

Title	Demonstrate knowledge of drum brakes on heavy vehicles and machines		
Level	3	Credits	2

Purpose	People credited with this unit standard are able to demonstrate knowledge of drum brakes on heavy vehicles and machines.
----------------	--

Classification	Motor Industry > Vehicle Braking Systems
-----------------------	--

Available grade	Achieved
------------------------	----------

Guidance Information

- 1 It is recommended that people hold credit for Unit 24407, *Demonstrate knowledge of brake lining friction materials* 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: 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.

Outcomes and performance criteria

Outcome 1

Demonstrate knowledge of drum brakes on heavy vehicles and machines.

Performance criteria

1.1 The layout of drum brakes is described.

Range leading trailing shoe, two leading shoe, duo servo brake, two trailing shoe brake.

1.2 The operating mechanisms of drum brakes are described.

Range S-cam, Z-cam, wedge expanders, hydraulic slave cylinders, slack adjusters.

1.3 The operation of drum brakes is described.

Range leading trailing shoe, two leading shoe, duo servo brake, two trailing shoe brake; hydraulic activation, pneumatic activation, mechanical activation.

1.4 Methods of park brake activation are described.

Range spring brakes, drive shaft brakes.

Replacement information	This unit standard, unit standard 24407, and unit standard 24419 replaced unit standard 15475.
--------------------------------	--

Planned review date	31 December 2025
----------------------------	------------------

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
--	------

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.