



Australian Government

AURTTA027 Carry out basic vehicle servicing operations

Release: 1

AURTTA027 Carry out basic vehicle servicing operations

Modification History

Release	Comment
Release 1	New unit of competency

Application

This unit describes the performance outcomes required to carry out basic vehicle servicing operations. It requires the learner to plan and prepare the servicing task; select the correct equipment and service the major vehicle systems according to manufacturer servicing procedures and specifications; record findings; maintain the work area; and check and store the servicing tools and equipment.

It 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 and is not suitable for use in a vocational qualification.

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

Competency Field

Mechanical Miscellaneous

Unit Sector

Technical

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 italicised text is used, further information is detailed in the range of conditions section
1. Plan to carry out basic vehicle servicing operations	1.1 <i>Safety and environmental requirements</i> are sourced and interpreted 1.2. Task instruction is interpreted and <i>vehicle</i> to be serviced is

ELEMENTS	PERFORMANCE CRITERIA
	identified 1.3 Manufacturer specifications and workplace procedures for basic vehicle servicing operations are sourced and interpreted 1.4 Potential hazards and risks associated with task are identified and reported to workplace supervisor 1.5 Tools and equipment required for vehicle servicing are identified according to manufacturer specifications
2. Carry out basic vehicle servicing operations	2.1 Tools and equipment are selected and checked prior to use according to manufacturer specifications and safety requirements 2.2 Basic vehicle servicing operations are carried out according to workplace procedures, manufacturer specifications and safety and environmental requirements 2.3 Observations of worn vehicle components or issues requiring further exploration are recorded 2.4 Basic vehicle servicing operation procedures are recorded
3. Complete work processes	3.1 Final inspection is made to ensure work meets task instruction and workplace standards, and serviced vehicle is presented ready for use or storage according to workplace procedures 3.2 Work area is cleaned, waste and non-recyclable materials are disposed of, and recyclable material is collected and stored according to environmental requirements and workplace procedures 3.3 Tools and equipment are checked and stored according to workplace procedures, or tagged and reported where necessary 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 appropriate sources of vehicle servicing information and servicing equipment operating procedures.
Reading skills to:	- select and interpret key information from manufacturer specifications, safety requirements and workplace procedures to perform basic vehicle servicing operations - select and interpret key information from environmental requirements and workplace procedures to ensure a clean and

Skills	Description
	safe work site.
Writing skills to:	legibly and accurately fill out workplace documentation using correct industry terminology and conventions.
Oral communication skills to:	participate effectively in verbal exchanges using questioning and active listening to request, clarify and clearly convey information.
Numeracy skills to:	- read and interpret metric and imperial systems of measurement - read and interpret mathematical information, including charts and drawings - use specialist tools and measuring equipment, including gauges - use basic mathematical operations, including addition, subtraction, multiplication and division, to calculate volumes and ratios.
Planning and organising skills to:	plan own work requirements and prioritise actions to achieve required outcomes.
Self-management skills to:	recognise own limitations when selecting and using tools and equipment and seek timely advice.
Problem-solving skills to:	- identify potential or actual hazards and take action to minimise risk - refer problems that cannot be readily resolved and seek assistance from workplace supervisor.
Technology skills to:	set up and operate equipment and tools required to perform basic vehicle servicing operations.

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>Safety and environmental requirements</i> must include:	- information about key aspects of work health and safety (WHS), occupational health and safety (OHS) and environmental requirements, including: - use of personal protective equipment, including safety glasses, ear protection and safety footwear - use of hand tools and lifting equipment - application of procedures for handling, storing and disposing of used oil, lubricants and coolants.
<i>Vehicle</i> must include	passenger or light commercial motor vehicle

one or more of the following:	• motorcycle • constructed vehicle.
Basic vehicle servicing operations must include:	• servicing the following: • engine and exhaust system • drive belt • cooling system • transmission and final drive • tyres, suspension and steering • fuel and intake system • electrical system • braking system • body fittings and pedal rubbers.

Unit Mapping Information

No equivalent unit.

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 AURTTA027 Carry out basic vehicle servicing operations

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Performance Evidence

Before competency can be determined, individuals must demonstrate they can perform the following according to the standards defined in this unit's elements, performance criteria, range of conditions and foundation skills:

- correctly perform basic servicing operations on a minimum of two different operational vehicles.

Knowledge Evidence

Individuals must be able to demonstrate knowledge of:

- key aspects of work health and safety (WHS), occupational health and safety (OHS) and environmental requirements relating to basic vehicle servicing operations, including:
 - use of personal protective equipment, including safety glasses, ear protection and safety footwear
 - use of hand tools and lifting equipment
 - safety data sheets (SDS) and procedures for handling, storing and disposing of used oil, lubricants, coolants, transmission and brake fluids
 - reasons for servicing vehicles
- basic vehicle servicing procedures, including:
 - servicing the engine:
 - checking for leaks, worn or loose fittings, cracks or other damage
 - changing the engine oil
 - changing the oil filter
 - servicing the drive belt:
 - checking for cracks, fraying, oil soaking and glazing at the belt to pulley contact area
 - adjusting the belt
 - servicing the cooling system:

- checking for leaks, signs of corrosion, damaged or cracked hoses, worn or loose fittings
- topping up the coolant
- servicing transmission and final drive systems:
 - checking for leaks, worn or loose fittings, cracks or other damage
 - checking and topping up transmission and final drive lubricant level
 - topping up the clutch master cylinder fluid
- servicing the tyres and suspension and steering system:
 - checking for leaks, splits in rubber boots, worn or loose fittings, and tyre wear
 - adjusting air pressure
 - lubricating ball joints
 - topping up power steering reservoir fluid
- servicing the fuel system:
 - checking for leaks, worn or loose fittings, cracks or other damage
 - replacing air filters
- servicing the electrical system:
 - checking the lighting system
 - checking and topping up the battery
- servicing the brakes:
 - checking for leaks, wear, excessive heat damage, cracks or other damage
 - topping up the master cylinder fluid
- other tasks, including checking:
 - windscreen wipers
 - windscreen washers (fluid level)
 - heating, ventilation and air-conditioning (HVAC) operation
 - body panels
 - exhaust system
 - mirrors
 - condition of foot pedal rubbers
- hand and power tools and equipment used in vehicle servicing
- work area clean-up and maintenance requirements.

Assessment Conditions

Assessors must satisfy SNR/AQTF assessor requirements.

Competency is to be assessed in the workplace or a simulated environment that accurately reflects performance in a real workplace setting.

Where assessment of competency includes third-party evidence, individuals must provide evidence that links them to the vehicles that they have serviced, 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
- personal protective equipment appropriate to the workplace
- two vehicles for servicing
- automotive hand and power tools and lifting and supporting equipment
- automotive fluids and oils, including:
 - engine oil
 - transmission oil
 - brake fluid.

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