

Title	Diagnose and repair faults in wheel tractor braking systems and carry out routine maintenance		
Level	4	Credits	5

Purpose	People credited with this unit standard are able to: diagnose faults in wheel tractor brakes; carry out routine maintenance of wheel tractor braking systems; and repair faults in wheel tractor brakes.
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Classification	Motor Industry > Vehicle Braking Systems
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Available grade	Achieved
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Guidance Information

- 1 It is recommended that people hold credit for Unit 24416, *Demonstrate knowledge of wheel tractor braking systems* 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;
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.
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.

- 6 Range
Wheel tractor braking systems may include – outboard slow axle brakes, high speed axle shaft dry brakes, high speed shaft axle wet brakes, high speed transmission dry brakes, emergency brake systems, auxiliary systems.
- 7 For this unit standard, it is essential that the practical assessment evidence is obtained in the workplace under normal workplace conditions.
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Outcomes and performance criteria

Outcome 1

Diagnose faults in wheel tractor brakes.

Performance criteria

- 1.1 The symptoms of the fault(s) are verified and recorded.
- Range may include – communication with customer or operator, operating tractor to reproduce the fault(s).
- 1.2 A diagnostic report on the braking system is completed and reported to the supervisor.
- Range may include – visual inspection of system following a logical systematic procedure, tractor operated and brake performance tested as specified by the tractor manufacturer, identifying and recording faults, estimating repair costs, recommending repairs and replacement of parts.

Outcome 2

Carry out routine maintenance of wheel tractor braking systems.

Performance criteria

- 2.1 Periodic and seasonal maintenance checks are carried out.
- Range may include – cleaning, lubricating, inspecting, adjusting, testing, recommending repair work.

Outcome 3

Repair faults in wheel tractor brakes.

Performance criteria

- 3.1 The machine is cleaned in the area to be worked, to allow clean access when dismantling components.
- Range may include – steam machine cleaning, solvent and water hand cleaning.

- 3.2 The machine is made safe before repairs are carried out.
Range may include – level surface, blocking, jacking.
- 3.3 Brake housings are stripped down.
- 3.4 Brake parts are cleaned and made ready for inspection.
- 3.5 Repairs required to the braking system are identified.
- 3.6 The tractor braking system is repaired and reassembled.
Range may include but is not limited to – reline or replace worn components, linkage operation, lubrication, adjustments.
- 3.7 Field test is completed, to ensure braking system operates.

Replacement information	This unit standard and unit standard 24416 replaced unit standard 5437.
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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 July 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.