



Australian Government

TLIB3108 Test operation of electric passenger train braking system

Release: 1

TLIB3108 Test operation of electric passenger train braking system

Modification History

Release 1. This is the first release of this unit of competency in the TLI Transport and Logistics Training Package.

Application

This unit involves the skills and knowledge required to test the operation of an electric train braking system in accordance with workplace procedures and the requirements of relevant safeworking regulations and codes of practice.

It includes preparing for train brake testing, testing train brake operation, dealing with identified faults, and recording brake test results in accordance with workplace requirements.

People achieving competence in this unit will need to fulfil the applicable state/territory legislated rail safety requirements and to comply with relevant codes of practice and/or guidelines.

Work is generally performed without supervision and within a team environment.

It involves the application of operational principles, regulations, safeworking codes, protocols and procedures when testing electric train braking systems, as part of workplace activities across a variety of operational contexts within the Australian rail industry.

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

Pre-requisite Unit

Not applicable.

Competency Field

B – Equipment Checking and Maintenance

Unit Sector

Not applicable.

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 Prepare for train brake testing

- 1.1 Work health and safety (WHS)/occupational health and safety (OHS) legislation, codes of practice, policies and procedures are identified and followed
- 1.2 Hazards are identified, risks are assessed and risk control measures are implemented
- 1.3 Train is isolated or secured in accordance with workplace procedures to make the work area safe for testing
- 1.4 Brake system is checked to ensure it is ready for testing

2 Test train brake operation

- 2.1 Brake tests are conducted to ensure compliance to required rail industry standards
- 2.2 Modified brake tests are conducted in accordance with workplace procedures to meet required rail industry standard, as required
- 2.3 Continuity tests are conducted in accordance with workplace procedures to ensure train braking system meets functional specifications
- 2.4 Brakes are applied and released on train and their function is confirmed
- 2.5 Faults are identified and appropriate corrective action is taken to ensure operational safety

3 Deal with identified faults

- 3.1 Identified faults are reported, rectified or isolated in accordance with workplace procedures
- 3.2 Confirmation/verification to continue is determined in accordance with workplace procedures
- 3.3 Detachment/uncoupling arrangements are made in accordance with operational requirements, as required
- 3.4 Faults or defects found during brake tests are recorded and/or reported in accordance with workplace procedures

Foundation Skills

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

Range of Conditions

Range is restricted to essential operating conditions and any other variables essential to the work environment.

Non-essential conditions can be found in the Companion Volume Implementation Guide.

Unit Mapping Information

This unit replaces and is equivalent to TLIB3108A Test operation of electric passenger train braking system.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=df441c6e-213d-43e3-874c-0b3f7036d851>

Assessment Requirements for TLIB3108 Test operation of electric passenger train braking system

Modification History

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Performance Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy all of the requirements of the elements and performance criteria on at least one occasion and include:

- applying rail safety practices and procedures
- assessing brake system defects
- conducting all relevant continuity brake system tests in accordance with workplace procedures and functional specifications
- conducting pre-safety tasks prior to brake test
- documenting outcomes of operation tests in accordance with workplace procedures
- identifying job hazards and taking required action to minimise, control or eliminate identified hazards
- implementing contingency plans
- interpreting and following operational instructions and prioritising work
- modifying activities depending on operational contingencies, risk situations and environments
- monitoring work activities in terms of planned schedule
- operating and adapting to differences in brakes and related equipment in accordance with operating procedures
- reading and interpreting relevant instructions, procedures, information and signs
- reporting and/or rectifying identified problems, faults or malfunctions promptly, in accordance with regulatory requirements and workplace procedures
- working systematically with required attention to detail without injury to self or others, or damage to equipment.

Knowledge Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy all of the requirements of the elements and performance criteria and include knowledge of:

- applicable minimum rail industry standards and codes of practice and/or guidelines
- brake systems, their components and their operation
- communications protocols
- diagnostic techniques
- documentation requirements relating to brake testing
- emergency procedures
- possible faults and appropriate reporting and rectification/isolation procedures
- relevant safety, work health and safety (WHS)/occupational health and safety (OHS), and environmental procedures and regulations
- relevant workplace procedures
- types of brake tests and their purpose.

Assessment Conditions

As a minimum, assessors must satisfy applicable regulatory requirements, which include requirements in the *Standards for Registered Training Organisations* current at the time of assessment.

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Assessment must occur in workplace operational situations or, where this is not available, in simulated workplace operational situations that replicate rail corridor workplace conditions.

Assessment processes and techniques must be appropriate to the language, literacy and numeracy requirements of the work being performed and the needs of the candidate.

Resources for assessment include:

- a range of relevant exercises, case studies and/or simulations
- relevant and appropriate materials, tools, equipment and personal protective equipment currently used in industry
- applicable documentation including workplace procedures, regulations, rail industry standards, codes of practice and operation manuals.

Links

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