



Australian Government

AURLTA101 Identify automotive mechanical systems and components

Release: 2

AURLTA101 Identify automotive mechanical systems and components

Modification History

Release	Comments
Release 2	This version first released with the Automotive Retail, Service and Repair Training Package Version 7.0. Updated to resolve typographical errors.
Release 1	This version first released with the Automotive Retail, Service and Repair Training Package Version 6.0

Application

This unit describes the skills and knowledge required to identify the function and basic operation of a range of vehicle mechanical systems and components. It involves preparing for the task, locating information on the systems and components, and demonstrating knowledge of mechanical systems.

The unit applies to those undertaking a Vocational Education and Training in Schools (VETiS) or pre-vocational qualification as preparation to entering the automotive service and repair or automotive manufacturing industry. The unit is designed for use in a highly supervised context.

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

Unit Sector

Mechanical – Light Vehicle – Technical

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Locate and identify mechanical system and its components	1.1 Identify task requirements from task instructions including vehicle or machinery to be worked 1.2 Obtain technical information regarding mechanical system to be identified

ELEMENT	PERFORMANCE CRITERIA
	1.3 Identify mechanical system major components according to workplace health and safety requirements and task instructions
2. Demonstrate knowledge of mechanical system	2.1 Confirm system function from technical information and demonstrate during workplace activities 2.2 Confirm system major component function and basic operation from technical information and demonstrate during workplace activities 2.3 Confirm system relationship to vehicle or machinery operation is from technical information

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
Oral communication	Participates effectively in verbal exchanges using questioning and active listening to request, clarifies and clearly conveys information
Numeracy	Uses and communicates basic numerical information that relates to automotive systems and components

Unit Mapping Information

Supersedes and is equivalent to AURLTA001 Identify automotive mechanical systems 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 AURLTA101 Identify automotive mechanical systems 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:

- identify, locate and check of the operation of the following vehicle mechanical systems while carrying out required workplace activities:
 - engine systems
 - transmission and drivetrain
 - steering system
 - suspension system
 - fuel system
 - cooling system
 - braking system
 - exhaust system.

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:

- work health and safety (WHS) requirements relating to the identification of vehicle mechanical systems and components, including procedures for:
 - selecting and using personal protective equipment (PPE)
 - using tools and equipment
 - following workplace safety procedures
- basic theory and principles of automotive mechanical systems, including:
 - mechanical advantage

- gear ratio
- hydraulics
- pneumatics
- identification, function and basic operation of vehicle mechanical systems and components, including:
 - engine systems
 - transmission and drivetrain
 - steering system
 - suspension system
 - fuel system
 - cooling system
 - braking system
 - exhaust system
- basic automotive terminology relating to mechanical systems.

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 vehicles or machinery that they have worked on, 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
- workshop or task instructions
- information regarding basic mechanical principles and fundamentals
- information regarding vehicle mechanical systems and components
- workplace safety equipment, including PPE
- vehicle or a range of automotive mechanical systems and components
- automotive tools and equipment.

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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