehicle and work area are prepared according to workplace procedures 1.6 Work is planned to identify methods, minimise waste and prevent damage to vehicle
2. Carry out removal and replacement activities	2.1 Mechanical units and assemblies are removed and replaced using approved procedures, hand tools and equipment and according to safety and environmental requirements 2.2 Assistance from licensed persons is sought when removing and replacing air conditioning, LPG, or other alternative fuel systems and components 2.3 Removal and replacement activities are completed according to OEM specifications and workplace procedures, and without causing damage to vehicle or components
3. Complete work processes	3.1 Final inspection is made to ensure work meets workplace expectations and vehicle is presented ready for use 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.

Skills	Description
Oral communication skills to:	- clarify instructions and procedures - clearly report issues, defects and outcomes.
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 problems and avoid rework and waste.
Teamwork skills to:	refer queries to and use strengths of appropriate personnel, including licensed persons, for vehicle systems as required.

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:	- personal protective equipment (PPE) - hand and power tools - jacking, support and lifting equipment.
<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 - manual handling and storage techniques - using tools and equipment - environmental requirements, including procedures for trapping, storing and disposing of waste materials and vehicle fluids released during process.

Unit Mapping Information

Equivalent to AURVTN2006 Remove and replace mechanical units and assemblies

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 AURVTN006 Remove and replace mechanical units during vehicle repair

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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 three of the following mechanical units on two different vehicles:
 - suspension parts and components
 - steering parts and components
 - final drive assembly
 - engine cross member or cradle
 - exhaust system
 - radiator.

Knowledge Evidence

Individuals must be able to demonstrate knowledge of:

- work health and safety (WHS) and occupational health and safety (OHS) requirements relating to removing and replacing mechanical units during vehicle repair, including procedures for:
 - selecting and using personal protective equipment (PPE)
 - manual handling and storage techniques
 - using tools and equipment
- environmental requirements, including procedures for trapping, storing and disposing of waste materials and vehicle fluids released during process
- types and layout of hard copy and electronic service and repair manuals, including from:
 - original equipment manufacturer (OEM)
 - component supplier
- removal and replacement procedures for mechanical units, including:

- correct use of tools, materials and safety equipment
- removal and replacement methods and techniques
- brake system fluids and bleeding processes, including anti-lock braking (ABS) systems
- types and functions of mechanical units, including:
 - suspension parts and components
 - steering parts and components
 - final drive assembly
 - engine cross member and cradle
 - exhaust system
 - radiator
- licence requirements associated with removal procedures, including:
 - air conditioning requirements
 - liquefied petroleum gas (LPG) requirements
- procedures for final inspection of fitted mechanical units.

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 mechanical units and assemblies that they have removed and replaced during vehicle repair, 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 specifications for mechanical units
- two different vehicles requiring the mechanical units specified in the performance evidence to be removed and replaced
- tools, equipment and materials appropriate for removing and replacing mechanical units, including required PPE.

Links

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