



**Australian Government**

# **AURTTB003 Machine brake drums and brake disc rotors**

**Release: 1**

## AURTTB003 Machine brake drums and brake disc rotors

### Modification History

Release	Comment
Release 1	New unit of competency.

### Application

This unit describes the performance outcomes required to measure, evaluate and machine vehicle brake drums and brake disc rotors to manufacturer specifications. It involves preparing for the task, machining disc brake rotors and brake drums, and completing workplace processes and documentation.

It applies to those working in the automotive service and repair industry.

No licensing, legislative, regulatory or certification requirements apply to this unit at the time of publication.

### Competency Field

Mechanical Miscellaneous

### Unit Sector

Technical - Brakes

### Elements and Performance Criteria

Elements	Performance Criteria
Elements describe the essential outcomes.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold and italicised text is used, further information is detailed in the range of conditions section.
1. Prepare to machine brake drums and brake	1.1 Job requirements are determined from workplace instructions 1.2 Brake drum and disc rotor machining procedures and information

<b>Elements</b> Elements describe the essential outcomes.	<b>Performance Criteria</b> Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold and italicised text is used, further information is detailed in the range of conditions section.
disc rotors	are sourced and interpreted 1.3 Brake drums and brake disc rotors are measured and evaluated against manufacturer specifications according to workplace procedures 1.4 Machining options are analysed and those most appropriate to the circumstances are selected 1.5 Hazards associated with the work are identified and risks are managed 1.6 Tools and equipment, including disc and drum brake lathe, are selected and checked for serviceability
2. Carry out machining operations	2.1 Brake drums and brake disc rotors are prepared for machining according to workplace procedures and <b><i>safety and environmental requirements</i></b> 2.2 Brake drums and brake disc rotors are positioned in brake lathe according to manufacturer specifications and workplace procedures 2.3 Brake drums and brake disc rotors are machined according to manufacturer specifications, workplace procedures, and safety and environmental requirements 2.4 Brake drums and brake disc rotors are measured against manufacturer specifications according to workplace procedures 2.5 Brake drums and brake disc rotor machining is completed according to manufacturer specifications, workplace procedures, and safety and environmental requirements 2.6 Brake drums and brake disc rotors are visually evaluated to ensure safe operation according to workplace procedures
3. Complete work processes	3.1 Brake drums and brake disc rotors are presented ready for use or stored according to workplace procedures 3.2 Work area is cleaned, waste and non-recyclable materials are disposed of, and recyclable material is collected 3.3 Tools and equipment are checked and stored according to workplace procedures 3.4 Workplace documentation is processed according to workplace procedures

## Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential to performance and are not explicit in the performance criteria.

Skills	Description
Learning skills to:	<ul style="list-style-type: none"> <li>locate appropriate sources of information efficiently.</li> </ul>
Reading skills to:	<ul style="list-style-type: none"> <li>interpret safe operating procedures for brake drums and brake disc rotor machining equipment from signs and workplace and manufacturer literature</li> <li>interpret information from manufacturer and workshop literature when seeking braking system specifications and procedures.</li> </ul>
Writing skills to:	<ul style="list-style-type: none"> <li>legibly and accurately fill out workplace documentation when making repair recommendations, recording measurements, and recording parts and material used.</li> </ul>
Oral communication skills to:	<ul style="list-style-type: none"> <li>clarify instructions, report diagnostic findings, and make repair recommendations.</li> </ul>
Numeracy skills to:	<ul style="list-style-type: none"> <li>measure braking system components and use basic mathematical operations, including addition and subtraction, to calculate distances, tolerances and deviations from manufacturer specifications.</li> </ul>
Planning and organising skills to:	<ul style="list-style-type: none"> <li>plan own work requirements and prioritise actions to achieve required outcomes and ensure tasks are completed within workplace timeframes.</li> </ul>
Technology skills to:	<ul style="list-style-type: none"> <li>use braking system measuring equipment, such as vernier calipers, micrometers and brake drum micrometers</li> <li>use brake lathes.</li> </ul>

## Range of Conditions

This section specifies work environments and conditions that may affect performance.

Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included. Bold italicised wording, if used in the performance criteria, is detailed below.

<b><i>Safety and environmental requirements</i></b> must include:	<ul style="list-style-type: none"> <li>work health and safety (WHS) and occupational health and safety (OHS) requirements, including procedures for working safely with brake machining equipment</li> <li>environmental requirements, including procedures for trapping,</li> </ul>
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	storing and disposing of metal swarf produced during machining.
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## Unit Mapping Information

Equivalent to AURTTB2003 Machine brake drums and disc brake rotors

## Links

Companion Volume implementation guides are found in VETNet -  
<https://vetnet.education.gov.au/Pages/TrainingDocs.aspx?q=b4278d82-d487-4070-a8c4-78045ec695b1>