



Australian Government

TLIC3028 Operate and monitor a heritage motive power unit

Release: 2

TLIC3028 Operate and monitor a heritage motive power unit

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 Knowledge Evidence
- 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 operate and monitor a heritage motive power unit in accordance with relevant workplace procedures, rail regulations and codes of practice.

It includes operating the controls of a heritage motive power unit, monitoring its performance and maintaining its operational condition during a journey. It also includes working collaboratively with other train crew and relevant personnel.

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 maintaining the safety and operation of a heritage motive power unit across a variety of operational contexts in the Australian heritage rail system.

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

Pre-requisite Unit

Not applicable.

Competency Field

C – Vehicle Operation

Unit Sector

Rail sector.

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 Operate heritage motive power unit

- 1.1** Motive power unit handling techniques, and track and road knowledge are applied to eliminate or minimise risk of injury to personnel or damage to equipment, rolling stock and load
- 1.2** Acceleration and braking techniques are applied safely within track, road and weather conditions
- 1.3** Heritage motive power unit and rolling stock movement between sections is monitored and vehicles are positioned safely in accordance with relevant codes of practice, system of safeworking and related requirements

2 Operate and monitor on-board equipment

- 2.1** Motive power unit equipment is monitored and operated to maintain optimum running conditions and to identify faults, defects and deficiencies
- 2.2** Appropriate actions are taken in response to identified faults, defects and deficiencies to ensure safe operation of motive power unit, including communications with operations controller, as required
- 2.3** Faults, defects and deficiencies are assessed to determine risk of damage to equipment or injury to personnel

3 Respond effectively to external operating factors

- 3.1** Instructions are verified, as required, interpreted and followed, in accordance with relevant codes of practice, rail regulatory requirements and organisational policies and procedures, to ensure actions taken are appropriate and safe
- 3.2** Fixed and hand signals, and verbal movement commands are interpreted and followed, in accordance with relevant codes of practice, system of safeworking and organisational policies and procedures, to ensure actions taken are appropriate and safe
- 3.3** Hazardous situations are recognised and interpreted, and appropriate initiatives and actions are taken to minimise risk to personnel and equipment in accordance with workplace procedures and applicable regulatory requirements

4 Work collaboratively

- 4.1** Safe operation and monitoring of motive power unit is maintained in collaboration with other train crew, network control officers and relevant personnel in accordance with workplace requirements and rail resource management

principles

- 4.2** Potential or actual conflicts or grievances with other train crew, network control officers or relevant personnel when operating a motive power unit are recognised and resolved in accordance with workplace procedures and rail resource management principles
- 4.3** Regular communication is maintained with train crew, network control officers, drivers of other trains and relevant personnel when operating a motive power unit in accordance with workplace procedures and regulatory requirements
- 4.4** Train crew, network control officers, drivers of other trains and relevant personnel are advised of operational problems, delays, safety incidents and emergency situations
- 4.5** Information provided by train crew, network control officers, drivers of other trains and relevant personnel about the ongoing operation of the motive power unit is interpreted and applied to driving activities in accordance with workplace procedures and applicable regulatory requirements

5 Follow all applicable rail regulatory requirements

- 5.1** Rail regulatory requirements applicable to operating a motive power unit, and the train and track or road concerned, are accessed, clarified as required and interpreted
- 5.2** Relevant rail regulatory requirements are applied and followed when operating a motive power unit
- 5.3** Rail resource management principles are applied in all rail operations involving a motive power unit in accordance with workplace procedures and applicable rail regulatory requirements

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 TLIC3028A Operate and monitor a heritage motive power unit.

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 TLIC3028 Operate and monitor a heritage motive power unit

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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 heritage motive power units and associated equipment and procedures
- communicating effectively with other train crews and relevant personnel
- identifying job hazards and taking required actions 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 heritage motive power unit performance
- operating electronic communications equipment to required protocol
- reading and interpreting relevant instructions, procedures, information and signs
- recognising problems that may arise when operating and monitoring a heritage motive power unit and taking appropriate actions
- selecting and using required personal protective equipment (PPE) conforming to rail network and work health and safety (WHS)/occupational health and safety (OHS) standards.

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, and local rail regulations as they relate to heritage railway operations
- braking and safety system procedures
- heritage motive power unit controls, instruments and indicators, and their purpose, location and use
- heritage motive power unit monitoring devices, braking and drive equipment, ancillary systems and signalling systems
- operating controls to start, accelerate, decelerate and stop a heritage motive power unit
- rail network system of safeworking including workplace procedures and operating requirements
- rail safety, WHS/OHS, and environmental procedures and regulations
- requirements for completing relevant documentation during and after operating and monitoring a heritage motive power unit
- speed and load limits for a heritage motive power unit
- track/bridge limitations, speed limitations, gauge limitations, curves and gradients, curfews, location of signals and crossings, emergency crossovers and operation of a turntable
- typical faults that can occur on a heritage motive power unit and related actions that should be taken when repairing, isolating, replacing, reporting and recording faulty equipment
- workplace procedures for:
 - adjusting controls to maximise efficient and safe running
 - checking battery and fluid levels and/or lubrication of a heritage motive power unit in accordance with safety data sheets (SDS)/material safety data sheets (MSDS) and/or manufacturer instructions and workplace procedures
 - emergency response procedures
 - identifying equipment defects and assessing them for appropriate actions
 - managing safety incidents and hazardous situations that may arise when operating and monitoring a heritage motive power unit
 - minor maintenance, cleaning, lubricating and servicing of a heritage motive power unit
 - operating and monitoring a heritage motive power unit
 - operating and monitoring ancillary equipment on a heritage motive power unit
 - required protocol for operating electronic communications equipment.

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 where it is appropriate to do so; where this is not appropriate, assessment must occur 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 must include access to:

- 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, regulations, codes of practice and operation manuals.

Links

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