



Australian Government

TLIS3009 Install mechanical signalling locking and interlocking devices

Release: 1

TLIS3009 Install mechanical signalling locking and interlocking devices

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 install mechanical signalling locking and interlocking devices in accordance with safeworking and regulatory requirements, and workplace procedures

It includes assembling components, installing equipment and components to specifications, and testing and adjusting equipment in accordance with workplace procedures.

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 performed under minimal supervision, generally within a team environment.

It involves the application of routine operational principles and procedures when installing mechanical signalling locking and interlocking devices, 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

S – Construction and Installation

Unit Sector

Not applicable.

Elements and Performance Criteria

Elements describe the Performance criteria describe the performance needed to demonstrate

essential outcomes.	achievement of the element.
1 Assemble components	1.1 Correct components are identified and selected to comply with job specifications 1.2 Hazards are identified, risks are assessed and control measures are implemented 1.3 Equipment and components are pre-assembled and positioned for installation in compliance with work orders and job specifications
2 Install equipment and components	2.1 Equipment/component layout is prepared and checked to ensure position matches job specifications 2.2 All fastening positions are marked and drilled for installation 2.3 Equipment and components are secured in correct sequence and position in compliance with job specifications 2.4 Additional requirements or alterations to existing components are identified and appropriate follow-up action is taken 2.5 Manufacturing of additional components is carried out to allow for complete installation 2.6 Alterations to existing components are carried out to provide for the installation of new equipment 2.7 All interlinking components are correctly attached and secured ready for testing in compliance with work specifications
3 Test and adjust equipment	3.1 Required authorisation for tests is confirmed to ensure safe train operations may continue 3.2 Test procedures are coordinated and liaison with appropriate personnel is maintained to ensure overall safety 3.3 Appropriate tests are carried out to ensure all operations are within specifications and appropriate adjustments are made to ensure smooth operation 3.4 Testing is carried out to ensure functionality of all operations to the locking table 3.5 Operational readiness is confirmed and required documentation/certification is correctly completed and processed to allow for commissioning

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 TLIS3009A Install mechanical signalling locking and interlocking devices.

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 TLIS3009 Install mechanical signalling locking and interlocking devices

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:

- adapting to differences in equipment in accordance with operating procedures
- applying relevant legislation and workplace procedures
- assembling interlinking components
- checking and confirming compliance with operational specifications
- 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, technical data and drawings
- reporting and/or rectifying identified problems, faults or malfunctions, in accordance with workplace procedures
- testing and adjusting close tolerance mechanically operating equipment when installing mechanical signalling locking and interlocking devices
- using hand, portable, power and air tools in accordance with workplace procedures
- working collaboratively with others when installing mechanical signalling locking and interlocking devices
- 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, relevant codes of practice and/or guidelines
- fault finding techniques
- hazards that may exist when installing mechanical signalling locking and interlocking devices, and ways of controlling the risks
- machining techniques
- safety data sheets (SDSs)/material safety data sheets (MSDSs)
- mechanical fitting techniques
- problems that may occur when installing mechanical signalling locking and interlocking devices and action that can be taken to report or resolve these problems
- rail industry standards for installing mechanical signalling locking and interlocking devices
- relevant mechanical theory and principles
- relevant rail danger zones
- relevant work health and safety (WHS)/occupational health and safety (OHS) and environmental procedures and regulations
- relevant recording and documentation procedures
- workplace procedures for installing mechanical signalling locking and interlocking devices.

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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