Title	Demonstrate knowledge of motorcycle, car, light and heavy commercial vehicle braking systems		
Level	2	Credits	3

Purpose	This theory-based unit standard is for people who wish to enter or are employed in the motor industry. People credited with this unit standard are able to demonstrate knowledge of motorcycle, car, light and heavy commercial vehicle braking systems.
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	Classification	Motor Industry > Vehicle Braking Systems
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Available grade

Explanatory notes

- 1 Evidence presented for assessment against this unit standard must be consistent with safe working practices and be in accordance with applicable manufacturer's specifications, service information, company and legislative requirements.
- 2 Legislation, regulations and/or industry standards relevant to this unit standard include but are not limited to the current version of including updated amendments to, and replacements of Resource Management Act 1991.

3 Definitions

Company requirements refer to instructions to staff on policy and procedures which are documented in memo or manual format and are available in the workplace. These requirements include but are not limited to – company specifications and procedures, work instructions, manufacturer specifications, product quality specifications and legislative requirements.

Service information may include but is not limited to – technical information of a vehicle, machine, or product detailing operation; installation and servicing procedures; manufacturer instructions and specifications; technical terms and descriptions; and detailed illustrations. This may be accessed from the manufacturer.

Outcomes and evidence requirements

Outcome 1

Demonstrate knowledge of motorcycle, car, light and heavy commercial vehicle braking systems.

Range foot brake, parking brake, emergency braking systems.

Evidence requirements

1.1 Braking systems are identified.

Range may include but is not limited to – disc, drum; mechanical, hydraulic, power assisted, pneumatic.

1.2 Safety and technological enhancements to braking systems are identified.

Range may include but is not limited to – anti-lock braking system (ABS), traction and stability control, electro-hydraulic, electronic (brake-bywire), automatic adjustment.

1.3 Components and layout of braking systems on a vehicle are described.

Range may include but is not limited to – master cylinder, brake booster, callipers, wheel (slave) cylinders, pipes, hoses, electronic control, rotor, shoes, discs and pads, adjustments, proportioning valve, pressure differential valve, combination valve, warning systems, cables, handbrake mechanisms, spring brake chambers.

- 1.4 Function of the brake systems and operation of each of the assembled systems are described.
- 1.5 Operating principles of ABS and traction control (TC) are described.

Planned review date	31 December 2021
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Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	27 July 2005	31 December 2018
Review	2	21 April 2016	N/A

Consent and Moderation Requirements (CMR) reference	0014

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

Please note

Providers must be granted consent to assess against standards (accredited) by NZQA, before they can report credits from assessment against unit standards or deliver courses of study leading to that assessment.

Industry Training Organisations must be granted consent to assess against standards by NZQA before they can register credits from assessment against unit standards.

Providers and Industry Training Organisations, which have been granted consent and which are assessing against unit standards must engage with the moderation system that applies to those standards.

Requirements for consent to assess and an outline of the moderation system that applies to this standard are outlined in the Consent and Moderation Requirements (CMRs). The CMR also includes useful information about special requirements for organisations wishing to develop education and training programmes, such as minimum qualifications for tutors and assessors, and special resource requirements.

Comments on this unit standard

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