

# AURTTB004 Inspect and service air braking systems

Release: 1

## AURTTB004 Inspect and service air braking systems

## **Modification History**

Release	Comment
Release 1	New unit of competency.

### **Application**

This unit describes the performance outcomes required to inspect and service air 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.

It applies to those working in the automotive service and repair industry. The air braking systems include those of agricultural machinery, heavy commercial vehicles or mobile plant machinery.

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.
Prepare to inspect and service air braking system	1.1 Job requirements are determined from workplace instructions     1.2 Servicing information is sourced and interpreted     1.3 Hazards associated with the work are identified and risks are managed

Approved Page 2 of 5

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.
	1.4 Tools, equipment and materials are selected and checked for serviceability
2. Inspect air braking system	2.1 Inspection is carried out according to manufacturer specifications, workplace procedures, and <i>safety and environmental requirements</i>
	2.2 Inspection results are compared with manufacturer specifications
	2.3 Inspection findings are reported according to workplace procedures, including recommendations for necessary repairs or adjustments
3. Service air braking system	3.1 Service and adjustments are carried out according to manufacturer specifications, workplace procedures, and safety and environmental requirements, and without causing damage to <i>components</i> or systems
	3.2 <i>Post-service testing</i> is carried out according to workplace procedures
4. Complete work processes	4.1 Final inspection is made to ensure work is to workplace expectations and vehicle is presented ready for use
	4.2 Work area is cleaned, waste and non-recyclable materials are disposed of, and recyclable material is collected
	4.3 Tools and equipment are checked and stored according to workplace procedures
	4.4 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:	• locate appropriate sources of information efficiently.
Reading skills to:	• interpret information from manufacturer and workshop literature when seeking inspection and service procedures and specifications relating to air braking systems.

Approved Page 3 of 5

Skills	Description
Writing skills to:	legibly and accurately fill out workplace documentation when reporting inspection findings, making recommendations, and recording parts and material used.
Oral communication skills to:	clarify instructions
	report inspection findings and make repair recommendations.
Numeracy skills to:	measure brake components and use basic mathematical operations, including addition and subtraction, to calculate distances, tolerances and deviations from manufacturer specifications
	interpret measuring equipment scales.
Technology skills to:	use precision measuring equipment, such as vernier calipers.

## **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.

Safety and environmental requirements must include:	<ul> <li>work health and safety (WHS) and occupational health and safety (OHS) requirements, including procedures for:</li> <li>managing and controlling brake dust</li> <li>working with stored energy</li> <li>environmental requirements, including procedures for trapping, storing and disposing of brake dust released from air braking systems.</li> </ul>
Components must include:	<ul> <li>air compressor, filters, air drier, receivers and tanks</li> <li>drive belts</li> <li>spring brake chambers, hoses and adjusters</li> <li>discs, pads, drums and linings</li> <li>brake valves</li> <li>brake lights</li> <li>trailer brake valves.</li> </ul>
Post-service testing must include:	static and dynamic testing of braking system.

Approved Page 4 of 5

# **Unit Mapping Information**

Equivalent to AURTTB2004 Inspect and service air braking systems

## Links

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

Approved Page 5 of 5