



Australian Government

AUMGTB011 Assemble, install and test braking system kits

Release: 1

AUMGTM013 Install or replace mechanical units and assemblies

Modification History

Release	Comment
Release 1	New unit of competency

Application

This unit describes the performance outcomes required to assemble, install and test a vehicle braking system kit and its associated components.

It applies to individuals in an automotive manufacturing environment and involves the application of skills and knowledge at a specialist level.

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

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.
1. Plan the job	1.1 Determine installation process using work order and job specifications 1.2 Identify, select and inspect braking system components to be installed 1.3 Select tools and equipment required for the job and check for safe operation 1.4 Access assembly and installation information from manufacturer specifications
2. Assemble and install braking system kit	2.1 Carry out assembly and installation activities according to workplace procedures 2.2 Assemble braking system kit, referring to appropriate sources of information 2.3 Install braking system kit using installation procedures that comply with manufacturer specifications, tolerances and

Elements	Performance Criteria
	adjustment requirements
3. Test braking system	3.1 Access and interpret test information from manufacturer specifications 3.2 Carry out system tests and inspection according to manufacturer specifications or workplace procedures 3.3 Record braking system assembly and test results
4. Complete work processes	4.1 Clean tools and equipment, inspect for defects and store according to workplace procedures 4.2 Identify, tag and report faulty tools and equipment according to workplace procedures 4.3 Complete workplace documentation according to workplace procedures

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential to performance.

Skills	Description
Reading skills to:	- identify workplace procedures and work health and safety (WHS) requirements - interpret job instructions and braking system manufacturer specifications - follow assembly specifications.
Writing skills to:	- legibly record braking system test results - complete faulty equipment tags.
Numeracy skills to:	measure components and equipment to determine compliance with specifications.
Oral communication skills to:	refer tool, equipment and machinery faults to supervisor.
Planning and organising skills to:	- identify and prepare braking system kits - identify and prepare assembly equipment and work area - conduct braking system tests.
Problem-solving skills to:	solve problems when braking system tests do not comply with specifications.

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
AUMGTB011 Assemble, install and test braking system kits	AUMGTB001 Assemble, install and test braking system kits	Additions to Assessment Requirements due to rationalisation of Range of Conditions. Minor changes to ensure policy adherence. Addition of multi-combination braking system compatibility to knowledge evidence.	Equivalent

Links

Companion Volume Implementation Guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=bd587669-08b3-4cd5-85f0-f9fa0c6304c1>

AUMGTM013 Install or replace mechanical units and assemblies

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Performance Evidence

Before competency can be determined, individuals must have competently assembled, installed and tested a braking system kit on a minimum of one occasion, in the manner described in the Performance Criteria of the unit.

Individuals must demonstrate they can:

- comply with workplace procedures and quality guidelines relating to assembling and installing braking system kits
- assemble and install braking system kit and its components
- test at least one of the following braking systems:
 - electric
 - hydraulic
 - mechanical
- check all sources of information for assembling braking system kit, including:
 - customer requirements
 - manufacturer specifications
 - Vehicle Standards Bulletin 6 (VSBS) national Code of Practice – Heavy Vehicle Modifications

Knowledge Evidence

The candidate must be able to demonstrate knowledge to complete the tasks outlined in the elements and performance criteria of this unit. This includes:

- WHS requirements and workplace procedures relating to assembling, installing and testing braking system kits
- braking system operating principles
- fabrication and routing procedures for brake lines
- procedures for assembling, fitting, bleeding and adjusting braking system kits
- brake fluid types and applications
- compatibility of different braking systems and technologies within truck/trailer combinations, including compliance, safety and performance implications.

Assessment Conditions

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

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

Where assessment of competency includes third-party evidence, individuals must provide evidence that links them to the vehicles on which they have worked, e.g. work sheets.

The following resources must be made available:

- automotive workplace or simulated workplace
- work sheets and workplace procedures relating to assembling and installing braking system kits
- braking system kits
- manufacturer specifications for braking system kits
- manufacturer fitting and operating instructions
- tools, equipment and fluids relating to assembling and installing braking systems
- vehicle or simulated frame for fitting a braking system kit.
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