

Title	Demonstrate knowledge of motorcycle carburettors, and diagnosing fuel system faults and their causes		
Level	3	Credits	2

Purpose	<p>This unit standard is intended for people in the motorcycle repair industry.</p> <p>People credited with this unit standard are able to demonstrate knowledge of motorcycle carburettors and diagnosing fuel system faults and their causes.</p>
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Classification	Motor Industry > Automotive Fuel Systems and Exhaust
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Available grade	Achieved
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Guidance Information

- 1 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.
- 2 Performance of the outcomes of this unit standard must comply with the following: Health and Safety at Work Act 2015.
- 3 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.
- 4 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.

Outcomes and performance criteria

Outcome 1

Demonstrate knowledge of motorcycle carburettors.

Range includes but is not limited to – piston or slide, constant velocity, and fixed venturi types.

Performance criteria

- 1.1 The terms constant velocity (CV) carburettor and fixed venturi carburettor are defined, and the differences between CV and piston or slide carburettors are described.
- 1.2 The functions of the various systems in a carburettor, with and without automatic choke, is determined.
- Range idle, progression, cruising, acceleration, power, cold start, carburettor heating.
- 1.3 The need for synchronisation of multiple carburettors is explained.

Outcome 2

Demonstrate knowledge of diagnosing fuel system faults and their causes.

Performance criteria

- 2.1 Diagnostic procedures are described.
- Range includes but is not limited to – test ride, symptoms, poor performance, poor starting, conditions, leaks, dirt and contamination, adjustment, blockage.
- 2.2 Testing of the carburettor for faults is described.
- Range piston valve, constant velocity, and fixed venturi types; includes but is not limited to – damage, wear, deterioration.
- 2.3 Testing the outlet pressure and flow rate of the fuel pump is described.
- 2.4 Testing the air intake system is described.
- Range includes but is not limited to – damaged parts, unserviceable parts, loose parts, air leaks, blockages, restrictions.

Replacement information	This unit standard and unit standard 24190 replaced unit standard 962.
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Planned review date	31 December 2025
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Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	25 January 2008	31 December 2022
Review	2	29 April 2021	N/A

Consent and Moderation Requirements (CMR) reference	0014
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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.