



Australian Government

TLIB3046 Service and clean mechanical signalling equipment and infrastructure

Release: 1

TLIB3046 Service and clean mechanical signalling equipment and infrastructure

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 service and clean mechanical signalling equipment and infrastructure, in accordance with safeworking and regulatory requirements, and workplace standards and procedures.

It includes cleaning and servicing the equipment/infrastructure, and checking/testing the operation and functionality of the equipment/infrastructure after cleaning.

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, rail industry standards and/or guidelines.

Work is performed under minimal supervision, generally within a team environment. It involves the application of routine operational principles and procedures when servicing and cleaning mechanical infrastructure signalling equipment, as part of workplace activities across a variety of operational contexts within the Australian rail system.

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 Clean and service equipment

- 1.1 Cleaning and servicing equipment, resources and consumables are confirmed ready for use
- 1.2 Hazards are identified, risks are assessed and control measures are implemented
- 1.3 All rubbish, weeds and obstructions are removed from equipment and housings
- 1.4 Initial visual check of operational equipment is performed to identify equipment faults
- 1.5 External surfaces are inspected and are prepared/painted to organisational standards as required to protect the equipment
- 1.6 All internal and external surfaces and operational components are cleaned and lubricated to ensure operational effectiveness
- 1.7 All chemicals, lubricants and consumables are used and disposed of in accordance with safety data sheets (SDSs)/material safety data sheets (MSDSs), work health and safety (WHS)/occupational health and safety (OHS) codes and practices, and environmental procedures

2 Check equipment operation

- 2.1 Approval to conduct a check of equipment operation is obtained in accordance with relevant operational rules and procedures
- 2.2 Track clearance check is made before conducting equipment operation check to ensure safe train movement
- 2.3 Authorised equipment operation check is carried out in accordance with operating procedures to identify equipment faults
- 2.4 Operational effectiveness of equipment is confirmed through observation during train movements as required
- 2.5 Equipment faults are identified, reported and appropriate corrective action is taken
- 2.6 Serviced equipment is locked and secured to prevent unauthorised access

3 Complete documentation

- 3.1 Required documentation procedures and processes are confirmed
- 3.2 Documentation is filled in legibly and proofread

3.3 Documentation is processed 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 TLIB3046A Service and clean mechanical signalling equipment and infrastructure.

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 TLIB3046 Service and clean mechanical signalling equipment and infrastructure

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 relevant workplace procedures
- carrying out visual inspection and functional checking tests
- checking operation of equipment in accordance with workplace procedures
- checking/confirming operational requirements
- 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 equipment in accordance with operating procedures
- reading and interpreting relevant instructions, procedures, information, diagrams and signs
- reporting identified problems, faults or malfunctions, in accordance with regulatory requirements and workplace procedures
- selecting and using required personal protective equipment (PPE) conforming to industry and work health and safety (WHS)/occupational health and safety (OHS) standards
- using chemical cleaning agents, solvents and lubricants in accordance with safety data sheets (SDSs)/material safety data sheets (MSDSs) and/or manufacturer instructions
- 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:

- applicable state/territory legislated rail safety requirements and relevant rail industry standards, codes of practice and/or guidelines
- documentation and record keeping requirements
- fault detection techniques
- fundamentals of signalling and operations of mechanical signalling equipment
- hazards that may exist when servicing and cleaning mechanical signalling equipment and infrastructure, and ways of controlling the risks involved
- problems that may occur when servicing and cleaning mechanical signalling equipment and infrastructure, and action that can be taken to report or resolve these problems
- rail/train movement systems
- recording procedures
- relevant WHS/OHS and environmental procedures and regulations
- workplace safeworking authorisation/approval processes and procedures
- workplace standards and procedures for servicing and cleaning mechanical signalling equipment and infrastructure.

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 PPE currently used in industry
- applicable documentation including workplace procedures, rail industry standards, SDSs/MSDSs, codes of practice and operation manuals.
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Links

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