



Australian Government

AURTTF101 Inspect and service petrol fuel systems

Release: 1

AURTTF101 Inspect and service petrol fuel systems

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 inspect and service vehicle petrol fuel systems. It involves preparing for the task, inspecting the fuel system for leaks, inspecting the air filter, reporting the inspection findings, servicing and adjusting the petrol fuel system, and completing workplace processes and documentation.

The unit applies to those working in the automotive service and repair industry. The petrol fuel systems include those of agricultural machinery, heavy commercial vehicles, light vehicles, mobile plant machinery, motorcycles or outdoor power equipment. The servicing operations undertaken may vary based on the occupation of the learner.

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

Unit Sector

Mechanical Miscellaneous Technical - Fuel Systems

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 inspect and service petrol fuel system	1.1 Identify job requirements from workplace instructions 1.2 Obtain and interpret servicing information 1.3 Identify hazards associated with the work, assess potential risks and implement control measures in line with workplace policies and procedures 1.4 Identify tools and equipment required for servicing activity and establish serviceability according to workplace procedures
2. Inspect petrol fuel	2.1 Carry out inspection according to manufacturer

ELEMENTS	PERFORMANCE CRITERIA
system	specifications, workplace procedures, workplace health and safety and environmental requirements 2.2 Compare inspection results with manufacturer specifications 2.3 Report inspection findings for necessary repairs according to workplace procedures
3. Service petrol fuel system	3.1 Carry out service and adjustments according to manufacturer specifications, workplace procedures, workplace health and safety and environmental requirements 3.2 Carry out post-service testing according to workplace procedures
4. Complete work processes	4.1 Carry out final inspection to ensure work meets workplace expectations and confirm vehicle or machinery is ready for use 4.2 Clear work area and dispose of or recycle materials according to workplace procedures 4.3 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.
Reading	Locates information from manufacturer and workshop literature when seeking service procedures and specifications relating to petrol fuel systems.
Oral communication	- Clarifies instructions - Makes repair recommendations.
Numeracy	Calculates liquid volumes and service schedule intervals using basic mathematical operations, including addition and subtraction.
Problem solving	Refers to problems outside area of responsibility to required person.

Unit Mapping Information

Supersedes and is equivalent to AURTTF001 Inspect and service petrol fuel systems.

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 AURTTF101 Inspect and service petrol fuel systems

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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:

- inspect and service the petrol fuel systems of at least two different vehicles or machinery in which the work for each must involve all of the following:
 - pre-inspection of all petrol fuel system components
 - servicing air filters
 - replacing fuel filters.
 - post-inspection of all petrol fuel system components.

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 inspect and service petrol fuel systems, including:
 - vehicle manufacturer specifications and procedures or equivalent documentation
- workplace procedures required to inspect and service petrol fuel systems, including:
 - establishing the 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
- workplace health and safety (WHS) requirements relating to inspecting and servicing petrol fuel systems, including procedures for working with:
 - stored fuel pressure

- flammable liquids
- environmental requirements relating to inspecting and servicing petrol fuel systems, including procedures for:
 - trapping, storing and disposing of flammable liquids released from fuel systems
 - disposing of filters.
- inspection procedures for petrol fuel systems, including:
 - inspecting components for damage and leaks
 - inspecting air filter and air intake housing and ducting for blockage or damage
- service and adjustment procedures for petrol fuel systems, including:
 - replacing fuel filter
 - cleaning or replacing air filter and checking air intake housing and ducting for damage
 - checking and adjusting base idle speed as required
 - fuel pressure testing as required
- post-service testing procedures for petrol fuel systems, including:
 - starting up and running system to full operation
 - testing system for leaks and correct operation
- identification, function and basic operation of petrol fuel system components, including:
 - types and applications of fuels, including petroleum and biofuels
 - fuel tank, cap and lines
 - fuel filters
 - fuel pumps, including:
 - mechanical
 - electrical
 - electronic control unit and sensors
 - fuel injection system components
 - accelerator pedal or control lever.

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 petrol fuel systems 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 repair workplace or simulated workplace
- workplace instructions

- manufacturer petrol fuel system specifications
- two different vehicles or machinery with petrol fuel systems requiring servicing
- tools, equipment and materials appropriate for inspecting and servicing petrol fuel systems.

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

Links

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