

Title	Machine brake disc rotors and brake drums		
Level	3	Credits	2

Purpose	People credited with this unit standard are able to machine brake disc rotors and brake drums.
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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 24410, *Demonstrate knowledge of machining brake disc rotors and brake drums* 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 Vehicles 2004;
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.
Lathe manufacturer instructions refer to specifications and/or instructions provided by the brake lathe manufacturer for the correct machining operation of brake rotors and drums. This includes either on-vehicle or off-vehicle machining.
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.

Outcomes and performance criteria

Outcome 1

Machine brake disc rotors and brake drums.

Performance criteria

- 1.1 The serviceability of brake discs and drums are verified.
- Range precision measurement of surfaces, visual inspection.
- 1.2 The disc and drum surfaces are machined.
- Range may include – lathe cutting bits checked for condition, lathe cutting depth, feed and speed calculated, reference to manufacturer's minimum thickness standard, mounting surfaces clean and free of burrs and grease, mounting hub runout, use of noise dampening device, equal cut on disc surfaces; runout and parallelism within manufacturer tolerances, disc thickness within manufacturer tolerance.
- 1.3 A non-directional finish is applied to the machined surfaces.
- 1.4 All disc and drum surfaces are washed to ensure that no fine particles remain as a result of resurfacing.
- 1.5 Disc rotors and drum surfaces are measured to ensure compliance with manufacturer minimum disc rotor thickness and maximum drum diameter tolerances.
- 1.6 The lathe and associated equipment are cleaned and stored ready for further use.
- 1.7 Machined discs and drums are labelled detailing the amount of machining carried out.

Replacement information	This unit standard and unit standard 24410 replaced unit standard 948.
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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

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.