



Australian Government

TLIB3120 Test mechanical signalling equipment and isolate faults

Release: 1

TLIB3120 Test mechanical signalling equipment and isolate faults

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 mechanical signalling equipment and isolate faults in accordance with safeworking and regulatory requirements, and workplace procedures.

It includes undertaking preparation tasks, conducting testing and/or isolating equipment, checking equipment operation, and finalising the testing and/or isolation of equipment, in accordance with workplace procedures and relevant regulatory requirements.

People achieving competence in this unit will need to fulfil rail industry standards and/or guidelines relevant to testing mechanical signalling equipment and isolating faults.

Work is performed under minimal supervision, generally within a team environment. It involves the application of regulatory requirements and workplace procedures when testing and isolating faults in mechanical signalling equipment.

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

Elements describe the essential outcomes.

PERFORMANCE CRITERIA

Performance criteria describe the performance needed to demonstrate achievement of the element.

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|---|--|
| 1 Prepare to test and/or isolate equipment | <ul style="list-style-type: none">1.1 Testing is appropriately sequenced in accordance with job schedule1.2 Hazards are identified, risks are assessed and control measures are implemented1.3 Appropriate personnel are consulted to ensure work is coordinated effectively with others involved on the worksite1.4 Location of equipment to be tested/isolated is determined from job specifications and diagrams1.5 Tools, equipment and testing devices needed to test and/or isolate are obtained in accordance with established procedures and are checked for correct operation and safety |
| 2 Test and/or isolate equipment | <ul style="list-style-type: none">2.1 Initial visual check of operational equipment is performed to identify equipment faults2.2 Equipment is isolated in accordance with relevant operational rules and procedures2.3 Established methods for dealing with unexpected situations are discussed with appropriate personnel and documented2.4 Unexpected situations are dealt with safely and with the approval of an authorised person |
| 3 Check equipment operation | <ul style="list-style-type: none">3.1 Approval to conduct a check of equipment operation is obtained in accordance with relevant operational rules and procedures3.2 Authorised equipment check is carried out to identify equipment faults in accordance with operating procedures3.3 Operational effectiveness of equipment is confirmed through observation during train movements as required3.4 Equipment faults are correctly identified and recorded, and appropriate corrective action is taken3.5 Service equipment is locked and secured to prevent unauthorised access3.6 Work completion is documented and appropriate personnel are notified in accordance with established procedures |
| 4 Finalise testing and/or isolation of | <ul style="list-style-type: none">4.1 Test results are documented in accordance with organisation requirements |

equipment

- 4.2 Faulty or replaced equipment is tagged and reported to the appropriate personnel for rectification
- 4.3 Fully operational equipment is handed over to approved personnel ensuring that hand over procedures are accurately followed and final documentation is completed

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 TLIB3120A Test mechanical signalling equipment and isolate faults.

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 TLIB3120 Test mechanical signalling equipment and isolate faults

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 basic mechanical, hydraulic, pneumatic and electrical awareness to testing and fault identification activities
- applying relevant workplace procedures
- checking equipment operation
- communicating effectively with others
- 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
- reading and interpreting relevant instructions, procedures, information and signs
- reporting and/or rectifying identified problems, faults or malfunctions, in accordance with regulatory requirements and workplace procedures
- selecting and using relevant meters, gauges, equipment and tools when testing mechanical signalling equipment and isolating faults
- working systematically with required attention to detail without injury to self or others, or damage to goods or 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:

- characteristics, capabilities and limitations of mechanical signalling equipment
- characteristics, capabilities and limitations of testing devices
- documentation and record requirements
- fault-finding techniques and procedures
- faults that may occur with equipment, and appropriate action that can be taken to report and/or rectify the identified faults in the equipment or its components
- focus of operation of work systems, equipment, management and site operating systems for testing mechanical signalling equipment and isolating faults
- guidelines relating to the safe use of machinery and equipment including the tagging of unserviceable or damaged items
- mechanical, hydraulic, pneumatic and electrical awareness
- operational safety requirements for signalling equipment
- relevant safety, work health and safety (WHS)/occupational health and safety (OHS) and environmental procedures and regulations
- relevant rail industry standards, rules, codes of practice and guidelines, and/or organisational procedures for inspecting, testing, isolating and tagging mechanical signalling equipment and isolating faults
- site layout and obstacles
- tools, meters, gauges and equipment used when testing mechanical signalling equipment and isolating faults and the precautions and procedures that should be followed in their use
- workplace procedures for testing mechanical signalling equipment and isolating faults, including tagging and reporting faulty equipment and components.

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 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, rules, codes of practice and operation manuals.

Links

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