

Title	Diagnose and rectify faults in carburetted petrol fuel systems used on outdoor powered equipment		
Level	4	Credits	4

Purpose	<p>This unit standard is intended for people in the outdoor power equipment repair industry.</p> <p>People credited with this unit standard are able to diagnose carburetted petrol fuel system faults on outdoor powered equipment and rectify petrol fuel system faults and their causes.</p>
----------------	---

Classification	Motor Industry > Automotive Fuel Systems and Exhaust
-----------------------	--

Available grade	Achieved
------------------------	----------

Guidance Information

- 1 It is recommended that people hold credit for Unit 15380, *Demonstrate knowledge of carburettors used on outdoor powered equipment* before being assessed against this unit standard.
- 2 Evidence presented for assessment against this unit standard must be consistent with safe working practices and be in accordance with applicable service information, and company requirements and legislative requirements. This includes the knowledge and use of suitable tools and equipment.
- 3 Performance of the outcomes of this unit standard must comply with the following: Health and Safety at Work Act 2015.
- 4 Any new, amended or replacement Acts, regulations, standards, codes of practice, guidelines, or authority requirements or conditions affecting this unit standard will take precedence for assessment purposes, pending review of this unit standard.
- 5 Definitions

Company requirements refer to instructions to staff on policy and procedures that are available in the workplace. These requirements may include – company policies and procedures, work instructions, product quality specifications and legislative requirements.

Service information refers to technical information for a vehicle, machine, or product detailing operation; installation and servicing procedures; manufacturer instructions; technical terms and descriptions; and detailed illustrations.

Suitable tools and equipment refer to industry approved tools and equipment that are recognised within the industry as being the most suited to complete the task in a professional and competent manner with due regard to safe working practices.

- 6 For this unit standard, it is essential that the practical assessment evidence is obtained in the workplace under normal workplace conditions.

Outcomes and performance criteria

Outcome 1

Diagnose carburetted petrol fuel system faults on outdoor powered equipment.

Performance criteria

- 1.1 Fuel system tests are carried out.
- Range external damage and security; setting of controls; sufficient amount of clean, fresh fuel in the tank; spark plug check and ignition test; fuel flow restrictions into the carburettor; compression check.
- 1.2 The engine is run to reproduce the symptoms of the fault, and all relevant details concerning the symptoms and conditions when they occur, are identified and noted.
- 1.3 The fault symptoms, conditions when they occur, and any test results are analysed, and a likely cause is determined.

Outcome 2

Rectify petrol fuel system faults and their causes.

Performance criteria

- 2.1 Precautions are taken to avoid fire and inhalation of petrol fumes, and to minimise contact of petrol with skin.
- 2.2 A contaminated fuel system is cleaned and restored to full serviceability.
- Range fuel tank, pipeline, filters, pump, carburettor.
- 2.3 Fuel blockages and restrictions are cleared to restore normal fuel flow rate.
- Range cleared by compressed air, replacement of parts.
- 2.4 Any fuel leaks are rectified.
- Range components tightened, sealed, replaced with new parts.
- 2.5 Carburettors are disassembled without damage to the parts.
- Range float type, diaphragm (pressure differential) type.

- 2.6 The carburettor parts are examined, and any damage, wear or deterioration identified.
- Range float type, diaphragm type.
- 2.7 Unserviceable carburettor parts are replaced with new parts, and the carburettor is assembled and adjusted.
- Range float type, diaphragm type.
- 2.8 Replacement fuel system components that meet manufacturer specifications are fitted in a manner that restores full serviceability of the system.
- Range fuel supply system components, air intake system components, controls.

Planned review date	31 December 2025
----------------------------	------------------

Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	23 February 1999	31 December 2022
Revision	2	16 April 2003	31 December 2022
Review	3	25 January 2008	31 December 2022
Review	4	29 April 2021	N/A

Consent and Moderation Requirements (CMR) reference	0014
--	------

This CMR can be accessed at <http://www.nzqa.govt.nz/framework/search/index.do>.

Comments on this unit standard

Please contact MITO New Zealand Incorporated info@mito.org.nz if you wish to suggest changes to the content of this unit standard.