Title	Inspect braking system for safe operation on light vehicles, and inspect hydraulic components off the vehicle				
Level	3		Credits	3	
Purpose		People credited with this unit standard are able to: inspect a braking system for safe operation on light vehicles; and inspect hydraulic braking system components off the vehicle.			
Classification		Motor Industry > Vehicle Braking Systems			

Available grade	Achieved

Guidance Information

- 1 It is recommended that people hold credit for Unit 31063, *Demonstrate knowledge of hydraulic brake system fault diagnosis* 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.
- Performance of the outcomes of this unit standard must comply with the following: Health and Safety at Work Act 2015;

Vehicle Inspection Requirements Manual (VIRM) In-service Certification;

Land Transport Rule: Light-vehicle Brakes 2002;

Land Transport Rule: Vehicle Repair 1998.

- 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.

Light vehicle refers to classes MA, MB, MC, MD, MD1, MD2 and NA as specified in the Vehicle equipment standards classifications at

https://www.nzta.govt.nz/vehicles/vehicle-types/vehicle-classes-and-standards/vehicle-classes/.

Service information refers to information such as 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.

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

Inspect a braking system for safe operation on light vehicles.

Performance criteria

1.1 The servicing requirements of a light vehicle braking system are identified.

Range may include – adjustment, brake fluid, replacement of parts, inspection procedures, servicing precautions, cleaning parts.

1.2 Brake system requirements for Warrant of Fitness regulations are identified.

Range condition, performance, repairs, modification, component replacement.

1.3 Brake fluid is inspected, and any contamination identified and noted.

Range may include – moisture up-take, using old and contaminated fluid during service, change intervals, storage of fluid.

1.4 Vehicle brake test and fault-finding procedures are carried out and defects noted.

Range may include – road test, using brake testing gauge or meter, using a floor mounted brake machine, following ABS (anti-lock braking system) test procedure.

1.5 Brake componentry is inspected, and defects noted.

Range may include – master cylinders, drum brake assembly, disc brake assembly, handbrake mechanism, hoses, brake booster, pipes, adjustments.

Outcome 2

Inspect hydraulic braking system components off the vehicle.

Range may include – single and double acting wheel cylinders, single and tandem master cylinders, brake boosters (vacuum operated), vacuum pumps, single and multi-piston callipers (fixed and floating types); evidence relating to a minimum of three components is required.

Performance criteria

- 2.1 Component parts are dismantled in a logical sequence.
- 2.2 Component parts are laid out in order of disassembly to ensure that any variance from service information is noted.
- 2.3 Component parts are cleaned, without damaging precision surfaces and rubber seals, to enable an assessment of their condition to be made.
- 2.4 Component parts are inspected for wear, corrosion, and damage, and a report is given to the supervisor.

Range visual inspection, precision measurement.

2.5 The feasibility of a repair is determined based on relevant factors.

Range relevant factors may include – type and extent of repair required, cost of repair, availability and cost of replacement, life expectancy

and guarantee.

2.6 A recommendation based on the feasibility of repair is presented to the supervisor.

Replacement information	This unit standard and unit standard 24409 replaced unit standard 938.

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 July 2021	N/A

Consent and Moderation Requirements (CMR) reference	0014
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This CMR can be accessed at http://www.nzga.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.