



**Australian Government**

# **TLIS2044 Carry out rail installation**

**Release: 2**

# TLIS2044 Carry out rail installation

## Modification History

Release 2. This is the second release of this unit of competency in the TLI Transport and Logistics Training Package:

- Minor statement changes in Assessment Conditions.

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 rail in accordance with safeworking and regulatory requirements, and organisational policies and procedures.

It includes identifying job requirements, preparing rail for installation, installing rail, joining rail ends, restoring track and completing documentation.

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

Work is performed under supervision, generally in a team environment. It involves the application of routine operational principles and procedures when installing rail, 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

Rail sector.

## Elements and Performance Criteria

### ELEMENTS

### PERFORMANCE CRITERIA

Elements describe the essential    Performance criteria describe the performance needed to

outcomes.

demonstrate achievement of the element.

**1 Identify job requirements**

- 1.1** Scope of work is determined and resources are arranged
- 1.2** Hazards are identified, risks are assessed and control measures are implemented
- 1.3** Replacement rail is checked for compliance with acceptance rail network standards, in accordance with organisational procedures

**2 Prepare rail for installation**

- 2.1** Rails are loaded and unloaded using approved methods to minimise risk to health and safety, and damage to rail components
- 2.2** Rails are cut to required length using an appropriate method to minimise delays and wastage
- 2.3** Rails are bent, as required, to the correct curvature to ensure correct track geometry is maintained to rail industry standard

**3 Position rail**

- 3.1** Existing rail is unfastened and removed, as required, using appropriate equipment or manual method
- 3.2** New rail is lifted into place using appropriate equipment or manual method, maximising efficiency and minimising risk of injuries

**4 Join rail ends**

- 4.1** Rail joints are prepared for welding or are assembled and installed to specifications in accordance with organisational procedures
- 4.2** Rail bonds or other track circuit connections are installed or restored, as required, in accordance with organisational procedures

**5 Restore track**

- 5.1** Track fastenings are restored in accordance with organisational procedures
- 5.2** Track measurements are recorded in accordance with workplace procedures
- 5.3** Equipment used to restore track is stored after use

**6 Complete documentation**

- 6.1** Documentation is completed in accordance with organisational procedures
- 6.2** Documentation is processed in accordance with

organisational 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 TLI Transport and Logistics Training Package Companion Volume Implementation Guide.

## **Unit Mapping Information**

This unit replaces and is equivalent to TLIS2044A Carry out rail installation.

## **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 TLIS2044 Carry out rail installation

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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
- checking compliance of work with job specifications
- checking that replacement rails meet rail industry standards and workplace requirements
- completing relevant documentation
- identifying job hazards and taking required action to minimise, control or eliminate identified hazards
- identifying job requirements
- installing rail
- interpreting and following operational instructions and prioritising work
- joining rail ends
- measuring rail weight and dimensions
- modifying activities depending on operational contingencies, risk situations and environments
- preparing rail for installation
- reporting and rectifying problems, faults and malfunctions within limits of own role, in accordance with workplace procedures
- restoring track
- selecting and using relevant equipment and tools.

## 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 of plant and equipment, transport, structures, hardware and components used in work activities
- hazards that may occur when loading and unloading rail, and when installing and replacing

rail, and action that can be taken to report or resolve these hazards

- rail industry acceptance standards for re-use of rails
- rail network installation standards
- relevant rail danger zones
- relevant recording and documentation procedures
- relevant rail safety, work health and safety (WHS)/occupational health and safety (OHS) and environmental procedures and regulations applicable to the job role
- workplace procedures for hazardous manual tasks
- workplace procedures for installing and replacing rail.

## Assessment Conditions

Assessors must hold credentials specified within the Standards for Registered Training Organisations current at the time of assessment.

Assessment must satisfy the Principles of Assessment and Rules of Evidence and all regulatory requirements included within the Standards for Registered Training Organisations current at the time of assessment.

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 must include access to:

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

## Links

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