



Australian Government

AURTTB101 Inspect and service braking systems

Release: 1

AURTTB101 Inspect and service braking systems

Modification History

Release	Comments
Release 1	This version first released with AUR Automotive Retail, Service and Repair Training Package Version 6.0

Application

This unit describes the skills and knowledge required to inspect and service braking systems according to manufacturer specifications. It involves preparing for the task, inspecting the system, reporting the inspection findings, servicing and adjusting the system, and completing workplace processes and documentation. The servicing undertaken will vary based on the work context.

The unit applies to those working in the automotive service and repair industry. The braking systems include those of agricultural machinery, heavy commercial vehicles, light vehicles, motorcycles, mobile plant machinery, outdoor power equipment or trailers. The braking systems may be hydraulic, air over hydraulic, air, mechanical, or hand and parking braking systems.

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

Unit Sector

Mechanical Miscellaneous Technical - Brakes

Elements and Performance Criteria

ELEMENTS	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare to inspect and service braking system	1.1 Identify job requirements from workplace instructions 1.2 Obtain and interpret servicing information 1.3 Identify hazards associated with the work, assess potential risks and implement control measures in line with workplace policies and procedures 1.4 Identify tools and equipment required for servicing activity and establish serviceability according to workplace

ELEMENTS	PERFORMANCE CRITERIA
	procedures
2. Inspect braking system	2.1 Carry out inspection according to manufacturer specifications, workplace procedures, workplace health and safety and environmental requirements 2.2 Compare inspection results with manufacturer specifications 2.3 Report inspection findings and recommendations for necessary repairs according to workplace procedures
3. Service braking system	3.1 Carry out service and adjustments according to manufacturer specifications, workplace procedures, workplace health and safety and environmental requirements 3.2 Carry out post-service testing according to workplace procedures
4. Complete work processes	4.1 Conduct final inspection according to workplace procedures and confirm vehicle is ready for use 4.2 Clear work area and dispose of or recycle materials according to workplace procedures 4.3 Complete documentation according to workplace procedures

Foundation Skills

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

SKILL	DESCRIPTION
Learning	Locates required sources of information efficiently.
Reading	Interprets information from manufacturer and workshop literature when seeking service procedures and specifications relating to braking systems.
Oral communication	Clarifies instructions.
Numeracy	- Measures brake components and use basic mathematical operations, including addition and subtraction, - Calculates deviations and tolerances from manufacturer specifications - Interprets measuring equipment scales.
Technology	Uses measuring equipment.
Problem solving	Refers problems outside area of responsibility to required person.

Unit Mapping Information

Supersedes and is equivalent to AURTTB001 Inspect and service braking systems.

Links

Companion Volume Implementation Guide is found on VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=b4278d82-d487-4070-a8c4-78045ec695b1>

Assessment Requirements for AURTTB101 Inspect and service braking systems

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Performance Evidence

The candidate must demonstrate the ability to complete the tasks outlined in the elements, performance criteria and foundation skills of this unit, including evidence of the ability to:

- inspect and service the brakes of at least two different vehicles or machinery, in which the work for each must involve inspecting and servicing at least one of the following:
 - disc braking system
 - drum braking systems
- complete dynamic and static testing.

Knowledge Evidence

The candidate must be able to demonstrate knowledge to complete the tasks outlined in the elements, performance criteria and foundation skills of this unit, including knowledge of:

- methods to locate and interpret information required to inspect and service brakes, including:
 - vehicle manufacturer specifications and procedures or equivalent documentation
- workplace procedures required to inspect and service brakes, including:
 - inspecting and servicing brakes
 - establishing the serviceability of tools and equipment
 - documentation procedures
 - housekeeping procedures, including:
 - examination of tools and equipment
 - storage of equipment
 - identification, tagging and isolation of faulty equipment
 - disposal of excess materials
 - recycling procedures
- workplace health and safety (WHS) requirements relating to inspecting and servicing braking systems, including procedures for:
 - lifting and supporting vehicles or machinery

- managing and controlling brake dust and brake fluids
- environmental requirements relating to inspecting and servicing braking systems, including procedures for:
 - trapping, storing and disposing of brake dust and brake fluid released from braking systems
- identification and function of major braking components, including:
 - discs, pads and callipers
 - drums, brake linings, wheel cylinders and hydraulic components
 - master cylinder
 - hydraulic and vacuum brake booster
 - diesel engine vacuum brake booster pump
 - electric and manual park braking systems
- basic operation of braking systems, including:
 - hydraulic braking systems
 - mechanical braking systems
 - air over hydraulic systems
 - air braking systems
- types, applications and testing of brake hydraulic fluids
- inspection procedures for braking system components, including:
 - component wear analysis
 - brake fluid testing
- service and adjustment procedures for braking systems, including:
 - brake bleeding
 - brake adjustment
 - park brake adjustment
- post-service testing procedures for braking systems, including static and dynamic testing.

Assessment Conditions

Competency is to be assessed in the workplace or a simulated environment that accurately reflects performance in a real workplace setting.

Assessment must include direct observation of tasks.

Where assessment of competency includes third-party evidence, individuals must provide evidence that links them to the braking systems that they have worked on, e.g. repair orders.

Assessors must verify performance evidence through questioning on skills and knowledge to ensure correct interpretation and application.

The following resources must be made available:

- automotive repair workplace or simulated workplace
- workplace instructions
- manufacturer braking system specifications

- two different vehicles or machinery with disc and drum braking systems requiring servicing
- tools, equipment and materials appropriate for inspecting and servicing braking systems.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

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