

<b>Title</b>	<b>Inspect and repair drum brakes on heavy vehicles or machines</b>		
<b>Level</b>	<b>3</b>	<b>Credits</b>	<b>3</b>

<b>Purpose</b>	People credited with this unit standard are able to inspect and repair drum brakes on heavy vehicles or machines.
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<b>Classification</b>	Motor Industry > Vehicle Braking Systems
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<b>Available grade</b>	Achieved
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### Guidance Information

- 1 It is recommended that people hold credit for Unit 24418, *Demonstrate knowledge of drum brakes on heavy vehicles and machines* 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;  
Vehicle Inspection Requirements Manual (VIRM) In-service Certification;  
Land Transport Rule: Heavy Vehicle Brakes 2006;  
Land Transport Rule: Heavy Vehicles 2004;  
Land Transport Rule: Vehicle Standards Compliance 2002.
- 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.  
*Heavy Vehicle* refers to classes MD3, MD4, ME, NB, TC and TD as specified in the Vehicle equipment standards classifications at <https://www.nzta.govt.nz/vehicles/vehicle-types/vehicle-classes-and-standards/vehicle-classes/>; or has a gross vehicle mass that exceeds 3500kg and is not of a class specified in the Vehicle equipment standards classifications.  
*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 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

Inspect drum brakes on heavy vehicles or machines.

#### Performance criteria

- 1.1 Brake drums are removed.
- 1.2 The operating mechanisms of drum brakes are inspected, and any defects noted.
- Range may include – S-cam, Z-cam, wedge expanders, hydraulic slave cylinders, slack adjusters.
- 1.3 Brake components are inspected for condition.
- Range may include – hydraulic activation, pneumatic activation, mechanical activation; drum ovality, drum condition, lining thickness, brake spring tension.
- 1.4 Park brake activation is checked, and any defects noted.
- Range may include – spring brakes, drive shaft brakes.
- 1.5 Safety precautions are taken when repairing foundation brakes.
- Range may include but is not limited to – chocking vehicle, raising and supporting vehicle, cleaning.

### Outcome 2

Repair drum brakes on heavy vehicles or machines.

#### Performance criteria

- 2.1 Activating mechanisms are repaired or replaced.
- 2.2 The brake adjusters are repaired or replaced.
- 2.3 Drum brake components are repaired or replaced and reassembled.
- 2.4 Park brake activation is adjusted.

## 2.5 Brakes are tested.

<b>Replacement information</b>	This unit standard, unit standard 24407, and unit standard 24418 replaced unit standard 15475.
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<b>Planned review date</b>	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

<b>Consent and Moderation Requirements (CMR) reference</b>	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](mailto:info@mito.org.nz) if you wish to suggest changes to the content of this unit standard.